URBAN | CROSSROADS

RUBIDOUX COMMERCE PARK

TRAFFIC ANALYSIS

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Reference Number	Agency	Date
15001-10 TA Report	City of Jurupa Valley	August 4, 2023

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LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
CA MUTCD	California Manual on Uniform Traffic Control Devices
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CMP	Congestion Management Program
DIF	Development Impact Fee
E+P	Existing plus Project
HCM	Highway Capacity Manual
ITE	Institute of Transportation Engineers
LOS	Level of Service
NCHRP	National Cooperative Highway Research Program
OPR	Office of Planning and Research
PCE	Passenger Car Equivalent
PHF	Peak Hour Factor
Project	Rubidoux Commerce Park
RCTC	Riverside County Transportation Commission
RIVCOM	Riverside County Model
RTA	Riverside Transit Agency
SB	Senate Bill
SBCTA	San Bernardino County Transportation Authority
SBTAM	San Bernardino County Transportation Analysis Model
SCAQMD	South Coast Air Quality Management District
SHS	State Highway System
SR	State Route
TA	Traffic Analysis
TUMF	Transportation Uniform Mitigation Fee
v/c	Volume to Capacity
VMT	Vehicle Miles Traveled
vphgpl	Vehicles per Hour Green per Lane
WRCOG	Western Riverside Council of Governments

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1 INTRODUCTION

This report presents the results of the Traffic Analysis (TA) for Rubidoux Commerce Park ("Project"), which is located west of Avalon Street at 26th Street in the City of Jurupa Valley, as shown on Exhibit 1-1. The purpose of this TA is to evaluate the potential circulation system deficiencies that may result from the development of the proposed Project, and where necessary recommend improvements to achieve acceptable operations consistent with General Plan level of service goals and policies. This traffic study has been prepared in accordance with the City of Jurupa Valley's Traffic Impact Analysis Guidelines. (1) A copy of the previously approved Project Traffic Study Scoping agreement is provided in Appendix 1.1 of this TA. This traffic analysis has been updated to use current existing count data for baseline conditions, updated cumulative development project, a new opening year, and proposed Project.

1.1 SUMMARY OF FINDINGS

The Project is to construct the following improvements as design features in conjunction with development of the site:

- Project to construct Van Dell Road from 20th Street to its proposed terminus at Driveway 6 at its ultimate full-section width as a Modified Industrial Collector (ultimate 80-foot right-of-way). The Project will construct the cul-de-sac at the southern terminus of Van Dell Road to meet applicable City Engineering and Fire Department standards.
- Project to construct 26th Street from the western boundary of Building 4 to Rubidoux Boulevard at its ultimate full-section width as a Modified Industrial Collector (ultimate 80-foot right-of-way).
- Project to construct Avalon Street from the Project's southern boundary to 20th Street at its ultimate full-section width as a Modified Industrial Collector (ultimate 80-foot right-of-way).

Additional details and intersection lane geometrics are provided in Section 1.6 *Recommendations* of this report.

1.2 PROJECT OVERVIEW

A preliminary site plan for the proposed Project is shown on Exhibit 1-2. The Project is proposed to consist of 1,188,715 square feet of industrial use. For the purposes of this TA, the Project has been evaluated assuming 50% general light industrial and 50% manufacturing use. It should be noted, since the time this traffic study has been prepared, the site plan has been updated: the total square footage has been reduced to 1,184,102 square feet of industrial use. In an effort to provide flexibility for minor changes to the site plan during final preparation, this traffic study evaluates the higher square footage in an effort to provide a conservative analysis.

The Project will be evaluated in a single phase with an opening year of 2025. As indicated on Exhibit 1-2, vehicular access will be provided via Van Dell Road for Buildings 1, 2, 3, and 5 while Avalon Street will provide access to Building 4. All truck traffic will be directed north to 20th Street via Van Dell Road or Avalon Street. Regional access to the Project site is available from the I-10 Freeway via Cedar Avenue or the SR-60 Freeway via the Rubidoux Boulevard or Market Street interchanges.

EXHIBIT 1-1: LOCATION MAP

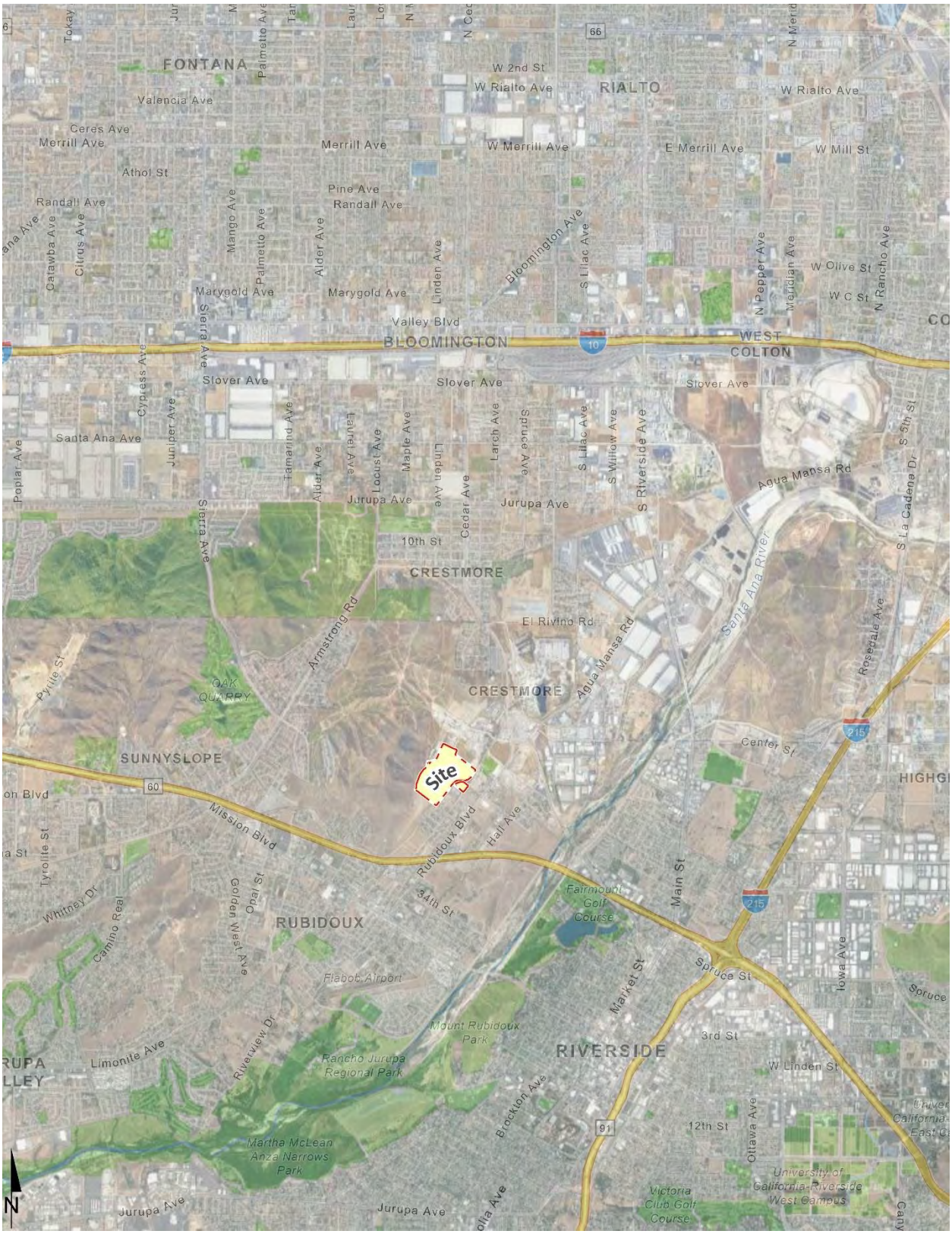


EXHIBIT 1-2: PRELIMINARY SITE PLAN

In order to develop the traffic characteristics of the proposed project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021). (2) The Project is anticipated to generate 5,724 vehicle trip-ends per day with 844 AM peak hour trips and 828 PM peak hour trips. The assumptions and methods used to estimate the Project's trip generation characteristics are discussed in greater detail in Section 4.1 *Project Trip Generation* of this report.

1.3 ANALYSIS SCENARIOS

For the purposes of this traffic study, potential deficiencies to traffic and circulation have been assessed for each of the following conditions:

- Existing (2022) Conditions
- Existing plus Project Conditions
- Opening Year Plus Project Conditions
- Opening Year Background Conditions Without Project
- Opening Year Background Conditions Plus Project
- Cumulative Horizon Year (2045) No Project Conditions
- Cumulative Horizon Year (2045) Plus Project Conditions

1.3.1 EXISTING (2022) CONDITIONS

Information for Existing (2022) conditions is disclosed to represent the baseline traffic conditions as they existed at the time this report was prepared.

1.3.2 E+P CONDITIONS

The Existing Plus Project (E+P) analysis determines circulation system deficiencies that would occur on the existing roadway system in the scenario of the Project being placed upon Existing conditions.

1.3.3 OPENING YEAR PLUS PROJECT CONDITIONS

The Opening Year Plus Project conditions analysis determines the traffic impacts based on a comparison of the Opening Year Plus Project traffic conditions to Existing conditions. To account for background traffic growth, an ambient growth factor from Existing (2022) conditions of 6.12% (2 percent per year, compounded over 3 years) is included for Opening Year Plus Project traffic conditions. The Opening Year Plus Project analysis is intended to identify "Opening Year" deficiencies associated with the development of the proposed Project based on the expected background growth within the study area.

1.3.4 OPENING YEAR BACKGROUND CONDITIONS WITHOUT PROJECT

The Opening Year Background Conditions Without Project analysis determines the traffic impacts based on a comparison of the Opening Year Background Without Project traffic conditions to Existing conditions. To account for background traffic growth, an ambient growth factor from Existing (2022) conditions of 6.12% (2 percent per year, compounded over 3 years) is included for Opening Year Background Without Project traffic conditions. The Opening Year Background Without Project analysis

is intended to identify "Opening Year" deficiencies associated with the development of approved cumulative projects in the area that are expected to be occupied by the Project's opening year.

1.3.5 OPENING YEAR BACKGROUND CONDITIONS PLUS PROJECT

The Opening Year Background Plus Project traffic conditions analysis determines the potential near-term cumulative circulation system deficiencies. To account for background traffic growth, traffic associated with other known approved cumulative development projects in conjunction with an ambient growth factor of 6.12% from Existing conditions are included for Opening Year Background Plus Project traffic conditions (2 percent per year, compounded over 3 years).

1.3.6 OPENING YEAR BACKGROUND PLUS PROJECT PLUS CUMULATIVE CONDITIONS

The Opening Year Background Plus Project traffic conditions analysis determines the potential near-term cumulative circulation system deficiencies. To account for background traffic growth, traffic associated with other known proposed and approved cumulative development projects in conjunction with an ambient growth factor of 6.12% from Existing conditions are included for Opening Year Background Plus Project traffic conditions (2 percent per year, compounded over 3 years).

1.3.7 CUMULATIVE HORIZON YEAR (2045) CONDITIONS

Traffic projections for Horizon Year No Project conditions were derived from the Riverside County Model (RIVCOM) for study area intersections located in Riverside County and the San Bernardino Transportation Analysis Model (SBTAM) for study area intersections located in San Bernardino County. The Cumulative Horizon Year conditions analysis will be utilized to determine if improvements funded through regional transportation mitigation fee programs, such as the Western Riverside Council of Governments Transportation Uniform Mitigation Fee (TUMF), City of Jurupa Valley Development Impact Fee (DIF) program, or other approved funding mechanism can accommodate the long-range cumulative traffic at the target Level of Service (LOS) identified in the City of Jurupa Valley (lead agency) General Plan. (3) Other improvements needed beyond the "funded" improvements (such as localized improvements to non-TUMF or non-DIF facilities) are identified as such. Each of these regional transportation fee programs are discussed in more detail in Section 9 *Local and Regional Funding Mechanisms*.

1.4 STUDY AREA

The 33 study area intersections shown on Exhibit 1-3 and listed in Table 1-1 were selected for evaluation if the Project is anticipated to contribute 50 or more peak hour trips per the City's Guidelines. (1) The "50 peak hour trip" criteria represent a minimum number of trips at which a typical intersection would have the potential to be substantively affected by a given development proposal. The 50 peak hour trip criterion is a traffic engineering rule of thumb that is accepted and widely used within Riverside County for estimating a potential area of influence (i.e., study area).

EXHIBIT 1-3: STUDY AREA

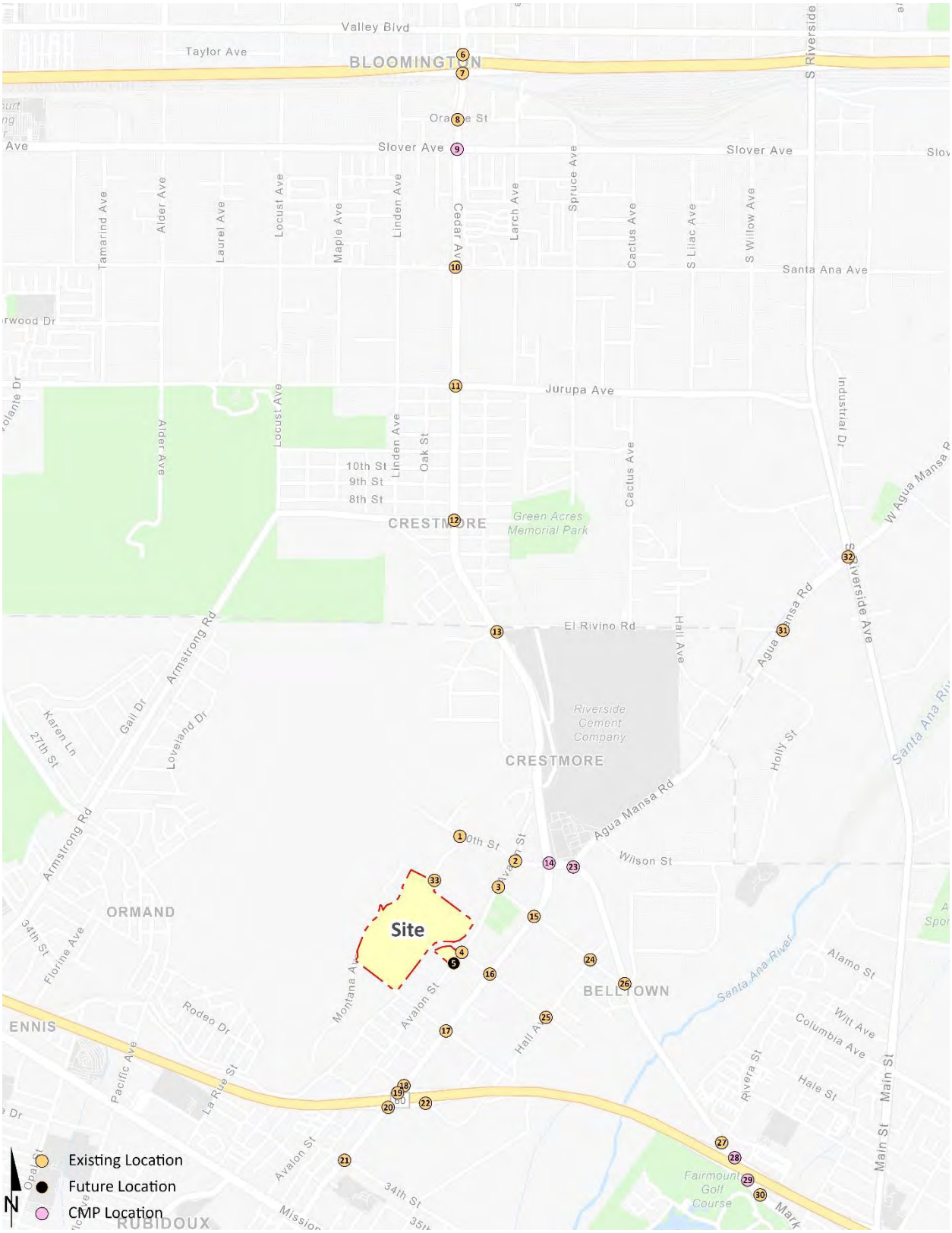


TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS

#	Intersection	Jurisdiction	CMP?
1	Van Dell Rd. & 20th St.	Jurupa Valley	No
2	Avalon St. & 20th St.	Jurupa Valley	No
3	Avalon St. & 24th St.	Jurupa Valley	No
4	Avalon St. & Primavera Av./26th St.	Jurupa Valley	No
5	Avalon St. & Driveway 7	Jurupa Valley	No
6	Cedar Av. & I-10 WB Ramps	Caltrans, SB County	No
7	Cedar Av. & I-10 EB Ramps	Caltrans, SB County	No
8	Cedar Av. & Orange St.	SB County	No
9	Cedar Av. & Slover Av.	SB County	Yes
10	Cedar Av. & Santa Ana Av.	SB County	No
11	Cedar Av. & Jurupa Av.	SB County	No
12	Cedar Av. & 7th St.	SB County	No
13	Cedar Av./Rubidoux Bl. & Tarragona Dr./El Rivino Rd.	Jurupa Valley, SB County	No
14	Rubidoux Bl. & 20th St./Market St.	Jurupa Valley	Yes
15	Rubidoux Bl. & 24th St.	Jurupa Valley	No
16	Rubidoux Bl. & 26th St.	Jurupa Valley	No
17	Rubidoux Bl. & 28th St.	Jurupa Valley	No
18	Rubidoux Bl. & SR-60 WB Off-Ramp	Caltrans, Jurupa Valley	No
19	Rubidoux Bl. & SR-60 WB On-Ramp	Caltrans, Jurupa Valley	No
20	Rubidoux Bl. & SR-60 EB Ramps	Caltrans, Jurupa Valley	No
21	Rubidoux Bl. & 34th St.	Jurupa Valley	No
22	30th St. & Frontage Rd./SR-60 EB On-Ramp	Caltrans, Jurupa Valley	No
23	Agua Mansa Rd. & Market St.	Jurupa Valley	Yes
24	Hall Av. & 24th St.	Jurupa Valley	No
25	Hall Av. & 26th St.	Jurupa Valley	No
26	Market St. & Via Cerro/24th St.	Jurupa Valley	No
27	Market St. & Rivera St.	Jurupa Valley, Riverside	No
28	Market St. & SR-60 WB Ramps	Caltrans, Jurupa Valley, Riverside	Yes
29	Market St. & SR-60 EB Ramps	Caltrans, Jurupa Valley, Riverside	Yes
30	Market St. & Redwood Dr.	Riverside	No
31	Agua Mansa Rd. & El Rivino Rd.	SB County, Rialto	No
32	Riverside Av. & Agua Mansa Rd.	Rialto, Colton	No
33	Van Dell Rd. & 25th St.	Jurupa Valley	No

The intent of a Congestion Management Program (CMP) is to directly link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related deficiencies, and improve air quality. The County of Riverside CMP became effective with the passage of Proposition 111 in 1990 and updated most recently updated in 2011. The Riverside County Transportation Commission (RCTC) adopted the 2011 CMP for the County of Riverside in December 2011. (4) CMP intersections are identified in Table 1-1. The County of San Bernardino CMP became effective with the passage of Proposition 111 in 1990 and updated most recently in 2016. The SBCTA adopted the 2016 CMP for the County of San Bernardino in June 2016. (5) There are 4 study area intersections identified as a Riverside County CMP facility and 1 study area intersection identified as a San Bernardino County CMP facility.

1.5 DEFICIENCIES

This section provides a summary of deficiencies by analysis scenario. Section 2 *Methodologies* provides information on the methodologies used in the analysis and Section 3 *Area Conditions*, Section 5 *E+P Traffic Conditions*, Section 6 *Opening Year Plus Project Traffic Conditions*, Section 7 *Opening Year Background Without Project Traffic Conditions*, Section 8 *Opening Year Background Plus Project Traffic Conditions*, Section 9 *Opening Year Background Plus Project Plus Cumulative Traffic Conditions*, and Section 10 *Cumulative Horizon Year (2045) Traffic Conditions* includes the detailed analysis. A summary of Level of Service (LOS) results for all analysis scenarios is presented in Table 1-2.

TABLE 1-2: SUMMARY OF LOS

#	Intersection	Existing		E+P		Opening Year Plus Project		Opening Year Background Without Project		Opening Year Background Plus Project		Opening Year Background Plus Project Plus Cumulative		Cumulative Horizon Year No Project		Cumulative Horizon Year Plus Project	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1	Van Dell Rd. & 20th St.	A	A	A	A	A	A	A	A	A	A	A	F	A	A	A	F
2	Avalon St. & 20th St.	A	A	F	A	F	A	A	A	F	A	F	F	F	A	F	F
3	Avalon St. & 24th St.	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
4	Avalon St. & Primavera Av./26th St.	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
5	Avalon St. & Driveway 7	N/A	N/A	A	A	A	A	N/A	N/A	A	A	A	A	N/A	N/A	A	A
6	Cedar Av. & I-10 WB Ramps	A	A	A	A	A	A	E	E	E	F	F	F	A	A	A	A
7	Cedar Av. & I-10 EB Ramps	A	A	A	A	A	A	F	E	F	F	F	F	E	E	E	F
8	Cedar Av. & Orange St.	A	A	A	A	A	A	A	A	A	A	E	E	A	A	A	A
9	Cedar Av. & Slover Av.	A	A	A	A	A	A	A	A	A	A	A	A	E	A	E	A
10	Cedar Av. & Santa Ana Av.	A	A	A	A	A	A	A	A	E	E	E	F	A	A	A	A
11	Cedar Av. & Jurupa Av.	E	E	E	E	E	E	F	F	F	F	F	F	F	F	F	F
12	Cedar Av. & 7th St.	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
13	Cedar Av./Rubidoux Bl. & El Rivino Rd.	A	A	A	A	A	A	A	A	A	E	A	F	A	A	A	A
14	Rubidoux Bl. & 20th St./Market St.	A	A	F	F	A	A	A	A	A	A	A	A	F	E	F	F
15	Rubidoux Bl. & 24th St.	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F
16	Rubidoux Bl. & 26th St.	A	A	A	A	A	A	A	A	A	E	E	F	A	A	A	A
17	Rubidoux Bl. & 28th St.	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
18	Rubidoux Bl. & SR-60 WB Off-Ramp	A	A	A	A	A	A	F	F	F	F	F	F	F	F	F	F
19	Rubidoux Bl. & SR-60 WB On-Ramp	A	A	A	A	A	A	F	F	F	F	F	F	F	F	F	F
20	Rubidoux Bl. & SR-60 EB Ramps	A	F	E	F	E	F	F	F	F	F	F	F	E	F	F	F
21	Rubidoux Bl. & 34th St.	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
22	30th St. & Frontage Rd./SR-60 EB On-Ramp	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
23	Agua Mansa Rd. & Market St.	A	A	A	A	A	A	A	E	A	E	E	F	E	A	F	E
24	Hall Av. & 24th St.	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
25	Hall Av. & 26th St.	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
26	Market St. & Via Cerro/24th St.	A	A	A	A	A	A	A	E	A	F	A	F	E	F	F	F
27	Market St. & Rivera St.	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
28	Market St. & SR-60 WB Ramps	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
29	Market St. & SR-60 EB Ramps	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
30	Market St. & Redwood Dr.	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
31	Agua Mansa Rd. & El Rivino Rd.	A	F	A	F	A	F	E	F	E	F	E	F	F	F	F	F
32	Riverside Av. & Agua Mansa Rd.	A	A	A	A	A	A	A	E	A	F	A	F	E	F	E	F
33	Van Dell Rd. & 25th St.	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A

A = A - D E = E F = F

1.5.1 EXISTING (2022) CONDITIONS

The following study area intersections are currently operating at an unacceptable LOS during the peak hours:

- Cedar Av. & Jurupa Av. (#11) – LOS E AM and PM peak hours
- Rubidoux Bl. & 24th St. (#15) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 EB Ramps (#20) – LOS F PM peak hour only
- Agua Mansa Rd. & El Rivino Rd. (#31) – LOS F PM peak hour only

1.5.2 E+P CONDITIONS

The following additional study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under E+P traffic conditions, in addition to the locations identified for Existing traffic conditions:

- Avalon St. & 20th St. (#2) – LOS F AM peak hour only
- Rubidoux Bl. & 20th St./Market St. (#14) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 EB Ramps (#20) – LOS E AM peak hour only (LOS F remains unchanged for PM peak hour)

1.5.3 OPENING YEAR CONDITIONS PLUS PROJECT

The following additional study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under Opening Year Plus Project traffic conditions, in addition to the locations identified for Existing traffic conditions:

- Avalon St. & 20th St. (#2) – LOS F AM peak hour only
- Rubidoux Bl. & 20th St./Market St. (#14) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 EB Ramps (#20) – LOS E AM peak hour only (LOS F remains unchanged for PM peak hour)

1.5.4 OPENING YEAR BACKGROUND CONDITIONS WITHOUT PROJECT

The following additional study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under Opening Year Background Without Project traffic conditions, in addition to the locations identified for Existing traffic conditions:

- Cedar Av. & I-10 WB Ramps (#6) – LOS E AM and PM peak hours
- Cedar Av. & I-10 EB Ramps (#7) – LOS F AM peak hour; LOS E PM peak hour
- Cedar Av. & Orange St. (#8) – LOS E AM and PM peak hours
- Cedar Av. & Jurupa Av. (#11) – LOS F AM and PM peak hours
- Rubidoux Bl. & 20th St./Market St. (#14) – LOS F PM peak hour only
- Rubidoux Bl. & 24th St. (#15) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 WB Off-Ramp (#18) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 WB On-Ramp (#19) – LOS F AM and PM peak hours

- Rubidoux Bl. & SR-60 EB Ramps (#20) – LOS F AM and PM peak hours
- Agua Mansa Rd. & Market St. (#23) – LOS E PM peak hour only
- Via Cerro/24th St. & Market St. (#26) – LOS E PM peak hour only
- Agua Mansa Rd. & El Rivino Rd. (#31) – LOS E AM peak hour; LOS F PM peak hour
- Riverside Dr. & Agua Mansa Rd. (#32) – LOS E PM peak hour only

1.5.5 OPENING YEAR BACKGROUND CONDITIONS PLUS PROJECT

The following additional study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under Opening Year Background Plus Project traffic conditions, in addition to the locations identified for Existing traffic conditions:

- Avalon St. & 20th St. (#2) – LOS F AM peak hour only
- Cedar Av. & I-10 WB Ramps (#6) – LOS E AM peak hour; LOS F PM peak hour
- Cedar Av. & I-10 EB Ramps (#7) – LOS F AM and PM peak hours
- Cedar Av. & Santa Ana Av. (#10) – LOS E AM and PM peak hours
- Cedar Av. & Jurupa Av. (#11) – LOS F AM and PM peak hours
- Cedar Av./Rubidoux Bl. & Tarragona Dr./El Rivino Rd. (#13) – LOS E PM peak hour only
- Rubidoux Bl. & 20th St./Market St. (#14) – LOS F AM and PM peak hours
- Rubidoux Bl. & 24th St. (#15) – LOS F AM and PM peak hours
- Rubidoux Bl. & 26th St. (#16) – LOS E PM peak hour only
- Rubidoux Bl. & SR-60 WB Off-Ramp (#18) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 WB On-Ramp (#19) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 EB Ramps (#20) – LOS F AM and PM peak hours
- Agua Mansa Rd. & Market St. (#23) – LOS E PM peak hour only
- Via Cerro/24th St. & Market St. (#26) – LOS E PM peak hour only
- Agua Mansa Rd. & El Rivino Rd. (#31) – LOS E AM peak hour; LOS F PM peak hour
- Riverside Dr. & Agua Mansa Rd. (#32) – LOS F PM peak hour only

1.5.6 OPENING YEAR BACKGROUND PLUS PROJECT PLUS CUMULATIVE CONDITIONS

The following study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under Opening Year Background Plus Project Plus Cumulative traffic conditions:

- Van Dell Rd. & 20th St. (#1) – LOS F PM peak hour only
- Avalon St. & 20th St. (#2) – LOS F AM and PM peak hours
- Cedar Av. & I-10 WB Ramps (#6) – LOS F AM and PM peak hours
- Cedar Av. & I-10 EB Ramps (#7) – LOS F AM and PM peak hours
- Cedar Av. & Orange St. (#8) – LOS E AM and PM peak hours
- Cedar Av. & Santa Ana Av. (#10) – LOS E AM peak hour; LOS F PM peak hour
- Cedar Av. & Jurupa Av. (#11) – LOS F AM and PM peak hours
- Cedar Av./Rubidoux Bl. & Tarragona Dr./El Rivino Rd. (#13) – LOS F PM peak hour only
- Rubidoux Bl. & 20th St./Market St. (#14) – LOS F AM and PM peak hours

- Rubidoux Bl. & 24th St. (#15) – LOS F AM and PM peak hours
- Rubidoux Bl. & 26th St. (#16) – LOS E AM peak hour; LOS F PM peak hour
- Rubidoux Bl. & SR-60 WB Off-Ramp (#18) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 WB On-Ramp (#19) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 EB Ramps (#20) – LOS F AM and PM peak hours
- Agua Mansa Rd. & Market St. (#23) – LOS E AM peak hour; LOS F PM peak hour
- Via Cerro/24th St. & Market St. (#26) – LOS E PM peak hour only
- Agua Mansa Rd. & El Rivino Rd. (#31) – LOS E AM peak hour; LOS F PM peak hour
- Riverside Dr. & Agua Mansa Rd. (#32) – LOS F PM peak hour only

1.5.7 CUMULATIVE HORIZON YEAR (2045) CONDITIONS

The following study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under Cumulative Horizon Year (2045) No Project traffic conditions:

- Avalon St. & 20th St. (#2) – LOS F AM peak hour only
- Cedar Av. & I-10 EB Ramps (#7) – LOS E AM and PM peak hours
- Cedar Av. & Slover Av. (#9) – LOS E AM peak hour only
- Cedar Av. & Jurupa Av. (#11) – LOS F AM and PM peak hours
- Rubidoux Bl. & 20th St./Market St. (#14) – LOS F AM and PM peak hours
- Rubidoux Bl. & 24th St. (#15) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 WB Off-Ramp (#18) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 WB On-Ramp (#19) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 EB Ramps (#20) – LOS E AM peak hour; LOS F PM peak hour
- Agua Mansa Rd. & Market St. (#23) – LOS E AM peak hour only
- Via Cerro/24th St. & Market St. (#26) – LOS E AM peak hour; LOS F PM peak hour
- Agua Mansa Rd. & El Rivino Rd. (#31) – LOS F AM and PM peak hours
- Riverside Dr. & Agua Mansa Rd. (#32) – LOS E AM peak hour; LOS F PM peak hour

The following additional study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under Cumulative Horizon Year (2045) Plus Project traffic conditions, in addition to those previously identified for No Project conditions:

- Van Dell Rd. & 20th St. (#1) – LOS F PM peak hour only
- Avalon St. & 20th St. (#2) – LOS F AM and PM peak hours (PM is a new deficiency)
- Cedar Av. & I-10 EB Ramps (#7) – LOS E to LOS F in the PM peak hour only
- Rubidoux Bl. & SR-60 EB Ramps (#20) – LOS E to LOS F in the AM peak hour only
- Agua Mansa Rd. & Market St. (#23) – LOS E to LOS F in the AM peak hour; LOS D to LOS E in the PM peak hour
- Via Cerro/24th St. & Market St. (#26) – LOS E to LOS F in the AM peak hour only

1.6 RECOMMENDATIONS

1.6.1 SITE ADJACENT AND SITE ACCESS RECOMMENDATIONS

The following recommendations are based on the minimum improvements needed to accommodate site access and maintain acceptable peak hour operations for the proposed Project. The driveway intersection recommendations are shown on Exhibit 1-4 and roadway improvements are summarized below.

Van Dell Road – Van Dell Road is a north-south oriented roadway located north of the Project providing access to Buildings 1, 2, 3, and 5. Project to construct Van Dell Road from 20th Street to its proposed terminus at Driveway 6 at its ultimate full-section width as a Modified Industrial Collector (ultimate 80-foot right-of-way). The Project will construct the cul-de-sac at the southern terminus of Van Dell Road to meet applicable City Engineering and Fire Department standards.

26th Street – 26th Street is an east-west oriented roadway. Project to construct 26th Street from the western boundary of Building 4 to Rubidoux Boulevard at its ultimate full-section width as a Modified Industrial Collector (ultimate 80-foot right-of-way). It should be noted that the Project is only required to improve the full-section of 26th Street, from the western boundary of Building 4 to Avalon Street; however, the Project will improve 26th Street above-and-beyond the minimum requirements. Access on 26th Street will be restricted across the existing Union Pacific Railroad tracks. This crossing will be a private crossing using a "knox-box" for emergency access only. There will be no public access to the Project site from Avalon Street via the 26th Street railroad crossing.

Avalon Street – Avalon Street is a north-south oriented roadway located along the Project's eastern boundary. Project to construct Avalon Street from the Project's southern boundary to 20th Street at its ultimate full-section width as a Modified Industrial Collector (ultimate 80-foot right-of-way). It should be noted the Project is only required to improve the half-section of Avalon Street, from the Project's southern boundary to 26th Street; however, the Project will improve Avalon Street above-and-beyond the minimum requirements. The Project will construct a Class III bike route along Avalon Street, from the Project's southern boundary of Building 4 to 20th Street.

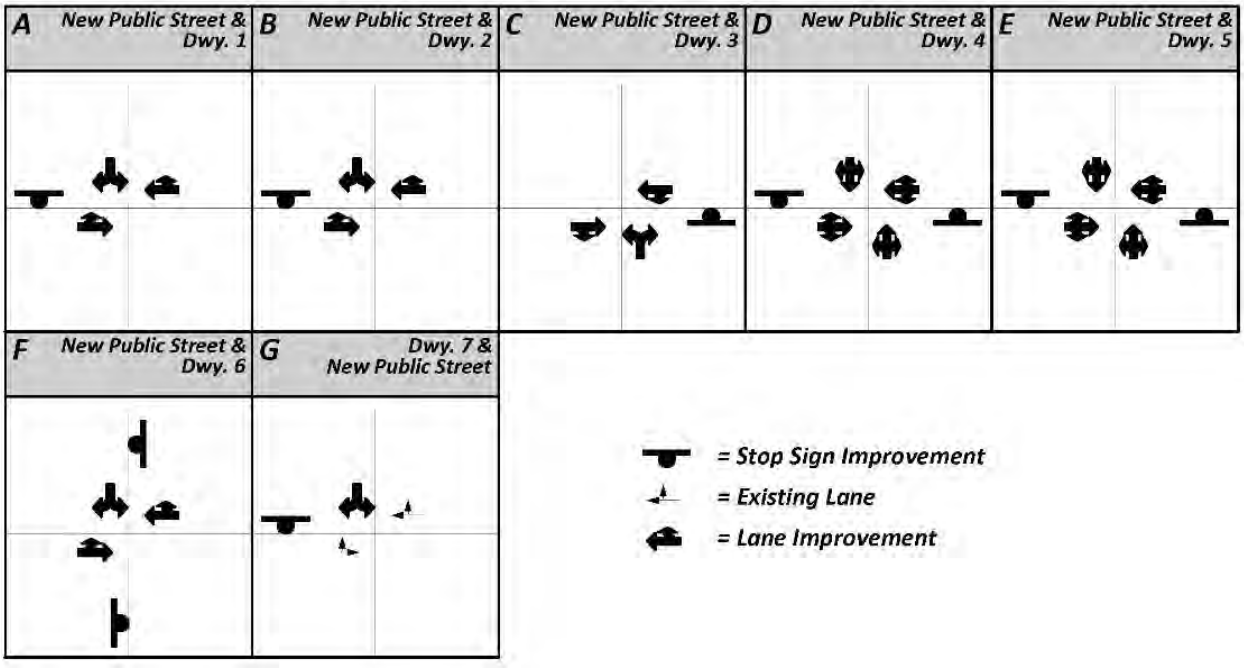
Wherever necessary, roadways adjacent to the Project, site access points and site-adjacent intersections will be constructed to be consistent with the identified roadway classifications and respective cross-sections in the City of Jurupa Valley General Plan Circulation Element.

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the Project site.

Per the County of Riverside, the recommended traffic index for an Industrial Collector Street is 8.0.

The Project Applicant and the City will work together on an appropriate mitigation measure to ensure Project truck traffic adheres to the routes as shown on the Project (Truck) trip distribution exhibit. The final improvements for restricting truck access will occur as part of the final site design and will not be discussed in the traffic study.

EXHIBIT 1-4: SITE ACCESS RECOMMENDATIONS



The recommended improvements needed to address the cumulative deficiencies identified under Existing (2022), E+P, Opening Year Plus Project, Opening Year Background Without Project, Opening Year Background Plus Project, Opening Year Background Plus Project Plus Cumulative, and Cumulative Horizon Year (2045) traffic conditions are shown in Table 1-3. For those improvements listed in Table 1-3 and not constructed as part of the Project, the Applicant's responsibility for the Project's contributions towards deficient intersections is fulfilled through payment of fair share and/or TUMF/DIF fees (if applicable) that would be assigned to construction of the identified recommended improvements. The Project Applicant would be required to pay TUMF/DIF and/or fair share fees consistent with the City's requirements (see Section 9 *Local and Regional Funding Mechanisms*).

Recommendation: Prior to the issuance of building permits, the Project Applicant shall participate in the County TUMF and City DIF fee programs by paying the requisite fees. TUMF and DIF fees may be reduced, or off-set based on the cost of TUMF/DIF eligible facilities constructed by the Project Applicant, or as agreed to with City staff.

1.7 TRUCK ACCESS AND CIRCULATION

Due to the typical wide turning radius of large trucks, a truck turning template has been overlaid on the site plan at each applicable Project driveway anticipated to be utilized by heavy trucks in order to determine appropriate curb radii and to verify that trucks will have sufficient space to execute turning maneuvers (see Exhibit 1-5). A WB-67 (53-foot trailer) has been utilized at all applicable driveways that are anticipated to be accessed by heavy trucks. As shown on Exhibit 1-5, the following modifications are necessary in order to accommodate site access for trucks:

- New Public Street & Driveway 1: modify the northwest corner to accommodate a 50-foot curb radius
- New Public Street & Driveway 5: modify the northwest and northeast corners to accommodate a 50-foot curb radius
- No changes necessary to the current design for Driveway 6 on New Public Street or Driveway 7 on Avalon Street to accommodate truck access

TABLE 1-3: SUMMARY OF INTERSECTION IMPROVEMENTS

#	Intersection	Jurisdiction	E+P	Opening Year Plus Project	Opening Year Background Without Project	Opening Year Background Plus Project	Opening Year Background Plus Project Plus Cumulative	Cumulative Horizon Year (2045) Plus Project	Improvements in City DIF or County TUMF?[1]	Project Responsibility[2]	Fair Share %[3]
1	Van Dell Rd. & 20th St.	Jurupa Valley	None	None	None	None	Install a traffic signal	Same	No	Construct	--
							Add NB right turn lane with overlap phasing	Same	No	Construct	
							Add WB left turn lane	Same	No	Construct	
2	Avalon St. & 20th St.	Jurupa Valley	Install a traffic signal	Same	None	Same	Same	Same	No	Construct	--
						Add EB left turn lane	Same	Same	No	Construct	
						Add WB left turn lane	Same	Same	No	Construct	
6	Cedar Av. & I-10 WB Ramps	Caltrans, County of San Bernardino	None	None	None	None	Add 2nd NB left turn lane	Not Applicable	No	Fair Share	14.5%
7	Cedar Av. & I-10 EB Ramps	Caltrans, County of San Bernardino	None	None	None	None	Add 2nd SB left turn lane	Same	No	Fair Share	17.9%
8	Cedar Av. & Orange St.	County of San Bernardino	None	None	None	None	Modify signal timing only	Not Applicable	No	Fair Share	18.4%
9	Cedar Av. & Slover Av.	County of San Bernardino	None	None	None	None	Same	Restripe the EB approach to provide two left turn lanes, one through lane, and one shared through-right turn lane	No	Fair Share	16.7%
10	Cedar Av. & Santa Ana Av.	County of San Bernardino	None	None	None	Modify signal timing only[5]	Same	Not Applicable	No	Construct	--
11	Cedar Av. & Jurupa Av.	County of San Bernardino	Restripe the EB approach to provide one left turn lane and one shared through-right turn lane	Same	Same		Same	Same	No	Construct	--
			Restripe the WB approach to provide one left turn lane and one shared through-right turn lane	Same	Same		Same	Same	No	Construct	
13	Cedar Av./Rubidoux Bl. & Tarragona Dr./El Rivino Rd.	Jurupa Valley, San Bernardino County	None	None	None	Modify cycle length during the PM peak hour only[5]	Same	Not Applicable	No	Construct	--
14	Rubidoux Bl. & 20th St./Market St.	Jurupa Valley	Add EB right turn lane	No Longer Applicable[4]	No Longer Applicable[4]	No Longer Applicable[4]	Same as E+P	Same as E+P	Yes (DIF, ST-044)	Fee Payment	--
			Add WB left turn lane	No Longer Applicable[4]	No Longer Applicable[4]	No Longer Applicable[4]	No Longer Applicable[4]	No Longer Applicable[4]	Yes (DIF, ST-044)	Fee Payment	
							Modify the traffic signal to implement overlap phasing for the NB and WB right turn lanes	Same	Yes (DIF, ST-044)	Fee Payment	
15	Rubidoux Bl. & 24th St.	Jurupa Valley	Install a traffic signal	Same	Same		Same	Same	No	Construct	--
			Add NB left turn lane	Same	Same		Same	Same	No	Construct	
			Add SB left turn lane	Same	Same		Same	Same	No	Construct	
16	Rubidoux Bl. & 26th St.	Jurupa Valley	None	None	None	Install a traffic signal	Same	Not Applicable	No	Fair Share	18.6%
18	Rubidoux Bl. & SR-60 WB Off-Ramp	Caltrans, Jurupa Valley	None	None	Add WB left turn lane		Same	Same	Yes (TUMF)	Fee Payment	--
19	Rubidoux Bl. & SR-60 WB On-Ramp	Caltrans, Jurupa Valley	None	None	Install a traffic signal		Same	Same	Yes (TUMF)	Fee Payment	--
20	Rubidoux Bl. & SR-60 EB Ramps	Caltrans, Jurupa Valley	EB right turn lane	Same	Add NB right turn lane		Same	Same	Yes (TUMF)	Construct	--
					Add EB left turn lane		Same	Same	Yes (TUMF)	Fee Payment	
					Add EB right turn lane		Same	Same	Yes (TUMF)	Fee Payment	
23	Agua Mansa Rd. & Market St.	Jurupa Valley	None	None	Restripe the EB approach to provide two left turn lanes, one through lane, and one shared through-right turn lane		Same	Same	No	Fair Share	31.5%
26	Via Cerro/24th St. & Market St.	Jurupa Valley	None	None	Add 2nd NB through lane		Same	Same	Yes (TUMF)	Fee Payment	--
					Add 2nd SB through lane		Same	Same	Yes (TUMF)	Fee Payment	
31	Agua Mansa Rd. & El Rivino Rd.	County of San Bernardino	Install a traffic signal	Same	Same		Same	Same	No	Construct	--
32	Riverside Av. & Agua Mansa Rd.	Rialto, Colton	None	None	Add 2nd NB through lane		Same	Same	No	Fair Share	18.9%
					Add 2nd SB through lane		Same	Same	No	Fair Share	

[1] Improvements included in City of Jurupa Valley DIF or County TUMF programs for local and regional components.

[2] Identifies the Project's responsibility to construct an improvement or contribute fair share or fee payment towards the implementation of the improvement shown.

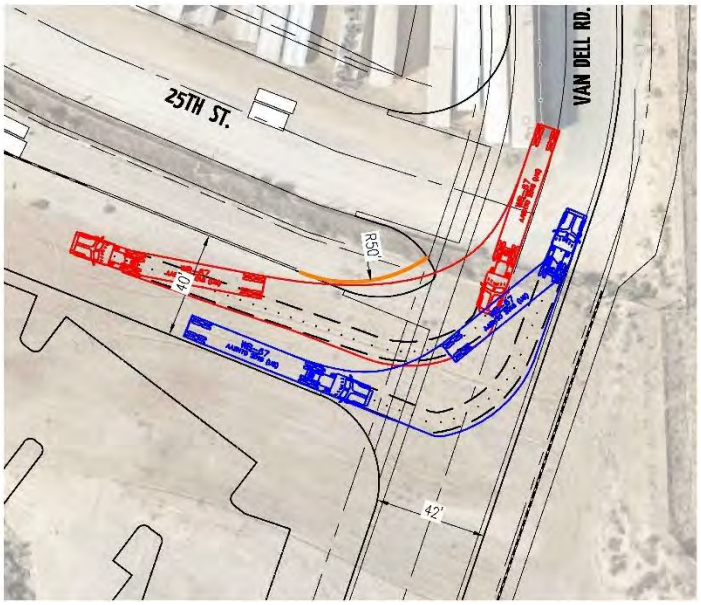
[3] Program improvements constructed by project may be eligible for fee credit, at discretion of City.
See Table 9-1 for Fair Share Calculations. Fair share for near-term improvements is based on EAPC total traffic volumes. Fair share for long-range improvements is based on Horizon Year (2045) With Project traffic volumes.

[4] The identified improvement is currently under construction and will be completed by the Project's opening year.

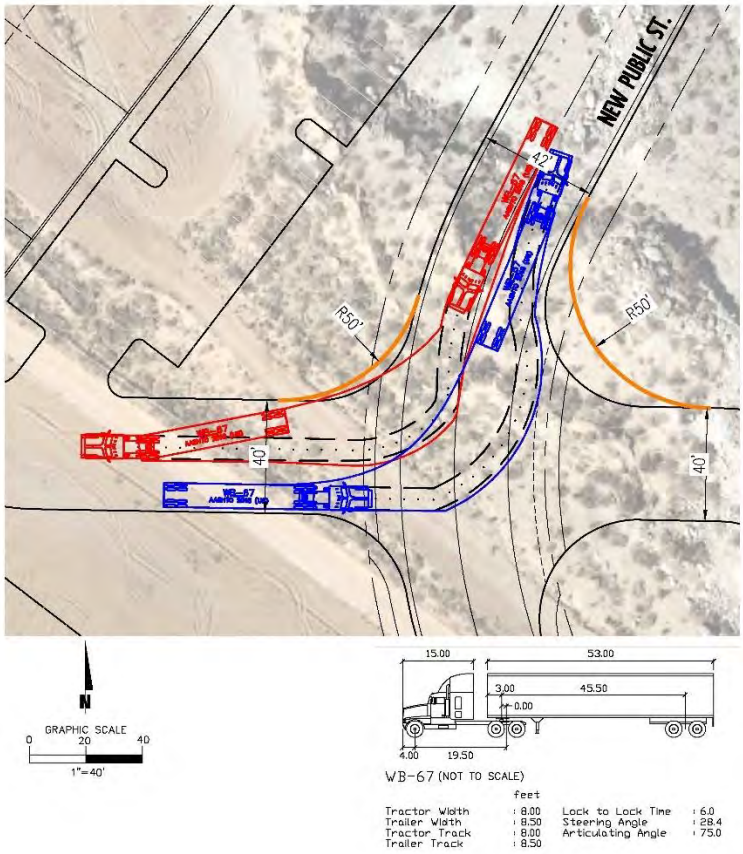
[5] Improvements include modifying signal timing only to optimize the splits. No physical improvements or changes to the existing cycle length.

EXHIBIT 1-5: TRUCK ACCESS

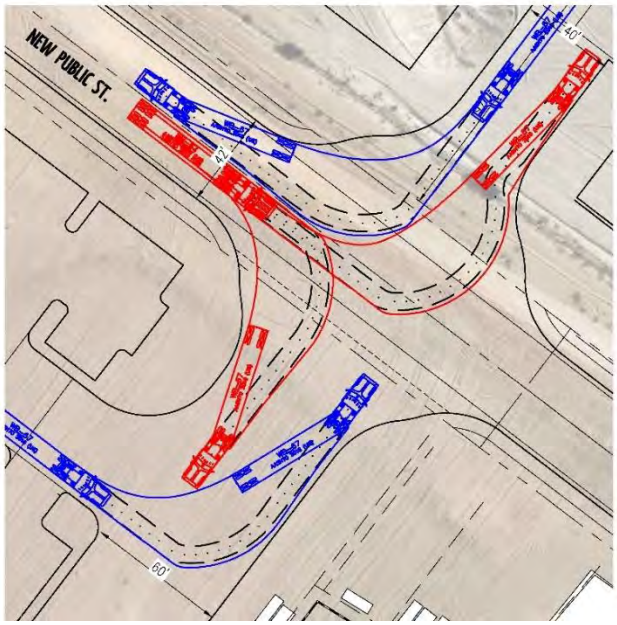
New Public Street & Driveway 1:



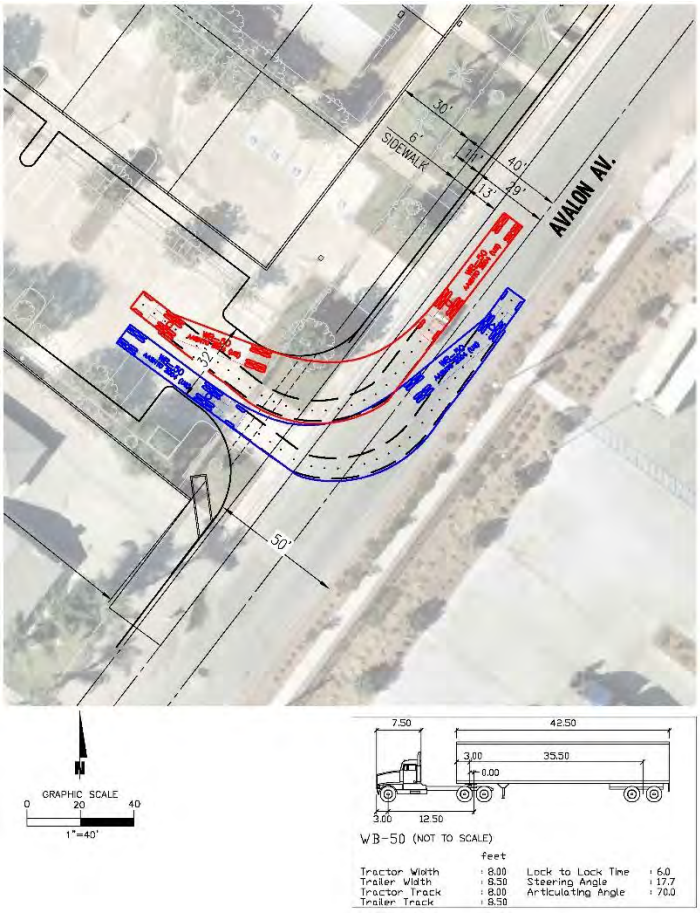
New Public Street & Driveway 5:



Driveway 6 & New Public Street:



Avalon Street & Driveway 7:



2 METHODOLOGIES

This section of the report presents the methodologies used to perform the traffic analyses summarized in this report. The methodologies described are consistent with City of Jurupa Valley's Traffic Study Guidelines.

2.1 LEVEL OF SERVICE

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors, such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS A, representing completely free-flow conditions, to LOS F, representing breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

2.2 INTERSECTION CAPACITY ANALYSIS

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The 6th Edition Highway Capacity Manual (HCM) methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. (6) The HCM uses different procedures depending on the type of intersection control.

2.2.1 SIGNALIZED INTERSECTIONS

The City of Jurupa Valley, City of Riverside, County of San Bernardino, City of Rialto, and City of Colton require signalized intersection operations analysis based on the methodology described in the HCM. (6) Intersection LOS operations are based on an intersection's average control delay. Control delays include initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections LOS is related to the average control delay per vehicle and is correlated to a LOS designation as described in Table 2-1.

TABLE 2-1: SIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service, V/C ≤ 1.0[1]
Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00	A
Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00	B
Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00	C
Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00	D
Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00	E
Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	80.01 and up	F

Source: HCM, 6th Edition

[1] If V/C is greater than 1.0 then LOS is F per HCM.

Consistent with the City of Jurupa Valley traffic study guidelines, a saturation flow rate of 1900 vehicles per hour green per lane (vphgpl) has been utilized for all intersections for all scenarios.

The traffic modeling and signal timing optimization software package Synchro (Version 11) has been utilized to analyze signalized intersections. Synchro is a microscopic traffic software program that is based on the signalized intersection capacity analysis as specified in the HCM. Macroscopic level models represent traffic in terms of aggregate measures for each movement at the study intersections. Equations are used to determine measures of effectiveness such as delay and queue length. The level of service and capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network.

The peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. Customary practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g., PHF = [Hourly Volume] / [4 x Peak 15-minute Flow Rate]). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for all analysis scenarios. Per the HCM, PHF values

over 0.95 often are indicative of high traffic volumes with capacity constraints on peak hour flows while lower PHF values are indicative of greater variability of flow during the peak hour. (6)

2.2.2 UNSIGNALIZED INTERSECTIONS

The City of Jurupa Valley, City of Riverside, County of San Bernardino, City of Rialto, and City of Colton require the operations of unsignalized intersections be evaluated using the methodology described in the HCM. (6) The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 2-2). At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. Delay for the intersection is reported for the worst individual movement at a two-way stop-controlled intersection. For all-way stop controlled intersections, LOS is computed for the intersection as a whole (average delay).

TABLE 2-2: UNSIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service, V/C ≤ 1.0[1]
Little or no delays.	0 to 10.00	A
Short traffic delays.	10.01 to 15.00	B
Average traffic delays.	15.01 to 25.00	C
Long traffic delays.	25.01 to 35.00	D
Very long traffic delays.	35.01 to 50.00	E
Extreme traffic delays with intersection capacity exceeded.	> 50.00	F

Source: HCM, 6th Edition

[1] If V/C is greater than 1.0 then LOS is F per HCM.

2.3 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY

The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or ascertain the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TA update uses the signal warrant criteria presented in the latest edition of the Caltrans' California Manual on Uniform Traffic Control Devices (CA MUTCD), for all study area intersections. (7)

The signal warrant criteria for Existing study area intersections are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. The CA MUTCD indicates that the installation of a traffic signal should be considered if one or more of the signal warrants are met. (7) Specifically, this TA update utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing traffic conditions. Rural warrants have been utilized for intersections located in communities with populations of less than 10,000 persons or with adjacent major streets operating above 40 miles per hour and urban warrants have been utilized for those that operate at less than 40 miles per hour. For the purposes of this study, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection.

As shown in Table 2-3, traffic signal warrant analyses were performed for the following unsignalized study area intersections during the peak weekday conditions wherein the Project is anticipated to contribute the highest trips:

TABLE 2-3: TRAFFIC SIGNAL WARRANT ANALYSIS LOCATIONS

#	Intersection
1	Van Dell Rd. & 20th St.
2	Avalon St. & 20th St.
3	Avalon St. & 24th St.
4	Avalon St. & Primavera Av./26th St.
5	Avalon St. & Driveway 7
15	Rubidoux Bl. & 24th St.
16	Rubidoux Bl. & 26th St.
17	Rubidoux Bl. & 28th St.
22	30th St. & Frontage Rd./SR-60 EB On-Ramp
24	Hall Av. & 24th St.
25	Hall Av. & 26th St.
30	Market St. & Redwood Dr.
31	Agua Mansa Rd. & El Rivino Rd.

The Existing conditions traffic signal warrant analysis is presented in the subsequent section, Section 3 *Area Conditions* of this report. The traffic signal warrant analyses for future conditions are presented in Section 5 *E+P Traffic Conditions,* Section 6 *Opening Year Plus Project Traffic Conditions*, Section 7 *Opening Year Background Without Project Traffic Conditions*, Section 8 *Opening Year Background Plus Project Traffic Conditions*, Section 9 *Opening Year Background Plus Project Plus Cumulative Traffic Conditions*, and Section 10 *Cumulative Horizon Year (2045) Traffic Conditions* of this report.

It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant.

2.4 FREEWAY OFF-RAMP QUEUING ANALYSIS

The 95th percentile queuing of vehicles has been assessed at the off-ramps to determine potential queuing deficiencies at the freeway ramp intersections at the I-10 Freeway at Cedar Avenue and the SR-60 Freeway at Rubidoux Boulevard and Market Street interchanges. Specifically, the queuing analysis is utilized to identify any potential queuing and “spill back” onto the I-10 Freeway or SR-60 Freeway mainline from the off-ramps.

The traffic progression analysis tool and HCM intersection analysis program, Synchro, has been used to assess the potential deficiencies/needs of the intersections with traffic added from the proposed Project. Storage (turn-pocket) length recommendations at the ramps have been based upon the 95th percentile queue resulting from the Synchro progression analysis. The footnote from the Synchro output sheets indicates if the 95th percentile cycle exceeds capacity. Traffic is simulated for two complete cycles of the 95th percentile traffic in Synchro in order to account for the effects of spillover between cycles. A vehicle is considered queued whenever it is traveling at less than 10 feet/second. A vehicle will only become queued when it is either at the stop bar or behind another queued vehicle. The 50th percentile or average queue represents the typical queue length for peak hour traffic conditions, while the 95th percentile queue is derived from the average queue plus 1.65 standard deviations.

2.5 MINIMUM ACCEPTABLE LEVELS OF SERVICE (LOS)

Minimum Acceptable LOS and associated definitions of intersection deficiencies have been obtained from each of the applicable surrounding jurisdictions.

2.5.1 CITY OF JURUPA VALLEY

Consistent with City's traffic study guidelines, the City of Jurupa Valley will endeavor to maintain the following target level of service (LOS) LOS D for all City intersections.

2.5.2 CITY OF RIVERSIDE

Consistent with the City's General Plan Circulation Element, the City of Riverside will endeavor to maintain LOS D or better on Arterial Streets wherever possible. At key locations, such as City Arterials that are used by regional freeway bypass traffic and at heavily traveled freeway interchanges, allow LOS E at peak hours as the acceptable standard on a case-by-case basis. Locations that may warrant the LOS E standard include portions of Arlington Avenue/Alessandro Boulevard, Van Buren Boulevard throughout the City, portions of La Sierra Avenue and selected freeway interchanges. A higher standard such as LOS C or better, may be adopted for Local and Collector streets in residential areas. The City also recognizes that LOS F may be expected along key freeway-feeder segments during peak commute hours due to regional travel patterns. As such, all study area intersections located within the City of Riverside utilize the minimum LOS threshold of LOS D for the purposes of this analysis.

2.5.3 COUNTY OF SAN BERNARDINO

The definition of an intersection deficiency in the County of San Bernardino is based on the County's General Plan Circulation Element. The County of San Bernardino's General Plan states that target LOS D be maintained at County intersections and roadway segments wherever possible within the Valley region.

2.5.4 CITY OF RIALTO

The City of Rialto 2010 General Plan Update has established minimum LOS standards. Specifically, General Plan Policies 4-1.20 and 4-1.21 establish the minimum standards to be applied to any TA, as follows:

- Policy 4-1.20: Design City streets so that signalized intersections operate at Level of Service (LOS) D or better during the morning and evening peak hours and require new development to mitigate traffic impacts that degrade LOS below that level.
- Policy 4-1.21: Design City streets so that unsignalized intersections operate with no vehicular movement having an average delay greater than 120 seconds during the morning and evening peak hours and require new development to mitigate traffic impacts that increase delay above that level.

2.5.5 CITY OF COLTON

The City of Colton has established LOS D as the minimum level of service for its intersections. Therefore, any intersection operating at LOS E or F will be considered deficient for the purposes of this analysis.

2.5.6 CMP

The CMP definition of deficiency is based on maintaining a level of service standard of LOS E or better, except where an existing LOS F condition is identified in the CMP document. However, in an effort to overstate as opposed to understate potential impacts, LOS D has been utilized for the CMP intersections for the purposes of this analysis.

2.5.7 CALTRANS

Senate Bill 743 (SB 743), approved in 2013, endeavors to change the way transportation impacts will be determined according to the California Environmental Quality Act (CEQA). The Office of Planning and Research (OPR) has recommended the use of vehicle miles traveled (VMT) as the replacement for automobile delay-based LOS. Caltrans acknowledges automobile delay will no longer be considered a CEQA impact for development projects and will use VMT as the metric for determining impacts on the State Highway System (SHS). However, LOS D has been utilized as the target LOS for Caltrans facilities, consistent with the County of Riverside.

2.6 DEFICIENCY CRITERIA

This section outlines the methodology used in this analysis related to identifying circulation system deficiencies.

2.6.1 CITY OF JURUPA VALLEY

For purposes of analyzing project-specific traffic deficiencies, the City of Jurupa Valley identifies project-related traffic deficiencies and required contributions towards traffic deficiencies based on the following criteria.

Signalized Intersections

Any signalized study intersection that is operating at LOS E or F without project traffic where the project increases delay by 3.0 or more seconds shall identify improvements to offset the increase in delay. Note that no changes in the traffic signal operations between the Background and With Project conditions shall be included when determining the project's impact at the intersection unless changes are being proposed as part of the project's mitigation program.

Unsignalized intersections

Consistent with the acceptable LOS for the Jurupa Valley General Plan, the City considers the following unsignalized intersection criteria when identifying operational deficiencies:

An operational improvement would be required if the study determines that either section a) or both sections b) and c) occur:

a) The addition of project related traffic causes the intersection to degrade from an acceptable LOS D or better to LOS E or F, OR
b) The project adds 5.0 seconds or more of delay to an intersection that is already projected to operate without project traffic at a LOS E or F; AND
c) The intersection meets the peak-hour traffic signal warrant after the addition of project traffic.

If the conditions above are satisfied, improvements should be identified that achieve the following:

- LOS D or better for case a) above or to pre-project LOS and delay for case b) above.

2.6.2 CITY OF RIVERSIDE

For the intersections that lie within the City of Riverside, determination of project-specific traffic deficiencies will be based on a comparison of without and with project levels of service for each analysis year. A traffic deficiency occurs if project traffic increases the average delay at an intersection by more than the thresholds identified on the table below (see Table 2-4). The thresholds for LOS A, B, and C do not apply to projects consistent with the General Plan.

TABLE 2-4: THRESHOLDS OF TRAFFIC DEFICIENCIES

Pre-Project LOS	Significant Impact Threshold[1]
A/B	10.0 seconds
C	8.0 seconds
D	5.0 seconds
E	2.0 seconds
F	1.0 seconds

[1] Increase in delay

2.6.3 COUNTY OF SAN BERNARDINO

To determine whether the addition of project traffic at a signalized study intersection results in a project-related traffic deficiency, the following thresholds of significance will be utilized:

- Any study intersection that is operating at a LOS A, B, C or D for any study scenario without project traffic in which the addition of project traffic causes the intersection to degrade to a LOS E or F shall mitigate the deficiency to bring the intersection back to at least LOS D.
- Any study intersection that is operating at a LOS E or F for any study scenario without project traffic shall mitigate any deficiencies so as to bring the intersection back to the overall level of delay established prior to project traffic being added.

- For scenarios which include the addition of Cumulative Project Traffic (i.e., shared deficiencies), study intersections shall be mitigated to LOS 'D' or better in the Valley and Mountain regions and LOS C or better in the Desert regions of the County.

To determine whether the addition of project traffic at an unsignalized study intersection results in a project-related traffic deficiency, the following thresholds of significance will be utilized:

- The addition of project related traffic causes the intersection to move from a LOS D or better to a LOS E or worse

  OR

- The project contributes additional traffic to an intersection that is already projected to operate at an LOS E or F with background traffic (per Section 10.5.2 b))

  AND

- One or both of the following conditions are met:
  - The project adds ten (10) or more trips to any approach
  - The intersection meets the peak hour traffic signal warrant after the addition of project traffic (per Section 10.5.2 c)).

The proposed significance thresholds will be applied at study area intersections for the purposes of determining project-related traffic deficiencies.

2.6.4 CITY OF RIALTO & CITY OF COLTON

To determine whether the addition of project traffic at a study intersection results in a significant project-related traffic deficiency, the following thresholds of significance will be utilized:

- A significant project-related traffic deficiency occurs at a study intersection if the addition of project-generated trips reduces the peak hour level of service of the study intersection to change from acceptable level of service (LOS A, B, C, or D) to an unacceptable level of service (LOS E or F);
- A significant project-related traffic deficiency occurs at a study intersection if the project-generated 50 or more peak hour trips worsen the pre-project level of service grade at a deficiently operating (LOS E or F) intersection.

The proposed significance thresholds will be applied at study area intersections for the purposes of determining project-related traffic deficiencies.

2.6.5 CALTRANS FACILITIES

To determine whether the addition of project traffic to the SHS freeway segments would result in a traffic deficiency, the following will be utilized:

- The traffic study finds that the LOS of a segment will degrade from D or better to E or F.
- The traffic study finds that the project will exacerbate an already deficient condition by contributing 50 or more one-way peak hour trips. A segment that is operating at or near capacity is deemed to be deficient.

2.7 PROJECT FAIR SHARE CALCULATION METHODOLOGY

In cases where this TA identifies that the Project would contribute additional traffic volumes to cumulative traffic deficiencies, Project fair share costs of improvements necessary to address deficiencies have been identified. The Project's fair share is determined based on the following equation, which is the ratio of Project traffic to new traffic, and new traffic is total future (Horizon Year) traffic less existing baseline traffic:

Project Fair Share % = Project Traffic / (Project Traffic + Cumulative Development Traffic)

The detailed Project fair share contribution calculations are presented in Section 9 *Local and Regional Funding Mechanisms* of this TA (see Table 9-1).

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3 AREA CONDITIONS

This section provides a summary of the existing circulation network, the City of Jurupa Valley General Plan Circulation Network, and a review of existing peak hour intersection operations, traffic signal warrant, and freeway off-ramp queuing analyses.

3.1 EXISTING CIRCULATION NETWORK

The study area includes a total of 33 existing and future intersections as shown previously on Exhibit 1-3. Exhibit 3-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

3.2 CITY OF JURUPA VALLEY GENERAL PLAN CIRCULATION ELEMENT

As noted previously, the Project site is located within the City of Jurupa Valley. The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the study area, as identified on the City of Jurupa Valley General Plan Circulation Element, are described subsequently. Exhibit 3-2 shows the City of Jurupa Valley General Plan Circulation Element and Exhibit 3-3 illustrates the City of Jurupa Valley General Plan roadway cross-sections.

Study area roadways that are classified as 4-lane Major Highways are identified as having two lanes of travel in each direction. The following study area roadways within the City of Jurupa Valley are classified as 4-lane Major Highways:

- Rubidoux Boulevard
- Market Street

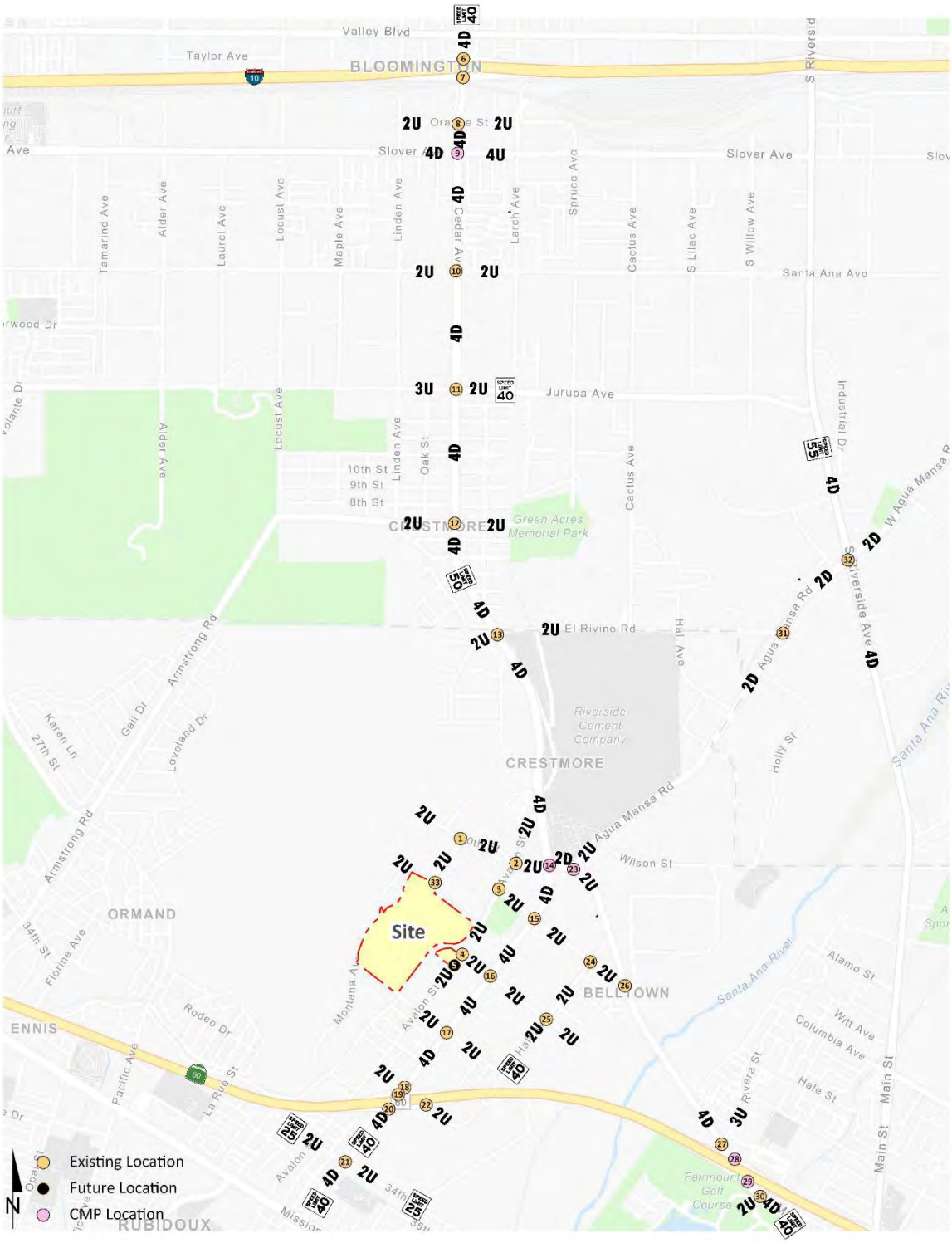
Study area roadways that are classified as Secondary Highways are identified as having two lanes of travel in each direction. The following study area roadway within the City of Jurupa Valley is classified as a 4-lane Secondary Highway:

- Agua Mansa Road

Study area roadways that are classified as Local Streets are identified as having one lane of travel in each direction. The following study area roadways within the City of Jurupa Valley are classified as a 2-lane Local Street:

- 20th Street
- 24th Street
- 28th Street
- 34th Street
- Hall Avenue

EXHIBIT 3-1: EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS



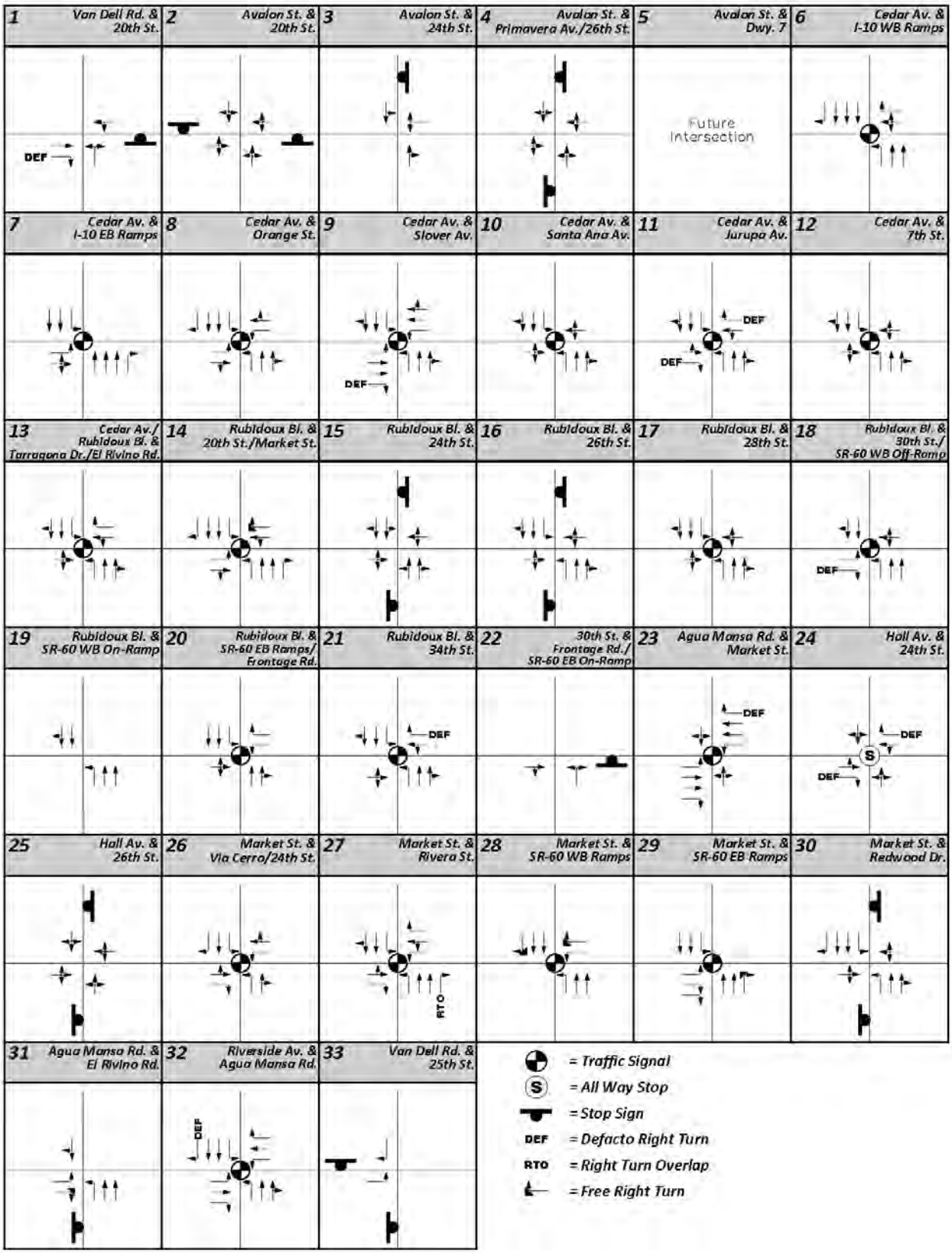

1 Van Dell Rd. & 20th St.
DEF
2 Avalon St. & 20th St.
3 Avalon St. & 24th St.
4 Avalon St. & Primavera Av./26th St.
5 Avalon St. & Dwy. 7
Future Intersection
6 Cedar Av. & I-10 WB Ramps
7 Cedar Av. & I-10 EB Ramps
8 Cedar Av. & Orange St.
9 Cedar Av. & Slover Av.
DEF
10 Cedar Av. & Santa Ana Av.
11 Cedar Av. & Jurupa Av.
DEF
DEF
12 Cedar Av. & 7th St.
13 Cedar Av./ Rubidoux Bl. & Tarragona Dr./El Rivino Rd.
14 Rubidoux Bl. & 20th St./Market St.
15 Rubidoux Bl. & 24th St.
16 Rubidoux Bl. & 26th St.
17 Rubidoux Bl. & 28th St.
18 Rubidoux Bl. & 30th St./ SR-60 WB Off-Ramp
DEF
19 Rubidoux Bl. & SR-60 WB On-Ramp
20 Rubidoux Bl. & SR-60 EB Ramps/ Frontage Rd.
21 Rubidoux Bl. & 34th St.
DEF
22 30th St. & Frontage Rd./ SR-60 EB On-Ramp
23 Agua Mansa Rd. & Market St.
DEF
24 Hall Av. & 24th St.
DEF
S
DEF
25 Hall Av. & 26th St.
26 Market St. & Via Cerro/24th St.
27 Market St. & Rivera St.
RTO
28 Market St. & SR-60 WB Ramps
29 Market St. & SR-60 EB Ramps
30 Market St. & Redwood Dr.
31 Agua Mansa Rd. & El Rivino Rd.
32 Riverside Av. & Agua Mansa Rd.
DEF
33 Van Dell Rd. & 25th St.
= Traffic Signal
S = All Way Stop
= Stop Sign
DEF = Defacto Right Turn
RTO = Right Turn Overlap
= Free Right Turn

EXHIBIT 3-2: CITY OF JURUPA VALLEY CIRCULATION ELEMENT

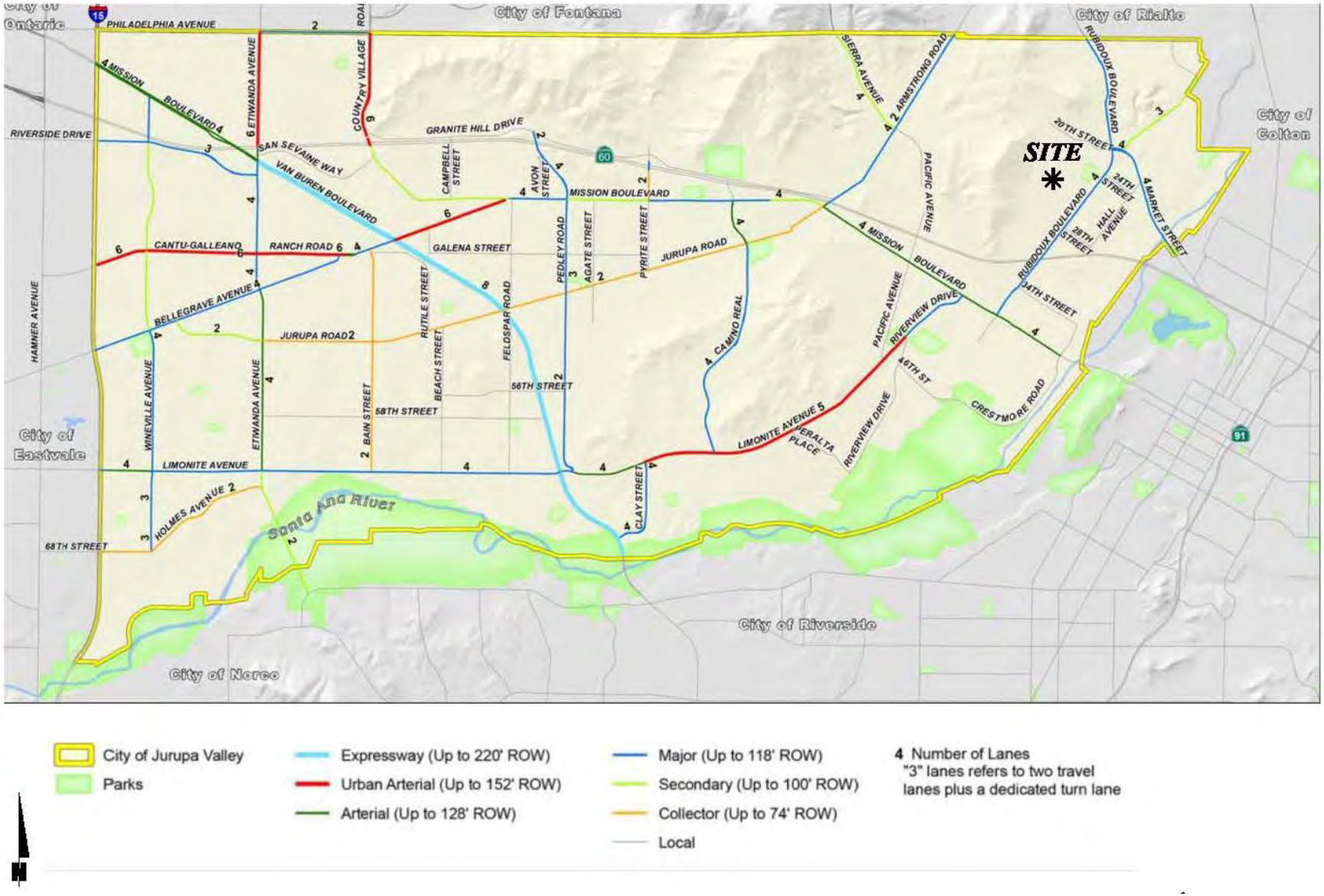


EXHIBIT 3-3: CITY OF JURUPA VALLEY GENERAL PLAN ROADWAY CROSS-SECTIONS

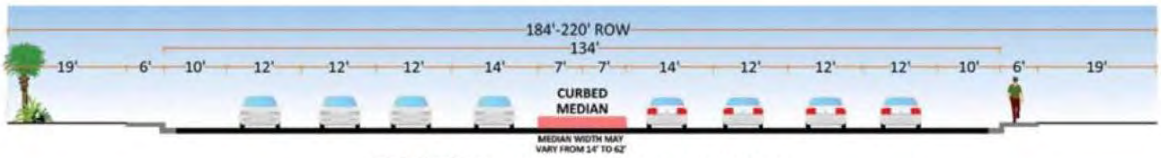


EXHIBIT 1: EXPRESSWAY- 6 TO 8 LANES

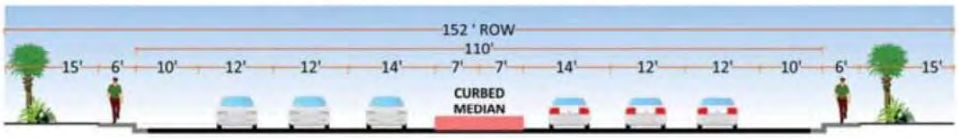


EXHIBIT 2: URBAN ARTERIAL

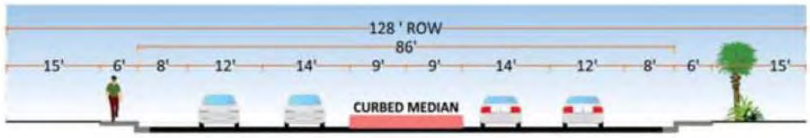


EXHIBIT 3: ARTERIAL

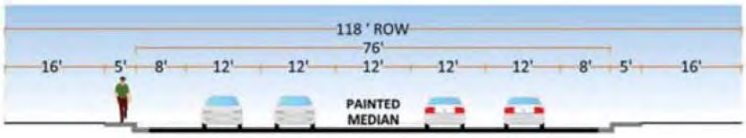


EXHIBIT 4: MAJOR - 4 LANES

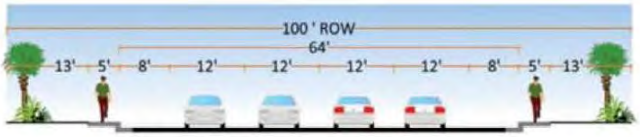


EXHIBIT 5: SECONDARY

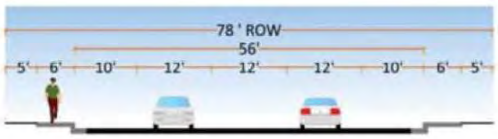


EXHIBIT 6: INDUSTRIAL COLLECTOR

EXHIBIT 7: COLLECTOR

3.3 CITY OF RIVERSIDE, COUNTY OF SAN BERNARDINO, CITY OF RIALTO, AND CITY OF COLTON GENERAL PLAN CIRCULATION ELEMENT

Exhibits 3-4 and 3-5 show the City of Riverside's General Plan Circulation Element and roadway cross-sections, respectively. Exhibits 3-6 and 3-7 show the County of San Bernardino's General Plan Circulation Element and roadway cross-sections, respectively, while Exhibits 3-8 and 3-9 show the City of Rialto's General Plan Circulation Element and roadway cross-sections, respectively. Exhibits 3-10 and 3-11 show the City of Colton's General Plan Circulation Element and roadway cross-sections, respectively.

3.4 BICYCLE & PEDESTRIAN FACILITIES

The City of Jurupa Valley General Plan currently does not include an existing and future trails and bikeway system. While the City's Master Plan on pedestrian, bicycle, and trails facilities are not provided within the City's General Plan, they are provided within other documents, such as the City of Jurupa Valley Circulation Master Plan for Bicyclists and Pedestrians. Exhibit 3-12 shows the City of Jurupa Valley Bicycle and Pedestrian Plan, Exhibit 3-13 shows the City of Riverside trails and bikeways, Exhibit 3-14 shows the City of Rialto bicycle routes, and Exhibit 3-15 shows the City of Colton General Plan bicycle plan. Existing pedestrian facilities within the study area are shown on Exhibit 3-16. Field observations conducted in October 2022 indicate nominal pedestrian and bicycle activity within the study area.

3.5 TRANSIT SERVICE

The Riverside Transit Agency (RTA) serves the City of Jurupa Valley. Transit service is reviewed and updated by RTA periodically to address ridership, budget, and community demand needs. The study area within the County of San Bernardino, City of Rialto, and City of Colton is currently served by Omnitrans, a public transit agency serving various jurisdictions within San Bernardino County. The City of Jurupa Valley Transit Routes is shown on Exhibit 3-17 and the City of Colton Transit Plan is shown on Exhibit 3-18. Based on a review of the existing transit routes within the vicinity of the proposed Project, RTA Route 29 currently operates on Rubidoux Boulevard and would likely serve the Project site. RTA Route 29 also runs along Market Street and 24th Street. RTA Route 204 runs along the SR-60 Freeway and RTA Route 49 runs along Mission Boulevard to the south. The northern portion of the study area is served by Omnitrans within the County of San Bernardino. Existing transit routes in the vicinity of the study area are illustrated on Exhibit 3-19. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate. As such, it is recommended that the applicant work in conjunction with RTA to potentially provide additional bus service to the site.

3.6 TRUCK ROUTES

The City of Jurupa Valley's General Plan does not provide designated truck routes. The City of Rialto truck routes are shown on Exhibit 3-20. Truck routes for the proposed Project have been determined based on discussions with City staff. These truck routes have been utilized in terms of routing proposed Project traffic throughout the study area.

EXHIBIT 3-4: CITY OF RIVERSIDE GENERAL PLAN CIRCULATION ELEMENT

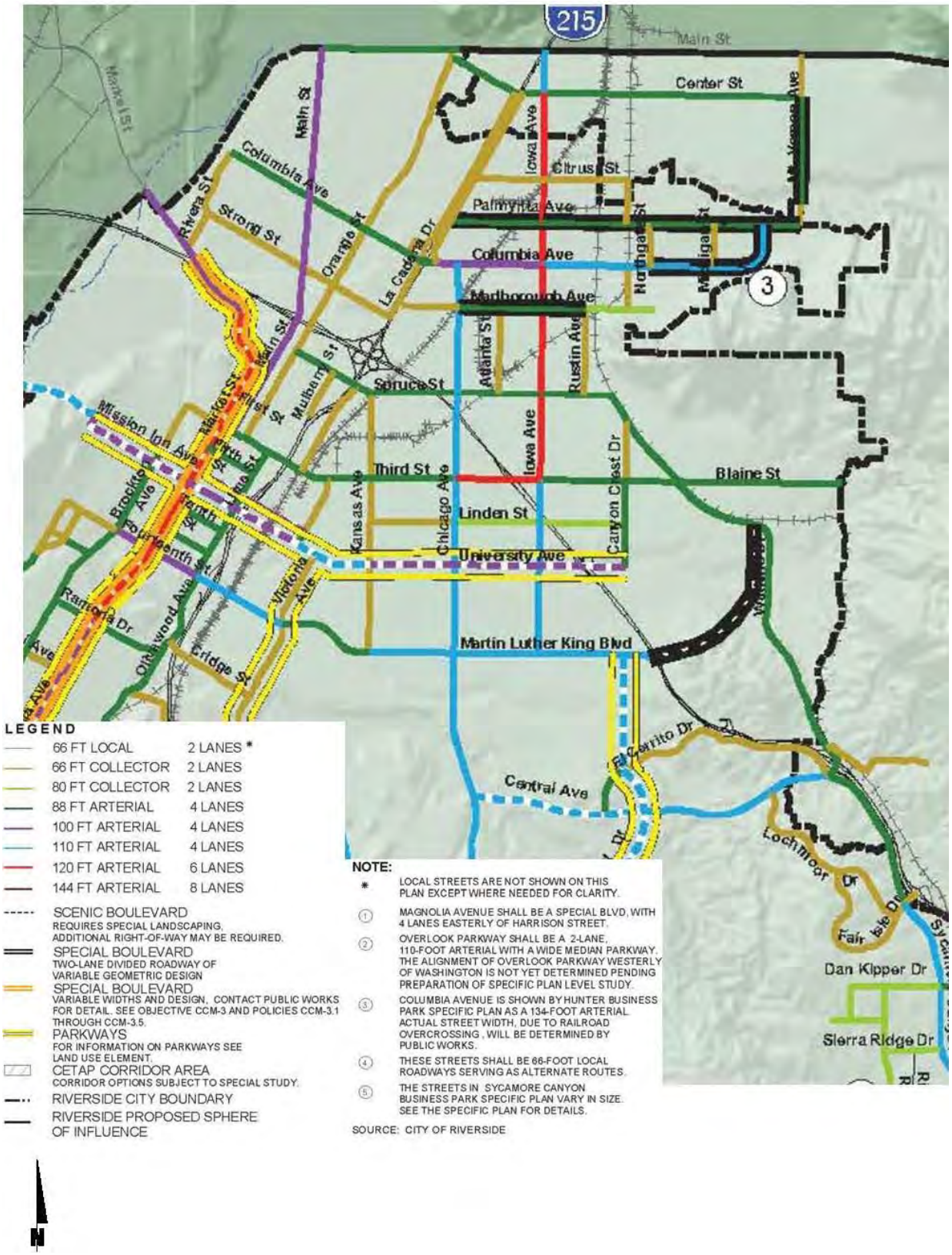
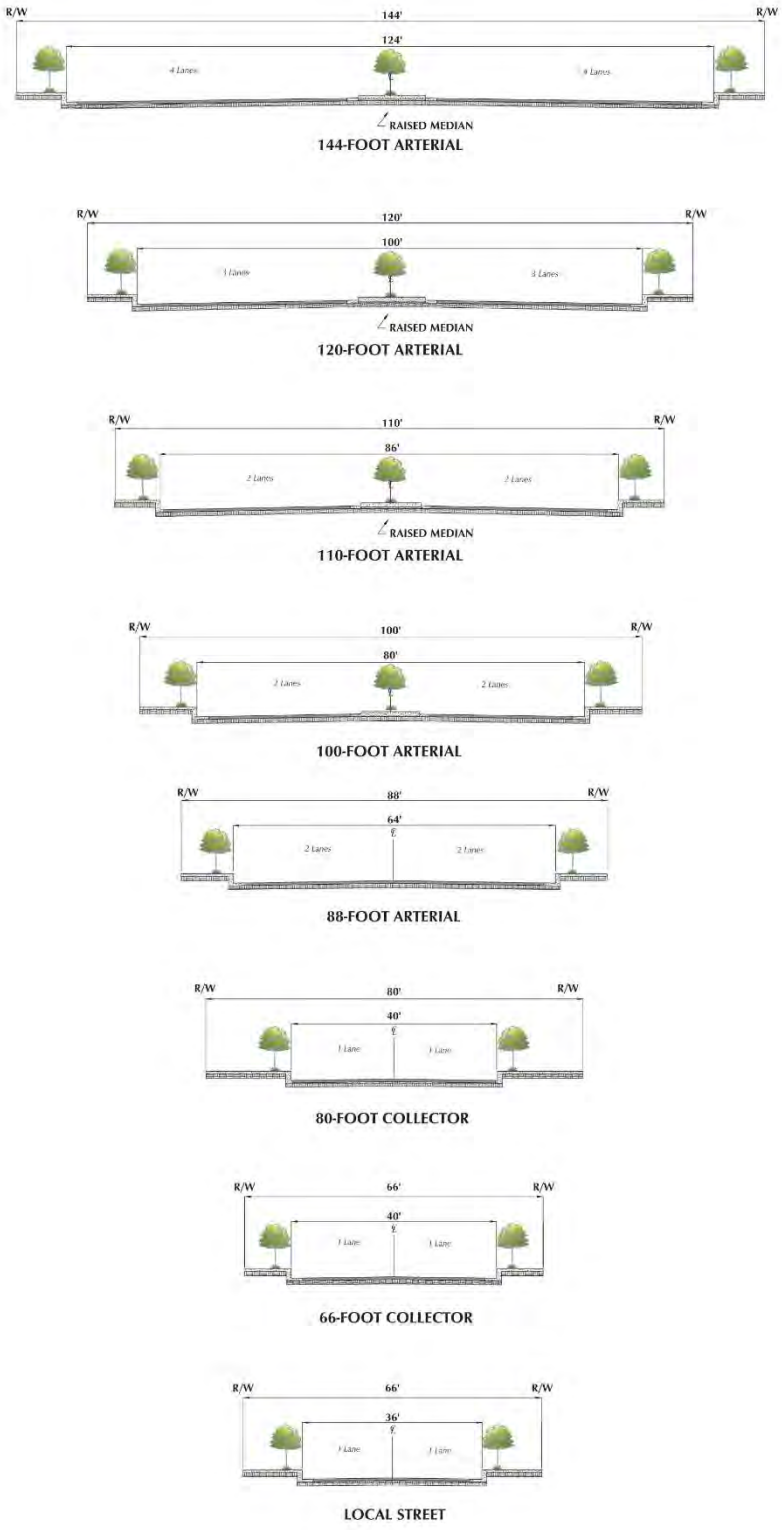


EXHIBIT 3-5: CITY OF RIVERSIDE GENERAL PLAN ROADWAY CROSS-SECTIONS



SOURCE: CITY OF RIVERSIDE, 2007

EXHIBIT 3-6: COUNTY OF SAN BERNARDINO GENERAL PLAN CIRCULATION ELEMENT

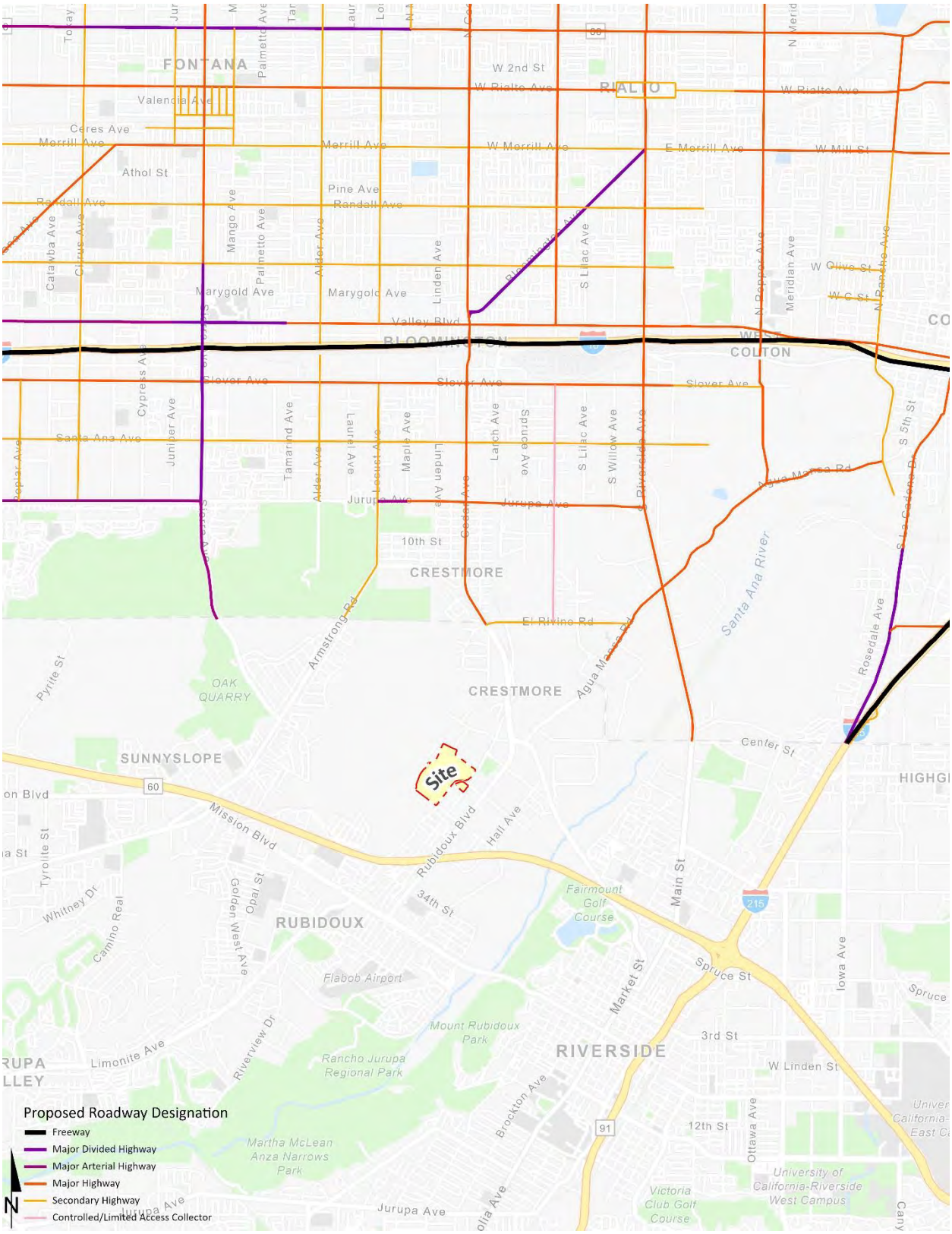
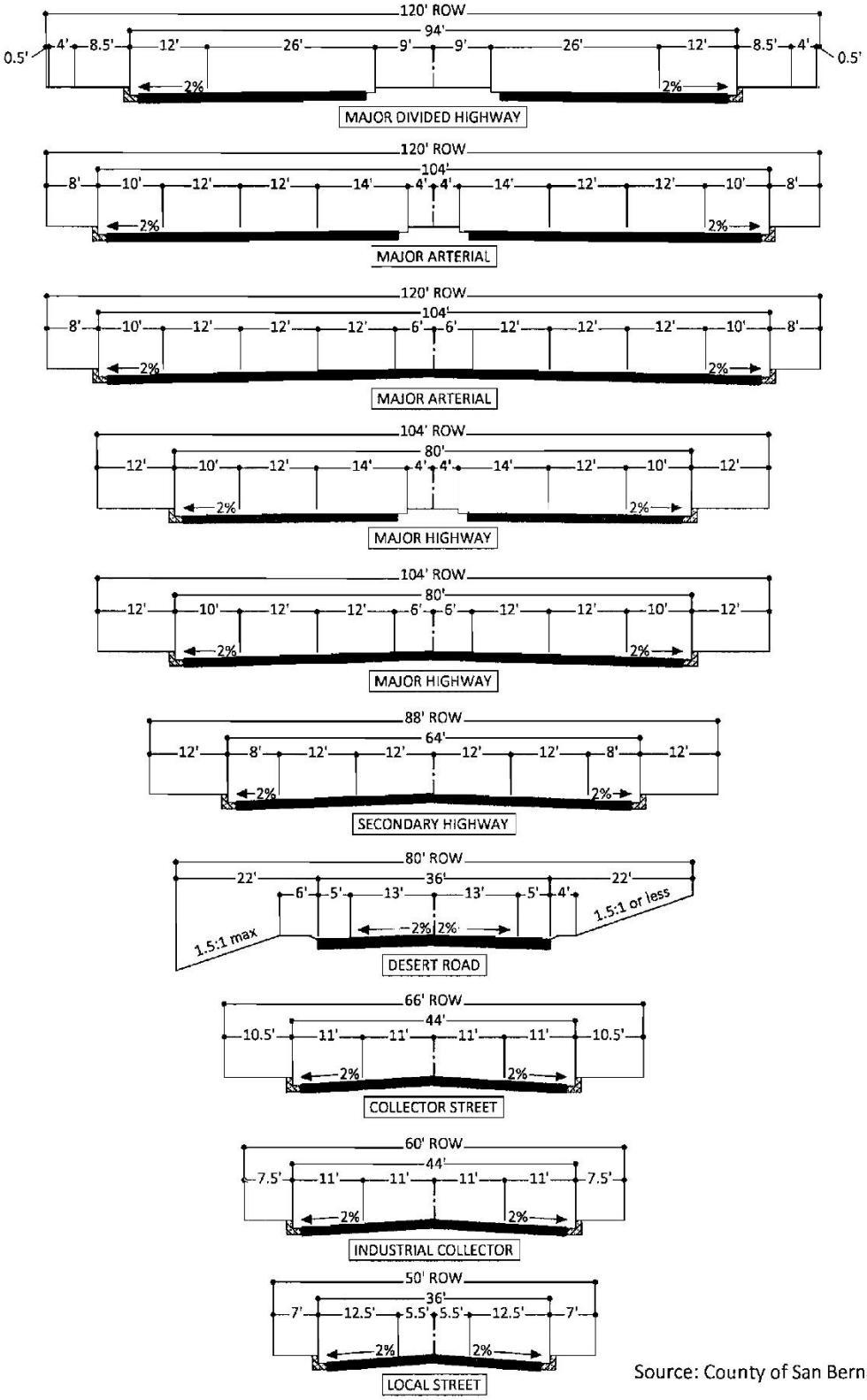
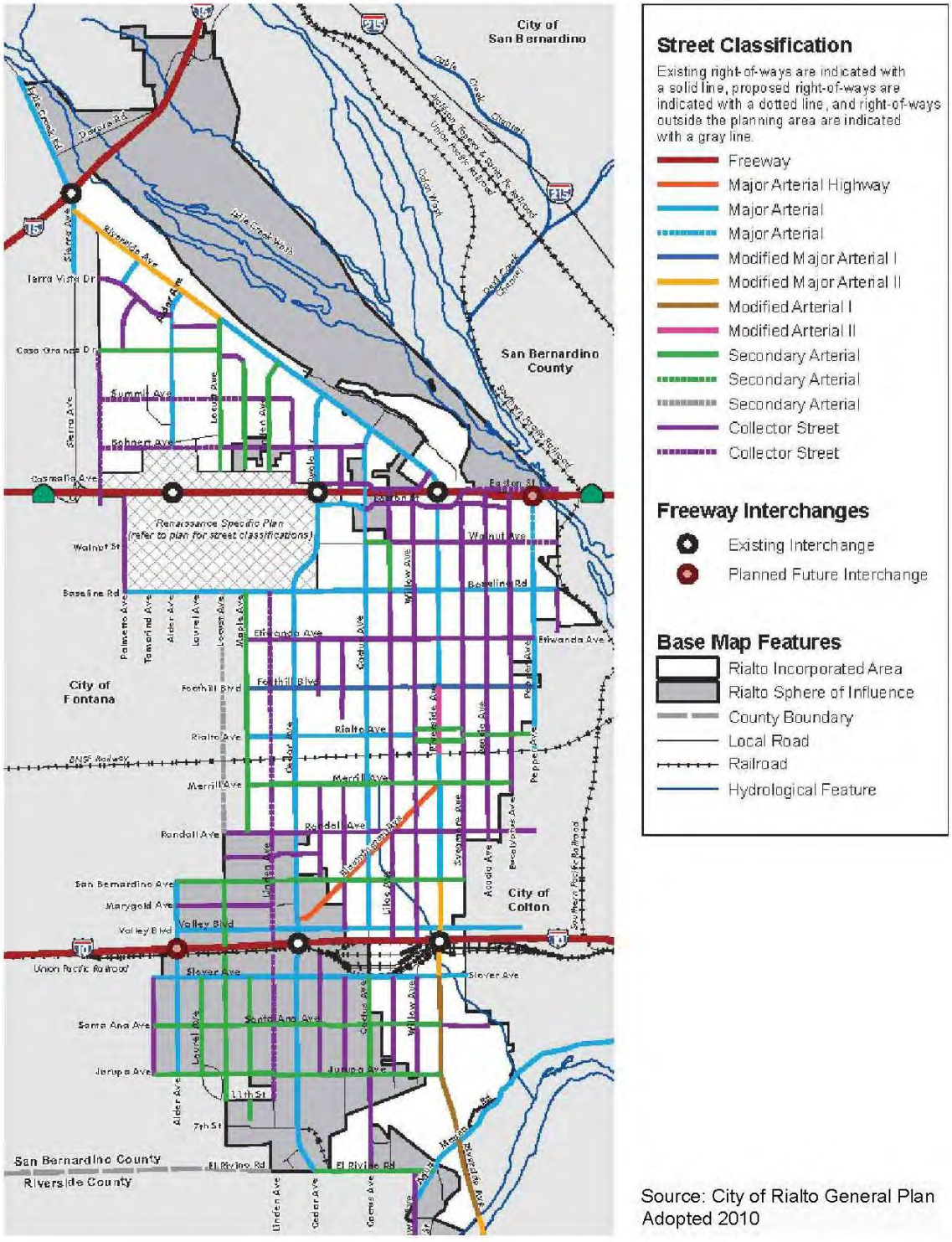


EXHIBIT 3-7: COUNTY OF SAN BERNARDINO GENERAL PLAN ROADWAY CROSS-SECTIONS



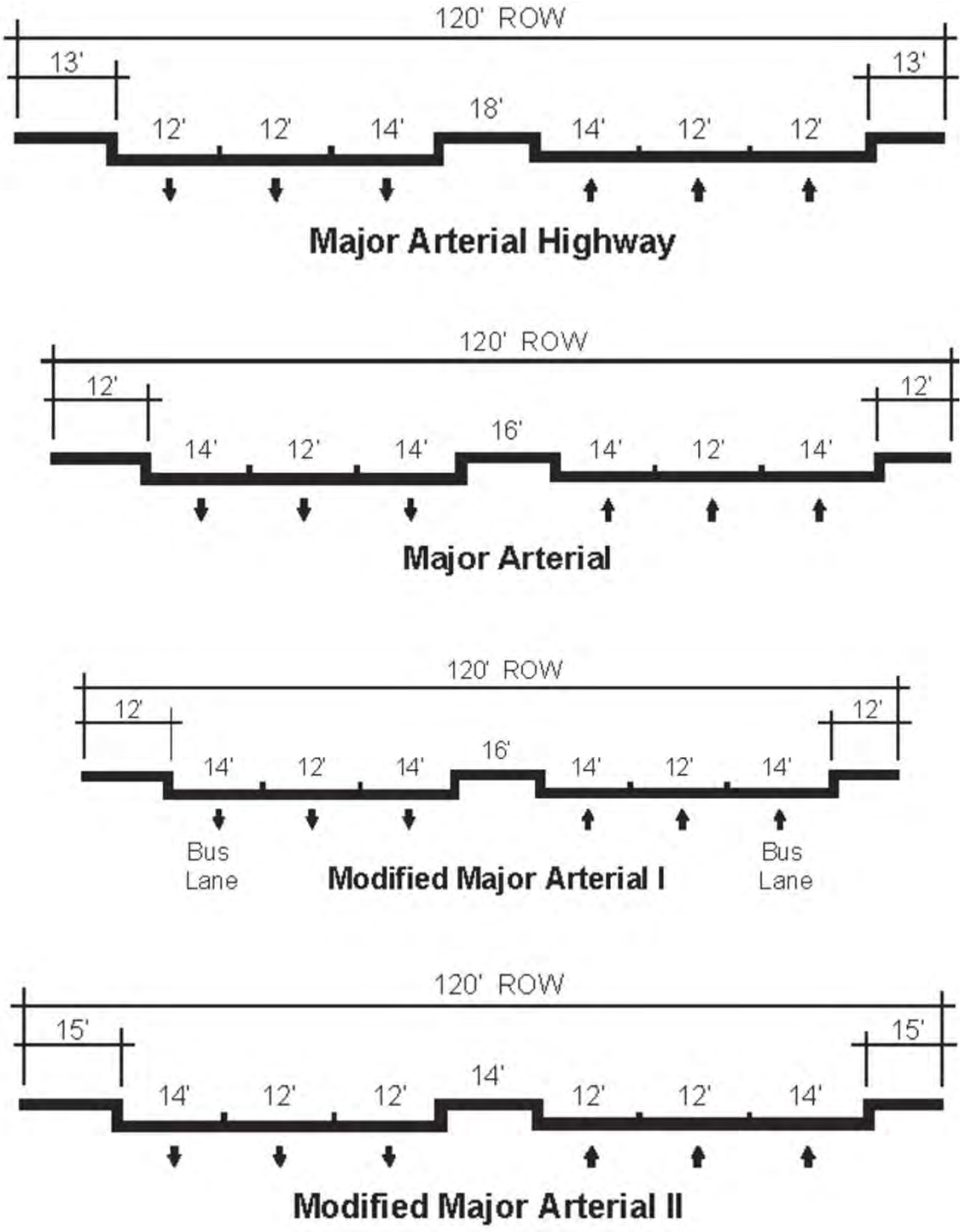
Source: County of San Bernardino

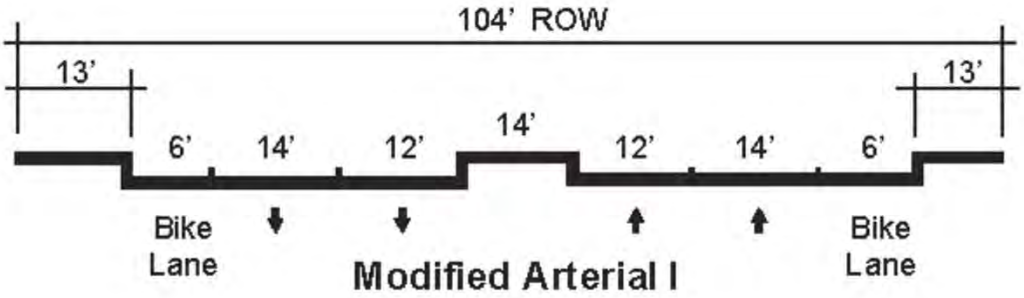
EXHIBIT 3-8: CITY OF RIALTO GENERAL PLAN CIRCULATION ELEMENT



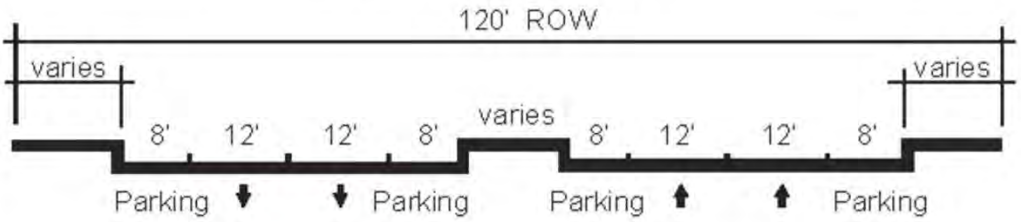
Source: City of Rialto General Plan Adopted 2010

EXHIBIT 3-9: CITY OF RIALTO GENERAL PLAN ROADWAY CROSS-SECTIONS

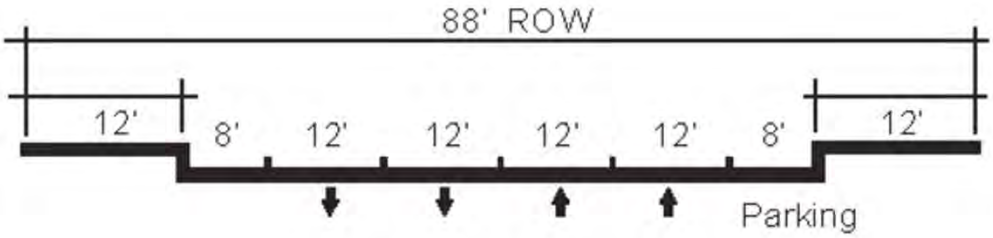




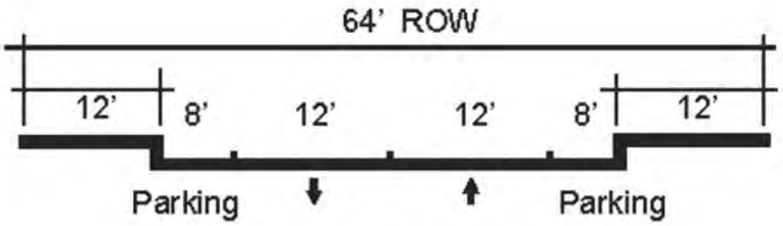
Modified Arterial I



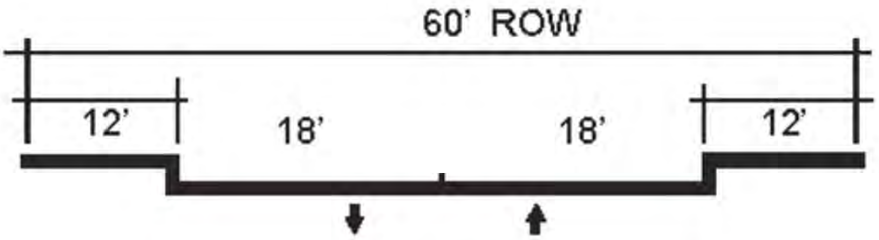
Modified Arterial II



Secondary Arterial

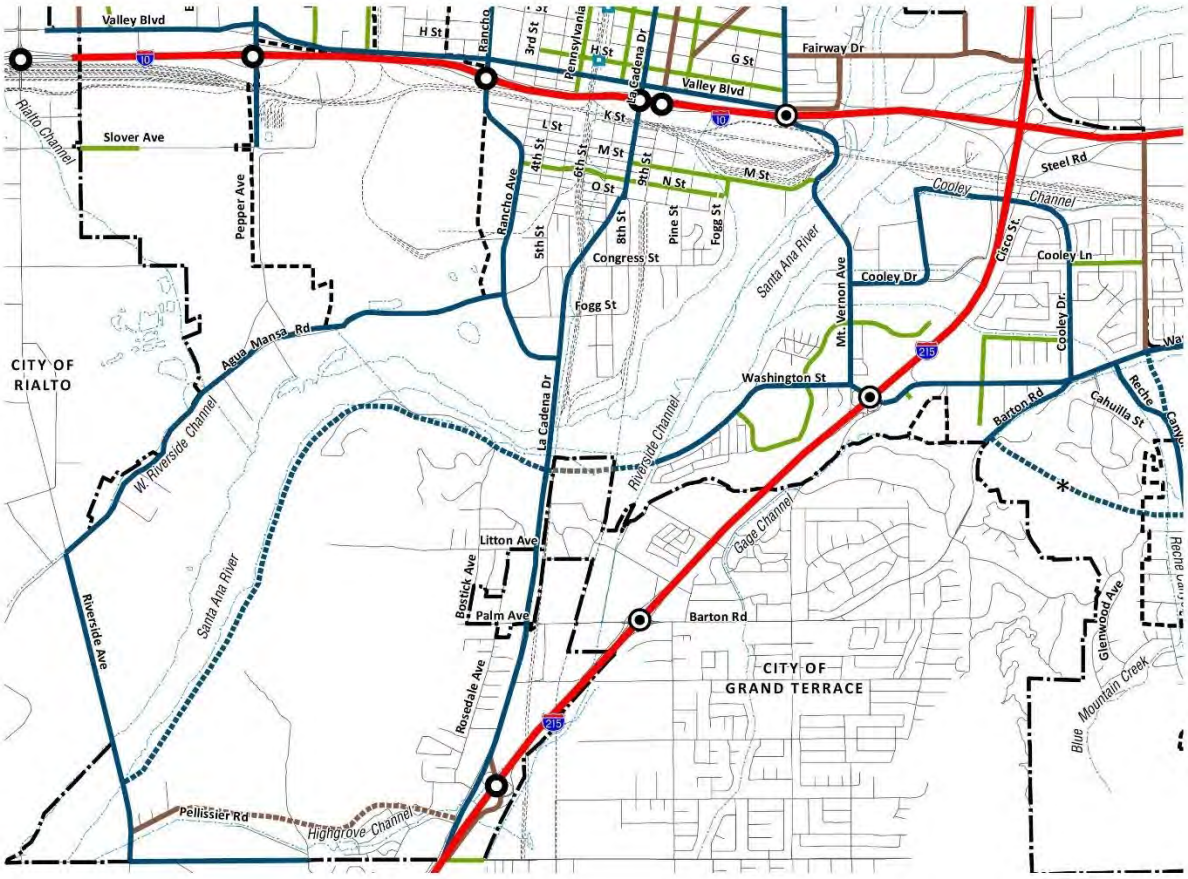


Collector



Local

EXHIBIT 3-10: CITY OF COLTON GENERAL PLAN CIRCULATION ELEMENT



Circulation Plan

- Freeway
- Major Arterial
- Planned Arterial
- Secondary Arterial
- Planned Secondary
- Collector Street
- Planned Collector
- Planned Roadway Located in Another City

Freeway Interchanges

- Interchanges
- Interchanges with Planned Improvements

Street Closure

- Street Closure (BSNF Quiet Zone Project)

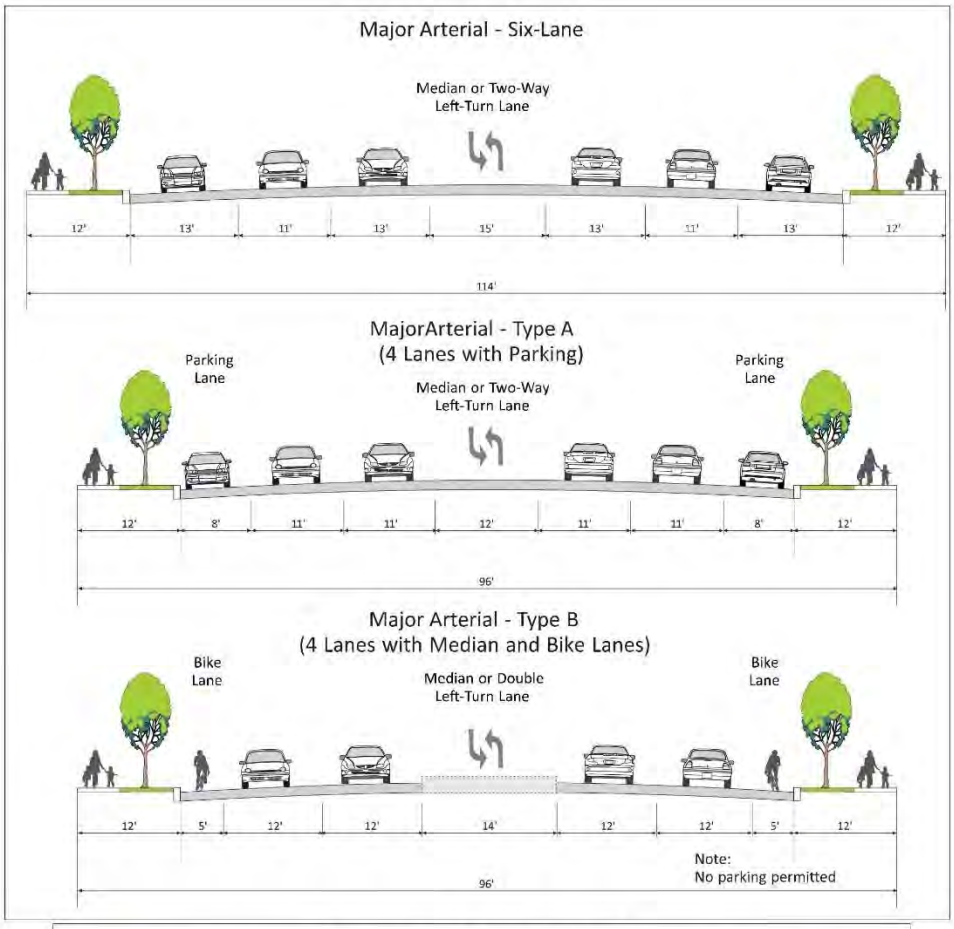
Boundaries

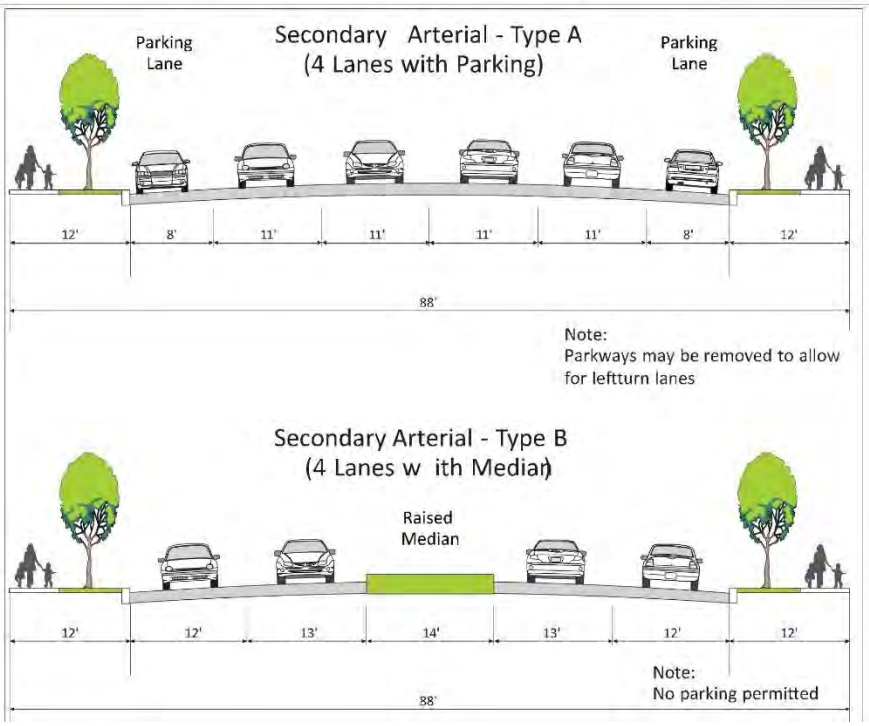
- City Boundary
- Sphere of Influence
- Railroad Tracks
- Watercourse

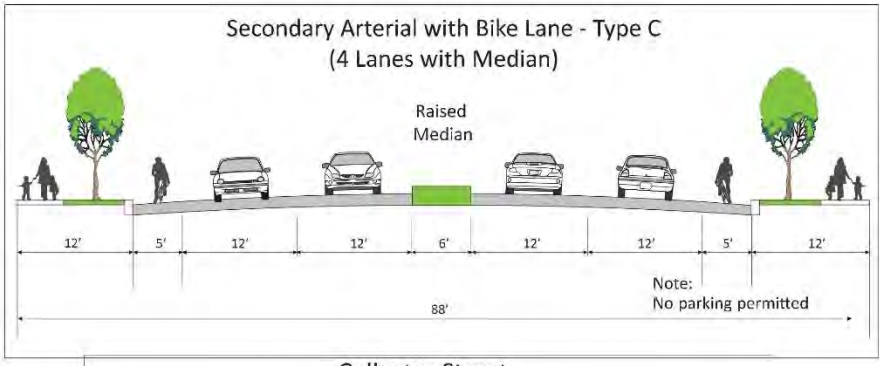
* Conceptual roadway location. Final roadway location to be determined on proposed subdivision design.

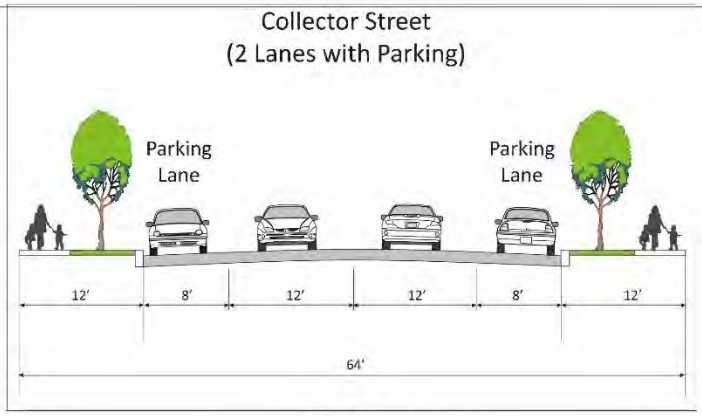
N

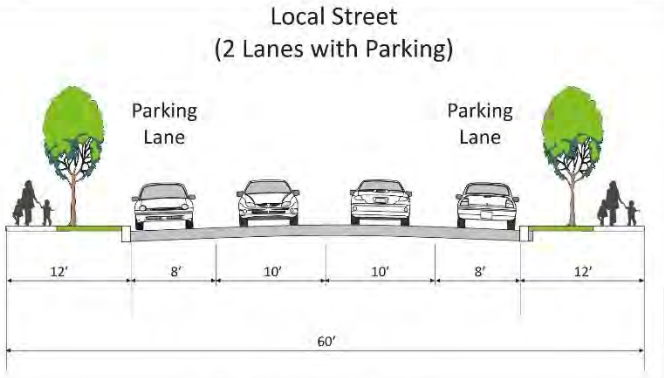
EXHIBIT 3-11: CITY OF COLTON GENERAL PLAN CROSS-SECTIONS






Secondary Arterial with Bike Lane - Type C
(4 Lanes with Median)
Raised
Median
12'
5'
12'
12'
6'
12'
12'
5'
12'
88'
Note:
No parking permitted


Collector Street
(2 Lanes with Parking)
Parking
Lane
Parking
Lane
12'
8'
12'
12'
8'
12'
64'


Local Street
(2 Lanes with Parking)
Parking
Lane
Parking
Lane
12'
8'
10'
10'
8'
12'
60'

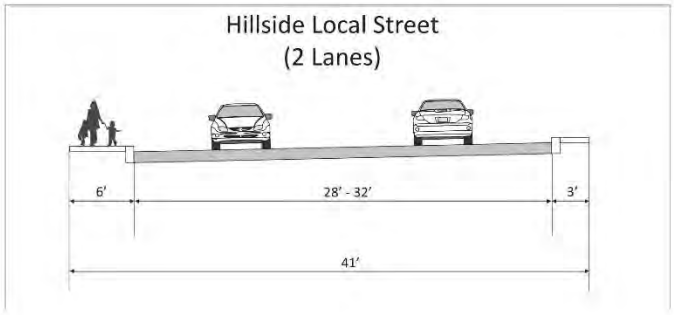

Hillside Local Street
(2 Lanes)
6'
28' - 32'
3'
41'

EXHIBIT 3-12: CITY OF JURUPA VALLEY BICYCLE AND PEDESTRIAN PLAN

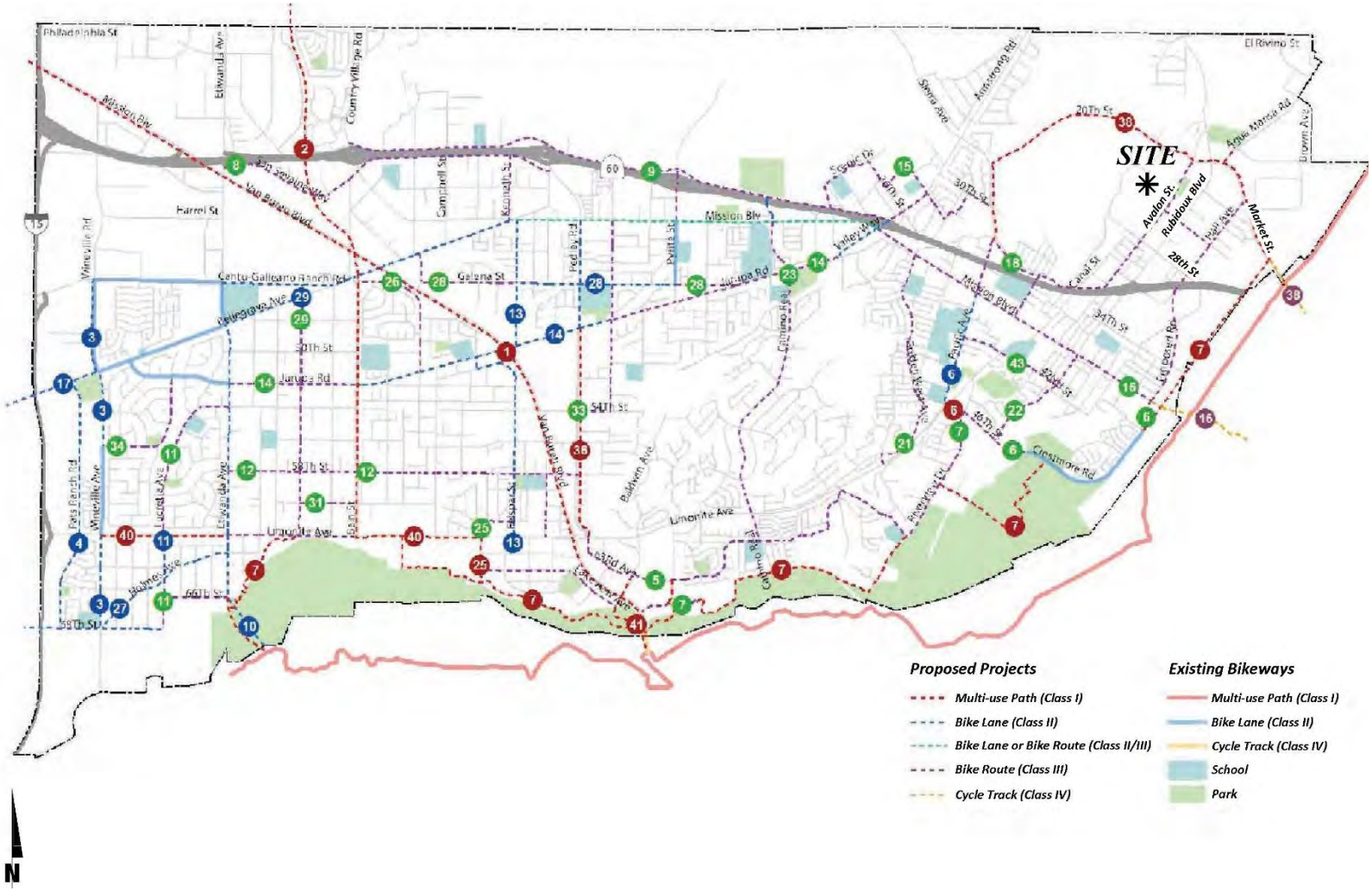
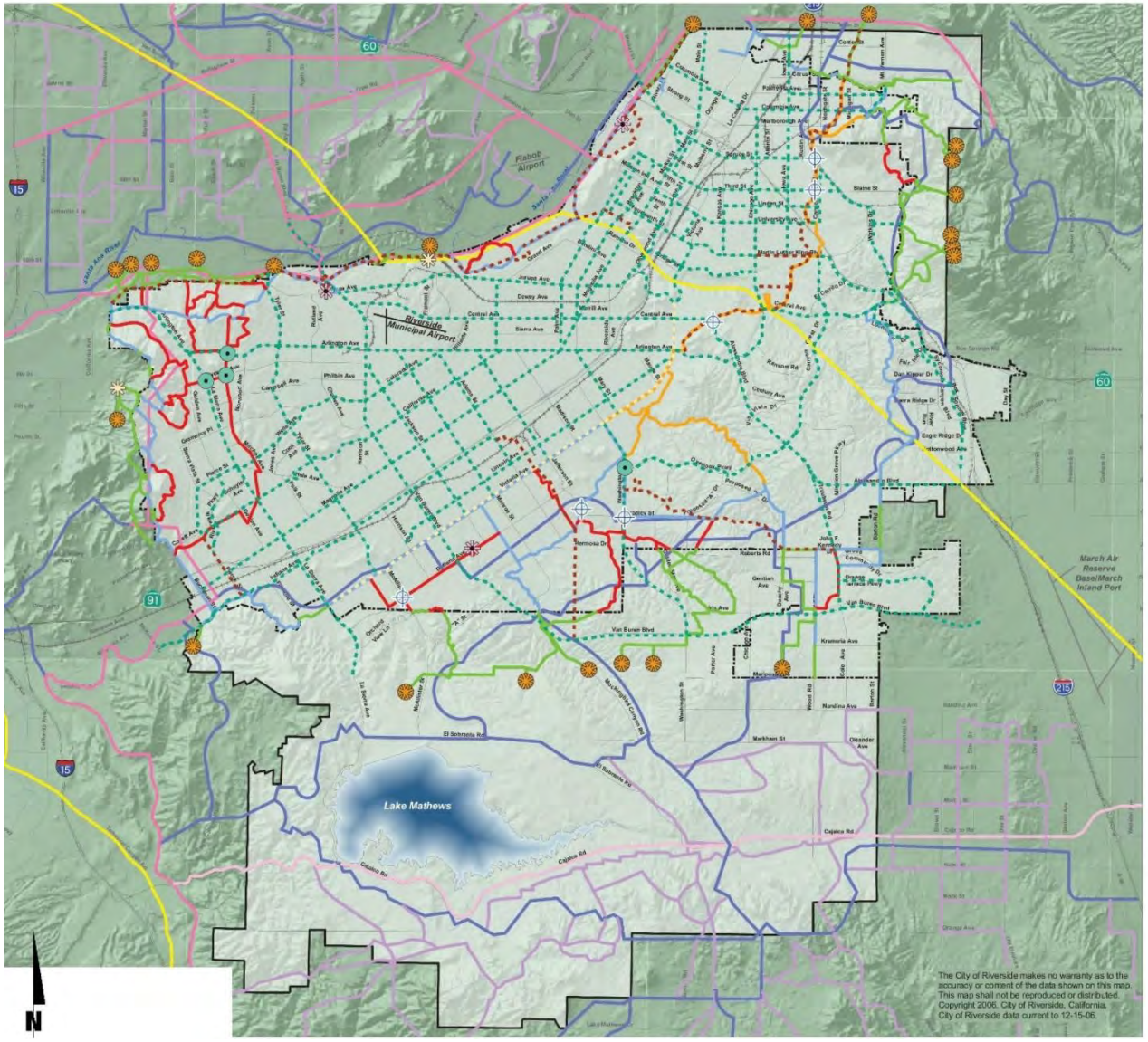


EXHIBIT 3-13: CITY OF RIVERSIDE TRAILS AND BIKEWAYS



CITY OF RIVERSIDE GENERAL PLAN 2025

LEGEND

CITY TRAIL POINTS
- STAGING AREAS EXISTING FACILITIES
- STAGING AREAS PROPOSED FACILITIES
- CONNECTION TO COUNTY DESIGNATED TRAILS
- TRAIL CROSSING PROPOSED STOP SIGN
- TRAIL CROSSING PROPOSED TRAFFIC SIGNAL

CITY TRAILS
- PRIMARY - EQUESTRIAN, BIKE & PEDESTRIAN TRAIL
- SECONDARY - EQUESTRIAN, BIKE & PEDESTRIAN TRAIL
- SECONDARY - NO EQUESTRIAN
- IN ADJACENT JURISDICTION

CITY BIKEWAYS
- CLASS 1
- CLASS 1&2
- CLASS 2

RIVERSIDE COUNTY TRAILS
- CLASS 1 BIKE PATH
- CLASS 1 BIKE PATH/REGIONAL TRAIL
- COMMUNITY TRAIL
- REGIONAL TRAIL
- HISTORIC TRAIL

- RIVERSIDE CITY BOUNDARY
- RIVERSIDE PROPOSED SPHERE OF INFLUENCE

SOURCE: CITY OF RIVERSIDE AND RIVERSIDE COUNTY GIS DATA

County Disclaimer: The County of Riverside assumes no warranty or legal responsibility for the information contained on this map. Data and information represented on this map is subject to change and may not be complete or appropriate for all purposes. County GIS and other sources should be queried for the most current information. Do not copy or resell this map. Horizontal accuracy: Parcel data is of mapping grade (quality) only and does not represent trustworthy locations or legal boundaries. User assumes all risk of use of this product. Copyright © 2006 county of Riverside, TLMA-GIS.

NOTE: Currently the City and County trails are not completely coordinated. The County Trails Plan is a conceptual plan at this time and many of the City's trails have not yet been built. An implementation tool of this General Plan is to work with the County to coordinate the RCIP and the City's General Plan (Tool #10).

EXHIBIT 3-14: CITY OF RIALTO BICYCLE ROUTES

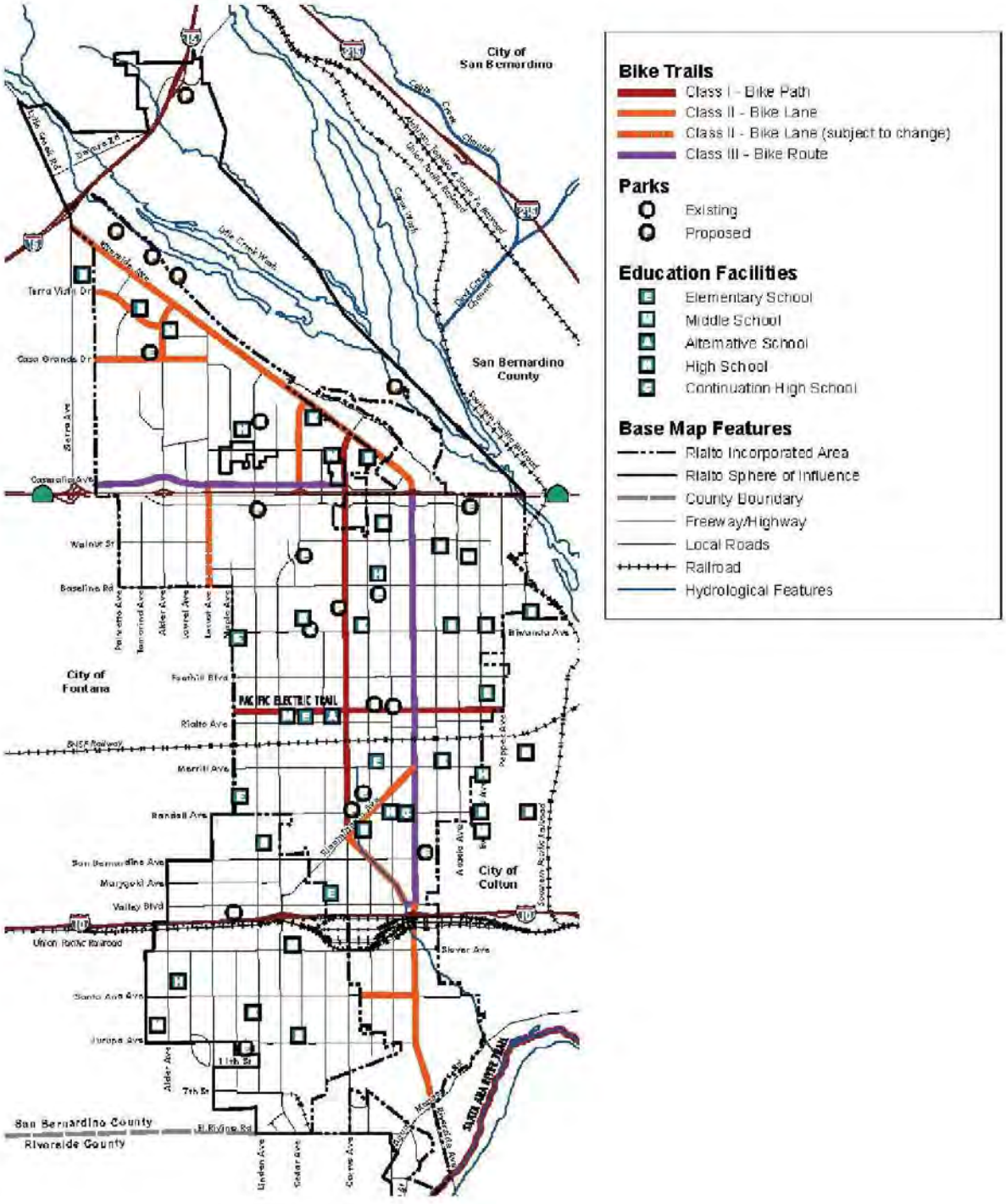


EXHIBIT 3-15: CITY OF COLTON GENERAL PLAN BICYCLE PLAN

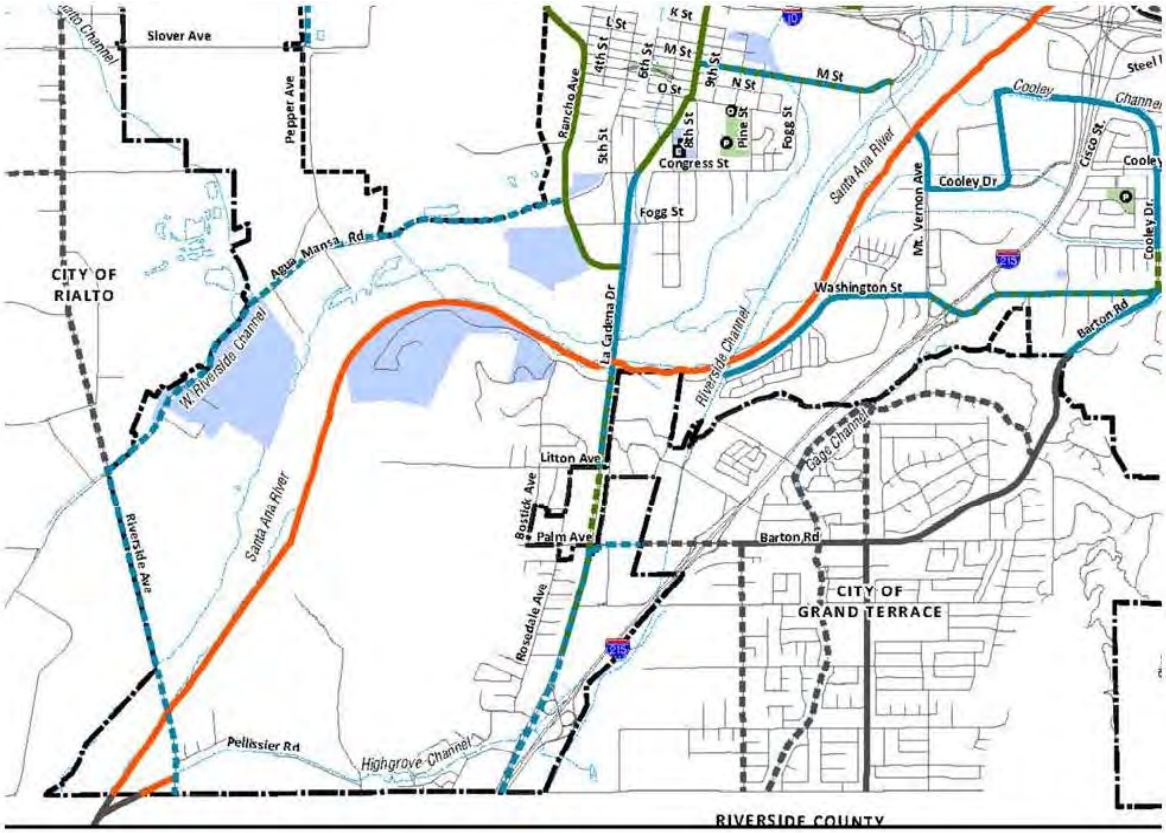


EXHIBIT 3-16: EXISTING PEDESTRIAN FACILITIES

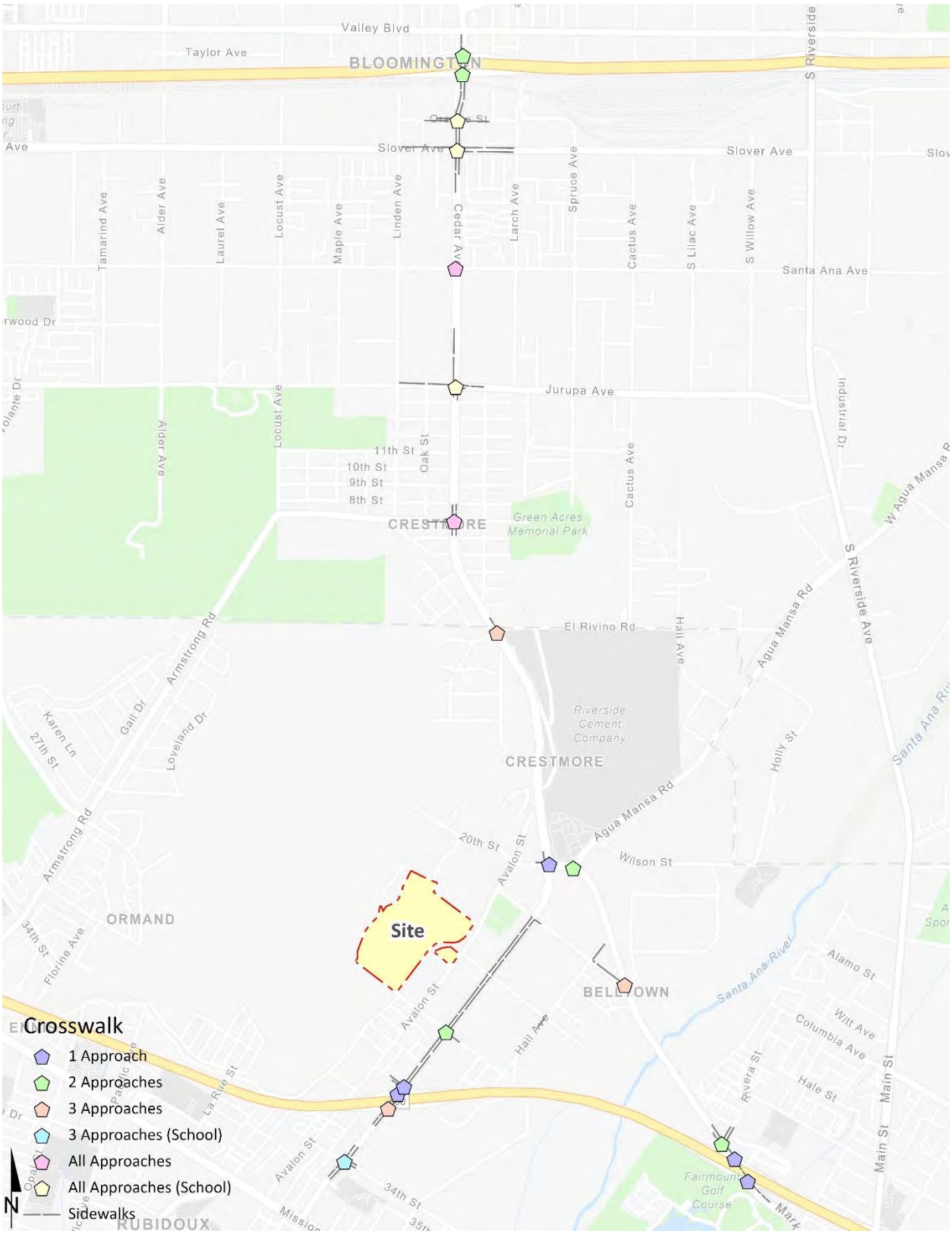


EXHIBIT 3-17: CITY OF JURUPA VALLEY TRANSIT ROUTES

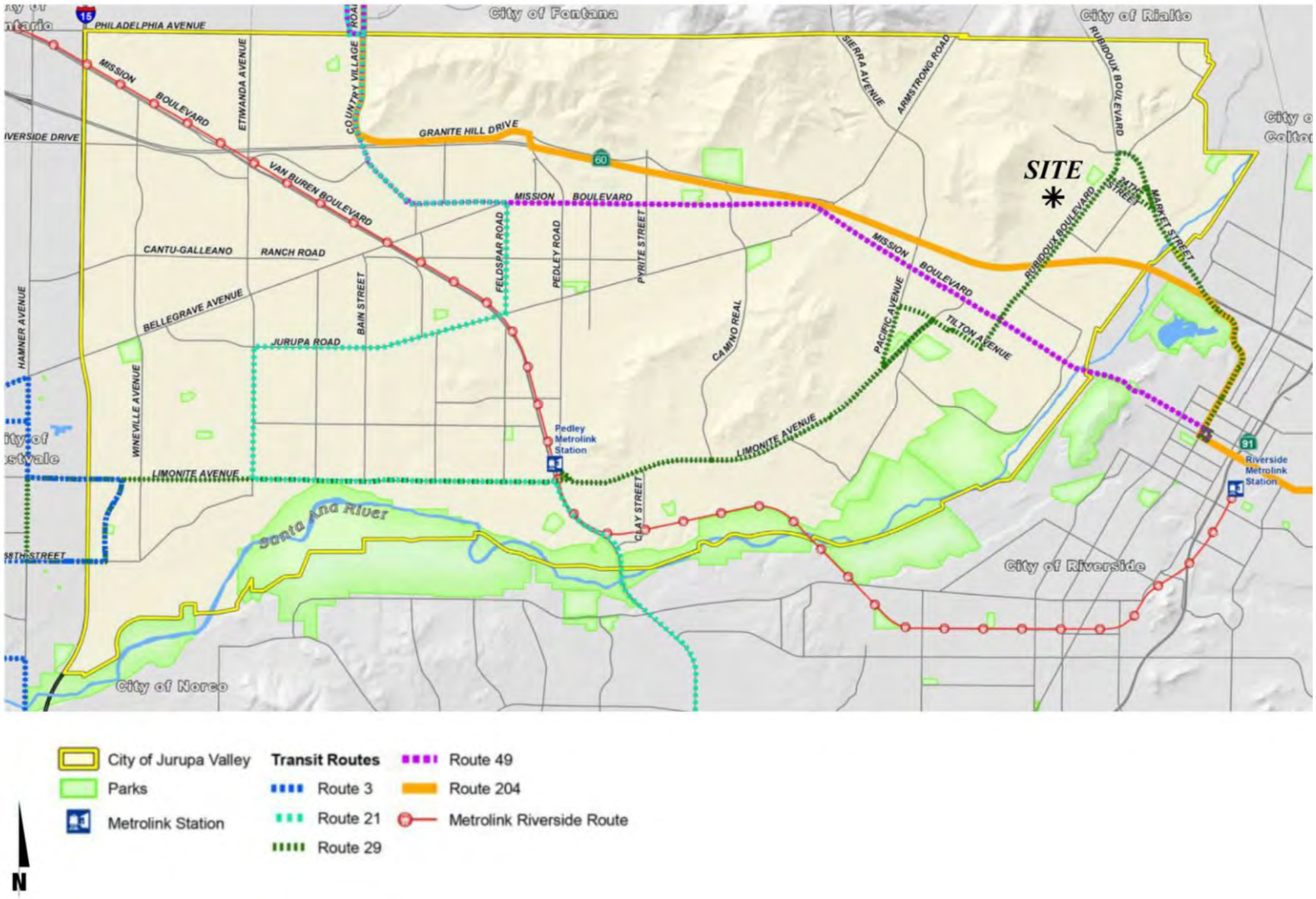


EXHIBIT 3-18: CITY OF COLTON TRANSIT PLAN

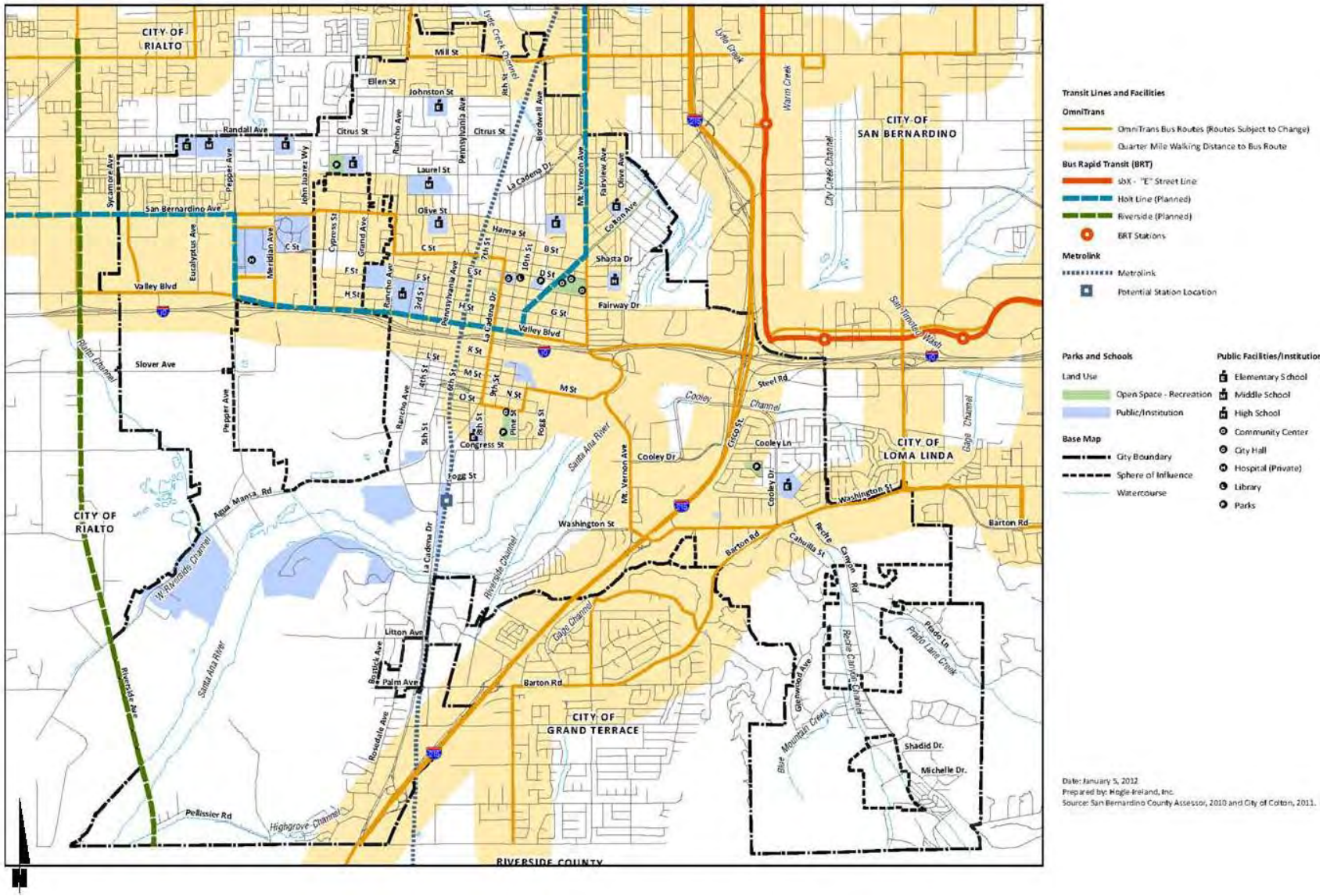


EXHIBIT 3-19: EXISTING TRANSIT ROUTES

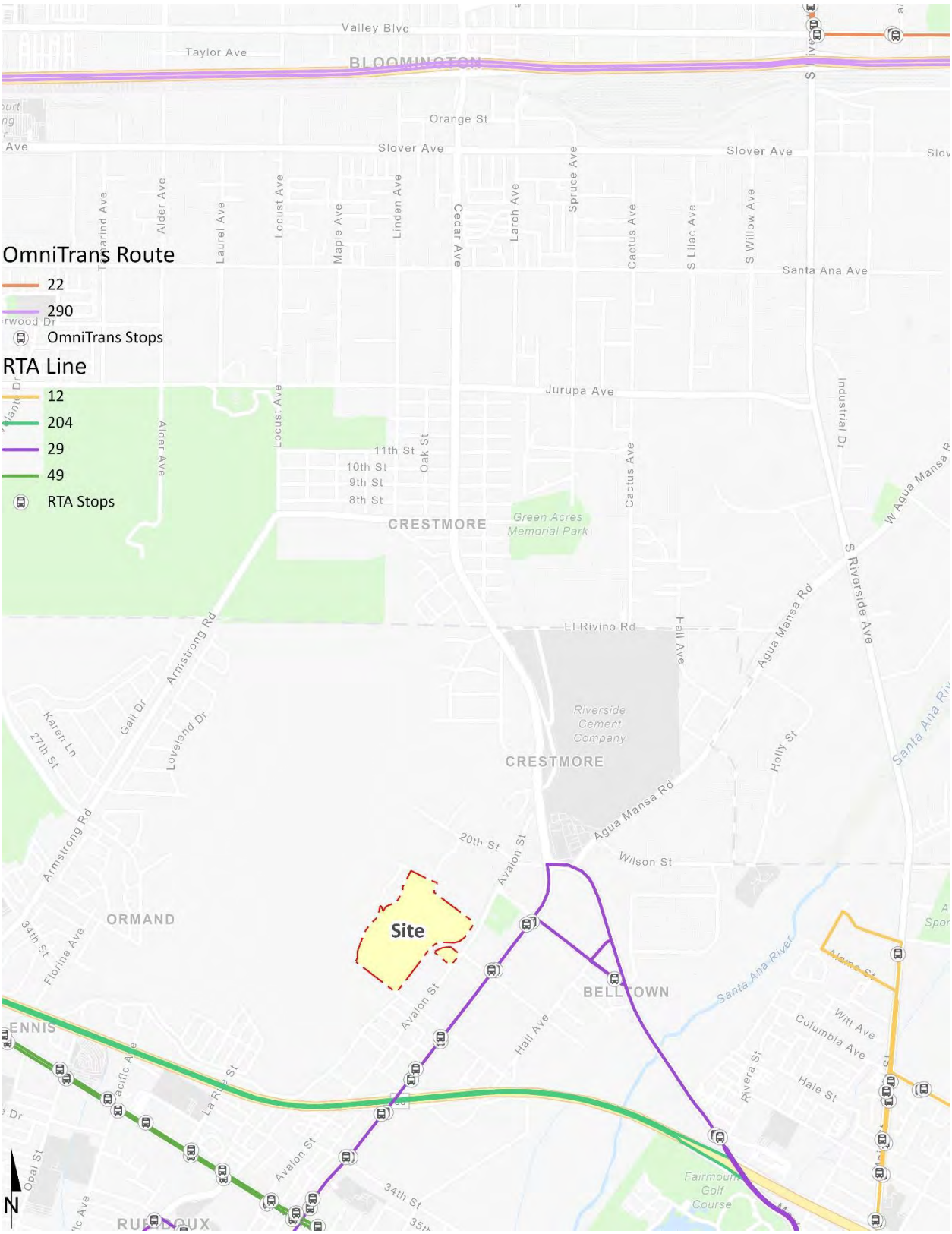
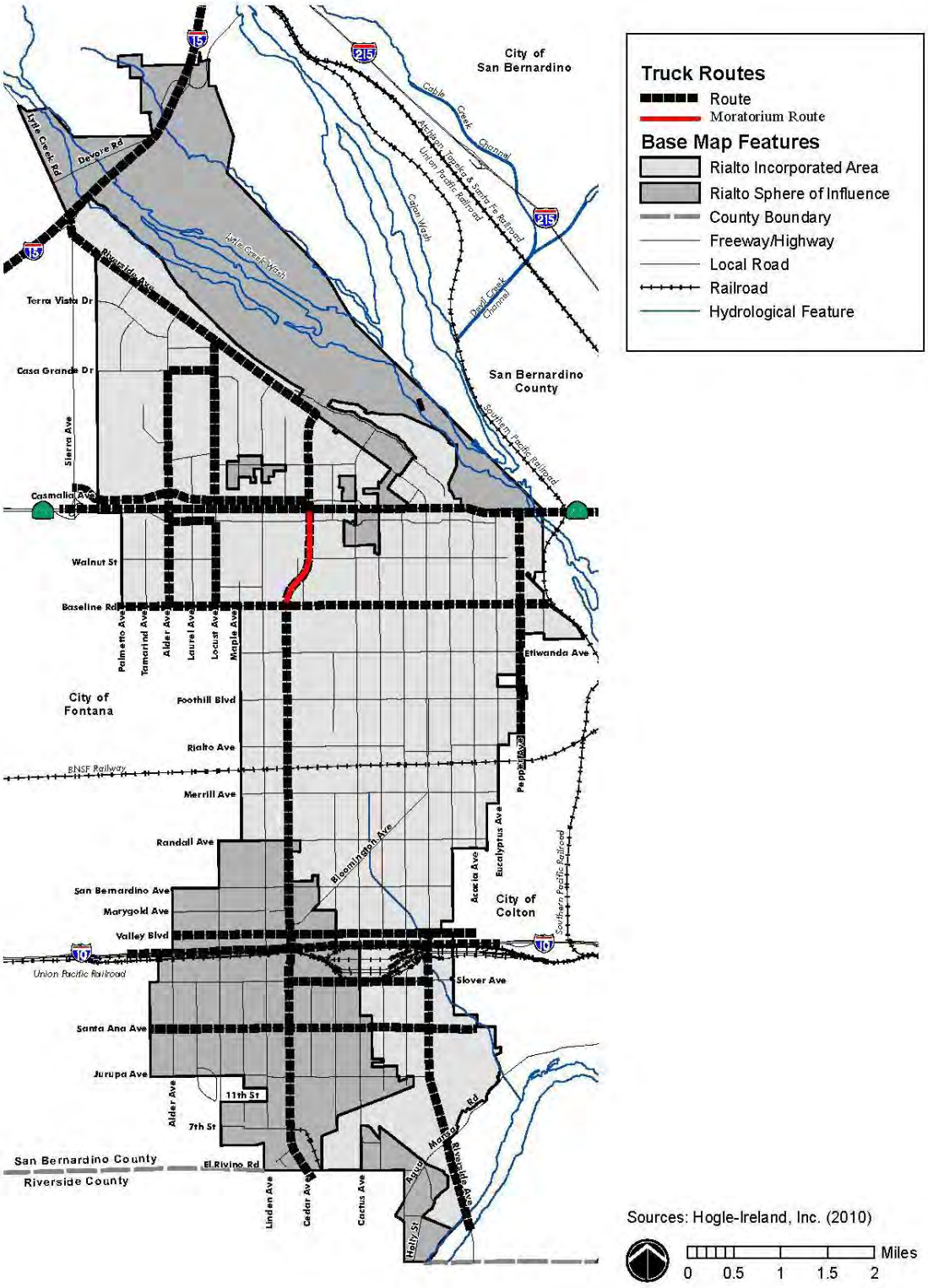


EXHIBIT 3-20: CITY OF RIALTO TRUCK ROUTES



3.7 EXISTING (2022) TRAFFIC COUNTS

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data collected in October 2022. The following peak hours were selected for analysis:

- Weekday AM Peak Hour (peak hour between 6:30 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 3:30 PM and 6:00 PM)

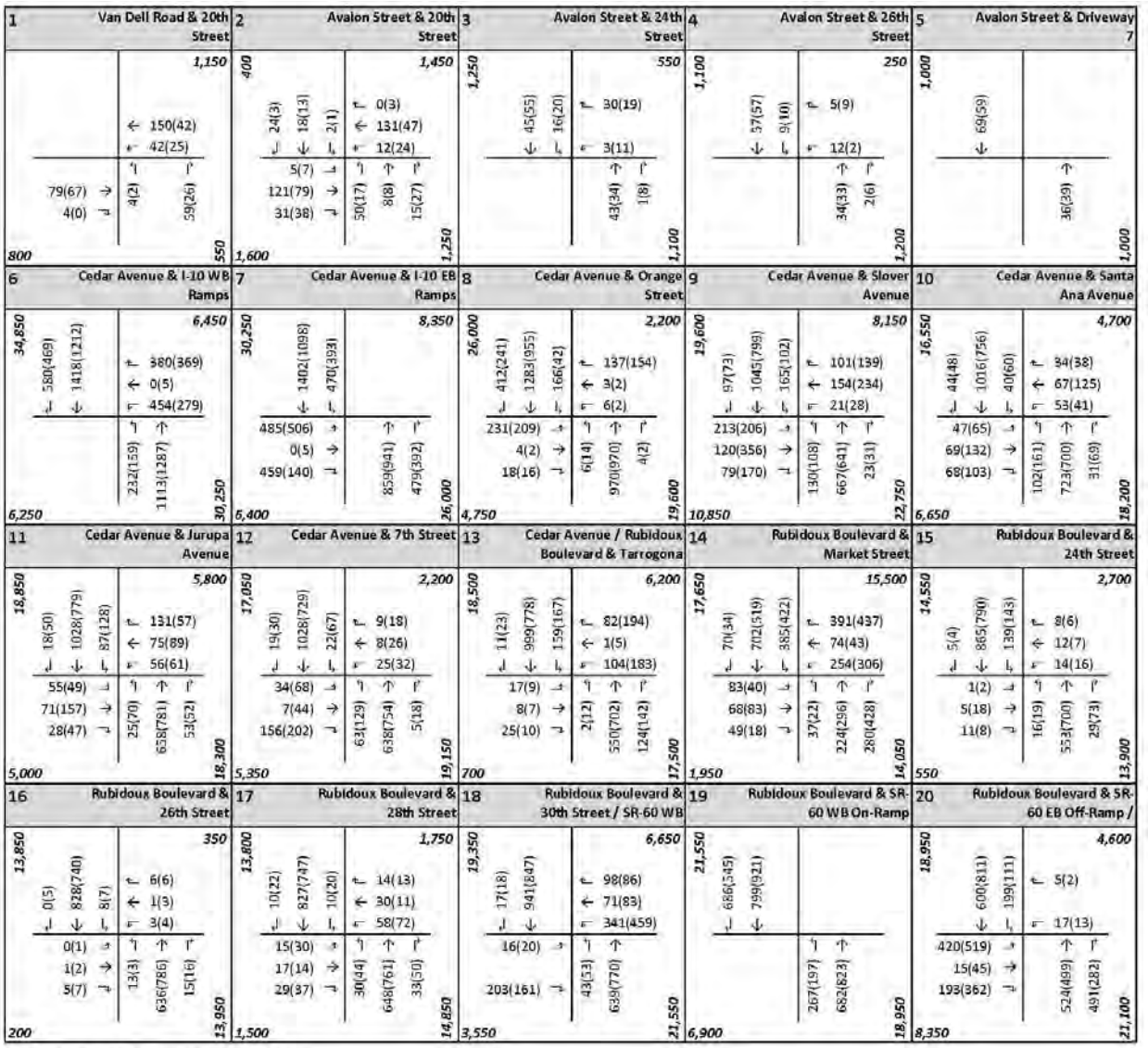
The 2022 weekday AM and weekday PM peak hour count data is representative of typical weekday peak hour traffic conditions in the study area. There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity or detour routes and near-by schools were in session and operating on normal schedules. As such, no additional adjustments were made to the traffic counts to establish the baseline condition. The raw manual peak hour turning movement traffic count data sheets are included in Appendix 3.1.

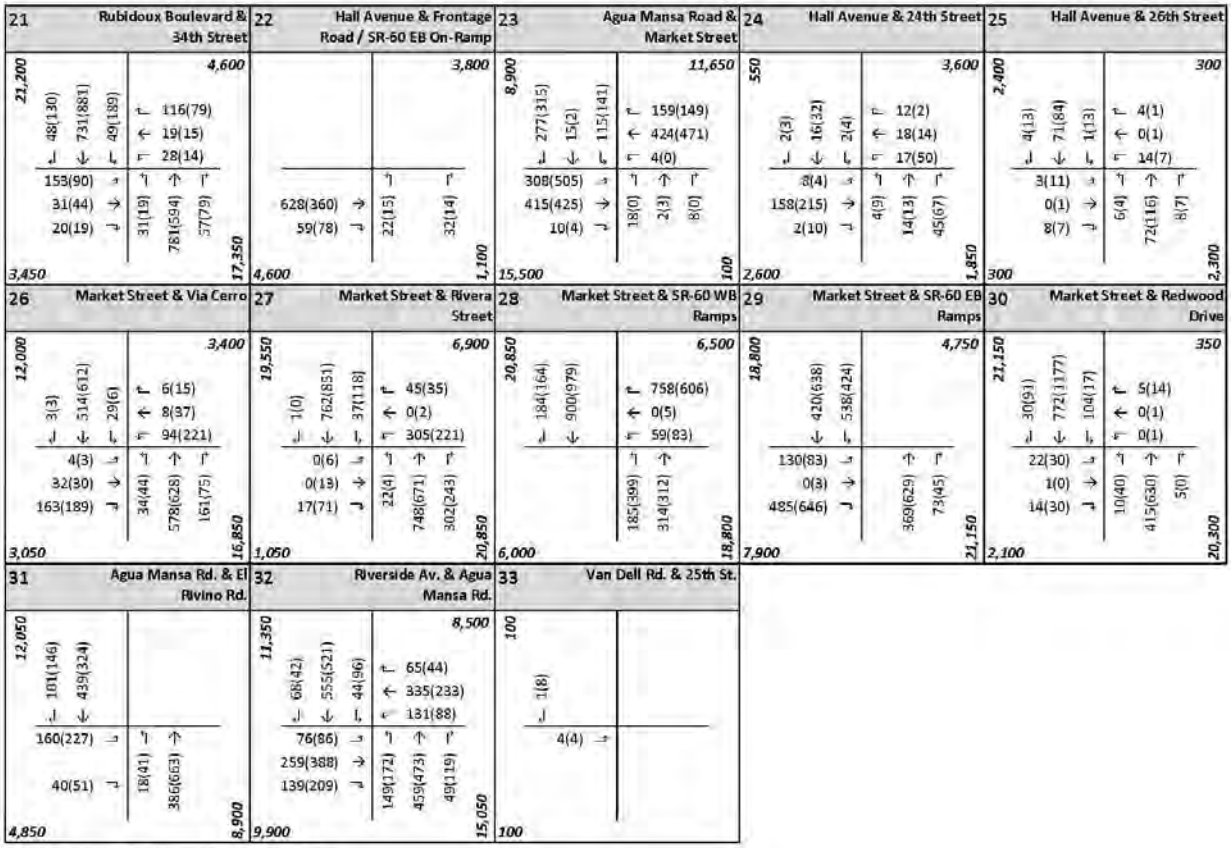
The traffic counts collected include the following vehicle classifications: Passenger Cars, 2-Axle Trucks, 3-Axle Trucks, and 4 or more Axle Trucks. To represent the impact large trucks, buses and recreational vehicles have on traffic flow, all trucks were converted into PCE. By their size alone, these vehicles occupy the same space as two or more passenger cars. In addition, the time it takes for them to accelerate and slow-down is much longer than for passenger cars and varies depending on the type of vehicle and number of axles. For the purpose of this analysis, a PCE factor of 1.5 has been applied to 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4+-axle trucks to estimate each turning movement. Existing weekday Average Daily Traffic (ADT) volumes are shown on Exhibit 3-21. Where actual 24-hour tube count data was not available, Existing ADT volumes were based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg:

Weekday PM Peak Hour (Approach Volume + Exit Volume) x 11.07 = Leg Volume

A comparison of the PM peak hour and daily traffic volumes of various roadway segments within the study area indicated that the peak-to-daily relationship is approximately 9.04 percent. As such, the above equation utilizing a factor of 11.07 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of 9.04 percent (i.e., 1/0.0904 = 11.07) and was assumed to sufficiently estimate ADT volumes for planning-level analyses. Existing weekday AM and weekday PM peak hour intersection volumes (in PCE) are shown on Exhibit 3-21.

EXHIBIT 3-21: EXISTING (2022) TRAFFIC VOLUMES (PCE)




21 Rubidoux Boulevard & 34th Street
22 Hall Avenue & Frontage Road / SR-60 EB On-Ramp
23 Agua Mansa Road & Market Street
24 Hall Avenue & 24th Street
25 Hall Avenue & 26th Street
26 Market Street & Via Cerro
27 Market Street & Rivera Street
28 Market Street & SR-60 WB Ramps
29 Market Street & SR-60 EB Ramps
30 Market Street & Redwood Drive
31 Agua Mansa Rd. & El Rivino Rd.
32 Riverside Av. & Agua Mansa Rd.
33 Van Dell Rd. & 25th St.
##(##) AM(PM) Peak Hour Intersection Volumes
Average Daily Trips

3.8 INTERSECTION OPERATIONS ANALYSIS

Existing peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection operations analysis results are summarized in Table 3-1, which indicates that the following study area intersections are currently operating at an unacceptable LOS during the peak hours:

- Cedar Av. & Jurupa Av. (#11) – LOS E AM and PM peak hours
- Rubidoux Bl. & 24th St. (#15) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 EB Ramps (#20) – LOS F PM peak hour only
- Agua Mansa Rd. & El Rivino Rd. (#31) – LOS F PM peak hour only

Signal timing for the freeway arterial-to-ramp intersections and the signalized intersections along the Cedar Avenue corridor have been obtained from the County and reflect the SBCTA coordinated signal timing. It should be noted that for the purposes of this analysis, no optimization of signal timing has been performed for the LOS analysis unless noted otherwise. The intersection operations analysis worksheets are included in Appendix 3.2 of this TA.

3.9 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for Existing (2022) traffic conditions are based on existing peak hour intersection turning volumes. There are no study area intersections that currently warrant a traffic signal for Existing (2022) traffic conditions. Existing (2022) conditions traffic signal warrant analysis worksheets are provided in Appendix 3.3.

3.10 FREEWAY OFF-RAMP QUEUING ANALYSIS

A queuing analysis was performed for the off-ramps at the I-10 Freeway at Cedar Avenue, SR-60 Freeway at Rubidoux Boulevard, and SR-60 Freeway at Market Street interchanges to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the I-10 Freeway or SR-60 Freeway mainline. Queuing analysis findings are presented in Table 3-2. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. As shown in Table 3-2, the following movement currently experiences a queuing issue during the weekday AM or weekday PM peak 95th percentile traffic flows:

- Cedar Avenue & I-10 Eastbound Ramps (#9), Eastbound left turn lane – PM peak hour only

It should be noted, although the 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 Freeway mainline. Worksheets for Existing (2020) traffic conditions off-ramp queuing analysis are provided in Appendix 3.4.

TABLE 3-1: INTERSECTION ANALYSIS FOR EXISTING (2022) CONDITIONS

#	Intersection	Traffic Control[1]	Delay[2] (secs.) AM	Delay[2] (secs.) PM	Level of Service AM	Level of Service PM
1	Van Dell Rd. & 20th St.	CSS	9.2	8.9	A	A
2	Avalon St. & 20th St.	CSS	12.4	10.6	B	B
3	Avalon St. & 24th St.	CSS	9.3	9.4	A	A
4	Avalon St. & Primavera Av./26th St.	CSS	9.1	8.7	A	A
5	Avalon St. & Driveway 7		Future Intersection			
6	Cedar Av. & I-10 WB Ramps	TS	23.3	17.8	C	B
7	Cedar Av. & I-10 EB Ramps	TS	41.6	34.1	D	C
8	Cedar Av. & Orange St.	TS	33.1	21.4	C	C
9	Cedar Av. & Slover Av.	TS	38.1	29.1	D	C
10	Cedar Av. & Santa Ana Av.	TS	30.9	35.8	C	D
11	Cedar Av. & Jurupa Av.	TS	**65.0**	**75.7**	**E**	**E**
12	Cedar Av. & 7th St.	TS	11.9	21.6	B	C
13	Cedar Av./Rubidoux Bl. & Tarragona Dr./El Rivino R	TS	10.8	15.5	B	B
14	Rubidoux Bl. & 20th St./Market St.	TS	31.2	42.8	C	D
15	Rubidoux Bl. & 24th St.	CSS	**111.2**	**133.6**	**F**	**F**
16	Rubidoux Bl. & 26th St.	CSS	14.4	17.3	B	C
17	Rubidoux Bl. & 28th St.	TS	10.5	10.9	B	B
18	Rubidoux Bl. & SR-60 WB Off-Ramp	TS	31.2	33.4	C	C
19	Rubidoux Bl. & SR-60 WB On-Ramp	UC	21.5	15.6	C	C
20	Rubidoux Bl. & SR-60 EB Ramps	TS	39.8	**97.9**	D	**F**
21	Rubidoux Bl. & 34th St.	TS	13.8	14.3	B	B
22	30th St. & Frontage Rd./SR-60 EB On-Ramp	CSS	14.3	11.5	B	B
23	Agua Mansa Rd. & Market St.	TS	25.9	37.8	C	D
24	Hall Av. & 24th St.	AWS	8.6	9.1	A	A
25	Hall Av. & 26th St.	CSS	9.8	10.5	A	B
26	Market St. & Via Cerro/24th St.	TS	22.1	33.7	C	C
27	Market St. & Rivera St.	TS	10.8	13.5	B	B
28	Market St. & SR-60 WB Ramps	TS	7.7	11.9	A	B
29	Market St. & SR-60 EB Ramps	TS	20.0	23.1	B	C
30	Market St. & Redwood Dr.	CSS	13.2	14.7	B	B
31	Agua Mansa Rd. & El Rivino Rd.	CSS	18.4	**52.5**	C	**F**
32	Riverside Av. & Agua Mansa Rd.	TS	24.8	26.7	C	C
33	Van Dell Rd. & 25th St.	CSS	8.5	8.6	A	A

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[3] AWS = All-way Stop; CSS = Cross-street Stop; TS = Traffic Signal

[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

TABLE 3-2: FREEWAY OFF-RAMP QUEUING SUMMARY FOR EXISTING (2022) CONDITIONS

#	Intersection	Movement	Available Stacking Distance (Feet)	95th Percentile Queue (Feet) AM Peak Hour	95th Percentile Queue (Feet) PM Peak Hour	Acceptable? [1] AM	Acceptable? [1] PM
6	Cedar Av. & I-10 WB Ramps	WBL/T/R	1,270	500 [2]	335	Yes	Yes
		WBR	480	282	274	Yes	Yes
7	Cedar Av. & I-10 EB Ramps	EBL	400	435 [3]	327	Yes	Yes
		EBL/T/R	1,900	577 [2]	284	Yes	Yes
18	Rubidoux Bl. & SR-60 WB Off-Ramp	WBL/T/R	1,250	599 [2]	730 [2]	Yes	Yes
20	Rubidoux Bl. & SR-60 EB Off-Ramp	EBL/T/R	1,100	753 [2]	**1197 [2]**	Yes	**No**
28	Market St. & SR-60 WB Ramps	WBL	170	71	98	Yes	Yes
		WBR	1,350	0	0	Yes	Yes
29	Market St. & SR-60 EB Ramps	EBL	155	129	87	Yes	Yes
		EBR	1,635	46	76	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 25 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

[3] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 or SR-60 Freeway mainline.

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4 PROJECTED FUTURE TRAFFIC

The Project is proposed to consist of 1,188,715 square feet industrial use. For the purposes of this TA, the Project has been evaluated assuming 50% general light industrial and 50% manufacturing use. It should be noted, since the time this traffic study has been prepared, the site plan has been updated: the total square footage has been reduced to 1,184,102 square feet of industrial use. In an effort to provide flexibility for minor changes to the site plan during final preparation, this traffic study evaluates the higher square footage in an effort to provide a conservative analysis.

The Project has been evaluated in a single phase with an opening year of 2025. Vehicular access will be provided via Van Dell Road for Buildings 1, 2, 3, and 5 while Avalon Street will provide access to Building 4. All truck traffic will be directed north to 20th Street via Van Dell Road or Avalon Street. Regional access to the Project site is available from the I-10 Freeway via Cedar Avenue or the SR-60 Freeway via the Rubidoux Boulevard or Market Street interchanges.

4.1 PROJECT TRIP GENERATION

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development.

Trip generation rates used to estimate Project traffic are shown in Table 4-1. The trip generation rates used for this analysis are based upon information collected by the ITE as provided in their Trip Generation Manual, 11th Edition, 2021. (2) For purposes of this analysis, the following ITE land use codes and vehicle mixes have been utilized for the proposed Project:

- ITE land use code 110 (General Light Industrial) has been used to derive site specific trip generation estimates for up to 594,358 square feet of the proposed Project (50% of the overall square footage). A light industrial facility is a free-standing facility devoted to a single use that has an emphasis on activities other than manufacturing. Typically, there is minimum office space. The vehicle mix has been obtained from the ITE's Trip Generation Manual. The truck percentages were further broken down by axle type per the following SCAQMD recommended truck mix: 2-Axle = 16.7%; 3-Axle = 20.7%; 4+-Axle = 62.6%. (8)
- ITE land use code 140 (Manufacturing) has been used to derive site specific trip generation estimates for up to 594,357 square feet (50% of the overall square footage). A manufacturing facility is an area where the primary activity is the conversion of raw materials or parts into finished products. Size and type of activity may vary substantially from one facility to another. In addition to the actual production of goods, manufacturing facilities also have office, warehouse, research, and associated functions. The vehicle mix has been obtained from the ITE's Trip Generation Manual. The truck percentages were further broken down by axle type per the following SCAQMD recommended truck mix: 2-Axle = 16.7%; 3-Axle = 20.7%; 4+-Axle = 62.6%. (8)

TABLE 4-1: TRIP GENERATION RATES

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicle Trip Generation Rates									
General Light Industrial[3]	TSF	110	0.651	0.089	0.740	0.091	0.559	0.650	4.870
Passenger Cars			0.645	0.085	0.730	0.086	0.554	0.640	4.620
2-Axle Trucks			0.001	0.001	0.002	0.001	0.001	0.002	0.042
3-Axle Trucks			0.001	0.001	0.002	0.001	0.001	0.002	0.052
4+-Axle Trucks			0.004	0.002	0.006	0.003	0.003	0.006	0.157
Manufacturing[3]	TSF	140	0.517	0.163	0.680	0.229	0.511	0.740	4.750
Passenger Cars			0.500	0.150	0.650	0.217	0.493	0.710	4.300
2-Axle Trucks			0.003	0.002	0.005	0.002	0.003	0.005	0.075
3-Axle Trucks			0.003	0.003	0.006	0.003	0.004	0.006	0.093
4+-Axle Trucks			0.011	0.008	0.019	0.008	0.011	0.019	0.282
Passenger Car Equivalent (PCE) Trip Generation									
General Light Industrial[3]	TSF	110	0.651	0.089	0.740	0.091	0.559	0.650	4.870
Passenger Cars			0.645	0.085	0.730	0.086	0.554	0.640	4.620
2-Axle Trucks (PCE = 1.5)			0.002	0.001	0.003	0.002	0.001	0.003	0.063
3-Axle Trucks (PCE = 2.0)			0.002	0.002	0.004	0.002	0.002	0.004	0.104
4+-Axle Trucks (PCE = 3.0)			0.012	0.007	0.019	0.009	0.010	0.019	0.470
Manufacturing[3]	TSF	140	0.517	0.163	0.680	0.229	0.511	0.740	4.750
Passenger Cars			0.500	0.150	0.650	0.217	0.493	0.710	4.300
2-Axle Trucks (PCE = 1.5)			0.005	0.003	0.008	0.003	0.004	0.008	0.113
3-Axle Trucks (PCE = 2.0)			0.006	0.006	0.012	0.005	0.007	0.012	0.186
4+-Axle Trucks (PCE = 3.0)			0.033	0.023	0.056	0.023	0.033	0.056	0.845

[1] Trip Generation & Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).

[2] TSF = thousand square feet

[3] Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.
Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.

Trip generation for heavy trucks was further broken down by truck type (or axle type). The total truck percentage is comprised of 3 different truck types: 2-axle, 3-axle, and 4+-axle trucks. PCE factors were applied to the trip generation rates for heavy trucks (large 2-axles, 3-axles, 4+-axles). PCEs allow the typical "real-world" mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, to be used for the purposes of capacity and level of service analyses. The PCE factors are consistent with the recommended PCE factors in the City's Guidelines. A summary of the Project's trip generation based on actual vehicles and in PCE is shown in Table 4-2. As shown in Table 4-2, the proposed Project is anticipated to generate a total of 6,364 PCE trip-ends per day, 881 PCE AM peak hour trips and 863 PCE PM peak hour trips (utilized for the operations analysis). The proposed Project is anticipated to generate a total of 5,724 actual vehicle trip-ends per day with 844 AM peak hour trips and 828 PM peak hour trips (see Table 4-2).

TABLE 4-2: PROJECT TRIP GENERATION SUMMARY

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
General Light Industrial	594.358	TSF							
Passenger Cars:			383	50	433	51	329	380	2,746
2-axle Trucks:			1	0	1	1	0	1	26
3-axle Trucks:			1	1	2	1	1	2	32
4+-axle Trucks:			2	1	3	2	2	4	94
Total Truck Trips (Actual Vehicles):			4	2	6	4	3	7	152
Total Trips (Actual Vehicles)[2]			387	52	439	55	332	387	2,898
Manufacturing	594.357	TSF							
Passenger Cars:			297	89	386	129	293	422	2,556
2-axle Trucks:			2	1	3	1	2	3	46
3-axle Trucks:			2	2	4	2	2	4	56
4+-axle Trucks:			7	5	12	5	7	12	168
Total Truck Trips (Actual Vehicles):			11	8	19	8	11	19	270
Total Trips (Actual Vehicles)[2]			308	97	405	137	304	441	2,826
Passenger Cars			680	139	819	180	622	802	5,302
Trucks			15	10	25	12	14	26	422
Total Trips (Actual Vehicles)[2]			**695**	**149**	**844**	**192**	**636**	**828**	**5,724**
Passenger Car Equivalent (PCE):									
General Light Industrial	594.358	TSF							
Passenger Cars:			383	50	433	51	329	380	2,746
2-axle Trucks:			1	1	2	1	1	2	38
3-axle Trucks:			1	1	2	1	1	2	62
4+-axle Trucks:			7	4	11	5	6	11	280
Total Truck Trips (PCE):			9	6	15	7	8	15	380
Total Trips (PCE)[2]			392	56	448	58	337	395	3,126
Manufacturing	594.357	TSF							
Passenger Cars:			297	89	386	129	293	422	2,556
2-axle Trucks:			3	2	5	2	3	5	68
3-axle Trucks:			4	4	8	3	4	7	112
4+-axle Trucks:			20	14	34	14	20	34	502
Total Truck Trips (PCE):			27	20	47	19	27	46	682
Total Trips (PCE)[2]			324	109	433	148	320	468	3,238
Passenger Cars			680	139	819	180	622	802	5,302
Trucks			36	26	62	26	35	61	1,062
Total Trips (PCE)[2]			**716**	**165**	**881**	**206**	**657**	**863**	**6,364**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

4.2 PROJECT TRIP DISTRIBUTION

The Project trip distribution and assignment process represents the directional orientation of traffic to and from the Project site. The trip distribution pattern of passenger cars is heavily influenced by the geographical location of the site, the location of surrounding uses, and the proximity to the regional freeway system. The trip distribution pattern for truck traffic is also influenced by the local truck routes approved by the City of Jurupa Valley, City of Riverside, County of San Bernardino, City of Rialto, and City of Colton. Given these differences, separate trip distributions were generated for both passenger cars and truck trips. The Project truck trip distribution pattern is graphically depicted on Exhibit 4-1. The Project passenger car trip distribution pattern for Buildings 1, 2, 3, and 5 is graphically depicted on Exhibit 4-2 and Building 4 is shown on Exhibit 4-3. Each of these distribution patterns was reviewed by the City of Jurupa Valley as part of the traffic study scoping process (see Appendix 1.1).

4.3 MODAL SPLIT

The potential for Project trips to be reduced by the use of public transit, walking or bicycling have not been included as part of the Project's estimated trip generation. Essentially, the Project's traffic projections are "conservative" in that these alternative travel modes would reduce the forecasted traffic volumes (non-truck trips only).

4.4 PROJECT TRIP ASSIGNMENT

The assignment of traffic from the Project area to the adjoining roadway system is based upon the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project. Based on the identified Project traffic generation and trip distribution patterns, Project only ADT and peak hour intersection turning movement volumes are shown on Exhibit 4-4.

EXHIBIT 4-1: PROJECT (TRUCK) TRIP DISTRIBUTION

EXHIBIT 4-2: PROJECT (BUILDING 1, 2, 3 & 5 PASSENGER CAR) TRIP DISTRIBUTION

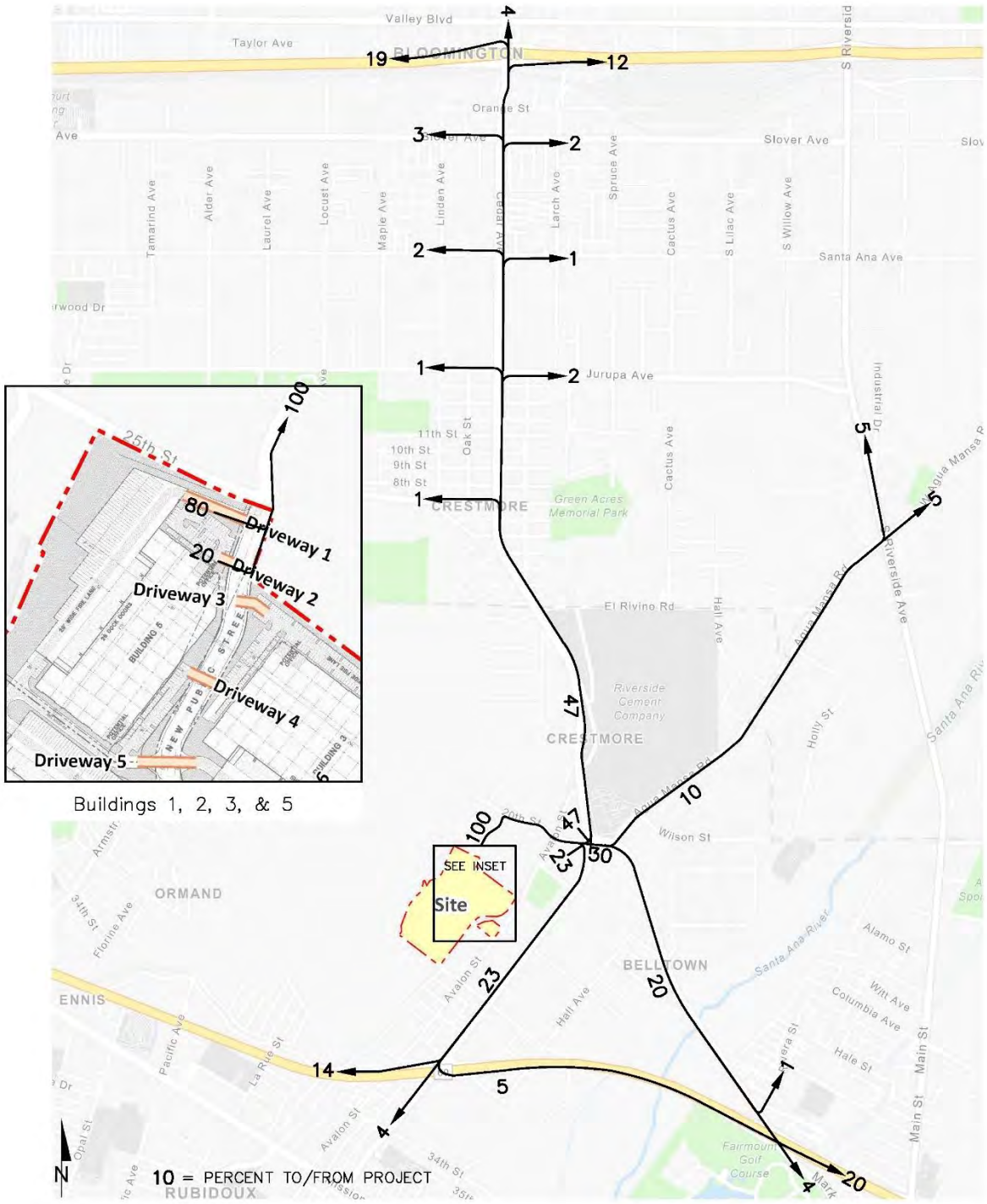


EXHIBIT 4-3: PROJECT (BUILDING 4 PASSENGER CAR) TRIP DISTRIBUTION

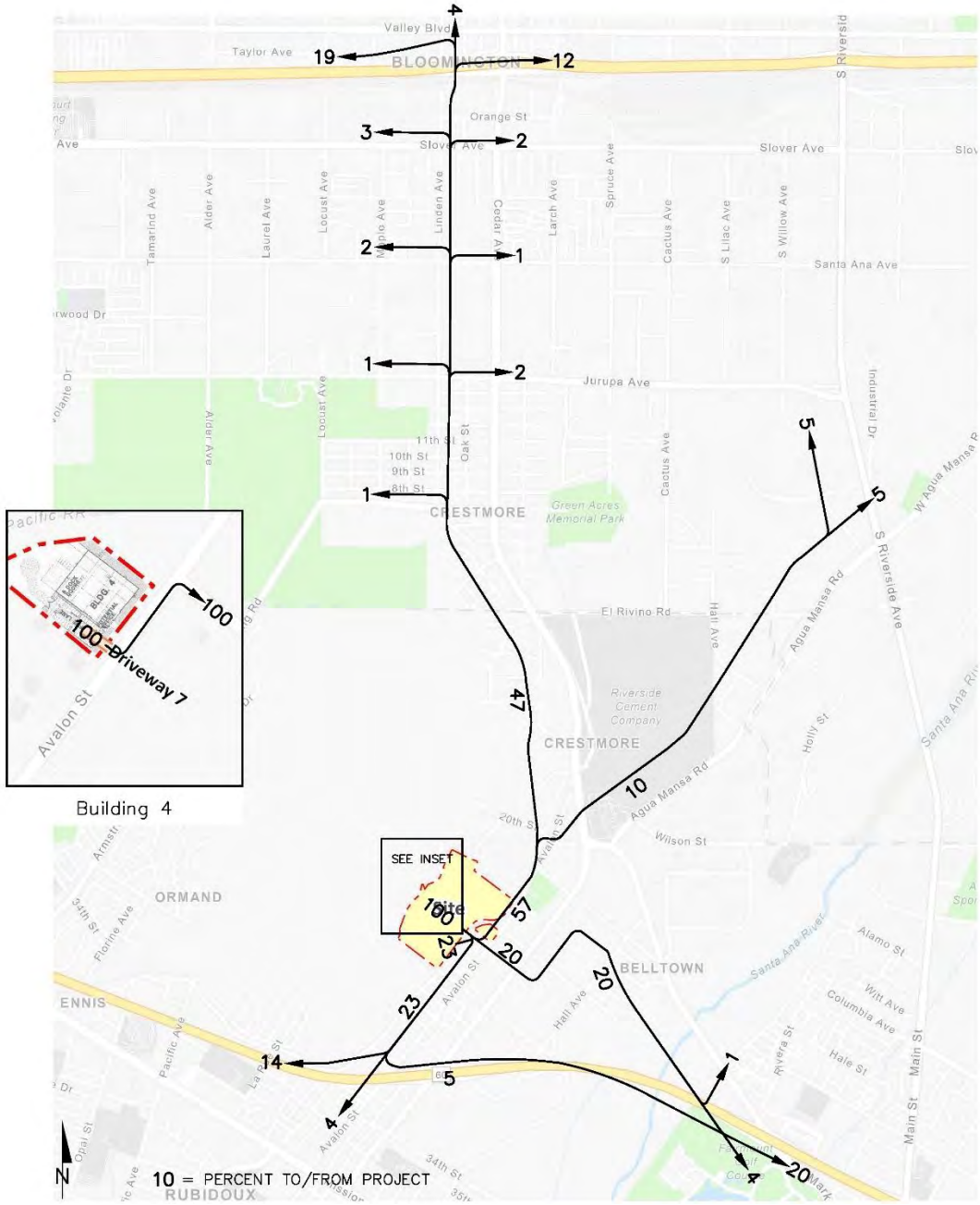
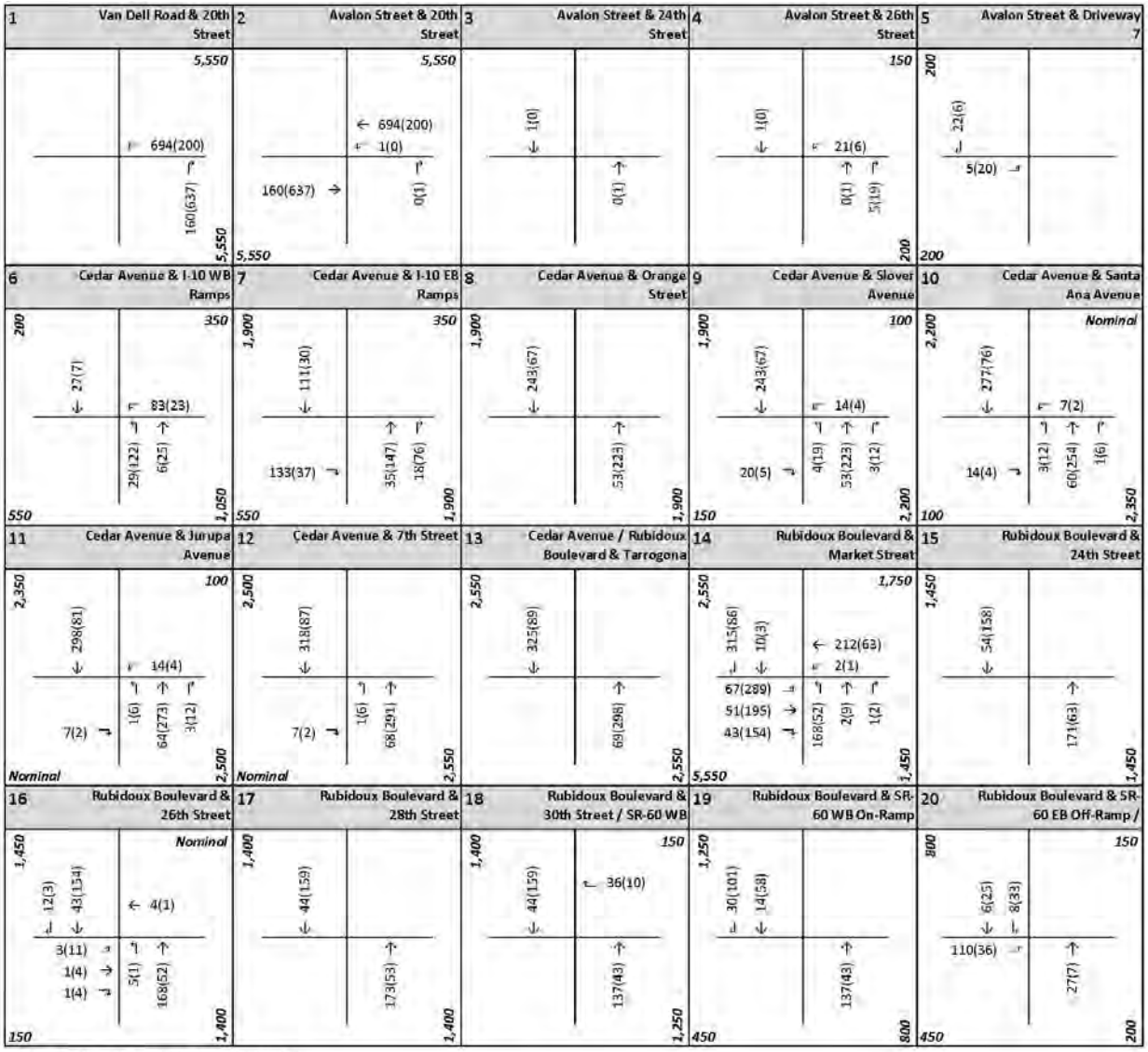
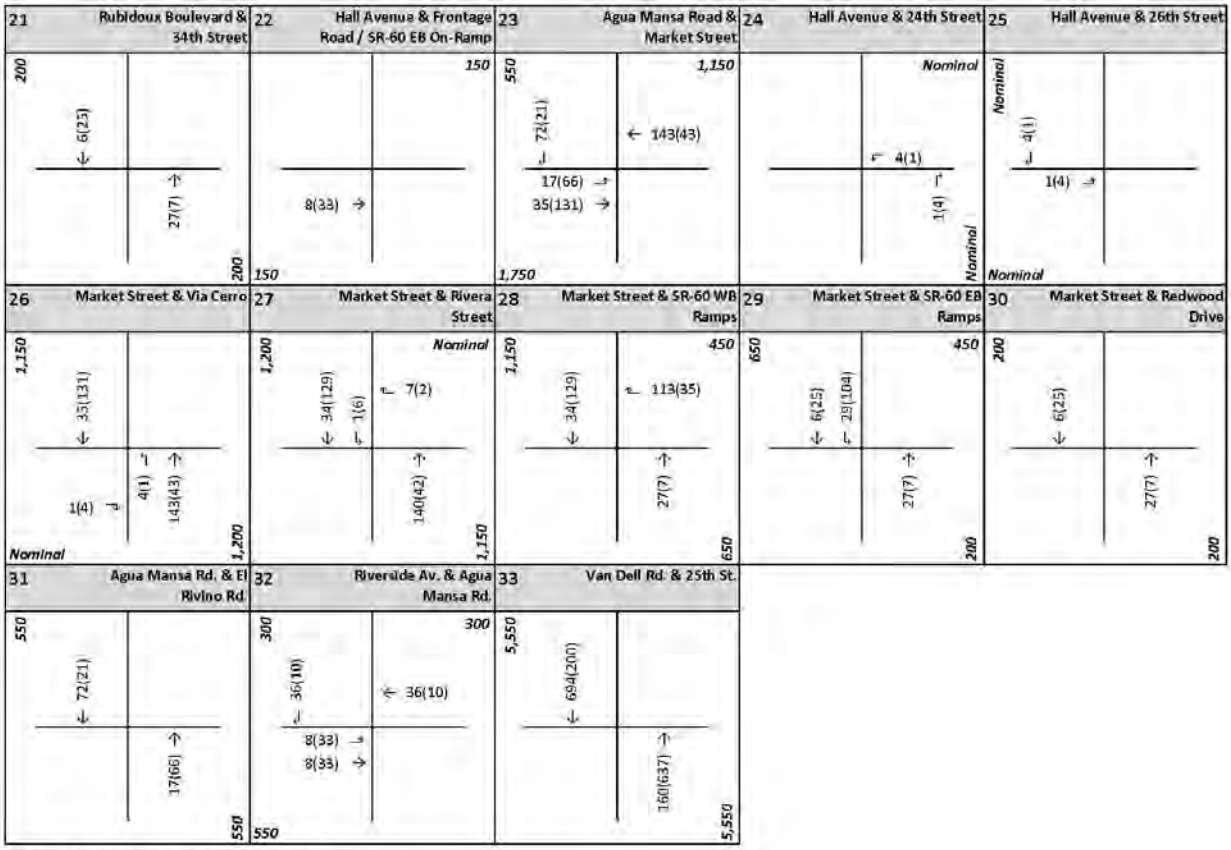


EXHIBIT 4-4: PROJECT ONLY TRAFFIC VOLUMES (PCE)



##(##) AM(PM) Peak Hour Intersection Volumes
Average Daily Trips



##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

4.5 BACKGROUND TRAFFIC

4.5.1 NEAR-TERM CONDITIONS

Future year traffic forecasts have been based upon background (ambient) growth at 2.0% per year for 2025 traffic conditions. The ambient growth factor is intended to approximate regional traffic growth. The total ambient growth is 6.12% for 2025 traffic conditions (growth of 2.0 percent per year over 3 years). This ambient growth rate is added to existing traffic volumes to account for area-wide growth not reflected by cumulative development projects. Ambient growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the development of future projects that have been approved but not yet built and/or for which development applications have been filed and are under consideration by governing agencies. Opening Year Plus Project traffic volumes, Opening Year Background Without Project traffic volumes, Opening Year Background Plus Project traffic volumes, and Opening Year Background Plus Project Plus Cumulative traffic volumes are provided in Section 6, Section 7, Section 8, and Section 9 of this report, respectively.

4.5.2 CUMULATIVE HORIZON YEAR (2045) CONDITIONS

Cumulative Horizon Year conditions are based on the RIVCOM (see Section 4.7 *Horizon Year Volume Development* for additional discussion).

4.6 CUMULATIVE DEVELOPMENT TRAFFIC

A cumulative project list was developed for the purposes of this analysis through consultation with planning and engineering staff from the City of Jurupa Valley. The neighboring jurisdictions of the County of San Bernardino, City of Fontana, City of Riverside, City of Rialto, and City of Colton have also been contacted to include key projects in their respective cities. The cumulative projects listed are those that would generate traffic and would contribute traffic to study area intersections. Exhibit 4-5 illustrates the cumulative development location map. A summary of cumulative development projects and their proposed land uses are shown in Table 4-3. If applicable, the traffic generated by individual cumulative projects were manually added to the Opening Year Background forecasts to ensure that traffic generated by the listed cumulative development projects in Table 4-3 are reflected as part of the background traffic. In an effort to conduct a conservative analysis, the cumulative projects are added in conjunction with the ambient growth identified in Section 4.5 *Background Traffic*. The Cumulative ADT and peak hour intersection turning movement volumes for all cumulative development projects are shown on Exhibit 4-6. Cumulative trip generation is provided in Appendix 4.2.

TABLE 4-3: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

ID	Project Name	Land Use	Quantity	Units[1]
City of Jurupa Valley				
JV1	Emerald Ridge South	Single Family Residential	97	DU
		Condo/Townhomes	118	DU
JV2	Highland Park & Highland Park II	Single Family Residential	432	DU
JV3	New Rio Vista Specific Plan 243	Residential	1697	DU
		School (K-8)	600	STU
		Business Park & Industrial	2698.000	TSF
		Active Park	22.2	AC
JV4	Pick-a-Part	Car Auction	50	AC
JV5	Boureston Medical Clinic	Medical Clinic	40.000	TSF
JV6	Emerald Ridge South	Residential	215	DU
JV7	Northtown Housing Development Group	Apartments	68	DU
		Commercial Retail	31.375	TSF
JV8	Agua Mansa Commerce Park Specific Plan	High-Cube Warehouse	4277.000	TSF
		General Light Industrial	150.000	TSF
		Commercial Retail	25.000	TSF
JV9	NWC of Hall Av. & Agua Mansa	Warehouse	334.523	TSF
JV10	SEC of Opal St. and Canal St.	Single Family Residential	41	DU
JV11	SEC of Camino Real and Limonite Av.	Multifamily Housing	121	DU
JV12	Carson Companies	Warehouse	334.523	TSF
JV13	Pearl Community	Single Family Residential	74	DU
JV14	Home Development (TTM37211 & CZ17003)	Single Family Residential	48	DU
JV15	Mobile Home Park	Single Family Residential	39	DU
JV16	General & Clay Industrial Park	Warehouse	328.056	TSF
JV17	Kiewit Industrial Park	Storage Yard	25.000	TSF
		Warehouse	38.000	TSF
JV18	Midland Carriers	Warehouse	42.132	TSF
JV19	Rubidoux Commercial Development LLC	General Light Industrial	306.894	TSF
JV20	6250 Morton Av.	Retail	9.800	TSF
JV21	NEC of Mission & Wallace	Retail	12.180	TSF
JV22	SWC of Mission & Valley	Fast-Food Restaurant	8.300	TSF
JV23	Madone Collection	Single Family Residential	35	DU
JV24	APN 174-040-019	Single Family Residential	75	DU
JV25	The District @ Jurupa	Residential	1,196	DU
		Retail	1482.500	TSF
		Business Park & Industrial	1530.000	TSF
JV26	Avalon Court (TTM 33649)	Single Family Residential	24	DU
County of San Bernardino				
SB1	Slover Av. between Locust Av. and Laurel Av.	High-Cube Warehouse	344	TSF
SB2	West of Agua Mansa Rd. and North of El Rivino Rd.	High-Cube Warehouse	476.000	TSF
		Warehouse	30.000	TSF
SB3	NWC of Cedar Av. and Jurupa Av.	High-Cube Warehouse	677.000	TSF
SB4	Locust Av. and 7th St.	Single Family Residential	198	DU
SB5	NEC and NWC of Cedar Av. and Orange St.	Warehouse	395.000	TSF
SB6	Holly Street Truck Terminal	Truck Terminal	450.000	TSF
SB7	Bloomington Commerce Center	High-Cube Warehouse	800.000	TSF
		High-Cube Fulfillment Center	451.640	TSF
SB8	Slover and Cactus Warehouse	Warehouse	257.855	TSF
SB9	Cedar Truck Yard	Truck Storage	8.94	AC
SB10	Cedar & Slover Retail	Gas Station, Car Wash, & Fast-Food	9.907	TSF

ID	Project Name	Land Use	Quantity	Units[1]
City of Fontana				
F1	West Valley Logistics Center	Warehouse	290.590	TSF
		High-Cube Warehouse	3183.100	TSF
City of Rialto				
RIA1	Panattoni I-10 (Cactus Av. & El Rivino Rd.)	Warehouse	2,475.745	TSF
RIA2	CapRock III	Warehouse	582.000	TSF
RIA3	Newmark Merrill Companies	Discount Super Store	198.000	TSF
		Tire Store	9.861	TSF
		Retail	25.436	TSF
		Fast Food w/ Drive-Thru	5.484	TSF
RIA4	Kore Infrastructure	Biosolids Facility	288	TPD
City of Colton				
COL1	2036 Miguel Bustamante Pkwy.	Warehouse	124.588	TSF
	2053 Miguel Bustamante Pkwy.	Warehouse	174.996	TSF
COL2	Roquet Ranch	Single Family Residential	754	DU
		Condo/Townhomes	244	DU
		Active Adult - Attached	52	DU
		Shopping Center	6.500	TSF
		Coffee Shop with Drive Thru	1.500	TSF
		Fast Food with Drive Thru	4.000	TSF
		Active Park[2, 4]	11.1	AC
		Passive Park[4]	8.4	AC
COL3	2163 Riverside Av.	High Cube Warehouse	447.330	TSF
City of Riverside				
R1	P06-0782 (Tract Map 34908) (1006 & 1008 Clark St.)	Single Family Residential	15	DU
R2	P05-0269 & P08-0416 (Tract Map 33550) (3719 Strong S	Single Family Residential	9	DU
R3	P06-1031 (Tract Map 31825) (1562 Orange St.)	Single Family Residential	7	DU
R4	P13-0087 P13-0262 (2450 Market St.)	Senior Housing	67	DU
R5	P14-0183 (Centerpointe Apartments) (3105 Market St.	Apartments	146	DU
R6	P09-0835 P10-0002 (3372 University Av.)	General Office	132.136	TSF
R7	P06-1237 (Jacobs Medical Office) (14th and Brockton A	Medical Office	65.281	TSF
R8	P12-0799 & P12-0800 (Tract Map 36516)	Single Family Residential	7	DU
R9	P09-0808 & P08-0809 (2340 14th St.)	Senior Housing	134	Beds
R10	P08-0980 & P09-0095 (3549 Iowa Av.)	Student Housing	114	Beds
R11	P09-0717 & P09-0718 (807 Blaine St.)	Apartments	55	DU

[1] DU = Dwelling Units; TSF = Thousand Square Feet; STU = Students; AC = Acres; TPD = Tons Per Day; VFP = Vehicle Fueling Positions

EXHIBIT 4-5: CUMULATIVE DEVELOPMENT LOCATION MAP

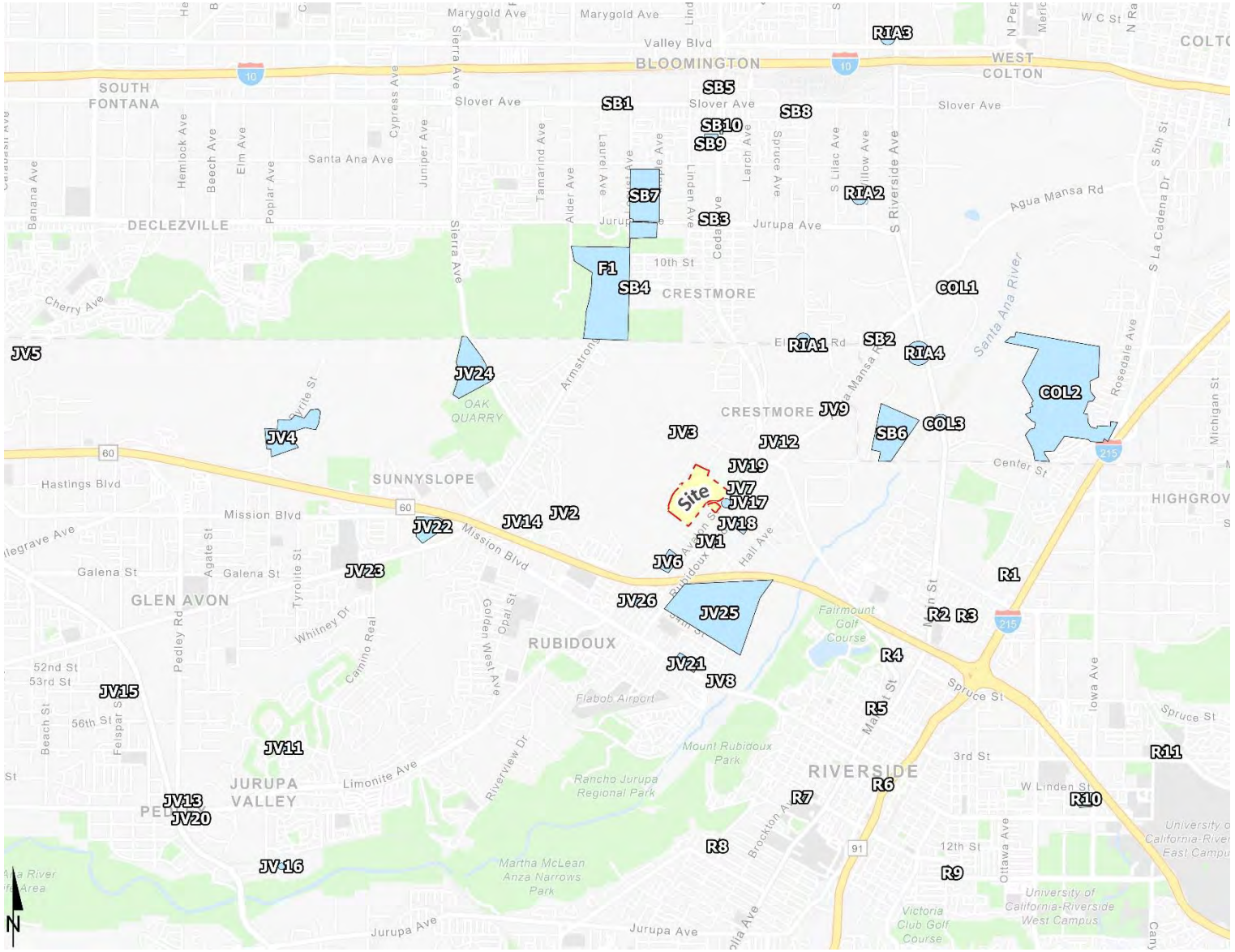
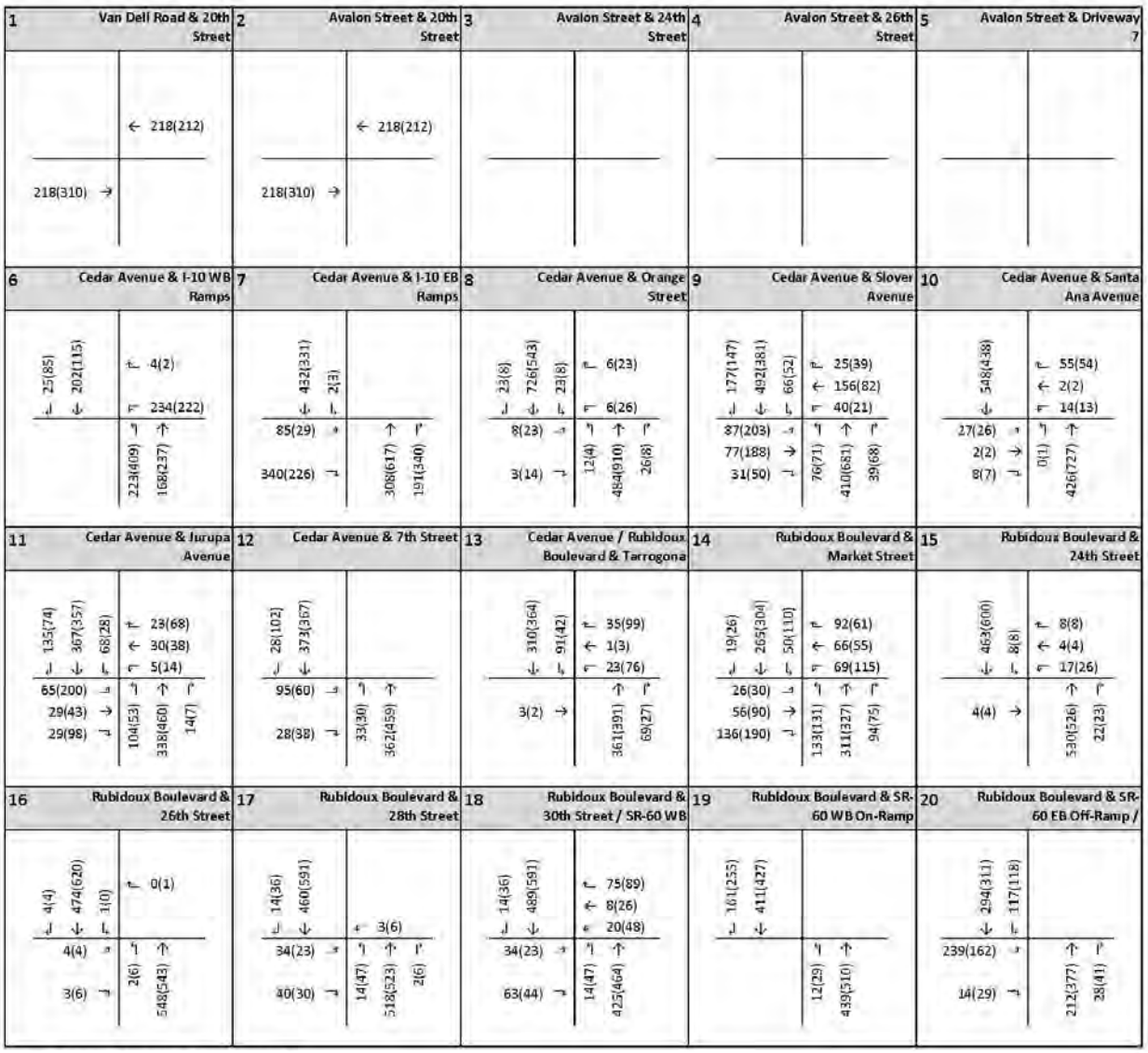
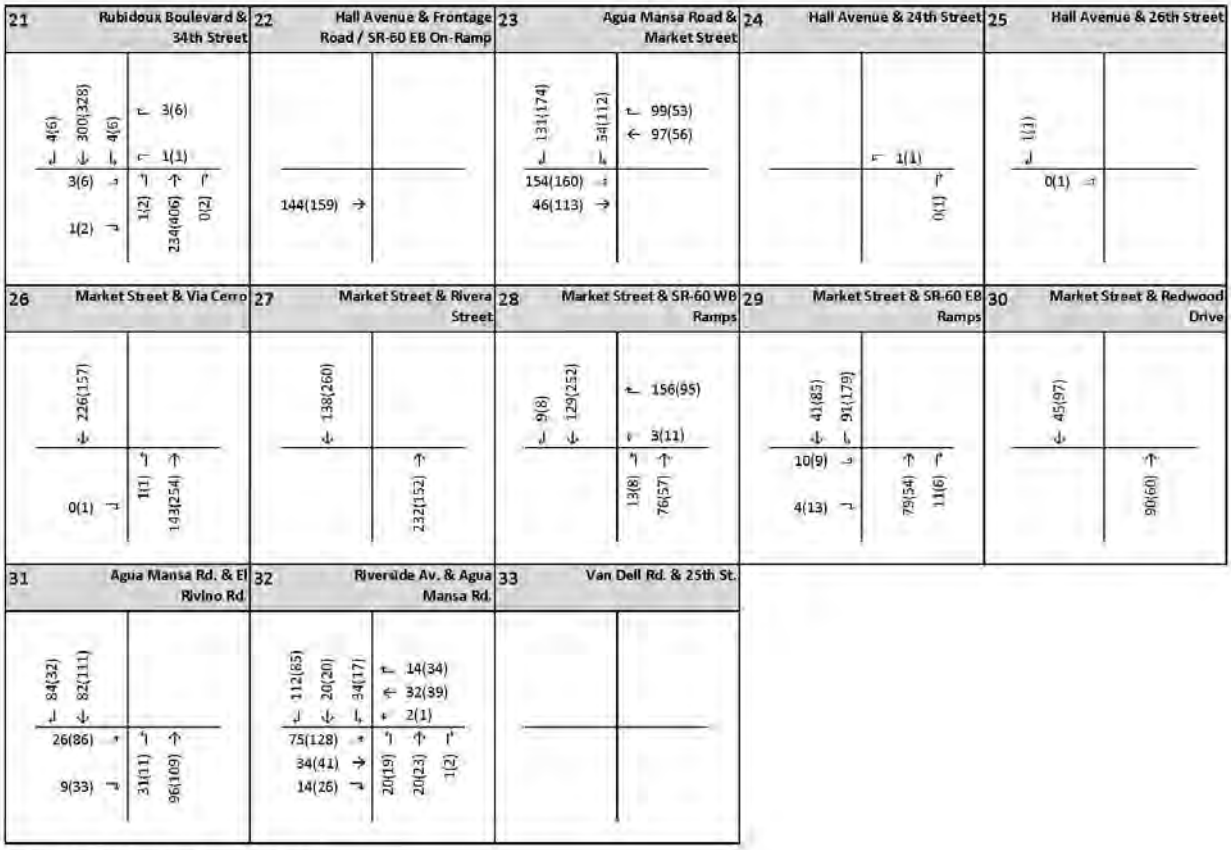


EXHIBIT 4-6: CUMULATIVE ONLY TRAFFIC VOLUMES (PCE)



##(##) AM(PM) Peak Hour Intersection Volumes
Average Daily Trips



##(##) AM(PM) Peak Hour Intersection Volumes
Average Daily Trips

4.7 CUMULATIVE HORIZON YEAR (2045) VOLUME DEVELOPMENT

Traffic projections for Cumulative Horizon Year without Project conditions were derived from the RIVCOM and SBTAM using accepted procedures for model forecast refinement and smoothing for study area intersections located within the County of Riverside and San Bernardino, respectively. The traffic forecasts reflect the area-wide growth anticipated between Existing (2022) conditions and Cumulative Horizon Year (2045) traffic conditions. In most instances the traffic model zone structure is not designed to provide accurate turning movements along arterial roadways unless refinement and reasonableness checking is performed. Therefore, the Cumulative Horizon Year peak hour forecasts were refined using the model derived long range forecasts, base (validation) year model forecasts, along with existing peak hour traffic count data collected at each analysis location in October 2022. The SBTAM has a base (validation) year of 2016 and a horizon (future forecast) year of 2040 (volumes adjusted to reflect 2045). The difference in model volumes (2040-2016) defines the growth in traffic over the 24-year period. The Riverside County Model (RIVCOM) has a base (validation) year of 2018 and a horizon (future forecast) year of 2045. The RIVCOM 2045 model utilized for the purposes of this analysis assumes buildout of the City of Jurupa Valley.

The refined future peak hour approach and departure volumes obtained from the model output data are then entered into a spreadsheet program consistent with the National Cooperative Highway Research Program (NCHRP Report 765), along with initial estimates of turning movement proportions. A linear programming algorithm is used to calculate individual turning movements which match the known directional roadway segment forecast volumes computed in the previous step. This program computes a likely set of intersection turning movements from intersection approach counts and the initial turning proportions from each approach leg.

The SBTAM uses an AM peak period-to-peak hour factor of 0.35 and a PM peak period-to-peak hour factor of 0.27. RIVCOM uses an AM peak period-to-peak hour factor of 0.38 and PM peak period-to-peak hour factor of 0.28. These factors represent the relationship of the highest single AM peak hour to the modeled 3-hour AM peak period (an even distribution would result in a factor of 0.33) and the highest single PM peak hour to the modeled 4-hour PM peak period (an even distribution would result in a factor of 0.25).

Typically, the model growth is prorated and is subsequently added to the existing (base validation) traffic volumes to represent Horizon Year traffic conditions. Reductions to traffic forecasts from either Existing, Opening Year Plus Project, Opening Year Background Without Project, Opening Year Background Plus Project, and Opening Year Background Plus Project Plus Cumulative traffic conditions were assumed as part of this analysis if they were justified by the future roadway infrastructure. In other words, new parallel roadway facilities (such as the future interchange and connection of Alder Road at the I-10 Freeway) would expectedly provide relief to other parallel facilities such as Cedar Avenue. Cumulative Horizon Year turning volumes were compared to Opening Year Background Plus Project Plus Cumulative traffic volumes in order to ensure a minimum growth as a part of the refinement process for specific movements that would not likely be affected by new parallel facilities.

Future estimated peak hour traffic data was used for new intersections and intersections with an anticipated change in travel patterns to further refine the Cumulative Horizon Year (2045) peak hour forecasts. The future Cumulative Horizon Year (2045) No Project peak hour turning movements were

then reviewed by Urban Crossroads, Inc. for reasonableness, and in some cases, were adjusted to achieve flow conservation, reasonable growth, and reasonable diversion between parallel routes. Flow conservation checks ensure that traffic flow between two closely spaced intersections, such as two adjacent driveway locations, is verified in order to make certain that vehicles leaving one intersection are entering the adjacent intersection and that there is no unexplained loss of vehicles. The result of this traffic forecasting procedure is a series of traffic volumes which are suitable for traffic operations analysis.

In an effort to conduct a conservative analysis, the presence of trucks has been accounted for based on the manual volume adjustments made to demonstrate growth above Opening Year Background Plus Project Plus Cumulative traffic forecasts, which are presented and evaluated in PCE (see Section 3.7 *Existing (2022) Traffic Counts* for discussion on PCE). As such, the Cumulative Horizon Year (2045) forecasts are also assumed to be in PCE for the purposes of this analysis. Post-processing worksheets for Cumulative Horizon Year (2045) Without Project traffic conditions are provided in Appendix 4.1.

5 E+P TRAFFIC CONDITIONS

This section discusses the traffic forecasts for Existing plus Project (E+P) conditions and the resulting intersection operations, traffic signal warrant, and freeway facility operations analyses.

5.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for E+P conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for E+P conditions (e.g., intersection and roadway improvements at the Project's frontage and driveways).

5.2 E+P TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes plus Project traffic (no background or cumulative traffic is included). The weekday ADT and weekday peak hour intersection turning movement volumes which can be expected for E+P traffic conditions are shown on Exhibit 5-1.

5.3 INTERSECTION OPERATIONS ANALYSIS

E+P peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TA. The intersection analysis results are summarized in Table 5-1 for E+P traffic conditions, which indicates that the following study area intersections are anticipated to operate at an unacceptable LOS, in addition to the locations previously identified under Existing traffic conditions:

- Avalon St. & 20th St. (#2) – LOS F AM peak hour only
- Rubidoux Bl. & 20th St./Market St. (#14) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 EB Ramps (#20) – LOS E AM peak hour only (LOS F remains unchanged for PM peak hour)

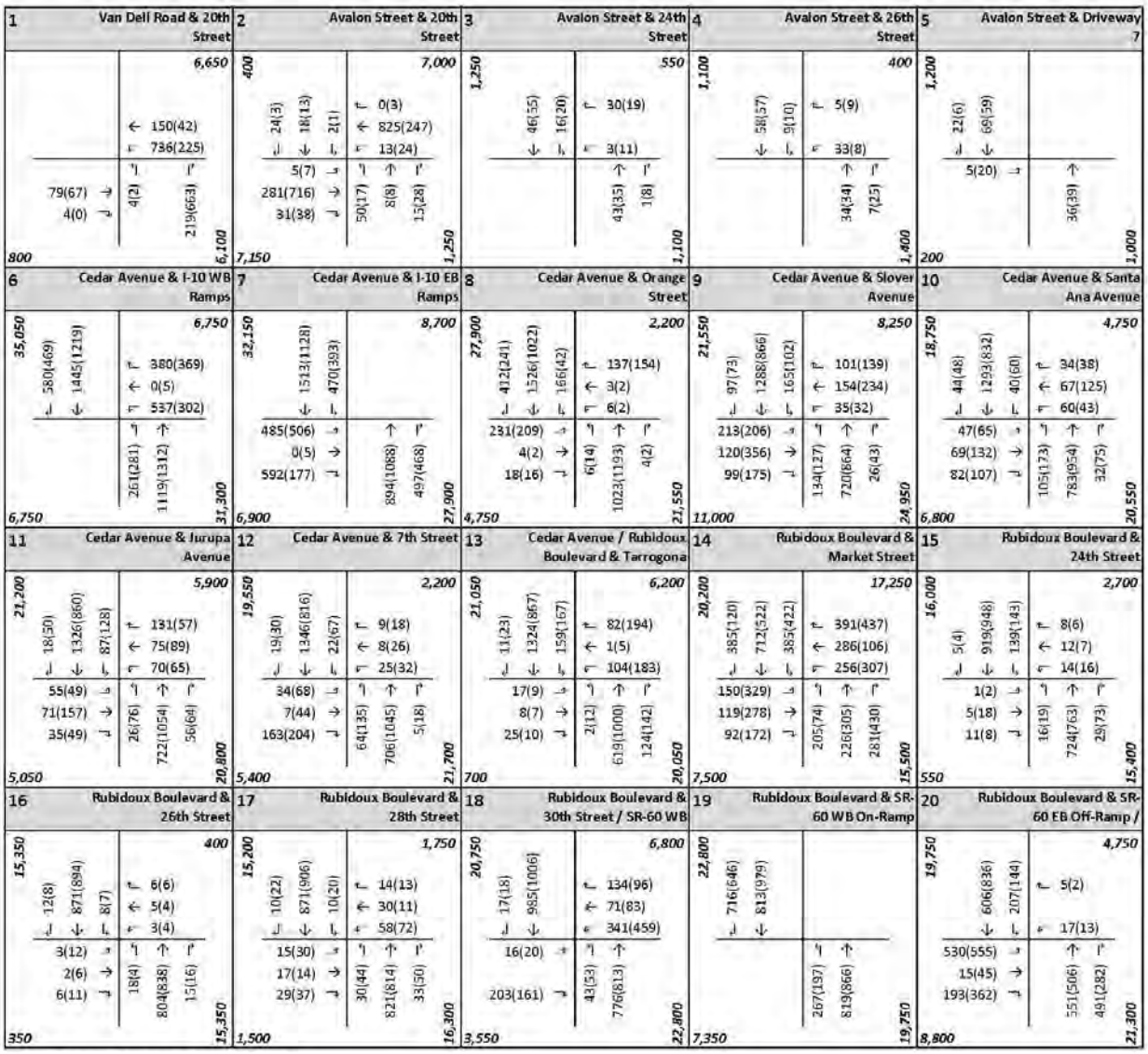
The intersection operations analysis worksheets for E+P traffic conditions are included in Appendix 5.1 of this TA.

5.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

The following study area intersections are anticipated to meet peak hour traffic signal warrants under E+P traffic conditions (see Appendix 5.2):

- Van Dell Rd. & 20th St. (#1)
- Agua Mansa Rd. & El Rivino Rd. (#31)

EXHIBIT 5-1: E+P TRAFFIC VOLUMES (PCE)



##(##) AM(PM) Peak Hour Intersection Volumes
Average Daily Trips

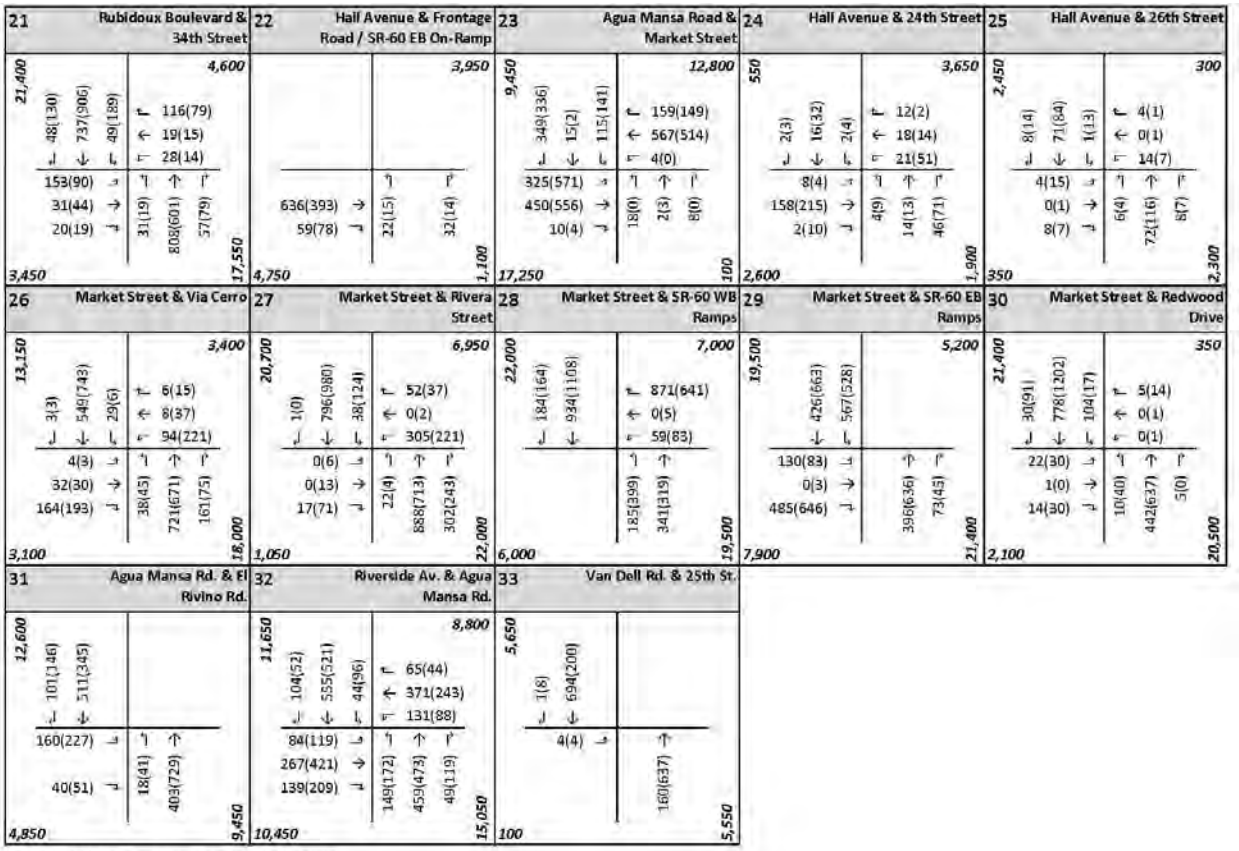

21 Rubidoux Boulevard & 34th Street
22 Hall Avenue & Frontage Road / SR-60 EB On-Ramp
23 Agua Mansa Road & Market Street
24 Hall Avenue & 24th Street
25 Hall Avenue & 26th Street
26 Market Street & Via Cerro
27 Market Street & Rivera Street
28 Market Street & SR-60 WB Ramps
29 Market Street & SR-60 EB Ramps
30 Market Street & Redwood Drive
31 Agua Mansa Rd. & El Rivino Rd.
32 Riverside Av. & Agua Mansa Rd.
33 Van Dell Rd. & 25th St.
##(##) AM(PM) Peak Hour Intersection Volumes
Average Daily Trips

TABLE 5-1: INTERSECTION ANALYSIS FOR E+P CONDITIONS

#	Intersection	Traffic Control[2]	Existing (2022) Delay[1] (secs.) AM	Existing (2022) Delay[1] (secs.) PM	Existing (2022) Level of Service AM	Existing (2022) Level of Service PM	E+P Delay[1] (secs.) AM	E+P Delay[1] (secs.) PM	E+P Level of Service AM	E+P Level of Service PM
1	Van Dell Rd. & 20th St.	CSS	9.2	8.9	A	A	19.1	28.2	C	D
2	Avalon St. & 20th St.	CSS	12.4	10.6	B	B	**126.8**	31.9	**F**	D
3	Avalon St. & 24th St.	CSS	9.3	9.4	A	A	9.3	9.4	A	A
4	Avalon St. & Primavera Av./26th St.	CSS	9.1	8.7	A	A	9.4	9.0	A	A
5	Avalon St. & Driveway 7	**CSS**	Future Intersection				9.1	9.1	A	A
6	Cedar Av. & I-10 WB Ramps	TS	23.3	17.8	C	B	27.1	23.4	C	C
7	Cedar Av. & I-10 EB Ramps	TS	41.6	34.1	D	C	42.0	36.2	D	D
8	Cedar Av. & Orange St.	TS	33.1	21.4	C	C	29.6	21.5	C	C
9	Cedar Av. & Slover Av.	TS	38.1	29.1	D	C	44.1	29.5	D	C
10	Cedar Av. & Santa Ana Av.	TS	30.9	35.8	C	D	32.6	35.8	C	D
11	Cedar Av. & Jurupa Av.	TS	**65.0**	**75.7**	**E**	**E**	**71.5**	**78.6**	**E**	**E**
12	Cedar Av. & 7th St.	TS	11.9	21.6	B	C	12.1	21.2	B	C
13	Cedar Av./Rubidoux Bl. & Tarragona Dr./El Rivino Rd.	TS	10.8	15.5	B	B	11.0	19.9	B	B
14	Rubidoux Bl. & 20th St./Market St.	TS	31.2	42.8	C	D	**84.1**	**>200.0**	**F**	**F**
15	Rubidoux Bl. & 24th St.	CSS	**111.2**	**133.6**	**F**	**F**	**>200.0**	**>200.0**	**F**	**F**
16	Rubidoux Bl. & 26th St.	CSS	14.4	17.3	B	C	19.5	21.6	C	C
17	Rubidoux Bl. & 28th St.	TS	10.5	10.9	B	B	10.7	11.0	B	B
18	Rubidoux Bl. & SR-60 WB Off-Ramp	TS	31.2	33.4	C	C	34.2	36.3	C	D
19	Rubidoux Bl. & SR-60 WB On-Ramp	UC	21.5	15.6	C	C	23.7	22.0	C	C
20	Rubidoux Bl. & SR-60 EB Ramps	TS	39.8	**97.9**	D	**F**	**58.2**	**106.4**	**E**	**F**
21	Rubidoux Bl. & 34th St.	TS	13.8	14.3	B	B	13.9	14.3	B	B
22	30th St. & Frontage Rd./SR-60 EB On-Ramp	CSS	14.3	11.5	B	B	14.5	11.8	B	B
23	Agua Mansa Rd. & Market St.	TS	25.9	37.8	C	D	30.8	42.3	C	D
24	Hall Av. & 24th St.	AWS	8.6	9.1	A	A	8.6	9.2	A	A
25	Hall Av. & 26th St.	CSS	9.8	10.5	A	B	9.8	10.5	A	B
26	Market St. & Via Cerro/24th St.	TS	22.1	33.7	C	C	24.8	38.3	C	D
27	Market St. & Rivera St.	TS	10.8	13.5	B	B	10.3	13.5	B	B
28	Market St. & SR-60 WB Ramps	TS	7.7	11.9	A	B	7.4	11.2	A	B
29	Market St. & SR-60 EB Ramps	TS	20.0	23.1	B	C	20.1	22.4	C	C
30	Market St. & Redwood Dr.	CSS	13.2	14.7	B	B	13.4	15.0	B	C
31	Agua Mansa Rd. & El Rivino Rd.	CSS	18.4	**52.5**	C	**F**	20.7	**62.9**	C	**F**
32	Riverside Av. & Agua Mansa Rd.	TS	24.8	26.7	C	C	26.2	30.2	C	C
33	Van Dell Rd. & 25th St.	**CSS**	8.5	8.6	A	A	17.3	17.2	C	C

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable l

1 Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

2 AWS = All-way Stop; CSS = Cross-street Stop; TS = Traffic Signal; **CSS** = Improvement

5.5 OFF-RAMP QUEUING ANALYSIS

A queuing analysis was performed for the off-ramps at the I-10 Freeway at Cedar Avenue, SR-60 Freeway at Rubidoux Boulevard, and SR-60 Freeway at Market Street interchanges to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the I-10 Freeway or SR-60 Freeway mainline. Queuing analysis findings are presented in Table 5-2. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. As shown in Table 5-2, there are no additional movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows under E+P traffic conditions, in addition to the movement previously identified under Existing (2022) traffic conditions. Worksheets for E+P traffic conditions off-ramp queuing analysis are provided in Appendix 5.3.

TABLE 5-2: FREEWAY OFF-RAMP QUEUING SUMMARY FOR E+P CONDITIONS

#	Intersection	Movement	Available Stacking Distance (Feet)	Existing (2022) 95th Percentile Queue AM Peak	Existing (2022) 95th Percentile Queue PM Peak	Existing (2022) Acceptable? [1] AM	Existing (2022) Acceptable? [1] PM	E+P 95th Percentile Queue AM Peak	E+P 95th Percentile Queue PM Peak	E+P Acceptable? [1] AM	E+P Acceptable? [1] PM
6	Cedar Av. & I-10 WB Ramps	WBL/T/R	1,270	500 [2]	335	Yes	Yes	646 [2]	350	Yes	Yes
		WBR	480	282	274	Yes	Yes	284	287	Yes	Yes
7	Cedar Av. & I-10 EB Ramps	EBL	400	435 [3]	327	Yes	Yes	435 [3]	349	Yes	Yes
		EBL/T/R	1,900	577 [2]	284	Yes	Yes	821 [2]	292	Yes	Yes
18	Rubidoux Bl. & SR-60 WB Off-Ramp	WBL/T/R	1,250	599 [2]	730 [2]	Yes	Yes	663 [2]	748 [2]	Yes	Yes
20	Rubidoux Bl. & SR-60 EB Off-Ramp	EBL/T/R	1,100	753 [2]	**1197 [2]**	Yes	**No**	937 [2]	**1,257 [2]**	Yes	**No**
28	Market St. & SR-60 WB Ramps	WBL	170	71	98	Yes	Yes	71	98	Yes	Yes
		WBR	1,350	0	0	Yes	Yes	0	0	Yes	Yes
29	Market St. & SR-60 EB Ramps	EBL	155	129	87	Yes	Yes	129	87	Yes	Yes
		EBR	1,635	46	76	Yes	Yes	46	88	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 25 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

[3] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 or SR-60 Freeway mainline.

5.6 DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

This section provides a summary of deficiencies and recommended improvements for E+P traffic conditions. Based on deficiency criteria discussed in Section 2.6 *Deficiency Criteria*, the following intersections were found to be deficient.

5.6.1 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

Improvements necessary to improve these traffic deficiencies back to acceptable levels are also discussed below. The intersection operations analysis worksheets for E+P traffic conditions, with improvements, are included in Appendix 5.4 of this TA.

Recommended Improvement – Avalon Street & 20th Street (#2) – The following improvements are necessary to bring the LOS back to acceptable levels:

- Install a traffic signal

Recommended Improvement – Cedar Avenue & Jurupa Avenue (#11) – The following improvements are necessary to bring the LOS back to acceptable levels:

- Restripe the eastbound approach to provide one left turn lane and one shared through-right turn lane.
- Restripe the westbound approach to provide one left turn lane and one shared through-right turn lane.

Recommended Improvement – Rubidoux Boulevard & 20th Street/Market Street (#14) – The following improvement is necessary to bring the LOS back to acceptable levels:

- Add an eastbound right turn lane.
- Add a westbound left turn lane.

Recommended Improvement – Rubidoux Boulevard & 24th Street (#15) – The following improvements are necessary to bring the LOS back to acceptable levels:

- Install a traffic signal.
- Add a northbound left turn lane.
- Add a southbound left turn lane.

Recommended Improvement – Rubidoux Boulevard & SR-60 Eastbound Ramps (#20) – The following improvements are necessary to bring the LOS back to acceptable levels:

- Add an eastbound right turn lane.

Recommended Improvement – Agua Mansa Road & El Rivino Road (#31) – The following improvement is necessary to bring the LOS back to acceptable levels:

- Install a traffic signal.

TABLE 5-3: INTERSECTION ANALYSIS FOR E+P CONDITIONS WITH IMPROVEMENTS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1] Northbound L	T	R	Southbound L	T	R	Eastbound L	T	R	Westbound L	T	R	Delay[2] (secs.) AM	PM	Level of Service AM	PM
2	Avalon St. & 20th St.																	
	- Without Improvements	CSS	0	1	0	0	1	0	0	1	0	0	1	0	**126.8**	31.9	**F**	D
	- With Improvements	**TS**	0	1	0	0	1	0	0	1	0	0	1	0	8.4	9.4	A	A
11	Cedar Av. & Jurupa Av.																	
	- Without Improvements	TS	1	2	0	1	2	0	0	1	d	0	1	d	**71.5**	**78.6**	**E**	**E**
	- With Improvements	TS	1	2	0	1	2	0	**1**	1	**0**	**1**	1	**0**	33.5	27.1	C	C
14	Rubidoux Bl. & 20th St./Market St.																	
	- Without Improvements	TS	1	2	1	1	2	1	1	1	0	0	1	1>>	**84.1**	**>200.0**	**F**	**F**
	- With Improvements	TS	1	2	1	1	2	1	1	1	**1**	**1**	1	1>>	46.9	54.2	D	D
15	Rubidoux Bl. & 24th St.																	
	- Without Improvements	CSS	0	2	0	0	2	0	0	1	0	0	1	0	**>200.0**	**>200.0**	**F**	**F**
	- With Improvements	**TS**	**1**	2	0	**1**	2	0	0	1	0	0	1	0	10.0	9.5	A	A
20	Rubidoux Bl. & SR-60 EB Ramps																	
	- Without Improvements	TS	0	2	0	1	2	0	0	1	0	1	0	1	**58.2**	**9.1**	**A**	**A**
	- With Improvements	TS	0	2	0	1	2	0	**1**	1	0	1	0	1	33.9	35.4	C	D
31	Agua Mansa Rd. & El Rivino Rd.																	
	- Without Improvements	CSS	1	2	0	0	1	0	0	1	0	0	0	0	20.7	**62.9**	C	**F**
	- With Improvements	**TS**	1	2	0	0	1	0	0	1	0	0	0	0	11.6	12.9	B	B

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicl outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free-Right Turn Lane; d = Defacto Right Turn Lane; **1** = Improvement

[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross-street Stop; AWS = All-way Stop; TS = Traffic Signal; **TS** = Improvements

5.6.2 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES ON OFF-RAMP QUEUES

Table 5-4 shows the freeway off-ramp queuing analysis results for the SR-60 Eastbound off-ramp at Rubidoux Boulevard with the improvements shown on Table 5-3 implemented. As shown on Table 5-4, the 95th percentile queue can be accommodated at the off-ramp without spilling back and affecting the SR-60 Freeway mainline with the proposed improvement. Worksheets for E+P traffic conditions off-ramp queuing analysis, with improvements, are provided in Appendix 5.5.

TABLE 5-4: FREEWAY OFF-RAMP QUEUING SUMMARY FOR E+P CONDITIONS WITH IMPROVEMENTS

#	Intersection	Movement	Available Stacking Distance (Feet)	E+P 95th Percentile Queue (Feet) AM Peak Hour	E+P 95th Percentile Queue (Feet) PM Peak Hour	Acceptable? [1] AM	Acceptable? [1] PM
20	Rubidoux Bl. & SR-60 EB Off-Ramp	**EBL**	**1100**	384	603 [2]	Yes	Yes
		EBL/T/R	1100	318	375 [2]	Yes	Yes

Note:**300** = Improvement

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 25 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

6 OPENING YEAR PLUS PROJECT TRAFFIC CONDITIONS

This section discusses the traffic forecasts for Opening Year (2025) Plus Project conditions and the resulting intersection operations, traffic signal warrant, and freeway off-ramp queuing analyses.

6.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Opening Year Plus Project conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for Opening Year Plus Project conditions (e.g., intersection and roadway improvements at the Project's frontage and driveways).

6.2 OPENING YEAR PLUS PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes plus an ambient growth factor of 6.12% plus Project traffic. The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Opening Year Plus Project traffic conditions are shown on Exhibit 6-1.

6.3 INTERSECTION OPERATIONS ANALYSIS

Opening Year Plus Project peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TA. The intersection analysis results are summarized in Table 6-1 for Opening Year Plus Project traffic conditions, which indicates that the following study area intersections are anticipated to operate at an unacceptable LOS, in addition to the locations previously identified under Existing traffic conditions:

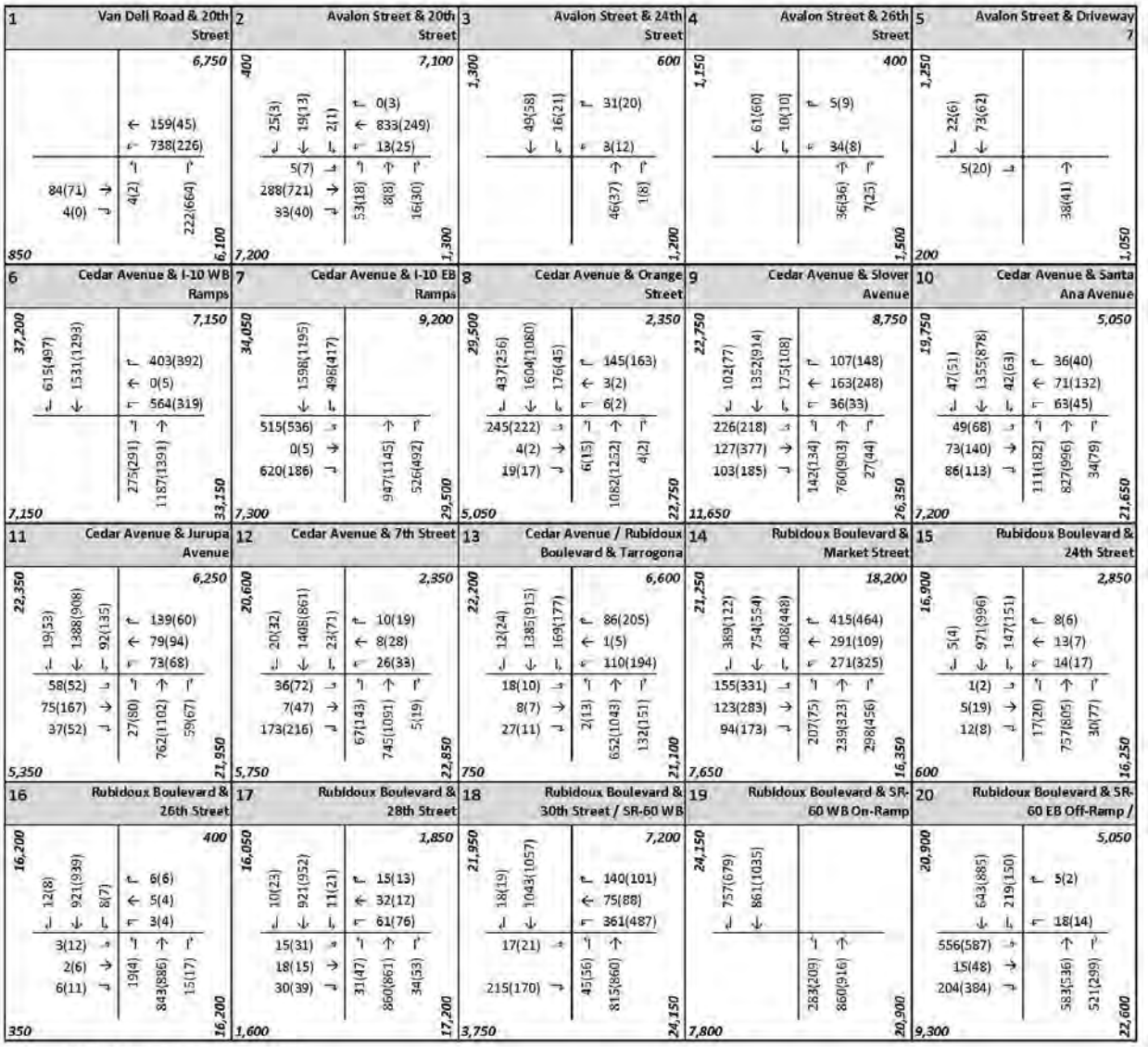
- Avalon St. & 20th St. (#2) – LOS F AM peak hour only
- Rubidoux Bl. & 20th St./Market St. (#14) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 EB Ramps (#20) – LOS E AM peak hour only (LOS F remains unchanged for PM peak hour)

The intersection operations analysis worksheets for Opening Year Plus Project traffic conditions are included in Appendix 6.1 of this TA.

6.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

There are no additional study area intersections anticipated to meet peak hour or planning level (ADT) traffic signal warrants under Opening Year Plus Project traffic conditions (see Appendix 6.2).

EXHIBIT 6-1: OPENING YEAR PLUS PROJECT TRAFFIC VOLUMES (PCE)



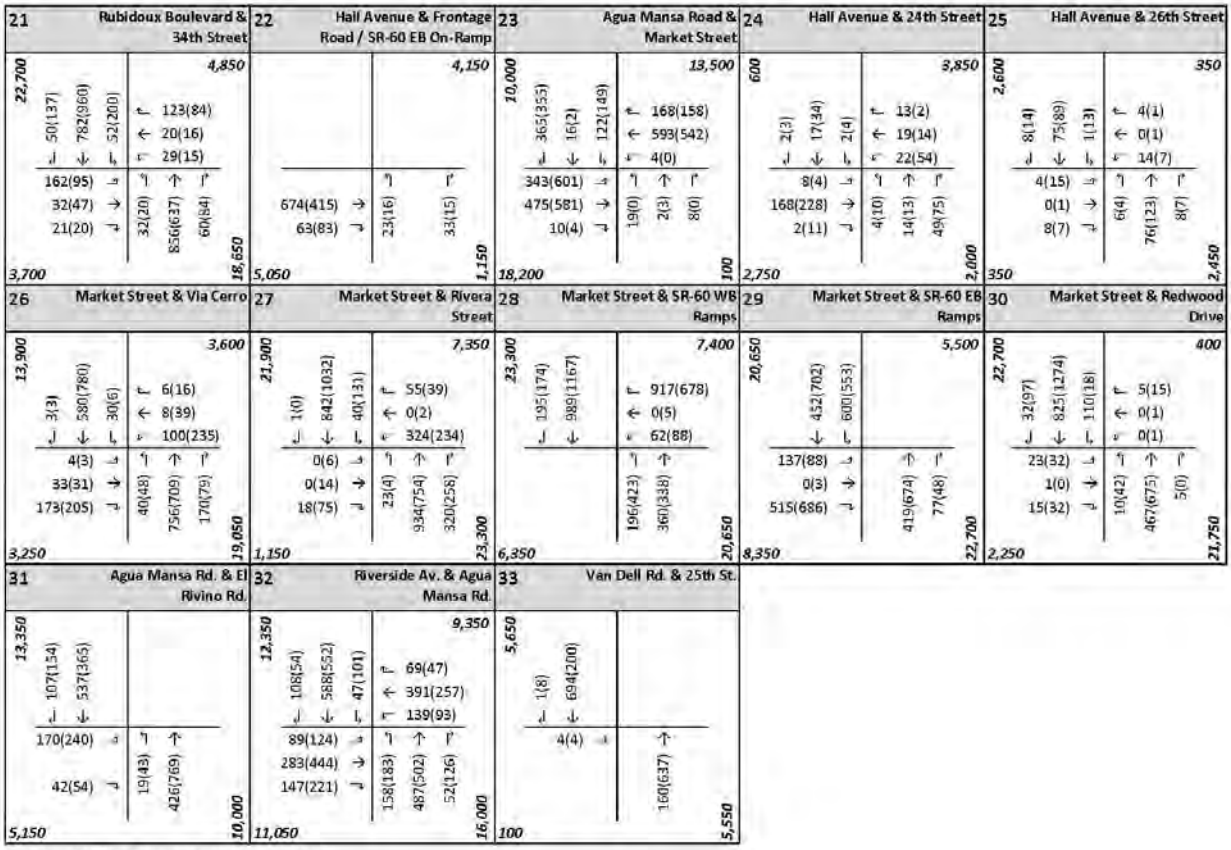

21 Rubidoux Boulevard & 34th Street
22 Hall Avenue & Frontage Road / SR-60 EB On-Ramp
23 Agua Mansa Road & Market Street
24 Hall Avenue & 24th Street
25 Hall Avenue & 26th Street
26 Market Street & Via Cerro
27 Market Street & Rivera Street
28 Market Street & SR-60 WB Ramps
29 Market Street & SR-60 EB Ramps
30 Market Street & Redwood Drive
31 Agua Mansa Rd. & El Rivino Rd.
32 Riverside Av. & Agua Mansa Rd.
33 Van Dell Rd. & 25th St.
##(##) AM(PM) Peak Hour Intersection Volumes
Average Daily Trips

TABLE 6-1: INTERSECTION ANALYSIS FOR OPENING YEAR PLUS PROJECT CONDITIONS

#	Intersection	Traffic Control[2]	Existing (2022) Delay[1] (secs.) AM	Existing (2022) Delay[1] (secs.) PM	Existing (2022) Level of Service AM	Existing (2022) Level of Service PM	Opening Year Plus Project Delay[1] (secs.) AM	Opening Year Plus Project Delay[1] (secs.) PM	Opening Year Plus Project Level of Service AM	Opening Year Plus Project Level of Service PM
1	Van Dell Rd. & 20th St.	CSS	9.2	8.9	A	A	20.0	29.1	C	D
2	Avalon St. & 20th St.	CSS	12.4	10.6	B	B	**158.1**	33.3	**F**	D
3	Avalon St. & 24th St.	CSS	9.3	9.4	A	A	9.3	9.5	A	A
4	Avalon St. & Primavera Av./26th St.	CSS	9.1	8.7	A	A	9.5	9.0	A	A
5	Avalon St. & Driveway 7	**CSS**	Future Intersection				9.2	9.2	A	A
6	Cedar Av. & I-10 WB Ramps	TS	23.3	17.8	C	B	31.6	24.7	C	C
7	Cedar Av. & I-10 EB Ramps	TS	41.6	34.1	D	C	46.2	37.2	D	D
8	Cedar Av. & Orange St.	TS	33.1	21.4	C	C	32.3	23.0	C	C
9	Cedar Av. & Slover Av.	TS	38.1	29.1	D	C	46.6	31.1	D	C
10	Cedar Av. & Santa Ana Av.	TS	30.9	35.8	C	D	32.8	35.3	C	D
11	Cedar Av. & Jurupa Av.	TS	**65.0**	**75.7**	**E**	**E**	**75.3**	**79.0**	**E**	**E**
12	Cedar Av. & 7th St.	TS	11.9	21.6	B	C	12.7	22.2	B	C
13	Cedar Av./Rubidoux Bl. & Tarragona Dr./El Rivino Rd.	TS	10.8	15.5	B	B	11.6	23.2	B	C
14	Rubidoux Bl. & 20th St./Market St.[3]	TS	31.2	42.8	C	D	31.4	35.2	C	D
15	Rubidoux Bl. & 24th St.	CSS	**111.2**	**133.6**	**F**	**F**	**>200.0**	**>200.0**	**F**	**F**
16	Rubidoux Bl. & 26th St.	CSS	14.4	17.3	B	C	20.5	23.0	C	C
17	Rubidoux Bl. & 28th St.	TS	10.5	10.9	B	B	11.0	11.5	B	B
18	Rubidoux Bl. & SR-60 WB Off-Ramp	TS	31.2	33.4	C	C	39.3	42.5	D	D
19	Rubidoux Bl. & SR-60 WB On-Ramp	UC	21.5	15.6	C	C	30.9	27.6	D	D
20	Rubidoux Bl. & SR-60 EB Ramps	TS	39.8	**97.9**	D	**F**	**65.7**	**121.1**	**E**	**F**
21	Rubidoux Bl. & 34th St.	TS	13.8	14.3	B	B	14.8	15.1	B	B
22	30th St. & Frontage Rd./SR-60 EB On-Ramp	CSS	14.3	11.5	B	B	15.2	12.1	C	B
23	Agua Mansa Rd. & Market St.	TS	25.9	37.8	C	D	33.4	50.5	C	D
24	Hall Av. & 24th St.	AWS	8.6	9.1	A	A	8.7	9.3	A	A
25	Hall Av. & 26th St.	CSS	9.8	10.5	A	B	9.9	10.6	A	B
26	Market St. & Via Cerro/24th St.	TS	22.1	33.7	C	C	26.8	46.4	C	D
27	Market St. & Rivera St.	TS	10.8	13.5	B	B	10.5	13.9	B	B
28	Market St. & SR-60 WB Ramps	TS	7.7	11.9	A	B	7.3	11.4	A	B
29	Market St. & SR-60 EB Ramps	TS	20.0	23.1	B	C	20.8	23.8	C	C
30	Market St. & Redwood Dr.	CSS	13.2	14.7	B	B	14.2	16.0	B	C
31	Agua Mansa Rd. & El Rivino Rd.	CSS	18.4	**52.5**	C	**F**	22.9	**89.4**	C	**F**
32	Riverside Av. & Agua Mansa Rd.	TS	24.8	26.7	C	C	29.1	34.2	C	C
33	Van Dell Rd. & 25th St.	**CSS**	8.5	8.6	A	A	17.3	17.2	C	C

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable l

1 Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

2 AWS = All-way Stop; CSS = Cross-street Stop; TS = Traffic Signal; **CSS** = Improvement

3 Intersection is currently under construction and is anticipated to be completed by the Project's opening year. As such, the analysis for opening year conditions includes the intersection improvements currently under construction.

6.5 OFF-RAMP QUEUING ANALYSIS

A queuing analysis was performed for the off-ramps at the I-10 Freeway at Cedar Avenue, SR-60 Freeway at Rubidoux Boulevard, and SR-60 Freeway at Market Street interchanges to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the I-10 Freeway or SR-60 Freeway mainline. Queuing analysis findings are presented in Table 6-2. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. As shown in Table 6-2, there are no additional movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows under Opening Year Plus Project traffic conditions, in addition to the movement previously identified under Existing (2022) traffic conditions. Worksheets for Opening Year Plus Project traffic conditions off-ramp queuing analysis are provided in Appendix 6.3.

TABLE 6-2: FREEWAY OFF-RAMP QUEUING SUMMARY FOR OPENING YEAR PLUS PROJECT CONDITIONS

			Available	Existing (2022)				Opening Year Plus Project			
			Stacking	95th Percentile Queue		Acceptable?[1]		95th Percentile Queue		Acceptable?[1]	
#	Intersection	Movement	Distance (Feet)	AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM
6	Cedar Av. & I-10 WB Ramps	WBL/T/R	1,270	500 [2]	335	Yes	Yes	697 [2]	374	Yes	Yes
		WBR	480	282	274	Yes	Yes	316	311	Yes	Yes
7	Cedar Av. & I-10 EB Ramps	EBL	400	435 [3]	327	Yes	Yes	480 [2,3]	373	Yes	Yes
		EBL/T/R	1,900	577 [2]	284	Yes	Yes	877 [2]	311	Yes	Yes
18	Rubidoux Bl. & SR-60 WB Off-Ramp	WBL/T/R	1,250	599 [2]	730 [2]	Yes	Yes	716 [2]	814 [2]	Yes	Yes
20	Rubidoux Bl. & SR-60 EB Off-Ramp	EBL/T/R	1,100	753 [2]	**1197 [2]**	Yes	**No**	999 [2]	**1,348 [2]**	Yes	**No**
28	Market St. & SR-60 WB Ramps	WBL	170	71	98	Yes	Yes	74	102	Yes	Yes
		WBR	1,350	0	0	Yes	Yes	0	0	Yes	Yes
29	Market St. & SR-60 EB Ramps	EBL	155	129	87	Yes	Yes	135	91	Yes	Yes
		EBR	1,635	46	76	Yes	Yes	48	123	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 25 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

[3] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 or SR-60 Freeway mainline.

6.6 DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

This section provides a summary of deficiencies and recommended improvements for Opening Year Plus Project traffic conditions. Based on deficiency criteria discussed in Section 2.6 *Deficiency Criteria*, the following intersections were found to be deficient.

6.6.1 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

Improvements necessary to improve these traffic deficiencies back to acceptable levels are also discussed below. The effectiveness of the recommended improvement strategies discussed below to address Opening Year Plus Project traffic deficiencies is presented in Table 6-3 and described below. The intersection operations analysis worksheets for Opening Year Plus Project traffic conditions, with improvements, are included in Appendix 6.4 of this TA.

Recommended Improvement – Avalon Street & 20th Street (#2) – The following improvements are necessary to bring the LOS back to acceptable levels:

- Install a traffic signal

Recommended Improvement – Cedar Avenue & Jurupa Avenue (#11) – The following improvements are necessary to bring the LOS back to acceptable levels:

- Restripe the eastbound approach to provide one left turn lane and one shared through-right turn lane.
- Restripe the westbound approach to provide one left turn lane and one shared through-right turn lane.

Recommended Improvement – Rubidoux Boulevard & 20th Street/Market Street (#14) – The following improvement is necessary to bring the LOS back to acceptable levels:

- Add an eastbound right turn lane and modify the signal to implement overlap phasing.
- Add a westbound left turn lane.

Recommended Improvement – Rubidoux Boulevard & 24th Street (#15) – The following improvements are necessary to bring the LOS back to acceptable levels:

- Install a traffic signal.
- Add a northbound left turn lane.
- Add a southbound left turn lane.

Recommended Improvement – Rubidoux Boulevard & SR-60 Eastbound Ramps (#20) – The following improvements are necessary to bring the LOS back to acceptable levels:

- Add an eastbound right turn lane.

Recommended Improvement – Agua Mansa Road & El Rivino Road (#31) – The following improvement is necessary to bring the LOS back to acceptable levels:

- Install a traffic signal.

TABLE 6-3: INTERSECTION ANALYSIS FOR OPENING YEAR PLUS PROJECT CONDITIONS WITH IMPROVEMENTS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1] Northbound L	T	R	Southbound L	T	R	Eastbound L	T	R	Westbound L	T	R	Delay[2] (secs.) AM	PM	Level of Service AM	PM
2	Avalon St. & 20th St.																	
	- Without Improvements	CSS	0	1	0	0	1	0	0	1	0	0	1	0	**126.8**	31.9	**F**	D
	- With Improvements	**TS**	0	1	0	0	1	0	0	1	0	0	1	0	8.6	6.9	A	A
11	Cedar Av. & Jurupa Av.																	
	- Without Improvements	TS	1	2	0	1	2	0	0	1	d	0	1	d	**71.5**	**78.6**	**E**	**E**
	- With Improvements	TS	1	2	0	1	2	0	**1**	1	**0**	**1**	1	**0**	33.8	27.2	C	C
15	Rubidoux Bl. & 24th St.																	
	- Without Improvements	CSS	0	2	0	0	2	0	0	1	0	0	1	0	**>200.0**	**>200.0**	**F**	**F**
	- With Improvements	**TS**	**1**	2	0	**1**	2	0	0	1	0	0	1	0	10.4	9.9	B	A
20	Rubidoux Bl. & SR-60 EB Ramps																	
	- Without Improvements	TS	0	2	0	1	2	0	0	1	0	1	0	1	**58.2**	**9.1**	**A**	**A**
	- With Improvements	TS	0	2	0	1	2	0	**1**	1	0	1	0	1	34.0	37.0	C	D
31	Agua Mansa Rd. & El Rivino Rd.																	
	- Without Improvements	CSS	1	2	0	0	1	0	0	1	0	0	0	0	20.7	**62.9**	C	**F**
	- With Improvements	**TS**	1	2	0	0	1	0	0	1	0	0	0	0	12.3	13.4	B	B

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; d = Defacto Right Turn Lane; **1** = Improvement

[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way st control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are

[3] CSS = Cross-street Stop; TS = Traffic Signal; **TS** = Improvements

6.6.2 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES ON OFF-RAMP QUEUES

Table 6-4 shows the freeway off-ramp queuing analysis results for the SR-60 Eastbound off-ramp at Rubidoux Boulevard with the improvements shown on Table 6-3 implemented. As shown on Table 6-4, the 95th percentile queue can be accommodated at the off-ramp without spilling back and affecting the SR-60 Freeway mainline with the proposed improvement. Worksheets for Opening Year Plus Project traffic conditions, with improvements, off-ramp queuing analysis are provided in Appendix 6.5.

TABLE 6-4: FREEWAY OFF-RAMP QUEUING SUMMARY FOR OPENING YEAR PLUS PROJECT CONDITIONS WITH IMPROVEMENTS

#	Intersection	Movement	Available Stacking Distance (Feet)	Opening Year Plus Project 95th Percentile Queue (Feet) AM Peak Hour	PM Peak Hour	Acceptable? [1] AM	PM
20	Rubidoux Bl. & SR-60 EB Off-Ramp	**EBL**	**1100**	403	652 [2]	Yes	Yes
		EBL/T/R	1100	335	462 [2]	Yes	Yes

Note: **300** = Improvement

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 25 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

7 OPENING YEAR BACKGROUND CONDITIONS WITHOUT PROJECT

This section discusses the traffic forecasts for Opening Year Background Conditions Without Project and the resulting intersection operations, traffic signal warrant, and freeway off-ramp queuing analyses.

7.1 ROADWAY IMPROVEMENTS

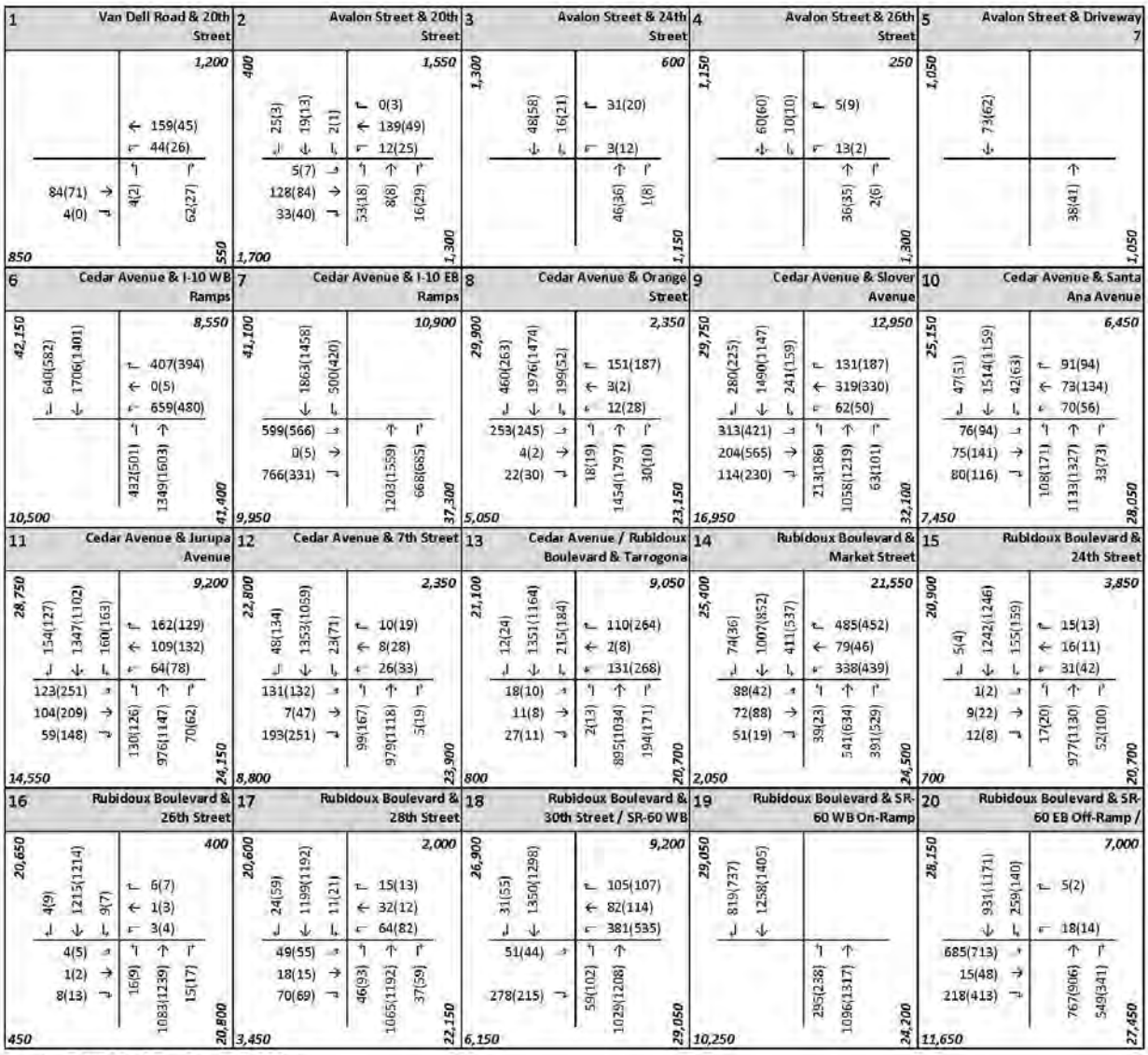
The lane configurations and traffic controls assumed to be in place for Opening Year Background Conditions Without Project are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

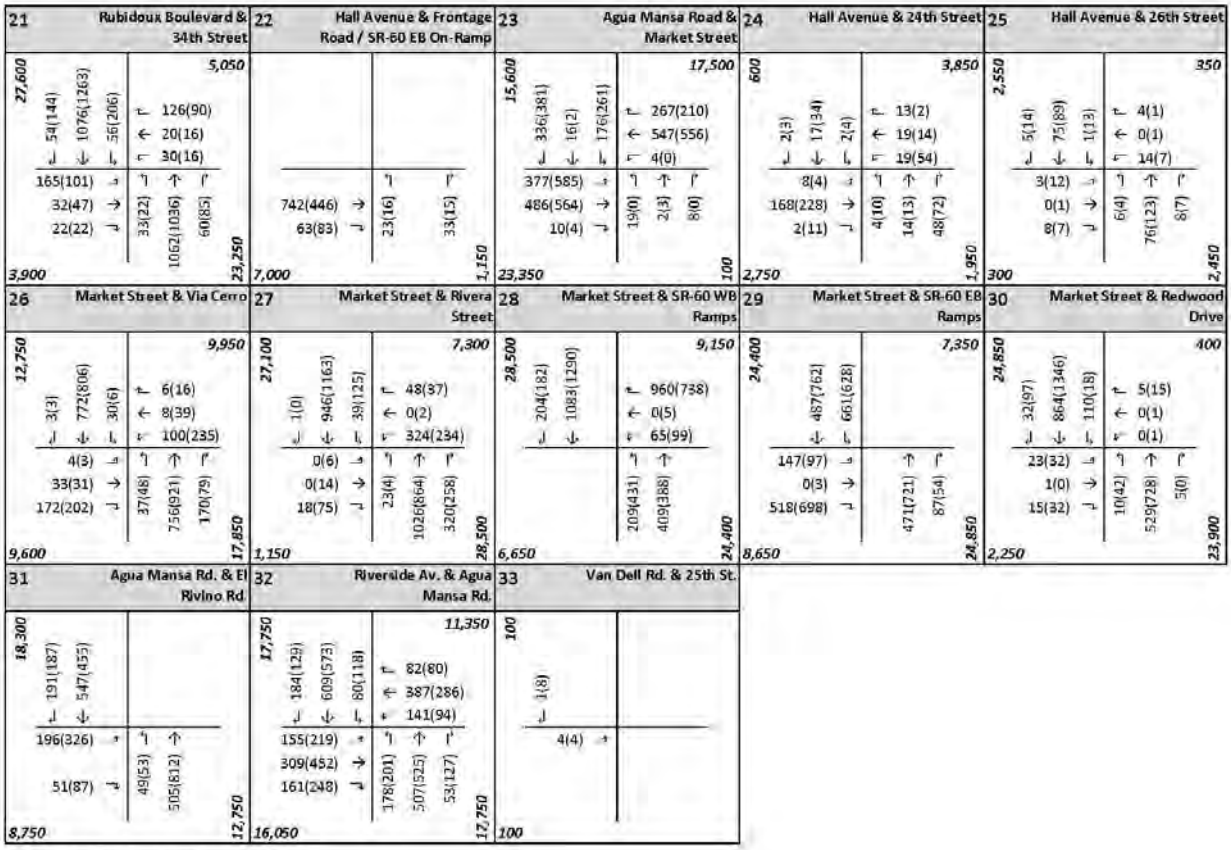
- Driveways and those facilities assumed to be constructed by approved cumulative developments to provide site access are also assumed to be in place Opening Year Background Conditions Without Project (e.g., intersection and roadway improvements along the cumulative development's frontages).

7.2 OPENING YEAR BACKGROUND CONDITIONS WITHOUT PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes plus an ambient growth factor of 6.12% plus traffic from approved projects in the area that are expected to be occupied by the Project's opening year. The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Opening Year Background Conditions Without Project are shown on Exhibit 7-1.

EXHIBIT 7-1: OPENING YEAR BACKGROUND CONDITIONS WITHOUT PROJECT TRAFFIC VOLUMES (PCE)





##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

7.3 INTERSECTION OPERATIONS ANALYSIS

Opening Year Background Conditions Without Project peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TA. The intersection analysis results are summarized in Table 7-1 for Opening Year Background Conditions Without Project, which indicates that the following study area intersections are anticipated to operate at an unacceptable LOS, in addition to the locations previously identified under Existing traffic conditions:

- Cedar Av. & I-10 WB Ramps (#6) – LOS E AM and PM peak hours
- Cedar Av. & I-10 EB Ramps (#7) – LOS F AM peak hour; LOS E PM peak hour
- Cedar Av. & Orange St. (#8) – LOS E AM and PM peak hours
- Cedar Av. & Jurupa Av. (#11) – LOS F AM and PM peak hours
- Rubidoux Bl. & 20th St./Market St. (#14) – LOS F PM peak hour only
- Rubidoux Bl. & SR-60 WB Off-Ramp (#18) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 WB On-Ramp (#19) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 EB Ramps (#20) – LOS F AM peak hour
- Agua Mansa Rd. & Market St. (#23) – LOS E PM peak hour only
- Via Cerro/24th St. & Market St. (#26) – LOS E PM peak hour only
- Agua Mansa Rd. & El Rivino Rd. (#31) – LOS E AM peak hour
- Riverside Dr. & Agua Mansa Rd. (#32) – LOS E PM peak hour only

The intersection operations analysis worksheets for Opening Year Background Conditions Without Project are included in Appendix 7.1 of this TA.

7.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

There are no additional study area intersections anticipated to meet peak hour or planning level (ADT) traffic signal warrants under Opening Year Background Conditions Without Project (see Appendix 7.2).

7.5 OFF-RAMP QUEUING ANALYSIS

A queuing analysis was performed for the off-ramps at the I-10 Freeway at Cedar Avenue, SR-60 Freeway at Rubidoux Boulevard, and SR-60 Freeway at Market Street interchanges to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the I-10 Freeway or SR-60 Freeway mainline. Queuing analysis findings are presented in Table 7-2. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. As shown in Table 7-2, there are no additional movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows under Opening Year Background Conditions Without Project, in addition to the movement previously identified under Existing (2022) traffic conditions. Worksheets for Opening Year Background Conditions without Project off-ramp queuing analysis are provided in Appendix 7.3.

TABLE 7-1: INTERSECTION ANALYSIS FOR OPENING YEAR BACKGROUND CONDITIONS WITHOUT PROJECT

#	Intersection	Traffic Control[2]	Existing (2022) Delay[1] (secs.) AM	Existing (2022) Delay[1] (secs.) PM	Existing (2022) Level of Service AM	Existing (2022) Level of Service PM	Opening Year Background Without Project Delay[1] (secs.) AM	Opening Year Background Without Project Delay[1] (secs.) PM	Opening Year Background Without Project Level of Service AM	Opening Year Background Without Project Level of Service PM
1	Van Dell Rd. & 20th St.	CSS	9.2	8.9	A	A	9.3	8.9	A	A
2	Avalon St. & 20th St.	CSS	12.4	10.6	B	B	12.8	10.7	B	B
3	Avalon St. & 24th St.	CSS	9.3	9.4	A	A	8.8	8.9	A	A
4	Avalon St. & Primavera Av./26th St.	CSS	9.1	8.7	A	A	9.2	8.7	A	A
5	Avalon St. & Driveway 7	**CSS**	Future Intersection				Future Intersection			
6	Cedar Av. & I-10 WB Ramps	TS	23.3	17.8	C	B	**56.1**	**66.0**	**E**	**E**
7	Cedar Av. & I-10 EB Ramps	TS	41.6	34.1	D	C	**94.0**	**73.8**	**F**	**E**
8	Cedar Av. & Orange St.	TS	33.1	21.4	C	C	27.6	27.6	C	C
9	Cedar Av. & Slover Av.	TS	38.1	29.1	D	C	49.8	47.7	D	D
10	Cedar Av. & Santa Ana Av.	TS	30.9	35.8	C	D	33.1	39.1	C	D
11	Cedar Av. & Jurupa Av.	TS	**65.0**	**75.7**	**E**	**E**	**168.5**	**>200.0**	**F**	**F**
12	Cedar Av. & 7th St.	TS	11.9	21.6	B	C	18.8	29.0	B	C
13	Cedar Av./Rubidoux Bl. & Tarragona Dr./El Rivino Rd.	TS	10.8	15.5	B	B	15.0	40.1	B	D
14	Rubidoux Bl. & 20th St./Market St.[3]	TS	31.2	42.8	C	D	24.1	28.8	C	C
15	Rubidoux Bl. & 24th St.	CSS	**111.2**	**133.6**	**F**	**F**	**>200.0**	**>200.0**	**F**	**F**
16	Rubidoux Bl. & 26th St.	CSS	14.4	17.3	B	C	23.6	28.9	C	D
17	Rubidoux Bl. & 28th St.	TS	10.5	10.9	B	B	15.4	17.8	B	B
18	Rubidoux Bl. & SR-60 WB Off-Ramp	TS	31.2	33.4	C	C	**80.2**	**100.2**	**F**	**F**
19	Rubidoux Bl. & SR-60 WB On-Ramp	UC	21.5	15.6	C	C	**196.1**	**>200.0**	**F**	**F**
20	Rubidoux Bl. & SR-60 EB Ramps	TS	39.8	**97.9**	D	**F**	**96.7**	**147.0**	**F**	**F**
21	Rubidoux Bl. & 34th St.	TS	13.8	14.3	B	B	19.9	21.2	B	C
22	30th St. & Frontage Rd./SR-60 EB On-Ramp	CSS	14.3	11.5	B	B	16.3	12.5	C	B
23	Agua Mansa Rd. & Market St.	TS	25.9	37.8	C	D	37.4	**64.8**	D	**E**
24	Hall Av. & 24th St.	AWS	8.6	9.1	A	A	8.7	9.4	A	A
25	Hall Av. & 26th St.	CSS	9.8	10.5	A	B	9.8	10.6	A	B
26	Market St. & Via Cerro/24th St.	TS	22.1	33.7	C	C	27.3	**78.1**	C	**E**
27	Market St. & Rivera St.	TS	10.8	13.5	B	B	10.2	12.9	B	B
28	Market St. & SR-60 WB Ramps	TS	7.7	11.9	A	B	7.1	11.3	A	B
29	Market St. & SR-60 EB Ramps	TS	20.0	23.1	B	C	21.3	28.0	C	C
30	Market St. & Redwood Dr.	CSS	13.2	14.7	B	B	14.5	17.0	B	C
31	Agua Mansa Rd. & El Rivino Rd.	CSS	18.4	**52.5**	C	**F**	**36.0**	**>200.0**	**E**	**F**
32	Riverside Av. & Agua Mansa Rd.	TS	24.8	26.7	C	C	41.0	**63.9**	D	**E**
33	Van Dell Rd. & 25th St.	CSS	8.5	8.6	A	A	8.5	8.6	A	A

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable l

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] AWS = All-way Stop; CSS = Cross-street Stop; TS = Traffic Signal; **CSS** = Improvement

[3] Intersection is currently under construction and is anticipated to be completed by the Project's opening year. As such, the analysis for opening year conditions includes the intersection improvements currently under construction.

TABLE 7-2: FREEWAY OFF-RAMP QUEUING SUMMARY FOR OPENING YEAR BACKGROUND CONDITIONS WITHOUT PROJECT

#	Intersection	Movement	Available Stacking Distance (Feet)	Existing (2022) 95th Percentile Queue AM Peak	Existing (2022) 95th Percentile Queue PM Peak	Existing (2022) Acceptable? [1] AM	Existing (2022) Acceptable? [1] PM	Opening Year Background Without Project 95th Percentile Queue AM Peak	Opening Year Background Without Project 95th Percentile Queue PM Peak	Opening Year Background Without Project Acceptable? [1] AM	Opening Year Background Without Project Acceptable? [1] PM
6	Cedar Av. & I-10 WB Ramps	WBL/T/R	1,270	500 [2]	335	Yes	Yes	864 [2]	650 [2]	Yes	Yes
		WBR	480	282	274	Yes	Yes	324	329	Yes	Yes
7	Cedar Av. & I-10 EB Ramps	EBL	400	435 [3]	327	Yes	Yes	635 [2,3]	550 [2,3]	Yes	Yes
		EBL/T/R	1,900	577 [2]	284	Yes	Yes	1,150 [2]	469 [2]	Yes	Yes
18	Rubidoux Bl. & SR-60 WB Off-Ramp	WBL/T/R	1,250	599 [2]	730 [2]	Yes	Yes	705 [2]	951 [2]	Yes	Yes
20	Rubidoux Bl. & SR-60 EB Off-Ramp	EBL/T/R	1,100	753 [2]	**1197 [2]**	Yes	**No**	1,232 [2]	**1,599 [2]**	**No**	**No**
28	Market St. & SR-60 WB Ramps	WBL	170	71	98	Yes	Yes	77	121 [2]	Yes	Yes
		WBR	1,350	0	0	Yes	Yes	0	0	Yes	Yes
29	Market St. & SR-60 EB Ramps	EBL	155	129	87	Yes	Yes	143	98	Yes	Yes
		EBR	1,635	46	76	Yes	Yes	48	159 [2]	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 25 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

[3] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 or SR-60 Freeway mainline.

7.6 DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

This section provides a summary of deficiencies and recommended improvements for Opening Year Background Conditions Without Project. Based on deficiency criteria discussed in Section 2.6 *Deficiency Criteria*, the following intersections were found to be deficient.

7.6.1 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

Improvement strategies have been recommended at intersections that have been identified as deficient in an effort to reduce each location's peak hour delay and improve the associated LOS grade to acceptable LOS. The effectiveness of the recommended improvement strategies to address Opening Year Background Conditions Plus Project traffic deficiencies are presented in Table 7-3. The intersection operations analysis worksheets for Opening Year Background Conditions Plus Project, with improvements, are included in Appendix 7.4 of this TA.

7.6.2 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES ON OFF-RAMP QUEUES

Table 7-4 shows the freeway off-ramp queuing analysis results for the SR-60 Eastbound off-ramp at Rubidoux Boulevard with the improvements shown on Table 7-3 implemented. As shown on Table 7-4, the 95th percentile queue can be accommodated at the off-ramp without spilling back and affecting the SR-60 Freeway mainline with the proposed improvement. Worksheets for Opening Year Background Conditions Without Project, with improvements, off-ramp queuing analysis are provided in Appendix 7.5.

TABLE 7-3: INTERSECTION ANALYSIS FOR OPENING YEAR BACKGROUND CONDITIONS WITHOUT PROJECT WITH IMPROVEMENTS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1] Northbound L	T	R	Southbound L	T	R	Eastbound L	T	R	Westbound L	T	R	Delay[2] (secs.) AM	PM	Level of Service AM	PM
6	Cedar Av. & I-10 WB ramps																	
	- Without Improvements	TS	1	2	0	0	3	1	0	0	0	0	1	1	**56.1**	**66.0**	**E**	**E**
	- With Improvements	TS	**2**	2	0	0	3	1	0	0	0	0	1	1	43.2	26.0	D	C
7	Cedar Av. & I-10 EB Ramps																	
	- Without Improvements	TS	0	3	1	1	2	0	1	1	0	0	0	0	**94.0**	**73.8**	**F**	**E**
	- With Improvements	TS	0	3	1	**2**	2	0	1	1	0	0	0	0	48.1	26.5	D	C
11	Cedar Av. & Jurupa Av.																	
	- Without Improvements	TS	1	2	0	1	2	0	0	1	d	0	1	d	**168.5**	**>200.0**	**F**	**F**
	- With Improvements	TS	1	2	0	1	2	0	**1**	1	**0**	**1**	1	**0**	34.0	41.3	C	D
15	Rubidoux Bl. & 24th St.																	
	- Without Improvements	CSS	0	2	0	0	2	0	0	1	0	0	1	0	**>200.0**	**>200.0**	**F**	**F**
	- With Improvements	**TS**	**1**	2	0	**1**	2	0	0	1	0	0	1	0	11.9	12.7	B	B
18	Rubidoux Bl. & SR-60 WB Off-Ramp																	
	- Without Improvements	TS	1	2	0	0	2	0	1	0	1	0	1	0	**80.2**	**100.2**	**F**	**F**
	- With Improvements	TS	1	2	0	0	2	0	1	0	1	**1**	1	0	41.0	45.3	D	D
19	Rubidoux Bl. & SR-60 WB On-Ramp																	
	- Without Improvements	UC	1	2	0	0	2	0	0	0	0	0	0	0	**196.1**	**>200.0**	**F**	**F**
	- With Improvements	**TS**	1	2	0	0	2	0	0	0	0	0	0	0	6.4	5.4	A	A
20	Rubidoux Bl. & SR-60 EB Ramps																	
	- Without Improvements	TS	0	2	0	1	2	0	0	1	0	1	0	1	**96.7**	**147.0**	**F**	**F**
	- With Improvements	TS	0	2	**1**	1	2	0	**1**	1	0	1	0	1	38.5	49.0	D	D
23	Agua Mansa Rd. & Market St.																	
	- Without Improvements	TS	0	1	0	0	1	0	1	2	1	1	2	d	37.4	**64.8**	D	**E**
	- With Improvements	TS	0	1	0	0	1	0	**2**	2	**0**	1	2	d	23.7	26.7	C	C
26	Market St. & Via Cerro/24th St.																	
	- Without Improvements	TS	1	1	0	1	1	1	0	1	1	1	1	0	27.3	**78.1**	C	**E**
	- With Improvements	TS	1	**2**	0	1	**2**	1	0	1	1	1	1	0	18.2	26.9	B	C
31	Agua Mansa Rd. & El Rivino Rd.																	
	- Without Improvements	CSS	1	2	0	0	1	0	0	1	0	0	0	0	**36.0**	**>200.0**	**E**	**F**
	- With Improvements	**TS**	1	2	0	0	1	0	0	1	0	0	0	0	13.6	23.0	B	C
32	Riverside Av. & Agua Mansa Rd.																	
	- Without Improvements	TS	1	2	0	1	2	d	1	1	1	1	1	1	41.0	**63.9**	D	**E**
	- With Improvements	TS	1	2	0	1	2	d	1	**2**	1	1	**2**	1	28.1	26.9	C	C

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicl outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; d = Defacto Right Turn Lane; **1** = Improvement

[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way st control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are

[3] CSS = Cross-street Stop; UC = Uncontrolled; TS = Traffic Signal**TS** = Improvements

[4] Improvements include modifying signal timing only. No physical improvements or changes to the existing cycle length.

[5] Improvements include modifying the cycle length during the PM peak hour only.

TABLE 7-4: FREEWAY OFF-RAMP QUEUING SUMMARY FOR OPENING YEAR BACKGROUND CONDITIONS WITHOUT PROJECT CONDITIONS WITH IMPROVEMENTS

#	Intersection	Movement	Available Stacking Distance (Feet)	Opening Year Background Without Project			
				95th Percentile Queue (Feet)		Acceptable? [1]	
				AM Peak Hour	PM Peak Hour	AM	PM
20	Rubidoux Bl. & SR-60 EB Off-Ramp	**EBL**	**1100**	556 [2]	782 [2]	Yes	Yes
		EBL/T/R	1100	478 [2]	622 [2]	Yes	Yes

Note: **300** = Improvement

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 25 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

8 OPENING YEAR BACKGROUND CONDITIONS PLUS PROJECT

This section discusses the traffic forecasts for Opening Year Background Conditions Plus Project and the resulting intersection operations, traffic signal warrant, and freeway off-ramp queuing analyses.

8.1 ROADWAY IMPROVEMENTS

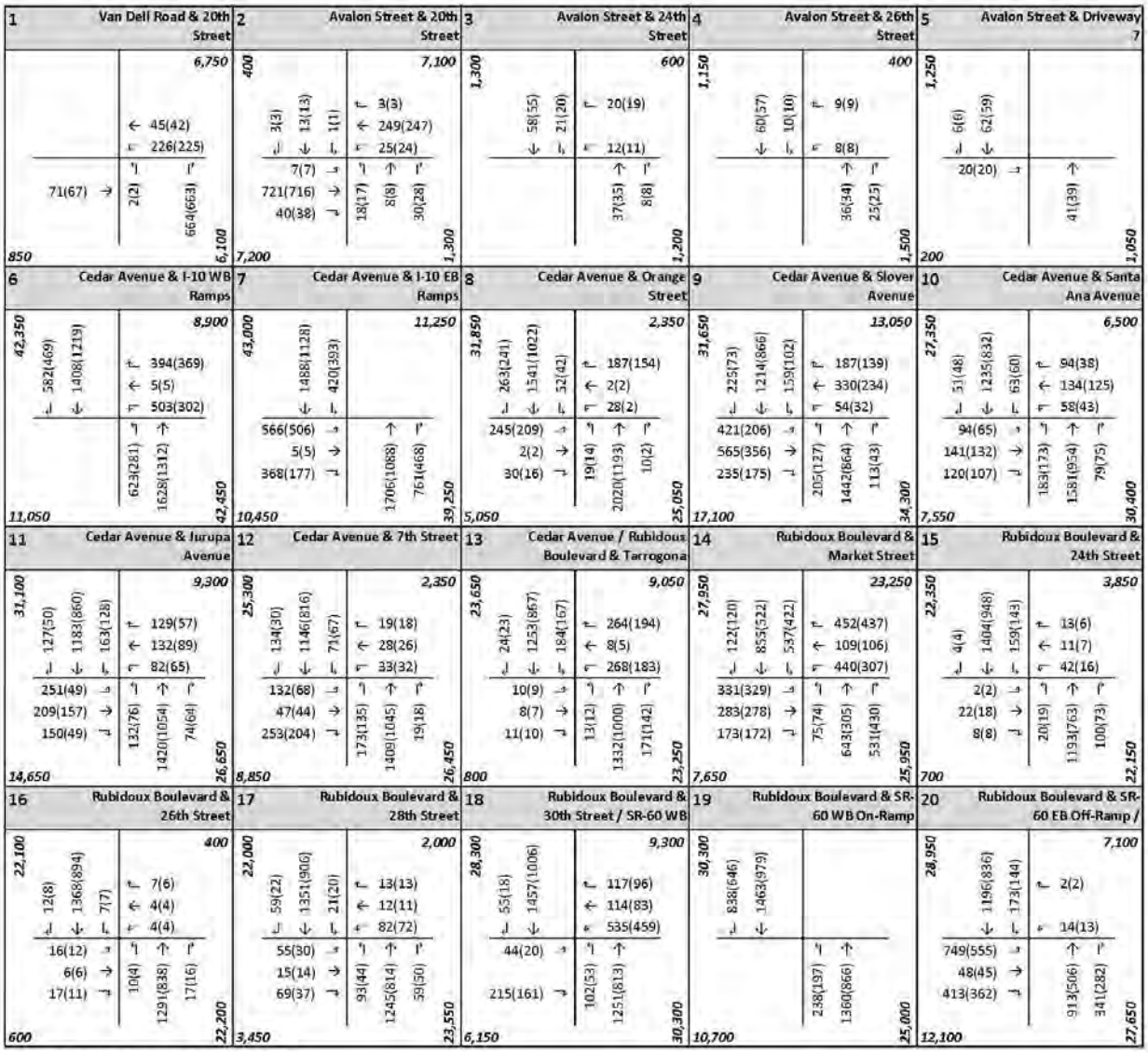
The lane configurations and traffic controls assumed to be in place for Opening Year Background Conditions Plus Project conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- Driveways and those facilities assumed to be constructed by approved cumulative developments to provide site access are also assumed to be in place for Opening Year Background Conditions Plus Project (e.g., intersection and roadway improvements along the cumulative development's frontages).
- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for Opening Year Background Conditions Plus Project (e.g., intersection and roadway improvements at the Project's frontage and driveways).

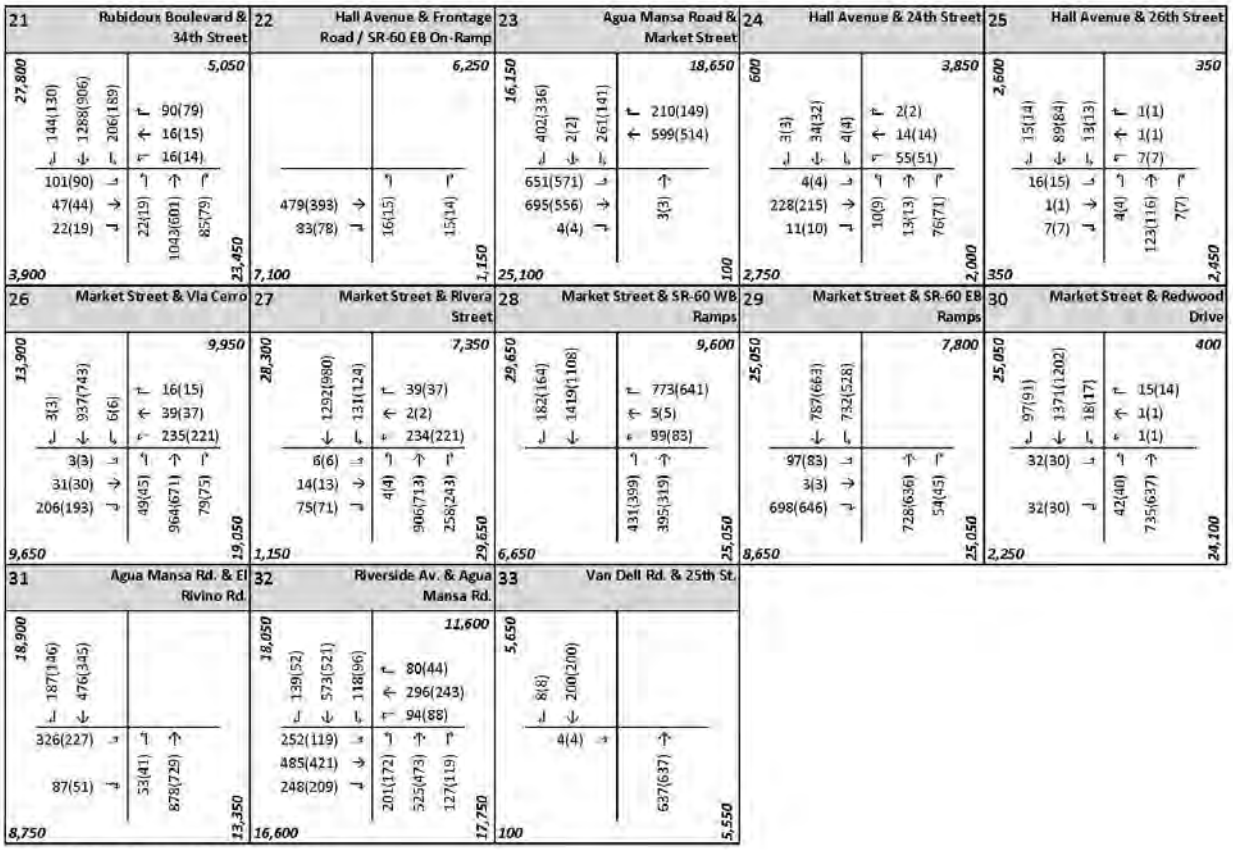
8.2 OPENING YEAR BACKGROUND CONDITIONS PLUS PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes plus an ambient growth factor of 6.12% plus traffic from approved project in the area that are expected to be occupied by the Project's opening year, plus Project traffic. The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Opening Year Background Conditions Plus Project are shown on Exhibit 8-1.

EXHIBIT 8-1: OPENING YEAR BACKGROUND CONDITIONS PLUS PROJECT TRAFFIC VOLUMES (PCE)



##(##) AM(PM) Peak Hour Intersection Volumes
Average Daily Trips


21 Rubidoux Boulevard & 34th Street
22 Hall Avenue & Frontage Road / SR-60 EB On-Ramp
23 Agua Mansa Road & Market Street
24 Hall Avenue & 24th Street
25 Hall Avenue & 26th Street
26 Market Street & Via Cerro
27 Market Street & Rivera Street
28 Market Street & SR-60 WB Ramps
29 Market Street & SR-60 EB Ramps
30 Market Street & Redwood Drive
31 Agua Mansa Rd. & El Rivino Rd.
32 Riverside Av. & Agua Mansa Rd.
33 Van Dell Rd. & 25th St.
##(##) AM(PM) Peak Hour Intersection Volumes
Average Daily Trips

8.3 INTERSECTION OPERATIONS ANALYSIS

Opening Year Background Conditions Plus Project peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TA. The intersection analysis results are summarized in Table 8-1 for Opening Year Background Conditions Plus Project traffic conditions, which indicates that the following study area intersections are anticipated to operate at an unacceptable LOS during the peak hours:

- Avalon St. & 20th St. (#2) – LOS F AM peak hour only
- Cedar Av. & I-10 WB Ramps (#6) – LOS E AM peak hour; LOS F PM peak hour
- Cedar Av. & I-10 EB Ramps (#7) – LOS F AM and PM peak hours
- Cedar Av. & Santa Ana Av. (#10) – LOS E AM and PM peak hours
- Cedar Av. & Jurupa Av. (#11) – LOS F AM and PM peak hours
- Cedar Av./Rubidoux Bl. & Tarragona Dr./El Rivino Rd. (#13) – LOS E PM peak hour only
- Rubidoux Bl. & 20th St./Market St. (#14) – LOS F AM and PM peak hours
- Rubidoux Bl. & 24th St. (#15) – LOS F AM and PM peak hours
- Rubidoux Bl. & 26th St. (#16) – LOS E PM peak hour only
- Rubidoux Bl. & SR-60 WB Off-Ramp (#18) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 WB On-Ramp (#19) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 EB Ramps (#20) – LOS F AM peak hour
- Agua Mansa Rd. & Market St. (#23) – LOS E PM peak hour only
- Via Cerro/24th St. & Market St. (#26) – LOS E PM peak hour only
- Agua Mansa Rd. & El Rivino Rd. (#31) – LOS E AM peak hour
- Riverside Dr. & Agua Mansa Rd. (#32) – LOS F PM peak hour only

The intersection operations analysis worksheets for Opening Year Background Conditions Plus Project are included in Appendix 8.1 of this TA.

8.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

There are no additional study area intersections anticipated to meet peak hour or planning level (ADT) traffic signal warrants under Opening Year Background Conditions Plus Project (see Appendix 8.2).

TABLE 8-1: INTERSECTION ANALYSIS FOR OPENING YEAR BACKGROUND CONDITIONS PLUS PROJECT

#	Intersection	Traffic Control[2]	Opening Year Background Plus Project Delay[1] (secs.) AM	PM	Level of Service AM	PM
1	Van Dell Rd. & 20th St.	CSS	20.0	29.1	C	D
2	Avalon St. & 20th St.	CSS	**158.1**	33.3	**F**	D
3	Avalon St. & 24th St.	CSS	8.8	8.9	A	A
4	Avalon St. & Primavera Av./26th St.	CSS	9.5	9.0	A	A
5	Avalon St. & Driveway 7	**CSS**	9.2	9.2	A	A
6	Cedar Av. & I-10 WB Ramps	TS	**70.4**	**100.0**	**E**	**F**
7	Cedar Av. & I-10 EB Ramps	TS	**118.3**	**98.6**	**F**	**F**
8	Cedar Av. & Orange St.	TS	46.5	39.8	D	D
9	Cedar Av. & Slover Av.	TS	51.4	40.4	D	D
10	Cedar Av. & Santa Ana Av.	TS	**62.3**	**64.3**	**E**	**E**
11	Cedar Av. & Jurupa Av.	TS	**182.6**	**>200.0**	**F**	**F**
12	Cedar Av. & 7th St.	TS	20.0	29.7	C	C
13	Cedar Av./Rubidoux Bl. & Tarragona Dr./El Rivino Rd.	TS	18.6	**77.8**	C	**E**
14	Rubidoux Bl. & 20th St./Market St.[3]	TS	36.6	42.2	D	D
15	Rubidoux Bl. & 24th St.	CSS	**>200.0**	**>200.0**	**F**	**F**
16	Rubidoux Bl. & 26th St.	CSS	33.2	**44.4**	D	**E**
17	Rubidoux Bl. & 28th St.	TS	17.6	23.5	B	C
18	Rubidoux Bl. & SR-60 WB Off-Ramp	TS	**95.1**	**127.3**	**F**	**F**
19	Rubidoux Bl. & SR-60 WB On-Ramp	UC	**>200.0**	**>200.0**	**F**	**F**
20	Rubidoux Bl. & SR-60 EB Ramps	TS	**127.7**	**155.9**	**F**	**F**
21	Rubidoux Bl. & 34th St.	TS	20.4	21.5	C	C
22	30th St. & Frontage Rd./SR-60 EB On-Ramp	CSS	16.4	12.9	C	B
23	Agua Mansa Rd. & Market St.	TS	52.6	**78.7**	D	**E**
24	Hall Av. & 24th St.	AWS	8.7	9.4	A	A
25	Hall Av. & 26th St.	CSS	9.9	10.6	A	B
26	Market St. & Via Cerro/24th St.	TS	38.0	**106.7**	D	**F**
27	Market St. & Rivera St.	TS	9.9	12.8	A	B
28	Market St. & SR-60 WB Ramps	TS	6.8	11.3	A	B
29	Market St. & SR-60 EB Ramps	TS	21.6	34.4	C	C
30	Market St. & Redwood Dr.	CSS	14.7	17.2	B	C
31	Agua Mansa Rd. & El Rivino Rd.	CSS	**44.5**	**>200.0**	**E**	**F**
32	Riverside Av. & Agua Mansa Rd.	TS	45.6	**81.4**	D	**F**
33	Van Dell Rd. & 25th St.	**CSS**	17.3	17.2	C	C

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable l

1 Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

2 AWS = All-way Stop; CSS = Cross-street Stop; TS = Traffic Signal; **CSS** = Improvement

3 Intersection is currently under construction and is anticipated to be completed by the Project's opening year. As such, the analysis for opening year conditions includes the intersection

8.5 OFF-RAMP QUEUING ANALYSIS

A queuing analysis was performed for the off-ramps at the I-10 Freeway at Cedar Avenue, SR-60 Freeway at Rubidoux Boulevard, and SR-60 Freeway at Market Street interchanges to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the I-10 Freeway or SR-60 Freeway mainline. Queuing analysis findings are presented in Table 8-2. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. As shown in Table 8-2, there are no additional movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows under Opening Year Background Conditions Plus Project traffic conditions, in addition to the movement previously identified under Existing (2022) traffic conditions. Worksheets for Opening Year Background Conditions Plus Project off-ramp queuing analysis are provided in Appendix 8.3.

TABLE 8-2: FREEWAY OFF-RAMP QUEUING SUMMARY FOR OPENING YEAR BACKGROUND CONDITIONS PLUS PROJECT

#	Intersection	Movement	Available Stacking Distance (Feet)	Opening Year Background Plus Project 95th Percentile Queue AM Peak	PM Peak	Acceptable? [1] AM	PM
6	Cedar Av. & I-10 WB Ramps	WBL/T/R	1,270	1,008 [2]	693 [2]	Yes	Yes
		WBR	480	324	210	Yes	Yes
7	Cedar Av. & I-10 EB Ramps	EBL	400	635 [2,3]	590 [2,3]	Yes	Yes
		EBL/T/R	1,900	1,386 [2]	501 [2]	Yes	Yes
18	Rubidoux Bl. & SR-60 WB Off-Ramp	WBL/T/R	1,250	764 [2]	970 [2]	Yes	Yes
20	Rubidoux Bl. & SR-60 EB Off-Ramp	EBL/T/R	1,100	**1,410 [2]**	**1,657 [2]**	**No**	**No**
28	Market St. & SR-60 WB Ramps	WBL	170	77	121 [2]	Yes	Yes
		WBR	1,350	0	0	Yes	Yes
29	Market St. & SR-60 EB Ramps	EBL	155	143	98	Yes	Yes
		EBR	1,635	48	184 [2]	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 25 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

[3] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 or SR-60 Freeway mainline.

8.6 DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

This section provides a summary of deficiencies and recommended improvements for Opening Year Background Conditions Plus Project. Based on deficiency criteria discussed in Section 2.6 *Deficiency Criteria*, the following intersections were found to be deficient.

8.6.1 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

Improvement strategies have been recommended at intersections that have been identified as deficient in an effort to reduce each location's peak hour delay and improve the associated LOS grade to acceptable LOS. The effectiveness of the recommended improvement strategies to address Opening Year Background Conditions Plus Project traffic deficiencies are presented in Table 8-3. The intersection operations analysis worksheets for Opening Year Background Conditions Plus Project, with improvements, are included in Appendix 8.4 of this TA.

8.6.2 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES ON OFF-RAMP QUEUES

Table 8-4 shows the freeway off-ramp queuing analysis results for the SR-60 Eastbound off-ramp at Rubidoux Boulevard with the improvements shown on Table 8-3 implemented. As shown on Table 8-4, the 95th percentile queue can be accommodated at the off-ramp without spilling back and affecting the SR-60 Freeway mainline with the proposed improvement. Worksheets for Opening Year Background Conditions Plus Project, with improvements, off-ramp queuing analysis are provided in Appendix 8.5.

TABLE 8-3: INTERSECTION ANALYSIS FOR OPENING YEAR BACKGROUND CONDITIONS PLUS PROJECT WITH IMPROVEMENTS

# Intersection	Traffic Control[3]	Intersection Approach Lanes[1] Northbound L	T	R	Southbound L	T	R	Eastbound L	T	R	Westbound L	T	R	Delay[2] (secs.) AM	PM	Level of Service AM	PM
2 Avalon St. & 20th St.																	
- Without Improvements	CSS	0	1	0	0	1	0	0	1	0	0	1	0	**158.1**	**33.3**	**F**	**D**
- With Improvements	**TS**	0	1	0	0	1	0	**1**	1	0	**1**	1	0	8.3	6.4	A	A
6 Cedar Av. & I-10 WB ramps																	
- Without Improvements	TS	1	2	0	0	3	1	0	0	0	0	1	1	**70.4**	**100.0**	**E**	**F**
- With Improvements	TS	**2**	2	0	0	3	1	0	0	0	0	1	1	53.4	36.0	D	D
7 Cedar Av. & I-10 EB Ramps																	
- Without Improvements	TS	0	3	1	1	2	0	1	1	0	0	0	0	**118.3**	**98.6**	**F**	**F**
- With Improvements	TS	0	3	1	**2**	2	0	1	1	0	0	0	0	47.3	23.5	D	C
10 Cedar Av. & Santa Ana Av.																	
- Without Improvements	TS	1	2	0	1	2	0	0	1	0	0	1	0	**62.3**	**64.3**	**E**	**E**
- With Improvements[4]	TS	1	2	0	1	2	0	0	1	0	0	1	0	29.8	26.0	C	C
11 Cedar Av. & Jurupa Av.																	
- Without Improvements	TS	1	2	0	1	2	0	0	1	d	0	1	d	**182.6**	**>200.0**	**F**	**F**
- With Improvements	TS	1	2	0	1	2	0	**1**	1	**0**	**1**	1	**0**	39.0	39.9	D	D
13 Cedar Av./Rubidoux Bl. & Tarragona Dr./El Rivino Rd.																	
- Without Improvements	TS	1	2	0	1	2	0	0	1	0	0	1	1	18.6	**77.8**	C	**E**
- With Improvements[4]	TS	1	2	0	1	2	0	0	1	0	0	1	1	18.6	43.0	B	D
15 Rubidoux Bl. & 24th St.																	
- Without Improvements	CSS	0	2	0	0	2	0	0	1	0	0	1	0	**>200.0**	**>200.0**	**F**	**F**
- With Improvements	**TS**	**1**	2	0	**1**	2	0	0	1	0	0	1	0	13.1	13.5	B	B
16 Rubidoux Bl. & 26th St.																	
- Without Improvements	CSS	1	2	0	1	2	0	0	1	0	0	1	0	**33.2**	**44.4**	**D**	**E**
- With Improvements	**TS**	1	2	0	1	2	0	0	1	0	0	1	0	7.5	8.5	A	A
18 Rubidoux Bl. & SR-60 WB Off-Ramp																	
- Without Improvements	TS	1	2	0	0	2	0	1	0	1	0	1	0	**95.1**	**127.3**	**F**	**F**
- With Improvements	TS	1	2	0	0	2	0	1	0	1	**1**	1	0	41.3	46.9	D	D
19 Rubidoux Bl. & SR-60 WB On-Ramp																	
- Without Improvements	UC	1	2	0	0	2	0	0	0	0	0	0	0	**>200.0**	**>200.0**	**F**	**F**
- With Improvements	**TS**	1	2	0	0	2	0	0	0	0	0	0	0	6.2	6.9	A	A
20 Rubidoux Bl. & SR-60 EB Ramps																	
- Without Improvements	TS	0	2	0	1	2	0	0	1	0	1	0	1	**127.7**	**155.9**	**F**	**F**
- With Improvements	TS	0	2	**1**	1	2	0	**1**	1	0	1	0	1	39.8	52.5	D	D
23 Agua Mansa Rd. & Market St.																	
- Without Improvements	TS	0	1	0	0	1	0	1	2	1	1	2	d	**52.6**	**78.7**	**D**	**E**
- With Improvements	TS	0	1	0	0	1	0	**2**	2	**0**	1	2	d	27.9	29.8	C	C
26 Market St. & Via Cerro/24th St.																	
- Without Improvements	TS	1	1	0	1	1	1	0	1	1	1	1	0	38.0	**106.7**	D	**F**
- With Improvements	TS	1	**2**	0	1	**2**	1	0	1	1	1	1	0	18.7	27.6	B	C
31 Agua Mansa Rd. & El Rivino Rd.																	
- Without Improvements	CSS	1	2	0	0	1	0	0	1	0	0	0	0	**44.5**	**>200.0**	**E**	**F**
- With Improvements	**TS**	1	2	0	0	1	0	0	1	0	0	0	0	15.2	24.3	B	C
32 Riverside Av. & Agua Mansa Rd.																	
- Without Improvements	TS	1	2	0	1	2	d	1	1	1	1	1	1	45.6	**81.4**	D	**F**
- With Improvements	TS	1	2	0	1	2	d	1	**2**	1	1	**2**	1	29.8	28.4	C	C

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; d = Defacto Right Turn Lane; **1** = Improvement

[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross-street Stop; UC = Uncontrolled; AWS = All-way Stop; TS = Traffic Signal; **TS** = Improvements

[4] Improvements include modifying signal timing only to optimize the splits. No physical improvements or changes to the existing cycle length.

TABLE 8-4: FREEWAY OFF-RAMP QUEUING SUMMARY FOR OPENING YEAR BACKGROUND CONDITIONS PLUS PROJECT WITH IMPROVEMENTS

#	Intersection	Movement	Available Stacking Distance (Feet)	Opening Year Background Plus Project 95th Percentile Queue (Feet) AM Peak Hour	PM Peak Hour	Acceptable? [1] AM	PM
20	Rubidoux Bl. & SR-60 EB Off-Ramp	**EBL**	**1100**	645 [2]	808 [2]	Yes	Yes
		EBL/T/R	1100	592 [2]	657 [2]	Yes	Yes

Note:**300** = Improvement

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 25 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

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9 OPENING YEAR BACKGROUND PLUS PROJECT PLUS CUMULATIVE PROJECT CONDITIONS

This section discusses the traffic forecasts for Opening Year Background Plus Project Plus Cumulative Project conditions and the resulting intersection operations, traffic signal warrant, and freeway off-ramp queuing analyses.

9.1 ROADWAY IMPROVEMENTS

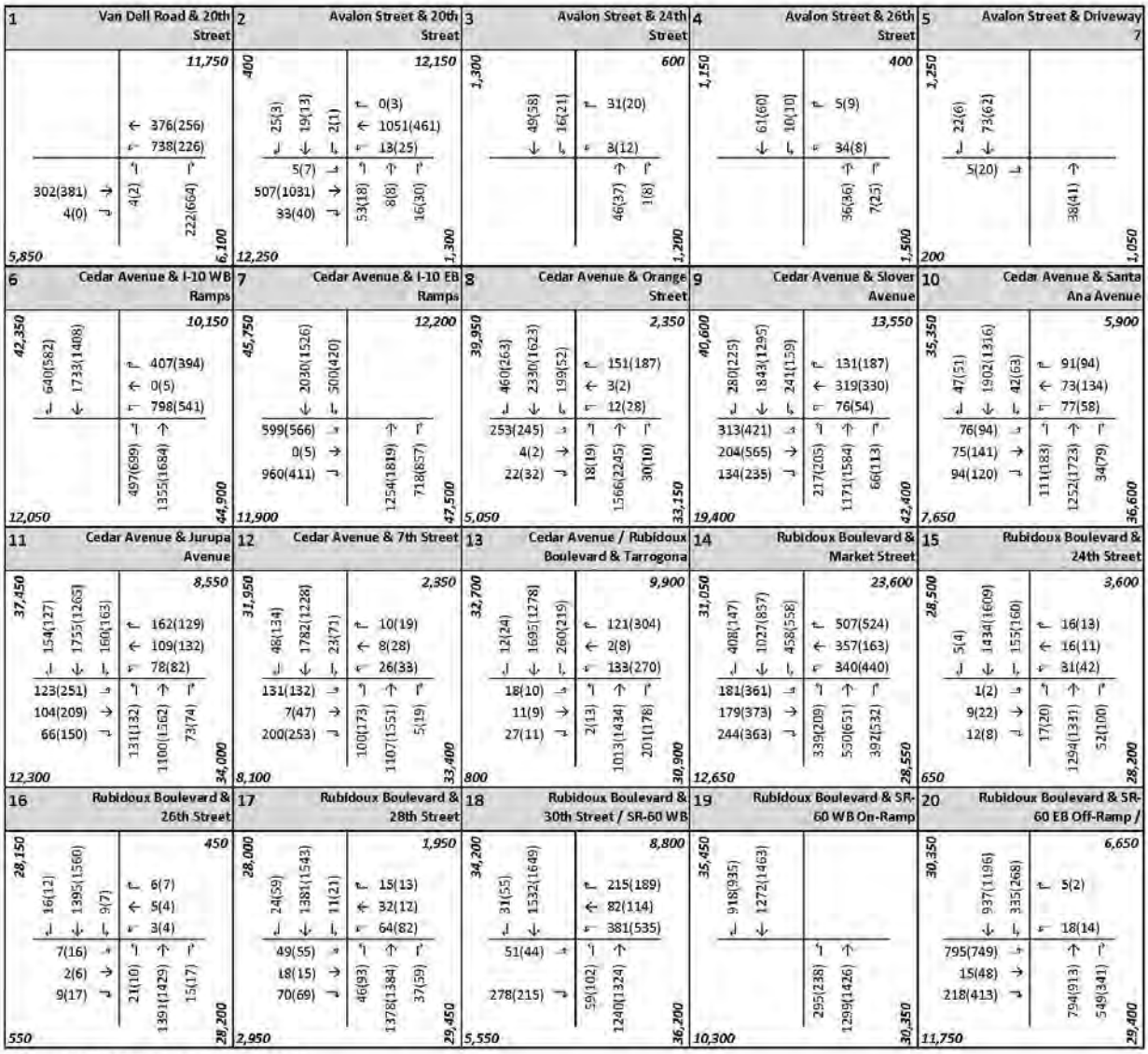
The lane configurations and traffic controls assumed to be in place for Opening Year Background Plus Project Plus Cumulative Project conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

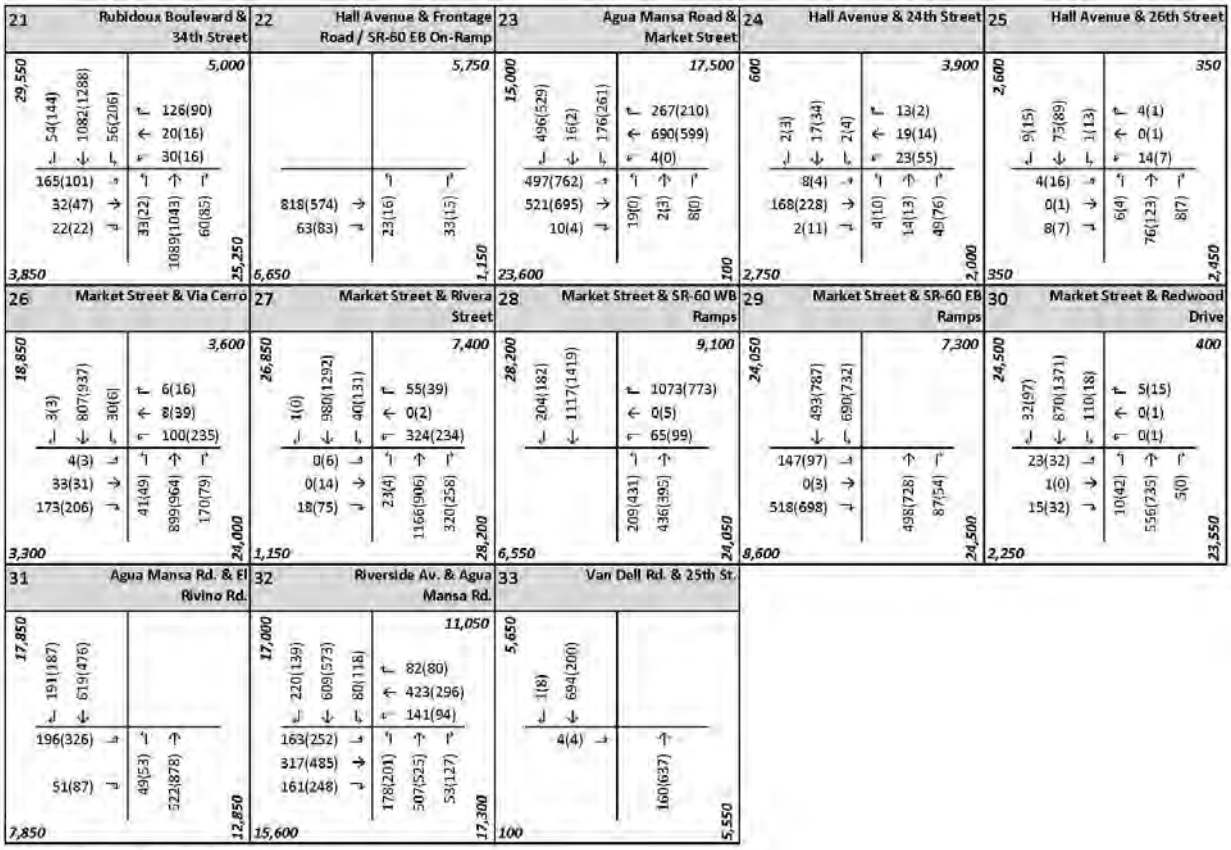
- Driveways and those facilities assumed to be constructed by approved and pending cumulative developments to provide site access are also assumed to be in place for Opening Year Background Plus Project Plus Cumulative Project Conditions (e.g., intersection and roadway improvements along the cumulative development's frontages).
- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for Opening Year Background Plus Project Plus Cumulative Project Conditions (e.g., intersection and roadway improvements at the Project's frontage and driveways).

9.2 OPENING YEAR BACKGROUND PLUS PROJECT PLUS CUMULATIVE PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes plus an ambient growth factor of 6.12% plus traffic from pending and approved but not yet constructed known development projects in the area, plus Project traffic. The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Opening Year Background Plus Project Plus Cumulative Project traffic conditions are shown on Exhibit 9-1.

EXHIBIT 9-1: OPENING YEAR BACKGROUND PLUS PROJECT PLUS CUMULATIVE PROJECT TRAFFIC VOLUMES (PCE)




21 Rubidoux Boulevard & 34th Street
22 Hall Avenue & Frontage Road / SR-60 EB On-Ramp
23 Agua Mansa Road & Market Street
24 Hall Avenue & 24th Street
25 Hall Avenue & 26th Street
26 Market Street & Via Cerro
27 Market Street & Rivera Street
28 Market Street & SR-60 WB Ramps
29 Market Street & SR-60 EB Ramps
30 Market Street & Redwood Drive
31 Agua Mansa Rd. & El Rivino Rd.
32 Riverside Av. & Agua Mansa Rd.
33 Van Dell Rd. & 25th St.
##(##) AM(PM) Peak Hour Intersection Volumes
Average Daily Trips

9.3 INTERSECTION OPERATIONS ANALYSIS

Opening Year Background Plus Project Plus Cumulative Project peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TA. The intersection analysis results are summarized in Table 9-1 for Opening Year Background Plus Project Plus Cumulative Project traffic conditions, which indicates that the following study area intersections are anticipated to operate at an unacceptable LOS during the peak hours:

- Van Dell Rd. & 20th St. (#1) – LOS F PM peak hour only
- Avalon St. & 20th St. (#2) – LOS F AM and PM peak hours
- Cedar Av. & I-10 WB Ramps (#6) – LOS F AM and PM peak hours
- Cedar Av. & I-10 EB Ramps (#7) – LOS F AM and PM peak hours
- Cedar Av. & Orange St. (#8) – LOS E AM and PM peak hours
- Cedar Av. & Santa Ana Av. (#10) – LOS E AM peak hour; LOS F PM peak hour
- Cedar Av. & Jurupa Av. (#11) – LOS F AM and PM peak hours
- Cedar Av./Rubidoux Bl. & Tarragona Dr./El Rivino Rd. (#13) – LOS F PM peak hour only
- Rubidoux Bl. & 20th St./Market St. (#14) – LOS F AM and PM peak hours
- Rubidoux Bl. & 24th St. (#15) – LOS F AM and PM peak hours
- Rubidoux Bl. & 26th St. (#16) – LOS E AM peak hour; LOS F PM peak hour
- Rubidoux Bl. & SR-60 WB Off-Ramp (#18) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 WB On-Ramp (#19) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 EB Ramps (#20) – LOS F AM peak hour
- Agua Mansa Rd. & Market St. (#23) – LOS E AM peak hour; LOS F PM peak hour
- Via Cerro/24th St. & Market St. (#26) – LOS F PM peak hour only
- Agua Mansa Rd. & El Rivino Rd. (#31) – LOS E AM peak hour; LOS F PM peak hour
- Riverside Dr. & Agua Mansa Rd. (#32) – LOS F PM peak hour only

The intersection operations analysis worksheets for Opening Year Background Plus Project Plus Cumulative Project traffic conditions are included in Appendix 9.1 of this TA.

9.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

There are no additional study area intersections anticipated to meet peak hour or planning level (ADT) traffic signal warrants under Opening Year Background Plus Project Plus Cumulative Project traffic conditions (see Appendix 9.2).

TABLE 9-1: INTERSECTION ANALYSIS FOR OPENING YEAR BACKGROUND PLUS PROJECT PLUS CUMULATIVE PROJECT CONDITIONS

#	Intersection	Traffic Control[2]	Opening Year Background Plus Project Plus Cumulative Delay[1] (secs.) AM	PM	Level of Service AM	PM
1	Van Dell Rd. & 20th St.	CSS	16.5	**>200.0**	C	**F**
2	Avalon St. & 20th St.	CSS	**>200.0**	**190.0**	**F**	**F**
3	Avalon St. & 24th St.	CSS	9.3	9.5	A	A
4	Avalon St. & Primavera Av./26th St.	CSS	9.5	9.0	A	A
5	Avalon St. & Driveway 7	**CSS**	9.2	9.2	A	A
6	Cedar Av. & I-10 WB Ramps	TS	**83.9**	**125.0**	**F**	**F**
7	Cedar Av. & I-10 EB Ramps	TS	**136.7**	**128.1**	**F**	**F**
8	Cedar Av. & Orange St.	TS	**60.8**	**63.6**	**E**	**E**
9	Cedar Av. & Slover Av.	TS	52.7	39.1	D	D
10	Cedar Av. & Santa Ana Av.	TS	**78.5**	**92.4**	**E**	**F**
11	Cedar Av. & Jurupa Av.	TS	**191.2**	**>200.0**	**F**	**F**
12	Cedar Av. & 7th St.	TS	20.7	31.0	C	C
13	Cedar Av./Rubidoux Bl. & Tarragona Dr./El Rivino Rd.	TS	22.4	**101.4**	C	**F**
14	Rubidoux Bl. & 20th St./Market St.[3]	TS	54.4	54.2	D	D
15	Rubidoux Bl. & 24th St.	CSS	**>200.0**	**>200.0**	**F**	**F**
16	Rubidoux Bl. & 26th St.	CSS	**40.3**	**63.8**	**E**	**F**
17	Rubidoux Bl. & 28th St.	TS	23.1	41.9	C	D
18	Rubidoux Bl. & SR-60 WB Off-Ramp	TS	**133.4**	**174.7**	**F**	**F**
19	Rubidoux Bl. & SR-60 WB On-Ramp	UC	**>200.0**	**>200.0**	**F**	**F**
20	Rubidoux Bl. & SR-60 EB Ramps	TS	**133.8**	**159.0**	**F**	**F**
21	Rubidoux Bl. & 34th St.	TS	20.4	21.5	C	C
22	30th St. & Frontage Rd./SR-60 EB On-Ramp	CSS	17.8	14.2	C	B
23	Agua Mansa Rd. & Market St.	TS	**79.8**	**129.8**	**E**	**F**
24	Hall Av. & 24th St.	AWS	8.7	9.4	A	A
25	Hall Av. & 26th St.	CSS	9.9	10.6	A	B
26	Market St. & Via Cerro/24th St.	TS	38.0	**106.7**	D	**F**
27	Market St. & Rivera St.	TS	9.9	12.8	A	B
28	Market St. & SR-60 WB Ramps	TS	6.8	11.3	A	B
29	Market St. & SR-60 EB Ramps	TS	21.6	34.4	C	C
30	Market St. & Redwood Dr.	CSS	14.7	17.2	B	C
31	Agua Mansa Rd. & El Rivino Rd.	CSS	**44.5**	**>200.0**	**E**	**F**
32	Riverside Av. & Agua Mansa Rd.	TS	45.6	**81.4**	D	**F**
33	Van Dell Rd. & 25th St.	**CSS**	17.3	17.2	C	C

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable l

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single l are shown.

[2] AWS = All-way Stop; CSS = Cross-street Stop; TS = Traffic Signal; **CSS** = Improvement

[3] Intersection is currently under construction and is anticipated to be completed by the Project's opening year. As such, the analysis for opening year conditions includes the intersection

9.5 OFF-RAMP QUEUING ANALYSIS

A queuing analysis was performed for the off-ramps at the I-10 Freeway at Cedar Avenue, SR-60 Freeway at Rubidoux Boulevard, and SR-60 Freeway at Market Street interchanges to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the I-10 Freeway or SR-60 Freeway mainline. Queuing analysis findings are presented in Table 9-2. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. As shown in Table 9-2, there are no additional movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows under Opening Year Background Plus Project Plus Cumulative Project traffic conditions, in addition to the movement previously identified under Existing (2022) traffic conditions. Worksheets for Opening Year Background Plus Project Plus Cumulative Project traffic conditions off-ramp queuing analysis are provided in Appendix 9.3.

TABLE 9-2: FREEWAY OFF-RAMP QUEUING SUMMARY FOR OPENING YEAR BACKGROUND PLUS PROJECT PLUS CUMULATIVE PROJECT CONDITIONS

#	Intersection	Movement	Available Stacking Distance (Feet)	Opening Year Background Plus Project Plus Cumulative 95th Percentile Queue AM Peak	PM Peak	Acceptable?[1] AM	PM
6	Cedar Av. & I-10 WB Ramps	WBL/T/R	1,270	1,103 [2]	764 [2]	Yes	Yes
		WBR	480	324	329	Yes	Yes
7	Cedar Av. & I-10 EB Ramps	EBL	400	635 [2,3]	620 [2,3]	Yes	Yes
		EBL/T/R	1,900	1,492 [2]	553 [2]	Yes	Yes
18	Rubidoux Bl. & SR-60 WB Off-Ramp	WBL/T/R	1,250	893 [2]	1,089 [2]	Yes	Yes
20	Rubidoux Bl. & SR-60 EB Off-Ramp	EBL/T/R	1,100	**1,410 [2]**	**1,657 [2]**	**No**	**No**
28	Market St. & SR-60 WB Ramps	WBL	170	77	121 [2]	Yes	Yes
		WBR	1,350	0	0	Yes	Yes
29	Market St. & SR-60 EB Ramps	EBL	155	143	98	Yes	Yes
		EBR	1,635	48	184 [2]	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 25 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

[3] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 or SR-60 Freeway mainline.

9.6 DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

This section provides a summary of deficiencies and recommended improvements for Opening Year Background Plus Project Plus Cumulative Project traffic conditions. Based on deficiency criteria discussed in Section 2.6 *Deficiency Criteria*, the following intersections were found to be deficient.

9.6.1 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

Improvement strategies have been recommended at intersections that have been identified as deficient in an effort to reduce each location's peak hour delay and improve the associated LOS grade to acceptable LOS. The effectiveness of the recommended improvement strategies to address Opening Year Background Plus Project Plus Cumulative Project traffic deficiencies are presented in Table 9-3. The intersection operations analysis worksheets for Opening Year Background Plus Project Plus Cumulative Project traffic conditions, with improvements, are included in Appendix 9.4 of this TA.

9.6.2 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES ON OFF-RAMP QUEUES

Table 9-4 shows the freeway off-ramp queuing analysis results for the SR-60 Eastbound off-ramp at Rubidoux Boulevard with the improvements shown on Table 9-3 implemented. As shown on Table 9-4, the 95th percentile queue can be accommodated at the off-ramp without spilling back and affecting the SR-60 Freeway mainline with the proposed improvement. Worksheets for Opening Year Background Plus Project Plus Cumulative Project traffic conditions, with improvements, off-ramp queuing analysis are provided in Appendix 9.5.

TABLE 9-3: INTERSECTION ANALYSIS FOR OPENING YEAR BACKGROUND PLUS PROJECT PLUS CUMULATIVE PROJECT CONDITIONS WITH IMPROVEMENTS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1] Northbound L	T	R	Southbound L	T	R	Eastbound L	T	R	Westbound L	T	R	Delay[2] (secs.) AM	PM	Level of Service AM	PM
1	Van Dell Rd. & 20th St.																	
	- Without Improvements	CSS	0	1	0	0	0	0	0	1	d	0	1	0	16.5	**>200.0**	C	**F**
	- With Improvements	**TS**	**1**	**0**	**1>**	0	0	0	0	1	d	**1**	1	0	30.9	24.7	C	C
2	Avalon St. & 20th St.																	
	- Without Improvements	CSS	0	1	0	0	1	0	0	1	0	0	1	0	**>200.0**	**190.0**	**F**	**F**
	- With Improvements	**TS**	0	1	0	0	1	0	**1**	1	0	**1**	1	0	11.0	9.0	B	A
6	Cedar Av. & I-10 WB ramps																	
	- Without Improvements	TS	1	2	0	0	3	1	0	0	0	0	1	1	**83.9**	**125.0**	**F**	**F**
	- With Improvements	TS	**2**	2	0	0	3	1	0	0	0	0	1	1	53.8	46.4	D	D
7	Cedar Av. & I-10 EB Ramps																	
	- Without Improvements	TS	0	3	1	1	2	0	1	1	0	0	0	0	**136.7**	**128.1**	**F**	**F**
	- With Improvements	TS	0	3	1	**2**	2	0	1	1	0	0	0	0	48.5	28.0	D	C
8	Cedar Av. & Orange St.																	
	- Without Improvements	TS	1	2	0	1	2	1	1	1	0	1	1	0	**60.8**	**63.6**	**E**	**E**
	- With Improvements[4]	TS	1	2	0	1	2	1	1	1	0	1	1	0	50.4	54.3	D	D
10	Cedar Av. & Santa Ana Av.																	
	- Without Improvements	TS	1	2	0	1	2	0	0	1	0	0	1	0	**78.5**	**92.4**	**E**	**F**
	- With Improvements[4]	TS	1	2	0	1	2	0	0	1	0	0	1	0	39.4	27.0	D	C
11	Cedar Av. & Jurupa Av.																	
	- Without Improvements	TS	1	2	0	1	2	0	0	1	d	0	1	d	**191.2**	**>200.0**	**F**	**F**
	- With Improvements	TS	1	2	0	1	2	0	**1**	1	**0**	**1**	1	**0**	51.6	50.1	D	D
13	Cedar Av./Rubidoux Bl. & Tarragona Dr./El Rivino Rd.																	
	- Without Improvements	TS	1	2	0	1	2	0	0	1	0	0	1	1	22.4	**101.4**	C	**F**
	- With Improvements[4]	TS	1	2	0	1	2	0	0	1	0	0	1	1	22.4	54.5	C	D
15	Rubidoux Bl. & 24th St.																	
	- Without Improvements	CSS	0	2	0	0	2	0	0	1	0	0	1	0	**>200.0**	**>200.0**	**F**	**F**
	- With Improvements	**TS**	**1**	2	0	**1**	2	0	0	1	0	0	1	0	15.4	15.7	B	B
16	Rubidoux Bl. & 26th St.																	
	- Without Improvements	CSS	1	2	0	1	2	0	0	1	0	0	1	0	**40.3**	**63.8**	**E**	**F**
	- With Improvements	**TS**	1	2	0	1	2	0	0	1	0	0	1	0	7.6	9.2	A	A
18	Rubidoux Bl. & SR-60 WB Off-Ramp																	
	- Without Improvements	TS	1	2	0	0	2	0	1	0	1	0	1	0	**133.4**	**174.7**	**F**	**F**
	- With Improvements	TS	1	2	0	0	2	0	1	0	1	**1**	1	0	52.1	52.7	D	D
19	Rubidoux Bl. & SR-60 WB On-Ramp																	
	- Without Improvements	UC	1	2	0	0	2	0	0	0	0	0	0	0	**>200.0**	**>200.0**	**F**	**F**
	- With Improvements	**TS**	1	2	0	0	2	0	0	0	0	0	0	0	6.9	11.6	A	B

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1] Northbound L	T	R	Southbound L	T	R	Eastbound L	T	R	Westbound L	T	R	Delay[2] (secs.) AM	PM	Level of Service AM	PM
20	Rubidoux Bl. & SR-60 EB Ramps																	
	- Without Improvements	TS	0	2	0	1	2	0	0	1	0	1	0	1	**133.8**	**159.0**	**F**	**F**
	- With Improvements	TS	0	2	**1**	1	2	0	**1**	1	0	1	0	1	40.2	53.6	D	D
23	Agua Mansa Rd. & Market St.																	
	- Without Improvements	TS	0	1	0	0	1	0	1	2	1	1	2	d	**79.8**	**129.8**	**E**	**F**
	- With Improvements	TS	0	1	0	0	1	0	**2**	2	**0**	1	2	d	37.8	48.0	D	D
26	Market St. & Via Cerro/24th St.																	
	- Without Improvements	TS	1	1	0	1	1	1	0	1	1	1	1	0	38.0	**106.7**	D	**F**
	- With Improvements	TS	1	**2**	0	1	**2**	1	0	1	1	1	1	0	18.7	27.6	B	C
31	Agua Mansa Rd. & El Rivino Rd.																	
	- Without Improvements	CSS	1	2	0	0	1	0	0	1	0	0	0	0	**44.5**	**>200.0**	**E**	**F**
	- With Improvements	**TS**	1	2	0	0	1	0	0	1	0	0	0	0	15.2	24.3	B	C
32	Riverside Av. & Agua Mansa Rd.																	
	- Without Improvements	TS	1	2	0	1	2	d	1	1	1	1	1	1	45.6	**81.4**	D	**F**
	- With Improvements	TS	1	2	0	1	2	d	1	**2**	1	1	**2**	1	29.8	28.4	C	C

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free-Right Turn Lane; d = Defacto Right Turn Lane; **1** = Improvement

[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross-street Stop; UC = Uncontrolled; TS = Traffic Signal; **TS** = Improvements

[4] Improvements include modifying signal timing only to optimize the splits. No physical improvements or changes to the existing cycle length.

TABLE 9-4: FREEWAY OFF-RAMP QUEUING SUMMARY FOR OPENING YEAR BACKGROUND PLUS PROJECT PLUS CUMULATIVE PROJECT CONDITIONS WITH IMPROVEMENTS

#	Intersection	Movement	Available Stacking Distance (Feet)	Opening Year Background Plus Project Plus Cumulative 95th Percentile Queue (Feet) AM Peak Hour	PM Peak Hour	Acceptable? [1] AM	PM
6	Cedar Av. & I-10 WB Ramps	WBL/T/R	1,270	1,103 [2]	764 [2]	Yes	Yes
		WBR	480	324	329	Yes	Yes
7	Cedar Av. & I-10 EB Ramps	EBL	400	492 [2,3]	551 [2,3]	Yes	Yes
		EBL/T/R	1,900	1,386 [2]	502 [2]	Yes	Yes
18	Rubidoux Bl. & SR-60 WB Off-Ramp	WBL	**500**	354	426	Yes	Yes
		WBT/R	1,250	286	374	Yes	Yes
20	Rubidoux Bl. & SR-60 EB Off-Ramp	**EBL**	**1,100**	645 [2]	821 [2]	Yes	Yes
		EBL/T/R	1,100	592 [2]	666 [2]	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 25 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

[3] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 or SR-60 Freeway mainline.

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10 CUMULATIVE HORIZON YEAR (2045) TRAFFIC CONDITIONS

This section discusses the methods used to develop Cumulative Horizon Year (2045) No Project and Plus Project traffic forecasts, and the resulting intersection operations, traffic signal warrant, and freeway off-ramp queuing analyses.

10.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Cumulative Horizon Year (2045) conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for Cumulative Horizon Year conditions only (e.g., intersection and roadway improvements along the Project's frontage and driveways).
- Driveways and those facilities assumed to be constructed by cumulative developments to provide site access are also assumed to be in place for Cumulative Horizon Year conditions only (e.g., intersection and roadway improvements along the cumulative development's frontages and driveways).
- Other parallel facilities, that although not evaluated for the purposes of this analysis, are anticipated to be in place for Cumulative Horizon Year traffic conditions and would affect the travel patterns within the study area. One future connection includes but is not limited to a future planned interchange at Alder Avenue and the I-10 Freeway which may result in reduced through traffic along other parallel routes, such as Cedar Avenue.

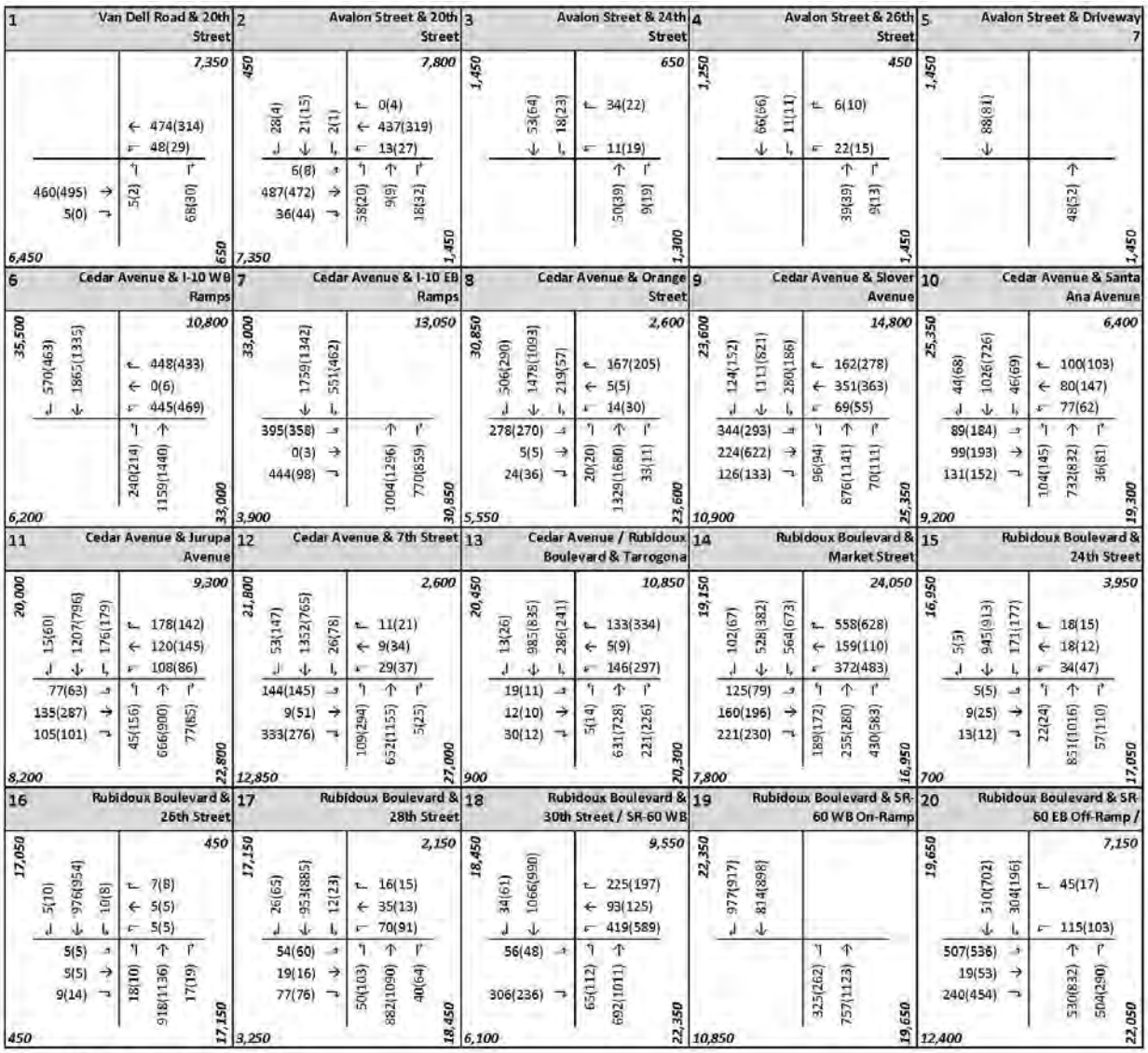
10.2 CUMULATIVE HORIZON YEAR (2045) NO PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes the refined post-processed volumes obtained from the RIVCOM and SBTAM (see Section 4.7 *Horizon Year Volume Development* of this TA for a detailed discussion on the post-processing methodology). The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Cumulative Horizon Year (2045) No Project traffic conditions are shown on Exhibit 10-1.

10.3 CUMULATIVE HORIZON YEAR (2045) PLUS PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes the refined post-processed volumes obtained from the RIVCOM and SBTAM, plus the traffic generated by the proposed Project (see Section 4.7 *Horizon Year Volume Development* of this TA for a detailed discussion on the post-processing methodology). Cumulative Horizon Year (2045) Plus Project traffic forecasts reflects buildout of the Project. The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Cumulative Horizon Year (2045) Plus Project traffic conditions are shown on Exhibit 10-2.

EXHIBIT 10-1: CUMULATIVE HORIZON YEAR (2045) NO PROJECT TRAFFIC VOLUMES (PCE)



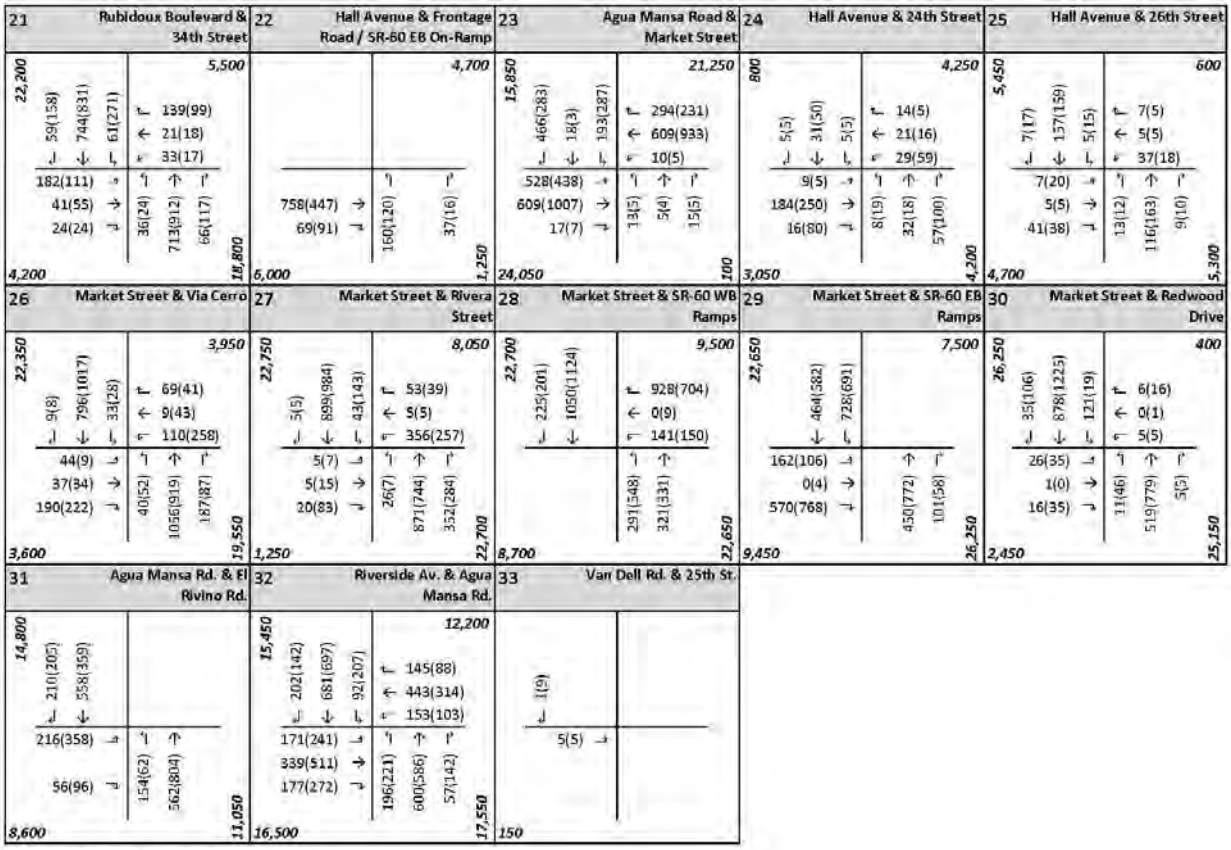
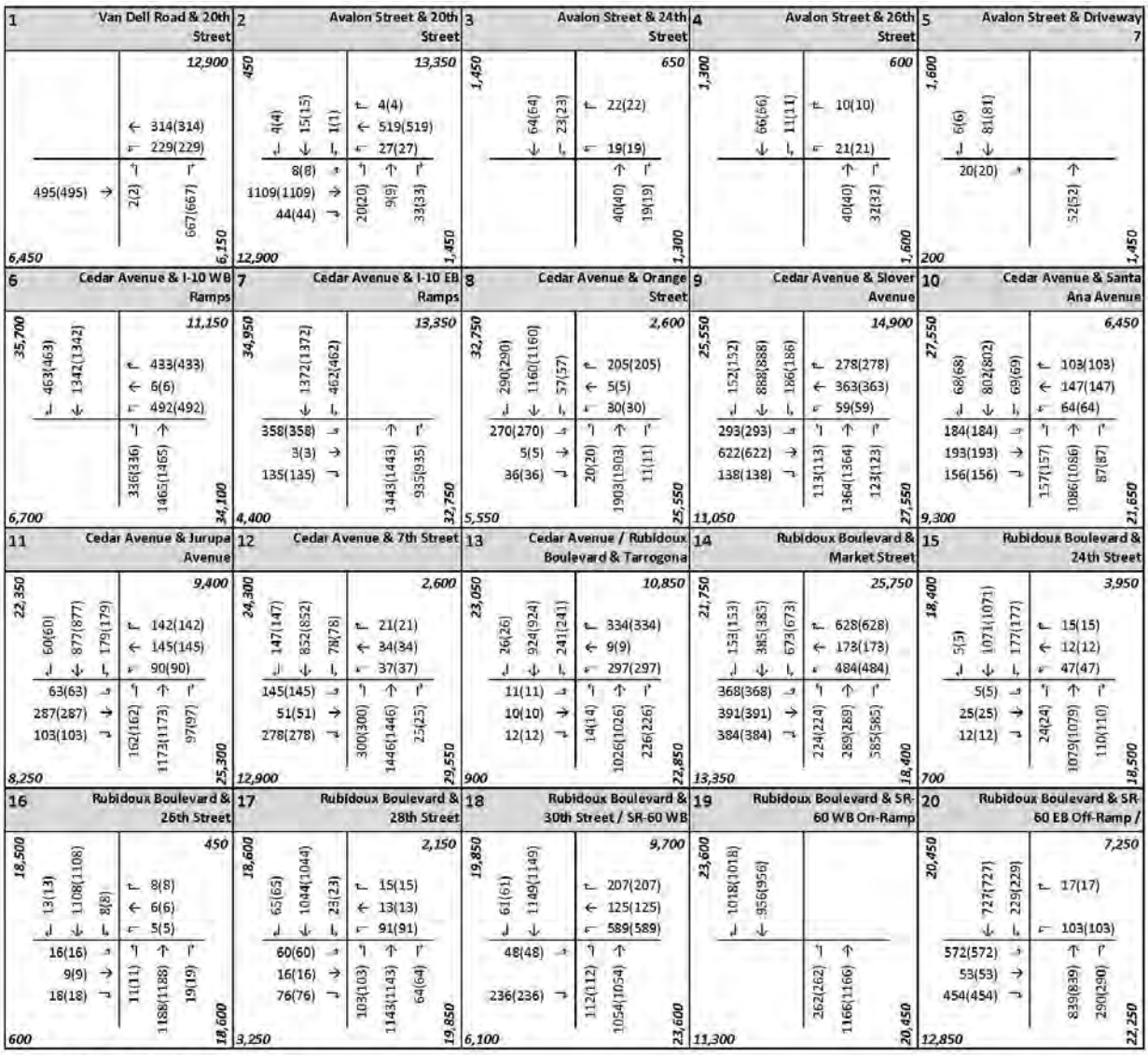
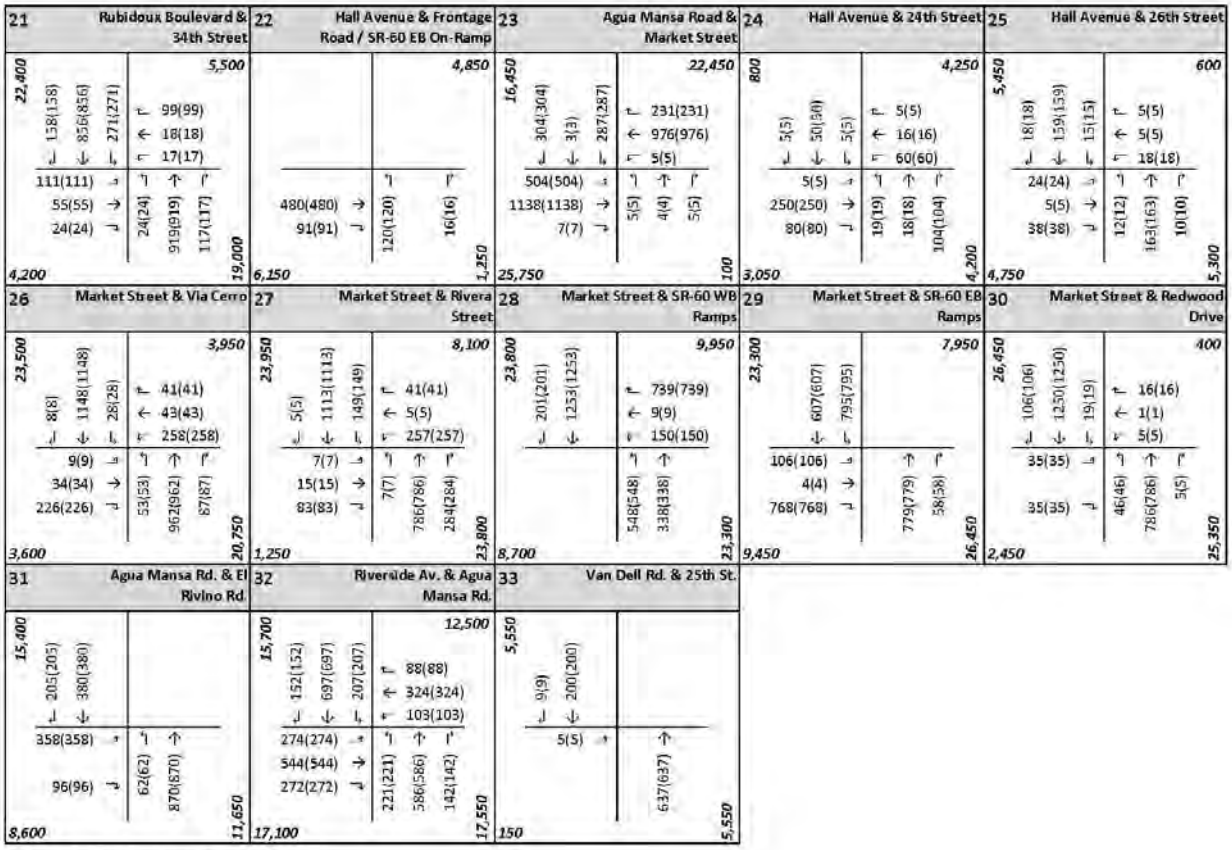

21 Rubidoux Boulevard & 34th Street
22,200
59(158) 744(831) 61(271)
182(111) 41(55) 24(24)
139(99) 21(18) 33(17)
36(24) 713(912) 66(117)
5,500
4,200
18,800
22 Hall Avenue & Frontage Road / SR-60 EB On-Ramp
758(447) 69(91)
160(120) 37(16)
4,700
6,000
1,250
23 Agua Mansa Road & Market Street
15,850
466(283) 18(3) 193(287)
528(438) 609(1007) 17(7)
294(231) 609(933) 10(5)
13(5) 5(4) 15(5)
21,250
24,050
100
24 Hall Avenue & 24th Street
800
5(5) 31(50) 5(5)
9(5) 184(250) 16(80)
14(5) 21(16) 29(59)
8(19) 32(18) 57(100)
4,250
3,050
4,200
25 Hall Avenue & 26th Street
5,450
7(17) 157(159) 5(15)
7(20) 5(5) 41(38)
7(5) 5(5) 37(18)
13(12) 116(163) 9(10)
600
4,700
5,300
26 Market Street & Via Cerro
22,350
9(8) 796(1017) 33(28)
44(9) 37(34) 190(222)
69(41) 9(43) 110(258)
40(52) 1056(919) 187(87)
3,950
3,600
19,550
27 Market Street & Rivera Street
22,750
5(5) 899(984) 43(143)
5(7) 5(15) 20(83)
53(39) 5(5) 356(257)
26(7) 871(744) 352(284)
8,050
1,250
22,700
28 Market Street & SR-60 WB Ramps
22,700
225(201) 1050(1124)
928(704) 0(9) 141(150)
291(348) 321(331)
9,500
8,700
22,650
29 Market Street & SR-60 EB Ramps
22,650
464(582) 728(691)
162(106) 0(4) 570(768)
450(772) 101(58)
7,500
9,450
26,250
30 Market Street & Redwood Drive
26,250
35(106) 878(1225) 121(19)
26(35) 1(0) 16(35)
6(16) 0(1) 5(5)
11(46) 519(779) 5(5)
400
2,450
25,150
31 Agua Mansa Rd. & El Rivino Rd.
14,800
210(205) 558(359)
216(358) 56(96)
154(62) 562(804)
8,600
11,050
32 Riverside Av. & Agua Mansa Rd.
15,450
202(142) 681(697) 92(207)
171(241) 339(511) 177(272)
145(88) 443(314) 153(103)
196(221) 600(586) 57(142)
12,200
16,500
17,550
33 Van Dell Rd. & 25th St.
1(9)
5(5)
150
##(##) AM(PM) Peak Hour Intersection Volumes
Average Daily Trips

EXHIBIT 10-2: CUMULATIVE HORIZON YEAR (2045) PLUS PROJECT TRAFFIC VOLUMES (PCE)




21 Rubidoux Boulevard & 34th Street
22 Hall Avenue & Frontage Road / SR-60 EB On-Ramp
23 Agua Mansa Road & Market Street
24 Hall Avenue & 24th Street
25 Hall Avenue & 26th Street
26 Market Street & Via Cerro
27 Market Street & Rivera Street
28 Market Street & SR-60 WB Ramps
29 Market Street & SR-60 EB Ramps
30 Market Street & Redwood Drive
31 Agua Mansa Rd. & El Rivino Rd.
32 Riverside Av. & Agua Mansa Rd.
33 Van Dell Rd. & 25th St.
##(##) AM(PM) Peak Hour Intersection Volumes
Average Daily Trips

10.4 INTERSECTION OPERATIONS ANALYSIS

10.4.1 CUMULATIVE HORIZON YEAR (2045) NO PROJECT CONDITIONS

LOS calculations were conducted for the study intersections to evaluate their operations under Cumulative Horizon Year No Project traffic conditions with roadway and intersection geometrics consistent with Section 10.1 *Roadway Improvements*. As shown in Table 10-1, the following study area intersections are anticipated to operate at an unacceptable LOS under Cumulative Horizon Year (2045) No Project traffic conditions:

- Avalon St. & 20th St. (#2) – LOS F AM peak hour only
- Cedar Av. & I-10 EB Ramps (#7) – LOS E AM and PM peak hours
- Cedar Av. & Slover Av. (#9) – LOS E AM peak hour only
- Cedar Av. & Jurupa Av. (#11) – LOS F AM and PM peak hours
- Rubidoux Bl. & 20th St./Market St. (#14) – LOS F AM and PM peak hours
- Rubidoux Bl. & 24th St. (#15) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 WB Off-Ramp (#18) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 WB On-Ramp (#19) – LOS F AM and PM peak hours
- Rubidoux Bl. & SR-60 EB Ramps (#20) – LOS E AM peak hour; LOS F PM peak hour
- Agua Mansa Rd. & Market St. (#23) – LOS E AM peak hour only
- Via Cerro/24th St. & Market St. (#26) – LOS E AM peak hour; LOS F PM peak hour
- Agua Mansa Rd. & El Rivino Rd. (#31) – LOS F AM and PM peak hours
- Riverside Dr. & Agua Mansa Rd. (#32) – LOS E AM peak hour; LOS F PM peak hour

The intersection operations analysis worksheets for Cumulative Horizon Year No Project traffic conditions are included in Appendix 10.1 of this TA.

10.4.2 CUMULATIVE HORIZON YEAR (2045) PLUS PROJECT TRAFFIC CONDITIONS

As shown in Table 10-1, the following additional study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under Cumulative Horizon Year (2045) Plus Project traffic conditions, in addition to those previously identified for No Project conditions:

- Van Dell Rd. & 20th St. (#1) – LOS F PM peak hour only
- Avalon St. & 20th St. (#2) – LOS F AM and PM peak hours (PM is a new deficiency)
- Cedar Av. & I-10 EB Ramps (#7) – LOS E to LOS F in the PM peak hour only
- Rubidoux Bl. & SR-60 EB Ramps (#20) – LOS E to LOS F in the AM peak hour only
- Agua Mansa Rd. & Market St. (#23) – LOS E to LOS F in the AM peak hour; LOS D to LOS E in the PM peak hour
- Via Cerro/24th St. & Market St. (#26) – LOS E to LOS F in the AM peak hour only

The intersection operations analysis worksheets for Cumulative Horizon Year Plus Project traffic conditions are included in Appendix 10.2 of this TA.

TABLE 10-1: INTERSECTION ANALYSIS FOR CUMULATIVE HORIZON YEAR (2045) CONDITIONS

#	Intersection	Traffic Control[2]	2045 Without Project Delay[1] (secs.) AM	2045 Without Project Delay[1] (secs.) PM	2045 Without Project Level of Service AM	2045 Without Project Level of Service PM	2045 With Project Delay[1] (secs.) AM	2045 With Project Delay[1] (secs.) PM	2045 With Project Level of Service AM	2045 With Project Level of Service PM
1	Van Dell Rd. & 20th St.	CSS	14.5	13.8	B	B	29.1	**>200.0**	D	**F**
2	Avalon St. & 20th St.	CSS	**68.6**	23.2	**F**	C	**>200.0**	**>200.0**	**F**	**F**
3	Avalon St. & 24th St.	CSS	9.5	9.7	A	A	9.5	9.7	A	A
4	Avalon St. & Primavera Av./26th St.	CSS	9.4	9.2	A	A	9.7	9.4	A	A
5	Avalon St. & Driveway 7	**CSS**	Future Intersection				9.3	9.4	A	A
6	Cedar Av. & I-10 WB Ramps	TS	26.2	24.3	C	C	36.2	36.5	D	D
7	Cedar Av. & I-10 EB Ramps	TS	**70.8**	**77.6**	**E**	**E**	**75.4**	**103.9**	**E**	**F**
8	Cedar Av. & Orange St.	TS	42.0	41.8	D	D	48.0	46.5	D	D
9	Cedar Av. & Slover Av.	TS	**65.2**	49.5	**E**	D	**72.4**	42.3	**E**	D
10	Cedar Av. & Santa Ana Av.	TS	32.7	49.4	C	D	34.5	47.2	C	D
11	Cedar Av. & Jurupa Av.	TS	**>200.0**	**>200.0**	**F**	**F**	**>200.0**	**>200.0**	**F**	**F**
12	Cedar Av. & 7th St.	TS	32.5	38.2	C	D	35.1	39.0	D	D
13	Cedar Av./Rubidoux Bl. & Tarragona Dr./El Rivino Rd.	TS	17.5	33.9	B	C	19.2	54.1	B	D
14	Rubidoux Bl. & 20th St./Market St.	TS	**89.8**	**62.1**	**F**	**E**	**105.9**	**98.8**	**F**	**F**
15	Rubidoux Bl. & 24th St.	CSS	**>200.0**	**>200.0**	**F**	**F**	**>200.0**	**>200.0**	**F**	**F**
16	Rubidoux Bl. & 26th St.	CSS	22.6	26.1	C	D	29.8	33.2	D	D
17	Rubidoux Bl. & 28th St.	TS	12.7	14.7	B	B	13.9	16.3	B	B
18	Rubidoux Bl. & SR-60 WB Off-Ramp	TS	**90.6**	**105.0**	**F**	**F**	**100.9**	**122.5**	**F**	**F**
19	Rubidoux Bl. & SR-60 WB On-Ramp	UC	**89.0**	**63.2**	**F**	**F**	**104.7**	**129.7**	**F**	**F**
20	Rubidoux Bl. & SR-60 EB Ramps	TS	**68.6**	**128.8**	**E**	**F**	**98.1**	**138.5**	**F**	**F**
21	Rubidoux Bl. & 34th St.	TS	15.2	29.7	B	C	15.3	29.7	B	C
22	30th St. & Frontage Rd./SR-60 EB On-Ramp	CSS	28.0	15.5	D	C	28.6	16.3	D	C
23	Agua Mansa Rd. & Market St.	TS	**73.7**	54.0	**E**	D	**105.1**	**74.5**	**F**	**E**
24	Hall Av. & 24th St.	AWS	9.1	9.8	A	A	9.1	9.8	A	A
25	Hall Av. & 26th St.	CSS	12.7	12.6	B	B	12.7	12.6	B	B
26	Market St. & Via Cerro/24th St.	TS	**69.7**	**134.6**	**E**	**F**	**100.9**	**175.9**	**F**	**F**
27	Market St. & Rivera St.	TS	11.9	14.9	B	B	11.4	15.9	B	B
28	Market St. & SR-60 WB Ramps	TS	14.6	20.6	B	C	13.2	21.6	B	C
29	Market St. & SR-60 EB Ramps	TS	22.9	40.2	C	D	23.6	55.0	C	D
30	Market St. & Redwood Dr.	CSS	15.2	16.5	C	C	15.5	16.9	C	C
31	Agua Mansa Rd. & El Rivino Rd.	CSS	**100.6**	**>200.0**	**F**	**F**	**132.9**	**>200.0**	**F**	**F**
32	Riverside Av. & Agua Mansa Rd.	TS	**55.7**	**93.0**	**E**	**F**	**61.3**	**112.7**	**E**	**F**
33	Van Dell Rd. & 25th St.	**CSS**	8.5	8.6	A	A	17.3	17.2	C	C

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable l

1 Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

2 AWS = All-way Stop; CSS = Cross-street Stop; TS = Traffic Signal; **CSS** = Improvement

Due to reductions to through traffic along Cedar Avenue/Rubidoux Boulevard under Horizon Year traffic conditions, the following intersections are anticipated to operate at an acceptable LOS under Cumulative Horizon Year traffic conditions although deficient under Opening Year Background Plus Project Plus Cumulative Project traffic conditions. As such, improvements identified previously (see Table 9-3) for the following intersections may not be necessary under Cumulative Horizon Year traffic conditions:

- Cedar Av. & I-10 WB Ramps (#6)
- Cedar Av. & Orange St. (#8)
- Cedar Av. & Santa Ana Av. (#10)
- Cedar Av./Rubidoux Bl. & Tarragona Dr./El Rivino Rd. (#13)
- Rubidoux Bl. & 26th St. (#16)

10.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

There are no additional unsignalized intersections anticipated to meet peak hour or planning level (ADT) volume-based traffic signal warrants under Cumulative Horizon Year (2045) No Project and Plus Project traffic conditions (see Appendix 10.3 and Appendix 10.4).

10.6 OFF-RAMP QUEUING ANALYSIS

A queuing analysis was performed for the off-ramps at the I-10 Freeway at Cedar Avenue, SR-60 Freeway at Rubidoux Boulevard, and SR-60 Freeway at Market Street interchanges to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the I-10 Freeway or SR-60 Freeway mainline. Queuing analysis findings are presented in Table 10-2. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. As shown in Table 10-2, there are no additional movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows under Cumulative Horizon Year (2045) traffic conditions, in addition to the movement previously identified under Existing (2022) traffic conditions. Worksheets for Cumulative Horizon Year (2045) No Project and Plus Project traffic conditions off-ramp queuing analysis are provided in Appendices 10.5 and 10.6, respectively.

TABLE 10-2: FREEWAY OFF-RAMP QUEUING SUMMARY FOR CUMULATIVE HORIZON YEAR (2045) CONDITIONS

#	Intersection	Movement	Available Stacking Distance (Feet)	2045 Without Project 95th Percentile Queue AM Peak	2045 Without Project 95th Percentile Queue PM Peak	2045 Without Project Acceptable? [1] AM	2045 Without Project Acceptable? [1] PM	2045 With Project 95th Percentile Queue AM Peak	2045 With Project 95th Percentile Queue PM Peak	2045 With Project Acceptable? [1] AM	2045 With Project Acceptable? [1] PM
6	Cedar Av. & I-10 WB Ramps	WBL/T/R	1,270	498 [2]	641	Yes	Yes	643 [2]	684 [2]	Yes	Yes
		WBR	480	363	375	Yes	Yes	363	375	Yes	Yes
7	Cedar Av. & I-10 EB Ramps	EBL	400	335	240	Yes	Yes	335	256	Yes	Yes
		EBL/T/R	1,900	535 [2]	201	Yes	Yes	777 [2]	201	Yes	Yes
18	Rubidoux Bl. & SR-60 WB Off-Ramp	WBL/T/R	1,250	996 [2]	1,211 [2]	Yes	Yes	1,056 [2]	1,229 [2]	Yes	Yes
20	Rubidoux Bl. & SR-60 EB Off-Ramp	EBL/T/R	1,100	980 [2]	**1,380 [2]**	Yes	**No**	**1,162 [2]**	**1,441 [2]**	**No**	**No**
28	Market St. & SR-60 WB Ramps	WBL	170	177 [2]	208 [2,3]	Yes	Yes	177 [2]	208 [2,3]	Yes	Yes
		WBR	1,350	0	0	Yes	Yes	0	0	Yes	Yes
29	Market St. & SR-60 EB Ramps	EBL	155	166 [2,3]	106	Yes	Yes	166 [2,3]	106	Yes	Yes
		EBR	1,635	50	107	Yes	Yes	50	120	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 25 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

[3] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 or SR-60 Freeway mainline.

10.8 DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

This section provides a summary of deficiencies and recommended improvements for Cumulative Horizon Year traffic conditions. Based on deficiency criteria discussed in Section 2.6 *Deficiency Criteria*, the following intersections were found to be deficient.

10.8.1 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

Improvement strategies have been recommended at intersections that have been identified as deficient in an effort to reduce each location's peak hour delay and improve the associated LOS grade to acceptable LOS. The effectiveness of the recommended improvement strategies to address Cumulative Horizon Year (2045) traffic deficiencies are presented in Table 10-3. The intersection operations analysis worksheets for Cumulative Horizon Year (2045) Plus Project traffic conditions, with improvements, are included in Appendix 10.7 of this TA.

10.8.2 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES ON OFF-RAMP QUEUES

Table 10-4 shows the freeway off-ramp queuing analysis results for the SR-60 Eastbound off-ramp at Rubidoux Boulevard with the improvements shown on Table 10-3 implemented. As shown on Table 10-4, the 95th percentile queue can be accommodated at the off-ramp without spilling back and affecting the SR-60 Freeway mainline with the proposed improvement. Worksheets for Cumulative Horizon Year (2045) Plus Project traffic conditions, with improvements, off-ramp queuing analysis are provided in Appendix 10.8.

TABLE 10-3: INTERSECTION ANALYSIS FOR CUMULATIVE HORIZON YEAR (2045) CONDITIONS WITH IMPROVEMENTS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1] Northbound L	T	R	Southbound L	T	R	Eastbound L	T	R	Westbound L	T	R	Delay[2] (secs.) AM	PM	Level of Service AM	PM
1	Van Dell Rd. & 20th St.																	
	- Without Improvements	CSS	0	1	0	0	0	0	0	1	d	0	1	0	29.1	**>200.0**	D	**F**
	- With Improvements	**TS**	**1**	**0**	**1>**	0	0	0	0	1	d	**1**	1	0	53.8	35.6	D	D
2	Avalon St. & 20th St.																	
	- Without Improvements	CSS	0	1	0	0	1	0	0	1	0	0	1	0	**>200.0**	**>200.0**	**F**	**F**
	- With Improvements	**TS**	0	1	0	0	1	0	**1**	1	0	**1**	1	0	14.3	14.6	B	B
7	Cedar Av. & I-10 EB Ramps																	
	- Without Improvements	TS	0	3	1	1	2	0	1	1	0	0	0	0	**75.4**	**103.9**	**E**	**F**
	- With Improvements	TS	0	3	1	**2**	2	0	1	1	0	0	0	0	33.3	17.3	C	B
9	Cedar Av. & Slover Av.																	
	- Without Improvements	TS	1	2	0	1	2	0	1	2	d	1	2	0	**72.4**	42.3	**E**	D
	- With Improvements	TS	1	2	0	1	2	0	**2**	2	**0**	1	2	0	54.0	51.5	D	D
11	Cedar Av. & Jurupa Av.																	
	- Without Improvements	TS	1	2	0	1	2	0	0	1	d	0	1	d	**>200.0**	**>200.0**	**F**	**F**
	- With Improvements	TS	1	2	0	1	2	0	**1**	1	**0**	**1**	1	**0**	32.8	30.9	C	C
14	Rubidoux Bl. & 20th St./Market St.																	
	- Without Improvements	TS	1	2	1	2	2	1	1	2	0	2	1	1	**105.9**	**98.8**	**F**	**F**
	- With Improvements	TS	1	2	**1>**	2	2	1	1	2	**1**	2	1	**1>**	46.5	46.8	D	D
15	Rubidoux Bl. & 24th St.																	
	- Without Improvements	CSS	0	2	0	0	2	0	0	1	0	0	1	0	**>200.0**	**>200.0**	**F**	**F**
	- With Improvements	**TS**	**1**	2	0	**1**	2	0	0	1	0	0	1	0	12.8	13.0	B	B
18	Rubidoux Bl. & SR-60 WB Off-Ramp																	
	- Without Improvements	TS	1	2	0	0	2	0	1	0	1	0	1	0	**100.9**	**122.5**	**F**	**F**
	- With Improvements	TS	1	2	0	0	2	0	1	0	1	**1**	1	0	49.1	51.0	D	D
19	Rubidoux Bl. & SR-60 WB On-Ramp																	
	- Without Improvements	UC	1	2	0	0	2	0	0	0	0	0	0	0	**104.7**	**129.7**	**F**	**F**
	- With Improvements	**TS**	1	2	0	0	2	0	0	0	0	0	0	0	7.7	4.8	A	A
20	Rubidoux Bl. & SR-60 EB Ramps																	
	- Without Improvements	TS	0	2	0	1	2	0	0	1	0	1	0	1	**98.1**	**138.5**	**F**	**F**
	- With Improvements	TS	0	2	**1**	1	2	0	**1**	1	0	1	0	1	42.2	53.8	D	D
23	Agua Mansa Rd. & Market St.																	
	- Without Improvements	TS	0	1	0	0	1	0	1	2	1	1	2	d	**105.1**	**74.5**	**F**	**E**
	- With Improvements	TS	0	1	0	0	1	0	**2**	2	**0**	1	2	d	49.2	39.8	D	D
26	Market St. & Via Cerro/24th St.																	
	- Without Improvements	TS	1	1	0	1	1	1	0	1	1	1	1	0	**100.9**	**175.9**	**F**	**F**
	- With Improvements	TS	1	**2**	0	1	**2**	1	0	1	1	1	1	0	22.5	34.1	C	C
31	Agua Mansa Rd. & El Rivino Rd.																	
	- Without Improvements	CSS	1	2	0	0	1	0	0	1	0	0	0	0	**132.9**	**>200.0**	**F**	**F**
	- With Improvements	**TS**	1	2	0	0	1	0	0	1	0	0	0	0	24.4	22.9	C	C
32	Riverside Av. & Agua Mansa Rd.																	
	- Without Improvements	TS	1	2	0	1	2	d	1	1	1	1	1	1	**61.3**	**112.7**	**E**	**F**
	- With Improvements	TS	1	2	0	1	2	d	1	**2**	1	1	**2**	1	38.3	35.7	D	D

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; d = Defacto Right Turn Lane; **1** = Improvement

[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] CSS = Cross-street Stop; UC = Uncontrolled; AWS = All-way Stop; TS = Traffic Signal; **TS** = Improvements

TABLE 10-4: FREEWAY OFF-RAMP QUEUING SUMMARY FOR CUMULATIVE HORIZON YEAR (2045) CONDITIONS WITH IMPROVEMENTS

#	Intersection	Movement	Available Stacking Distance (Feet)	2045 With Project 95th Percentile Queue (Feet)		Acceptable? [1]	
				AM Peak Hour	PM Peak Hour	AM	PM
7	Cedar Av. & I-10 EB Ramps	EBL	400	325	314 [2]	Yes	Yes
		EBL/T/R	1,900	756 [2]	225	Yes	Yes
18	Rubidoux Bl. & SR-60 WB Off-Ramp	WBL	**500**	398	497 [2]	Yes	Yes
		WBT/R	1,250	356	426	Yes	Yes
20	Rubidoux Bl. & SR-60 EB Off-Ramp	**EBL**	**1,100**	516 [2]	629 [2]	Yes	Yes
		EBL/T/R	1,100	429 [2]	608 [2]	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 25 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

[2] 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

[3] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 or SR-60 Freeway mainline.

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11 LOCAL AND REGIONAL FUNDING MECHANISMS

Transportation improvements within the City of Jurupa Valley are funded through a combination of improvements constructed by the Project, development impact fee programs or fair share contributions. Fee programs applicable to the Project are described below.

11.1 CITY OF JURUPA VALLEY DEVELOPMENT IMPACT FEE (DIF) PROGRAM

Upon incorporation, the City of Jurupa Valley has adopted the County of Riverside's Development Impact Fee (DIF) program. The DIF program consists of two separate transportation components: Roads, Bridges and Major Improvements component and the Traffic Signals component. Eligible facilities for funding by the DIF program are identified on the Public Needs List.

Similar to the Western Riverside Council of Governments (WRCOG) Transportation Uniform Mitigation Fee (TUMF) Program, after the City's DIF fees are collected, they are placed in a separate interest-bearing account pursuant to the requirements of Government Code § 66000 et seq. The timing to use the DIF fees is established through periodic capital improvement programs which are overseen by the City's Public Works Department.

The cost of signalizing DIF network intersections is identified under the Traffic Signals component of the DIF program. Generally, DIF eligible intersections as those consisting of two intersecting General Plan roadways. Fee credits and reimbursements will be available as part of the Fee Program and will only be given to projects that are identified as a Fee Program facility. The Project's Conditions of Approval will establish and clarify eligibility

The City may grant developers a credit against specific components of fees when those developers construct certain facilities and landscaped medians identified in the list of improvements funded by the DIF program. The Project applicant will be subject to the City's DIF fee program and will pay the requisite City DIF fees at the rates then in effect. The Project Applicant's payment of the requisite DIF fees at the rates then in effect pursuant to the DIF Program will mitigate its impacts to DIF-funded facilities.

11.2 TRANSPORTATION UNIFORM MITIGATION FEE (TUMF) PROGRAM

The TUMF program is administered by the WRCOG based upon a regional Nexus Study most recently updated in 2016 to address major changes in right of way acquisition and improvement cost factors. (3) This regional program was put into place to ensure that development pays its fair share, and that funding is in place for construction of facilities needed to maintain the requisite level of service and critical to mobility in the region. TUMF is a truly regional mitigation fee program and is imposed and implemented in every jurisdiction in Western Riverside County.

TUMF guidelines empower a local zone committee to prioritize and arbitrate certain projects. The Project is located in the Northwest Zone. The zone has developed a 5-year capital improvement program to prioritize public construction of certain roads. TUMF is focused on improvements necessitated by regional growth.

11.3 FAIR SHARE CONTRIBUTION

Project improvement may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair share contribution toward future improvements or a combination of these approaches. Improvements constructed by development may be eligible for a fee credit or reimbursement through the program where appropriate (to be determined at the City's discretion).

When off-site improvements are identified with a minor share of responsibility assigned to proposed development, the approving jurisdiction may elect to collect a fair share contribution or require the development to construct improvements. Detailed fair share calculations, for each peak hour, has been provided in Table 11-1 for the applicable deficient study area intersections. These fees are collected with the proceeds solely used as part of a funding mechanism aimed at ensuring that regional highways and arterial expansions keep pace with the projected population increases.

TABLE 11-1: PROJECT FAIR SHARE CALCULATIONS

#	Intersection		Project Only	Cumulative Only	Project % of New Traffic
6	Cedar Av. & I-10 WB Ramps				
		AM:	145	854	**14.5%**
		PM:	177	1,125	13.6%
7	Cedar Av. & I-10 EB Ramps				
		AM:	297	1,358	**17.9%**
		PM:	290	1,627	15.1%
8	Cedar Av. & Orange St.				
		AM:	296	1,316	**18.4%**
		PM:	290	1,650	14.9%
9	Cedar Av. & Slover Av.				
		AM:	337	1,675	**16.7%**
		PM:	330	1,982	14.3%
16	Rubidoux Bl. & 26th St.				
		AM:	237	1,036	**18.6%**
		PM:	230	1,184	16.3%
23	Agua Mansa Rd. & Market St.				
		AM:	267	580	**31.5%**
		PM:	261	668	28.1%
32	Riverside Av. & Agua Mansa Rd.				
		AM:	88	377	**18.9%**
		PM:	86	435	16.5%

BOLD = Denotes highest fair share percentage.

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12 REFERENCES

1. **City of Jurupa Valley.** *Traffic Impact Analysis Guidelines.* City of Jurupa Valley : s.n., November 2020.
2. **Institute of Transportation Engineers.** *Trip Generation Manual.* 11th Edition. 2021.
3. **Western Riverside Council of Governments.** *TUMF Nexus Study, 2016 Program Update.* July 2017.
4. **Riverside County Transportation Commission.** *2011 Riverside County Congestion Management Program.* County of Riverside : RCTC, December 14, 2011.
5. **San Bernardino Associated Governments.** *Congestion Management Program for County of San Bernardino.* County of San Bernardino : s.n., Updated June 2016.
6. **Transportation Research Board.** *Highway Capacity Manual (HCM).* 6th Edition. s.l. : National Academy of Sciences, 2016.
7. **Caltrans.** Manual on Uniform Traffic Control Devices (MUTCD). [book auth.] California Department of Transportation. *California Manual on Uniform Traffic Control Devices (CAMUTCD).* 2014.
8. **South Coast Air Quality Managment District (SCAQMD).** *Warehouse Truck Trip Study Data Results and Usage.* June 2014.
9. **San Bernardino Associated Governments.** I-10 Corridor Project. *The I-10 & I-15 Corridor Projects.* [Online] www.1015projects.com.

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APPENDIX 1.1: APPROVED TRAFFIC STUDY SCOPING AGREEMENT

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Exhibit B
SCOPING AGREEMENT FOR TRAFFIC IMPACT STUDY

This letter acknowledges the City of Jurupa Valley requirements for traffic impact analysis of the following project. The analysis must follow the standards adopted by the City and listed in the Riverside County Transportation Department's document *Traffic Study Guidelines* dated April 2008, and requirements identified by the City of Jurupa Valley Engineering Department.

Case No. MA17132

Related Cases – *(List all that apply; e.g., SP, PP, SDP, EIR, GPA, EIR, etc., Include City MA #.)*

Project Name: Rubidoux Warehouse
Project Address: West of Avalon Street at 26th Street
Project Description:

	Consultant	Developer
Name:	Urban Crossroads, Inc. – Charlene So	Proficiency Rubidoux LLC
Address:	260 E. Baker Street, Suite 200 Costa Mesa, CA 92626	11777 San Vincente Bl., Suite 780 Los Angeles, CA 90049
Telephone:	(949) 336-5982	(949) 842-3074
Fax:		
Email:	cso@urbanxroads.com	menglhard@proficiencycapital.com

A. Trip Generation Source: (ITE 9th Edition or other) **ITE 10th Edition**

Current GP Land Use	Industrial- Technology and Innovation	Proposed Land Use	Heavy Industrial
Current Zoning	Manufacturing-Medium (M-M)	Proposed Zoning	Manufacturing-Medium (M-M)

	Current Trip Generation			*Proposed Trip Generation*		
Period	*In*	*Out*	*Total*	*In*	*Out*	*Total*
AM Trips	-	-	-	**351**	**67**	**418**
PM Trips	-	-	-	**83**	**343**	**426**
Daily Trips	-	-	-	**2,363**	**2,363**	**4,726**

Internal Trip Allowance ☐ Yes ☒ No 0 % Trip Discount

Pass-By Trip Allowance ☐ Yes ☒ No 0 % Trip Discount

A pass-by trip discount may be allowed for appropriate land uses. Justification for trip discounts must be provided. The pass-by trips at adjacent study area intersections and project driveways shall be indicated on a report figure.

B. Trip Geographic Distribution: N **varies%** S **varies%** E **varies** % W **varies** %
(Attach exhibit for detailed assignment) **See attached Exhibit 3 and 4**

C. Background Traffic:

Project Build-out Year: 2022 Annual Ambient Growth Rate: 2 %
Phase Year(s) none
(Provide realistic opening year, considering time needed for approvals and construction.)

Other area projects or issues to be analyzed:

Model/Forecast methodology: RivTAM, SBTAM

D. Study intersections: *(NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies.)*

See attached Exhibit 2

1. Van Dell Rd. & 20th St.
2. Van Dell Rd./Driveway 2 & Driveway 1
3. Driveway & Primavera Av.
4. Avalon St. & 20th St.
5. Avalon St. & 24th St.
6. Avalon St. & Primavera Av./26th St.
7. Avalon St. & Driveway 4
8. Cedar Av. & I-10 WB Ramps
9. Cedar Av. & I-10 EB Ramps
10. Cedar Av. & Orange St.
11. Cedar Av. & Slover Av.
12. Cedar Av. & Santa Ana Av.
13. Cedar Av. & Jurupa Av.
14. Cedar Av. & 7th St.
15. Cedar Av./Rubidoux Bl. & Tarragona Dr./El Rivino Rd.
16. Rubidoux Bl. & Market St.
17. Rubidoux Bl. & 24th St.
18. Rubidoux Bl. & 26th St.
19. Rubidoux Bl. & 28th St.
20. Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp
21. Rubidoux Bl. & SR-60 WB On-Ramp
22. Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.
23. Rubidoux Bl. & 34th St.
24. Hall Av. & Frontage Rd./SR-60 EB On-Ramp
25. Agua Mansa Rd. & Market St.
26. Hall Av. & 24th St.
27. Hall Av. & 26th St.
28. Via Cerro & Market St.
29. Rivera St. & Market St.
30. Market St. & SR-60 WB Ramps
31. Market St. & SR-60 EB Ramps
32. Market St. & Redwood Dr.
33. Agua Mansa Rd. & El Rivino Rd.
34. Riverside Av. & Agua Mansa Rd.

E. Study Roadway Segments: *(NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies.)*

1. None
2.
3.
4.
5.
6.
7.
8.
9.
10.

E. Other Jurisdictional Impacts:

☐ Yes ☒ No

Is this project within another City's Sphere of Influence or one-mile radius of another City's boundaries?

If so, name of City Jurisdiction:

F. Site Plan (please attach reduced copy)

G. Specific issues to be addressed in the Study (in addition to the standard analysis described in the Guideline) (To be filled out by the City Engineering Department)

(NOTE: If the traffic study states that "a traffic signal is warranted" (or "a traffic signal appears to be warranted," or similar statement) at an existing unsignalized intersection under existing conditions, 8-hour approach traffic volume information must be submitted in addition to the peak hourly turning movement counts for that intersection.)

H. Existing Conditions

Traffic count data must be new or recent. Provide traffic count dates if using other than new counts.

Date of counts: Traffic counts for the study area intersections were collected in May 2019 when local schools were in session and operating on normal bell schedules. To reflect Existing (2020) traffic conditions, a 2% growth rate will be applied to the 2019 traffic counts.

***NOTE* Traffic Study Submittal Form and appropriate fee must be submitted with, or prior to submittal of this form. Fees are collected through the Planning Department as part of the planning application fees. Contact the Planning Department for a schedule of fees. City staff will not process the Scoping Agreement prior to receipt of the applicable fees.**

Proposed by:		**Approved Scoping Agreement:**	
Charlene So	12/13/19		12-17-19
Consultant's Representative	Date	City of Jurupa Valley	Date
Scoping Agreement Submitted on	10/25/18		
Revised on	12/13/19		

URBAN CROSSROADS

260 E. Baker St. | Suite 200 | Costa Mesa, CA 92626 | (949) 660-1994
urbanxroads.com

December 13, 2019

Mr. Steve Loriso
City of Jurupa Valley
8930 Limonite Avenue
Jurupa Valley, CA 92509

SUBJECT: SCOPING AGREEMENT FOR THE RUBIDOUX WAREHOUSE TRAFFIC IMPACT ANALYSIS

Dear Mr. Steve Loriso:

The firm of Urban Crossroads, Inc. is pleased to submit this scoping agreement for the proposed Rubidoux Warehouse development ("Project"), which is located west of Avalon Street at 26th Street in the City of Jurupa Valley.

Our goal is to obtain comments from City of Jurupa Valley staff, to ensure that the traffic study fully addresses the potential impacts of the proposed Project. The remainder of this letter describes the draft proposed analysis methodology, project trip generation, trip distribution, and project traffic assignment/project trips on the surrounding roadway network, which have been used to establish the draft proposed project study area and analysis locations.

The preliminary site plan for the proposed Project is shown on Exhibit 1. Exhibit 2 depicts the location of the proposed Project in relation to the existing roadway network. The proposed Project is anticipated to include the development of 757,142 square feet of high-cube fulfillment center warehouse use (60% of Building 1), 252,381 square feet of high-cube warehouse with cold storage use (20% of Building 1), and 289,835 square feet of general light industrial use (20% of Building 1 and 100% of Building 2) (Proposed Project). An alternative land use will also be evaluated for the purposes of the TIA which will evaluate manufacturing use for 1,299,358 square feet (Alternative Land Use).

It is anticipated that the Project will be operational by Year 2022. Access to the Project site will be provided along Van Dell Road, Primavera Avenue, and Avalon Street.

STUDY AREA

Our understanding is that the City of Jurupa Valley has adopted the County of Riverside's TIA guidelines. The traffic impact study area was defined in conformance with the requirements of the City's TIA guidelines. The study area intersections are shown on Exhibit 2. Note 3 of the study area intersections along Agua Mansa Road are applicable only to the Manufacturing Alternative where the Project would contribute more than 50 peak hour trips.

ANALYSIS SCENARIOS

Consistent with City's traffic study guidelines, the analysis of peak hour operations at study area intersections will be provided for the following analysis scenarios:

- Existing (2020) Conditions
- Existing plus Project (E+P) Conditions
- Existing plus Ambient Growth plus Project (EAP) Conditions
- Existing plus Ambient Growth plus Cumulative plus Project (EAPC) Conditions
- Horizon Year (2040) Without Project Conditions
- Horizon Year (2040) With Project Conditions

Highway Capacity Manual (HCM) (6th Edition) methodology will be utilized for intersections.

Each analysis scenario will evaluate the morning and evening peak hour on a typical weekday (Tuesday through Thursday).

TRIP GENERATION

Trip generation represents the amount of traffic that is attracted and produced by a development and is based upon the specific land uses planned for a given project. Trip generation rates for the Project are shown in Table 1 based on actual vehicles and passenger car equivalent (PCE). The trip generation summary for the proposed Project in both actual vehicles and PCE are shown on Table 2.

PROPOSED PROJECT

The following ITE land use codes and vehicle mixes have been utilized:

- The trip generation rates used for this analysis are based upon information collected by the Institute of Transportation Engineers (ITE) as provided in their Trip Generation Manual, 10th Edition, 2017. ITE land use code 157 (High-Cube With Cold Storage Warehouse) has been used to derive site specific trip generation estimates for up to 252,381 square feet of the proposed Project (20% of Building 1). The truck percentage was obtained from the ITE's High Cube Warehouse Vehicle Trip Generation Analysis (October 2016). The vehicle mix varies by peak hour and overall daily: 69.2% passenger cars in the AM peak hour, 78.3% passenger cars in the PM peak hour, and 67.8% passenger cars weekday daily. Trip generation for heavy trucks was further broken down by truck type (or axle type). The total truck percentage is comprised of 3 different truck types: 2-axle, 3-axle, and 4+-axle trucks. For the purposes of this analysis, the percentage of trucks, by axle type, were obtained from the SCAQMD Warehouse Truck Trip Study Data Results and Usage (2014) recommended truck mix. The SCAQMD has recently performed surveys of existing facilities and compiled the data to provide interim guidance on the mix of heavy trucks

for these types of high-cube warehousing/distribution facilities. Based on this interim guidance from the SCAQMD, the following truck fleet mix was utilized for the purposes of estimating the truck trip generation for the site (with cold storage): 34.7% of the total trucks as 2-axle trucks, 11.0% of the total trucks as 3-axle trucks, and 54.3% of the total trucks as 4+-axle trucks.

- The trip generation rates used for this analysis for High-Cube Fulfillment Center Warehouse use is based upon trip-generation statistics published in the DRAFT TUMF High-Cube Warehouse Trip Generation Study (WSP, November 6, 2018) which was commissioned by Western Riverside Council of Governments (WRCOG) in support of the Transportation Uniform Mitigation Fee (TUMF) update. However, the WSP study does not include a vehicle split, as such, the vehicle splits per the ITE High-Cube Warehouse Vehicle Trip Generation Analysis (October 2016) have been utilized. The analysis indicates daily trip generation rates (for all vehicles) at fulfillment centers are less than that are published by the ITE. The WSP trip generation rates were published in November 2018 and are based on data collected at 11 local high-cube fulfillment center sites. As such, for the purposes of this scoping agreement, the 2018 WSP rates has been utilized for Fulfillment Center Warehouses.
- ITE land use code 110 (General Light Industrial) has been used to derive site specific trip generation estimates for up to 289,835 square feet of the proposed Project (20% of the square footage of Building 1 and 100% of the total square footage of Building 2). The ITE Trip Generation Handbook (3rd Edition, 2017) identifies a 21.4% mix of heavy trucks, however, does not provide a breakdown of the 20% further by axle type. As such, the South Coast Air Quality Management District (SCAQMD) Warehouse Truck Trip Study Data Results and Usage (2014) for general light industrial trucks has been utilized for the truck mix: 8.0% 2-axle trucks, 3.9% 3-axle trucks, and 9.5% 4+-axle trucks.

Finally, PCE factors were applied to the trip generation rates for heavy trucks (large 2-axles, 3-axles, 4+-axles). PCEs allow the typical "real-world" mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, to be used for the purposes of capacity and level of service analyses. The PCE factors are consistent with the recommended PCE factors in the City's traffic study guidelines: 1.5 for 2-Axle, 2.0 for 3-Axle, and 3.0 for 4+-Axle.

As shown on Table 2, the proposed Project is anticipated to generate a net total of 3,632 PCE trip-ends per day with 237 PCE AM peak hour trips and 278 PCE PM peak hour trips.

ALTERNATIVE PROJECT LAND USE: MANUFACTURING

The following ITE land use codes and vehicle mixes have been utilized for the Alternative Project:

- ITE land use code 140 (Manufacturing) has been used to derive site specific trip generation estimates for up to 1,299,358 square feet of the proposed Project (100% of Buildings 1 and 2).

The City of Fontana's Truck Trip Generation Study (August 2003) identifies a vehicle mix of: 79.57% passenger cars, 3.46% 2-axle trucks, 4.64% 3-axle trucks, and 12.33% 4+-axle trucks.

Finally, PCE factors were applied to the trip generation rates for heavy trucks (large 2-axles, 3-axles, 4+-axles). PCEs allow the typical "real-world" mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, to be used for the purposes of capacity and level of service analyses. The PCE factors are consistent with the recommended PCE factors in the City's traffic study guidelines: 1.5 for 2-Axle, 2.0 for 3-Axle, and 3.0 for 4+-Axle.

As shown on Table 3, the Alternative Project is anticipated to generate a net total of 6,691 PCE trip-ends per day with 1,056 PCE AM peak hour trips and 1,141 PCE PM peak hour trips.

TRIP DISTRIBUTION

Exhibit 3 illustrates the Project truck trip distribution patterns. As shown, all trucks are proposed to utilize Van Dell Road to 20th Street for Building 1, while trucks associated with Building 2 will utilize Avalon Street to 20th Street. Exhibit 4 illustrates the Project passenger car trip distribution patterns.

LEVEL OF SERVICE (LOS) CRITERIA

Consistent with City's traffic study guidelines, the City of Jurupa Valley will maintain the following target level of service (LOS): LOS C on all City-maintained roads and conventional State Highways. As an exception, LOS D may be allowed in Community Development areas at intersections of any combination of Secondary Highways, Major Highways, Arterial Highways, Urban Arterial Highways, Expressways or conventional State Highways. LOS E may be allowed in designated Community Centers to the extent that it would support transit-oriented development and pedestrian communities.

THRESHOLDS OF SIGNIFICANCE

For purposes of analyzing California Environmental Quality Act (CEQA) impacts, the City of Jurupa Valley identifies significant impacts and required contributions towards impacts based on the following:

- Pre-project conditions are at or better than acceptable LOS levels and the addition of the project traffic to existing conditions (E+P) results in unacceptable LOS conditions then the project has a project-specific significant impact under both the City standards and CEQA. The project will be required to mitigate this impact.
- Pre-project conditions are at or better than acceptable LOS levels and the addition of the project traffic to existing conditions plus ambient growth at the project opening year (EAP) results in unacceptable LOS conditions then the project has a near-term cumulative significant impact under the City standards. The project will be required to mitigate this impact through the payment of fees (if included in an approved AB 1600 program).

- Pre-project conditions are at or better than acceptable LOS levels and the addition of the project traffic to existing conditions plus ambient growth at the project opening year and the addition of traffic from identified cumulative projects (EAPC) results in unacceptable LOS conditions then the project has a near-term cumulative significant impact under the City standards. The project will be required to provide a fair-share contribution towards feasible mitigation to address this impact. It is important to note here that if a system improvement is not listed on any CIP, TUMF list of projects, or other required mitigation program then those funding sources are not considered to be eligible to address cumulative impacts.
- When pre-project LOS conditions are worse than acceptable levels, the impact from the addition of project traffic for all analysis scenarios is considered to be cumulatively significant under both the City standards and CEQA. In all instances the project will be conditioned to provide a contribution towards mitigation to address the project's significant impact.

EXISTING COUNT DATA

Traffic counts for the study area intersections were collected in May 2019 when local schools were in session and operating on normal bell schedules. To reflect Existing (2020) traffic conditions, a 2% growth rate will be applied to the 2019 traffic counts.

CUMULATIVE DEVELOPMENT PROJECTS

The list of cumulative projects and a map showing project locations are provided in Table 4 and Exhibit 5. These cumulative projects will be added to the baseline forecasts, in conjunction with a background growth factor (calculated at 2% per year, compounded annually) for EAPC traffic conditions. The list has been updated with information provided by the City's Planning Department.

If you have any questions, please contact me directly at (949) 336-5982.

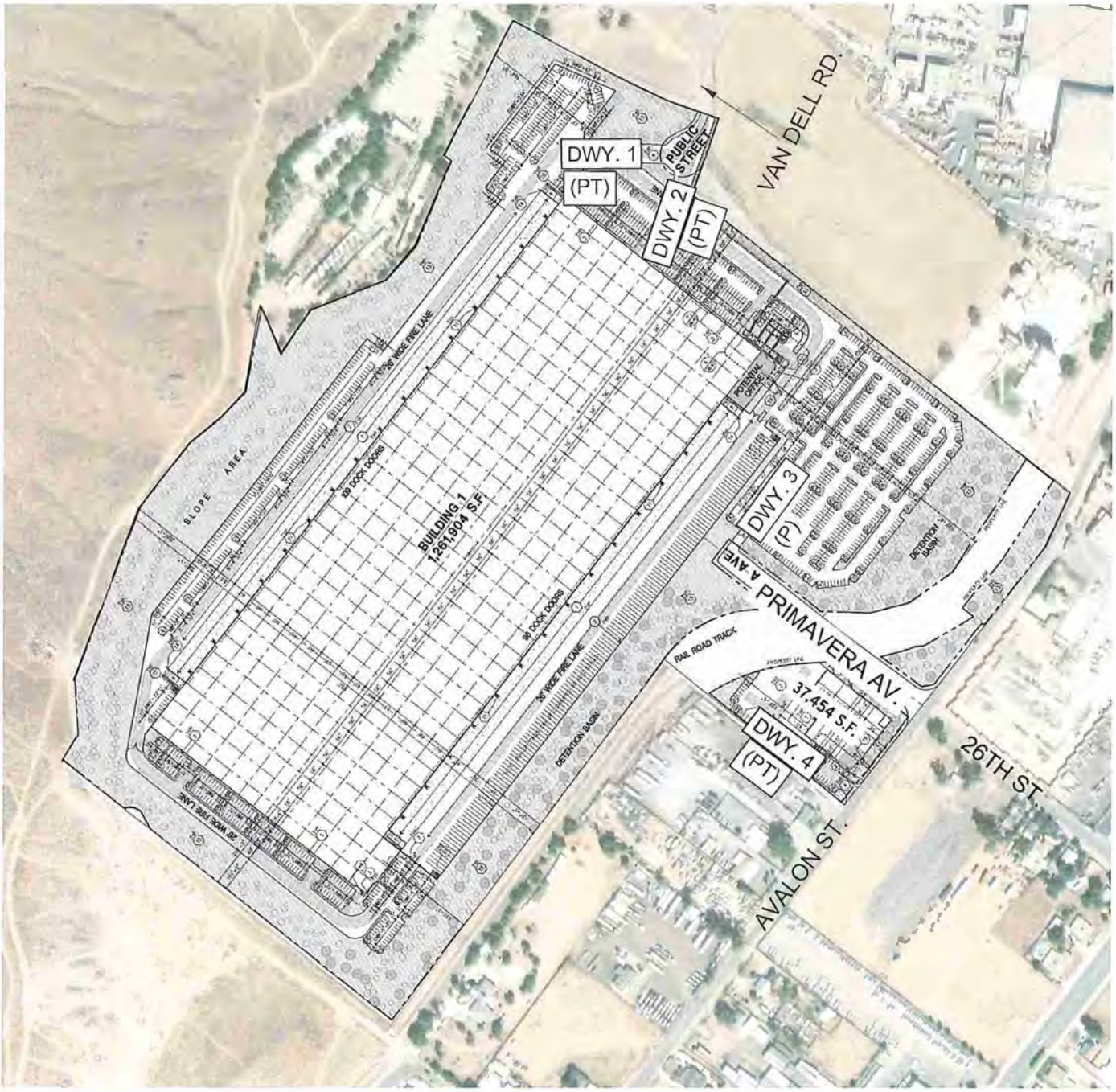
Respectfully submitted,

URBAN CROSSROADS, INC.

Charlene So

Charlene So, P.E.
Associate Principal

EXHIBIT 1: PRELIMINARY SITE PLAN



LEGEND:

RIRO = RIGHT-IN/RIGHT-OUT ONLY ACCESS
P = PASSENGER CARS ONLY
T = TRUCKS ONLY
PT = PASSENGER CARS AND TRUCKS

N

NOTE: UNLESS NOTED, ALL DRIVEWAYS ARE ASSUMED TO BE FULL ACCESS.

EXHIBIT 2: LOCATION MAP

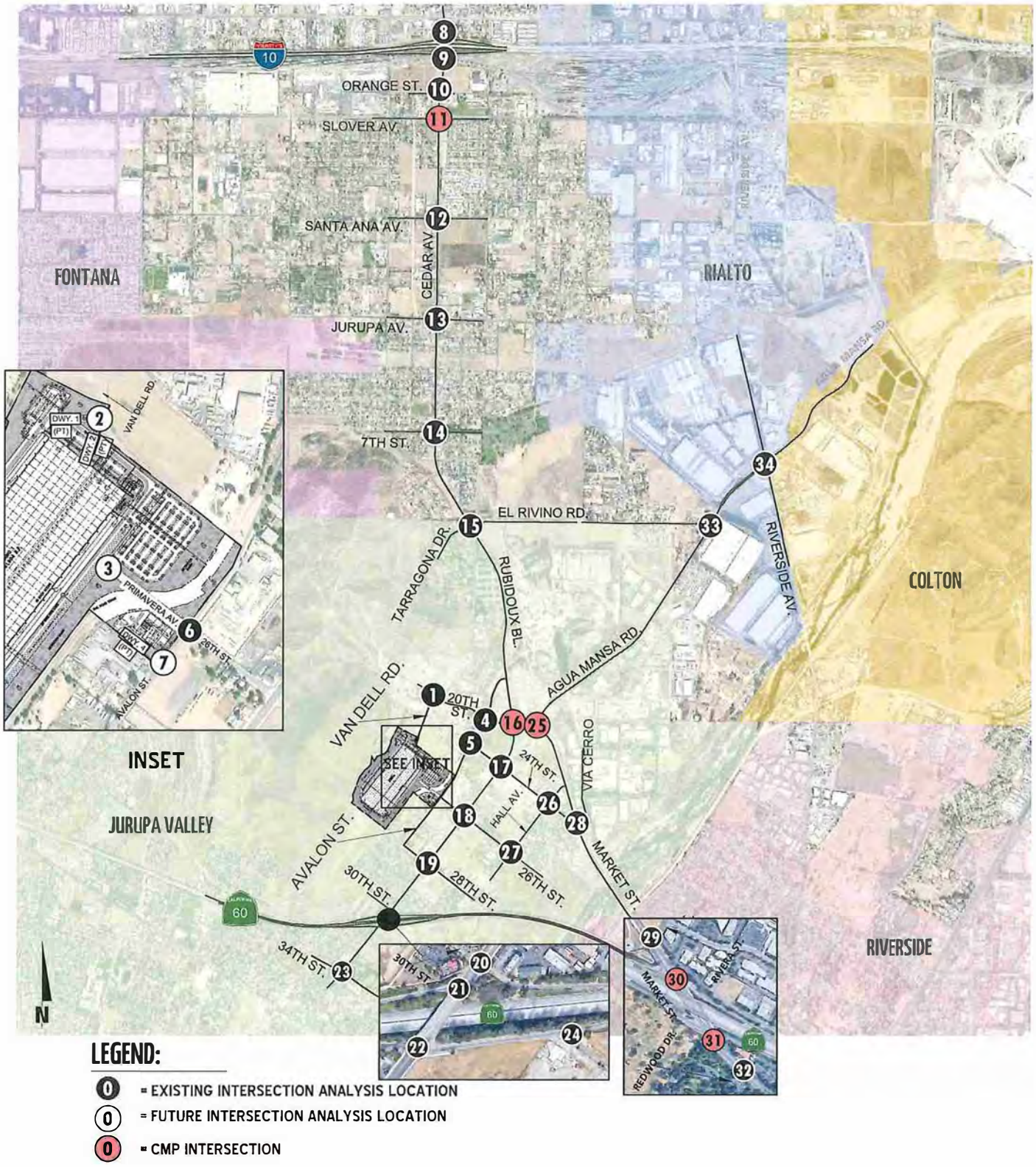
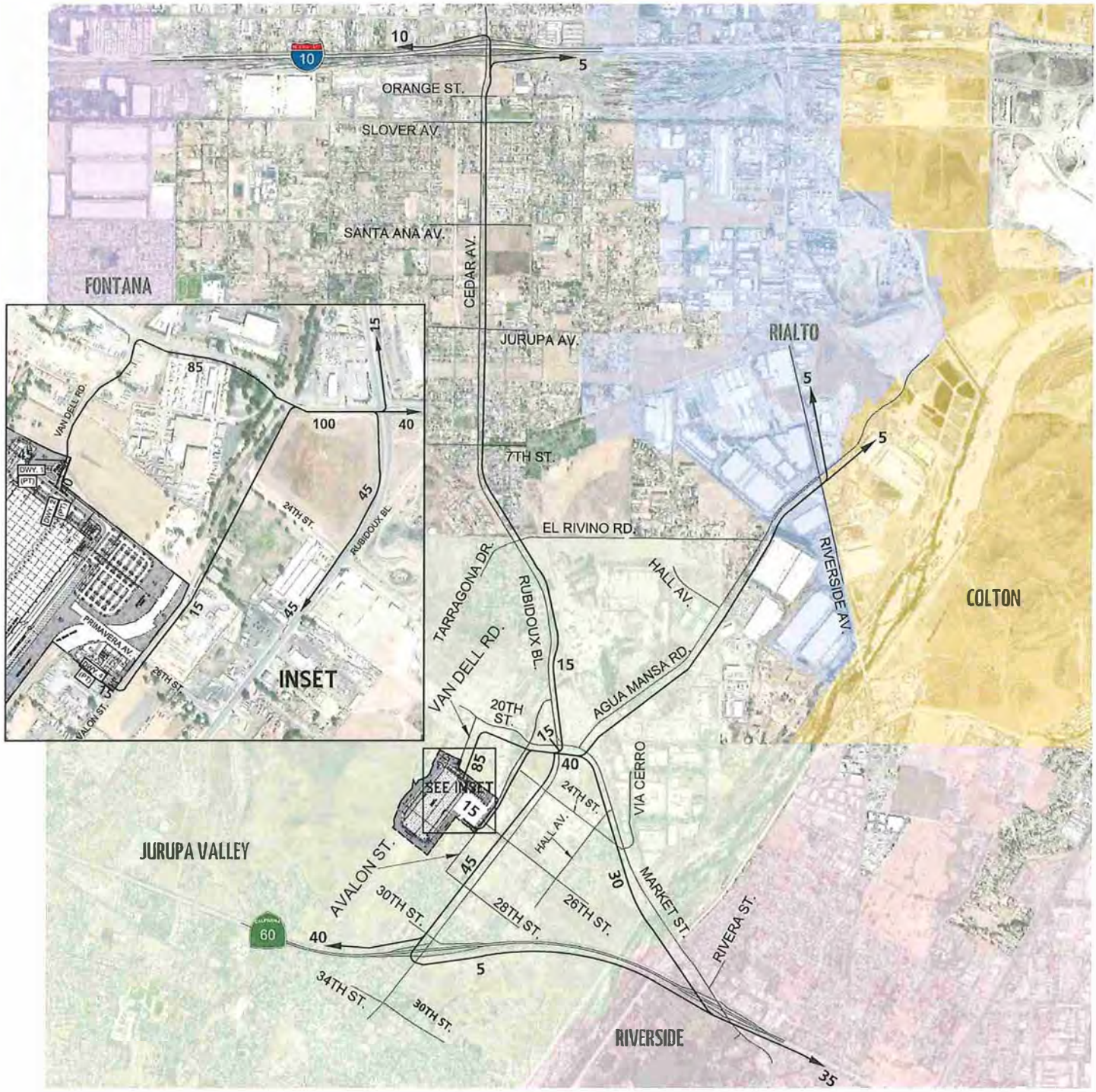


EXHIBIT 3: PROJECT (TRUCK) TRIP DISTRIBUTION



LEGEND:

10 = PERCENT TO/FROM PROJECT

N

11759 - trip-b.dwg

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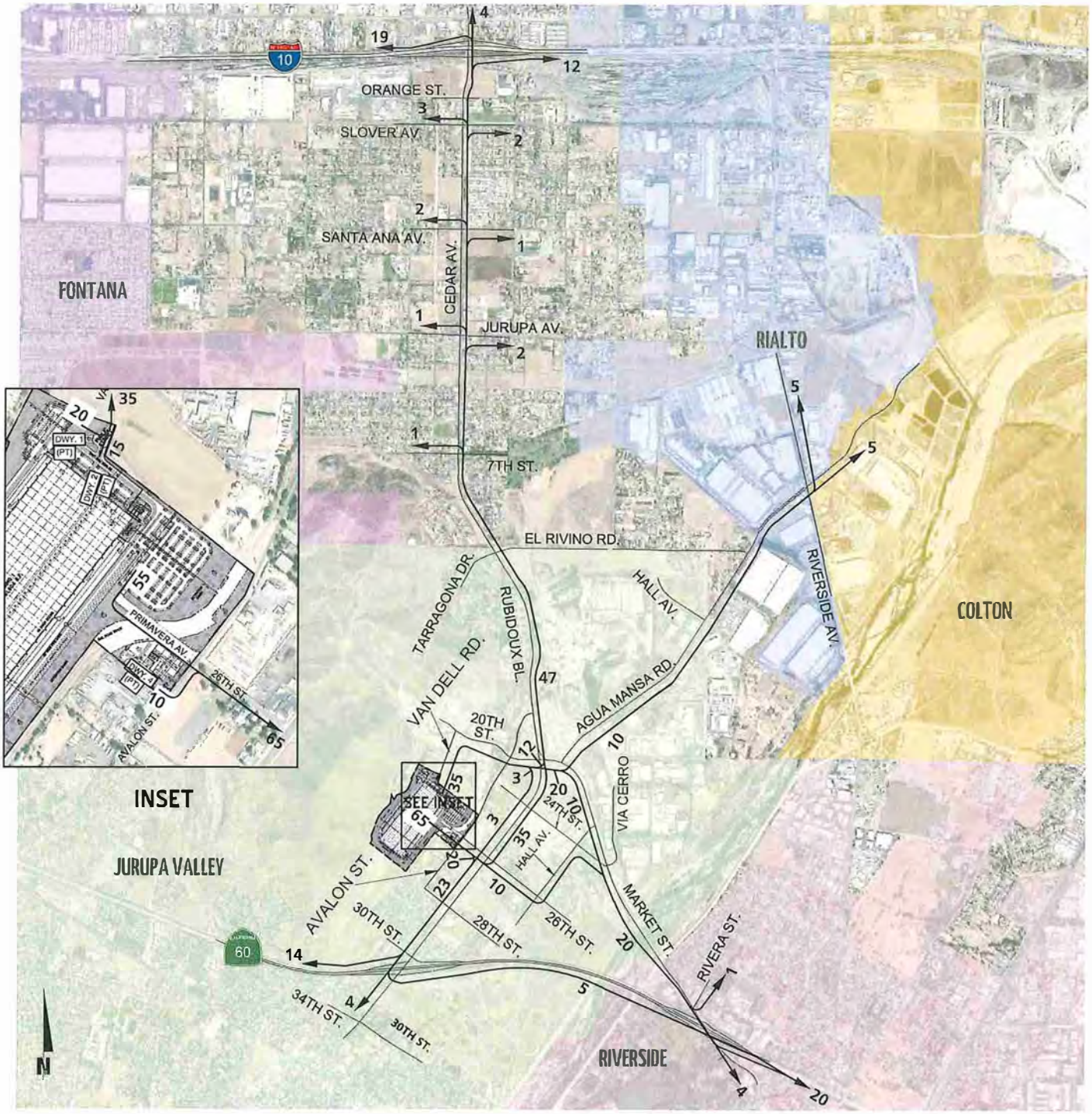
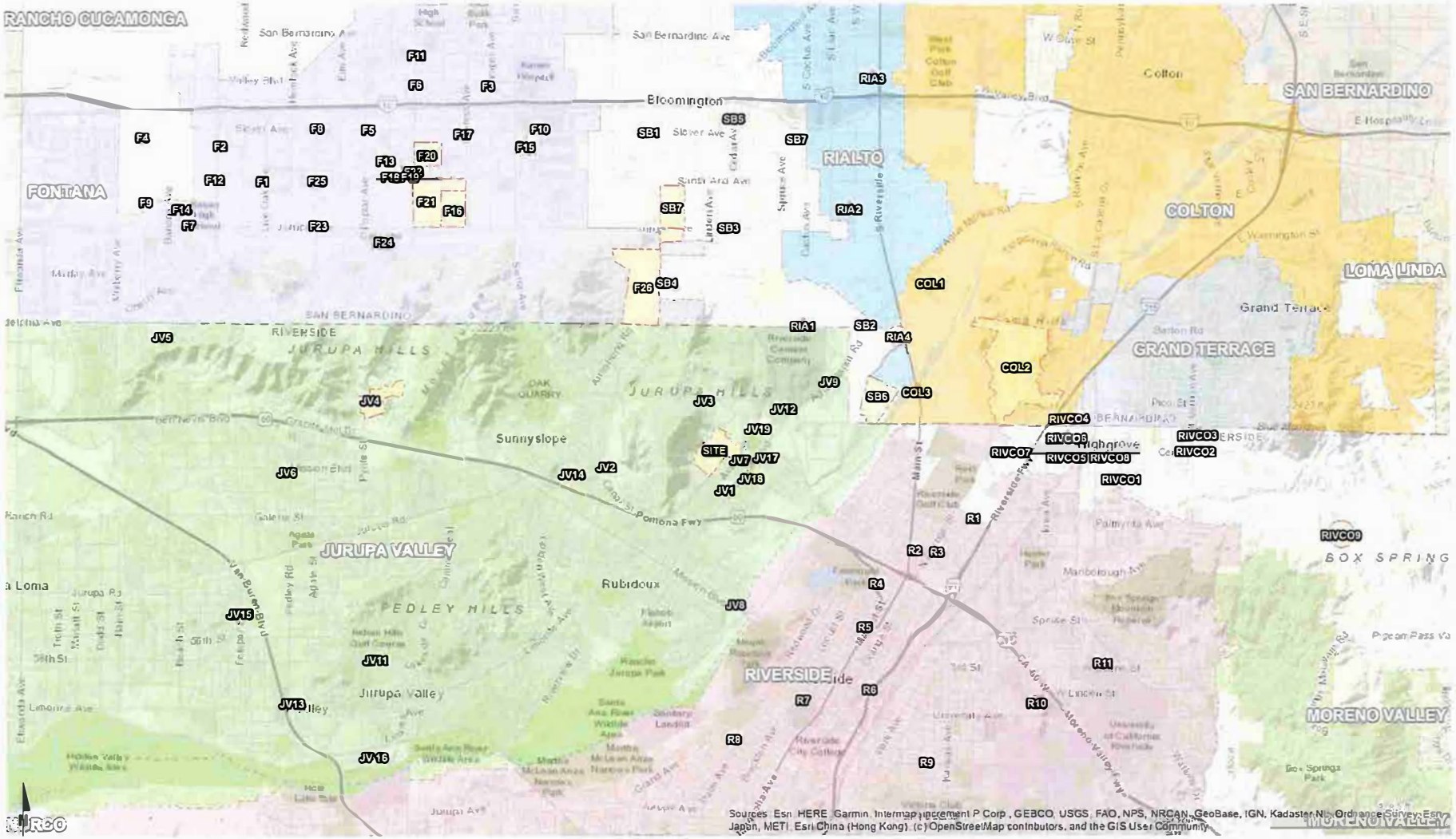
EXHIBIT 4: PROJECT (PASSENGER CAR) TRIP DISTRIBUTION



LEGEND:

10 = PERCENT TO/FROM PROJECT

EXHIBIT 5: CUMULATIVE DEVELOPMENT PROJECTS LOCATION MAP



11759- cd.mxd

Table 1

Project Trip Generation Rates

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicle Trip Generation Rates									
General Light Industrial[3]	TSF	110	0.616	0.084	0.700	0.082	0.548	0.630	4.960
Passenger Cars (78.6%)			0.493	0.067	0.560	0.066	0.438	0.504	3.968
2-Axle Trucks (8.0%)			0.021	0.003	0.023	0.003	0.018	0.021	0.166
3-Axle Trucks (3.9%)			0.026	0.003	0.029	0.003	0.023	0.026	0.205
4-Axle+ Trucks (9.5%)			0.077	0.011	0.088	0.010	0.069	0.079	0.621
Manufacturing[3]	TSF	140	0.477	0.143	0.620	0.208	0.462	0.670	3.930
Passenger Cars (79.57%)			0.380	0.113	0.493	0.165	0.368	0.533	3.127
2-Axle Trucks (3.46%)			0.017	0.005	0.021	0.007	0.016	0.023	0.136
3-Axle Trucks (4.64%)			0.022	0.007	0.029	0.010	0.021	0.031	0.182
4+-Axle Trucks (12.33%)			0.059	0.018	0.076	0.026	0.057	0.083	0.485
High-Cube Fulfillment Center Warehouse[4]	TSF	--	0.094	0.028	0.122	0.046	0.119	0.165	2.129
Passenger Cars			0.079	0.024	0.103	0.040	0.104	0.144	1.750
2-4 Axle Trucks			0.006	0.002	0.008	0.003	0.008	0.011	0.162
5+-Axle Trucks			0.008	0.003	0.011	0.003	0.007	0.010	0.217
High-Cube Cold Storage Warehouse[5]	TSF	157	0.085	0.025	0.110	0.032	0.088	0.120	2.120
Passenger Cars (AM-69.2%; PM-78.3%; Daily-67.8%)			0.059	0.018	0.076	0.025	0.069	0.094	1.437
2-Axle Trucks (AM-10.69%; PM-7.53%; Daily-11.17%)			0.009	0.003	0.012	0.002	0.007	0.009	0.237
3-Axle Trucks (AM-3.39%; PM-2.39%; Daily-3.54%)			0.003	0.001	0.004	0.001	0.002	0.003	0.075
4-Axle+ Trucks (AM-16.76%; PM-11.80%; Daily-17.52%)			0.014	0.004	0.018	0.004	0.010	0.014	0.371
Passenger Car Equivalent (PCE) Trip Generation Rates[6]									
General Light Industrial[3]	TSF	110	0.616	0.084	0.700	0.082	0.548	0.630	4.960
Passenger Cars (78.6%)			0.493	0.067	0.560	0.066	0.438	0.504	3.968
2-Axle Trucks (8.0%) (PCE = 1.5)			0.031	0.004	0.035	0.004	0.027	0.032	0.248
3-Axle Trucks (3.9%) (PCE = 2.0)			0.051	0.007	0.058	0.007	0.045	0.052	0.411
4-Axle+ Trucks (9.5%) (PCE = 3.0)			0.231	0.032	0.263	0.031	0.206	0.237	1.863
Manufacturing[3]	TSF	140	0.477	0.143	0.620	0.208	0.462	0.670	3.930
Passenger Cars (79.57%)			0.380	0.113	0.493	0.165	0.368	0.533	3.127
2-Axle Trucks (3.46%) (PCE = 1.5)			0.025	0.007	0.032	0.011	0.024	0.035	0.204
3-Axle Trucks (4.64%) (PCE = 2.0)			0.044	0.013	0.058	0.019	0.043	0.062	0.365
4+-Axle Trucks (12.33%) (PCE = 3.0)			0.177	0.053	0.229	0.077	0.171	0.248	1.454
High-Cube Fulfillment Center Warehouse[4]	TSF	--	0.094	0.028	0.122	0.046	0.119	0.165	2.129
Passenger Cars			0.079	0.024	0.103	0.040	0.104	0.144	1.750
2-4 Axle Trucks (PCE = 2.0)			0.012	0.004	0.016	0.006	0.016	0.022	0.324
5+-Axle Trucks (PCE = 3.0)			0.025	0.008	0.033	0.008	0.022	0.030	0.651
High-Cube Cold Storage Warehouse[5]	TSF	157	0.085	0.025	0.110	0.032	0.088	0.120	2.120
Passenger Cars (AM-69.2%; PM-78.3%; Daily-67.8%)			0.059	0.018	0.076	0.025	0.069	0.094	1.437
2-Axle Trucks (AM-10.69%; PM-7.53%; Daily-11.17%) (PCE = 1.5)			0.014	0.004	0.018	0.004	0.010	0.014	0.355
3-Axle Trucks (AM-3.39%; PM-2.39%; Daily-3.54%) (PCE = 2.0)			0.006	0.002	0.007	0.002	0.004	0.006	0.150
4-Axle+ Trucks (AM-16.76%; PM-11.80%; Daily-17.52%) (PCE = 3.0)			0.043	0.013	0.055	0.011	0.031	0.042	1.114

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Tenth Edition (2017).

[2] TSF = thousand square feet

[3] Vehicle mix source: ITE Trip Generation Handbook, 2017. Truck Mix Source: City of Fontana Truck Trip Generation Study (Land Use 150), August 2003.

[4] Vehicle Mix Source: High Cube Warehouse Trip Generation Study, WSP, January 29, 2019.
Inbound and outbound split source: High Cube Warehouse Vehicle Trip Generation Analysis, October 2016, ITE.

[5] Vehicle Mix Source: High Cube Warehouse Vehicle Trip Generation Analysis, October 2016, ITE.
Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type for high-cube warehouse.

[6] PCE rates are per SBCTA.

[7] Truck Mix Source: City of Fontana Truck Trip Generation Study (Land Use 140), August 2003.

Table 2

Proposed Project Trip Generation Summary

Land Use	Quantity	Units[1]	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Project Trip Generation Summary (Actual)									
High-Cube Fulfillment Center Warehouse (60% of Bldg. 1)	757.142	TSF							
Passenger Cars:			60	18	78	31	79	110	1,326
Truck Trips:									
2-4 axle:			5	1	6	2	6	8	124
5+-axle:			6	2	8	2	5	7	164
- Truck Trips			11	3	14	4	11	15	288
Fulfillment Center Total Trips (Actual Vehicles) [2]			**71**	**21**	**92**	**35**	**90**	**125**	**1,614**
High-Cube Cold Storage Warehouse (20% of Bldg. 1)	252.381	TSF							
Passenger Cars:			15	4	19	6	17	23	364
Truck Trips:									
2-axle:			2	1	3	1	2	3	60
3-axle:			1	0	1	0	1	1	20
4+-axle:			4	1	5	1	3	4	94
- Truck Trips			7	2	9	2	6	8	174
High-Cube Cold Storage Total Trips (Actual Vehicles) [2]			**22**	**6**	**28**	**8**	**23**	**31**	**538**
General Light Industrial (20% of Bldg. 1)	252.381	TSF							
Passenger Cars:			124	17	141	17	111	128	1,002
Truck Trips:									
2-axle:			5	1	6	1	5	6	42
3-axle:			6	1	7	1	6	7	52
4+-axle:			19	3	22	3	17	20	158
- Truck Trips			30	5	35	5	28	33	252
General Light Industrial Total Trips (Actual Vehicles) [2]			**154**	**22**	**176**	**22**	**139**	**161**	**1,254**
General Light Industrial (Bldg. 2)	37.454	TSF							
Passenger Cars:			18	3	21	2	16	18	150
Truck Trips:									
2-axle:			1	0	1	0	1	1	6
3-axle:			1	0	1	0	1	1	8
4+-axle:			3	0	3	0	3	3	24
- Truck Trips			5	0	5	0	5	5	38
General Light Industrial Total Trips (Actual Vehicles) [2]			**23**	**3**	**26**	**2**	**21**	**23**	**188**
Total Passenger Cars			*217*	*42*	*259*	*56*	*223*	*279*	*2,842*
Total Trucks			*53*	*10*	*63*	*11*	*50*	*61*	*752*
Total Proposed Project (Actual Vehicles)			**270**	**52**	**322**	**67**	**273**	**340**	**3,594**

Proposed Project Trip Generation Summary

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Project Trip Generation Summary (PCE)									
High-Cube Fulfillment Center Warehouse (Bldg. 1)	757.142	TSF							
Passenger Cars:			60	18	78	31	79	110	1,326
Truck Trips:									
2-4 axle:			9	3	12	5	12	17	246
5+-axle:			19	6	25	6	16	22	494
- Truck Trips			28	9	37	11	28	39	740
Fulfillment Center Total Trips (PCE) [2]			**88**	**27**	**115**	**42**	**107**	**149**	**2,066**
High-Cube Cold Storage Warehouse (Bldg. 1)	252.381	TSF							
Passenger Cars:			15	4	19	6	17	23	364
Truck Trips:									
2-axle:			3	1	4	1	2	3	90
3-axle:			1	0	1	0	1	1	38
4+-axle:			11	3	14	3	8	11	282
- Truck Trips			15	4	19	4	11	15	410
High-Cube Cold Storage Total Trips (PCE) [2]			**30**	**8**	**38**	**10**	**28**	**38**	**774**
General Light Industrial (Bldg. 1)	252.381	TSF							
Passenger Cars:			124	17	141	17	111	128	1,002
Truck Trips:									
2-axle:			8	1	9	1	7	8	64
3-axle:			13	2	15	2	11	13	104
4+-axle:			58	8	66	8	52	60	470
- Truck Trips			79	11	90	11	70	81	638
General Light Industrial Total Trips (PCE) [2]			**203**	**28**	**231**	**28**	**181**	**209**	**1,640**
General Light Industrial (Bldg. 2)	37.454	TSF							
Passenger Cars:			18	3	21	2	16	18	150
Truck Trips:									
2-axle:			1	0	1	0	1	1	10
3-axle:			2	0	2	0	2	2	16
4+-axle:			9	1	10	1	8	9	70
- Truck Trips			12	1	13	1	11	12	96
General Light Industrial Total Trips (PCE) [2]			**30**	**4**	**34**	**3**	**27**	**30**	**246**
Total Passenger Cars			*217*	*42*	*259*	*56*	*223*	*279*	*2,842*
Total Trucks			*134*	*25*	*159*	*27*	*120*	*147*	*1,884*
Total Proposed Project (PCE)			**351**	**67**	**418**	**83**	**343**	**426**	**4,726**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

Table 3

Alternative Project Trip Generation Summary

Land Use	Quantity	Units[1]	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Trip Generation Summary (Actual)									
Manufacturing	1,299.358	TSF							
Passenger Cars:			494	147	641	215	478	693	4,063
Truck Trips:									
2-axle:			21	6	27	9	21	30	177
3-axle:			29	9	38	13	28	41	237
4+-axle:			76	23	99	33	74	107	630
- Truck Trips			126	38	164	55	123	178	1,044
TOTAL TRIPS (Actual) [2]			**620**	**185**	**805**	**270**	**601**	**871**	**5,107**
Trip Generation Summary (PCE)									
Manufacturing	1,299.358	TSF							
Passenger Cars:			494	147	641	215	478	693	4,063
Truck Trips:									
2-axle:			32	10	42	14	31	45	265
3-axle:			58	17	75	25	56	81	474
4+-axle:			229	69	298	100	222	322	1,889
- Truck Trips			319	96	415	139	309	448	2,628
TOTAL TRIPS (PCE) [2]			**813**	**243**	**1,056**	**354**	**787**	**1,141**	**6,691**

[1] TSF = thousand square feet

[2] TOTAL TRIPS = Passenger Cars + Truck Trips.

Table 4

Cumulative Development Land Use Summary

ID	Project Name	Land Use[1]	Quantity	Units[2]
City of Jurupa Valley				
JV1	Emerald Ridge South	SFDR	97	DU
		Condo/Townhomes	118	DU
JV2	Highland Park	SFDR	398	DU
JV3	New Rio Vista Specific Plan 243	SFDR	579	DU
		Condo/Townhomes	290	DU
		Apartment	346	DU
		Active Park	22.2	AC
		School (K-8)	600	STU
JV4	Pick-a-Part	Car Auction	50	AC
JV5	Boureston Medical Clinic	Medical Clinic	40.000	TSF
JV6	Emerald Ridge North	SFDR	184	DU
JV7	Northtown Housing Development Group	Apartments	68	DU
		Commercial Retail	31.375	TSF
JV8	Agua Mansa Commerce Park Specific Plan	High-Cube Warehouse	4277.000	TSF
		General Light Industrial	150.000	TSF
		Commercial Retail	25.000	TSF
JV9	NWC of Hall Av. & Agua Mansa	Warehouse	334.523	TSF
JV10	SEC of Opal St. and Canal St.	SFDR	41	DU
JV11	SEC of Camino Real and Limonite Av.	Multifamily Housing	121	DU
JV12	Carson Companies	Warehouse	334.523	TSF
JV13	Pearl Community	SFDR	90	DU
JV14	Home Development (TTM37211 & CZ17003)	SFDR	48	DU
JV15	Mobile Home Park	SFDR	39	DU
JV16	General & Clay Industrial Park	Warehouse	328.056	TSF
JV17	Kiewit Industrial Park	Storage Yard	25.000	TSF
		Warehouse	38.000	TSF
JV18	Midland Carriers	Warehouse	42.132	TSF
JV19	Rubidoux Commercial Development LLC	General Light Industrial	306.894	TSF
County of San Bernardino				
SB1	Slover Av. between Locust Av. and Laurel Av.	High-Cube Warehouse	344	TSF
SB2	West of Agua Mansa Rd. and North of El Rivino Rd.	High-Cube Warehouse	476.000	TSF
		Warehouse	30.000	TSF
SB3	NWC of Cedar Av. and Jurupa Av.	High-Cube Warehouse	677.000	TSF
SB4	Locust Av. and 7th St.	SFDR	198	DU
SB5	NEC and NWC of Cedar Av. and Orange St.	Warehouse	395.000	TSF
SB6	Holly Street Truck Terminal	Truck Terminal	450.000	TSF
SB7	Bloomington Commerce Center	High-Cube Warehouse	800.000	TSF
		High-Cube Fulfillment Center	451.640	TSF
SB8	Slover and Cactus Warehouse	Warehouse	257.855	TSF

Table 4
Page 2 of 3

Cumulative Development Land Use Summary

ID	Project Name	Land Use[1]	Quantity	Units[2]
		City of Fontana		
F1	Fontana Skilled Nursing Facility (ASP 16-07)	Nursing Facility	59	Beds
F2	Industrial Repair Facility (ASP 16-13)	General Light Industrial	17.930	TSF
F3	Retail Center with Gas Station (ASP 16-18)	Shopping Center	18.800	TSF
		Gas Station	16	VFP
F4	Starbucks (ASP 16-36)	Coffee/Donut Shop w/ Drive-thru	2.500	TSF
F5	DRP 16-05	SFDR	7	DU
F6	Light Industrial Building (DRP 16-13)	General Light Industrial	230.300	TSF
F7	Fontana South Walmart	Walmart	200.000	TSF
		Fuel Station	16	VFP
		Shopping Center	5.340	TSF
		Fast Food w/o Drive-Thru	5.340	TSF
F8	Citrus Commerce Center (NWC of Oleander and Jurupa)	High-Cube Warehouse	2171.449	TSF
F9	Arrow Recovery Group (TPM 14-18)	General Light Industrial	73.020	TSF
F10	NWC of Citrus and Santa Ana	High-Cube Warehouse	431.530	TSF
F11	SEC of Catawba and Santa Ana	High-Cube Warehouse	319.100	TSF
F12	Citrus Center	General Office	47.000	TSF
		Shopping Center	44.500	TSF
		Fast Food	8.658	TSF
F13	Southwest Industrial Park[5]	General Light Industrial	6018.092	TSF
		Manufacturing	1113.002	TSF
		High-Cube Warehouse	12414.730	TSF
		Single Family	397.000	DU
		Church	103.670	TSF
		General Office	1584.670	TSF
		Office Park	3095.710	TSF
		Research & Development	1626.490	TSF
		Shopping Center	1638.790	TSF
F14	Seefried	High-Cube Warehouse	424.000	TSF
F15	DCT Industrial	High-Cube Warehouse	971.000	TSF
F16	West Valley Logistics Center	Warehouse	290.590	TSF
		High-Cube Warehouse	3183.100	TSF
		City of Rialto		
RIA1	Panattoni I-10 (Cactus Av. & El Rivino Rd.)	Warehouse	2,475.745	TSF
RIA2	CapRock III	Warehouse	582.000	TSF
RIA3	Newmark Merrill Companies	Discount Super Store	198.000	TSF
		Tire Store	9.861	TSF
		Retail	25.436	TSF
		Fast Food w/ Drive-Thru	5.484	TSF
RIA4	Kore Infrastructure	Biosolids Facility	288	TPD

Table 4

Cumulative Development Land Use Summary

ID	Project Name	Land Use[1]	Quantity	Units[2]
City of Colton				
COL1	2036 Miguel Bustamante Pkwy.	Warehouse	124.588	TSF
	2053 Miguel Bustamante Pkwy.	Warehouse	174.996	TSF
COL2	Roquet Ranch	SFDR	754	DU
		Condo/Townhomes	244	DU
		Active Adult - Attached	52	DU
		Shopping Center	6.500	TSF
		Coffee Shop with Drive Thru	1.500	TSF
		Fast Food with Drive Thru	4.000	TSF
		Active Park[2, 4]	11.1	AC
		Passive Park[4]	8.4	AC
COL3	2163 Riverside Av.	High Cube Warehouse	447.330	TSF
City of Riverside				
R1	P06-0782 (Tract Map 34908) (1006 & 1008 Clark St.)	SFDR	15	DU
R2	P05-0269 & P08-0416 (Tract Map 33550) (3719 Strong St.)	SFDR	9	DU
R3	P06-1031 (Tract Map 31825) (1562 Orange St.)	SFDR	7	DU
R4	P13-0087 P13-0262 (2450 Market St.)	Senior Housing	67	DU
R5	P14-0183 (Centerpointe Apartments) (3105 Market St.)	Apartments	146	DU
R6	P09-0835 P10-0002 (3372 University Av.)	General Office	132.136	TSF
R7	P06-1237 (Jacobs Medical Office) (14th and Brockton Av.)	Medical Office	65.281	TSF
R8	P12-0799 & P12-0800 (Tract Map 36516)	SFDR	7	DU
R9	P09-0808 & P08-0809 (2340 14th St.)	Senior Housing	134	Beds
R10	P08-0980 & P09-0095 (3549 Iowa Av.)	Student Housing	114	Beds

[1] SFDR = Single Family Detached Residential

[2] DU = Dwelling Units; TSF = Thousand Square Feet; STU = Students; AC = Acres; TPD = Tons Per Day; VFP = Vehicle Fueling Positions

APPENDIX 3.1: 2022 TRAFFIC COUNTS

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Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Jurupa Valley
N/S: Van Dell Road
E/W: 20th Street
Weather: Clear

File Name : 01_JVY_Van D_20th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	20th Street Westbound			Van Dell Road Northbound			20th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:30 AM	3	16	19	2	10	12	13	0	13	44
06:45 AM	5	18	23	1	8	9	11	0	11	43
Total	8	34	42	3	18	21	24	0	24	87
07:00 AM	3	16	19	2	7	9	8	0	8	36
07:15 AM	3	11	14	1	9	10	8	0	8	32
07:30 AM	3	19	22	0	3	3	4	2	6	31
07:45 AM	2	12	14	1	11	12	4	2	6	32
Total	11	58	69	4	30	34	24	4	28	131
08:00 AM	3	21	24	1	5	6	8	2	10	40
08:15 AM	8	21	29	1	9	10	10	0	10	49
08:30 AM	7	18	25	1	5	6	12	1	13	44
08:45 AM	10	25	35	0	9	9	14	0	14	58
Total	28	85	113	3	28	31	44	3	47	191
Grand Total	47	177	224	10	76	86	92	7	99	409
Apprch %	21	79		11.6	88.4		92.9	7.1		
Total %	11.5	43.3	54.8	2.4	18.6	21	22.5	1.7	24.2	
Passenger Vehicles	31	61	92	6	8	14	25	5	30	136
% Passenger Vehicles	66	34.5	41.1	60	10.5	16.3	27.2	71.4	30.3	33.3
Large 2 Axle Vehicles	6	10	16	0	3	3	3	2	5	24
% Large 2 Axle Vehicles	12.8	5.6	7.1	0	3.9	3.5	3.3	28.6	5.1	5.9
3 Axle Vehicles	5	65	70	3	41	44	36	0	36	150
% 3 Axle Vehicles	10.6	36.7	31.2	30	53.9	51.2	39.1	0	36.4	36.7
4+ Axle Trucks	5	41	46	1	24	25	28	0	28	99
% 4+ Axle Trucks	10.6	23.2	20.5	10	31.6	29.1	30.4	0	28.3	24.2

	20th Street Westbound			Van Dell Road Northbound			20th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	3	21	24	**1**	5	6	8	**2**	10	40
08:15 AM	8	21	29	1	**9**	**10**	10	0	10	49
08:30 AM	7	18	25	1	5	6	12	1	13	44
08:45 AM	**10**	**25**	**35**	0	9	9	**14**	0	**14**	**58**
Total Volume	28	85	113	3	28	31	44	3	47	191
% App. Total	24.8	75.2		9.7	90.3		93.6	6.4		
PHF	.700	.850	.807	.750	.778	.775	.786	.375	.839	.823

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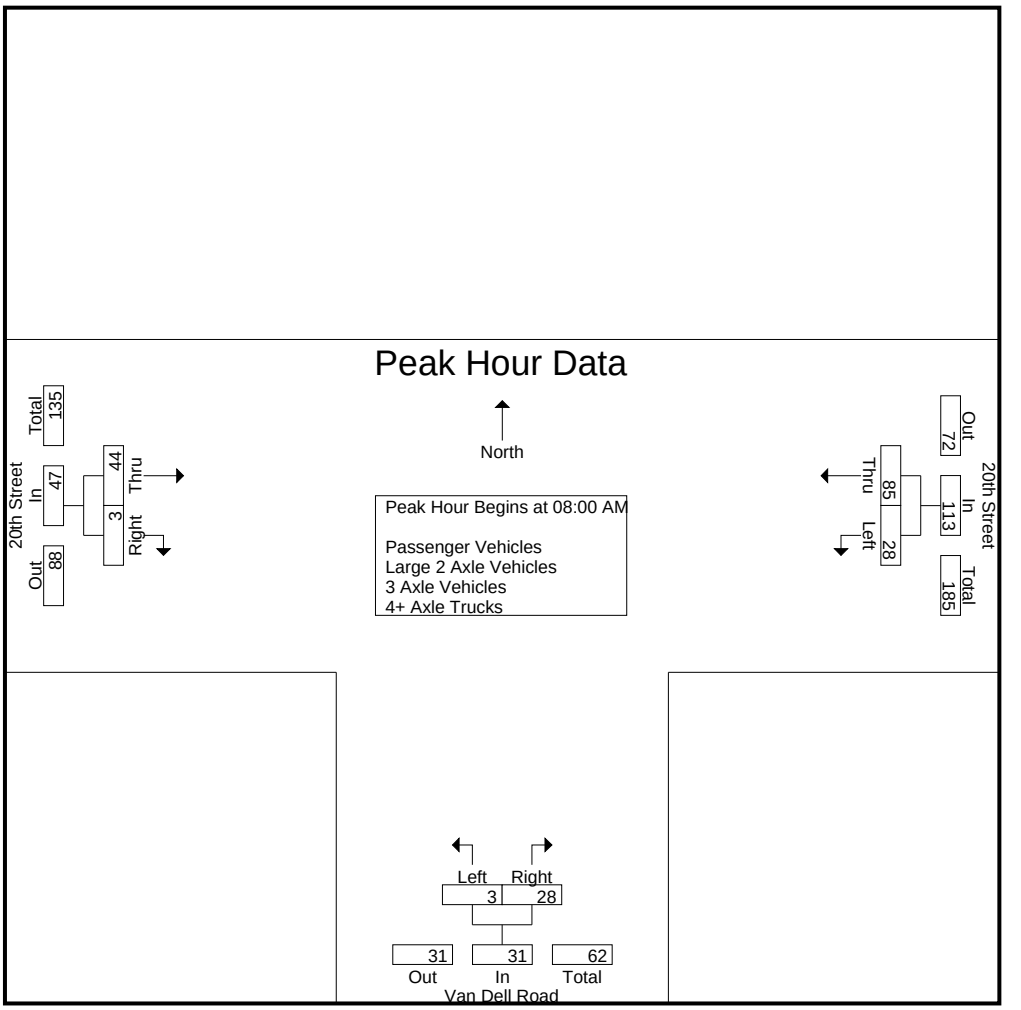

Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			06:30 AM			08:00 AM		
+0 mins.	3	21	24	**2**	**10**	**12**	8	**2**	10
+15 mins.	8	21	29	1	8	9	10	0	10
+30 mins.	7	18	25	2	7	9	12	1	13
+45 mins.	**10**	**25**	**35**	1	9	10	**14**	0	**14**
Total Volume	28	85	113	6	34	40	44	3	47
% App. Total	24.8	75.2		15	85		93.6	6.4	
PHF	.700	.850	.807	.750	.850	.833	.786	.375	.839

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Weather: Clear

File Name : 01_JVY_Van D_20th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	20th Street Westbound			Van Dell Road Northbound			20th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:30 AM	2	6	8	1	1	2	2	0	2	12
06:45 AM	3	6	9	0	0	0	0	0	0	9
Total	5	12	17	1	1	2	2	0	2	21
07:00 AM	2	7	9	1	0	1	2	0	2	12
07:15 AM	2	2	4	1	1	2	2	0	2	8
07:30 AM	3	4	7	0	1	1	0	2	2	10
07:45 AM	2	4	6	1	0	1	0	2	2	9
Total	9	17	26	3	2	5	4	4	8	39
08:00 AM	2	10	12	1	0	1	3	1	4	17
08:15 AM	5	6	11	1	4	5	5	0	5	21
08:30 AM	4	3	7	0	0	0	5	0	5	12
08:45 AM	6	13	19	0	1	1	6	0	6	26
Total	17	32	49	2	5	7	19	1	20	76
Grand Total	31	61	92	6	8	14	25	5	30	136
Apprch %	33.7	66.3		42.9	57.1		83.3	16.7		
Total %	22.8	44.9	67.6	4.4	5.9	10.3	18.4	3.7	22.1	

	20th Street Westbound			Van Dell Road Northbound			20th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	2	10	12	**1**	0	1	3	**1**	4	17
08:15 AM	5	6	11	1	**4**	**5**	5	0	5	21
08:30 AM	4	3	7	0	0	0	5	0	5	12
08:45 AM	**6**	**13**	**19**	0	1	1	**6**	0	**6**	**26**
Total Volume	17	32	49	2	5	7	19	1	20	76
% App. Total	34.7	65.3		28.6	71.4		95	5		
PHF	.708	.615	.645	.500	.313	.350	.792	.250	.833	.731

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File Name : 01_JVY_Van D_20th AM
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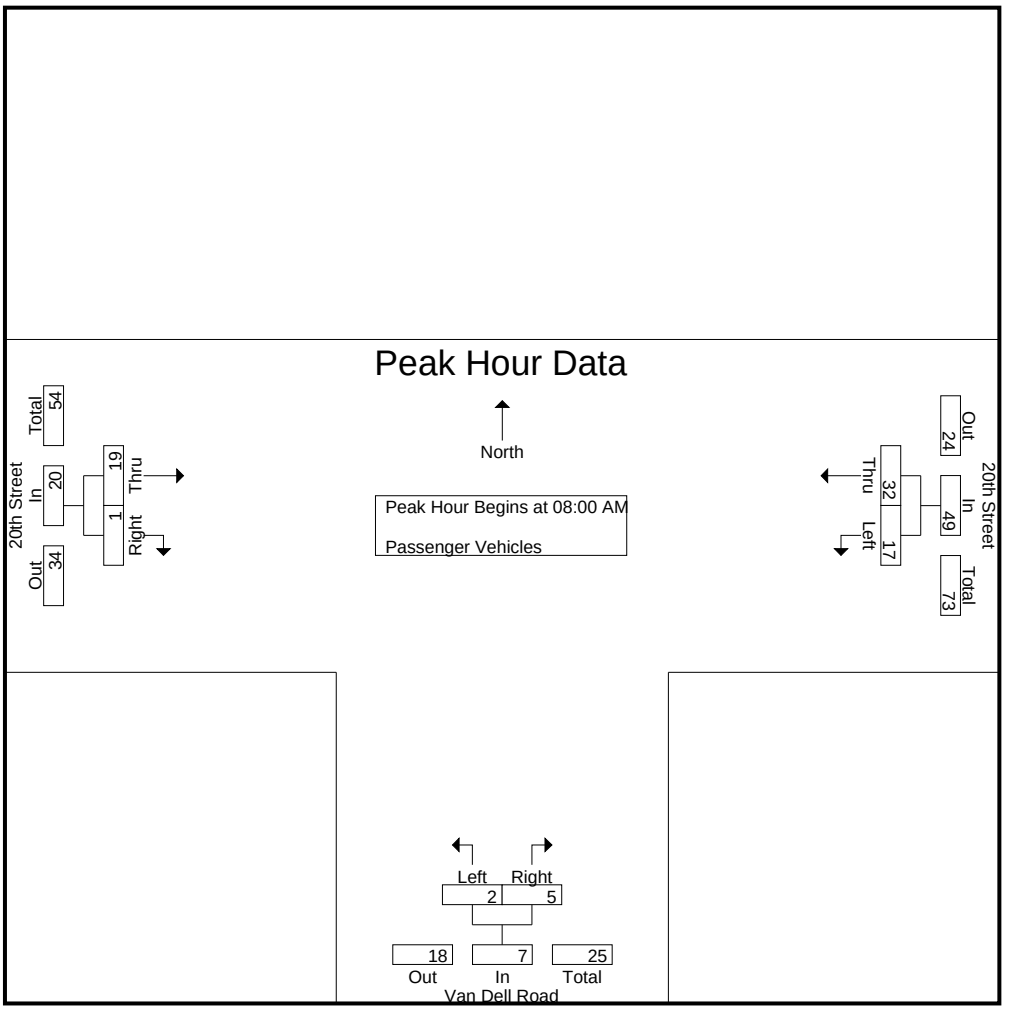
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	2	10	12	**1**	0	1	3	**1**	4
+15 mins.	5	6	11	1	**4**	**5**	5	0	5
+30 mins.	4	3	7	0	0	0	5	0	5
+45 mins.	**6**	**13**	**19**	0	1	1	**6**	0	**6**
Total Volume	17	32	49	2	5	7	19	1	20
% App. Total	34.7	65.3		28.6	71.4		95	5	
PHF	.708	.615	.645	.500	.313	.350	.792	.250	.833

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City of Jurupa Valley
N/S: Van Dell Road
E/W: 20th Street
Weather: Clear

File Name : 01_JVY_Van D_20th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	20th Street Westbound			Van Dell Road Northbound			20th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:30 AM	1	1	2	0	1	1	1	0	1	4
06:45 AM	1	1	2	0	0	0	1	0	1	3
Total	2	2	4	0	1	1	2	0	2	7
07:00 AM	0	2	2	0	0	0	1	0	1	3
07:15 AM	1	1	2	0	0	0	0	0	0	2
07:30 AM	0	2	2	0	0	0	0	0	0	2
07:45 AM	0	0	0	0	1	1	0	0	0	1
Total	1	5	6	0	1	1	1	0	1	8
08:00 AM	1	1	2	0	0	0	0	1	1	3
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	2	1	3	0	1	1	0	1	1	5
08:45 AM	0	1	1	0	0	0	0	0	0	1
Total	3	3	6	0	1	1	0	2	2	9
Grand Total	6	10	16	0	3	3	3	2	5	24
Apprch %	37.5	62.5		0	100		60	40		
Total %	25	41.7	66.7	0	12.5	12.5	12.5	8.3	20.8	

	20th Street Westbound			Van Dell Road Northbound			20th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	1	**1**	2	0	0	0	0	**1**	**1**	3
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	**2**	1	**3**	0	**1**	**1**	0	1	1	**5**
08:45 AM	0	1	1	0	0	0	0	0	0	1
Total Volume	3	3	6	0	1	1	0	2	2	9
% App. Total	50	50		0	100		0	100		
PHF	.375	.750	.500	.000	.250	.250	.000	.500	.500	.450

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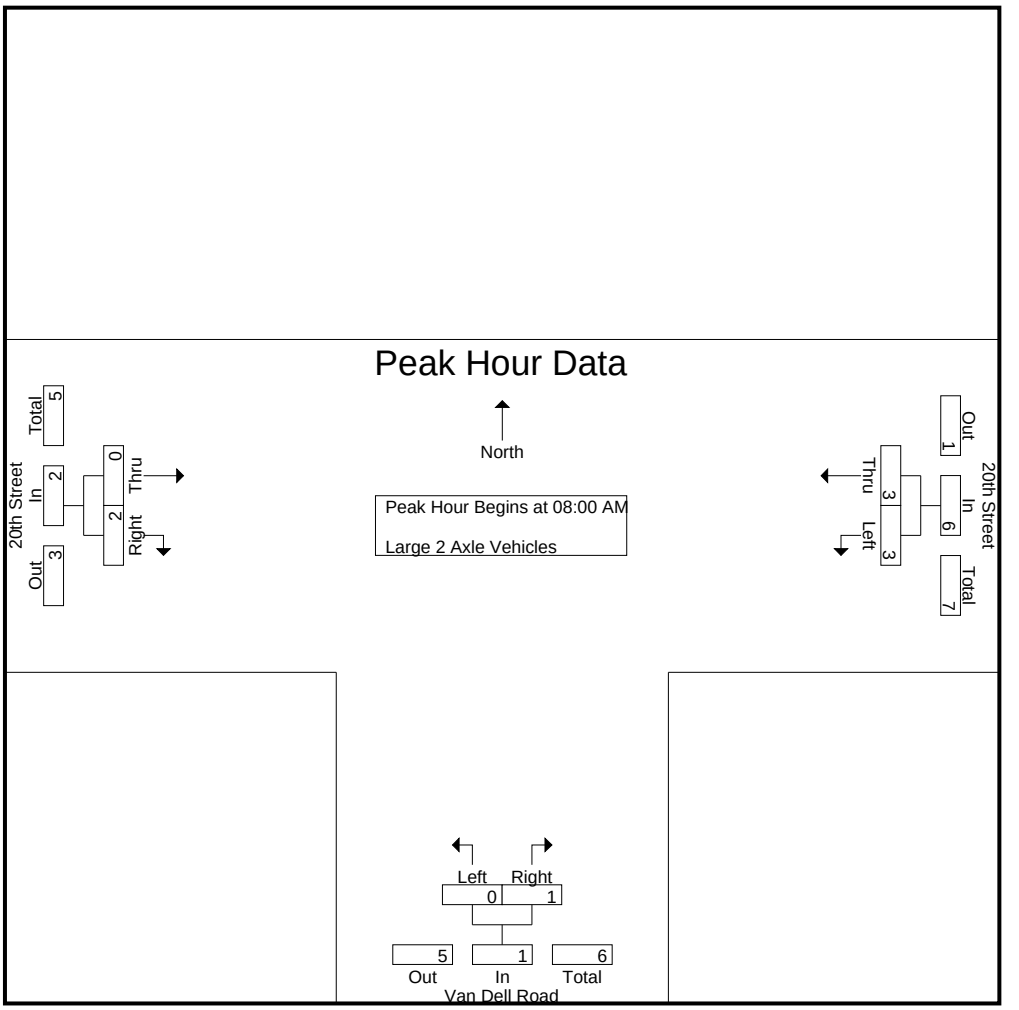

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	1	**1**	2	0	0	0	0	**1**	**1**
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	**2**	1	**3**	0	**1**	**1**	0	1	1
+45 mins.	0	1	1	0	0	0	0	0	0
Total Volume	3	3	6	0	1	1	0	2	2
% App. Total	50	50		0	100		0	100	
PHF	.375	.750	.500	.000	.250	.250	.000	.500	.500

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
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City of Jurupa Valley
N/S: Van Dell Road
E/W: 20th Street
Weather: Clear

File Name : 01_JVY_Van D_20th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

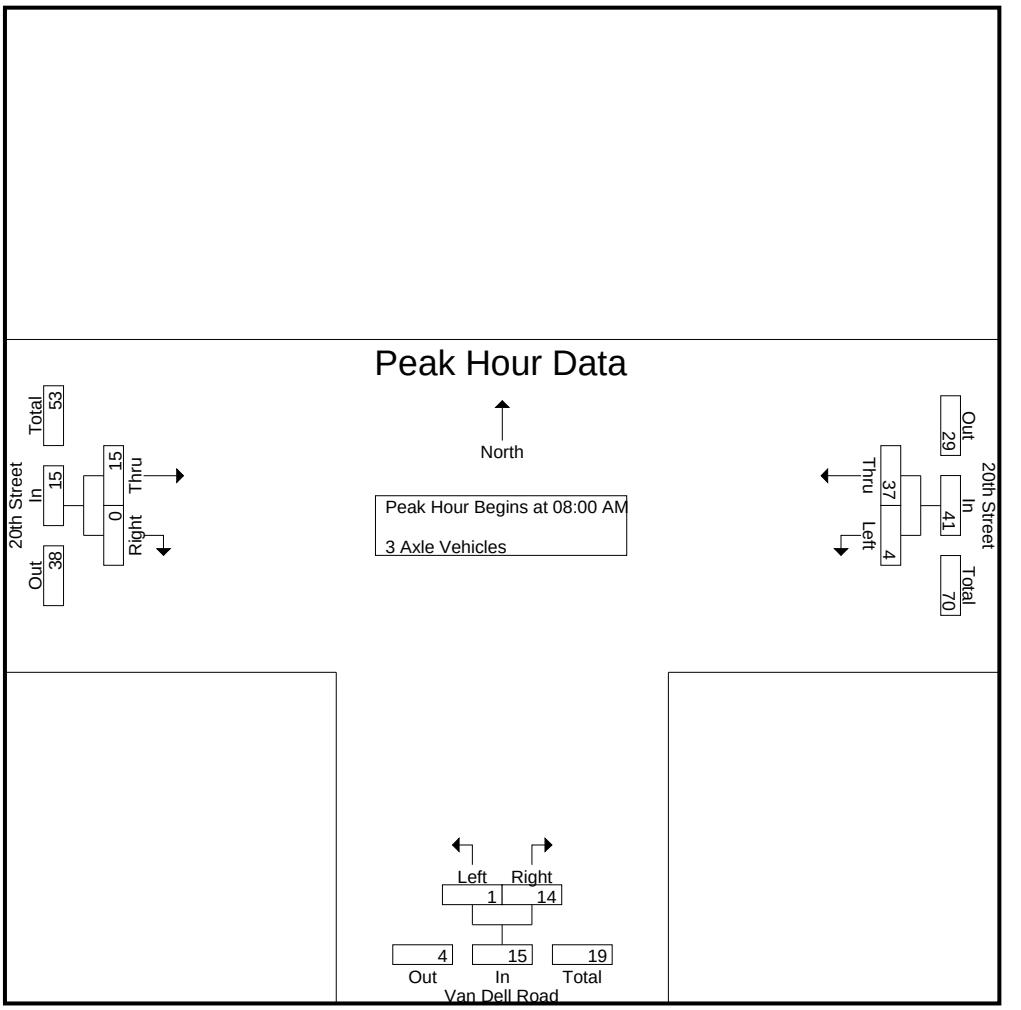
	20th Street Westbound			Van Dell Road Northbound			20th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:30 AM	0	2	2	0	5	5	6	0	6	13
06:45 AM	1	5	6	1	6	7	6	0	6	19
Total	1	7	8	1	11	12	12	0	12	32
07:00 AM	0	5	5	1	4	5	4	0	4	14
07:15 AM	0	3	3	0	5	5	2	0	2	10
07:30 AM	0	8	8	0	0	0	1	0	1	9
07:45 AM	0	5	5	0	7	7	2	0	2	14
Total	0	21	21	1	16	17	9	0	9	47
08:00 AM	0	7	7	0	1	1	3	0	3	11
08:15 AM	1	11	12	0	3	3	4	0	4	19
08:30 AM	1	10	11	1	3	4	3	0	3	18
08:45 AM	2	9	11	0	7	7	5	0	5	23
Total	4	37	41	1	14	15	15	0	15	71
Grand Total	5	65	70	3	41	44	36	0	36	150
Apprch %	7.1	92.9		6.8	93.2		100	0		
Total %	3.3	43.3	46.7	2	27.3	29.3	24	0	24	

	20th Street Westbound			Van Dell Road Northbound			20th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	7	7	0	1	1	3	0	3	11
08:15 AM	1	**11**	**12**	0	3	3	4	0	4	19
08:30 AM	1	10	11	**1**	3	4	3	0	3	18
08:45 AM	**2**	9	11	0	**7**	**7**	**5**	0	**5**	**23**
Total Volume	4	37	41	1	14	15	15	0	15	71
% App. Total	9.8	90.2		6.7	93.3		100	0		
PHF	.500	.841	.854	.250	.500	.536	.750	.000	.750	.772

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Jurupa Valley
N/S: Van Dell Road
E/W: 20th Street
Weather: Clear

File Name : 01_JVY_Van D_20th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	0	7	7	0	1	1	3	0	3
+15 mins.	1	**11**	**12**	0	3	3	4	0	4
+30 mins.	1	10	11	**1**	3	4	3	0	3
+45 mins.	**2**	9	11	0	**7**	**7**	**5**	0	**5**
Total Volume	4	37	41	1	14	15	15	0	15
% App. Total	9.8	90.2		6.7	93.3		100	0	
PHF	.500	.841	.854	.250	.500	.536	.750	.000	.750

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Start Date : 10/4/2022
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Groups Printed- 4+ Axle Trucks

	20th Street Westbound			Van Dell Road Northbound			20th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:30 AM	0	7	7	1	3	4	4	0	4	15
06:45 AM	0	6	6	0	2	2	4	0	4	12
Total	0	13	13	1	5	6	8	0	8	27
07:00 AM	1	2	3	0	3	3	1	0	1	7
07:15 AM	0	5	5	0	3	3	4	0	4	12
07:30 AM	0	5	5	0	2	2	3	0	3	10
07:45 AM	0	3	3	0	3	3	2	0	2	8
Total	1	15	16	0	11	11	10	0	10	37
08:00 AM	0	3	3	0	4	4	2	0	2	9
08:15 AM	2	4	6	0	2	2	1	0	1	9
08:30 AM	0	4	4	0	1	1	4	0	4	9
08:45 AM	2	2	4	0	1	1	3	0	3	8
Total	4	13	17	0	8	8	10	0	10	35
Grand Total	5	41	46	1	24	25	28	0	28	99
Apprch %	10.9	89.1		4	96		100	0		
Total %	5.1	41.4	46.5	1	24.2	25.3	28.3	0	28.3	

	20th Street Westbound			Van Dell Road Northbound			20th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	3	3	0	**4**	**4**	2	0	2	**9**
08:15 AM	**2**	**4**	**6**	0	2	2	1	0	1	9
08:30 AM	0	4	4	0	1	1	**4**	0	**4**	9
08:45 AM	2	2	4	0	1	1	3	0	3	8
Total Volume	4	13	17	0	8	8	10	0	10	35
% App. Total	23.5	76.5		0	100		100	0		
PHF	.500	.813	.708	.000	.500	.500	.625	.000	.625	.972

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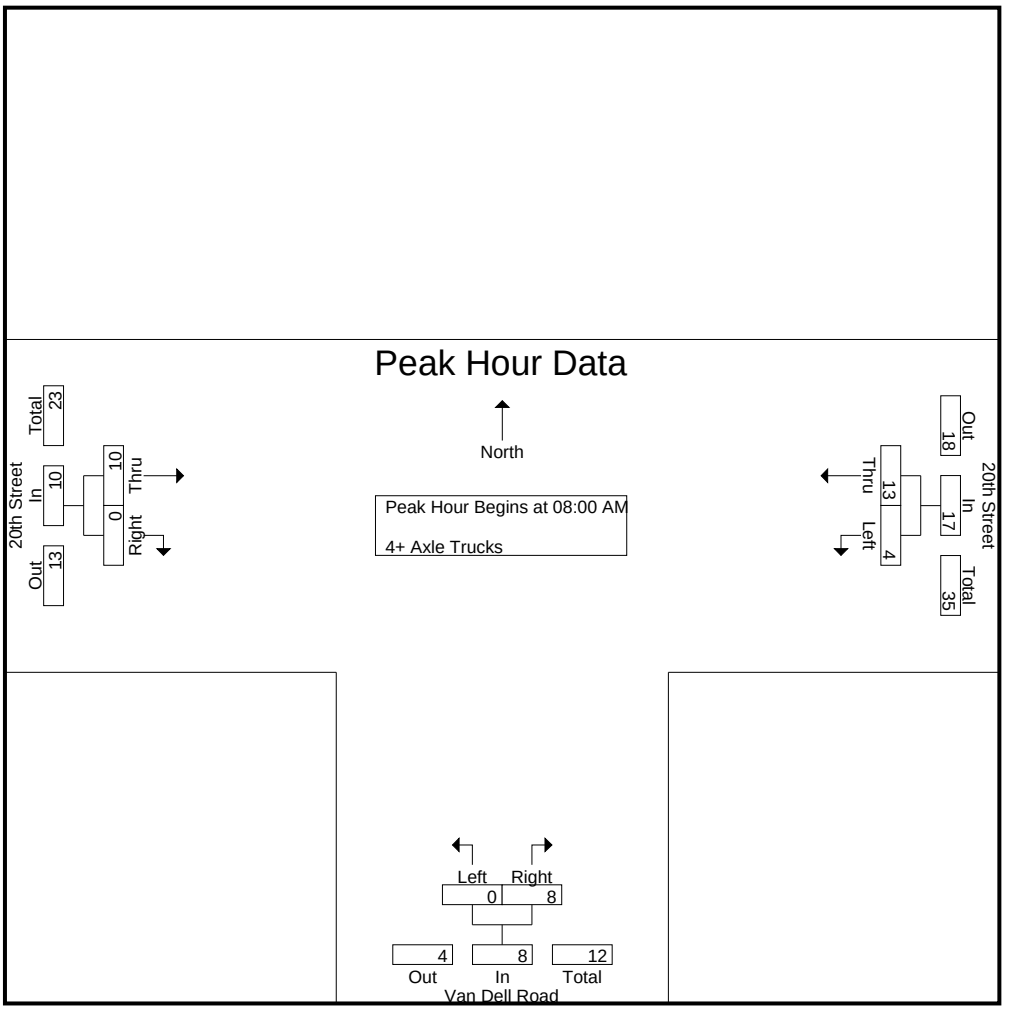

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	0	3	3	0	**4**	**4**	2	0	2
+15 mins.	**2**	**4**	**6**	0	2	2	1	0	1
+30 mins.	0	4	4	0	1	1	**4**	0	**4**
+45 mins.	2	2	4	0	1	1	3	0	3
Total Volume	4	13	17	0	8	8	10	0	10
% App. Total	23.5	76.5		0	100		100	0	
PHF	.500	.813	.708	.000	.500	.500	.625	.000	.625

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File Name : 01_JVY_Van D_20th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	20th Street Westbound			Van Dell Road Northbound			20th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
03:30 PM	4	3	7	0	4	4	5	0	5	16
03:45 PM	1	4	5	0	7	7	1	0	1	13
Total	5	7	12	0	11	11	6	0	6	29
04:00 PM	4	7	11	0	4	4	18	0	18	33
04:15 PM	3	4	7	0	3	3	11	0	11	21
04:30 PM	1	4	5	0	4	4	9	0	9	18
04:45 PM	7	5	12	1	6	7	12	0	12	31
Total	15	20	35	1	17	18	50	0	50	103
05:00 PM	0	3	3	0	2	2	14	1	15	20
05:15 PM	2	1	3	0	0	0	10	0	10	13
05:30 PM	1	3	4	0	6	6	5	0	5	15
05:45 PM	0	2	2	0	3	3	4	0	4	9
Total	3	9	12	0	11	11	33	1	34	57
Grand Total	23	36	59	1	39	40	89	1	90	189
Apprch %	39	61		2.5	97.5		98.9	1.1		
Total %	12.2	19	31.2	0.5	20.6	21.2	47.1	0.5	47.6	
Passenger Vehicles	14	13	27	0	28	28	73	0	73	128
% Passenger Vehicles	60.9	36.1	45.8	0	71.8	70	82	0	81.1	67.7
Large 2 Axle Vehicles	1	5	6	1	4	5	5	1	6	17
% Large 2 Axle Vehicles	4.3	13.9	10.2	100	10.3	12.5	5.6	100	6.7	9
3 Axle Vehicles	2	4	6	0	2	2	1	0	1	9
% 3 Axle Vehicles	8.7	11.1	10.2	0	5.1	5	1.1	0	1.1	4.8
4+ Axle Trucks	6	14	20	0	5	5	10	0	10	35
% 4+ Axle Trucks	26.1	38.9	33.9	0	12.8	12.5	11.2	0	11.1	18.5

	20th Street Westbound			Van Dell Road Northbound			20th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	4	**7**	11	0	4	4	**18**	0	**18**	**33**
04:15 PM	3	4	7	0	3	3	11	0	11	21
04:30 PM	1	4	5	0	4	4	9	0	9	18
04:45 PM	**7**	5	**12**	**1**	**6**	**7**	12	0	12	31
Total Volume	15	20	35	1	17	18	50	0	50	103
% App. Total	42.9	57.1		5.6	94.4		100	0		
PHF	.536	.714	.729	.250	.708	.643	.694	.000	.694	.780

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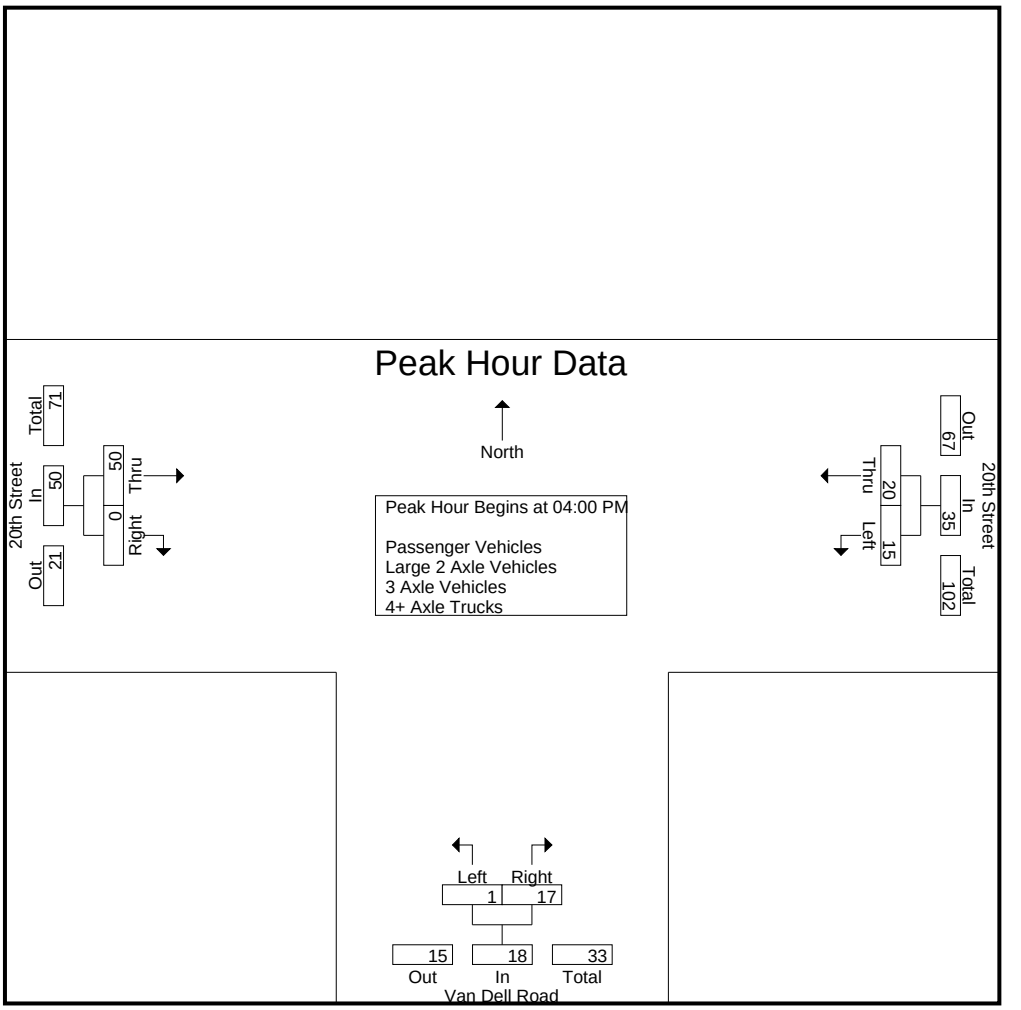

Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			03:30 PM			04:00 PM		
+0 mins.	4	**7**	11	0	4	4	**18**	0	**18**
+15 mins.	3	4	7	0	**7**	**7**	11	0	11
+30 mins.	1	4	5	0	4	4	9	0	9
+45 mins.	**7**	5	**12**	0	3	3	12	0	12
Total Volume	15	20	35	0	18	18	50	0	50
% App. Total	42.9	57.1		0	100		100	0	
PHF	.536	.714	.729	.000	.643	.643	.694	.000	.694

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Groups Printed- Passenger Vehicles

	20th Street Westbound			Van Dell Road Northbound			20th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
03:30 PM	2	2	4	0	3	3	5	0	5	12
03:45 PM	1	1	2	0	6	6	1	0	1	9
Total	3	3	6	0	9	9	6	0	6	21
04:00 PM	3	2	5	0	3	3	16	0	16	24
04:15 PM	1	2	3	0	2	2	7	0	7	12
04:30 PM	0	1	1	0	3	3	6	0	6	10
04:45 PM	5	0	5	0	3	3	9	0	9	17
Total	9	5	14	0	11	11	38	0	38	63
05:00 PM	0	1	1	0	2	2	12	0	12	15
05:15 PM	2	1	3	0	0	0	9	0	9	12
05:30 PM	0	1	1	0	5	5	5	0	5	11
05:45 PM	0	2	2	0	1	1	3	0	3	6
Total	2	5	7	0	8	8	29	0	29	44
Grand Total	14	13	27	0	28	28	73	0	73	128
Apprch %	51.9	48.1		0	100		100	0		
Total %	10.9	10.2	21.1	0	21.9	21.9	57	0	57	

	20th Street Westbound			Van Dell Road Northbound			20th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	3	**2**	**5**	0	**3**	**3**	**16**	0	**16**	**24**
04:15 PM	1	2	3	0	2	2	7	0	7	12
04:30 PM	0	1	1	0	3	3	6	0	6	10
04:45 PM	**5**	0	5	0	3	3	9	0	9	17
Total Volume	9	5	14	0	11	11	38	0	38	63
% App. Total	64.3	35.7		0	100		100	0		
PHF	.450	.625	.700	.000	.917	.917	.594	.000	.594	.656

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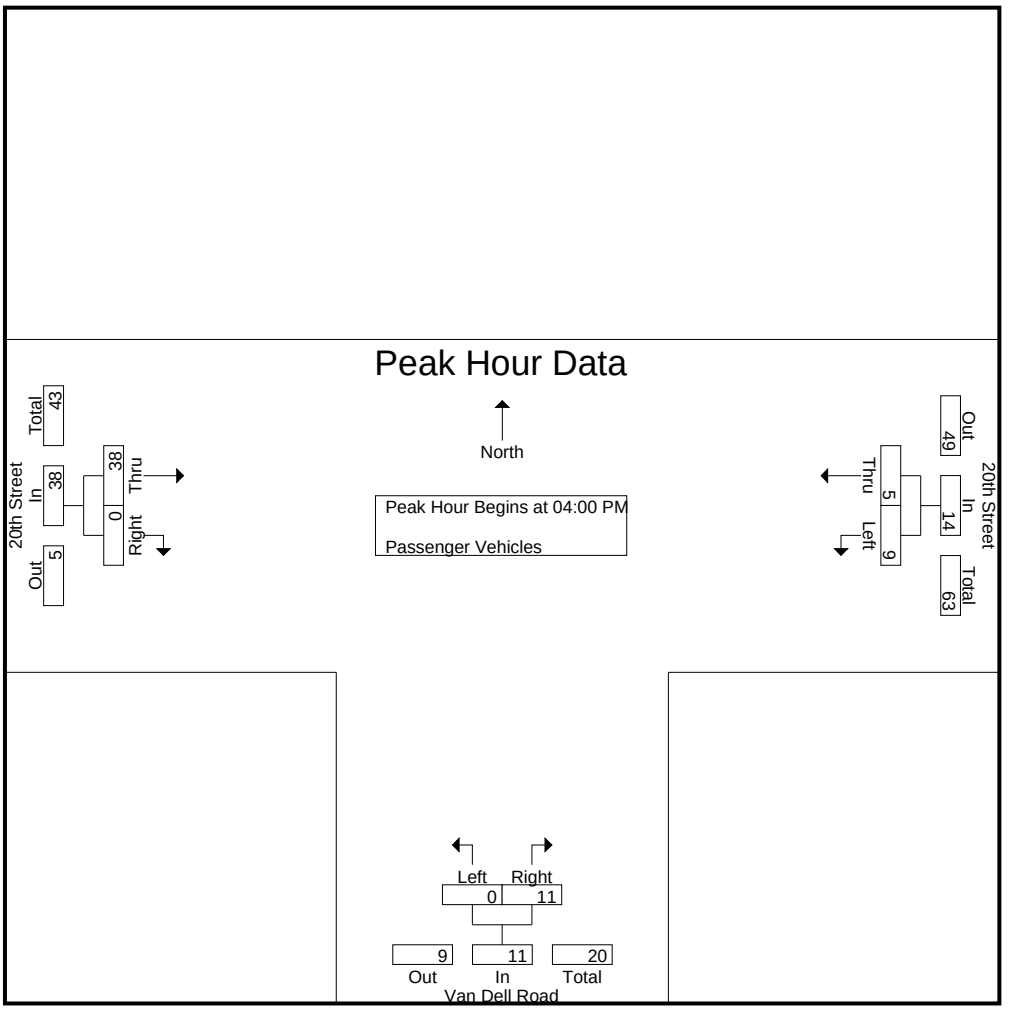

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	3	**2**	**5**	0	**3**	**3**	**16**	0	**16**
+15 mins.	1	2	3	0	2	2	7	0	7
+30 mins.	0	1	1	0	3	3	6	0	6
+45 mins.	**5**	0	5	0	3	3	9	0	9
Total Volume	9	5	14	0	11	11	38	0	38
% App. Total	64.3	35.7		0	100		100	0	
PHF	.450	.625	.700	.000	.917	.917	.594	.000	.594

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Groups Printed- Large 2 Axle Vehicles

	20th Street Westbound			Van Dell Road Northbound			20th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
03:30 PM	0	1	1	0	1	1	0	0	0	2
03:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	1	1	0	0	0	2
04:00 PM	0	2	2	0	0	0	1	0	1	3
04:15 PM	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	1	1	0	0	0	2	0	2	3
04:45 PM	1	1	2	1	1	2	0	0	0	4
Total	1	4	5	1	1	2	4	0	4	11
05:00 PM	0	0	0	0	0	0	1	1	2	2
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	1	1	0	0	0	1
05:45 PM	0	0	0	0	1	1	0	0	0	1
Total	0	0	0	0	2	2	1	1	2	4
Grand Total	1	5	6	1	4	5	5	1	6	17
Apprch %	16.7	83.3		20	80		83.3	16.7		
Total %	5.9	29.4	35.3	5.9	23.5	29.4	29.4	5.9	35.3	

	20th Street Westbound			Van Dell Road Northbound			20th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	**2**	**2**	0	0	0	1	0	1	3
04:15 PM	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	1	1	0	0	0	**2**	0	**2**	3
04:45 PM	**1**	1	2	**1**	**1**	**2**	0	0	0	**4**
Total Volume	1	4	5	1	1	2	4	0	4	11
% App. Total	20	80		50	50		100	0		
PHF	.250	.500	.625	.250	.250	.250	.500	.000	.500	.688

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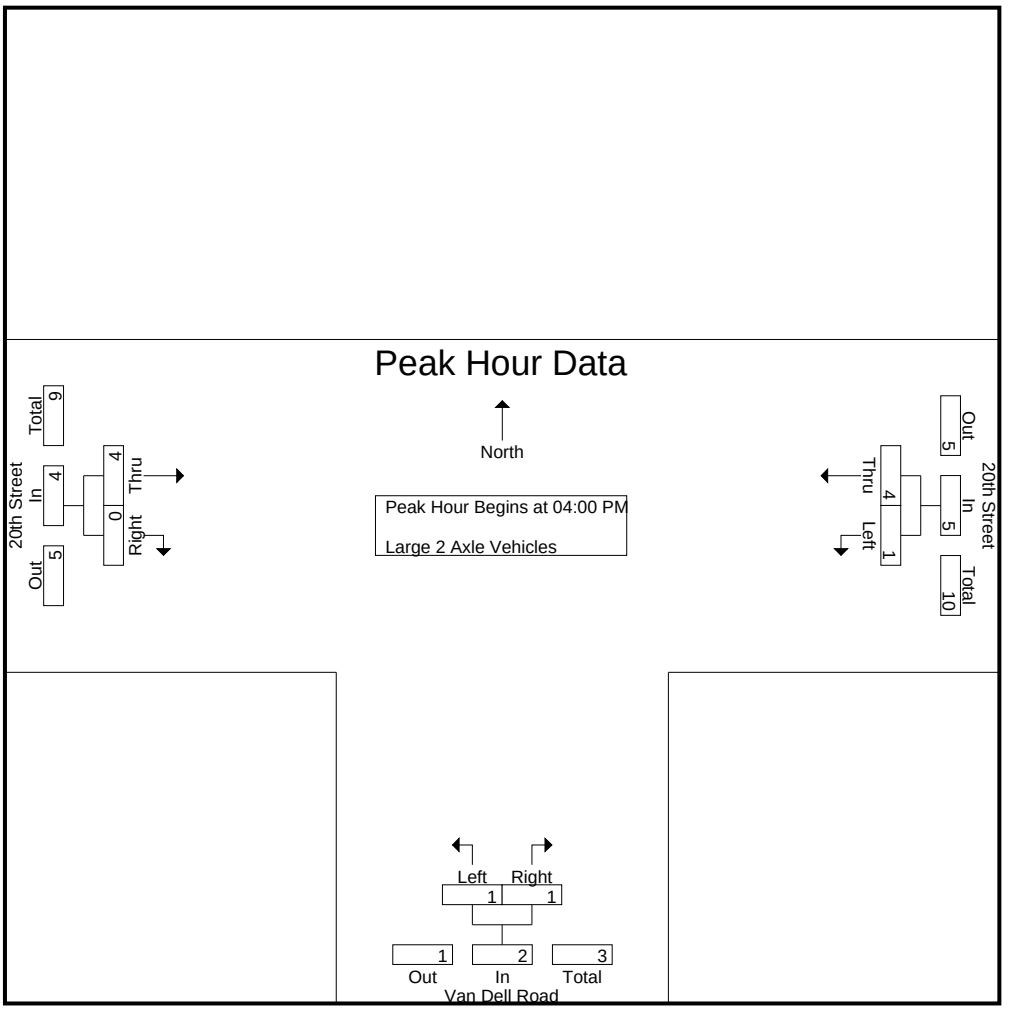

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	**2**	**2**	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	0	1	0	1
+30 mins.	0	1	1	0	0	0	**2**	0	**2**
+45 mins.	**1**	1	2	**1**	**1**	**2**	0	0	0
Total Volume	1	4	5	1	1	2	4	0	4
% App. Total	20	80		50	50		100	0	
PHF	.250	.500	.625	.250	.250	.250	.500	.000	.500

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Groups Printed- 3 Axle Vehicles

	20th Street Westbound			Van Dell Road Northbound			20th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
03:30 PM	1	0	1	0	0	0	0	0	0	1
03:45 PM	0	0	0	0	0	0	0	0	0	0
Total	1	0	1	0	0	0	0	0	0	1
04:00 PM	0	1	1	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	1	0	1	0	1	1	0	0	0	2
04:45 PM	0	1	1	0	1	1	1	0	1	3
Total	1	2	3	0	2	2	1	0	1	6
05:00 PM	0	1	1	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	1	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	2	2	0	0	0	0	0	0	2
Grand Total	2	4	6	0	2	2	1	0	1	9
Apprch %	33.3	66.7		0	100		100	0		
Total %	22.2	44.4	66.7	0	22.2	22.2	11.1	0	11.1	

	20th Street Westbound			Van Dell Road Northbound			20th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	**1**	**1**	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	**1**	0	1	0	**1**	**1**	0	0	0	2
04:45 PM	0	1	1	0	1	1	**1**	0	**1**	**3**
Total Volume	1	2	3	0	2	2	1	0	1	6
% App. Total	33.3	66.7		0	100		100	0		
PHF	.250	.500	.750	.000	.500	.500	.250	.000	.250	.500

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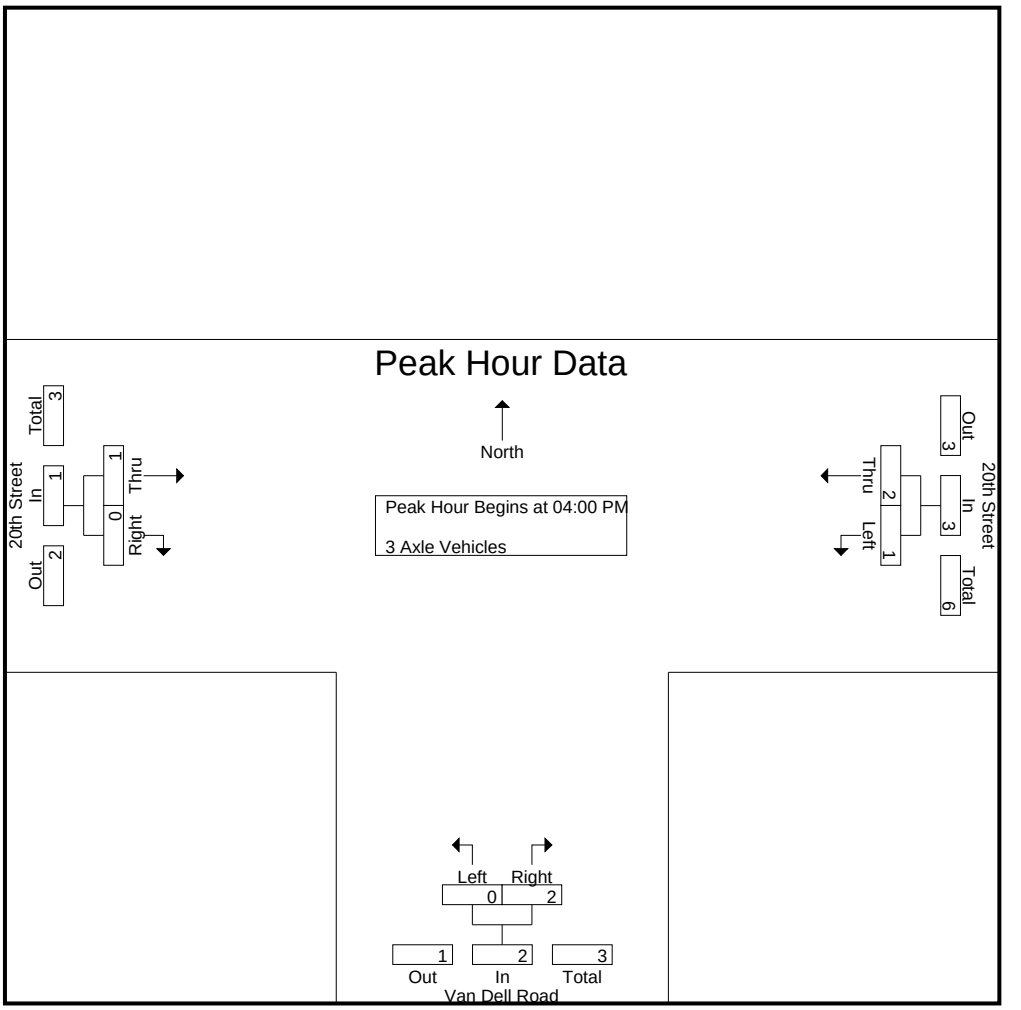

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	**1**	**1**	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	**1**	0	1	0	**1**	**1**	0	0	0
+45 mins.	0	1	1	0	1	1	**1**	0	**1**
Total Volume	1	2	3	0	2	2	1	0	1
% App. Total	33.3	66.7		0	100		100	0	
PHF	.250	.500	.750	.000	.500	.500	.250	.000	.250

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File Name : 01_JVY_Van D_20th PM
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Groups Printed- 4+ Axle Trucks

	20th Street Westbound			Van Dell Road Northbound			20th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
03:30 PM	1	0	1	0	0	0	0	0	0	1
03:45 PM	0	3	3	0	1	1	0	0	0	4
Total	1	3	4	0	1	1	0	0	0	5
04:00 PM	1	2	3	0	1	1	1	0	1	5
04:15 PM	2	2	4	0	1	1	3	0	3	8
04:30 PM	0	2	2	0	0	0	1	0	1	3
04:45 PM	1	3	4	0	1	1	2	0	2	7
Total	4	9	13	0	3	3	7	0	7	23
05:00 PM	0	1	1	0	0	0	1	0	1	2
05:15 PM	0	0	0	0	0	0	1	0	1	1
05:30 PM	1	1	2	0	0	0	0	0	0	2
05:45 PM	0	0	0	0	1	1	1	0	1	2
Total	1	2	3	0	1	1	3	0	3	7
Grand Total	6	14	20	0	5	5	10	0	10	35
Apprch %	30	70		0	100		100	0		
Total %	17.1	40	57.1	0	14.3	14.3	28.6	0	28.6	

	20th Street Westbound			Van Dell Road Northbound			20th Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	1	2	3	0	**1**	**1**	1	0	1	5
04:15 PM	**2**	2	**4**	0	1	1	**3**	0	**3**	**8**
04:30 PM	0	2	2	0	0	0	1	0	1	3
04:45 PM	1	**3**	4	0	1	1	2	0	2	7
Total Volume	4	9	13	0	3	3	7	0	7	23
% App. Total	30.8	69.2		0	100		100	0		
PHF	.500	.750	.813	.000	.750	.750	.583	.000	.583	.719

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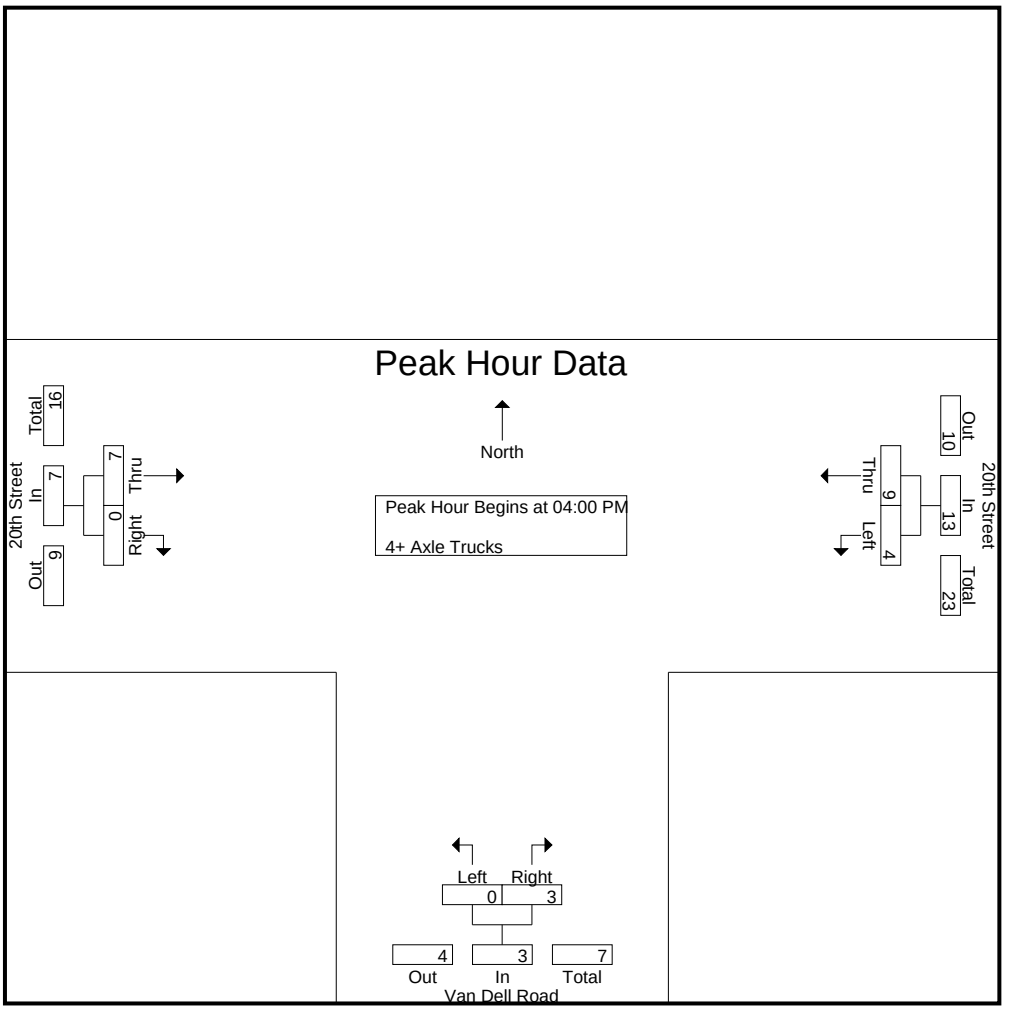
City of Jurupa Valley
N/S: Van Dell Road
E/W: 20th Street
Weather: Clear

File Name : 01_JVY_Van D_20th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	1	2	3	0	**1**	**1**	1	0	1
+15 mins.	**2**	2	**4**	0	1	1	**3**	0	**3**
+30 mins.	0	2	2	0	0	0	1	0	1
+45 mins.	1	**3**	4	0	1	1	2	0	2
Total Volume	4	9	13	0	3	3	7	0	7
% App. Total	30.8	69.2		0	100		100	0	
PHF	.500	.750	.813	.000	.750	.750	.583	.000	.583

Location: Jurupa Valley
N/S: Van Dell Road
E/W: 20th Street

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Van Dell Road	East Leg 20th Street	South Leg Van Dell Road	West Leg 20th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	1	0	1
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	1

	North Leg Van Dell Road	East Leg 20th Street	South Leg Van Dell Road	West Leg 20th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	1	0	1
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	1

Location: Jurupa Valley
N/S: Van Dell Road
E/W: 20th Street

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Dead End			Westbound 20th Street			Northbound Van Dell Road			Eastbound 20th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Dead End			Westbound 20th Street			Northbound Van Dell Road			Eastbound 20th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	1	0	2

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City of Jurupa Valley
N/S: Avalon Street
E/W: 20th Street
Weather: Clear

File Name : 04_JVY_Ava_20th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Avalon Street Southbound				20th Street Westbound				Avalon Street Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	4	4	8	2	17	1	20	4	2	6	12	0	18	3	21	61
06:45 AM	0	9	4	13	1	17	1	19	9	4	1	14	0	16	3	19	65
Total	0	13	8	21	3	34	2	39	13	6	7	26	0	34	6	40	126
07:00 AM	1	5	5	11	3	16	1	20	8	1	1	10	0	16	4	20	61
07:15 AM	1	4	2	7	3	15	0	18	3	6	0	9	0	16	2	18	52
07:30 AM	1	4	7	12	1	12	0	13	4	4	1	9	0	11	2	13	47
07:45 AM	0	8	3	11	3	10	0	13	4	3	5	12	0	15	2	17	53
Total	3	21	17	41	10	53	1	64	19	14	7	40	0	58	10	68	213
08:00 AM	1	2	4	7	2	18	0	20	4	4	6	14	0	15	1	16	57
08:15 AM	0	6	4	10	2	21	0	23	9	2	1	12	2	12	4	18	63
08:30 AM	0	3	2	5	2	16	0	18	7	2	4	13	2	9	5	16	52
08:45 AM	0	2	5	7	3	17	0	20	14	0	2	16	1	25	8	34	77
Total	1	13	15	29	9	72	0	81	34	8	13	55	5	61	18	84	249
Grand Total	4	47	40	91	22	159	3	184	66	28	27	121	5	153	34	192	588
Apprch %	4.4	51.6	44		12	86.4	1.6		54.5	23.1	22.3		2.6	79.7	17.7		
Total %	0.7	8	6.8	15.5	3.7	27	0.5	31.3	11.2	4.8	4.6	20.6	0.9	26	5.8	32.7	
Passenger Vehicles	2	40	24	66	18	58	2	78	43	28	22	93	5	29	12	46	283
% Passenger Vehicles	50	85.1	60	72.5	81.8	36.5	66.7	42.4	65.2	100	81.5	76.9	100	19	35.3	24	48.1
Large 2 Axle Vehicles	1	4	2	7	1	12	0	13	2	0	3	5	0	8	1	9	34
% Large 2 Axle Vehicles	25	8.5	5	7.7	4.5	7.5	0	7.1	3	0	11.1	4.1	0	5.2	2.9	4.7	5.8
3 Axle Vehicles	1	2	6	9	1	51	1	53	14	0	2	16	0	61	14	75	153
% 3 Axle Vehicles	25	4.3	15	9.9	4.5	32.1	33.3	28.8	21.2	0	7.4	13.2	0	39.9	41.2	39.1	26
4+ Axle Trucks	0	1	8	9	2	38	0	40	7	0	0	7	0	55	7	62	118
% 4+ Axle Trucks	0	2.1	20	9.9	9.1	23.9	0	21.7	10.6	0	0	5.8	0	35.9	20.6	32.3	20.1

	Avalon Street Southbound				20th Street Westbound				Avalon Street Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	**1**	2	4	7	2	18	0	20	4	**4**	**6**	14	0	15	1	16	57
08:15 AM	0	**6**	4	**10**	2	**21**	0	**23**	9	2	1	12	**2**	12	4	18	63
08:30 AM	0	3	2	5	2	16	0	18	7	2	4	13	2	9	5	16	52
08:45 AM	0	2	**5**	7	**3**	17	0	20	**14**	0	2	**16**	1	**25**	**8**	**34**	**77**
Total Volume	1	13	15	29	9	72	0	81	34	8	13	55	5	61	18	84	249
% App. Total	3.4	44.8	51.7		11.1	88.9	0		61.8	14.5	23.6		6	72.6	21.4		
PHF	.250	.542	.750	.725	.750	.857	.000	.880	.607	.500	.542	.859	.625	.610	.563	.618	.808

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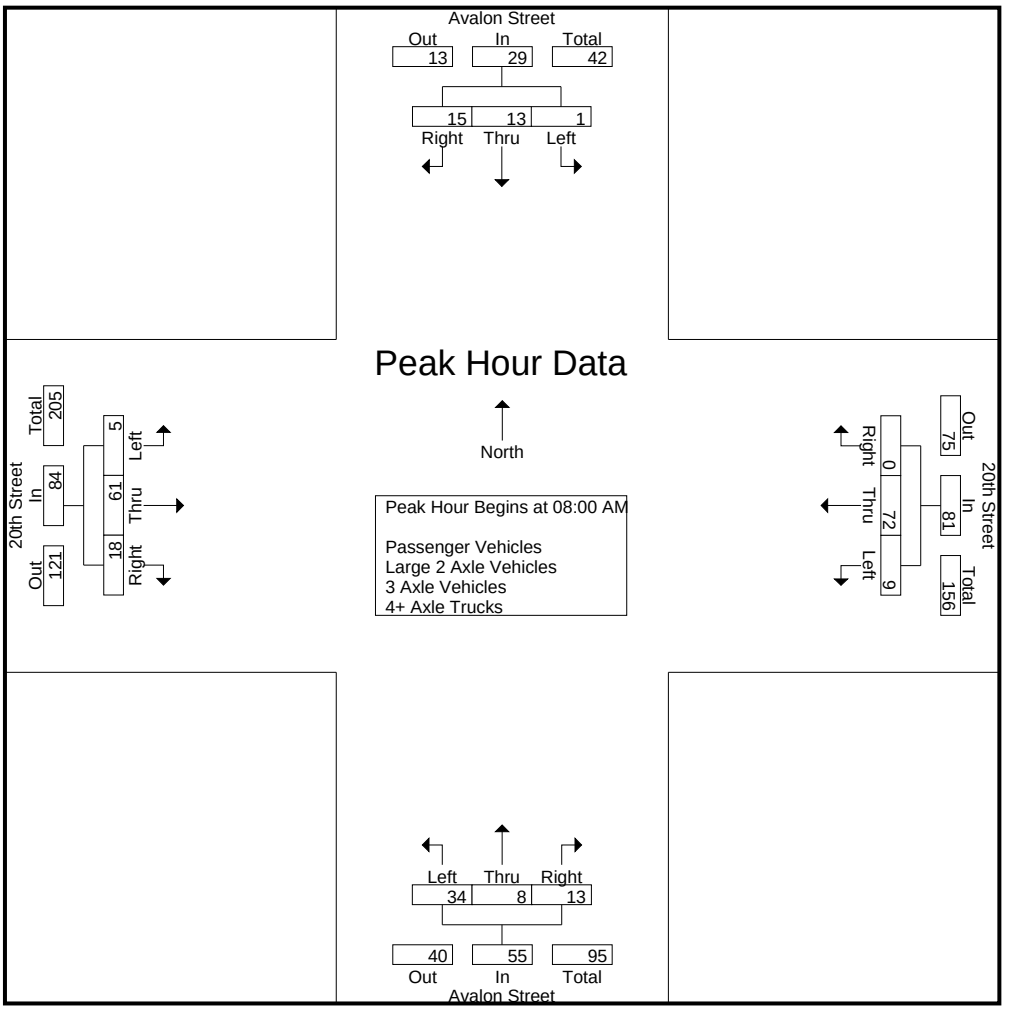
City of Jurupa Valley
N/S: Avalon Street
E/W: 20th Street
Weather: Clear

File Name : 04_JVY_Ava_20th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	06:45 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	**9**	4	**13**	2	18	0	20	4	**4**	**6**	14	0	15	1	16
+15 mins.	**1**	5	5	11	2	**21**	0	**23**	9	2	1	12	**2**	12	4	18
+30 mins.	1	4	2	7	2	16	0	18	7	2	4	13	2	9	5	16
+45 mins.	1	4	**7**	12	**3**	17	0	20	**14**	0	2	**16**	1	**25**	**8**	**34**
Total Volume	3	22	18	43	9	72	0	81	34	8	13	55	5	61	18	84
% App. Total	7	51.2	41.9		11.1	88.9	0		61.8	14.5	23.6		6	72.6	21.4	
PHF	.750	.611	.643	.827	.750	.857	.000	.880	.607	.500	.542	.859	.625	.610	.563	.618

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City of Jurupa Valley
N/S: Avalon Street
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Weather: Clear

File Name : 04_JVY_Ava_20th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Avalon Street Southbound				20th Street Westbound				Avalon Street Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	4	2	6	1	8	1	10	3	2	4	9	0	3	1	4	29
06:45 AM	0	9	3	12	1	6	1	8	7	4	0	11	0	1	0	1	32
Total	0	13	5	18	2	14	2	18	10	6	4	20	0	4	1	5	61
07:00 AM	0	5	5	10	3	8	0	11	5	1	1	7	0	2	0	2	30
07:15 AM	1	4	1	6	3	4	0	7	3	6	0	9	0	2	1	3	25
07:30 AM	1	4	2	7	1	4	0	5	1	4	1	6	0	1	0	1	19
07:45 AM	0	6	3	9	2	2	0	4	3	3	5	11	0	1	0	1	25
Total	2	19	11	32	9	18	0	27	12	14	7	33	0	6	1	7	99
08:00 AM	0	1	2	3	2	7	0	9	4	4	5	13	0	4	0	4	29
08:15 AM	0	3	2	5	2	9	0	11	3	2	1	6	2	4	2	8	30
08:30 AM	0	2	1	3	1	5	0	6	3	2	4	9	2	3	2	7	25
08:45 AM	0	2	3	5	2	5	0	7	11	0	1	12	1	8	6	15	39
Total	0	8	8	16	7	26	0	33	21	8	11	40	5	19	10	34	123
Grand Total	2	40	24	66	18	58	2	78	43	28	22	93	5	29	12	46	283
Apprch %	3	60.6	36.4		23.1	74.4	2.6		46.2	30.1	23.7		10.9	63	26.1		
Total %	0.7	14.1	8.5	23.3	6.4	20.5	0.7	27.6	15.2	9.9	7.8	32.9	1.8	10.2	4.2	16.3	

	Avalon Street Southbound				20th Street Westbound				Avalon Street Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	1	2	3	**2**	7	0	9	4	**4**	**5**	**13**	0	4	0	4	29
08:15 AM	0	**3**	2	**5**	2	**9**	0	**11**	3	2	1	6	**2**	4	2	8	30
08:30 AM	0	2	1	3	1	5	0	6	3	2	4	9	2	3	2	7	25
08:45 AM	0	2	**3**	5	2	5	0	7	**11**	0	1	12	1	**8**	**6**	**15**	**39**
Total Volume	0	8	8	16	7	26	0	33	21	8	11	40	5	19	10	34	123
% App. Total	0	50	50		21.2	78.8	0		52.5	20	27.5		14.7	55.9	29.4		
PHF	.000	.667	.667	.800	.875	.722	.000	.750	.477	.500	.550	.769	.625	.594	.417	.567	.788

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City of Jurupa Valley
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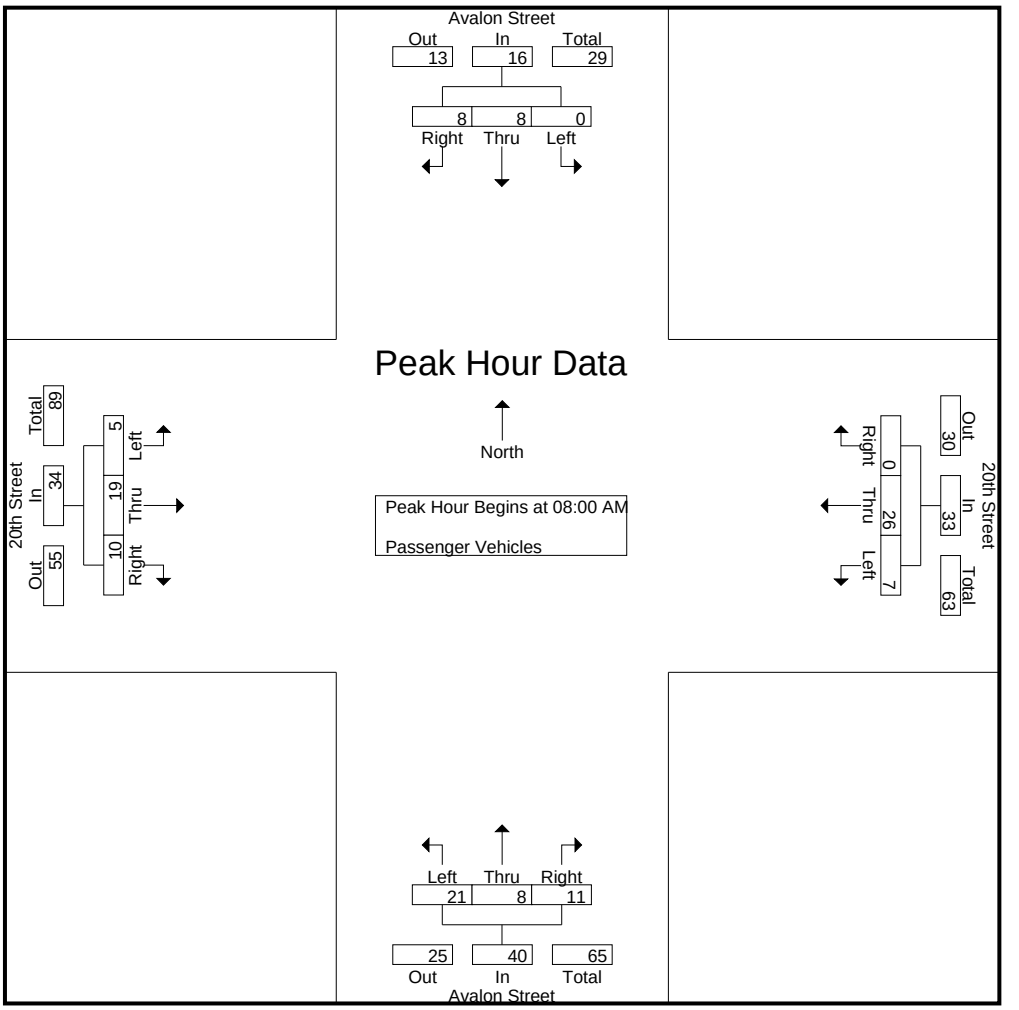
File Name : 04_JVY_Ava_20th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	1	2	3	**2**	7	0	9	4	**4**	**5**	**13**	0	4	0	4
+15 mins.	0	**3**	2	**5**	2	**9**	0	**11**	3	2	1	6	**2**	4	2	8
+30 mins.	0	2	1	3	1	5	0	6	3	2	4	9	2	3	2	7
+45 mins.	0	2	**3**	5	2	5	0	7	**11**	0	1	12	1	**8**	**6**	**15**
Total Volume	0	8	8	16	7	26	0	33	21	8	11	40	5	19	10	34
% App. Total	0	50	50		21.2	78.8	0		52.5	20	27.5		14.7	55.9	29.4	
PHF	.000	.667	.667	.800	.875	.722	.000	.750	.477	.500	.550	.769	.625	.594	.417	.567

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City of Jurupa Valley
N/S: Avalon Street
E/W: 20th Street
Weather: Clear

File Name : 04_JVY_Ava_20th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Avalon Street Southbound				20th Street Westbound				Avalon Street Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	0	0	0	0	1	0	1	0	0	2	2	0	1	0	1	4
06:45 AM	0	0	0	0	0	3	0	3	0	0	1	1	0	1	0	1	5
Total	0	0	0	0	0	4	0	4	0	0	3	3	0	2	0	2	9
07:00 AM	1	0	0	1	0	2	0	2	1	0	0	1	0	1	1	2	6
07:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
07:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	2
07:45 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	3	0	3	5
Total	1	2	0	3	0	4	0	4	2	0	0	2	0	6	1	7	16
08:00 AM	0	1	1	2	0	2	0	2	0	0	0	0	0	0	0	0	4
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	1	0	1	0	2	0	2	0	0	0	0	0	0	0	0	3
08:45 AM	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	2
Total	0	2	2	4	1	4	0	5	0	0	0	0	0	0	0	0	9
Grand Total	1	4	2	7	1	12	0	13	2	0	3	5	0	8	1	9	34
Apprch %	14.3	57.1	28.6		7.7	92.3	0		40	0	60		0	88.9	11.1		
Total %	2.9	11.8	5.9	20.6	2.9	35.3	0	38.2	5.9	0	8.8	14.7	0	23.5	2.9	26.5	

	Avalon Street Southbound				20th Street Westbound				Avalon Street Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	**1**	**1**	**2**	0	**2**	0	**2**	0	0	0	0	0	0	0	0	**4**
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	1	0	1	0	2	0	2	0	0	0	0	0	0	0	0	3
08:45 AM	0	0	1	1	**1**	0	0	1	0	0	0	0	0	0	0	0	2
Total Volume	0	2	2	4	1	4	0	5	0	0	0	0	0	0	0	0	9
% App. Total	0	50	50		20	80	0		0	0	0		0	0	0		
PHF	.000	.500	.500	.500	.250	.500	.000	.625	.000	.000	.000	.000	.000	.000	.000	.000	.563

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City of Jurupa Valley
N/S: Avalon Street
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File Name : 04_JVY_Ava_20th AM
Site Code : 05122894
Start Date : 10/4/2022
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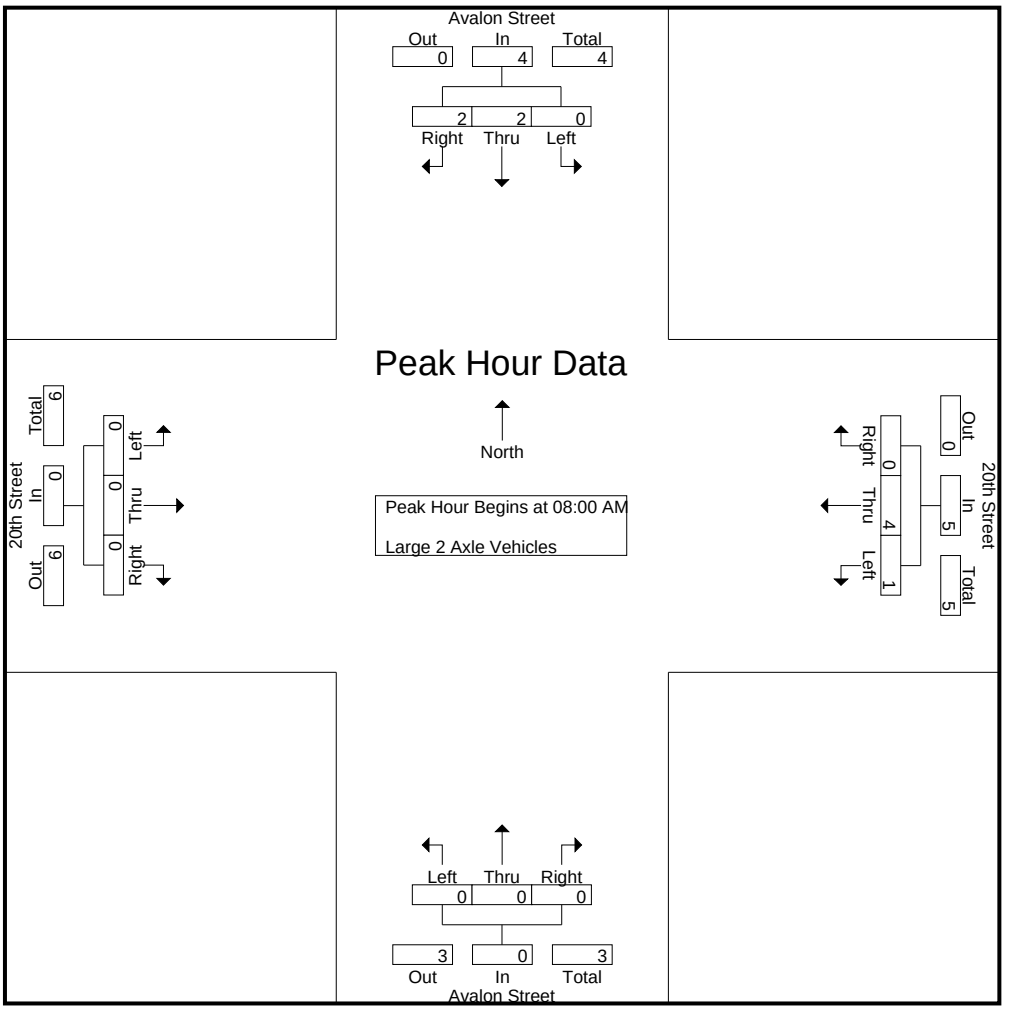

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	**1**	**1**	**2**	0	**2**	0	**2**	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	1	0	1	0	2	0	2	0	0	0	0	0	0	0	0
+45 mins.	0	0	1	1	**1**	0	0	1	0	0	0	0	0	0	0	0
Total Volume	0	2	2	4	1	4	0	5	0	0	0	0	0	0	0	0
% App. Total	0	50	50		20	80	0		0	0	0		0	0	0	
PHF	.000	.500	.500	.500	.250	.500	.000	.625	.000	.000	.000	.000	.000	.000	.000	.000

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City of Jurupa Valley
N/S: Avalon Street
E/W: 20th Street
Weather: Clear

File Name : 04_JVY_Ava_20th AM
Site Code : 05122894
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Groups Printed- 3 Axle Vehicles

	Avalon Street Southbound				20th Street Westbound				Avalon Street Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	0	1	1	0	3	0	3	0	0	0	0	0	8	2	10	14
06:45 AM	0	0	0	0	0	5	0	5	1	0	0	1	0	7	3	10	16
Total	0	0	1	1	0	8	0	8	1	0	0	1	0	15	5	20	30
07:00 AM	0	0	0	0	0	2	1	3	1	0	0	1	0	8	2	10	14
07:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	7	0	7	11
07:30 AM	0	0	3	3	0	4	0	4	1	0	0	1	0	1	0	1	9
07:45 AM	0	0	0	0	1	6	0	7	0	0	0	0	0	6	2	8	15
Total	0	0	3	3	1	16	1	18	2	0	0	2	0	22	4	26	49
08:00 AM	1	0	1	2	0	5	0	5	0	0	1	1	0	4	1	5	13
08:15 AM	0	2	1	3	0	7	0	7	5	0	0	5	0	5	2	7	22
08:30 AM	0	0	0	0	0	7	0	7	3	0	0	3	0	3	0	3	13
08:45 AM	0	0	0	0	0	8	0	8	3	0	1	4	0	12	2	14	26
Total	1	2	2	5	0	27	0	27	11	0	2	13	0	24	5	29	74
Grand Total	1	2	6	9	1	51	1	53	14	0	2	16	0	61	14	75	153
Apprch %	11.1	22.2	66.7		1.9	96.2	1.9		87.5	0	12.5		0	81.3	18.7		
Total %	0.7	1.3	3.9	5.9	0.7	33.3	0.7	34.6	9.2	0	1.3	10.5	0	39.9	9.2	49	

	Avalon Street Southbound				20th Street Westbound				Avalon Street Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	**1**	0	**1**	2	0	5	0	5	0	0	**1**	1	0	4	1	5	13
08:15 AM	0	**2**	1	**3**	0	7	0	7	**5**	0	0	**5**	0	5	**2**	7	22
08:30 AM	0	0	0	0	0	7	0	7	3	0	0	3	0	3	0	3	13
08:45 AM	0	0	0	0	0	**8**	0	**8**	3	0	1	4	0	**12**	2	**14**	**26**
Total Volume	1	2	2	5	0	27	0	27	11	0	2	13	0	24	5	29	74
% App. Total	20	40	40		0	100	0		84.6	0	15.4		0	82.8	17.2		
PHF	.250	.250	.500	.417	.000	.844	.000	.844	.550	.000	.500	.650	.000	.500	.625	.518	.712

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N/S: Avalon Street
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File Name : 04_JVY_Ava_20th AM
Site Code : 05122894
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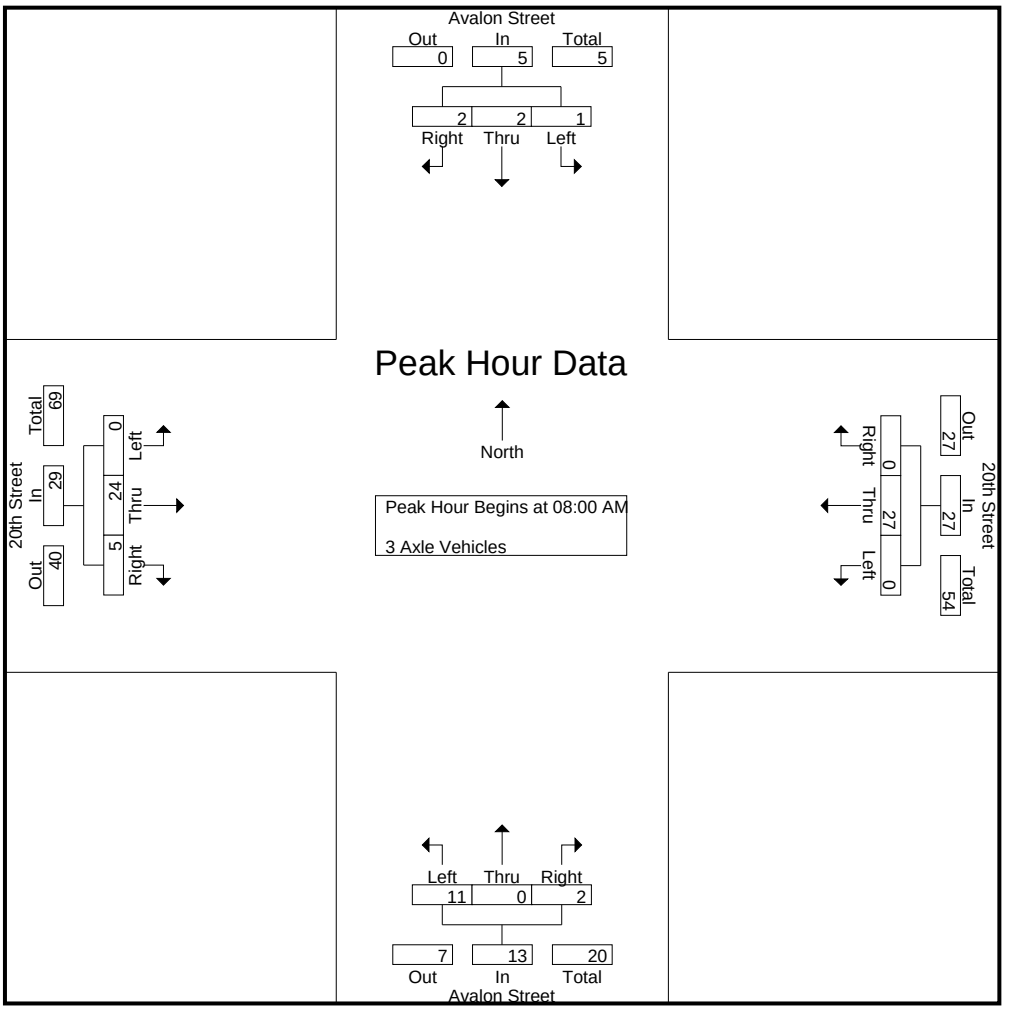

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	**1**	0	**1**	2	0	5	0	5	0	0	**1**	1	0	4	1	5
+15 mins.	0	**2**	1	**3**	0	7	0	7	**5**	0	0	**5**	0	5	**2**	7
+30 mins.	0	0	0	0	0	7	0	7	3	0	0	3	0	3	0	3
+45 mins.	0	0	0	0	0	**8**	0	**8**	3	0	1	4	0	**12**	2	**14**
Total Volume	1	2	2	5	0	27	0	27	11	0	2	13	0	24	5	29
% App. Total	20	40	40		0	100	0		84.6	0	15.4		0	82.8	17.2	
PHF	.250	.250	.500	.417	.000	.844	.000	.844	.550	.000	.500	.650	.000	.500	.625	.518

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City of Jurupa Valley
N/S: Avalon Street
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File Name : 04_JVY_Ava_20th AM
Site Code : 05122894
Start Date : 10/4/2022
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Groups Printed- 4+ Axle Trucks

	Avalon Street Southbound				20th Street Westbound				Avalon Street Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	0	1	1	1	5	0	6	1	0	0	1	0	6	0	6	14
06:45 AM	0	0	1	1	0	3	0	3	1	0	0	1	0	7	0	7	12
Total	0	0	2	2	1	8	0	9	2	0	0	2	0	13	0	13	26
07:00 AM	0	0	0	0	0	4	0	4	1	0	0	1	0	5	1	6	11
07:15 AM	0	0	1	1	0	5	0	5	0	0	0	0	0	6	1	7	13
07:30 AM	0	0	2	2	0	4	0	4	1	0	0	1	0	8	2	10	17
07:45 AM	0	0	0	0	0	2	0	2	1	0	0	1	0	5	0	5	8
Total	0	0	3	3	0	15	0	15	3	0	0	3	0	24	4	28	49
08:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	7	0	7	11
08:15 AM	0	1	1	2	0	5	0	5	1	0	0	1	0	3	0	3	11
08:30 AM	0	0	1	1	1	2	0	3	1	0	0	1	0	3	3	6	11
08:45 AM	0	0	1	1	0	4	0	4	0	0	0	0	0	5	0	5	10
Total	0	1	3	4	1	15	0	16	2	0	0	2	0	18	3	21	43
Grand Total	0	1	8	9	2	38	0	40	7	0	0	7	0	55	7	62	118
Apprch %	0	11.1	88.9		5	95	0		100	0	0		0	88.7	11.3		
Total %	0	0.8	6.8	7.6	1.7	32.2	0	33.9	5.9	0	0	5.9	0	46.6	5.9	52.5	

	Avalon Street Southbound				20th Street Westbound				Avalon Street Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	**7**	0	**7**	**11**
08:15 AM	0	**1**	**1**	**2**	0	**5**	0	**5**	**1**	0	0	**1**	0	3	0	3	11
08:30 AM	0	0	1	1	**1**	2	0	3	1	0	0	1	0	3	**3**	6	11
08:45 AM	0	0	1	1	0	4	0	4	0	0	0	0	0	5	0	5	10
Total Volume	0	1	3	4	1	15	0	16	2	0	0	2	0	18	3	21	43
% App. Total	0	25	75		6.2	93.8	0		100	0	0		0	85.7	14.3		
PHF	.000	.250	.750	.500	.250	.750	.000	.800	.500	.000	.000	.500	.000	.643	.250	.750	.977

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Site Code : 05122894
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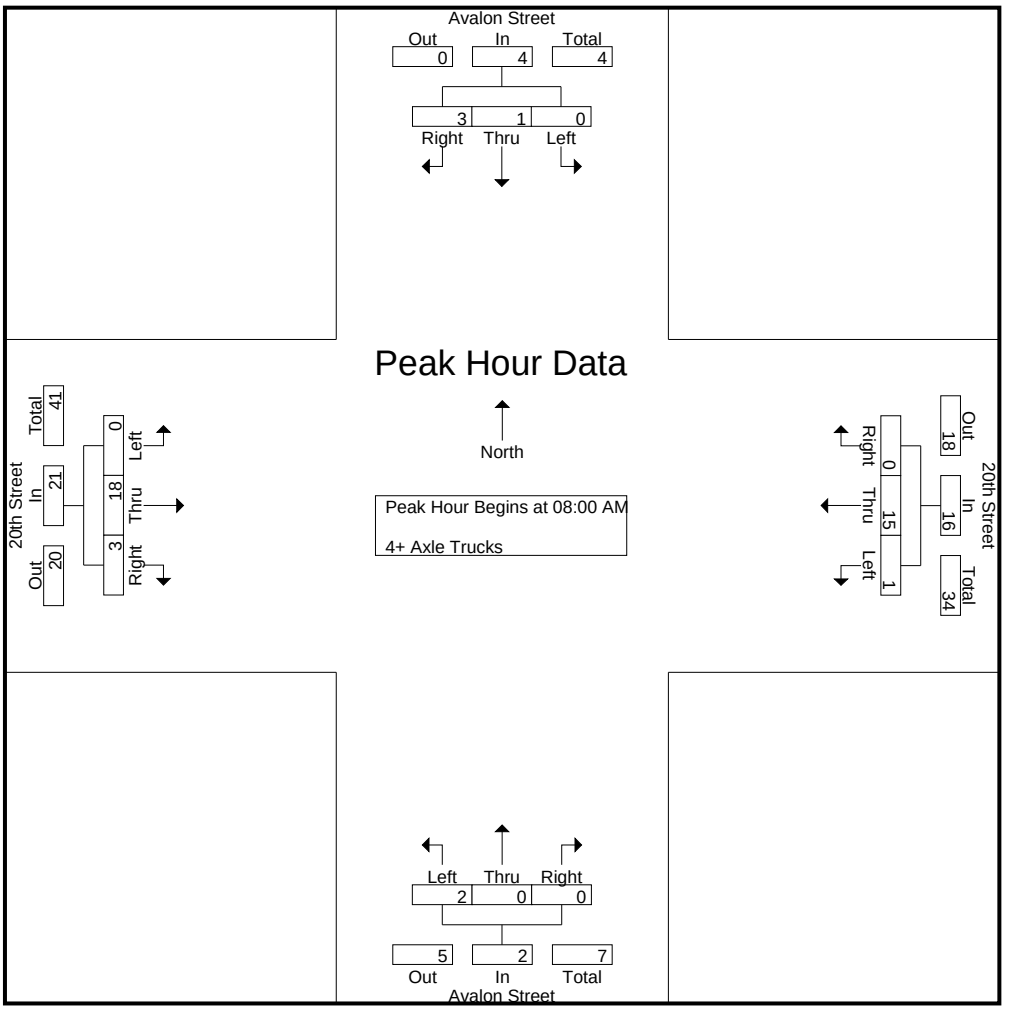

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	**7**	0	**7**
+15 mins.	0	**1**	**1**	**2**	0	**5**	0	**5**	**1**	0	0	**1**	0	3	0	3
+30 mins.	0	0	1	1	**1**	2	0	3	1	0	0	1	0	3	**3**	6
+45 mins.	0	0	1	1	0	4	0	4	0	0	0	0	0	5	0	5
Total Volume	0	1	3	4	1	15	0	16	2	0	0	2	0	18	3	21
% App. Total	0	25	75		6.2	93.8	0		100	0	0		0	85.7	14.3	
PHF	.000	.250	.750	.500	.250	.750	.000	.800	.500	.000	.000	.500	.000	.643	.250	.750

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City of Jurupa Valley
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File Name : 04_JVY_Ava_20th PM
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Avalon Street Southbound				20th Street Westbound				Avalon Street Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	2	1	3	5	2	0	7	5	1	6	12	6	19	16	41	63
03:45 PM	1	4	1	6	2	6	0	8	3	5	6	14	0	10	2	12	40
Total	1	6	2	9	7	8	0	15	8	6	12	26	6	29	18	53	103
04:00 PM	0	1	0	1	6	9	2	17	2	1	5	8	1	16	11	28	54
04:15 PM	0	5	1	6	6	5	1	12	2	1	5	8	0	18	5	23	49
04:30 PM	0	3	0	3	2	5	0	7	0	5	2	7	0	9	4	13	30
04:45 PM	1	6	1	8	3	9	2	14	5	0	5	10	0	12	6	18	50
Total	1	15	2	18	17	28	5	50	9	7	17	33	1	55	26	82	183
05:00 PM	1	3	1	5	2	2	1	5	1	2	5	8	0	20	5	25	43
05:15 PM	0	3	0	3	4	4	0	8	1	0	8	9	0	10	5	15	35
05:30 PM	0	5	0	5	1	2	0	3	1	4	3	8	1	5	5	11	27
05:45 PM	1	6	0	7	4	3	0	7	0	2	4	6	0	5	3	8	28
Total	2	17	1	20	11	11	1	23	3	8	20	31	1	40	18	59	133
Grand Total	4	38	5	47	35	47	6	88	20	21	49	90	8	124	62	194	419
Apprch %	8.5	80.9	10.6		39.8	53.4	6.8		22.2	23.3	54.4		4.1	63.9	32		
Total %	1	9.1	1.2	11.2	8.4	11.2	1.4	21	4.8	5	11.7	21.5	1.9	29.6	14.8	46.3	
Passenger Vehicles	4	37	5	46	31	19	6	56	12	21	47	80	8	96	59	163	345
% Passenger Vehicles	100	97.4	100	97.9	88.6	40.4	100	63.6	60	100	95.9	88.9	100	77.4	95.2	84	82.3
Large 2 Axle Vehicles	0	1	0	1	3	6	0	9	2	0	0	2	0	7	1	8	20
% Large 2 Axle Vehicles	0	2.6	0	2.1	8.6	12.8	0	10.2	10	0	0	2.2	0	5.6	1.6	4.1	4.8
3 Axle Vehicles	0	0	0	0	0	4	0	4	2	0	1	3	0	4	2	6	13
% 3 Axle Vehicles	0	0	0	0	0	8.5	0	4.5	10	0	2	3.3	0	3.2	3.2	3.1	3.1
4+ Axle Trucks	0	0	0	0	1	18	0	19	4	0	1	5	0	17	0	17	41
% 4+ Axle Trucks	0	0	0	0	2.9	38.3	0	21.6	20	0	2	5.6	0	13.7	0	8.8	9.8

	Avalon Street Southbound				20th Street Westbound				Avalon Street Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	0	2	**1**	3	5	2	0	7	**5**	1	**6**	12	**6**	**19**	**16**	**41**	**63**
03:45 PM	**1**	4	1	**6**	2	6	0	8	3	**5**	6	**14**	0	10	2	12	40
04:00 PM	0	1	0	1	**6**	**9**	**2**	**17**	2	1	5	8	1	16	11	28	54
04:15 PM	0	**5**	1	6	6	5	1	12	2	1	5	8	0	18	5	23	49
Total Volume	1	12	3	16	19	22	3	44	12	8	22	42	7	63	34	104	206
% App. Total	6.2	75	18.8		43.2	50	6.8		28.6	19	52.4		6.7	60.6	32.7		
PHF	.250	.600	.750	.667	.792	.611	.375	.647	.600	.400	.917	.750	.292	.829	.531	.634	.817

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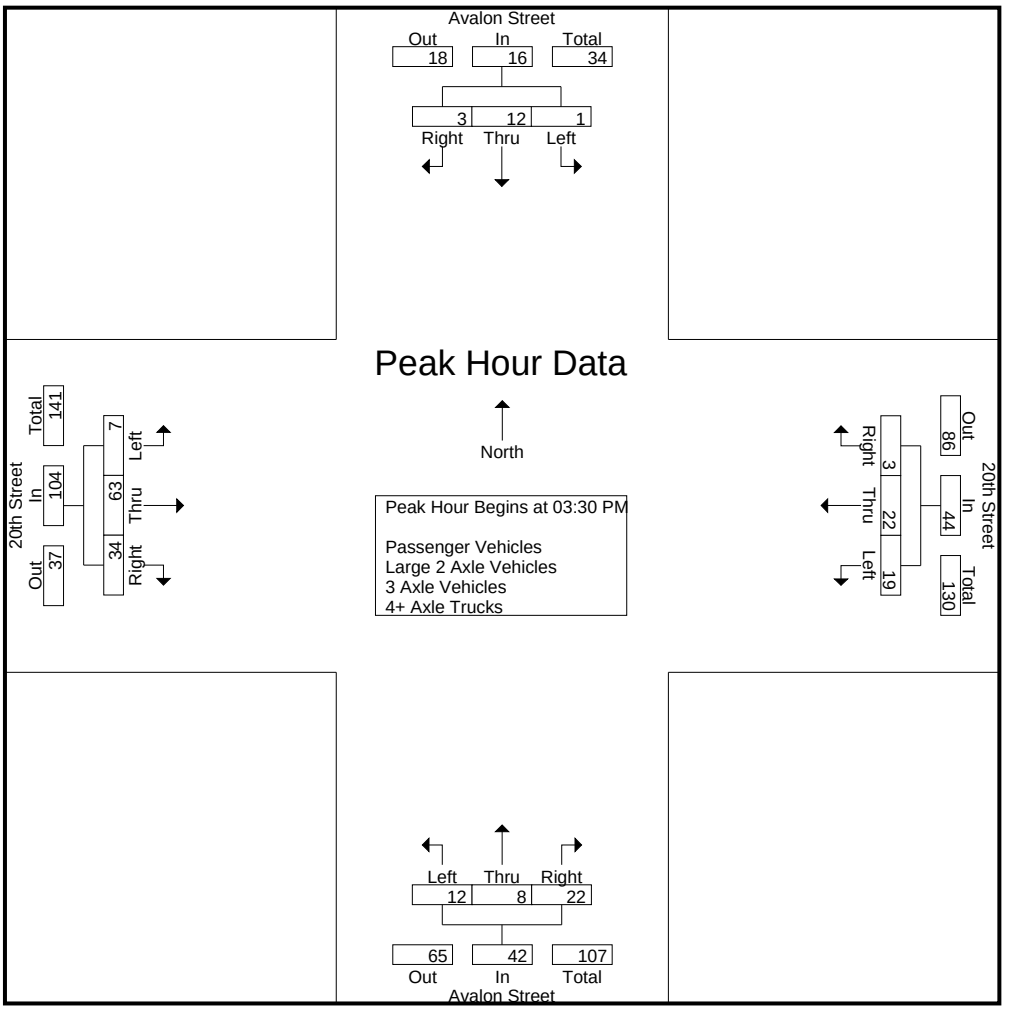

Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:00 PM				03:30 PM				03:30 PM			
+0 mins.	0	5	**1**	6	**6**	**9**	**2**	**17**	**5**	1	**6**	12	**6**	**19**	**16**	**41**
+15 mins.	0	3	0	3	6	5	1	12	3	**5**	6	**14**	0	10	2	12
+30 mins.	**1**	**6**	1	**8**	2	5	0	7	2	1	5	8	1	16	11	28
+45 mins.	1	3	1	5	3	9	2	14	2	1	5	8	0	18	5	23
Total Volume	2	17	3	22	17	28	5	50	12	8	22	42	7	63	34	104
% App. Total	9.1	77.3	13.6		34	56	10		28.6	19	52.4		6.7	60.6	32.7	
PHF	.500	.708	.750	.688	.708	.778	.625	.735	.600	.400	.917	.750	.292	.829	.531	.634

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File Name : 04_JVY_Ava_20th PM
Site Code : 05122894
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Groups Printed- Passenger Vehicles

	Avalon Street Southbound				20th Street Westbound				Avalon Street Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	2	1	3	5	1	0	6	4	1	5	10	6	18	15	39	58
03:45 PM	1	3	1	5	1	0	0	1	2	5	6	13	0	9	2	11	30
Total	1	5	2	8	6	1	0	7	6	6	11	23	6	27	17	50	88
04:00 PM	0	1	0	1	6	5	2	13	1	1	5	7	1	14	10	25	46
04:15 PM	0	5	1	6	4	1	1	6	2	1	5	8	0	11	5	16	36
04:30 PM	0	3	0	3	2	0	0	2	0	5	2	7	0	6	4	10	22
04:45 PM	1	6	1	8	3	5	2	10	1	0	5	6	0	6	5	11	35
Total	1	15	2	18	15	11	5	31	4	7	17	28	1	37	24	62	139
05:00 PM	1	3	1	5	1	1	1	3	0	2	5	7	0	17	5	22	37
05:15 PM	0	3	0	3	4	3	0	7	1	0	7	8	0	8	5	13	31
05:30 PM	0	5	0	5	1	0	0	1	1	4	3	8	1	4	5	10	24
05:45 PM	1	6	0	7	4	3	0	7	0	2	4	6	0	3	3	6	26
Total	2	17	1	20	10	7	1	18	2	8	19	29	1	32	18	51	118
Grand Total	4	37	5	46	31	19	6	56	12	21	47	80	8	96	59	163	345
Apprch %	8.7	80.4	10.9		55.4	33.9	10.7		15	26.2	58.8		4.9	58.9	36.2		
Total %	1.2	10.7	1.4	13.3	9	5.5	1.7	16.2	3.5	6.1	13.6	23.2	2.3	27.8	17.1	47.2	

	Avalon Street Southbound				20th Street Westbound				Avalon Street Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	0	2	**1**	3	5	1	0	6	**4**	1	5	10	**6**	**18**	**15**	**39**	**58**
03:45 PM	**1**	3	1	5	1	0	0	1	2	**5**	**6**	**13**	0	9	2	11	30
04:00 PM	0	1	0	1	**6**	**5**	**2**	**13**	1	1	5	7	1	14	10	25	46
04:15 PM	0	**5**	1	**6**	4	1	1	6	2	1	5	8	0	11	5	16	36
Total Volume	1	11	3	15	16	7	3	26	9	8	21	38	7	52	32	91	170
% App. Total	6.7	73.3	20		61.5	26.9	11.5		23.7	21.1	55.3		7.7	57.1	35.2		
PHF	.250	.550	.750	.625	.667	.350	.375	.500	.563	.400	.875	.731	.292	.722	.533	.583	.733

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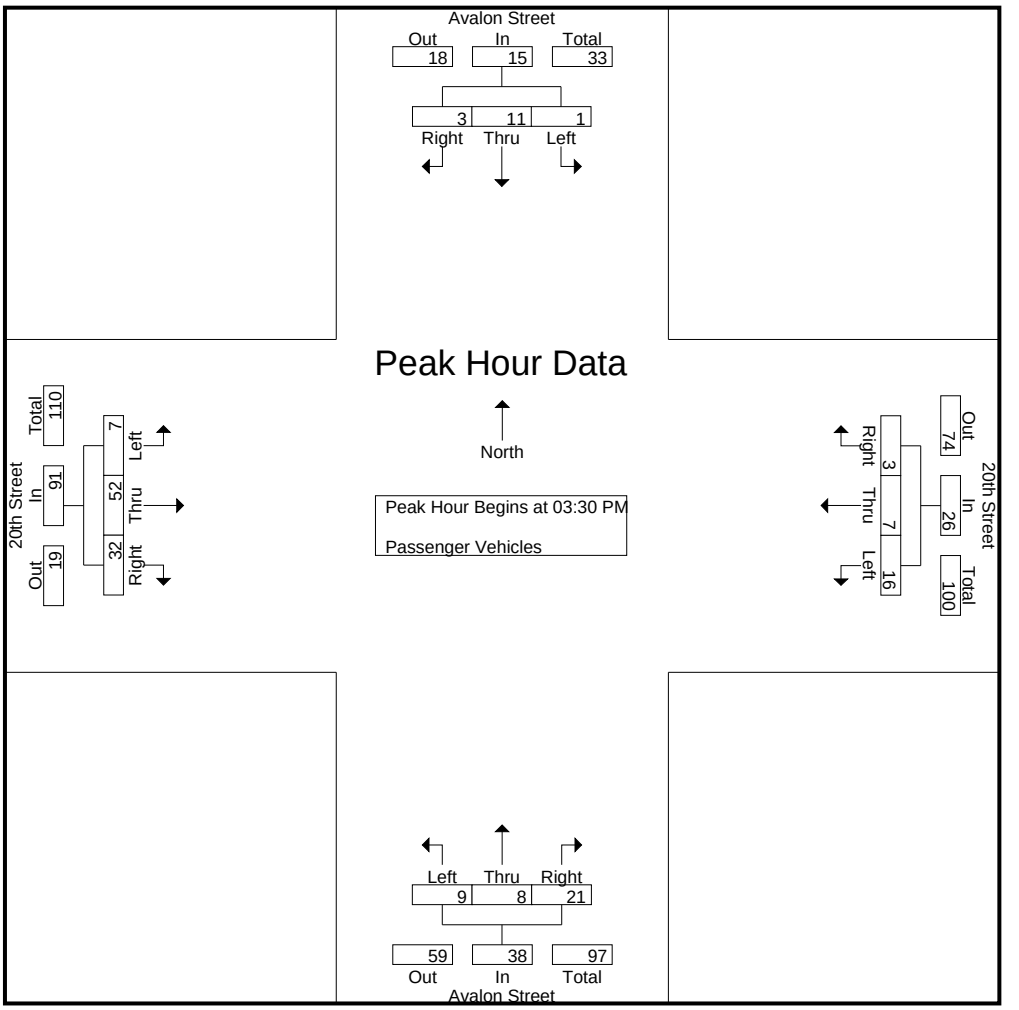
File Name : 04_JVY_Ava_20th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM				03:30 PM				03:30 PM				03:30 PM			
+0 mins.	0	2	**1**	3	5	1	0	6	**4**	1	5	10	**6**	**18**	**15**	**39**
+15 mins.	**1**	3	1	5	1	0	0	1	2	**5**	**6**	**13**	0	9	2	11
+30 mins.	0	1	0	1	**6**	**5**	**2**	**13**	1	1	5	7	1	14	10	25
+45 mins.	0	**5**	1	**6**	4	1	1	6	2	1	5	8	0	11	5	16
Total Volume	1	11	3	15	16	7	3	26	9	8	21	38	7	52	32	91
% App. Total	6.7	73.3	20		61.5	26.9	11.5		23.7	21.1	55.3		7.7	57.1	35.2	
PHF	.250	.550	.750	.625	.667	.350	.375	.500	.563	.400	.875	.731	.292	.722	.533	.583

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City of Jurupa Valley
N/S: Avalon Street
E/W: 20th Street
Weather: Clear

File Name : 04_JVY_Ava_20th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Avalon Street Southbound				20th Street Westbound				Avalon Street Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
03:45 PM	0	1	0	1	1	2	0	3	1	0	0	1	0	0	0	0	5
Total	0	1	0	1	1	2	0	3	1	0	0	1	0	1	0	1	6
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
04:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1	2
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
04:45 PM	0	0	0	0	0	1	0	1	1	0	0	1	0	0	1	1	3
Total	0	0	0	0	1	4	0	5	1	0	0	1	0	4	1	5	11
05:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	1	0	0	0	0	0	2	0	2	3
Grand Total	0	1	0	1	3	6	0	9	2	0	0	2	0	7	1	8	20
Apprch %	0	100	0		33.3	66.7	0		100	0	0		0	87.5	12.5		
Total %	0	5	0	5	15	30	0	45	10	0	0	10	0	35	5	40	

	Avalon Street Southbound				20th Street Westbound				Avalon Street Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
03:45 PM	0	**1**	0	**1**	**1**	**2**	0	**3**	**1**	0	0	**1**	0	0	0	0	**5**
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	**2**	0	**2**	3
04:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1	2
Total Volume	0	1	0	1	2	3	0	5	1	0	0	1	0	4	0	4	11
% App. Total	0	100	0		40	60	0		100	0	0		0	100	0		
PHF	.000	.250	.000	.250	.500	.375	.000	.417	.250	.000	.000	.250	.000	.500	.000	.500	.550

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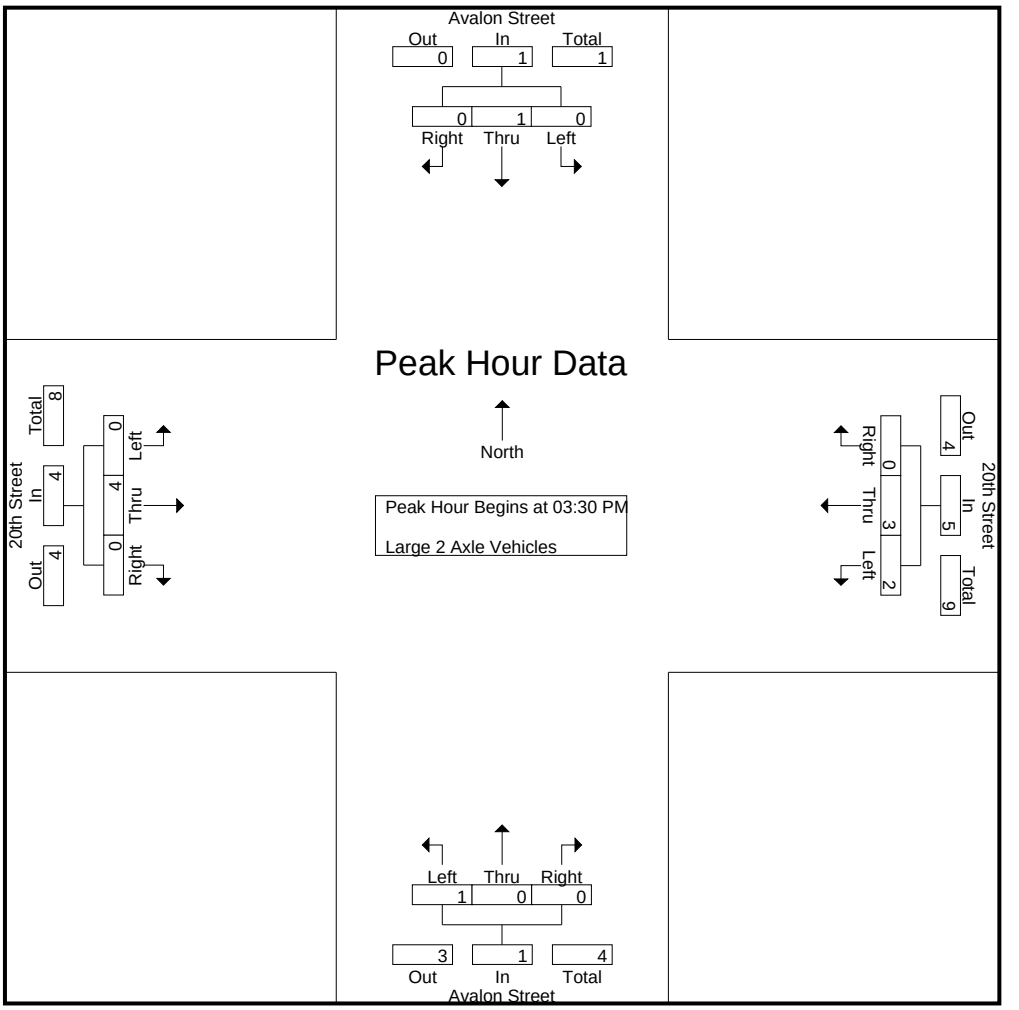
City of Jurupa Valley
N/S: Avalon Street
E/W: 20th Street
Weather: Clear

File Name : 04_JVY_Ava_20th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM				03:30 PM				03:30 PM				03:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+15 mins.	0	**1**	0	**1**	**1**	**2**	0	**3**	**1**	0	0	**1**	0	0	0	0
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	**2**	0	**2**
+45 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1
Total Volume	0	1	0	1	2	3	0	5	1	0	0	1	0	4	0	4
% App. Total	0	100	0		40	60	0		100	0	0		0	100	0	
PHF	.000	.250	.000	.250	.500	.375	.000	.417	.250	.000	.000	.250	.000	.500	.000	.500

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City of Jurupa Valley
N/S: Avalon Street
E/W: 20th Street
Weather: Clear

File Name : 04_JVY_Ava_20th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Avalon Street Southbound				20th Street Westbound				Avalon Street Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	2
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	2
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Total	0	0	0	0	0	3	0	3	0	0	0	0	0	3	1	4	7
05:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	2
05:15 PM	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	1	0	1	2	0	1	0	1	4
Grand Total	0	0	0	0	0	4	0	4	2	0	1	3	0	4	2	6	13
Apprch %	0	0	0		0	100	0		66.7	0	33.3		0	66.7	33.3		
Total %	0	0	0	0	0	30.8	0	30.8	15.4	0	7.7	23.1	0	30.8	15.4	46.2	

	Avalon Street Southbound				20th Street Westbound				Avalon Street Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	0	0	0	0	0	0	0	0	**1**	0	0	**1**	0	0	**1**	**1**	**2**
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	1	1	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	1	0	0	1	0	0	2	2	4
% App. Total	0	0	0		0	100	0		100	0	0		0	0	100		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.250	.000	.000	.250	.000	.000	.500	.500	.500

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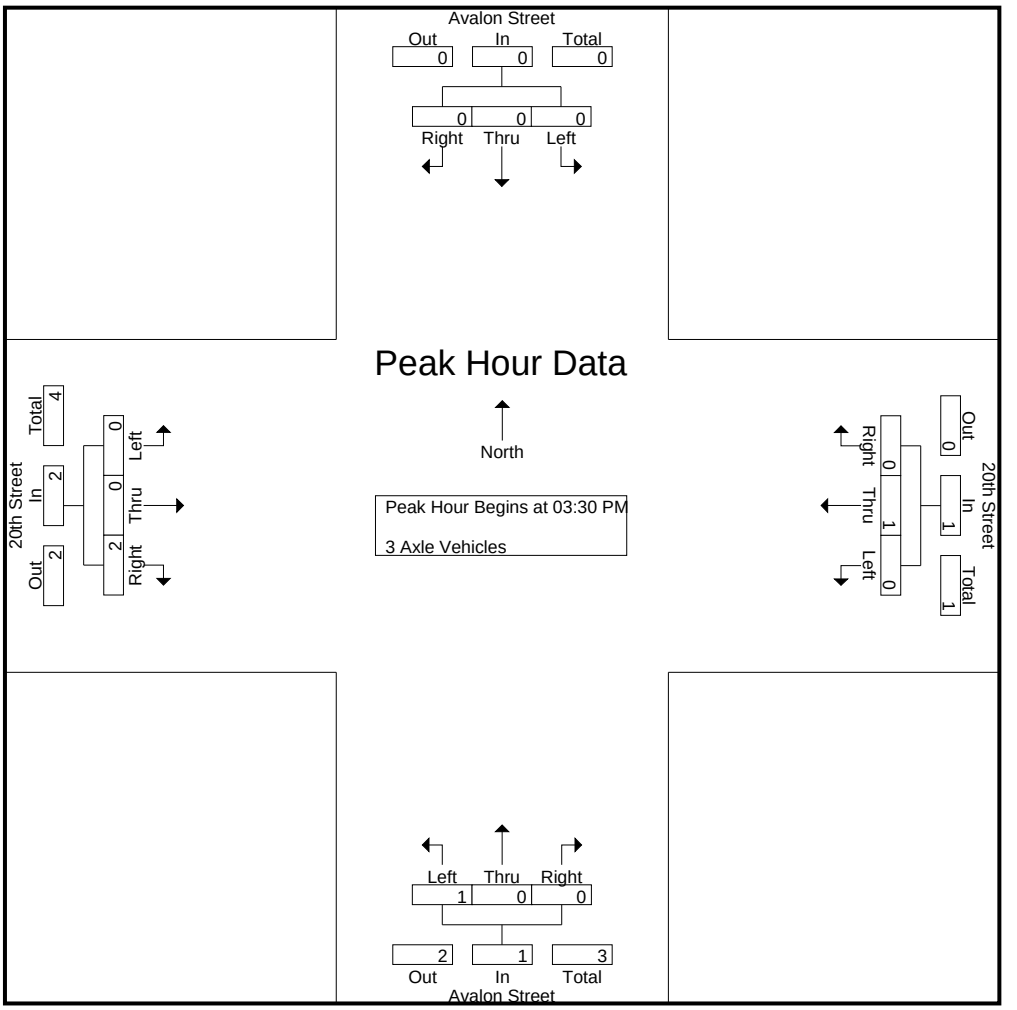
City of Jurupa Valley
N/S: Avalon Street
E/W: 20th Street
Weather: Clear

File Name : 04_JVY_Ava_20th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM				03:30 PM				03:30 PM				03:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	**1**	0	0	**1**	0	0	**1**	**1**
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	1	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	1	0	0	1	0	0	2	2
% App. Total	0	0	0		0	100	0		100	0	0		0	0	100	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.250	.000	.000	.250	.000	.000	.500	.500

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City of Jurupa Valley
N/S: Avalon Street
E/W: 20th Street
Weather: Clear

File Name : 04_JVY_Ava_20th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Avalon Street Southbound				20th Street Westbound				Avalon Street Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	2
03:45 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
Total	0	0	0	0	0	5	0	5	0	0	1	1	0	1	0	1	7
04:00 PM	0	0	0	0	0	2	0	2	1	0	0	1	0	0	0	0	3
04:15 PM	0	0	0	0	1	4	0	5	0	0	0	0	0	6	0	6	11
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
04:45 PM	0	0	0	0	0	2	0	2	3	0	0	3	0	4	0	4	9
Total	0	0	0	0	1	10	0	11	4	0	0	4	0	11	0	11	26
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
05:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	0	0	0	0	0	3	0	3	0	0	0	0	0	5	0	5	8
Grand Total	0	0	0	0	1	18	0	19	4	0	1	5	0	17	0	17	41
Apprch %	0	0	0		5.3	94.7	0		80	0	20		0	100	0		
Total %	0	0	0	0	2.4	43.9	0	46.3	9.8	0	2.4	12.2	0	41.5	0	41.5	

	Avalon Street Southbound				20th Street Westbound				Avalon Street Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	0	0	0	0	0	1	0	1	0	0	**1**	**1**	0	0	0	0	2
03:45 PM	0	0	0	0	0	**4**	0	4	0	0	0	0	0	1	0	1	5
04:00 PM	0	0	0	0	0	2	0	2	**1**	0	0	1	0	0	0	0	3
04:15 PM	0	0	0	0	**1**	4	0	**5**	0	0	0	0	0	**6**	0	**6**	**11**
Total Volume	0	0	0	0	1	11	0	12	1	0	1	2	0	7	0	7	21
% App. Total	0	0	0		8.3	91.7	0		50	0	50		0	100	0		
PHF	.000	.000	.000	.000	.250	.688	.000	.600	.250	.000	.250	.500	.000	.292	.000	.292	.477

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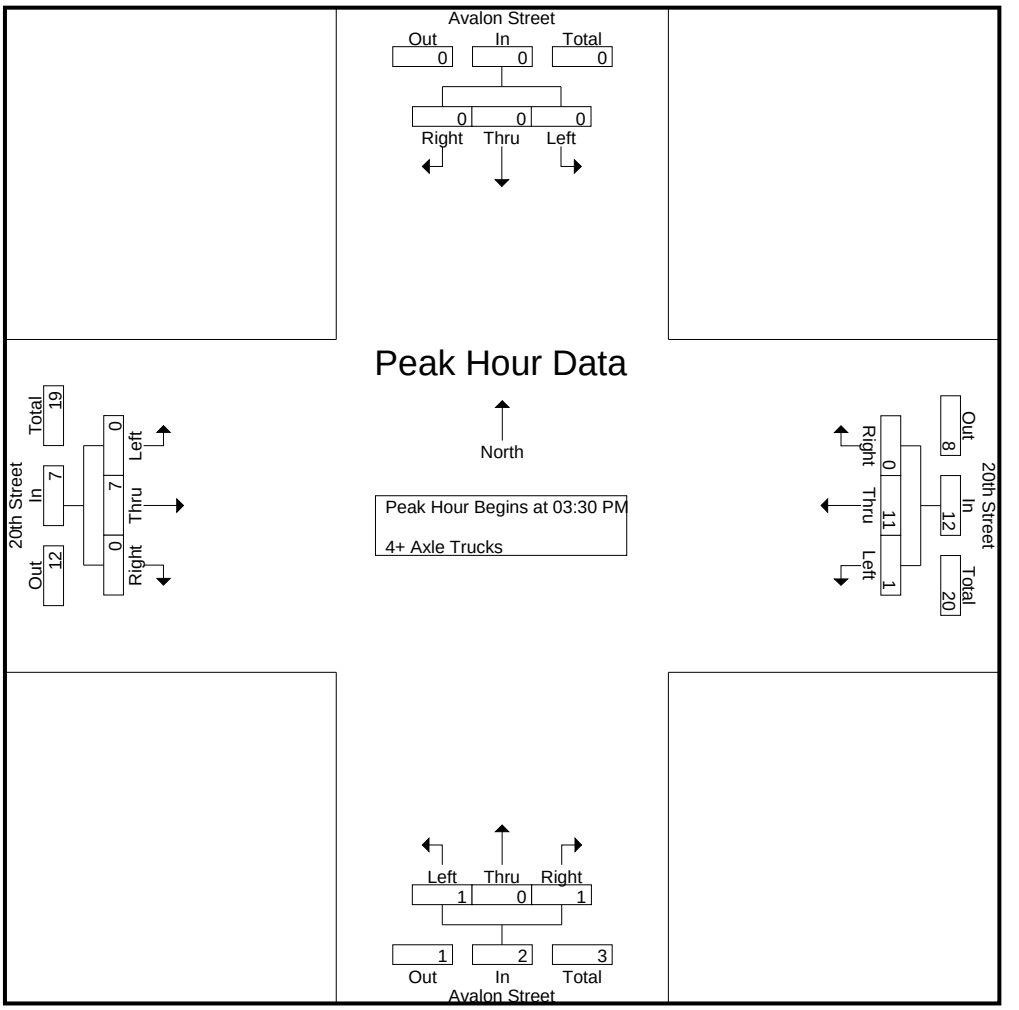
City of Jurupa Valley
N/S: Avalon Street
E/W: 20th Street
Weather: Clear

File Name : 04_JVY_Ava_20th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM				03:30 PM				03:30 PM				03:30 PM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	**1**	**1**	0	0	0	0
+15 mins.	0	0	0	0	0	**4**	0	4	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	2	0	2	**1**	0	0	1	0	0	0	0
+45 mins.	0	0	0	0	**1**	4	0	**5**	0	0	0	0	0	**6**	0	**6**
Total Volume	0	0	0	0	1	11	0	12	1	0	1	2	0	7	0	7
% App. Total	0	0	0		8.3	91.7	0		50	0	50		0	100	0	
PHF	.000	.000	.000	.000	.250	.688	.000	.600	.250	.000	.250	.500	.000	.292	.000	.292

Location: Jurupa Valley
N/S: Avalon Street
E/W: 20th Street

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Avalon Street	East Leg 20th Street	South Leg Avalon Street	West Leg 20th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	1	0	1
6:45 AM	0	0	2	0	2
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	3	0	3

	North Leg Avalon Street	East Leg 20th Street	South Leg Avalon Street	West Leg 20th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0
4:00 PM	0	0	3	0	3
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	3	0	3

Location: Jurupa Valley
N/S: Avalon Street
E/W: 20th Street

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Avalon Street			Westbound 20th Street			Northbound Avalon Street			Eastbound 20th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	0	0	0	0	1	0	0	0	0	2

	Southbound Avalon Street			Westbound 20th Street			Northbound Avalon Street			Eastbound 20th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	1	0	0	0	1	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	1	0	0	0	1	0	2

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City of Jurupa Valley
N/S: Avalon Street
E/W: 24th Street
Weather: Clear

File Name : 05_JVY_Ava_24th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Avalon Street Southbound			24th Street Westbound			Avalon Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:30 AM	0	9	9	0	4	4	7	0	7	20
06:45 AM	1	12	13	0	6	6	8	1	9	28
Total	1	21	22	0	10	10	15	1	16	48
07:00 AM	1	10	11	0	3	3	8	0	8	22
07:15 AM	0	9	9	0	3	3	6	0	6	18
07:30 AM	1	5	6	1	2	3	8	1	9	18
07:45 AM	1	13	14	2	2	4	10	0	10	28
Total	3	37	40	3	10	13	32	1	33	86
08:00 AM	0	6	6	0	2	2	12	1	13	21
08:15 AM	1	10	11	0	7	7	5	0	5	23
08:30 AM	3	7	10	2	5	7	10	0	10	27
08:45 AM	4	10	14	1	5	6	9	0	9	29
Total	8	33	41	3	19	22	36	1	37	100
Grand Total	12	91	103	6	39	45	83	3	86	234
Apprch %	11.7	88.3		13.3	86.7		96.5	3.5		
Total %	5.1	38.9	44	2.6	16.7	19.2	35.5	1.3	36.8	
Passenger Vehicles	4	66	70	5	26	31	67	3	70	171
% Passenger Vehicles	33.3	72.5	68	83.3	66.7	68.9	80.7	100	81.4	73.1
Large 2 Axle Vehicles	1	5	6	1	2	3	2	0	2	11
% Large 2 Axle Vehicles	8.3	5.5	5.8	16.7	5.1	6.7	2.4	0	2.3	4.7
3 Axle Vehicles	3	14	17	0	6	6	10	0	10	33
% 3 Axle Vehicles	25	15.4	16.5	0	15.4	13.3	12	0	11.6	14.1
4+ Axle Trucks	4	6	10	0	5	5	4	0	4	19
% 4+ Axle Trucks	33.3	6.6	9.7	0	12.8	11.1	4.8	0	4.7	8.1

	Avalon Street Southbound			24th Street Westbound			Avalon Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	6	6	0	2	2	**12**	**1**	**13**	21
08:15 AM	1	**10**	11	0	**7**	**7**	5	0	5	23
08:30 AM	3	7	10	**2**	5	7	10	0	10	27
08:45 AM	**4**	10	**14**	1	5	6	9	0	9	**29**
Total Volume	8	33	41	3	19	22	36	1	37	100
% App. Total	19.5	80.5		13.6	86.4		97.3	2.7		
PHF	.500	.825	.732	.375	.679	.786	.750	.250	.712	.862

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City of Jurupa Valley
N/S: Avalon Street
E/W: 24th Street
Weather: Clear

File Name : 05_JVY_Ava_24th AM
Site Code : 05122894
Start Date : 10/4/2022
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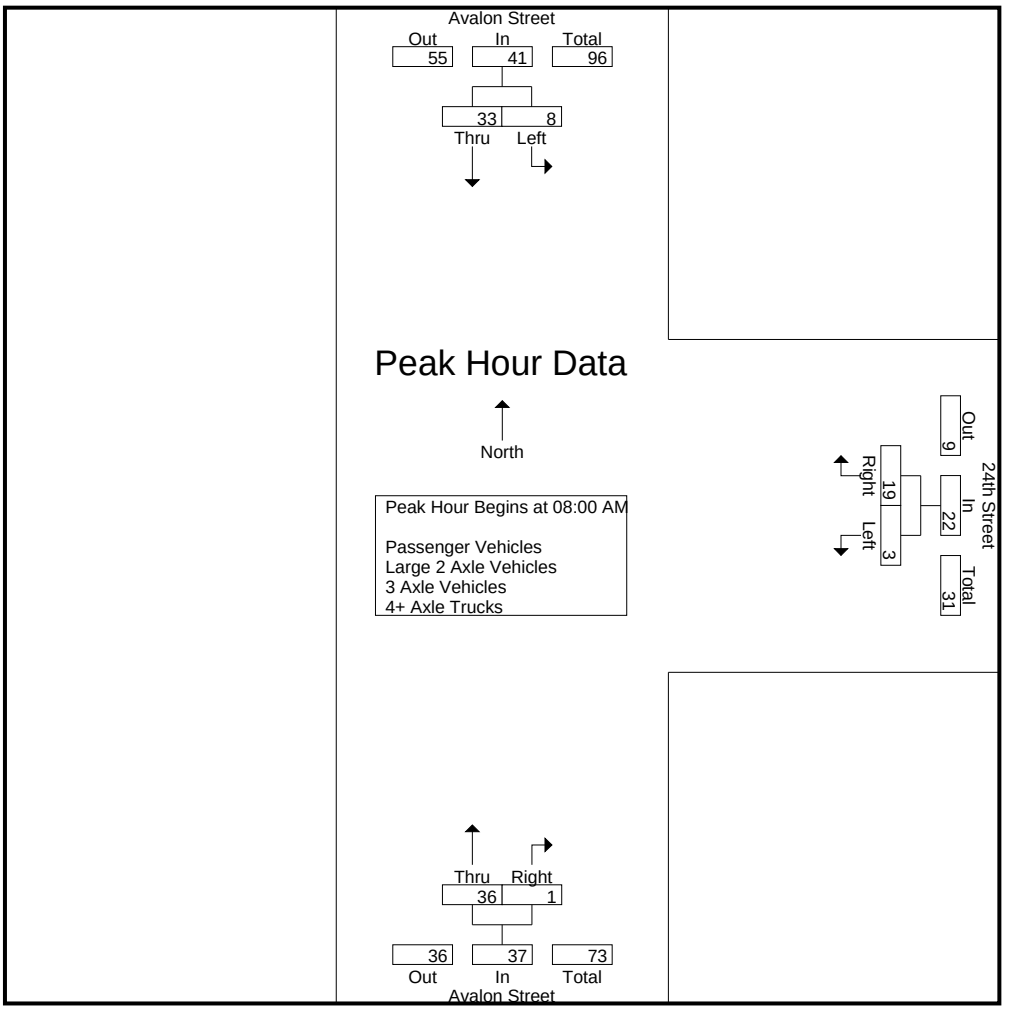

Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	06:30 AM			08:00 AM			07:15 AM		
+0 mins.	0	9	9	0	2	2	6	0	6
+15 mins.	**1**	**12**	**13**	0	**7**	**7**	8	**1**	9
+30 mins.	1	10	11	**2**	5	7	10	0	10
+45 mins.	0	9	9	1	5	6	**12**	1	**13**
Total Volume	2	40	42	3	19	22	36	2	38
% App. Total	4.8	95.2		13.6	86.4		94.7	5.3	
PHF	.500	.833	.808	.375	.679	.786	.750	.500	.731

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File Name : 05_JVY_Ava_24th AM
Site Code : 05122894
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Groups Printed- Passenger Vehicles

	Avalon Street Southbound			24th Street Westbound			Avalon Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:30 AM	0	6	6	0	3	3	5	0	5	14
06:45 AM	0	10	10	0	5	5	6	1	7	22
Total	0	16	16	0	8	8	11	1	12	36
07:00 AM	0	7	7	0	2	2	6	0	6	15
07:15 AM	0	8	8	0	3	3	6	0	6	17
07:30 AM	0	4	4	1	1	2	6	1	7	13
07:45 AM	0	9	9	1	2	3	9	0	9	21
Total	0	28	28	2	8	10	27	1	28	66
08:00 AM	0	4	4	0	2	2	11	1	12	18
08:15 AM	1	5	6	0	2	2	4	0	4	12
08:30 AM	0	5	5	2	2	4	8	0	8	17
08:45 AM	3	8	11	1	4	5	6	0	6	22
Total	4	22	26	3	10	13	29	1	30	69
Grand Total	4	66	70	5	26	31	67	3	70	171
Apprch %	5.7	94.3		16.1	83.9		95.7	4.3		
Total %	2.3	38.6	40.9	2.9	15.2	18.1	39.2	1.8	40.9	

	Avalon Street Southbound			24th Street Westbound			Avalon Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	4	4	0	2	2	**11**	**1**	**12**	18
08:15 AM	1	5	6	0	2	2	4	0	4	12
08:30 AM	0	5	5	**2**	2	4	8	0	8	17
08:45 AM	**3**	**8**	**11**	1	**4**	**5**	6	0	6	**22**
Total Volume	4	22	26	3	10	13	29	1	30	69
% App. Total	15.4	84.6		23.1	76.9		96.7	3.3		
PHF	.333	.688	.591	.375	.625	.650	.659	.250	.625	.784

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City of Jurupa Valley
N/S: Avalon Street
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File Name : 05_JVY_Ava_24th AM
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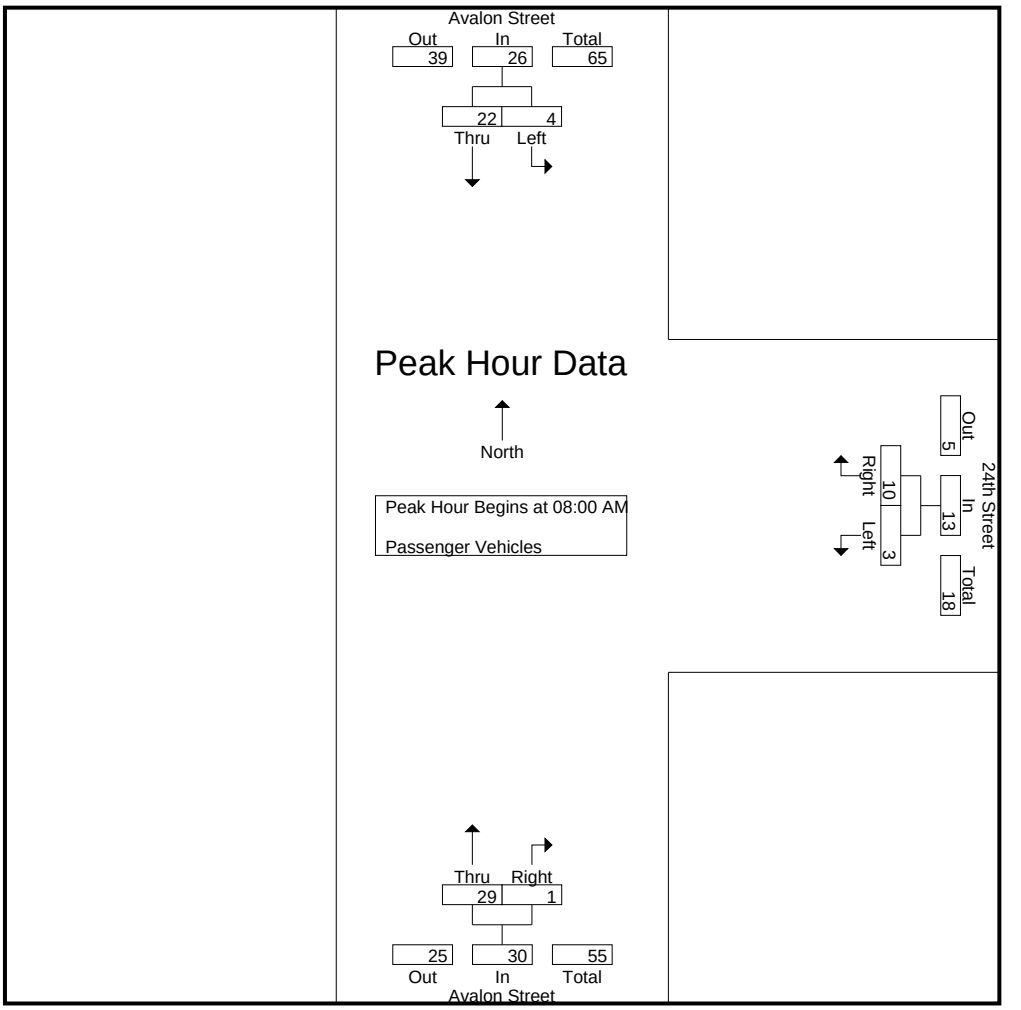

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	0	4	4	0	2	2	**11**	**1**	**12**
+15 mins.	1	5	6	0	2	2	4	0	4
+30 mins.	0	5	5	**2**	2	4	8	0	8
+45 mins.	**3**	**8**	**11**	1	**4**	**5**	6	0	6
Total Volume	4	22	26	3	10	13	29	1	30
% App. Total	15.4	84.6		23.1	76.9		96.7	3.3	
PHF	.333	.688	.591	.375	.625	.650	.659	.250	.625

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City of Jurupa Valley
N/S: Avalon Street
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Weather: Clear

File Name : 05_JVY_Ava_24th AM
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Groups Printed- Large 2 Axle Vehicles

	Avalon Street Southbound			24th Street Westbound			Avalon Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:30 AM	0	0	0	0	0	0	1	0	1	1
06:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	1	1
07:00 AM	0	1	1	0	1	1	0	0	0	2
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	1	0	1	1
07:45 AM	0	2	2	1	0	1	0	0	0	3
Total	0	3	3	1	1	2	1	0	1	6
08:00 AM	0	1	1	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	1	1	0	1	1	0	0	0	2
08:45 AM	1	0	1	0	0	0	0	0	0	1
Total	1	2	3	0	1	1	0	0	0	4
Grand Total	1	5	6	1	2	3	2	0	2	11
Apprch %	16.7	83.3		33.3	66.7		100	0		
Total %	9.1	45.5	54.5	9.1	18.2	27.3	18.2	0	18.2	

	Avalon Street Southbound			24th Street Westbound			Avalon Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	**1**	**1**	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	1	1	0	**1**	**1**	0	0	0	**2**
08:45 AM	**1**	0	1	0	0	0	0	0	0	1
Total Volume	1	2	3	0	1	1	0	0	0	4
% App. Total	33.3	66.7		0	100		0	0		
PHF	.250	.500	.750	.000	.250	.250	.000	.000	.000	.500

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City of Jurupa Valley
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File Name : 05_JVY_Ava_24th AM
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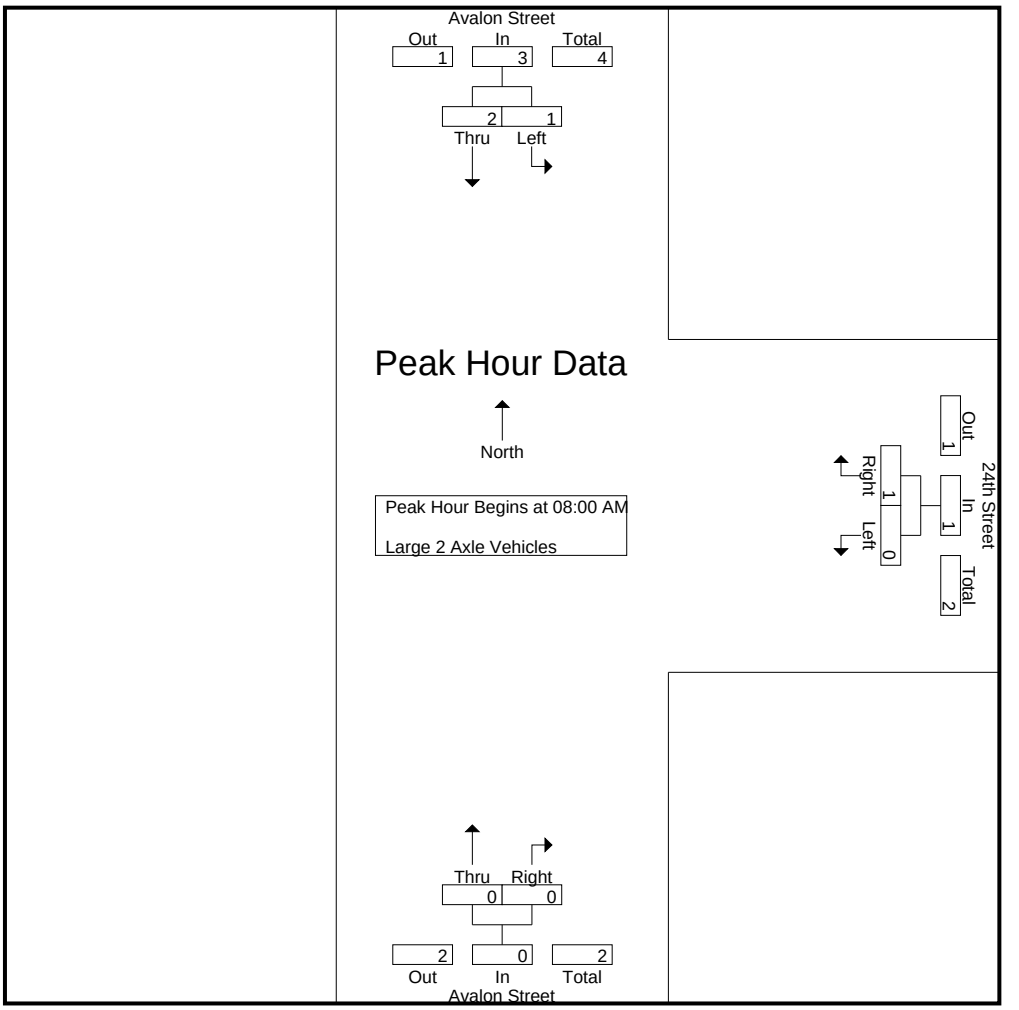

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	0	**1**	**1**	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	1	1	0	**1**	**1**	0	0	0
+45 mins.	**1**	0	1	0	0	0	0	0	0
Total Volume	1	2	3	0	1	1	0	0	0
% App. Total	33.3	66.7		0	100		0	0	
PHF	.250	.500	.750	.000	.250	.250	.000	.000	.000

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City of Jurupa Valley
N/S: Avalon Street
E/W: 24th Street
Weather: Clear

File Name : 05_JVY_Ava_24th AM
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Groups Printed- 3 Axle Vehicles

	Avalon Street Southbound			24th Street Westbound			Avalon Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:30 AM	0	2	2	0	0	0	0	0	0	2
06:45 AM	1	2	3	0	0	0	1	0	1	4
Total	1	4	5	0	0	0	1	0	1	6
07:00 AM	1	1	2	0	0	0	1	0	1	3
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	1	0	1	1
07:45 AM	1	2	3	0	0	0	0	0	0	3
Total	2	3	5	0	0	0	2	0	2	7
08:00 AM	0	1	1	0	0	0	1	0	1	2
08:15 AM	0	4	4	0	4	4	1	0	1	9
08:30 AM	0	0	0	0	1	1	2	0	2	3
08:45 AM	0	2	2	0	1	1	3	0	3	6
Total	0	7	7	0	6	6	7	0	7	20
Grand Total	3	14	17	0	6	6	10	0	10	33
Apprch %	17.6	82.4		0	100		100	0		
Total %	9.1	42.4	51.5	0	18.2	18.2	30.3	0	30.3	

	Avalon Street Southbound			24th Street Westbound			Avalon Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	1	1	0	0	0	1	0	1	2
08:15 AM	0	**4**	**4**	0	**4**	**4**	1	0	1	**9**
08:30 AM	0	0	0	0	1	1	2	0	2	3
08:45 AM	0	2	2	0	1	1	**3**	0	**3**	6
Total Volume	0	7	7	0	6	6	7	0	7	20
% App. Total	0	100		0	100		100	0		
PHF	.000	.438	.438	.000	.375	.375	.583	.000	.583	.556

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File Name : 05_JVY_Ava_24th AM
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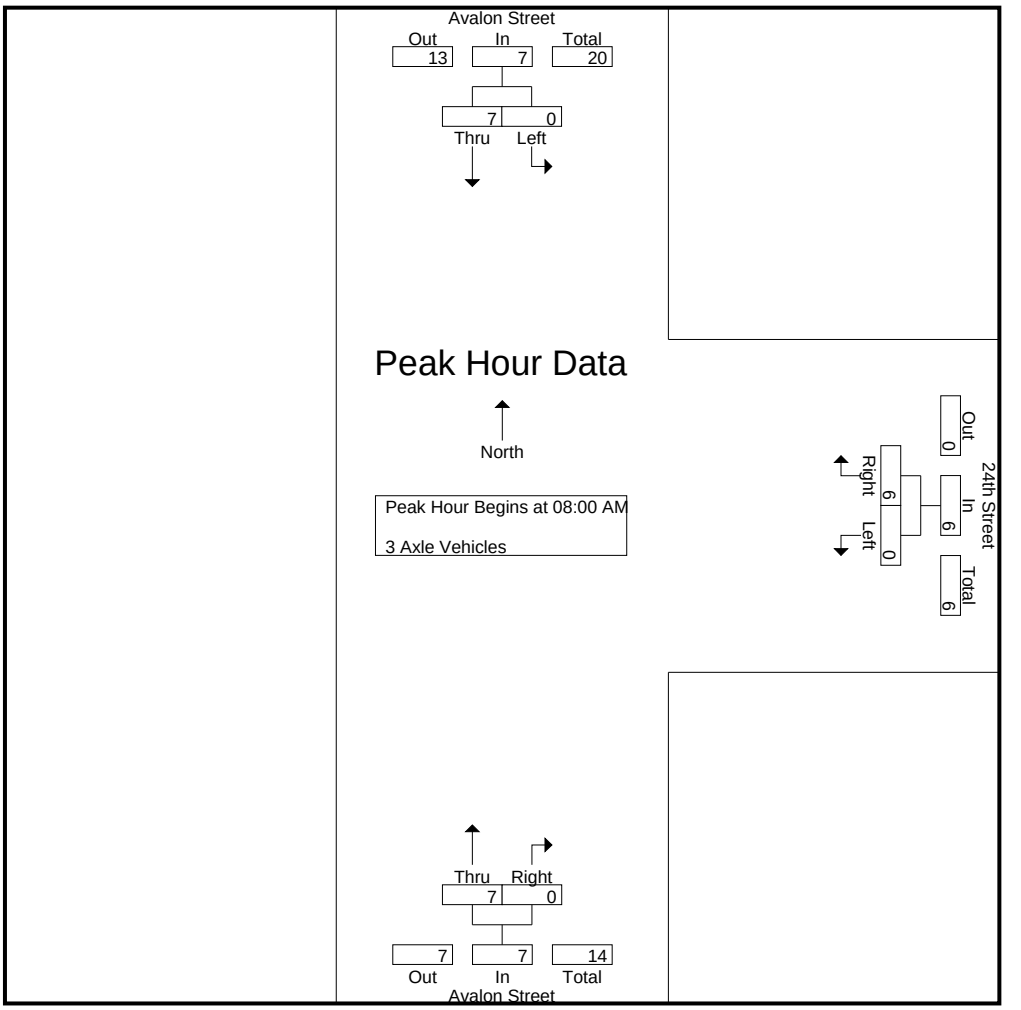

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	0	1	1	0	0	0	1	0	1
+15 mins.	0	**4**	**4**	0	**4**	**4**	1	0	1
+30 mins.	0	0	0	0	1	1	2	0	2
+45 mins.	0	2	2	0	1	1	**3**	0	**3**
Total Volume	0	7	7	0	6	6	7	0	7
% App. Total	0	100		0	100		100	0	
PHF	.000	.438	.438	.000	.375	.375	.583	.000	.583

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City of Jurupa Valley
N/S: Avalon Street
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File Name : 05_JVY_Ava_24th AM
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Groups Printed- 4+ Axle Trucks

	Avalon Street Southbound			24th Street Westbound			Avalon Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:30 AM	0	1	1	0	1	1	1	0	1	3
06:45 AM	0	0	0	0	1	1	1	0	1	2
Total	0	1	1	0	2	2	2	0	2	5
07:00 AM	0	1	1	0	0	0	1	0	1	2
07:15 AM	0	1	1	0	0	0	0	0	0	1
07:30 AM	1	1	2	0	1	1	0	0	0	3
07:45 AM	0	0	0	0	0	0	1	0	1	1
Total	1	3	4	0	1	1	2	0	2	7
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	1	1	0	1	1	0	0	0	2
08:30 AM	3	1	4	0	1	1	0	0	0	5
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	3	2	5	0	2	2	0	0	0	7
Grand Total	4	6	10	0	5	5	4	0	4	19
Apprch %	40	60		0	100		100	0		
Total %	21.1	31.6	52.6	0	26.3	26.3	21.1	0	21.1	

	Avalon Street Southbound			24th Street Westbound			Avalon Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	**1**	1	0	**1**	**1**	0	0	0	2
08:30 AM	**3**	1	**4**	0	1	1	0	0	0	**5**
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	3	2	5	0	2	2	0	0	0	7
% App. Total	60	40		0	100		0	0		
PHF	.250	.500	.313	.000	.500	.500	.000	.000	.000	.350

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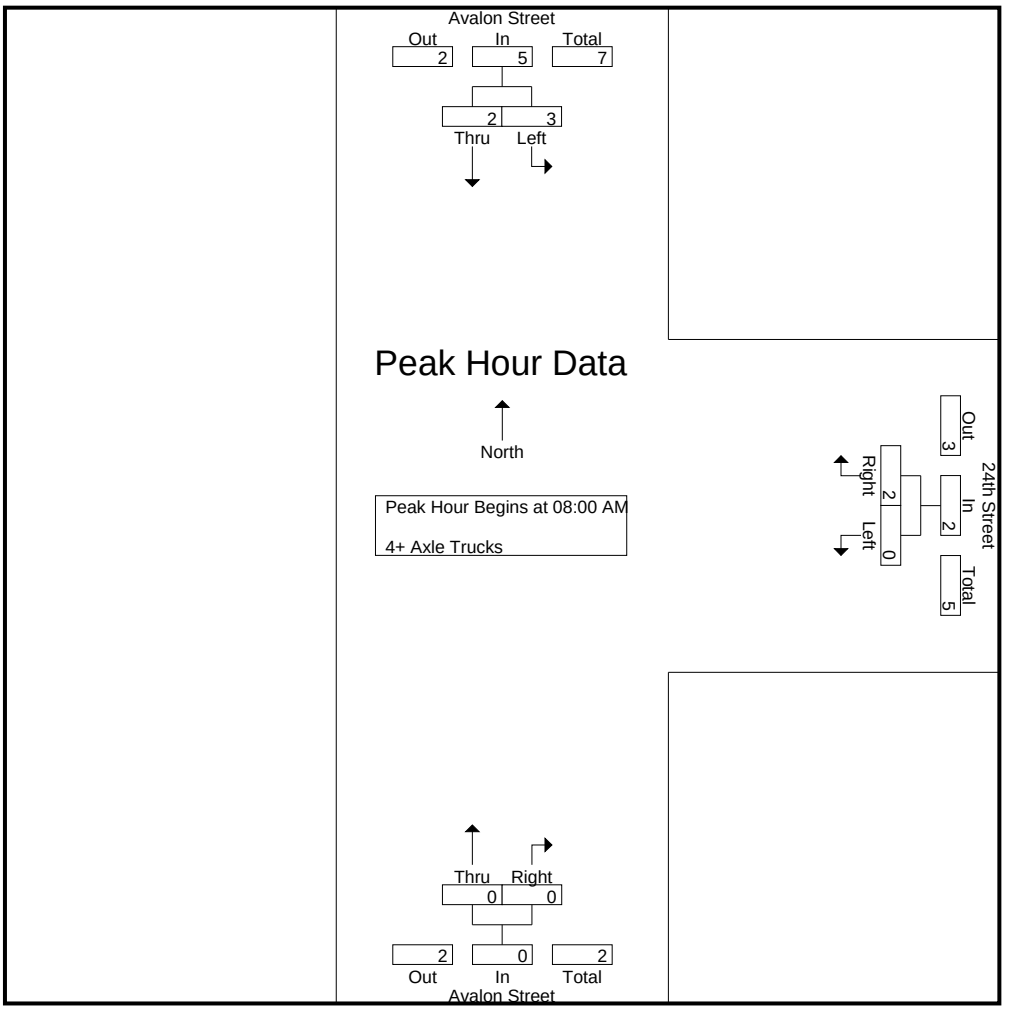

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	**1**	1	0	**1**	**1**	0	0	0
+30 mins.	**3**	1	**4**	0	1	1	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	3	2	5	0	2	2	0	0	0
% App. Total	60	40		0	100		0	0	
PHF	.250	.500	.313	.000	.500	.500	.000	.000	.000

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City of Jurupa Valley
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File Name : 05_JVY_Ava_24th PM
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Avalon Street Southbound				24th Street Westbound				Avalon Street Northbound						
Start Time	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	9	16	0	25	0	5	0	5	7	1	0	8	0	38	38
03:45 PM	1	7	0	8	5	3	0	8	11	1	0	12	0	28	28
Total	10	23	0	33	5	8	0	13	18	2	0	20	0	66	66
04:00 PM	7	11	0	18	1	1	0	2	8	4	0	12	0	32	32
04:15 PM	2	15	0	17	5	2	0	7	6	2	0	8	0	32	32
04:30 PM	2	6	0	8	1	0	0	1	7	3	0	10	0	19	19
04:45 PM	6	12	0	18	2	4	0	6	7	1	0	8	0	32	32
Total	17	44	0	61	9	7	0	16	28	10	0	38	0	115	115
05:00 PM	2	6	0	8	1	1	0	2	8	5	0	13	0	23	23
05:15 PM	2	9	0	11	0	1	0	1	8	7	0	15	0	27	27
05:30 PM	2	9	0	11	2	1	0	3	7	2	0	9	0	23	23
05:45 PM	0	13	0	13	1	0	0	1	6	0	0	6	0	20	20
Total	6	37	0	43	4	3	0	7	29	14	0	43	0	93	93
Grand Total	33	104	0	137	18	18	0	36	75	26	0	101	0	274	274
Apprch %	24.1	75.9			50	50			74.3	25.7					
Total %	12	38		50	6.6	6.6		13.1	27.4	9.5		36.9	0	100	
Passenger Vehicles	32	98		130	18	8		26	74	25		99	0	0	255
% Passenger Vehicles	97	94.2	0	94.9	100	44.4	0	72.2	98.7	96.2	0	98	0	0	93.1
Large 2 Axle Vehicles	1	3		4	0	2		2	1	1		2	0	0	8
% Large 2 Axle Vehicles	3	2.9	0	2.9	0	11.1	0	5.6	1.3	3.8	0	2	0	0	2.9
3 Axle Vehicles	0	2		2	0	2		2	0	0		0	0	0	4
% 3 Axle Vehicles	0	1.9	0	1.5	0	11.1	0	5.6	0	0	0	0	0	0	1.5
4+ Axle Trucks	0	1		1	0	6		6	0	0		0	0	0	7
% 4+ Axle Trucks	0	1	0	0.7	0	33.3	0	16.7	0	0	0	0	0	0	2.6

	Avalon Street Southbound			24th Street Westbound			Avalon Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:30 PM										
03:30 PM	**9**	**16**	**25**	0	**5**	5	7	1	8	**38**
03:45 PM	1	7	8	**5**	3	**8**	**11**	1	**12**	28
04:00 PM	7	11	18	1	1	2	8	**4**	12	32
04:15 PM	2	15	17	5	2	7	6	2	8	32
Total Volume	19	49	68	11	11	22	32	8	40	130
% App. Total	27.9	72.1		50	50		80	20		
PHF	.528	.766	.680	.550	.550	.688	.727	.500	.833	.855

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City of Jurupa Valley
N/S: Avalon Street
E/W: 24th Street
Weather: Clear

File Name : 05_JVY_Ava_24th PM
Site Code : 05122894
Start Date : 10/4/2022
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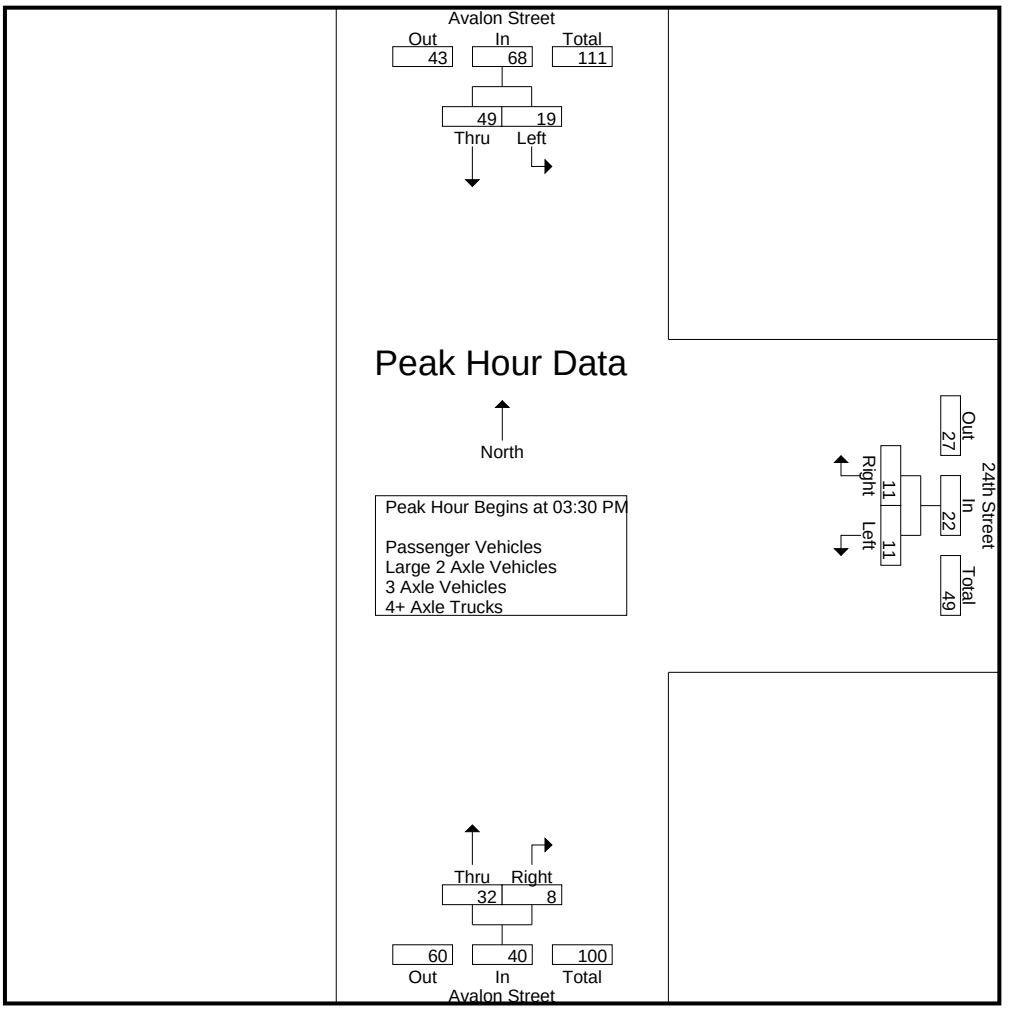

Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM			03:30 PM			04:30 PM		
+0 mins.	**9**	**16**	**25**	0	**5**	5	7	3	10
+15 mins.	1	7	8	**5**	3	**8**	7	1	8
+30 mins.	7	11	18	1	1	2	**8**	5	13
+45 mins.	2	15	17	5	2	7	8	**7**	**15**
Total Volume	19	49	68	11	11	22	30	16	46
% App. Total	27.9	72.1		50	50		65.2	34.8	
PHF	.528	.766	.680	.550	.550	.688	.938	.571	.767

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City of Jurupa Valley
N/S: Avalon Street
E/W: 24th Street
Weather: Clear

File Name : 05_JVY_Ava_24th PM
Site Code : 05122894
Start Date : 10/4/2022
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Groups Printed- Passenger Vehicles

	Avalon Street Southbound				24th Street Westbound				Avalon Street Northbound						
Start Time	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	9	15	0	24	0	2	0	2	7	1	0	8	0	34	34
03:45 PM	1	5	0	6	5	3	0	8	10	1	0	11	0	25	25
Total	10	20	0	30	5	5	0	10	17	2	0	19	0	59	59
04:00 PM	7	10	0	17	1	0	0	1	8	4	0	12	0	30	30
04:15 PM	2	13	0	15	5	2	0	7	6	2	0	8	0	30	30
04:30 PM	2	6	0	8	1	0	0	1	7	3	0	10	0	19	19
04:45 PM	5	12	0	17	2	0	0	2	7	1	0	8	0	27	27
Total	16	41	0	57	9	2	0	11	28	10	0	38	0	106	106
05:00 PM	2	6	0	8	1	0	0	1	8	5	0	13	0	22	22
05:15 PM	2	9	0	11	0	0	0	0	8	6	0	14	0	25	25
05:30 PM	2	9	0	11	2	1	0	3	7	2	0	9	0	23	23
05:45 PM	0	13	0	13	1	0	0	1	6	0	0	6	0	20	20
Total	6	37	0	43	4	1	0	5	29	13	0	42	0	90	90
Grand Total	32	98	0	130	18	8	0	26	74	25	0	99	0	255	255
Apprch %	24.6	75.4			69.2	30.8			74.7	25.3					
Total %	12.5	38.4		51	7.1	3.1		10.2	29	9.8		38.8	0	100	

	Avalon Street Southbound			24th Street Westbound			Avalon Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:30 PM										
03:30 PM	**9**	**15**	**24**	0	2	2	7	1	8	**34**
03:45 PM	1	5	6	**5**	**3**	**8**	**10**	1	11	25
04:00 PM	7	10	17	1	0	1	8	**4**	**12**	30
04:15 PM	2	13	15	5	2	7	6	2	8	30
Total Volume	19	43	62	11	7	18	31	8	39	119
% App. Total	30.6	69.4		61.1	38.9		79.5	20.5		
PHF	.528	.717	.646	.550	.583	.563	.775	.500	.813	.875

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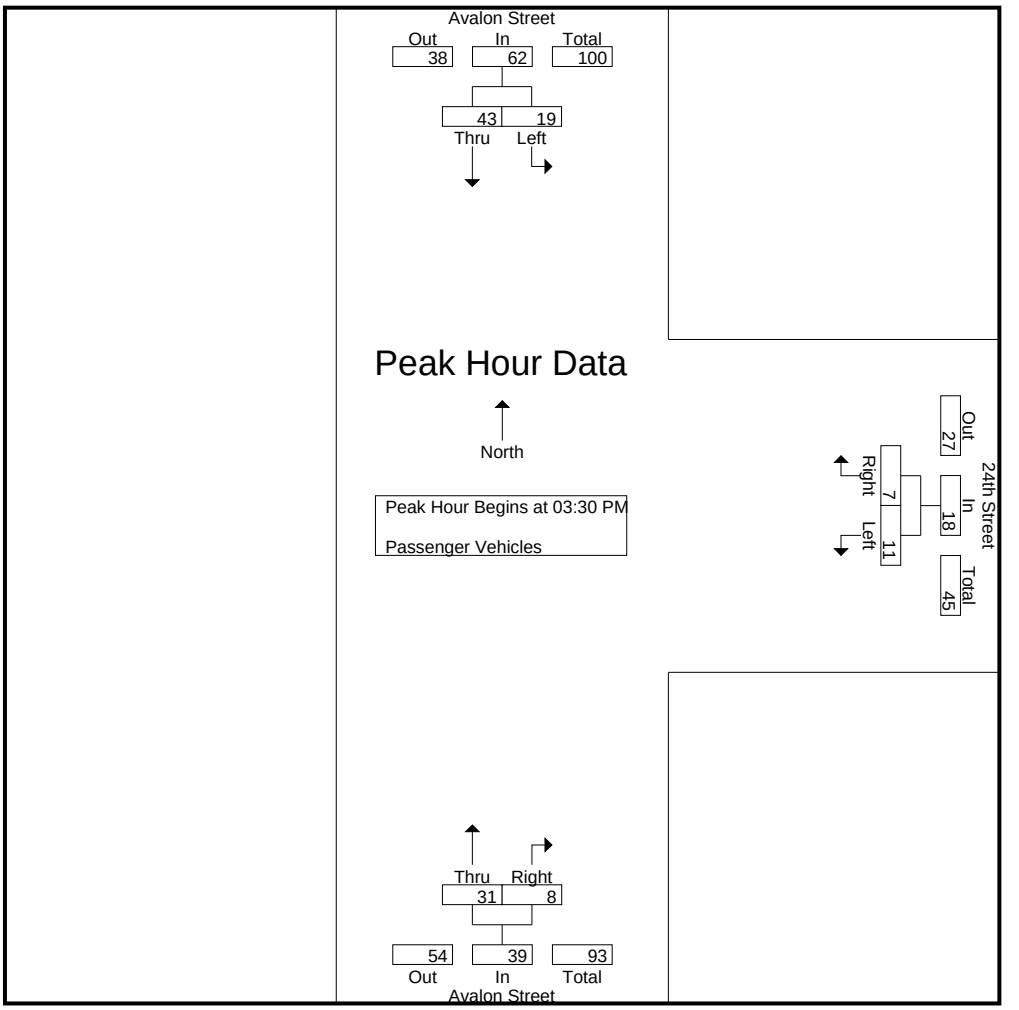
City of Jurupa Valley
N/S: Avalon Street
E/W: 24th Street
Weather: Clear

File Name : 05_JVY_Ava_24th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM			03:30 PM			03:30 PM		
+0 mins.	**9**	**15**	**24**	0	2	2	7	1	8
+15 mins.	1	5	6	**5**	**3**	**8**	**10**	1	11
+30 mins.	7	10	17	1	0	1	8	**4**	**12**
+45 mins.	2	13	15	5	2	7	6	2	8
Total Volume	19	43	62	11	7	18	31	8	39
% App. Total	30.6	69.4		61.1	38.9		79.5	20.5	
PHF	.528	.717	.646	.550	.583	.563	.775	.500	.813

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City of Jurupa Valley
N/S: Avalon Street
E/W: 24th Street
Weather: Clear

File Name : 05_JVY_Ava_24th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Avalon Street Southbound				24th Street Westbound				Avalon Street Northbound						
Start Time	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1
03:45 PM	0	2	0	2	0	0	0	0	1	0	0	1	0	3	3
Total	0	2	0	2	0	1	0	1	1	0	0	1	0	4	4
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	2	2
Total	1	1	0	2	0	1	0	1	0	0	0	0	0	3	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1
Grand Total	1	3	0	4	0	2	0	2	1	1	0	2	0	8	8
Apprch %	25	75			0	100			50	50					
Total %	12.5	37.5		50	0	25		25	12.5	12.5		25	0	100	

	Avalon Street Southbound			24th Street Westbound			Avalon Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:30 PM										
03:30 PM	0	0	0	0	**1**	**1**	0	0	0	1
03:45 PM	0	**2**	**2**	0	0	0	**1**	0	**1**	**3**
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	1	1	0	0	0	0	0	0	1
Total Volume	0	3	3	0	1	1	1	0	1	5
% App. Total	0	100		0	100		100	0		
PHF	.000	.375	.375	.000	.250	.250	.250	.000	.250	.417

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City of Jurupa Valley
N/S: Avalon Street
E/W: 24th Street
Weather: Clear

File Name : 05_JVY_Ava_24th PM
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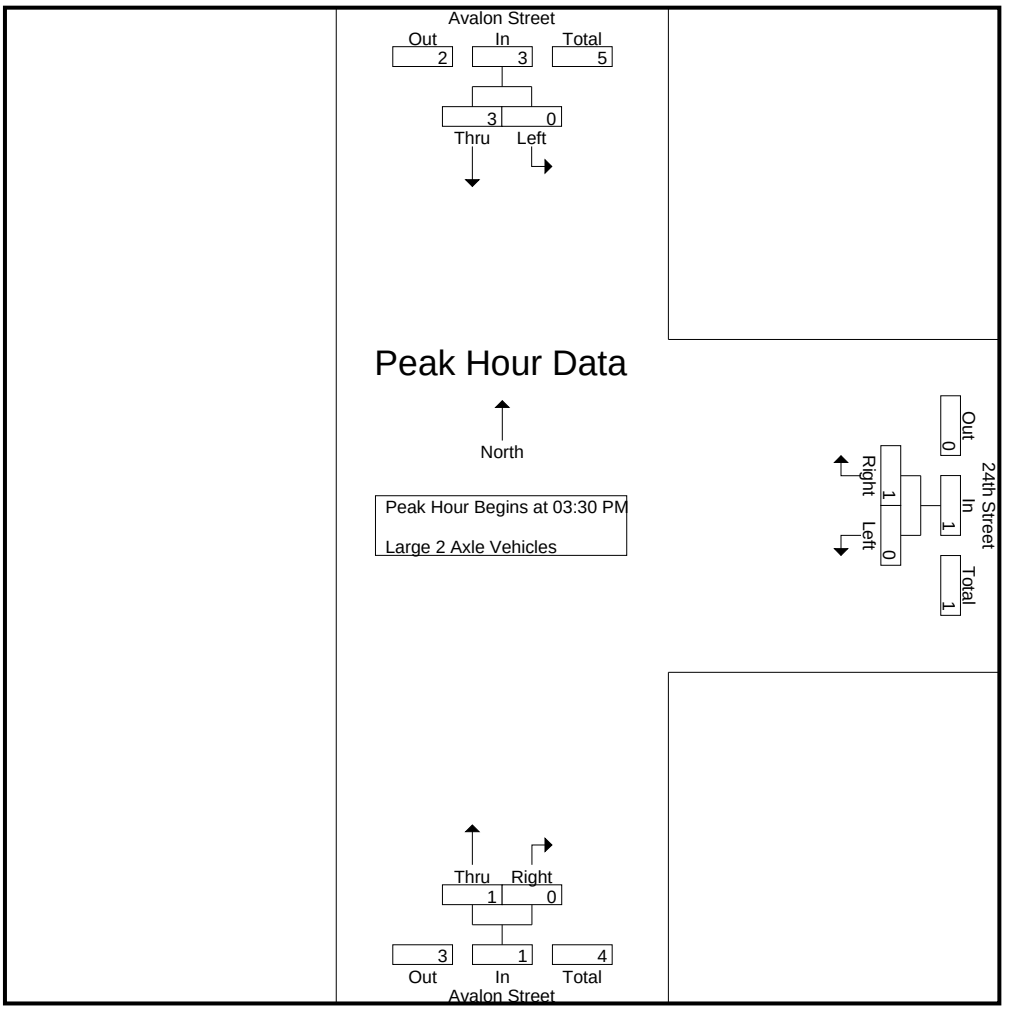

Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM			03:30 PM			03:30 PM		
+0 mins.	0	0	0	0	**1**	**1**	0	0	0
+15 mins.	0	**2**	**2**	0	0	0	**1**	0	**1**
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	1	1	0	0	0	0	0	0
Total Volume	0	3	3	0	1	1	1	0	1
% App. Total	0	100		0	100		100	0	
PHF	.000	.375	.375	.000	.250	.250	.250	.000	.250

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City of Jurupa Valley
N/S: Avalon Street
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Weather: Clear

File Name : 05_JVY_Ava_24th PM
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Groups Printed- 3 Axle Vehicles

	Avalon Street Southbound				24th Street Westbound				Avalon Street Northbound						
Start Time	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1
04:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	2	2
Grand Total	0	2	0	2	0	2	0	2	0	0	0	0	0	4	4
Apprch %	0	100			0	100			0	0					
Total %	0	50		50	0	50		50	0	0		0	0	100	

	Avalon Street Southbound			24th Street Westbound			Avalon Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:30 PM										
03:30 PM	0	**1**	**1**	0	0	0	0	0	0	**1**
03:45 PM	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	1	1	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	2	0	0	0	0	0	0	2
% App. Total	0	100		0	0		0	0		
PHF	.000	.500	.500	.000	.000	.000	.000	.000	.000	.500

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City of Jurupa Valley
N/S: Avalon Street
E/W: 24th Street
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File Name : 05_JVY_Ava_24th PM
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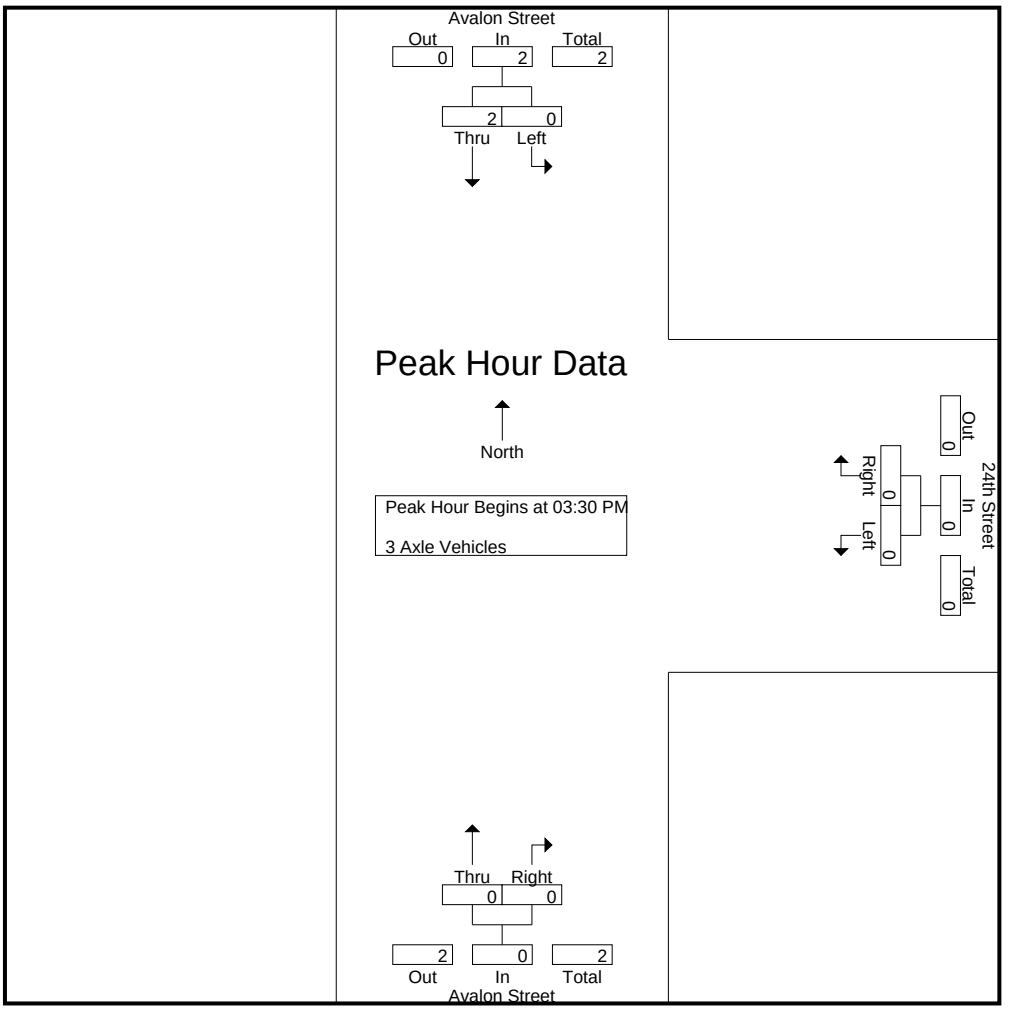

Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM			03:30 PM			03:30 PM		
+0 mins.	0	**1**	**1**	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	1	1	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	2	2	0	0	0	0	0	0
% App. Total	0	100		0	0		0	0	
PHF	.000	.500	.500	.000	.000	.000	.000	.000	.000

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City of Jurupa Valley
N/S: Avalon Street
E/W: 24th Street
Weather: Clear

File Name : 05_JVY_Ava_24th PM
Site Code : 05122894
Start Date : 10/4/2022
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Groups Printed- 4+ Axle Trucks

	Avalon Street Southbound				24th Street Westbound				Avalon Street Northbound						
Start Time	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	2
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	2	2
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1
04:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	3
Total	0	1	0	1	0	4	0	4	0	0	0	0	0	5	5
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	1	0	1	0	6	0	6	0	0	0	0	0	7	7
Apprch %	0	100			0	100			0	0					
Total %	0	14.3		14.3	0	85.7		85.7	0	0		0	0	100	

	Avalon Street Southbound			24th Street Westbound			Avalon Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:30 PM										
03:30 PM	0	0	0	0	**2**	**2**	0	0	0	**2**
03:45 PM	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	1	1	0	0	0	1
04:15 PM	0	**1**	**1**	0	0	0	0	0	0	1
Total Volume	0	1	1	0	3	3	0	0	0	4
% App. Total	0	100		0	100		0	0		
PHF	.000	.250	.250	.000	.375	.375	.000	.000	.000	.500

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City of Jurupa Valley
N/S: Avalon Street
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File Name : 05_JVY_Ava_24th PM
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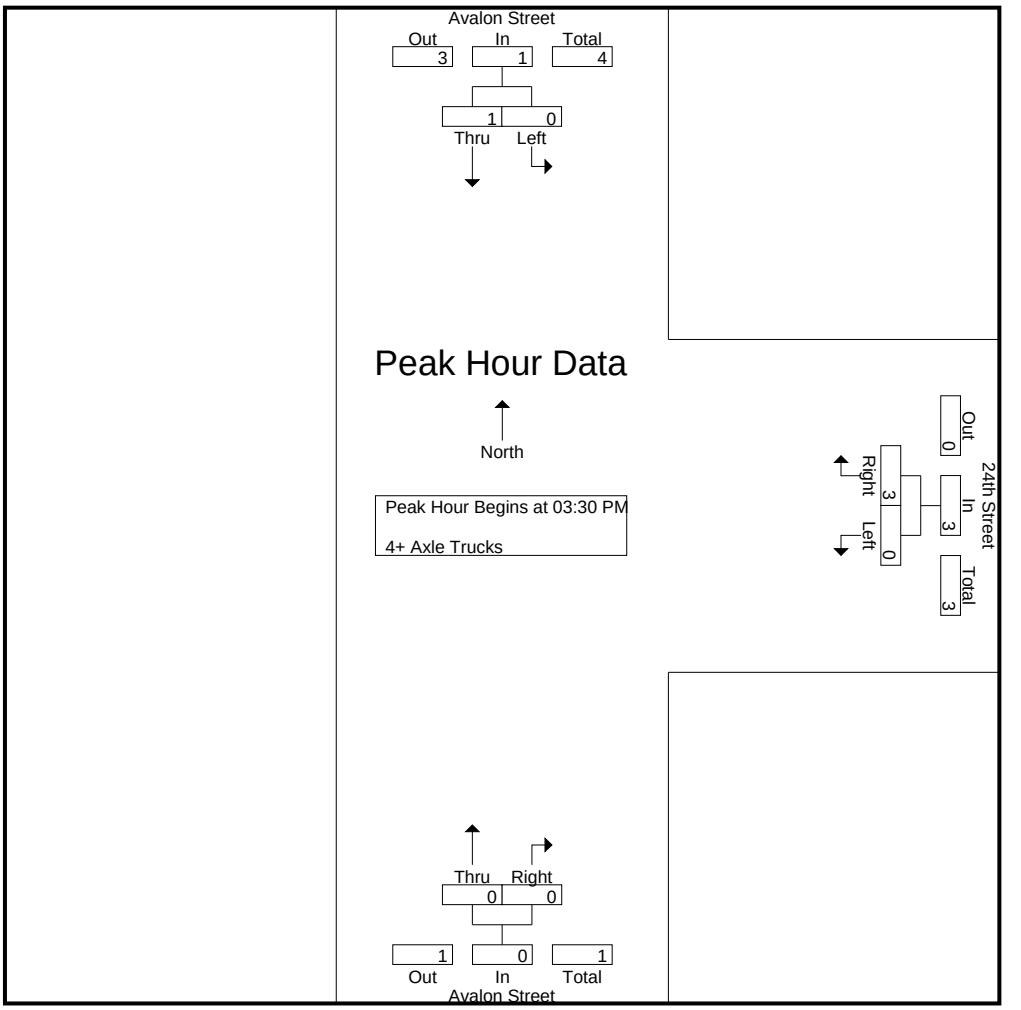

Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM			03:30 PM			03:30 PM		
+0 mins.	0	0	0	0	**2**	**2**	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	1	1	0	0	0
+45 mins.	0	**1**	**1**	0	0	0	0	0	0
Total Volume	0	1	1	0	3	3	0	0	0
% App. Total	0	100		0	100		0	0	
PHF	.000	.250	.250	.000	.375	.375	.000	.000	.000

Location: Jurupa Valley
N/S: Avalon Street
E/W: 24th Street

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Avalon Street	East Leg 24th Street	South Leg Avalon Street	West Leg Dead End	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Avalon Street	East Leg 24th Street	South Leg Avalon Street	West Leg Dead End	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

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Location: Jurupa Valley
N/S: Avalon Street
E/W: 24th Street

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Avalon Street			Westbound 24th Street			Northbound Avalon Street			Eastbound Dead End			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Avalon Street			Westbound 24th Street			Northbound Avalon Street			Eastbound Dead End			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	0	0	0	0	0	1

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Corona, CA 92878
(951)268-6268

City of Jurupa Valley
N/S: Avalon Street
E/W: Primavera Avenue/26th Street
Weather: Clear

File Name : 06_JVY_Ava_26th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Avalon Street Southbound				26th Street Westbound				Avalon Street Northbound				Primavera Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	1	14	0	15	1	0	3	4	0	7	1	8	0	0	0	0	27
06:45 AM	3	11	0	14	0	0	0	0	0	8	0	8	0	0	0	0	22
Total	4	25	0	29	1	0	3	4	0	15	1	16	0	0	0	0	49
07:00 AM	3	8	0	11	2	0	0	2	0	8	0	8	0	0	0	0	21
07:15 AM	0	9	0	9	4	0	1	5	0	6	1	7	0	0	0	0	21
07:30 AM	0	5	0	5	2	0	2	4	0	6	1	7	0	0	0	0	16
07:45 AM	0	15	0	15	1	0	1	2	0	10	2	12	0	0	0	0	29
Total	3	37	0	40	9	0	4	13	0	30	4	34	0	0	0	0	87
08:00 AM	1	4	0	5	0	0	0	0	1	13	1	15	0	0	0	0	20
08:15 AM	3	9	0	12	0	0	2	2	0	4	0	4	0	0	0	0	18
08:30 AM	1	7	0	8	0	0	1	1	0	8	0	8	0	0	0	0	17
08:45 AM	3	9	0	12	1	0	2	3	0	12	0	12	0	0	0	0	27
Total	8	29	0	37	1	0	5	6	1	37	1	39	0	0	0	0	82
Grand Total	15	91	0	106	11	0	12	23	1	82	6	89	0	0	0	0	218
Apprch %	14.2	85.8	0		47.8	0	52.2		1.1	92.1	6.7		0	0	0		
Total %	6.9	41.7	0	48.6	5	0	5.5	10.6	0.5	37.6	2.8	40.8	0	0	0	0	
Passenger Vehicles	12	58	0	70	7	0	4	11	1	72	6	79	0	0	0	0	160
% Passenger Vehicles	80	63.7	0	66	63.6	0	33.3	47.8	100	87.8	100	88.8	0	0	0	0	73.4
Large 2 Axle Vehicles	0	16	0	16	1	0	3	4	0	2	0	2	0	0	0	0	22
% Large 2 Axle Vehicles	0	17.6	0	15.1	9.1	0	25	17.4	0	2.4	0	2.2	0	0	0	0	10.1
3 Axle Vehicles	3	12	0	15	1	0	3	4	0	7	0	7	0	0	0	0	26
% 3 Axle Vehicles	20	13.2	0	14.2	9.1	0	25	17.4	0	8.5	0	7.9	0	0	0	0	11.9
4+ Axle Trucks	0	5	0	5	2	0	2	4	0	1	0	1	0	0	0	0	10
% 4+ Axle Trucks	0	5.5	0	4.7	18.2	0	16.7	17.4	0	1.2	0	1.1	0	0	0	0	4.6

	Avalon Street Southbound				26th Street Westbound				Avalon Street Northbound				Primavera Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 06:30 AM																	
06:30 AM	1	**14**	0	**15**	1	0	**3**	4	0	7	**1**	**8**	0	0	0	0	**27**
06:45 AM	**3**	11	0	14	0	0	0	0	0	**8**	0	8	0	0	0	0	22
07:00 AM	3	8	0	11	2	0	0	2	0	8	0	8	0	0	0	0	21
07:15 AM	0	9	0	9	**4**	0	1	**5**	0	6	1	7	0	0	0	0	21
Total Volume	7	42	0	49	7	0	4	11	0	29	2	31	0	0	0	0	91
% App. Total	14.3	85.7	0		63.6	0	36.4		0	93.5	6.5		0	0	0		
PHF	.583	.750	.000	.817	.438	.000	.333	.550	.000	.906	.500	.969	.000	.000	.000	.000	.843

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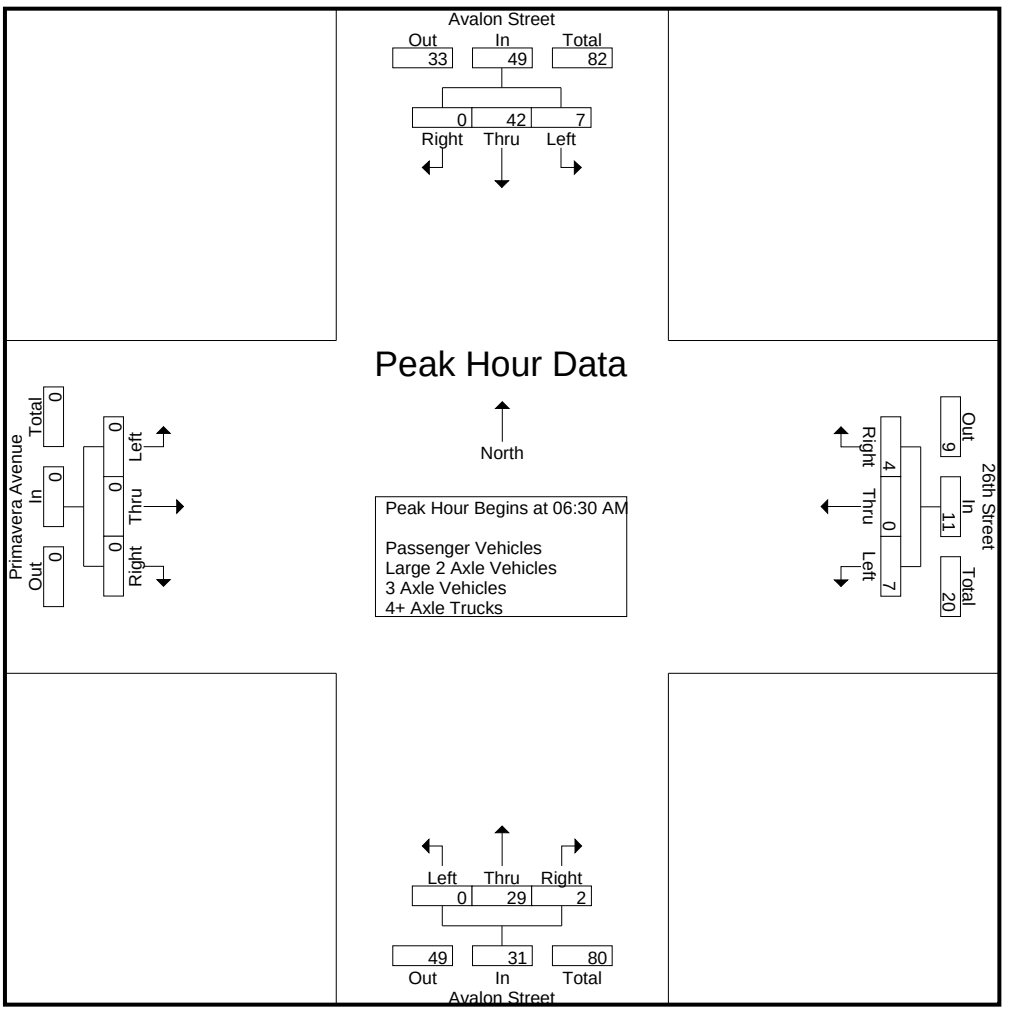

Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	06:30 AM				07:00 AM				07:15 AM				06:30 AM			
+0 mins.	1	**14**	0	**15**	2	0	0	2	0	6	1	7	0	0	0	0
+15 mins.	**3**	11	0	14	**4**	0	1	**5**	0	6	1	7	0	0	0	0
+30 mins.	3	8	0	11	2	0	**2**	4	0	10	**2**	12	0	0	0	0
+45 mins.	0	9	0	9	1	0	1	2	**1**	**13**	1	**15**	0	0	0	0
Total Volume	7	42	0	49	9	0	4	13	1	35	5	41	0	0	0	0
% App. Total	14.3	85.7	0		69.2	0	30.8		2.4	85.4	12.2		0	0	0	
PHF	.583	.750	.000	.817	.563	.000	.500	.650	.250	.673	.625	.683	.000	.000	.000	.000

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Groups Printed- Passenger Vehicles

	Avalon Street Southbound				26th Street Westbound				Avalon Street Northbound				Primavera Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	5	0	5	0	0	2	2	0	6	1	7	0	0	0	0	14
06:45 AM	2	8	0	10	0	0	0	0	0	7	0	7	0	0	0	0	17
Total	2	13	0	15	0	0	2	2	0	13	1	14	0	0	0	0	31
07:00 AM	3	5	0	8	2	0	0	2	0	6	0	6	0	0	0	0	16
07:15 AM	0	8	0	8	2	0	0	2	0	6	1	7	0	0	0	0	17
07:30 AM	0	4	0	4	1	0	0	1	0	6	1	7	0	0	0	0	12
07:45 AM	0	9	0	9	1	0	0	1	0	10	2	12	0	0	0	0	22
Total	3	26	0	29	6	0	0	6	0	28	4	32	0	0	0	0	67
08:00 AM	1	2	0	3	0	0	0	0	1	12	1	14	0	0	0	0	17
08:15 AM	2	6	0	8	0	0	1	1	0	4	0	4	0	0	0	0	13
08:30 AM	1	4	0	5	0	0	0	0	0	7	0	7	0	0	0	0	12
08:45 AM	3	7	0	10	1	0	1	2	0	8	0	8	0	0	0	0	20
Total	7	19	0	26	1	0	2	3	1	31	1	33	0	0	0	0	62
Grand Total	12	58	0	70	7	0	4	11	1	72	6	79	0	0	0	0	160
Apprch %	17.1	82.9	0		63.6	0	36.4		1.3	91.1	7.6		0	0	0		
Total %	7.5	36.2	0	43.8	4.4	0	2.5	6.9	0.6	45	3.8	49.4	0	0	0	0	

	Avalon Street Southbound				26th Street Westbound				Avalon Street Northbound				Primavera Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 07:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 06:30 AM																	
06:30 AM	0	5	0	5	0	0	**2**	**2**	0	6	**1**	**7**	0	0	0	0	14
06:45 AM	2	**8**	0	**10**	0	0	0	0	0	**7**	0	7	0	0	0	0	**17**
07:00 AM	**3**	5	0	8	**2**	0	0	2	0	6	0	6	0	0	0	0	16
07:15 AM	0	8	0	8	2	0	0	2	0	6	1	7	0	0	0	0	17
Total Volume	5	26	0	31	4	0	2	6	0	25	2	27	0	0	0	0	64
% App. Total	16.1	83.9	0		66.7	0	33.3		0	92.6	7.4		0	0	0		
PHF	.417	.813	.000	.775	.500	.000	.250	.750	.000	.893	.500	.964	.000	.000	.000	.000	.941

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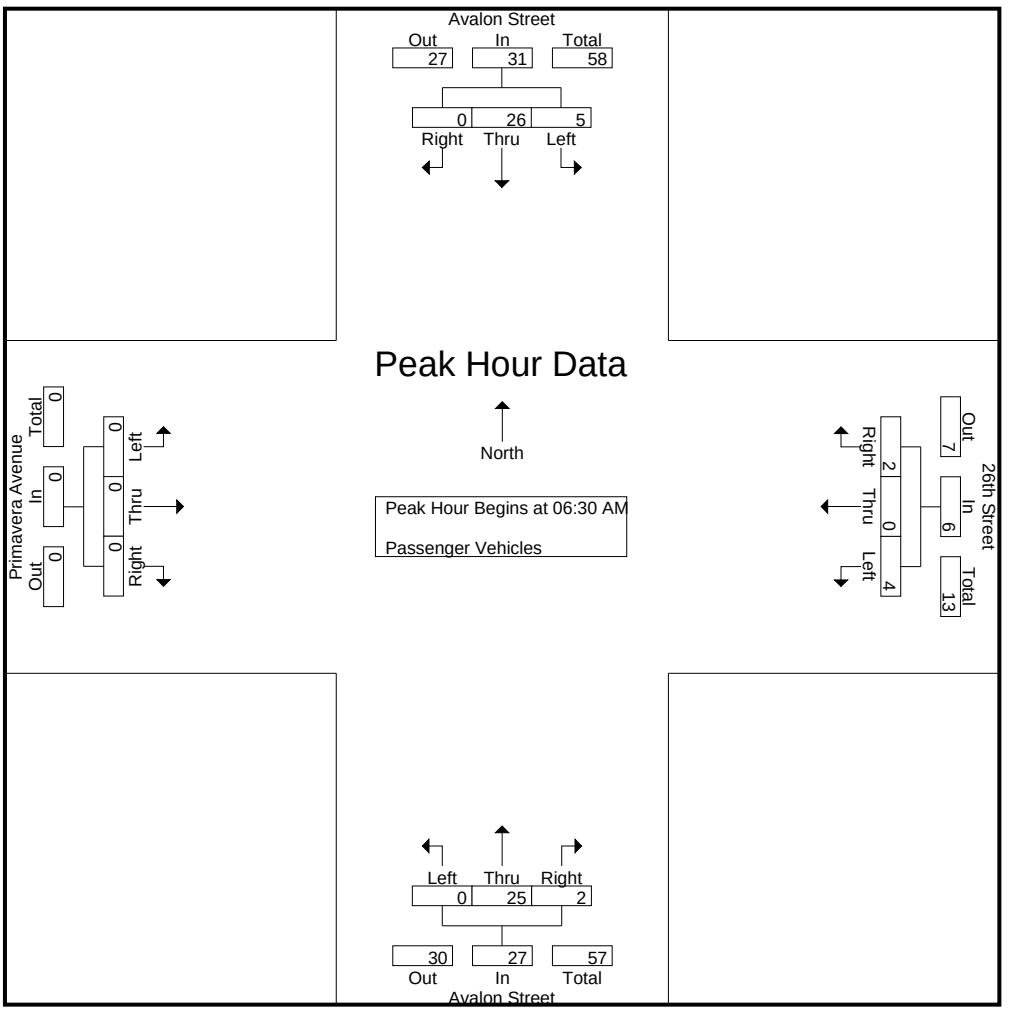

Peak Hour Analysis From 06:30 AM to 07:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	06:30 AM				06:30 AM				06:30 AM				06:30 AM			
+0 mins.	0	5	0	5	0	0	**2**	**2**	0	6	**1**	**7**	0	0	0	0
+15 mins.	2	**8**	0	**10**	0	0	0	0	0	**7**	0	7	0	0	0	0
+30 mins.	**3**	5	0	8	**2**	0	0	2	0	6	0	6	0	0	0	0
+45 mins.	0	8	0	8	2	0	0	2	0	6	1	7	0	0	0	0
Total Volume	5	26	0	31	4	0	2	6	0	25	2	27	0	0	0	0
% App. Total	16.1	83.9	0		66.7	0	33.3		0	92.6	7.4		0	0	0	
PHF	.417	.813	.000	.775	.500	.000	.250	.750	.000	.893	.500	.964	.000	.000	.000	.000

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Groups Printed- Large 2 Axle Vehicles

	Avalon Street Southbound				26th Street Westbound				Avalon Street Northbound				Primavera Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	6	0	6	0	0	1	1	0	1	0	1	0	0	0	0	8
06:45 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	8	0	8	0	0	1	1	0	1	0	1	0	0	0	0	10
07:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	2
07:45 AM	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	0	5	0	5	1	0	2	3	0	0	0	0	0	0	0	0	8
08:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
08:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
Grand Total	0	16	0	16	1	0	3	4	0	2	0	2	0	0	0	0	22
Apprch %	0	100	0		25	0	75		0	100	0		0	0	0		
Total %	0	72.7	0	72.7	4.5	0	13.6	18.2	0	9.1	0	9.1	0	0	0	0	

	Avalon Street Southbound				26th Street Westbound				Avalon Street Northbound				Primavera Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 07:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 06:30 AM																	
06:30 AM	0	**6**	0	**6**	0	0	**1**	**1**	0	**1**	0	**1**	0	0	0	0	**8**
06:45 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
07:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total Volume	0	9	0	9	0	0	2	2	0	1	0	1	0	0	0	0	12
% App. Total	0	100	0		0	0	100		0	100	0		0	0	0		
PHF	.000	.375	.000	.375	.000	.000	.500	.500	.000	.250	.000	.250	.000	.000	.000	.000	.375

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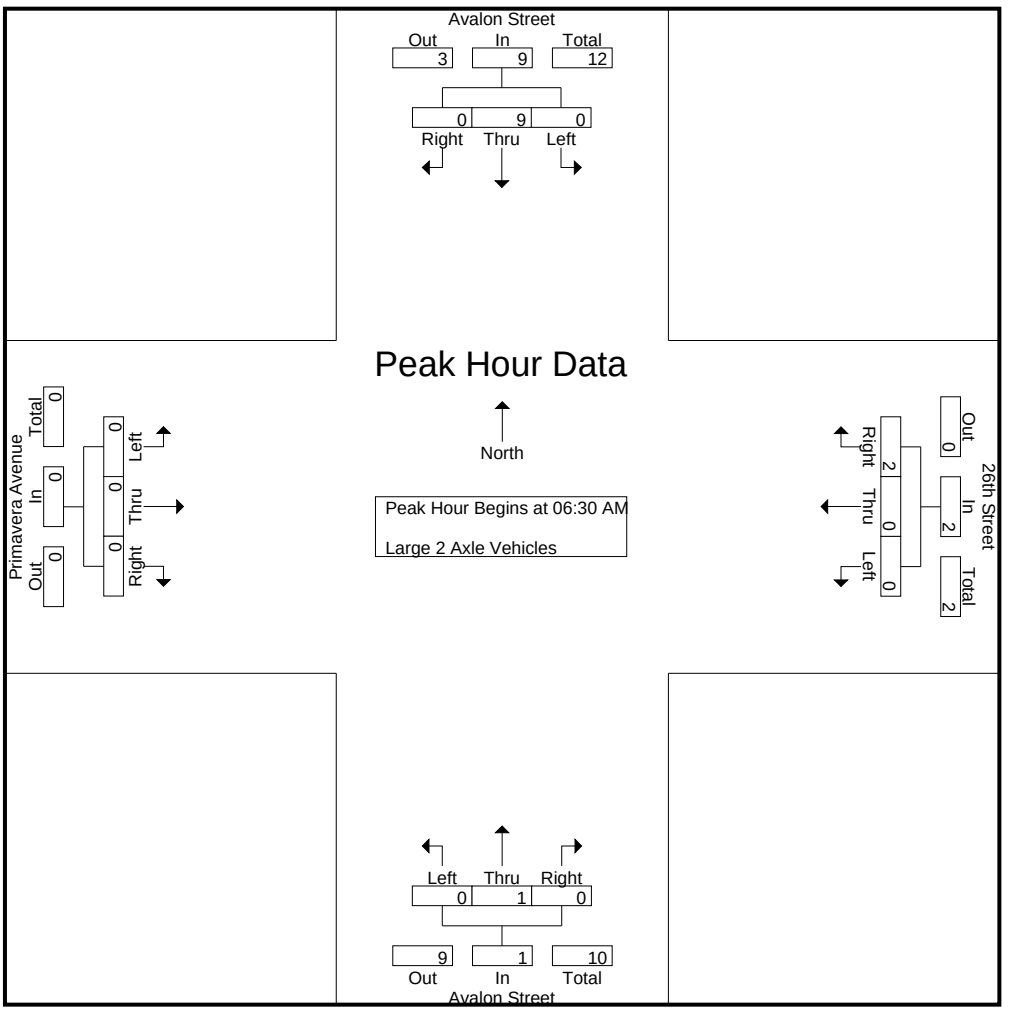

Peak Hour Analysis From 06:30 AM to 07:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	06:30 AM				06:30 AM				06:30 AM				06:30 AM			
+0 mins.	0	**6**	0	**6**	0	0	**1**	**1**	0	**1**	0	**1**	0	0	0	0
+15 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
Total Volume	0	9	0	9	0	0	2	2	0	1	0	1	0	0	0	0
% App. Total	0	100	0		0	0	100		0	100	0		0	0	0	
PHF	.000	.375	.000	.375	.000	.000	.500	.500	.000	.250	.000	.250	.000	.000	.000	.000

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Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Avalon Street Southbound				26th Street Westbound				Avalon Street Northbound				Primavera Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
06:45 AM	1	1	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
Total	2	3	0	5	0	0	0	0	0	1	0	1	0	0	0	0	6
07:00 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	3	0	3	1	0	1	2	0	1	0	1	0	0	0	0	6
08:00 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
08:15 AM	1	3	0	4	0	0	1	1	0	0	0	0	0	0	0	0	5
08:30 AM	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	2
08:45 AM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
Total	1	6	0	7	0	0	2	2	0	5	0	5	0	0	0	0	14
Grand Total	3	12	0	15	1	0	3	4	0	7	0	7	0	0	0	0	26
Apprch %	20	80	0		25	0	75		0	100	0		0	0	0		
Total %	11.5	46.2	0	57.7	3.8	0	11.5	15.4	0	26.9	0	26.9	0	0	0	0	

	Avalon Street Southbound				26th Street Westbound				Avalon Street Northbound				Primavera Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 07:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 06:30 AM																	
06:30 AM	**1**	**2**	0	**3**	0	0	0	0	0	0	0	0	0	0	0	0	**3**
06:45 AM	1	1	0	2	0	0	0	0	0	**1**	0	**1**	0	0	0	0	3
07:00 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:15 AM	0	0	0	0	**1**	0	0	**1**	0	0	0	0	0	0	0	0	1
Total Volume	2	4	0	6	1	0	0	1	0	2	0	2	0	0	0	0	9
% App. Total	33.3	66.7	0		100	0	0		0	100	0		0	0	0		
PHF	.500	.500	.000	.500	.250	.000	.000	.250	.000	.500	.000	.500	.000	.000	.000	.000	.750

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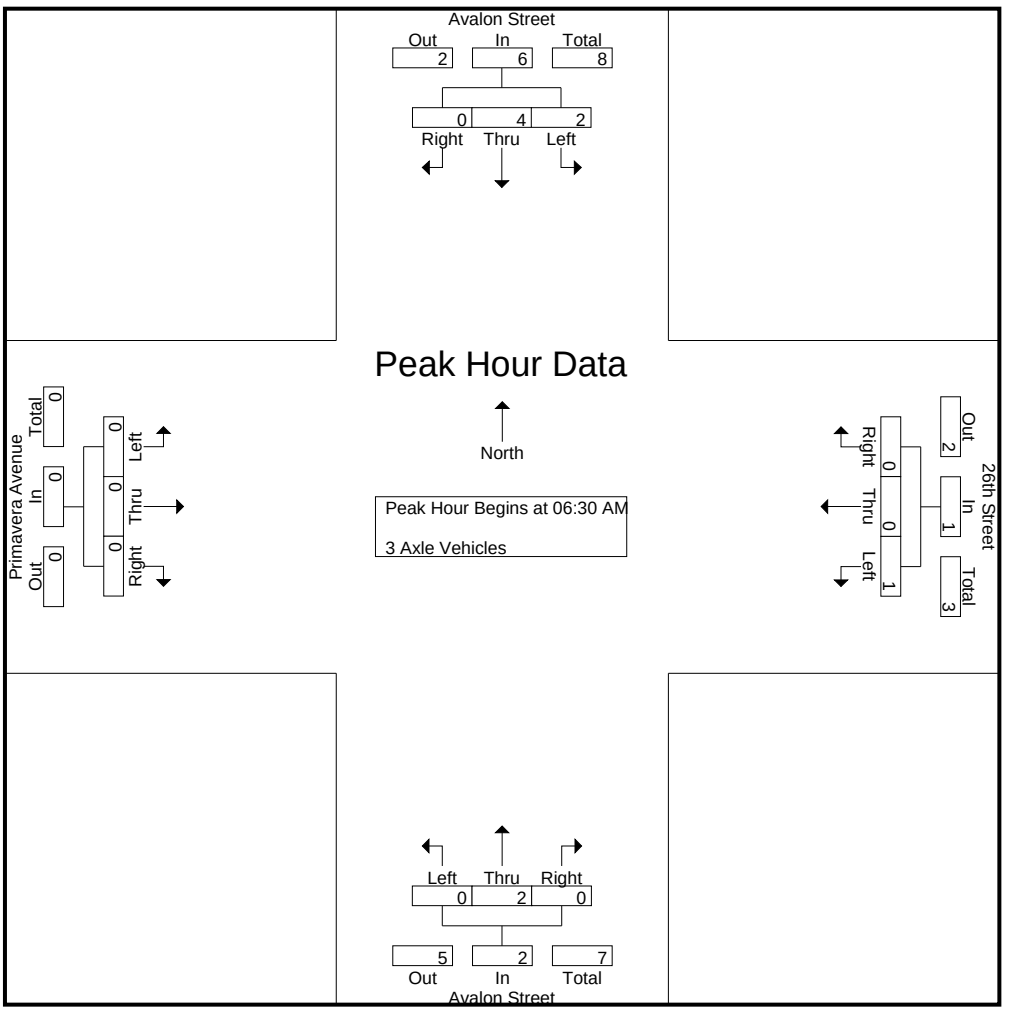

Peak Hour Analysis From 06:30 AM to 07:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	06:30 AM				06:30 AM				06:30 AM				06:30 AM			
+0 mins.	**1**	**2**	0	**3**	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	1	1	0	2	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	0	0	0	**1**	0	0	**1**	0	0	0	0	0	0	0	0
Total Volume	2	4	0	6	1	0	0	1	0	2	0	2	0	0	0	0
% App. Total	33.3	66.7	0		100	0	0		0	100	0		0	0	0	
PHF	.500	.500	.000	.500	.250	.000	.000	.250	.000	.500	.000	.500	.000	.000	.000	.000

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Page No : 1

Groups Printed- 4+ Axle Trucks

	Avalon Street Southbound				26th Street Westbound				Avalon Street Northbound				Primavera Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
07:00 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:15 AM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
07:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total	0	3	0	3	1	0	1	2	0	1	0	1	0	0	0	0	6
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
Grand Total	0	5	0	5	2	0	2	4	0	1	0	1	0	0	0	0	10
Apprch %	0	100	0		50	0	50		0	100	0		0	0	0		
Total %	0	50	0	50	20	0	20	40	0	10	0	10	0	0	0	0	

	Avalon Street Southbound				26th Street Westbound				Avalon Street Northbound				Primavera Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 07:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 06:30 AM																	
06:30 AM	0	**1**	0	**1**	**1**	0	0	**1**	0	0	0	0	0	0	0	0	**2**
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	1	0	1	0	0	0	0	0	**1**	0	**1**	0	0	0	0	2
07:15 AM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
Total Volume	0	3	0	3	2	0	0	2	0	1	0	1	0	0	0	0	6
% App. Total	0	100	0		100	0	0		0	100	0		0	0	0		
PHF	.000	.750	.000	.750	.500	.000	.000	.500	.000	.250	.000	.250	.000	.000	.000	.000	.750

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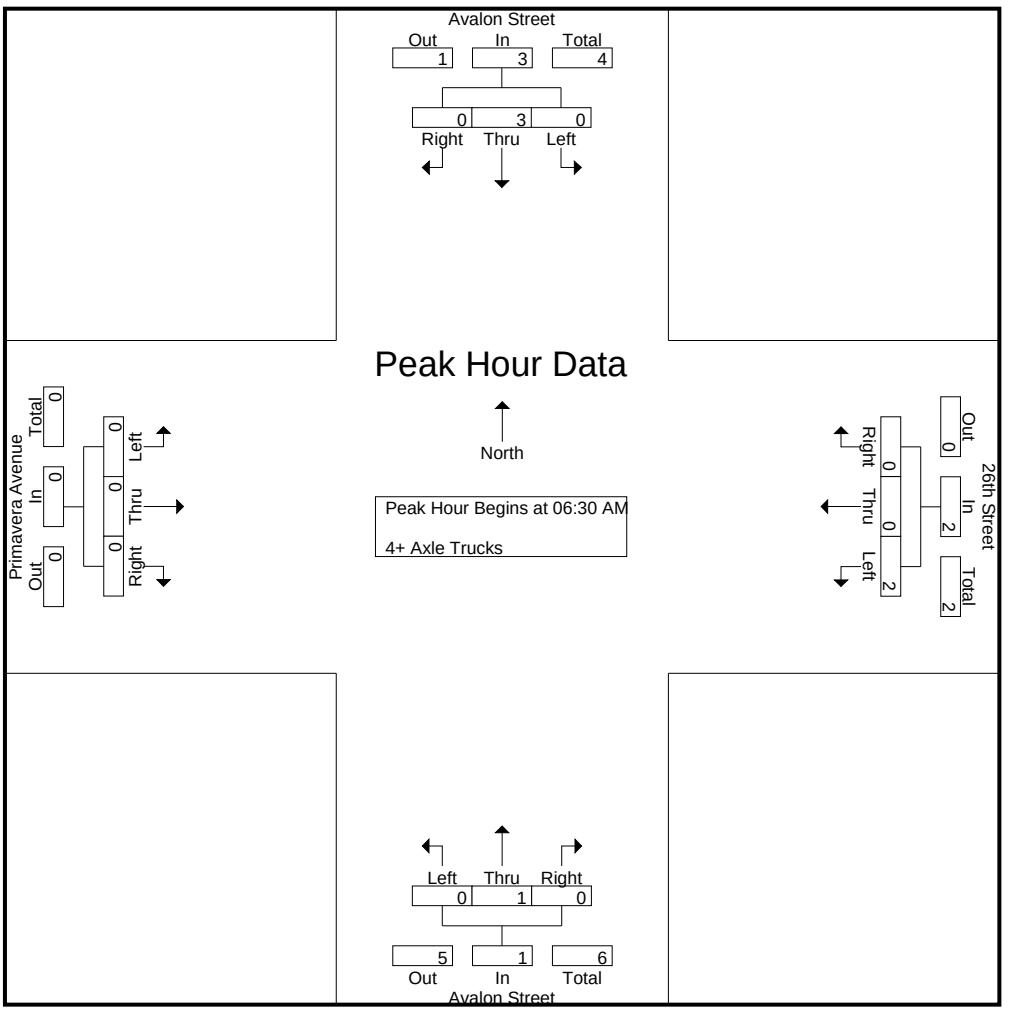
City of Jurupa Valley
N/S: Avalon Street
E/W: Primavera Avenue/26th Street
Weather: Clear

File Name : 06_JVY_Ava_26th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 06:30 AM to 07:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	06:30 AM				06:30 AM				06:30 AM				06:30 AM			
+0 mins.	0	**1**	0	**1**	**1**	0	0	**1**	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+45 mins.	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0
Total Volume	0	3	0	3	2	0	0	2	0	1	0	1	0	0	0	0
% App. Total	0	100	0		100	0	0		0	100	0		0	0	0	
PHF	.000	.750	.000	.750	.500	.000	.000	.500	.000	.250	.000	.250	.000	.000	.000	.000

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City of Jurupa Valley
N/S: Avalon Street
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Weather: Clear

File Name : 06_JVY_Ava_26th PM
Site Code : 05122894
Start Date : 10/4/2022
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Avalon Street Southbound				26th Street Westbound				Avalon Street Northbound				Primavera Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	2	16	0	18	0	0	1	1	1	8	1	10	0	0	0	0	29
03:45 PM	0	10	0	10	1	0	2	3	0	8	0	8	0	0	1	1	22
Total	2	26	0	28	1	0	3	4	1	16	1	18	0	0	1	1	51
04:00 PM	2	14	0	16	0	0	3	3	0	8	2	10	0	0	0	0	29
04:15 PM	3	11	0	14	1	0	1	2	0	9	1	10	0	0	0	0	26
04:30 PM	0	9	0	9	2	0	3	5	0	11	1	12	0	0	0	0	26
04:45 PM	0	10	0	10	1	0	0	1	0	6	0	6	0	0	0	0	17
Total	5	44	0	49	4	0	7	11	0	34	4	38	0	0	0	0	98
05:00 PM	1	8	0	9	1	0	1	2	0	14	2	16	0	0	0	0	27
05:15 PM	0	10	0	10	0	0	0	0	0	11	0	11	0	0	0	0	21
05:30 PM	0	8	0	8	0	0	0	0	0	9	0	9	0	0	0	0	17
05:45 PM	2	13	0	15	0	0	0	0	0	5	0	5	0	0	0	0	20
Total	3	39	0	42	1	0	1	2	0	39	2	41	0	0	0	0	85
Grand Total	10	109	0	119	6	0	11	17	1	89	7	97	0	0	1	1	234
Apprch %	8.4	91.6	0		35.3	0	64.7		1	91.8	7.2		0	0	100		
Total %	4.3	46.6	0	50.9	2.6	0	4.7	7.3	0.4	38	3	41.5	0	0	0.4	0.4	
Passenger Vehicles	7	102	0	109	6	0	7	13	1	87	5	93	0	0	1	1	216
% Passenger Vehicles	70	93.6	0	91.6	100	0	63.6	76.5	100	97.8	71.4	95.9	0	0	100	100	92.3
Large 2 Axle Vehicles	2	4	0	6	0	0	4	4	0	2	0	2	0	0	0	0	12
% Large 2 Axle Vehicles	20	3.7	0	5	0	0	36.4	23.5	0	2.2	0	2.1	0	0	0	0	5.1
3 Axle Vehicles	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
% 3 Axle Vehicles	0	1.8	0	1.7	0	0	0	0	0	0	0	0	0	0	0	0	0.9
4+ Axle Trucks	1	1	0	2	0	0	0	0	0	0	2	2	0	0	0	0	4
% 4+ Axle Trucks	10	0.9	0	1.7	0	0	0	0	0	0	28.6	2.1	0	0	0	0	1.7

	Avalon Street Southbound				26th Street Westbound				Avalon Street Northbound				Primavera Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	2	**16**	0	**18**	0	0	1	1	**1**	8	1	**10**	0	0	0	0	**29**
03:45 PM	0	10	0	10	**1**	0	2	**3**	0	8	0	8	0	0	**1**	**1**	22
04:00 PM	2	14	0	16	0	0	**3**	3	0	8	**2**	10	0	0	0	0	29
04:15 PM	**3**	11	0	14	1	0	1	2	0	**9**	1	10	0	0	0	0	26
Total Volume	7	51	0	58	2	0	7	9	1	33	4	38	0	0	1	1	106
% App. Total	12.1	87.9	0		22.2	0	77.8		2.6	86.8	10.5		0	0	100		
PHF	.583	.797	.000	.806	.500	.000	.583	.750	.250	.917	.500	.950	.000	.000	.250	.250	.914

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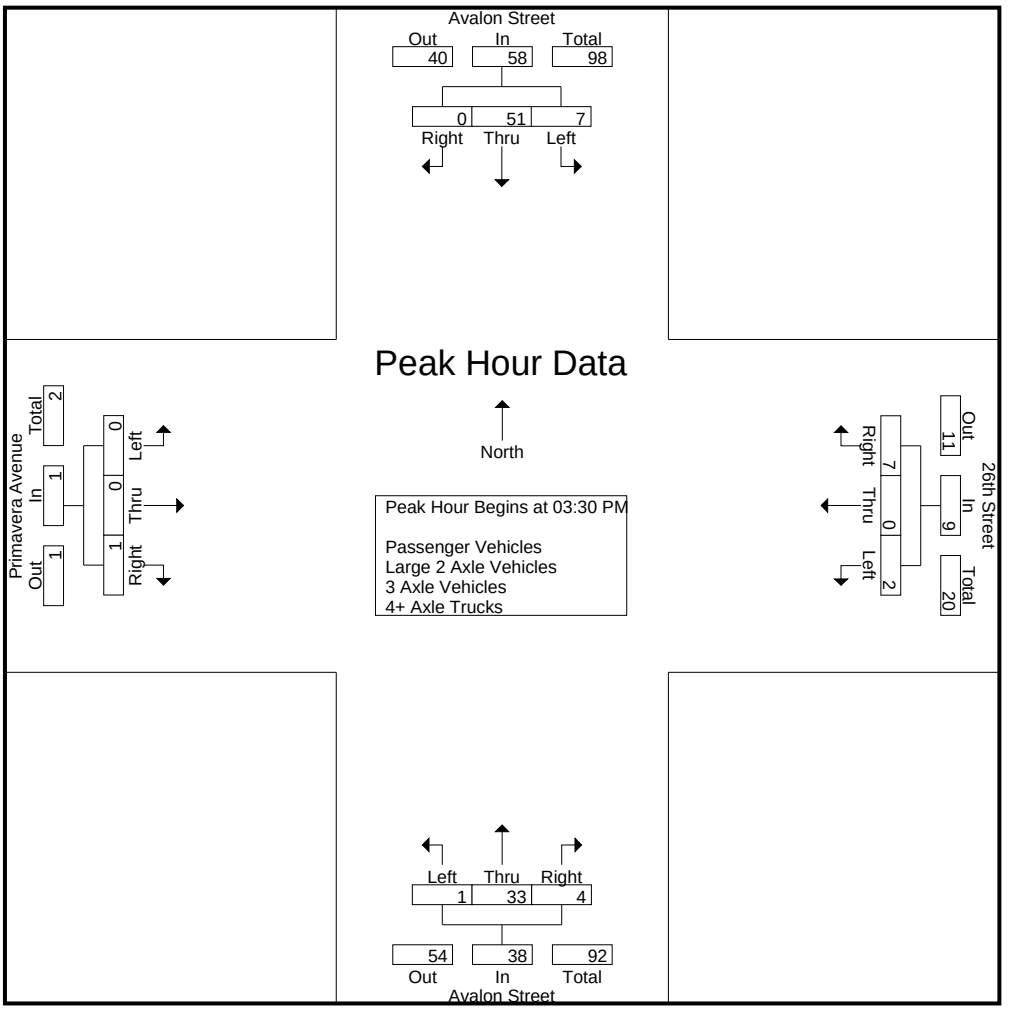
Weather: Clear

File Name : 06_JVY_Ava_26th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM				03:45 PM				04:30 PM				03:30 PM			
+0 mins.	2	**16**	0	**18**	1	0	2	3	0	11	1	12	0	0	0	0
+15 mins.	0	10	0	10	0	0	**3**	3	0	6	0	6	0	0	**1**	**1**
+30 mins.	2	14	0	16	1	0	1	2	0	**14**	**2**	**16**	0	0	0	0
+45 mins.	**3**	11	0	14	**2**	0	3	**5**	0	11	0	11	0	0	0	0
Total Volume	7	51	0	58	4	0	9	13	0	42	3	45	0	0	1	1
% App. Total	12.1	87.9	0		30.8	0	69.2		0	93.3	6.7		0	0	100	
PHF	.583	.797	.000	.806	.500	.000	.750	.650	.000	.750	.375	.703	.000	.000	.250	.250

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File Name : 06_JVY_Ava_26th PM
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Start Date : 10/4/2022
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Groups Printed- Passenger Vehicles

	Avalon Street Southbound				26th Street Westbound				Avalon Street Northbound				Primavera Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	1	15	0	16	0	0	1	1	1	8	1	10	0	0	0	0	27
03:45 PM	0	8	0	8	1	0	0	1	0	8	0	8	0	0	1	1	18
Total	1	23	0	24	1	0	1	2	1	16	1	18	0	0	1	1	45
04:00 PM	2	12	0	14	0	0	3	3	0	8	2	10	0	0	0	0	27
04:15 PM	2	10	0	12	1	0	0	1	0	9	0	9	0	0	0	0	22
04:30 PM	0	9	0	9	2	0	3	5	0	11	1	12	0	0	0	0	26
04:45 PM	0	10	0	10	1	0	0	1	0	5	0	5	0	0	0	0	16
Total	4	41	0	45	4	0	6	10	0	33	3	36	0	0	0	0	91
05:00 PM	0	7	0	7	1	0	0	1	0	14	1	15	0	0	0	0	23
05:15 PM	0	10	0	10	0	0	0	0	0	10	0	10	0	0	0	0	20
05:30 PM	0	8	0	8	0	0	0	0	0	9	0	9	0	0	0	0	17
05:45 PM	2	13	0	15	0	0	0	0	0	5	0	5	0	0	0	0	20
Total	2	38	0	40	1	0	0	1	0	38	1	39	0	0	0	0	80
Grand Total	7	102	0	109	6	0	7	13	1	87	5	93	0	0	1	1	216
Apprch %	6.4	93.6	0		46.2	0	53.8		1.1	93.5	5.4		0	0	100		
Total %	3.2	47.2	0	50.5	2.8	0	3.2	6	0.5	40.3	2.3	43.1	0	0	0.5	0.5	

	Avalon Street Southbound				26th Street Westbound				Avalon Street Northbound				Primavera Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	1	**15**	0	**16**	0	0	1	1	**1**	8	1	**10**	0	0	0	0	**27**
03:45 PM	0	8	0	8	**1**	0	0	1	0	8	0	8	0	0	**1**	**1**	18
04:00 PM	**2**	12	0	14	0	0	**3**	**3**	0	8	**2**	10	0	0	0	0	27
04:15 PM	2	10	0	12	1	0	0	1	0	**9**	0	9	0	0	0	0	22
Total Volume	5	45	0	50	2	0	4	6	1	33	3	37	0	0	1	1	94
% App. Total	10	90	0		33.3	0	66.7		2.7	89.2	8.1		0	0	100		
PHF	.625	.750	.000	.781	.500	.000	.333	.500	.250	.917	.375	.925	.000	.000	.250	.250	.870

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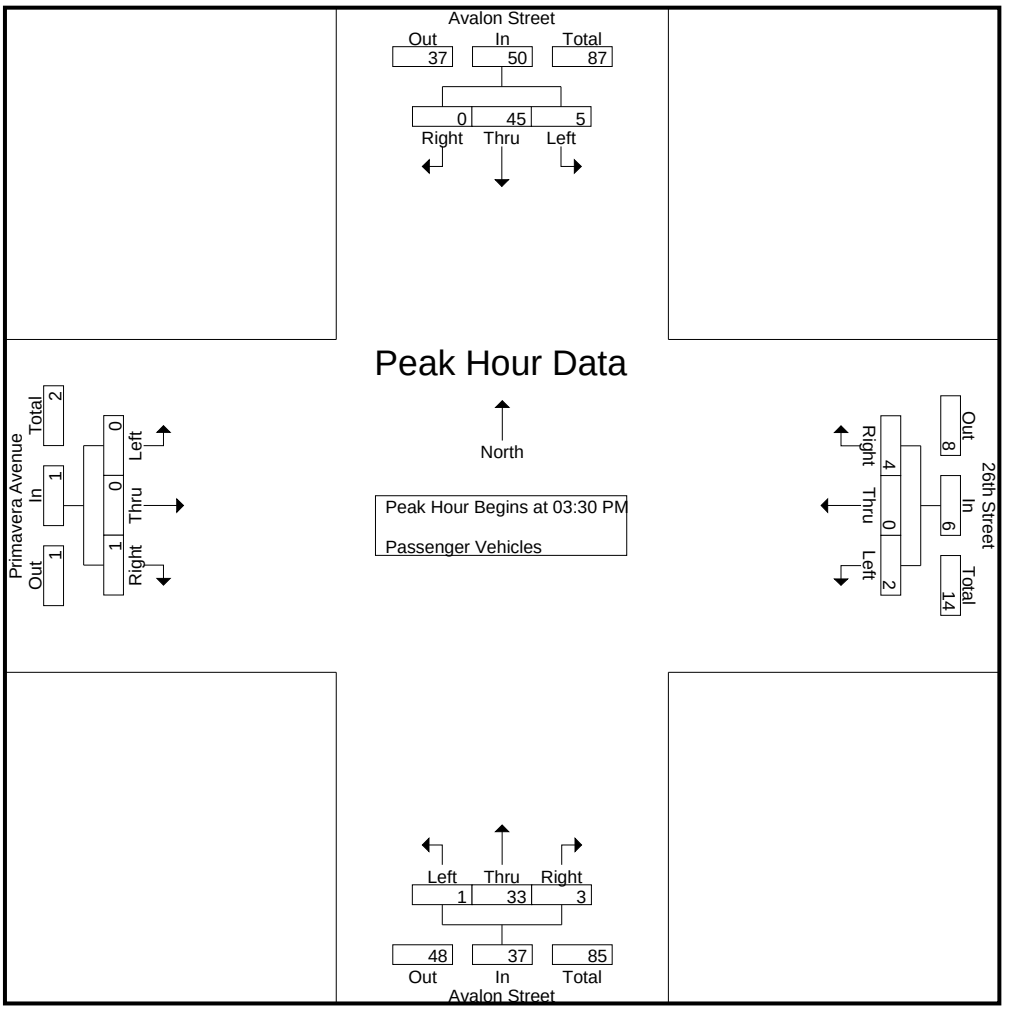

Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM				03:30 PM				03:30 PM				03:30 PM			
+0 mins.	1	**15**	0	**16**	0	0	1	1	**1**	8	1	**10**	0	0	0	0
+15 mins.	0	8	0	8	**1**	0	0	1	0	8	0	8	0	0	**1**	**1**
+30 mins.	**2**	12	0	14	0	0	**3**	**3**	0	8	**2**	10	0	0	0	0
+45 mins.	2	10	0	12	1	0	0	1	0	**9**	0	9	0	0	0	0
Total Volume	5	45	0	50	2	0	4	6	1	33	3	37	0	0	1	1
% App. Total	10	90	0		33.3	0	66.7		2.7	89.2	8.1		0	0	100	
PHF	.625	.750	.000	.781	.500	.000	.333	.500	.250	.917	.375	.925	.000	.000	.250	.250

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City of Jurupa Valley
N/S: Avalon Street
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Weather: Clear

File Name : 06_JVY_Ava_26th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Avalon Street Southbound				26th Street Westbound				Avalon Street Northbound				Primavera Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	2	0	2	0	0	2	2	0	0	0	0	0	0	0	0	4
Total	0	2	0	2	0	0	2	2	0	0	0	0	0	0	0	0	4
04:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	1	1	0	2	0	0	1	1	0	1	0	1	0	0	0	0	4
05:00 PM	1	1	0	2	0	0	1	1	0	0	0	0	0	0	0	0	3
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	1	0	2	0	0	1	1	0	1	0	1	0	0	0	0	4
Grand Total	2	4	0	6	0	0	4	4	0	2	0	2	0	0	0	0	12
Apprch %	33.3	66.7	0		0	0	100		0	100	0		0	0	0		
Total %	16.7	33.3	0	50	0	0	33.3	33.3	0	16.7	0	16.7	0	0	0	0	

	Avalon Street Southbound				26th Street Westbound				Avalon Street Northbound				Primavera Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	**2**	0	**2**	0	0	**2**	**2**	0	0	0	0	0	0	0	0	**4**
04:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	**1**	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
Total Volume	1	3	0	4	0	0	3	3	0	0	0	0	0	0	0	0	7
% App. Total	25	75	0		0	0	100		0	0	0		0	0	0		
PHF	.250	.375	.000	.500	.000	.000	.375	.375	.000	.000	.000	.000	.000	.000	.000	.000	.438

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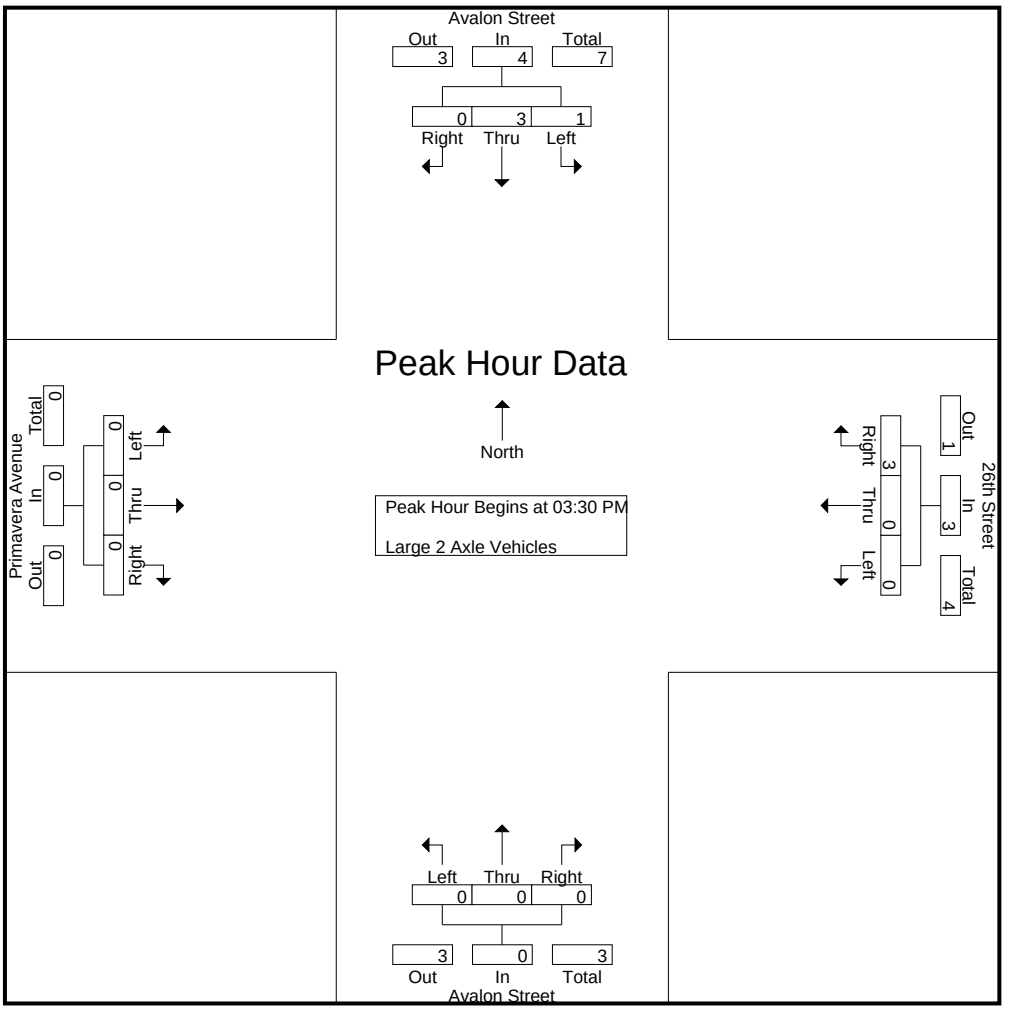

Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM				03:30 PM				03:30 PM				03:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	**2**	0	**2**	0	0	**2**	**2**	0	0	0	0	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	**1**	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0
Total Volume	1	3	0	4	0	0	3	3	0	0	0	0	0	0	0	0
% App. Total	25	75	0		0	0	100		0	0	0		0	0	0	
PHF	.250	.375	.000	.500	.000	.000	.375	.375	.000	.000	.000	.000	.000	.000	.000	.000

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Weather: Clear

File Name : 06_JVY_Ava_26th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Avalon Street Southbound				26th Street Westbound				Avalon Street Northbound				Primavera Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Apprch %	0	100	0		0	0	0		0	0	0		0	0	0		
Total %	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	

	Avalon Street Southbound				26th Street Westbound				Avalon Street Northbound				Primavera Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	**1**
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500

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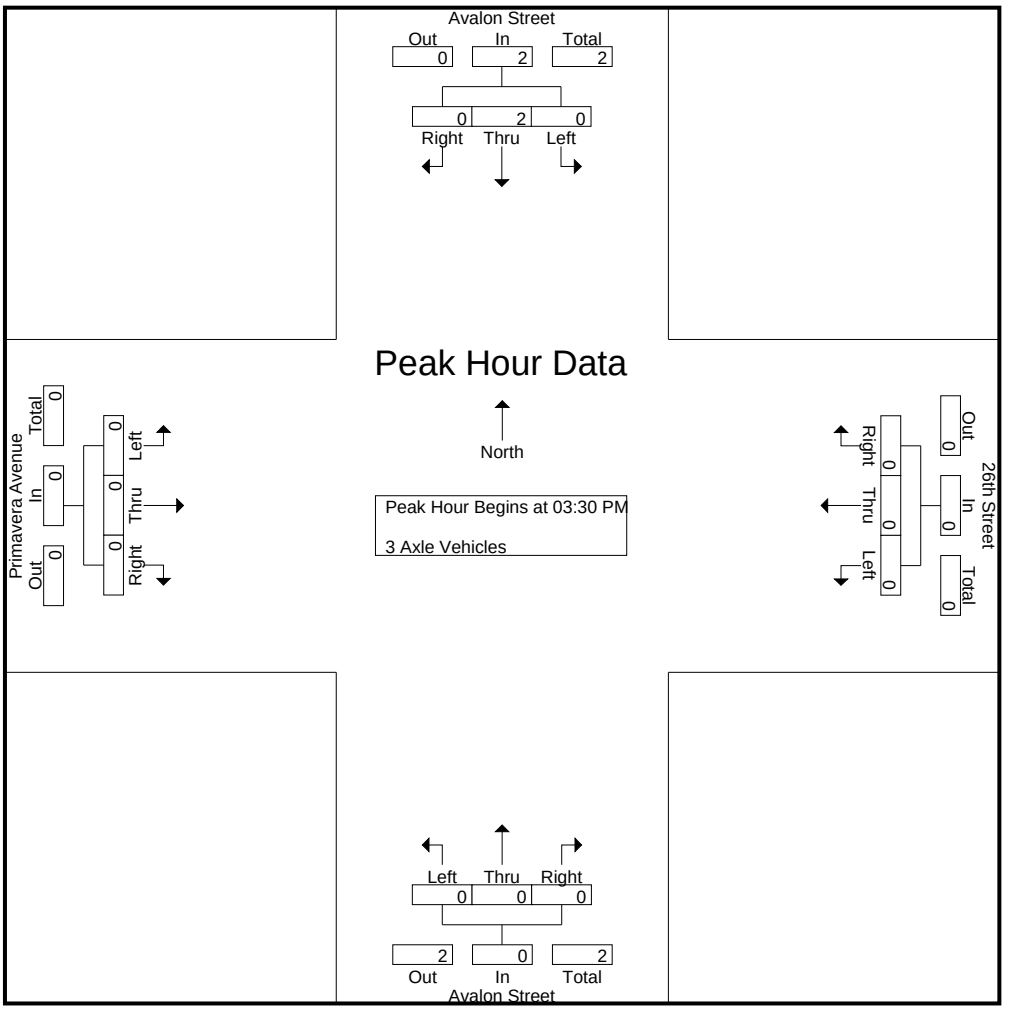
City of Jurupa Valley
N/S: Avalon Street
E/W: Primavera Avenue/26th Street
Weather: Clear

File Name : 06_JVY_Ava_26th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM				03:30 PM				03:30 PM				03:30 PM			
+0 mins.	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0	
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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City of Jurupa Valley
N/S: Avalon Street
E/W: Primavera Avenue/26th Street
Weather: Clear

File Name : 06_JVY_Ava_26th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Avalon Street Southbound				26th Street Westbound				Avalon Street Northbound				Primavera Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Grand Total	1	1	0	2	0	0	0	0	0	0	2	2	0	0	0	0	4
Apprch %	50	50	0		0	0	0		0	0	100		0	0	0		
Total %	25	25	0	50	0	0	0	0	0	0	50	50	0	0	0	0	

	Avalon Street Southbound				26th Street Westbound				Avalon Street Northbound				Primavera Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	**1**	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	1
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	**1**	0	1	0	0	0	0	0	0	**1**	**1**	0	0	0	0	**2**
Total Volume	1	1	0	2	0	0	0	0	0	0	1	1	0	0	0	0	3
% App. Total	50	50	0		0	0	0		0	0	100		0	0	0		
PHF	.250	.250	.000	.500	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.000	.000	.375

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City of Jurupa Valley
N/S: Avalon Street
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Weather: Clear

File Name : 06_JVY_Ava_26th PM
Site Code : 05122894
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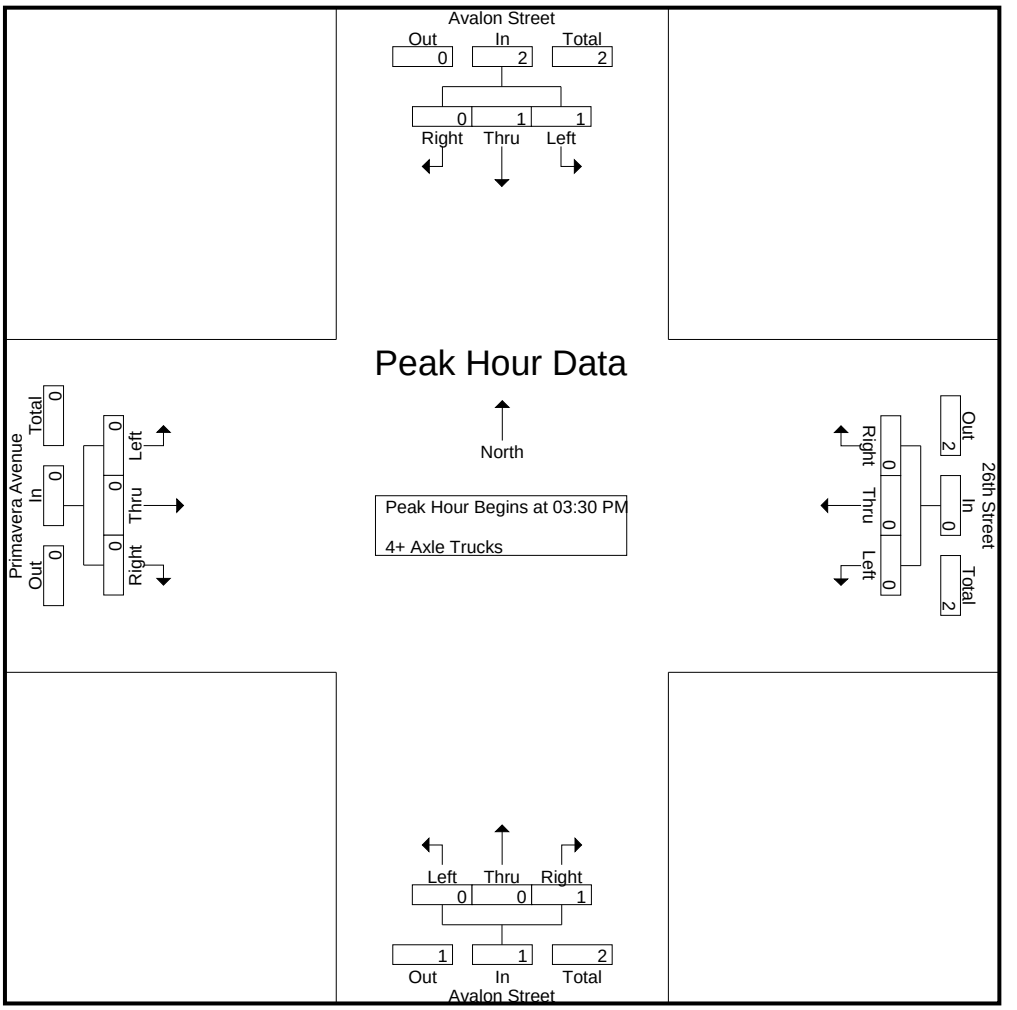
Page No : 2



Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM				03:30 PM				03:30 PM				03:30 PM			
+0 mins.	**1**	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	**1**	0	1	0	0	0	0	0	0	**1**	**1**	0	0	0	0
Total Volume	1	1	0	2	0	0	0	0	0	0	1	1	0	0	0	0
% App. Total	50	50	0		0	0	0		0	0	100		0	0	0	
PHF	.250	.250	.000	.500	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.000	.000

Location: Jurupa Valley
N/S: Avalon Street
E/W: Primavera Ave/26th St

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Avalon Street Pedestrians	East Leg 26th Street Pedestrians	South Leg Avalon Street Pedestrians	West Leg Primavera Ave Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	2	0	2	4
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	2	4

	North Leg Avalon Street Pedestrians	East Leg 26th Street Pedestrians	South Leg Avalon Street Pedestrians	West Leg Primavera Ave Pedestrians	
3:30 PM	0	0	1	0	1
3:45 PM	0	0	0	1	1
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	1	2

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Location: Jurupa Valley
N/S: Avalon Street
E/W: Primavera Ave/26th St

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Avalon Street			Westbound 26th Street			Northbound Avalon Street			Eastbound Primavera Ave			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	0	0	0	0	1

	Southbound Avalon Street			Westbound 26th Street			Northbound Avalon Street			Eastbound Primavera Ave			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	0	0	0	0	1

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County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 08_CSB_Ced_10W AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Cedar Avenue Southbound					I-10 Westbound Off Ramp Westbound					Cedar Avenue Northbound					I-10 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	285	168	67	453	82	0	74	39	156	64	174	0	0	238	0	0	0	0	0	106	847	953
06:45 AM	0	245	128	59	373	86	0	95	29	181	67	246	0	0	313	0	0	0	0	0	88	867	955
Total	0	530	296	126	826	168	0	169	68	337	131	420	0	0	551	0	0	0	0	0	194	1714	1908
07:00 AM	0	283	170	79	453	77	0	85	33	162	45	223	0	0	268	0	0	0	0	0	112	883	995
07:15 AM	0	342	179	74	521	83	0	87	26	170	59	234	0	0	293	0	0	0	0	0	100	984	1084
07:30 AM	0	368	122	61	490	109	0	93	14	202	38	269	0	0	307	0	0	0	0	0	75	999	1074
07:45 AM	0	353	124	61	477	108	0	88	31	196	32	258	0	0	290	0	0	0	0	0	92	963	1055
Total	0	1346	595	275	1941	377	0	353	104	730	174	984	0	0	1158	0	0	0	0	0	379	3829	4208
08:00 AM	0	296	125	59	421	100	0	86	31	186	43	238	0	0	281	0	0	0	0	0	90	888	978
08:15 AM	0	291	151	76	442	93	1	69	31	163	42	238	0	0	280	0	0	0	0	0	107	885	992
08:30 AM	0	284	105	54	389	68	0	64	35	132	48	214	0	0	262	0	0	0	0	0	89	783	872
08:45 AM	0	296	108	54	404	75	1	82	19	158	5	153	0	0	158	0	0	0	0	0	73	720	793
Total	0	1167	489	243	1656	336	2	301	116	639	138	843	0	0	981	0	0	0	0	0	359	3276	3635
Grand Total	0	3043	1380	644	4423	881	2	823	288	1706	443	2247	0	0	2690	0	0	0	0	0	932	8819	9751
Apprch %	0	68.8	31.2			51.6	0.1	48.2			16.5	83.5	0			0	0	0					
Total %	0	34.5	15.6		50.2	10	0	9.3		19.3	5	25.5	0		30.5	0	0	0		0	9.6	90.4	
Passenger Vehicles	0	2919	1301		4829	805	1	774		1847	351	2069	0		2420	0	0	0		0	0	0	9096
% Passenger Vehicles	0	95.9	94.3	94.6	95.3	91.4	50	94	92.7	92.6	79.2	92.1	0	0	90	0	0	0	0	0	0	0	93.3
Large 2 Axle Vehicles	0	65	28		104	21	1	25		57	35	76	0		111	0	0	0		0	0	0	272
% Large 2 Axle Vehicles	0	2.1	2	1.7	2.1	2.4	50	3	3.5	2.9	7.9	3.4	0	0	4.1	0	0	0	0	0	0	0	2.8
3 Axle Vehicles	0	15	13		31	17	0	8		29	17	38	0		55	0	0	0		0	0	0	115
% 3 Axle Vehicles	0	0.5	0.9	0.5	0.6	1.9	0	1	1.4	1.5	3.8	1.7	0	0	2	0	0	0	0	0	0	0	1.2
4+ Axle Trucks	0	44	38		103	38	0	16		61	40	64	0		104	0	0	0		0	0	0	268
% 4+ Axle Trucks	0	1.4	2.8	3.3	2	4.3	0	1.9	2.4	3.1	9	2.8	0	0	3.9	0	0	0	0	0	0	0	2.7

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County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 08_CSB_Ced_10W AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				I-10 Westbound Off Ramp Westbound				Cedar Avenue Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	342	**179**	**521**	83	0	87	170	**59**	234	0	293	0	0	0	0	984
07:30 AM	0	**368**	122	490	**109**	0	**93**	**202**	38	**269**	0	**307**	0	0	0	0	**999**
07:45 AM	0	353	124	477	108	0	88	196	32	258	0	290	0	0	0	0	963
08:00 AM	0	296	125	421	100	0	86	186	43	238	0	281	0	0	0	0	888
Total Volume	0	1359	550	1909	400	0	354	754	172	999	0	1171	0	0	0	0	3834
% App. Total	0	71.2	28.8		53.1	0	46.9		14.7	85.3	0		0	0	0		
PHF	.000	.923	.768	.916	.917	.000	.952	.933	.729	.928	.000	.954	.000	.000	.000	.000	.959

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County of San Bernardino
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File Name : 08_CSB_Ced_10W AM
Site Code : 05122894
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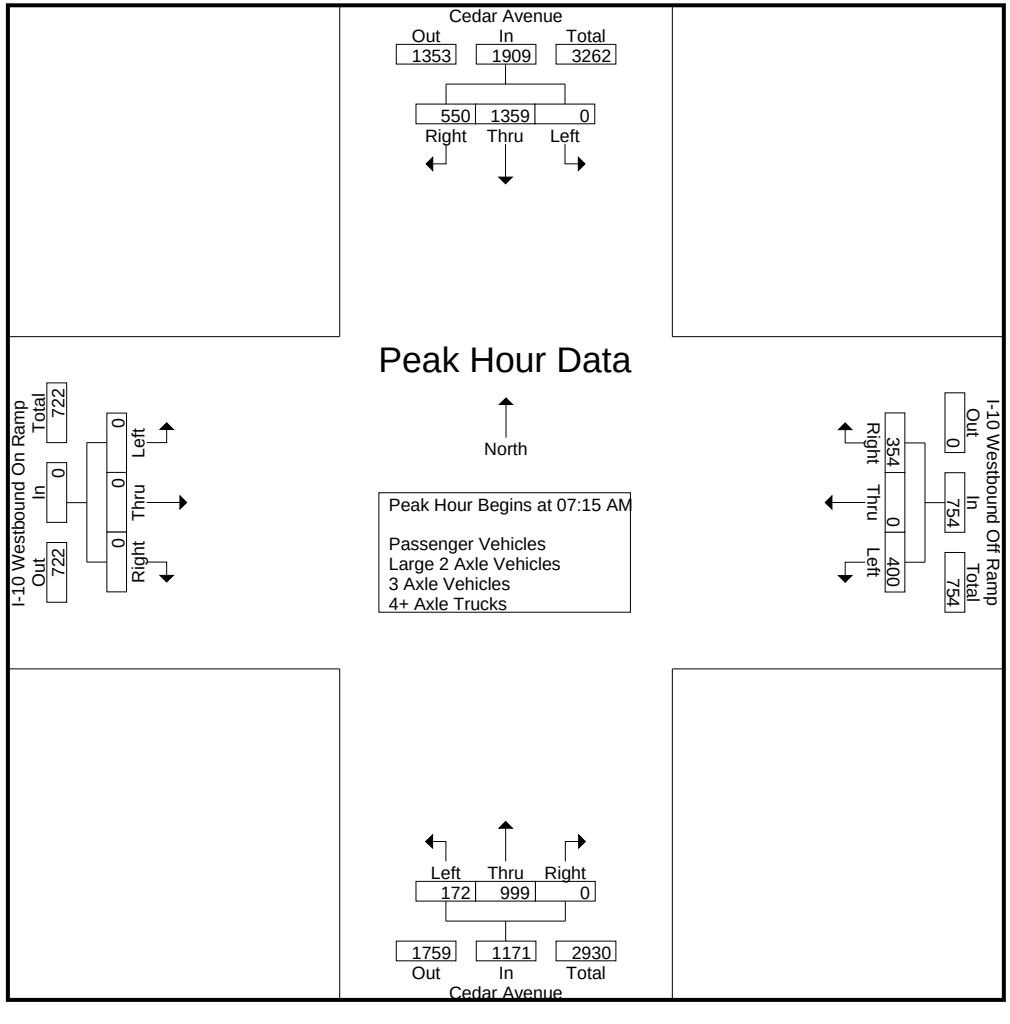

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County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 08_CSB_Ced_10W AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				I-10 Westbound Off Ramp Westbound				Cedar Avenue Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:15 AM				06:45 AM				06:30 AM				
+0 mins.	0	283	170	453	83	0	87	170	**67**	246	0	**313**	0	0	0	0	
+15 mins.	0	342	**179**	**521**	**109**	0	**93**	**202**	45	223	0	268	0	0	0	0	
+30 mins.	0	**368**	122	490	108	0	88	196	59	234	0	293	0	0	0	0	
+45 mins.	0	353	124	477	100	0	86	186	38	**269**	0	307	0	0	0	0	
Total Volume	0	1346	595	1941	400	0	354	754	209	972	0	1181	0	0	0	0	
% App. Total	0	69.3	30.7		53.1	0	46.9		17.7	82.3	0		0	0	0		
PHF	.000	.914	.831	.931	.917	.000	.952	.933	.780	.903	.000	.943	.000	.000	.000	.000	

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File Name : 08_CSB_Ced_10W AM
Site Code : 05122894
Start Date : 10/4/2022
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Groups Printed- Passenger Vehicles

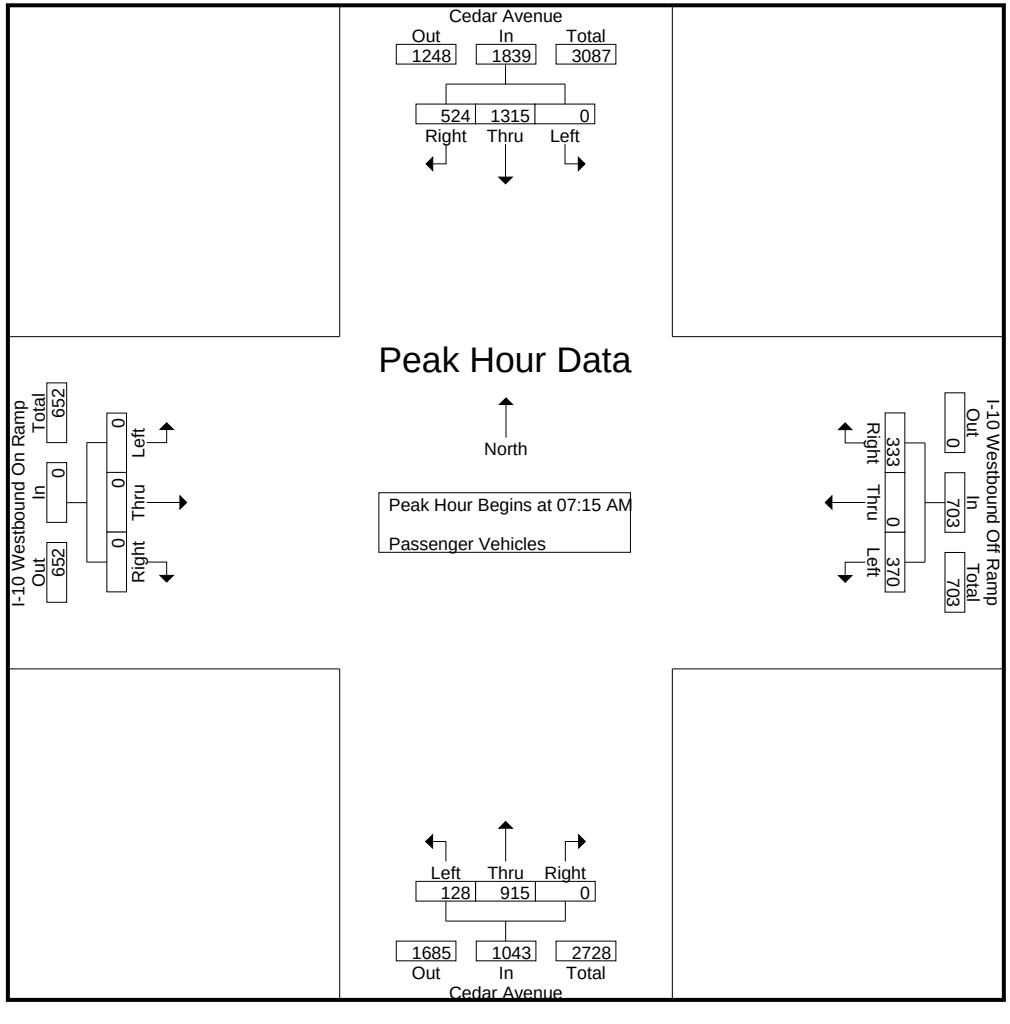
	Cedar Avenue Southbound					I-10 Westbound Off Ramp Westbound					Cedar Avenue Northbound					I-10 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	271	161	62	432	71	0	71	38	142	55	161	0	0	216	0	0	0	0	0	100	790	890
06:45 AM	0	235	121	58	356	81	0	86	26	167	56	231	0	0	287	0	0	0	0	0	84	810	894
Total	0	506	282	120	788	152	0	157	64	309	111	392	0	0	503	0	0	0	0	0	184	1600	1784
07:00 AM	0	274	163	75	437	70	0	82	31	152	39	203	0	0	242	0	0	0	0	0	106	831	937
07:15 AM	0	334	173	72	507	75	0	82	23	157	47	213	0	0	260	0	0	0	0	0	95	924	1019
07:30 AM	0	359	117	58	476	103	0	92	14	195	27	250	0	0	277	0	0	0	0	0	72	948	1020
07:45 AM	0	344	117	58	461	102	0	81	28	183	22	239	0	0	261	0	0	0	0	0	86	905	991
Total	0	1311	570	263	1881	350	0	337	96	687	135	905	0	0	1040	0	0	0	0	0	359	3608	3967
08:00 AM	0	278	117	55	395	90	0	78	27	168	32	213	0	0	245	0	0	0	0	0	82	808	890
08:15 AM	0	276	140	71	416	84	0	66	30	150	31	220	0	0	251	0	0	0	0	0	101	817	918
08:30 AM	0	269	94	53	363	64	0	58	34	122	38	198	0	0	236	0	0	0	0	0	87	721	808
08:45 AM	0	279	98	47	377	65	1	78	16	144	4	141	0	0	145	0	0	0	0	0	63	666	729
Total	0	1102	449	226	1551	303	1	280	107	584	105	772	0	0	877	0	0	0	0	0	333	3012	3345
Grand Total	0	2919	1301	609	4220	805	1	774	267	1580	351	2069	0	0	2420	0	0	0	0	0	876	8220	9096
Apprch %	0	69.2	30.8			50.9	0.1	49			14.5	85.5	0			0	0	0					
Total %	0	35.5	15.8		51.3	9.8	0	9.4		19.2	4.3	25.2	0		29.4	0	0	0		0	9.6	90.4	

	Cedar Avenue Southbound				I-10 Westbound Off Ramp Westbound				Cedar Avenue Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	334	**173**	**507**	75	0	82	157	**47**	213	0	260	0	0	0	0	924
07:30 AM	0	**359**	117	476	**103**	0	**92**	**195**	27	**250**	0	**277**	0	0	0	0	**948**
07:45 AM	0	344	117	461	102	0	81	183	22	239	0	261	0	0	0	0	905
08:00 AM	0	278	117	395	90	0	78	168	32	213	0	245	0	0	0	0	808
Total Volume	0	1315	524	1839	370	0	333	703	128	915	0	1043	0	0	0	0	3585
% App. Total	0	71.5	28.5		52.6	0	47.4		12.3	87.7	0		0	0	0		
PHF	.000	.916	.757	.907	.898	.000	.905	.901	.681	.915	.000	.941	.000	.000	.000	.000	.945

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 08_CSB_Ced_10W AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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Corona, CA 92878
(951)268-6268

County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 08_CSB_Ced_10W AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				I-10 Westbound Off Ramp Westbound				Cedar Avenue Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	334	**173**	**507**	75	0	82	157	**47**	213	0	260	0	0	0	0	
+15 mins.	0	**359**	117	476	**103**	0	**92**	**195**	27	**250**	0	**277**	0	0	0	0	
+30 mins.	0	344	117	461	102	0	81	183	22	239	0	261	0	0	0	0	
+45 mins.	0	278	117	395	90	0	78	168	32	213	0	245	0	0	0	0	
Total Volume	0	1315	524	1839	370	0	333	703	128	915	0	1043	0	0	0	0	
% App. Total	0	71.5	28.5		52.6	0	47.4		12.3	87.7	0		0	0	0		
PHF	.000	.916	.757	.907	.898	.000	.905	.901	.681	.915	.000	.941	.000	.000	.000	.000	

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County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 08_CSB_Ced_10W AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

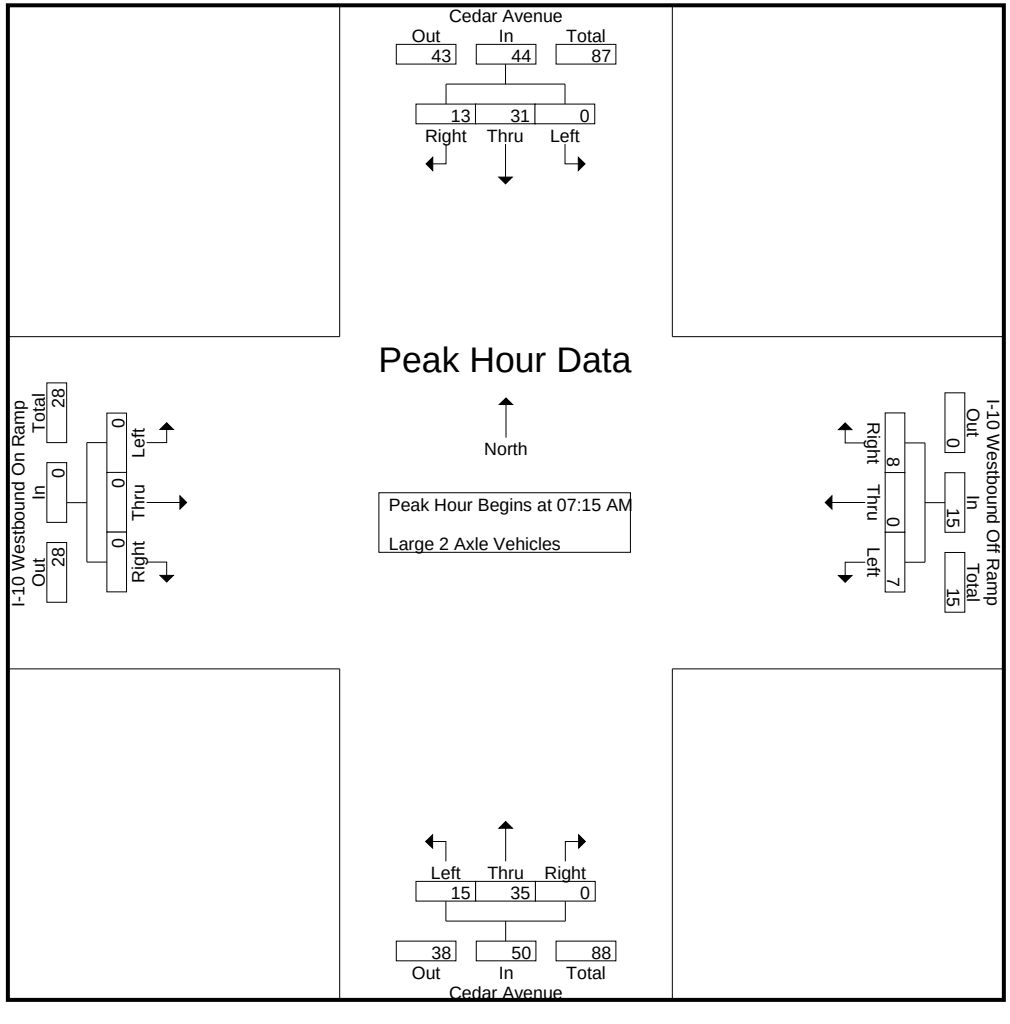
	Cedar Avenue Southbound					I-10 Westbound Off Ramp Westbound					Cedar Avenue Northbound					I-10 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	6	1	0	7	6	0	2	1	8	5	5	0	0	10	0	0	0	0	0	1	25	26
06:45 AM	0	4	2	1	6	2	0	7	2	9	6	10	0	0	16	0	0	0	0	0	3	31	34
Total	0	10	3	1	13	8	0	9	3	17	11	15	0	0	26	0	0	0	0	0	4	56	60
07:00 AM	0	5	4	3	9	1	0	3	2	4	3	7	0	0	10	0	0	0	0	0	5	23	28
07:15 AM	0	5	1	0	6	0	0	2	0	2	3	12	0	0	15	0	0	0	0	0	0	23	23
07:30 AM	0	7	3	2	10	2	0	1	0	3	5	5	0	0	10	0	0	0	0	0	2	23	25
07:45 AM	0	6	3	1	9	3	0	2	1	5	3	9	0	0	12	0	0	0	0	0	2	26	28
Total	0	23	11	6	34	6	0	8	3	14	14	33	0	0	47	0	0	0	0	0	9	95	104
08:00 AM	0	13	6	2	19	2	0	3	1	5	4	9	0	0	13	0	0	0	0	0	3	37	40
08:15 AM	0	7	0	0	7	1	1	1	1	3	4	7	0	0	11	0	0	0	0	0	1	21	22
08:30 AM	0	5	6	1	11	0	0	3	1	3	2	8	0	0	10	0	0	0	0	0	2	24	26
08:45 AM	0	7	2	1	9	4	0	1	1	5	0	4	0	0	4	0	0	0	0	0	2	18	20
Total	0	32	14	4	46	7	1	8	4	16	10	28	0	0	38	0	0	0	0	0	8	100	108
Grand Total	0	65	28	11	93	21	1	25	10	47	35	76	0	0	111	0	0	0	0	0	21	251	272
Apprch %	0	69.9	30.1			44.7	2.1	53.2			31.5	68.5	0			0	0	0					
Total %	0	25.9	11.2		37.1	8.4	0.4	10		18.7	13.9	30.3	0		44.2	0	0	0		0	7.7	92.3	

	Cedar Avenue Southbound				I-10 Westbound Off Ramp Westbound				Cedar Avenue Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	5	1	6	0	0	2	2	3	**12**	0	**15**	0	0	0	0	23
07:30 AM	0	7	3	10	2	0	1	3	**5**	5	0	10	0	0	0	0	23
07:45 AM	0	6	3	9	**3**	0	2	**5**	3	9	0	12	0	0	0	0	26
08:00 AM	0	**13**	**6**	**19**	2	0	**3**	5	4	9	0	13	0	0	0	0	**37**
Total Volume	0	31	13	44	7	0	8	15	15	35	0	50	0	0	0	0	109
% App. Total	0	70.5	29.5		46.7	0	53.3		30	70	0		0	0	0		
PHF	.000	.596	.542	.579	.583	.000	.667	.750	.750	.729	.000	.833	.000	.000	.000	.000	.736

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 08_CSB_Ced_10W AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 08_CSB_Ced_10W AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				I-10 Westbound Off Ramp Westbound				Cedar Avenue Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	5	1	6	0	0	2	2	3	**12**	0	**15**	0	0	0	0	
+15 mins.	0	7	3	10	2	0	1	3	**5**	5	0	10	0	0	0	0	
+30 mins.	0	6	3	9	**3**	0	2	**5**	3	9	0	12	0	0	0	0	
+45 mins.	0	**13**	**6**	**19**	2	0	**3**	5	4	9	0	13	0	0	0	0	
Total Volume	0	31	13	44	7	0	8	15	15	35	0	50	0	0	0	0	
% App. Total	0	70.5	29.5		46.7	0	53.3		30	70	0		0	0	0		
PHF	.000	.596	.542	.579	.583	.000	.667	.750	.750	.729	.000	.833	.000	.000	.000	.000	

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County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 08_CSB_Ced_10W AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

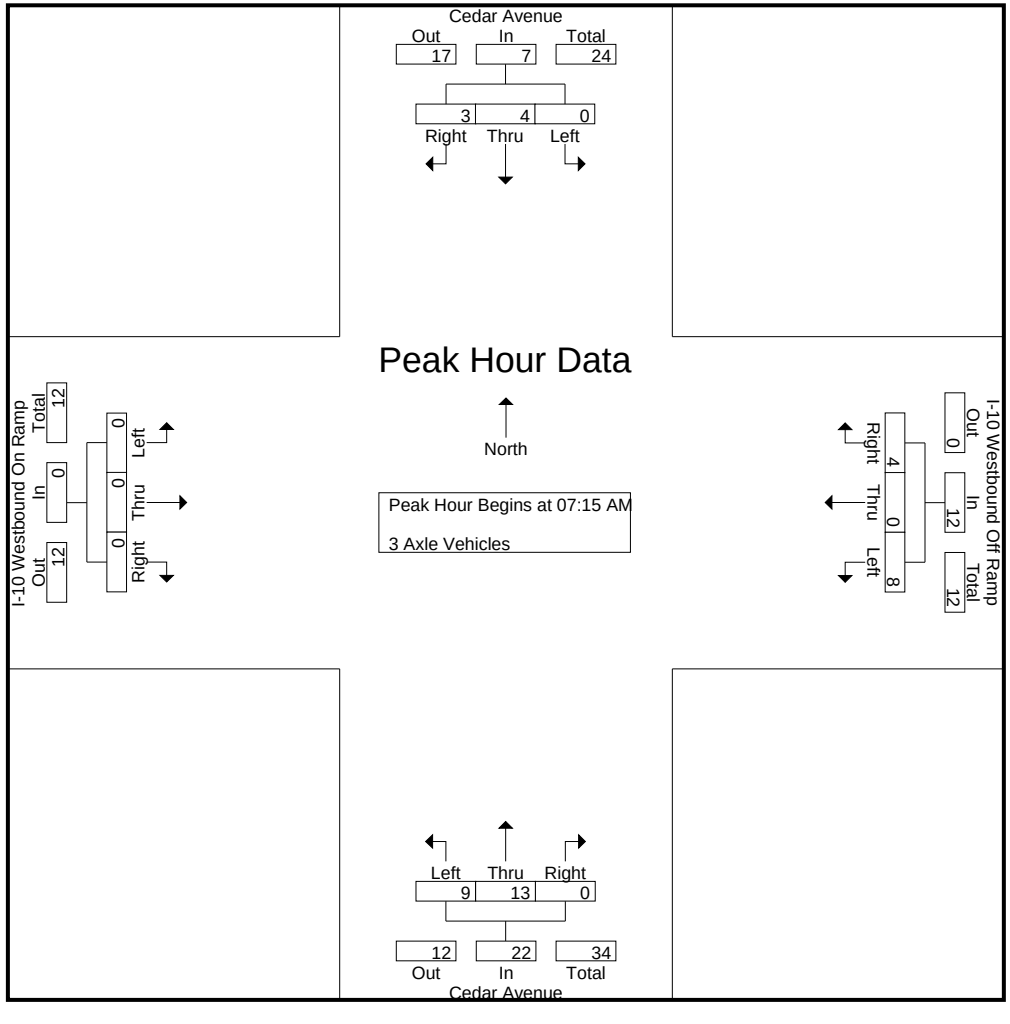
	Cedar Avenue Southbound					I-10 Westbound Off Ramp Westbound					Cedar Avenue Northbound					I-10 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	1	3	2	4	2	0	0	0	2	0	4	0	0	4	0	0	0	0	0	2	10	12
06:45 AM	0	2	3	0	5	1	0	1	0	2	2	3	0	0	5	0	0	0	0	0	0	12	12
Total	0	3	6	2	9	3	0	1	0	4	2	7	0	0	9	0	0	0	0	0	2	22	24
07:00 AM	0	1	1	0	2	1	0	0	0	1	2	5	0	0	7	0	0	0	0	0	0	10	10
07:15 AM	0	0	1	0	1	3	0	0	0	3	3	3	0	0	6	0	0	0	0	0	0	10	10
07:30 AM	0	0	0	0	0	1	0	0	0	1	3	6	0	0	9	0	0	0	0	0	0	10	10
07:45 AM	0	1	2	0	3	0	0	1	0	1	2	2	0	0	4	0	0	0	0	0	0	8	8
Total	0	2	4	0	6	5	0	1	0	6	10	16	0	0	26	0	0	0	0	0	0	38	38
08:00 AM	0	3	0	0	3	4	0	3	3	7	1	2	0	0	3	0	0	0	0	0	3	13	16
08:15 AM	0	2	1	0	3	4	0	1	0	5	2	4	0	0	6	0	0	0	0	0	0	14	14
08:30 AM	0	2	1	0	3	0	0	0	0	0	2	4	0	0	6	0	0	0	0	0	0	9	9
08:45 AM	0	3	1	1	4	1	0	2	1	3	0	5	0	0	5	0	0	0	0	0	2	12	14
Total	0	10	3	1	13	9	0	6	4	15	5	15	0	0	20	0	0	0	0	0	5	48	53
Grand Total	0	15	13	3	28	17	0	8	4	25	17	38	0	0	55	0	0	0	0	0	7	108	115
Apprch %	0	53.6	46.4			68	0	32			30.9	69.1	0			0	0	0					
Total %	0	13.9	12		25.9	15.7	0	7.4		23.1	15.7	35.2	0		50.9	0	0	0		0	6.1	93.9	

	Cedar Avenue Southbound				I-10 Westbound Off Ramp Westbound				Cedar Avenue Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	1	1	3	0	0	3	**3**	3	0	6	0	0	0	0	10
07:30 AM	0	0	0	0	1	0	0	1	3	**6**	0	**9**	0	0	0	0	10
07:45 AM	0	1	**2**	**3**	0	0	1	1	2	2	0	4	0	0	0	0	8
08:00 AM	0	**3**	0	3	**4**	0	**3**	**7**	1	2	0	3	0	0	0	0	**13**
Total Volume	0	4	3	7	8	0	4	12	9	13	0	22	0	0	0	0	41
% App. Total	0	57.1	42.9		66.7	0	33.3		40.9	59.1	0		0	0	0		
PHF	.000	.333	.375	.583	.500	.000	.333	.429	.750	.542	.000	.611	.000	.000	.000	.000	.788

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 08_CSB_Ced_10W AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 08_CSB_Ced_10W AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				I-10 Westbound Off Ramp Westbound				Cedar Avenue Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	0	1	1	3	0	0	3	**3**	3	0	6	0	0	0	0	
+15 mins.	0	0	0	0	1	0	0	1	3	**6**	0	**9**	0	0	0	0	
+30 mins.	0	1	**2**	**3**	0	0	1	1	2	2	0	4	0	0	0	0	
+45 mins.	0	**3**	0	3	**4**	0	**3**	**7**	1	2	0	3	0	0	0	0	
Total Volume	0	4	3	7	8	0	4	12	9	13	0	22	0	0	0	0	
% App. Total	0	57.1	42.9		66.7	0	33.3		40.9	59.1	0		0	0	0		
PHF	.000	.333	.375	.583	.500	.000	.333	.429	.750	.542	.000	.611	.000	.000	.000	.000	

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County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 08_CSB_Ced_10W AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Cedar Avenue Southbound					I-10 Westbound Off Ramp Westbound					Cedar Avenue Northbound					I-10 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	7	3	3	10	3	0	1	0	4	4	4	0	0	8	0	0	0	0	0	3	22	25
06:45 AM	0	4	2	0	6	2	0	1	1	3	3	2	0	0	5	0	0	0	0	0	1	14	15
Total	0	11	5	3	16	5	0	2	1	7	7	6	0	0	13	0	0	0	0	0	4	36	40
07:00 AM	0	3	2	1	5	5	0	0	0	5	1	8	0	0	9	0	0	0	0	0	1	19	20
07:15 AM	0	3	4	2	7	5	0	3	3	8	6	6	0	0	12	0	0	0	0	0	5	27	32
07:30 AM	0	2	2	1	4	3	0	0	0	3	3	8	0	0	11	0	0	0	0	0	1	18	19
07:45 AM	0	2	2	2	4	3	0	4	2	7	5	8	0	0	13	0	0	0	0	0	4	24	28
Total	0	10	10	6	20	16	0	7	5	23	15	30	0	0	45	0	0	0	0	0	11	88	99
08:00 AM	0	2	2	2	4	4	0	2	0	6	6	14	0	0	20	0	0	0	0	0	2	30	32
08:15 AM	0	6	10	5	16	4	0	1	0	5	5	7	0	0	12	0	0	0	0	0	5	33	38
08:30 AM	0	8	4	0	12	4	0	3	0	7	6	4	0	0	10	0	0	0	0	0	0	29	29
08:45 AM	0	7	7	5	14	5	0	1	1	6	1	3	0	0	4	0	0	0	0	0	6	24	30
Total	0	23	23	12	46	17	0	7	1	24	18	28	0	0	46	0	0	0	0	0	13	116	129
Grand Total	0	44	38	21	82	38	0	16	7	54	40	64	0	0	104	0	0	0	0	0	28	240	268
Apprch %	0	53.7	46.3			70.4	0	29.6			38.5	61.5	0			0	0	0					
Total %	0	18.3	15.8		34.2	15.8	0	6.7		22.5	16.7	26.7	0		43.3	0	0	0		0	10.4	89.6	

	Cedar Avenue Southbound				I-10 Westbound Off Ramp Westbound				Cedar Avenue Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**3**	**4**	**7**	**5**	0	3	**8**	**6**	6	0	12	0	0	0	0	27
07:30 AM	0	2	2	4	3	0	0	3	3	8	0	11	0	0	0	0	18
07:45 AM	0	2	2	4	3	0	**4**	7	5	8	0	13	0	0	0	0	24
08:00 AM	0	2	2	4	4	0	2	6	6	**14**	0	**20**	0	0	0	0	**30**
Total Volume	0	9	10	19	15	0	9	24	20	36	0	56	0	0	0	0	99
% App. Total	0	47.4	52.6		62.5	0	37.5		35.7	64.3	0		0	0	0		
PHF	.000	.750	.625	.679	.750	.000	.563	.750	.833	.643	.000	.700	.000	.000	.000	.000	.825

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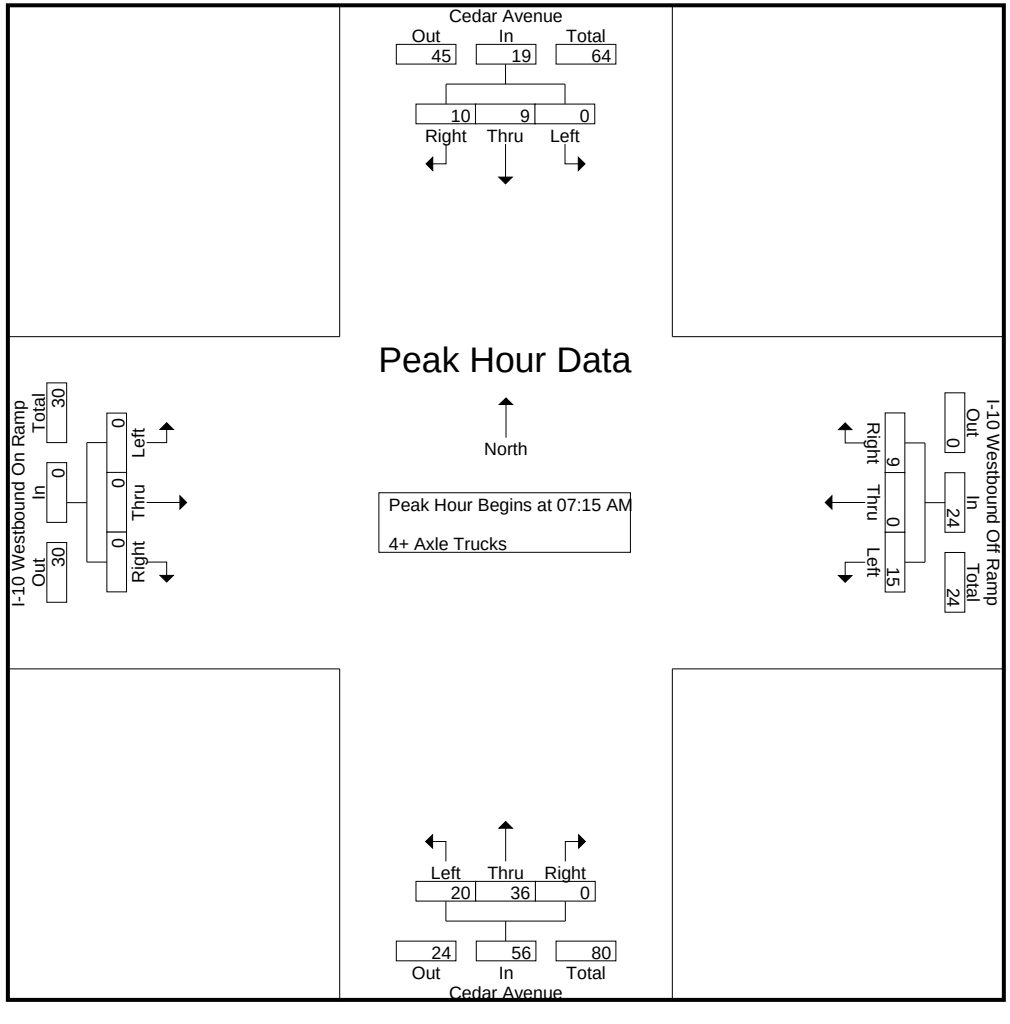
PO Box 1178
Corona, CA 92878
(951)268-6268

County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 08_CSB_Ced_10W AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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File Name : 08_CSB_Ced_10W AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				I-10 Westbound Off Ramp Westbound				Cedar Avenue Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	**3**	**4**	**7**	**5**	0	3	**8**	**6**	6	0	12	0	0	0	0	
+15 mins.	0	2	2	4	3	0	0	3	3	8	0	11	0	0	0	0	
+30 mins.	0	2	2	4	3	0	**4**	7	5	8	0	13	0	0	0	0	
+45 mins.	0	2	2	4	4	0	2	6	6	**14**	0	**20**	0	0	0	0	
Total Volume	0	9	10	19	15	0	9	24	20	36	0	56	0	0	0	0	
% App. Total	0	47.4	52.6		62.5	0	37.5		35.7	64.3	0		0	0	0		
PHF	.000	.750	.625	.679	.750	.000	.563	.750	.833	.643	.000	.700	.000	.000	.000	.000	

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File Name : 08_CSB_Ced_10W PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Cedar Avenue Southbound					I-10 Westbound Off Ramp Westbound					Cedar Avenue Northbound					I-10 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	264	112	53	376	60	1	115	18	176	61	275	0	0	336	0	0	0	0	0	71	888	959
03:45 PM	0	292	110	51	402	49	0	85	14	134	41	272	0	0	313	0	0	0	0	0	65	849	914
Total	0	556	222	104	778	109	1	200	32	310	102	547	0	0	649	0	0	0	0	0	136	1737	1873
04:00 PM	0	272	116	56	388	58	0	94	14	152	37	300	0	0	337	0	0	0	0	0	70	877	947
04:15 PM	0	261	97	42	358	44	1	79	10	124	29	292	0	0	321	0	0	0	0	0	52	803	855
04:30 PM	0	260	95	31	355	66	2	83	4	151	33	304	0	0	337	0	0	0	0	0	35	843	878
04:45 PM	0	327	118	55	445	55	1	103	6	159	26	300	0	0	326	0	0	0	0	0	61	930	991
Total	0	1120	426	184	1546	223	4	359	34	586	125	1196	0	0	1321	0	0	0	0	0	218	3453	3671
05:00 PM	0	299	127	44	426	47	1	70	18	118	30	305	0	0	335	0	0	0	0	0	62	879	941
05:15 PM	0	252	94	44	346	64	0	87	5	151	35	292	0	0	327	0	0	0	0	0	49	824	873
05:30 PM	0	247	103	46	350	69	1	83	6	153	46	281	0	0	327	0	0	0	0	0	52	830	882
05:45 PM	0	282	114	40	396	69	0	81	4	150	22	303	0	0	325	0	0	0	0	0	44	871	915
Total	0	1080	438	174	1518	249	2	321	33	572	133	1181	0	0	1314	0	0	0	0	0	207	3404	3611
Grand Total	0	2756	1086	462	3842	581	7	880	99	1468	360	2924	0	0	3284	0	0	0	0	0	561	8594	9155
Apprch %	0	71.7	28.3			39.6	0.5	59.9			11	89	0			0	0	0					
Total %	0	32.1	12.6		44.7	6.8	0.1	10.2		17.1	4.2	34	0		38.2	0	0	0		0	6.1	93.9	
Passenger Vehicles	0	2637	1023		4101	518	5	835		1454	299	2806	0		3105	0	0	0		0	0	0	8660
% Passenger Vehicles	0	95.7	94.2	95.5	95.3	89.2	71.4	94.9	97	92.8	83.1	96	0	0	94.5	0	0	0	0	0	0	0	94.6
Large 2 Axle Vehicles	0	59	19		84	10	2	18		30	12	39	0		51	0	0	0		0	0	0	165
% Large 2 Axle Vehicles	0	2.1	1.7	1.3	2	1.7	28.6	2	0	1.9	3.3	1.3	0	0	1.6	0	0	0	0	0	0	0	1.8
3 Axle Vehicles	0	21	9		33	16	0	8		25	11	33	0		44	0	0	0		0	0	0	102
% 3 Axle Vehicles	0	0.8	0.8	0.6	0.8	2.8	0	0.9	1	1.6	3.1	1.1	0	0	1.3	0	0	0	0	0	0	0	1.1
4+ Axle Trucks	0	39	35		86	37	0	19		58	38	46	0		84	0	0	0		0	0	0	228
% 4+ Axle Trucks	0	1.4	3.2	2.6	2	6.4	0	2.2	2	3.7	10.6	1.6	0	0	2.6	0	0	0	0	0	0	0	2.5

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County of San Bernardino
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Weather: Clear

File Name : 08_CSB_Ced_10W PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				I-10 Westbound Off Ramp Westbound				Cedar Avenue Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	260	95	355	**66**	**2**	83	151	33	304	0	**337**	0	0	0	0	843
04:45 PM	0	**327**	118	**445**	55	1	**103**	**159**	26	300	0	326	0	0	0	0	**930**
05:00 PM	0	299	**127**	426	47	1	70	118	30	**305**	0	335	0	0	0	0	879
05:15 PM	0	252	94	346	64	0	87	151	**35**	292	0	327	0	0	0	0	824
Total Volume	0	1138	434	1572	232	4	343	579	124	1201	0	1325	0	0	0	0	3476
% App. Total	0	72.4	27.6		40.1	0.7	59.2		9.4	90.6	0		0	0	0		
PHF	.000	.870	.854	.883	.879	.500	.833	.910	.886	.984	.000	.983	.000	.000	.000	.000	.934

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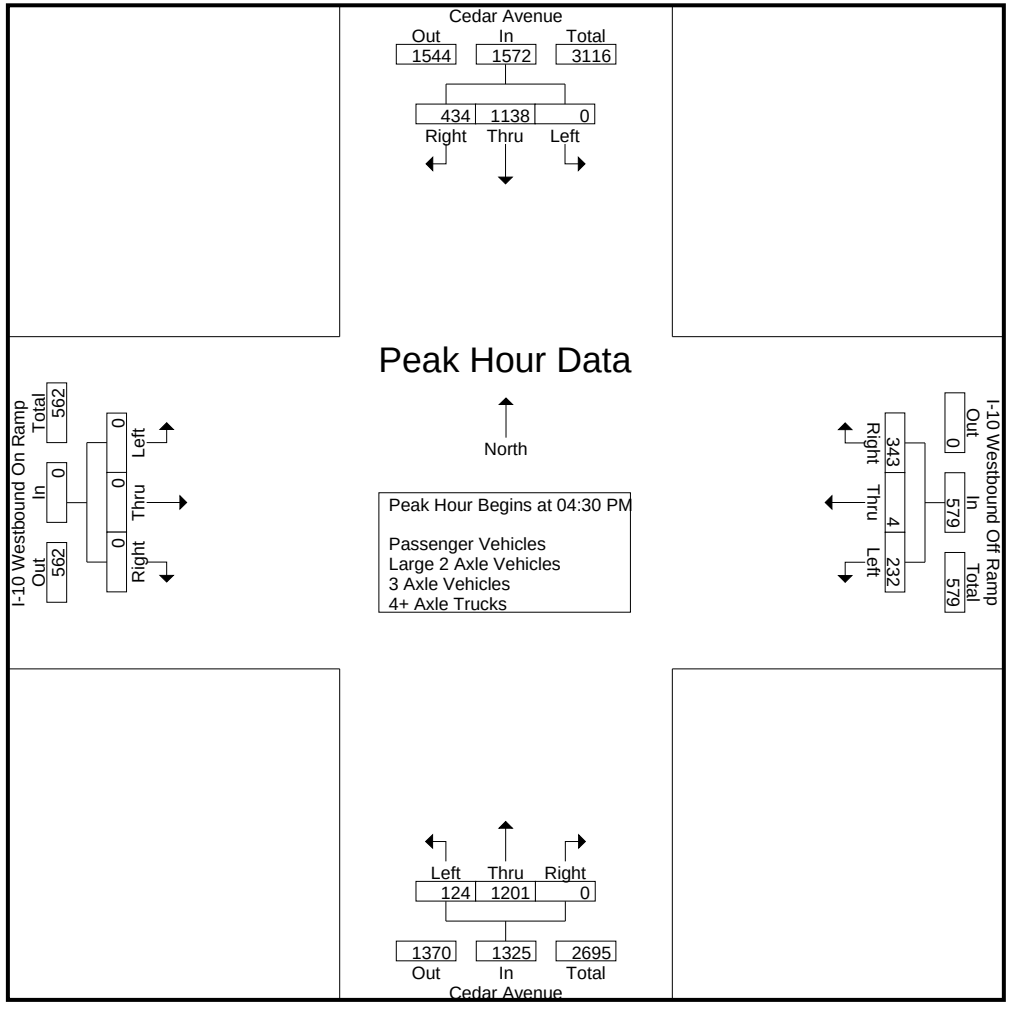
Page No : 3



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Site Code : 05122894
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	Cedar Avenue Southbound				I-10 Westbound Off Ramp Westbound				Cedar Avenue Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				03:30 PM				04:30 PM				03:30 PM				
+0 mins.	0	261	97	358	**60**	**1**	**115**	**176**	33	304	0	**337**	0	0	0	0	
+15 mins.	0	260	95	355	49	0	85	134	26	300	0	326	0	0	0	0	
+30 mins.	0	**327**	118	**445**	58	0	94	152	30	**305**	0	335	0	0	0	0	
+45 mins.	0	299	**127**	426	44	1	79	124	**35**	292	0	327	0	0	0	0	
Total Volume	0	1147	437	1584	211	2	373	586	124	1201	0	1325	0	0	0	0	
% App. Total	0	72.4	27.6		36	0.3	63.7		9.4	90.6	0		0	0	0		
PHF	.000	.877	.860	.890	.879	.500	.811	.832	.886	.984	.000	.983	.000	.000	.000	.000	

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Groups Printed- Passenger Vehicles

	Cedar Avenue Southbound					I-10 Westbound Off Ramp Westbound					Cedar Avenue Northbound					I-10 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	256	107	52	363	52	1	109	16	162	45	260	0	0	305	0	0	0	0	0	68	830	898
03:45 PM	0	274	100	47	374	44	0	81	14	125	38	260	0	0	298	0	0	0	0	0	61	797	858
Total	0	530	207	99	737	96	1	190	30	287	83	520	0	0	603	0	0	0	0	0	129	1627	1756
04:00 PM	0	256	110	54	366	51	0	87	13	138	33	291	0	0	324	0	0	0	0	0	67	828	895
04:15 PM	0	246	86	38	332	39	1	78	10	118	24	281	0	0	305	0	0	0	0	0	48	755	803
04:30 PM	0	251	87	29	338	58	0	78	4	136	28	286	0	0	314	0	0	0	0	0	33	788	821
04:45 PM	0	318	114	55	432	51	1	97	6	149	21	283	0	0	304	0	0	0	0	0	61	885	946
Total	0	1071	397	176	1468	199	2	340	33	541	106	1141	0	0	1247	0	0	0	0	0	209	3256	3465
05:00 PM	0	286	124	42	410	41	1	64	18	106	25	296	0	0	321	0	0	0	0	0	60	837	897
05:15 PM	0	243	88	41	331	56	0	82	5	138	31	284	0	0	315	0	0	0	0	0	46	784	830
05:30 PM	0	236	95	43	331	62	1	81	6	144	36	273	0	0	309	0	0	0	0	0	49	784	833
05:45 PM	0	271	112	40	383	64	0	78	4	142	18	292	0	0	310	0	0	0	0	0	44	835	879
Total	0	1036	419	166	1455	223	2	305	33	530	110	1145	0	0	1255	0	0	0	0	0	199	3240	3439
Grand Total	0	2637	1023	441	3660	518	5	835	96	1358	299	2806	0	0	3105	0	0	0	0	0	537	8123	8660
Apprch %	0	72	28			38.1	0.4	61.5			9.6	90.4	0			0	0	0					
Total %	0	32.5	12.6		45.1	6.4	0.1	10.3		16.7	3.7	34.5	0		38.2	0	0	0		0	6.2	93.8	

	Cedar Avenue Southbound				I-10 Westbound Off Ramp Westbound				Cedar Avenue Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	251	87	338	**58**	0	78	136	28	286	0	314	0	0	0	0	788
04:45 PM	0	**318**	114	**432**	51	**1**	**97**	**149**	21	283	0	304	0	0	0	0	**885**
05:00 PM	0	286	**124**	410	41	1	64	106	25	**296**	0	**321**	0	0	0	0	837
05:15 PM	0	243	88	331	56	0	82	138	**31**	284	0	315	0	0	0	0	784
Total Volume	0	1098	413	1511	206	2	321	529	105	1149	0	1254	0	0	0	0	3294
% App. Total	0	72.7	27.3		38.9	0.4	60.7		8.4	91.6	0		0	0	0		
PHF	.000	.863	.833	.874	.888	.500	.827	.888	.847	.970	.000	.977	.000	.000	.000	.000	.931

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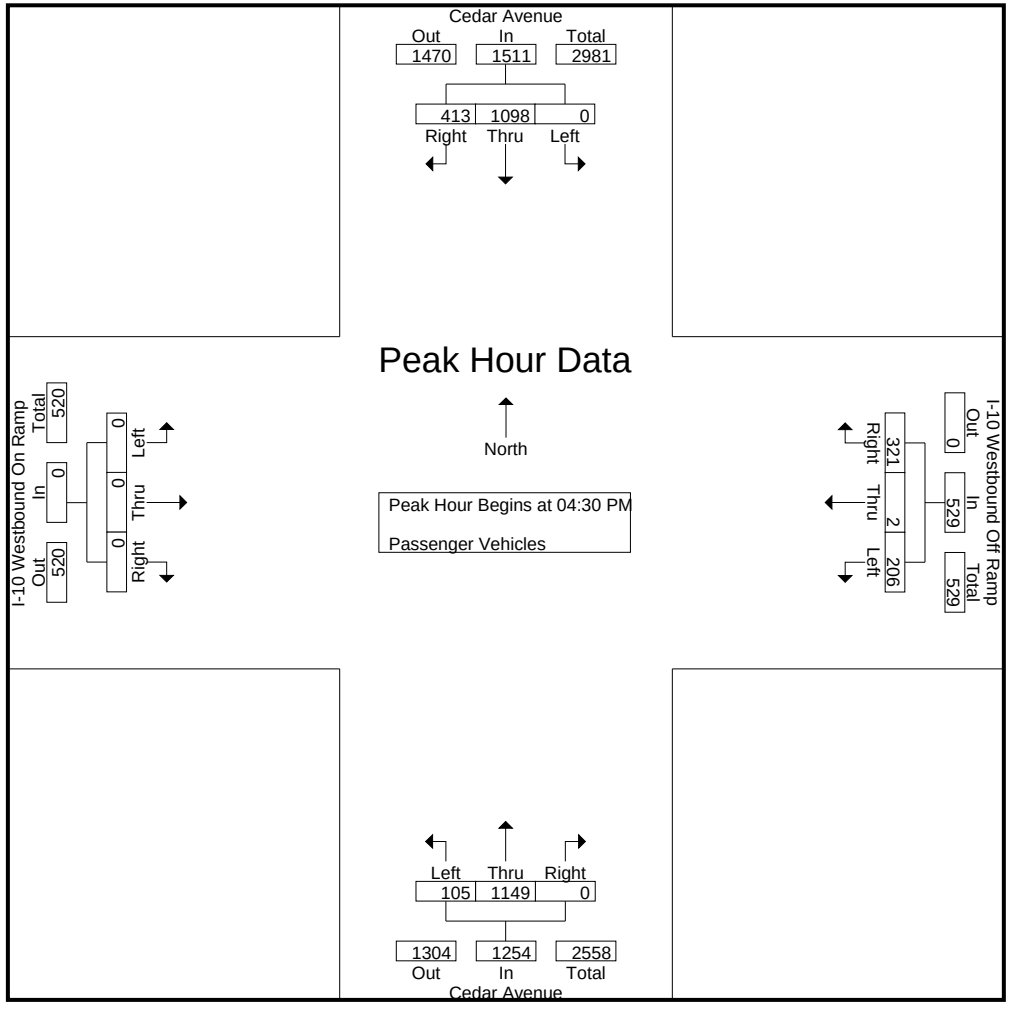
Page No : 2



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	Cedar Avenue Southbound				I-10 Westbound Off Ramp Westbound				Cedar Avenue Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	251	87	338	**58**	0	78	136	28	286	0	314	0	0	0	0	
+15 mins.	0	**318**	114	**432**	51	**1**	**97**	**149**	21	283	0	304	0	0	0	0	
+30 mins.	0	286	**124**	410	41	1	64	106	25	**296**	0	**321**	0	0	0	0	
+45 mins.	0	243	88	331	56	0	82	138	**31**	284	0	315	0	0	0	0	
Total Volume	0	1098	413	1511	206	2	321	529	105	1149	0	1254	0	0	0	0	
% App. Total	0	72.7	27.3		38.9	0.4	60.7		8.4	91.6	0		0	0	0		
PHF	.000	.863	.833	.874	.888	.500	.827	.888	.847	.970	.000	.977	.000	.000	.000	.000	

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Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Cedar Avenue Southbound					I-10 Westbound Off Ramp Westbound					Cedar Avenue Northbound					I-10 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	6	0	0	6	0	0	4	0	4	2	4	0	0	6	0	0	0	0	0	0	16	16
03:45 PM	0	9	5	3	14	2	0	1	0	3	1	4	0	0	5	0	0	0	0	0	3	22	25
Total	0	15	5	3	20	2	0	5	0	7	3	8	0	0	11	0	0	0	0	0	3	38	41
04:00 PM	0	5	3	0	8	1	0	2	0	3	0	3	0	0	3	0	0	0	0	0	0	14	14
04:15 PM	0	8	4	2	12	1	0	0	0	1	1	3	0	0	4	0	0	0	0	0	2	17	19
04:30 PM	0	4	1	0	5	2	2	1	0	5	2	8	0	0	10	0	0	0	0	0	0	20	20
04:45 PM	0	3	0	0	3	1	0	3	0	4	2	5	0	0	7	0	0	0	0	0	0	14	14
Total	0	20	8	2	28	5	2	6	0	13	5	19	0	0	24	0	0	0	0	0	2	65	67
05:00 PM	0	5	0	0	5	2	0	2	0	4	0	3	0	0	3	0	0	0	0	0	0	12	12
05:15 PM	0	5	2	0	7	1	0	4	0	5	0	4	0	0	4	0	0	0	0	0	0	16	16
05:30 PM	0	7	2	1	9	0	0	1	0	1	3	3	0	0	6	0	0	0	0	0	1	16	17
05:45 PM	0	7	2	0	9	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	12	12
Total	0	24	6	1	30	3	0	7	0	10	4	12	0	0	16	0	0	0	0	0	1	56	57
Grand Total	0	59	19	6	78	10	2	18	0	30	12	39	0	0	51	0	0	0	0	0	6	159	165
Apprch %	0	75.6	24.4			33.3	6.7	60			23.5	76.5	0			0	0	0					
Total %	0	37.1	11.9		49.1	6.3	1.3	11.3		18.9	7.5	24.5	0		32.1	0	0	0		0	3.6	96.4	

	Cedar Avenue Southbound				I-10 Westbound Off Ramp Westbound				Cedar Avenue Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	4	1	5	**2**	**2**	1	**5**	**2**	**8**	0	**10**	0	0	0	0	**20**
04:45 PM	0	3	0	3	1	0	3	4	2	5	0	7	0	0	0	0	14
05:00 PM	0	**5**	0	5	2	0	2	4	0	3	0	3	0	0	0	0	12
05:15 PM	0	5	**2**	**7**	1	0	**4**	5	0	4	0	4	0	0	0	0	16
Total Volume	0	17	3	20	6	2	10	18	4	20	0	24	0	0	0	0	62
% App. Total	0	85	15		33.3	11.1	55.6		16.7	83.3	0		0	0	0		
PHF	.000	.850	.375	.714	.750	.250	.625	.900	.500	.625	.000	.600	.000	.000	.000	.000	.775

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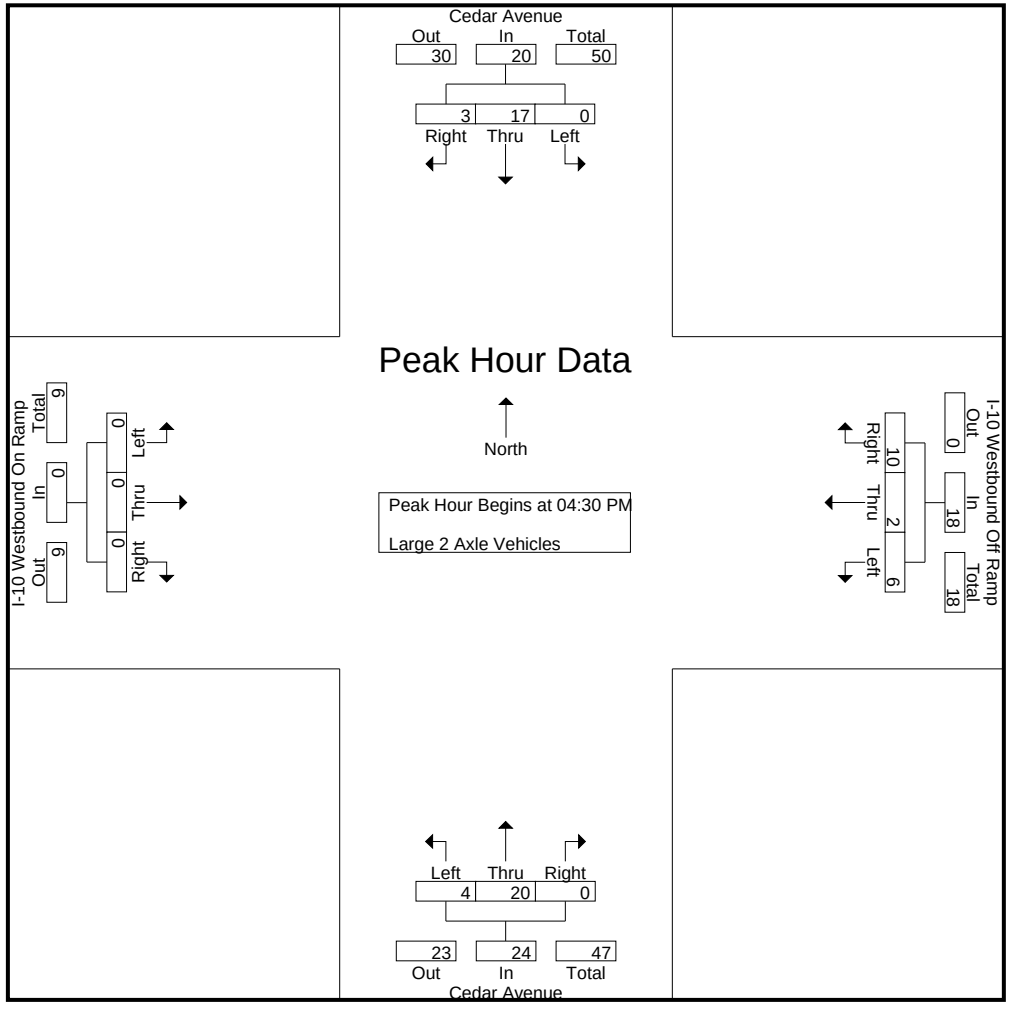
N/S: Cedar Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 08_CSB_Ced_10W PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 08_CSB_Ced_10W PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				I-10 Westbound Off Ramp Westbound				Cedar Avenue Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	4	1	5	**2**	**2**	1	**5**	**2**	**8**	0	**10**	0	0	0	0	
+15 mins.	0	3	0	3	1	0	3	4	2	5	0	7	0	0	0	0	
+30 mins.	0	**5**	0	5	2	0	2	4	0	3	0	3	0	0	0	0	
+45 mins.	0	5	**2**	**7**	1	0	**4**	5	0	4	0	4	0	0	0	0	
Total Volume	0	17	3	20	6	2	10	18	4	20	0	24	0	0	0	0	
% App. Total	0	85	15		33.3	11.1	55.6		16.7	83.3	0		0	0	0		
PHF	.000	.850	.375	.714	.750	.250	.625	.900	.500	.625	.000	.600	.000	.000	.000	.000	

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County of San Bernardino
N/S: Cedar Avenue
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Weather: Clear

File Name : 08_CSB_Ced_10W PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Cedar Avenue Southbound					I-10 Westbound Off Ramp Westbound					Cedar Avenue Northbound					I-10 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	1	2	0	3	2	0	1	1	3	5	7	0	0	12	0	0	0	0	0	1	18	19
03:45 PM	0	3	1	0	4	2	0	2	0	4	1	1	0	0	2	0	0	0	0	0	0	10	10
Total	0	4	3	0	7	4	0	3	1	7	6	8	0	0	14	0	0	0	0	0	1	28	29
04:00 PM	0	6	0	0	6	3	0	1	0	4	0	3	0	0	3	0	0	0	0	0	0	13	13
04:15 PM	0	2	2	1	4	2	0	1	0	3	1	2	0	0	3	0	0	0	0	0	1	10	11
04:30 PM	0	2	2	1	4	0	0	2	0	2	1	5	0	0	6	0	0	0	0	0	1	12	13
04:45 PM	0	3	0	0	3	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	10	10
Total	0	13	4	2	17	5	0	4	0	9	2	17	0	0	19	0	0	0	0	0	2	45	47
05:00 PM	0	2	1	1	3	2	0	1	0	3	2	1	0	0	3	0	0	0	0	0	1	9	10
05:15 PM	0	0	0	0	0	2	0	0	0	2	0	1	0	0	1	0	0	0	0	0	0	3	3
05:30 PM	0	1	1	0	2	3	0	0	0	3	1	2	0	0	3	0	0	0	0	0	0	8	8
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	5	5
Total	0	4	2	1	6	7	0	1	0	8	3	8	0	0	11	0	0	0	0	0	1	25	26
Grand Total	0	21	9	3	30	16	0	8	1	24	11	33	0	0	44	0	0	0	0	0	4	98	102
Apprch %	0	70	30			66.7	0	33.3			25	75	0			0	0	0					
Total %	0	21.4	9.2		30.6	16.3	0	8.2		24.5	11.2	33.7	0		44.9	0	0	0		0	3.9	96.1	

	Cedar Avenue Southbound				I-10 Westbound Off Ramp Westbound				Cedar Avenue Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	2	**2**	**4**	0	0	**2**	2	1	5	0	6	0	0	0	0	**12**
04:45 PM	0	**3**	0	3	0	0	0	0	0	**7**	0	**7**	0	0	0	0	10
05:00 PM	0	2	1	3	**2**	0	1	**3**	**2**	1	0	3	0	0	0	0	9
05:15 PM	0	0	0	0	2	0	0	2	0	1	0	1	0	0	0	0	3
Total Volume	0	7	3	10	4	0	3	7	3	14	0	17	0	0	0	0	34
% App. Total	0	70	30		57.1	0	42.9		17.6	82.4	0		0	0	0		
PHF	.000	.583	.375	.625	.500	.000	.375	.583	.375	.500	.000	.607	.000	.000	.000	.000	.708

Counts Unlimited, Inc.
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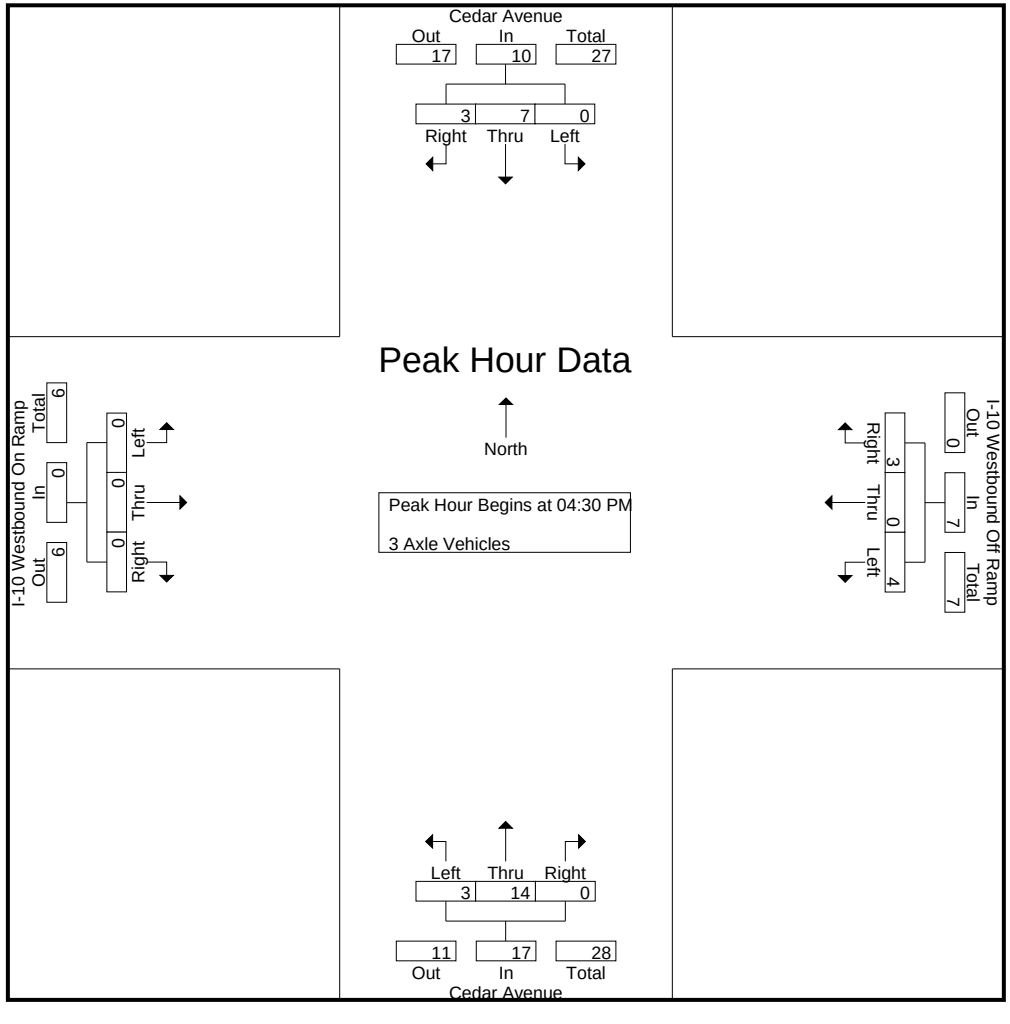
County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 08_CSB_Ced_10W PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
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E/W: I-10 Westbound Ramps
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File Name : 08_CSB_Ced_10W PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				I-10 Westbound Off Ramp Westbound				Cedar Avenue Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	2	**2**	**4**	0	0	**2**	2	1	5	0	6	0	0	0	0	
+15 mins.	0	**3**	0	3	0	0	0	0	0	**7**	0	**7**	0	0	0	0	
+30 mins.	0	2	1	3	**2**	0	1	**3**	**2**	1	0	3	0	0	0	0	
+45 mins.	0	0	0	0	2	0	0	2	0	1	0	1	0	0	0	0	
Total Volume	0	7	3	10	4	0	3	7	3	14	0	17	0	0	0	0	
% App. Total	0	70	30		57.1	0	42.9		17.6	82.4	0		0	0	0		
PHF	.000	.583	.375	.625	.500	.000	.375	.583	.375	.500	.000	.607	.000	.000	.000	.000	

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File Name : 08_CSB_Ced_10W PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Cedar Avenue Southbound					I-10 Westbound Off Ramp Westbound					Cedar Avenue Northbound					I-10 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	1	3	1	4	6	0	1	1	7	9	4	0	0	13	0	0	0	0	0	2	24	26
03:45 PM	0	6	4	1	10	1	0	1	0	2	1	7	0	0	8	0	0	0	0	0	1	20	21
Total	0	7	7	2	14	7	0	2	1	9	10	11	0	0	21	0	0	0	0	0	3	44	47
04:00 PM	0	5	3	2	8	3	0	4	1	7	4	3	0	0	7	0	0	0	0	0	3	22	25
04:15 PM	0	5	5	1	10	2	0	0	0	2	3	6	0	0	9	0	0	0	0	0	1	21	22
04:30 PM	0	3	5	1	8	6	0	2	0	8	2	5	0	0	7	0	0	0	0	0	1	23	24
04:45 PM	0	3	4	0	7	3	0	3	0	6	3	5	0	0	8	0	0	0	0	0	0	21	21
Total	0	16	17	4	33	14	0	9	1	23	12	19	0	0	31	0	0	0	0	0	5	87	92
05:00 PM	0	6	2	1	8	2	0	3	0	5	3	5	0	0	8	0	0	0	0	0	1	21	22
05:15 PM	0	4	4	3	8	5	0	1	0	6	4	3	0	0	7	0	0	0	0	0	3	21	24
05:30 PM	0	3	5	2	8	4	0	1	0	5	6	3	0	0	9	0	0	0	0	0	2	22	24
05:45 PM	0	3	0	0	3	5	0	3	0	8	3	5	0	0	8	0	0	0	0	0	0	19	19
Total	0	16	11	6	27	16	0	8	0	24	16	16	0	0	32	0	0	0	0	0	6	83	89
Grand Total	0	39	35	12	74	37	0	19	2	56	38	46	0	0	84	0	0	0	0	0	14	214	228
Apprch %	0	52.7	47.3			66.1	0	33.9			45.2	54.8	0			0	0	0					
Total %	0	18.2	16.4		34.6	17.3	0	8.9		26.2	17.8	21.5	0		39.3	0	0	0		0	6.1	93.9	

	Cedar Avenue Southbound				I-10 Westbound Off Ramp Westbound				Cedar Avenue Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	3	**5**	**8**	**6**	0	2	**8**	2	**5**	0	7	0	0	0	0	**23**
04:45 PM	0	3	4	7	3	0	**3**	6	3	5	0	**8**	0	0	0	0	21
05:00 PM	0	**6**	2	8	2	0	3	5	3	5	0	8	0	0	0	0	21
05:15 PM	0	4	4	8	5	0	1	6	**4**	3	0	7	0	0	0	0	21
Total Volume	0	16	15	31	16	0	9	25	12	18	0	30	0	0	0	0	86
% App. Total	0	51.6	48.4		64	0	36		40	60	0		0	0	0		
PHF	.000	.667	.750	.969	.667	.000	.750	.781	.750	.900	.000	.938	.000	.000	.000	.000	.935

Counts Unlimited, Inc.
PO Box 1178
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County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 08_CSB_Ced_10W PM
Site Code : 05122894
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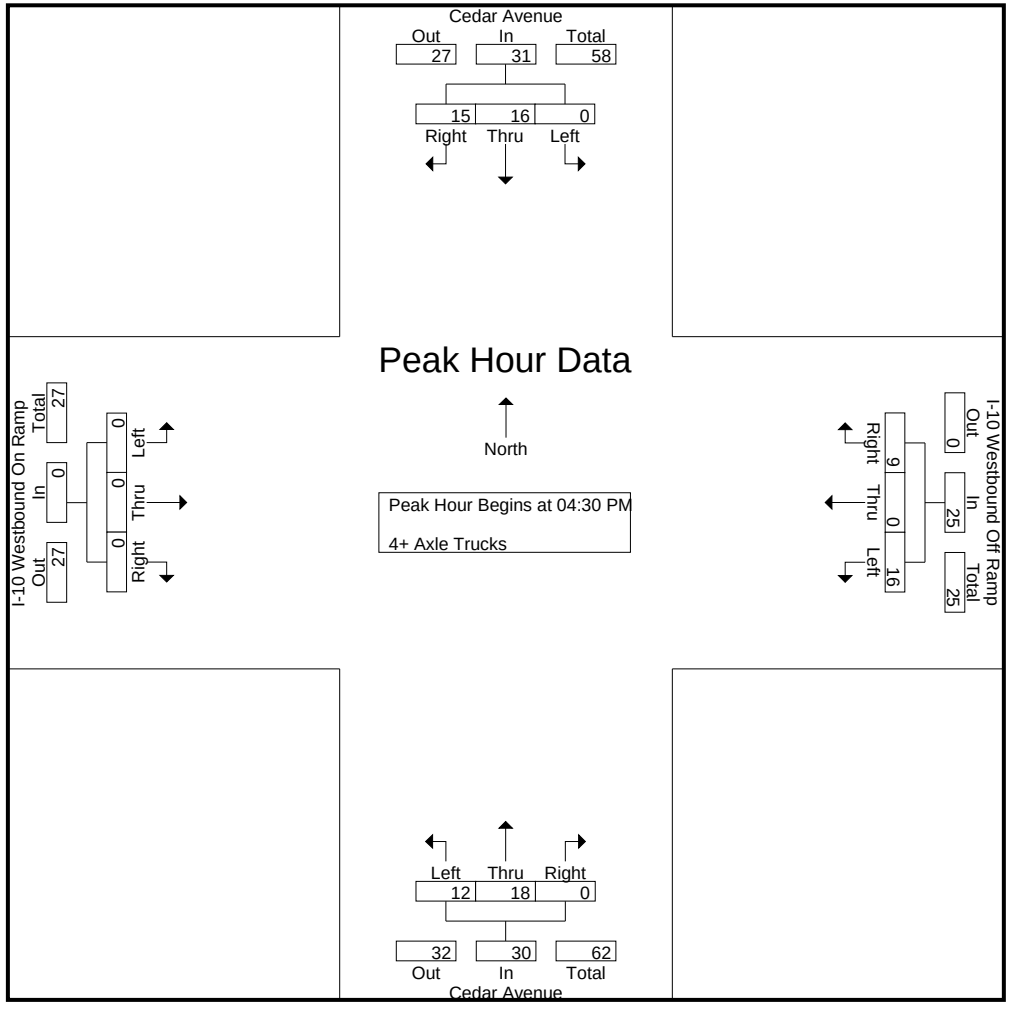
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 08_CSB_Ced_10W PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				I-10 Westbound Off Ramp Westbound				Cedar Avenue Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	3	**5**	**8**	**6**	0	2	**8**	2	**5**	0	7	0	0	0	0	
+15 mins.	0	3	4	7	3	0	**3**	6	3	5	0	**8**	0	0	0	0	
+30 mins.	0	**6**	2	8	2	0	3	5	3	5	0	8	0	0	0	0	
+45 mins.	0	4	4	8	5	0	1	6	**4**	3	0	7	0	0	0	0	
Total Volume	0	16	15	31	16	0	9	25	12	18	0	30	0	0	0	0	
% App. Total	0	51.6	48.4		64	0	36		40	60	0		0	0	0		
PHF	.000	.667	.750	.969	.667	.000	.750	.781	.750	.900	.000	.938	.000	.000	.000	.000	

Location: County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 WB Ramps

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Cedar Avenue	East Leg I-10 WB Ramps	South Leg Cedar Avenue	West Leg I-10 WB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	2	2
6:45 AM	0	2	0	0	2
7:00 AM	0	2	0	0	2
7:15 AM	0	3	0	0	3
7:30 AM	0	4	0	0	4
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	2	0	4	6
8:30 AM	0	0	0	2	2
8:45 AM	0	1	0	0	1
TOTAL VOLUMES:	0	14	0	8	22

	North Leg Cedar Avenue	East Leg I-10 WB Ramps	South Leg Cedar Avenue	West Leg I-10 WB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	1	1
3:45 PM	0	0	0	0	0
4:00 PM	0	2	0	0	2
4:15 PM	0	0	0	0	0
4:30 PM	0	1	0	1	2
4:45 PM	0	0	0	2	2
5:00 PM	0	0	0	2	2
5:15 PM	0	1	0	0	1
5:30 PM	0	1	0	1	2
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	5	0	7	12

Location: County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 WB Ramps

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Cedar Avenue			Westbound I-10 WB Ramps			Northbound Cedar Avenue			Eastbound I-10 WB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
6:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
7:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	1	3	0	0	0	2	0	0	0	0	0	0	6

	Southbound Cedar Avenue			Westbound I-10 WB Ramps			Northbound Cedar Avenue			Eastbound I-10 WB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	2
4:00 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	1	0	3	0	0	0	0	5

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County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 09_CSB_Ced_10E AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Cedar Avenue Southbound					I-10 Eastbound On Ramp Westbound					Cedar Avenue Northbound					I-10 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	105	257	0	0	362	0	0	0	0	0	0	173	87	50	260	63	0	75	18	138	68	760	828
06:45 AM	90	252	0	0	342	0	0	0	0	0	0	200	81	43	281	110	0	88	14	198	57	821	878
Total	195	509	0	0	704	0	0	0	0	0	0	373	168	93	541	173	0	163	32	336	125	1581	1706
07:00 AM	89	276	0	0	365	0	0	0	0	0	0	157	106	54	263	106	0	66	12	172	66	800	866
07:15 AM	113	304	0	0	417	0	0	0	0	0	0	188	83	38	271	96	0	62	7	158	45	846	891
07:30 AM	127	362	0	0	489	0	0	0	0	0	0	169	110	64	279	134	0	73	5	207	69	975	1044
07:45 AM	116	338	0	0	454	0	0	0	0	0	0	181	118	77	299	99	0	112	23	211	100	964	1064
Total	445	1280	0	0	1725	0	0	0	0	0	0	695	417	233	1112	435	0	313	47	748	280	3585	3865
08:00 AM	93	305	0	0	398	0	0	0	0	0	0	180	80	46	260	94	0	99	13	193	59	851	910
08:15 AM	80	298	0	0	378	0	0	0	0	0	0	175	69	46	244	102	0	95	16	197	62	819	881
08:30 AM	61	292	0	0	353	0	0	0	0	0	0	163	84	46	247	94	0	91	14	185	60	785	845
08:45 AM	78	293	0	0	371	0	0	0	0	0	0	65	47	35	112	91	0	93	19	184	54	667	721
Total	312	1188	0	0	1500	0	0	0	0	0	0	583	280	173	863	381	0	378	62	759	235	3122	3357
Grand Total	952	2977	0	0	3929	0	0	0	0	0	0	1651	865	499	2516	989	0	854	141	1843	640	8288	8928
Apprch %	24.2	75.8	0			0	0	0			0	65.6	34.4			53.7	0	46.3					
Total %	11.5	35.9	0		47.4	0	0	0		0	0	19.9	10.4		30.4	11.9	0	10.3		22.2	7.2	92.8	
Passenger Vehicles	913	2811	0		3724	0	0	0		0	0	1516	764		2727	899	0	699		1719	0	0	8170
% Passenger Vehicles	95.9	94.4	0	0	94.8	0	0	0	0	0	0	91.8	88.3	89.6	90.4	90.9	0	81.9	85.8	86.6	0	0	91.5
Large 2 Axle Vehicles	17	76	0		93	0	0	0		0	0	57	28		100	33	0	43		82	0	0	275
% Large 2 Axle Vehicles	1.8	2.6	0	0	2.4	0	0	0	0	0	0	3.5	3.2	3	3.3	3.3	0	5	4.3	4.1	0	0	3.1
3 Axle Vehicles	2	27	0		29	0	0	0		0	0	27	13		45	26	0	32		61	0	0	135
% 3 Axle Vehicles	0.2	0.9	0	0	0.7	0	0	0	0	0	0	1.6	1.5	1	1.5	2.6	0	3.7	2.1	3.1	0	0	1.5
4+ Axle Trucks	20	63	0		83	0	0	0		0	0	51	60		143	31	0	80		122	0	0	348
% 4+ Axle Trucks	2.1	2.1	0	0	2.1	0	0	0	0	0	0	3.1	6.9	6.4	4.7	3.1	0	9.4	7.8	6.1	0	0	3.9

Counts Unlimited, Inc.
PO Box 1178
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County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 09_CSB_Ced_10E AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2

	Cedar Avenue Southbound				I-10 Eastbound On Ramp Westbound				Cedar Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	113	304	0	417	0	0	0	0	0	**188**	83	271	96	0	62	158	846
07:30 AM	**127**	**362**	0	**489**	0	0	0	0	0	169	110	279	**134**	0	73	207	**975**
07:45 AM	116	338	0	454	0	0	0	0	0	181	**118**	**299**	99	0	**112**	**211**	964
08:00 AM	93	305	0	398	0	0	0	0	0	180	80	260	94	0	99	193	851
Total Volume	449	1309	0	1758	0	0	0	0	0	718	391	1109	423	0	346	769	3636
% App. Total	25.5	74.5	0		0	0	0		0	64.7	35.3		55	0	45		
PHF	.884	.904	.000	.899	.000	.000	.000	.000	.000	.955	.828	.927	.789	.000	.772	.911	.932

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File Name : 09_CSB_Ced_10E AM
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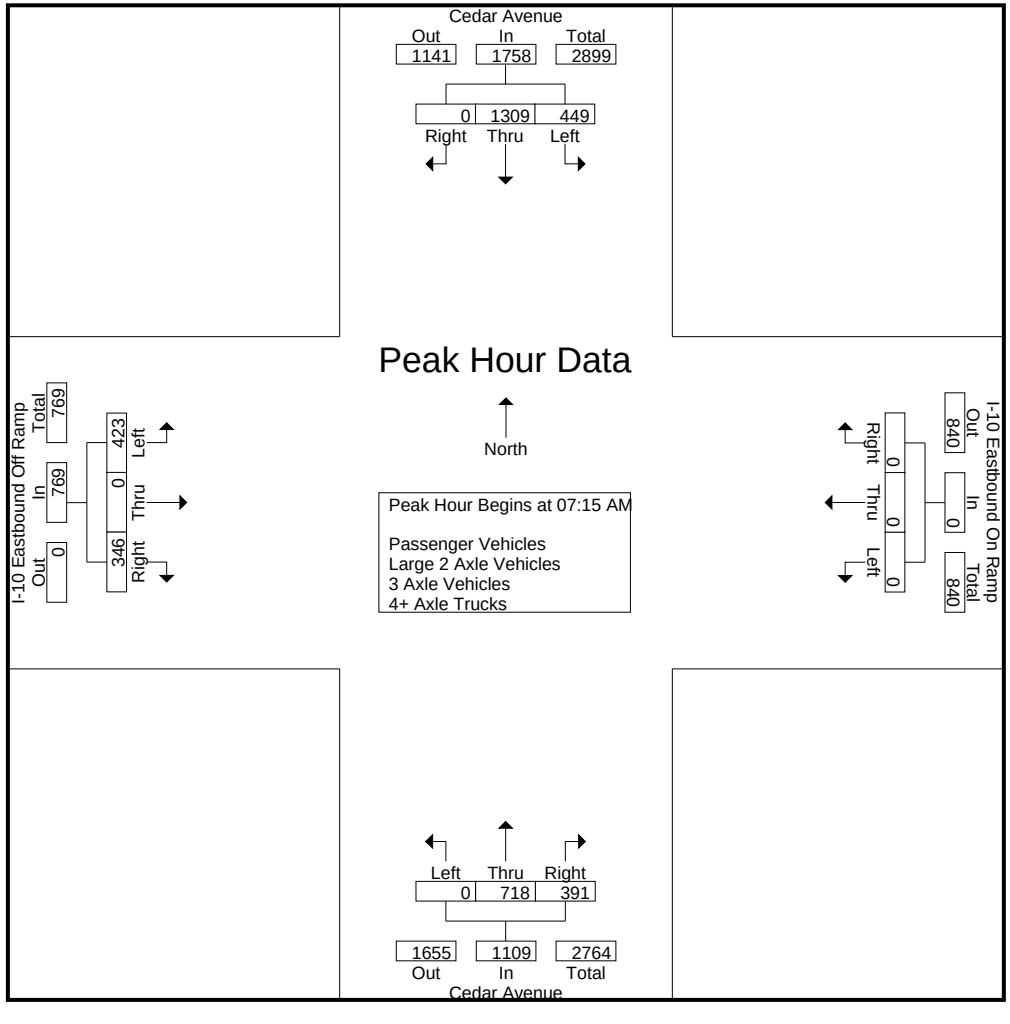
Page No : 3



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County of San Bernardino
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	Cedar Avenue Southbound				I-10 Eastbound On Ramp Westbound				Cedar Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				06:30 AM				07:00 AM				07:30 AM				
+0 mins.	113	304	0	417	0	0	0	0	0	157	106	263	**134**	0	73	207	
+15 mins.	**127**	**362**	0	**489**	0	0	0	0	0	**188**	83	271	99	0	**112**	**211**	
+30 mins.	116	338	0	454	0	0	0	0	0	169	110	279	94	0	99	193	
+45 mins.	93	305	0	398	0	0	0	0	0	181	**118**	**299**	102	0	95	197	
Total Volume	449	1309	0	1758	0	0	0	0	0	695	417	1112	429	0	379	808	
% App. Total	25.5	74.5	0		0	0	0		0	62.5	37.5		53.1	0	46.9		
PHF	.884	.904	.000	.899	.000	.000	.000	.000	.000	.924	.883	.930	.800	.000	.846	.957	

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File Name : 09_CSB_Ced_10E AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Cedar Avenue Southbound					I-10 Eastbound On Ramp Westbound					Cedar Avenue Northbound					I-10 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	102	237	0	0	339	0	0	0	0	0	0	163	81	47	244	55	0	62	15	117	62	700	762
06:45 AM	82	242	0	0	324	0	0	0	0	0	0	184	72	39	256	103	0	71	8	174	47	754	801
Total	184	479	0	0	663	0	0	0	0	0	0	347	153	86	500	158	0	133	23	291	109	1454	1563
07:00 AM	87	262	0	0	349	0	0	0	0	0	0	142	98	49	240	96	0	53	11	149	60	738	798
07:15 AM	110	291	0	0	401	0	0	0	0	0	0	168	69	33	237	91	0	49	6	140	39	778	817
07:30 AM	123	347	0	0	470	0	0	0	0	0	0	153	99	58	252	124	0	62	5	186	63	908	971
07:45 AM	113	330	0	0	443	0	0	0	0	0	0	165	105	72	270	92	0	91	20	183	92	896	988
Total	433	1230	0	0	1663	0	0	0	0	0	0	628	371	212	999	403	0	255	42	658	254	3320	3574
08:00 AM	86	282	0	0	368	0	0	0	0	0	0	161	67	37	228	84	0	79	11	163	48	759	807
08:15 AM	79	274	0	0	353	0	0	0	0	0	0	163	58	38	221	91	0	83	14	174	52	748	800
08:30 AM	57	275	0	0	332	0	0	0	0	0	0	157	72	41	229	79	0	74	14	153	55	714	769
08:45 AM	74	271	0	0	345	0	0	0	0	0	0	60	43	33	103	84	0	75	17	159	50	607	657
Total	296	1102	0	0	1398	0	0	0	0	0	0	541	240	149	781	338	0	311	56	649	205	2828	3033
Grand Total	913	2811	0	0	3724	0	0	0	0	0	0	1516	764	447	2280	899	0	699	121	1598	568	7602	8170
Apprch %	24.5	75.5	0			0	0	0			0	66.5	33.5			56.3	0	43.7					
Total %	12	37	0		49	0	0	0		0	0	19.9	10		30	11.8	0	9.2		21	7	93	

	Cedar Avenue Southbound				I-10 Eastbound On Ramp Westbound				Cedar Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	110	291	0	401	0	0	0	0	0	**168**	69	237	91	0	49	140	778
07:30 AM	**123**	**347**	0	**470**	0	0	0	0	0	153	99	252	**124**	0	62	**186**	**908**
07:45 AM	113	330	0	443	0	0	0	0	0	165	**105**	**270**	92	0	**91**	183	896
08:00 AM	86	282	0	368	0	0	0	0	0	161	67	228	84	0	79	163	759
Total Volume	432	1250	0	1682	0	0	0	0	0	647	340	987	391	0	281	672	3341
% App. Total	25.7	74.3	0		0	0	0		0	65.6	34.4		58.2	0	41.8		
PHF	.878	.901	.000	.895	.000	.000	.000	.000	.000	.963	.810	.914	.788	.000	.772	.903	.920

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County of San Bernardino
N/S: Cedar Avenue
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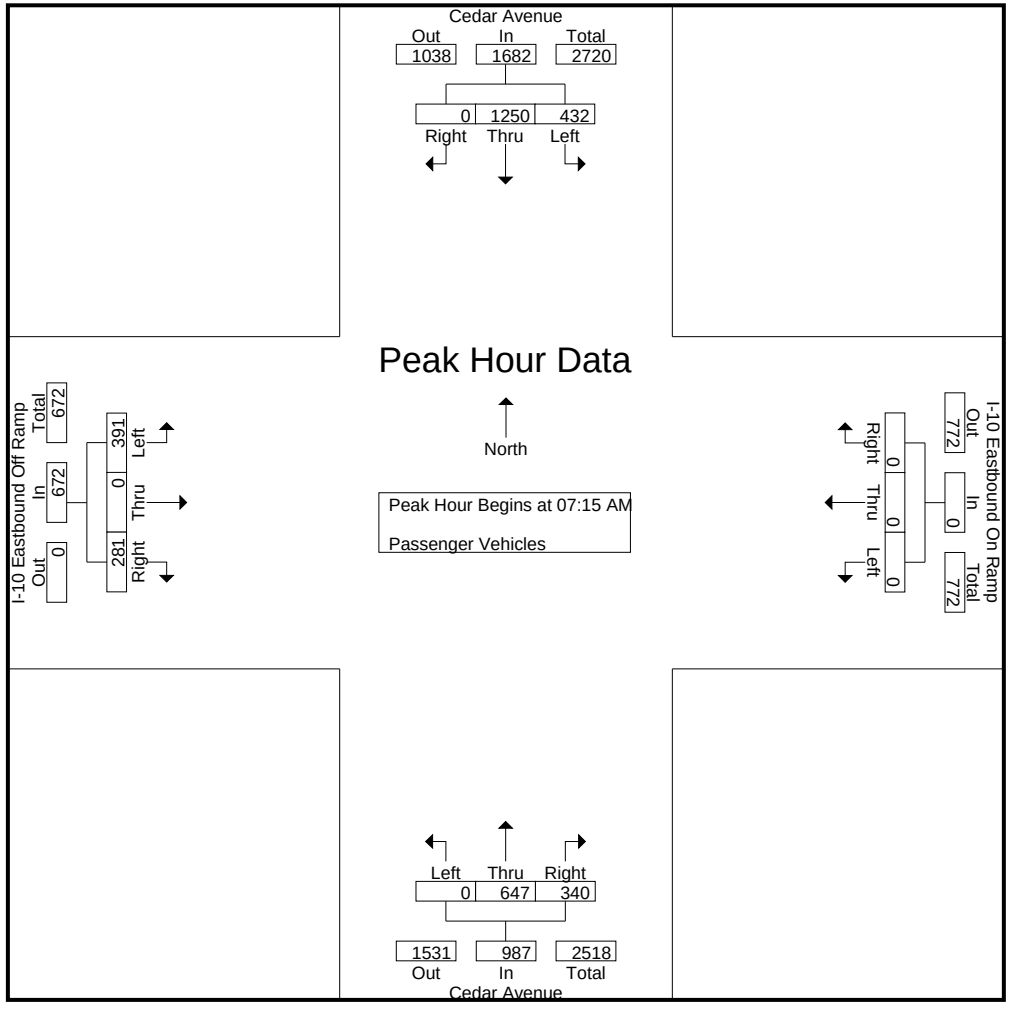
File Name : 09_CSB_Ced_10E AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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Start Date : 10/4/2022

	Cedar Avenue Southbound				I-10 Eastbound On Ramp Westbound				Cedar Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	110	291	0	401	0	0	0	0	0	**168**	69	237	91	0	49	140	
+15 mins.	**123**	**347**	0	**470**	0	0	0	0	0	153	99	252	**124**	0	62	**186**	
+30 mins.	113	330	0	443	0	0	0	0	0	165	**105**	**270**	92	0	**91**	183	
+45 mins.	86	282	0	368	0	0	0	0	0	161	67	228	84	0	79	163	
Total Volume	432	1250	0	1682	0	0	0	0	0	647	340	987	391	0	281	672	
% App. Total	25.7	74.3	0		0	0	0		0	65.6	34.4		58.2	0	41.8		
PHF	.878	.901	.000	.895	.000	.000	.000	.000	.000	.963	.810	.914	.788	.000	.772	.903	

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County of San Bernardino
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File Name : 09_CSB_Ced_10E AM
Site Code : 05122894
Start Date : 10/4/2022
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Groups Printed- Large 2 Axle Vehicles

	Cedar Avenue Southbound					I-10 Eastbound On Ramp Westbound					Cedar Avenue Northbound					I-10 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	1	10	0	0	11	0	0	0	0	0	0	4	2	0	6	3	0	1	1	4	1	21	22
06:45 AM	4	4	0	0	8	0	0	0	0	0	0	8	4	2	12	4	0	7	3	11	5	31	36
Total	5	14	0	0	19	0	0	0	0	0	0	12	6	2	18	7	0	8	4	15	6	52	58
07:00 AM	1	5	0	0	6	0	0	0	0	0	0	6	1	0	7	4	0	6	1	10	1	23	24
07:15 AM	2	4	0	0	6	0	0	0	0	0	0	8	5	2	13	1	0	4	0	5	2	24	26
07:30 AM	1	9	0	0	10	0	0	0	0	0	0	8	3	2	11	2	0	3	0	5	2	26	28
07:45 AM	2	6	0	0	8	0	0	0	0	0	0	5	2	2	7	4	0	5	0	9	2	24	26
Total	6	24	0	0	30	0	0	0	0	0	0	27	11	6	38	11	0	18	1	29	7	97	104
08:00 AM	4	9	0	0	13	0	0	0	0	0	0	9	2	1	11	3	0	7	1	10	2	34	36
08:15 AM	0	10	0	0	10	0	0	0	0	0	0	4	3	2	7	4	0	1	0	5	2	22	24
08:30 AM	0	7	0	0	7	0	0	0	0	0	0	3	5	4	8	7	0	3	0	10	4	25	29
08:45 AM	2	12	0	0	14	0	0	0	0	0	0	2	1	0	3	1	0	6	0	7	0	24	24
Total	6	38	0	0	44	0	0	0	0	0	0	18	11	7	29	15	0	17	1	32	8	105	113
Grand Total	17	76	0	0	93	0	0	0	0	0	0	57	28	15	85	33	0	43	6	76	21	254	275
Apprch %	18.3	81.7	0			0	0	0			0	67.1	32.9			43.4	0	56.6					
Total %	6.7	29.9	0		36.6	0	0	0		0	0	22.4	11		33.5	13	0	16.9		29.9	7.6	92.4	

	Cedar Avenue Southbound				I-10 Eastbound On Ramp Westbound				Cedar Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	2	4	0	6	0	0	0	0	0	8	**5**	**13**	1	0	4	5	24
07:30 AM	1	**9**	0	10	0	0	0	0	0	8	3	11	2	0	3	5	26
07:45 AM	2	6	0	8	0	0	0	0	0	5	2	7	**4**	0	5	9	24
08:00 AM	**4**	9	0	**13**	0	0	0	0	0	**9**	2	11	3	0	**7**	**10**	**34**
Total Volume	9	28	0	37	0	0	0	0	0	30	12	42	10	0	19	29	108
% App. Total	24.3	75.7	0		0	0	0		0	71.4	28.6		34.5	0	65.5		
PHF	.563	.778	.000	.712	.000	.000	.000	.000	.000	.833	.600	.808	.625	.000	.679	.725	.794

Counts Unlimited, Inc.
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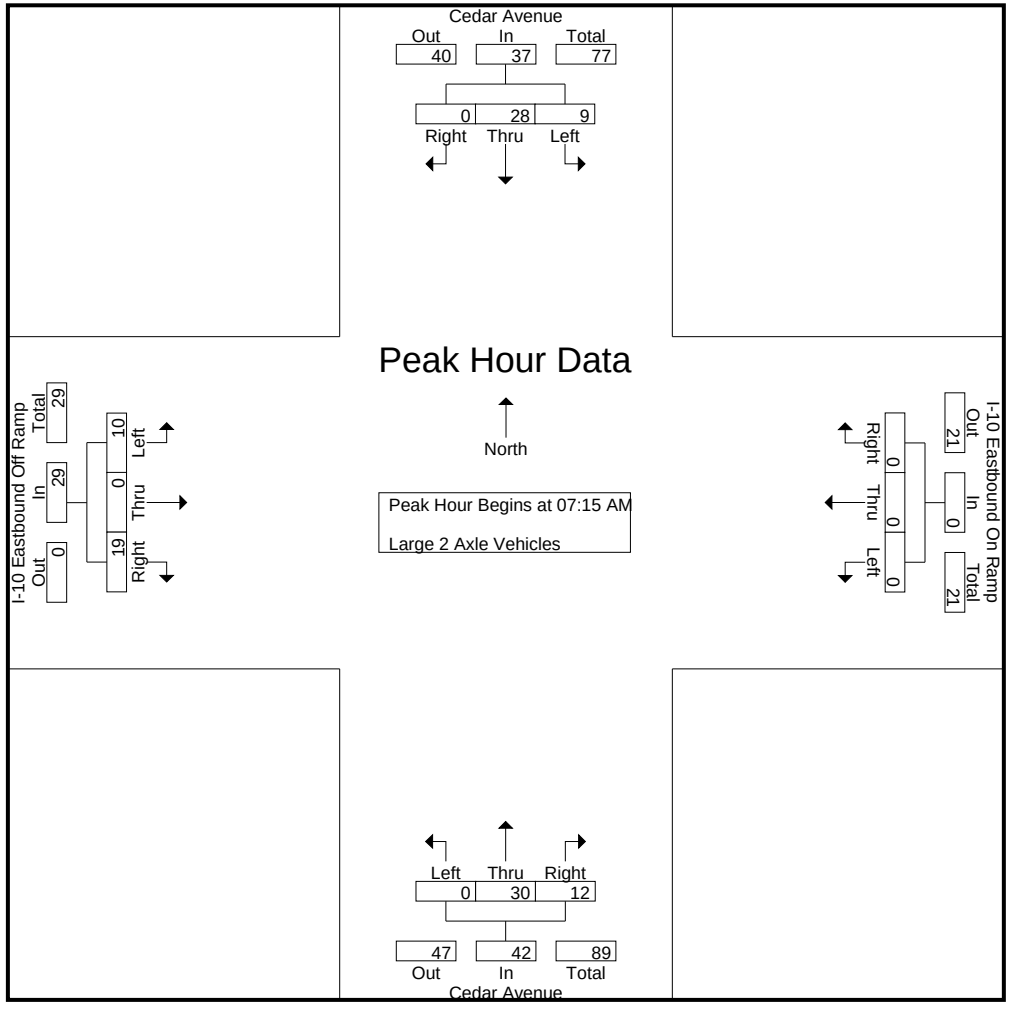

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	Cedar Avenue Southbound				I-10 Eastbound On Ramp Westbound				Cedar Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	2	4	0	6	0	0	0	0	0	8	**5**	**13**	1	0	4	5	
+15 mins.	1	**9**	0	10	0	0	0	0	0	8	3	11	2	0	3	5	
+30 mins.	2	6	0	8	0	0	0	0	0	5	2	7	**4**	0	5	9	
+45 mins.	**4**	9	0	**13**	0	0	0	0	0	**9**	2	11	3	0	**7**	**10**	
Total Volume	9	28	0	37	0	0	0	0	0	30	12	42	10	0	19	29	
% App. Total	24.3	75.7	0		0	0	0		0	71.4	28.6		34.5	0	65.5		
PHF	.563	.778	.000	.712	.000	.000	.000	.000	.000	.833	.600	.808	.625	.000	.679	.725	

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Groups Printed- 3 Axle Vehicles

	Cedar Avenue Southbound					I-10 Eastbound On Ramp Westbound					Cedar Avenue Northbound					I-10 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	3	0	3	1	6	1	10	11
06:45 AM	1	3	0	0	4	0	0	0	0	0	0	4	2	1	6	0	0	3	1	3	2	13	15
Total	1	6	0	0	7	0	0	0	0	0	0	5	2	1	7	3	0	6	2	9	3	23	26
07:00 AM	0	2	0	0	2	0	0	0	0	0	0	3	1	1	4	3	0	2	0	5	1	11	12
07:15 AM	0	4	0	0	4	0	0	0	0	0	0	4	1	1	5	2	0	1	1	3	2	12	14
07:30 AM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	4	0	4	0	8	0	12	12
07:45 AM	0	1	0	0	1	0	0	0	0	0	0	5	2	0	7	1	0	7	0	8	0	16	16
Total	0	8	0	0	8	0	0	0	0	0	0	15	4	2	19	10	0	14	1	24	3	51	54
08:00 AM	0	7	0	0	7	0	0	0	0	0	0	1	1	0	2	2	0	2	0	4	0	13	13
08:15 AM	0	4	0	0	4	0	0	0	0	0	0	3	2	1	5	4	0	2	0	6	1	15	16
08:30 AM	1	1	0	0	2	0	0	0	0	0	0	1	2	0	3	4	0	6	0	10	0	15	15
08:45 AM	0	1	0	0	1	0	0	0	0	0	0	2	2	1	4	3	0	2	0	5	1	10	11
Total	1	13	0	0	14	0	0	0	0	0	0	7	7	2	14	13	0	12	0	25	2	53	55
Grand Total	2	27	0	0	29	0	0	0	0	0	0	27	13	5	40	26	0	32	3	58	8	127	135
Apprch %	6.9	93.1	0			0	0	0			0	67.5	32.5			44.8	0	55.2					
Total %	1.6	21.3	0		22.8	0	0	0		0	0	21.3	10.2		31.5	20.5	0	25.2		45.7	5.9	94.1	

	Cedar Avenue Southbound				I-10 Eastbound On Ramp Westbound				Cedar Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	4	0	4	0	0	0	0	0	4	1	5	2	0	1	3	12
07:30 AM	0	1	0	1	0	0	0	0	0	3	0	3	**4**	0	4	**8**	12
07:45 AM	0	1	0	1	0	0	0	0	0	**5**	**2**	**7**	1	0	**7**	8	**16**
08:00 AM	0	**7**	0	**7**	0	0	0	0	0	1	1	2	2	0	2	4	13
Total Volume	0	13	0	13	0	0	0	0	0	13	4	17	9	0	14	23	53
% App. Total	0	100	0		0	0	0		0	76.5	23.5		39.1	0	60.9		
PHF	.000	.464	.000	.464	.000	.000	.000	.000	.000	.650	.500	.607	.563	.000	.500	.719	.828

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County of San Bernardino
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Start Date : 10/4/2022
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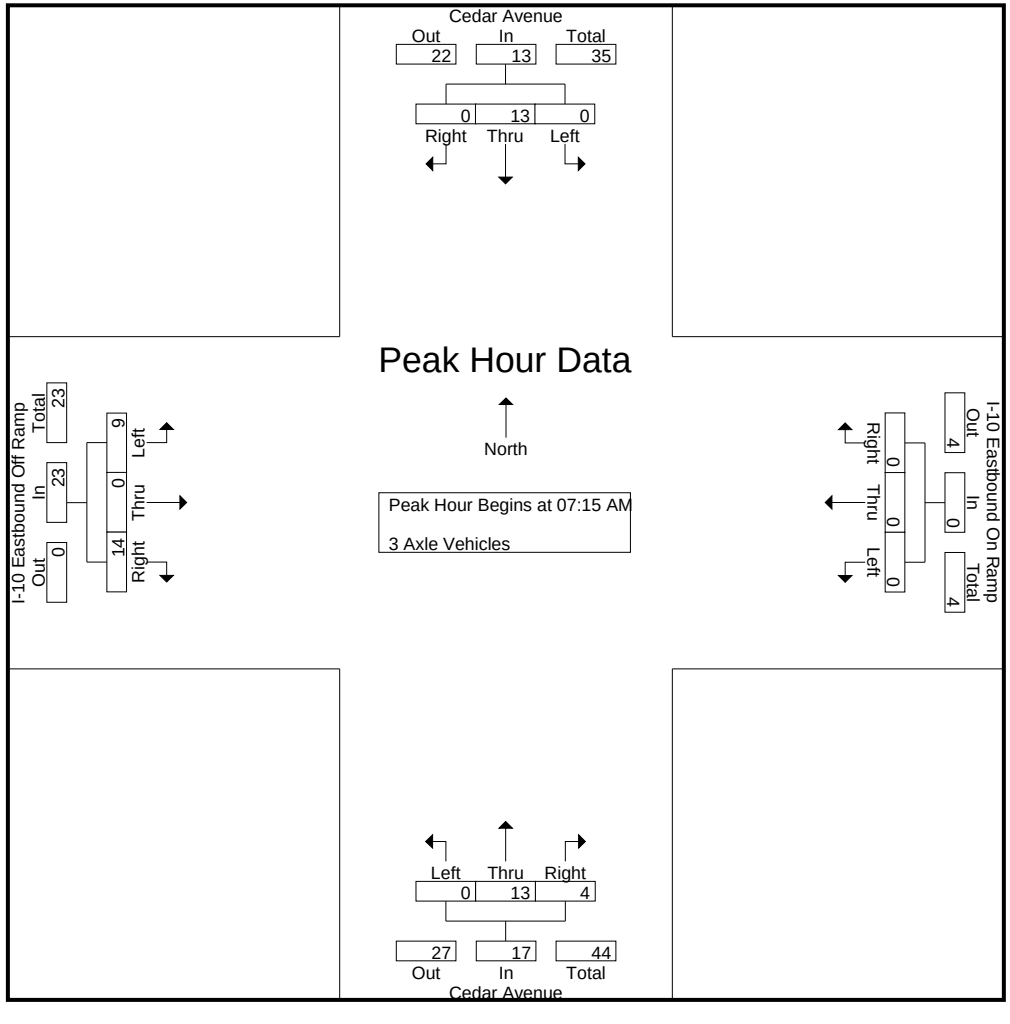

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 09_CSB_Ced_10E AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				I-10 Eastbound On Ramp Westbound				Cedar Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	4	0	4	0	0	0	0	0	4	1	5	2	0	1	3	
+15 mins.	0	1	0	1	0	0	0	0	0	3	0	3	**4**	0	4	**8**	
+30 mins.	0	1	0	1	0	0	0	0	0	**5**	**2**	**7**	1	0	**7**	8	
+45 mins.	0	**7**	0	**7**	0	0	0	0	0	1	1	2	2	0	2	4	
Total Volume	0	13	0	13	0	0	0	0	0	13	4	17	9	0	14	23	
% App. Total	0	100	0		0	0	0		0	76.5	23.5		39.1	0	60.9		
PHF	.000	.464	.000	.464	.000	.000	.000	.000	.000	.650	.500	.607	.563	.000	.500	.719	

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Page No : 1

Groups Printed- 4+ Axle Trucks

	Cedar Avenue Southbound					I-10 Eastbound On Ramp Westbound					Cedar Avenue Northbound					I-10 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	2	7	0	0	9	0	0	0	0	0	0	5	4	3	9	2	0	9	1	11	4	29	33
06:45 AM	3	3	0	0	6	0	0	0	0	0	0	4	3	1	7	3	0	7	2	10	3	23	26
Total	5	10	0	0	15	0	0	0	0	0	0	9	7	4	16	5	0	16	3	21	7	52	59
07:00 AM	1	7	0	0	8	0	0	0	0	0	0	6	6	4	12	3	0	5	0	8	4	28	32
07:15 AM	1	5	0	0	6	0	0	0	0	0	0	8	8	2	16	2	0	8	0	10	2	32	34
07:30 AM	3	5	0	0	8	0	0	0	0	0	0	5	8	4	13	4	0	4	0	8	4	29	33
07:45 AM	1	1	0	0	2	0	0	0	0	0	0	6	9	3	15	2	0	9	3	11	6	28	34
Total	6	18	0	0	24	0	0	0	0	0	0	25	31	13	56	11	0	26	3	37	16	117	133
08:00 AM	3	7	0	0	10	0	0	0	0	0	0	9	10	8	19	5	0	11	1	16	9	45	54
08:15 AM	1	10	0	0	11	0	0	0	0	0	0	5	6	5	11	3	0	9	2	12	7	34	41
08:30 AM	3	9	0	0	12	0	0	0	0	0	0	2	5	1	7	4	0	8	0	12	1	31	32
08:45 AM	2	9	0	0	11	0	0	0	0	0	0	1	1	1	2	3	0	10	2	13	3	26	29
Total	9	35	0	0	44	0	0	0	0	0	0	17	22	15	39	15	0	38	5	53	20	136	156
Grand Total	20	63	0	0	83	0	0	0	0	0	0	51	60	32	111	31	0	80	11	111	43	305	348
Apprch %	24.1	75.9	0			0	0	0			0	45.9	54.1			27.9	0	72.1					
Total %	6.6	20.7	0		27.2	0	0	0		0	0	16.7	19.7		36.4	10.2	0	26.2		36.4	12.4	87.6	

	Cedar Avenue Southbound				I-10 Eastbound On Ramp Westbound				Cedar Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	5	0	6	0	0	0	0	0	8	8	16	2	0	8	10	32
07:30 AM	**3**	5	0	8	0	0	0	0	0	5	8	13	4	0	4	8	29
07:45 AM	1	1	0	2	0	0	0	0	0	6	9	15	2	0	9	11	28
08:00 AM	3	**7**	0	**10**	0	0	0	0	0	**9**	**10**	**19**	**5**	0	**11**	**16**	**45**
Total Volume	8	18	0	26	0	0	0	0	0	28	35	63	13	0	32	45	134
% App. Total	30.8	69.2	0		0	0	0		0	44.4	55.6		28.9	0	71.1		
PHF	.667	.643	.000	.650	.000	.000	.000	.000	.000	.778	.875	.829	.650	.000	.727	.703	.744

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File Name : 09_CSB_Ced_10E AM
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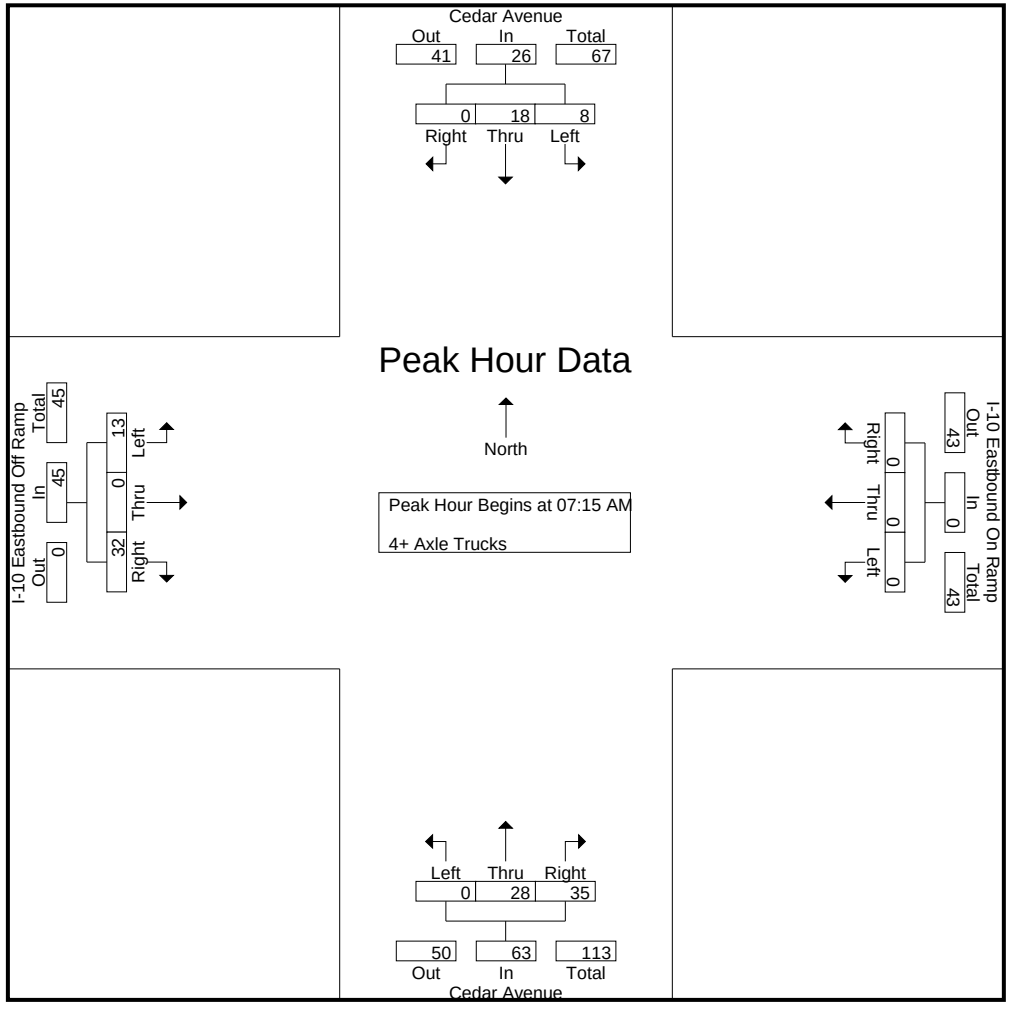

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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	1	5	0	6	0	0	0	0	0	8	8	16	2	0	8	10	
+15 mins.	**3**	5	0	8	0	0	0	0	0	5	8	13	4	0	4	8	
+30 mins.	1	1	0	2	0	0	0	0	0	6	9	15	2	0	9	11	
+45 mins.	3	**7**	0	**10**	0	0	0	0	0	**9**	**10**	**19**	**5**	0	**11**	**16**	
Total Volume	8	18	0	26	0	0	0	0	0	28	35	63	13	0	32	45	
% App. Total	30.8	69.2	0		0	0	0		0	44.4	55.6		28.9	0	71.1		
PHF	.667	.643	.000	.650	.000	.000	.000	.000	.000	.778	.875	.829	.650	.000	.727	.703	

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Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Cedar Avenue Southbound					I-10 Eastbound On Ramp Westbound					Cedar Avenue Northbound					I-10 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	71	254	0	0	325	0	0	0	0	0	0	224	81	35	305	106	3	43	6	152	41	782	823
03:45 PM	85	261	0	0	346	0	0	0	0	0	0	195	87	53	282	107	0	31	5	138	58	766	824
Total	156	515	0	0	671	0	0	0	0	0	0	419	168	88	587	213	3	74	11	290	99	1548	1647
04:00 PM	94	246	0	0	340	0	0	0	0	0	0	210	80	47	290	132	1	33	7	166	54	796	850
04:15 PM	93	217	0	0	310	0	0	0	0	0	0	192	73	42	265	120	0	25	2	145	44	720	764
04:30 PM	90	238	0	0	328	0	0	0	0	0	0	197	75	43	272	138	0	34	3	172	46	772	818
04:45 PM	97	284	0	0	381	0	0	0	0	0	0	212	87	56	299	103	2	22	2	127	58	807	865
Total	374	985	0	0	1359	0	0	0	0	0	0	811	315	188	1126	493	3	114	14	610	202	3095	3297
05:00 PM	95	259	0	0	354	0	0	0	0	0	0	204	96	56	300	124	2	23	4	149	60	803	863
05:15 PM	99	224	0	0	323	0	0	0	0	0	0	221	102	46	323	98	0	21	1	119	47	765	812
05:30 PM	93	222	0	0	315	0	0	0	0	0	0	198	93	49	291	125	1	27	3	153	52	759	811
05:45 PM	96	251	0	0	347	0	0	0	0	0	0	206	78	44	284	114	0	33	1	147	45	778	823
Total	383	956	0	0	1339	0	0	0	0	0	0	829	369	195	1198	461	3	104	9	568	204	3105	3309
Grand Total	913	2456	0	0	3369	0	0	0	0	0	0	2059	852	471	2911	1167	9	292	34	1468	505	7748	8253
Apprch %	27.1	72.9	0			0	0	0			0	70.7	29.3			79.5	0.6	19.9					
Total %	11.8	31.7	0		43.5	0	0	0		0	0	26.6	11		37.6	15.1	0.1	3.8		18.9	6.1	93.9	
Passenger Vehicles	880	2304	0		3184	0	0	0		0	0	1975	809		3233	1117	6	208		1358	0	0	7775
% Passenger Vehicles	96.4	93.8	0	0	94.5	0	0	0	0	0	0	95.9	95	95.3	95.6	95.7	66.7	71.2	79.4	90.4	0	0	94.2
Large 2 Axle Vehicles	14	66	0		80	0	0	0		0	0	26	17		54	15	3	24		44	0	0	178
% Large 2 Axle Vehicles	1.5	2.7	0	0	2.4	0	0	0	0	0	0	1.3	2	2.3	1.6	1.3	33.3	8.2	5.9	2.9	0	0	2.2
3 Axle Vehicles	4	33	0		37	0	0	0		0	0	26	8		38	16	0	11		29	0	0	104
% 3 Axle Vehicles	0.4	1.3	0	0	1.1	0	0	0	0	0	0	1.3	0.9	0.8	1.1	1.4	0	3.8	5.9	1.9	0	0	1.3
4+ Axle Trucks	15	53	0		68	0	0	0		0	0	32	18		57	19	0	49		71	0	0	196
% 4+ Axle Trucks	1.6	2.2	0	0	2	0	0	0	0	0	0	1.6	2.1	1.5	1.7	1.6	0	16.8	8.8	4.7	0	0	2.4

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Start Date : 10/4/2022

	Cedar Avenue Southbound				I-10 Eastbound On Ramp Westbound				Cedar Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	90	238	0	328	0	0	0	0	0	197	75	272	**138**	0	**34**	**172**	772
04:45 PM	97	**284**	0	**381**	0	0	0	0	0	212	87	299	103	**2**	22	127	**807**
05:00 PM	95	259	0	354	0	0	0	0	0	204	96	300	124	2	23	149	803
05:15 PM	**99**	224	0	323	0	0	0	0	0	**221**	**102**	**323**	98	0	21	119	765
Total Volume	381	1005	0	1386	0	0	0	0	0	834	360	1194	463	4	100	567	3147
% App. Total	27.5	72.5	0		0	0	0		0	69.8	30.2		81.7	0.7	17.6		
PHF	.962	.885	.000	.909	.000	.000	.000	.000	.000	.943	.882	.924	.839	.500	.735	.824	.975

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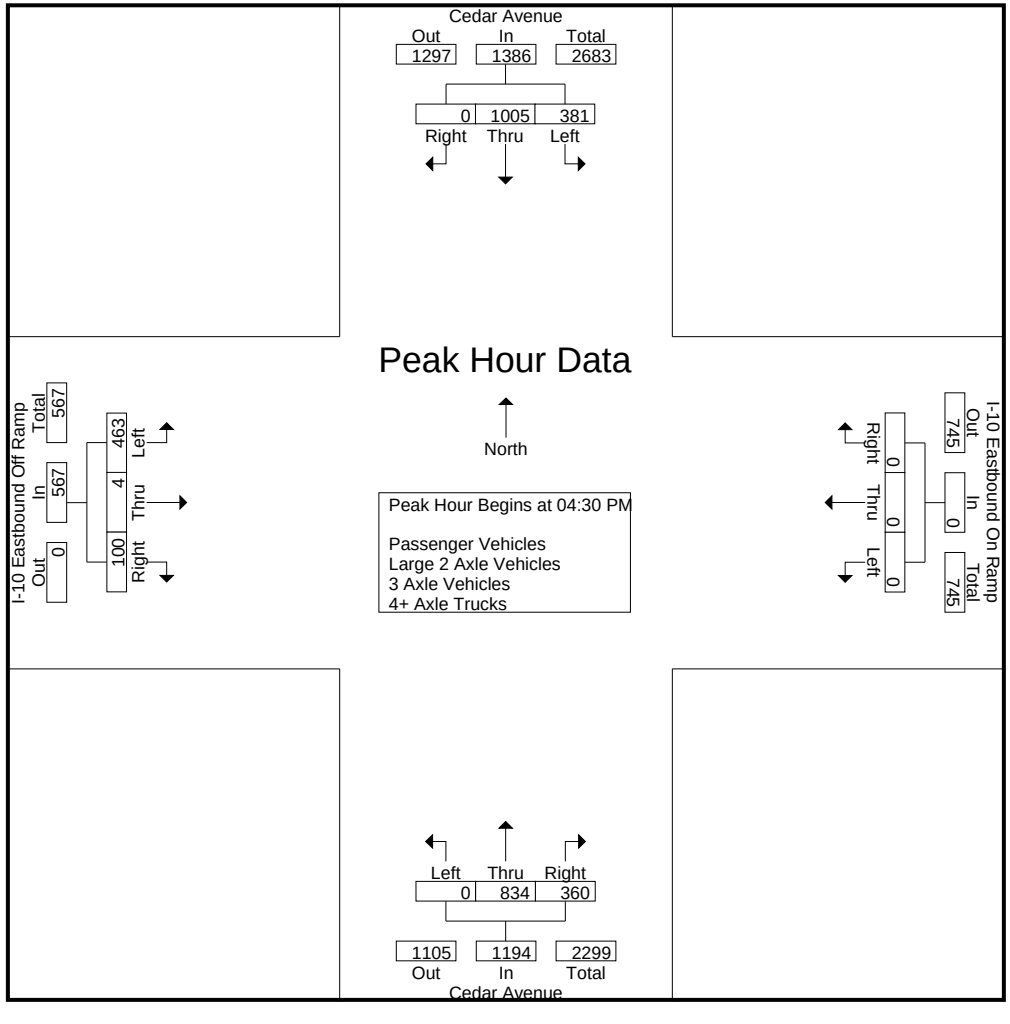

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	Cedar Avenue Southbound				I-10 Eastbound On Ramp Westbound				Cedar Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				03:30 PM				04:45 PM				03:45 PM				
+0 mins.	90	238	0	328	0	0	0	0	0	212	87	299	107	0	31	138	
+15 mins.	97	**284**	0	**381**	0	0	0	0	0	204	96	300	132	**1**	33	166	
+30 mins.	95	259	0	354	0	0	0	0	0	**221**	**102**	**323**	120	0	25	145	
+45 mins.	**99**	224	0	323	0	0	0	0	0	198	93	291	**138**	0	**34**	**172**	
Total Volume	381	1005	0	1386	0	0	0	0	0	835	378	1213	497	1	123	621	
% App. Total	27.5	72.5	0		0	0	0		0	68.8	31.2		80	0.2	19.8		
PHF	.962	.885	.000	.909	.000	.000	.000	.000	.000	.945	.926	.939	.900	.250	.904	.903	

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Page No : 1

Groups Printed- Passenger Vehicles

	Cedar Avenue Southbound					I-10 Eastbound On Ramp Westbound					Cedar Avenue Northbound					I-10 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	69	239	0	0	308	0	0	0	0	0	0	208	76	34	284	99	2	23	3	124	37	716	753
03:45 PM	77	244	0	0	321	0	0	0	0	0	0	190	83	49	273	105	0	24	5	129	54	723	777
Total	146	483	0	0	629	0	0	0	0	0	0	398	159	83	557	204	2	47	8	253	91	1439	1530
04:00 PM	92	224	0	0	316	0	0	0	0	0	0	204	77	45	281	125	1	26	5	152	50	749	799
04:15 PM	89	201	0	0	290	0	0	0	0	0	0	185	68	40	253	117	0	18	1	135	41	678	719
04:30 PM	88	223	0	0	311	0	0	0	0	0	0	187	68	39	255	128	0	24	2	152	41	718	759
04:45 PM	95	271	0	0	366	0	0	0	0	0	0	202	81	54	283	96	1	16	2	113	56	762	818
Total	364	919	0	0	1283	0	0	0	0	0	0	778	294	178	1072	466	2	84	10	552	188	2907	3095
05:00 PM	93	243	0	0	336	0	0	0	0	0	0	198	91	52	289	122	1	19	4	142	56	767	823
05:15 PM	96	210	0	0	306	0	0	0	0	0	0	217	101	46	318	94	0	18	1	112	47	736	783
05:30 PM	90	210	0	0	300	0	0	0	0	0	0	190	87	46	277	120	1	18	3	139	49	716	765
05:45 PM	91	239	0	0	330	0	0	0	0	0	0	194	77	44	271	111	0	22	1	133	45	734	779
Total	370	902	0	0	1272	0	0	0	0	0	0	799	356	188	1155	447	2	77	9	526	197	2953	3150
Grand Total	880	2304	0	0	3184	0	0	0	0	0	0	1975	809	449	2784	1117	6	208	27	1331	476	7299	7775
Apprch %	27.6	72.4	0			0	0	0			0	70.9	29.1			83.9	0.5	15.6					
Total %	12.1	31.6	0		43.6	0	0	0		0	0	27.1	11.1		38.1	15.3	0.1	2.8		18.2	6.1	93.9	

	Cedar Avenue Southbound				I-10 Eastbound On Ramp Westbound				Cedar Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	88	223	0	311	0	0	0	0	0	187	68	255	**128**	0	**24**	**152**	718
04:45 PM	95	**271**	0	**366**	0	0	0	0	0	202	81	283	96	**1**	16	113	762
05:00 PM	93	243	0	336	0	0	0	0	0	198	91	289	122	1	19	142	**767**
05:15 PM	**96**	210	0	306	0	0	0	0	0	**217**	**101**	**318**	94	0	18	112	736
Total Volume	372	947	0	1319	0	0	0	0	0	804	341	1145	440	2	77	519	2983
% App. Total	28.2	71.8	0		0	0	0		0	70.2	29.8		84.8	0.4	14.8		
PHF	.969	.874	.000	.901	.000	.000	.000	.000	.000	.926	.844	.900	.859	.500	.802	.854	.972

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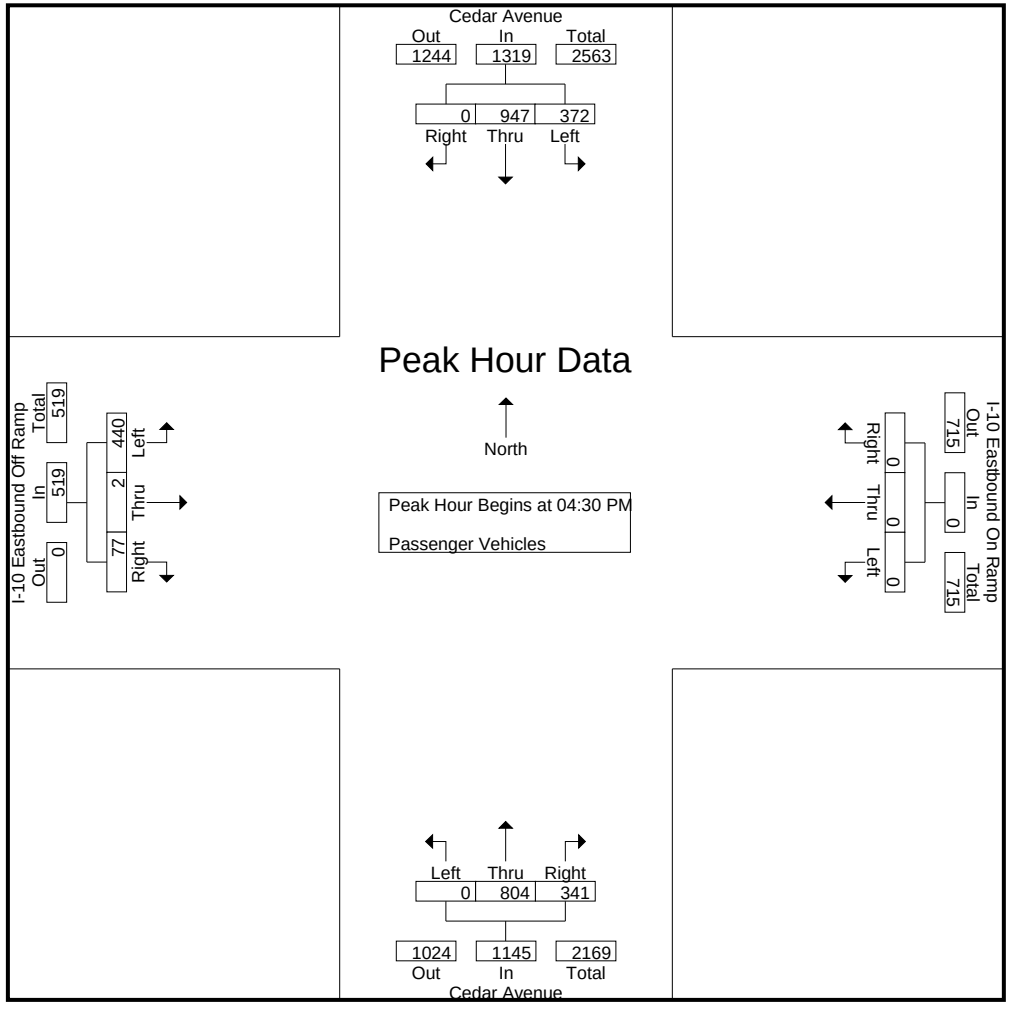

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Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
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Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	88	223	0	311	0	0	0	0	0	187	68	255	**128**	0	**24**	**152**	
+15 mins.	95	**271**	0	**366**	0	0	0	0	0	202	81	283	96	**1**	16	113	
+30 mins.	93	243	0	336	0	0	0	0	0	198	91	289	122	1	19	142	
+45 mins.	**96**	210	0	306	0	0	0	0	0	**217**	**101**	**318**	94	0	18	112	
Total Volume	372	947	0	1319	0	0	0	0	0	804	341	1145	440	2	77	519	
% App. Total	28.2	71.8	0		0	0	0		0	70.2	29.8		84.8	0.4	14.8		
PHF	.969	.874	.000	.901	.000	.000	.000	.000	.000	.926	.844	.900	.859	.500	.802	.854	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 09_CSB_Ced_10E PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

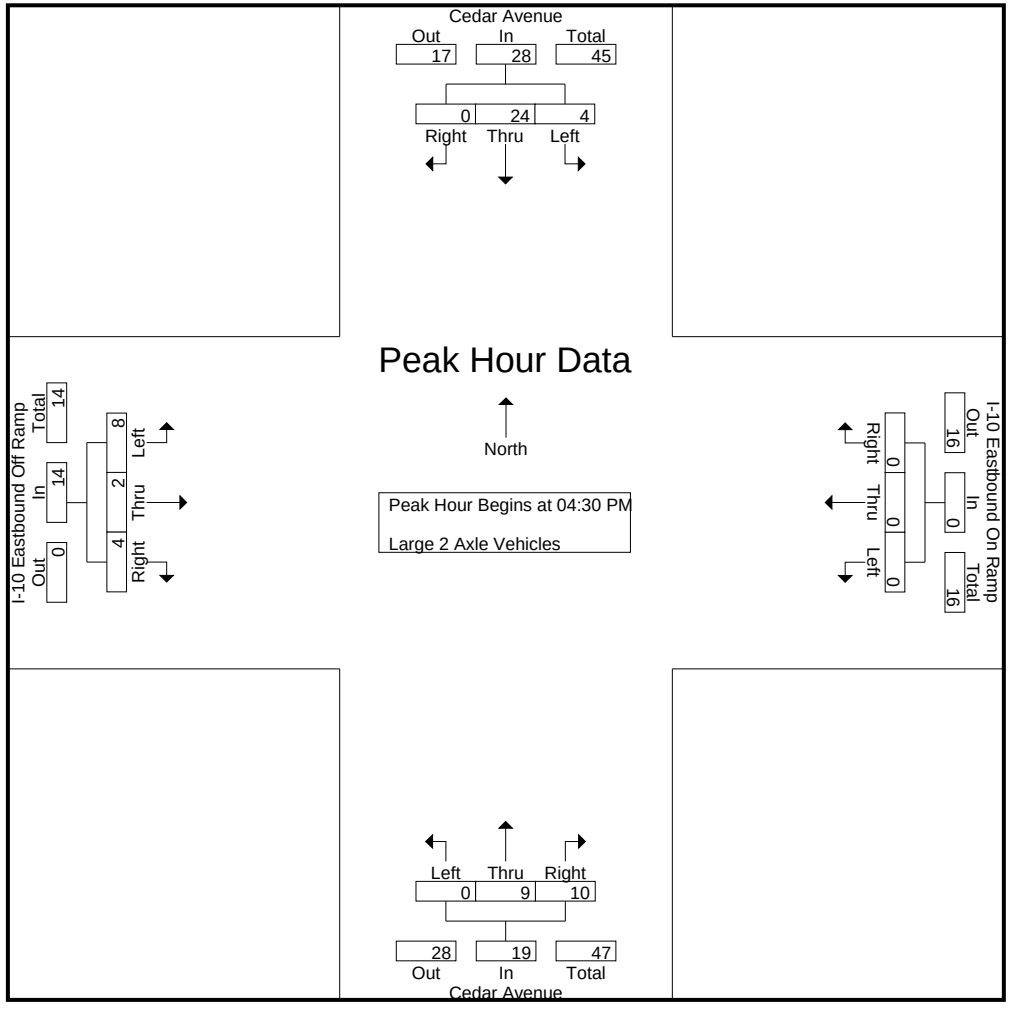
	Cedar Avenue Southbound					I-10 Eastbound On Ramp Westbound					Cedar Avenue Northbound					I-10 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	2	5	0	0	7	0	0	0	0	0	0	3	1	1	4	2	1	4	1	7	2	18	20
03:45 PM	2	11	0	0	13	0	0	0	0	0	0	1	2	2	3	1	0	3	0	4	2	20	22
Total	4	16	0	0	20	0	0	0	0	0	0	4	3	3	7	3	1	7	1	11	4	38	42
04:00 PM	1	6	0	0	7	0	0	0	0	0	0	3	2	1	5	2	0	1	0	3	1	15	16
04:15 PM	1	8	0	0	9	0	0	0	0	0	0	3	1	0	4	1	0	4	1	5	1	18	19
04:30 PM	1	5	0	0	6	0	0	0	0	0	0	5	5	3	10	4	0	0	0	4	3	20	23
04:45 PM	2	4	0	0	6	0	0	0	0	0	0	2	2	1	4	1	1	3	0	5	1	15	16
Total	5	23	0	0	28	0	0	0	0	0	0	13	10	5	23	8	1	8	1	17	6	68	74
05:00 PM	1	8	0	0	9	0	0	0	0	0	0	1	2	2	3	0	1	1	0	2	2	14	16
05:15 PM	0	7	0	0	7	0	0	0	0	0	0	1	1	0	2	3	0	0	0	3	0	12	12
05:30 PM	2	7	0	0	9	0	0	0	0	0	0	3	1	1	4	0	0	1	0	1	1	14	15
05:45 PM	2	5	0	0	7	0	0	0	0	0	0	4	0	0	4	1	0	7	0	8	0	19	19
Total	5	27	0	0	32	0	0	0	0	0	0	9	4	3	13	4	1	9	0	14	3	59	62
Grand Total	14	66	0	0	80	0	0	0	0	0	0	26	17	11	43	15	3	24	2	42	13	165	178
Apprch %	17.5	82.5	0			0	0	0			0	60.5	39.5			35.7	7.1	57.1					
Total %	8.5	40	0		48.5	0	0	0		0	0	15.8	10.3		26.1	9.1	1.8	14.5		25.5	7.3	92.7	

	Cedar Avenue Southbound				I-10 Eastbound On Ramp Westbound				Cedar Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	1	5	0	6	0	0	0	0	0	**5**	**5**	**10**	**4**	0	0	4	**20**
04:45 PM	**2**	4	0	6	0	0	0	0	0	2	2	4	1	**1**	**3**	**5**	15
05:00 PM	1	**8**	0	**9**	0	0	0	0	0	1	2	3	0	1	1	2	14
05:15 PM	0	7	0	7	0	0	0	0	0	1	1	2	3	0	0	3	12
Total Volume	4	24	0	28	0	0	0	0	0	9	10	19	8	2	4	14	61
% App. Total	14.3	85.7	0		0	0	0		0	47.4	52.6		57.1	14.3	28.6		
PHF	.500	.750	.000	.778	.000	.000	.000	.000	.000	.450	.500	.475	.500	.500	.333	.700	.763

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 09_CSB_Ced_10E PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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PO Box 1178
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County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 09_CSB_Ced_10E PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				I-10 Eastbound On Ramp Westbound				Cedar Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	1	5	0	6	0	0	0	0	0	**5**	**5**	**10**	**4**	0	0	4	
+15 mins.	**2**	4	0	6	0	0	0	0	0	2	2	4	1	**1**	**3**	**5**	
+30 mins.	1	**8**	0	**9**	0	0	0	0	0	1	2	3	0	1	1	2	
+45 mins.	0	7	0	7	0	0	0	0	0	1	1	2	3	0	0	3	
Total Volume	4	24	0	28	0	0	0	0	0	9	10	19	8	2	4	14	
% App. Total	14.3	85.7	0		0	0	0		0	47.4	52.6		57.1	14.3	28.6		
PHF	.500	.750	.000	.778	.000	.000	.000	.000	.000	.450	.500	.475	.500	.500	.333	.700	

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County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 09_CSB_Ced_10E PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

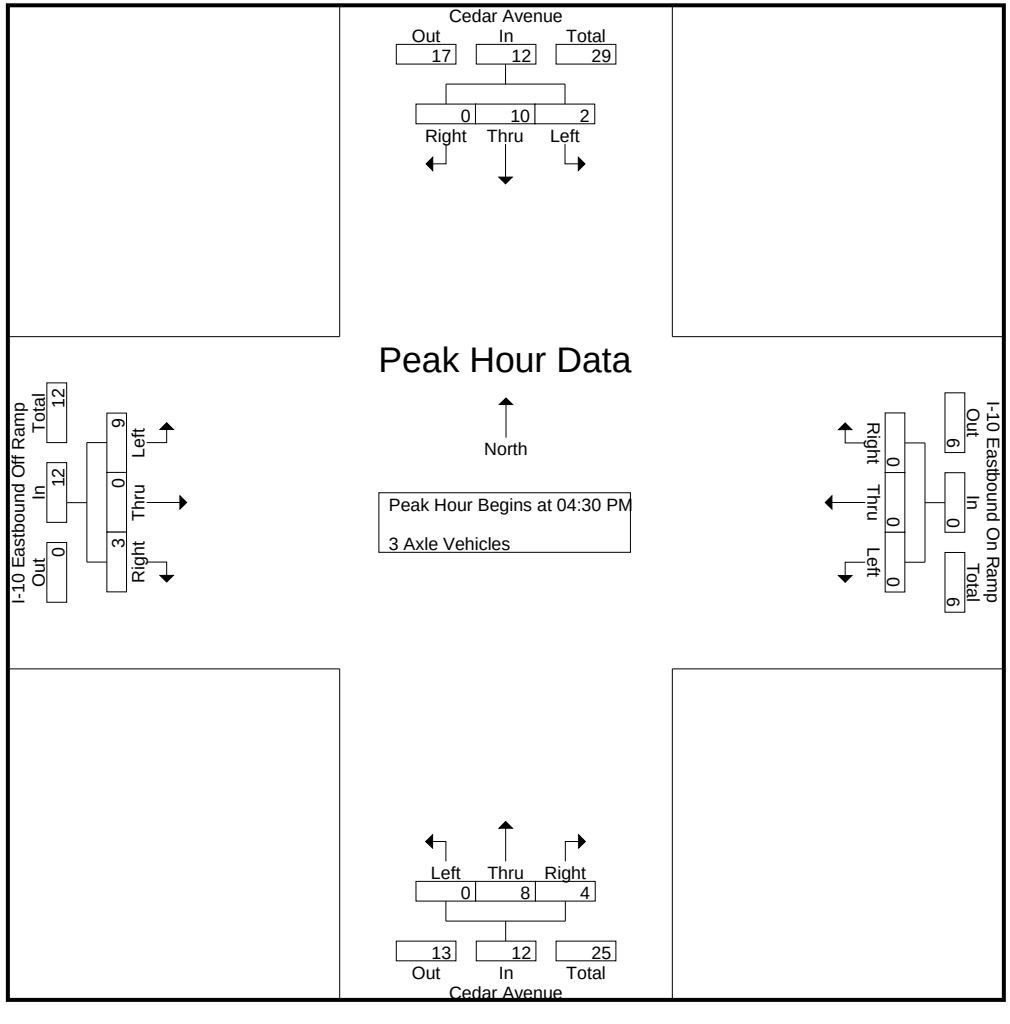
	Cedar Avenue Southbound					I-10 Eastbound On Ramp Westbound					Cedar Avenue Northbound					I-10 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	2	0	0	2	0	0	0	0	0	0	8	0	0	8	1	0	3	0	4	0	14	14
03:45 PM	1	3	0	0	4	0	0	0	0	0	0	3	1	1	4	0	0	0	0	0	1	8	9
Total	1	5	0	0	6	0	0	0	0	0	0	11	1	1	12	1	0	3	0	4	1	22	23
04:00 PM	0	10	0	0	10	0	0	0	0	0	0	0	0	0	0	4	0	4	2	8	2	18	20
04:15 PM	0	4	0	0	4	0	0	0	0	0	0	2	1	1	3	1	0	0	0	1	1	8	9
04:30 PM	0	2	0	0	2	0	0	0	0	0	0	2	1	0	3	4	0	1	0	5	0	10	10
04:45 PM	0	4	0	0	4	0	0	0	0	0	0	4	3	1	7	4	0	0	0	4	1	15	16
Total	0	20	0	0	20	0	0	0	0	0	0	8	5	2	13	13	0	5	2	18	4	51	55
05:00 PM	1	2	0	0	3	0	0	0	0	0	0	1	0	0	1	1	0	1	0	2	0	6	6
05:15 PM	1	2	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	5	5
05:30 PM	0	3	0	0	3	0	0	0	0	0	0	2	1	1	3	1	0	0	0	1	1	7	8
05:45 PM	1	1	0	0	2	0	0	0	0	0	0	3	1	0	4	0	0	1	0	1	0	7	7
Total	3	8	0	0	11	0	0	0	0	0	0	7	2	1	9	2	0	3	0	5	1	25	26
Grand Total	4	33	0	0	37	0	0	0	0	0	0	26	8	4	34	16	0	11	2	27	6	98	104
Apprch %	10.8	89.2	0			0	0	0			0	76.5	23.5			59.3	0	40.7					
Total %	4.1	33.7	0		37.8	0	0	0		0	0	26.5	8.2		34.7	16.3	0	11.2		27.6	5.8	94.2	

	Cedar Avenue Southbound				I-10 Eastbound On Ramp Westbound				Cedar Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	2	0	2	0	0	0	0	0	2	1	3	**4**	0	**1**	**5**	10
04:45 PM	0	**4**	0	**4**	0	0	0	0	0	**4**	**3**	**7**	4	0	0	4	**15**
05:00 PM	**1**	2	0	3	0	0	0	0	0	1	0	1	1	0	1	2	6
05:15 PM	1	2	0	3	0	0	0	0	0	1	0	1	0	0	1	1	5
Total Volume	2	10	0	12	0	0	0	0	0	8	4	12	9	0	3	12	36
% App. Total	16.7	83.3	0		0	0	0		0	66.7	33.3		75	0	25		
PHF	.500	.625	.000	.750	.000	.000	.000	.000	.000	.500	.333	.429	.563	.000	.750	.600	.600

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 09_CSB_Ced_10E PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 09_CSB_Ced_10E PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				I-10 Eastbound On Ramp Westbound				Cedar Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	2	0	2	0	0	0	0	0	2	1	3	**4**	0	**1**	**5**	
+15 mins.	0	**4**	0	**4**	0	0	0	0	0	**4**	**3**	**7**	4	0	0	4	
+30 mins.	**1**	2	0	3	0	0	0	0	0	1	0	1	1	0	1	2	
+45 mins.	1	2	0	3	0	0	0	0	0	1	0	1	0	0	1	1	
Total Volume	2	10	0	12	0	0	0	0	0	8	4	12	9	0	3	12	
% App. Total	16.7	83.3	0		0	0	0		0	66.7	33.3		75	0	25		
PHF	.500	.625	.000	.750	.000	.000	.000	.000	.000	.500	.333	.429	.563	.000	.750	.600	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 09_CSB_Ced_10E PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

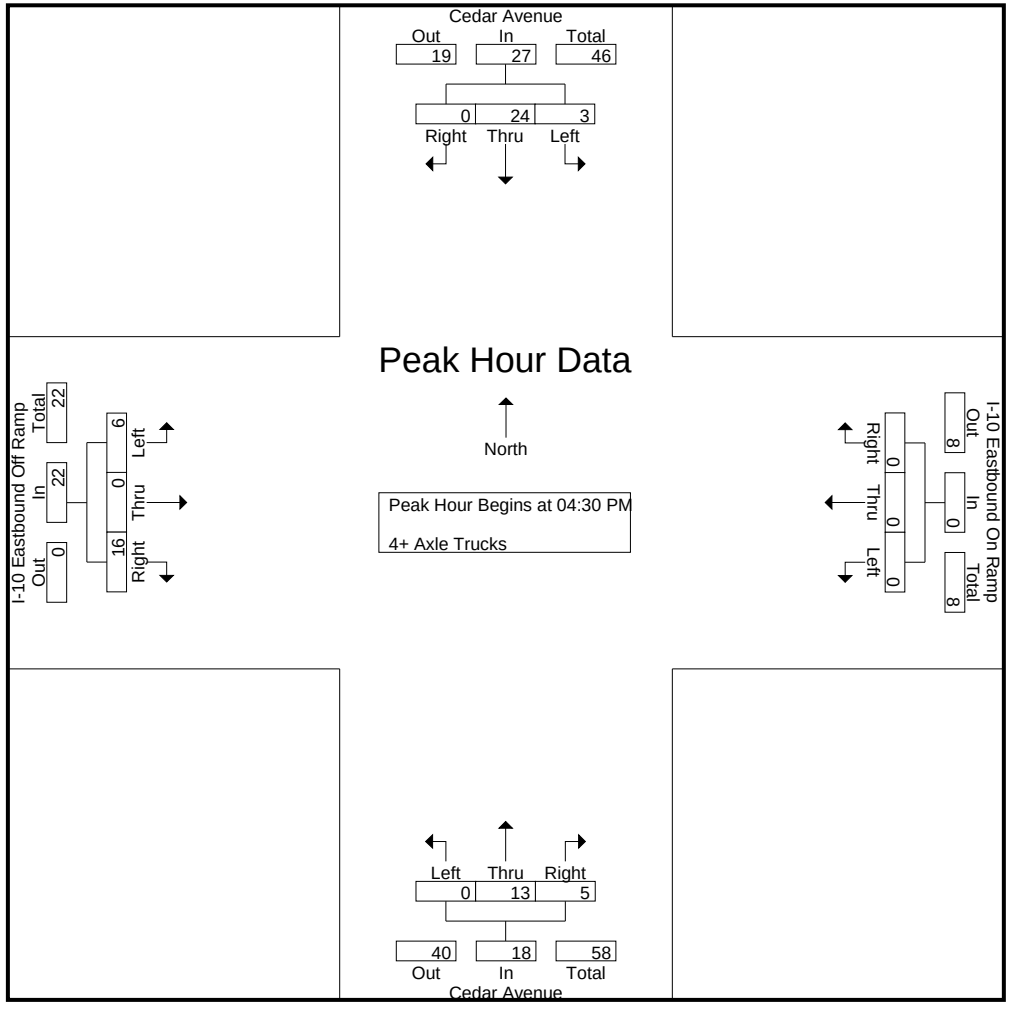
	Cedar Avenue Southbound					I-10 Eastbound On Ramp Westbound					Cedar Avenue Northbound					I-10 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	8	0	0	8	0	0	0	0	0	0	5	4	0	9	4	0	13	2	17	2	34	36
03:45 PM	5	3	0	0	8	0	0	0	0	0	0	1	1	1	2	1	0	4	0	5	1	15	16
Total	5	11	0	0	16	0	0	0	0	0	0	6	5	1	11	5	0	17	2	22	3	49	52
04:00 PM	1	6	0	0	7	0	0	0	0	0	0	3	1	1	4	1	0	2	0	3	1	14	15
04:15 PM	3	4	0	0	7	0	0	0	0	0	0	2	3	1	5	1	0	3	0	4	1	16	17
04:30 PM	1	8	0	0	9	0	0	0	0	0	0	3	1	1	4	2	0	9	1	11	2	24	26
04:45 PM	0	5	0	0	5	0	0	0	0	0	0	4	1	0	5	2	0	3	0	5	0	15	15
Total	5	23	0	0	28	0	0	0	0	0	0	12	6	3	18	6	0	17	1	23	4	69	73
05:00 PM	0	6	0	0	6	0	0	0	0	0	0	4	3	2	7	1	0	2	0	3	2	16	18
05:15 PM	2	5	0	0	7	0	0	0	0	0	0	2	0	0	2	1	0	2	0	3	0	12	12
05:30 PM	1	2	0	0	3	0	0	0	0	0	0	3	4	1	7	4	0	8	0	12	1	22	23
05:45 PM	2	6	0	0	8	0	0	0	0	0	0	5	0	0	5	2	0	3	0	5	0	18	18
Total	5	19	0	0	24	0	0	0	0	0	0	14	7	3	21	8	0	15	0	23	3	68	71
Grand Total	15	53	0	0	68	0	0	0	0	0	0	32	18	7	50	19	0	49	3	68	10	186	196
Apprch %	22.1	77.9	0			0	0	0			0	64	36			27.9	0	72.1					
Total %	8.1	28.5	0		36.6	0	0	0		0	0	17.2	9.7		26.9	10.2	0	26.3		36.6	5.1	94.9	

	Cedar Avenue Southbound				I-10 Eastbound On Ramp Westbound				Cedar Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	1	**8**	0	**9**	0	0	0	0	0	3	1	4	**2**	0	**9**	**11**	**24**
04:45 PM	0	5	0	5	0	0	0	0	0	**4**	1	5	2	0	3	5	15
05:00 PM	0	6	0	6	0	0	0	0	0	4	**3**	**7**	1	0	2	3	16
05:15 PM	**2**	5	0	7	0	0	0	0	0	2	0	2	1	0	2	3	12
Total Volume	3	24	0	27	0	0	0	0	0	13	5	18	6	0	16	22	67
% App. Total	11.1	88.9	0		0	0	0		0	72.2	27.8		27.3	0	72.7		
PHF	.375	.750	.000	.750	.000	.000	.000	.000	.000	.813	.417	.643	.750	.000	.444	.500	.698

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 09_CSB_Ced_10E PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 09_CSB_Ced_10E PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				I-10 Eastbound On Ramp Westbound				Cedar Avenue Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	1	**8**	0	**9**	0	0	0	0	0	3	1	4	**2**	0	**9**	**11**	
+15 mins.	0	5	0	5	0	0	0	0	0	**4**	1	5	2	0	3	5	
+30 mins.	0	6	0	6	0	0	0	0	0	4	**3**	**7**	1	0	2	3	
+45 mins.	**2**	5	0	7	0	0	0	0	0	2	0	2	1	0	2	3	
Total Volume	3	24	0	27	0	0	0	0	0	13	5	18	6	0	16	22	
% App. Total	11.1	88.9	0		0	0	0		0	72.2	27.8		27.3	0	72.7		
PHF	.375	.750	.000	.750	.000	.000	.000	.000	.000	.813	.417	.643	.750	.000	.444	.500	

Location: County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 EB Ramps

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Cedar Avenue	East Leg I-10 EB Ramps	South Leg Cedar Avenue	West Leg I-10 EB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	1	1
7:00 AM	1	1	0	1	3
7:15 AM	0	1	0	0	1
7:30 AM	0	0	0	1	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	3	3
8:30 AM	0	0	0	1	1
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	1	2	0	7	10

	North Leg Cedar Avenue	East Leg I-10 EB Ramps	South Leg Cedar Avenue	West Leg I-10 EB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	2	2
3:45 PM	0	0	0	0	0
4:00 PM	0	1	0	0	1
4:15 PM	1	1	0	1	3
4:30 PM	0	1	0	0	1
4:45 PM	0	1	0	0	1
5:00 PM	0	0	0	0	0
5:15 PM	0	1	0	0	1
5:30 PM	1	2	0	0	3
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	2	7	0	3	12

Counts Unlimited, Inc.
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951-268-6268

Location: County of San Bernardino
N/S: Cedar Avenue
E/W: I-10 EB Ramps

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Cedar Avenue			Westbound I-10 EB Ramps			Northbound Cedar Avenue			Eastbound I-10 EB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	1	0	0	0	0	0	1	0	0	0	0	2
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	3	0	0	0	0	0	1	0	0	0	0	4

	Southbound Cedar Avenue			Westbound I-10 EB Ramps			Northbound Cedar Avenue			Eastbound I-10 EB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:00 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	0	0	0	3	0	0	0	0	5

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County of San Bernardino
N/S: Cedar Avenue
E/W: Orange Street
Weather: Clear

File Name : 10_CSB_Ced_Ora AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Cedar Avenue Southbound					Orange Street Westbound					Cedar Avenue Northbound					Orange Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	26	250	41	4	317	0	0	25	3	25	0	238	2	0	240	25	0	0	0	25	7	607	614
06:45 AM	36	244	67	18	347	0	0	26	17	26	0	182	1	1	183	28	0	1	1	29	37	585	622
Total	62	494	108	22	664	0	0	51	20	51	0	420	3	1	423	53	0	1	1	54	44	1192	1236
07:00 AM	28	239	40	10	307	0	0	33	22	33	1	188	1	0	190	40	0	4	2	44	34	574	608
07:15 AM	20	259	90	22	369	0	0	43	34	43	2	201	0	0	203	45	0	4	0	49	56	664	720
07:30 AM	34	291	110	14	435	1	2	47	22	50	2	209	2	0	213	66	1	4	0	71	36	769	805
07:45 AM	44	276	93	27	413	1	1	30	18	32	2	199	0	0	201	54	2	2	1	58	46	704	750
Total	126	1065	333	73	1524	2	3	153	96	158	7	797	3	0	807	205	3	14	3	222	172	2711	2883
08:00 AM	47	296	70	14	413	2	0	24	18	26	0	165	0	0	165	33	0	3	2	36	34	640	674
08:15 AM	39	264	114	28	417	0	0	28	21	28	1	179	2	0	182	38	1	4	2	43	51	670	721
08:30 AM	41	245	112	37	398	1	2	23	14	26	2	197	5	0	204	44	0	8	3	52	54	680	734
08:45 AM	35	273	69	22	377	3	0	18	13	21	6	89	2	0	97	32	12	6	0	50	35	545	580
Total	162	1078	365	101	1605	6	2	93	66	101	9	630	9	0	648	147	13	21	7	181	174	2535	2709
Grand Total	350	2637	806	196	3793	8	5	297	182	310	16	1847	15	1	1878	405	16	36	11	457	390	6438	6828
Apprch %	9.2	69.5	21.2			2.6	1.6	95.8			0.9	98.3	0.8			88.6	3.5	7.9					
Total %	5.4	41	12.5		58.9	0.1	0.1	4.6		4.8	0.2	28.7	0.2		29.2	6.3	0.2	0.6		7.1	5.7	94.3	
Passenger Vehicles	341	2363	770		3663	7	5	289		478	14	1615	15		1645	368	15	19		411	0	0	6197
% Passenger Vehicles	97.4	89.6	95.5	96.4	91.8	87.5	100	97.3	97.3	97.2	87.5	87.4	100	100	87.5	90.9	93.8	52.8	81.8	87.8	0	0	90.8
Large 2 Axle Vehicles	6	90	15		115	0	0	6		10	0	98	0		98	7	1	5		14	0	0	237
% Large 2 Axle Vehicles	1.7	3.4	1.9	2	2.9	0	0	2	2.2	2	0	5.3	0	0	5.2	1.7	6.2	13.9	9.1	3	0	0	3.5
3 Axle Vehicles	0	64	2		67	0	0	2		3	1	33	0		34	7	0	4		12	0	0	116
% 3 Axle Vehicles	0	2.4	0.2	0.5	1.7	0	0	0.7	0.5	0.6	6.2	1.8	0	0	1.8	1.7	0	11.1	9.1	2.6	0	0	1.7
4+ Axle Trucks	3	120	19		144	1	0	0		1	1	101	0		102	23	0	8		31	0	0	278
% 4+ Axle Trucks	0.9	4.6	2.4	1	3.6	12.5	0	0	0	0.2	6.2	5.5	0	0	5.4	5.7	0	22.2	0	6.6	0	0	4.1

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E/W: Orange Street
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Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Orange Street Westbound				Cedar Avenue Northbound				Orange Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	34	291	110	**435**	1	**2**	**47**	**50**	**2**	**209**	**2**	**213**	**66**	1	**4**	**71**	**769**
07:45 AM	44	276	93	413	1	1	30	32	2	199	0	201	54	**2**	2	58	704
08:00 AM	**47**	**296**	70	413	**2**	0	24	26	0	165	0	165	33	0	3	36	640
08:15 AM	39	264	**114**	417	0	0	28	28	1	179	2	182	38	1	4	43	670
Total Volume	164	1127	387	1678	4	3	129	136	5	752	4	761	191	4	13	208	2783
% App. Total	9.8	67.2	23.1		2.9	2.2	94.9		0.7	98.8	0.5		91.8	1.9	6.2		
PHF	.872	.952	.849	.964	.500	.375	.686	.680	.625	.900	.500	.893	.723	.500	.813	.732	.905

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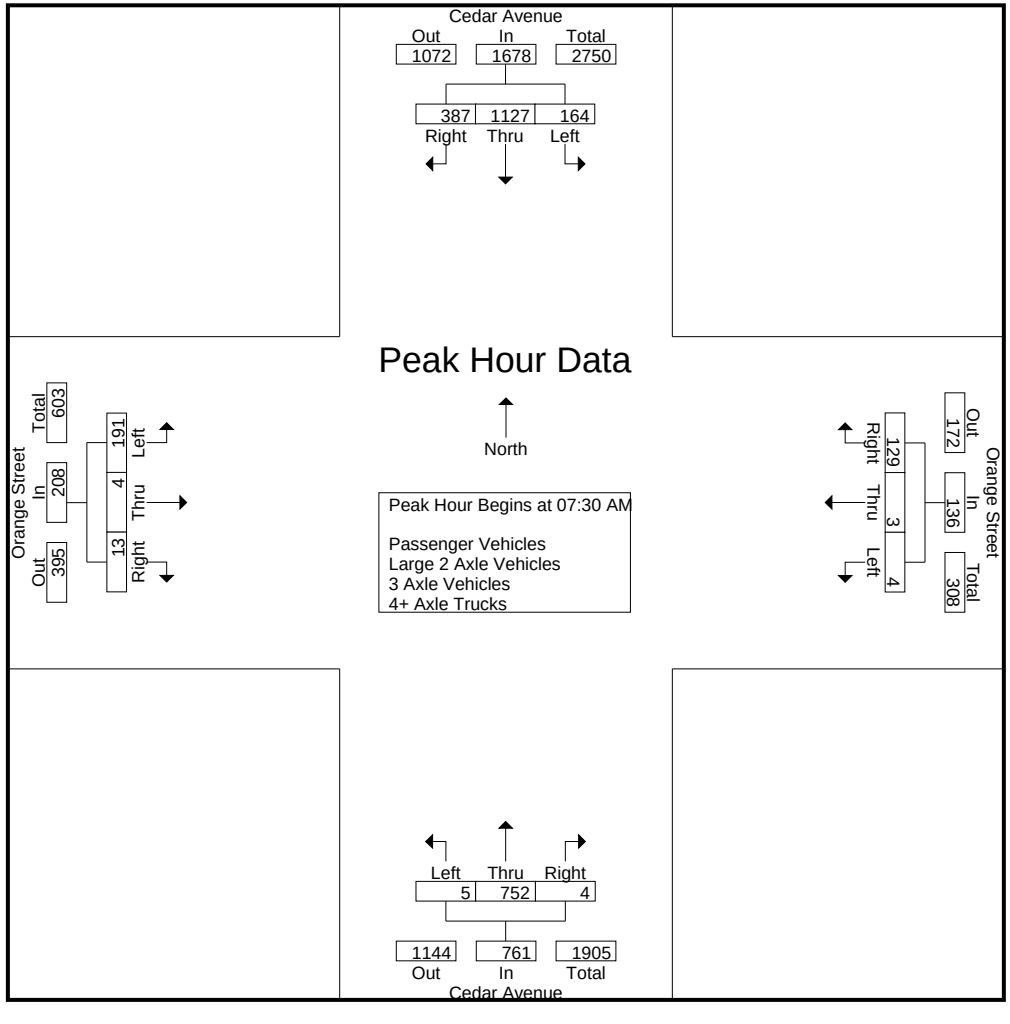
Site Code : 05122894
Start Date : 10/4/2022
Page No : 3



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File Name : 10_CSB_Ced_Ora AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Orange Street Westbound				Cedar Avenue Northbound				Orange Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:00 AM				06:30 AM				07:00 AM				
+0 mins.	34	291	110	**435**	0	0	33	33	0	**238**	**2**	**240**	40	0	**4**	44	
+15 mins.	44	276	93	413	0	0	43	43	0	182	1	183	45	0	4	49	
+30 mins.	**47**	**296**	70	413	**1**	**2**	**47**	**50**	1	188	1	190	**66**	1	4	**71**	
+45 mins.	39	264	**114**	417	1	1	30	32	**2**	201	0	203	54	**2**	2	58	
Total Volume	164	1127	387	1678	2	3	153	158	3	809	4	816	205	3	14	222	
% App. Total	9.8	67.2	23.1		1.3	1.9	96.8		0.4	99.1	0.5		92.3	1.4	6.3		
PHF	.872	.952	.849	.964	.500	.375	.814	.790	.375	.850	.500	.850	.777	.375	.875	.782	

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Groups Printed- Passenger Vehicles

	Cedar Avenue Southbound					Orange Street Westbound					Cedar Avenue Northbound					Orange Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	25	220	35	4	280	0	0	25	3	25	0	217	2	0	219	24	0	0	0	24	7	548	555
06:45 AM	35	220	65	18	320	0	0	25	17	25	0	161	1	1	162	23	0	0	0	23	36	530	566
Total	60	440	100	22	600	0	0	50	20	50	0	378	3	1	381	47	0	0	0	47	43	1078	1121
07:00 AM	28	215	38	8	281	0	0	29	19	29	1	166	1	0	168	35	0	3	2	38	29	516	545
07:15 AM	19	240	87	21	346	0	0	43	34	43	2	171	0	0	173	38	0	1	0	39	55	601	656
07:30 AM	34	271	104	13	409	1	2	47	22	50	2	185	2	0	189	59	1	3	0	63	35	711	746
07:45 AM	44	249	91	27	384	1	1	30	18	32	1	169	0	0	170	48	2	1	1	51	46	637	683
Total	125	975	320	69	1420	2	3	149	93	154	6	691	3	0	700	180	3	8	3	191	165	2465	2630
08:00 AM	46	259	65	13	370	1	0	24	18	25	0	140	0	0	140	31	0	1	1	32	32	567	599
08:15 AM	39	233	107	26	379	0	0	27	20	27	1	152	2	0	155	36	1	3	2	40	48	601	649
08:30 AM	40	215	110	37	365	1	2	23	14	26	2	171	5	0	178	43	0	4	3	47	54	616	670
08:45 AM	31	241	68	22	340	3	0	16	12	19	5	83	2	0	90	31	11	3	0	45	34	494	528
Total	156	948	350	98	1454	5	2	90	64	97	8	546	9	0	563	141	12	11	6	164	168	2278	2446
Grand Total	341	2363	770	189	3474	7	5	289	177	301	14	1615	15	1	1644	368	15	19	9	402	376	5821	6197
Apprch %	9.8	68	22.2			2.3	1.7	96			0.9	98.2	0.9			91.5	3.7	4.7					
Total %	5.9	40.6	13.2		59.7	0.1	0.1	5		5.2	0.2	27.7	0.3		28.2	6.3	0.3	0.3		6.9	6.1	93.9	

	Cedar Avenue Southbound				Orange Street Westbound				Cedar Avenue Northbound				Orange Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	34	**271**	104	**409**	**1**	**2**	**47**	**50**	**2**	**185**	**2**	**189**	**59**	1	**3**	**63**	**711**
07:45 AM	44	249	91	384	1	1	30	32	1	169	0	170	48	**2**	1	51	637
08:00 AM	**46**	259	65	370	1	0	24	25	0	140	0	140	31	0	1	32	567
08:15 AM	39	233	**107**	379	0	0	27	27	1	152	2	155	36	1	3	40	601
Total Volume	163	1012	367	1542	3	3	128	134	4	646	4	654	174	4	8	186	2516
% App. Total	10.6	65.6	23.8		2.2	2.2	95.5		0.6	98.8	0.6		93.5	2.2	4.3		
PHF	.886	.934	.857	.943	.750	.375	.681	.670	.500	.873	.500	.865	.737	.500	.667	.738	.885

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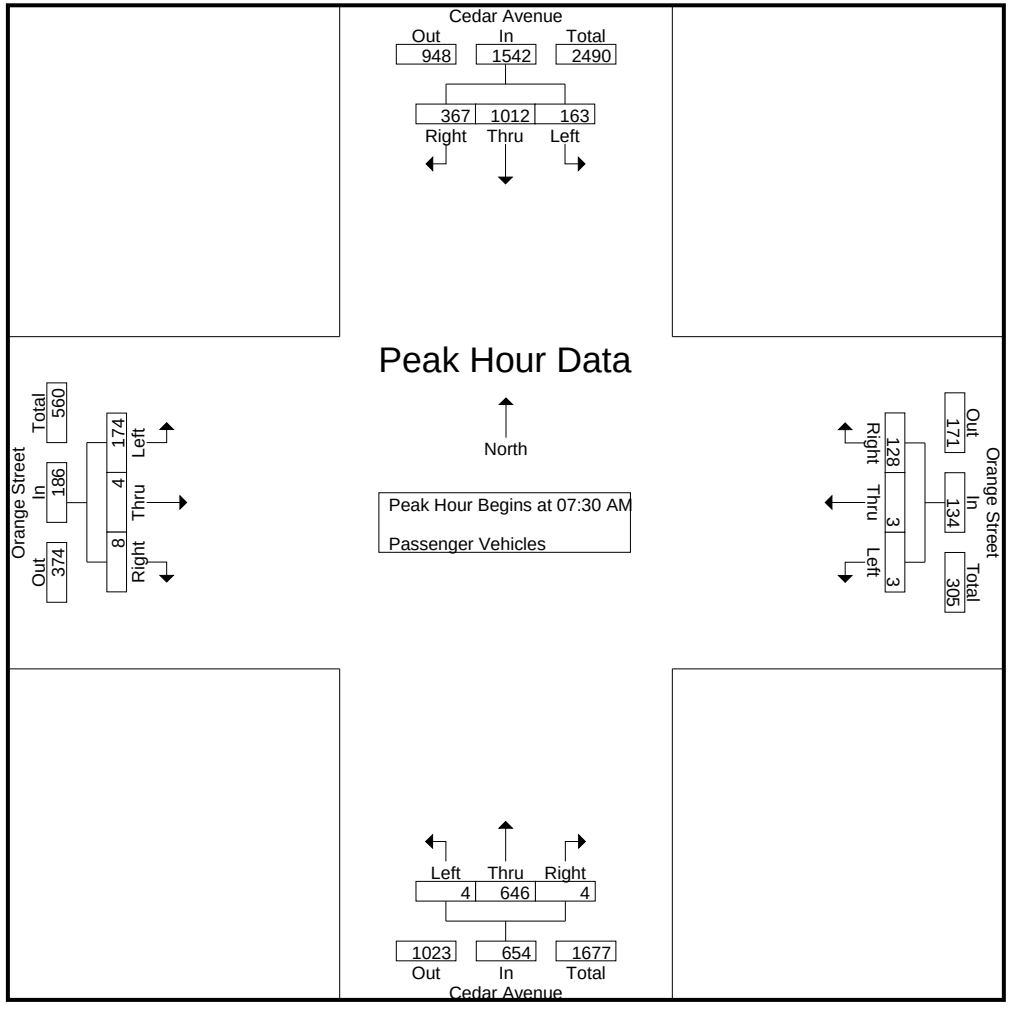
Start Date : 10/4/2022
Page No : 2



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	Cedar Avenue Southbound				Orange Street Westbound				Cedar Avenue Northbound				Orange Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	34	**271**	104	**409**	**1**	**2**	**47**	**50**	**2**	**185**	**2**	**189**	**59**	1	**3**	**63**	
+15 mins.	44	249	91	384	1	1	30	32	1	169	0	170	48	**2**	1	51	
+30 mins.	**46**	259	65	370	1	0	24	25	0	140	0	140	31	0	1	32	
+45 mins.	39	233	**107**	379	0	0	27	27	1	152	2	155	36	1	3	40	
Total Volume	163	1012	367	1542	3	3	128	134	4	646	4	654	174	4	8	186	
% App. Total	10.6	65.6	23.8		2.2	2.2	95.5		0.6	98.8	0.6		93.5	2.2	4.3		
PHF	.886	.934	.857	.943	.750	.375	.681	.670	.500	.873	.500	.865	.737	.500	.667	.738	

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Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Cedar Avenue Southbound					Orange Street Westbound					Cedar Avenue Northbound					Orange Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	1	10	3	0	14	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	23	23
06:45 AM	1	10	0	0	11	0	0	0	0	0	0	11	0	0	11	3	0	0	0	3	0	25	25
Total	2	20	3	0	25	0	0	0	0	0	0	20	0	0	20	3	0	0	0	3	0	48	48
07:00 AM	0	7	2	2	9	0	0	4	3	4	0	13	0	0	13	0	0	0	0	0	5	26	31
07:15 AM	1	4	0	0	5	0	0	0	0	0	0	14	0	0	14	1	0	1	0	2	0	21	21
07:30 AM	0	5	4	1	9	0	0	0	0	0	0	11	0	0	11	0	0	1	0	1	1	21	22
07:45 AM	0	12	0	0	12	0	0	0	0	0	0	7	0	0	7	1	0	0	0	1	0	20	20
Total	1	28	6	3	35	0	0	4	3	4	0	45	0	0	45	2	0	2	0	4	6	88	94
08:00 AM	0	14	2	0	16	0	0	0	0	0	0	12	0	0	12	0	0	2	1	2	1	30	31
08:15 AM	0	10	3	1	13	0	0	0	0	0	0	9	0	0	9	1	0	0	0	1	1	23	24
08:30 AM	0	9	1	0	10	0	0	0	0	0	0	11	0	0	11	1	0	0	0	1	0	22	22
08:45 AM	3	9	0	0	12	0	0	2	1	2	0	1	0	0	1	0	1	1	0	2	1	17	18
Total	3	42	6	1	51	0	0	2	1	2	0	33	0	0	33	2	1	3	1	6	3	92	95
Grand Total	6	90	15	4	111	0	0	6	4	6	0	98	0	0	98	7	1	5	1	13	9	228	237
Apprch %	5.4	81.1	13.5			0	0	100			0	100	0			53.8	7.7	38.5					
Total %	2.6	39.5	6.6		48.7	0	0	2.6		2.6	0	43	0		43	3.1	0.4	2.2		5.7	3.8	96.2	

	Cedar Avenue Southbound				Orange Street Westbound				Cedar Avenue Northbound				Orange Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	5	**4**	9	0	0	0	0	0	11	0	11	0	0	1	1	21
07:45 AM	0	12	0	12	0	0	0	0	0	7	0	7	**1**	0	0	1	20
08:00 AM	0	**14**	2	**16**	0	0	0	0	0	**12**	0	**12**	0	0	**2**	**2**	**30**
08:15 AM	0	10	3	13	0	0	0	0	0	9	0	9	1	0	0	1	23
Total Volume	0	41	9	50	0	0	0	0	0	39	0	39	2	0	3	5	94
% App. Total	0	82	18		0	0	0		0	100	0		40	0	60		
PHF	.000	.732	.563	.781	.000	.000	.000	.000	.000	.813	.000	.813	.500	.000	.375	.625	.783

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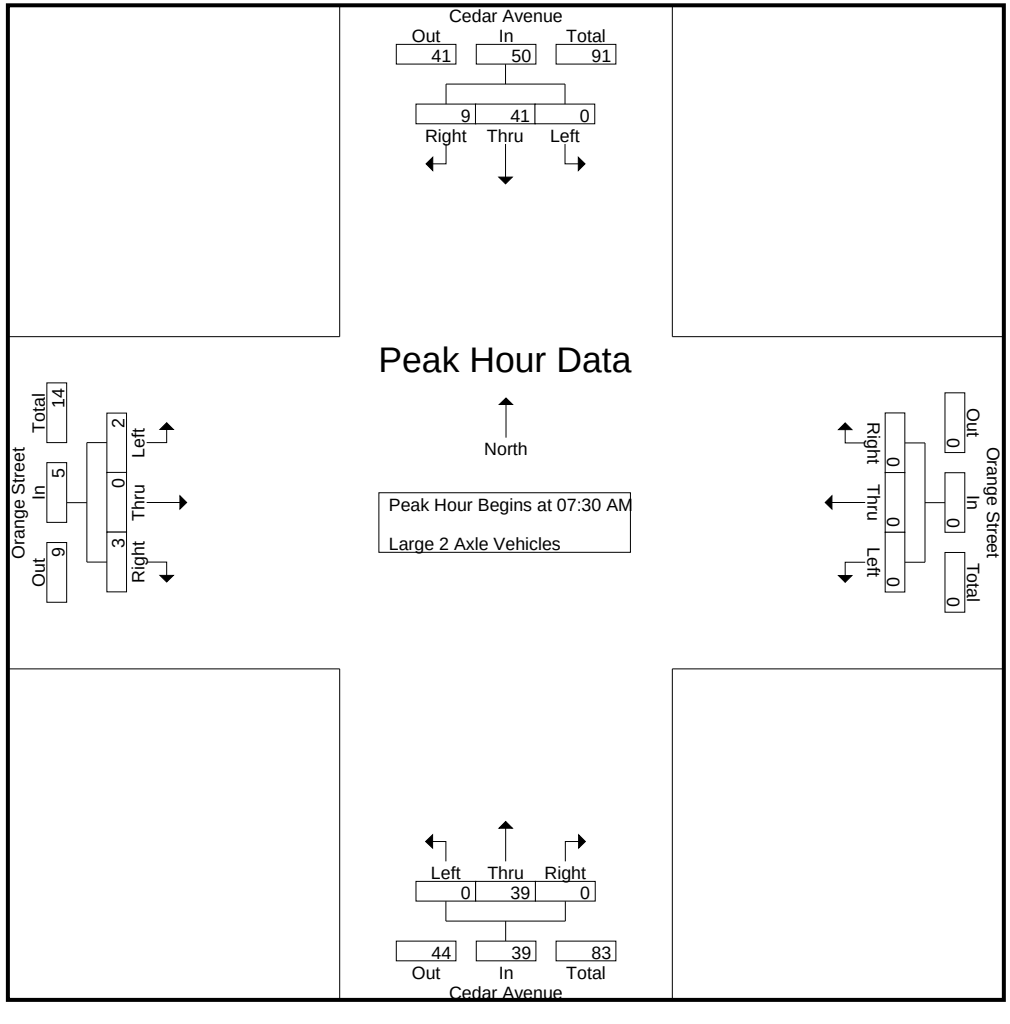

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	Cedar Avenue Southbound				Orange Street Westbound				Cedar Avenue Northbound				Orange Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	5	**4**	9	0	0	0	0	0	11	0	11	0	0	1	1	
+15 mins.	0	12	0	12	0	0	0	0	0	7	0	7	**1**	0	0	1	
+30 mins.	0	**14**	2	**16**	0	0	0	0	0	**12**	0	**12**	0	0	**2**	**2**	
+45 mins.	0	10	3	13	0	0	0	0	0	9	0	9	1	0	0	1	
Total Volume	0	41	9	50	0	0	0	0	0	39	0	39	2	0	3	5	
% App. Total	0	82	18		0	0	0		0	100	0		40	0	60		
PHF	.000	.732	.563	.781	.000	.000	.000	.000	.000	.813	.000	.813	.500	.000	.375	.625	

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Corona, CA 92878
(951)268-6268

County of San Bernardino
N/S: Cedar Avenue
E/W: Orange Street
Weather: Clear

File Name : 10_CSB_Ced_Ora AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Cedar Avenue Southbound					Orange Street Westbound					Cedar Avenue Northbound					Orange Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	6	0	0	6	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	8	8
06:45 AM	0	7	0	0	7	0	0	1	0	1	0	6	0	0	6	0	0	1	1	1	1	15	16
Total	0	13	0	0	13	0	0	1	0	1	0	8	0	0	8	0	0	1	1	1	1	23	24
07:00 AM	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	2	0	1	0	3	0	10	10
07:15 AM	0	6	0	0	6	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	11	11
07:30 AM	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	3	0	0	0	3	0	10	10
07:45 AM	0	8	0	0	8	0	0	0	0	0	1	6	0	0	7	1	0	1	0	2	0	17	17
Total	0	24	0	0	24	0	0	0	0	0	1	15	0	0	16	6	0	2	0	8	0	48	48
08:00 AM	0	9	0	0	9	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	0	12	12
08:15 AM	0	6	2	1	8	0	0	1	1	1	0	4	0	0	4	0	0	0	0	0	2	13	15
08:30 AM	0	8	0	0	8	0	0	0	0	0	0	4	0	0	4	0	0	1	0	1	0	13	13
08:45 AM	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
Total	0	27	2	1	29	0	0	1	1	1	0	10	0	0	10	1	0	1	0	2	2	42	44
Grand Total	0	64	2	1	66	0	0	2	1	2	1	33	0	0	34	7	0	4	1	11	3	113	116
Apprch %	0	97	3			0	0	100			2.9	97.1	0			63.6	0	36.4					
Total %	0	56.6	1.8		58.4	0	0	1.8		1.8	0.9	29.2	0		30.1	6.2	0	3.5		9.7	2.6	97.4	

	Cedar Avenue Southbound				Orange Street Westbound				Cedar Avenue Northbound				Orange Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	5	0	5	0	0	0	0	0	2	0	2	**3**	0	0	**3**	10
07:45 AM	0	8	0	8	0	0	0	0	**1**	**6**	0	**7**	1	0	**1**	2	**17**
08:00 AM	0	**9**	0	**9**	0	0	0	0	0	2	0	2	1	0	0	1	12
08:15 AM	0	6	**2**	8	0	0	**1**	**1**	0	4	0	4	0	0	0	0	13
Total Volume	0	28	2	30	0	0	1	1	1	14	0	15	5	0	1	6	52
% App. Total	0	93.3	6.7		0	0	100		6.7	93.3	0		83.3	0	16.7		
PHF	.000	.778	.250	.833	.000	.000	.250	.250	.250	.583	.000	.536	.417	.000	.250	.500	.765

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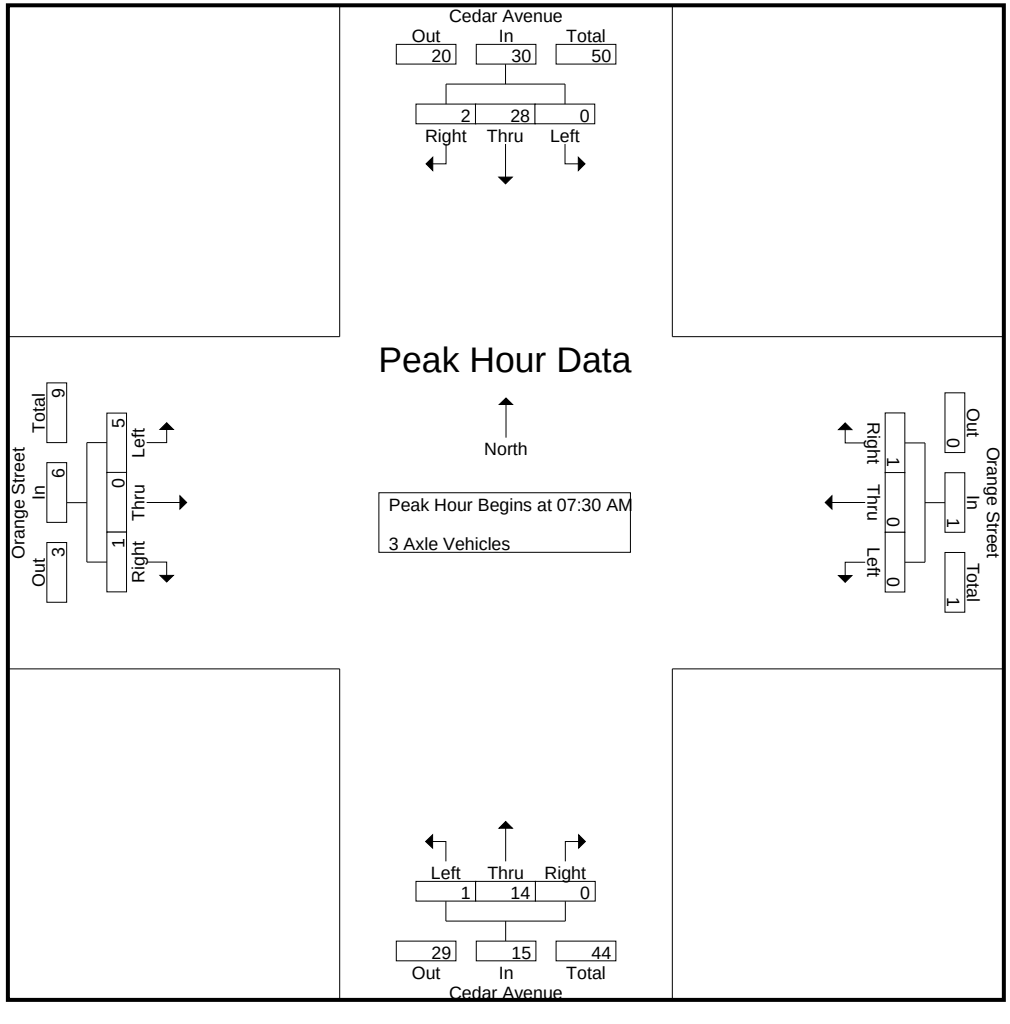
County of San Bernardino
N/S: Cedar Avenue
E/W: Orange Street
Weather: Clear

File Name : 10_CSB_Ced_Ora AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Orange Street Westbound				Cedar Avenue Northbound				Orange Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	5	0	5	0	0	0	0	0	2	0	2	**3**	0	0	**3**	
+15 mins.	0	8	0	8	0	0	0	0	**1**	**6**	0	**7**	1	0	**1**	2	
+30 mins.	0	**9**	0	**9**	0	0	0	0	0	2	0	2	1	0	0	1	
+45 mins.	0	6	**2**	8	0	0	**1**	**1**	0	4	0	4	0	0	0	0	
Total Volume	0	28	2	30	0	0	1	1	1	14	0	15	5	0	1	6	
% App. Total	0	93.3	6.7		0	0	100		6.7	93.3	0		83.3	0	16.7		
PHF	.000	.778	.250	.833	.000	.000	.250	.250	.250	.583	.000	.536	.417	.000	.250	.500	

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Groups Printed- 4+ Axle Trucks

	Cedar Avenue Southbound					Orange Street Westbound					Cedar Avenue Northbound					Orange Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	14	3	0	17	0	0	0	0	0	0	10	0	0	10	1	0	0	0	1	0	28	28
06:45 AM	0	7	2	0	9	0	0	0	0	0	0	4	0	0	4	2	0	0	0	2	0	15	15
Total	0	21	5	0	26	0	0	0	0	0	0	14	0	0	14	3	0	0	0	3	0	43	43
07:00 AM	0	12	0	0	12	0	0	0	0	0	0	7	0	0	7	3	0	0	0	3	0	22	22
07:15 AM	0	9	3	1	12	0	0	0	0	0	0	11	0	0	11	6	0	2	0	8	1	31	32
07:30 AM	0	10	2	0	12	0	0	0	0	0	0	11	0	0	11	4	0	0	0	4	0	27	27
07:45 AM	0	7	2	0	9	0	0	0	0	0	0	17	0	0	17	4	0	0	0	4	0	30	30
Total	0	38	7	1	45	0	0	0	0	0	0	46	0	0	46	17	0	2	0	19	1	110	111
08:00 AM	1	14	3	1	18	1	0	0	0	1	0	11	0	0	11	1	0	0	0	1	1	31	32
08:15 AM	0	15	2	0	17	0	0	0	0	0	0	14	0	0	14	1	0	1	0	2	0	33	33
08:30 AM	1	13	1	0	15	0	0	0	0	0	0	11	0	0	11	0	0	3	0	3	0	29	29
08:45 AM	1	19	1	0	21	0	0	0	0	0	1	5	0	0	6	1	0	2	0	3	0	30	30
Total	3	61	7	1	71	1	0	0	0	1	1	41	0	0	42	3	0	6	0	9	1	123	124
Grand Total	3	120	19	2	142	1	0	0	0	1	1	101	0	0	102	23	0	8	0	31	2	276	278
Apprch %	2.1	84.5	13.4			100	0	0			1	99	0			74.2	0	25.8					
Total %	1.1	43.5	6.9		51.4	0.4	0	0		0.4	0.4	36.6	0		37	8.3	0	2.9		11.2	0.7	99.3	

	Cedar Avenue Southbound				Orange Street Westbound				Cedar Avenue Northbound				Orange Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	10	2	12	0	0	0	0	0	11	0	11	**4**	0	0	**4**	27
07:45 AM	0	7	2	9	0	0	0	0	0	**17**	0	**17**	4	0	0	4	30
08:00 AM	**1**	14	**3**	**18**	**1**	0	0	**1**	0	11	0	11	1	0	0	1	31
08:15 AM	0	**15**	2	17	0	0	0	0	0	14	0	14	1	0	**1**	2	**33**
Total Volume	1	46	9	56	1	0	0	1	0	53	0	53	10	0	1	11	121
% App. Total	1.8	82.1	16.1		100	0	0		0	100	0		90.9	0	9.1		
PHF	.250	.767	.750	.778	.250	.000	.000	.250	.000	.779	.000	.779	.625	.000	.250	.688	.917

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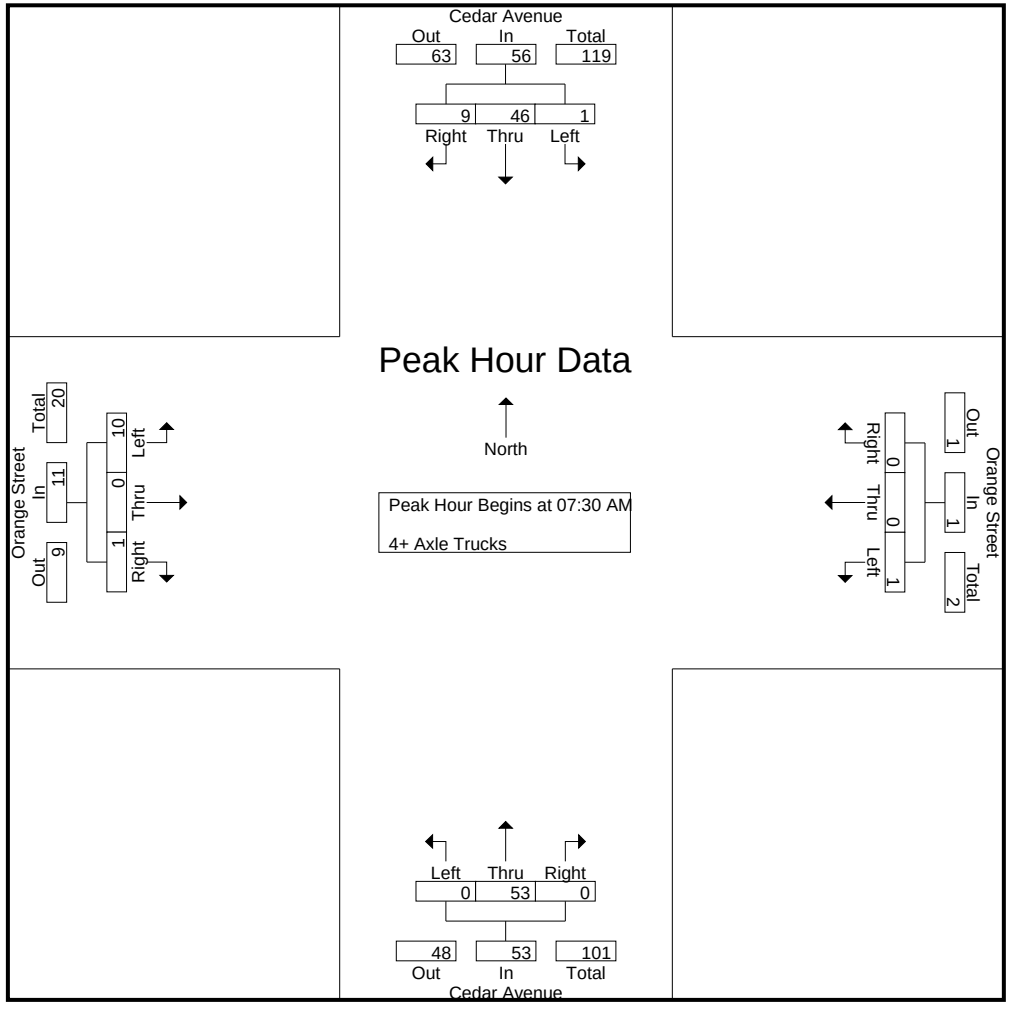
Page No : 2



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	Cedar Avenue Southbound				Orange Street Westbound				Cedar Avenue Northbound				Orange Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	10	2	12	0	0	0	0	0	11	0	11	**4**	0	0	**4**	
+15 mins.	0	7	2	9	0	0	0	0	0	**17**	0	**17**	4	0	0	4	
+30 mins.	**1**	14	**3**	**18**	**1**	0	0	**1**	0	11	0	11	1	0	0	1	
+45 mins.	0	**15**	2	17	0	0	0	0	0	14	0	14	1	0	**1**	2	
Total Volume	1	46	9	56	1	0	0	1	0	53	0	53	10	0	1	11	
% App. Total	1.8	82.1	16.1		100	0	0		0	100	0		90.9	0	9.1		
PHF	.250	.767	.750	.778	.250	.000	.000	.250	.000	.779	.000	.779	.625	.000	.250	.688	

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Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Cedar Avenue Southbound					Orange Street Westbound					Cedar Avenue Northbound					Orange Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	20	211	102	16	333	1	1	65	32	67	0	238	1	0	239	39	0	1	0	40	48	679	727
03:45 PM	18	187	76	31	281	0	1	34	12	35	0	157	2	1	159	76	7	1	0	84	44	559	603
Total	38	398	178	47	614	1	2	99	44	102	0	395	3	1	398	115	7	2	0	124	92	1238	1330
04:00 PM	6	201	66	21	273	0	0	48	9	48	1	171	2	0	174	66	3	7	6	76	36	571	607
04:15 PM	9	210	45	12	264	1	1	52	12	54	2	145	0	0	147	74	2	3	2	79	26	544	570
04:30 PM	16	219	49	15	284	1	4	49	20	54	4	160	1	0	165	49	1	3	1	53	36	556	592
04:45 PM	11	226	61	16	298	0	2	25	7	27	5	211	1	0	217	52	1	2	1	55	24	597	621
Total	42	856	221	64	1119	2	7	174	48	183	12	687	4	0	703	241	7	15	10	263	122	2268	2390
05:00 PM	12	210	51	7	273	1	0	57	20	58	3	191	0	0	194	43	0	3	2	46	29	571	600
05:15 PM	14	209	52	22	275	0	0	34	9	34	2	252	0	0	254	49	1	3	1	53	32	616	648
05:30 PM	4	202	47	14	253	1	0	36	8	37	0	243	1	0	244	51	0	1	1	52	23	586	609
05:45 PM	16	194	60	20	270	0	2	36	11	38	3	163	2	0	168	60	6	0	0	66	31	542	573
Total	46	815	210	63	1071	2	2	163	48	167	8	849	3	0	860	203	7	7	4	217	115	2315	2430
Grand Total	126	2069	609	174	2804	5	11	436	140	452	20	1931	10	1	1961	559	21	24	14	604	329	5821	6150
Apprch %	4.5	73.8	21.7			1.1	2.4	96.5			1	98.5	0.5			92.5	3.5	4					
Total %	2.2	35.5	10.5		48.2	0.1	0.2	7.5		7.8	0.3	33.2	0.2		33.7	9.6	0.4	0.4		10.4	5.3	94.7	
Passenger Vehicles	119	1876	568		2729	4	11	420		571	14	1800	10		1825	533	20	18		583	0	0	5708
% Passenger Vehicles	94.4	90.7	93.3	95.4	91.6	80	100	96.3	97.1	96.5	70	93.2	100	100	93	95.3	95.2	75	85.7	94.3	0	0	92.8
Large 2 Axle Vehicles	2	78	5		87	0	0	10		13	1	49	0		50	9	1	2		13	0	0	163
% Large 2 Axle Vehicles	1.6	3.8	0.8	1.1	2.9	0	0	2.3	2.1	2.2	5	2.5	0	0	2.5	1.6	4.8	8.3	7.1	2.1	0	0	2.7
3 Axle Vehicles	3	37	12		55	0	0	4		4	0	27	0		27	2	0	2		5	0	0	91
% 3 Axle Vehicles	2.4	1.8	2	1.7	1.8	0	0	0.9	0	0.7	0	1.4	0	0	1.4	0.4	0	8.3	7.1	0.8	0	0	1.5
4+ Axle Trucks	2	78	24		107	1	0	2		4	5	55	0		60	15	0	2		17	0	0	188
% 4+ Axle Trucks	1.6	3.8	3.9	1.7	3.6	20	0	0.5	0.7	0.7	25	2.8	0	0	3.1	2.7	0	8.3	0	2.8	0	0	3.1

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Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Orange Street Westbound				Cedar Avenue Northbound				Orange Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	11	**226**	**61**	**298**	0	**2**	25	27	**5**	211	**1**	217	**52**	**1**	2	**55**	597
05:00 PM	12	210	51	273	**1**	0	**57**	**58**	3	191	0	194	43	0	**3**	46	571
05:15 PM	**14**	209	52	275	0	0	34	34	2	**252**	0	**254**	49	1	3	53	**616**
05:30 PM	4	202	47	253	1	0	36	37	0	243	1	244	51	0	1	52	586
Total Volume	41	847	211	1099	2	2	152	156	10	897	2	909	195	2	9	206	2370
% App. Total	3.7	77.1	19.2		1.3	1.3	97.4		1.1	98.7	0.2		94.7	1	4.4		
PHF	.732	.937	.865	.922	.500	.250	.667	.672	.500	.890	.500	.895	.938	.500	.750	.936	.962

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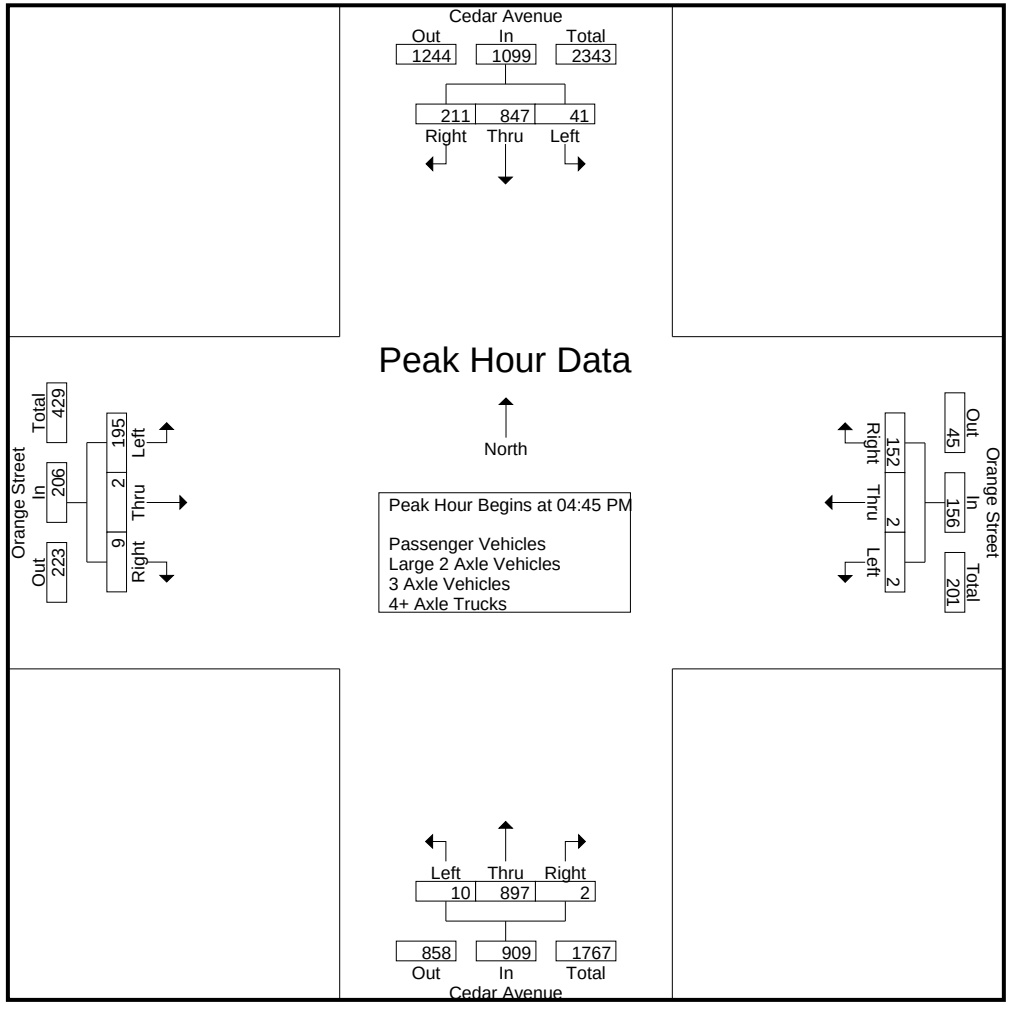

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	Cedar Avenue Southbound				Orange Street Westbound				Cedar Avenue Northbound				Orange Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	03:30 PM				03:30 PM				04:45 PM				03:45 PM				
+0 mins.	**20**	**211**	**102**	**333**	**1**	**1**	**65**	**67**	**5**	211	**1**	217	**76**	**7**	1	**84**	
+15 mins.	18	187	76	281	0	1	34	35	3	191	0	194	66	3	**7**	76	
+30 mins.	6	201	66	273	0	0	48	48	2	**252**	0	**254**	74	2	3	79	
+45 mins.	9	210	45	264	1	1	52	54	0	243	1	244	49	1	3	53	
Total Volume	53	809	289	1151	2	3	199	204	10	897	2	909	265	13	14	292	
% App. Total	4.6	70.3	25.1		1	1.5	97.5		1.1	98.7	0.2		90.8	4.5	4.8		
PHF	.663	.959	.708	.864	.500	.750	.765	.761	.500	.890	.500	.895	.872	.464	.500	.869	

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Groups Printed- Passenger Vehicles

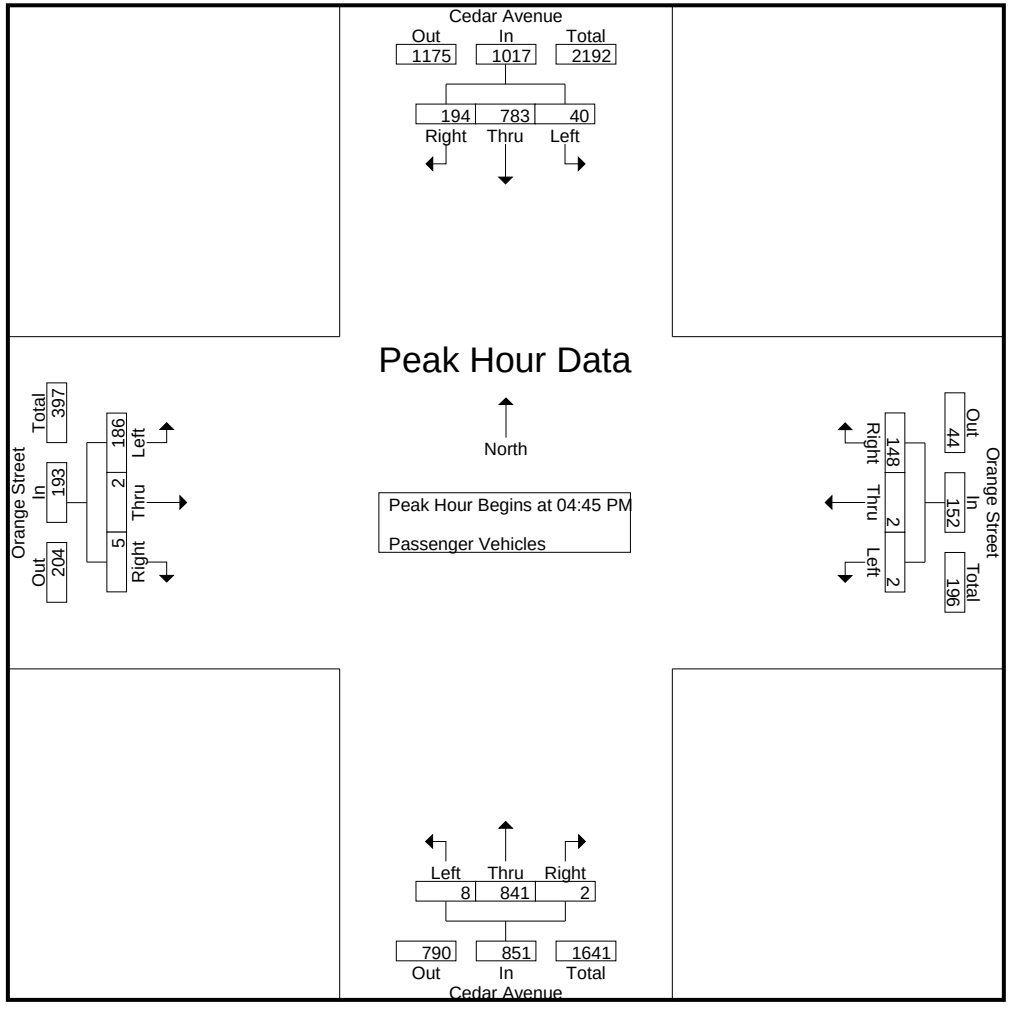
	Cedar Avenue Southbound					Orange Street Westbound					Cedar Avenue Northbound					Orange Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	18	183	96	14	297	1	1	62	31	64	0	220	1	0	221	37	0	1	0	38	45	620	665
03:45 PM	16	171	73	30	260	0	1	33	12	34	0	148	2	1	150	73	7	1	0	81	43	525	568
Total	34	354	169	44	557	1	2	95	43	98	0	368	3	1	371	110	7	2	0	119	88	1145	1233
04:00 PM	5	180	63	20	248	0	0	47	9	47	0	157	2	0	159	65	3	6	5	74	34	528	562
04:15 PM	9	183	42	12	234	1	1	49	11	51	1	132	0	0	133	73	2	3	2	78	25	496	521
04:30 PM	15	199	44	15	258	0	4	47	20	51	2	151	1	0	154	41	1	2	1	44	36	507	543
04:45 PM	10	213	55	15	278	0	2	24	6	26	5	193	1	0	199	49	1	2	1	52	22	555	577
Total	39	775	204	62	1018	1	7	167	46	175	8	633	4	0	645	228	7	13	9	248	117	2086	2203
05:00 PM	12	194	50	6	256	1	0	56	20	57	2	180	0	0	182	38	0	1	1	39	27	534	561
05:15 PM	14	192	49	21	255	0	0	33	8	33	1	241	0	0	242	49	1	1	1	51	30	581	611
05:30 PM	4	184	40	13	228	1	0	35	8	36	0	227	1	0	228	50	0	1	1	51	22	543	565
05:45 PM	16	177	56	20	249	0	2	34	11	36	3	151	2	0	156	58	5	0	0	63	31	504	535
Total	46	747	195	60	988	2	2	158	47	162	6	799	3	0	808	195	6	3	3	204	110	2162	2272
Grand Total	119	1876	568	166	2563	4	11	420	136	435	14	1800	10	1	1824	533	20	18	12	571	315	5393	5708
Apprch %	4.6	73.2	22.2			0.9	2.5	96.6			0.8	98.7	0.5			93.3	3.5	3.2					
Total %	2.2	34.8	10.5		47.5	0.1	0.2	7.8		8.1	0.3	33.4	0.2		33.8	9.9	0.4	0.3		10.6	5.5	94.5	

	Cedar Avenue Southbound				Orange Street Westbound				Cedar Avenue Northbound				Orange Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	10	**213**	**55**	**278**	0	**2**	24	26	**5**	193	**1**	199	49	**1**	**2**	**52**	555
05:00 PM	12	194	50	256	**1**	0	**56**	**57**	2	180	0	182	38	0	1	39	534
05:15 PM	**14**	192	49	255	0	0	33	33	1	**241**	0	**242**	49	1	1	51	**581**
05:30 PM	4	184	40	228	1	0	35	36	0	227	1	228	**50**	0	1	51	543
Total Volume	40	783	194	1017	2	2	148	152	8	841	2	851	186	2	5	193	2213
% App. Total	3.9	77	19.1		1.3	1.3	97.4		0.9	98.8	0.2		96.4	1	2.6		
PHF	.714	.919	.882	.915	.500	.250	.661	.667	.400	.872	.500	.879	.930	.500	.625	.928	.952

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

County of San Bernardino
N/S: Cedar Avenue
E/W: Orange Street
Weather: Clear

File Name : 10_CSB_Ced_Ora PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
E/W: Orange Street
Weather: Clear

File Name : 10_CSB_Ced_Ora PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Orange Street Westbound				Cedar Avenue Northbound				Orange Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	10	**213**	**55**	**278**	0	**2**	24	26	**5**	193	**1**	199	49	**1**	**2**	**52**	
+15 mins.	12	194	50	256	**1**	0	**56**	**57**	2	180	0	182	38	0	1	39	
+30 mins.	**14**	192	49	255	0	0	33	33	1	**241**	0	**242**	49	1	1	51	
+45 mins.	4	184	40	228	1	0	35	36	0	227	1	228	**50**	0	1	51	
Total Volume	40	783	194	1017	2	2	148	152	8	841	2	851	186	2	5	193	
% App. Total	3.9	77	19.1		1.3	1.3	97.4		0.9	98.8	0.2		96.4	1	2.6		
PHF	.714	.919	.882	.915	.500	.250	.661	.667	.400	.872	.500	.879	.930	.500	.625	.928	

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County of San Bernardino
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Weather: Clear

File Name : 10_CSB_Ced_Ora PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Cedar Avenue Southbound					Orange Street Westbound					Cedar Avenue Northbound					Orange Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	9	2	1	11	0	0	1	0	1	0	6	0	0	6	0	0	0	0	0	1	18	19
03:45 PM	1	9	0	0	10	0	0	1	0	1	0	2	0	0	2	2	0	0	0	2	0	15	15
Total	1	18	2	1	21	0	0	2	0	2	0	8	0	0	8	2	0	0	0	2	1	33	34
04:00 PM	0	6	0	0	6	0	0	1	0	1	0	7	0	0	7	0	0	0	0	0	0	14	14
04:15 PM	0	15	0	0	15	0	0	1	1	1	1	4	0	0	5	1	0	0	0	1	1	22	23
04:30 PM	1	4	1	0	6	0	0	2	0	2	0	5	0	0	5	4	0	1	0	5	0	18	18
04:45 PM	0	6	1	1	7	0	0	1	1	1	0	6	0	0	6	1	0	0	0	1	2	15	17
Total	1	31	2	1	34	0	0	5	2	5	1	22	0	0	23	6	0	1	0	7	3	69	72
05:00 PM	0	5	0	0	5	0	0	1	0	1	0	5	0	0	5	1	0	1	1	2	1	13	14
05:15 PM	0	8	1	0	9	0	0	1	1	1	0	4	0	0	4	0	0	0	0	0	1	14	15
05:30 PM	0	8	0	0	8	0	0	1	0	1	0	5	0	0	5	0	0	0	0	0	0	14	14
05:45 PM	0	8	0	0	8	0	0	0	0	0	0	5	0	0	5	0	1	0	0	1	0	14	14
Total	0	29	1	0	30	0	0	3	1	3	0	19	0	0	19	1	1	1	1	3	2	55	57
Grand Total	2	78	5	2	85	0	0	10	3	10	1	49	0	0	50	9	1	2	1	12	6	157	163
Apprch %	2.4	91.8	5.9			0	0	100			2	98	0			75	8.3	16.7					
Total %	1.3	49.7	3.2		54.1	0	0	6.4		6.4	0.6	31.2	0		31.8	5.7	0.6	1.3		7.6	3.7	96.3	

	Cedar Avenue Southbound				Orange Street Westbound				Cedar Avenue Northbound				Orange Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	6	**1**	7	0	0	**1**	**1**	0	**6**	0	**6**	**1**	0	0	1	**15**
05:00 PM	0	5	0	5	0	0	1	1	0	5	0	5	1	0	**1**	**2**	13
05:15 PM	0	**8**	1	**9**	0	0	1	1	0	4	0	4	0	0	0	0	14
05:30 PM	0	8	0	8	0	0	1	1	0	5	0	5	0	0	0	0	14
Total Volume	0	27	2	29	0	0	4	4	0	20	0	20	2	0	1	3	56
% App. Total	0	93.1	6.9		0	0	100		0	100	0		66.7	0	33.3		
PHF	.000	.844	.500	.806	.000	.000	1.00	1.00	.000	.833	.000	.833	.500	.000	.250	.375	.933

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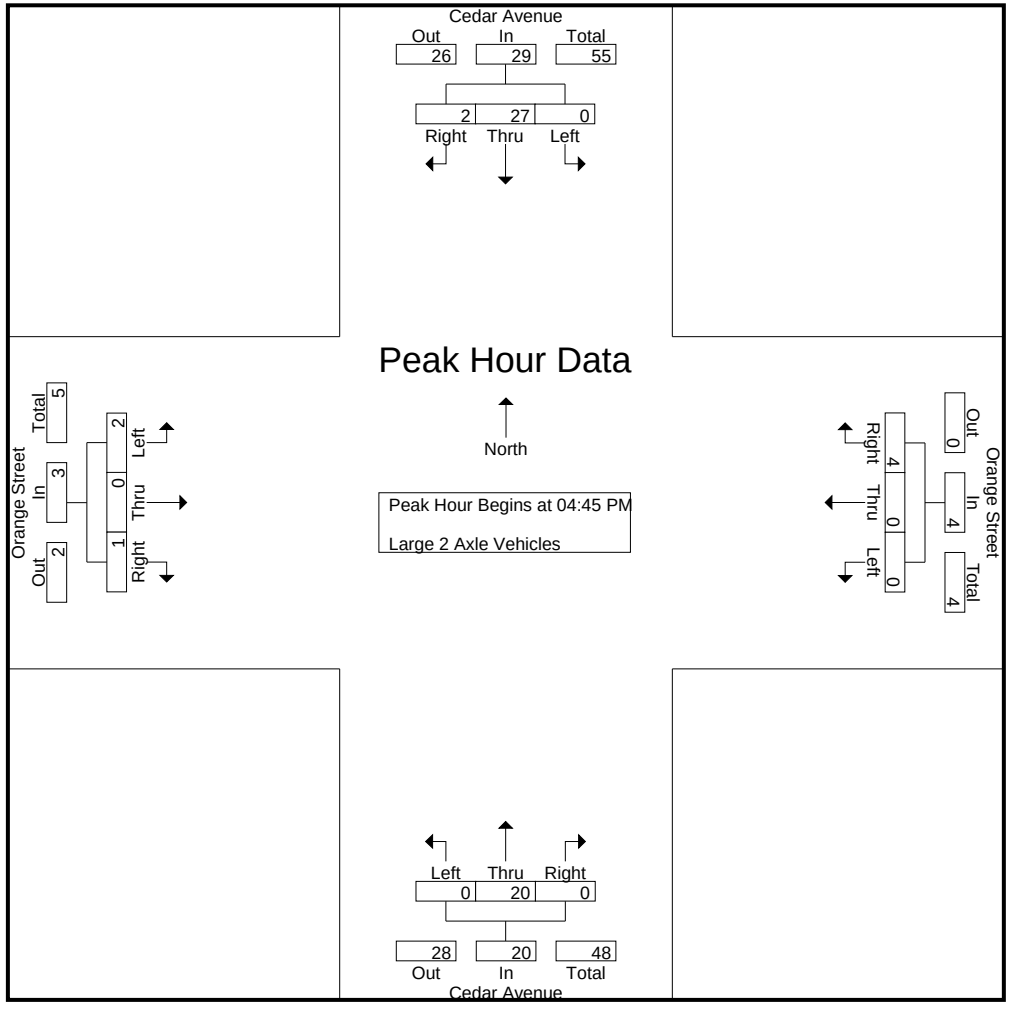
County of San Bernardino
N/S: Cedar Avenue
E/W: Orange Street
Weather: Clear

File Name : 10_CSB_Ced_Ora PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
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File Name : 10_CSB_Ced_Ora PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Orange Street Westbound				Cedar Avenue Northbound				Orange Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	6	**1**	7	0	0	**1**	**1**	0	**6**	0	**6**	**1**	0	0	1	
+15 mins.	0	5	0	5	0	0	1	1	0	5	0	5	1	0	**1**	**2**	
+30 mins.	0	**8**	1	**9**	0	0	1	1	0	4	0	4	0	0	0	0	
+45 mins.	0	8	0	8	0	0	1	1	0	5	0	5	0	0	0	0	
Total Volume	0	27	2	29	0	0	4	4	0	20	0	20	2	0	1	3	
% App. Total	0	93.1	6.9		0	0	100		0	100	0		66.7	0	33.3		
PHF	.000	.844	.500	.806	.000	.000	1.000	1.000	.000	.833	.000	.833	.500	.000	.250	.375	

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County of San Bernardino
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E/W: Orange Street
Weather: Clear

File Name : 10_CSB_Ced_Ora PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Cedar Avenue Southbound					Orange Street Westbound					Cedar Avenue Northbound					Orange Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	1	4	1	0	6	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	11	11
03:45 PM	0	2	3	1	5	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	1	8	9
Total	1	6	4	1	11	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	1	19	20
04:00 PM	1	9	2	1	12	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	13	15
04:15 PM	0	5	1	0	6	0	0	2	0	2	0	3	0	0	3	0	0	0	0	0	0	11	11
04:30 PM	0	5	1	0	6	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	0	9	9
04:45 PM	1	2	1	0	4	0	0	0	0	0	0	5	0	0	5	1	0	0	0	1	0	10	10
Total	2	21	5	1	28	0	0	2	0	2	0	10	0	0	10	2	0	1	1	3	2	43	45
05:00 PM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	6	6
05:15 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4	4
05:30 PM	0	1	3	1	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	1	6	7
05:45 PM	0	4	0	0	4	0	0	2	0	2	0	3	0	0	3	0	0	0	0	0	0	9	9
Total	0	10	3	1	13	0	0	2	0	2	0	9	0	0	9	0	0	1	0	1	1	25	26
Grand Total	3	37	12	3	52	0	0	4	0	4	0	27	0	0	27	2	0	2	1	4	4	87	91
Apprch %	5.8	71.2	23.1			0	0	100			0	100	0			50	0	50					
Total %	3.4	42.5	13.8		59.8	0	0	4.6		4.6	0	31	0		31	2.3	0	2.3		4.6	4.4	95.6	

	Cedar Avenue Southbound				Orange Street Westbound				Cedar Avenue Northbound				Orange Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**1**	2	1	**4**	0	0	0	0	0	**5**	0	**5**	**1**	0	0	**1**	**10**
05:00 PM	0	**3**	0	3	0	0	0	0	0	2	0	2	0	0	**1**	1	6
05:15 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
05:30 PM	0	1	**3**	4	0	0	0	0	0	2	0	2	0	0	0	0	6
Total Volume	1	8	4	13	0	0	0	0	0	11	0	11	1	0	1	2	26
% App. Total	7.7	61.5	30.8		0	0	0		0	100	0		50	0	50		
PHF	.250	.667	.333	.813	.000	.000	.000	.000	.000	.550	.000	.550	.250	.000	.250	.500	.650

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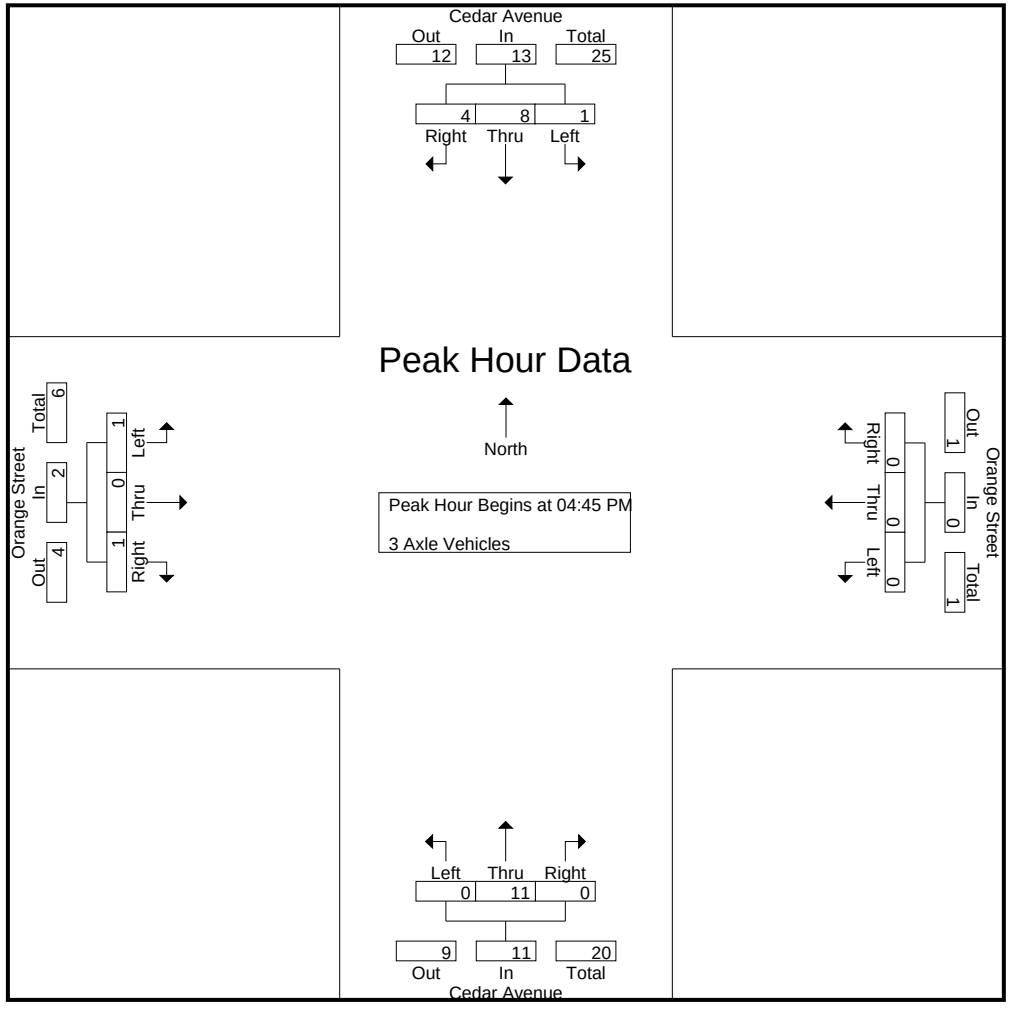
Page No : 2



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Start Date : 10/4/2022

	Cedar Avenue Southbound				Orange Street Westbound				Cedar Avenue Northbound				Orange Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	**1**	2	1	**4**	0	0	0	0	0	**5**	0	**5**	**1**	0	0	**1**	
+15 mins.	0	**3**	0	3	0	0	0	0	0	2	0	2	0	0	**1**	1	
+30 mins.	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	
+45 mins.	0	1	**3**	4	0	0	0	0	0	2	0	2	0	0	0	0	
Total Volume	1	8	4	13	0	0	0	0	0	11	0	11	1	0	1	2	
% App. Total	7.7	61.5	30.8		0	0	0		0	100	0		50	0	50		
PHF	.250	.667	.333	.813	.000	.000	.000	.000	.000	.550	.000	.550	.250	.000	.250	.500	

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File Name : 10_CSB_Ced_Ora PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Cedar Avenue Southbound					Orange Street Westbound					Cedar Avenue Northbound					Orange Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	1	15	3	1	19	0	0	2	1	2	0	7	0	0	7	2	0	0	0	2	2	30	32
03:45 PM	1	5	0	0	6	0	0	0	0	0	0	4	0	0	4	1	0	0	0	1	0	11	11
Total	2	20	3	1	25	0	0	2	1	2	0	11	0	0	11	3	0	0	0	3	2	41	43
04:00 PM	0	6	1	0	7	0	0	0	0	0	1	7	0	0	8	1	0	0	0	1	0	16	16
04:15 PM	0	7	2	0	9	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	15	15
04:30 PM	0	11	3	0	14	1	0	0	0	1	2	2	0	0	4	3	0	0	0	3	0	22	22
04:45 PM	0	5	4	0	9	0	0	0	0	0	0	7	0	0	7	1	0	0	0	1	0	17	17
Total	0	29	10	0	39	1	0	0	0	1	3	22	0	0	25	5	0	0	0	5	0	70	70
05:00 PM	0	8	1	1	9	0	0	0	0	0	1	4	0	0	5	4	0	0	0	4	1	18	19
05:15 PM	0	7	2	1	9	0	0	0	0	0	1	5	0	0	6	0	0	2	0	2	1	17	18
05:30 PM	0	9	4	0	13	0	0	0	0	0	0	9	0	0	9	1	0	0	0	1	0	23	23
05:45 PM	0	5	4	0	9	0	0	0	0	0	0	4	0	0	4	2	0	0	0	2	0	15	15
Total	0	29	11	2	40	0	0	0	0	0	2	22	0	0	24	7	0	2	0	9	2	73	75
Grand Total	2	78	24	3	104	1	0	2	1	3	5	55	0	0	60	15	0	2	0	17	4	184	188
Apprch %	1.9	75	23.1			33.3	0	66.7			8.3	91.7	0			88.2	0	11.8					
Total %	1.1	42.4	13		56.5	0.5	0	1.1		1.6	2.7	29.9	0		32.6	8.2	0	1.1		9.2	2.1	97.9	

	Cedar Avenue Southbound				Orange Street Westbound				Cedar Avenue Northbound				Orange Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	5	**4**	9	0	0	0	0	0	7	0	7	1	0	0	1	17
05:00 PM	0	8	1	9	0	0	0	0	**1**	4	0	5	**4**	0	0	**4**	18
05:15 PM	0	7	2	9	0	0	0	0	1	5	0	6	0	0	**2**	2	17
05:30 PM	0	**9**	4	**13**	0	0	0	0	0	**9**	0	**9**	1	0	0	1	**23**
Total Volume	0	29	11	40	0	0	0	0	2	25	0	27	6	0	2	8	75
% App. Total	0	72.5	27.5		0	0	0		7.4	92.6	0		75	0	25		
PHF	.000	.806	.688	.769	.000	.000	.000	.000	.500	.694	.000	.750	.375	.000	.250	.500	.815

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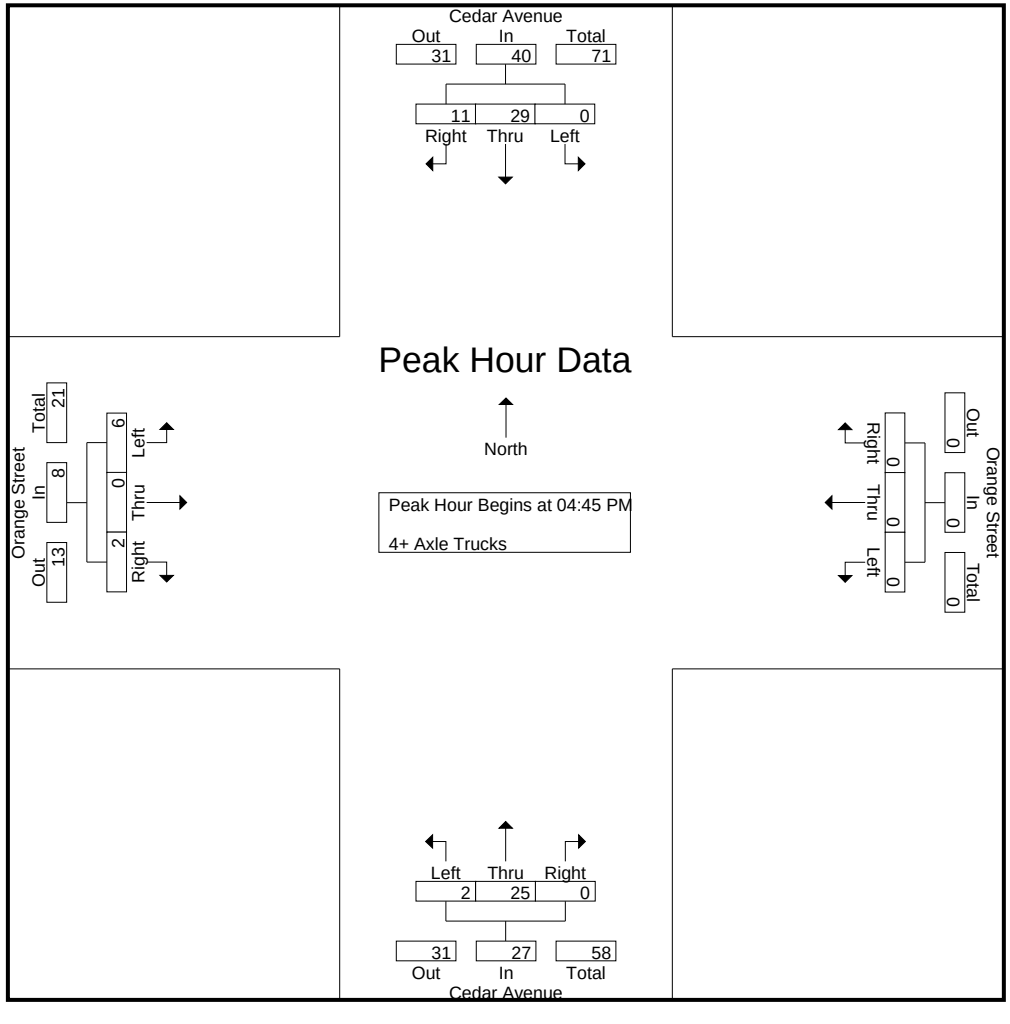
County of San Bernardino
N/S: Cedar Avenue
E/W: Orange Street
Weather: Clear

File Name : 10_CSB_Ced_Ora PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
E/W: Orange Street
Weather: Clear

File Name : 10_CSB_Ced_Ora PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Orange Street Westbound				Cedar Avenue Northbound				Orange Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	5	**4**	9	0	0	0	0	0	7	0	7	1	0	0	1	
+15 mins.	0	8	1	9	0	0	0	0	**1**	4	0	5	**4**	0	0	**4**	
+30 mins.	0	7	2	9	0	0	0	0	1	5	0	6	0	0	**2**	2	
+45 mins.	0	**9**	4	**13**	0	0	0	0	0	**9**	0	**9**	1	0	0	1	
Total Volume	0	29	11	40	0	0	0	0	2	25	0	27	6	0	2	8	
% App. Total	0	72.5	27.5		0	0	0		7.4	92.6	0		75	0	25		
PHF	.000	.806	.688	.769	.000	.000	.000	.000	.500	.694	.000	.750	.375	.000	.250	.500	

Location: County of San Bernardino
N/S: Cedar Avenue
E/W: Orange Street

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Cedar Avenue	East Leg Orange Street	South Leg Cedar Avenue	West Leg Orange Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	1	0	1
7:00 AM	0	0	0	1	1
7:15 AM	0	1	1	0	2
7:30 AM	0	0	1	1	2
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	1	2	3
8:30 AM	0	0	0	0	0
8:45 AM	0	0	2	1	3
TOTAL VOLUMES:	0	1	6	5	12

	North Leg Cedar Avenue	East Leg Orange Street	South Leg Cedar Avenue	West Leg Orange Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	0	1	0	1
4:00 PM	0	1	0	0	1
4:15 PM	0	1	1	1	3
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	1	1
5:30 PM	0	4	2	2	8
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	6	4	4	14

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951-268-6268

Location: County of San Bernardino
N/S: Cedar Avenue
E/W: Orange Street

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Cedar Avenue			Westbound Orange Street			Northbound Cedar Avenue			Eastbound Orange Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	1	0	0	0	0	0	1	0	0	0	0	2
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	1	0	0	0	0	1	0	0	0	0	3

	Southbound Cedar Avenue			Westbound Orange Street			Northbound Cedar Avenue			Eastbound Orange Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	0	0	0	0	0	1	0	0	3

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County of San Bernardino
N/S: Cedar Avenue
E/W: Slover Avenue
Weather: Clear

File Name : 11_CSB_Ced_Slo AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Cedar Avenue Southbound					Slover Avenue Westbound					Cedar Avenue Northbound					Slover Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	20	193	14	1	227	3	18	42	23	63	19	181	5	0	205	23	6	11	4	40	28	535	563
06:45 AM	23	203	21	1	247	6	17	23	12	46	13	149	4	0	166	38	12	14	6	64	19	523	542
Total	43	396	35	2	474	9	35	65	35	109	32	330	9	0	371	61	18	25	10	104	47	1058	1105
07:00 AM	14	226	15	0	255	4	24	27	10	55	18	144	4	0	166	27	10	14	3	51	13	527	540
07:15 AM	17	220	12	1	249	5	27	32	12	64	30	161	2	0	193	32	19	15	4	66	17	572	589
07:30 AM	20	234	22	0	276	3	28	22	9	53	24	153	2	1	179	54	12	8	1	74	11	582	593
07:45 AM	33	224	26	0	283	6	24	19	6	49	30	134	6	0	170	48	30	14	6	92	12	594	606
Total	84	904	75	1	1063	18	103	100	37	221	102	592	14	1	708	161	71	51	14	283	53	2275	2328
08:00 AM	26	256	22	0	304	2	18	15	10	35	24	131	2	0	157	47	15	18	7	80	17	576	593
08:15 AM	26	221	12	1	259	5	37	11	4	53	31	136	4	1	171	50	29	15	3	94	9	577	586
08:30 AM	36	182	21	0	239	4	45	19	10	68	36	155	5	1	196	54	34	15	5	103	16	606	622
08:45 AM	34	197	22	2	253	4	31	12	3	47	28	60	8	2	96	34	48	25	4	107	11	503	514
Total	122	856	77	3	1055	15	131	57	27	203	119	482	19	4	620	185	126	73	19	384	53	2262	2315
Grand Total	249	2156	187	6	2592	42	269	222	99	533	253	1404	42	5	1699	407	215	149	43	771	153	5595	5748
Apprch %	9.6	83.2	7.2			7.9	50.5	41.7			14.9	82.6	2.5			52.8	27.9	19.3					
Total %	4.5	38.5	3.3		46.3	0.8	4.8	4		9.5	4.5	25.1	0.8		30.4	7.3	3.8	2.7		13.8	2.7	97.3	
Passenger Vehicles	189	1941	165		2299	34	218	162		498	231	1248	34		1517	374	181	120		716	0	0	5030
% Passenger Vehicles	75.9	90	88.2	66.7	88.5	81	81	73	84.8	78.8	91.3	88.9	81	80	89	91.9	84.2	80.5	95.3	88	0	0	87.5
Large 2 Axle Vehicles	18	78	8		104	1	11	20		37	10	68	2		81	17	13	8		38	0	0	260
% Large 2 Axle Vehicles	7.2	3.6	4.3	0	4	2.4	4.1	9	5.1	5.9	4	4.8	4.8	20	4.8	4.2	6	5.4	0	4.7	0	0	4.5
3 Axle Vehicles	17	40	5		62	4	7	7		20	5	18	0		23	6	13	5		24	0	0	129
% 3 Axle Vehicles	6.8	1.9	2.7	0	2.4	9.5	2.6	3.2	2	3.2	2	1.3	0	0	1.3	1.5	6	3.4	0	2.9	0	0	2.2
4+ Axle Trucks	25	97	9		133	3	33	33		77	7	70	6		83	10	8	16		36	0	0	329
% 4+ Axle Trucks	10	4.5	4.8	33.3	5.1	7.1	12.3	14.9	8.1	12.2	2.8	5	14.3	0	4.9	2.5	3.7	10.7	4.7	4.4	0	0	5.7

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County of San Bernardino
N/S: Cedar Avenue
E/W: Slover Avenue
Weather: Clear

File Name : 11_CSB_Ced_Slo AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Slover Avenue Westbound				Cedar Avenue Northbound				Slover Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	33	224	**26**	283	**6**	24	**19**	49	30	134	**6**	170	48	30	14	92	594
08:00 AM	26	**256**	22	**304**	2	18	15	35	24	131	2	157	47	15	**18**	80	576
08:15 AM	26	221	12	259	5	37	11	53	31	136	4	171	50	29	15	94	577
08:30 AM	**36**	182	21	239	4	**45**	19	**68**	**36**	**155**	5	**196**	**54**	**34**	15	**103**	**606**
Total Volume	121	883	81	1085	17	124	64	205	121	556	17	694	199	108	62	369	2353
% App. Total	11.2	81.4	7.5		8.3	60.5	31.2		17.4	80.1	2.4		53.9	29.3	16.8		
PHF	.840	.862	.779	.892	.708	.689	.842	.754	.840	.897	.708	.885	.921	.794	.861	.896	.971

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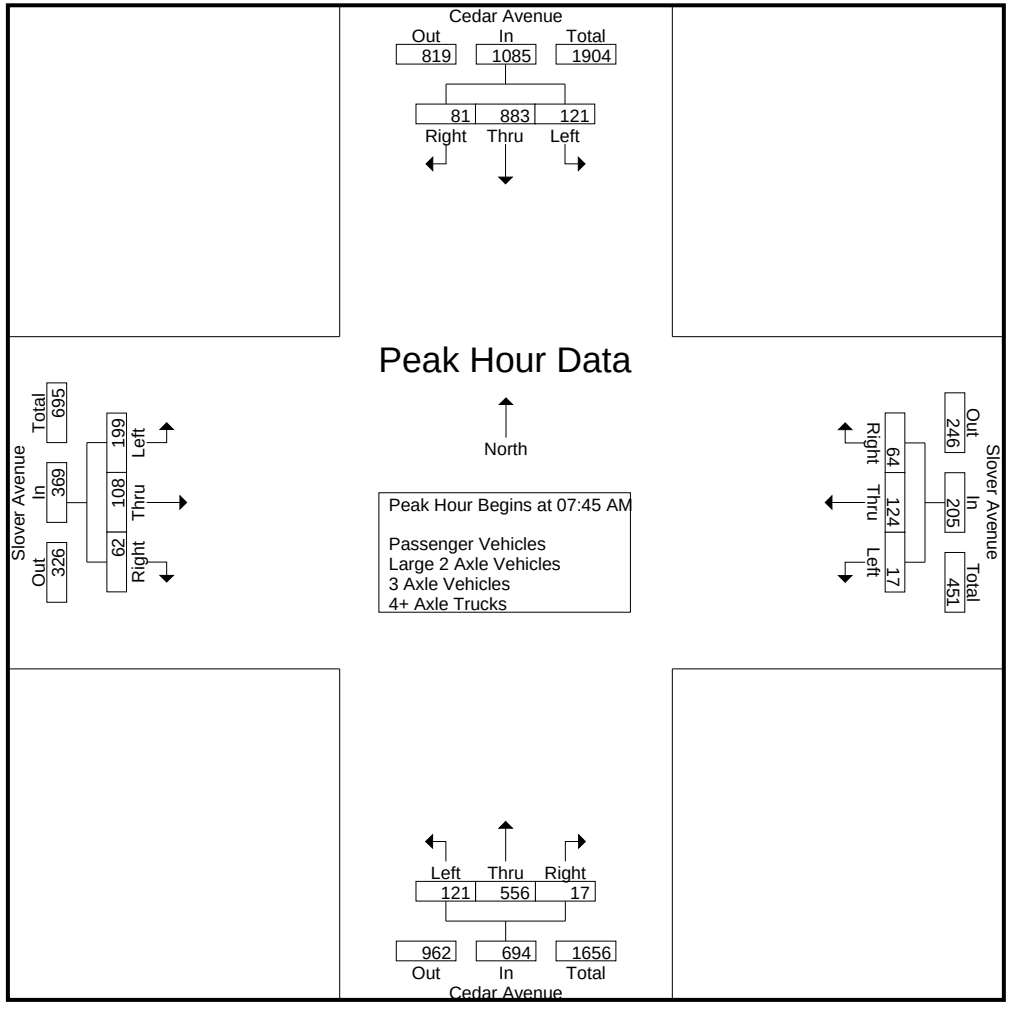
File Name : 11_CSB_Ced_Slo AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 3



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County of San Bernardino
N/S: Cedar Avenue
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File Name : 11_CSB_Ced_Slo AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Slover Avenue Westbound				Cedar Avenue Northbound				Slover Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				06:30 AM				06:30 AM				08:00 AM				
+0 mins.	20	234	22	276	3	18	**42**	63	19	**181**	**5**	**205**	47	15	18	80	
+15 mins.	**33**	224	**26**	283	**6**	17	23	46	13	149	4	166	50	29	15	94	
+30 mins.	26	**256**	22	**304**	4	24	27	55	18	144	4	166	**54**	34	15	103	
+45 mins.	26	221	12	259	5	**27**	32	**64**	**30**	161	2	193	34	**48**	**25**	**107**	
Total Volume	105	935	82	1122	18	86	124	228	80	635	15	730	185	126	73	384	
% App. Total	9.4	83.3	7.3		7.9	37.7	54.4		11	87	2.1		48.2	32.8	19		
PHF	.795	.913	.788	.923	.750	.796	.738	.891	.667	.877	.750	.890	.856	.656	.730	.897	

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Groups Printed- Passenger Vehicles

	Cedar Avenue Southbound					Slover Avenue Westbound					Cedar Avenue Northbound					Slover Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	16	173	12	1	201	3	17	39	22	59	18	166	4	0	188	21	6	9	4	36	27	484	511
06:45 AM	13	185	17	1	215	5	10	17	9	32	13	137	4	0	154	33	12	10	6	55	16	456	472
Total	29	358	29	2	416	8	27	56	31	91	31	303	8	0	342	54	18	19	10	91	43	940	983
07:00 AM	11	205	13	0	229	3	18	21	10	42	18	133	4	0	155	23	5	12	3	40	13	466	479
07:15 AM	15	200	10	0	225	3	23	22	11	48	22	142	1	0	165	30	15	8	3	53	14	491	505
07:30 AM	14	220	19	0	253	3	25	13	7	41	22	134	2	1	158	51	10	6	1	67	9	519	528
07:45 AM	26	210	23	0	259	5	20	11	4	36	29	115	6	0	150	45	26	11	5	82	9	527	536
Total	66	835	65	0	966	14	86	67	32	167	91	524	13	1	628	149	56	37	12	242	45	2003	2048
08:00 AM	19	226	21	0	266	1	17	12	8	30	21	112	1	0	134	43	13	15	7	71	15	501	516
08:15 AM	20	189	10	0	219	4	31	6	4	41	28	118	3	1	149	46	25	11	3	82	8	491	499
08:30 AM	28	162	19	0	209	4	39	14	7	57	34	137	4	1	175	50	31	14	5	95	13	536	549
08:45 AM	27	171	21	2	219	3	18	7	2	28	26	54	5	1	85	32	38	24	4	94	9	426	435
Total	94	748	71	2	913	12	105	39	21	156	109	421	13	3	543	171	107	64	19	342	45	1954	1999
Grand Total	189	1941	165	4	2295	34	218	162	84	414	231	1248	34	4	1513	374	181	120	41	675	133	4897	5030
Apprch %	8.2	84.6	7.2			8.2	52.7	39.1			15.3	82.5	2.2			55.4	26.8	17.8					
Total %	3.9	39.6	3.4		46.9	0.7	4.5	3.3		8.5	4.7	25.5	0.7		30.9	7.6	3.7	2.5		13.8	2.6	97.4	

	Cedar Avenue Southbound				Slover Avenue Westbound				Cedar Avenue Northbound				Slover Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	26	210	**23**	259	**5**	20	11	36	29	115	**6**	150	45	26	11	82	527
08:00 AM	19	**226**	21	**266**	1	17	12	30	21	112	1	134	43	13	**15**	71	501
08:15 AM	20	189	10	219	4	31	6	41	28	118	3	149	46	25	11	82	491
08:30 AM	**28**	162	19	209	4	**39**	**14**	**57**	**34**	**137**	4	**175**	**50**	**31**	14	**95**	**536**
Total Volume	93	787	73	953	14	107	43	164	112	482	14	608	184	95	51	330	2055
% App. Total	9.8	82.6	7.7		8.5	65.2	26.2		18.4	79.3	2.3		55.8	28.8	15.5		
PHF	.830	.871	.793	.896	.700	.686	.768	.719	.824	.880	.583	.869	.920	.766	.850	.868	.958

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File Name : 11_CSB_Ced_Slo AM
Site Code : 05122894
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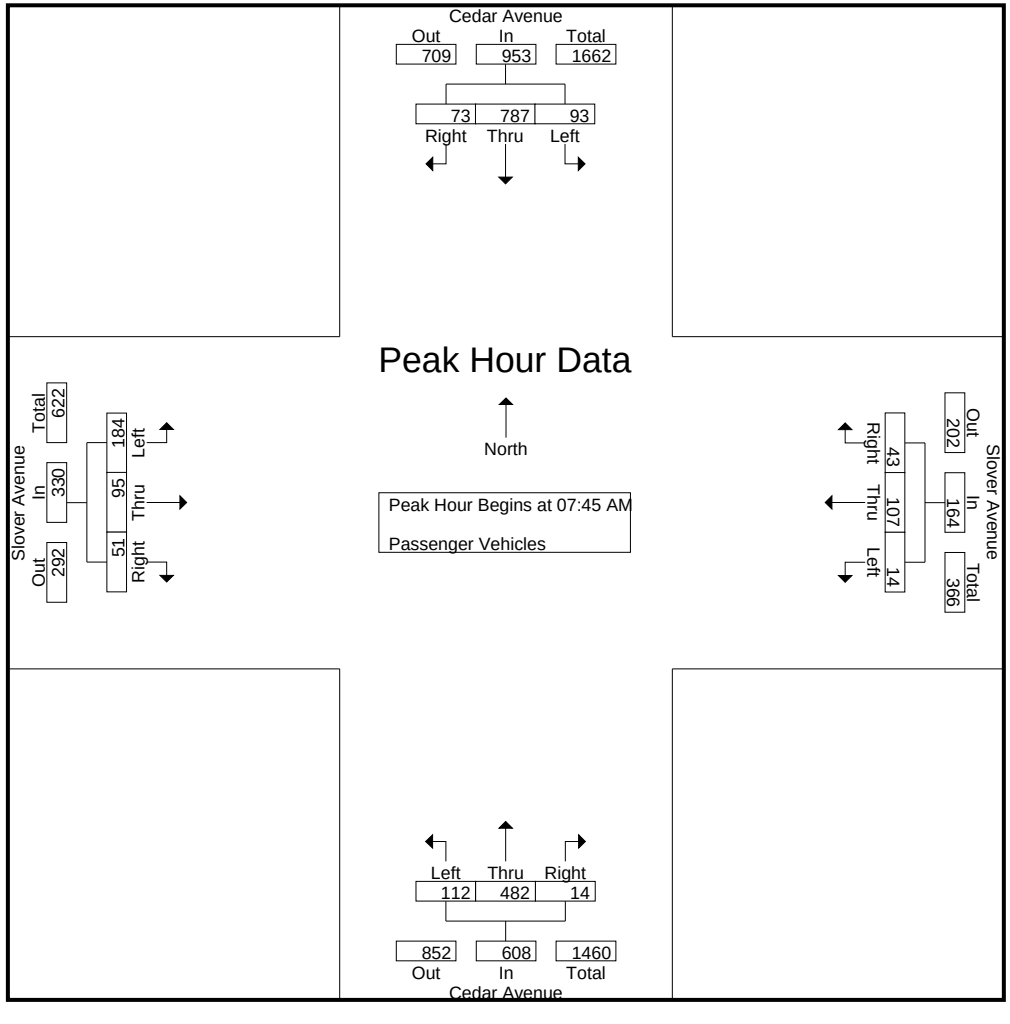
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
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File Name : 11_CSB_Ced_Slo AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Slover Avenue Westbound				Cedar Avenue Northbound				Slover Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	26	210	**23**	259	**5**	20	11	36	29	115	**6**	150	45	26	11	82	
+15 mins.	19	**226**	21	**266**	1	17	12	30	21	112	1	134	43	13	**15**	71	
+30 mins.	20	189	10	219	4	31	6	41	28	118	3	149	46	25	11	82	
+45 mins.	**28**	162	19	209	4	**39**	**14**	**57**	**34**	**137**	4	**175**	**50**	**31**	14	**95**	
Total Volume	93	787	73	953	14	107	43	164	112	482	14	608	184	95	51	330	
% App. Total	9.8	82.6	7.7		8.5	65.2	26.2		18.4	79.3	2.3		55.8	28.8	15.5		
PHF	.830	.871	.793	.896	.700	.686	.768	.719	.824	.880	.583	.869	.920	.766	.850	.868	

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File Name : 11_CSB_Ced_Slo AM
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Page No : 1

Groups Printed- Large 2 Axle Vehicles

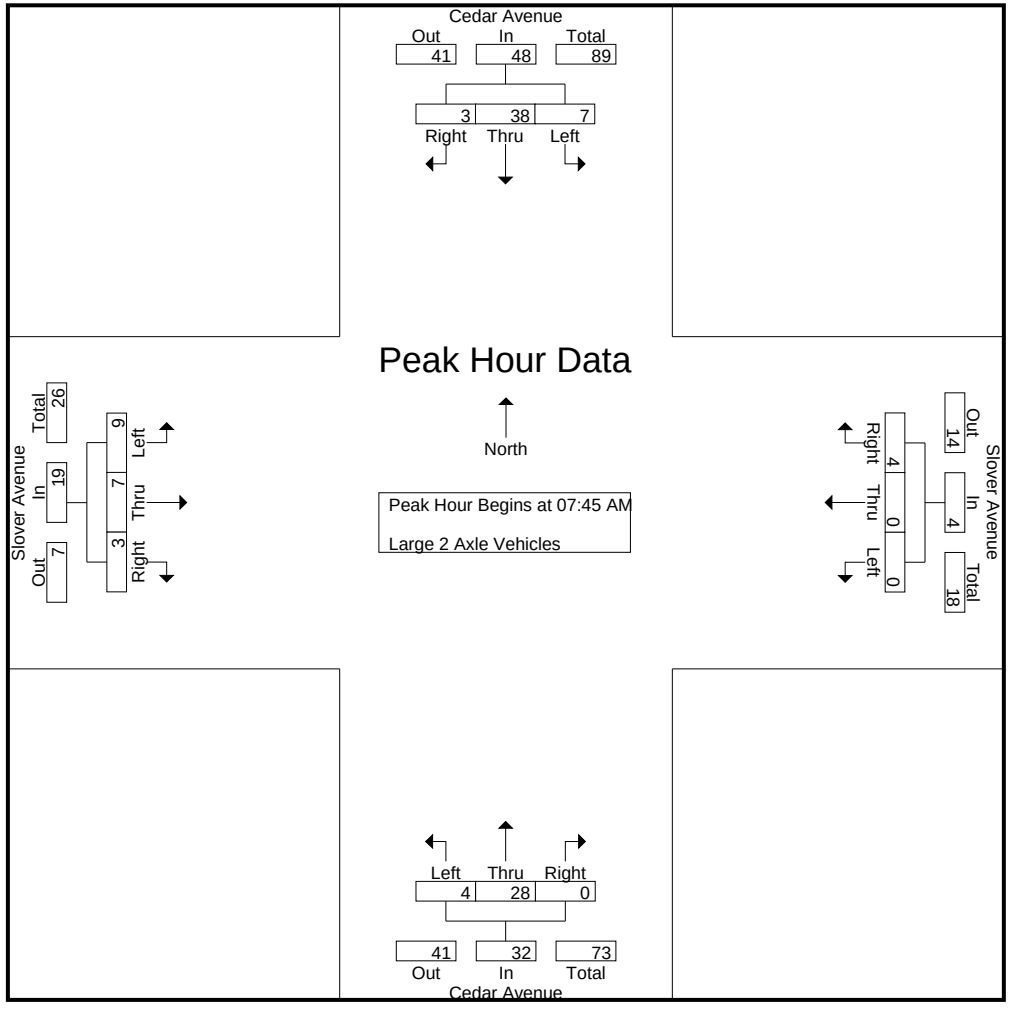
	Cedar Avenue Southbound					Slover Avenue Westbound					Cedar Avenue Northbound					Slover Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	3	7	0	0	10	0	0	2	1	2	1	6	1	0	8	1	0	1	0	2	1	22	23
06:45 AM	3	8	2	0	13	0	1	3	1	4	0	7	0	0	7	2	0	1	0	3	1	27	28
Total	6	15	2	0	23	0	1	5	2	6	1	13	1	0	15	3	0	2	0	5	2	49	51
07:00 AM	1	7	2	0	10	1	2	2	0	5	0	7	0	0	7	2	2	1	0	5	0	27	27
07:15 AM	1	5	0	0	6	0	1	3	0	4	4	9	0	0	13	1	1	1	0	3	0	26	26
07:30 AM	1	5	1	0	7	0	2	4	1	6	0	10	0	0	10	2	0	0	0	2	1	25	26
07:45 AM	1	8	1	0	10	0	0	1	0	1	1	6	0	0	7	1	2	2	0	5	0	23	23
Total	4	25	4	0	33	1	5	10	1	16	5	32	0	0	37	6	5	4	0	15	1	101	102
08:00 AM	2	12	1	0	15	0	0	1	1	1	2	8	0	0	10	4	2	0	0	6	1	32	33
08:15 AM	3	12	0	0	15	0	0	1	0	1	0	8	0	0	8	1	2	1	0	4	0	28	28
08:30 AM	1	6	1	0	8	0	0	1	1	1	1	6	0	0	7	3	1	0	0	4	1	20	21
08:45 AM	2	8	0	0	10	0	5	2	0	7	1	1	1	1	3	0	3	1	0	4	1	24	25
Total	8	38	2	0	48	0	5	5	2	10	4	23	1	1	28	8	8	2	0	18	3	104	107
Grand Total	18	78	8	0	104	1	11	20	5	32	10	68	2	1	80	17	13	8	0	38	6	254	260
Apprch %	17.3	75	7.7			3.1	34.4	62.5			12.5	85	2.5			44.7	34.2	21.1					
Total %	7.1	30.7	3.1		40.9	0.4	4.3	7.9		12.6	3.9	26.8	0.8		31.5	6.7	5.1	3.1		15	2.3	97.7	

	Cedar Avenue Southbound				Slover Avenue Westbound				Cedar Avenue Northbound				Slover Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	1	8	**1**	10	0	0	**1**	**1**	1	6	0	7	1	**2**	**2**	5	23
08:00 AM	2	**12**	1	**15**	0	0	1	1	**2**	**8**	0	**10**	**4**	2	0	**6**	**32**
08:15 AM	**3**	12	0	15	0	0	1	1	0	8	0	8	1	2	1	4	28
08:30 AM	1	6	1	8	0	0	1	1	1	6	0	7	3	1	0	4	20
Total Volume	7	38	3	48	0	0	4	4	4	28	0	32	9	7	3	19	103
% App. Total	14.6	79.2	6.2		0	0	100		12.5	87.5	0		47.4	36.8	15.8		
PHF	.583	.792	.750	.800	.000	.000	1.00	1.00	.500	.875	.000	.800	.563	.875	.375	.792	.805

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

County of San Bernardino
N/S: Cedar Avenue
E/W: Slover Avenue
Weather: Clear

File Name : 11_CSB_Ced_Slo AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
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File Name : 11_CSB_Ced_Slo AM
Site Code : 05122894
Start Date : 10/4/2022
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	Cedar Avenue Southbound				Slover Avenue Westbound				Cedar Avenue Northbound				Slover Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	1	8	**1**	10	0	0	**1**	**1**	1	6	0	7	1	**2**	**2**	5	
+15 mins.	2	**12**	1	**15**	0	0	1	1	**2**	**8**	0	**10**	**4**	2	0	**6**	
+30 mins.	**3**	12	0	15	0	0	1	1	0	8	0	8	1	2	1	4	
+45 mins.	1	6	1	8	0	0	1	1	1	6	0	7	3	1	0	4	
Total Volume	7	38	3	48	0	0	4	4	4	28	0	32	9	7	3	19	
% App. Total	14.6	79.2	6.2		0	0	100		12.5	87.5	0		47.4	36.8	15.8		
PHF	.583	.792	.750	.800	.000	.000	1.000	1.000	.500	.875	.000	.800	.563	.875	.375	.792	

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County of San Bernardino
N/S: Cedar Avenue
E/W: Slover Avenue
Weather: Clear

File Name : 11_CSB_Ced_Slo AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Cedar Avenue Southbound					Slover Avenue Westbound					Cedar Avenue Northbound					Slover Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	4	2	0	6	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	9	9
06:45 AM	1	5	2	0	8	1	0	1	1	2	0	2	0	0	2	3	0	0	0	3	1	15	16
Total	1	9	4	0	14	1	0	1	1	2	0	5	0	0	5	3	0	0	0	3	1	24	25
07:00 AM	0	4	0	0	4	0	2	0	0	2	0	2	0	0	2	0	2	0	0	2	0	10	10
07:15 AM	1	5	0	0	6	1	0	2	1	3	1	2	0	0	3	0	2	3	0	5	1	17	18
07:30 AM	3	1	1	0	5	0	0	2	0	2	0	1	0	0	1	0	1	1	0	2	0	10	10
07:45 AM	4	4	0	0	8	1	2	2	0	5	0	0	0	0	0	2	2	0	0	4	0	17	17
Total	8	14	1	0	23	2	4	6	1	12	1	5	0	0	6	2	7	4	0	13	1	54	55
08:00 AM	2	8	0	0	10	1	0	0	0	1	1	2	0	0	3	0	0	0	0	0	0	14	14
08:15 AM	2	5	0	0	7	0	1	0	0	1	1	2	0	0	3	1	1	1	0	3	0	14	14
08:30 AM	1	4	0	0	5	0	1	0	0	1	1	4	0	0	5	0	1	0	0	1	0	12	12
08:45 AM	3	0	0	0	3	0	1	0	0	1	1	0	0	0	1	0	4	0	0	4	0	9	9
Total	8	17	0	0	25	1	3	0	0	4	4	8	0	0	12	1	6	1	0	8	0	49	49
Grand Total	17	40	5	0	62	4	7	7	2	18	5	18	0	0	23	6	13	5	0	24	2	127	129
Apprch %	27.4	64.5	8.1			22.2	38.9	38.9			21.7	78.3	0			25	54.2	20.8					
Total %	13.4	31.5	3.9		48.8	3.1	5.5	5.5		14.2	3.9	14.2	0		18.1	4.7	10.2	3.9		18.9	1.6	98.4	

	Cedar Avenue Southbound				Slover Avenue Westbound				Cedar Avenue Northbound				Slover Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**4**	4	0	8	**1**	**2**	**2**	**5**	0	0	0	0	**2**	**2**	0	**4**	**17**
08:00 AM	2	**8**	0	**10**	1	0	0	1	**1**	2	0	3	0	0	0	0	14
08:15 AM	2	5	0	7	0	1	0	1	1	2	0	3	1	1	**1**	3	14
08:30 AM	1	4	0	5	0	1	0	1	1	**4**	0	**5**	0	1	0	1	12
Total Volume	9	21	0	30	2	4	2	8	3	8	0	11	3	4	1	8	57
% App. Total	30	70	0		25	50	25		27.3	72.7	0		37.5	50	12.5		
PHF	.563	.656	.000	.750	.500	.500	.250	.400	.750	.500	.000	.550	.375	.500	.250	.500	.838

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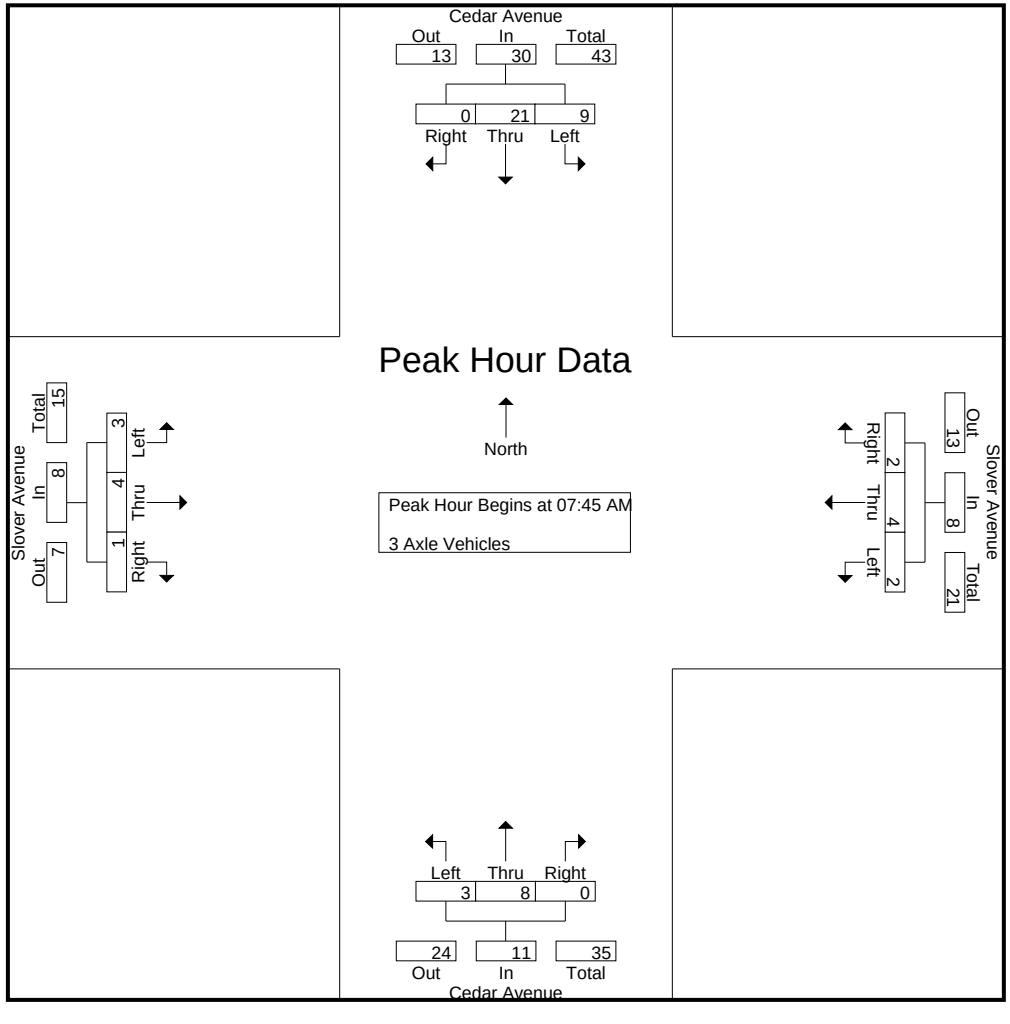
County of San Bernardino
N/S: Cedar Avenue
E/W: Slover Avenue
Weather: Clear

File Name : 11_CSB_Ced_Slo AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
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File Name : 11_CSB_Ced_Slo AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Slover Avenue Westbound				Cedar Avenue Northbound				Slover Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	**4**	4	0	8	**1**	**2**	**2**	**5**	0	0	0	0	**2**	**2**	0	**4**	
+15 mins.	2	**8**	0	**10**	1	0	0	1	**1**	2	0	3	0	0	0	0	
+30 mins.	2	5	0	7	0	1	0	1	1	2	0	3	1	1	**1**	3	
+45 mins.	1	4	0	5	0	1	0	1	1	**4**	0	**5**	0	1	0	1	
Total Volume	9	21	0	30	2	4	2	8	3	8	0	11	3	4	1	8	
% App. Total	30	70	0		25	50	25		27.3	72.7	0		37.5	50	12.5		
PHF	.563	.656	.000	.750	.500	.500	.250	.400	.750	.500	.000	.550	.375	.500	.250	.500	

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County of San Bernardino
N/S: Cedar Avenue
E/W: Slover Avenue
Weather: Clear

File Name : 11_CSB_Ced_Slo AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Cedar Avenue Southbound					Slover Avenue Westbound					Cedar Avenue Northbound					Slover Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	1	9	0	0	10	0	1	1	0	2	0	6	0	0	6	1	0	1	0	2	0	20	20
06:45 AM	6	5	0	0	11	0	6	2	1	8	0	3	0	0	3	0	0	3	0	3	1	25	26
Total	7	14	0	0	21	0	7	3	1	10	0	9	0	0	9	1	0	4	0	5	1	45	46
07:00 AM	2	10	0	0	12	0	2	4	0	6	0	2	0	0	2	2	1	1	0	4	0	24	24
07:15 AM	0	10	2	1	12	1	3	5	0	9	3	8	1	0	12	1	1	3	1	5	2	38	40
07:30 AM	2	8	1	0	11	0	1	3	1	4	2	8	0	0	10	1	1	1	0	3	1	28	29
07:45 AM	2	2	2	0	6	0	2	5	2	7	0	13	0	0	13	0	0	1	1	1	3	27	30
Total	6	30	5	1	41	1	8	17	3	26	5	31	1	0	37	4	3	6	2	13	6	117	123
08:00 AM	3	10	0	0	13	0	1	2	1	3	0	9	1	0	10	0	0	3	0	3	1	29	30
08:15 AM	1	15	2	1	18	1	5	4	0	10	2	8	1	0	11	2	1	2	0	5	1	44	45
08:30 AM	6	10	1	0	17	0	5	4	2	9	0	8	1	0	9	1	1	1	0	3	2	38	40
08:45 AM	2	18	1	0	21	1	7	3	1	11	0	5	2	0	7	2	3	0	0	5	1	44	45
Total	12	53	4	1	69	2	18	13	4	33	2	30	5	0	37	5	5	6	0	16	5	155	160
Grand Total	25	97	9	2	131	3	33	33	8	69	7	70	6	0	83	10	8	16	2	34	12	317	329
Apprch %	19.1	74	6.9			4.3	47.8	47.8			8.4	84.3	7.2			29.4	23.5	47.1					
Total %	7.9	30.6	2.8		41.3	0.9	10.4	10.4		21.8	2.2	22.1	1.9		26.2	3.2	2.5	5		10.7	3.6	96.4	

	Cedar Avenue Southbound				Slover Avenue Westbound				Cedar Avenue Northbound				Slover Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	2	2	**2**	6	0	2	**5**	7	0	**13**	0	**13**	0	0	1	1	27
08:00 AM	3	10	0	13	0	1	2	3	0	9	**1**	10	0	0	**3**	3	29
08:15 AM	1	**15**	2	**18**	**1**	**5**	4	**10**	**2**	8	1	11	**2**	**1**	2	**5**	**44**
08:30 AM	**6**	10	1	17	0	5	4	9	0	8	1	9	1	1	1	3	38
Total Volume	12	37	5	54	1	13	15	29	2	38	3	43	3	2	7	12	138
% App. Total	22.2	68.5	9.3		3.4	44.8	51.7		4.7	88.4	7		25	16.7	58.3		
PHF	.500	.617	.625	.750	.250	.650	.750	.725	.250	.731	.750	.827	.375	.500	.583	.600	.784

Counts Unlimited, Inc.
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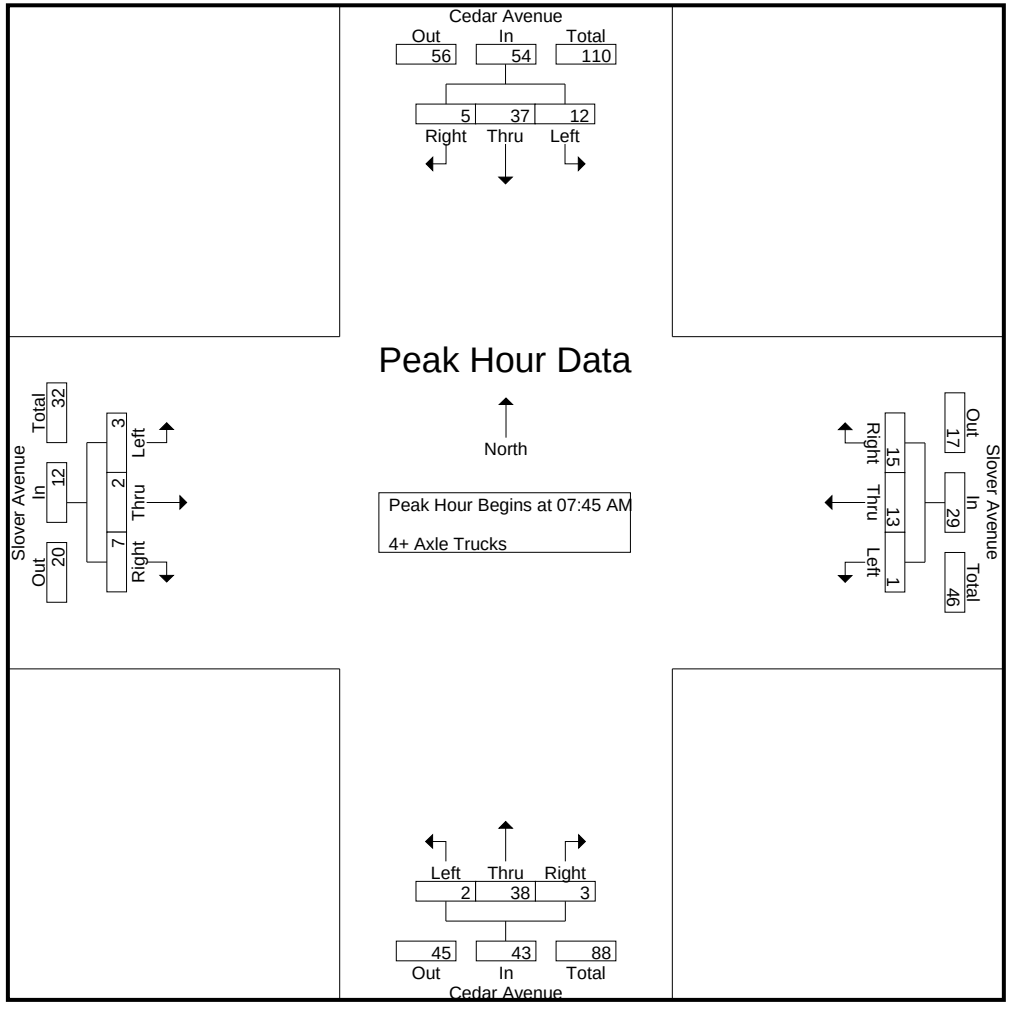

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	Cedar Avenue Southbound				Slover Avenue Westbound				Cedar Avenue Northbound				Slover Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	2	2	**2**	6	0	2	**5**	7	0	**13**	0	**13**	0	0	1	1	
+15 mins.	3	10	0	13	0	1	2	3	0	9	**1**	10	0	0	**3**	3	
+30 mins.	1	**15**	2	**18**	**1**	**5**	4	**10**	**2**	8	1	11	**2**	**1**	2	**5**	
+45 mins.	**6**	10	1	17	0	5	4	9	0	8	1	9	1	1	1	3	
Total Volume	12	37	5	54	1	13	15	29	2	38	3	43	3	2	7	12	
% App. Total	22.2	68.5	9.3		3.4	44.8	51.7		4.7	88.4	7		25	16.7	58.3		
PHF	.500	.617	.625	.750	.250	.650	.750	.725	.250	.731	.750	.827	.375	.500	.583	.600	

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Weather: Clear

File Name : 11_CSB_Ced_Slo PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Cedar Avenue Southbound					Slover Avenue Westbound					Cedar Avenue Northbound					Slover Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	19	161	13	1	193	4	50	33	20	87	28	165	2	0	195	42	44	25	7	111	28	586	614
03:45 PM	11	186	16	3	213	9	53	23	11	85	23	144	6	1	173	47	86	30	9	163	24	634	658
Total	30	347	29	4	406	13	103	56	31	172	51	309	8	1	368	89	130	55	16	274	52	1220	1272
04:00 PM	19	161	14	3	194	4	50	29	13	83	15	106	9	0	130	37	89	61	15	187	31	594	625
04:15 PM	19	164	13	0	196	8	39	18	6	65	21	92	10	1	123	47	78	25	10	150	17	534	551
04:30 PM	20	168	17	2	205	4	46	15	6	65	21	93	2	1	116	50	61	34	11	145	20	531	551
04:45 PM	14	200	20	6	234	4	35	12	5	51	21	148	5	0	174	39	84	31	6	154	17	613	630
Total	72	693	64	11	829	20	170	74	30	264	78	439	26	2	543	173	312	151	42	636	85	2272	2357
05:00 PM	15	189	14	3	218	3	20	17	7	40	14	138	7	1	159	59	49	28	9	136	20	553	573
05:15 PM	15	164	14	2	193	6	29	14	9	49	18	175	4	1	197	58	67	28	8	153	20	592	612
05:30 PM	17	175	14	0	206	9	22	22	12	53	15	151	10	1	176	60	58	28	7	146	20	581	601
05:45 PM	15	171	19	0	205	5	29	19	7	53	31	138	18	0	187	44	47	25	11	116	18	561	579
Total	62	699	61	5	822	23	100	72	35	195	78	602	39	3	719	221	221	109	35	551	78	2287	2365
Grand Total	164	1739	154	20	2057	56	373	202	96	631	207	1350	73	6	1630	483	663	315	93	1461	215	5779	5994
Apprch %	8	84.5	7.5			8.9	59.1	32			12.7	82.8	4.5			33.1	45.4	21.6					
Total %	2.8	30.1	2.7		35.6	1	6.5	3.5		10.9	3.6	23.4	1.3		28.2	8.4	11.5	5.5		25.3	3.6	96.4	
Passenger Vehicles	107	1612	132		1866	53	310	167		615	179	1262	64		1511	464	549	276		1375	0	0	5367
% Passenger Vehicles	65.2	92.7	85.7	75	89.8	94.6	83.1	82.7	88.5	84.6	86.5	93.5	87.7	100	92.4	96.1	82.8	87.6	92.5	88.5	0	0	89.5
Large 2 Axle Vehicles	24	60	6		92	1	19	9		31	7	36	4		47	10	32	9		53	0	0	223
% Large 2 Axle Vehicles	14.6	3.5	3.9	10	4.4	1.8	5.1	4.5	2.1	4.3	3.4	2.7	5.5	0	2.9	2.1	4.8	2.9	2.2	3.4	0	0	3.7
3 Axle Vehicles	4	22	7		36	1	10	7		22	5	16	3		24	4	25	7		40	0	0	122
% 3 Axle Vehicles	2.4	1.3	4.5	15	1.7	1.8	2.7	3.5	4.2	3	2.4	1.2	4.1	0	1.5	0.8	3.8	2.2	4.3	2.6	0	0	2
4+ Axle Trucks	29	45	9		83	1	34	19		59	16	36	2		54	5	57	23		86	0	0	282
% 4+ Axle Trucks	17.7	2.6	5.8	0	4	1.8	9.1	9.4	5.2	8.1	7.7	2.7	2.7	0	3.3	1	8.6	7.3	1.1	5.5	0	0	4.7

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Corona, CA 92878
(951)268-6268

County of San Bernardino
N/S: Cedar Avenue
E/W: Slover Avenue
Weather: Clear

File Name : 11_CSB_Ced_Slo PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Slover Avenue Westbound				Cedar Avenue Northbound				Slover Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	**19**	161	13	193	4	50	**33**	**87**	**28**	**165**	2	**195**	42	44	25	111	586
03:45 PM	11	**186**	**16**	**213**	**9**	**53**	23	85	23	144	6	173	**47**	86	30	163	**634**
04:00 PM	19	161	14	194	4	50	29	83	15	106	9	130	37	**89**	**61**	**187**	594
04:15 PM	19	164	13	196	8	39	18	65	21	92	**10**	123	47	78	25	150	534
Total Volume	68	672	56	796	25	192	103	320	87	507	27	621	173	297	141	611	2348
% App. Total	8.5	84.4	7		7.8	60	32.2		14	81.6	4.3		28.3	48.6	23.1		
PHF	.895	.903	.875	.934	.694	.906	.780	.920	.777	.768	.675	.796	.920	.834	.578	.817	.926

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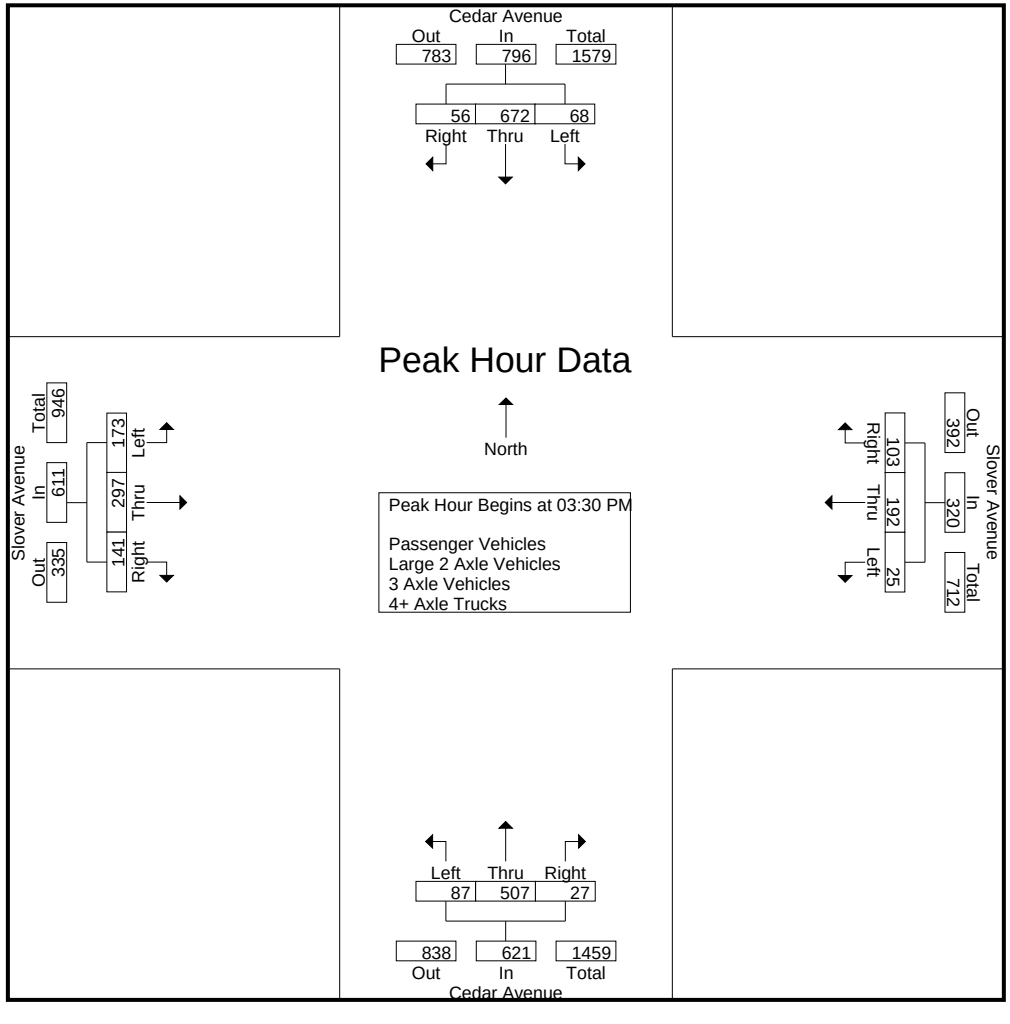
File Name : 11_CSB_Ced_Slo PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 3



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County of San Bernardino
N/S: Cedar Avenue
E/W: Slover Avenue
Weather: Clear

File Name : 11_CSB_Ced_Slo PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Slover Avenue Westbound				Cedar Avenue Northbound				Slover Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				03:30 PM				05:00 PM				03:45 PM				
+0 mins.	19	164	13	196	4	50	**33**	**87**	14	138	7	159	47	86	30	163	
+15 mins.	**20**	168	17	205	**9**	**53**	23	85	18	**175**	4	**197**	37	**89**	**61**	**187**	
+30 mins.	14	**200**	**20**	**234**	4	50	29	83	15	151	10	176	47	78	25	150	
+45 mins.	15	189	14	218	8	39	18	65	**31**	138	**18**	187	**50**	61	34	145	
Total Volume	68	721	64	853	25	192	103	320	78	602	39	719	181	314	150	645	
% App. Total	8	84.5	7.5		7.8	60	32.2		10.8	83.7	5.4		28.1	48.7	23.3		
PHF	.850	.901	.800	.911	.694	.906	.780	.920	.629	.860	.542	.912	.905	.882	.615	.862	

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County of San Bernardino
N/S: Cedar Avenue
E/W: Slover Avenue
Weather: Clear

File Name : 11_CSB_Ced_Slo PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Cedar Avenue Southbound					Slover Avenue Westbound					Cedar Avenue Northbound					Slover Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	11	146	11	0	168	4	46	28	18	78	21	152	2	0	175	41	39	22	7	102	25	523	548
03:45 PM	6	170	15	3	191	9	47	21	11	77	22	135	5	1	162	45	76	26	9	147	24	577	601
Total	17	316	26	3	359	13	93	49	29	155	43	287	7	1	337	86	115	48	16	249	49	1100	1149
04:00 PM	13	148	9	1	170	3	40	24	11	67	14	100	8	0	122	35	77	55	15	167	27	526	553
04:15 PM	13	146	10	0	169	7	32	17	6	56	15	83	9	1	107	46	63	21	9	130	16	462	478
04:30 PM	12	157	15	1	184	4	38	13	6	55	17	88	1	1	106	46	52	30	11	128	19	473	492
04:45 PM	12	191	19	6	222	4	27	7	4	38	17	136	4	0	157	36	64	26	6	126	16	543	559
Total	50	642	53	8	745	18	137	61	27	216	63	407	22	2	492	163	256	132	41	551	78	2004	2082
05:00 PM	12	177	11	2	200	3	15	13	6	31	11	132	7	1	150	56	41	22	6	119	15	500	515
05:15 PM	10	154	13	2	177	6	23	12	8	41	18	165	4	1	187	58	55	26	7	139	18	544	562
05:30 PM	10	165	12	0	187	9	19	18	10	46	15	142	9	1	166	58	45	25	6	128	17	527	544
05:45 PM	8	158	17	0	183	4	23	14	5	41	29	129	15	0	173	43	37	23	10	103	15	500	515
Total	40	654	53	4	747	22	80	57	29	159	73	568	35	3	676	215	178	96	29	489	65	2071	2136
Grand Total	107	1612	132	15	1851	53	310	167	85	530	179	1262	64	6	1505	464	549	276	86	1289	192	5175	5367
Apprch %	5.8	87.1	7.1			10	58.5	31.5			11.9	83.9	4.3			36	42.6	21.4					
Total %	2.1	31.1	2.6		35.8	1	6	3.2		10.2	3.5	24.4	1.2		29.1	9	10.6	5.3		24.9	3.6	96.4	

	Cedar Avenue Southbound				Slover Avenue Westbound				Cedar Avenue Northbound				Slover Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	11	146	11	168	4	46	**28**	**78**	21	**152**	2	**175**	41	39	22	102	523
03:45 PM	6	**170**	**15**	**191**	**9**	**47**	21	77	**22**	135	5	162	45	76	26	147	**577**
04:00 PM	**13**	148	9	170	3	40	24	67	14	100	8	122	35	**77**	**55**	**167**	526
04:15 PM	13	146	10	169	7	32	17	56	15	83	**9**	107	**46**	63	21	130	462
Total Volume	43	610	45	698	23	165	90	278	72	470	24	566	167	255	124	546	2088
% App. Total	6.2	87.4	6.4		8.3	59.4	32.4		12.7	83	4.2		30.6	46.7	22.7		
PHF	.827	.897	.750	.914	.639	.878	.804	.891	.818	.773	.667	.809	.908	.828	.564	.817	.905

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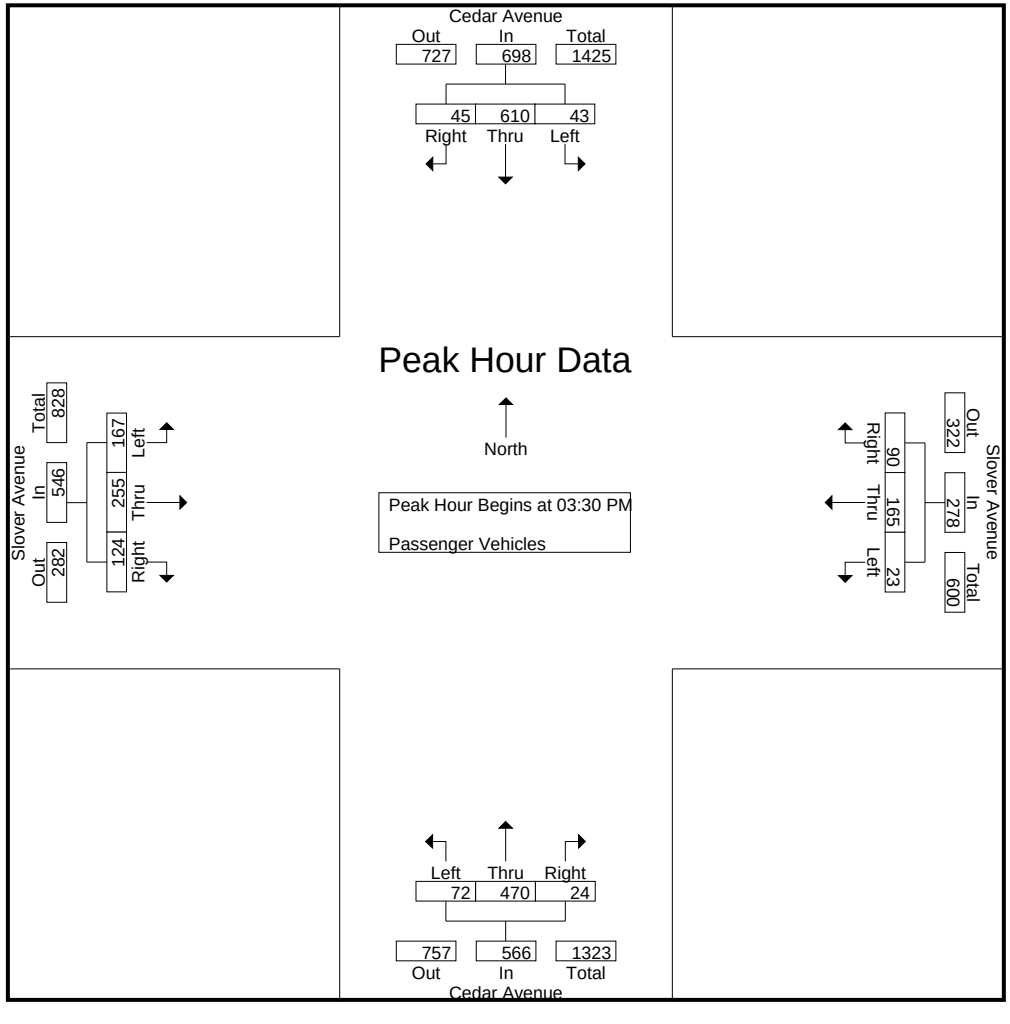
County of San Bernardino
N/S: Cedar Avenue
E/W: Slover Avenue
Weather: Clear

File Name : 11_CSB_Ced_Slo PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
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File Name : 11_CSB_Ced_Slo PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 3

	Cedar Avenue Southbound				Slover Avenue Westbound				Cedar Avenue Northbound				Slover Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	03:30 PM				03:30 PM				03:30 PM				03:30 PM				
+0 mins.	11	146	11	168	4	46	**28**	**78**	21	**152**	2	**175**	41	39	22	102	
+15 mins.	6	**170**	**15**	**191**	**9**	**47**	21	77	**22**	135	5	162	45	76	26	147	
+30 mins.	**13**	148	9	170	3	40	24	67	14	100	8	122	35	**77**	**55**	**167**	
+45 mins.	13	146	10	169	7	32	17	56	15	83	**9**	107	**46**	63	21	130	
Total Volume	43	610	45	698	23	165	90	278	72	470	24	566	167	255	124	546	
% App. Total	6.2	87.4	6.4		8.3	59.4	32.4		12.7	83	4.2		30.6	46.7	22.7		
PHF	.827	.897	.750	.914	.639	.878	.804	.891	.818	.773	.667	.809	.908	.828	.564	.817	

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County of San Bernardino
N/S: Cedar Avenue
E/W: Slover Avenue
Weather: Clear

File Name : 11_CSB_Ced_Slo PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Cedar Avenue Southbound					Slover Avenue Westbound					Cedar Avenue Northbound					Slover Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	2	5	1	1	8	0	2	2	1	4	2	5	0	0	7	1	2	0	0	3	2	22	24
03:45 PM	4	9	0	0	13	0	1	0	0	1	1	2	1	0	4	2	3	0	0	5	0	23	23
Total	6	14	1	1	21	0	3	2	1	5	3	7	1	0	11	3	5	0	0	8	2	45	47
04:00 PM	4	4	1	0	9	0	2	1	0	3	0	1	0	0	1	2	4	2	0	8	0	21	21
04:15 PM	3	11	2	0	16	1	1	1	0	3	1	6	0	0	7	0	4	1	1	5	1	31	32
04:30 PM	1	3	2	1	6	0	4	1	0	5	1	2	0	0	3	1	3	1	0	5	1	19	20
04:45 PM	0	6	0	0	6	0	3	2	0	5	1	5	1	0	7	1	8	2	0	11	0	29	29
Total	8	24	5	1	37	1	10	5	0	16	3	14	1	0	18	4	19	6	1	29	2	100	102
05:00 PM	2	2	0	0	4	0	2	0	0	2	0	3	0	0	3	2	1	2	1	5	1	14	15
05:15 PM	1	5	0	0	6	0	1	0	0	1	0	5	0	0	5	0	1	0	0	1	0	13	13
05:30 PM	2	8	0	0	10	0	1	0	0	1	0	4	1	0	5	1	6	0	0	7	0	23	23
05:45 PM	5	7	0	0	12	0	2	2	1	4	1	3	1	0	5	0	0	1	0	1	1	22	23
Total	10	22	0	0	32	0	6	2	1	8	1	15	2	0	18	3	8	3	1	14	2	72	74
Grand Total	24	60	6	2	90	1	19	9	2	29	7	36	4	0	47	10	32	9	2	51	6	217	223
Apprch %	26.7	66.7	6.7			3.4	65.5	31			14.9	76.6	8.5			19.6	62.7	17.6					
Total %	11.1	27.6	2.8		41.5	0.5	8.8	4.1		13.4	3.2	16.6	1.8		21.7	4.6	14.7	4.1		23.5	2.7	97.3	

	Cedar Avenue Southbound				Slover Avenue Westbound				Cedar Avenue Northbound				Slover Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	2	5	1	8	0	**2**	**2**	**4**	**2**	5	0	**7**	1	2	0	3	22
03:45 PM	**4**	9	0	13	0	1	0	1	1	2	**1**	4	**2**	3	0	5	23
04:00 PM	4	4	1	9	0	2	1	3	0	1	0	1	2	**4**	**2**	**8**	21
04:15 PM	3	**11**	**2**	**16**	**1**	1	1	3	1	**6**	0	7	0	4	1	5	**31**
Total Volume	13	29	4	46	1	6	4	11	4	14	1	19	5	13	3	21	97
% App. Total	28.3	63	8.7		9.1	54.5	36.4		21.1	73.7	5.3		23.8	61.9	14.3		
PHF	.813	.659	.500	.719	.250	.750	.500	.688	.500	.583	.250	.679	.625	.813	.375	.656	.782

Counts Unlimited, Inc.
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County of San Bernardino
N/S: Cedar Avenue
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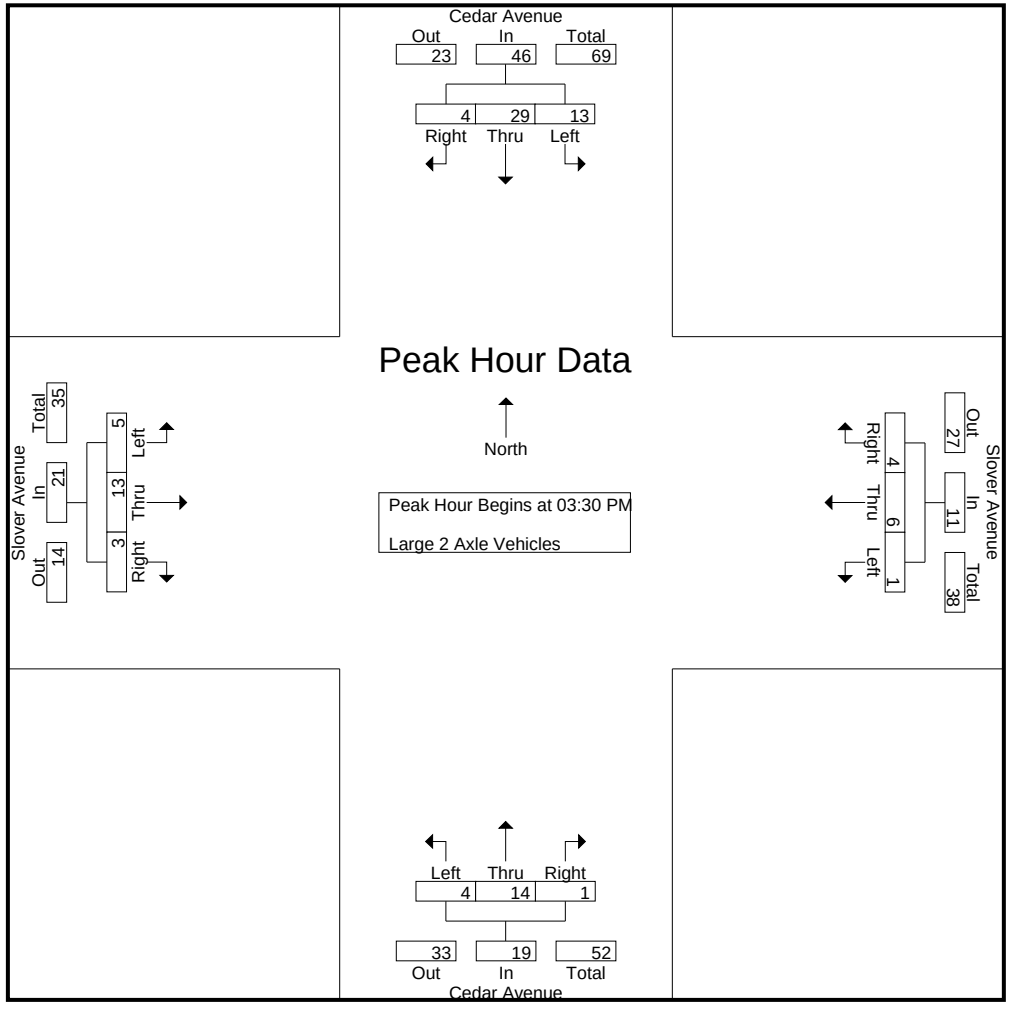
Weather: Clear

File Name : 11_CSB_Ced_Slo PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
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File Name : 11_CSB_Ced_Slo PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Slover Avenue Westbound				Cedar Avenue Northbound				Slover Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	03:30 PM				03:30 PM				03:30 PM				03:30 PM				
+0 mins.	2	5	1	8	0	**2**	**2**	**4**	**2**	5	0	**7**	1	2	0	3	
+15 mins.	**4**	9	0	13	0	1	0	1	1	2	**1**	4	**2**	3	0	5	
+30 mins.	4	4	1	9	0	2	1	3	0	1	0	1	2	**4**	**2**	**8**	
+45 mins.	3	**11**	**2**	**16**	**1**	1	1	3	1	**6**	0	7	0	4	1	5	
Total Volume	13	29	4	46	1	6	4	11	4	14	1	19	5	13	3	21	
% App. Total	28.3	63	8.7		9.1	54.5	36.4		21.1	73.7	5.3		23.8	61.9	14.3		
PHF	.813	.659	.500	.719	.250	.750	.500	.688	.500	.583	.250	.679	.625	.813	.375	.656	

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County of San Bernardino
N/S: Cedar Avenue
E/W: Slover Avenue
Weather: Clear

File Name : 11_CSB_Ced_Slo PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Cedar Avenue Southbound					Slover Avenue Westbound					Cedar Avenue Northbound					Slover Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	2	2	0	0	4	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	9	9
03:45 PM	1	0	0	0	1	0	0	1	0	1	0	2	0	0	2	0	3	1	0	4	0	8	8
Total	3	2	0	0	5	0	0	1	0	1	0	7	0	0	7	0	3	1	0	4	0	17	17
04:00 PM	0	5	3	2	8	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	2	12	14
04:15 PM	0	4	1	0	5	0	1	0	0	1	3	1	1	0	5	0	2	0	0	2	0	13	13
04:30 PM	1	2	0	0	3	0	2	0	0	2	2	1	0	0	3	2	3	0	0	5	0	13	13
04:45 PM	0	2	0	0	2	0	2	2	1	4	0	2	0	0	2	1	4	1	0	6	1	14	15
Total	1	13	4	2	18	0	7	2	1	9	5	5	1	0	11	3	10	1	0	14	3	52	55
05:00 PM	0	2	2	1	4	0	1	2	1	3	0	0	0	0	0	0	3	2	1	5	3	12	15
05:15 PM	0	2	0	0	2	0	0	1	1	1	0	0	0	0	0	0	2	1	1	3	2	6	8
05:30 PM	0	0	1	0	1	0	1	1	1	2	0	1	0	0	1	0	3	1	1	4	2	8	10
05:45 PM	0	3	0	0	3	1	1	0	0	2	0	3	2	0	5	1	4	1	1	6	1	16	17
Total	0	7	3	1	10	1	3	4	3	8	0	4	2	0	6	1	12	5	4	18	8	42	50
Grand Total	4	22	7	3	33	1	10	7	4	18	5	16	3	0	24	4	25	7	4	36	11	111	122
Apprch %	12.1	66.7	21.2			5.6	55.6	38.9			20.8	66.7	12.5			11.1	69.4	19.4					
Total %	3.6	19.8	6.3		29.7	0.9	9	6.3		16.2	4.5	14.4	2.7		21.6	3.6	22.5	6.3		32.4	9	91	

	Cedar Avenue Southbound				Slover Avenue Westbound				Cedar Avenue Northbound				Slover Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	**2**	2	0	4	0	0	0	0	0	**5**	0	**5**	0	0	0	0	9
03:45 PM	1	0	0	1	0	0	**1**	1	0	2	0	2	0	**3**	**1**	**4**	8
04:00 PM	0	**5**	**3**	**8**	0	**2**	0	**2**	0	1	0	1	0	1	0	1	12
04:15 PM	0	4	1	5	0	1	0	1	**3**	1	**1**	5	0	2	0	2	**13**
Total Volume	3	11	4	18	0	3	1	4	3	9	1	13	0	6	1	7	42
% App. Total	16.7	61.1	22.2		0	75	25		23.1	69.2	7.7		0	85.7	14.3		
PHF	.375	.550	.333	.563	.000	.375	.250	.500	.250	.450	.250	.650	.000	.500	.250	.438	.808

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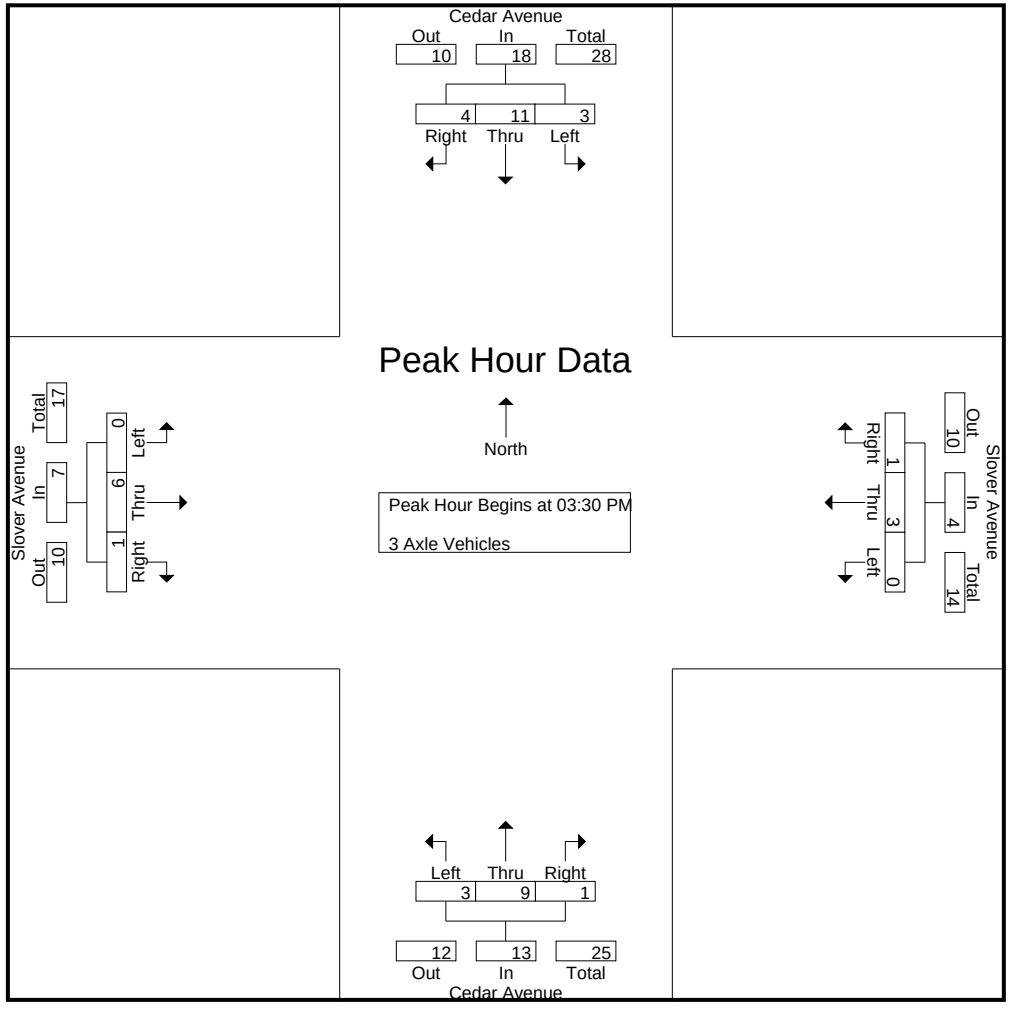
County of San Bernardino
N/S: Cedar Avenue
E/W: Slover Avenue
Weather: Clear

File Name : 11_CSB_Ced_Slo PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
E/W: Slover Avenue
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File Name : 11_CSB_Ced_Slo PM
Site Code : 05122894
Start Date : 10/4/2022
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	Cedar Avenue Southbound				Slover Avenue Westbound				Cedar Avenue Northbound				Slover Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	03:30 PM				03:30 PM				03:30 PM				03:30 PM				
+0 mins.	**2**	2	0	4	0	0	0	0	0	**5**	0	**5**	0	0	0	0	
+15 mins.	1	0	0	1	0	0	**1**	1	0	2	0	2	0	**3**	**1**	**4**	
+30 mins.	0	**5**	**3**	**8**	0	**2**	0	**2**	0	1	0	1	0	1	0	1	
+45 mins.	0	4	1	5	0	1	0	1	**3**	1	**1**	5	0	2	0	2	
Total Volume	3	11	4	18	0	3	1	4	3	9	1	13	0	6	1	7	
% App. Total	16.7	61.1	22.2		0	75	25		23.1	69.2	7.7		0	85.7	14.3		
PHF	.375	.550	.333	.563	.000	.375	.250	.500	.250	.450	.250	.650	.000	.500	.250	.438	

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County of San Bernardino
N/S: Cedar Avenue
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File Name : 11_CSB_Ced_Slo PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Cedar Avenue Southbound					Slover Avenue Westbound					Cedar Avenue Northbound					Slover Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	4	8	1	0	13	0	2	3	1	5	5	3	0	0	8	0	3	3	0	6	1	32	33
03:45 PM	0	7	1	0	8	0	5	1	0	6	0	5	0	0	5	0	4	3	0	7	0	26	26
Total	4	15	2	0	21	0	7	4	1	11	5	8	0	0	13	0	7	6	0	13	1	58	59
04:00 PM	2	4	1	0	7	1	6	4	2	11	1	4	1	0	6	0	7	4	0	11	2	35	37
04:15 PM	3	3	0	0	6	0	5	0	0	5	2	2	0	0	4	1	9	3	0	13	0	28	28
04:30 PM	6	6	0	0	12	0	2	1	0	3	1	2	1	0	4	1	3	3	0	7	0	26	26
04:45 PM	2	1	1	0	4	0	3	1	0	4	3	5	0	0	8	1	8	2	0	11	0	27	27
Total	13	14	2	0	29	1	16	6	2	23	7	13	2	0	22	3	27	12	0	42	2	116	118
05:00 PM	1	8	1	0	10	0	2	2	0	4	3	3	0	0	6	1	4	2	1	7	1	27	28
05:15 PM	4	3	1	0	8	0	5	1	0	6	0	5	0	0	5	0	9	1	0	10	0	29	29
05:30 PM	5	2	1	0	8	0	1	3	1	4	0	4	0	0	4	1	4	2	0	7	1	23	24
05:45 PM	2	3	2	0	7	0	3	3	1	6	1	3	0	0	4	0	6	0	0	6	1	23	24
Total	12	16	5	0	33	0	11	9	2	20	4	15	0	0	19	2	23	5	1	30	3	102	105
Grand Total	29	45	9	0	83	1	34	19	5	54	16	36	2	0	54	5	57	23	1	85	6	276	282
Apprch %	34.9	54.2	10.8			1.9	63	35.2			29.6	66.7	3.7			5.9	67.1	27.1					
Total %	10.5	16.3	3.3		30.1	0.4	12.3	6.9		19.6	5.8	13	0.7		19.6	1.8	20.7	8.3		30.8	2.1	97.9	

	Cedar Avenue Southbound				Slover Avenue Westbound				Cedar Avenue Northbound				Slover Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	**4**	**8**	**1**	**13**	0	2	3	5	**5**	3	0	**8**	0	3	3	6	32
03:45 PM	0	7	1	8	0	5	1	6	0	**5**	0	5	0	4	3	7	26
04:00 PM	2	4	1	7	**1**	**6**	**4**	**11**	1	4	**1**	6	0	7	**4**	11	**35**
04:15 PM	3	3	0	6	0	5	0	5	2	2	0	4	**1**	**9**	3	**13**	28
Total Volume	9	22	3	34	1	18	8	27	8	14	1	23	1	23	13	37	121
% App. Total	26.5	64.7	8.8		3.7	66.7	29.6		34.8	60.9	4.3		2.7	62.2	35.1		
PHF	.563	.688	.750	.654	.250	.750	.500	.614	.400	.700	.250	.719	.250	.639	.813	.712	.864

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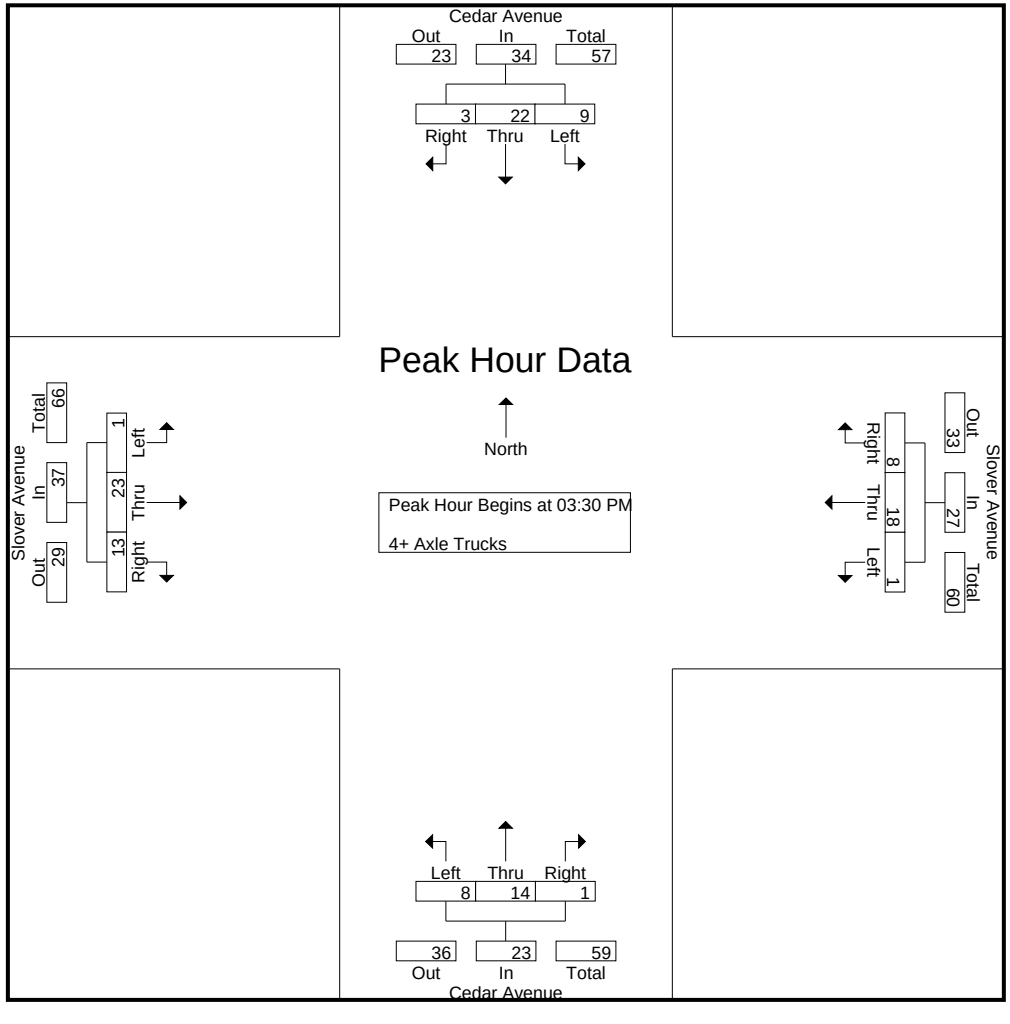
File Name : 11_CSB_Ced_Slo PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
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File Name : 11_CSB_Ced_Slo PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Slover Avenue Westbound				Cedar Avenue Northbound				Slover Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	03:30 PM				03:30 PM				03:30 PM				03:30 PM				
+0 mins.	**4**	**8**	**1**	**13**	0	2	3	5	**5**	3	0	**8**	0	3	3	6	
+15 mins.	0	7	1	8	0	5	1	6	0	**5**	0	5	0	4	3	7	
+30 mins.	2	4	1	7	**1**	**6**	**4**	**11**	1	4	**1**	6	0	7	**4**	11	
+45 mins.	3	3	0	6	0	5	0	5	2	2	0	4	**1**	**9**	3	**13**	
Total Volume	9	22	3	34	1	18	8	27	8	14	1	23	1	23	13	37	
% App. Total	26.5	64.7	8.8		3.7	66.7	29.6		34.8	60.9	4.3		2.7	62.2	35.1		
PHF	.563	.688	.750	.654	.250	.750	.500	.614	.400	.700	.250	.719	.250	.639	.813	.712	

Location: County of San Bernardino
N/S: Cedar Avenue
E/W: Slover Avenue

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Cedar Avenue	East Leg Slover Avenue	South Leg Cedar Avenue	West Leg Slover Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	1	2	3	6
7:45 AM	0	0	2	2	4
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	2	2
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	1	4	7	12

	North Leg Cedar Avenue	East Leg Slover Avenue	South Leg Cedar Avenue	West Leg Slover Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	1	1
3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	2	1	0	0	3
4:45 PM	1	0	0	1	2
5:00 PM	3	0	0	0	3
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	1	0	0	1
TOTAL VOLUMES:	6	2	0	2	10

Location: County of San Bernardino
N/S: Cedar Avenue
E/W: Slover Avenue

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Cedar Avenue			Westbound Slover Avenue			Northbound Cedar Avenue			Eastbound Slover Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	1	0	0	0	1	0	0	0	0	0	0	0	2
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	0	2	0	0	0	0	0	0	0	3

	Southbound Cedar Avenue			Westbound Slover Avenue			Northbound Cedar Avenue			Eastbound Slover Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	0	0	0	1	0	2

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County of San Bernardino
N/S: Cedar Avenue
E/W: Santa Ana Avenue
Weather: Clear

File Name : 12_CSB_Ced_St Ana AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Cedar Avenue Southbound					Santa Ana Avenue Westbound					Cedar Avenue Northbound					Santa Ana Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	8	168	13	0	189	3	17	3	3	23	4	168	2	0	174	6	5	9	6	20	9	406	415
06:45 AM	10	185	12	1	207	3	11	6	3	20	14	135	2	1	151	5	7	10	7	22	12	400	412
Total	18	353	25	1	396	6	28	9	6	43	18	303	4	1	325	11	12	19	13	42	21	806	827
07:00 AM	19	198	17	0	234	10	9	5	3	24	10	152	2	0	164	4	11	11	5	26	8	448	456
07:15 AM	17	230	14	1	261	10	14	10	1	34	24	173	5	1	202	13	15	21	15	49	18	546	564
07:30 AM	13	225	11	4	249	12	17	8	4	37	32	172	19	2	223	10	17	15	7	42	17	551	568
07:45 AM	2	233	12	1	247	10	17	6	4	33	17	136	3	1	156	15	20	15	7	50	13	486	499
Total	51	886	54	6	991	42	57	29	12	128	83	633	29	4	745	42	63	62	34	167	56	2031	2087
08:00 AM	5	214	7	1	226	5	18	6	2	29	24	134	2	0	160	7	14	13	9	34	12	449	461
08:15 AM	16	192	14	1	222	5	21	5	0	31	32	126	8	2	166	16	16	15	5	47	8	466	474
08:30 AM	6	163	10	1	179	6	29	11	4	46	32	156	4	0	192	12	18	16	11	46	16	463	479
08:45 AM	10	187	8	0	205	3	20	8	6	31	13	107	3	0	123	24	32	10	3	66	9	425	434
Total	37	756	39	3	832	19	88	30	12	137	101	523	17	2	641	59	80	54	28	193	45	1803	1848
Grand Total	106	1995	118	10	2219	67	173	68	30	308	202	1459	50	7	1711	112	155	135	75	402	122	4640	4762
Apprch %	4.8	89.9	5.3			21.8	56.2	22.1			11.8	85.3	2.9			27.9	38.6	33.6					
Total %	2.3	43	2.5		47.8	1.4	3.7	1.5		6.6	4.4	31.4	1.1		36.9	2.4	3.3	2.9		8.7	2.6	97.4	
Passenger Vehicles	95	1774	115		1994	47	166	59		300	190	1295	42		1532	106	146	122		442	0	0	4268
% Passenger Vehicles	89.6	88.9	97.5	100	89.5	70.1	96	86.8	93.3	88.8	94.1	88.8	84	71.4	89.2	94.6	94.2	90.4	90.7	92.7	0	0	89.6
Large 2 Axle Vehicles	1	67	2		70	3	6	4		14	7	64	1		72	3	5	10		24	0	0	180
% Large 2 Axle Vehicles	0.9	3.4	1.7	0	3.1	4.5	3.5	5.9	3.3	4.1	3.5	4.4	2	0	4.2	2.7	3.2	7.4	8	5	0	0	3.8
3 Axle Vehicles	2	49	0		51	6	0	2		9	2	21	3		27	1	3	1		5	0	0	92
% 3 Axle Vehicles	1.9	2.5	0	0	2.3	9	0	2.9	3.3	2.7	1	1.4	6	14.3	1.6	0.9	1.9	0.7	0	1	0	0	1.9
4+ Axle Trucks	8	105	1		114	11	1	3		15	3	79	4		87	2	1	2		6	0	0	222
% 4+ Axle Trucks	7.5	5.3	0.8	0	5.1	16.4	0.6	4.4	0	4.4	1.5	5.4	8	14.3	5.1	1.8	0.6	1.5	1.3	1.3	0	0	4.7

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County of San Bernardino
N/S: Cedar Avenue
E/W: Santa Ana Avenue
Weather: Clear

File Name : 12_CSB_Ced_St Ana AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Santa Ana Avenue Westbound				Cedar Avenue Northbound				Santa Ana Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**17**	230	**14**	**261**	10	14	**10**	34	24	**173**	5	202	13	15	**21**	49	546
07:30 AM	13	225	11	249	**12**	17	8	**37**	**32**	172	**19**	**223**	10	17	15	42	**551**
07:45 AM	2	**233**	12	247	10	17	6	33	17	136	3	156	**15**	**20**	15	**50**	486
08:00 AM	5	214	7	226	5	**18**	6	29	24	134	2	160	7	14	13	34	449
Total Volume	37	902	44	983	37	66	30	133	97	615	29	741	45	66	64	175	2032
% App. Total	3.8	91.8	4.5		27.8	49.6	22.6		13.1	83	3.9		25.7	37.7	36.6		
PHF	.544	.968	.786	.942	.771	.917	.750	.899	.758	.889	.382	.831	.750	.825	.762	.875	.922

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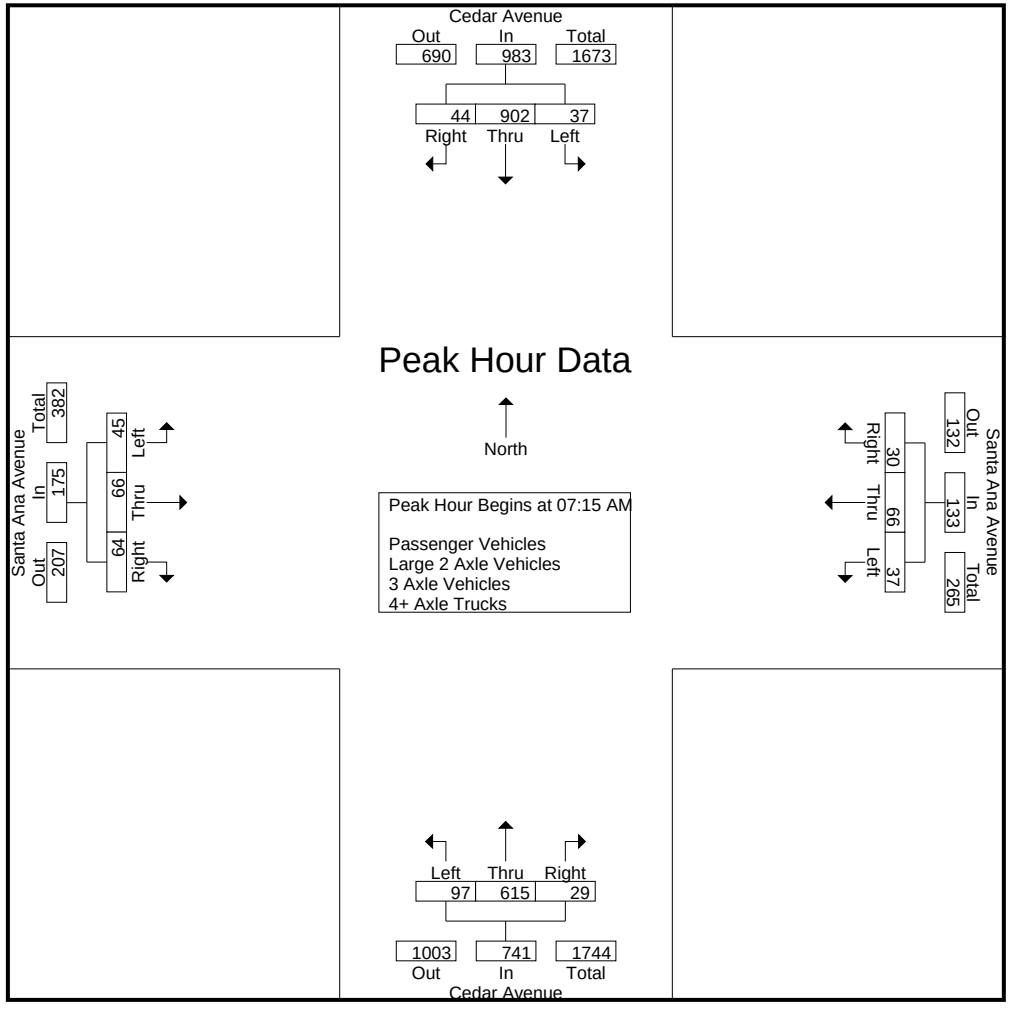
File Name : 12_CSB_Ced_St Ana AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 3



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Weather: Clear

File Name : 12_CSB_Ced_St Ana AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Santa Ana Avenue Westbound				Cedar Avenue Northbound				Santa Ana Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:45 AM				07:00 AM				08:00 AM				
+0 mins.	**19**	198	**17**	234	**10**	17	6	33	10	152	2	164	7	14	13	34	
+15 mins.	17	230	14	**261**	5	18	6	29	24	**173**	5	202	16	16	15	47	
+30 mins.	13	225	11	249	5	21	5	31	**32**	172	**19**	**223**	12	18	**16**	46	
+45 mins.	2	**233**	12	247	6	**29**	**11**	**46**	17	136	3	156	**24**	**32**	10	**66**	
Total Volume	51	886	54	991	26	85	28	139	83	633	29	745	59	80	54	193	
% App. Total	5.1	89.4	5.4		18.7	61.2	20.1		11.1	85	3.9		30.6	41.5	28		
PHF	.671	.951	.794	.949	.650	.733	.636	.755	.648	.915	.382	.835	.615	.625	.844	.731	

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File Name : 12_CSB_Ced_St Ana AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Cedar Avenue Southbound					Santa Ana Avenue Westbound					Cedar Avenue Northbound					Santa Ana Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	8	151	13	0	172	3	16	3	3	22	4	152	1	0	157	5	4	7	4	16	7	367	374
06:45 AM	9	165	12	1	186	0	10	5	3	15	12	125	1	0	138	5	7	6	5	18	9	357	366
Total	17	316	25	1	358	3	26	8	6	37	16	277	2	0	295	10	11	13	9	34	16	724	740
07:00 AM	17	177	16	0	210	5	9	5	3	19	9	140	1	0	150	4	8	10	5	22	8	401	409
07:15 AM	17	207	14	1	238	7	13	8	1	28	21	147	5	1	173	13	12	20	15	45	18	484	502
07:30 AM	13	206	11	4	230	9	16	8	4	33	31	157	19	2	207	10	17	14	7	41	17	511	528
07:45 AM	1	216	12	1	229	7	17	6	4	30	17	118	2	1	137	15	19	14	6	48	12	444	456
Total	48	806	53	6	907	28	55	27	12	110	78	562	27	4	667	42	56	58	33	156	55	1840	1895
08:00 AM	4	184	7	1	195	3	18	5	2	26	23	114	2	0	139	5	14	13	9	32	12	392	404
08:15 AM	13	163	13	1	189	5	21	3	0	29	29	110	4	1	143	15	15	13	4	43	6	404	410
08:30 AM	4	142	10	1	156	5	29	8	2	42	31	140	4	0	175	12	18	15	10	45	13	418	431
08:45 AM	9	163	7	0	179	3	17	8	6	28	13	92	3	0	108	22	32	10	3	64	9	379	388
Total	30	652	37	3	719	16	85	24	10	125	96	456	13	1	565	54	79	51	26	184	40	1593	1633
Grand Total	95	1774	115	10	1984	47	166	59	28	272	190	1295	42	5	1527	106	146	122	68	374	111	4157	4268
Apprch %	4.8	89.4	5.8			17.3	61	21.7			12.4	84.8	2.8			28.3	39	32.6					
Total %	2.3	42.7	2.8		47.7	1.1	4	1.4		6.5	4.6	31.2	1		36.7	2.5	3.5	2.9		9	2.6	97.4	

	Cedar Avenue Southbound				Santa Ana Avenue Westbound				Cedar Avenue Northbound				Santa Ana Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**17**	207	**14**	**238**	7	13	**8**	28	21	147	5	173	13	12	**20**	45	484
07:30 AM	13	206	11	230	**9**	16	8	**33**	**31**	**157**	**19**	**207**	10	17	14	41	**511**
07:45 AM	1	**216**	12	229	7	17	6	30	17	118	2	137	**15**	**19**	14	**48**	444
08:00 AM	4	184	7	195	3	**18**	5	26	23	114	2	139	5	14	13	32	392
Total Volume	35	813	44	892	26	64	27	117	92	536	28	656	43	62	61	166	1831
% App. Total	3.9	91.1	4.9		22.2	54.7	23.1		14	81.7	4.3		25.9	37.3	36.7		
PHF	.515	.941	.786	.937	.722	.889	.844	.886	.742	.854	.368	.792	.717	.816	.763	.865	.896

Counts Unlimited, Inc.
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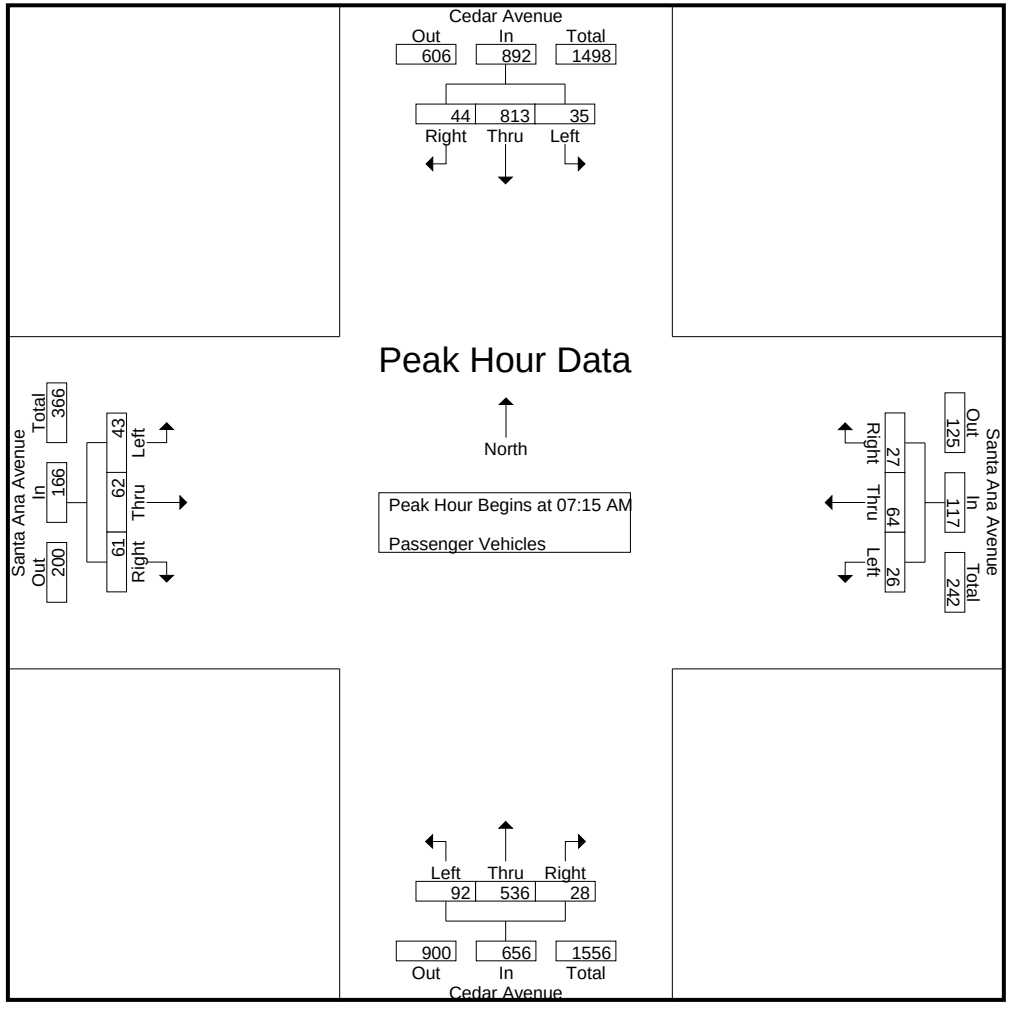
County of San Bernardino
N/S: Cedar Avenue
E/W: Santa Ana Avenue
Weather: Clear

File Name : 12_CSB_Ced_St Ana AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
E/W: Santa Ana Avenue
Weather: Clear

File Name : 12_CSB_Ced_St Ana AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Santa Ana Avenue Westbound				Cedar Avenue Northbound				Santa Ana Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	**17**	207	**14**	**238**	7	13	**8**	28	21	147	5	173	13	12	**20**	45	
+15 mins.	13	206	11	230	**9**	16	8	**33**	**31**	**157**	**19**	**207**	10	17	14	41	
+30 mins.	1	**216**	12	229	7	17	6	30	17	118	2	137	**15**	**19**	14	**48**	
+45 mins.	4	184	7	195	3	**18**	5	26	23	114	2	139	5	14	13	32	
Total Volume	35	813	44	892	26	64	27	117	92	536	28	656	43	62	61	166	
% App. Total	3.9	91.1	4.9		22.2	54.7	23.1		14	81.7	4.3		25.9	37.3	36.7		
PHF	.515	.941	.786	.937	.722	.889	.844	.886	.742	.854	.368	.792	.717	.816	.763	.865	

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County of San Bernardino
N/S: Cedar Avenue
E/W: Santa Ana Avenue
Weather: Clear

File Name : 12_CSB_Ced_St Ana AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Cedar Avenue Southbound					Santa Ana Avenue Westbound					Cedar Avenue Northbound					Santa Ana Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	4	0	0	4	0	1	0	0	1	0	7	0	0	7	1	1	2	2	4	2	16	18
06:45 AM	0	7	0	0	7	0	1	0	0	1	1	7	0	0	8	0	0	3	1	3	1	19	20
Total	0	11	0	0	11	0	2	0	0	2	1	14	0	0	15	1	1	5	3	7	3	35	38
07:00 AM	0	8	0	0	8	1	0	0	0	1	1	8	0	0	9	0	2	1	0	3	0	21	21
07:15 AM	0	3	0	0	3	1	1	1	0	3	2	12	0	0	14	0	2	0	0	2	0	22	22
07:30 AM	0	5	0	0	5	0	1	0	0	1	1	4	0	0	5	0	0	0	0	0	0	11	11
07:45 AM	1	8	0	0	9	1	0	0	0	1	0	6	0	0	6	0	0	1	1	1	1	17	18
Total	1	24	0	0	25	3	2	1	0	6	4	30	0	0	34	0	4	2	1	6	1	71	72
08:00 AM	0	9	0	0	9	0	0	0	0	0	0	9	0	0	9	1	0	0	0	1	0	19	19
08:15 AM	0	11	1	0	12	0	0	2	0	2	1	3	1	0	5	0	0	2	1	2	1	21	22
08:30 AM	0	5	0	0	5	0	0	1	1	1	1	4	0	0	5	0	0	1	1	1	2	12	14
08:45 AM	0	7	1	0	8	0	2	0	0	2	0	4	0	0	4	1	0	0	0	1	0	15	15
Total	0	32	2	0	34	0	2	3	1	5	2	20	1	0	23	2	0	3	2	5	3	67	70
Grand Total	1	67	2	0	70	3	6	4	1	13	7	64	1	0	72	3	5	10	6	18	7	173	180
Apprch %	1.4	95.7	2.9			23.1	46.2	30.8			9.7	88.9	1.4			16.7	27.8	55.6					
Total %	0.6	38.7	1.2		40.5	1.7	3.5	2.3		7.5	4	37	0.6		41.6	1.7	2.9	5.8		10.4	3.9	96.1	

	Cedar Avenue Southbound				Santa Ana Avenue Westbound				Cedar Avenue Northbound				Santa Ana Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	3	0	3	**1**	**1**	**1**	**3**	**2**	**12**	0	**14**	0	**2**	0	**2**	**22**
07:30 AM	0	5	0	5	0	1	0	1	1	4	0	5	0	0	0	0	11
07:45 AM	**1**	8	0	**9**	1	0	0	1	0	6	0	6	0	0	**1**	1	17
08:00 AM	0	**9**	0	9	0	0	0	0	0	9	0	9	**1**	0	0	1	19
Total Volume	1	25	0	26	2	2	1	5	3	31	0	34	1	2	1	4	69
% App. Total	3.8	96.2	0		40	40	20		8.8	91.2	0		25	50	25		
PHF	.250	.694	.000	.722	.500	.500	.250	.417	.375	.646	.000	.607	.250	.250	.250	.500	.784

Counts Unlimited, Inc.
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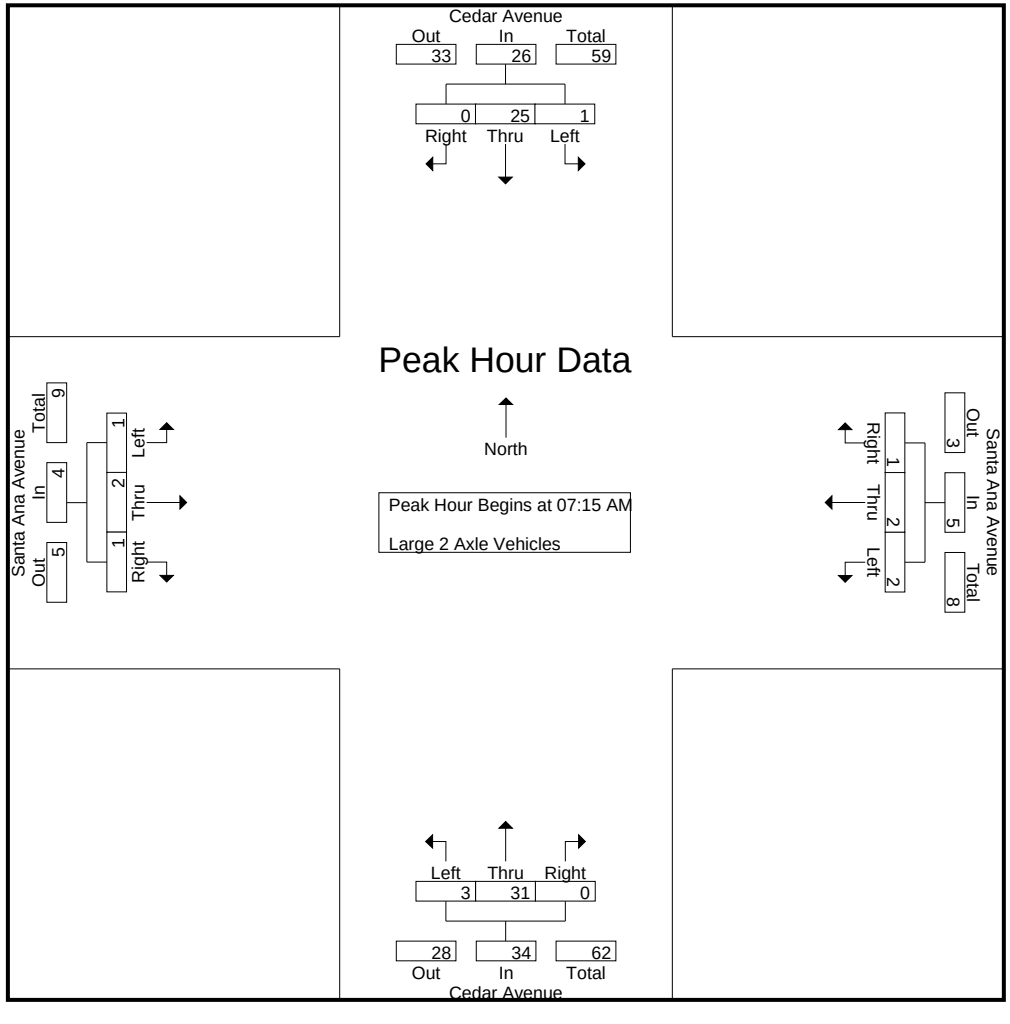
County of San Bernardino
N/S: Cedar Avenue
E/W: Santa Ana Avenue
Weather: Clear

File Name : 12_CSB_Ced_St Ana AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
E/W: Santa Ana Avenue
Weather: Clear

File Name : 12_CSB_Ced_St Ana AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Santa Ana Avenue Westbound				Cedar Avenue Northbound				Santa Ana Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	3	0	3	**1**	**1**	**1**	**3**	**2**	**12**	0	**14**	0	**2**	0	**2**	
+15 mins.	0	5	0	5	0	1	0	1	1	4	0	5	0	0	0	0	
+30 mins.	**1**	8	0	**9**	1	0	0	1	0	6	0	6	0	0	**1**	1	
+45 mins.	0	**9**	0	9	0	0	0	0	0	9	0	9	**1**	0	0	1	
Total Volume	1	25	0	26	2	2	1	5	3	31	0	34	1	2	1	4	
% App. Total	3.8	96.2	0		40	40	20		8.8	91.2	0		25	50	25		
PHF	.250	.694	.000	.722	.500	.500	.250	.417	.375	.646	.000	.607	.250	.250	.250	.500	

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County of San Bernardino
N/S: Cedar Avenue
E/W: Santa Ana Avenue
Weather: Clear

File Name : 12_CSB_Ced_St Ana AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Cedar Avenue Southbound					Santa Ana Avenue Westbound					Cedar Avenue Northbound					Santa Ana Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	4	0	0	4	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	7	7
06:45 AM	0	6	0	0	6	2	0	0	0	2	0	2	0	0	2	0	0	0	0	0	0	10	10
Total	0	10	0	0	10	2	0	0	0	2	0	4	1	0	5	0	0	0	0	0	0	17	17
07:00 AM	1	3	0	0	4	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	7	7
07:15 AM	0	7	0	0	7	0	0	1	0	1	1	2	0	0	3	0	1	0	0	1	0	12	12
07:30 AM	0	4	0	0	4	1	0	0	0	1	0	1	0	0	1	0	0	1	0	1	0	7	7
07:45 AM	0	6	0	0	6	1	0	0	0	1	0	1	0	0	1	0	1	0	0	1	0	9	9
Total	1	20	0	0	21	3	0	1	0	4	1	6	0	0	7	0	2	1	0	3	0	35	35
08:00 AM	0	10	0	0	10	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	12	12
08:15 AM	0	4	0	0	4	0	0	0	0	0	1	4	2	1	7	0	1	0	0	1	1	12	13
08:30 AM	1	5	0	0	6	0	0	1	1	1	0	4	0	0	4	0	0	0	0	0	1	11	12
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	3	3
Total	1	19	0	0	20	1	0	1	1	2	1	11	2	1	14	1	1	0	0	2	2	38	40
Grand Total	2	49	0	0	51	6	0	2	1	8	2	21	3	1	26	1	3	1	0	5	2	90	92
Apprch %	3.9	96.1	0			75	0	25			7.7	80.8	11.5			20	60	20					
Total %	2.2	54.4	0		56.7	6.7	0	2.2		8.9	2.2	23.3	3.3		28.9	1.1	3.3	1.1		5.6	2.2	97.8	

	Cedar Avenue Southbound				Santa Ana Avenue Westbound				Cedar Avenue Northbound				Santa Ana Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	7	0	7	0	0	**1**	**1**	**1**	**2**	0	**3**	0	**1**	0	**1**	**12**
07:30 AM	0	4	0	4	**1**	0	0	1	0	1	0	1	0	0	**1**	1	7
07:45 AM	0	6	0	6	1	0	0	1	0	1	0	1	0	1	0	1	9
08:00 AM	0	**10**	0	**10**	1	0	0	1	0	0	0	0	**1**	0	0	1	12
Total Volume	0	27	0	27	3	0	1	4	1	4	0	5	1	2	1	4	40
% App. Total	0	100	0		75	0	25		20	80	0		25	50	25		
PHF	.000	.675	.000	.675	.750	.000	.250	1.00	.250	.500	.000	.417	.250	.500	.250	1.00	.833

Counts Unlimited, Inc.
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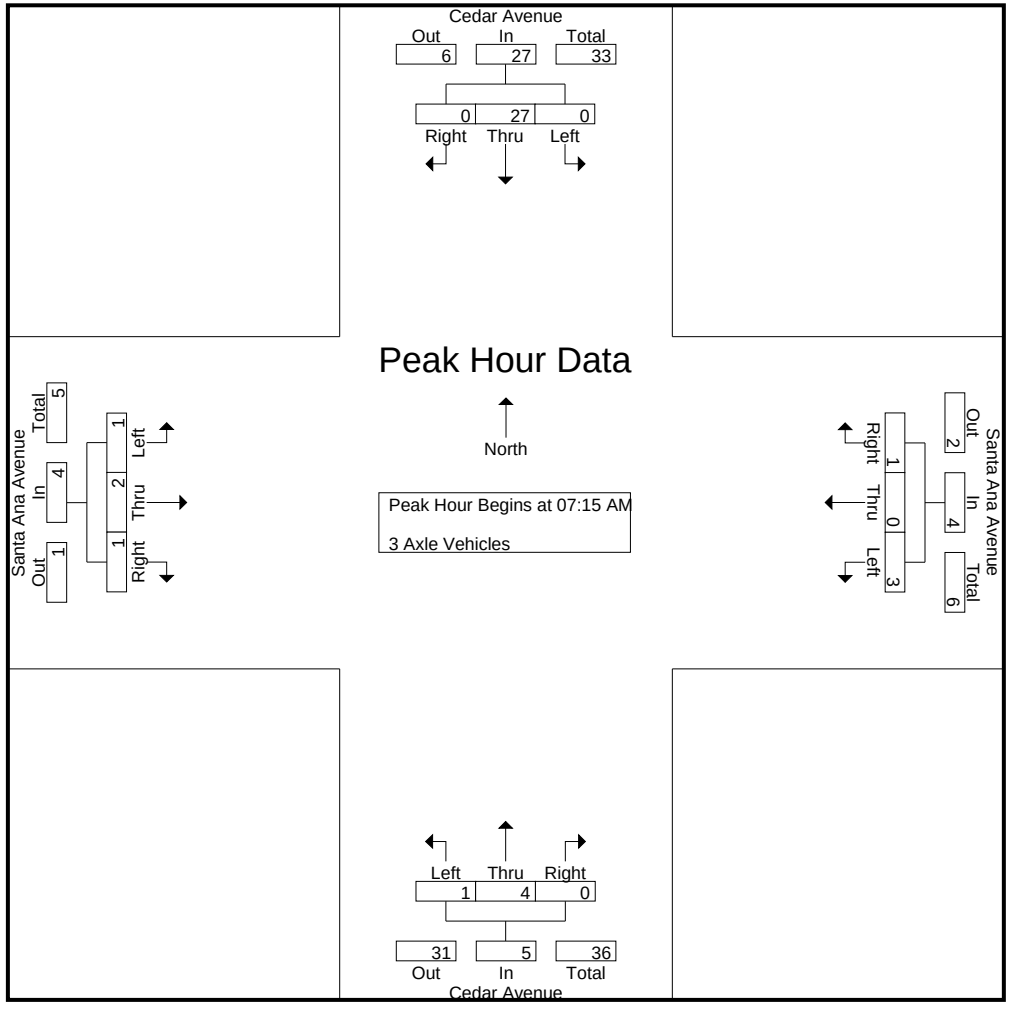
County of San Bernardino
N/S: Cedar Avenue
E/W: Santa Ana Avenue
Weather: Clear

File Name : 12_CSB_Ced_St Ana AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
E/W: Santa Ana Avenue
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File Name : 12_CSB_Ced_St Ana AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Santa Ana Avenue Westbound				Cedar Avenue Northbound				Santa Ana Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	7	0	7	0	0	**1**	**1**	**1**	**2**	0	**3**	0	**1**	0	**1**	
+15 mins.	0	4	0	4	**1**	0	0	1	0	1	0	1	0	0	**1**	1	
+30 mins.	0	6	0	6	1	0	0	1	0	1	0	1	0	1	0	1	
+45 mins.	0	**10**	0	**10**	1	0	0	1	0	0	0	0	**1**	0	0	1	
Total Volume	0	27	0	27	3	0	1	4	1	4	0	5	1	2	1	4	
% App. Total	0	100	0		75	0	25		20	80	0		25	50	25		
PHF	.000	.675	.000	.675	.750	.000	.250	1.000	.250	.500	.000	.417	.250	.500	.250	1.000	

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County of San Bernardino
N/S: Cedar Avenue
E/W: Santa Ana Avenue
Weather: Clear

File Name : 12_CSB_Ced_St Ana AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Cedar Avenue Southbound					Santa Ana Avenue Westbound					Cedar Avenue Northbound					Santa Ana Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	9	0	0	9	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	16	16
06:45 AM	1	7	0	0	8	1	0	1	0	2	1	1	1	1	3	0	0	1	1	1	2	14	16
Total	1	16	0	0	17	1	0	1	0	2	1	8	1	1	10	0	0	1	1	1	2	30	32
07:00 AM	1	10	1	0	12	3	0	0	0	3	0	2	1	0	3	0	1	0	0	1	0	19	19
07:15 AM	0	13	0	0	13	2	0	0	0	2	0	12	0	0	12	0	0	1	0	1	0	28	28
07:30 AM	0	10	0	0	10	2	0	0	0	2	0	10	0	0	10	0	0	0	0	0	0	22	22
07:45 AM	0	3	0	0	3	1	0	0	0	1	0	11	1	0	12	0	0	0	0	0	0	16	16
Total	1	36	1	0	38	8	0	0	0	8	0	35	2	0	37	0	1	1	0	2	0	85	85
08:00 AM	1	11	0	0	12	1	0	1	0	2	1	11	0	0	12	0	0	0	0	0	0	26	26
08:15 AM	3	14	0	0	17	0	0	0	0	0	1	9	1	0	11	1	0	0	0	1	0	29	29
08:30 AM	1	11	0	0	12	1	0	1	0	2	0	8	0	0	8	0	0	0	0	0	0	22	22
08:45 AM	1	17	0	0	18	0	1	0	0	1	0	8	0	0	8	1	0	0	0	1	0	28	28
Total	6	53	0	0	59	2	1	2	0	5	2	36	1	0	39	2	0	0	0	2	0	105	105
Grand Total	8	105	1	0	114	11	1	3	0	15	3	79	4	1	86	2	1	2	1	5	2	220	222
Apprch %	7	92.1	0.9			73.3	6.7	20			3.5	91.9	4.7			40	20	40					
Total %	3.6	47.7	0.5		51.8	5	0.5	1.4		6.8	1.4	35.9	1.8		39.1	0.9	0.5	0.9		2.3	0.9	99.1	

	Cedar Avenue Southbound				Santa Ana Avenue Westbound				Cedar Avenue Northbound				Santa Ana Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**13**	0	**13**	**2**	0	0	**2**	0	**12**	0	**12**	0	0	**1**	**1**	**28**
07:30 AM	0	10	0	10	2	0	0	2	0	10	0	10	0	0	0	0	22
07:45 AM	0	3	0	3	1	0	0	1	0	11	**1**	12	0	0	0	0	16
08:00 AM	**1**	11	0	12	1	0	**1**	2	**1**	11	0	12	0	0	0	0	26
Total Volume	1	37	0	38	6	0	1	7	1	44	1	46	0	0	1	1	92
% App. Total	2.6	97.4	0		85.7	0	14.3		2.2	95.7	2.2		0	0	100		
PHF	.250	.712	.000	.731	.750	.000	.250	.875	.250	.917	.250	.958	.000	.000	.250	.250	.821

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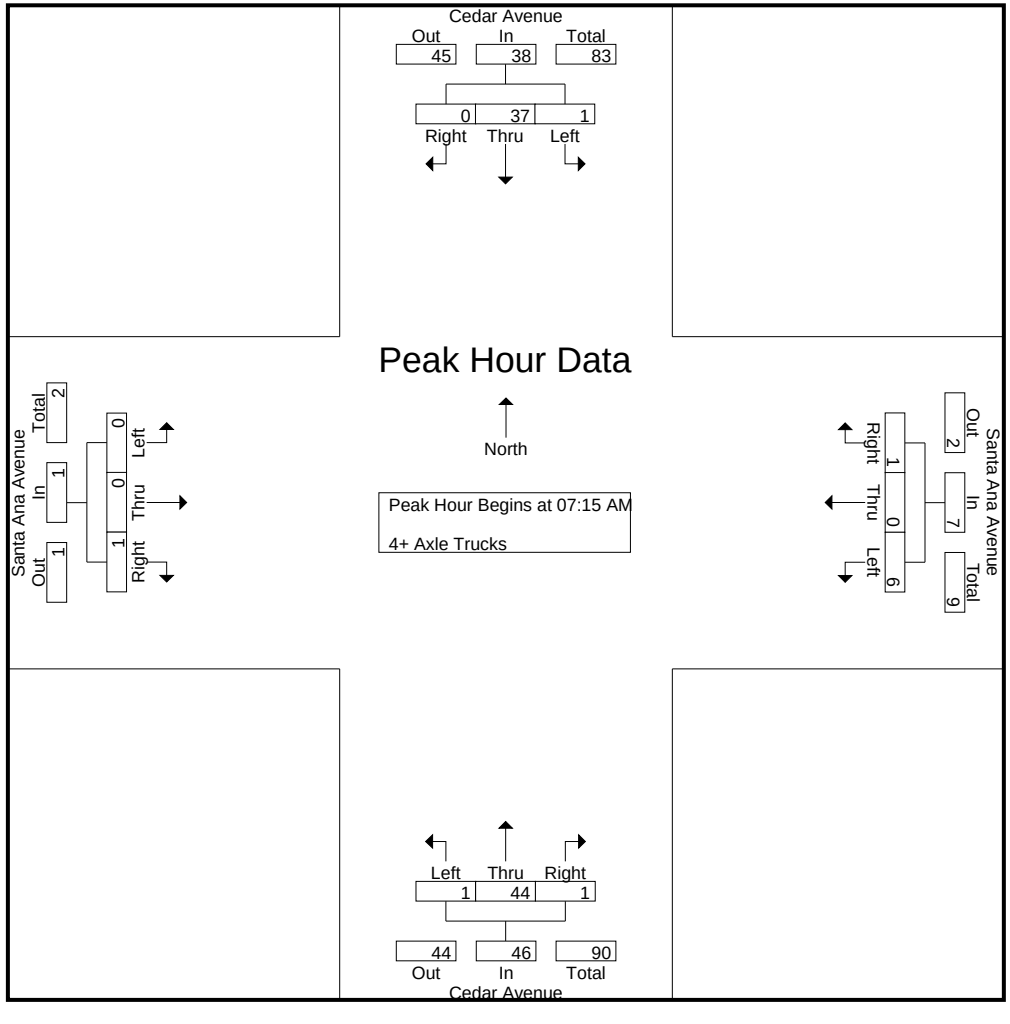
County of San Bernardino
N/S: Cedar Avenue
E/W: Santa Ana Avenue
Weather: Clear

File Name : 12_CSB_Ced_St Ana AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
E/W: Santa Ana Avenue
Weather: Clear

File Name : 12_CSB_Ced_St Ana AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Santa Ana Avenue Westbound				Cedar Avenue Northbound				Santa Ana Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	**13**	0	**13**	**2**	0	0	**2**	0	**12**	0	**12**	0	0	**1**	**1**	
+15 mins.	0	10	0	10	2	0	0	2	0	10	0	10	0	0	0	0	
+30 mins.	0	3	0	3	1	0	0	1	0	11	**1**	12	0	0	0	0	
+45 mins.	**1**	11	0	12	1	0	**1**	2	**1**	11	0	12	0	0	0	0	
Total Volume	1	37	0	38	6	0	1	7	1	44	1	46	0	0	1	1	
% App. Total	2.6	97.4	0		85.7	0	14.3		2.2	95.7	2.2		0	0	100		
PHF	.250	.712	.000	.731	.750	.000	.250	.875	.250	.917	.250	.958	.000	.000	.250	.250	

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File Name : 12_CSB_Ced_St Ana PM
Site Code : 05122894
Start Date : 10/4/2022
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Cedar Avenue Southbound					Santa Ana Avenue Westbound					Cedar Avenue Northbound					Santa Ana Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	12	141	15	1	168	5	40	11	7	56	42	164	9	1	215	10	28	19	8	57	17	496	513
03:45 PM	13	171	13	1	197	7	25	6	0	38	40	174	8	0	222	19	30	12	4	61	5	518	523
Total	25	312	28	2	365	12	65	17	7	94	82	338	17	1	437	29	58	31	12	118	22	1014	1036
04:00 PM	12	161	12	0	185	7	31	11	4	49	36	153	17	0	206	19	33	29	11	81	15	521	536
04:15 PM	14	193	7	3	214	15	21	7	1	43	33	145	25	4	203	13	37	39	18	89	26	549	575
04:30 PM	11	151	12	0	174	8	25	6	5	39	35	105	20	3	160	10	22	26	10	58	18	431	449
04:45 PM	10	200	13	0	223	10	19	3	1	32	28	130	11	1	169	7	31	31	10	69	12	493	505
Total	47	705	44	3	796	40	96	27	11	163	132	533	73	8	738	49	123	125	49	297	71	1994	2065
05:00 PM	9	170	15	0	194	12	27	4	1	43	29	131	15	1	175	21	28	29	13	78	15	490	505
05:15 PM	11	178	13	1	202	5	14	7	5	26	31	186	6	0	223	11	18	12	7	41	13	492	505
05:30 PM	5	161	18	3	184	5	24	3	2	32	43	187	15	1	245	19	22	28	14	69	20	530	550
05:45 PM	6	167	18	2	191	8	17	5	2	30	24	147	7	0	178	19	25	21	10	65	14	464	478
Total	31	676	64	6	771	30	82	19	10	131	127	651	43	2	821	70	93	90	44	253	62	1976	2038
Grand Total	103	1693	136	11	1932	82	243	63	28	388	341	1522	133	11	1996	148	274	246	105	668	155	4984	5139
Apprch %	5.3	87.6	7			21.1	62.6	16.2			17.1	76.3	6.7			22.2	41	36.8					
Total %	2.1	34	2.7		38.8	1.6	4.9	1.3		7.8	6.8	30.5	2.7		40	3	5.5	4.9		13.4	3	97	
Passenger Vehicles	88	1560	131		1790	74	229	55		383	322	1419	116		1867	145	257	235		741	0	0	4781
% Passenger Vehicles	85.4	92.1	96.3	100	92.1	90.2	94.2	87.3	89.3	92.1	94.4	93.2	87.2	90.9	93	98	93.8	95.5	99	95.9	0	0	93
Large 2 Axle Vehicles	4	47	3		54	2	12	3		18	11	31	2		44	1	11	7		20	0	0	136
% Large 2 Axle Vehicles	3.9	2.8	2.2	0	2.8	2.4	4.9	4.8	3.6	4.3	3.2	2	1.5	0	2.2	0.7	4	2.8	1	2.6	0	0	2.6
3 Axle Vehicles	3	28	0		31	0	1	3		5	4	24	7		36	1	5	4		10	0	0	82
% 3 Axle Vehicles	2.9	1.7	0	0	1.6	0	0.4	4.8	3.6	1.2	1.2	1.6	5.3	9.1	1.8	0.7	1.8	1.6	0	1.3	0	0	1.6
4+ Axle Trucks	8	58	2		68	6	1	2		10	4	48	8		60	1	1	0		2	0	0	140
% 4+ Axle Trucks	7.8	3.4	1.5	0	3.5	7.3	0.4	3.2	3.6	2.4	1.2	3.2	6	0	3	0.7	0.4	0	0	0.3	0	0	2.7

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File Name : 12_CSB_Ced_St Ana PM
Site Code : 05122894
Start Date : 10/4/2022
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	Cedar Avenue Southbound				Santa Ana Avenue Westbound				Cedar Avenue Northbound				Santa Ana Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	12	141	**15**	168	5	**40**	**11**	**56**	**42**	164	9	215	10	28	19	57	496
03:45 PM	13	171	13	197	7	25	6	38	40	**174**	8	**222**	**19**	30	12	61	518
04:00 PM	12	161	12	185	7	31	11	49	36	153	17	206	19	33	29	81	521
04:15 PM	**14**	**193**	7	**214**	**15**	21	7	43	33	145	**25**	203	13	**37**	**39**	**89**	**549**
Total Volume	51	666	47	764	34	117	35	186	151	636	59	846	61	128	99	288	2084
% App. Total	6.7	87.2	6.2		18.3	62.9	18.8		17.8	75.2	7		21.2	44.4	34.4		
PHF	.911	.863	.783	.893	.567	.731	.795	.830	.899	.914	.590	.953	.803	.865	.635	.809	.949

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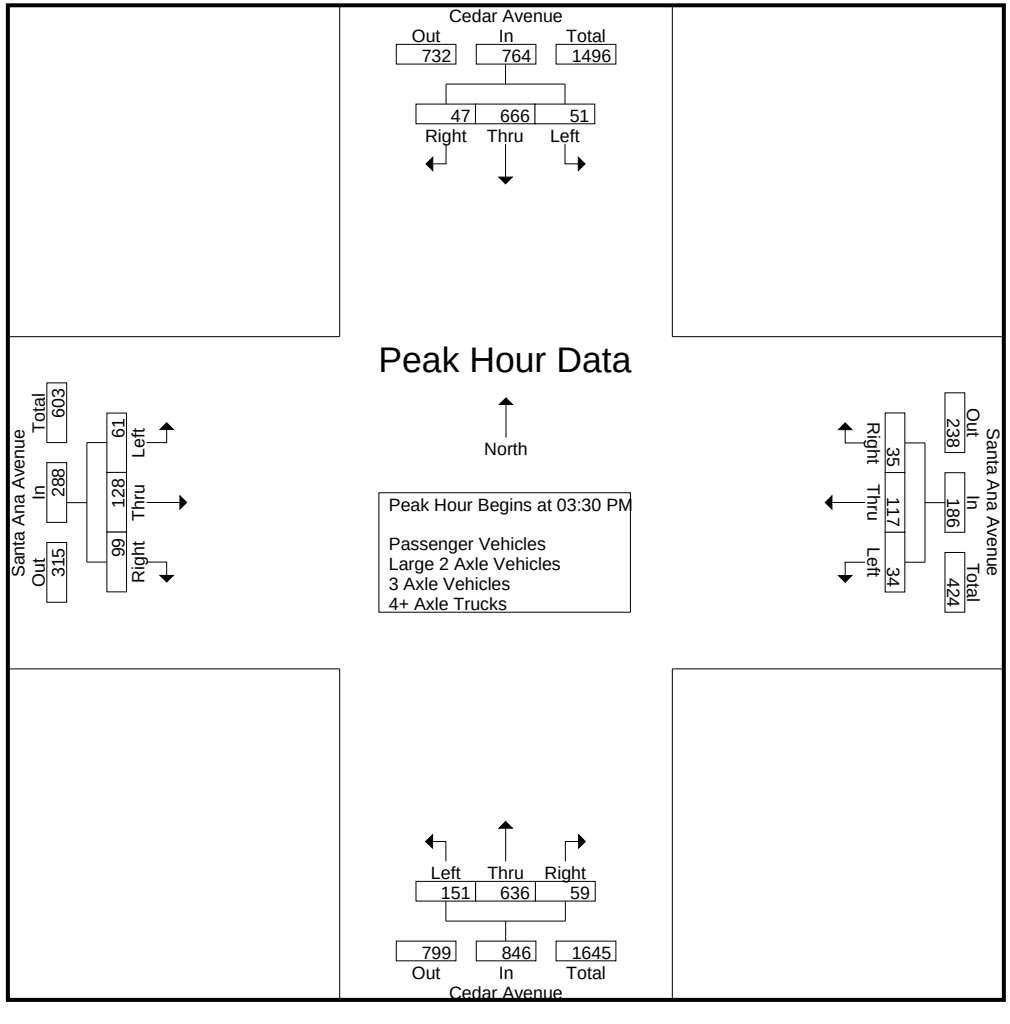

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File Name : 12_CSB_Ced_St Ana PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Santa Ana Avenue Westbound				Cedar Avenue Northbound				Santa Ana Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				03:30 PM				03:30 PM				04:00 PM				
+0 mins.	**14**	193	7	214	5	**40**	**11**	**56**	**42**	164	9	215	**19**	33	29	81	
+15 mins.	11	151	12	174	7	25	6	38	40	**174**	8	**222**	13	**37**	**39**	**89**	
+30 mins.	10	**200**	13	**223**	7	31	11	49	36	153	17	206	10	22	26	58	
+45 mins.	9	170	**15**	194	**15**	21	7	43	33	145	**25**	203	7	31	31	69	
Total Volume	44	714	47	805	34	117	35	186	151	636	59	846	49	123	125	297	
% App. Total	5.5	88.7	5.8		18.3	62.9	18.8		17.8	75.2	7		16.5	41.4	42.1		
PHF	.786	.893	.783	.902	.567	.731	.795	.830	.899	.914	.590	.953	.645	.831	.801	.834	

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Groups Printed- Passenger Vehicles

	Cedar Avenue Southbound					Santa Ana Avenue Westbound					Cedar Avenue Northbound					Santa Ana Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	11	126	15	1	152	4	35	11	7	50	37	151	7	1	195	9	27	19	8	55	17	452	469
03:45 PM	12	154	12	1	178	7	25	6	0	38	39	164	6	0	209	19	29	10	4	58	5	483	488
Total	23	280	27	2	330	11	60	17	7	88	76	315	13	1	404	28	56	29	12	113	22	935	957
04:00 PM	10	145	11	0	166	7	29	10	4	46	35	137	14	0	186	17	33	27	11	77	15	475	490
04:15 PM	12	172	7	3	191	12	17	5	1	34	30	134	24	3	188	13	35	37	18	85	25	498	523
04:30 PM	7	142	12	0	161	8	24	4	3	36	34	99	18	3	151	10	18	24	10	52	16	400	416
04:45 PM	8	192	12	0	212	10	19	2	1	31	27	120	11	1	158	7	31	29	9	67	11	468	479
Total	37	651	42	3	730	37	89	21	9	147	126	490	67	7	683	47	117	117	48	281	67	1841	1908
05:00 PM	7	157	14	0	178	11	25	4	1	40	28	123	15	1	166	21	25	28	13	74	15	458	473
05:15 PM	10	163	12	1	185	4	14	7	5	25	28	177	5	0	210	11	16	12	7	39	13	459	472
05:30 PM	5	153	18	3	176	3	24	3	2	30	41	176	10	1	227	19	20	28	14	67	20	500	520
05:45 PM	6	156	18	2	180	8	17	3	1	28	23	138	6	0	167	19	23	21	10	63	13	438	451
Total	28	629	62	6	719	26	80	17	9	123	120	614	36	2	770	70	84	89	44	243	61	1855	1916
Grand Total	88	1560	131	11	1779	74	229	55	25	358	322	1419	116	10	1857	145	257	235	104	637	150	4631	4781
Apprch %	4.9	87.7	7.4			20.7	64	15.4			17.3	76.4	6.2			22.8	40.3	36.9					
Total %	1.9	33.7	2.8		38.4	1.6	4.9	1.2		7.7	7	30.6	2.5		40.1	3.1	5.5	5.1		13.8	3.1	96.9	

	Cedar Avenue Southbound				Santa Ana Avenue Westbound				Cedar Avenue Northbound				Santa Ana Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	11	126	**15**	152	4	**35**	**11**	**50**	37	151	7	195	9	27	19	55	452
03:45 PM	**12**	154	12	178	7	25	6	38	**39**	**164**	6	**209**	**19**	29	10	58	483
04:00 PM	10	145	11	166	7	29	10	46	35	137	14	186	17	33	27	77	475
04:15 PM	12	**172**	7	**191**	**12**	17	5	34	30	134	**24**	188	13	**35**	**37**	**85**	**498**
Total Volume	45	597	45	687	30	106	32	168	141	586	51	778	58	124	93	275	1908
% App. Total	6.6	86.9	6.6		17.9	63.1	19		18.1	75.3	6.6		21.1	45.1	33.8		
PHF	.938	.868	.750	.899	.625	.757	.727	.840	.904	.893	.531	.931	.763	.886	.628	.809	.958

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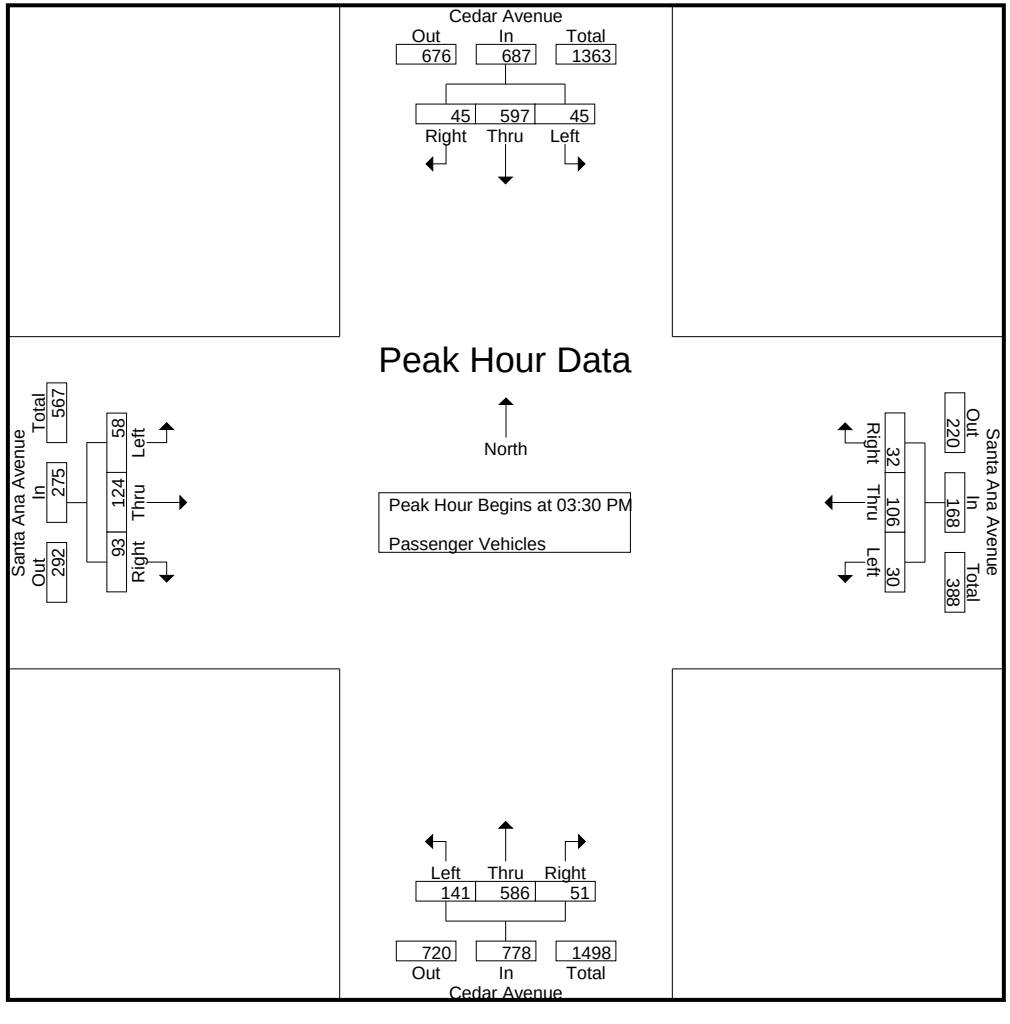

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	Cedar Avenue Southbound				Santa Ana Avenue Westbound				Cedar Avenue Northbound				Santa Ana Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	03:30 PM				03:30 PM				03:30 PM				03:30 PM				
+0 mins.	11	126	**15**	152	4	**35**	**11**	**50**	37	151	7	195	9	27	19	55	
+15 mins.	**12**	154	12	178	7	25	6	38	**39**	**164**	6	**209**	**19**	29	10	58	
+30 mins.	10	145	11	166	7	29	10	46	35	137	14	186	17	33	27	77	
+45 mins.	12	**172**	7	**191**	**12**	17	5	34	30	134	**24**	188	13	**35**	**37**	**85**	
Total Volume	45	597	45	687	30	106	32	168	141	586	51	778	58	124	93	275	
% App. Total	6.6	86.9	6.6		17.9	63.1	19		18.1	75.3	6.6		21.1	45.1	33.8		
PHF	.938	.868	.750	.899	.625	.757	.727	.840	.904	.893	.531	.931	.763	.886	.628	.809	

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Groups Printed- Large 2 Axle Vehicles

	Cedar Avenue Southbound					Santa Ana Avenue Westbound					Cedar Avenue Northbound					Santa Ana Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	3	0	0	3	0	4	0	0	4	4	4	0	0	8	0	0	0	0	0	0	15	15
03:45 PM	0	7	1	0	8	0	0	0	0	0	1	3	0	0	4	0	1	1	0	2	0	14	14
Total	0	10	1	0	11	0	4	0	0	4	5	7	0	0	12	0	1	1	0	2	0	29	29
04:00 PM	0	5	1	0	6	0	1	1	0	2	0	3	2	0	5	1	0	1	0	2	0	15	15
04:15 PM	1	11	0	0	12	1	4	0	0	5	0	5	0	0	5	0	0	2	0	2	0	24	24
04:30 PM	2	2	0	0	4	0	1	0	0	1	1	1	0	0	2	0	3	2	0	5	0	12	12
04:45 PM	1	4	0	0	5	0	0	0	0	0	0	4	0	0	4	0	0	1	1	1	1	10	11
Total	4	22	1	0	27	1	6	1	0	8	1	13	2	0	16	1	3	6	1	10	1	61	62
05:00 PM	0	2	0	0	2	0	2	0	0	2	1	1	0	0	2	0	3	0	0	3	0	9	9
05:15 PM	0	6	1	0	7	0	0	0	0	0	2	4	0	0	6	0	1	0	0	1	0	14	14
05:30 PM	0	2	0	0	2	1	0	0	0	1	2	4	0	0	6	0	2	0	0	2	0	11	11
05:45 PM	0	5	0	0	5	0	0	2	1	2	0	2	0	0	2	0	1	0	0	1	1	10	11
Total	0	15	1	0	16	1	2	2	1	5	5	11	0	0	16	0	7	0	0	7	1	44	45
Grand Total	4	47	3	0	54	2	12	3	1	17	11	31	2	0	44	1	11	7	1	19	2	134	136
Apprch %	7.4	87	5.6			11.8	70.6	17.6			25	70.5	4.5			5.3	57.9	36.8					
Total %	3	35.1	2.2		40.3	1.5	9	2.2		12.7	8.2	23.1	1.5		32.8	0.7	8.2	5.2		14.2	1.5	98.5	

	Cedar Avenue Southbound				Santa Ana Avenue Westbound				Cedar Avenue Northbound				Santa Ana Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	0	3	0	3	0	**4**	0	4	**4**	4	0	**8**	0	0	0	0	15
03:45 PM	0	7	**1**	8	0	0	0	0	1	3	0	4	0	**1**	1	**2**	14
04:00 PM	0	5	1	6	0	1	**1**	2	0	3	**2**	5	**1**	0	1	2	15
04:15 PM	**1**	**11**	0	**12**	**1**	4	0	**5**	0	**5**	0	5	0	0	**2**	2	**24**
Total Volume	1	26	2	29	1	9	1	11	5	15	2	22	1	1	4	6	68
% App. Total	3.4	89.7	6.9		9.1	81.8	9.1		22.7	68.2	9.1		16.7	16.7	66.7		
PHF	.250	.591	.500	.604	.250	.563	.250	.550	.313	.750	.250	.688	.250	.250	.500	.750	.708

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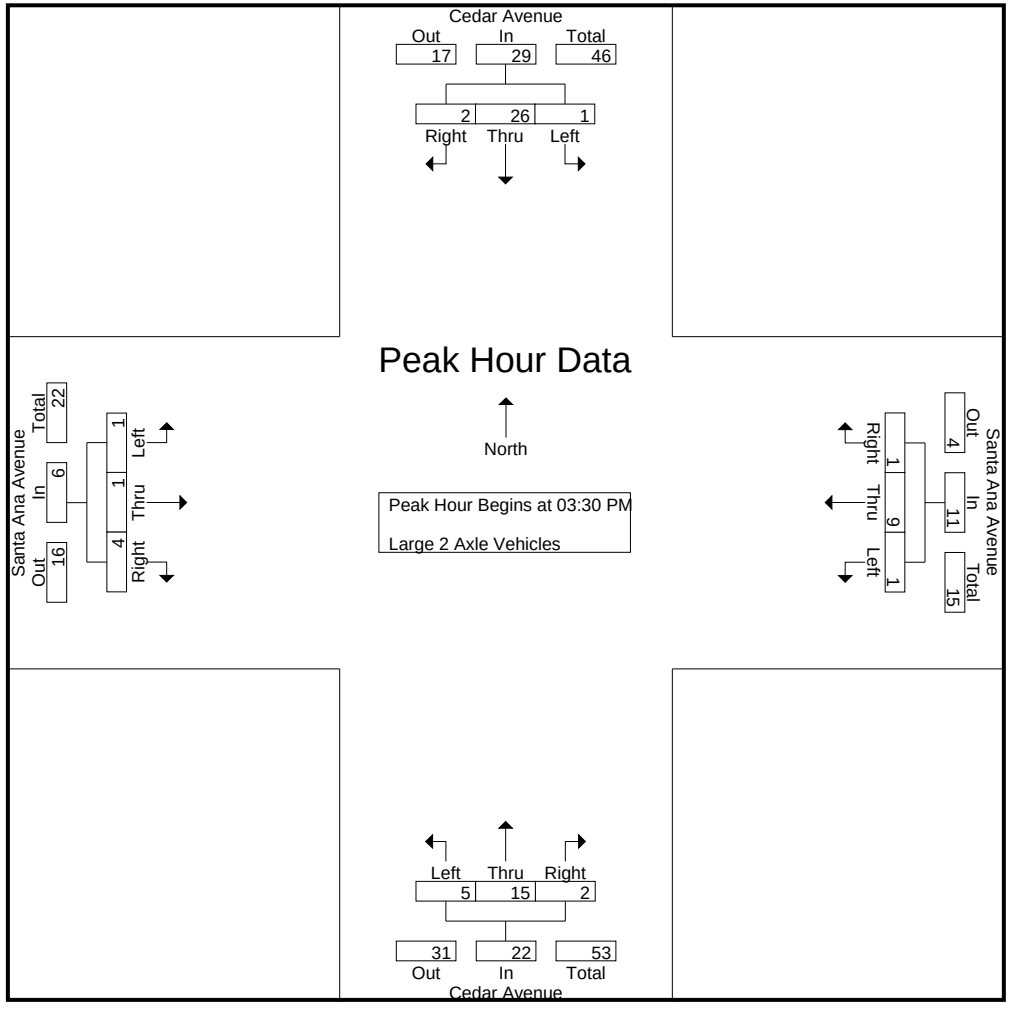
Corona, CA 92878
(951)268-6268

County of San Bernardino
N/S: Cedar Avenue
E/W: Santa Ana Avenue
Weather: Clear

File Name : 12_CSB_Ced_St Ana PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

County of San Bernardino
N/S: Cedar Avenue
E/W: Santa Ana Avenue
Weather: Clear

File Name : 12_CSB_Ced_St Ana PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Santa Ana Avenue Westbound				Cedar Avenue Northbound				Santa Ana Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	03:30 PM				03:30 PM				03:30 PM				03:30 PM				
+0 mins.	0	3	0	3	0	**4**	0	4	**4**	4	0	**8**	0	0	0	0	
+15 mins.	0	7	**1**	8	0	0	0	0	1	3	0	4	0	**1**	1	**2**	
+30 mins.	0	5	1	6	0	1	**1**	2	0	3	**2**	5	**1**	0	1	2	
+45 mins.	**1**	**11**	0	**12**	**1**	4	0	**5**	0	**5**	0	5	0	0	**2**	2	
Total Volume	1	26	2	29	1	9	1	11	5	15	2	22	1	1	4	6	
% App. Total	3.4	89.7	6.9		9.1	81.8	9.1		22.7	68.2	9.1		16.7	16.7	66.7		
PHF	.250	.591	.500	.604	.250	.563	.250	.550	.313	.750	.250	.688	.250	.250	.500	.750	

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County of San Bernardino
N/S: Cedar Avenue
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Weather: Clear

File Name : 12_CSB_Ced_St Ana PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Cedar Avenue Southbound					Santa Ana Avenue Westbound					Cedar Avenue Northbound					Santa Ana Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	2	0	0	2	0	0	0	0	0	0	4	2	0	6	1	1	0	0	2	0	10	10
03:45 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	4	4
Total	0	3	0	0	3	0	0	0	0	0	0	6	2	0	8	1	1	1	0	3	0	14	14
04:00 PM	2	2	0	0	4	0	1	0	0	1	1	5	0	0	6	0	0	1	0	1	0	12	12
04:15 PM	0	4	0	0	4	0	0	2	0	2	2	3	1	1	6	0	2	0	0	2	1	14	15
04:30 PM	0	2	0	0	2	0	0	1	1	1	0	2	2	0	4	0	1	0	0	1	1	8	9
04:45 PM	1	2	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	5	5
Total	3	10	0	0	13	0	1	3	1	4	3	11	3	1	17	0	3	2	0	5	2	39	41
05:00 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	4	4
05:15 PM	0	5	0	0	5	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	0	7	7
05:30 PM	0	2	0	0	2	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	0	6	6
05:45 PM	0	5	0	0	5	0	0	0	0	0	0	4	0	0	4	0	1	0	0	1	0	10	10
Total	0	15	0	0	15	0	0	0	0	0	1	7	2	0	10	0	1	1	0	2	0	27	27
Grand Total	3	28	0	0	31	0	1	3	1	4	4	24	7	1	35	1	5	4	0	10	2	80	82
Apprch %	9.7	90.3	0			0	25	75			11.4	68.6	20			10	50	40					
Total %	3.8	35	0		38.8	0	1.2	3.8		5	5	30	8.8		43.8	1.2	6.2	5		12.5	2.4	97.6	

	Cedar Avenue Southbound				Santa Ana Avenue Westbound				Cedar Avenue Northbound				Santa Ana Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	0	2	0	2	0	0	0	0	0	4	**2**	**6**	**1**	1	0	**2**	10
03:45 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	**1**	1	4
04:00 PM	**2**	2	0	**4**	0	**1**	0	1	1	**5**	0	6	0	0	1	1	12
04:15 PM	0	**4**	0	4	0	0	**2**	**2**	**2**	3	1	6	0	**2**	0	2	**14**
Total Volume	2	9	0	11	0	1	2	3	3	14	3	20	1	3	2	6	40
% App. Total	18.2	81.8	0		0	33.3	66.7		15	70	15		16.7	50	33.3		
PHF	.250	.563	.000	.688	.000	.250	.250	.375	.375	.700	.375	.833	.250	.375	.500	.750	.714

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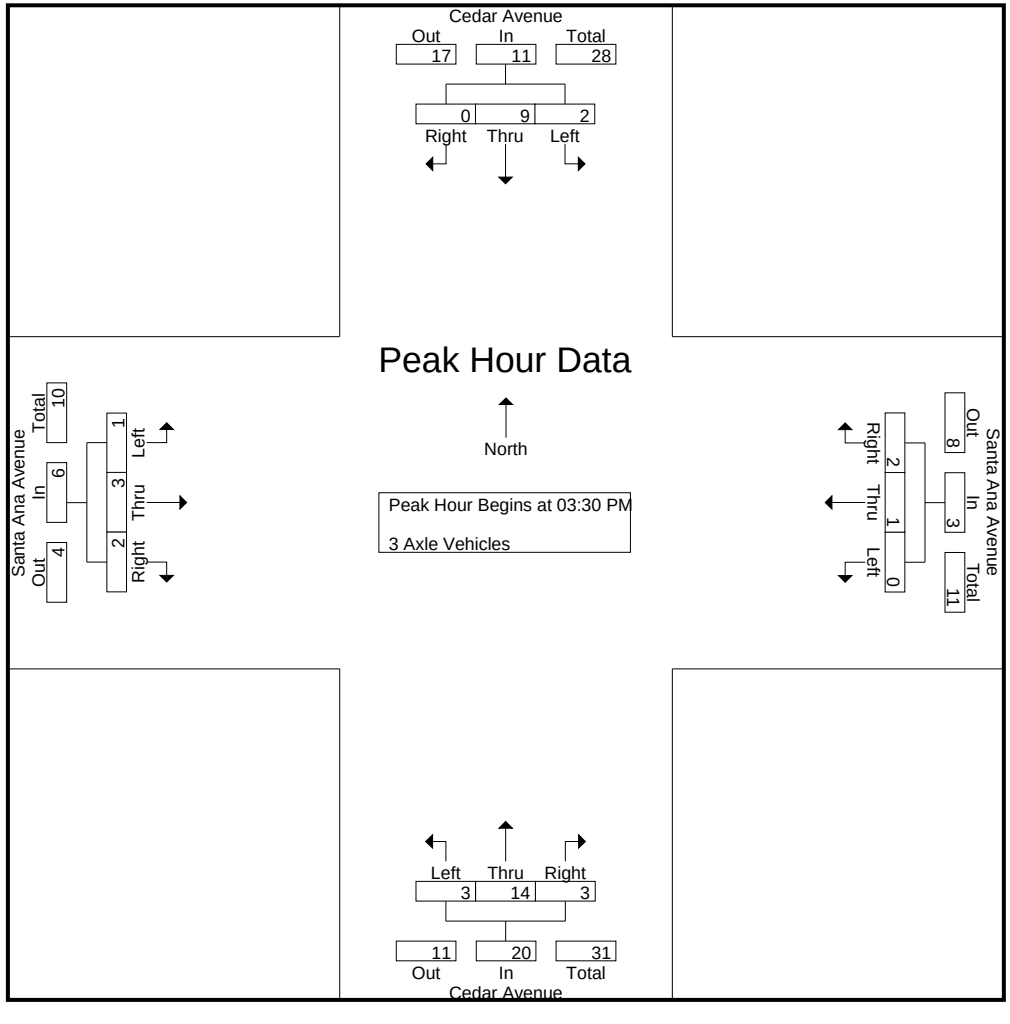
County of San Bernardino
N/S: Cedar Avenue
E/W: Santa Ana Avenue
Weather: Clear

File Name : 12_CSB_Ced_St Ana PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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File Name : 12_CSB_Ced_St Ana PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Santa Ana Avenue Westbound				Cedar Avenue Northbound				Santa Ana Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	03:30 PM				03:30 PM				03:30 PM				03:30 PM				
+0 mins.	0	2	0	2	0	0	0	0	0	4	**2**	**6**	**1**	1	0	**2**	
+15 mins.	0	1	0	1	0	0	0	0	0	2	0	2	0	0	**1**	1	
+30 mins.	**2**	2	0	**4**	0	**1**	0	1	1	**5**	0	6	0	0	1	1	
+45 mins.	0	**4**	0	4	0	0	**2**	**2**	**2**	3	1	6	0	**2**	0	2	
Total Volume	2	9	0	11	0	1	2	3	3	14	3	20	1	3	2	6	
% App. Total	18.2	81.8	0		0	33.3	66.7		15	70	15		16.7	50	33.3		
PHF	.250	.563	.000	.688	.000	.250	.250	.375	.375	.700	.375	.833	.250	.375	.500	.750	

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File Name : 12_CSB_Ced_St Ana PM
Site Code : 05122894
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Page No : 1

Groups Printed- 4+ Axle Trucks

	Cedar Avenue Southbound					Santa Ana Avenue Westbound					Cedar Avenue Northbound					Santa Ana Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	1	10	0	0	11	1	1	0	0	2	1	5	0	0	6	0	0	0	0	0	0	19	19
03:45 PM	1	9	0	0	10	0	0	0	0	0	0	5	2	0	7	0	0	0	0	0	0	17	17
Total	2	19	0	0	21	1	1	0	0	2	1	10	2	0	13	0	0	0	0	0	0	36	36
04:00 PM	0	9	0	0	9	0	0	0	0	0	0	8	1	0	9	1	0	0	0	1	0	19	19
04:15 PM	1	6	0	0	7	2	0	0	0	2	1	3	0	0	4	0	0	0	0	0	0	13	13
04:30 PM	2	5	0	0	7	0	0	1	1	1	0	3	0	0	3	0	0	0	0	0	1	11	12
04:45 PM	0	2	1	0	3	0	0	1	0	1	1	5	0	0	6	0	0	0	0	0	0	10	10
Total	3	22	1	0	26	2	0	2	1	4	2	19	1	0	22	1	0	0	0	1	1	53	54
05:00 PM	2	8	1	0	11	1	0	0	0	1	0	7	0	0	7	0	0	0	0	0	0	19	19
05:15 PM	1	4	0	0	5	1	0	0	0	1	0	5	0	0	5	0	1	0	0	1	0	12	12
05:30 PM	0	4	0	0	4	1	0	0	0	1	0	4	4	0	8	0	0	0	0	0	0	13	13
05:45 PM	0	1	0	0	1	0	0	0	0	0	1	3	1	0	5	0	0	0	0	0	0	6	6
Total	3	17	1	0	21	3	0	0	0	3	1	19	5	0	25	0	1	0	0	1	0	50	50
Grand Total	8	58	2	0	68	6	1	2	1	9	4	48	8	0	60	1	1	0	0	2	1	139	140
Apprch %	11.8	85.3	2.9			66.7	11.1	22.2			6.7	80	13.3			50	50	0					
Total %	5.8	41.7	1.4		48.9	4.3	0.7	1.4		6.5	2.9	34.5	5.8		43.2	0.7	0.7	0		1.4	0.7	99.3	

	Cedar Avenue Southbound				Santa Ana Avenue Westbound				Cedar Avenue Northbound				Santa Ana Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	**1**	**10**	0	**11**	1	**1**	0	**2**	**1**	5	0	6	0	0	0	0	**19**
03:45 PM	1	9	0	10	0	0	0	0	0	5	**2**	7	0	0	0	0	17
04:00 PM	0	9	0	9	0	0	0	0	0	**8**	1	**9**	**1**	0	0	**1**	19
04:15 PM	1	6	0	7	**2**	0	0	2	1	3	0	4	0	0	0	0	13
Total Volume	3	34	0	37	3	1	0	4	2	21	3	26	1	0	0	1	68
% App. Total	8.1	91.9	0		75	25	0		7.7	80.8	11.5		100	0	0		
PHF	.750	.850	.000	.841	.375	.250	.000	.500	.500	.656	.375	.722	.250	.000	.000	.250	.895

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File Name : 12_CSB_Ced_St Ana PM
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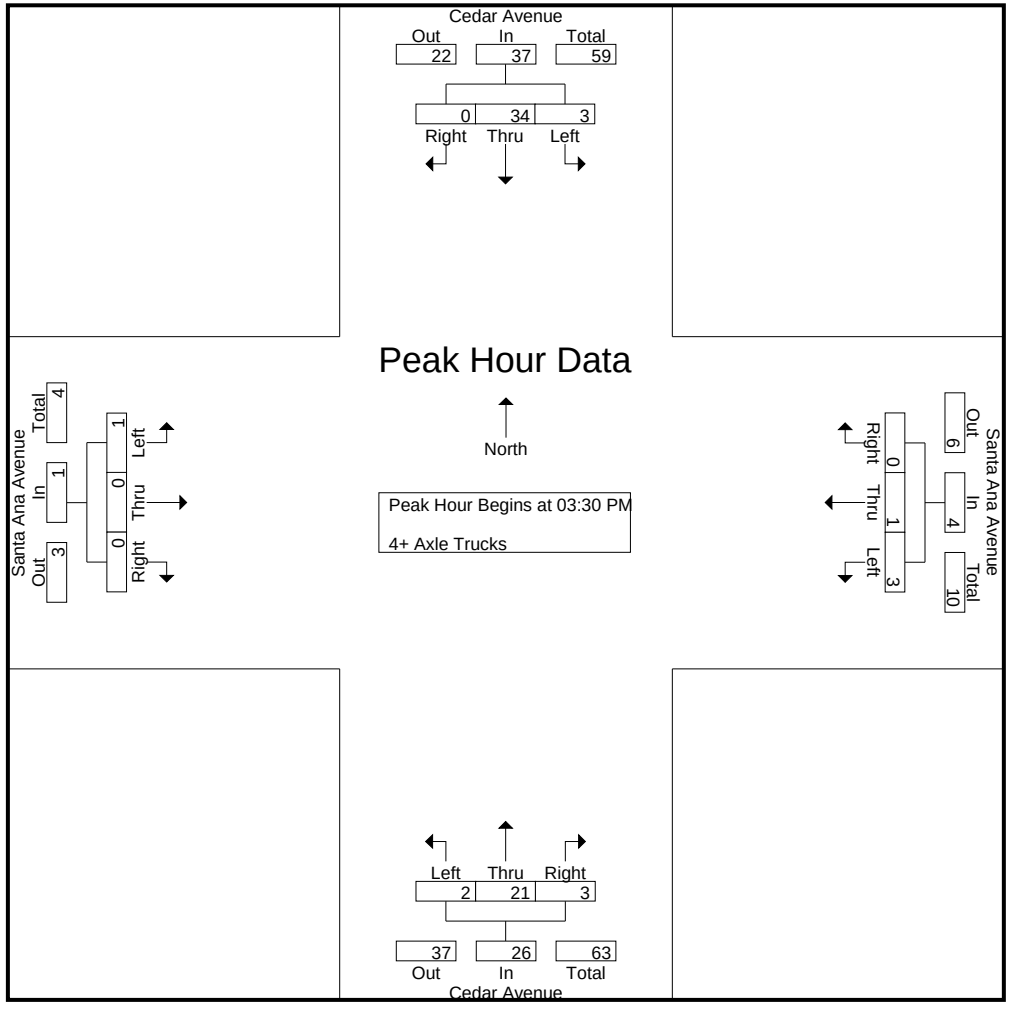
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
E/W: Santa Ana Avenue
Weather: Clear

File Name : 12_CSB_Ced_St Ana PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Santa Ana Avenue Westbound				Cedar Avenue Northbound				Santa Ana Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	03:30 PM				03:30 PM				03:30 PM				03:30 PM				
+0 mins.	**1**	**10**	0	**11**	1	**1**	0	**2**	**1**	5	0	6	0	0	0	0	
+15 mins.	1	9	0	10	0	0	0	0	0	5	**2**	7	0	0	0	0	
+30 mins.	0	9	0	9	0	0	0	0	0	**8**	1	**9**	**1**	0	0	**1**	
+45 mins.	1	6	0	7	**2**	0	0	2	1	3	0	4	0	0	0	0	
Total Volume	3	34	0	37	3	1	0	4	2	21	3	26	1	0	0	1	
% App. Total	8.1	91.9	0		75	25	0		7.7	80.8	11.5		100	0	0		
PHF	.750	.850	.000	.841	.375	.250	.000	.500	.500	.656	.375	.722	.250	.000	.000	.250	

Location: County of San Bernardino
N/S: Cedar Avenue
E/W: Santa Ana Avenue

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Cedar Avenue	East Leg Santa Ana Avenue	South Leg Cedar Avenue	West Leg Santa Ana Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	1	0	0	0	1
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	3	1	0	0	4
8:00 AM	3	0	0	0	3
8:15 AM	2	0	0	0	2
8:30 AM	0	0	0	2	2
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	9	1	0	2	12

	North Leg Cedar Avenue	East Leg Santa Ana Avenue	South Leg Cedar Avenue	West Leg Santa Ana Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	1	1
3:45 PM	1	0	0	1	2
4:00 PM	4	0	0	0	4
4:15 PM	2	0	0	0	2
4:30 PM	0	0	0	0	0
4:45 PM	1	0	0	0	1
5:00 PM	2	0	0	0	2
5:15 PM	0	0	0	0	0
5:30 PM	2	0	0	0	2
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	12	0	0	2	14

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Location: County of San Bernardino
N/S: Cedar Avenue
E/W: Santa Ana Avenue

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Cedar Avenue			Westbound Santa Ana Avenue			Northbound Cedar Avenue			Eastbound Santa Ana Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	0	0	1

	Southbound Cedar Avenue			Westbound Santa Ana Avenue			Northbound Cedar Avenue			Eastbound Santa Ana Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
4:00 PM	0	0	0	0	2	0	0	0	0	0	1	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:30 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	5	0	0	0	0	0	5	0	10

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County of San Bernardino
N/S: Cedar Avenue
E/W: Jurupa Avenue
Weather: Clear

File Name : 13_CSB_Ced_Juru AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Cedar Avenue Southbound					Jurupa Avenue Westbound					Cedar Avenue Northbound					Jurupa Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	15	167	5	0	187	13	12	41	28	66	4	140	9	2	153	4	7	1	0	12	30	418	448
06:45 AM	19	190	5	1	214	9	14	27	20	50	4	122	5	0	131	7	10	6	4	23	25	418	443
Total	34	357	10	1	401	22	26	68	48	116	8	262	14	2	284	11	17	7	4	35	55	836	891
07:00 AM	18	192	5	0	215	4	14	28	20	46	8	111	10	1	129	10	7	8	5	25	26	415	441
07:15 AM	22	228	5	1	255	13	28	28	18	69	5	137	13	3	155	18	12	7	4	37	26	516	542
07:30 AM	21	213	6	0	240	19	23	67	42	109	9	142	20	5	171	19	17	5	2	41	49	561	610
07:45 AM	17	232	4	0	253	11	8	19	15	38	6	135	6	1	147	9	20	7	6	36	22	474	496
Total	78	865	20	1	963	47	73	142	95	262	28	525	49	10	602	56	56	27	17	139	123	1966	2089
08:00 AM	24	213	2	1	239	9	14	16	12	39	4	130	9	1	143	7	21	8	6	36	20	457	477
08:15 AM	26	197	5	0	228	10	23	25	20	58	6	142	9	0	157	7	20	4	2	31	22	474	496
08:30 AM	28	138	2	0	168	6	28	17	15	51	10	149	4	0	163	9	27	5	1	41	16	423	439
08:45 AM	40	161	8	0	209	6	10	15	10	31	9	104	4	1	117	3	26	5	4	34	15	391	406
Total	118	709	17	1	844	31	75	73	57	179	29	525	26	2	580	26	94	22	13	142	73	1745	1818
Grand Total	230	1931	47	3	2208	100	174	283	200	557	65	1312	89	14	1466	93	167	56	34	316	251	4547	4798
Apprch %	10.4	87.5	2.1			18	31.2	50.8			4.4	89.5	6.1			29.4	52.8	17.7					
Total %	5.1	42.5	1		48.6	2.2	3.8	6.2		12.2	1.4	28.9	2		32.2	2	3.7	1.2		6.9	5.2	94.8	
Passenger Vehicles	215	1684	42		1944	85	165	268		708	61	1147	82		1304	88	163	54		338	0	0	4294
% Passenger Vehicles	93.5	87.2	89.4	100	87.9	85	94.8	94.7	95	93.5	93.8	87.4	92.1	100	88.1	94.6	97.6	96.4	97.1	96.6	0	0	89.5
Large 2 Axle Vehicles	8	70	4		82	10	9	8		31	2	60	5		67	2	3	2		8	0	0	188
% Large 2 Axle Vehicles	3.5	3.6	8.5	0	3.7	10	5.2	2.8	2	4.1	3.1	4.6	5.6	0	4.5	2.2	1.8	3.6	2.9	2.3	0	0	3.9
3 Axle Vehicles	3	53	0		56	3	0	6		14	1	21	1		23	2	1	0		3	0	0	96
% 3 Axle Vehicles	1.3	2.7	0	0	2.5	3	0	2.1	2.5	1.8	1.5	1.6	1.1	0	1.6	2.2	0.6	0	0	0.9	0	0	2
4+ Axle Trucks	4	124	1		129	2	0	1		4	1	84	1		86	1	0	0		1	0	0	220
% 4+ Axle Trucks	1.7	6.4	2.1	0	5.8	2	0	0.4	0.5	0.5	1.5	6.4	1.1	0	5.8	1.1	0	0	0	0.3	0	0	4.6

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County of San Bernardino
N/S: Cedar Avenue
E/W: Jurupa Avenue
Weather: Clear

File Name : 13_CSB_Ced_Juru AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2

	Cedar Avenue Southbound				Jurupa Avenue Westbound				Cedar Avenue Northbound				Jurupa Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	22	228	5	**255**	13	**28**	28	69	5	137	13	155	18	12	7	37	516
07:30 AM	21	213	**6**	240	**19**	23	**67**	**109**	**9**	**142**	**20**	**171**	**19**	17	5	**41**	**561**
07:45 AM	17	**232**	4	253	11	8	19	38	6	135	6	147	9	20	7	36	474
08:00 AM	**24**	213	2	239	9	14	16	39	4	130	9	143	7	**21**	**8**	36	457
Total Volume	84	886	17	987	52	73	130	255	24	544	48	616	53	70	27	150	2008
% App. Total	8.5	89.8	1.7		20.4	28.6	51		3.9	88.3	7.8		35.3	46.7	18		
PHF	.875	.955	.708	.968	.684	.652	.485	.585	.667	.958	.600	.901	.697	.833	.844	.915	.895

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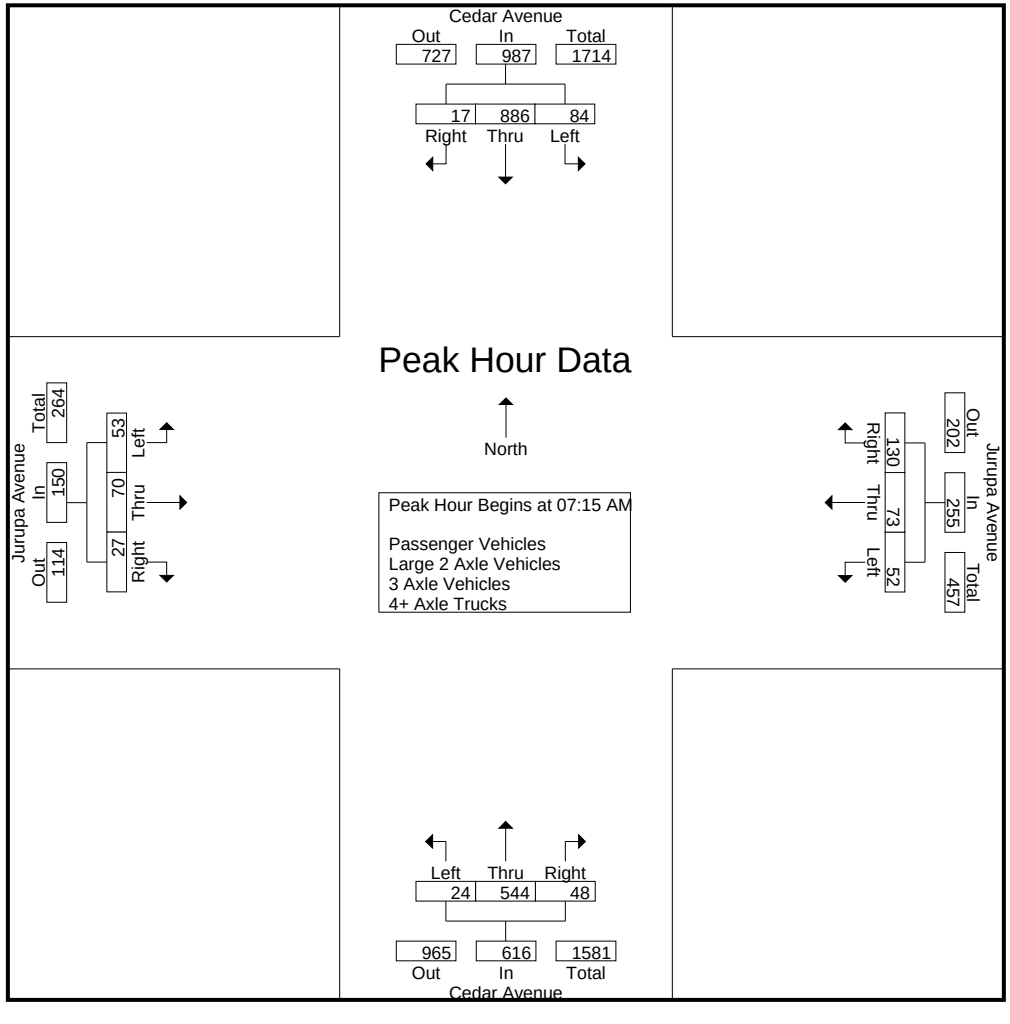
File Name : 13_CSB_Ced_Juru AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 3



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County of San Bernardino
N/S: Cedar Avenue
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File Name : 13_CSB_Ced_Juru AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Jurupa Avenue Westbound				Cedar Avenue Northbound				Jurupa Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				06:45 AM				07:30 AM				07:15 AM				
+0 mins.	22	228	5	**255**	9	14	27	50	**9**	**142**	**20**	**171**	18	12	7	37	
+15 mins.	21	213	**6**	240	4	14	28	46	6	135	6	147	**19**	17	5	**41**	
+30 mins.	17	**232**	4	253	13	**28**	28	69	4	130	9	143	9	20	7	36	
+45 mins.	**24**	213	2	239	**19**	23	**67**	**109**	6	142	9	157	7	**21**	**8**	36	
Total Volume	84	886	17	987	45	79	150	274	25	549	44	618	53	70	27	150	
% App. Total	8.5	89.8	1.7		16.4	28.8	54.7		4	88.8	7.1		35.3	46.7	18		
PHF	.875	.955	.708	.968	.592	.705	.560	.628	.694	.967	.550	.904	.697	.833	.844	.915	

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County of San Bernardino
N/S: Cedar Avenue
E/W: Jurupa Avenue
Weather: Clear

File Name : 13_CSB_Ced_Juru AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Cedar Avenue Southbound					Jurupa Avenue Westbound					Cedar Avenue Northbound					Jurupa Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	12	149	5	0	166	9	11	38	26	58	3	124	8	2	135	4	7	1	0	12	28	371	399
06:45 AM	17	167	4	1	188	7	14	26	19	47	4	111	5	0	120	7	9	6	4	22	24	377	401
Total	29	316	9	1	354	16	25	64	45	105	7	235	13	2	255	11	16	7	4	34	52	748	800
07:00 AM	16	169	4	0	189	4	12	28	20	44	8	103	10	1	121	10	7	8	5	25	26	379	405
07:15 AM	22	196	4	1	222	13	26	28	18	67	4	109	12	3	125	16	11	6	4	33	26	447	473
07:30 AM	19	190	5	0	214	17	22	66	42	105	9	125	19	5	153	19	17	5	2	41	49	513	562
07:45 AM	17	211	4	0	232	10	8	18	15	36	6	115	6	1	127	9	20	6	5	35	21	430	451
Total	74	766	17	1	857	44	68	140	95	252	27	452	47	10	526	54	55	25	16	134	122	1769	1891
08:00 AM	23	183	2	1	208	9	14	16	12	39	4	112	6	1	122	7	21	8	6	36	20	405	425
08:15 AM	23	166	5	0	194	7	22	21	17	50	6	126	9	0	141	5	19	4	2	28	19	413	432
08:30 AM	27	117	2	0	146	4	26	15	13	45	9	137	3	0	149	8	26	5	1	39	14	379	393
08:45 AM	39	136	7	0	182	5	10	12	8	27	8	85	4	1	97	3	26	5	4	34	13	340	353
Total	112	602	16	1	730	25	72	64	50	161	27	460	22	2	509	23	92	22	13	137	66	1537	1603
Grand Total	215	1684	42	3	1941	85	165	268	190	518	61	1147	82	14	1290	88	163	54	33	305	240	4054	4294
Apprch %	11.1	86.8	2.2			16.4	31.9	51.7			4.7	88.9	6.4			28.9	53.4	17.7					
Total %	5.3	41.5	1		47.9	2.1	4.1	6.6		12.8	1.5	28.3	2		31.8	2.2	4	1.3		7.5	5.6	94.4	

	Cedar Avenue Southbound				Jurupa Avenue Westbound				Cedar Avenue Northbound				Jurupa Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	22	196	4	222	13	**26**	28	67	4	109	12	125	16	11	6	33	447
07:30 AM	19	190	**5**	214	**17**	22	**66**	**105**	**9**	**125**	**19**	**153**	**19**	17	5	**41**	**513**
07:45 AM	17	**211**	4	**232**	10	8	18	36	6	115	6	127	9	20	6	35	430
08:00 AM	**23**	183	2	208	9	14	16	39	4	112	6	122	7	**21**	**8**	36	405
Total Volume	81	780	15	876	49	70	128	247	23	461	43	527	51	69	25	145	1795
% App. Total	9.2	89	1.7		19.8	28.3	51.8		4.4	87.5	8.2		35.2	47.6	17.2		
PHF	.880	.924	.750	.944	.721	.673	.485	.588	.639	.922	.566	.861	.671	.821	.781	.884	.875

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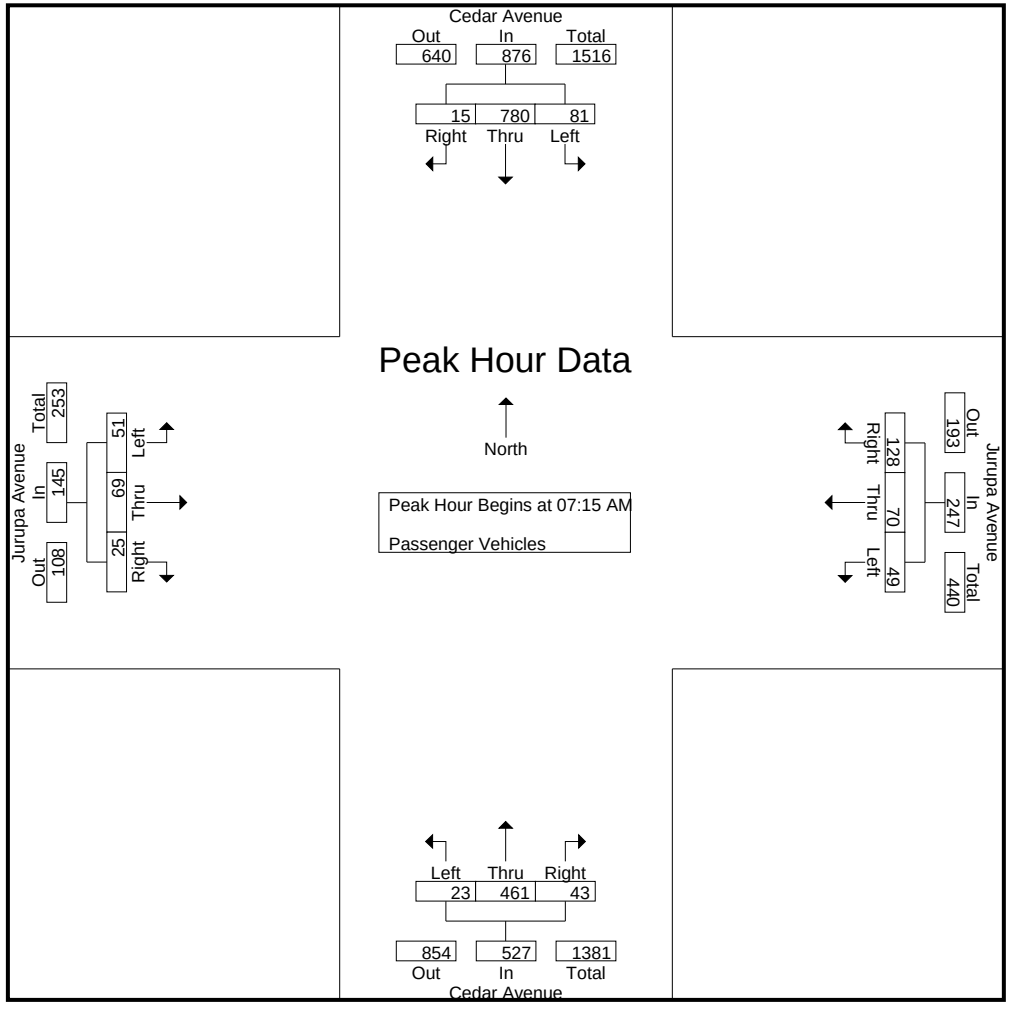
County of San Bernardino
N/S: Cedar Avenue
E/W: Jurupa Avenue
Weather: Clear

File Name : 13_CSB_Ced_Juru AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
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File Name : 13_CSB_Ced_Juru AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 3

	Cedar Avenue Southbound				Jurupa Avenue Westbound				Cedar Avenue Northbound				Jurupa Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	22	196	4	222	13	**26**	28	67	4	109	12	125	16	11	6	33	
+15 mins.	19	190	**5**	214	**17**	22	**66**	**105**	**9**	**125**	**19**	**153**	**19**	17	5	**41**	
+30 mins.	17	**211**	4	**232**	10	8	18	36	6	115	6	127	9	20	6	35	
+45 mins.	**23**	183	2	208	9	14	16	39	4	112	6	122	7	**21**	**8**	36	
Total Volume	81	780	15	876	49	70	128	247	23	461	43	527	51	69	25	145	
% App. Total	9.2	89	1.7		19.8	28.3	51.8		4.4	87.5	8.2		35.2	47.6	17.2		
PHF	.880	.924	.750	.944	.721	.673	.485	.588	.639	.922	.566	.861	.671	.821	.781	.884	

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County of San Bernardino
N/S: Cedar Avenue
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Weather: Clear

File Name : 13_CSB_Ced_Juru AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Cedar Avenue Southbound					Jurupa Avenue Westbound					Cedar Avenue Northbound					Jurupa Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	3	6	0	0	9	4	1	2	1	7	0	5	1	0	6	0	0	0	0	0	1	22	23
06:45 AM	1	5	0	0	6	1	0	1	1	2	0	5	0	0	5	0	0	0	0	0	1	13	14
Total	4	11	0	0	15	5	1	3	2	9	0	10	1	0	11	0	0	0	0	0	2	35	37
07:00 AM	1	7	1	0	9	0	2	0	0	2	0	4	0	0	4	0	0	0	0	0	0	15	15
07:15 AM	0	6	1	0	7	0	2	0	0	2	1	14	1	0	16	1	1	1	0	3	0	28	28
07:30 AM	2	5	1	0	8	1	1	1	0	3	0	6	1	0	7	0	0	0	0	0	0	18	18
07:45 AM	0	7	0	0	7	0	0	1	0	1	0	5	0	0	5	0	0	1	1	1	1	14	15
Total	3	25	3	0	31	1	5	2	0	8	1	29	2	0	32	1	1	2	1	4	1	75	76
08:00 AM	0	9	0	0	9	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	0	16	16
08:15 AM	1	10	0	0	11	2	1	1	1	4	0	5	0	0	5	0	1	0	0	1	1	21	22
08:30 AM	0	6	0	0	6	1	2	0	0	3	1	2	1	0	4	1	1	0	0	2	0	15	15
08:45 AM	0	9	1	0	10	1	0	2	1	3	0	8	0	0	8	0	0	0	0	0	1	21	22
Total	1	34	1	0	36	4	3	3	2	10	1	21	2	0	24	1	2	0	0	3	2	73	75
Grand Total	8	70	4	0	82	10	9	8	4	27	2	60	5	0	67	2	3	2	1	7	5	183	188
Apprch %	9.8	85.4	4.9			37	33.3	29.6			3	89.6	7.5			28.6	42.9	28.6					
Total %	4.4	38.3	2.2		44.8	5.5	4.9	4.4		14.8	1.1	32.8	2.7		36.6	1.1	1.6	1.1		3.8	2.7	97.3	

	Cedar Avenue Southbound				Jurupa Avenue Westbound				Cedar Avenue Northbound				Jurupa Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	6	**1**	7	0	**2**	0	2	**1**	**14**	**1**	**16**	**1**	**1**	**1**	**3**	**28**
07:30 AM	**2**	5	1	8	**1**	1	**1**	**3**	0	6	1	7	0	0	0	0	18
07:45 AM	0	7	0	7	0	0	1	1	0	5	0	5	0	0	1	1	14
08:00 AM	0	**9**	0	**9**	0	0	0	0	0	6	1	7	0	0	0	0	16
Total Volume	2	27	2	31	1	3	2	6	1	31	3	35	1	1	2	4	76
% App. Total	6.5	87.1	6.5		16.7	50	33.3		2.9	88.6	8.6		25	25	50		
PHF	.250	.750	.500	.861	.250	.375	.500	.500	.250	.554	.750	.547	.250	.250	.500	.333	.679

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County of San Bernardino
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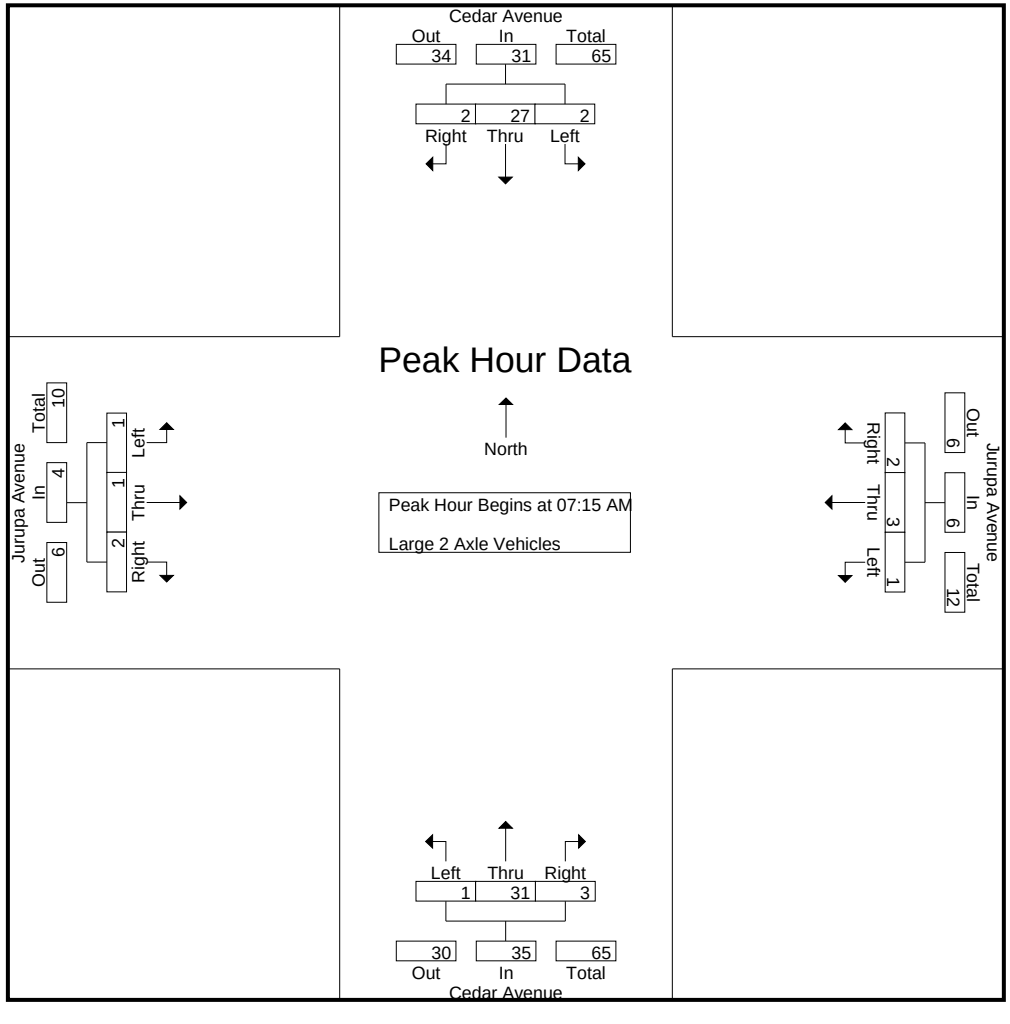
File Name : 13_CSB_Ced_Juru AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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File Name : 13_CSB_Ced_Juru AM
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Start Date : 10/4/2022

	Cedar Avenue Southbound				Jurupa Avenue Westbound				Cedar Avenue Northbound				Jurupa Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	6	**1**	7	0	**2**	0	2	**1**	**14**	**1**	**16**	**1**	**1**	**1**	**3**	
+15 mins.	**2**	5	1	8	**1**	1	**1**	**3**	0	6	1	7	0	0	0	0	
+30 mins.	0	7	0	7	0	0	1	1	0	5	0	5	0	0	1	1	
+45 mins.	0	**9**	0	**9**	0	0	0	0	0	6	1	7	0	0	0	0	
Total Volume	2	27	2	31	1	3	2	6	1	31	3	35	1	1	2	4	
% App. Total	6.5	87.1	6.5		16.7	50	33.3		2.9	88.6	8.6		25	25	50		
PHF	.250	.750	.500	.861	.250	.375	.500	.500	.250	.554	.750	.547	.250	.250	.500	.333	

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File Name : 13_CSB_Ced_Juru AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Cedar Avenue Southbound					Jurupa Avenue Westbound					Cedar Avenue Northbound					Jurupa Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	6	6
06:45 AM	1	5	0	0	6	1	0	0	0	1	0	3	0	0	3	0	1	0	0	1	0	11	11
Total	1	9	0	0	10	1	0	0	0	1	0	5	0	0	5	0	1	0	0	1	0	17	17
07:00 AM	1	4	0	0	5	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	6	6
07:15 AM	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	0	8	8
07:30 AM	0	7	0	0	7	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	8	8
07:45 AM	0	7	0	0	7	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	10	10
Total	1	23	0	0	24	1	0	0	0	1	0	6	0	0	6	1	0	0	0	1	0	32	32
08:00 AM	0	11	0	0	11	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	13	13
08:15 AM	0	6	0	0	6	1	0	3	2	4	0	3	0	0	3	1	0	0	0	1	2	14	16
08:30 AM	1	3	0	0	4	0	0	2	2	2	0	3	0	0	3	0	0	0	0	0	2	9	11
08:45 AM	0	1	0	0	1	0	0	1	1	1	1	3	0	0	4	0	0	0	0	0	1	6	7
Total	1	21	0	0	22	1	0	6	5	7	1	10	1	0	12	1	0	0	0	1	5	42	47
Grand Total	3	53	0	0	56	3	0	6	5	9	1	21	1	0	23	2	1	0	0	3	5	91	96
Apprch %	5.4	94.6	0			33.3	0	66.7			4.3	91.3	4.3			66.7	33.3	0					
Total %	3.3	58.2	0		61.5	3.3	0	6.6		9.9	1.1	23.1	1.1		25.3	2.2	1.1	0		3.3	5.2	94.8	

	Cedar Avenue Southbound				Jurupa Avenue Westbound				Cedar Avenue Northbound				Jurupa Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	5	0	5	0	0	0	0	0	**2**	0	**2**	**1**	0	0	**1**	8
07:30 AM	0	7	0	7	0	0	0	0	0	1	0	1	0	0	0	0	8
07:45 AM	0	7	0	7	**1**	0	0	**1**	0	2	0	2	0	0	0	0	10
08:00 AM	0	**11**	0	**11**	0	0	0	0	0	1	**1**	2	0	0	0	0	**13**
Total Volume	0	30	0	30	1	0	0	1	0	6	1	7	1	0	0	1	39
% App. Total	0	100	0		100	0	0		0	85.7	14.3		100	0	0		
PHF	.000	.682	.000	.682	.250	.000	.000	.250	.000	.750	.250	.875	.250	.000	.000	.250	.750

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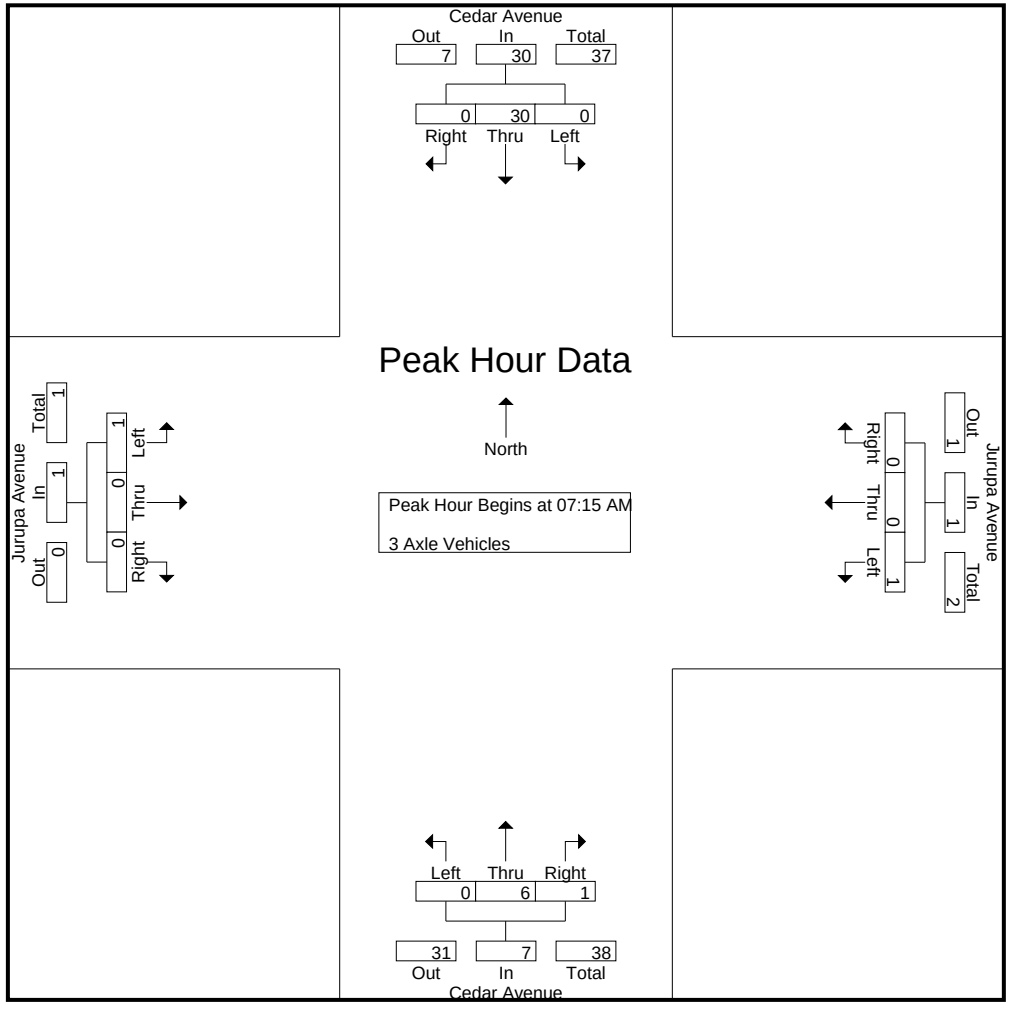
County of San Bernardino
N/S: Cedar Avenue
E/W: Jurupa Avenue
Weather: Clear

File Name : 13_CSB_Ced_Juru AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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N/S: Cedar Avenue
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File Name : 13_CSB_Ced_Juru AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Jurupa Avenue Westbound				Cedar Avenue Northbound				Jurupa Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	5	0	5	0	0	0	0	0	**2**	0	**2**	**1**	0	0	**1**	
+15 mins.	0	7	0	7	0	0	0	0	0	1	0	1	0	0	0	0	
+30 mins.	0	7	0	7	**1**	0	0	**1**	0	2	0	2	0	0	0	0	
+45 mins.	0	**11**	0	**11**	0	0	0	0	0	1	**1**	2	0	0	0	0	
Total Volume	0	30	0	30	1	0	0	1	0	6	1	7	1	0	0	1	
% App. Total	0	100	0		100	0	0		0	85.7	14.3		100	0	0		
PHF	.000	.682	.000	.682	.250	.000	.000	.250	.000	.750	.250	.875	.250	.000	.000	.250	

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Groups Printed- 4+ Axle Trucks

	Cedar Avenue Southbound					Jurupa Avenue Westbound					Cedar Avenue Northbound					Jurupa Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	8	0	0	8	0	0	1	1	1	1	9	0	0	10	0	0	0	0	0	1	19	20
06:45 AM	0	13	1	0	14	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	17	17
Total	0	21	1	0	22	0	0	1	1	1	1	12	0	0	13	0	0	0	0	0	1	36	37
07:00 AM	0	12	0	0	12	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	15	15
07:15 AM	0	21	0	0	21	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	0	33	33
07:30 AM	0	11	0	0	11	1	0	0	0	1	0	10	0	0	10	0	0	0	0	0	0	22	22
07:45 AM	0	7	0	0	7	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	0	20	20
Total	0	51	0	0	51	1	0	0	0	1	0	38	0	0	38	0	0	0	0	0	0	90	90
08:00 AM	1	10	0	0	11	0	0	0	0	0	0	11	1	0	12	0	0	0	0	0	0	23	23
08:15 AM	2	15	0	0	17	0	0	0	0	0	0	8	0	0	8	1	0	0	0	1	0	26	26
08:30 AM	0	12	0	0	12	1	0	0	0	1	0	7	0	0	7	0	0	0	0	0	0	20	20
08:45 AM	1	15	0	0	16	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	24	24
Total	4	52	0	0	56	1	0	0	0	1	0	34	1	0	35	1	0	0	0	1	0	93	93
Grand Total	4	124	1	0	129	2	0	1	1	3	1	84	1	0	86	1	0	0	0	1	1	219	220
Apprch %	3.1	96.1	0.8			66.7	0	33.3			1.2	97.7	1.2			100	0	0					
Total %	1.8	56.6	0.5		58.9	0.9	0	0.5		1.4	0.5	38.4	0.5		39.3	0.5	0	0		0.5	0.5	99.5	

	Cedar Avenue Southbound				Jurupa Avenue Westbound				Cedar Avenue Northbound				Jurupa Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**21**	0	**21**	0	0	0	0	0	12	0	12	0	0	0	0	**33**
07:30 AM	0	11	0	11	**1**	0	0	**1**	0	10	0	10	0	0	0	0	22
07:45 AM	0	7	0	7	0	0	0	0	0	**13**	0	**13**	0	0	0	0	20
08:00 AM	**1**	10	0	11	0	0	0	0	0	11	**1**	12	0	0	0	0	23
Total Volume	1	49	0	50	1	0	0	1	0	46	1	47	0	0	0	0	98
% App. Total	2	98	0		100	0	0		0	97.9	2.1		0	0	0		
PHF	.250	.583	.000	.595	.250	.000	.000	.250	.000	.885	.250	.904	.000	.000	.000	.000	.742

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Site Code : 05122894
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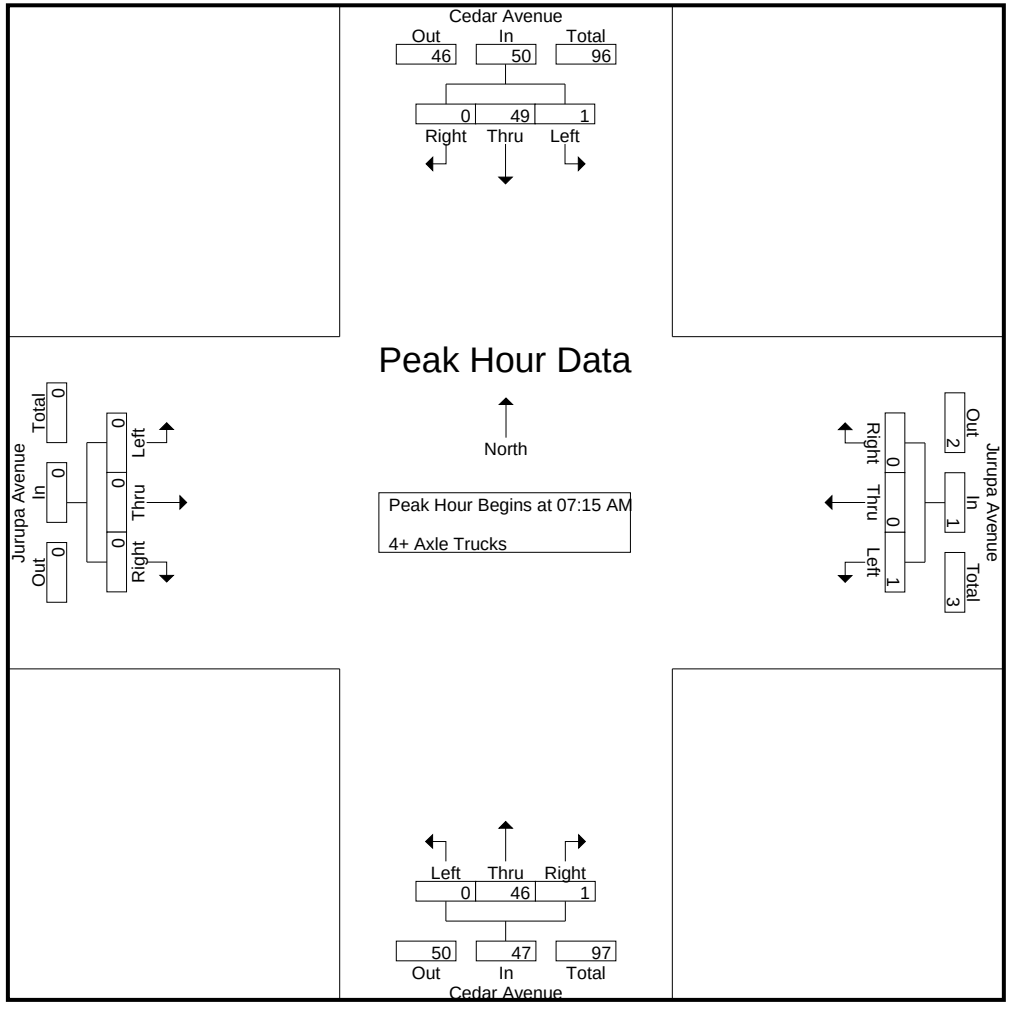
Page No : 2



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	Cedar Avenue Southbound				Jurupa Avenue Westbound				Cedar Avenue Northbound				Jurupa Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	**21**	0	**21**	0	0	0	0	0	12	0	12	0	0	0	0	
+15 mins.	0	11	0	11	**1**	0	0	**1**	0	10	0	10	0	0	0	0	
+30 mins.	0	7	0	7	0	0	0	0	0	**13**	0	**13**	0	0	0	0	
+45 mins.	**1**	10	0	11	0	0	0	0	0	11	**1**	12	0	0	0	0	
Total Volume	1	49	0	50	1	0	0	1	0	46	1	47	0	0	0	0	
% App. Total	2	98	0		100	0	0		0	97.9	2.1		0	0	0		
PHF	.250	.583	.000	.595	.250	.000	.000	.250	.000	.885	.250	.904	.000	.000	.000	.000	

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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Cedar Avenue Southbound					Jurupa Avenue Westbound					Cedar Avenue Northbound					Jurupa Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	20	159	11	2	190	14	17	16	9	47	13	199	16	1	228	10	25	7	5	42	17	507	524
03:45 PM	27	150	9	1	186	11	18	22	16	51	12	173	7	0	192	8	26	8	4	42	21	471	492
Total	47	309	20	3	376	25	35	38	25	98	25	372	23	1	420	18	51	15	9	84	38	978	1016
04:00 PM	28	157	6	1	191	12	25	11	5	48	17	166	16	0	199	12	40	16	7	68	13	506	519
04:15 PM	34	220	11	2	265	11	10	6	5	27	17	175	16	3	208	4	30	18	9	52	19	552	571
04:30 PM	25	176	7	2	208	13	26	12	7	51	18	153	13	1	184	7	34	16	5	57	15	500	515
04:45 PM	45	188	12	0	245	13	20	11	9	44	19	155	14	4	188	1	46	12	6	59	19	536	555
Total	132	741	36	5	909	49	81	40	26	170	71	649	59	8	779	24	150	62	27	236	66	2094	2160
05:00 PM	30	171	11	1	212	11	21	16	10	48	17	134	9	2	160	11	32	12	7	55	20	475	495
05:15 PM	22	184	17	2	223	20	20	12	8	52	13	197	12	2	222	19	42	8	3	69	15	566	581
05:30 PM	23	182	10	2	215	15	27	17	15	59	20	218	15	4	253	16	29	15	7	60	28	587	615
05:45 PM	18	157	14	3	189	11	21	16	9	48	15	125	11	1	151	12	47	8	2	67	15	455	470
Total	93	694	52	8	839	57	89	61	42	207	65	674	47	9	786	58	150	43	19	251	78	2083	2161
Grand Total	272	1744	108	16	2124	131	205	139	93	475	161	1695	129	18	1985	100	351	120	55	571	182	5155	5337
Apprch %	12.8	82.1	5.1			27.6	43.2	29.3			8.1	85.4	6.5			17.5	61.5	21					
Total %	5.3	33.8	2.1		41.2	2.5	4	2.7		9.2	3.1	32.9	2.5		38.5	1.9	6.8	2.3		11.1	3.4	96.6	
Passenger Vehicles	253	1603	105		1977	126	195	132		543	157	1555	121		1851	94	321	119		589	0	0	4960
% Passenger Vehicles	93	91.9	97.2	100	92.4	96.2	95.1	95	96.8	95.6	97.5	91.7	93.8	100	92.4	94	91.5	99.2	100	94.1	0	0	92.9
Large 2 Axle Vehicles	11	48	0		59	4	8	3		17	3	42	5		50	1	26	0		27	0	0	153
% Large 2 Axle Vehicles	4	2.8	0	0	2.8	3.1	3.9	2.2	2.2	3	1.9	2.5	3.9	0	2.5	1	7.4	0	0	4.3	0	0	2.9
3 Axle Vehicles	4	30	0		34	0	1	3		5	0	30	1		31	3	3	1		7	0	0	77
% 3 Axle Vehicles	1.5	1.7	0	0	1.6	0	0.5	2.2	1.1	0.9	0	1.8	0.8	0	1.5	3	0.9	0.8	0	1.1	0	0	1.4
4+ Axle Trucks	4	63	3		70	1	1	1		3	1	68	2		71	2	1	0		3	0	0	147
% 4+ Axle Trucks	1.5	3.6	2.8	0	3.3	0.8	0.5	0.7	0	0.5	0.6	4	1.6	0	3.5	2	0.3	0	0	0.5	0	0	2.8

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File Name : 13_CSB_Ced_Juru PM
Site Code : 05122894
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	Cedar Avenue Southbound				Jurupa Avenue Westbound				Cedar Avenue Northbound				Jurupa Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**45**	**188**	12	**245**	13	20	11	44	19	155	14	188	1	**46**	12	59	536
05:00 PM	30	171	11	212	11	21	16	48	17	134	9	160	11	32	12	55	475
05:15 PM	22	184	**17**	223	**20**	20	12	52	13	197	12	222	**19**	42	8	**69**	566
05:30 PM	23	182	10	215	15	**27**	**17**	**59**	**20**	**218**	**15**	**253**	16	29	**15**	60	**587**
Total Volume	120	725	50	895	59	88	56	203	69	704	50	823	47	149	47	243	2164
% App. Total	13.4	81	5.6		29.1	43.3	27.6		8.4	85.5	6.1		19.3	61.3	19.3		
PHF	.667	.964	.735	.913	.738	.815	.824	.860	.863	.807	.833	.813	.618	.810	.783	.880	.922

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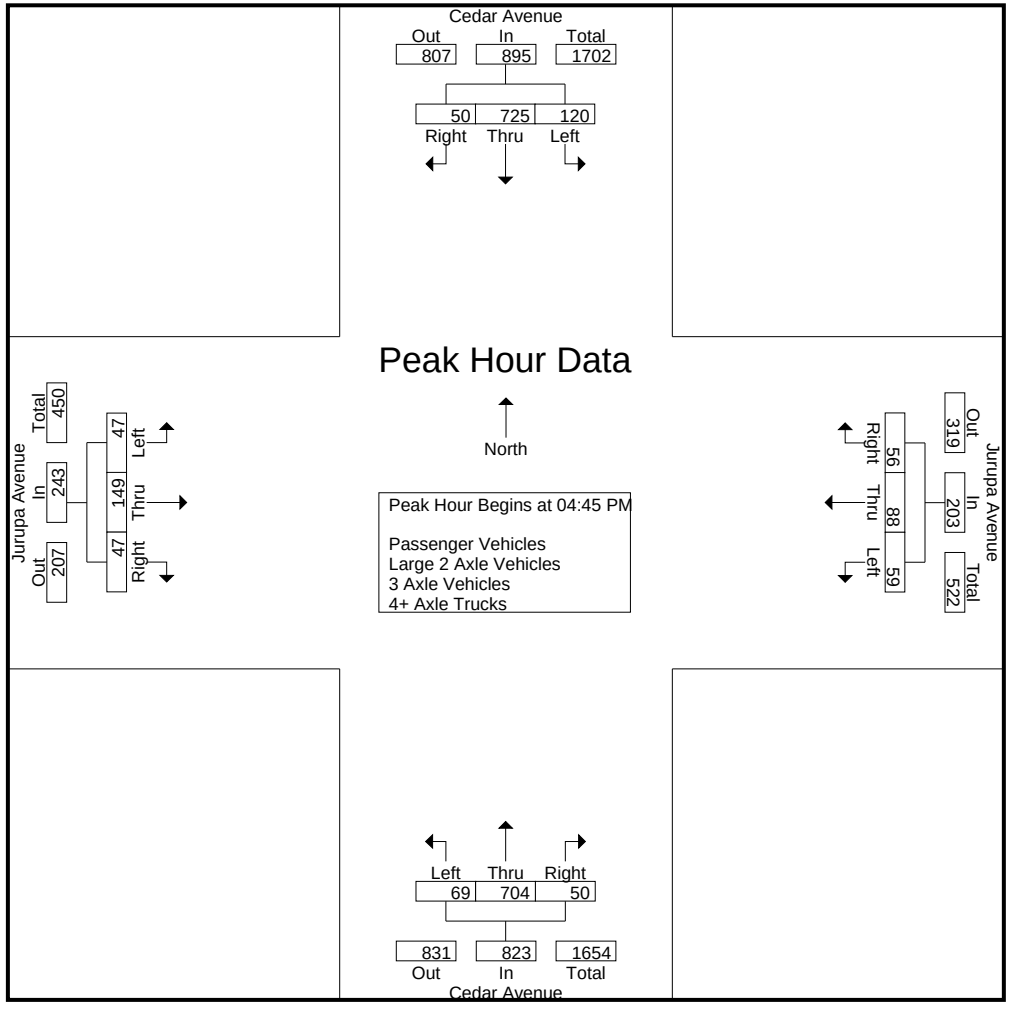

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Start Date : 10/4/2022
Page No : 4

	Cedar Avenue Southbound				Jurupa Avenue Westbound				Cedar Avenue Northbound				Jurupa Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				05:00 PM				03:30 PM				05:00 PM				
+0 mins.	34	**220**	11	**265**	11	21	16	48	13	**199**	**16**	**228**	11	32	12	55	
+15 mins.	25	176	7	208	**20**	20	12	52	12	173	7	192	**19**	42	8	**69**	
+30 mins.	**45**	188	**12**	245	15	**27**	**17**	**59**	**17**	166	16	199	16	29	**15**	60	
+45 mins.	30	171	11	212	11	21	16	48	17	175	16	208	12	**47**	8	67	
Total Volume	134	755	41	930	57	89	61	207	59	713	55	827	58	150	43	251	
% App. Total	14.4	81.2	4.4		27.5	43	29.5		7.1	86.2	6.7		23.1	59.8	17.1		
PHF	.744	.858	.854	.877	.713	.824	.897	.877	.868	.896	.859	.907	.763	.798	.717	.909	

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Groups Printed- Passenger Vehicles

	Cedar Avenue Southbound					Jurupa Avenue Westbound					Cedar Avenue Northbound					Jurupa Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	16	143	10	2	169	14	15	16	9	45	12	175	13	1	200	9	22	7	5	38	17	452	469
03:45 PM	25	134	9	1	168	10	18	21	15	49	11	157	6	0	174	8	23	8	4	39	20	430	450
Total	41	277	19	3	337	24	33	37	24	94	23	332	19	1	374	17	45	15	9	77	37	882	919
04:00 PM	27	139	6	1	172	11	24	10	5	45	17	149	16	0	182	10	37	16	7	63	13	462	475
04:15 PM	33	194	11	2	238	11	9	6	5	26	16	165	16	3	197	4	28	18	9	50	19	511	530
04:30 PM	25	166	5	2	196	13	25	10	7	48	18	143	13	1	174	7	30	15	5	52	15	470	485
04:45 PM	41	180	12	0	233	12	20	11	9	43	19	138	13	4	170	1	42	12	6	55	19	501	520
Total	126	679	34	5	839	47	78	37	26	162	70	595	58	8	723	22	137	61	27	220	66	1944	2010
05:00 PM	29	158	11	1	198	10	20	15	9	45	16	127	9	2	152	11	31	12	7	54	19	449	468
05:15 PM	19	170	17	2	206	20	19	12	8	51	13	182	12	2	207	19	38	8	3	65	15	529	544
05:30 PM	21	174	10	2	205	14	27	16	14	57	20	203	13	4	236	15	26	15	7	56	27	554	581
05:45 PM	17	145	14	3	176	11	18	15	9	44	15	116	10	1	141	10	44	8	2	62	15	423	438
Total	86	647	52	8	785	55	84	58	40	197	64	628	44	9	736	55	139	43	19	237	76	1955	2031
Grand Total	253	1603	105	16	1961	126	195	132	90	453	157	1555	121	18	1833	94	321	119	55	534	179	4781	4960
Apprch %	12.9	81.7	5.4			27.8	43	29.1			8.6	84.8	6.6			17.6	60.1	22.3					
Total %	5.3	33.5	2.2		41	2.6	4.1	2.8		9.5	3.3	32.5	2.5		38.3	2	6.7	2.5		11.2	3.6	96.4	

	Cedar Avenue Southbound				Jurupa Avenue Westbound				Cedar Avenue Northbound				Jurupa Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**41**	**180**	12	**233**	12	20	11	43	19	138	**13**	170	1	**42**	12	55	501
05:00 PM	29	158	11	198	10	20	15	45	16	127	9	152	11	31	12	54	449
05:15 PM	19	170	**17**	206	**20**	19	12	51	13	182	12	207	**19**	38	8	**65**	529
05:30 PM	21	174	10	205	14	**27**	**16**	**57**	**20**	**203**	13	**236**	15	26	**15**	56	**554**
Total Volume	110	682	50	842	56	86	54	196	68	650	47	765	46	137	47	230	2033
% App. Total	13.1	81	5.9		28.6	43.9	27.6		8.9	85	6.1		20	59.6	20.4		
PHF	.671	.947	.735	.903	.700	.796	.844	.860	.850	.800	.904	.810	.605	.815	.783	.885	.917

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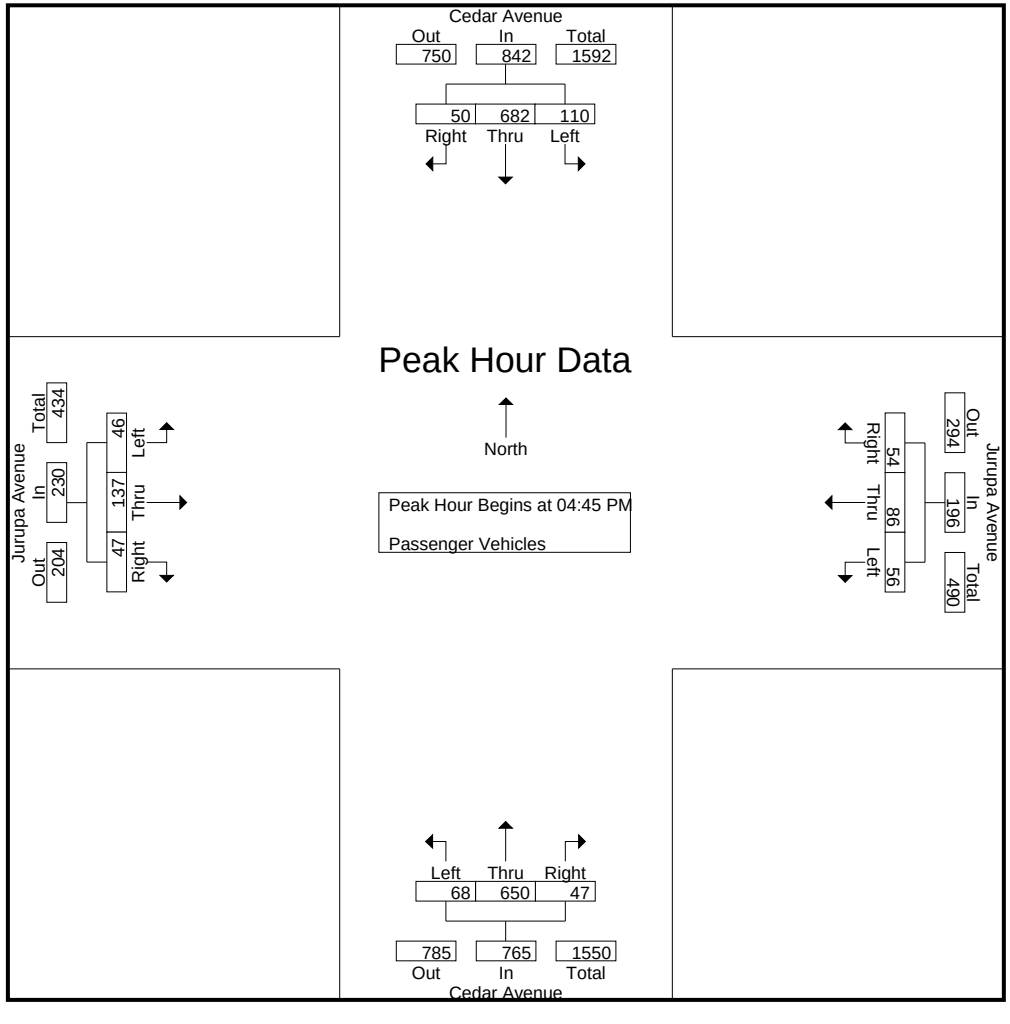

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E/W: Jurupa Avenue
Weather: Clear

File Name : 13_CSB_Ced_Juru PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Jurupa Avenue Westbound				Cedar Avenue Northbound				Jurupa Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	**41**	**180**	12	**233**	12	20	11	43	19	138	**13**	170	1	**42**	12	55	
+15 mins.	29	158	11	198	10	20	15	45	16	127	9	152	11	31	12	54	
+30 mins.	19	170	**17**	206	**20**	19	12	51	13	182	12	207	**19**	38	8	**65**	
+45 mins.	21	174	10	205	14	**27**	**16**	**57**	**20**	**203**	13	**236**	15	26	**15**	56	
Total Volume	110	682	50	842	56	86	54	196	68	650	47	765	46	137	47	230	
% App. Total	13.1	81	5.9		28.6	43.9	27.6		8.9	85	6.1		20	59.6	20.4		
PHF	.671	.947	.735	.903	.700	.796	.844	.860	.850	.800	.904	.810	.605	.815	.783	.885	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

County of San Bernardino
N/S: Cedar Avenue
E/W: Jurupa Avenue
Weather: Clear

File Name : 13_CSB_Ced_Juru PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Cedar Avenue Southbound					Jurupa Avenue Westbound					Cedar Avenue Northbound					Jurupa Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	1	4	0	0	5	0	1	0	0	1	1	7	3	0	11	0	3	0	0	3	0	20	20
03:45 PM	1	6	0	0	7	0	0	0	0	0	0	4	0	0	4	0	2	0	0	2	0	13	13
Total	2	10	0	0	12	0	1	0	0	1	1	11	3	0	15	0	5	0	0	5	0	33	33
04:00 PM	0	6	0	0	6	1	0	1	0	2	0	4	0	0	4	1	2	0	0	3	0	15	15
04:15 PM	1	10	0	0	11	0	1	0	0	1	1	4	0	0	5	0	2	0	0	2	0	19	19
04:30 PM	0	5	0	0	5	0	1	0	0	1	0	3	0	0	3	0	4	0	0	4	0	13	13
04:45 PM	3	3	0	0	6	1	0	0	0	1	0	5	1	0	6	0	4	0	0	4	0	17	17
Total	4	24	0	0	28	2	2	1	0	5	1	16	1	0	18	1	12	0	0	13	0	64	64
05:00 PM	1	3	0	0	4	1	1	1	1	3	1	1	0	0	2	0	1	0	0	1	1	10	11
05:15 PM	2	4	0	0	6	0	1	0	0	1	0	5	0	0	5	0	3	0	0	3	0	15	15
05:30 PM	1	4	0	0	5	1	0	1	1	2	0	5	1	0	6	0	2	0	0	2	1	15	16
05:45 PM	1	3	0	0	4	0	3	0	0	3	0	4	0	0	4	0	3	0	0	3	0	14	14
Total	5	14	0	0	19	2	5	2	2	9	1	15	1	0	17	0	9	0	0	9	2	54	56
Grand Total	11	48	0	0	59	4	8	3	2	15	3	42	5	0	50	1	26	0	0	27	2	151	153
Apprch %	18.6	81.4	0			26.7	53.3	20			6	84	10			3.7	96.3	0					
Total %	7.3	31.8	0		39.1	2.6	5.3	2		9.9	2	27.8	3.3		33.1	0.7	17.2	0		17.9	1.3	98.7	

	Cedar Avenue Southbound				Jurupa Avenue Westbound				Cedar Avenue Northbound				Jurupa Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**3**	3	0	**6**	**1**	0	0	1	0	**5**	**1**	**6**	0	**4**	0	**4**	**17**
05:00 PM	1	3	0	4	1	**1**	**1**	**3**	**1**	1	0	2	0	1	0	1	10
05:15 PM	2	**4**	0	6	0	1	0	1	0	5	0	5	0	3	0	3	15
05:30 PM	1	4	0	5	1	0	1	2	0	5	1	6	0	2	0	2	15
Total Volume	7	14	0	21	3	2	2	7	1	16	2	19	0	10	0	10	57
% App. Total	33.3	66.7	0		42.9	28.6	28.6		5.3	84.2	10.5		0	100	0		
PHF	.583	.875	.000	.875	.750	.500	.500	.583	.250	.800	.500	.792	.000	.625	.000	.625	.838

Counts Unlimited, Inc.
PO Box 1178
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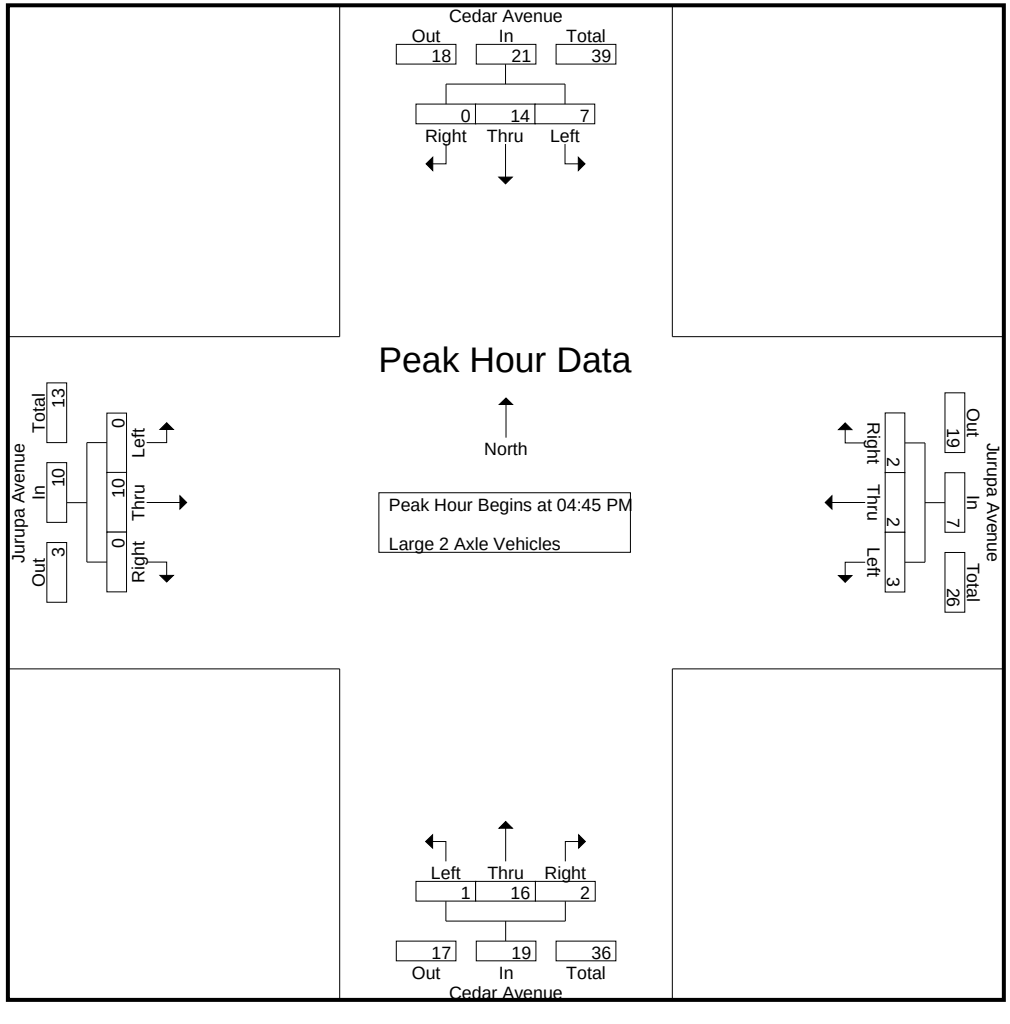
(951)268-6268

County of San Bernardino
N/S: Cedar Avenue
E/W: Jurupa Avenue
Weather: Clear

File Name : 13_CSB_Ced_Juru PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
E/W: Jurupa Avenue
Weather: Clear

File Name : 13_CSB_Ced_Juru PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Jurupa Avenue Westbound				Cedar Avenue Northbound				Jurupa Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	**3**	3	0	**6**	**1**	0	0	1	0	**5**	**1**	**6**	0	**4**	0	**4**	
+15 mins.	1	3	0	4	1	**1**	**1**	**3**	**1**	1	0	2	0	1	0	1	
+30 mins.	2	**4**	0	6	0	1	0	1	0	5	0	5	0	3	0	3	
+45 mins.	1	4	0	5	1	0	1	2	0	5	1	6	0	2	0	2	
Total Volume	7	14	0	21	3	2	2	7	1	16	2	19	0	10	0	10	
% App. Total	33.3	66.7	0		42.9	28.6	28.6		5.3	84.2	10.5		0	100	0		
PHF	.583	.875	.000	.875	.750	.500	.500	.583	.250	.800	.500	.792	.000	.625	.000	.625	

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County of San Bernardino
N/S: Cedar Avenue
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Weather: Clear

File Name : 13_CSB_Ced_Juru PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Cedar Avenue Southbound					Jurupa Avenue Westbound					Cedar Avenue Northbound					Jurupa Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	1	2	0	0	3	0	0	0	0	0	0	8	0	0	8	1	0	0	0	1	0	12	12
03:45 PM	0	2	0	0	2	0	0	1	1	1	0	2	0	0	2	0	1	0	0	1	1	6	7
Total	1	4	0	0	5	0	0	1	1	1	0	10	0	0	10	1	1	0	0	2	1	18	19
04:00 PM	1	3	0	0	4	0	1	0	0	1	0	5	0	0	5	1	1	0	0	2	0	12	12
04:15 PM	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	7	7
04:30 PM	0	2	0	0	2	0	0	1	0	1	0	4	0	0	4	0	0	1	0	1	0	8	8
04:45 PM	1	3	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	6	6
Total	2	13	0	0	15	0	1	1	0	2	0	13	0	0	13	1	1	1	0	3	0	33	33
05:00 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
05:15 PM	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	0	8	8
05:30 PM	1	0	0	0	1	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	0	5	5
05:45 PM	0	5	0	0	5	0	0	1	0	1	0	2	0	0	2	1	0	0	0	1	0	9	9
Total	1	13	0	0	14	0	0	1	0	1	0	7	1	0	8	1	1	0	0	2	0	25	25
Grand Total	4	30	0	0	34	0	1	3	1	4	0	30	1	0	31	3	3	1	0	7	1	76	77
Apprch %	11.8	88.2	0			0	25	75			0	96.8	3.2			42.9	42.9	14.3					
Total %	5.3	39.5	0		44.7	0	1.3	3.9		5.3	0	39.5	1.3		40.8	3.9	3.9	1.3		9.2	1.3	98.7	

	Cedar Avenue Southbound				Jurupa Avenue Westbound				Cedar Avenue Northbound				Jurupa Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**1**	3	0	4	0	0	0	0	0	2	0	2	0	0	0	0	6
05:00 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:15 PM	0	**5**	0	**5**	0	0	0	0	0	2	0	2	0	**1**	0	**1**	**8**
05:30 PM	1	0	0	1	0	0	0	0	0	**3**	**1**	**4**	0	0	0	0	5
Total Volume	2	11	0	13	0	0	0	0	0	7	1	8	0	1	0	1	22
% App. Total	15.4	84.6	0		0	0	0		0	87.5	12.5		0	100	0		
PHF	.500	.550	.000	.650	.000	.000	.000	.000	.000	.583	.250	.500	.000	.250	.000	.250	.688

Counts Unlimited, Inc.
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County of San Bernardino
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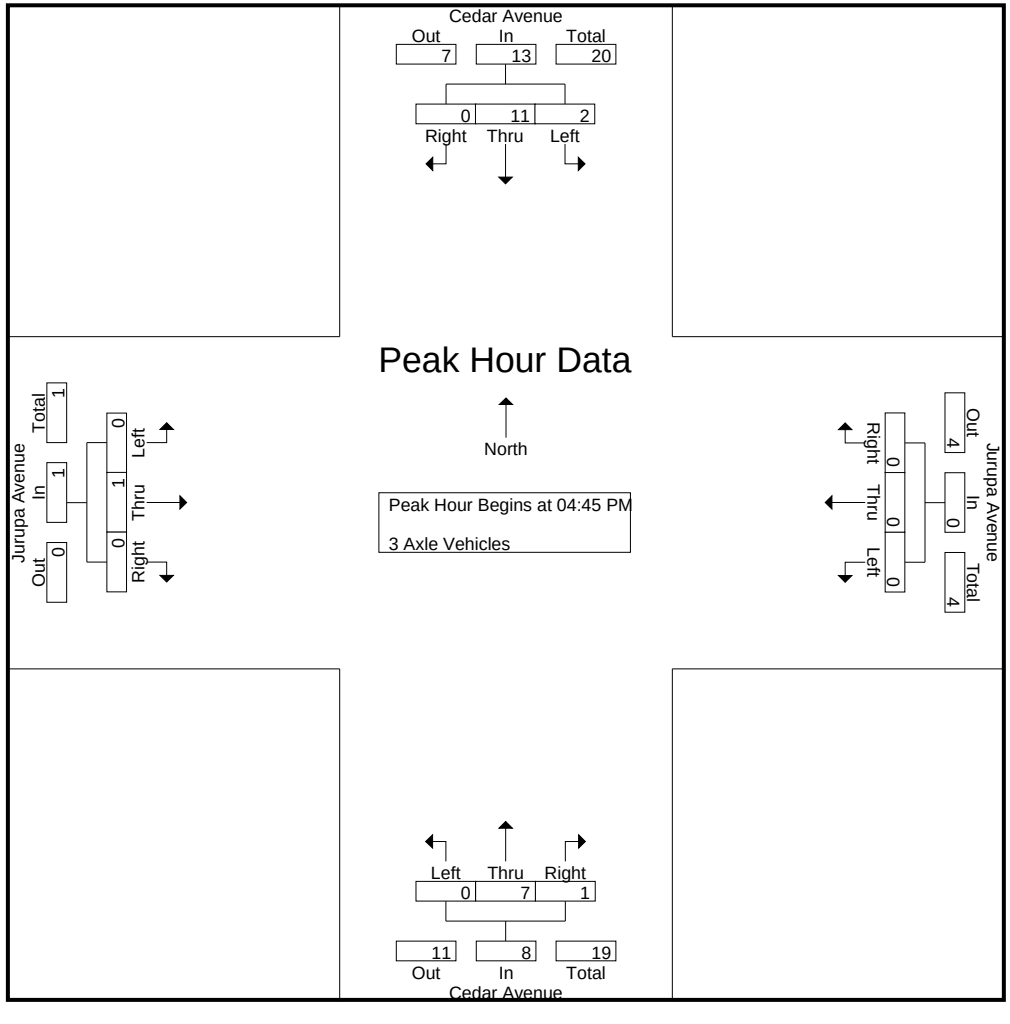
File Name : 13_CSB_Ced_Juru PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
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File Name : 13_CSB_Ced_Juru PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				Jurupa Avenue Westbound				Cedar Avenue Northbound				Jurupa Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	**1**	3	0	4	0	0	0	0	0	2	0	2	0	0	0	0	
+15 mins.	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	**5**	0	**5**	0	0	0	0	0	2	0	2	0	**1**	0	**1**	
+45 mins.	1	0	0	1	0	0	0	0	0	**3**	**1**	**4**	0	0	0	0	
Total Volume	2	11	0	13	0	0	0	0	0	7	1	8	0	1	0	1	
% App. Total	15.4	84.6	0		0	0	0		0	87.5	12.5		0	100	0		
PHF	.500	.550	.000	.650	.000	.000	.000	.000	.000	.583	.250	.500	.000	.250	.000	.250	

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N/S: Cedar Avenue
E/W: Jurupa Avenue
Weather: Clear

File Name : 13_CSB_Ced_Juru PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Cedar Avenue Southbound					Jurupa Avenue Westbound					Cedar Avenue Northbound					Jurupa Avenue Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	2	10	1	0	13	0	1	0	0	1	0	9	0	0	9	0	0	0	0	0	0	23	23
03:45 PM	1	8	0	0	9	1	0	0	0	1	1	10	1	0	12	0	0	0	0	0	0	22	22
Total	3	18	1	0	22	1	1	0	0	2	1	19	1	0	21	0	0	0	0	0	0	45	45
04:00 PM	0	9	0	0	9	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	17	17
04:15 PM	0	11	0	0	11	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	15	15
04:30 PM	0	3	2	0	5	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	0	9	9
04:45 PM	0	2	0	0	2	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	12	12
Total	0	25	2	0	27	0	0	1	0	1	0	25	0	0	25	0	0	0	0	0	0	53	53
05:00 PM	0	7	0	0	7	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	13	13
05:15 PM	1	5	0	0	6	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	14	14
05:30 PM	0	4	0	0	4	0	0	0	0	0	0	7	0	0	7	1	1	0	0	2	0	13	13
05:45 PM	0	4	0	0	4	0	0	0	0	0	0	3	1	0	4	1	0	0	0	1	0	9	9
Total	1	20	0	0	21	0	0	0	0	0	0	24	1	0	25	2	1	0	0	3	0	49	49
Grand Total	4	63	3	0	70	1	1	1	0	3	1	68	2	0	71	2	1	0	0	3	0	147	147
Apprch %	5.7	90	4.3			33.3	33.3	33.3			1.4	95.8	2.8			66.7	33.3	0					
Total %	2.7	42.9	2		47.6	0.7	0.7	0.7		2	0.7	46.3	1.4		48.3	1.4	0.7	0		2	0	100	

	Cedar Avenue Southbound				Jurupa Avenue Westbound				Cedar Avenue Northbound				Jurupa Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	2	0	2	0	0	0	0	0	**10**	0	**10**	0	0	0	0	12
05:00 PM	0	**7**	0	**7**	0	0	0	0	0	6	0	6	0	0	0	0	13
05:15 PM	**1**	5	0	6	0	0	0	0	0	8	0	8	0	0	0	0	**14**
05:30 PM	0	4	0	4	0	0	0	0	0	7	0	7	**1**	**1**	0	**2**	13
Total Volume	1	18	0	19	0	0	0	0	0	31	0	31	1	1	0	2	52
% App. Total	5.3	94.7	0		0	0	0		0	100	0		50	50	0		
PHF	.250	.643	.000	.679	.000	.000	.000	.000	.000	.775	.000	.775	.250	.250	.000	.250	.929

Counts Unlimited, Inc.
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County of San Bernardino
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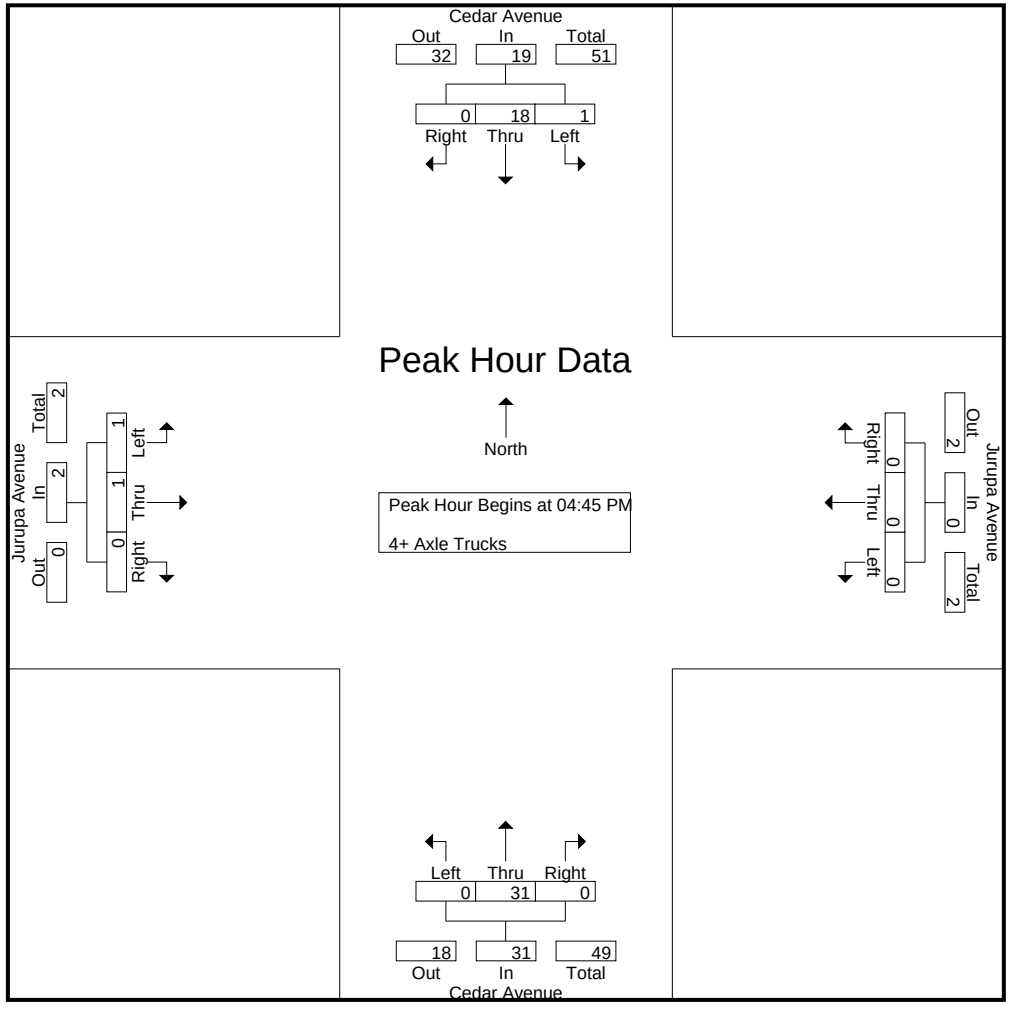

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	Cedar Avenue Southbound				Jurupa Avenue Westbound				Cedar Avenue Northbound				Jurupa Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	2	0	2	0	0	0	0	0	**10**	0	**10**	0	0	0	0	
+15 mins.	0	**7**	0	**7**	0	0	0	0	0	6	0	6	0	0	0	0	
+30 mins.	**1**	5	0	6	0	0	0	0	0	8	0	8	0	0	0	0	
+45 mins.	0	4	0	4	0	0	0	0	0	7	0	7	**1**	**1**	0	**2**	
Total Volume	1	18	0	19	0	0	0	0	0	31	0	31	1	1	0	2	
% App. Total	5.3	94.7	0		0	0	0		0	100	0		50	50	0		
PHF	.250	.643	.000	.679	.000	.000	.000	.000	.000	.775	.000	.775	.250	.250	.000	.250	

Location: County of San Bernardino
N/S: Cedar Avenue
E/W: Jurupa Avenue

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Cedar Avenue Pedestrians	East Leg Jurupa Avenue Pedestrians	South Leg Cedar Avenue Pedestrians	West Leg Jurupa Avenue Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	1	0	0	0	1
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	1	0	0	1
8:15 AM	0	0	2	2	4
8:30 AM	0	0	0	2	2
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	1	1	2	4	8

	North Leg Cedar Avenue Pedestrians	East Leg Jurupa Avenue Pedestrians	South Leg Cedar Avenue Pedestrians	West Leg Jurupa Avenue Pedestrians	
3:30 PM	0	0	0	1	1
3:45 PM	1	0	0	1	2
4:00 PM	4	0	0	0	4
4:15 PM	2	0	0	0	2
4:30 PM	0	0	0	0	0
4:45 PM	1	0	0	0	1
5:00 PM	2	0	0	0	2
5:15 PM	0	0	0	0	0
5:30 PM	2	0	0	0	2
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	12	0	0	2	14

Location: County of San Bernardino
N/S: Cedar Avenue
E/W: Jurupa Avenue

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Cedar Avenue			Westbound Jurupa Avenue			Northbound Cedar Avenue			Eastbound Jurupa Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	0	1	0	0	1	0	0	0	0	3

	Southbound Cedar Avenue			Westbound Jurupa Avenue			Northbound Cedar Avenue			Eastbound Jurupa Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
4:00 PM	0	0	0	0	2	0	0	0	0	0	1	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:30 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	5	0	0	0	0	0	5	0	10

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County of San Bernardino
N/S: Cedar Avenue
E/W: 7th Street
Weather: Clear

File Name : 14_CSB_Ced_7th AM
Site Code : 05122894
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Cedar Avenue Southbound					7th Street Westbound					Cedar Avenue Northbound					7th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	1	171	6	0	178	6	3	3	2	12	17	129	3	0	149	4	0	20	14	24	16	363	379
06:45 AM	4	199	11	2	214	5	2	3	2	10	14	104	1	1	119	11	4	20	6	35	11	378	389
Total	5	370	17	2	392	11	5	6	4	22	31	233	4	1	268	15	4	40	20	59	27	741	768
07:00 AM	5	184	5	0	194	7	8	2	1	17	9	94	1	0	104	6	1	19	9	26	10	341	351
07:15 AM	2	220	5	0	227	4	3	2	2	9	21	127	2	0	150	9	3	26	16	38	18	424	442
07:30 AM	7	222	5	0	234	7	2	2	2	11	6	134	0	0	140	5	0	39	17	44	19	429	448
07:45 AM	4	244	3	0	251	11	1	0	0	12	19	130	1	1	150	7	0	39	27	46	28	459	487
Total	18	870	18	0	906	29	14	6	5	49	55	485	4	1	544	27	4	123	69	154	75	1653	1728
08:00 AM	8	212	6	0	226	2	2	5	4	9	15	124	1	0	140	12	4	43	27	59	31	434	465
08:15 AM	7	197	5	0	209	9	5	4	4	18	11	123	2	0	136	9	2	16	13	27	17	390	407
08:30 AM	7	151	4	0	162	6	3	2	1	11	19	125	5	1	149	9	3	35	18	47	20	369	389
08:45 AM	11	153	2	0	166	2	1	4	3	7	11	102	2	0	115	4	5	42	23	51	26	339	365
Total	33	713	17	0	763	19	11	15	12	45	56	474	10	1	540	34	14	136	81	184	94	1532	1626
Grand Total	56	1953	52	2	2061	59	30	27	21	116	142	1192	18	3	1352	76	22	299	170	397	196	3926	4122
Apprch %	2.7	94.8	2.5			50.9	25.9	23.3			10.5	88.2	1.3			19.1	5.5	75.3					
Total %	1.4	49.7	1.3		52.5	1.5	0.8	0.7		3	3.6	30.4	0.5		34.4	1.9	0.6	7.6		10.1	4.8	95.2	
Passenger Vehicles	53	1696	46		1796	58	27	27		133	133	1014	16		1166	70	22	274		527	0	0	3622
% Passenger Vehicles	94.6	86.8	88.5	50	87.1	98.3	90	100	100	97.1	93.7	85.1	88.9	100	86.1	92.1	100	91.6	94.7	92.9	0	0	87.9
Large 2 Axle Vehicles	3	86	5		95	1	3	0		4	6	71	2		79	6	0	17		29	0	0	207
% Large 2 Axle Vehicles	5.4	4.4	9.6	50	4.6	1.7	10	0	0	2.9	4.2	6	11.1	0	5.8	7.9	0	5.7	3.5	5.1	0	0	5
3 Axle Vehicles	0	58	1		59	0	0	0		0	2	27	0		29	0	0	5		8	0	0	96
% 3 Axle Vehicles	0	3	1.9	0	2.9	0	0	0	0	0	1.4	2.3	0	0	2.1	0	0	1.7	1.8	1.4	0	0	2.3
4+ Axle Trucks	0	113	0		113	0	0	0		0	1	80	0		81	0	0	3		3	0	0	197
% 4+ Axle Trucks	0	5.8	0	0	5.5	0	0	0	0	0	0.7	6.7	0	0	6	0	0	1	0	0.5	0	0	4.8

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	Cedar Avenue Southbound				7th Street Westbound				Cedar Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	2	220	5	227	4	**3**	2	9	**21**	127	**2**	**150**	9	3	26	38	424
07:30 AM	7	222	5	234	7	2	2	11	6	**134**	0	140	5	0	39	44	429
07:45 AM	4	**244**	3	**251**	**11**	1	0	**12**	19	130	1	150	7	0	39	46	**459**
08:00 AM	**8**	212	**6**	226	2	2	**5**	9	15	124	1	140	**12**	**4**	**43**	**59**	434
Total Volume	21	898	19	938	24	8	9	41	61	515	4	580	33	7	147	187	1746
% App. Total	2.2	95.7	2		58.5	19.5	22		10.5	88.8	0.7		17.6	3.7	78.6		
PHF	.656	.920	.792	.934	.545	.667	.450	.854	.726	.961	.500	.967	.688	.438	.855	.792	.951

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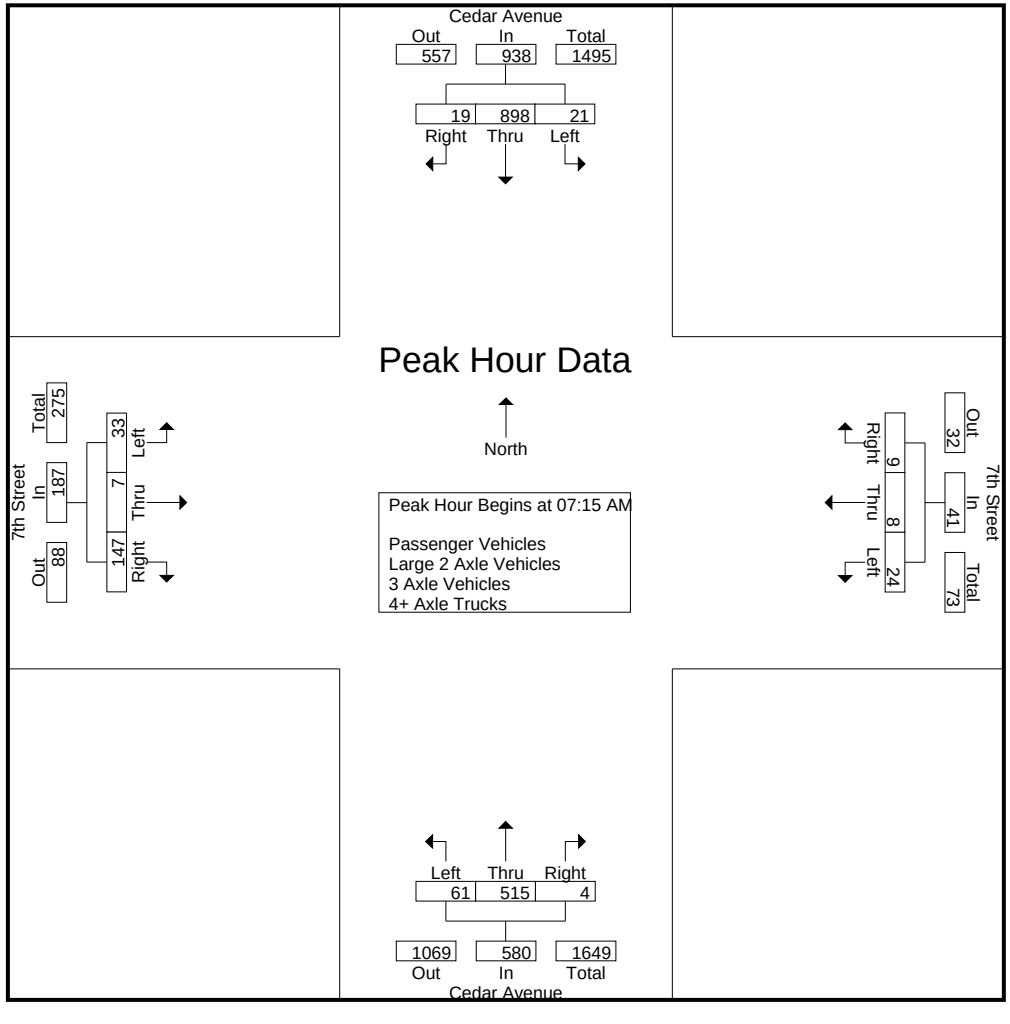
Page No : 3



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File Name : 14_CSB_Ced_7th AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				7th Street Westbound				Cedar Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:30 AM				07:15 AM				07:15 AM				
+0 mins.	2	220	5	227	7	2	2	11	**21**	127	**2**	**150**	9	3	26	38	
+15 mins.	7	222	5	234	**11**	1	0	12	6	**134**	0	140	5	0	39	44	
+30 mins.	4	**244**	3	**251**	2	2	**5**	9	19	130	1	150	7	0	39	46	
+45 mins.	**8**	212	**6**	226	9	**5**	4	**18**	15	124	1	140	**12**	**4**	**43**	**59**	
Total Volume	21	898	19	938	29	10	11	50	61	515	4	580	33	7	147	187	
% App. Total	2.2	95.7	2		58	20	22		10.5	88.8	0.7		17.6	3.7	78.6		
PHF	.656	.920	.792	.934	.659	.500	.550	.694	.726	.961	.500	.967	.688	.438	.855	.792	

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Groups Printed- Passenger Vehicles

	Cedar Avenue Southbound					7th Street Westbound					Cedar Avenue Northbound					7th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	154	4	0	158	6	3	3	2	12	17	113	2	0	132	4	0	17	12	21	14	323	337
06:45 AM	4	170	10	1	184	5	2	3	2	10	14	94	1	1	109	10	4	18	6	32	10	335	345
Total	4	324	14	1	342	11	5	6	4	22	31	207	3	1	241	14	4	35	18	53	24	658	682
07:00 AM	5	162	4	0	171	7	5	2	1	14	7	85	1	0	93	5	1	19	9	25	10	303	313
07:15 AM	2	187	5	0	194	4	3	2	2	9	19	95	1	0	115	9	3	24	14	36	16	354	370
07:30 AM	5	202	5	0	212	6	2	2	2	10	6	114	0	0	120	5	0	34	16	39	18	381	399
07:45 AM	4	222	3	0	229	11	1	0	0	12	19	109	1	1	129	7	0	35	24	42	25	412	437
Total	16	773	17	0	806	28	11	6	5	45	51	403	3	1	457	26	4	112	63	142	69	1450	1519
08:00 AM	8	184	6	0	198	2	2	5	4	9	14	104	1	0	119	10	4	41	27	55	31	381	412
08:15 AM	7	162	5	0	174	9	5	4	4	18	10	105	2	0	117	8	2	15	13	25	17	334	351
08:30 AM	7	125	3	0	135	6	3	2	1	11	18	113	5	1	136	9	3	31	17	43	19	325	344
08:45 AM	11	128	1	0	140	2	1	4	3	7	9	82	2	0	93	3	5	40	23	48	26	288	314
Total	33	599	15	0	647	19	11	15	12	45	51	404	10	1	465	30	14	127	80	171	93	1328	1421
Grand Total	53	1696	46	1	1795	58	27	27	21	112	133	1014	16	3	1163	70	22	274	161	366	186	3436	3622
Apprch %	3	94.5	2.6			51.8	24.1	24.1			11.4	87.2	1.4			19.1	6	74.9					
Total %	1.5	49.4	1.3		52.2	1.7	0.8	0.8		3.3	3.9	29.5	0.5		33.8	2	0.6	8		10.7	5.1	94.9	

	Cedar Avenue Southbound				7th Street Westbound				Cedar Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	2	187	5	194	4	**3**	2	9	**19**	95	**1**	115	9	3	24	36	354
07:30 AM	5	202	5	212	6	2	2	10	6	**114**	0	120	5	0	34	39	381
07:45 AM	4	**222**	3	**229**	**11**	1	0	**12**	19	109	1	**129**	7	0	35	42	**412**
08:00 AM	**8**	184	**6**	198	2	2	**5**	9	14	104	1	119	**10**	**4**	**41**	**55**	381
Total Volume	19	795	19	833	23	8	9	40	58	422	3	483	31	7	134	172	1528
% App. Total	2.3	95.4	2.3		57.5	20	22.5		12	87.4	0.6		18	4.1	77.9		
PHF	.594	.895	.792	.909	.523	.667	.450	.833	.763	.925	.750	.936	.775	.438	.817	.782	.927

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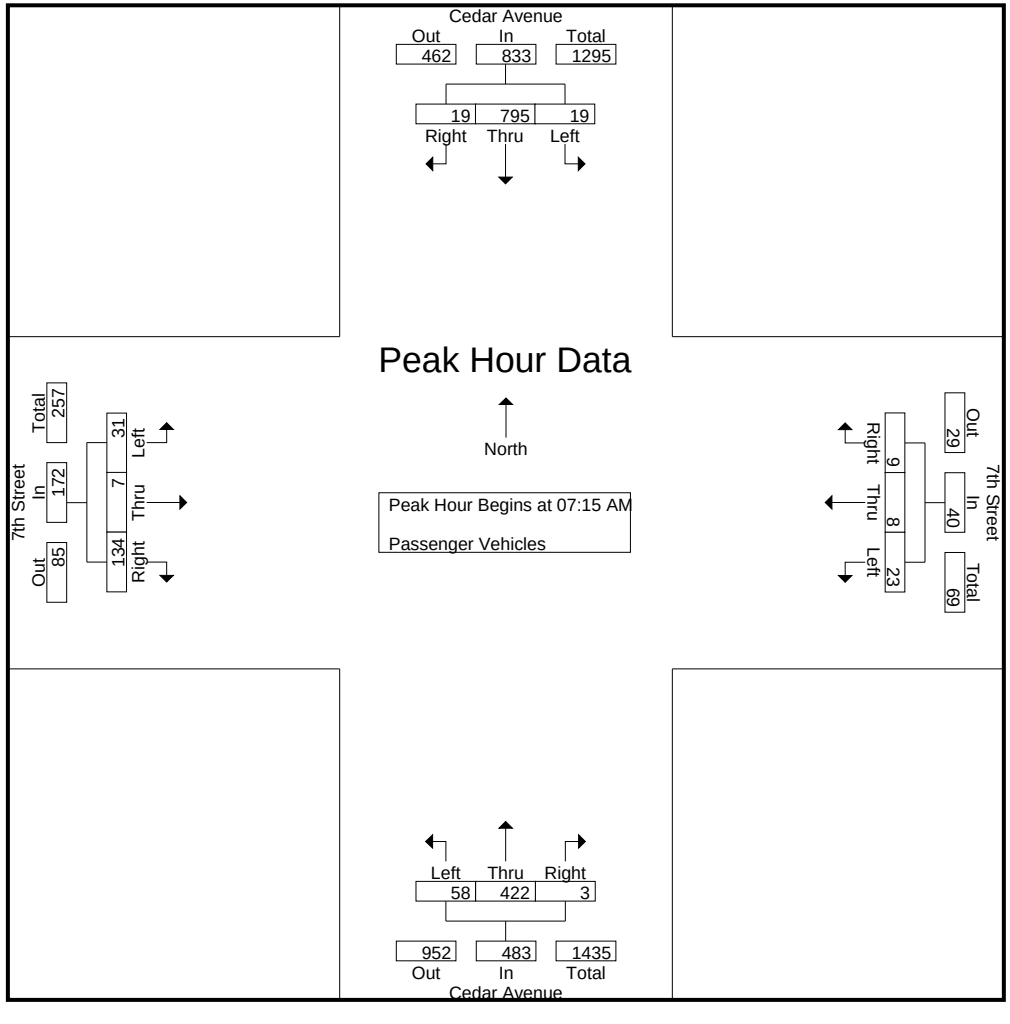

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	Cedar Avenue Southbound				7th Street Westbound				Cedar Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	2	187	5	194	4	**3**	2	9	**19**	95	**1**	115	9	3	24	36	
+15 mins.	5	202	5	212	6	2	2	10	6	**114**	0	120	5	0	34	39	
+30 mins.	4	**222**	3	**229**	**11**	1	0	**12**	19	109	1	**129**	7	0	35	42	
+45 mins.	**8**	184	**6**	198	2	2	**5**	9	14	104	1	119	**10**	**4**	**41**	**55**	
Total Volume	19	795	19	833	23	8	9	40	58	422	3	483	31	7	134	172	
% App. Total	2.3	95.4	2.3		57.5	20	22.5		12	87.4	0.6		18	4.1	77.9		
PHF	.594	.895	.792	.909	.523	.667	.450	.833	.763	.925	.750	.936	.775	.438	.817	.782	

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Groups Printed- Large 2 Axle Vehicles

	Cedar Avenue Southbound					7th Street Westbound					Cedar Avenue Northbound					7th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	1	8	2	0	11	0	0	0	0	0	0	6	1	0	7	0	0	2	1	2	1	20	21
06:45 AM	0	9	1	1	10	0	0	0	0	0	0	6	0	0	6	1	0	1	0	2	1	18	19
Total	1	17	3	1	21	0	0	0	0	0	0	12	1	0	13	1	0	3	1	4	2	38	40
07:00 AM	0	9	1	0	10	0	3	0	0	3	1	6	0	0	7	1	0	0	0	1	0	21	21
07:15 AM	0	10	0	0	10	0	0	0	0	0	2	17	1	0	20	0	0	2	2	2	2	32	34
07:30 AM	2	3	0	0	5	1	0	0	0	1	0	7	0	0	7	0	0	5	1	5	1	18	19
07:45 AM	0	7	0	0	7	0	0	0	0	0	0	7	0	0	7	0	0	2	1	2	1	16	17
Total	2	29	1	0	32	1	3	0	0	4	3	37	1	0	41	1	0	9	4	10	4	87	91
08:00 AM	0	11	0	0	11	0	0	0	0	0	1	6	0	0	7	2	0	1	0	3	0	21	21
08:15 AM	0	13	0	0	13	0	0	0	0	0	1	5	0	0	6	1	0	1	0	2	0	21	21
08:30 AM	0	8	0	0	8	0	0	0	0	0	1	4	0	0	5	0	0	2	1	2	1	15	16
08:45 AM	0	8	1	0	9	0	0	0	0	0	0	7	0	0	7	1	0	1	0	2	0	18	18
Total	0	40	1	0	41	0	0	0	0	0	3	22	0	0	25	4	0	5	1	9	1	75	76
Grand Total	3	86	5	1	94	1	3	0	0	4	6	71	2	0	79	6	0	17	6	23	7	200	207
Apprch %	3.2	91.5	5.3			25	75	0			7.6	89.9	2.5			26.1	0	73.9					
Total %	1.5	43	2.5		47	0.5	1.5	0		2	3	35.5	1		39.5	3	0	8.5		11.5	3.4	96.6	

	Cedar Avenue Southbound				7th Street Westbound				Cedar Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	10	0	10	0	0	0	0	**2**	**17**	**1**	**20**	0	0	2	2	**32**
07:30 AM	**2**	3	0	5	**1**	0	0	**1**	0	7	0	7	0	0	**5**	**5**	18
07:45 AM	0	7	0	7	0	0	0	0	0	7	0	7	0	0	2	2	16
08:00 AM	0	**11**	0	**11**	0	0	0	0	1	6	0	7	**2**	0	1	3	21
Total Volume	2	31	0	33	1	0	0	1	3	37	1	41	2	0	10	12	87
% App. Total	6.1	93.9	0		100	0	0		7.3	90.2	2.4		16.7	0	83.3		
PHF	.250	.705	.000	.750	.250	.000	.000	.250	.375	.544	.250	.513	.250	.000	.500	.600	.680

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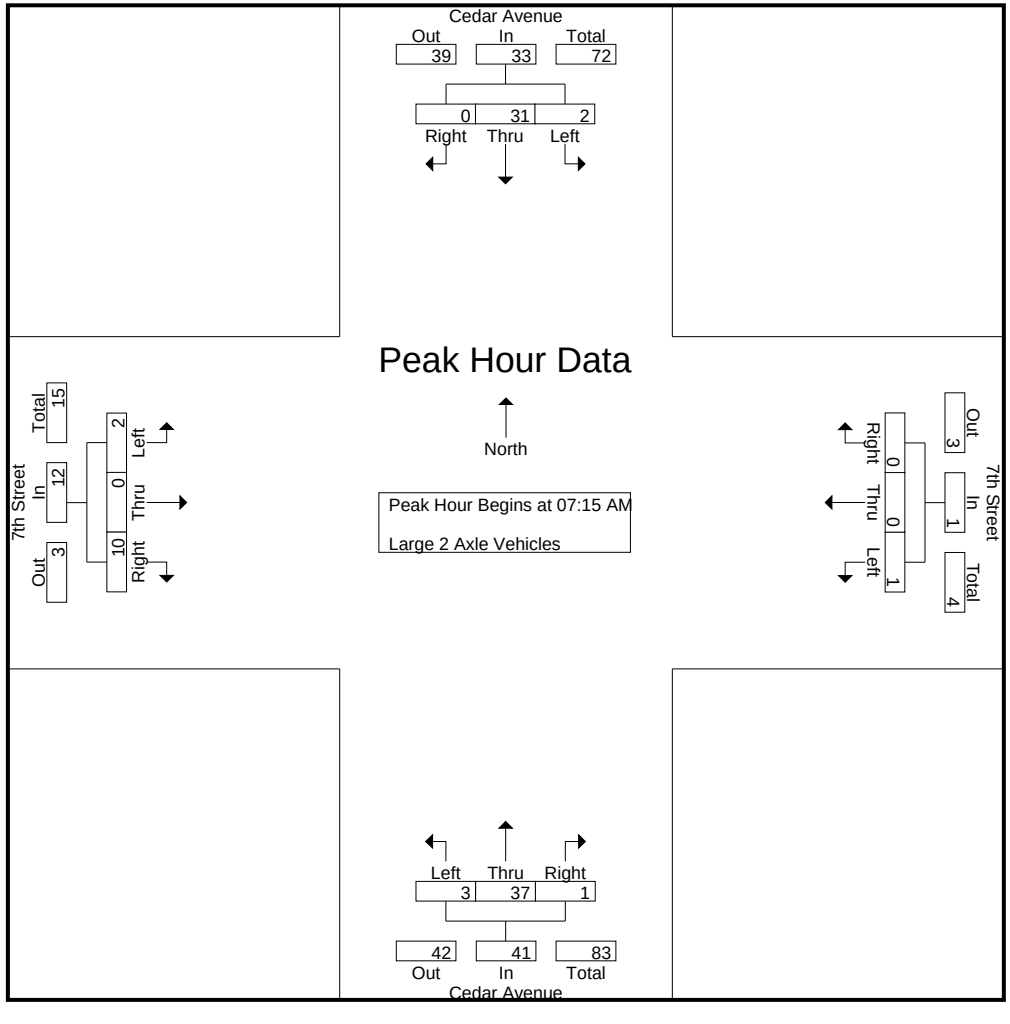

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	Cedar Avenue Southbound				7th Street Westbound				Cedar Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	10	0	10	0	0	0	0	**2**	**17**	**1**	**20**	0	0	2	2	
+15 mins.	**2**	3	0	5	**1**	0	0	**1**	0	7	0	7	0	0	**5**	**5**	
+30 mins.	0	7	0	7	0	0	0	0	0	7	0	7	0	0	2	2	
+45 mins.	0	**11**	0	**11**	0	0	0	0	1	6	0	7	**2**	0	1	3	
Total Volume	2	31	0	33	1	0	0	1	3	37	1	41	2	0	10	12	
% App. Total	6.1	93.9	0		100	0	0		7.3	90.2	2.4		16.7	0	83.3		
PHF	.250	.705	.000	.750	.250	.000	.000	.250	.375	.544	.250	.513	.250	.000	.500	.600	

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County of San Bernardino
N/S: Cedar Avenue
E/W: 7th Street
Weather: Clear

File Name : 14_CSB_Ced_7th AM
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Groups Printed- 3 Axle Vehicles

	Cedar Avenue Southbound					7th Street Westbound					Cedar Avenue Northbound					7th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	0	0	1	1	1	1	8	9
06:45 AM	0	9	0	0	9	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	0	13	13
Total	0	12	0	0	12	0	0	0	0	0	0	7	0	0	7	0	0	2	1	2	1	21	22
07:00 AM	0	3	0	0	3	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	5	5
07:15 AM	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	7	7
07:30 AM	0	8	0	0	8	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	11	11
07:45 AM	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	9	11
Total	0	23	0	0	23	0	0	0	0	0	1	6	0	0	7	0	0	2	2	2	2	32	34
08:00 AM	0	10	0	0	10	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	13	13
08:15 AM	0	7	0	0	7	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	12	12
08:30 AM	0	5	1	0	6	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	9	9
08:45 AM	0	1	0	0	1	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	0	6	6
Total	0	23	1	0	24	0	0	0	0	0	1	14	0	0	15	0	0	1	0	1	0	40	40
Grand Total	0	58	1	0	59	0	0	0	0	0	2	27	0	0	29	0	0	5	3	5	3	93	96
Apprch %	0	98.3	1.7			0	0	0			6.9	93.1	0			0	0	100					
Total %	0	62.4	1.1		63.4	0	0	0		0	2.2	29	0		31.2	0	0	5.4		5.4	3.1	96.9	

	Cedar Avenue Southbound				7th Street Westbound				Cedar Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	5	0	5	0	0	0	0	0	2	0	2	0	0	0	0	7
07:30 AM	0	8	0	8	0	0	0	0	0	**3**	0	**3**	0	0	0	0	11
07:45 AM	0	7	0	7	0	0	0	0	0	0	0	0	0	0	**2**	**2**	9
08:00 AM	0	**10**	0	**10**	0	0	0	0	0	3	0	3	0	0	0	0	**13**
Total Volume	0	30	0	30	0	0	0	0	0	8	0	8	0	0	2	2	40
% App. Total	0	100	0		0	0	0		0	100	0		0	0	100		
PHF	.000	.750	.000	.750	.000	.000	.000	.000	.000	.667	.000	.667	.000	.000	.250	.250	.769

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County of San Bernardino
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Weather: Clear

File Name : 14_CSB_Ced_7th AM
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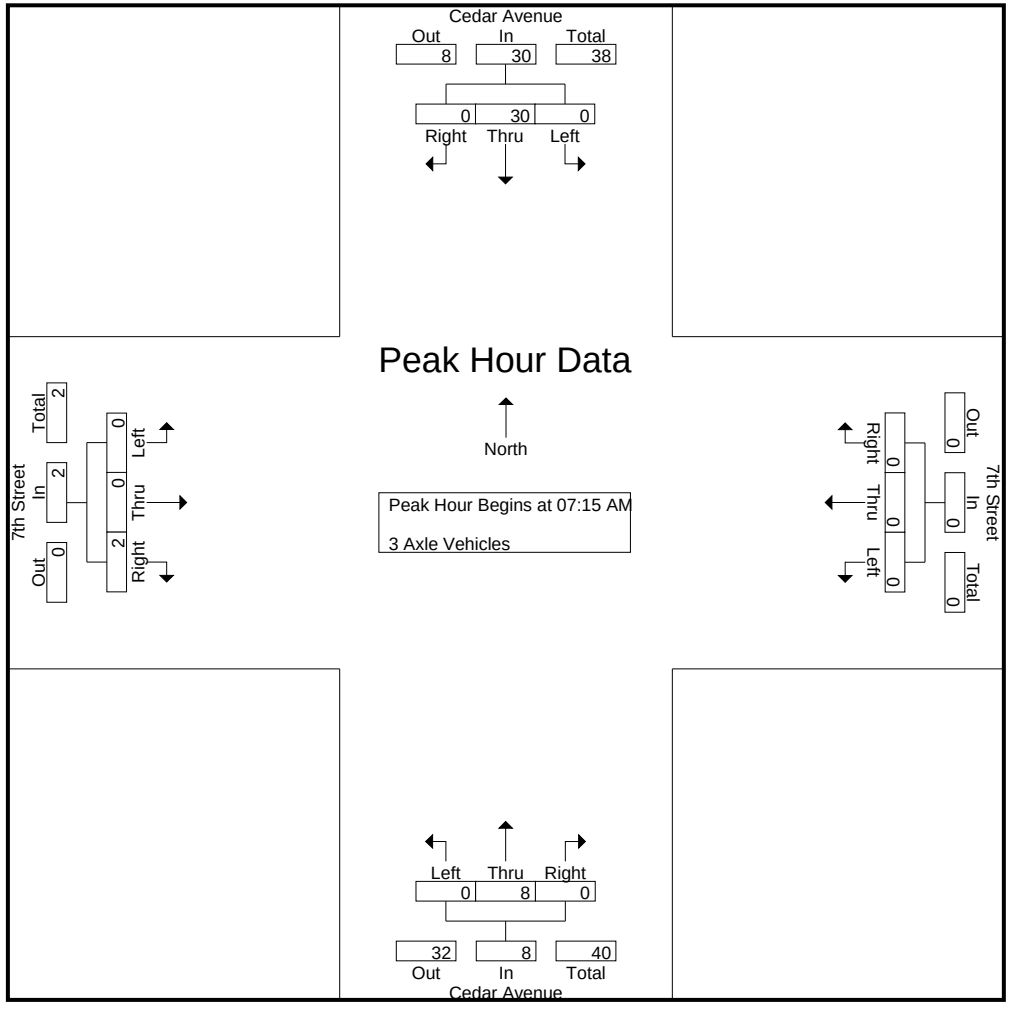

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	Cedar Avenue Southbound				7th Street Westbound				Cedar Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	5	0	5	0	0	0	0	0	2	0	2	0	0	0	0	
+15 mins.	0	8	0	8	0	0	0	0	0	**3**	0	**3**	0	0	0	0	
+30 mins.	0	7	0	7	0	0	0	0	0	0	0	0	0	0	**2**	**2**	
+45 mins.	0	**10**	0	**10**	0	0	0	0	0	3	0	3	0	0	0	0	
Total Volume	0	30	0	30	0	0	0	0	0	8	0	8	0	0	2	2	
% App. Total	0	100	0		0	0	0		0	100	0		0	0	100		
PHF	.000	.750	.000	.750	.000	.000	.000	.000	.000	.667	.000	.667	.000	.000	.250	.250	

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Groups Printed- 4+ Axle Trucks

	Cedar Avenue Southbound					7th Street Westbound					Cedar Avenue Northbound					7th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	6	0	0	6	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	12	12
06:45 AM	0	11	0	0	11	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	12	12
Total	0	17	0	0	17	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	24	24
07:00 AM	0	10	0	0	10	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	12	12
07:15 AM	0	18	0	0	18	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	0	31	31
07:30 AM	0	9	0	0	9	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	19	19
07:45 AM	0	8	0	0	8	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	0	22	22
Total	0	45	0	0	45	0	0	0	0	0	0	39	0	0	39	0	0	0	0	0	0	84	84
08:00 AM	0	7	0	0	7	0	0	0	0	0	0	11	0	0	11	0	0	1	0	1	0	19	19
08:15 AM	0	15	0	0	15	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	23	23
08:30 AM	0	13	0	0	13	0	0	0	0	0	0	6	0	0	6	0	0	1	0	1	0	20	20
08:45 AM	0	16	0	0	16	0	0	0	0	0	1	9	0	0	10	0	0	1	0	1	0	27	27
Total	0	51	0	0	51	0	0	0	0	0	1	34	0	0	35	0	0	3	0	3	0	89	89
Grand Total	0	113	0	0	113	0	0	0	0	0	1	80	0	0	81	0	0	3	0	3	0	197	197
Apprch %	0	100	0			0	0	0			1.2	98.8	0			0	0	100					
Total %	0	57.4	0		57.4	0	0	0		0	0.5	40.6	0		41.1	0	0	1.5		1.5	0	100	

	Cedar Avenue Southbound				7th Street Westbound				Cedar Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**18**	0	**18**	0	0	0	0	0	13	0	13	0	0	0	0	**31**
07:30 AM	0	9	0	9	0	0	0	0	0	10	0	10	0	0	0	0	19
07:45 AM	0	8	0	8	0	0	0	0	0	**14**	0	**14**	0	0	0	0	22
08:00 AM	0	7	0	7	0	0	0	0	0	11	0	11	0	0	**1**	**1**	19
Total Volume	0	42	0	42	0	0	0	0	0	48	0	48	0	0	1	1	91
% App. Total	0	100	0		0	0	0		0	100	0		0	0	100		
PHF	.000	.583	.000	.583	.000	.000	.000	.000	.000	.857	.000	.857	.000	.000	.250	.250	.734

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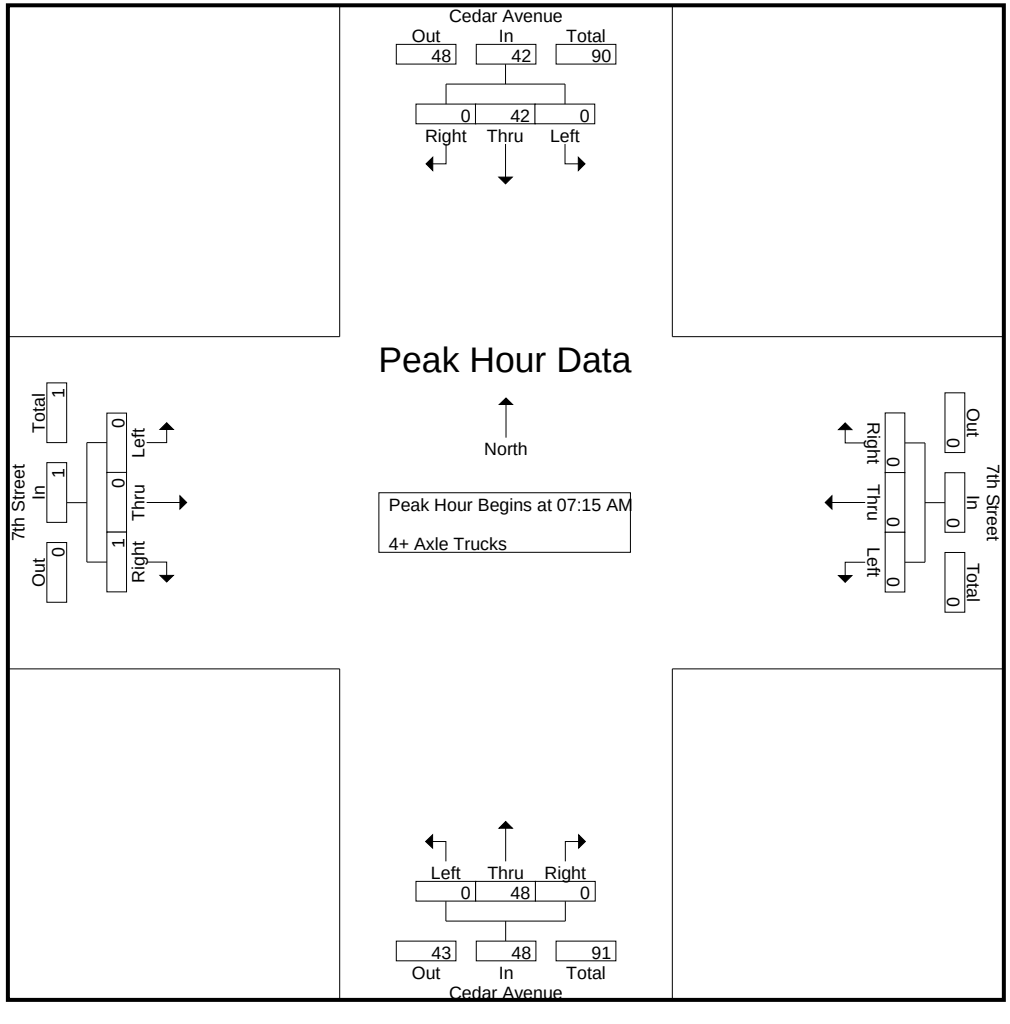

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	Cedar Avenue Southbound				7th Street Westbound				Cedar Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	**18**	0	**18**	0	0	0	0	0	13	0	13	0	0	0	0	
+15 mins.	0	9	0	9	0	0	0	0	0	10	0	10	0	0	0	0	
+30 mins.	0	8	0	8	0	0	0	0	0	**14**	0	**14**	0	0	0	0	
+45 mins.	0	7	0	7	0	0	0	0	0	11	0	11	0	0	**1**	**1**	
Total Volume	0	42	0	42	0	0	0	0	0	48	0	48	0	0	1	1	
% App. Total	0	100	0		0	0	0		0	100	0		0	0	100		
PHF	.000	.583	.000	.583	.000	.000	.000	.000	.000	.857	.000	.857	.000	.000	.250	.250	

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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Cedar Avenue Southbound					7th Street Westbound					Cedar Avenue Northbound					7th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	3	158	9	0	170	3	4	4	4	11	27	209	2	0	238	19	3	38	19	60	23	479	502
03:45 PM	11	138	12	1	161	5	8	7	5	20	33	159	4	0	196	20	13	58	14	91	20	468	488
Total	14	296	21	1	331	8	12	11	9	31	60	368	6	0	434	39	16	96	33	151	43	947	990
04:00 PM	10	172	5	1	187	7	4	4	1	15	24	197	3	0	224	12	7	46	20	65	22	491	513
04:15 PM	22	174	5	1	201	8	4	4	2	16	30	142	1	0	173	23	9	62	14	94	17	484	501
04:30 PM	17	182	5	1	204	4	3	5	2	12	22	164	3	0	189	9	8	40	19	57	22	462	484
04:45 PM	10	170	8	0	188	3	6	4	2	13	28	151	2	0	181	9	10	51	32	70	34	452	486
Total	59	698	23	3	780	22	17	17	7	56	104	654	9	0	767	53	34	199	85	286	95	1889	1984
05:00 PM	18	165	6	0	189	10	11	5	3	26	30	141	2	0	173	13	13	46	15	72	18	460	478
05:15 PM	21	166	8	0	195	5	4	4	2	13	37	182	9	0	228	25	10	55	18	90	20	526	546
05:30 PM	17	176	8	1	201	13	5	5	2	23	33	211	4	0	248	19	10	40	10	69	13	541	554
05:45 PM	10	143	3	2	156	13	4	4	2	21	25	140	8	2	173	11	7	51	21	69	27	419	446
Total	66	650	25	3	741	41	24	18	9	83	125	674	23	2	822	68	40	192	64	300	78	1946	2024
Grand Total	139	1644	69	7	1852	71	53	46	25	170	289	1696	38	2	2023	160	90	487	182	737	216	4782	4998
Apprch %	7.5	88.8	3.7			41.8	31.2	27.1			14.3	83.8	1.9			21.7	12.2	66.1					
Total %	2.9	34.4	1.4		38.7	1.5	1.1	1		3.6	6	35.5	0.8		42.3	3.3	1.9	10.2		15.4	4.3	95.7	
Passenger Vehicles	137	1494	68		1705	68	53	45		191	283	1553	36		1874	152	86	462		875	0	0	4645
% Passenger Vehicles	98.6	90.9	98.6	85.7	91.7	95.8	100	97.8	100	97.9	97.9	91.6	94.7	100	92.5	95	95.6	94.9	96.2	95.2	0	0	92.9
Large 2 Axle Vehicles	2	61	1		65	3	0	1		4	5	53	2		60	5	4	13		25	0	0	154
% Large 2 Axle Vehicles	1.4	3.7	1.4	14.3	3.5	4.2	0	2.2	0	2.1	1.7	3.1	5.3	0	3	3.1	4.4	2.7	1.6	2.7	0	0	3.1
3 Axle Vehicles	0	31	0		31	0	0	0		0	1	26	0		27	3	0	9		16	0	0	74
% 3 Axle Vehicles	0	1.9	0	0	1.7	0	0	0	0	0	0.3	1.5	0	0	1.3	1.9	0	1.8	2.2	1.7	0	0	1.5
4+ Axle Trucks	0	58	0		58	0	0	0		0	0	64	0		64	0	0	3		3	0	0	125
% 4+ Axle Trucks	0	3.5	0	0	3.1	0	0	0	0	0	0	3.8	0	0	3.2	0	0	0.6	0	0.3	0	0	2.5

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	Cedar Avenue Southbound				7th Street Westbound				Cedar Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	10	170	**8**	188	3	6	4	13	28	151	2	181	9	10	51	70	452
05:00 PM	18	165	6	189	10	**11**	**5**	**26**	30	141	2	173	13	**13**	46	72	460
05:15 PM	**21**	166	8	195	5	4	4	13	**37**	182	**9**	228	**25**	10	**55**	**90**	526
05:30 PM	17	**176**	8	**201**	**13**	5	5	23	33	**211**	4	**248**	19	10	40	69	**541**
Total Volume	66	677	30	773	31	26	18	75	128	685	17	830	66	43	192	301	1979
% App. Total	8.5	87.6	3.9		41.3	34.7	24		15.4	82.5	2		21.9	14.3	63.8		
PHF	.786	.962	.938	.961	.596	.591	.900	.721	.865	.812	.472	.837	.660	.827	.873	.836	.915

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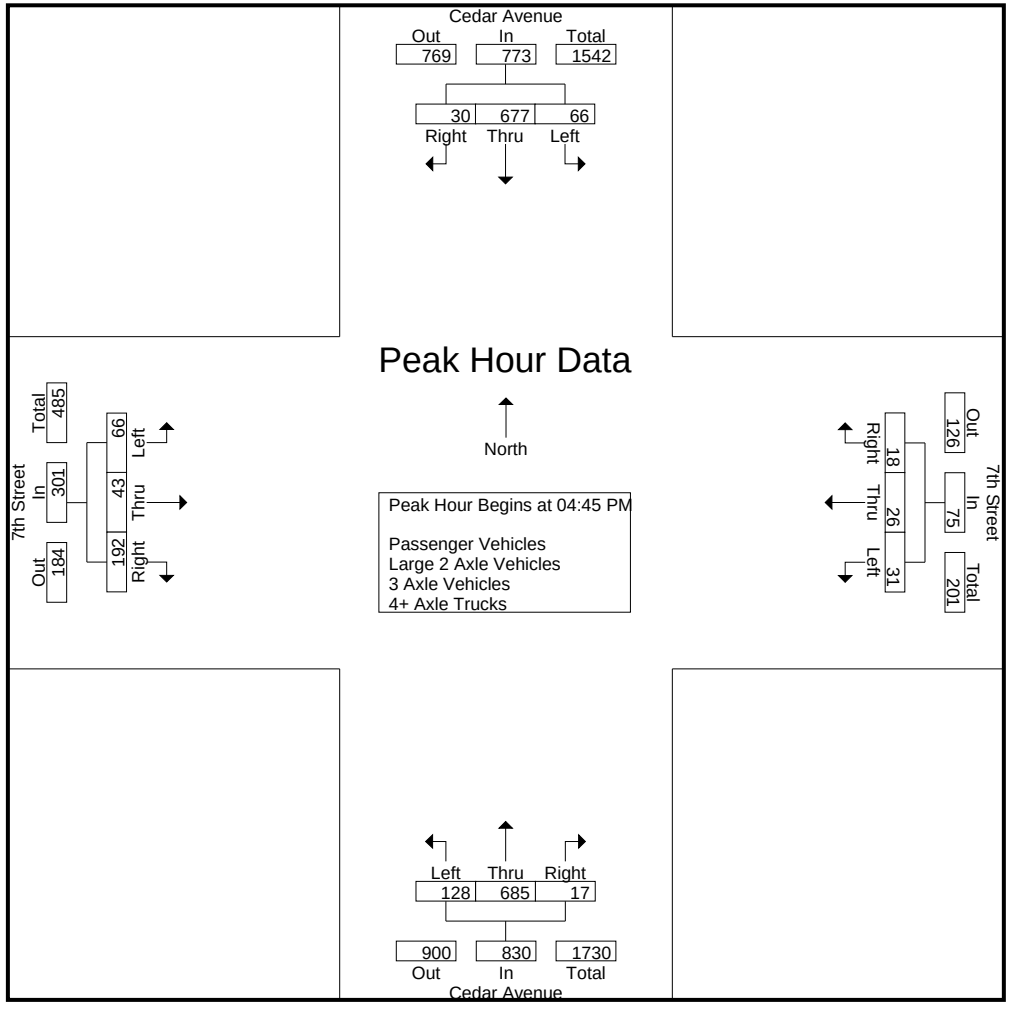

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	Cedar Avenue Southbound				7th Street Westbound				Cedar Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				05:00 PM				03:30 PM				03:30 PM				
+0 mins.	**22**	174	5	201	10	**11**	**5**	**26**	27	**209**	2	**238**	19	3	38	60	
+15 mins.	17	**182**	5	**204**	5	4	4	13	**33**	159	**4**	196	20	**13**	58	91	
+30 mins.	10	170	**8**	188	**13**	5	5	23	24	197	3	224	12	7	46	65	
+45 mins.	18	165	6	189	13	4	4	21	30	142	1	173	**23**	9	**62**	**94**	
Total Volume	67	691	24	782	41	24	18	83	114	707	10	831	74	32	204	310	
% App. Total	8.6	88.4	3.1		49.4	28.9	21.7		13.7	85.1	1.2		23.9	10.3	65.8		
PHF	.761	.949	.750	.958	.788	.545	.900	.798	.864	.846	.625	.873	.804	.615	.823	.824	

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Groups Printed- Passenger Vehicles

	Cedar Avenue Southbound					7th Street Westbound					Cedar Avenue Northbound					7th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	3	138	9	0	150	3	4	4	4	11	25	184	2	0	211	17	3	35	18	55	22	427	449
03:45 PM	10	122	12	1	144	5	8	7	5	20	33	143	4	0	180	20	12	57	13	89	19	433	452
Total	13	260	21	1	294	8	12	11	9	31	58	327	6	0	391	37	15	92	31	144	41	860	901
04:00 PM	10	152	5	1	167	6	4	3	1	13	23	180	3	0	206	11	7	42	19	60	21	446	467
04:15 PM	22	148	5	1	175	8	4	4	2	16	30	131	1	0	162	22	9	59	14	90	17	443	460
04:30 PM	17	168	5	1	190	4	3	5	2	12	22	154	3	0	179	8	7	38	19	53	22	434	456
04:45 PM	10	162	8	0	180	3	6	4	2	13	28	137	2	0	167	9	10	50	31	69	33	429	462
Total	59	630	23	3	712	21	17	16	7	54	103	602	9	0	714	50	33	189	83	272	93	1752	1845
05:00 PM	18	150	6	0	174	9	11	5	3	25	30	134	2	0	166	12	13	43	15	68	18	433	451
05:15 PM	21	153	8	0	182	5	4	4	2	13	35	167	8	0	210	25	9	51	15	85	17	490	507
05:30 PM	16	168	8	1	192	13	5	5	2	23	33	194	4	0	231	18	9	39	10	66	13	512	525
05:45 PM	10	133	2	1	145	12	4	4	2	20	24	129	7	2	160	10	7	48	21	65	26	390	416
Total	65	604	24	2	693	39	24	18	9	81	122	624	21	2	767	65	38	181	61	284	74	1825	1899
Grand Total	137	1494	68	6	1699	68	53	45	25	166	283	1553	36	2	1872	152	86	462	175	700	208	4437	4645
Apprch %	8.1	87.9	4			41	31.9	27.1			15.1	83	1.9			21.7	12.3	66					
Total %	3.1	33.7	1.5		38.3	1.5	1.2	1		3.7	6.4	35	0.8		42.2	3.4	1.9	10.4		15.8	4.5	95.5	

	Cedar Avenue Southbound				7th Street Westbound				Cedar Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	10	162	**8**	180	3	6	4	13	28	137	2	167	9	10	50	69	429
05:00 PM	18	150	6	174	9	**11**	**5**	**25**	30	134	2	166	12	**13**	43	68	433
05:15 PM	**21**	153	8	182	5	4	4	13	**35**	167	**8**	210	**25**	9	**51**	**85**	490
05:30 PM	16	**168**	8	**192**	**13**	5	5	23	33	**194**	4	**231**	18	9	39	66	**512**
Total Volume	65	633	30	728	30	26	18	74	126	632	16	774	64	41	183	288	1864
% App. Total	8.9	87	4.1		40.5	35.1	24.3		16.3	81.7	2.1		22.2	14.2	63.5		
PHF	.774	.942	.938	.948	.577	.591	.900	.740	.900	.814	.500	.838	.640	.788	.897	.847	.910

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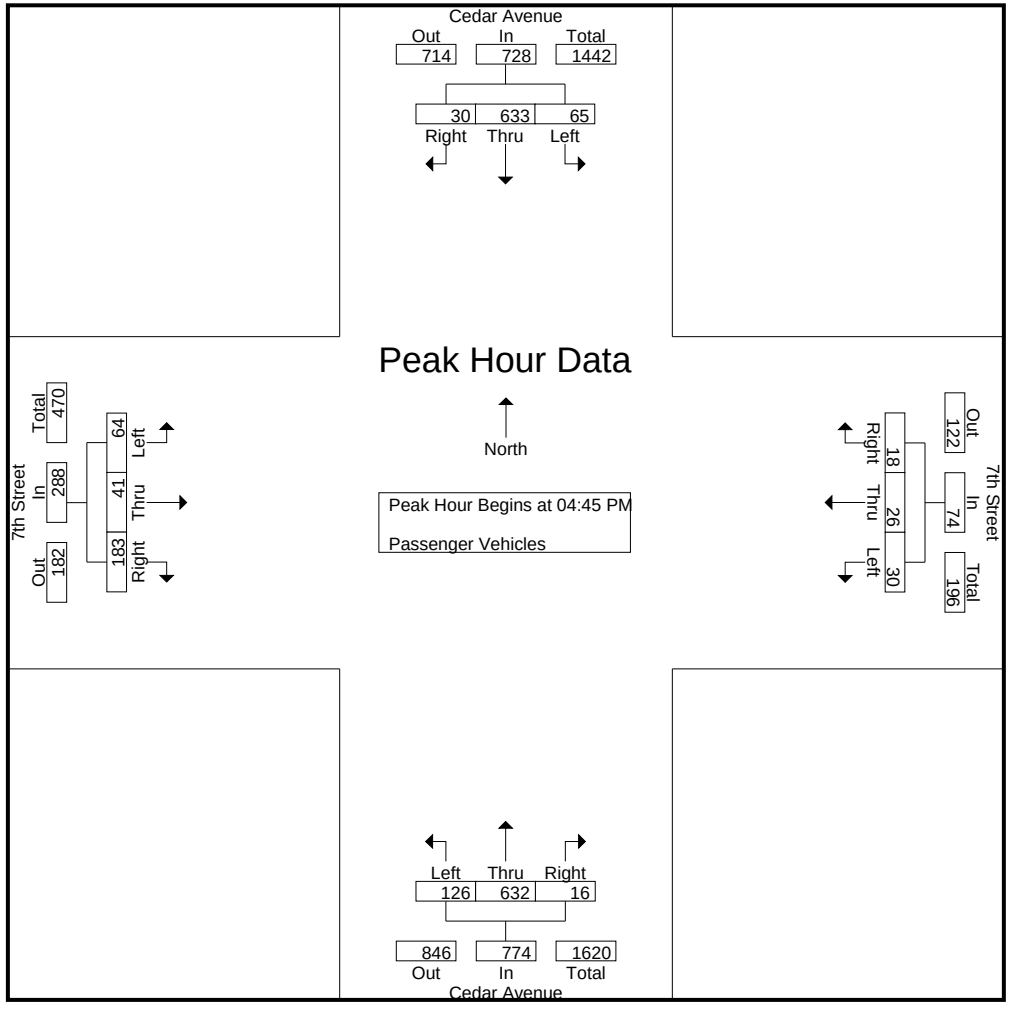
County of San Bernardino
N/S: Cedar Avenue
E/W: 7th Street
Weather: Clear

File Name : 14_CSB_Ced_7th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
E/W: 7th Street
Weather: Clear

File Name : 14_CSB_Ced_7th PM
Site Code : 05122894
Start Date : 10/4/2022
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	Cedar Avenue Southbound				7th Street Westbound				Cedar Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	10	162	**8**	180	3	6	4	13	28	137	2	167	9	10	50	69	
+15 mins.	18	150	6	174	9	**11**	**5**	**25**	30	134	2	166	12	**13**	43	68	
+30 mins.	**21**	153	8	182	5	4	4	13	**35**	167	**8**	210	**25**	9	**51**	**85**	
+45 mins.	16	**168**	8	**192**	**13**	5	5	23	33	**194**	4	**231**	18	9	39	66	
Total Volume	65	633	30	728	30	26	18	74	126	632	16	774	64	41	183	288	
% App. Total	8.9	87	4.1		40.5	35.1	24.3		16.3	81.7	2.1		22.2	14.2	63.5		
PHF	.774	.942	.938	.948	.577	.591	.900	.740	.900	.814	.500	.838	.640	.788	.897	.847	

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County of San Bernardino
N/S: Cedar Avenue
E/W: 7th Street
Weather: Clear

File Name : 14_CSB_Ced_7th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Cedar Avenue Southbound					7th Street Westbound					Cedar Avenue Northbound					7th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	6	0	0	6	0	0	0	0	0	1	12	0	0	13	2	0	2	0	4	0	23	23
03:45 PM	1	6	0	0	7	0	0	0	0	0	0	3	0	0	3	0	1	1	1	2	1	12	13
Total	1	12	0	0	13	0	0	0	0	0	1	15	0	0	16	2	1	3	1	6	1	35	36
04:00 PM	0	9	0	0	9	1	0	1	0	2	1	6	0	0	7	1	0	3	1	4	1	22	23
04:15 PM	0	10	0	0	10	0	0	0	0	0	0	5	0	0	5	1	0	2	0	3	0	18	18
04:30 PM	0	8	0	0	8	0	0	0	0	0	0	3	0	0	3	0	1	1	0	2	0	13	13
04:45 PM	0	4	0	0	4	0	0	0	0	0	0	5	0	0	5	0	0	1	1	1	1	10	11
Total	0	31	0	0	31	1	0	1	0	2	1	19	0	0	20	2	1	7	2	10	2	63	65
05:00 PM	0	4	0	0	4	1	0	0	0	1	0	3	0	0	3	0	0	1	0	1	0	9	9
05:15 PM	0	4	0	0	4	0	0	0	0	0	2	6	1	0	9	0	1	0	0	1	0	14	14
05:30 PM	1	4	0	0	5	0	0	0	0	0	0	6	0	0	6	1	1	1	0	3	0	14	14
05:45 PM	0	6	1	1	7	1	0	0	0	1	1	4	1	0	6	0	0	1	0	1	1	15	16
Total	1	18	1	1	20	2	0	0	0	2	3	19	2	0	24	1	2	3	0	6	1	52	53
Grand Total	2	61	1	1	64	3	0	1	0	4	5	53	2	0	60	5	4	13	3	22	4	150	154
Apprch %	3.1	95.3	1.6			75	0	25			8.3	88.3	3.3			22.7	18.2	59.1					
Total %	1.3	40.7	0.7		42.7	2	0	0.7		2.7	3.3	35.3	1.3		40	3.3	2.7	8.7		14.7	2.6	97.4	

	Cedar Avenue Southbound				7th Street Westbound				Cedar Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	**4**	0	4	0	0	0	0	0	5	0	5	0	0	**1**	1	10
05:00 PM	0	4	0	4	**1**	0	0	**1**	0	3	0	3	0	0	1	1	9
05:15 PM	0	4	0	4	0	0	0	0	**2**	**6**	**1**	**9**	0	**1**	0	1	**14**
05:30 PM	**1**	4	0	**5**	0	0	0	0	0	6	0	6	**1**	1	1	**3**	14
Total Volume	1	16	0	17	1	0	0	1	2	20	1	23	1	2	3	6	47
% App. Total	5.9	94.1	0		100	0	0		8.7	87	4.3		16.7	33.3	50		
PHF	.250	1.00	.000	.850	.250	.000	.000	.250	.250	.833	.250	.639	.250	.500	.750	.500	.839

Counts Unlimited, Inc.
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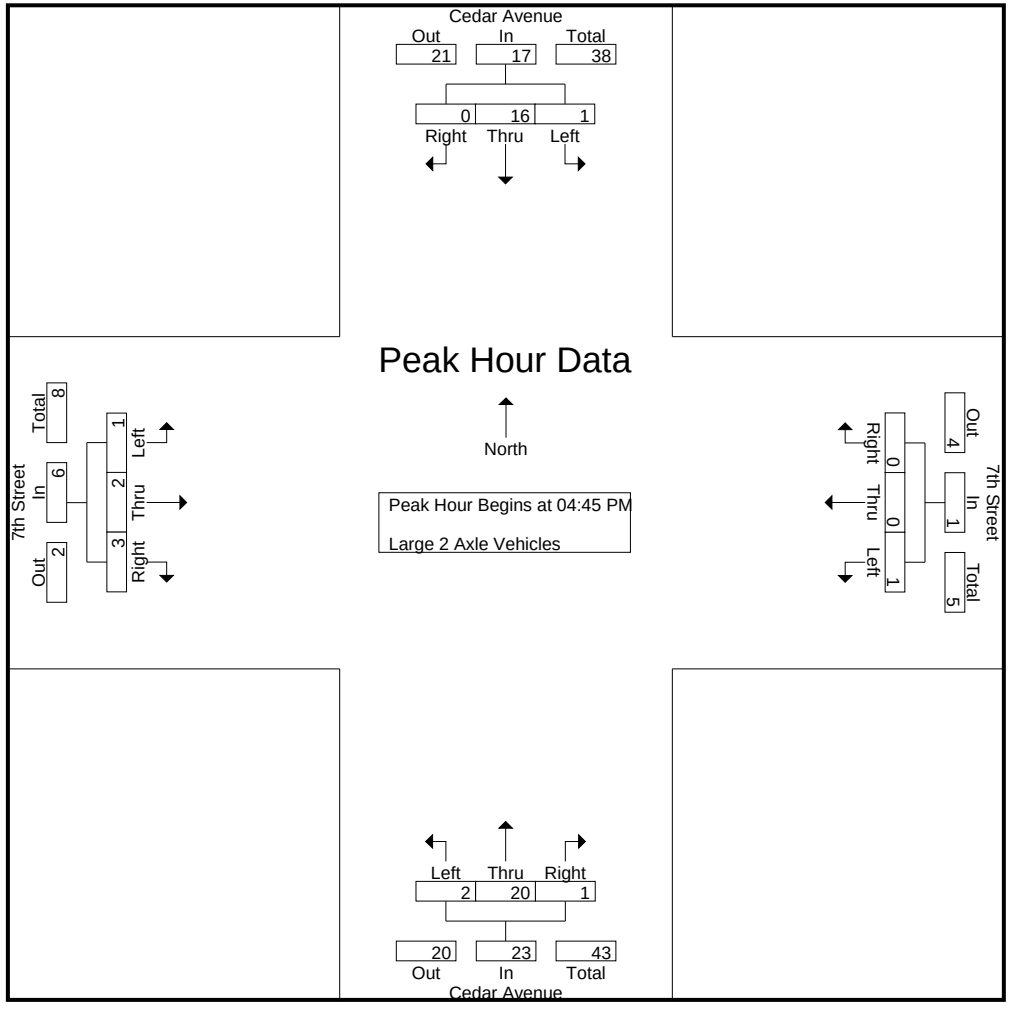
County of San Bernardino
N/S: Cedar Avenue
E/W: 7th Street
Weather: Clear

File Name : 14_CSB_Ced_7th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
E/W: 7th Street
Weather: Clear

File Name : 14_CSB_Ced_7th PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				7th Street Westbound				Cedar Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	**4**	0	4	0	0	0	0	0	5	0	5	0	0	**1**	1	
+15 mins.	0	4	0	4	**1**	0	0	**1**	0	3	0	3	0	0	1	1	
+30 mins.	0	4	0	4	0	0	0	0	**2**	**6**	**1**	**9**	0	**1**	0	1	
+45 mins.	**1**	4	0	**5**	0	0	0	0	0	6	0	6	**1**	1	1	**3**	
Total Volume	1	16	0	17	1	0	0	1	2	20	1	23	1	2	3	6	
% App. Total	5.9	94.1	0		100	0	0		8.7	87	4.3		16.7	33.3	50		
PHF	.250	1.000	.000	.850	.250	.000	.000	.250	.250	.833	.250	.639	.250	.500	.750	.500	

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County of San Bernardino
N/S: Cedar Avenue
E/W: 7th Street
Weather: Clear

File Name : 14_CSB_Ced_7th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Cedar Avenue Southbound					7th Street Westbound					Cedar Avenue Northbound					7th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	3	0	0	3	0	0	0	0	0	1	5	0	0	6	0	0	1	1	1	1	10	11
03:45 PM	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	5	5
Total	0	5	0	0	5	0	0	0	0	0	1	8	0	0	9	0	0	1	1	1	1	15	16
04:00 PM	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	0	0	1	0	1	0	8	8
04:15 PM	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	0	9	9
04:30 PM	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	0	7	7
04:45 PM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	4
Total	0	14	0	0	14	0	0	0	0	0	0	11	0	0	11	1	0	2	0	3	0	28	28
05:00 PM	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	5	5
05:15 PM	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	4	3	4	3	9	12
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	6	6
05:45 PM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	1	0	2	0	3	0	7	7
Total	0	12	0	0	12	0	0	0	0	0	0	7	0	0	7	2	0	6	3	8	3	27	30
Grand Total	0	31	0	0	31	0	0	0	0	0	1	26	0	0	27	3	0	9	4	12	4	70	74
Apprch %	0	100	0			0	0	0			3.7	96.3	0			25	0	75					
Total %	0	44.3	0		44.3	0	0	0		0	1.4	37.1	0		38.6	4.3	0	12.9		17.1	5.4	94.6	

	Cedar Avenue Southbound				7th Street Westbound				Cedar Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
05:00 PM	0	**4**	0	**4**	0	0	0	0	0	0	0	0	**1**	0	0	1	5
05:15 PM	0	4	0	4	0	0	0	0	0	1	0	1	0	0	**4**	**4**	**9**
05:30 PM	0	1	0	1	0	0	0	0	0	**5**	0	**5**	0	0	0	0	6
Total Volume	0	12	0	12	0	0	0	0	0	7	0	7	1	0	4	5	24
% App. Total	0	100	0		0	0	0		0	100	0		20	0	80		
PHF	.000	.750	.000	.750	.000	.000	.000	.000	.000	.350	.000	.350	.250	.000	.250	.313	.667

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County of San Bernardino
N/S: Cedar Avenue
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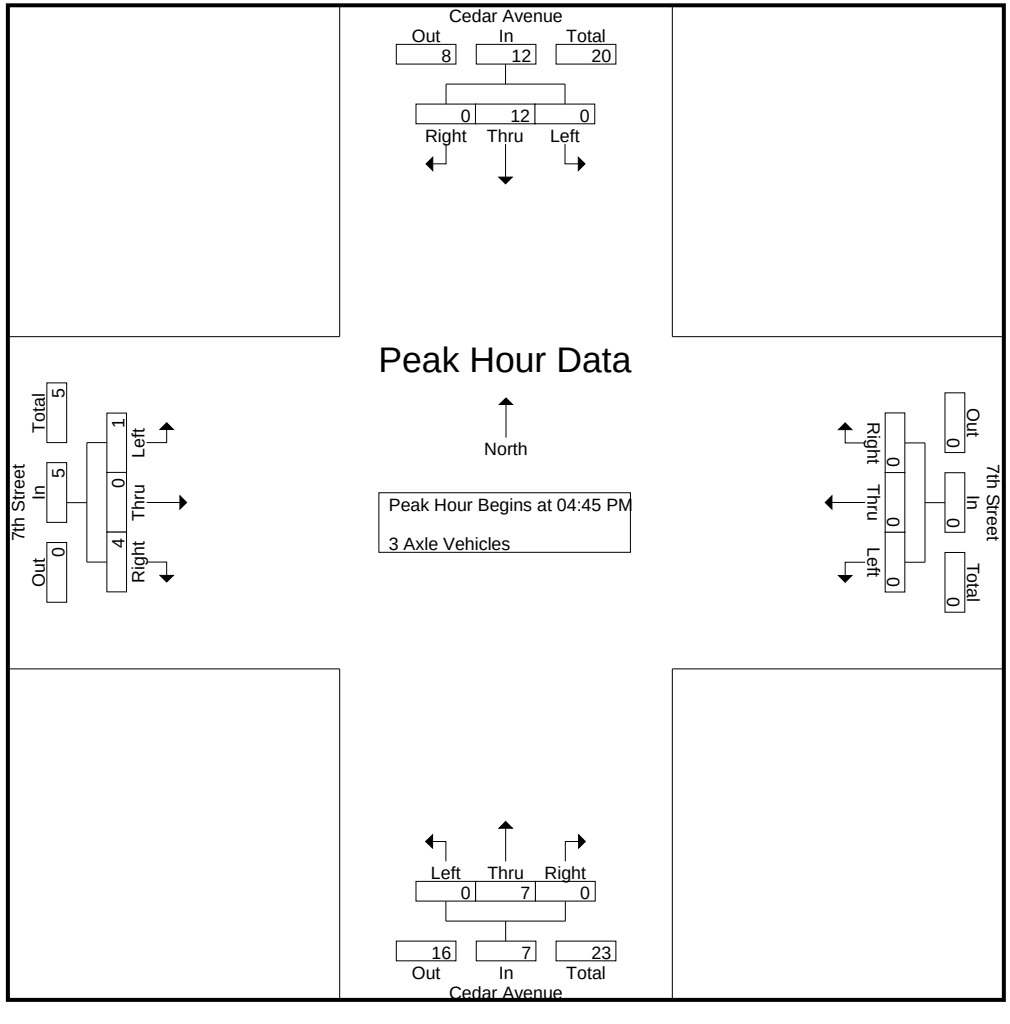
File Name : 14_CSB_Ced_7th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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Site Code : 05122894
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	Cedar Avenue Southbound				7th Street Westbound				Cedar Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	
+15 mins.	0	**4**	0	**4**	0	0	0	0	0	0	0	0	**1**	0	0	1	
+30 mins.	0	4	0	4	0	0	0	0	0	1	0	1	0	0	**4**	**4**	
+45 mins.	0	1	0	1	0	0	0	0	0	**5**	0	**5**	0	0	0	0	
Total Volume	0	12	0	12	0	0	0	0	0	7	0	7	1	0	4	5	
% App. Total	0	100	0		0	0	0		0	100	0		20	0	80		
PHF	.000	.750	.000	.750	.000	.000	.000	.000	.000	.350	.000	.350	.250	.000	.250	.313	

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File Name : 14_CSB_Ced_7th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Cedar Avenue Southbound					7th Street Westbound					Cedar Avenue Northbound					7th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	11	0	0	11	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	19	19
03:45 PM	0	8	0	0	8	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	18	18
Total	0	19	0	0	19	0	0	0	0	0	0	18	0	0	18	0	0	0	0	0	0	37	37
04:00 PM	0	8	0	0	8	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	15	15
04:15 PM	0	11	0	0	11	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	14	14
04:30 PM	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	0	0	1	0	1	0	8	8
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	9	9
Total	0	23	0	0	23	0	0	0	0	0	0	22	0	0	22	0	0	1	0	1	0	46	46
05:00 PM	0	7	0	0	7	0	0	0	0	0	0	4	0	0	4	0	0	2	0	2	0	13	13
05:15 PM	0	5	0	0	5	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	13	13
05:30 PM	0	3	0	0	3	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	9	9
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	7	7
Total	0	16	0	0	16	0	0	0	0	0	0	24	0	0	24	0	0	2	0	2	0	42	42
Grand Total	0	58	0	0	58	0	0	0	0	0	0	64	0	0	64	0	0	3	0	3	0	125	125
Apprch %	0	100	0			0	0	0			0	100	0			0	0	100					
Total %	0	46.4	0		46.4	0	0	0		0	0	51.2	0		51.2	0	0	2.4		2.4	0	100	

	Cedar Avenue Southbound				7th Street Westbound				Cedar Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	1	0	1	0	0	0	0	0	**8**	0	**8**	0	0	0	0	9
05:00 PM	0	**7**	0	**7**	0	0	0	0	0	4	0	4	0	0	**2**	**2**	**13**
05:15 PM	0	5	0	5	0	0	0	0	0	8	0	8	0	0	0	0	13
05:30 PM	0	3	0	3	0	0	0	0	0	6	0	6	0	0	0	0	9
Total Volume	0	16	0	16	0	0	0	0	0	26	0	26	0	0	2	2	44
% App. Total	0	100	0		0	0	0		0	100	0		0	0	100		
PHF	.000	.571	.000	.571	.000	.000	.000	.000	.000	.813	.000	.813	.000	.000	.250	.250	.846

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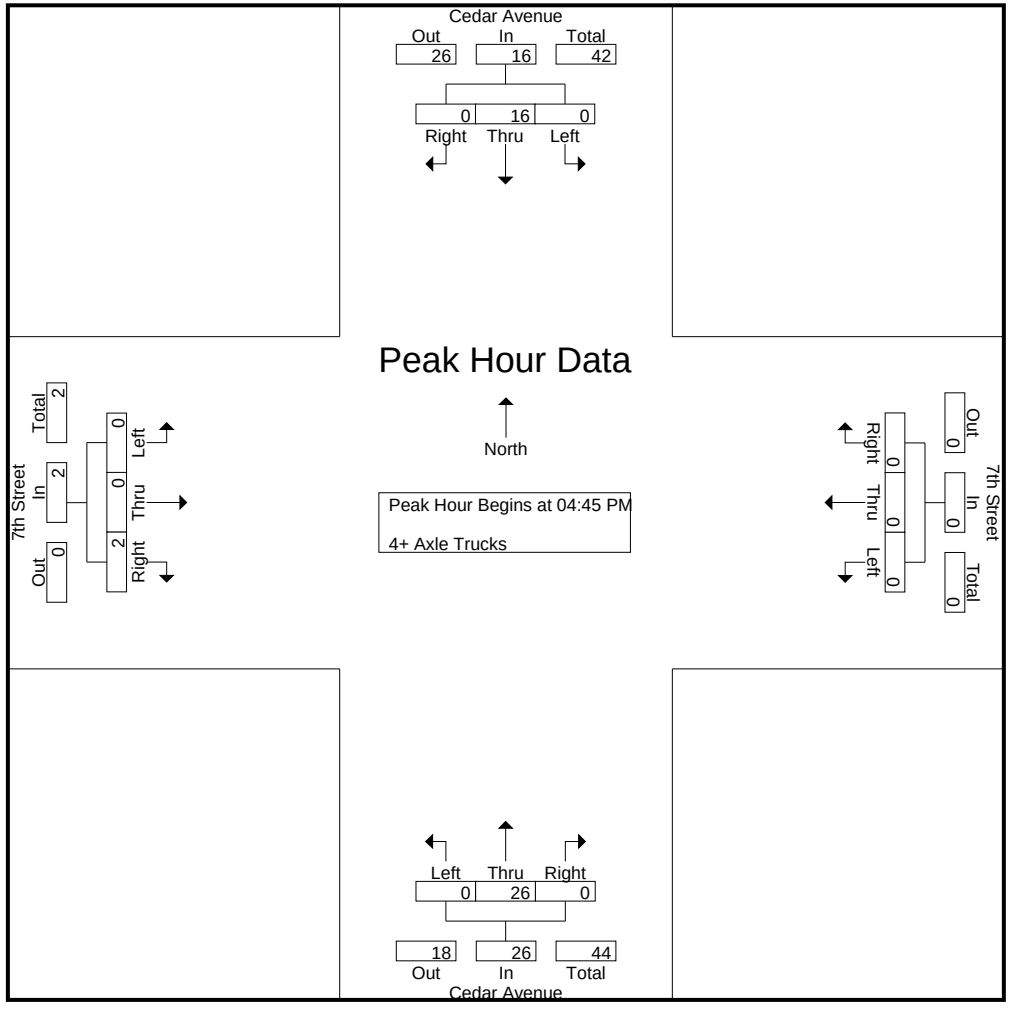
County of San Bernardino
N/S: Cedar Avenue
E/W: 7th Street
Weather: Clear

File Name : 14_CSB_Ced_7th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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County of San Bernardino
N/S: Cedar Avenue
E/W: 7th Street
Weather: Clear

File Name : 14_CSB_Ced_7th PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				7th Street Westbound				Cedar Avenue Northbound				7th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	1	0	1	0	0	0	0	0	**8**	0	**8**	0	0	0	0	
+15 mins.	0	**7**	0	**7**	0	0	0	0	0	4	0	4	0	0	**2**	**2**	
+30 mins.	0	5	0	5	0	0	0	0	0	8	0	8	0	0	0	0	
+45 mins.	0	3	0	3	0	0	0	0	0	6	0	6	0	0	0	0	
Total Volume	0	16	0	16	0	0	0	0	0	26	0	26	0	0	2	2	
% App. Total	0	100	0		0	0	0		0	100	0		0	0	100		
PHF	.000	.571	.000	.571	.000	.000	.000	.000	.000	.813	.000	.813	.000	.000	.250	.250	

Location: County of San Bernardino
N/S: Cedar Avenue
E/W: 7th Street

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Cedar Avenue	East Leg 7th Street	South Leg Cedar Avenue	West Leg 7th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	1	1	1	3
8:00 AM	0	0	0	0	0
8:15 AM	0	1	1	0	2
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	2	2	1	5

	North Leg Cedar Avenue	East Leg 7th Street	South Leg Cedar Avenue	West Leg 7th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0
4:15 PM	1	0	0	0	1
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	2	1	0	0	3
5:30 PM	0	0	0	1	1
5:45 PM	0	0	4	0	4
TOTAL VOLUMES:	3	1	4	1	9

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951-268-6268

Location: County of San Bernardino
N/S: Cedar Avenue
E/W: 7th Street

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Cedar Avenue			Westbound 7th Street			Northbound Cedar Avenue			Eastbound 7th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	1	0	1

	Southbound Cedar Avenue			Westbound 7th Street			Northbound Cedar Avenue			Eastbound 7th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:15 PM	0	0	0	1	0	0	0	0	1	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	1	0	0	0	1	1	0	0	0	4

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City of Jurupa Valley
N/S: Cedar Avenue/Rubidoux Boulevard
E/W: Tarragona Drive/El Rivino Road
Weather: Clear

File Name : 15_JVY_Ced_El R AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Cedar Avenue Southbound					El Rivino Road Westbound					Rubidoux Boulevard Northbound					Tarragona Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	35	135	3	1	173	70	0	33	19	103	0	104	24	5	128	1	0	1	1	2	26	406	432
06:45 AM	44	195	1	0	240	23	0	18	12	41	1	101	30	4	132	0	1	6	3	7	19	420	439
Total	79	330	4	1	413	93	0	51	31	144	1	205	54	9	260	1	1	7	4	9	45	826	871
07:00 AM	29	204	1	0	234	32	0	18	14	50	0	80	28	3	108	1	0	2	0	3	17	395	412
07:15 AM	21	227	4	0	252	16	0	12	7	28	1	136	22	0	159	5	1	6	1	12	8	451	459
07:30 AM	27	231	1	0	259	24	0	13	8	37	0	87	18	1	105	5	1	8	3	14	12	415	427
07:45 AM	46	232	1	0	279	18	0	18	9	36	0	116	28	1	144	3	2	4	2	9	12	468	480
Total	123	894	7	0	1024	90	0	61	38	151	1	419	96	5	516	14	4	20	6	38	49	1729	1778
08:00 AM	44	200	4	0	248	22	1	13	6	36	1	116	35	5	152	1	3	6	3	10	14	446	460
08:15 AM	35	165	2	0	202	18	0	19	7	37	5	116	34	3	155	1	0	0	0	1	10	395	405
08:30 AM	39	142	3	0	184	18	0	23	17	41	3	90	78	6	171	4	1	4	1	9	24	405	429
08:45 AM	51	142	1	1	194	34	0	26	14	60	1	85	75	5	161	6	2	3	2	11	22	426	448
Total	169	649	10	1	828	92	1	81	44	174	10	407	222	19	639	12	6	13	6	31	70	1672	1742
Grand Total	371	1873	21	2	2265	275	1	193	113	469	12	1031	372	33	1415	27	11	40	16	78	164	4227	4391
Apprch %	16.4	82.7	0.9			58.6	0.2	41.2			0.8	72.9	26.3			34.6	14.1	51.3					
Total %	8.8	44.3	0.5		53.6	6.5	0	4.6		11.1	0.3	24.4	8.8		33.5	0.6	0.3	0.9		1.8	3.7	96.3	
Passenger Vehicles	312	1658	18		1990	210	1	153		455	11	896	326		1261	24	9	37		85	0	0	3791
% Passenger Vehicles	84.1	88.5	85.7	100	87.8	76.4	100	79.3	80.5	78.2	91.7	86.9	87.6	84.8	87.1	88.9	81.8	92.5	93.8	90.4	0	0	86.3
Large 2 Axle Vehicles	18	79	2		99	35	0	19		69	1	48	12		62	2	2	3		8	0	0	238
% Large 2 Axle Vehicles	4.9	4.2	9.5	0	4.4	12.7	0	9.8	13.3	11.9	8.3	4.7	3.2	3	4.3	7.4	18.2	7.5	6.2	8.5	0	0	5.4
3 Axle Vehicles	13	50	1		64	10	0	4		15	0	23	7		30	0	0	0		0	0	0	109
% 3 Axle Vehicles	3.5	2.7	4.8	0	2.8	3.6	0	2.1	0.9	2.6	0	2.2	1.9	0	2.1	0	0	0	0	0	0	0	2.5
4+ Axle Trucks	28	86	0		114	20	0	17		43	0	64	27		95	1	0	0		1	0	0	253
% 4+ Axle Trucks	7.5	4.6	0	0	5	7.3	0	8.8	5.3	7.4	0	6.2	7.3	12.1	6.6	3.7	0	0	0	1.1	0	0	5.8

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City of Jurupa Valley
N/S: Cedar Avenue/Rubidoux Boulevard
E/W: Tarragona Drive/El Rivino Road
Weather: Clear

File Name : 15_JVY_Ced_El R AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				El Rivino Road Westbound				Rubidoux Boulevard Northbound				Tarragona Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	21	227	**4**	252	16	0	12	28	**1**	**136**	22	**159**	**5**	1	6	12	451
07:30 AM	27	231	1	259	**24**	0	13	**37**	0	87	18	105	5	1	**8**	**14**	415
07:45 AM	**46**	**232**	1	**279**	18	0	**18**	36	0	116	28	144	3	2	4	9	**468**
08:00 AM	44	200	4	248	22	**1**	13	36	1	116	**35**	152	1	**3**	6	10	446
Total Volume	138	890	10	1038	80	1	56	137	2	455	103	560	14	7	24	45	1780
% App. Total	13.3	85.7	1		58.4	0.7	40.9		0.4	81.2	18.4		31.1	15.6	53.3		
PHF	.750	.959	.625	.930	.833	.250	.778	.926	.500	.836	.736	.881	.700	.583	.750	.804	.951

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City of Jurupa Valley
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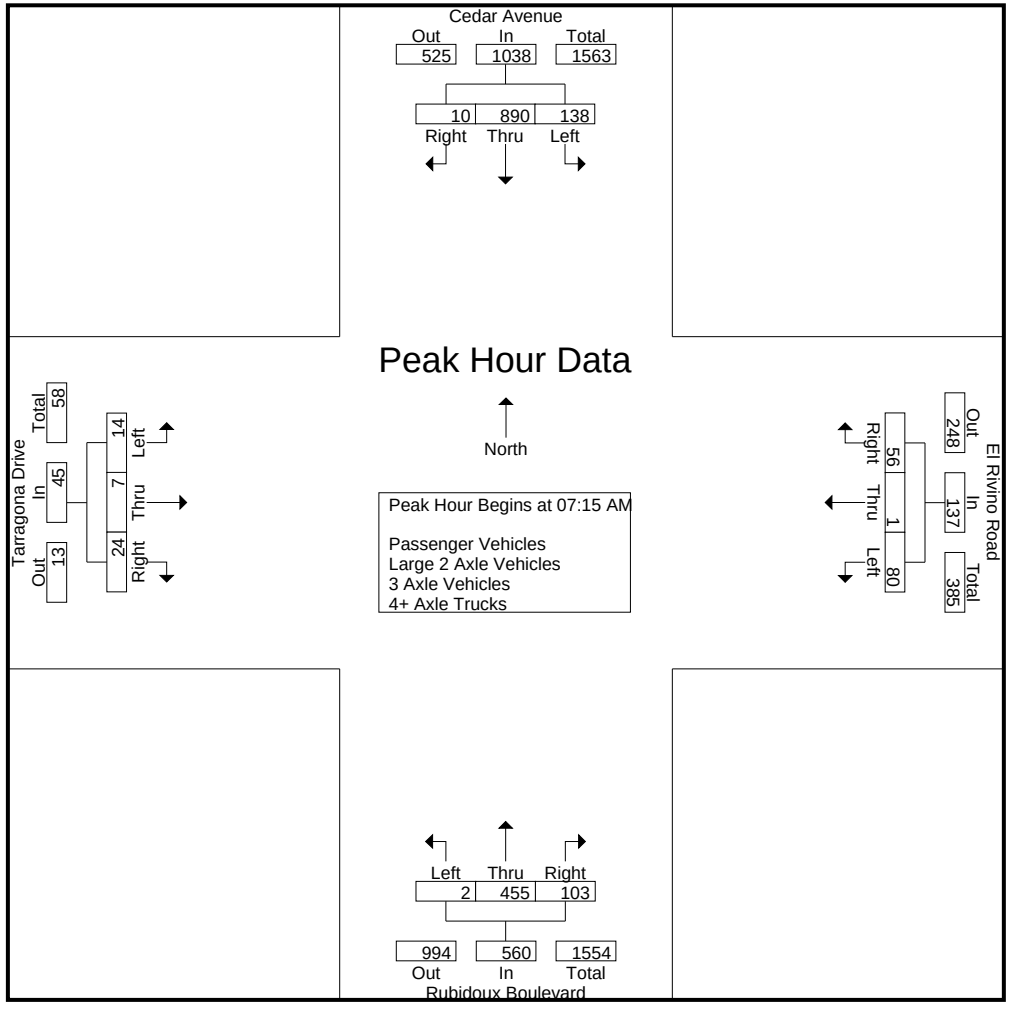
Weather: Clear

File Name : 15_JVY_Ced_El R AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 3



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City of Jurupa Valley
N/S: Cedar Avenue/Rubidoux Boulevard
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Weather: Clear

File Name : 15_JVY_Ced_El R AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				El Rivino Road Westbound				Rubidoux Boulevard Northbound				Tarragona Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				06:30 AM				08:00 AM				07:15 AM				
+0 mins.	21	227	**4**	252	**70**	0	**33**	**103**	1	**116**	35	152	**5**	1	6	12	
+15 mins.	27	231	1	259	23	0	18	41	**5**	116	34	155	5	1	**8**	**14**	
+30 mins.	**46**	**232**	1	**279**	32	0	18	50	3	90	**78**	**171**	3	2	4	9	
+45 mins.	44	200	4	248	16	0	12	28	1	85	75	161	1	**3**	6	10	
Total Volume	138	890	10	1038	141	0	81	222	10	407	222	639	14	7	24	45	
% App. Total	13.3	85.7	1		63.5	0	36.5		1.6	63.7	34.7		31.1	15.6	53.3		
PHF	.750	.959	.625	.930	.504	.000	.614	.539	.500	.877	.712	.934	.700	.583	.750	.804	

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City of Jurupa Valley
N/S: Cedar Avenue/Rubidoux Boulevard
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Weather: Clear

File Name : 15_JVY_Ced_El R AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Cedar Avenue Southbound					El Rivino Road Westbound					Rubidoux Boulevard Northbound					Tarragona Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	30	122	3	1	155	67	0	29	16	96	0	93	18	4	111	1	0	1	1	2	22	364	386
06:45 AM	38	173	1	0	212	19	0	17	12	36	1	91	24	4	116	0	1	6	3	7	19	371	390
Total	68	295	4	1	367	86	0	46	28	132	1	184	42	8	227	1	1	7	4	9	41	735	776
07:00 AM	27	180	1	0	208	23	0	12	9	35	0	74	24	2	98	1	0	2	0	3	11	344	355
07:15 AM	15	200	3	0	218	8	0	6	3	14	1	109	17	0	127	5	1	4	1	10	4	369	373
07:30 AM	22	212	0	0	234	16	0	11	6	27	0	76	15	1	91	5	0	8	3	13	10	365	375
07:45 AM	43	214	1	0	258	12	0	10	6	22	0	101	24	1	125	2	2	4	2	8	9	413	422
Total	107	806	5	0	918	59	0	39	24	98	1	360	80	4	441	13	3	18	6	34	34	1491	1525
08:00 AM	39	176	4	0	219	18	1	10	6	29	1	101	33	5	135	0	3	6	3	9	14	392	406
08:15 AM	25	141	2	0	168	11	0	16	7	27	5	102	29	2	136	0	0	0	0	0	9	331	340
08:30 AM	30	118	2	0	150	12	0	20	14	32	3	79	70	4	152	4	0	3	0	7	18	341	359
08:45 AM	43	122	1	1	166	24	0	22	12	46	0	70	72	5	142	6	2	3	2	11	20	365	385
Total	137	557	9	1	703	65	1	68	39	134	9	352	204	16	565	10	5	12	5	27	61	1429	1490
Grand Total	312	1658	18	2	1988	210	1	153	91	364	11	896	326	28	1233	24	9	37	15	70	136	3655	3791
Apprch %	15.7	83.4	0.9			57.7	0.3	42			0.9	72.7	26.4			34.3	12.9	52.9					
Total %	8.5	45.4	0.5		54.4	5.7	0	4.2		10	0.3	24.5	8.9		33.7	0.7	0.2	1		1.9	3.6	96.4	

	Cedar Avenue Southbound				El Rivino Road Westbound				Rubidoux Boulevard Northbound				Tarragona Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	15	200	3	218	8	0	6	14	**1**	**109**	17	127	**5**	1	4	10	369
07:30 AM	22	212	0	234	16	0	**11**	27	0	76	15	91	5	0	**8**	**13**	365
07:45 AM	**43**	**214**	1	**258**	12	0	10	22	0	101	24	125	2	2	4	8	**413**
08:00 AM	39	176	**4**	219	**18**	**1**	10	**29**	1	101	**33**	**135**	0	**3**	6	9	392
Total Volume	119	802	8	929	54	1	37	92	2	387	89	478	12	6	22	40	1539
% App. Total	12.8	86.3	0.9		58.7	1.1	40.2		0.4	81	18.6		30	15	55		
PHF	.692	.937	.500	.900	.750	.250	.841	.793	.500	.888	.674	.885	.600	.500	.688	.769	.932

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City of Jurupa Valley
N/S: Cedar Avenue/Rubidoux Boulevard
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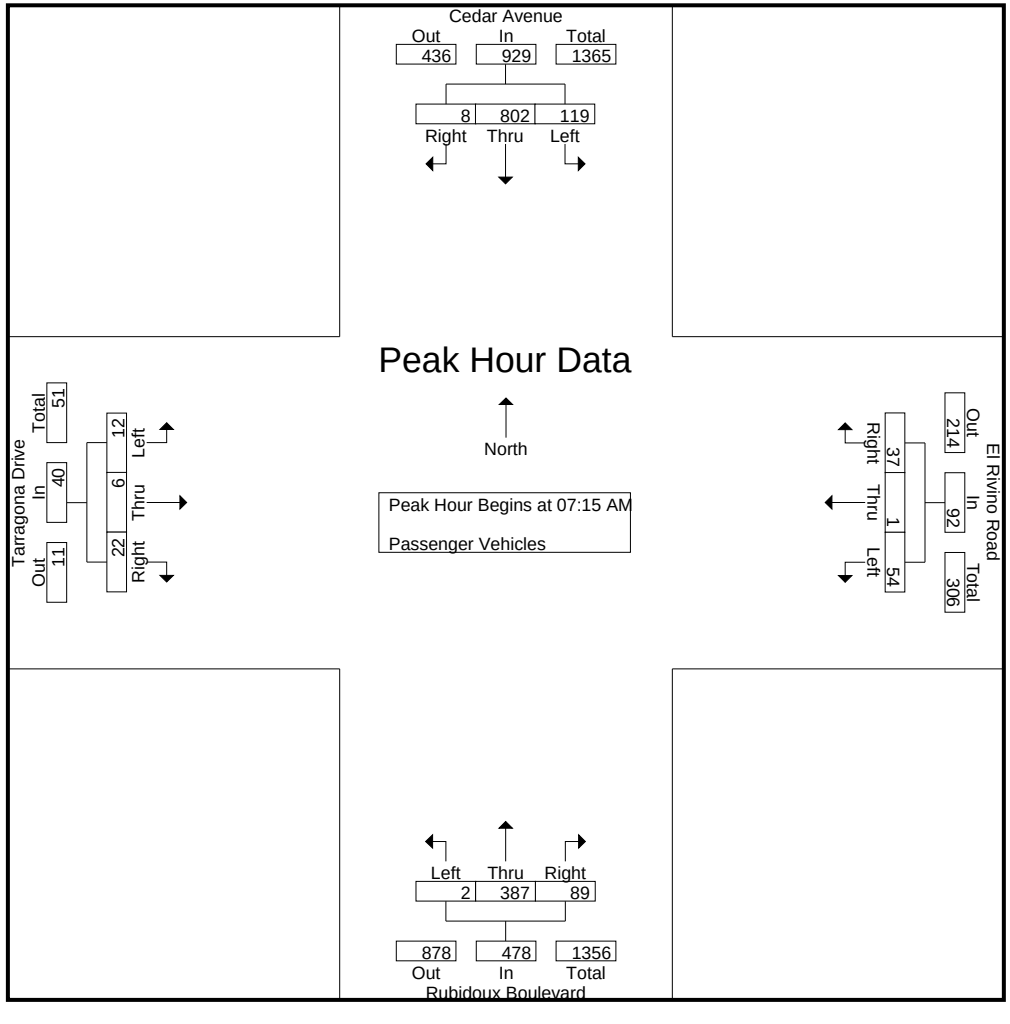
Weather: Clear

File Name : 15_JVY_Ced_El R AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Cedar Avenue/Rubidoux Boulevard
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File Name : 15_JVY_Ced_El R AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				El Rivino Road Westbound				Rubidoux Boulevard Northbound				Tarragona Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	15	200	3	218	8	0	6	14	**1**	**109**	17	127	**5**	1	4	10	
+15 mins.	22	212	0	234	16	0	**11**	27	0	76	15	91	5	0	**8**	**13**	
+30 mins.	**43**	**214**	1	**258**	12	0	10	22	0	101	24	125	2	2	4	8	
+45 mins.	39	176	**4**	219	**18**	**1**	10	**29**	1	101	**33**	**135**	0	**3**	6	9	
Total Volume	119	802	8	929	54	1	37	92	2	387	89	478	12	6	22	40	
% App. Total	12.8	86.3	0.9		58.7	1.1	40.2		0.4	81	18.6		30	15	55		
PHF	.692	.937	.500	.900	.750	.250	.841	.793	.500	.888	.674	.885	.600	.500	.688	.769	

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City of Jurupa Valley
N/S: Cedar Avenue/Rubidoux Boulevard
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Weather: Clear

File Name : 15_JVY_Ced_El R AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Cedar Avenue Southbound					El Rivino Road Westbound					Rubidoux Boulevard Northbound					Tarragona Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	4	5	0	0	9	0	0	0	0	0	0	4	3	1	7	0	0	0	0	0	1	16	17
06:45 AM	2	6	0	0	8	1	0	1	0	2	0	6	2	0	8	0	0	0	0	0	0	18	18
Total	6	11	0	0	17	1	0	1	0	2	0	10	5	1	15	0	0	0	0	0	1	34	35
07:00 AM	0	12	0	0	12	5	0	5	4	10	0	2	2	0	4	0	0	0	0	0	4	26	30
07:15 AM	3	8	1	0	12	8	0	4	3	12	0	12	1	0	13	0	0	2	0	2	3	39	42
07:30 AM	3	4	1	0	8	3	0	1	1	4	0	2	1	0	3	0	1	0	0	1	1	16	17
07:45 AM	0	5	0	0	5	4	0	2	2	6	0	5	1	0	6	1	0	0	0	1	2	18	20
Total	6	29	2	0	37	20	0	12	10	32	0	21	5	0	26	1	1	2	0	4	10	99	109
08:00 AM	0	12	0	0	12	2	0	0	0	2	0	4	1	0	5	0	0	0	0	0	0	19	19
08:15 AM	2	9	0	0	11	3	0	1	0	4	0	5	0	0	5	1	0	0	0	1	0	21	21
08:30 AM	2	10	0	0	12	3	0	3	3	6	0	3	1	0	4	0	1	1	1	2	4	24	28
08:45 AM	2	8	0	0	10	6	0	2	2	8	1	5	0	0	6	0	0	0	0	0	2	24	26
Total	6	39	0	0	45	14	0	6	5	20	1	17	2	0	20	1	1	1	1	3	6	88	94
Grand Total	18	79	2	0	99	35	0	19	15	54	1	48	12	1	61	2	2	3	1	7	17	221	238
Apprch %	18.2	79.8	2			64.8	0	35.2			1.6	78.7	19.7			28.6	28.6	42.9					
Total %	8.1	35.7	0.9		44.8	15.8	0	8.6		24.4	0.5	21.7	5.4		27.6	0.9	0.9	1.4		3.2	7.1	92.9	

	Cedar Avenue Southbound				El Rivino Road Westbound				Rubidoux Boulevard Northbound				Tarragona Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**3**	8	**1**	**12**	**8**	0	**4**	**12**	0	**12**	**1**	**13**	0	0	**2**	**2**	**39**
07:30 AM	3	4	1	8	3	0	1	4	0	2	1	3	0	**1**	0	1	16
07:45 AM	0	5	0	5	4	0	2	6	0	5	1	6	**1**	0	0	1	18
08:00 AM	0	**12**	0	12	2	0	0	2	0	4	1	5	0	0	0	0	19
Total Volume	6	29	2	37	17	0	7	24	0	23	4	27	1	1	2	4	92
% App. Total	16.2	78.4	5.4		70.8	0	29.2		0	85.2	14.8		25	25	50		
PHF	.500	.604	.500	.771	.531	.000	.438	.500	.000	.479	1.00	.519	.250	.250	.250	.500	.590

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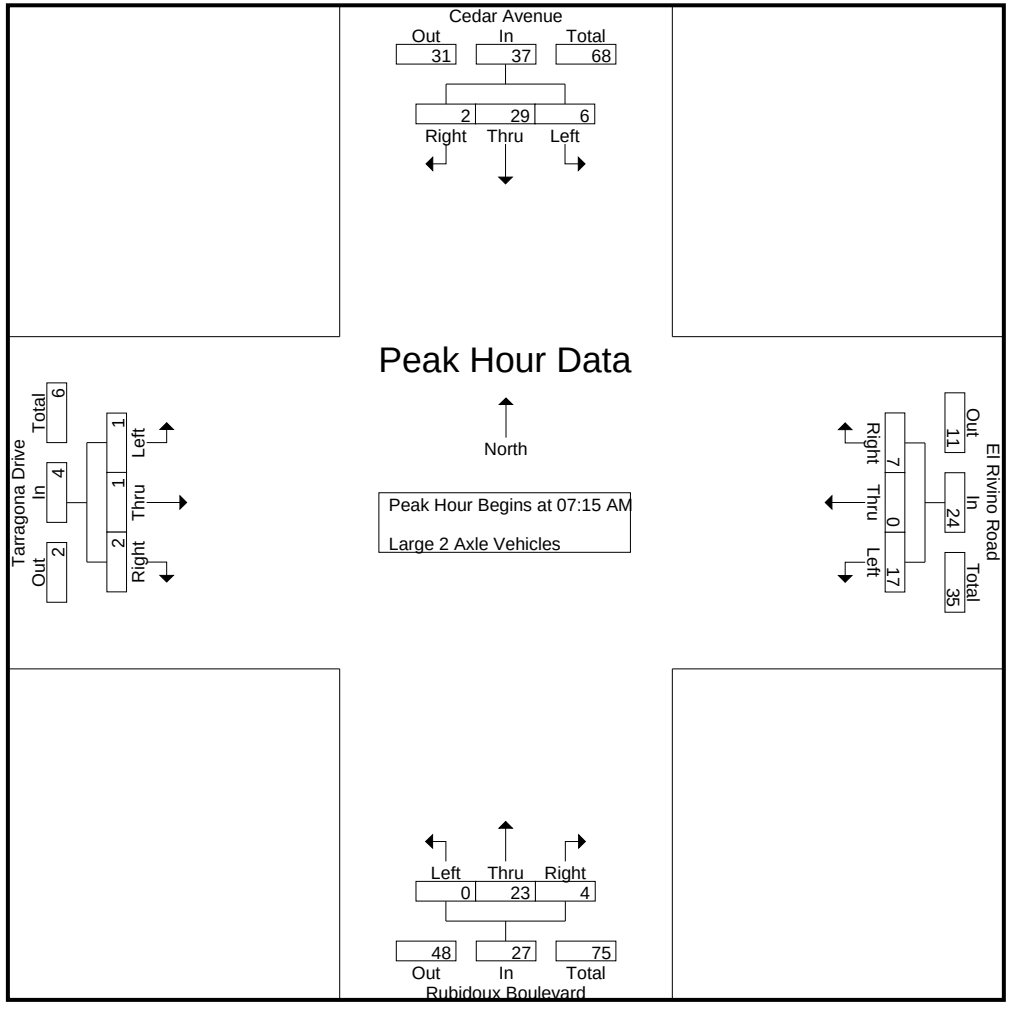
City of Jurupa Valley
N/S: Cedar Avenue/Rubidoux Boulevard
E/W: Tarragona Drive/El Rivino Road
Weather: Clear

File Name : 15_JVY_Ced_El R AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Cedar Avenue/Rubidoux Boulevard
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Weather: Clear

File Name : 15_JVY_Ced_El R AM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				El Rivino Road Westbound				Rubidoux Boulevard Northbound				Tarragona Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	**3**	8	**1**	**12**	**8**	0	**4**	**12**	0	**12**	**1**	**13**	0	0	**2**	**2**	
+15 mins.	3	4	1	8	3	0	1	4	0	2	1	3	0	**1**	0	1	
+30 mins.	0	5	0	5	4	0	2	6	0	5	1	6	**1**	0	0	1	
+45 mins.	0	**12**	0	12	2	0	0	2	0	4	1	5	0	0	0	0	
Total Volume	6	29	2	37	17	0	7	24	0	23	4	27	1	1	2	4	
% App. Total	16.2	78.4	5.4		70.8	0	29.2		0	85.2	14.8		25	25	50		
PHF	.500	.604	.500	.771	.531	.000	.438	.500	.000	.479	1.000	.519	.250	.250	.250	.500	

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City of Jurupa Valley
N/S: Cedar Avenue/Rubidoux Boulevard
E/W: Tarragona Drive/El Rivino Road
Weather: Clear

File Name : 15_JVY_Ced_El R AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Cedar Avenue Southbound					El Rivino Road Westbound					Rubidoux Boulevard Northbound					Tarragona Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	1	3	0	0	4	1	0	0	0	1	0	4	2	0	6	0	0	0	0	0	0	11	11
06:45 AM	3	7	0	0	10	0	0	0	0	0	0	3	2	0	5	0	0	0	0	0	0	15	15
Total	4	10	0	0	14	1	0	0	0	1	0	7	4	0	11	0	0	0	0	0	0	26	26
07:00 AM	0	2	0	0	2	2	0	1	1	3	0	2	0	0	2	0	0	0	0	0	1	7	8
07:15 AM	2	3	0	0	5	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	8	8
07:30 AM	1	7	0	0	8	2	0	0	0	2	0	2	0	0	2	0	0	0	0	0	0	12	12
07:45 AM	2	7	0	0	9	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	10	10
Total	5	19	0	0	24	5	0	1	1	6	0	6	1	0	7	0	0	0	0	0	1	37	38
08:00 AM	3	7	0	0	10	0	0	2	0	2	0	3	0	0	3	0	0	0	0	0	0	15	15
08:15 AM	1	7	0	0	8	2	0	0	0	2	0	2	1	0	3	0	0	0	0	0	0	13	13
08:30 AM	0	6	1	0	7	2	0	0	0	2	0	2	0	0	2	0	0	0	0	0	0	11	11
08:45 AM	0	1	0	0	1	0	0	1	0	1	0	3	1	0	4	0	0	0	0	0	0	6	6
Total	4	21	1	0	26	4	0	3	0	7	0	10	2	0	12	0	0	0	0	0	0	45	45
Grand Total	13	50	1	0	64	10	0	4	1	14	0	23	7	0	30	0	0	0	0	0	1	108	109
Apprch %	20.3	78.1	1.6			71.4	0	28.6			0	76.7	23.3			0	0	0					
Total %	12	46.3	0.9		59.3	9.3	0	3.7		13	0	21.3	6.5		27.8	0	0	0		0	0.9	99.1	

	Cedar Avenue Southbound				El Rivino Road Westbound				Rubidoux Boulevard Northbound				Tarragona Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	2	3	0	5	0	0	0	0	0	2	**1**	**3**	0	0	0	0	8
07:30 AM	1	**7**	0	8	**2**	0	0	**2**	0	2	0	2	0	0	0	0	12
07:45 AM	2	7	0	9	1	0	0	1	0	0	0	0	0	0	0	0	10
08:00 AM	**3**	7	0	**10**	0	0	**2**	2	0	**3**	0	3	0	0	0	0	**15**
Total Volume	8	24	0	32	3	0	2	5	0	7	1	8	0	0	0	0	45
% App. Total	25	75	0		60	0	40		0	87.5	12.5		0	0	0		
PHF	.667	.857	.000	.800	.375	.000	.250	.625	.000	.583	.250	.667	.000	.000	.000	.000	.750

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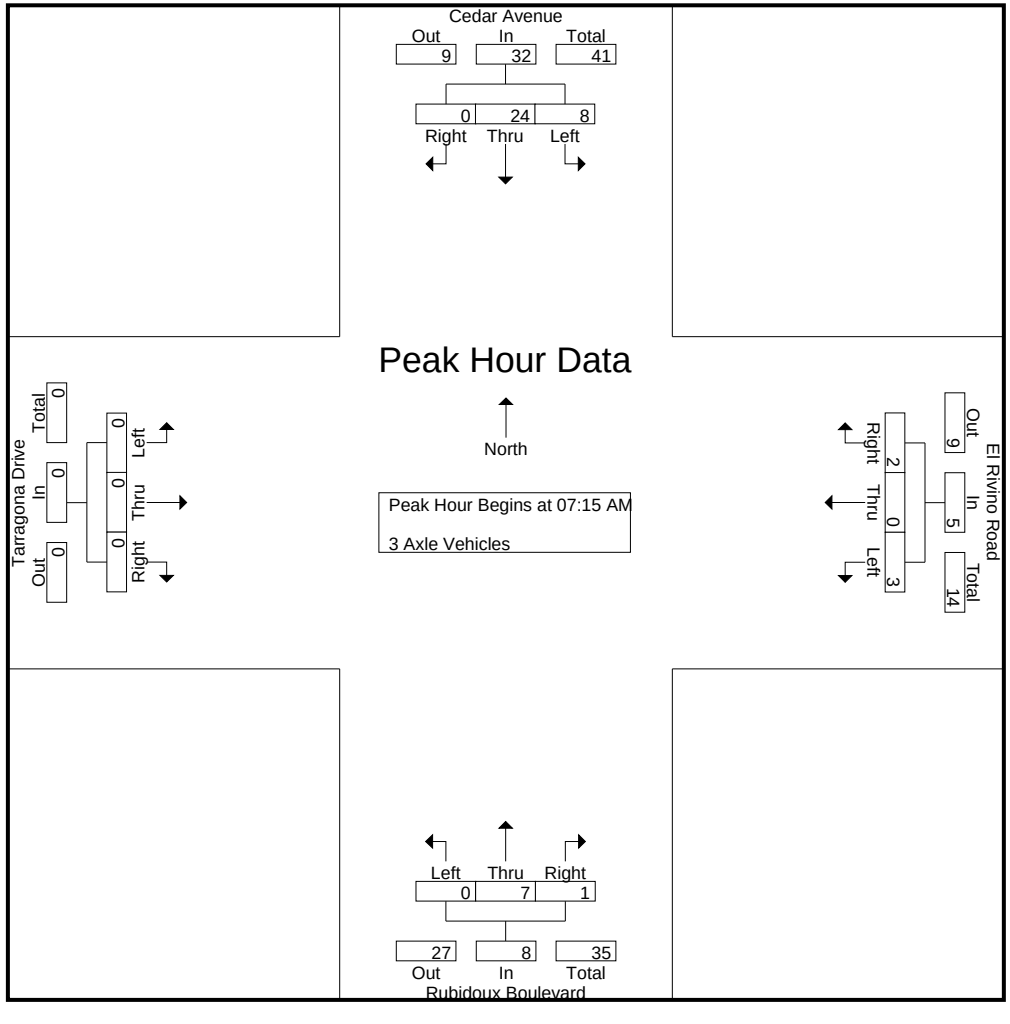
City of Jurupa Valley
N/S: Cedar Avenue/Rubidoux Boulevard
E/W: Tarragona Drive/El Rivino Road
Weather: Clear

File Name : 15_JVY_Ced_El R AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
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File Name : 15_JVY_Ced_El R AM
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Start Date : 10/4/2022

	Cedar Avenue Southbound				El Rivino Road Westbound				Rubidoux Boulevard Northbound				Tarragona Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	2	3	0	5	0	0	0	0	0	2	**1**	**3**	0	0	0	0	
+15 mins.	1	**7**	0	8	**2**	0	0	**2**	0	2	0	2	0	0	0	0	
+30 mins.	2	7	0	9	1	0	0	1	0	0	0	0	0	0	0	0	
+45 mins.	**3**	7	0	**10**	0	0	**2**	2	0	**3**	0	3	0	0	0	0	
Total Volume	8	24	0	32	3	0	2	5	0	7	1	8	0	0	0	0	
% App. Total	25	75	0		60	0	40		0	87.5	12.5		0	0	0		
PHF	.667	.857	.000	.800	.375	.000	.250	.625	.000	.583	.250	.667	.000	.000	.000	.000	

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City of Jurupa Valley
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Weather: Clear

File Name : 15_JVY_Ced_El R AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Cedar Avenue Southbound					El Rivino Road Westbound					Rubidoux Boulevard Northbound					Tarragona Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	5	0	0	5	2	0	4	3	6	0	3	1	0	4	0	0	0	0	0	3	15	18
06:45 AM	1	9	0	0	10	3	0	0	0	3	0	1	2	0	3	0	0	0	0	0	0	16	16
Total	1	14	0	0	15	5	0	4	3	9	0	4	3	0	7	0	0	0	0	0	3	31	34
07:00 AM	2	10	0	0	12	2	0	0	0	2	0	2	2	1	4	0	0	0	0	0	1	18	19
07:15 AM	1	16	0	0	17	0	0	2	1	2	0	13	3	0	16	0	0	0	0	0	1	35	36
07:30 AM	1	8	0	0	9	3	0	1	1	4	0	7	2	0	9	0	0	0	0	0	1	22	23
07:45 AM	1	6	0	0	7	1	0	6	1	7	0	10	3	0	13	0	0	0	0	0	1	27	28
Total	5	40	0	0	45	6	0	9	3	15	0	32	10	1	42	0	0	0	0	0	4	102	106
08:00 AM	2	5	0	0	7	2	0	1	0	3	0	8	1	0	9	1	0	0	0	1	0	20	20
08:15 AM	7	8	0	0	15	2	0	2	0	4	0	7	4	1	11	0	0	0	0	0	1	30	31
08:30 AM	7	8	0	0	15	1	0	0	0	1	0	6	7	2	13	0	0	0	0	0	2	29	31
08:45 AM	6	11	0	0	17	4	0	1	0	5	0	7	2	0	9	0	0	0	0	0	0	31	31
Total	22	32	0	0	54	9	0	4	0	13	0	28	14	3	42	1	0	0	0	1	3	110	113
Grand Total	28	86	0	0	114	20	0	17	6	37	0	64	27	4	91	1	0	0	0	1	10	243	253
Apprch %	24.6	75.4	0			54.1	0	45.9			0	70.3	29.7			100	0	0					
Total %	11.5	35.4	0		46.9	8.2	0	7		15.2	0	26.3	11.1		37.4	0.4	0	0		0.4	4	96	

	Cedar Avenue Southbound				El Rivino Road Westbound				Rubidoux Boulevard Northbound				Tarragona Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	**16**	0	**17**	0	0	2	2	0	**13**	**3**	**16**	0	0	0	0	**35**
07:30 AM	1	8	0	9	**3**	0	1	4	0	7	2	9	0	0	0	0	22
07:45 AM	1	6	0	7	1	0	**6**	**7**	0	10	3	13	0	0	0	0	27
08:00 AM	**2**	5	0	7	2	0	1	3	0	8	1	9	**1**	0	0	**1**	20
Total Volume	5	35	0	40	6	0	10	16	0	38	9	47	1	0	0	1	104
% App. Total	12.5	87.5	0		37.5	0	62.5		0	80.9	19.1		100	0	0		
PHF	.625	.547	.000	.588	.500	.000	.417	.571	.000	.731	.750	.734	.250	.000	.000	.250	.743

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File Name : 15_JVY_Ced_El R AM
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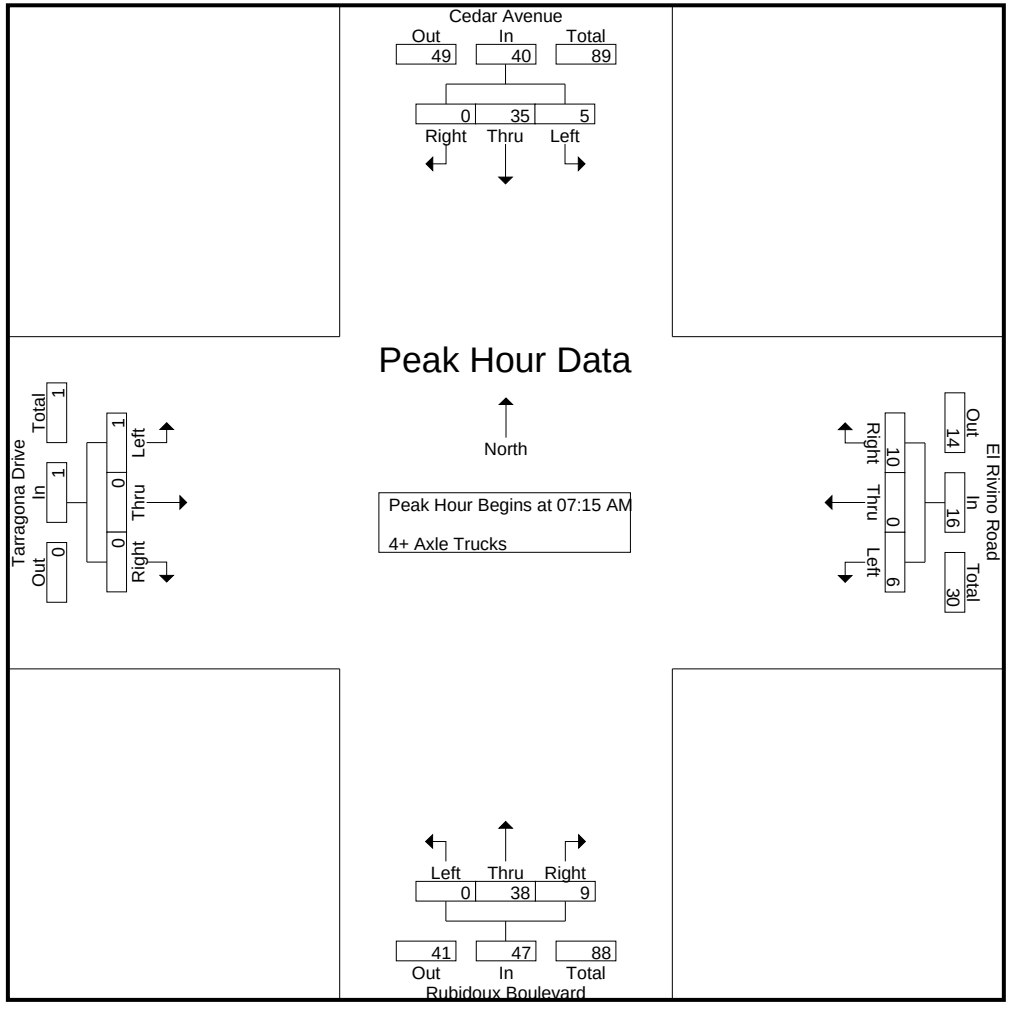

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Page No : 3

	Cedar Avenue Southbound				El Rivino Road Westbound				Rubidoux Boulevard Northbound				Tarragona Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	1	**16**	0	**17**	0	0	2	2	0	**13**	**3**	**16**	0	0	0	0	
+15 mins.	1	8	0	9	**3**	0	1	4	0	7	2	9	0	0	0	0	
+30 mins.	1	6	0	7	1	0	**6**	**7**	0	10	3	13	0	0	0	0	
+45 mins.	**2**	5	0	7	2	0	1	3	0	8	1	9	**1**	0	0	**1**	
Total Volume	5	35	0	40	6	0	10	16	0	38	9	47	1	0	0	1	
% App. Total	12.5	87.5	0		37.5	0	62.5		0	80.9	19.1		100	0	0		
PHF	.625	.547	.000	.588	.500	.000	.417	.571	.000	.731	.750	.734	.250	.000	.000	.250	

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Weather: Clear

File Name : 15_JVY_Ced_El R PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Cedar Avenue Southbound					El Rivino Road Westbound					Rubidoux Boulevard Northbound					Tarragona Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	25	153	6	0	184	32	1	67	20	100	2	155	33	0	190	1	2	2	1	5	21	479	500
03:45 PM	36	174	6	0	216	23	1	40	22	64	5	165	23	3	193	3	1	2	0	6	25	479	504
Total	61	327	12	0	400	55	2	107	42	164	7	320	56	3	383	4	3	4	1	11	46	958	1004
04:00 PM	34	173	6	1	213	41	0	34	18	75	1	176	21	3	198	3	0	2	2	5	24	491	515
04:15 PM	43	197	4	0	244	48	3	36	14	87	4	132	13	1	149	2	4	3	1	9	16	489	505
04:30 PM	34	164	2	0	200	40	0	39	18	79	3	139	22	2	164	3	0	2	0	5	20	448	468
04:45 PM	27	200	3	0	230	24	0	24	17	48	4	156	13	1	173	2	1	3	2	6	20	457	477
Total	138	734	15	1	887	153	3	133	67	289	12	603	69	7	684	10	5	10	5	25	80	1885	1965
05:00 PM	25	167	6	0	198	20	1	30	17	51	1	149	16	3	166	3	2	1	1	6	21	421	442
05:15 PM	33	188	2	0	223	34	1	22	14	57	5	183	19	2	207	2	4	3	2	9	18	496	514
05:30 PM	30	184	6	1	220	37	1	31	14	69	5	192	18	1	215	4	1	2	1	7	17	511	528
05:45 PM	27	156	3	0	186	25	0	20	13	45	1	127	13	2	141	2	1	1	0	4	15	376	391
Total	115	695	17	1	827	116	3	103	58	222	12	651	66	8	729	11	8	7	4	26	71	1804	1875
Grand Total	314	1756	44	2	2114	324	8	343	167	675	31	1574	191	18	1796	25	16	21	10	62	197	4647	4844
Apprch %	14.9	83.1	2.1			48	1.2	50.8			1.7	87.6	10.6			40.3	25.8	33.9					
Total %	6.8	37.8	0.9		45.5	7	0.2	7.4		14.5	0.7	33.9	4.1		38.6	0.5	0.3	0.5		1.3	4.1	95.9	
Passenger Vehicles	267	1632	43		1944	261	8	315		738	28	1447	116		1601	25	14	19		68	0	0	4351
% Passenger Vehicles	85	92.9	97.7	100	91.9	80.6	100	91.8	92.2	87.6	90.3	91.9	60.7	55.6	88.3	100	87.5	90.5	100	94.4	0	0	89.8
Large 2 Axle Vehicles	15	56	1		72	14	0	14		35	3	51	28		84	0	2	2		4	0	0	195
% Large 2 Axle Vehicles	4.8	3.2	2.3	0	3.4	4.3	0	4.1	4.2	4.2	9.7	3.2	14.7	11.1	4.6	0	12.5	9.5	0	5.6	0	0	4
3 Axle Vehicles	19	21	0		40	18	0	2		20	0	23	15		40	0	0	0		0	0	0	100
% 3 Axle Vehicles	6.1	1.2	0	0	1.9	5.6	0	0.6	0	2.4	0	1.5	7.9	11.1	2.2	0	0	0	0	0	0	0	2.1
4+ Axle Trucks	13	47	0		60	31	0	12		49	0	53	32		89	0	0	0		0	0	0	198
% 4+ Axle Trucks	4.1	2.7	0	0	2.8	9.6	0	3.5	3.6	5.8	0	3.4	16.8	22.2	4.9	0	0	0	0	0	0	0	4.1

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City of Jurupa Valley
N/S: Cedar Avenue/Rubidoux Boulevard
E/W: Tarragona Drive/El Rivino Road
Weather: Clear

File Name : 15_JVY_Ced_El R PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				El Rivino Road Westbound				Rubidoux Boulevard Northbound				Tarragona Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	25	153	**6**	184	32	1	**67**	**100**	2	155	**33**	190	1	2	2	5	479
03:45 PM	36	174	6	216	23	1	40	64	**5**	165	23	193	**3**	1	2	6	479
04:00 PM	34	173	6	213	41	0	34	75	1	**176**	21	**198**	3	0	2	5	**491**
04:15 PM	**43**	**197**	4	**244**	**48**	**3**	36	87	4	132	13	149	2	**4**	**3**	**9**	489
Total Volume	138	697	22	857	144	5	177	326	12	628	90	730	9	7	9	25	1938
% App. Total	16.1	81.3	2.6		44.2	1.5	54.3		1.6	86	12.3		36	28	36		
PHF	.802	.885	.917	.878	.750	.417	.660	.815	.600	.892	.682	.922	.750	.438	.750	.694	.987

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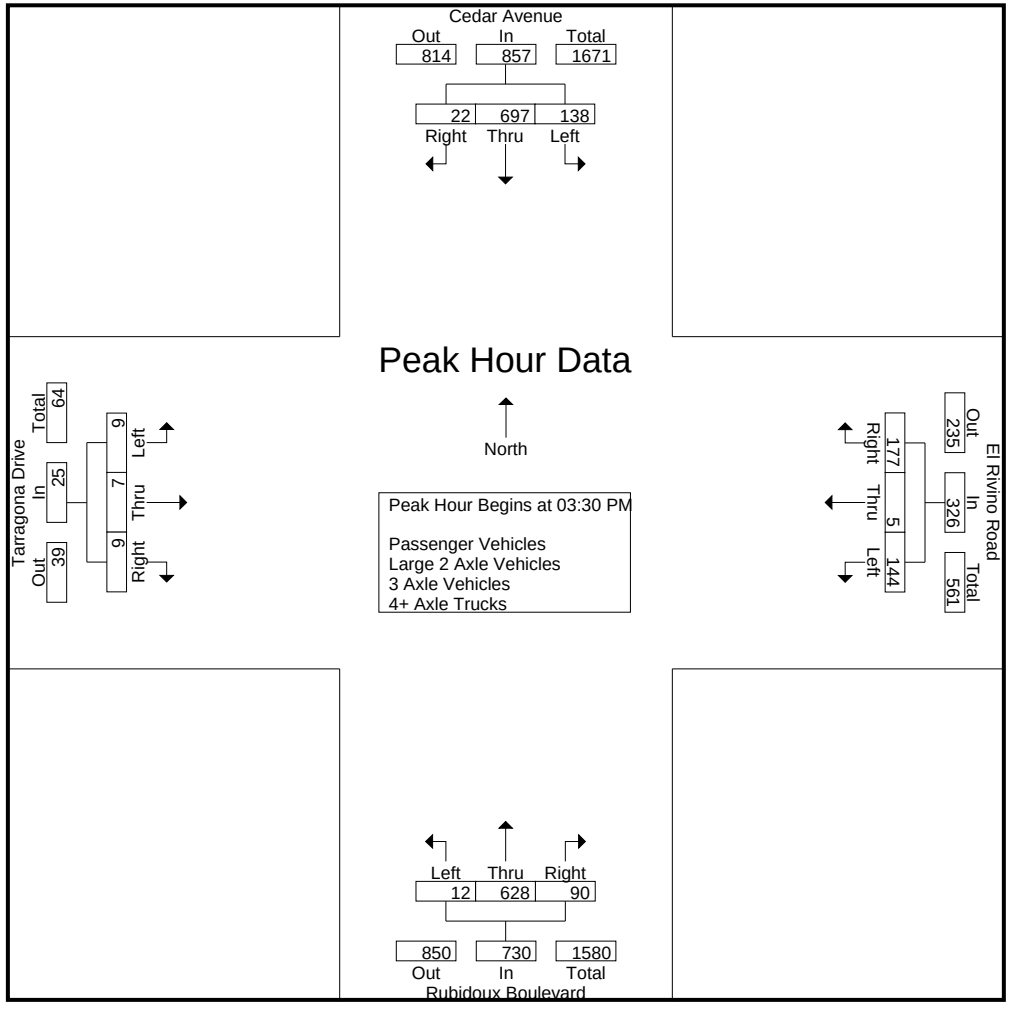
Weather: Clear

File Name : 15_JVY_Ced_El R PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 3



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City of Jurupa Valley
N/S: Cedar Avenue/Rubidoux Boulevard
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Weather: Clear

File Name : 15_JVY_Ced_El R PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				El Rivino Road Westbound				Rubidoux Boulevard Northbound				Tarragona Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				03:30 PM				04:45 PM				04:45 PM				
+0 mins.	34	173	**6**	213	32	1	**67**	**100**	4	156	13	173	2	1	**3**	6	
+15 mins.	**43**	197	4	**244**	23	1	40	64	1	149	16	166	3	2	1	6	
+30 mins.	34	164	2	200	41	0	34	75	**5**	183	**19**	207	2	**4**	3	**9**	
+45 mins.	27	**200**	3	230	**48**	**3**	36	87	5	**192**	18	**215**	**4**	1	2	7	
Total Volume	138	734	15	887	144	5	177	326	15	680	66	761	11	8	9	28	
% App. Total	15.6	82.8	1.7		44.2	1.5	54.3		2	89.4	8.7		39.3	28.6	32.1		
PHF	.802	.918	.625	.909	.750	.417	.660	.815	.750	.885	.868	.885	.688	.500	.750	.778	

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City of Jurupa Valley
N/S: Cedar Avenue/Rubidoux Boulevard
E/W: Tarragona Drive/El Rivino Road
Weather: Clear

File Name : 15_JVY_Ced_El R PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Cedar Avenue Southbound					El Rivino Road Westbound					Rubidoux Boulevard Northbound					Tarragona Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	17	140	6	0	163	23	1	61	19	85	2	132	16	0	150	1	2	2	1	5	20	403	423
03:45 PM	32	156	6	0	194	20	1	40	22	61	5	146	15	1	166	3	1	0	0	4	23	425	448
Total	49	296	12	0	357	43	2	101	41	146	7	278	31	1	316	4	3	2	1	9	43	828	871
04:00 PM	26	162	5	1	193	31	0	26	13	57	1	163	13	2	177	3	0	2	2	5	18	432	450
04:15 PM	39	173	4	0	216	42	3	33	13	78	4	125	6	1	135	2	4	3	1	9	15	438	453
04:30 PM	31	151	2	0	184	32	0	38	18	70	2	131	15	1	148	3	0	2	0	5	19	407	426
04:45 PM	22	196	3	0	221	21	0	23	16	44	4	143	9	1	156	2	1	3	2	6	19	427	446
Total	118	682	14	1	814	126	3	120	60	249	11	562	43	5	616	10	5	10	5	25	71	1704	1775
05:00 PM	21	154	6	0	181	16	1	27	15	44	0	144	11	1	155	3	2	1	1	6	17	386	403
05:15 PM	27	177	2	0	206	24	1	18	12	43	5	163	13	1	181	2	2	3	2	7	15	437	452
05:30 PM	27	178	6	1	211	33	1	30	14	64	4	182	9	0	195	4	1	2	1	7	16	477	493
05:45 PM	25	145	3	0	173	19	0	19	12	38	1	118	9	2	128	2	1	1	0	4	14	343	357
Total	100	654	17	1	771	92	3	94	53	189	10	607	42	4	659	11	6	7	4	24	62	1643	1705
Grand Total	267	1632	43	2	1942	261	8	315	154	584	28	1447	116	10	1591	25	14	19	10	58	176	4175	4351
Apprch %	13.7	84	2.2			44.7	1.4	53.9			1.8	90.9	7.3			43.1	24.1	32.8					
Total %	6.4	39.1	1		46.5	6.3	0.2	7.5		14	0.7	34.7	2.8		38.1	0.6	0.3	0.5		1.4	4	96	

	Cedar Avenue Southbound				El Rivino Road Westbound				Rubidoux Boulevard Northbound				Tarragona Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	17	140	**6**	163	23	1	**61**	**85**	2	132	**16**	150	1	2	2	5	403
03:45 PM	32	156	6	194	20	1	40	61	**5**	146	15	166	**3**	1	0	4	425
04:00 PM	26	162	5	193	31	0	26	57	1	**163**	13	**177**	3	0	2	5	432
04:15 PM	**39**	**173**	4	**216**	**42**	**3**	33	78	4	125	6	135	2	**4**	**3**	**9**	**438**
Total Volume	114	631	21	766	116	5	160	281	12	566	50	628	9	7	7	23	1698
% App. Total	14.9	82.4	2.7		41.3	1.8	56.9		1.9	90.1	8		39.1	30.4	30.4		
PHF	.731	.912	.875	.887	.690	.417	.656	.826	.600	.868	.781	.887	.750	.438	.583	.639	.969

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City of Jurupa Valley
N/S: Cedar Avenue/Rubidoux Boulevard
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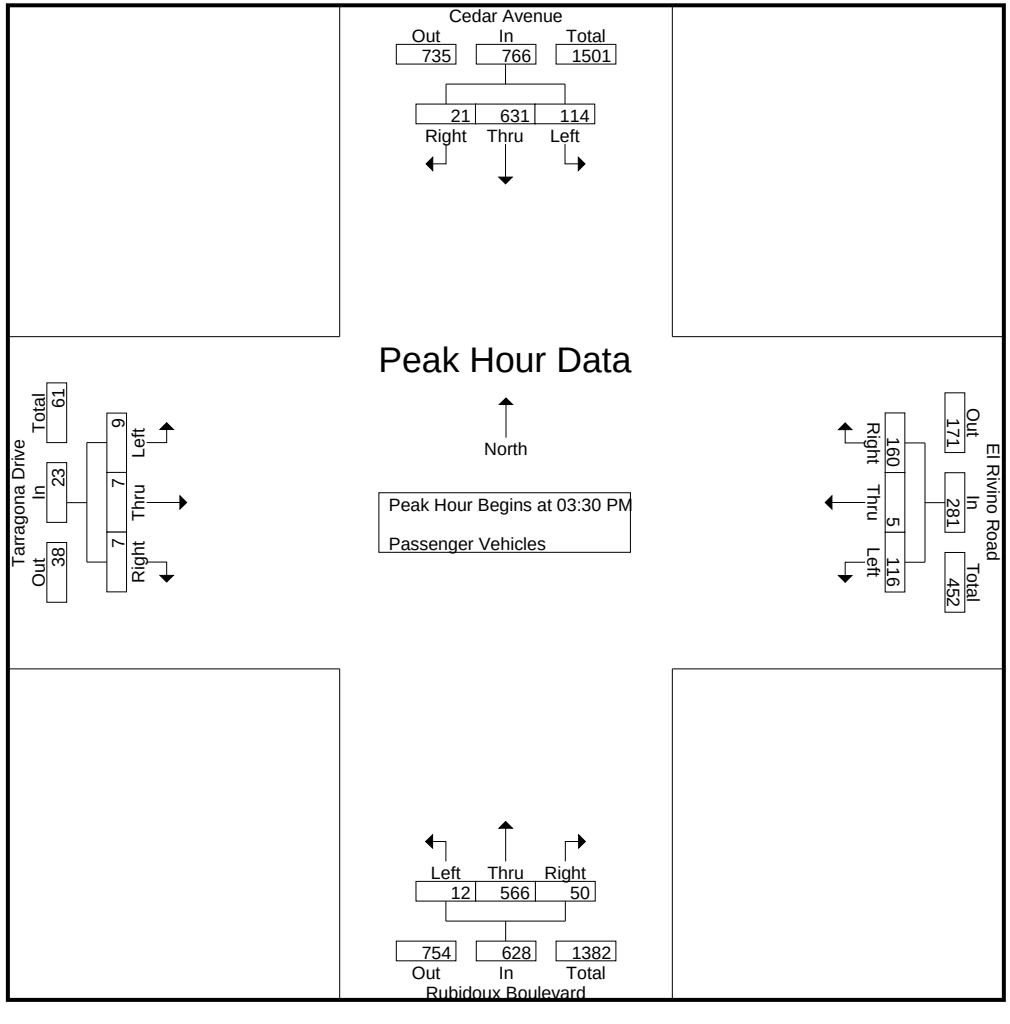
Weather: Clear

File Name : 15_JVY_Ced_El R PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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File Name : 15_JVY_Ced_El R PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				El Rivino Road Westbound				Rubidoux Boulevard Northbound				Tarragona Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	03:30 PM				03:30 PM				03:30 PM				03:30 PM				
+0 mins.	17	140	**6**	163	23	1	**61**	**85**	2	132	**16**	150	1	2	2	5	
+15 mins.	32	156	6	194	20	1	40	61	**5**	146	15	166	**3**	1	0	4	
+30 mins.	26	162	5	193	31	0	26	57	1	**163**	13	**177**	3	0	2	5	
+45 mins.	**39**	**173**	4	**216**	**42**	**3**	33	78	4	125	6	135	2	**4**	**3**	**9**	
Total Volume	114	631	21	766	116	5	160	281	12	566	50	628	9	7	7	23	
% App. Total	14.9	82.4	2.7		41.3	1.8	56.9		1.9	90.1	8		39.1	30.4	30.4		
PHF	.731	.912	.875	.887	.690	.417	.656	.826	.600	.868	.781	.887	.750	.438	.583	.639	

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City of Jurupa Valley
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Weather: Clear

File Name : 15_JVY_Ced_El R PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Cedar Avenue Southbound					El Rivino Road Westbound					Rubidoux Boulevard Northbound					Tarragona Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	2	4	0	0	6	3	0	4	0	7	0	10	6	0	16	0	0	0	0	0	0	29	29
03:45 PM	2	9	0	0	11	1	0	0	0	1	0	6	3	1	9	0	0	2	0	2	1	23	24
Total	4	13	0	0	17	4	0	4	0	8	0	16	9	1	25	0	0	2	0	2	1	52	53
04:00 PM	5	3	1	0	9	2	0	6	4	8	0	4	3	0	7	0	0	0	0	0	4	24	28
04:15 PM	0	12	0	0	12	0	0	1	0	1	0	4	2	0	6	0	0	0	0	0	0	19	19
04:30 PM	1	8	0	0	9	1	0	0	0	1	1	2	2	0	5	0	0	0	0	0	0	15	15
04:45 PM	3	2	0	0	5	1	0	0	0	1	0	4	2	0	6	0	0	0	0	0	0	12	12
Total	9	25	1	0	35	4	0	7	4	11	1	14	9	0	24	0	0	0	0	0	4	70	74
05:00 PM	1	5	0	0	6	0	0	1	1	1	1	3	3	1	7	0	0	0	0	0	2	14	16
05:15 PM	0	3	0	0	3	3	0	1	1	4	0	10	1	0	11	0	2	0	0	2	1	20	21
05:30 PM	0	4	0	0	4	2	0	0	0	2	1	5	4	0	10	0	0	0	0	0	0	16	16
05:45 PM	1	6	0	0	7	1	0	1	1	2	0	3	2	0	5	0	0	0	0	0	1	14	15
Total	2	18	0	0	20	6	0	3	3	9	2	21	10	1	33	0	2	0	0	2	4	64	68
Grand Total	15	56	1	0	72	14	0	14	7	28	3	51	28	2	82	0	2	2	0	4	9	186	195
Apprch %	20.8	77.8	1.4			50	0	50			3.7	62.2	34.1			0	50	50					
Total %	8.1	30.1	0.5		38.7	7.5	0	7.5		15.1	1.6	27.4	15.1		44.1	0	1.1	1.1		2.2	4.6	95.4	

	Cedar Avenue Southbound				El Rivino Road Westbound				Rubidoux Boulevard Northbound				Tarragona Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	2	4	0	6	**3**	0	4	7	0	**10**	**6**	**16**	0	0	0	0	**29**
03:45 PM	2	9	0	11	1	0	0	1	0	6	3	9	0	0	**2**	**2**	23
04:00 PM	**5**	3	**1**	9	2	0	**6**	**8**	0	4	3	7	0	0	0	0	24
04:15 PM	0	**12**	0	**12**	0	0	1	1	0	4	2	6	0	0	0	0	19
Total Volume	9	28	1	38	6	0	11	17	0	24	14	38	0	0	2	2	95
% App. Total	23.7	73.7	2.6		35.3	0	64.7		0	63.2	36.8		0	0	100		
PHF	.450	.583	.250	.792	.500	.000	.458	.531	.000	.600	.583	.594	.000	.000	.250	.250	.819

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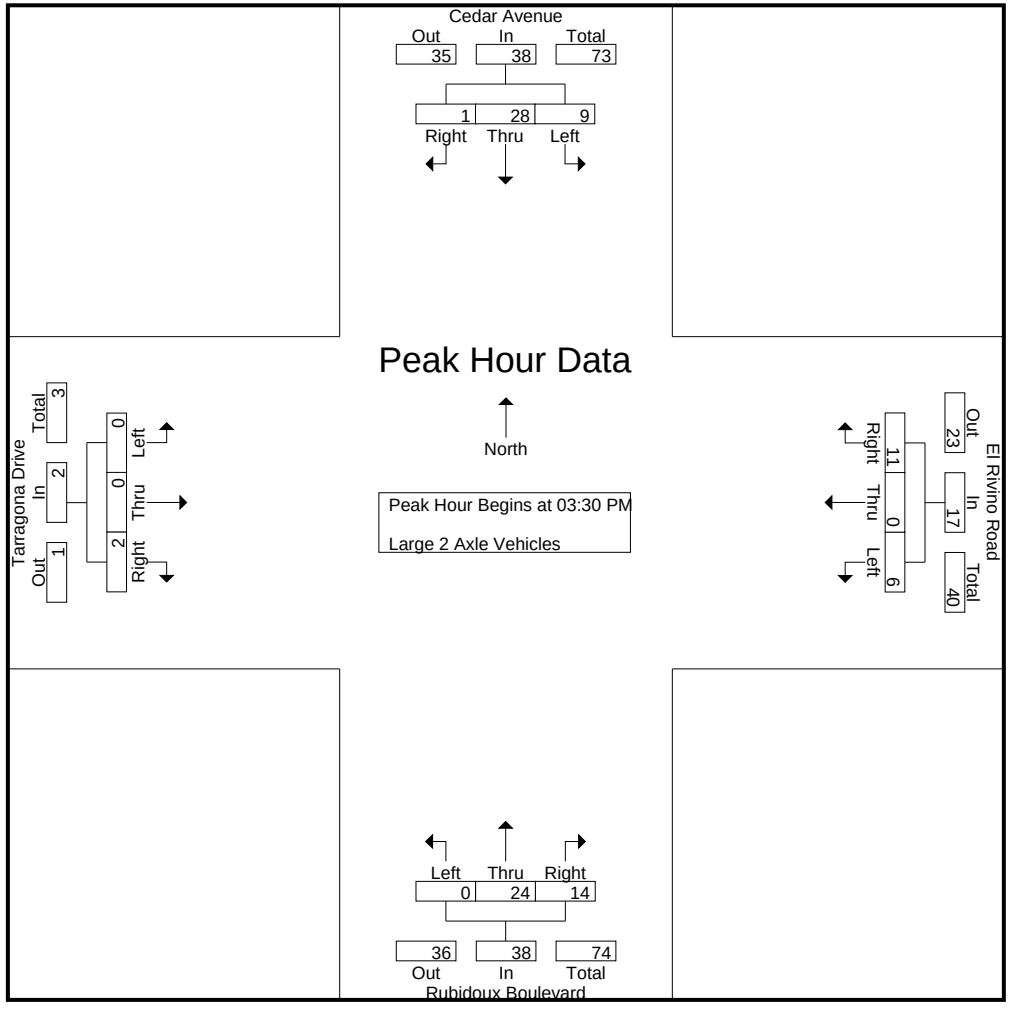
File Name : 15_JVY_Ced_El R PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
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File Name : 15_JVY_Ced_El R PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				El Rivino Road Westbound				Rubidoux Boulevard Northbound				Tarragona Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	03:30 PM				03:30 PM				03:30 PM				03:30 PM				
+0 mins.	2	4	0	6	**3**	0	4	7	0	**10**	**6**	**16**	0	0	0	0	
+15 mins.	2	9	0	11	1	0	0	1	0	6	3	9	0	0	**2**	**2**	
+30 mins.	**5**	3	**1**	9	2	0	**6**	**8**	0	4	3	7	0	0	0	0	
+45 mins.	0	**12**	0	**12**	0	0	1	1	0	4	2	6	0	0	0	0	
Total Volume	9	28	1	38	6	0	11	17	0	24	14	38	0	0	2	2	
% App. Total	23.7	73.7	2.6		35.3	0	64.7		0	63.2	36.8		0	0	100		
PHF	.450	.583	.250	.792	.500	.000	.458	.531	.000	.600	.583	.594	.000	.000	.250	.250	

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City of Jurupa Valley
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Weather: Clear

File Name : 15_JVY_Ced_El R PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Cedar Avenue Southbound					El Rivino Road Westbound					Rubidoux Boulevard Northbound					Tarragona Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	2	2	0	0	4	3	0	0	0	3	0	5	3	0	8	0	0	0	0	0	0	15	15
03:45 PM	0	2	0	0	2	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	5	5
Total	2	4	0	0	6	3	0	0	0	3	0	7	4	0	11	0	0	0	0	0	0	20	20
04:00 PM	2	1	0	0	3	2	0	0	0	2	0	5	2	0	7	0	0	0	0	0	0	12	12
04:15 PM	2	4	0	0	6	3	0	1	0	4	0	2	1	0	3	0	0	0	0	0	0	13	13
04:30 PM	2	0	0	0	2	1	0	0	0	1	0	3	1	0	4	0	0	0	0	0	0	7	7
04:45 PM	2	1	0	0	3	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	5	5
Total	8	6	0	0	14	6	0	1	0	7	0	11	5	0	16	0	0	0	0	0	0	37	37
05:00 PM	3	2	0	0	5	3	0	0	0	3	0	0	1	0	1	0	0	0	0	0	0	9	9
05:15 PM	4	4	0	0	8	3	0	0	0	3	0	2	2	1	4	0	0	0	0	0	1	15	16
05:30 PM	1	1	0	0	2	2	0	1	0	3	0	2	2	1	4	0	0	0	0	0	1	9	10
05:45 PM	1	4	0	0	5	1	0	0	0	1	0	1	1	0	2	0	0	0	0	0	0	8	8
Total	9	11	0	0	20	9	0	1	0	10	0	5	6	2	11	0	0	0	0	0	2	41	43
Grand Total	19	21	0	0	40	18	0	2	0	20	0	23	15	2	38	0	0	0	0	0	2	98	100
Apprch %	47.5	52.5	0			90	0	10			0	60.5	39.5			0	0	0					
Total %	19.4	21.4	0		40.8	18.4	0	2		20.4	0	23.5	15.3		38.8	0	0	0		0	2	98	

	Cedar Avenue Southbound				El Rivino Road Westbound				Rubidoux Boulevard Northbound				Tarragona Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	**2**	2	0	4	**3**	0	0	3	0	**5**	**3**	**8**	0	0	0	0	**15**
03:45 PM	0	2	0	2	0	0	0	0	0	2	1	3	0	0	0	0	5
04:00 PM	2	1	0	3	2	0	0	2	0	5	2	7	0	0	0	0	12
04:15 PM	2	**4**	0	**6**	3	0	**1**	**4**	0	2	1	3	0	0	0	0	13
Total Volume	6	9	0	15	8	0	1	9	0	14	7	21	0	0	0	0	45
% App. Total	40	60	0		88.9	0	11.1		0	66.7	33.3		0	0	0		
PHF	.750	.563	.000	.625	.667	.000	.250	.563	.000	.700	.583	.656	.000	.000	.000	.000	.750

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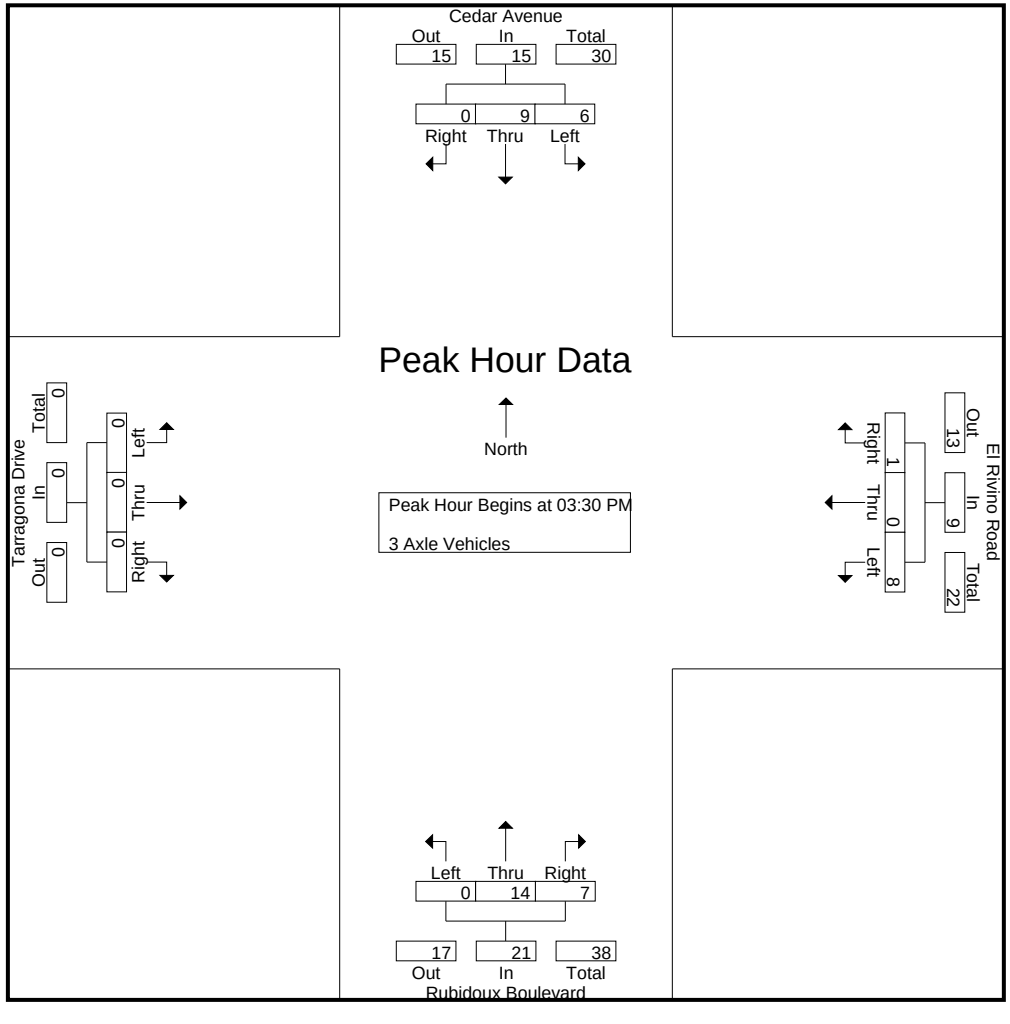
City of Jurupa Valley
N/S: Cedar Avenue/Rubidoux Boulevard
E/W: Tarragona Drive/El Rivino Road
Weather: Clear

File Name : 15_JVY_Ced_El R PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Cedar Avenue/Rubidoux Boulevard
E/W: Tarragona Drive/El Rivino Road
Weather: Clear

File Name : 15_JVY_Ced_El R PM
Site Code : 05122894
Start Date : 10/4/2022

	Cedar Avenue Southbound				El Rivino Road Westbound				Rubidoux Boulevard Northbound				Tarragona Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	03:30 PM				03:30 PM				03:30 PM				03:30 PM				
+0 mins.	**2**	2	0	4	**3**	0	0	3	0	**5**	**3**	**8**	0	0	0	0	
+15 mins.	0	2	0	2	0	0	0	0	0	2	1	3	0	0	0	0	
+30 mins.	2	1	0	3	2	0	0	2	0	5	2	7	0	0	0	0	
+45 mins.	2	**4**	0	**6**	3	0	**1**	**4**	0	2	1	3	0	0	0	0	
Total Volume	6	9	0	15	8	0	1	9	0	14	7	21	0	0	0	0	
% App. Total	40	60	0		88.9	0	11.1		0	66.7	33.3		0	0	0		
PHF	.750	.563	.000	.625	.667	.000	.250	.563	.000	.700	.583	.656	.000	.000	.000	.000	

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City of Jurupa Valley
N/S: Cedar Avenue/Rubidoux Boulevard
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Weather: Clear

File Name : 15_JVY_Ced_El R PM
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Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Cedar Avenue Southbound					El Rivino Road Westbound					Rubidoux Boulevard Northbound					Tarragona Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	4	7	0	0	11	3	0	2	1	5	0	8	8	0	16	0	0	0	0	0	1	32	33
03:45 PM	2	7	0	0	9	2	0	0	0	2	0	11	4	1	15	0	0	0	0	0	1	26	27
Total	6	14	0	0	20	5	0	2	1	7	0	19	12	1	31	0	0	0	0	0	2	58	60
04:00 PM	1	7	0	0	8	6	0	2	1	8	0	4	3	1	7	0	0	0	0	0	2	23	25
04:15 PM	2	8	0	0	10	3	0	1	1	4	0	1	4	0	5	0	0	0	0	0	1	19	20
04:30 PM	0	5	0	0	5	6	0	1	0	7	0	3	4	1	7	0	0	0	0	0	1	19	20
04:45 PM	0	1	0	0	1	2	0	1	1	3	0	8	1	0	9	0	0	0	0	0	1	13	14
Total	3	21	0	0	24	17	0	5	3	22	0	16	12	2	28	0	0	0	0	0	5	74	79
05:00 PM	0	6	0	0	6	1	0	2	1	3	0	2	1	1	3	0	0	0	0	0	2	12	14
05:15 PM	2	4	0	0	6	4	0	3	1	7	0	8	3	0	11	0	0	0	0	0	1	24	25
05:30 PM	2	1	0	0	3	0	0	0	0	0	0	3	3	0	6	0	0	0	0	0	0	9	9
05:45 PM	0	1	0	0	1	4	0	0	0	4	0	5	1	0	6	0	0	0	0	0	0	11	11
Total	4	12	0	0	16	9	0	5	2	14	0	18	8	1	26	0	0	0	0	0	3	56	59
Grand Total	13	47	0	0	60	31	0	12	6	43	0	53	32	4	85	0	0	0	0	0	10	188	198
Apprch %	21.7	78.3	0			72.1	0	27.9			0	62.4	37.6			0	0	0					
Total %	6.9	25	0		31.9	16.5	0	6.4		22.9	0	28.2	17		45.2	0	0	0		0	5.1	94.9	

	Cedar Avenue Southbound				El Rivino Road Westbound				Rubidoux Boulevard Northbound				Tarragona Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	**4**	7	0	**11**	3	0	**2**	5	0	8	**8**	**16**	0	0	0	0	**32**
03:45 PM	2	7	0	9	2	0	0	2	0	**11**	4	15	0	0	0	0	26
04:00 PM	1	7	0	8	**6**	0	2	**8**	0	4	3	7	0	0	0	0	23
04:15 PM	2	**8**	0	10	3	0	1	4	0	1	4	5	0	0	0	0	19
Total Volume	9	29	0	38	14	0	5	19	0	24	19	43	0	0	0	0	100
% App. Total	23.7	76.3	0		73.7	0	26.3		0	55.8	44.2		0	0	0		
PHF	.563	.906	.000	.864	.583	.000	.625	.594	.000	.545	.594	.672	.000	.000	.000	.000	.781

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File Name : 15_JVY_Ced_El R PM
Site Code : 05122894
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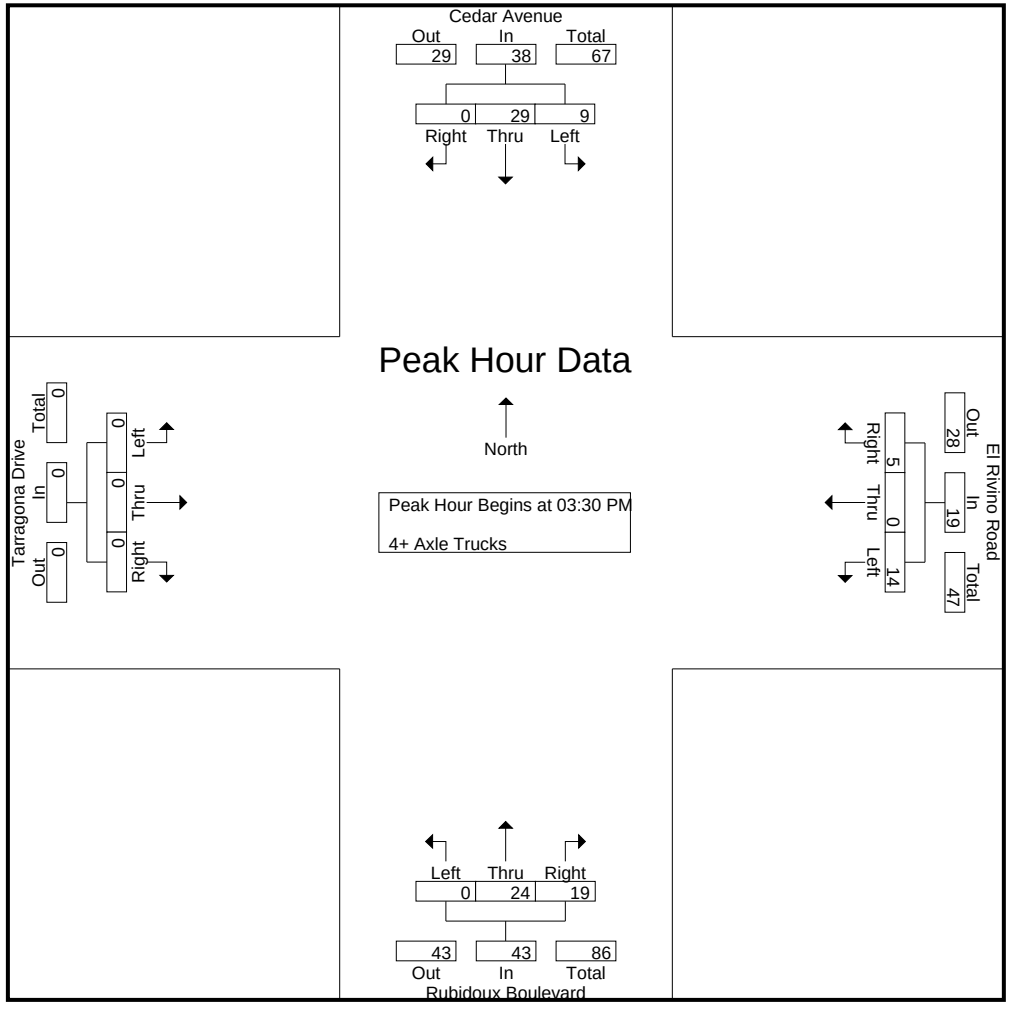

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	Cedar Avenue Southbound				El Rivino Road Westbound				Rubidoux Boulevard Northbound				Tarragona Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	03:30 PM				03:30 PM				03:30 PM				03:30 PM				
+0 mins.	**4**	7	0	**11**	3	0	**2**	5	0	8	**8**	**16**	0	0	0	0	
+15 mins.	2	7	0	9	2	0	0	2	0	**11**	4	15	0	0	0	0	
+30 mins.	1	7	0	8	**6**	0	2	**8**	0	4	3	7	0	0	0	0	
+45 mins.	2	**8**	0	10	3	0	1	4	0	1	4	5	0	0	0	0	
Total Volume	9	29	0	38	14	0	5	19	0	24	19	43	0	0	0	0	
% App. Total	23.7	76.3	0		73.7	0	26.3		0	55.8	44.2		0	0	0		
PHF	.563	.906	.000	.864	.583	.000	.625	.594	.000	.545	.594	.672	.000	.000	.000	.000	

Location: Jurupa Valley
N/S: Cedar Ave/Rubidoux Blvd
E/W: Tarragona Dr/El Rivino Rd

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Cedar Avenue	East Leg El Rivino Road	South Leg Rubidoux Boulevard	West Leg Tarragona Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	1	1
8:45 AM	0	1	0	0	1
TOTAL VOLUMES:	0	1	0	1	2

	North Leg Cedar Avenue	East Leg El Rivino Road	South Leg Rubidoux Boulevard	West Leg Tarragona Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	1	1
5:15 PM	0	0	0	0	0
5:30 PM	1	0	0	2	3
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	3	4

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Location: Jurupa Valley
N/S: Cedar Ave/Rubidoux Blvd
E/W: Tarragona Dr/El Rivino Rd

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Cedar Avenue			Westbound El Rivino Road			Northbound Rubidoux Boulevard			Eastbound Tarragona Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	1	0	0	0	0	0	0	0	0	0	0	0	1

	Southbound Cedar Avenue			Westbound El Rivino Road			Northbound Rubidoux Boulevard			Eastbound Tarragona Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	1	0	0	1	0	3

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 20th Street/Market Street
Weather: Clear

File Name : 16_JVY_Rub_Mark AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Rubidoux Boulevard Southbound					Market Street Westbound					Rubidoux Boulevard Northbound					20th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	100	94	8	4	202	28	11	76	0	115	3	56	38	20	97	5	14	5	2	24	26	438	464
06:45 AM	87	108	9	7	204	36	12	76	0	124	7	51	39	20	97	8	11	9	3	28	30	453	483
Total	187	202	17	11	406	64	23	152	0	239	10	107	77	40	194	13	25	14	5	52	56	891	947
07:00 AM	75	103	7	2	185	17	11	71	0	99	8	56	38	21	102	3	8	11	3	22	26	408	434
07:15 AM	69	138	9	4	216	32	9	78	0	119	8	48	51	20	107	12	10	6	3	28	27	470	497
07:30 AM	74	197	9	5	280	48	6	67	0	121	1	40	56	24	97	9	8	2	0	19	29	517	546
07:45 AM	72	162	14	9	248	41	8	79	0	128	6	59	46	24	111	11	11	11	7	33	40	520	560
Total	290	600	39	20	929	138	34	295	0	467	23	203	191	89	417	35	37	30	13	102	122	1915	2037
08:00 AM	110	128	11	5	249	42	14	105	0	161	2	51	41	17	94	7	9	7	5	23	27	527	554
08:15 AM	87	99	8	7	194	32	10	86	0	128	6	64	46	12	116	5	6	4	2	15	21	453	474
08:30 AM	95	86	5	3	186	28	7	87	0	122	12	70	28	14	110	5	7	8	2	20	19	438	457
08:45 AM	73	53	7	7	133	27	12	64	0	103	2	70	37	10	109	10	9	14	6	33	23	378	401
Total	365	366	31	22	762	129	43	342	0	514	22	255	152	53	429	27	31	33	15	91	90	1796	1886
Grand Total	842	1168	87	53	2097	331	100	789	0	1220	55	565	420	182	1040	75	93	77	33	245	268	4602	4870
Apprch %	40.2	55.7	4.1			27.1	8.2	64.7			5.3	54.3	40.4			30.6	38	31.4					
Total %	18.3	25.4	1.9		45.6	7.2	2.2	17.1		26.5	1.2	12.3	9.1		22.6	1.6	2	1.7		5.3	5.5	94.5	
Passenger Vehicles	774	1042	36		1873	201	43	719		963	20	505	315		973	30	38	12		88	0	0	3897
% Passenger Vehicles	91.9	89.2	41.4	39.6	87.1	60.7	43	91.1	0	78.9	36.4	89.4	75	73.1	79.6	40	40.9	15.6	24.2	31.7	0	0	80
Large 2 Axle Vehicles	27	51	9		93	30	9	17		56	11	23	20		63	10	20	9		43	0	0	255
% Large 2 Axle Vehicles	3.2	4.4	10.3	11.3	4.3	9.1	9	2.2	0	4.6	20	4.1	4.8	4.9	5.2	13.3	21.5	11.7	12.1	15.5	0	0	5.2
3 Axle Vehicles	10	26	20		71	25	25	15		65	9	12	20		47	6	14	44		80	0	0	263
% 3 Axle Vehicles	1.2	2.2	23	28.3	3.3	7.6	25	1.9	0	5.3	16.4	2.1	4.8	3.3	3.8	8	15.1	57.1	48.5	28.8	0	0	5.4
4+ Axle Trucks	31	49	22		113	75	23	38		136	15	25	65		139	29	21	12		67	0	0	455
% 4+ Axle Trucks	3.7	4.2	25.3	20.8	5.3	22.7	23	4.8	0	11.1	27.3	4.4	15.5	18.7	11.4	38.7	22.6	15.6	15.2	24.1	0	0	9.3

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City of Jurupa Valley
N/S: Rubidoux Boulevard
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File Name : 16_JVY_Rub_Mark AM
Site Code : 05122894
Start Date : 10/4/2022
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	Rubidoux Boulevard Southbound				Market Street Westbound				Rubidoux Boulevard Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	69	138	9	216	32	9	78	119	**8**	48	51	107	**12**	10	6	28	470
07:30 AM	74	**197**	9	**280**	**48**	6	67	121	1	40	**56**	97	9	8	2	19	517
07:45 AM	72	162	**14**	248	41	8	79	128	6	**59**	46	**111**	11	**11**	**11**	**33**	520
08:00 AM	**110**	128	11	249	42	**14**	**105**	**161**	2	51	41	94	7	9	7	23	**527**
Total Volume	325	625	43	993	163	37	329	529	17	198	194	409	39	38	26	103	2034
% App. Total	32.7	62.9	4.3		30.8	7	62.2		4.2	48.4	47.4		37.9	36.9	25.2		
PHF	.739	.793	.768	.887	.849	.661	.783	.821	.531	.839	.866	.921	.813	.864	.591	.780	.965

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File Name : 16_JVY_Rub_Mark AM
Site Code : 05122894
Start Date : 10/4/2022
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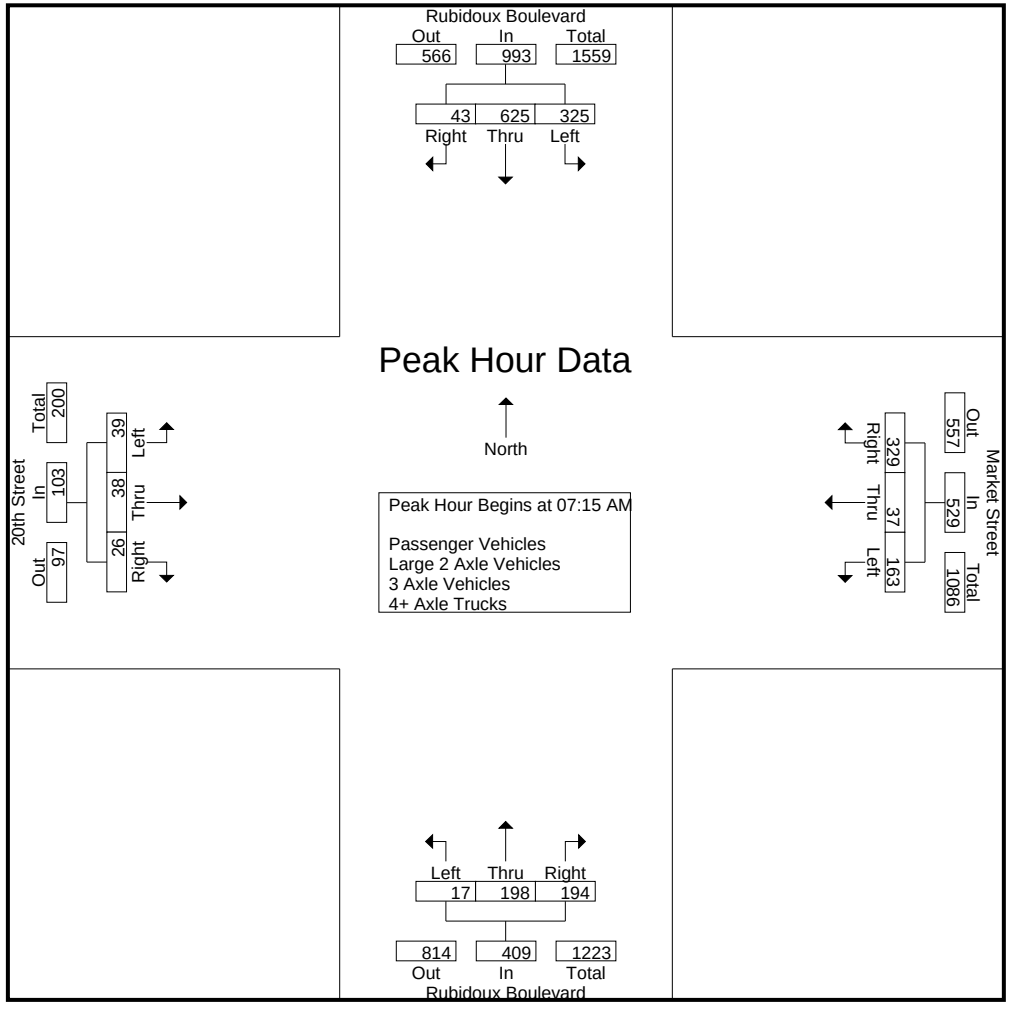

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File Name : 16_JVY_Rub_Mark AM
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Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				Market Street Westbound				Rubidoux Boulevard Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:45 AM				07:45 AM				07:15 AM				
+0 mins.	69	138	9	216	41	8	79	128	6	59	**46**	111	**12**	10	6	28	
+15 mins.	74	**197**	9	**280**	**42**	**14**	**105**	**161**	2	51	41	94	9	8	2	19	
+30 mins.	72	162	**14**	248	32	10	86	128	6	64	46	**116**	11	**11**	**11**	**33**	
+45 mins.	**110**	128	11	249	28	7	87	122	**12**	**70**	28	110	7	9	7	23	
Total Volume	325	625	43	993	143	39	357	539	26	244	161	431	39	38	26	103	
% App. Total	32.7	62.9	4.3		26.5	7.2	66.2		6	56.6	37.4		37.9	36.9	25.2		
PHF	.739	.793	.768	.887	.851	.696	.850	.837	.542	.871	.875	.929	.813	.864	.591	.780	

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Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Rubidoux Boulevard Southbound					Market Street Westbound					Rubidoux Boulevard Northbound					20th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	96	87	3	2	186	15	6	68	0	89	3	51	28	15	82	3	4	1	0	8	17	365	382
06:45 AM	77	102	2	2	181	18	6	71	0	95	3	47	32	18	82	3	5	0	0	8	20	366	386
Total	173	189	5	4	367	33	12	139	0	184	6	98	60	33	164	6	9	1	0	16	37	731	768
07:00 AM	66	92	2	0	160	13	7	67	0	87	4	51	32	18	87	1	2	2	1	5	19	339	358
07:15 AM	63	121	4	2	188	17	2	68	0	87	2	41	41	14	84	1	3	1	0	5	16	364	380
07:30 AM	69	182	3	2	254	34	3	59	0	96	0	34	44	17	78	3	4	0	0	7	19	435	454
07:45 AM	67	148	10	6	225	26	1	72	0	99	1	55	36	17	92	6	9	2	2	17	25	433	458
Total	265	543	19	10	827	90	13	266	0	369	7	181	153	66	341	11	18	5	3	34	79	1571	1650
08:00 AM	105	113	5	1	223	30	6	99	0	135	1	46	29	12	76	3	4	2	1	9	14	443	457
08:15 AM	78	89	3	2	170	19	4	77	0	100	3	56	36	10	95	3	4	0	0	7	12	372	384
08:30 AM	90	66	1	1	157	15	4	79	0	98	2	61	15	9	78	3	1	2	2	6	12	339	351
08:45 AM	63	42	3	3	108	14	4	59	0	77	1	63	22	3	86	4	2	2	2	8	8	279	287
Total	336	310	12	7	658	78	18	314	0	410	7	226	102	34	335	13	11	6	5	30	46	1433	1479
Grand Total	774	1042	36	21	1852	201	43	719	0	963	20	505	315	133	840	30	38	12	8	80	162	3735	3897
Apprch %	41.8	56.3	1.9			20.9	4.5	74.7			2.4	60.1	37.5			37.5	47.5	15					
Total %	20.7	27.9	1		49.6	5.4	1.2	19.3		25.8	0.5	13.5	8.4		22.5	0.8	1	0.3		2.1	4.2	95.8	

	Rubidoux Boulevard Southbound				Market Street Westbound				Rubidoux Boulevard Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	63	121	4	188	17	2	68	87	**2**	41	41	84	1	3	1	5	364
07:30 AM	69	**182**	3	**254**	**34**	3	59	96	0	34	**44**	78	3	4	0	7	435
07:45 AM	67	148	**10**	225	26	1	72	99	1	**55**	36	**92**	**6**	**9**	**2**	**17**	433
08:00 AM	**105**	113	5	223	30	**6**	**99**	**135**	1	46	29	76	3	4	2	9	**443**
Total Volume	304	564	22	890	107	12	298	417	4	176	150	330	13	20	5	38	1675
% App. Total	34.2	63.4	2.5		25.7	2.9	71.5		1.2	53.3	45.5		34.2	52.6	13.2		
PHF	.724	.775	.550	.876	.787	.500	.753	.772	.500	.800	.852	.897	.542	.556	.625	.559	.945

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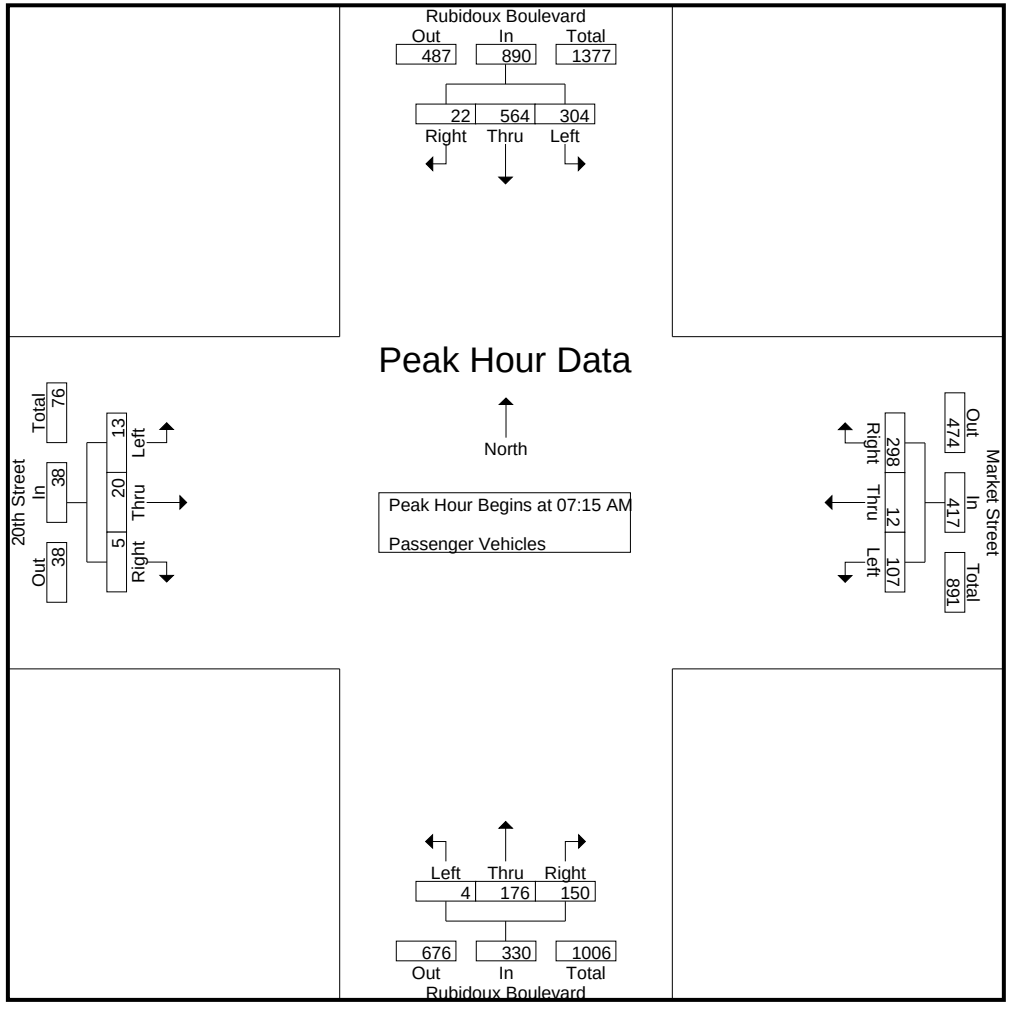
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 20th Street/Market Street
Weather: Clear

File Name : 16_JVY_Rub_Mark AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 20th Street/Market Street
Weather: Clear

File Name : 16_JVY_Rub_Mark AM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				Market Street Westbound				Rubidoux Boulevard Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	63	121	4	188	17	2	68	87	**2**	41	41	84	1	3	1	5	
+15 mins.	69	**182**	3	**254**	**34**	3	59	96	0	34	**44**	78	3	4	0	7	
+30 mins.	67	148	**10**	225	26	1	72	99	1	**55**	36	**92**	**6**	**9**	**2**	**17**	
+45 mins.	**105**	113	5	223	30	**6**	**99**	**135**	1	46	29	76	3	4	2	9	
Total Volume	304	564	22	890	107	12	298	417	4	176	150	330	13	20	5	38	
% App. Total	34.2	63.4	2.5		25.7	2.9	71.5		1.2	53.3	45.5		34.2	52.6	13.2		
PHF	.724	.775	.550	.876	.787	.500	.753	.772	.500	.800	.852	.897	.542	.556	.625	.559	

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 20th Street/Market Street
Weather: Clear

File Name : 16_JVY_Rub_Mark AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Rubidoux Boulevard Southbound					Market Street Westbound					Rubidoux Boulevard Northbound					20th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	3	2	0	0	5	2	0	2	0	4	0	2	2	1	4	1	3	0	0	4	1	17	18
06:45 AM	2	1	2	2	5	6	4	1	0	11	2	3	1	0	6	3	2	0	0	5	2	27	29
Total	5	3	2	2	10	8	4	3	0	15	2	5	3	1	10	4	5	0	0	9	3	44	47
07:00 AM	4	4	2	1	10	1	2	0	0	3	2	4	2	0	8	0	4	2	1	6	2	27	29
07:15 AM	2	8	1	0	11	3	1	3	0	7	2	3	3	2	8	3	2	0	0	5	2	31	33
07:30 AM	1	6	0	0	7	6	0	1	0	7	1	3	2	2	6	1	1	0	0	2	2	22	24
07:45 AM	2	5	1	1	8	2	1	3	0	6	0	2	1	1	3	1	1	3	3	5	5	22	27
Total	9	23	4	2	36	12	4	7	0	23	5	12	8	5	25	5	8	5	4	18	11	102	113
08:00 AM	2	4	2	1	8	2	0	2	0	4	0	1	3	1	4	0	0	0	0	0	2	16	18
08:15 AM	4	4	1	1	9	4	0	2	0	6	0	1	1	0	2	0	2	0	0	2	1	19	20
08:30 AM	2	11	0	0	13	3	1	2	0	6	4	2	2	0	8	1	4	2	0	7	0	34	34
08:45 AM	5	6	0	0	11	1	0	1	0	2	0	2	3	2	5	0	1	2	0	3	2	21	23
Total	13	25	3	2	41	10	1	7	0	18	4	6	9	3	19	1	7	4	0	12	5	90	95
Grand Total	27	51	9	6	87	30	9	17	0	56	11	23	20	9	54	10	20	9	4	39	19	236	255
Apprch %	31	58.6	10.3			53.6	16.1	30.4			20.4	42.6	37			25.6	51.3	23.1					
Total %	11.4	21.6	3.8		36.9	12.7	3.8	7.2		23.7	4.7	9.7	8.5		22.9	4.2	8.5	3.8		16.5	7.5	92.5	

	Rubidoux Boulevard Southbound				Market Street Westbound				Rubidoux Boulevard Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**2**	**8**	1	**11**	3	**1**	**3**	**7**	**2**	**3**	**3**	**8**	**3**	**2**	0	**5**	**31**
07:30 AM	1	6	0	7	**6**	0	1	7	1	3	2	6	1	1	0	2	22
07:45 AM	2	5	1	8	2	1	3	6	0	2	1	3	1	1	**3**	5	22
08:00 AM	2	4	**2**	8	2	0	2	4	0	1	3	4	0	0	0	0	16
Total Volume	7	23	4	34	13	2	9	24	3	9	9	21	5	4	3	12	91
% App. Total	20.6	67.6	11.8		54.2	8.3	37.5		14.3	42.9	42.9		41.7	33.3	25		
PHF	.875	.719	.500	.773	.542	.500	.750	.857	.375	.750	.750	.656	.417	.500	.250	.600	.734

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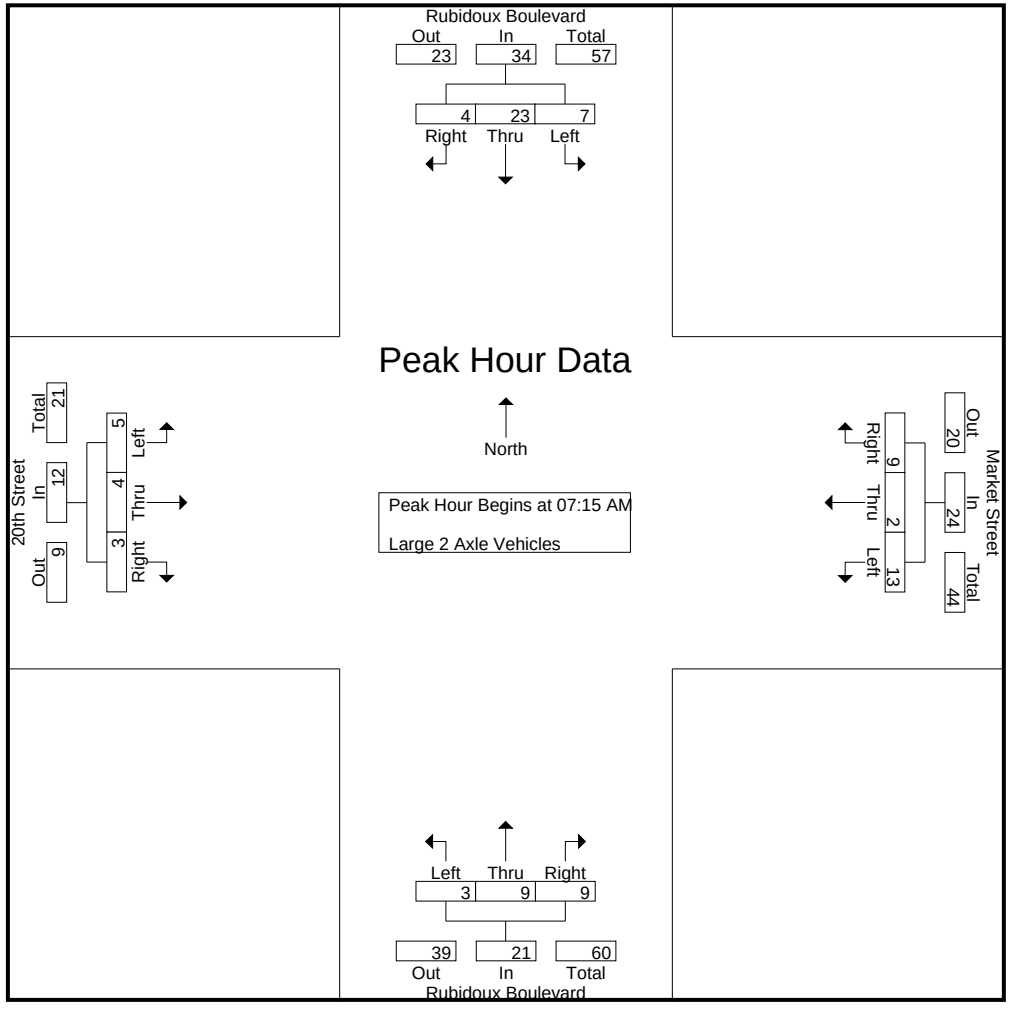
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 20th Street/Market Street
Weather: Clear

File Name : 16_JVY_Rub_Mark AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
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File Name : 16_JVY_Rub_Mark AM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				Market Street Westbound				Rubidoux Boulevard Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	**2**	**8**	1	**11**	3	**1**	**3**	**7**	**2**	**3**	**3**	**8**	**3**	**2**	0	**5**	
+15 mins.	1	6	0	7	**6**	0	1	7	1	3	2	6	1	1	0	2	
+30 mins.	2	5	1	8	2	1	3	6	0	2	1	3	1	1	**3**	5	
+45 mins.	2	4	**2**	8	2	0	2	4	0	1	3	4	0	0	0	0	
Total Volume	7	23	4	34	13	2	9	24	3	9	9	21	5	4	3	12	
% App. Total	20.6	67.6	11.8		54.2	8.3	37.5		14.3	42.9	42.9		41.7	33.3	25		
PHF	.875	.719	.500	.773	.542	.500	.750	.857	.375	.750	.750	.656	.417	.500	.250	.600	

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 20th Street/Market Street
Weather: Clear

File Name : 16_JVY_Rub_Mark AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Rubidoux Boulevard Southbound					Market Street Westbound					Rubidoux Boulevard Northbound					20th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	1	3	2	1	6	3	1	3	0	7	0	2	1	0	3	0	5	2	1	7	2	23	25
06:45 AM	2	1	3	2	6	2	2	3	0	7	1	1	2	1	4	1	0	6	3	7	6	24	30
Total	3	4	5	3	12	5	3	6	0	14	1	3	3	1	7	1	5	8	4	14	8	47	55
07:00 AM	0	4	2	1	6	0	1	1	0	2	0	0	1	0	1	1	0	7	1	8	2	17	19
07:15 AM	0	1	2	2	3	4	2	1	0	7	0	1	0	0	1	1	3	5	3	9	5	20	25
07:30 AM	0	1	3	2	4	0	2	1	0	3	0	2	4	1	6	0	1	1	0	2	3	15	18
07:45 AM	1	4	2	2	7	3	4	1	0	8	1	0	3	2	4	0	0	5	1	5	5	24	29
Total	1	10	9	7	20	7	9	4	0	20	1	3	8	3	12	2	4	18	5	24	15	76	91
08:00 AM	2	5	2	2	9	4	4	1	0	9	1	2	2	1	5	0	1	4	3	5	6	28	34
08:15 AM	2	3	3	3	8	1	3	2	0	6	1	0	1	0	2	0	0	4	2	4	5	20	25
08:30 AM	2	4	1	0	7	4	1	2	0	7	4	2	2	0	8	0	1	3	0	4	0	26	26
08:45 AM	0	0	0	0	0	4	5	0	0	9	1	2	4	1	7	3	3	7	2	13	3	29	32
Total	6	12	6	5	24	13	13	5	0	31	7	6	9	2	22	3	5	18	7	26	14	103	117
Grand Total	10	26	20	15	56	25	25	15	0	65	9	12	20	6	41	6	14	44	16	64	37	226	263
Apprch %	17.9	46.4	35.7			38.5	38.5	23.1			22	29.3	48.8			9.4	21.9	68.8					
Total %	4.4	11.5	8.8		24.8	11.1	11.1	6.6		28.8	4	5.3	8.8		18.1	2.7	6.2	19.5		28.3	14.1	85.9	

	Rubidoux Boulevard Southbound				Market Street Westbound				Rubidoux Boulevard Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	1	2	3	**4**	2	**1**	7	0	1	0	1	**1**	**3**	**5**	**9**	20
07:30 AM	0	1	**3**	4	0	2	1	3	0	**2**	**4**	**6**	0	1	1	2	15
07:45 AM	1	4	2	7	3	**4**	1	8	**1**	0	3	4	0	0	5	5	24
08:00 AM	**2**	**5**	2	**9**	4	4	1	**9**	1	2	2	5	0	1	4	5	**28**
Total Volume	3	11	9	23	11	12	4	27	2	5	9	16	1	5	15	21	87
% App. Total	13	47.8	39.1		40.7	44.4	14.8		12.5	31.2	56.2		4.8	23.8	71.4		
PHF	.375	.550	.750	.639	.688	.750	1.00	.750	.500	.625	.563	.667	.250	.417	.750	.583	.777

Counts Unlimited, Inc.
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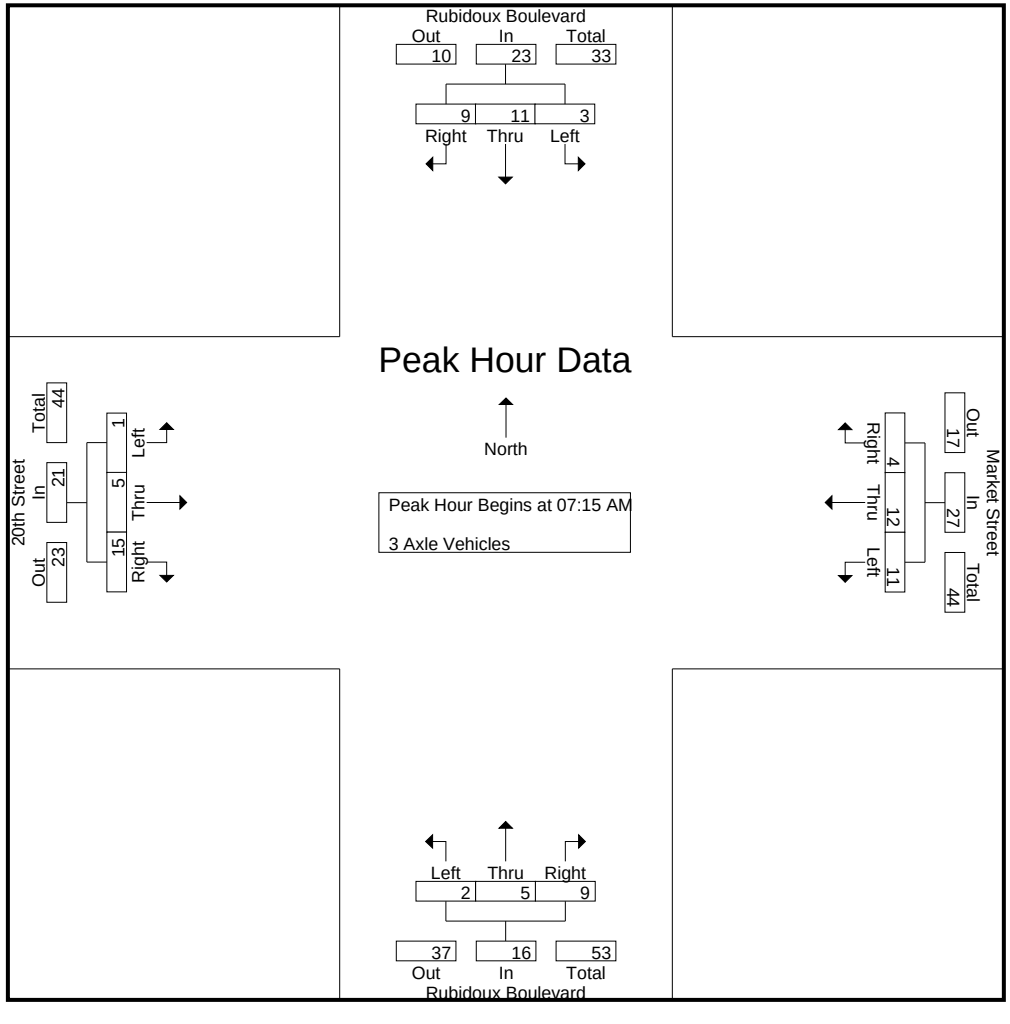
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 20th Street/Market Street
Weather: Clear

File Name : 16_JVY_Rub_Mark AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Rubidoux Boulevard
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File Name : 16_JVY_Rub_Mark AM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				Market Street Westbound				Rubidoux Boulevard Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	1	2	3	**4**	2	**1**	7	0	1	0	1	**1**	**3**	**5**	**9**	
+15 mins.	0	1	**3**	4	0	2	1	3	0	**2**	**4**	**6**	0	1	1	2	
+30 mins.	1	4	2	7	3	**4**	1	8	**1**	0	3	4	0	0	5	5	
+45 mins.	**2**	**5**	2	**9**	4	4	1	**9**	1	2	2	5	0	1	4	5	
Total Volume	3	11	9	23	11	12	4	27	2	5	9	16	1	5	15	21	
% App. Total	13	47.8	39.1		40.7	44.4	14.8		12.5	31.2	56.2		4.8	23.8	71.4		
PHF	.375	.550	.750	.639	.688	.750	1.000	.750	.500	.625	.563	.667	.250	.417	.750	.583	

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 20th Street/Market Street
Weather: Clear

File Name : 16_JVY_Rub_Mark AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Rubidoux Boulevard Southbound					Market Street Westbound					Rubidoux Boulevard Northbound					20th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	2	3	1	5	8	4	3	0	15	0	1	7	4	8	1	2	2	1	5	6	33	39
06:45 AM	6	4	2	1	12	10	0	1	0	11	1	0	4	1	5	1	4	3	0	8	2	36	38
Total	6	6	5	2	17	18	4	4	0	26	1	1	11	5	13	2	6	5	1	13	8	69	77
07:00 AM	5	3	1	0	9	3	1	3	0	7	2	1	3	3	6	1	2	0	0	3	3	25	28
07:15 AM	4	8	2	0	14	8	4	6	0	18	4	3	7	4	14	7	2	0	0	9	4	55	59
07:30 AM	4	8	3	1	15	8	1	6	0	15	0	1	6	4	7	5	2	1	0	8	5	45	50
07:45 AM	2	5	1	0	8	10	2	3	0	15	4	2	6	4	12	4	1	1	1	6	5	41	46
Total	15	24	7	1	46	29	8	18	0	55	10	7	22	15	39	17	7	2	1	26	17	166	183
08:00 AM	1	6	2	1	9	6	4	3	0	13	0	2	7	3	9	4	4	1	1	9	5	40	45
08:15 AM	3	3	1	1	7	8	3	5	0	16	2	7	8	2	17	2	0	0	0	2	3	42	45
08:30 AM	1	5	3	2	9	6	1	4	0	11	2	5	9	5	16	1	1	1	0	3	7	39	46
08:45 AM	5	5	4	4	14	8	3	4	0	15	0	3	8	4	11	3	3	3	2	9	10	49	59
Total	10	19	10	8	39	28	11	16	0	55	4	17	32	14	53	10	8	5	3	23	25	170	195
Grand Total	31	49	22	11	102	75	23	38	0	136	15	25	65	34	105	29	21	12	5	62	50	405	455
Apprch %	30.4	48	21.6			55.1	16.9	27.9			14.3	23.8	61.9			46.8	33.9	19.4					
Total %	7.7	12.1	5.4		25.2	18.5	5.7	9.4		33.6	3.7	6.2	16		25.9	7.2	5.2	3		15.3	11	89	

	Rubidoux Boulevard Southbound				Market Street Westbound				Rubidoux Boulevard Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**4**	**8**	2	14	8	**4**	**6**	**18**	**4**	**3**	**7**	**14**	**7**	2	0	**9**	**55**
07:30 AM	4	8	**3**	**15**	8	1	6	15	0	1	6	7	5	2	**1**	8	45
07:45 AM	2	5	1	8	**10**	2	3	15	4	2	6	12	4	1	1	6	41
08:00 AM	1	6	2	9	6	4	3	13	0	2	7	9	4	**4**	1	9	40
Total Volume	11	27	8	46	32	11	18	61	8	8	26	42	20	9	3	32	181
% App. Total	23.9	58.7	17.4		52.5	18	29.5		19	19	61.9		62.5	28.1	9.4		
PHF	.688	.844	.667	.767	.800	.688	.750	.847	.500	.667	.929	.750	.714	.563	.750	.889	.823

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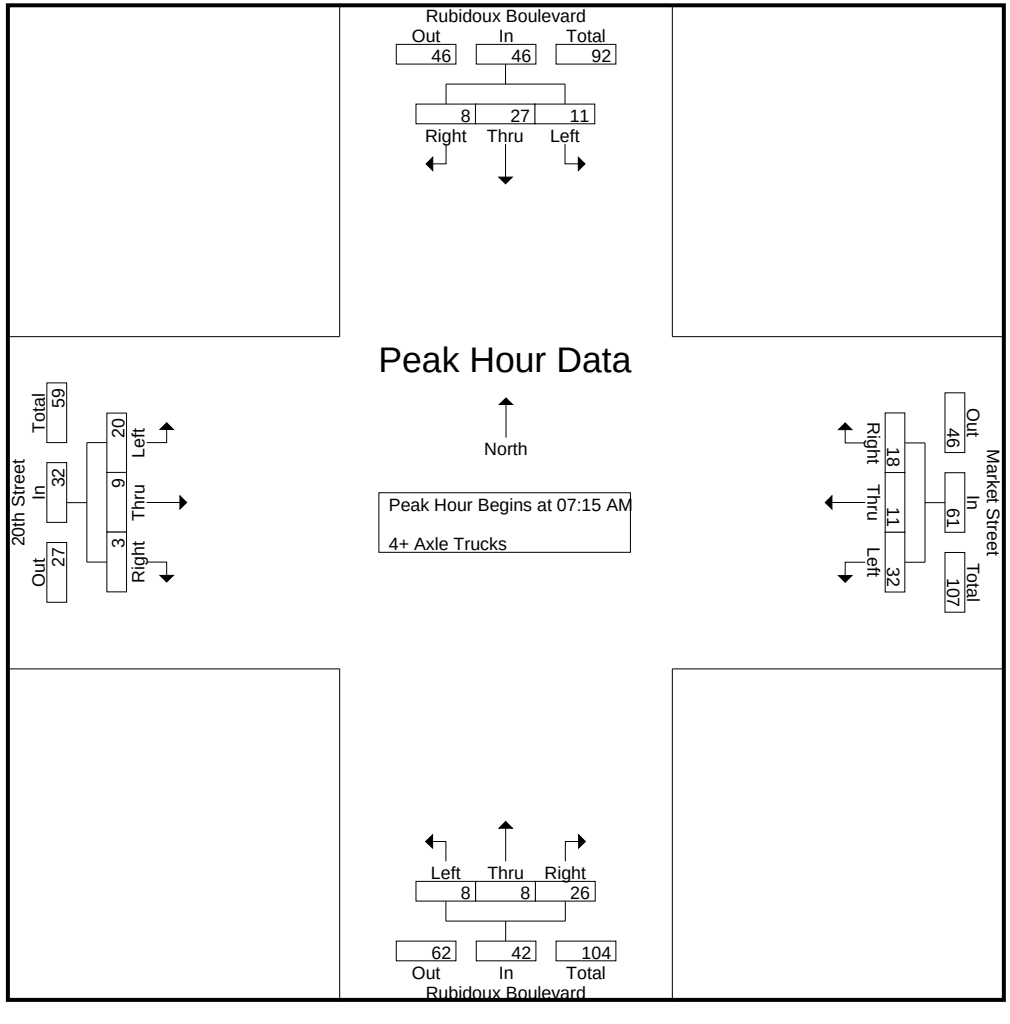
Weather: Clear

File Name : 16_JVY_Rub_Mark AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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	Rubidoux Boulevard Southbound				Market Street Westbound				Rubidoux Boulevard Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	**4**	**8**	2	14	8	**4**	**6**	**18**	**4**	**3**	**7**	**14**	**7**	2	0	**9**	
+15 mins.	4	8	**3**	**15**	8	1	6	15	0	1	6	7	5	2	**1**	8	
+30 mins.	2	5	1	8	**10**	2	3	15	4	2	6	12	4	1	1	6	
+45 mins.	1	6	2	9	6	4	3	13	0	2	7	9	4	**4**	1	9	
Total Volume	11	27	8	46	32	11	18	61	8	8	26	42	20	9	3	32	
% App. Total	23.9	58.7	17.4		52.5	18	29.5		19	19	61.9		62.5	28.1	9.4		
PHF	.688	.844	.667	.767	.800	.688	.750	.847	.500	.667	.929	.750	.714	.563	.750	.889	

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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Rubidoux Boulevard Southbound					Market Street Westbound					Rubidoux Boulevard Northbound					20th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	92	103	4	1	199	56	6	81	0	143	0	70	59	32	129	10	19	3	1	32	34	503	537
03:45 PM	90	95	4	1	189	42	6	106	0	154	5	83	55	36	143	7	9	1	1	17	38	503	541
Total	182	198	8	2	388	98	12	187	0	297	5	153	114	68	272	17	28	4	2	49	72	1006	1078
04:00 PM	81	131	5	3	217	44	8	98	0	150	6	78	55	28	139	6	16	4	2	26	33	532	565
04:15 PM	95	132	11	2	238	57	7	80	0	144	1	55	80	37	136	4	18	5	1	27	40	545	585
04:30 PM	105	136	2	1	243	51	6	98	0	155	2	46	60	34	108	2	11	2	1	15	36	521	557
04:45 PM	77	131	8	5	216	53	8	83	0	144	6	51	81	39	138	6	18	5	1	29	45	527	572
Total	358	530	26	11	914	205	29	359	0	593	15	230	276	138	521	18	63	16	5	97	154	2125	2279
05:00 PM	94	122	6	2	222	62	7	111	0	180	4	61	63	36	128	6	20	5	1	31	39	561	600
05:15 PM	105	124	12	6	241	54	5	100	0	159	2	68	62	17	132	12	17	0	0	29	23	561	584
05:30 PM	112	99	4	3	215	48	3	101	0	152	1	75	76	36	152	6	9	4	4	19	43	538	581
05:45 PM	109	93	4	1	206	36	4	84	0	124	0	59	72	42	131	4	4	5	3	13	46	474	520
Total	420	438	26	12	884	200	19	396	0	615	7	263	273	131	543	28	50	14	8	92	151	2134	2285
Grand Total	960	1166	60	25	2186	503	60	942	0	1505	27	646	663	337	1336	63	141	34	15	238	377	5265	5642
Apprch %	43.9	53.3	2.7			33.4	4	62.6			2	48.4	49.6			26.5	59.2	14.3					
Total %	18.2	22.1	1.1		41.5	9.6	1.1	17.9		28.6	0.5	12.3	12.6		25.4	1.2	2.7	0.6		4.5	6.7	93.3	
Passenger Vehicles	906	1051	50		2030	400	30	895		1325	14	550	444		1234	45	118	24		199	0	0	4788
% Passenger Vehicles	94.4	90.1	83.3	92	91.8	79.5	50	95	0	88	51.9	85.1	67	67.1	73.8	71.4	83.7	70.6	80	78.7	0	0	84.9
Large 2 Axle Vehicles	22	34	3		59	19	9	0		28	1	36	54		118	8	7	2		17	0	0	222
% Large 2 Axle Vehicles	2.3	2.9	5	0	2.7	3.8	15	0	0	1.9	3.7	5.6	8.1	8	7.1	12.7	5	5.9	0	6.7	0	0	3.9
3 Axle Vehicles	8	20	1		30	18	4	9		31	5	19	49		99	5	5	3		14	0	0	174
% 3 Axle Vehicles	0.8	1.7	1.7	4	1.4	3.6	6.7	1	0	2.1	18.5	2.9	7.4	7.7	5.9	7.9	3.5	8.8	6.7	5.5	0	0	3.1
4+ Axle Trucks	24	61	6		92	66	17	38		121	7	41	116		222	5	11	5		23	0	0	458
% 4+ Axle Trucks	2.5	5.2	10	4	4.2	13.1	28.3	4	0	8	25.9	6.3	17.5	17.2	13.3	7.9	7.8	14.7	13.3	9.1	0	0	8.1

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	Rubidoux Boulevard Southbound				Market Street Westbound				Rubidoux Boulevard Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	77	**131**	8	216	53	**8**	83	144	**6**	51	**81**	138	6	18	**5**	29	527
05:00 PM	94	122	6	222	**62**	7	**111**	**180**	4	61	63	128	6	**20**	5	**31**	**561**
05:15 PM	105	124	**12**	**241**	54	5	100	159	2	68	62	132	**12**	17	0	29	561
05:30 PM	**112**	99	4	215	48	3	101	152	1	**75**	76	**152**	6	9	4	19	538
Total Volume	388	476	30	894	217	23	395	635	13	255	282	550	30	64	14	108	2187
% App. Total	43.4	53.2	3.4		34.2	3.6	62.2		2.4	46.4	51.3		27.8	59.3	13		
PHF	.866	.908	.625	.927	.875	.719	.890	.882	.542	.850	.870	.905	.625	.800	.700	.871	.975

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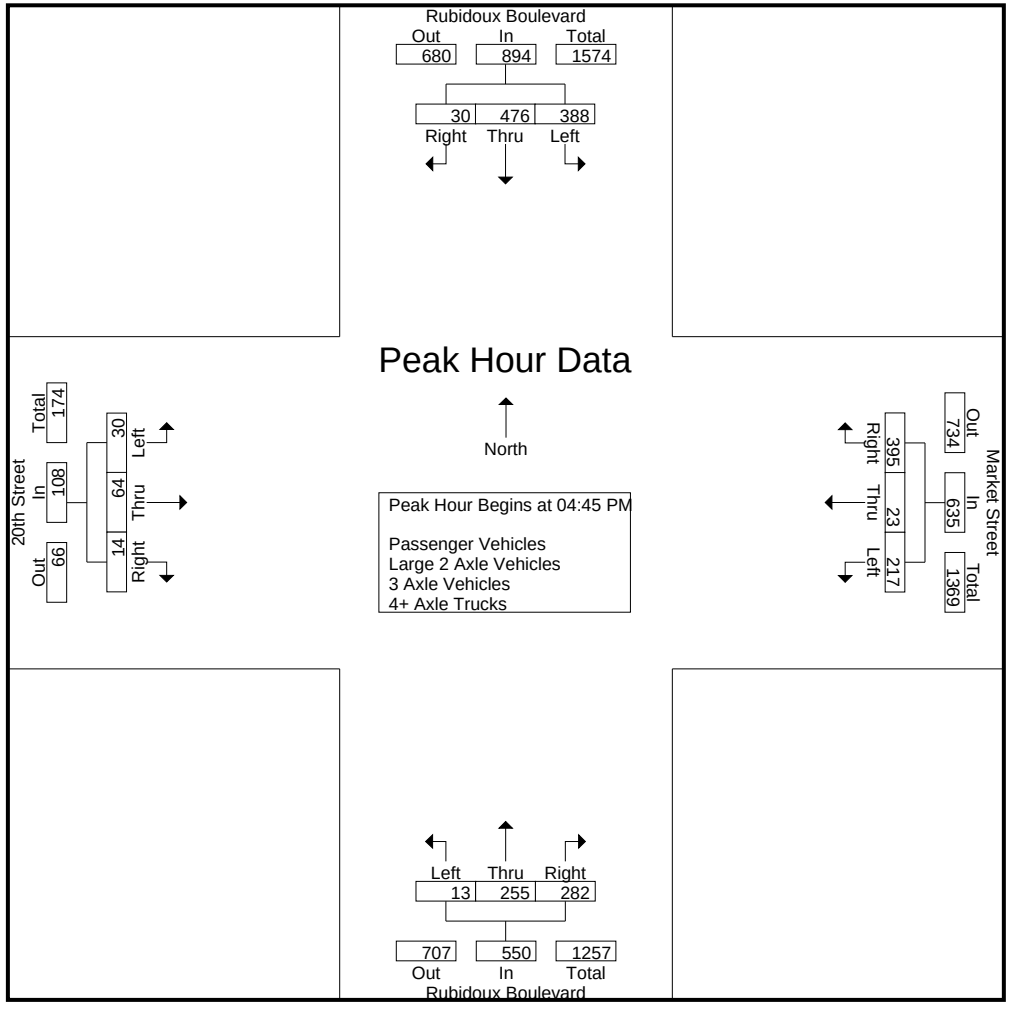

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	Rubidoux Boulevard Southbound				Market Street Westbound				Rubidoux Boulevard Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:45 PM				04:45 PM				
+0 mins.	**105**	**136**	2	**243**	51	6	98	155	**6**	51	**81**	138	6	18	**5**	29	
+15 mins.	77	131	8	216	53	**8**	83	144	4	61	63	128	6	**20**	5	**31**	
+30 mins.	94	122	6	222	**62**	7	**111**	**180**	2	68	62	132	**12**	17	0	29	
+45 mins.	105	124	**12**	241	54	5	100	159	1	**75**	76	**152**	6	9	4	19	
Total Volume	381	513	28	922	220	26	392	638	13	255	282	550	30	64	14	108	
% App. Total	41.3	55.6	3		34.5	4.1	61.4		2.4	46.4	51.3		27.8	59.3	13		
PHF	.907	.943	.583	.949	.887	.813	.883	.886	.542	.850	.870	.905	.625	.800	.700	.871	

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Groups Printed- Passenger Vehicles

	Rubidoux Boulevard Southbound					Market Street Westbound					Rubidoux Boulevard Northbound					20th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	81	90	3	1	174	40	4	71	0	115	0	58	26	14	84	7	17	1	0	25	15	398	413
03:45 PM	85	83	2	1	170	30	1	99	0	130	2	66	38	27	106	5	9	1	1	15	29	421	450
Total	166	173	5	2	344	70	5	170	0	245	2	124	64	41	190	12	26	2	1	40	44	819	863
04:00 PM	74	116	4	3	194	37	6	94	0	137	4	69	40	21	113	6	12	4	2	22	26	466	492
04:15 PM	89	116	9	2	214	50	2	77	0	129	0	49	60	24	109	3	15	2	1	20	27	472	499
04:30 PM	99	119	1	1	219	38	1	91	0	130	1	37	35	22	73	1	9	0	0	10	23	432	455
04:45 PM	74	129	7	5	210	39	4	79	0	122	2	45	58	27	105	4	11	2	0	17	32	454	486
Total	336	480	21	11	837	164	13	341	0	518	7	200	193	94	400	14	47	8	3	69	108	1824	1932
05:00 PM	89	111	5	1	205	49	3	109	0	161	2	54	40	26	96	5	19	5	1	29	28	491	519
05:15 PM	99	110	11	5	220	46	4	96	0	146	2	61	44	13	107	6	14	0	0	20	18	493	511
05:30 PM	110	94	4	3	208	43	1	98	0	142	1	61	55	26	117	5	9	4	4	18	33	485	518
05:45 PM	106	83	4	1	193	28	4	81	0	113	0	50	48	26	98	3	3	5	3	11	30	415	445
Total	404	398	24	10	826	166	12	384	0	562	5	226	187	91	418	19	45	14	8	78	109	1884	1993
Grand Total	906	1051	50	23	2007	400	30	895	0	1325	14	550	444	226	1008	45	118	24	12	187	261	4527	4788
Apprch %	45.1	52.4	2.5			30.2	2.3	67.5			1.4	54.6	44			24.1	63.1	12.8					
Total %	20	23.2	1.1		44.3	8.8	0.7	19.8		29.3	0.3	12.1	9.8		22.3	1	2.6	0.5		4.1	5.5	94.5	

	Rubidoux Boulevard Southbound				Market Street Westbound				Rubidoux Boulevard Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	74	**129**	7	210	39	**4**	79	122	**2**	45	**58**	105	4	11	2	17	454
05:00 PM	89	111	5	205	**49**	3	**109**	**161**	2	54	40	96	5	**19**	**5**	**29**	491
05:15 PM	99	110	**11**	**220**	46	4	96	146	2	**61**	44	107	**6**	14	0	20	**493**
05:30 PM	**110**	94	4	208	43	1	98	142	1	61	55	**117**	5	9	4	18	485
Total Volume	372	444	27	843	177	12	382	571	7	221	197	425	20	53	11	84	1923
% App. Total	44.1	52.7	3.2		31	2.1	66.9		1.6	52	46.4		23.8	63.1	13.1		
PHF	.845	.860	.614	.958	.903	.750	.876	.887	.875	.906	.849	.908	.833	.697	.550	.724	.975

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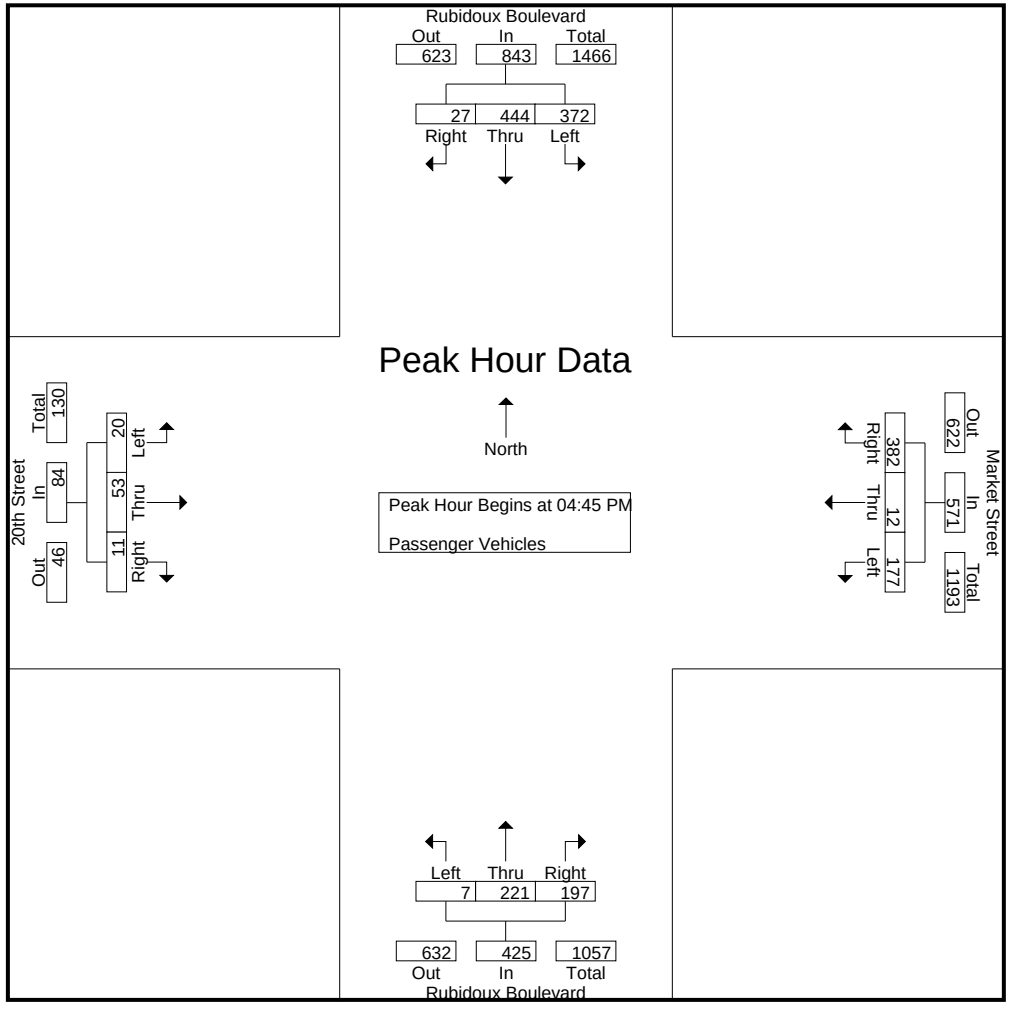

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	Rubidoux Boulevard Southbound				Market Street Westbound				Rubidoux Boulevard Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	74	**129**	7	210	39	**4**	79	122	**2**	45	**58**	105	4	11	2	17	
+15 mins.	89	111	5	205	**49**	3	**109**	**161**	2	54	40	96	5	**19**	**5**	**29**	
+30 mins.	99	110	**11**	**220**	46	4	96	146	2	**61**	44	107	**6**	14	0	20	
+45 mins.	**110**	94	4	208	43	1	98	142	1	61	55	**117**	5	9	4	18	
Total Volume	372	444	27	843	177	12	382	571	7	221	197	425	20	53	11	84	
% App. Total	44.1	52.7	3.2		31	2.1	66.9		1.6	52	46.4		23.8	63.1	13.1		
PHF	.845	.860	.614	.958	.903	.750	.876	.887	.875	.906	.849	.908	.833	.697	.550	.724	

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Groups Printed- Large 2 Axle Vehicles

	Rubidoux Boulevard Southbound					Market Street Westbound					Rubidoux Boulevard Northbound					20th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	6	3	0	0	9	2	1	0	0	3	0	4	12	7	16	2	2	0	0	4	7	32	39
03:45 PM	3	3	1	0	7	2	2	0	0	4	1	6	2	1	9	1	0	0	0	1	1	21	22
Total	9	6	1	0	16	4	3	0	0	7	1	10	14	8	25	3	2	0	0	5	8	53	61
04:00 PM	2	5	0	0	7	3	1	0	0	4	0	2	5	3	7	0	2	0	0	2	3	20	23
04:15 PM	3	5	0	0	8	1	0	0	0	1	0	3	8	6	11	0	0	1	0	1	6	21	27
04:30 PM	3	3	1	0	7	1	1	0	0	2	0	4	4	2	8	0	1	1	0	2	2	19	21
04:45 PM	1	1	1	0	3	5	1	0	0	6	0	3	5	2	8	0	2	0	0	2	2	19	21
Total	9	14	2	0	25	10	3	0	0	13	0	12	22	13	34	0	5	2	0	7	13	79	92
05:00 PM	1	1	0	0	2	2	3	0	0	5	0	4	4	1	8	1	0	0	0	1	1	16	17
05:15 PM	1	4	0	0	5	2	0	0	0	2	0	2	6	1	8	3	0	0	0	3	1	18	19
05:30 PM	1	2	0	0	3	0	0	0	0	0	0	5	3	0	8	1	0	0	0	1	0	12	12
05:45 PM	1	7	0	0	8	1	0	0	0	1	0	3	5	4	8	0	0	0	0	0	4	17	21
Total	4	14	0	0	18	5	3	0	0	8	0	14	18	6	32	5	0	0	0	5	6	63	69
Grand Total	22	34	3	0	59	19	9	0	0	28	1	36	54	27	91	8	7	2	0	17	27	195	222
Apprch %	37.3	57.6	5.1			67.9	32.1	0			1.1	39.6	59.3			47.1	41.2	11.8					
Total %	11.3	17.4	1.5		30.3	9.7	4.6	0		14.4	0.5	18.5	27.7		46.7	4.1	3.6	1		8.7	12.2	87.8	

	Rubidoux Boulevard Southbound				Market Street Westbound				Rubidoux Boulevard Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**1**	1	**1**	3	**5**	1	0	**6**	0	3	5	**8**	0	**2**	0	2	**19**
05:00 PM	1	1	0	2	2	**3**	0	5	0	4	4	8	1	0	0	1	16
05:15 PM	1	**4**	0	**5**	2	0	0	2	0	2	**6**	8	**3**	0	0	**3**	18
05:30 PM	1	2	0	3	0	0	0	0	0	**5**	3	8	1	0	0	1	12
Total Volume	4	8	1	13	9	4	0	13	0	14	18	32	5	2	0	7	65
% App. Total	30.8	61.5	7.7		69.2	30.8	0		0	43.8	56.2		71.4	28.6	0		
PHF	1.00	.500	.250	.650	.450	.333	.000	.542	.000	.700	.750	1.00	.417	.250	.000	.583	.855

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PO Box 1178
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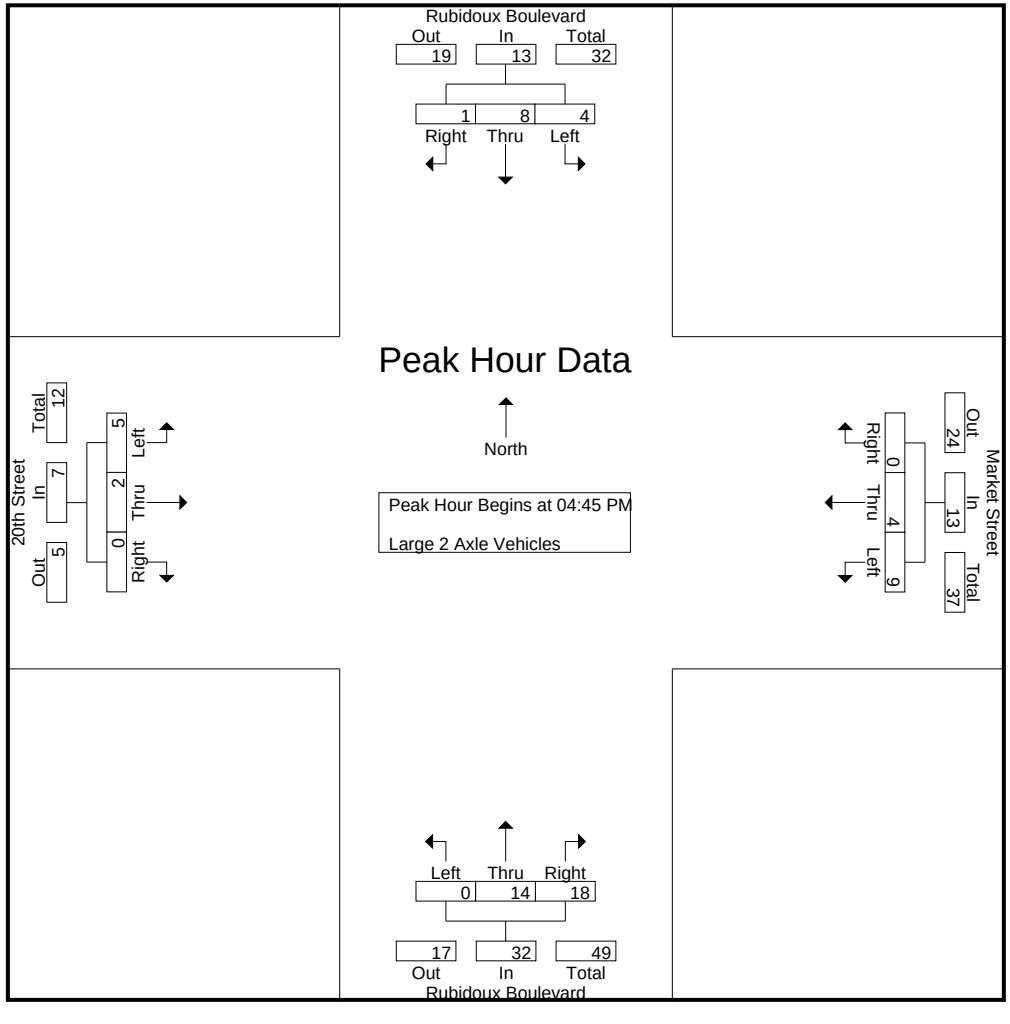
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 20th Street/Market Street
Weather: Clear

File Name : 16_JVY_Rub_Mark PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 20th Street/Market Street
Weather: Clear

File Name : 16_JVY_Rub_Mark PM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				Market Street Westbound				Rubidoux Boulevard Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	**1**	1	**1**	3	**5**	1	0	**6**	0	3	5	**8**	0	**2**	0	2	
+15 mins.	1	1	0	2	2	**3**	0	5	0	4	4	8	1	0	0	1	
+30 mins.	1	**4**	0	**5**	2	0	0	2	0	2	**6**	8	**3**	0	0	**3**	
+45 mins.	1	2	0	3	0	0	0	0	0	**5**	3	8	1	0	0	1	
Total Volume	4	8	1	13	9	4	0	13	0	14	18	32	5	2	0	7	
% App. Total	30.8	61.5	7.7		69.2	30.8	0		0	43.8	56.2		71.4	28.6	0		
PHF	1.000	.500	.250	.650	.450	.333	.000	.542	.000	.700	.750	1.000	.417	.250	.000	.583	

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 20th Street/Market Street
Weather: Clear

File Name : 16_JVY_Rub_Mark PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Rubidoux Boulevard Southbound					Market Street Westbound					Rubidoux Boulevard Northbound					20th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	1	2	0	0	3	5	0	1	0	6	0	3	6	3	9	1	0	1	0	2	3	20	23
03:45 PM	1	0	0	0	1	2	0	1	0	3	0	2	4	4	6	0	0	0	0	0	4	10	14
Total	2	2	0	0	4	7	0	2	0	9	0	5	10	7	15	1	0	1	0	2	7	30	37
04:00 PM	1	3	0	0	4	0	0	2	0	2	1	2	2	2	5	0	1	0	0	1	2	12	14
04:15 PM	0	4	0	0	4	3	0	1	0	4	0	1	3	2	4	0	1	0	0	1	2	13	15
04:30 PM	1	1	0	0	2	3	3	0	0	6	1	3	7	4	11	1	0	0	0	1	4	20	24
04:45 PM	0	0	0	0	0	2	0	1	0	3	2	1	3	3	6	1	2	2	1	5	4	14	18
Total	2	8	0	0	10	8	3	4	0	15	4	7	15	11	26	2	4	2	1	8	12	59	71
05:00 PM	1	5	0	0	6	1	0	0	0	1	1	1	6	2	8	0	0	0	0	0	2	15	17
05:15 PM	2	3	1	1	6	2	1	1	0	4	0	1	6	1	7	2	1	0	0	3	2	20	22
05:30 PM	0	1	0	0	1	0	0	1	0	1	0	3	8	2	11	0	0	0	0	0	2	13	15
05:45 PM	1	1	0	0	2	0	0	1	0	1	0	2	4	3	6	0	0	0	0	0	3	9	12
Total	4	10	1	1	15	3	1	3	0	7	1	7	24	8	32	2	1	0	0	3	9	57	66
Grand Total	8	20	1	1	29	18	4	9	0	31	5	19	49	26	73	5	5	3	1	13	28	146	174
Apprch %	27.6	69	3.4			58.1	12.9	29			6.8	26	67.1			38.5	38.5	23.1					
Total %	5.5	13.7	0.7		19.9	12.3	2.7	6.2		21.2	3.4	13	33.6		50	3.4	3.4	2.1		8.9	16.1	83.9	

	Rubidoux Boulevard Southbound				Market Street Westbound				Rubidoux Boulevard Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	**2**	0	**1**	3	**2**	1	3	6	1	**2**	**2**	**5**	14
05:00 PM	1	**5**	0	**6**	1	0	0	1	1	1	6	8	0	0	0	0	15
05:15 PM	**2**	3	**1**	6	2	**1**	1	**4**	0	1	6	7	**2**	1	0	3	**20**
05:30 PM	0	1	0	1	0	0	1	1	0	**3**	**8**	**11**	0	0	0	0	13
Total Volume	3	9	1	13	5	1	3	9	3	6	23	32	3	3	2	8	62
% App. Total	23.1	69.2	7.7		55.6	11.1	33.3		9.4	18.8	71.9		37.5	37.5	25		
PHF	.375	.450	.250	.542	.625	.250	.750	.563	.375	.500	.719	.727	.375	.375	.250	.400	.775

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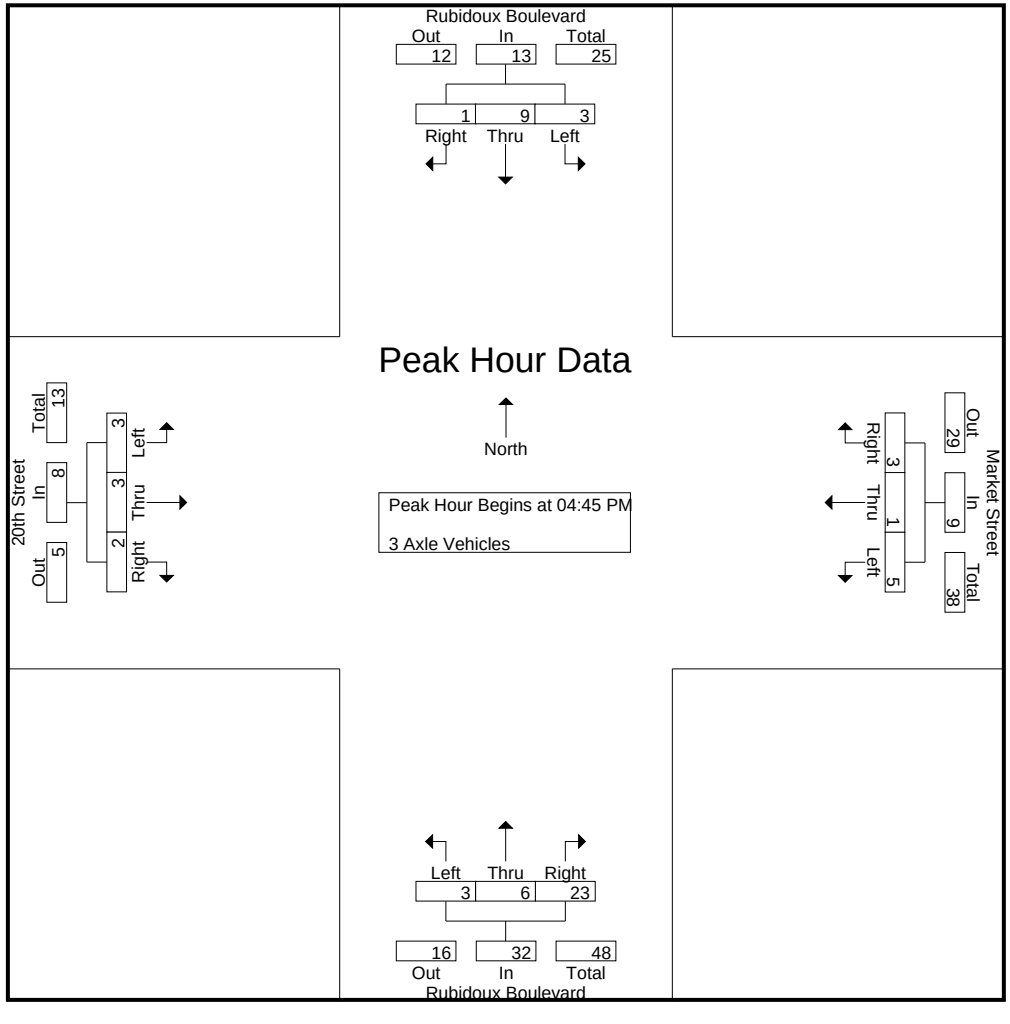
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 20th Street/Market Street
Weather: Clear

File Name : 16_JVY_Rub_Mark PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 20th Street/Market Street
Weather: Clear

File Name : 16_JVY_Rub_Mark PM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				Market Street Westbound				Rubidoux Boulevard Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	0	0	**2**	0	**1**	3	**2**	1	3	6	1	**2**	**2**	**5**	
+15 mins.	1	**5**	0	**6**	1	0	0	1	1	1	6	8	0	0	0	0	
+30 mins.	**2**	3	**1**	6	2	**1**	1	**4**	0	1	6	7	**2**	1	0	3	
+45 mins.	0	1	0	1	0	0	1	1	0	**3**	**8**	**11**	0	0	0	0	
Total Volume	3	9	1	13	5	1	3	9	3	6	23	32	3	3	2	8	
% App. Total	23.1	69.2	7.7		55.6	11.1	33.3		9.4	18.8	71.9		37.5	37.5	25		
PHF	.375	.450	.250	.542	.625	.250	.750	.563	.375	.500	.719	.727	.375	.375	.250	.400	

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 20th Street/Market Street
Weather: Clear

File Name : 16_JVY_Rub_Mark PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Rubidoux Boulevard Southbound					Market Street Westbound					Rubidoux Boulevard Northbound					20th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	4	8	1	0	13	9	1	9	0	19	0	5	15	8	20	0	0	1	1	1	9	53	62
03:45 PM	1	9	1	0	11	8	3	6	0	17	2	9	11	4	22	1	0	0	0	1	4	51	55
Total	5	17	2	0	24	17	4	15	0	36	2	14	26	12	42	1	0	1	1	2	13	104	117
04:00 PM	4	7	1	0	12	4	1	2	0	7	1	5	8	2	14	0	1	0	0	1	2	34	36
04:15 PM	3	7	2	0	12	3	5	2	0	10	1	2	9	5	12	1	2	2	0	5	5	39	44
04:30 PM	2	13	0	0	15	9	1	7	0	17	0	2	14	6	16	0	1	1	1	2	7	50	57
04:45 PM	2	1	0	0	3	7	3	3	0	13	2	2	15	7	19	1	3	1	0	5	7	40	47
Total	11	28	3	0	42	23	10	14	0	47	4	11	46	20	61	2	7	4	1	13	21	163	184
05:00 PM	3	5	1	1	9	10	1	2	0	13	1	2	13	7	16	0	1	0	0	1	8	39	47
05:15 PM	3	7	0	0	10	4	0	3	0	7	0	4	6	2	10	1	2	0	0	3	2	30	32
05:30 PM	1	2	0	0	3	5	2	2	0	9	0	6	10	8	16	0	0	0	0	0	8	28	36
05:45 PM	1	2	0	0	3	7	0	2	0	9	0	4	15	9	19	1	1	0	0	2	9	33	42
Total	8	16	1	1	25	26	3	9	0	38	1	16	44	26	61	2	4	0	0	6	27	130	157
Grand Total	24	61	6	1	91	66	17	38	0	121	7	41	116	58	164	5	11	5	2	21	61	397	458
Apprch %	26.4	67	6.6			54.5	14	31.4			4.3	25	70.7			23.8	52.4	23.8					
Total %	6	15.4	1.5		22.9	16.6	4.3	9.6		30.5	1.8	10.3	29.2		41.3	1.3	2.8	1.3		5.3	13.3	86.7	

	Rubidoux Boulevard Southbound				Market Street Westbound				Rubidoux Boulevard Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	2	1	0	3	7	**3**	**3**	**13**	**2**	2	**15**	**19**	**1**	**3**	**1**	**5**	**40**
05:00 PM	**3**	5	**1**	9	**10**	1	2	13	1	2	13	16	0	1	0	1	39
05:15 PM	3	**7**	0	**10**	4	0	3	7	0	4	6	10	1	2	0	3	30
05:30 PM	1	2	0	3	5	2	2	9	0	**6**	10	16	0	0	0	0	28
Total Volume	9	15	1	25	26	6	10	42	3	14	44	61	2	6	1	9	137
% App. Total	36	60	4		61.9	14.3	23.8		4.9	23	72.1		22.2	66.7	11.1		
PHF	.750	.536	.250	.625	.650	.500	.833	.808	.375	.583	.733	.803	.500	.500	.250	.450	.856

Counts Unlimited, Inc.
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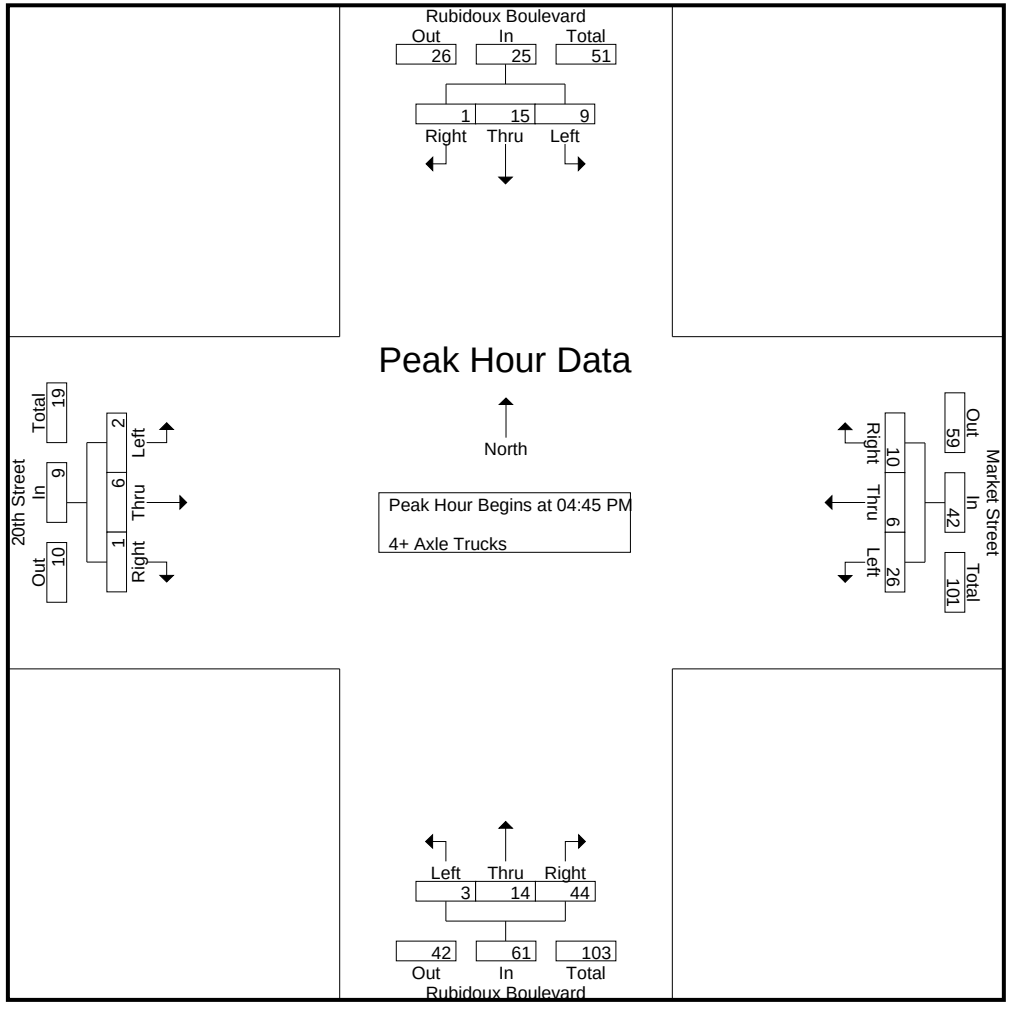
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 20th Street/Market Street
Weather: Clear

File Name : 16_JVY_Rub_Mark PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 20th Street/Market Street
Weather: Clear

File Name : 16_JVY_Rub_Mark PM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				Market Street Westbound				Rubidoux Boulevard Northbound				20th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	2	1	0	3	7	**3**	**3**	**13**	**2**	2	**15**	**19**	**1**	**3**	**1**	**5**	
+15 mins.	**3**	5	**1**	9	**10**	1	2	13	1	2	13	16	0	1	0	1	
+30 mins.	3	**7**	0	**10**	4	0	3	7	0	4	6	10	1	2	0	3	
+45 mins.	1	2	0	3	5	2	2	9	0	**6**	10	16	0	0	0	0	
Total Volume	9	15	1	25	26	6	10	42	3	14	44	61	2	6	1	9	
% App. Total	36	60	4		61.9	14.3	23.8		4.9	23	72.1		22.2	66.7	11.1		
PHF	.750	.536	.250	.625	.650	.500	.833	.808	.375	.583	.733	.803	.500	.500	.250	.450	

Location: Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 20th St/Market St

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Rubidoux Boulevard	East Leg Market Street	South Leg Rubidoux Boulevard	West Leg 20th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	1	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	1	1

	North Leg Rubidoux Boulevard	East Leg Market Street	South Leg Rubidoux Boulevard	West Leg 20th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	1	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	1	1

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Location: Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 20th St/Market St

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Rubidoux Boulevard			Westbound Market Street			Northbound Rubidoux Boulevard			Eastbound 20th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	0	0	0	0	0	0	0	0	1

	Southbound Rubidoux Boulevard			Westbound Market Street			Northbound Rubidoux Boulevard			Eastbound 20th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	1	1

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 24th Street
Weather: Clear

File Name : 17_JVY_Rub_24th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Rubidoux Boulevard Southbound				24th Street Westbound				Rubidoux Boulevard Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	7	120	0	127	4	3	4	11	2	92	3	97	0	1	0	1	236
06:45 AM	20	134	0	154	5	2	1	8	4	92	9	105	0	1	1	2	269
Total	27	254	0	281	9	5	5	19	6	184	12	202	0	2	1	3	505
07:00 AM	17	112	1	130	1	1	2	4	2	107	4	113	0	0	1	1	248
07:15 AM	35	161	0	196	2	1	1	4	2	98	9	109	1	0	0	1	310
07:30 AM	45	195	1	241	3	1	5	9	1	104	2	107	0	0	1	1	358
07:45 AM	33	180	1	214	3	3	0	6	1	120	4	125	0	1	1	2	347
Total	130	648	3	781	9	6	8	23	6	429	19	454	1	1	3	5	1263
08:00 AM	19	157	0	176	2	0	0	2	1	115	4	120	0	1	0	1	299
08:15 AM	19	126	0	145	3	0	4	7	7	119	8	134	0	0	1	1	287
08:30 AM	7	116	0	123	2	1	1	4	7	117	4	128	0	0	2	2	257
08:45 AM	10	84	1	95	5	1	2	8	7	117	5	129	0	2	1	3	235
Total	55	483	1	539	12	2	7	21	22	468	21	511	0	3	4	7	1078
Grand Total	212	1385	4	1601	30	13	20	63	34	1081	52	1167	1	6	8	15	2846
Apprch %	13.2	86.5	0.2		47.6	20.6	31.7		2.9	92.6	4.5		6.7	40	53.3		
Total %	7.4	48.7	0.1	56.3	1.1	0.5	0.7	2.2	1.2	38	1.8	41	0	0.2	0.3	0.5	
Passenger Vehicles	203	1074	3	1280	24	12	14	50	20	857	36	913	1	6	2	9	2252
% Passenger Vehicles	95.8	77.5	75	80	80	92.3	70	79.4	58.8	79.3	69.2	78.2	100	100	25	60	79.1
Large 2 Axle Vehicles	6	88	1	95	4	1	4	9	2	67	6	75	0	0	0	0	179
% Large 2 Axle Vehicles	2.8	6.4	25	5.9	13.3	7.7	20	14.3	5.9	6.2	11.5	6.4	0	0	0	0	6.3
3 Axle Vehicles	0	96	0	96	1	0	2	3	7	54	4	65	0	0	3	3	167
% 3 Axle Vehicles	0	6.9	0	6	3.3	0	10	4.8	20.6	5	7.7	5.6	0	0	37.5	20	5.9
4+ Axle Trucks	3	127	0	130	1	0	0	1	5	103	6	114	0	0	3	3	248
% 4+ Axle Trucks	1.4	9.2	0	8.1	3.3	0	0	1.6	14.7	9.5	11.5	9.8	0	0	37.5	20	8.7

	Rubidoux Boulevard Southbound				24th Street Westbound				Rubidoux Boulevard Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	35	161	0	196	2	1	1	4	**2**	98	**9**	109	**1**	0	0	1	310
07:30 AM	**45**	**195**	**1**	**241**	**3**	1	**5**	**9**	1	104	2	107	0	0	**1**	1	**358**
07:45 AM	33	180	1	214	3	**3**	0	6	1	**120**	4	**125**	0	**1**	1	**2**	347
08:00 AM	19	157	0	176	2	0	0	2	1	115	4	120	0	1	0	1	299
Total Volume	132	693	2	827	10	5	6	21	5	437	19	461	1	2	2	5	1314
% App. Total	16	83.8	0.2		47.6	23.8	28.6		1.1	94.8	4.1		20	40	40		
PHF	.733	.888	.500	.858	.833	.417	.300	.583	.625	.910	.528	.922	.250	.500	.500	.625	.918

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File Name : 17_JVY_Rub_24th AM
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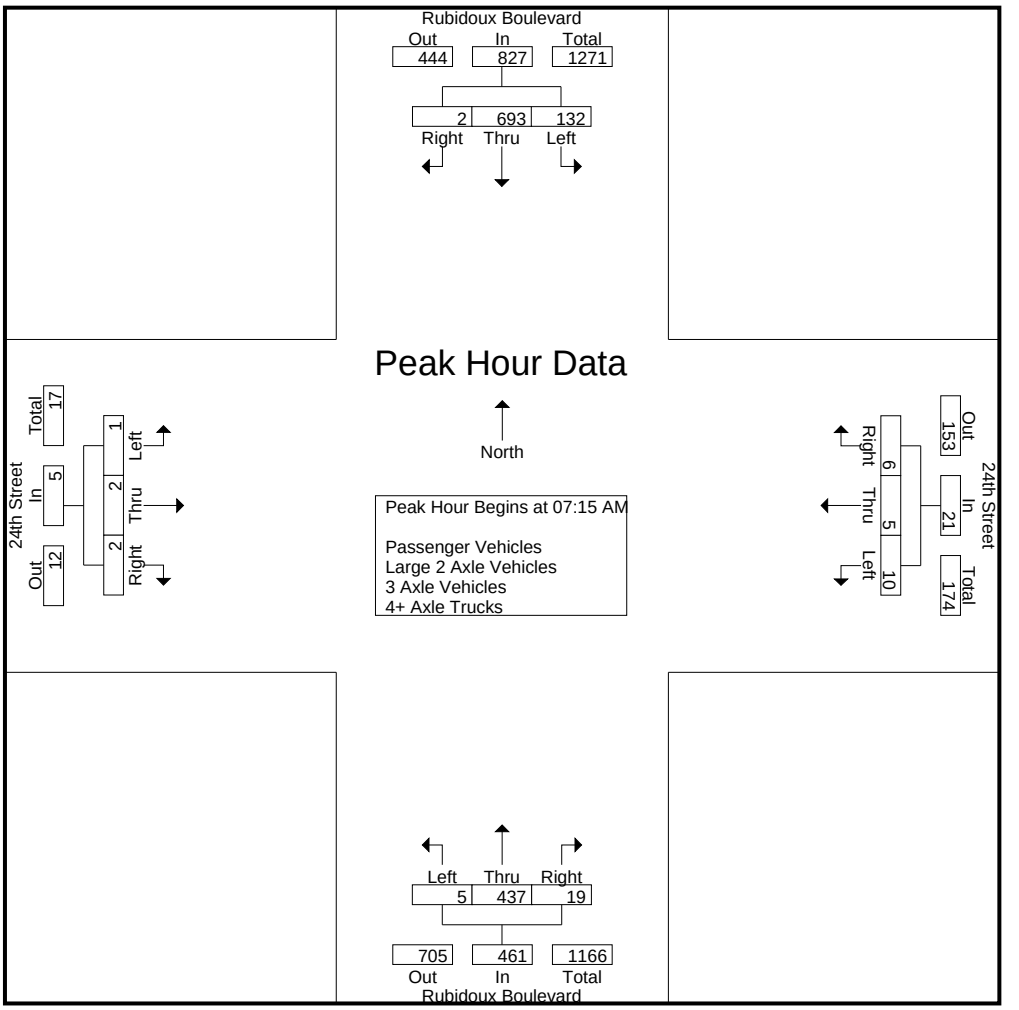

Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				06:30 AM				08:00 AM				08:00 AM			
+0 mins.	35	161	0	196	4	**3**	**4**	**11**	1	115	4	120	0	1	0	1
+15 mins.	**45**	**195**	**1**	**241**	**5**	2	1	8	**7**	**119**	**8**	**134**	0	0	1	1
+30 mins.	33	180	1	214	1	1	2	4	7	117	4	128	0	0	**2**	2
+45 mins.	19	157	0	176	2	1	1	4	7	117	5	129	0	**2**	1	**3**
Total Volume	132	693	2	827	12	7	8	27	22	468	21	511	0	3	4	7
% App. Total	16	83.8	0.2		44.4	25.9	29.6		4.3	91.6	4.1		0	42.9	57.1	
PHF	.733	.888	.500	.858	.600	.583	.500	.614	.786	.983	.656	.953	.000	.375	.500	.583

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Groups Printed- Passenger Vehicles

	Rubidoux Boulevard Southbound				24th Street Westbound				Rubidoux Boulevard Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	7	97	0	104	4	3	3	10	1	76	2	79	0	1	0	1	194
06:45 AM	19	103	0	122	5	2	0	7	3	78	6	87	0	1	0	1	217
Total	26	200	0	226	9	5	3	17	4	154	8	166	0	2	0	2	411
07:00 AM	17	86	1	104	1	1	1	3	1	88	3	92	0	0	0	0	199
07:15 AM	35	124	0	159	1	1	1	3	2	77	5	84	1	0	0	1	247
07:30 AM	44	161	1	206	2	1	3	6	0	84	2	86	0	0	0	0	298
07:45 AM	31	145	0	176	3	3	0	6	1	97	3	101	0	1	0	1	284
Total	127	516	2	645	7	6	5	18	4	346	13	363	1	1	0	2	1028
08:00 AM	18	124	0	142	1	0	0	1	1	92	2	95	0	1	0	1	239
08:15 AM	18	97	0	115	3	0	3	6	2	97	6	105	0	0	1	1	227
08:30 AM	6	80	0	86	1	0	1	2	3	78	3	84	0	0	0	0	172
08:45 AM	8	57	1	66	3	1	2	6	6	90	4	100	0	2	1	3	175
Total	50	358	1	409	8	1	6	15	12	357	15	384	0	3	2	5	813
Grand Total	203	1074	3	1280	24	12	14	50	20	857	36	913	1	6	2	9	2252
Apprch %	15.9	83.9	0.2		48	24	28		2.2	93.9	3.9		11.1	66.7	22.2		
Total %	9	47.7	0.1	56.8	1.1	0.5	0.6	2.2	0.9	38.1	1.6	40.5	0	0.3	0.1	0.4	

	Rubidoux Boulevard Southbound				24th Street Westbound				Rubidoux Boulevard Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	35	124	0	159	1	1	1	3	**2**	77	**5**	84	**1**	0	0	**1**	247
07:30 AM	**44**	**161**	**1**	**206**	2	1	**3**	**6**	0	84	2	86	0	0	0	0	**298**
07:45 AM	31	145	0	176	**3**	**3**	0	6	1	**97**	3	**101**	0	**1**	0	1	284
08:00 AM	18	124	0	142	1	0	0	1	1	92	2	95	0	1	0	1	239
Total Volume	128	554	1	683	7	5	4	16	4	350	12	366	1	2	0	3	1068
% App. Total	18.7	81.1	0.1		43.8	31.2	25		1.1	95.6	3.3		33.3	66.7	0		
PHF	.727	.860	.250	.829	.583	.417	.333	.667	.500	.902	.600	.906	.250	.500	.000	.750	.896

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File Name : 17_JVY_Rub_24th AM
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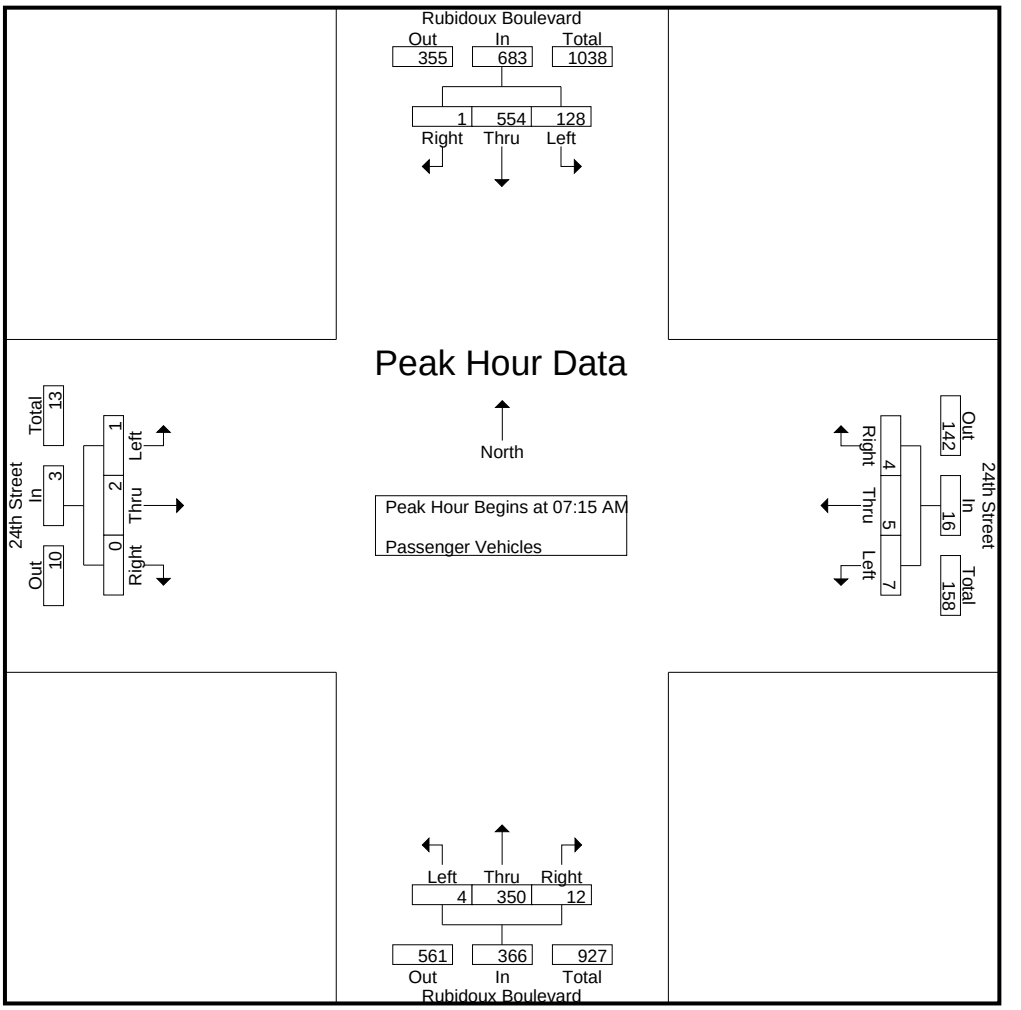

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	35	124	0	159	1	1	1	3	**2**	77	**5**	84	**1**	0	0	**1**
+15 mins.	**44**	**161**	**1**	**206**	2	1	**3**	**6**	0	84	2	86	0	0	0	0
+30 mins.	31	145	0	176	**3**	**3**	0	6	1	**97**	3	**101**	0	**1**	0	1
+45 mins.	18	124	0	142	1	0	0	1	1	92	2	95	0	1	0	1
Total Volume	128	554	1	683	7	5	4	16	4	350	12	366	1	2	0	3
% App. Total	18.7	81.1	0.1		43.8	31.2	25		1.1	95.6	3.3		33.3	66.7	0	
PHF	.727	.860	.250	.829	.583	.417	.333	.667	.500	.902	.600	.906	.250	.500	.000	.750

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City of Jurupa Valley
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File Name : 17_JVY_Rub_24th AM
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Groups Printed- Large 2 Axle Vehicles

	Rubidoux Boulevard Southbound				24th Street Westbound				Rubidoux Boulevard Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	4	0	4	0	0	0	0	0	4	0	4	0	0	0	0	8
06:45 AM	1	7	0	8	0	0	1	1	0	6	1	7	0	0	0	0	16
Total	1	11	0	12	0	0	1	1	0	10	1	11	0	0	0	0	24
07:00 AM	0	8	0	8	0	0	1	1	1	11	1	13	0	0	0	0	22
07:15 AM	0	10	0	10	0	0	0	0	0	6	1	7	0	0	0	0	17
07:30 AM	0	16	0	16	1	0	1	2	0	6	0	6	0	0	0	0	24
07:45 AM	1	10	1	12	0	0	0	0	0	7	0	7	0	0	0	0	19
Total	1	44	1	46	1	0	2	3	1	30	2	33	0	0	0	0	82
08:00 AM	0	9	0	9	0	0	0	0	0	4	0	4	0	0	0	0	13
08:15 AM	1	7	0	8	0	0	1	1	0	2	2	4	0	0	0	0	13
08:30 AM	1	13	0	14	1	1	0	2	1	14	1	16	0	0	0	0	32
08:45 AM	2	4	0	6	2	0	0	2	0	7	0	7	0	0	0	0	15
Total	4	33	0	37	3	1	1	5	1	27	3	31	0	0	0	0	73
Grand Total	6	88	1	95	4	1	4	9	2	67	6	75	0	0	0	0	179
Apprch %	6.3	92.6	1.1		44.4	11.1	44.4		2.7	89.3	8		0	0	0		
Total %	3.4	49.2	0.6	53.1	2.2	0.6	2.2	5	1.1	37.4	3.4	41.9	0	0	0	0	

	Rubidoux Boulevard Southbound				24th Street Westbound				Rubidoux Boulevard Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	10	0	10	0	0	0	0	0	6	**1**	**7**	0	0	0	0	17
07:30 AM	0	**16**	0	**16**	**1**	0	**1**	**2**	0	6	0	6	0	0	0	0	**24**
07:45 AM	**1**	10	**1**	12	0	0	0	0	0	**7**	0	7	0	0	0	0	19
08:00 AM	0	9	0	9	0	0	0	0	0	4	0	4	0	0	0	0	13
Total Volume	1	45	1	47	1	0	1	2	0	23	1	24	0	0	0	0	73
% App. Total	2.1	95.7	2.1		50	0	50		0	95.8	4.2		0	0	0		
PHF	.250	.703	.250	.734	.250	.000	.250	.250	.000	.821	.250	.857	.000	.000	.000	.000	.760

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File Name : 17_JVY_Rub_24th AM
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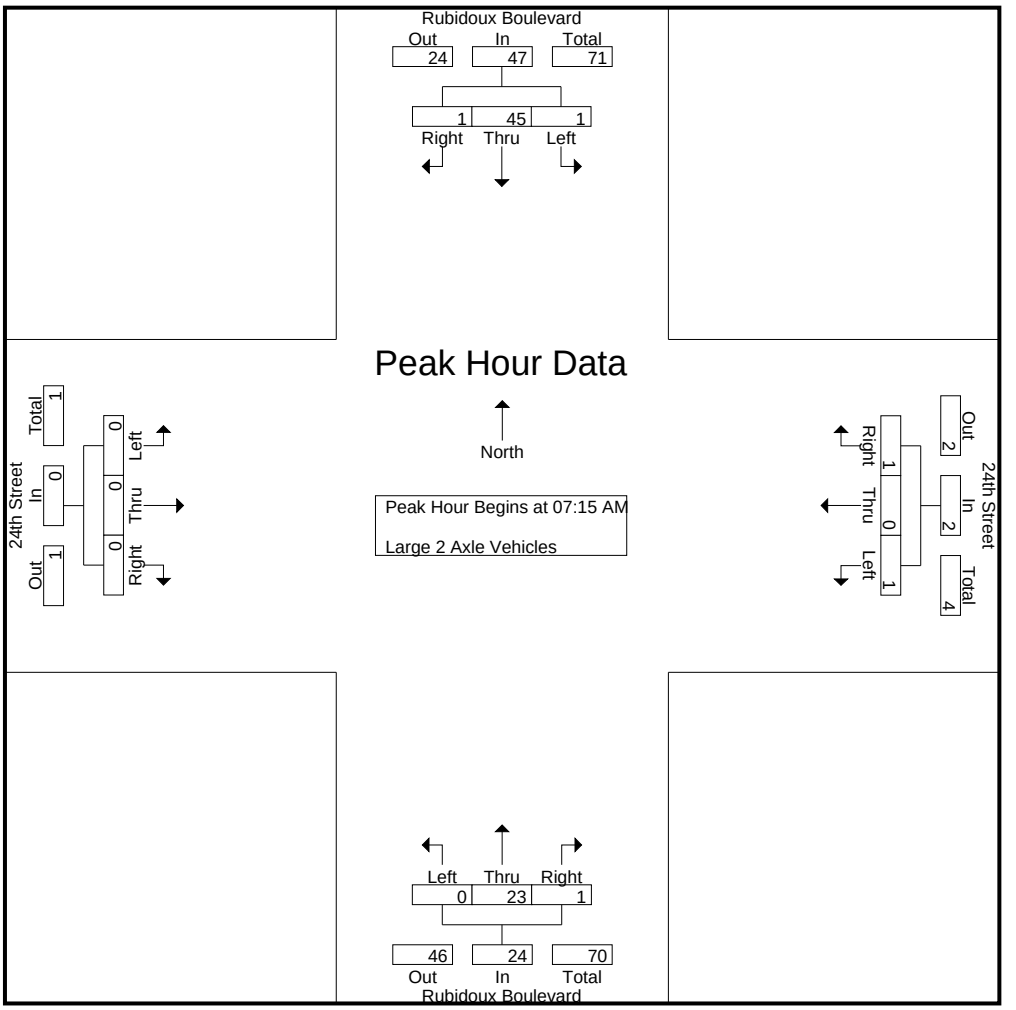

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	10	0	10	0	0	0	0	0	6	**1**	**7**	0	0	0	0
+15 mins.	0	**16**	0	**16**	**1**	0	**1**	**2**	0	6	0	6	0	0	0	0
+30 mins.	**1**	10	**1**	12	0	0	0	0	0	**7**	0	7	0	0	0	0
+45 mins.	0	9	0	9	0	0	0	0	0	4	0	4	0	0	0	0
Total Volume	1	45	1	47	1	0	1	2	0	23	1	24	0	0	0	0
% App. Total	2.1	95.7	2.1		50	0	50		0	95.8	4.2		0	0	0	
PHF	.250	.703	.250	.734	.250	.000	.250	.250	.000	.821	.250	.857	.000	.000	.000	.000

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File Name : 17_JVY_Rub_24th AM
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Groups Printed- 3 Axle Vehicles

	Rubidoux Boulevard Southbound				24th Street Westbound				Rubidoux Boulevard Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	7	0	7	0	0	1	1	0	4	0	4	0	0	0	0	12
06:45 AM	0	8	0	8	0	0	0	0	0	3	0	3	0	0	1	1	12
Total	0	15	0	15	0	0	1	1	0	7	0	7	0	0	1	1	24
07:00 AM	0	12	0	12	0	0	0	0	0	2	0	2	0	0	1	1	15
07:15 AM	0	12	0	12	0	0	0	0	0	3	2	5	0	0	0	0	17
07:30 AM	0	4	0	4	0	0	1	1	0	7	0	7	0	0	0	0	12
07:45 AM	0	12	0	12	0	0	0	0	0	5	0	5	0	0	1	1	18
Total	0	40	0	40	0	0	1	1	0	17	2	19	0	0	2	2	62
08:00 AM	0	11	0	11	1	0	0	1	0	9	1	10	0	0	0	0	22
08:15 AM	0	9	0	9	0	0	0	0	4	3	0	7	0	0	0	0	16
08:30 AM	0	11	0	11	0	0	0	0	2	9	0	11	0	0	0	0	22
08:45 AM	0	10	0	10	0	0	0	0	1	9	1	11	0	0	0	0	21
Total	0	41	0	41	1	0	0	1	7	30	2	39	0	0	0	0	81
Grand Total	0	96	0	96	1	0	2	3	7	54	4	65	0	0	3	3	167
Apprch %	0	100	0		33.3	0	66.7		10.8	83.1	6.2		0	0	100		
Total %	0	57.5	0	57.5	0.6	0	1.2	1.8	4.2	32.3	2.4	38.9	0	0	1.8	1.8	

	Rubidoux Boulevard Southbound				24th Street Westbound				Rubidoux Boulevard Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**12**	0	**12**	0	0	0	0	0	3	**2**	5	0	0	0	0	17
07:30 AM	0	4	0	4	0	0	**1**	**1**	0	7	0	7	0	0	0	0	12
07:45 AM	0	12	0	12	0	0	0	0	0	5	0	5	0	0	**1**	**1**	18
08:00 AM	0	11	0	11	**1**	0	0	1	0	**9**	1	**10**	0	0	0	0	**22**
Total Volume	0	39	0	39	1	0	1	2	0	24	3	27	0	0	1	1	69
% App. Total	0	100	0		50	0	50		0	88.9	11.1		0	0	100		
PHF	.000	.813	.000	.813	.250	.000	.250	.500	.000	.667	.375	.675	.000	.000	.250	.250	.784

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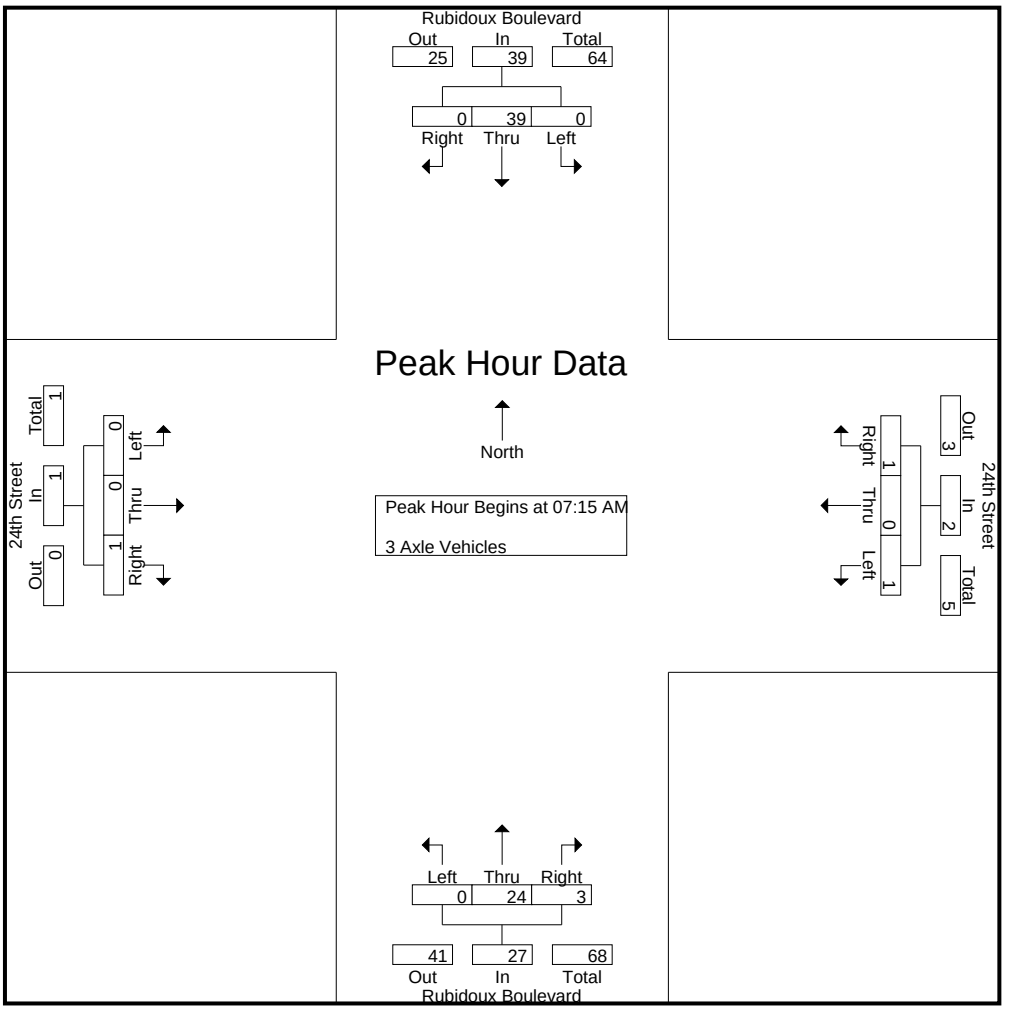

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	**12**	0	**12**	0	0	0	0	0	3	**2**	5	0	0	0	0
+15 mins.	0	4	0	4	0	0	**1**	**1**	0	7	0	7	0	0	0	0
+30 mins.	0	12	0	12	0	0	0	0	0	5	0	5	0	0	**1**	**1**
+45 mins.	0	11	0	11	**1**	0	0	1	0	**9**	1	**10**	0	0	0	0
Total Volume	0	39	0	39	1	0	1	2	0	24	3	27	0	0	1	1
% App. Total	0	100	0		50	0	50		0	88.9	11.1		0	0	100	
PHF	.000	.813	.000	.813	.250	.000	.250	.500	.000	.667	.375	.675	.000	.000	.250	.250

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Groups Printed- 4+ Axle Trucks

	Rubidoux Boulevard Southbound				24th Street Westbound				Rubidoux Boulevard Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	12	0	12	0	0	0	0	1	8	1	10	0	0	0	0	22
06:45 AM	0	16	0	16	0	0	0	0	1	5	2	8	0	0	0	0	24
Total	0	28	0	28	0	0	0	0	2	13	3	18	0	0	0	0	46
07:00 AM	0	6	0	6	0	0	0	0	0	6	0	6	0	0	0	0	12
07:15 AM	0	15	0	15	1	0	0	1	0	12	1	13	0	0	0	0	29
07:30 AM	1	14	0	15	0	0	0	0	1	7	0	8	0	0	1	1	24
07:45 AM	1	13	0	14	0	0	0	0	0	11	1	12	0	0	0	0	26
Total	2	48	0	50	1	0	0	1	1	36	2	39	0	0	1	1	91
08:00 AM	1	13	0	14	0	0	0	0	0	10	1	11	0	0	0	0	25
08:15 AM	0	13	0	13	0	0	0	0	1	17	0	18	0	0	0	0	31
08:30 AM	0	12	0	12	0	0	0	0	1	16	0	17	0	0	2	2	31
08:45 AM	0	13	0	13	0	0	0	0	0	11	0	11	0	0	0	0	24
Total	1	51	0	52	0	0	0	0	2	54	1	57	0	0	2	2	111
Grand Total	3	127	0	130	1	0	0	1	5	103	6	114	0	0	3	3	248
Apprch %	2.3	97.7	0		100	0	0		4.4	90.4	5.3		0	0	100		
Total %	1.2	51.2	0	52.4	0.4	0	0	0.4	2	41.5	2.4	46	0	0	1.2	1.2	

	Rubidoux Boulevard Southbound				24th Street Westbound				Rubidoux Boulevard Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**15**	0	**15**	**1**	0	0	**1**	0	**12**	**1**	**13**	0	0	0	0	**29**
07:30 AM	**1**	14	0	15	0	0	0	0	**1**	7	0	8	0	0	**1**	**1**	24
07:45 AM	1	13	0	14	0	0	0	0	0	11	1	12	0	0	0	0	26
08:00 AM	1	13	0	14	0	0	0	0	0	10	1	11	0	0	0	0	25
Total Volume	3	55	0	58	1	0	0	1	1	40	3	44	0	0	1	1	104
% App. Total	5.2	94.8	0		100	0	0		2.3	90.9	6.8		0	0	100		
PHF	.750	.917	.000	.967	.250	.000	.000	.250	.250	.833	.750	.846	.000	.000	.250	.250	.897

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Weather: Clear

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Site Code : 05122894
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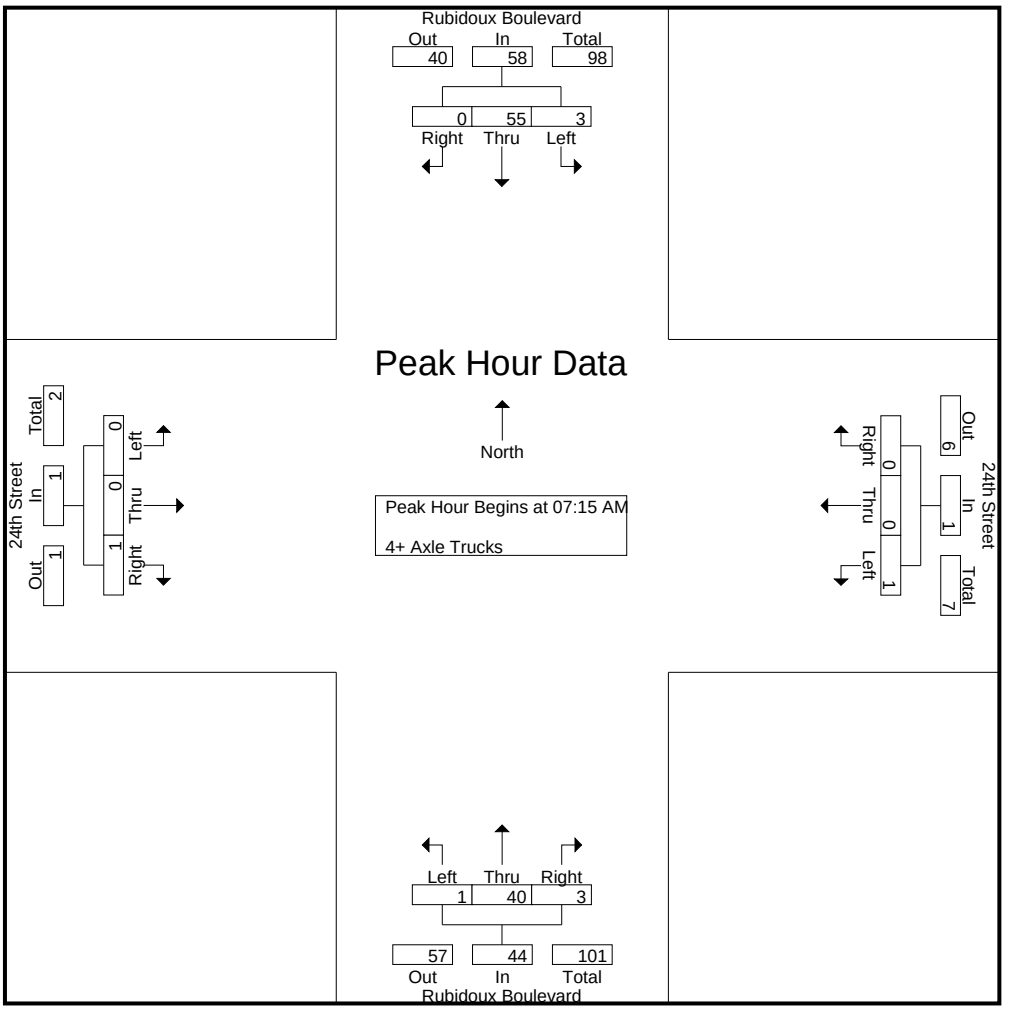

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	**15**	0	**15**	**1**	0	0	**1**	0	**12**	**1**	**13**	0	0	0	0
+15 mins.	**1**	14	0	15	0	0	0	0	**1**	7	0	8	0	0	**1**	**1**
+30 mins.	1	13	0	14	0	0	0	0	0	11	1	12	0	0	0	0
+45 mins.	1	13	0	14	0	0	0	0	0	10	1	11	0	0	0	0
Total Volume	3	55	0	58	1	0	0	1	1	40	3	44	0	0	1	1
% App. Total	5.2	94.8	0		100	0	0		2.3	90.9	6.8		0	0	100	
PHF	.750	.917	.000	.967	.250	.000	.000	.250	.250	.833	.750	.846	.000	.000	.250	.250

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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Rubidoux Boulevard Southbound				24th Street Westbound				Rubidoux Boulevard Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	23	149	0	172	6	0	3	9	6	123	11	140	0	10	2	12	333
03:45 PM	26	117	1	144	2	4	8	14	1	144	9	154	1	1	1	3	315
Total	49	266	1	316	8	4	11	23	7	267	20	294	1	11	3	15	648
04:00 PM	25	163	0	188	2	2	7	11	0	117	10	127	0	6	4	10	336
04:15 PM	35	160	2	197	2	3	1	6	3	131	14	148	0	6	0	6	357
04:30 PM	34	153	0	187	3	1	1	5	0	130	16	146	1	1	3	5	343
04:45 PM	49	145	1	195	6	0	1	7	7	134	15	156	0	3	3	6	364
Total	143	621	3	767	13	6	10	29	10	512	55	577	1	16	10	27	1400
05:00 PM	21	181	0	202	5	1	2	8	1	129	15	145	1	7	2	10	365
05:15 PM	25	134	0	159	4	1	3	8	2	119	16	137	1	6	3	10	314
05:30 PM	12	157	0	169	2	3	1	6	0	159	19	178	0	2	1	3	356
05:45 PM	13	121	0	134	2	0	7	9	1	117	17	135	0	2	0	2	280
Total	71	593	0	664	13	5	13	31	4	524	67	595	2	17	6	25	1315
Grand Total	263	1480	4	1747	34	15	34	83	21	1303	142	1466	4	44	19	67	3363
Apprch %	15.1	84.7	0.2		41	18.1	41		1.4	88.9	9.7		6	65.7	28.4		
Total %	7.8	44	0.1	51.9	1	0.4	1	2.5	0.6	38.7	4.2	43.6	0.1	1.3	0.6	2	
Passenger Vehicles	253	1239	4	1496	34	14	28	76	12	979	126	1117	3	43	19	65	2754
% Passenger Vehicles	96.2	83.7	100	85.6	100	93.3	82.4	91.6	57.1	75.1	88.7	76.2	75	97.7	100	97	81.9
Large 2 Axle Vehicles	6	69	0	75	0	0	4	4	2	91	7	100	0	1	0	1	180
% Large 2 Axle Vehicles	2.3	4.7	0	4.3	0	0	11.8	4.8	9.5	7	4.9	6.8	0	2.3	0	1.5	5.4
3 Axle Vehicles	0	51	0	51	0	0	0	0	3	75	2	80	0	0	0	0	131
% 3 Axle Vehicles	0	3.4	0	2.9	0	0	0	0	14.3	5.8	1.4	5.5	0	0	0	0	3.9
4+ Axle Trucks	4	121	0	125	0	1	2	3	4	158	7	169	1	0	0	1	298
% 4+ Axle Trucks	1.5	8.2	0	7.2	0	6.7	5.9	3.6	19	12.1	4.9	11.5	25	0	0	1.5	8.9

	Rubidoux Boulevard Southbound				24th Street Westbound				Rubidoux Boulevard Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	35	160	**2**	197	2	**3**	1	6	3	131	14	148	0	6	0	6	357
04:30 PM	34	153	0	187	3	1	1	5	0	130	**16**	146	**1**	1	**3**	5	343
04:45 PM	**49**	145	1	195	**6**	0	1	7	**7**	**134**	15	**156**	0	3	3	6	364
05:00 PM	21	**181**	0	**202**	5	1	**2**	**8**	1	129	15	145	1	**7**	2	**10**	**365**
Total Volume	139	639	3	781	16	5	5	26	11	524	60	595	2	17	8	27	1429
% App. Total	17.8	81.8	0.4		61.5	19.2	19.2		1.8	88.1	10.1		7.4	63	29.6		
PHF	.709	.883	.375	.967	.667	.417	.625	.813	.393	.978	.938	.954	.500	.607	.667	.675	.979

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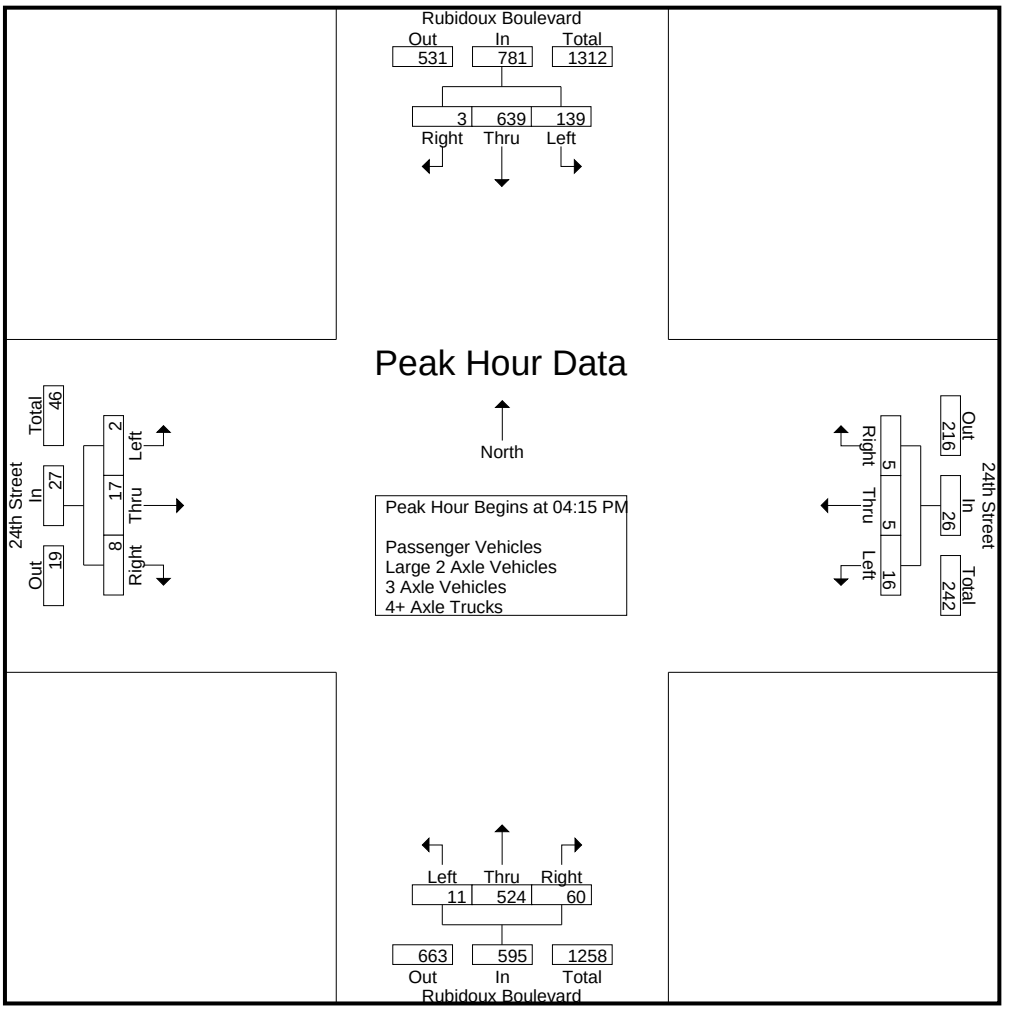

Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				03:30 PM				04:45 PM				03:30 PM			
+0 mins.	35	160	**2**	197	**6**	0	3	9	**7**	134	15	156	0	**10**	2	**12**
+15 mins.	34	153	0	187	2	**4**	**8**	**14**	1	129	15	145	**1**	1	1	3
+30 mins.	**49**	145	1	195	2	2	7	11	2	119	16	137	0	6	**4**	10
+45 mins.	21	**181**	0	**202**	2	3	1	6	0	**159**	**19**	**178**	0	6	0	6
Total Volume	139	639	3	781	12	9	19	40	10	541	65	616	1	23	7	31
% App. Total	17.8	81.8	0.4		30	22.5	47.5		1.6	87.8	10.6		3.2	74.2	22.6	
PHF	.709	.883	.375	.967	.500	.563	.594	.714	.357	.851	.855	.865	.250	.575	.438	.646

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Groups Printed- Passenger Vehicles

	Rubidoux Boulevard Southbound				24th Street Westbound				Rubidoux Boulevard Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	21	114	0	135	6	0	3	9	3	77	9	89	0	10	2	12	245
03:45 PM	23	98	1	122	2	4	6	12	1	110	7	118	0	1	1	2	254
Total	44	212	1	257	8	4	9	21	4	187	16	207	0	11	3	14	499
04:00 PM	25	139	0	164	2	1	7	10	0	92	9	101	0	6	4	10	285
04:15 PM	34	130	2	166	2	3	0	5	3	102	11	116	0	6	0	6	293
04:30 PM	31	126	0	157	3	1	1	5	0	90	14	104	1	1	3	5	271
04:45 PM	49	121	1	171	6	0	1	7	3	102	13	118	0	2	3	5	301
Total	139	516	3	658	13	5	9	27	6	386	47	439	1	15	10	26	1150
05:00 PM	21	152	0	173	5	1	2	8	0	98	14	112	1	7	2	10	303
05:15 PM	25	113	0	138	4	1	3	8	1	97	15	113	1	6	3	10	269
05:30 PM	11	144	0	155	2	3	0	5	0	125	17	142	0	2	1	3	305
05:45 PM	13	102	0	115	2	0	5	7	1	86	17	104	0	2	0	2	228
Total	70	511	0	581	13	5	10	28	2	406	63	471	2	17	6	25	1105
Grand Total	253	1239	4	1496	34	14	28	76	12	979	126	1117	3	43	19	65	2754
Apprch %	16.9	82.8	0.3		44.7	18.4	36.8		1.1	87.6	11.3		4.6	66.2	29.2		
Total %	9.2	45	0.1	54.3	1.2	0.5	1	2.8	0.4	35.5	4.6	40.6	0.1	1.6	0.7	2.4	

	Rubidoux Boulevard Southbound				24th Street Westbound				Rubidoux Boulevard Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	34	130	**2**	166	2	**3**	0	5	**3**	**102**	11	116	0	6	0	6	293
04:30 PM	31	126	0	157	3	1	1	5	0	90	**14**	104	**1**	1	**3**	5	271
04:45 PM	**49**	121	1	171	**6**	0	1	7	3	102	13	**118**	0	2	3	5	301
05:00 PM	21	**152**	0	**173**	5	1	**2**	**8**	0	98	14	112	1	**7**	2	**10**	**303**
Total Volume	135	529	3	667	16	5	4	25	6	392	52	450	2	16	8	26	1168
% App. Total	20.2	79.3	0.4		64	20	16		1.3	87.1	11.6		7.7	61.5	30.8		
PHF	.689	.870	.375	.964	.667	.417	.500	.781	.500	.961	.929	.953	.500	.571	.667	.650	.964

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File Name : 17_JVY_Rub_24th PM
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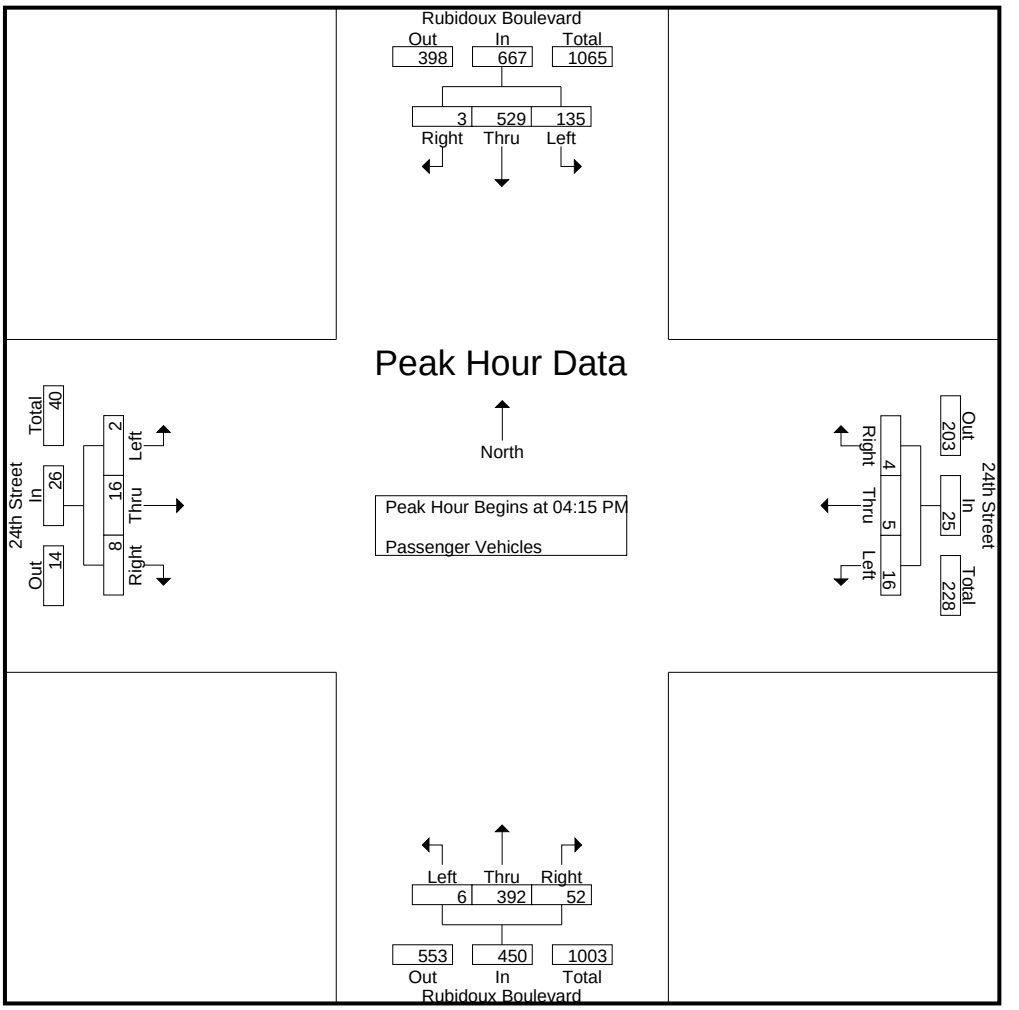

Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	34	130	**2**	166	2	**3**	0	5	**3**	**102**	11	116	0	6	0	6
+15 mins.	31	126	0	157	3	1	1	5	0	90	**14**	104	**1**	1	**3**	5
+30 mins.	**49**	121	1	171	**6**	0	1	7	3	102	13	**118**	0	2	3	5
+45 mins.	21	**152**	0	**173**	5	1	**2**	**8**	0	98	14	112	1	**7**	2	**10**
Total Volume	135	529	3	667	16	5	4	25	6	392	52	450	2	16	8	26
% App. Total	20.2	79.3	0.4		64	20	16		1.3	87.1	11.6		7.7	61.5	30.8	
PHF	.689	.870	.375	.964	.667	.417	.500	.781	.500	.961	.929	.953	.500	.571	.667	.650

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File Name : 17_JVY_Rub_24th PM
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Groups Printed- Large 2 Axle Vehicles

	Rubidoux Boulevard Southbound				24th Street Westbound				Rubidoux Boulevard Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	2	8	0	10	0	0	0	0	1	18	2	21	0	0	0	0	31
03:45 PM	1	4	0	5	0	0	2	2	0	6	1	7	0	0	0	0	14
Total	3	12	0	15	0	0	2	2	1	24	3	28	0	0	0	0	45
04:00 PM	0	7	0	7	0	0	0	0	0	8	0	8	0	0	0	0	15
04:15 PM	1	11	0	12	0	0	1	1	0	11	2	13	0	0	0	0	26
04:30 PM	2	4	0	6	0	0	0	0	0	10	0	10	0	0	0	0	16
04:45 PM	0	8	0	8	0	0	0	0	1	11	0	12	0	1	0	1	21
Total	3	30	0	33	0	0	1	1	1	40	2	43	0	1	0	1	78
05:00 PM	0	6	0	6	0	0	0	0	0	7	0	7	0	0	0	0	13
05:15 PM	0	6	0	6	0	0	0	0	0	4	1	5	0	0	0	0	11
05:30 PM	0	5	0	5	0	0	0	0	0	8	1	9	0	0	0	0	14
05:45 PM	0	10	0	10	0	0	1	1	0	8	0	8	0	0	0	0	19
Total	0	27	0	27	0	0	1	1	0	27	2	29	0	0	0	0	57
Grand Total	6	69	0	75	0	0	4	4	2	91	7	100	0	1	0	1	180
Apprch %	8	92	0		0	0	100		2	91	7		0	100	0		
Total %	3.3	38.3	0	41.7	0	0	2.2	2.2	1.1	50.6	3.9	55.6	0	0.6	0	0.6	

	Rubidoux Boulevard Southbound				24th Street Westbound				Rubidoux Boulevard Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	1	**11**	0	**12**	0	0	**1**	**1**	0	**11**	**2**	**13**	0	0	0	0	**26**
04:30 PM	**2**	4	0	6	0	0	0	0	0	10	0	10	0	0	0	0	16
04:45 PM	0	8	0	8	0	0	0	0	**1**	11	0	12	0	**1**	0	**1**	21
05:00 PM	0	6	0	6	0	0	0	0	0	7	0	7	0	0	0	0	13
Total Volume	3	29	0	32	0	0	1	1	1	39	2	42	0	1	0	1	76
% App. Total	9.4	90.6	0		0	0	100		2.4	92.9	4.8		0	100	0		
PHF	.375	.659	.000	.667	.000	.000	.250	.250	.250	.886	.250	.808	.000	.250	.000	.250	.731

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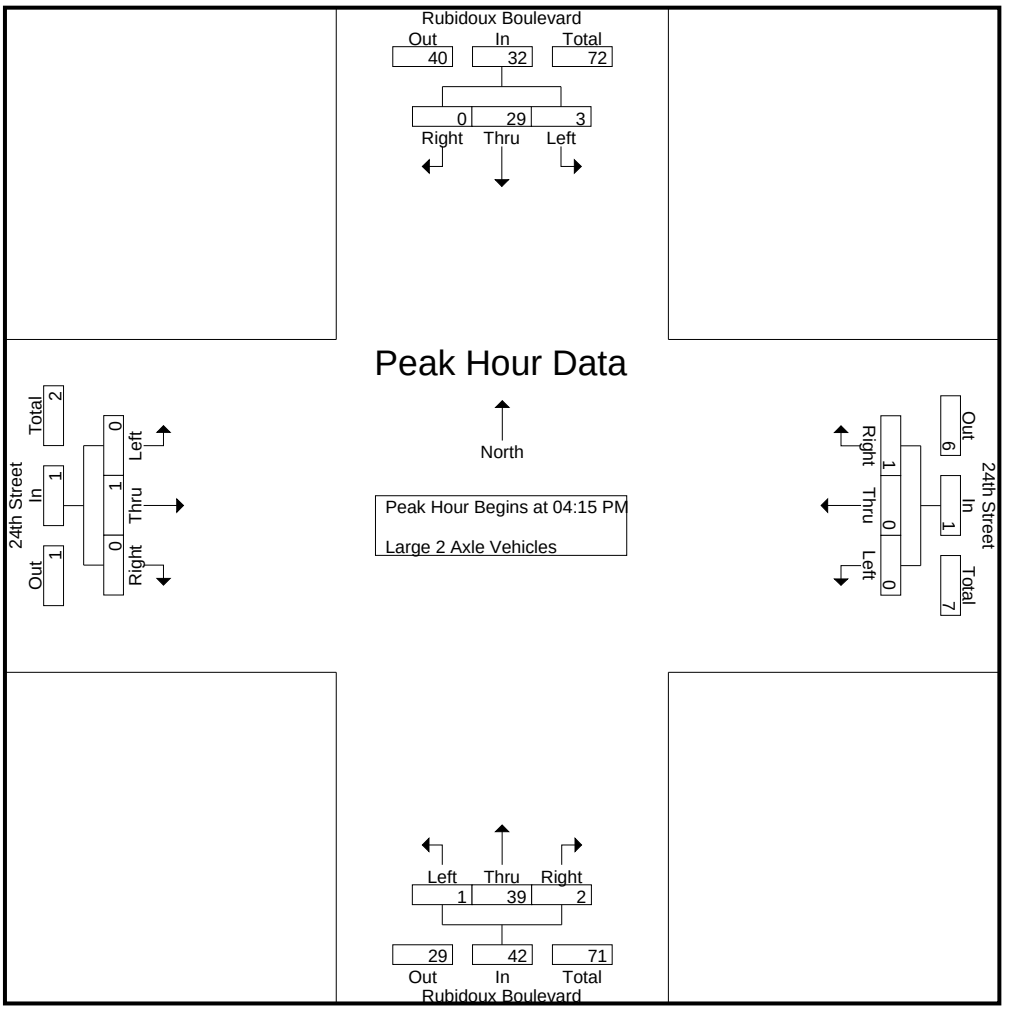

Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	1	**11**	0	**12**	0	0	**1**	**1**	0	**11**	**2**	**13**	0	0	0	0
+15 mins.	**2**	4	0	6	0	0	0	0	0	10	0	10	0	0	0	0
+30 mins.	0	8	0	8	0	0	0	0	**1**	11	0	12	0	**1**	0	**1**
+45 mins.	0	6	0	6	0	0	0	0	0	7	0	7	0	0	0	0
Total Volume	3	29	0	32	0	0	1	1	1	39	2	42	0	1	0	1
% App. Total	9.4	90.6	0		0	0	100		2.4	92.9	4.8		0	100	0	
PHF	.375	.659	.000	.667	.000	.000	.250	.250	.250	.886	.250	.808	.000	.250	.000	.250

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Groups Printed- 3 Axle Vehicles

	Rubidoux Boulevard Southbound				24th Street Westbound				Rubidoux Boulevard Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	9	0	9	0	0	0	0	1	9	0	10	0	0	0	0	19
03:45 PM	0	1	0	1	0	0	0	0	0	9	1	10	0	0	0	0	11
Total	0	10	0	10	0	0	0	0	1	18	1	20	0	0	0	0	30
04:00 PM	0	6	0	6	0	0	0	0	0	4	1	5	0	0	0	0	11
04:15 PM	0	8	0	8	0	0	0	0	0	5	0	5	0	0	0	0	13
04:30 PM	0	6	0	6	0	0	0	0	0	11	0	11	0	0	0	0	17
04:45 PM	0	4	0	4	0	0	0	0	0	5	0	5	0	0	0	0	9
Total	0	24	0	24	0	0	0	0	0	25	1	26	0	0	0	0	50
05:00 PM	0	8	0	8	0	0	0	0	1	9	0	10	0	0	0	0	18
05:15 PM	0	7	0	7	0	0	0	0	1	7	0	8	0	0	0	0	15
05:30 PM	0	1	0	1	0	0	0	0	0	10	0	10	0	0	0	0	11
05:45 PM	0	1	0	1	0	0	0	0	0	6	0	6	0	0	0	0	7
Total	0	17	0	17	0	0	0	0	2	32	0	34	0	0	0	0	51
Grand Total	0	51	0	51	0	0	0	0	3	75	2	80	0	0	0	0	131
Apprch %	0	100	0		0	0	0		3.8	93.8	2.5		0	0	0		
Total %	0	38.9	0	38.9	0	0	0	0	2.3	57.3	1.5	61.1	0	0	0	0	

	Rubidoux Boulevard Southbound				24th Street Westbound				Rubidoux Boulevard Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	**8**	0	**8**	0	0	0	0	0	5	0	5	0	0	0	0	13
04:30 PM	0	6	0	6	0	0	0	0	0	**11**	0	**11**	0	0	0	0	17
04:45 PM	0	4	0	4	0	0	0	0	0	5	0	5	0	0	0	0	9
05:00 PM	0	8	0	8	0	0	0	0	**1**	9	0	10	0	0	0	0	**18**
Total Volume	0	26	0	26	0	0	0	0	1	30	0	31	0	0	0	0	57
% App. Total	0	100	0		0	0	0		3.2	96.8	0		0	0	0		
PHF	.000	.813	.000	.813	.000	.000	.000	.000	.250	.682	.000	.705	.000	.000	.000	.000	.792

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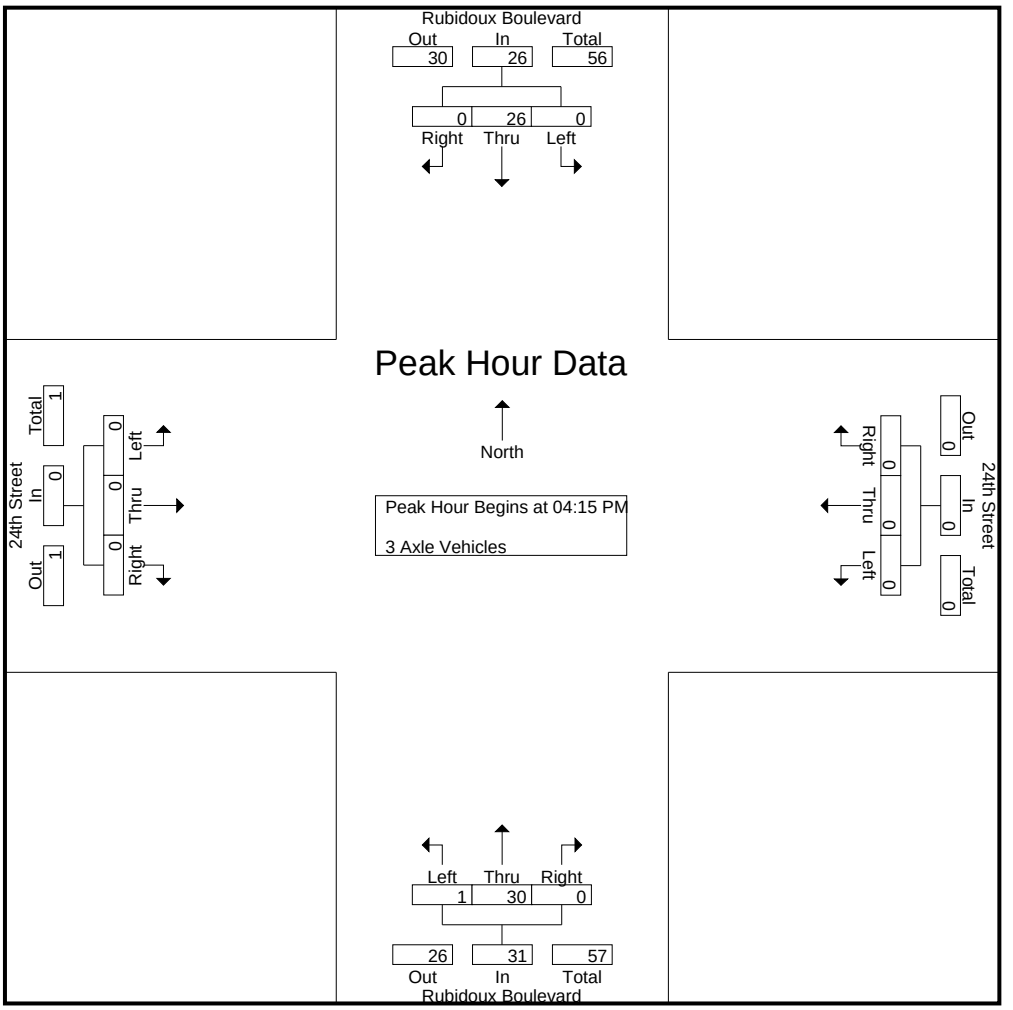
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 24th Street
Weather: Clear

File Name : 17_JVY_Rub_24th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	**8**	0	**8**	0	0	0	0	0	5	0	5	0	0	0	0
+15 mins.	0	6	0	6	0	0	0	0	0	**11**	0	**11**	0	0	0	0
+30 mins.	0	4	0	4	0	0	0	0	0	5	0	5	0	0	0	0
+45 mins.	0	8	0	8	0	0	0	0	**1**	9	0	10	0	0	0	0
Total Volume	0	26	0	26	0	0	0	0	1	30	0	31	0	0	0	0
% App. Total	0	100	0		0	0	0		3.2	96.8	0		0	0	0	
PHF	.000	.813	.000	.813	.000	.000	.000	.000	.250	.682	.000	.705	.000	.000	.000	.000

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City of Jurupa Valley
N/S: Rubidoux Boulevard
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Weather: Clear

File Name : 17_JVY_Rub_24th PM
Site Code : 05122894
Start Date : 10/4/2022
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Groups Printed- 4+ Axle Trucks

	Rubidoux Boulevard Southbound				24th Street Westbound				Rubidoux Boulevard Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	18	0	18	0	0	0	0	1	19	0	20	0	0	0	0	38
03:45 PM	2	14	0	16	0	0	0	0	0	19	0	19	1	0	0	1	36
Total	2	32	0	34	0	0	0	0	1	38	0	39	1	0	0	1	74
04:00 PM	0	11	0	11	0	1	0	1	0	13	0	13	0	0	0	0	25
04:15 PM	0	11	0	11	0	0	0	0	0	13	1	14	0	0	0	0	25
04:30 PM	1	17	0	18	0	0	0	0	0	19	2	21	0	0	0	0	39
04:45 PM	0	12	0	12	0	0	0	0	3	16	2	21	0	0	0	0	33
Total	1	51	0	52	0	1	0	1	3	61	5	69	0	0	0	0	122
05:00 PM	0	15	0	15	0	0	0	0	0	15	1	16	0	0	0	0	31
05:15 PM	0	8	0	8	0	0	0	0	0	11	0	11	0	0	0	0	19
05:30 PM	1	7	0	8	0	0	1	1	0	16	1	17	0	0	0	0	26
05:45 PM	0	8	0	8	0	0	1	1	0	17	0	17	0	0	0	0	26
Total	1	38	0	39	0	0	2	2	0	59	2	61	0	0	0	0	102
Grand Total	4	121	0	125	0	1	2	3	4	158	7	169	1	0	0	1	298
Apprch %	3.2	96.8	0		0	33.3	66.7		2.4	93.5	4.1		100	0	0		
Total %	1.3	40.6	0	41.9	0	0.3	0.7	1	1.3	53	2.3	56.7	0.3	0	0	0.3	

	Rubidoux Boulevard Southbound				24th Street Westbound				Rubidoux Boulevard Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	11	0	11	0	0	0	0	0	13	1	14	0	0	0	0	25
04:30 PM	**1**	**17**	0	**18**	0	0	0	0	0	**19**	**2**	**21**	0	0	0	0	**39**
04:45 PM	0	12	0	12	0	0	0	0	**3**	16	2	21	0	0	0	0	33
05:00 PM	0	15	0	15	0	0	0	0	0	15	1	16	0	0	0	0	31
Total Volume	1	55	0	56	0	0	0	0	3	63	6	72	0	0	0	0	128
% App. Total	1.8	98.2	0		0	0	0		4.2	87.5	8.3		0	0	0		
PHF	.250	.809	.000	.778	.000	.000	.000	.000	.250	.829	.750	.857	.000	.000	.000	.000	.821

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City of Jurupa Valley
N/S: Rubidoux Boulevard
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File Name : 17_JVY_Rub_24th PM
Site Code : 05122894
Start Date : 10/4/2022
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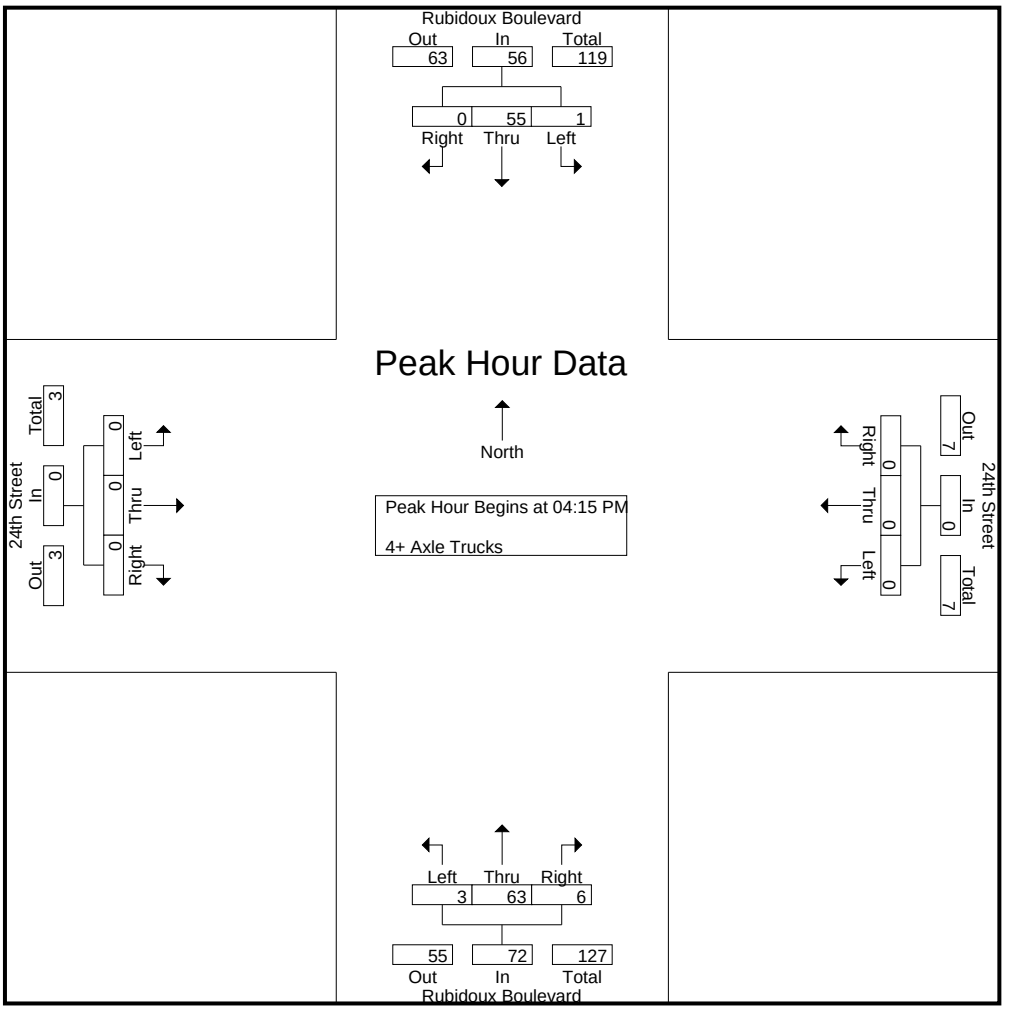

Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	11	0	11	0	0	0	0	0	13	1	14	0	0	0	0
+15 mins.	**1**	**17**	0	**18**	0	0	0	0	0	**19**	**2**	**21**	0	0	0	0
+30 mins.	0	12	0	12	0	0	0	0	**3**	16	2	21	0	0	0	0
+45 mins.	0	15	0	15	0	0	0	0	0	15	1	16	0	0	0	0
Total Volume	1	55	0	56	0	0	0	0	3	63	6	72	0	0	0	0
% App. Total	1.8	98.2	0		0	0	0		4.2	87.5	8.3		0	0	0	
PHF	.250	.809	.000	.778	.000	.000	.000	.000	.250	.829	.750	.857	.000	.000	.000	.000

Location: Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 24th Street

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Rubidoux Boulevard	East Leg 24th Street	South Leg Rubidoux Boulevard	West Leg 24th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	1	0	1
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	1	0	0	1
TOTAL VOLUMES:	0	1	1	0	2

	North Leg Rubidoux Boulevard	East Leg 24th Street	South Leg Rubidoux Boulevard	West Leg 24th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	1	0	1
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	1	1
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	1	2

Location: Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 24th Street

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Rubidoux Boulevard			Westbound 24th Street			Northbound Rubidoux Boulevard			Eastbound 24th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	1	0	0	0	1

	Southbound Rubidoux Boulevard			Westbound 24th Street			Northbound Rubidoux Boulevard			Eastbound 24th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	0	0	0	0	0	0	0	0	2

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 26th Street
Weather: Clear

File Name : 18_JVY_Rub_26th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Rubidoux Boulevard Southbound				26th Street Westbound				Rubidoux Boulevard Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	2	112	0	114	0	0	1	1	4	92	3	99	1	0	2	3	217
06:45 AM	2	136	0	138	3	0	0	3	0	106	2	108	0	0	4	4	253
Total	4	248	0	252	3	0	1	4	4	198	5	207	1	0	6	7	470
07:00 AM	2	120	0	122	1	0	2	3	1	128	1	130	0	0	2	2	257
07:15 AM	1	153	0	154	0	0	6	6	0	99	1	100	0	0	1	1	261
07:30 AM	1	198	0	199	1	0	2	3	4	102	0	106	0	0	0	0	308
07:45 AM	1	184	0	185	1	0	1	2	2	134	1	137	0	0	0	0	324
Total	5	655	0	660	3	0	11	14	7	463	3	473	0	0	3	3	1150
08:00 AM	2	152	0	154	0	1	0	1	0	122	4	126	0	0	2	2	283
08:15 AM	2	127	0	129	1	0	1	2	2	135	4	141	0	1	2	3	275
08:30 AM	2	117	0	119	2	0	1	3	2	127	2	131	0	0	1	1	254
08:45 AM	2	82	1	85	3	0	1	4	4	124	1	129	1	0	1	2	220
Total	8	478	1	487	6	1	3	10	8	508	11	527	1	1	6	8	1032
Grand Total	17	1381	1	1399	12	1	15	28	19	1169	19	1207	2	1	15	18	2652
Apprch %	1.2	98.7	0.1		42.9	3.6	53.6		1.6	96.9	1.6		11.1	5.6	83.3		
Total %	0.6	52.1	0	52.8	0.5	0	0.6	1.1	0.7	44.1	0.7	45.5	0.1	0	0.6	0.7	
Passenger Vehicles	14	1049	1	1064	7	1	10	18	11	917	11	939	2	1	12	15	2036
% Passenger Vehicles	82.4	76	100	76.1	58.3	100	66.7	64.3	57.9	78.4	57.9	77.8	100	100	80	83.3	76.8
Large 2 Axle Vehicles	1	87	0	88	3	0	3	6	3	72	3	78	0	0	0	0	172
% Large 2 Axle Vehicles	5.9	6.3	0	6.3	25	0	20	21.4	15.8	6.2	15.8	6.5	0	0	0	0	6.5
3 Axle Vehicles	0	97	0	97	0	0	0	0	3	57	1	61	0	0	3	3	161
% 3 Axle Vehicles	0	7	0	6.9	0	0	0	0	15.8	4.9	5.3	5.1	0	0	20	16.7	6.1
4+ Axle Trucks	2	148	0	150	2	0	2	4	2	123	4	129	0	0	0	0	283
% 4+ Axle Trucks	11.8	10.7	0	10.7	16.7	0	13.3	14.3	10.5	10.5	21.1	10.7	0	0	0	0	10.7

	Rubidoux Boulevard Southbound				26th Street Westbound				Rubidoux Boulevard Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	**198**	0	**199**	**1**	0	**2**	**3**	**4**	102	0	106	0	0	0	0	308
07:45 AM	1	184	0	185	1	0	1	2	2	134	1	137	0	0	0	0	**324**
08:00 AM	**2**	152	0	154	0	**1**	0	1	0	122	**4**	126	0	0	**2**	2	283
08:15 AM	2	127	0	129	1	0	1	2	2	**135**	4	**141**	0	**1**	2	**3**	275
Total Volume	6	661	0	667	3	1	4	8	8	493	9	510	0	1	4	5	1190
% App. Total	0.9	99.1	0		37.5	12.5	50		1.6	96.7	1.8		0	20	80		
PHF	.750	.835	.000	.838	.750	.250	.500	.667	.500	.913	.563	.904	.000	.250	.500	.417	.918

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City of Jurupa Valley
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File Name : 18_JVY_Rub_26th AM
Site Code : 05122894
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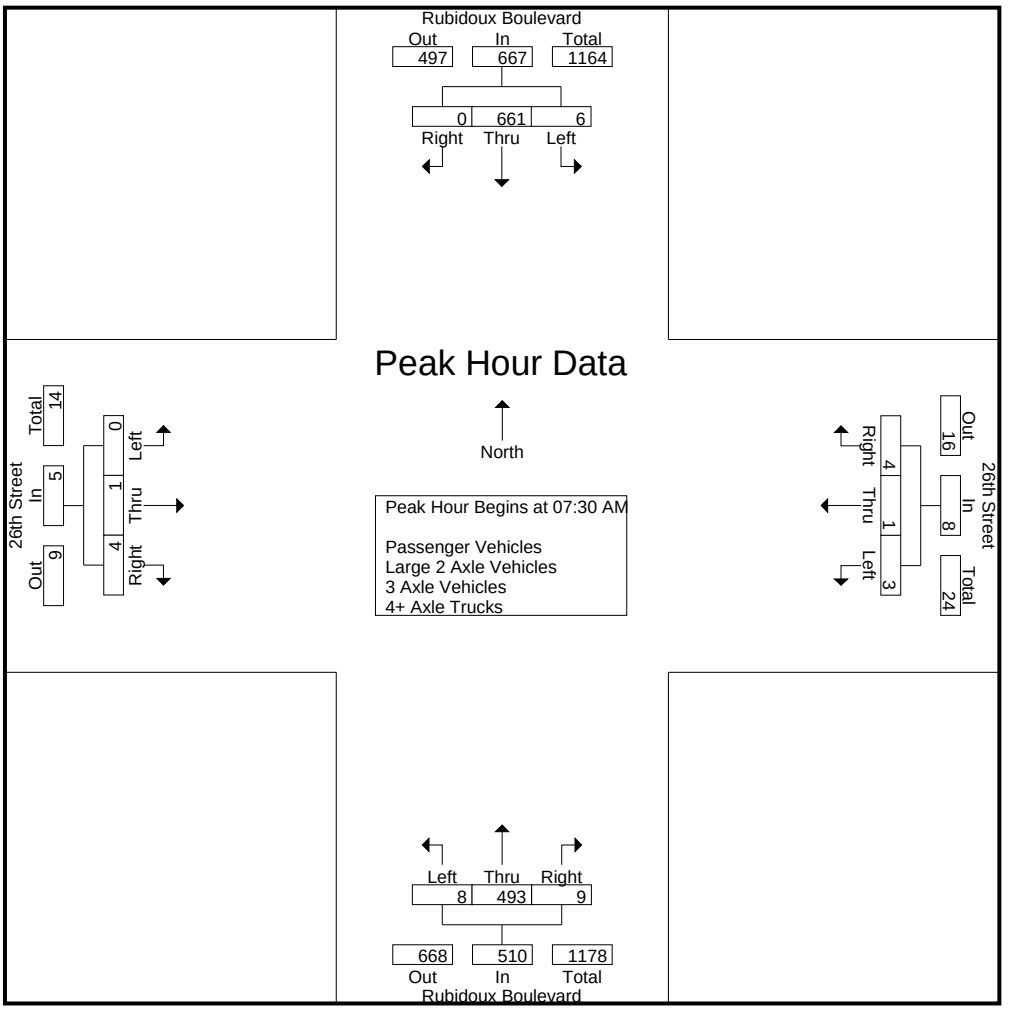

Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				06:45 AM				07:45 AM				06:30 AM			
+0 mins.	1	153	0	154	**3**	0	0	3	**2**	134	1	137	**1**	0	2	3
+15 mins.	1	**198**	0	**199**	1	0	2	3	0	122	**4**	126	0	0	**4**	**4**
+30 mins.	1	184	0	185	0	0	**6**	**6**	2	**135**	4	**141**	0	0	2	2
+45 mins.	**2**	152	0	154	1	0	2	3	2	127	2	131	0	0	1	1
Total Volume	5	687	0	692	5	0	10	15	6	518	11	535	1	0	9	10
% App. Total	0.7	99.3	0		33.3	0	66.7		1.1	96.8	2.1		10	0	90	
PHF	.625	.867	.000	.869	.417	.000	.417	.625	.750	.959	.688	.949	.250	.000	.563	.625

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File Name : 18_JVY_Rub_26th AM
Site Code : 05122894
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Groups Printed- Passenger Vehicles

	Rubidoux Boulevard Southbound				26th Street Westbound				Rubidoux Boulevard Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	2	88	0	90	0	0	1	1	3	76	2	81	1	0	1	2	174
06:45 AM	2	102	0	104	1	0	0	1	0	88	1	89	0	0	3	3	197
Total	4	190	0	194	1	0	1	2	3	164	3	170	1	0	4	5	371
07:00 AM	2	90	0	92	0	0	1	1	1	108	1	110	0	0	2	2	205
07:15 AM	1	115	0	116	0	0	3	3	0	75	0	75	0	0	1	1	195
07:30 AM	1	158	0	159	1	0	2	3	1	78	0	79	0	0	0	0	241
07:45 AM	1	151	0	152	1	0	1	2	1	107	1	109	0	0	0	0	263
Total	5	514	0	519	2	0	7	9	3	368	2	373	0	0	3	3	904
08:00 AM	2	120	0	122	0	1	0	1	0	98	2	100	0	0	2	2	225
08:15 AM	1	102	0	103	1	0	0	1	1	107	2	110	0	1	1	2	216
08:30 AM	1	73	0	74	1	0	1	2	1	84	2	87	0	0	1	1	164
08:45 AM	1	50	1	52	2	0	1	3	3	96	0	99	1	0	1	2	156
Total	5	345	1	351	4	1	2	7	5	385	6	396	1	1	5	7	761
Grand Total	14	1049	1	1064	7	1	10	18	11	917	11	939	2	1	12	15	2036
Apprch %	1.3	98.6	0.1		38.9	5.6	55.6		1.2	97.7	1.2		13.3	6.7	80		
Total %	0.7	51.5	0	52.3	0.3	0	0.5	0.9	0.5	45	0.5	46.1	0.1	0	0.6	0.7	

	Rubidoux Boulevard Southbound				26th Street Westbound				Rubidoux Boulevard Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	**158**	0	**159**	**1**	0	**2**	**3**	**1**	78	0	79	0	0	0	0	241
07:45 AM	1	151	0	152	1	0	1	2	1	**107**	1	109	0	0	0	0	**263**
08:00 AM	**2**	120	0	122	0	**1**	0	1	0	98	**2**	100	0	0	**2**	**2**	225
08:15 AM	1	102	0	103	1	0	0	1	1	107	2	**110**	0	**1**	1	2	216
Total Volume	5	531	0	536	3	1	3	7	3	390	5	398	0	1	3	4	945
% App. Total	0.9	99.1	0		42.9	14.3	42.9		0.8	98	1.3		0	25	75		
PHF	.625	.840	.000	.843	.750	.250	.375	.583	.750	.911	.625	.905	.000	.250	.375	.500	.898

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 26th Street
Weather: Clear

File Name : 18_JVY_Rub_26th AM
Site Code : 05122894
Start Date : 10/4/2022
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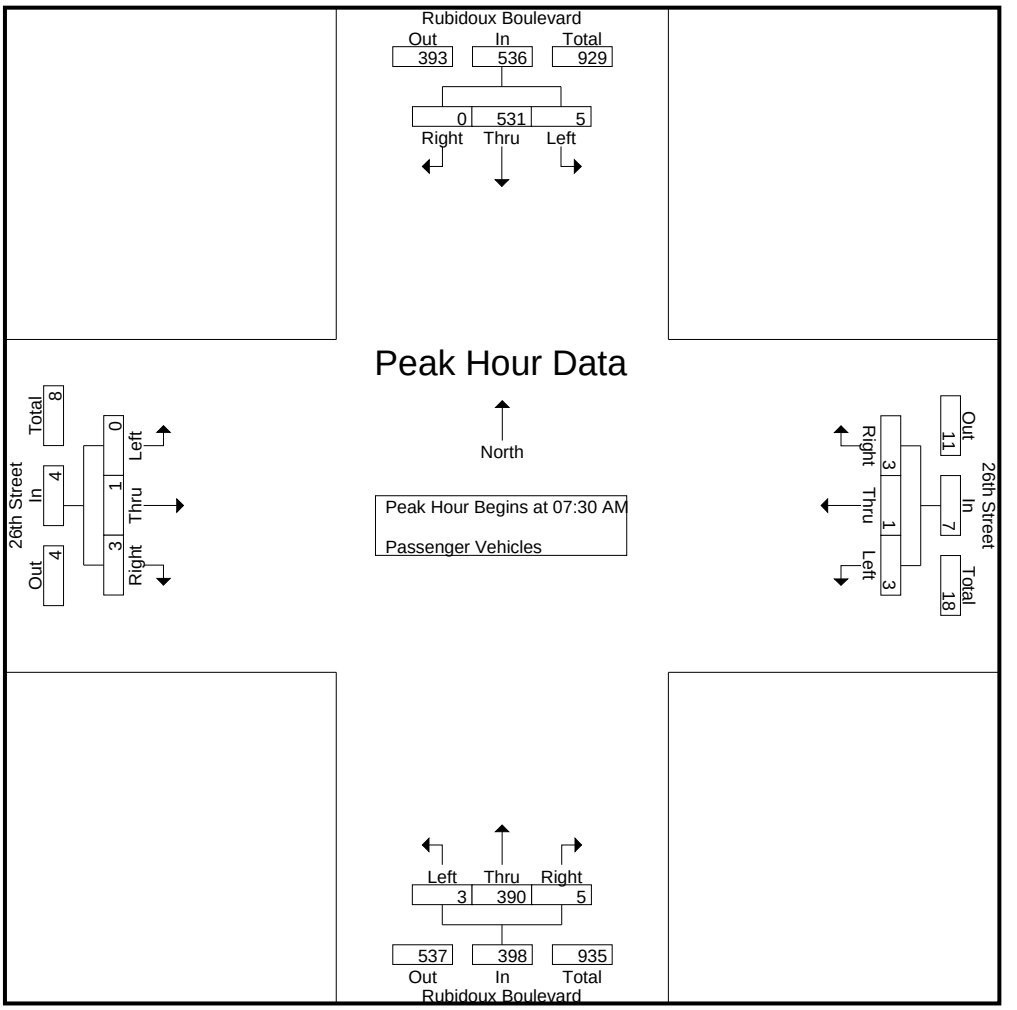

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	1	**158**	0	**159**	**1**	0	**2**	**3**	**1**	78	0	79	0	0	0	0
+15 mins.	1	151	0	152	1	0	1	2	1	**107**	1	109	0	0	0	0
+30 mins.	**2**	120	0	122	0	**1**	0	1	0	98	**2**	100	0	0	**2**	**2**
+45 mins.	1	102	0	103	1	0	0	1	1	107	2	**110**	0	**1**	1	2
Total Volume	5	531	0	536	3	1	3	7	3	390	5	398	0	1	3	4
% App. Total	0.9	99.1	0		42.9	14.3	42.9		0.8	98	1.3		0	25	75	
PHF	.625	.840	.000	.843	.750	.250	.375	.583	.750	.911	.625	.905	.000	.250	.375	.500

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City of Jurupa Valley
N/S: Rubidoux Boulevard
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Weather: Clear

File Name : 18_JVY_Rub_26th AM
Site Code : 05122894
Start Date : 10/4/2022
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Groups Printed- Large 2 Axle Vehicles

	Rubidoux Boulevard Southbound				26th Street Westbound				Rubidoux Boulevard Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	4	0	4	0	0	0	0	1	2	1	4	0	0	0	0	8
06:45 AM	0	7	0	7	1	0	0	1	0	8	0	8	0	0	0	0	16
Total	0	11	0	11	1	0	0	1	1	10	1	12	0	0	0	0	24
07:00 AM	0	8	0	8	1	0	1	2	0	11	0	11	0	0	0	0	21
07:15 AM	0	8	0	8	0	0	2	2	0	7	1	8	0	0	0	0	18
07:30 AM	0	18	0	18	0	0	0	0	2	7	0	9	0	0	0	0	27
07:45 AM	0	8	0	8	0	0	0	0	0	7	0	7	0	0	0	0	15
Total	0	42	0	42	1	0	3	4	2	32	1	35	0	0	0	0	81
08:00 AM	0	7	0	7	0	0	0	0	0	5	0	5	0	0	0	0	12
08:15 AM	0	4	0	4	0	0	0	0	0	5	1	6	0	0	0	0	10
08:30 AM	1	13	0	14	0	0	0	0	0	13	0	13	0	0	0	0	27
08:45 AM	0	10	0	10	1	0	0	1	0	7	0	7	0	0	0	0	18
Total	1	34	0	35	1	0	0	1	0	30	1	31	0	0	0	0	67
Grand Total	1	87	0	88	3	0	3	6	3	72	3	78	0	0	0	0	172
Apprch %	1.1	98.9	0		50	0	50		3.8	92.3	3.8		0	0	0		
Total %	0.6	50.6	0	51.2	1.7	0	1.7	3.5	1.7	41.9	1.7	45.3	0	0	0	0	

	Rubidoux Boulevard Southbound				26th Street Westbound				Rubidoux Boulevard Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**18**	0	**18**	0	0	0	0	**2**	**7**	0	**9**	0	0	0	0	**27**
07:45 AM	0	8	0	8	0	0	0	0	0	7	0	7	0	0	0	0	15
08:00 AM	0	7	0	7	0	0	0	0	0	5	0	5	0	0	0	0	12
08:15 AM	0	4	0	4	0	0	0	0	0	5	**1**	6	0	0	0	0	10
Total Volume	0	37	0	37	0	0	0	0	2	24	1	27	0	0	0	0	64
% App. Total	0	100	0		0	0	0		7.4	88.9	3.7		0	0	0		
PHF	.000	.514	.000	.514	.000	.000	.000	.000	.250	.857	.250	.750	.000	.000	.000	.000	.593

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City of Jurupa Valley
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File Name : 18_JVY_Rub_26th AM
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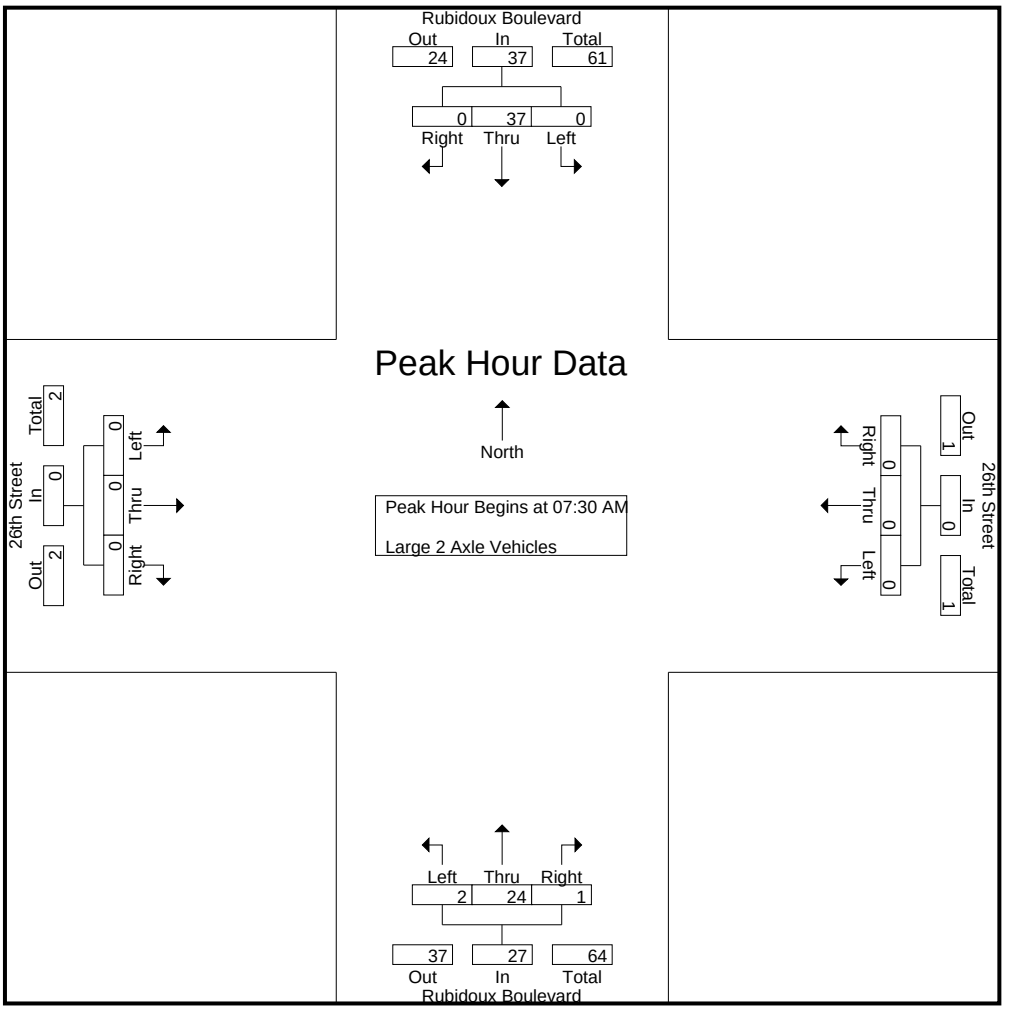

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	**18**	0	**18**	0	0	0	0	**2**	**7**	0	**9**	0	0	0	0
+15 mins.	0	8	0	8	0	0	0	0	0	7	0	7	0	0	0	0
+30 mins.	0	7	0	7	0	0	0	0	0	5	0	5	0	0	0	0
+45 mins.	0	4	0	4	0	0	0	0	0	5	**1**	6	0	0	0	0
Total Volume	0	37	0	37	0	0	0	0	2	24	1	27	0	0	0	0
% App. Total	0	100	0		0	0	0		7.4	88.9	3.7		0	0	0	
PHF	.000	.514	.000	.514	.000	.000	.000	.000	.250	.857	.250	.750	.000	.000	.000	.000

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 26th Street
Weather: Clear

File Name : 18_JVY_Rub_26th AM
Site Code : 05122894
Start Date : 10/4/2022
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Groups Printed- 3 Axle Vehicles

	Rubidoux Boulevard Southbound				26th Street Westbound				Rubidoux Boulevard Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	6	0	6	0	0	0	0	0	3	0	3	0	0	1	1	10
06:45 AM	0	8	0	8	0	0	0	0	0	1	0	1	0	0	1	1	10
Total	0	14	0	14	0	0	0	0	0	4	0	4	0	0	2	2	20
07:00 AM	0	14	0	14	0	0	0	0	0	1	0	1	0	0	0	0	15
07:15 AM	0	11	0	11	0	0	0	0	0	4	0	4	0	0	0	0	15
07:30 AM	0	4	0	4	0	0	0	0	1	9	0	10	0	0	0	0	14
07:45 AM	0	12	0	12	0	0	0	0	0	5	0	5	0	0	0	0	17
Total	0	41	0	41	0	0	0	0	1	19	0	20	0	0	0	0	61
08:00 AM	0	12	0	12	0	0	0	0	0	7	0	7	0	0	0	0	19
08:15 AM	0	10	0	10	0	0	0	0	1	6	1	8	0	0	1	1	19
08:30 AM	0	11	0	11	0	0	0	0	1	11	0	12	0	0	0	0	23
08:45 AM	0	9	0	9	0	0	0	0	0	10	0	10	0	0	0	0	19
Total	0	42	0	42	0	0	0	0	2	34	1	37	0	0	1	1	80
Grand Total	0	97	0	97	0	0	0	0	3	57	1	61	0	0	3	3	161
Apprch %	0	100	0		0	0	0		4.9	93.4	1.6		0	0	100		
Total %	0	60.2	0	60.2	0	0	0	0	1.9	35.4	0.6	37.9	0	0	1.9	1.9	

	Rubidoux Boulevard Southbound				26th Street Westbound				Rubidoux Boulevard Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	4	0	4	0	0	0	0	**1**	**9**	0	**10**	0	0	0	0	14
07:45 AM	0	**12**	0	**12**	0	0	0	0	0	5	0	5	0	0	0	0	17
08:00 AM	0	12	0	12	0	0	0	0	0	7	0	7	0	0	0	0	**19**
08:15 AM	0	10	0	10	0	0	0	0	1	6	**1**	8	0	0	**1**	**1**	19
Total Volume	0	38	0	38	0	0	0	0	2	27	1	30	0	0	1	1	69
% App. Total	0	100	0		0	0	0		6.7	90	3.3		0	0	100		
PHF	.000	.792	.000	.792	.000	.000	.000	.000	.500	.750	.250	.750	.000	.000	.250	.250	.908

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File Name : 18_JVY_Rub_26th AM
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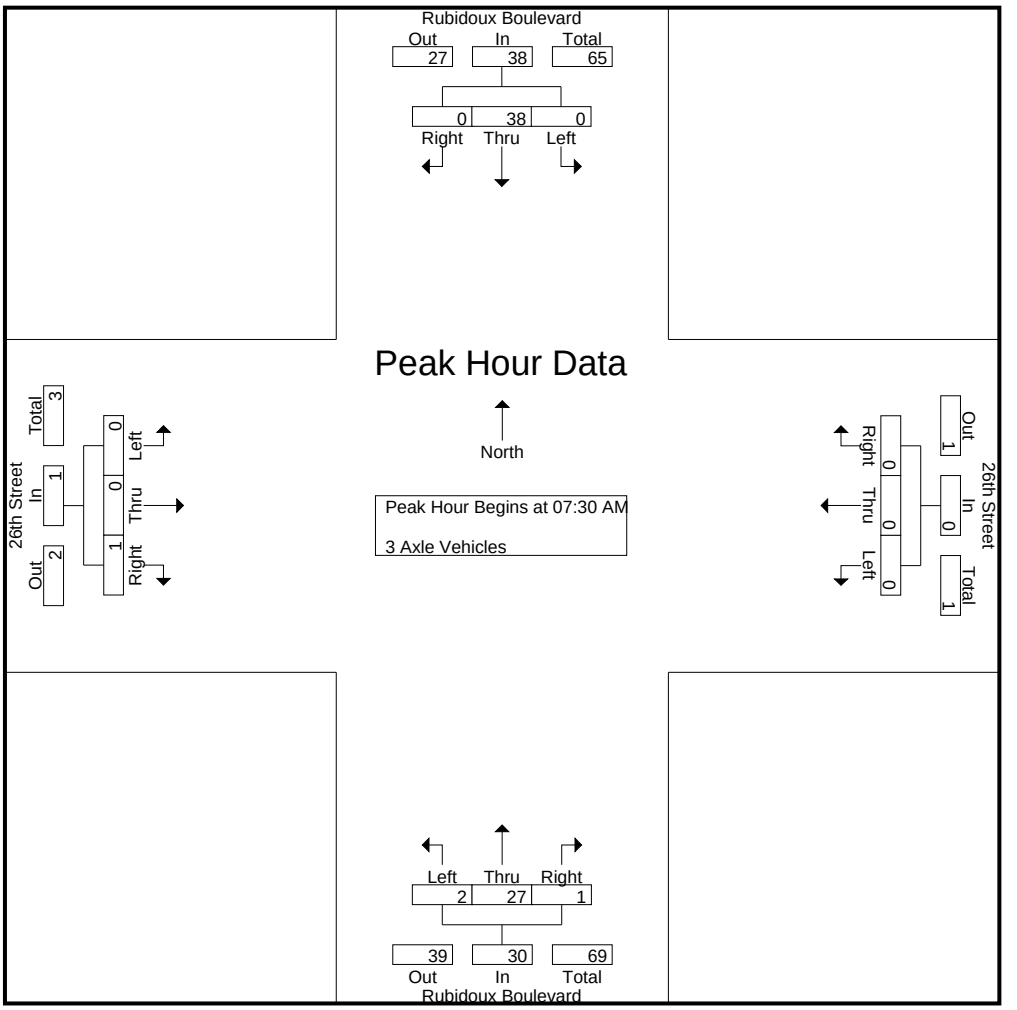

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	4	0	4	0	0	0	0	**1**	**9**	0	**10**	0	0	0	0
+15 mins.	0	**12**	0	**12**	0	0	0	0	0	5	0	5	0	0	0	0
+30 mins.	0	12	0	12	0	0	0	0	0	7	0	7	0	0	0	0
+45 mins.	0	10	0	10	0	0	0	0	1	6	**1**	8	0	0	**1**	**1**
Total Volume	0	38	0	38	0	0	0	0	2	27	1	30	0	0	1	1
% App. Total	0	100	0		0	0	0		6.7	90	3.3		0	0	100	
PHF	.000	.792	.000	.792	.000	.000	.000	.000	.500	.750	.250	.750	.000	.000	.250	.250

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Weather: Clear

File Name : 18_JVY_Rub_26th AM
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Groups Printed- 4+ Axle Trucks

	Rubidoux Boulevard Southbound				26th Street Westbound				Rubidoux Boulevard Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	14	0	14	0	0	0	0	0	11	0	11	0	0	0	0	25
06:45 AM	0	19	0	19	1	0	0	1	0	9	1	10	0	0	0	0	30
Total	0	33	0	33	1	0	0	1	0	20	1	21	0	0	0	0	55
07:00 AM	0	8	0	8	0	0	0	0	0	8	0	8	0	0	0	0	16
07:15 AM	0	19	0	19	0	0	1	1	0	13	0	13	0	0	0	0	33
07:30 AM	0	18	0	18	0	0	0	0	0	8	0	8	0	0	0	0	26
07:45 AM	0	13	0	13	0	0	0	0	1	15	0	16	0	0	0	0	29
Total	0	58	0	58	0	0	1	1	1	44	0	45	0	0	0	0	104
08:00 AM	0	13	0	13	0	0	0	0	0	12	2	14	0	0	0	0	27
08:15 AM	1	11	0	12	0	0	1	1	0	17	0	17	0	0	0	0	30
08:30 AM	0	20	0	20	1	0	0	1	0	19	0	19	0	0	0	0	40
08:45 AM	1	13	0	14	0	0	0	0	1	11	1	13	0	0	0	0	27
Total	2	57	0	59	1	0	1	2	1	59	3	63	0	0	0	0	124
Grand Total	2	148	0	150	2	0	2	4	2	123	4	129	0	0	0	0	283
Apprch %	1.3	98.7	0		50	0	50		1.6	95.3	3.1		0	0	0		
Total %	0.7	52.3	0	53	0.7	0	0.7	1.4	0.7	43.5	1.4	45.6	0	0	0	0	

	Rubidoux Boulevard Southbound				26th Street Westbound				Rubidoux Boulevard Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**18**	0	**18**	0	0	0	0	0	8	0	8	0	0	0	0	26
07:45 AM	0	13	0	13	0	0	0	0	**1**	15	0	16	0	0	0	0	29
08:00 AM	0	13	0	13	0	0	0	0	0	12	**2**	14	0	0	0	0	27
08:15 AM	**1**	11	0	12	0	0	**1**	**1**	0	**17**	0	**17**	0	0	0	0	**30**
Total Volume	1	55	0	56	0	0	1	1	1	52	2	55	0	0	0	0	112
% App. Total	1.8	98.2	0		0	0	100		1.8	94.5	3.6		0	0	0		
PHF	.250	.764	.000	.778	.000	.000	.250	.250	.250	.765	.250	.809	.000	.000	.000	.000	.933

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File Name : 18_JVY_Rub_26th AM
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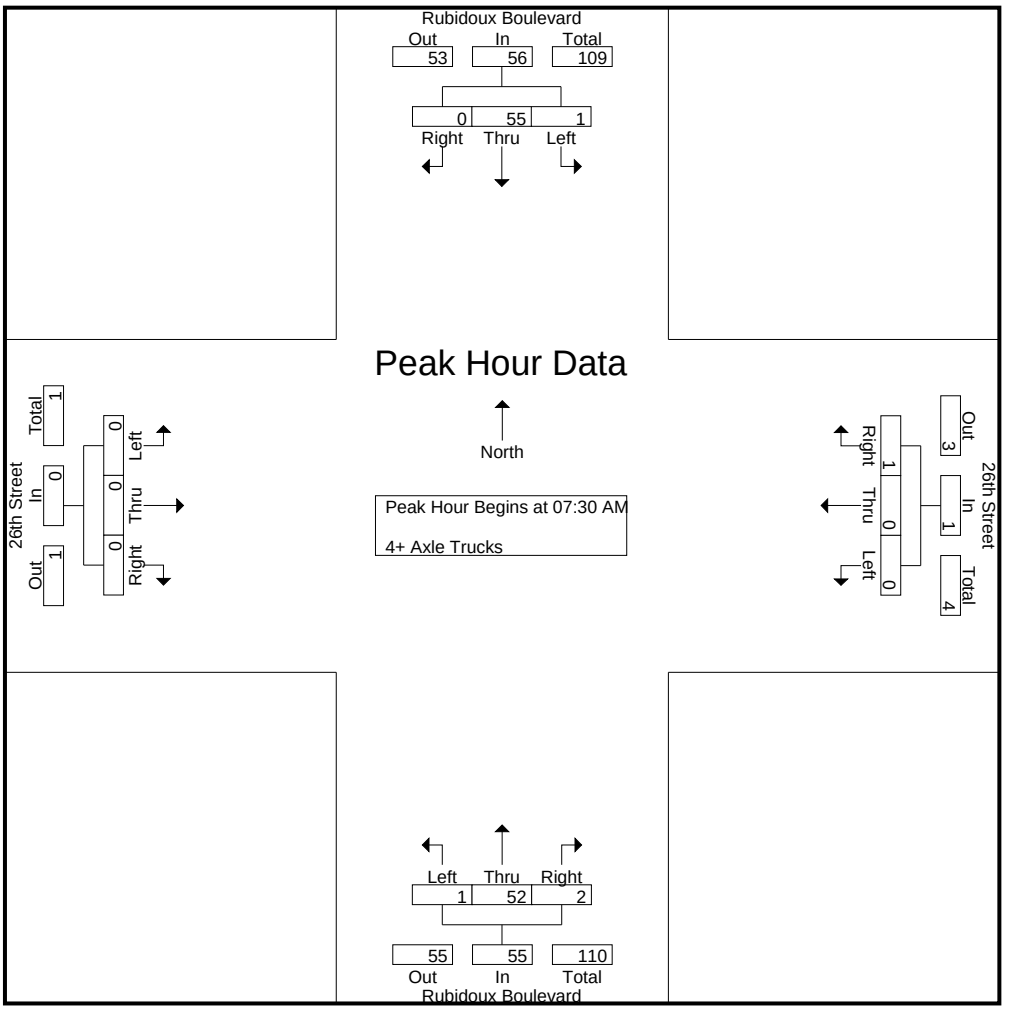

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	**18**	0	**18**	0	0	0	0	0	8	0	8	0	0	0	0
+15 mins.	0	13	0	13	0	0	0	0	**1**	15	0	16	0	0	0	0
+30 mins.	0	13	0	13	0	0	0	0	0	12	**2**	14	0	0	0	0
+45 mins.	**1**	11	0	12	0	0	**1**	**1**	0	**17**	0	**17**	0	0	0	0
Total Volume	1	55	0	56	0	0	1	1	1	52	2	55	0	0	0	0
% App. Total	1.8	98.2	0		0	0	100		1.8	94.5	3.6		0	0	0	
PHF	.250	.764	.000	.778	.000	.000	.250	.250	.250	.765	.250	.809	.000	.000	.000	.000

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 26th Street
Weather: Clear

File Name : 18_JVY_Rub_26th PM
Site Code : 05122894
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Rubidoux Boulevard Southbound				26th Street Westbound				Rubidoux Boulevard Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	2	156	0	158	5	1	4	10	3	136	3	142	2	1	1	4	314
03:45 PM	1	118	0	119	2	0	3	5	2	147	6	155	0	0	2	2	281
Total	3	274	0	277	7	1	7	15	5	283	9	297	2	1	3	6	595
04:00 PM	4	166	1	171	3	0	5	8	3	129	4	136	1	0	2	3	318
04:15 PM	3	152	2	157	1	0	0	1	1	146	2	149	0	1	4	5	312
04:30 PM	2	138	1	141	0	0	2	2	1	138	1	140	1	0	0	1	284
04:45 PM	3	145	3	151	1	0	0	1	1	145	4	150	0	0	3	3	305
Total	12	601	7	620	5	0	7	12	6	558	11	575	2	1	9	12	1219
05:00 PM	3	183	0	186	0	1	0	1	1	157	6	164	0	0	1	1	352
05:15 PM	1	141	0	142	3	1	4	8	0	134	1	135	1	2	2	5	290
05:30 PM	0	161	0	161	0	1	1	2	0	171	1	172	0	0	0	0	335
05:45 PM	2	117	0	119	2	0	1	3	1	142	6	149	0	0	2	2	273
Total	6	602	0	608	5	3	6	14	2	604	14	620	1	2	5	8	1250
Grand Total	21	1477	7	1505	17	4	20	41	13	1445	34	1492	5	4	17	26	3064
Apprch %	1.4	98.1	0.5		41.5	9.8	48.8		0.9	96.8	2.3		19.2	15.4	65.4		
Total %	0.7	48.2	0.2	49.1	0.6	0.1	0.7	1.3	0.4	47.2	1.1	48.7	0.2	0.1	0.6	0.8	
Passenger Vehicles	20	1273	5	1298	13	4	14	31	11	1121	25	1157	5	3	15	23	2509
% Passenger Vehicles	95.2	86.2	71.4	86.2	76.5	100	70	75.6	84.6	77.6	73.5	77.5	100	75	88.2	88.5	81.9
Large 2 Axle Vehicles	0	48	0	48	1	0	3	4	2	86	1	89	0	1	1	2	143
% Large 2 Axle Vehicles	0	3.2	0	3.2	5.9	0	15	9.8	15.4	6	2.9	6	0	25	5.9	7.7	4.7
3 Axle Vehicles	0	44	0	44	0	0	2	2	0	71	2	73	0	0	0	0	119
% 3 Axle Vehicles	0	3	0	2.9	0	0	10	4.9	0	4.9	5.9	4.9	0	0	0	0	3.9
4+ Axle Trucks	1	112	2	115	3	0	1	4	0	167	6	173	0	0	1	1	293
% 4+ Axle Trucks	4.8	7.6	28.6	7.6	17.6	0	5	9.8	0	11.6	17.6	11.6	0	0	5.9	3.8	9.6

	Rubidoux Boulevard Southbound				26th Street Westbound				Rubidoux Boulevard Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**3**	145	**3**	151	1	0	0	1	**1**	145	4	150	0	0	**3**	3	305
05:00 PM	3	**183**	0	**186**	0	**1**	0	1	1	157	**6**	164	0	0	1	1	**352**
05:15 PM	1	141	0	142	**3**	1	**4**	**8**	0	134	1	135	**1**	**2**	2	**5**	290
05:30 PM	0	161	0	161	0	1	1	2	0	**171**	1	**172**	0	0	0	0	335
Total Volume	7	630	3	640	4	3	5	12	2	607	12	621	1	2	6	9	1282
% App. Total	1.1	98.4	0.5		33.3	25	41.7		0.3	97.7	1.9		11.1	22.2	66.7		
PHF	.583	.861	.250	.860	.333	.750	.313	.375	.500	.887	.500	.903	.250	.250	.500	.450	.911

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City of Jurupa Valley
N/S: Rubidoux Boulevard
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File Name : 18_JVY_Rub_26th PM
Site Code : 05122894
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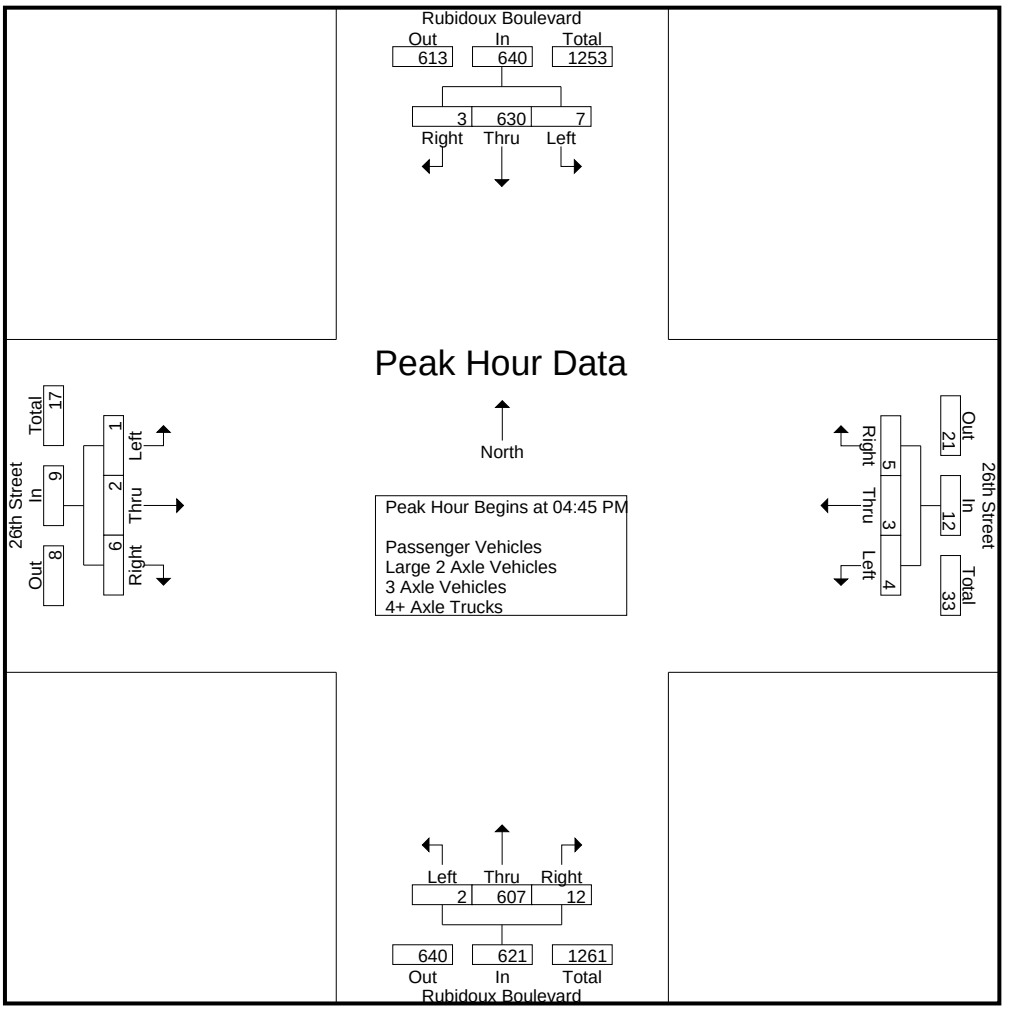

Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				03:30 PM				04:45 PM				03:30 PM			
+0 mins.	**3**	145	**3**	151	**5**	**1**	4	**10**	**1**	145	4	150	**2**	**1**	1	4
+15 mins.	3	**183**	0	**186**	2	0	3	5	1	157	**6**	164	0	0	2	2
+30 mins.	1	141	0	142	3	0	**5**	8	0	134	1	135	1	0	2	3
+45 mins.	0	161	0	161	1	0	0	1	0	**171**	1	**172**	0	1	**4**	**5**
Total Volume	7	630	3	640	11	1	12	24	2	607	12	621	3	2	9	14
% App. Total	1.1	98.4	0.5		45.8	4.2	50		0.3	97.7	1.9		21.4	14.3	64.3	
PHF	.583	.861	.250	.860	.550	.250	.600	.600	.500	.887	.500	.903	.375	.500	.563	.700

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City of Jurupa Valley
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File Name : 18_JVY_Rub_26th PM
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Groups Printed- Passenger Vehicles

	Rubidoux Boulevard Southbound				26th Street Westbound				Rubidoux Boulevard Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	2	121	0	123	4	1	3	8	3	94	2	99	2	1	1	4	234
03:45 PM	1	100	0	101	1	0	2	3	1	113	3	117	0	0	1	1	222
Total	3	221	0	224	5	1	5	11	4	207	5	216	2	1	2	5	456
04:00 PM	3	142	1	146	2	0	3	5	3	106	4	113	1	0	2	3	267
04:15 PM	3	128	1	132	1	0	0	1	1	114	1	116	0	0	4	4	253
04:30 PM	2	124	1	127	0	0	1	1	1	107	1	109	1	0	0	1	238
04:45 PM	3	129	2	134	1	0	0	1	1	112	3	116	0	0	3	3	254
Total	11	523	5	539	4	0	4	8	6	439	9	454	2	0	9	11	1012
05:00 PM	3	156	0	159	0	1	0	1	0	122	4	126	0	0	0	0	286
05:15 PM	1	122	0	123	3	1	3	7	0	113	1	114	1	2	2	5	249
05:30 PM	0	150	0	150	0	1	1	2	0	132	1	133	0	0	0	0	285
05:45 PM	2	101	0	103	1	0	1	2	1	108	5	114	0	0	2	2	221
Total	6	529	0	535	4	3	5	12	1	475	11	487	1	2	4	7	1041
Grand Total	20	1273	5	1298	13	4	14	31	11	1121	25	1157	5	3	15	23	2509
Apprch %	1.5	98.1	0.4		41.9	12.9	45.2		1	96.9	2.2		21.7	13	65.2		
Total %	0.8	50.7	0.2	51.7	0.5	0.2	0.6	1.2	0.4	44.7	1	46.1	0.2	0.1	0.6	0.9	

	Rubidoux Boulevard Southbound				26th Street Westbound				Rubidoux Boulevard Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**3**	129	**2**	134	1	0	0	1	**1**	112	3	116	0	0	**3**	3	254
05:00 PM	3	**156**	0	**159**	0	**1**	0	1	0	122	**4**	126	0	0	0	0	**286**
05:15 PM	1	122	0	123	**3**	1	**3**	**7**	0	113	1	114	**1**	**2**	2	**5**	249
05:30 PM	0	150	0	150	0	1	1	2	0	**132**	1	**133**	0	0	0	0	285
Total Volume	7	557	2	566	4	3	4	11	1	479	9	489	1	2	5	8	1074
% App. Total	1.2	98.4	0.4		36.4	27.3	36.4		0.2	98	1.8		12.5	25	62.5		
PHF	.583	.893	.250	.890	.333	.750	.333	.393	.250	.907	.563	.919	.250	.250	.417	.400	.939

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Weather: Clear

File Name : 18_JVY_Rub_26th PM
Site Code : 05122894
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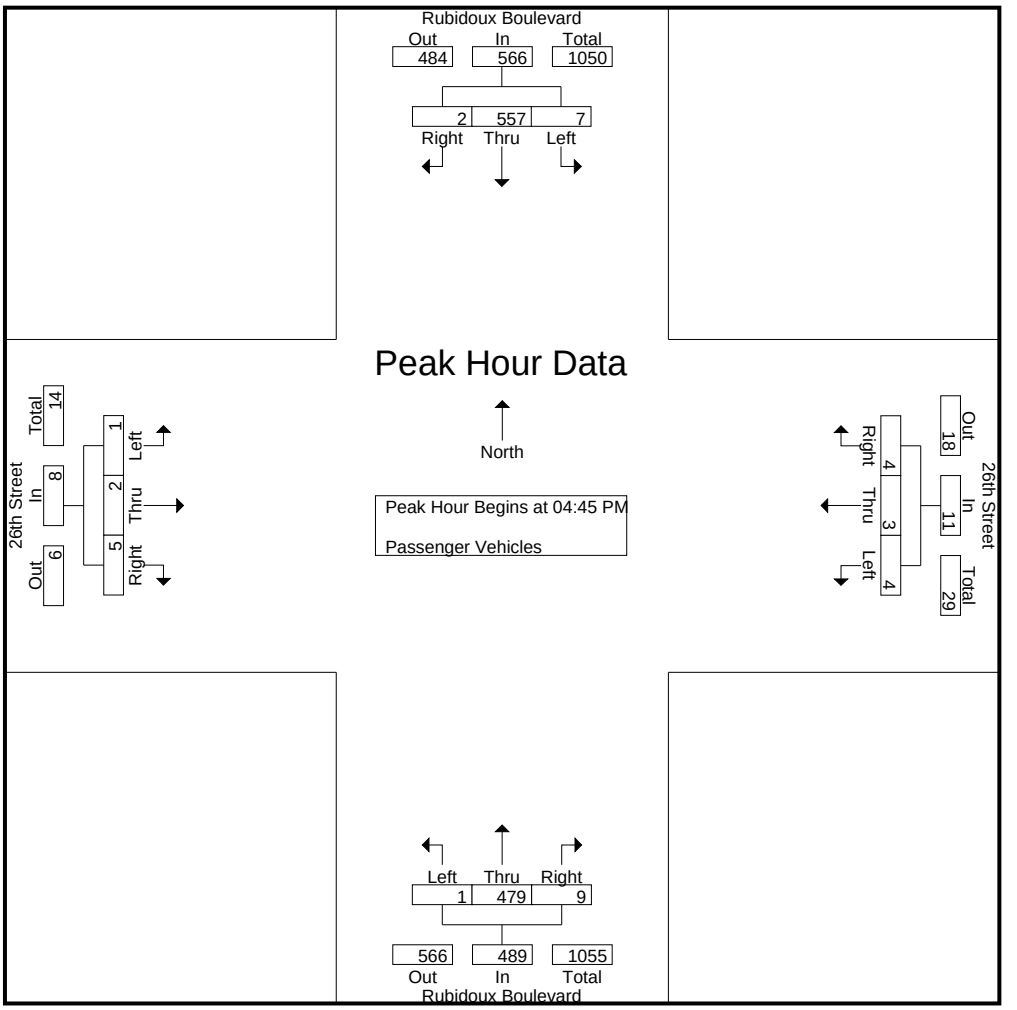

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	**3**	129	**2**	134	1	0	0	1	**1**	112	3	116	0	0	**3**	3
+15 mins.	3	**156**	0	**159**	0	**1**	0	1	0	122	**4**	126	0	0	0	0
+30 mins.	1	122	0	123	**3**	1	**3**	**7**	0	113	1	114	**1**	**2**	2	**5**
+45 mins.	0	150	0	150	0	1	1	2	0	**132**	1	**133**	0	0	0	0
Total Volume	7	557	2	566	4	3	4	11	1	479	9	489	1	2	5	8
% App. Total	1.2	98.4	0.4		36.4	27.3	36.4		0.2	98	1.8		12.5	25	62.5	
PHF	.583	.893	.250	.890	.333	.750	.333	.393	.250	.907	.563	.919	.250	.250	.417	.400

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N/S: Rubidoux Boulevard
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Weather: Clear

File Name : 18_JVY_Rub_26th PM
Site Code : 05122894
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Groups Printed- Large 2 Axle Vehicles

	Rubidoux Boulevard Southbound				26th Street Westbound				Rubidoux Boulevard Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	9	0	9	0	0	0	0	0	12	0	12	0	0	0	0	21
03:45 PM	0	4	0	4	0	0	1	1	1	5	1	7	0	0	0	0	12
Total	0	13	0	13	0	0	1	1	1	17	1	19	0	0	0	0	33
04:00 PM	0	6	0	6	1	0	2	3	0	5	0	5	0	0	0	0	14
04:15 PM	0	7	0	7	0	0	0	0	0	14	0	14	0	1	0	1	22
04:30 PM	0	3	0	3	0	0	0	0	0	9	0	9	0	0	0	0	12
04:45 PM	0	1	0	1	0	0	0	0	0	10	0	10	0	0	0	0	11
Total	0	17	0	17	1	0	2	3	0	38	0	38	0	1	0	1	59
05:00 PM	0	5	0	5	0	0	0	0	1	6	0	7	0	0	1	1	13
05:15 PM	0	5	0	5	0	0	0	0	0	4	0	4	0	0	0	0	9
05:30 PM	0	1	0	1	0	0	0	0	0	10	0	10	0	0	0	0	11
05:45 PM	0	7	0	7	0	0	0	0	0	11	0	11	0	0	0	0	18
Total	0	18	0	18	0	0	0	0	1	31	0	32	0	0	1	1	51
Grand Total	0	48	0	48	1	0	3	4	2	86	1	89	0	1	1	2	143
Apprch %	0	100	0		25	0	75		2.2	96.6	1.1		0	50	50		
Total %	0	33.6	0	33.6	0.7	0	2.1	2.8	1.4	60.1	0.7	62.2	0	0.7	0.7	1.4	

	Rubidoux Boulevard Southbound				26th Street Westbound				Rubidoux Boulevard Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	1	0	1	0	0	0	0	0	**10**	0	**10**	0	0	0	0	11
05:00 PM	0	**5**	0	**5**	0	0	0	0	**1**	6	0	7	0	0	**1**	**1**	**13**
05:15 PM	0	5	0	5	0	0	0	0	0	4	0	4	0	0	0	0	9
05:30 PM	0	1	0	1	0	0	0	0	0	10	0	10	0	0	0	0	11
Total Volume	0	12	0	12	0	0	0	0	1	30	0	31	0	0	1	1	44
% App. Total	0	100	0		0	0	0		3.2	96.8	0		0	0	100		
PHF	.000	.600	.000	.600	.000	.000	.000	.000	.250	.750	.000	.775	.000	.000	.250	.250	.846

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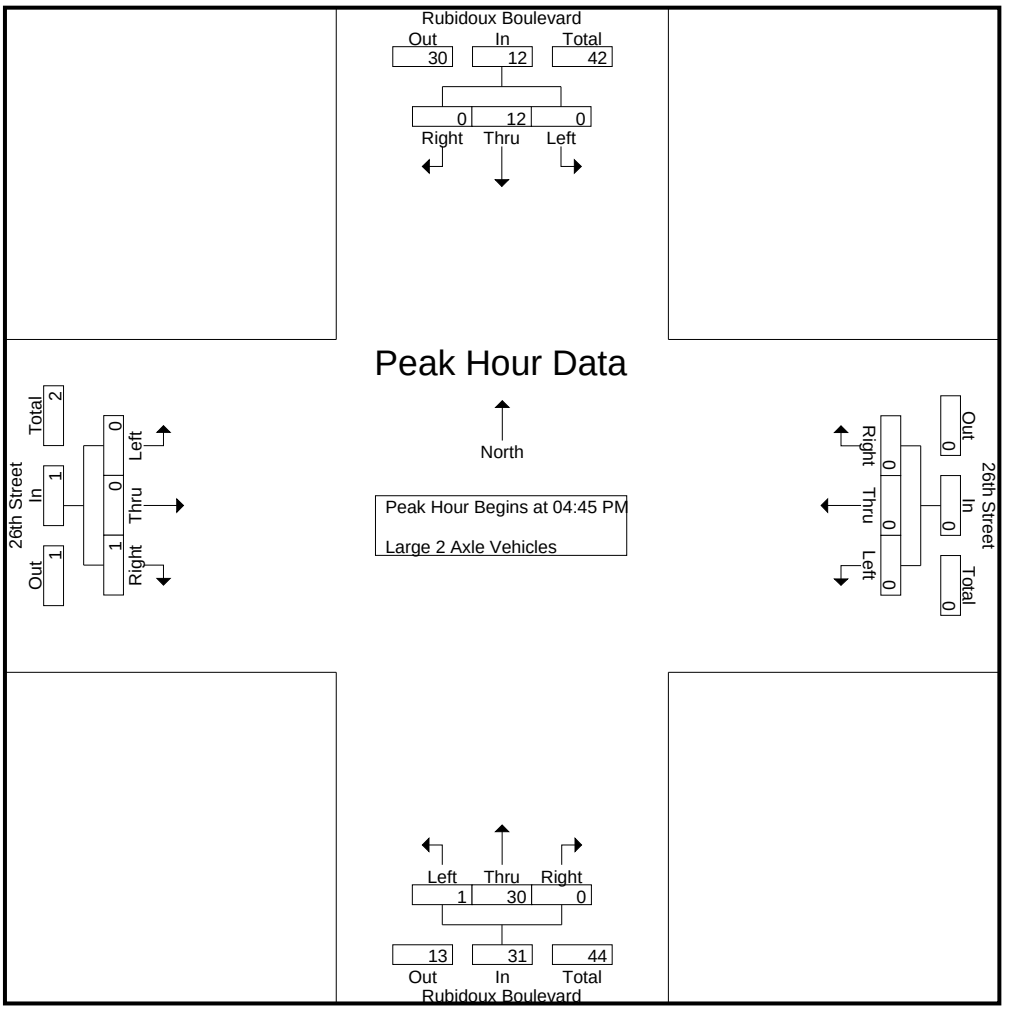

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	1	0	1	0	0	0	0	0	**10**	0	**10**	0	0	0	0
+15 mins.	0	**5**	0	**5**	0	0	0	0	**1**	6	0	7	0	0	**1**	**1**
+30 mins.	0	5	0	5	0	0	0	0	0	4	0	4	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	10	0	10	0	0	0	0
Total Volume	0	12	0	12	0	0	0	0	1	30	0	31	0	0	1	1
% App. Total	0	100	0		0	0	0		3.2	96.8	0		0	0	100	
PHF	.000	.600	.000	.600	.000	.000	.000	.000	.250	.750	.000	.775	.000	.000	.250	.250

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Groups Printed- 3 Axle Vehicles

	Rubidoux Boulevard Southbound				26th Street Westbound				Rubidoux Boulevard Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	9	0	9	0	0	1	1	0	7	0	7	0	0	0	0	17
03:45 PM	0	1	0	1	0	0	0	0	0	10	0	10	0	0	0	0	11
Total	0	10	0	10	0	0	1	1	0	17	0	17	0	0	0	0	28
04:00 PM	0	5	0	5	0	0	0	0	0	3	0	3	0	0	0	0	8
04:15 PM	0	7	0	7	0	0	0	0	0	4	0	4	0	0	0	0	11
04:30 PM	0	2	0	2	0	0	0	0	0	9	0	9	0	0	0	0	11
04:45 PM	0	4	0	4	0	0	0	0	0	4	0	4	0	0	0	0	8
Total	0	18	0	18	0	0	0	0	0	20	0	20	0	0	0	0	38
05:00 PM	0	7	0	7	0	0	0	0	0	11	2	13	0	0	0	0	20
05:15 PM	0	6	0	6	0	0	1	1	0	6	0	6	0	0	0	0	13
05:30 PM	0	1	0	1	0	0	0	0	0	11	0	11	0	0	0	0	12
05:45 PM	0	2	0	2	0	0	0	0	0	6	0	6	0	0	0	0	8
Total	0	16	0	16	0	0	1	1	0	34	2	36	0	0	0	0	53
Grand Total	0	44	0	44	0	0	2	2	0	71	2	73	0	0	0	0	119
Apprch %	0	100	0		0	0	100		0	97.3	2.7		0	0	0		
Total %	0	37	0	37	0	0	1.7	1.7	0	59.7	1.7	61.3	0	0	0	0	

	Rubidoux Boulevard Southbound				26th Street Westbound				Rubidoux Boulevard Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	4	0	4	0	0	0	0	0	4	0	4	0	0	0	0	8
05:00 PM	0	**7**	0	**7**	0	0	0	0	0	**11**	**2**	**13**	0	0	0	0	**20**
05:15 PM	0	6	0	6	0	0	**1**	**1**	0	6	0	6	0	0	0	0	13
05:30 PM	0	1	0	1	0	0	0	0	0	11	0	11	0	0	0	0	12
Total Volume	0	18	0	18	0	0	1	1	0	32	2	34	0	0	0	0	53
% App. Total	0	100	0		0	0	100		0	94.1	5.9		0	0	0		
PHF	.000	.643	.000	.643	.000	.000	.250	.250	.000	.727	.250	.654	.000	.000	.000	.000	.663

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City of Jurupa Valley
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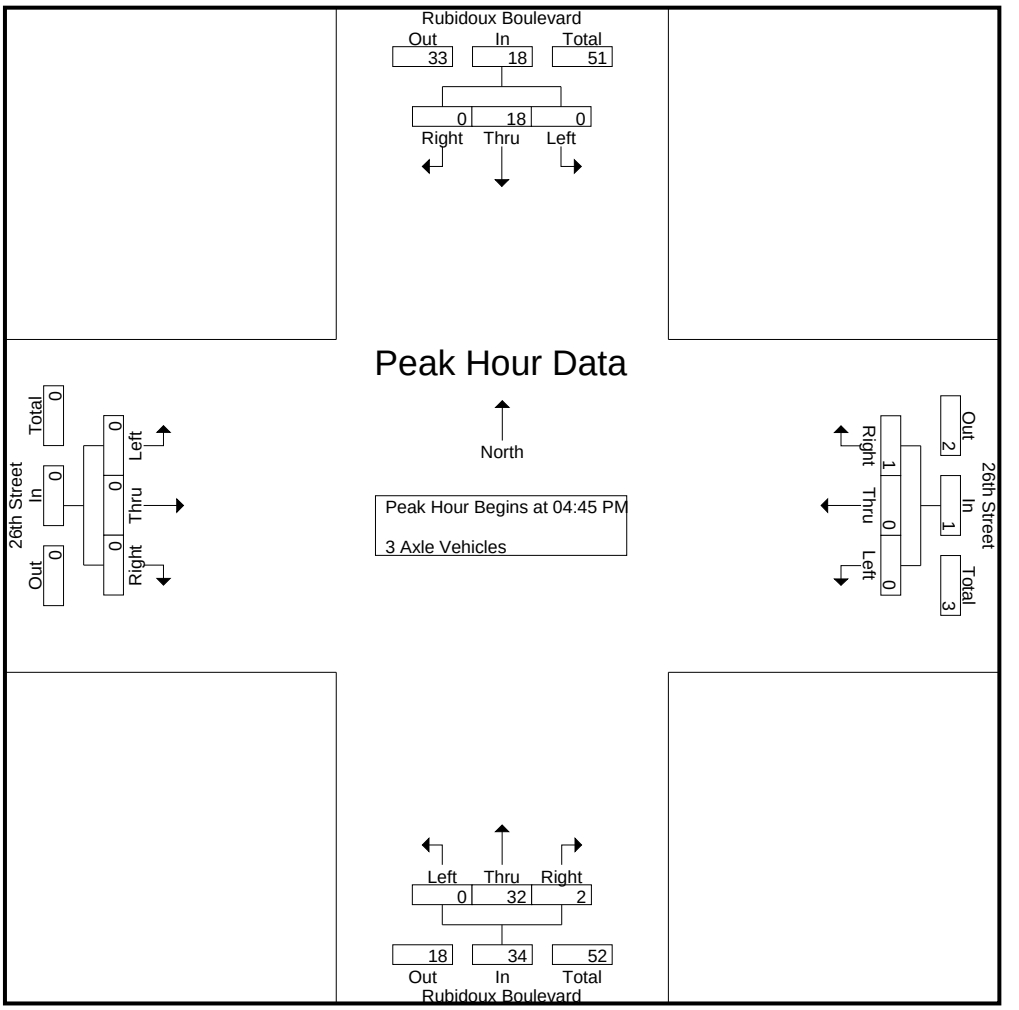

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	4	0	4	0	0	0	0	0	4	0	4	0	0	0	0
+15 mins.	0	**7**	0	**7**	0	0	0	0	0	**11**	**2**	**13**	0	0	0	0
+30 mins.	0	6	0	6	0	0	**1**	**1**	0	6	0	6	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	11	0	11	0	0	0	0
Total Volume	0	18	0	18	0	0	1	1	0	32	2	34	0	0	0	0
% App. Total	0	100	0		0	0	100		0	94.1	5.9		0	0	0	
PHF	.000	.643	.000	.643	.000	.000	.250	.250	.000	.727	.250	.654	.000	.000	.000	.000

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File Name : 18_JVY_Rub_26th PM
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Groups Printed- 4+ Axle Trucks

	Rubidoux Boulevard Southbound				26th Street Westbound				Rubidoux Boulevard Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	17	0	17	1	0	0	1	0	23	1	24	0	0	0	0	42
03:45 PM	0	13	0	13	1	0	0	1	0	19	2	21	0	0	1	1	36
Total	0	30	0	30	2	0	0	2	0	42	3	45	0	0	1	1	78
04:00 PM	1	13	0	14	0	0	0	0	0	15	0	15	0	0	0	0	29
04:15 PM	0	10	1	11	0	0	0	0	0	14	1	15	0	0	0	0	26
04:30 PM	0	9	0	9	0	0	1	1	0	13	0	13	0	0	0	0	23
04:45 PM	0	11	1	12	0	0	0	0	0	19	1	20	0	0	0	0	32
Total	1	43	2	46	0	0	1	1	0	61	2	63	0	0	0	0	110
05:00 PM	0	15	0	15	0	0	0	0	0	18	0	18	0	0	0	0	33
05:15 PM	0	8	0	8	0	0	0	0	0	11	0	11	0	0	0	0	19
05:30 PM	0	9	0	9	0	0	0	0	0	18	0	18	0	0	0	0	27
05:45 PM	0	7	0	7	1	0	0	1	0	17	1	18	0	0	0	0	26
Total	0	39	0	39	1	0	0	1	0	64	1	65	0	0	0	0	105
Grand Total	1	112	2	115	3	0	1	4	0	167	6	173	0	0	1	1	293
Apprch %	0.9	97.4	1.7		75	0	25		0	96.5	3.5		0	0	100		
Total %	0.3	38.2	0.7	39.2	1	0	0.3	1.4	0	57	2	59	0	0	0.3	0.3	

	Rubidoux Boulevard Southbound				26th Street Westbound				Rubidoux Boulevard Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	11	**1**	12	0	0	0	0	0	**19**	**1**	**20**	0	0	0	0	32
05:00 PM	0	**15**	0	**15**	0	0	0	0	0	18	0	18	0	0	0	0	**33**
05:15 PM	0	8	0	8	0	0	0	0	0	11	0	11	0	0	0	0	19
05:30 PM	0	9	0	9	0	0	0	0	0	18	0	18	0	0	0	0	27
Total Volume	0	43	1	44	0	0	0	0	0	66	1	67	0	0	0	0	111
% App. Total	0	97.7	2.3		0	0	0		0	98.5	1.5		0	0	0		
PHF	.000	.717	.250	.733	.000	.000	.000	.000	.000	.868	.250	.838	.000	.000	.000	.000	.841

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 26th Street
Weather: Clear

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Start Date : 10/4/2022
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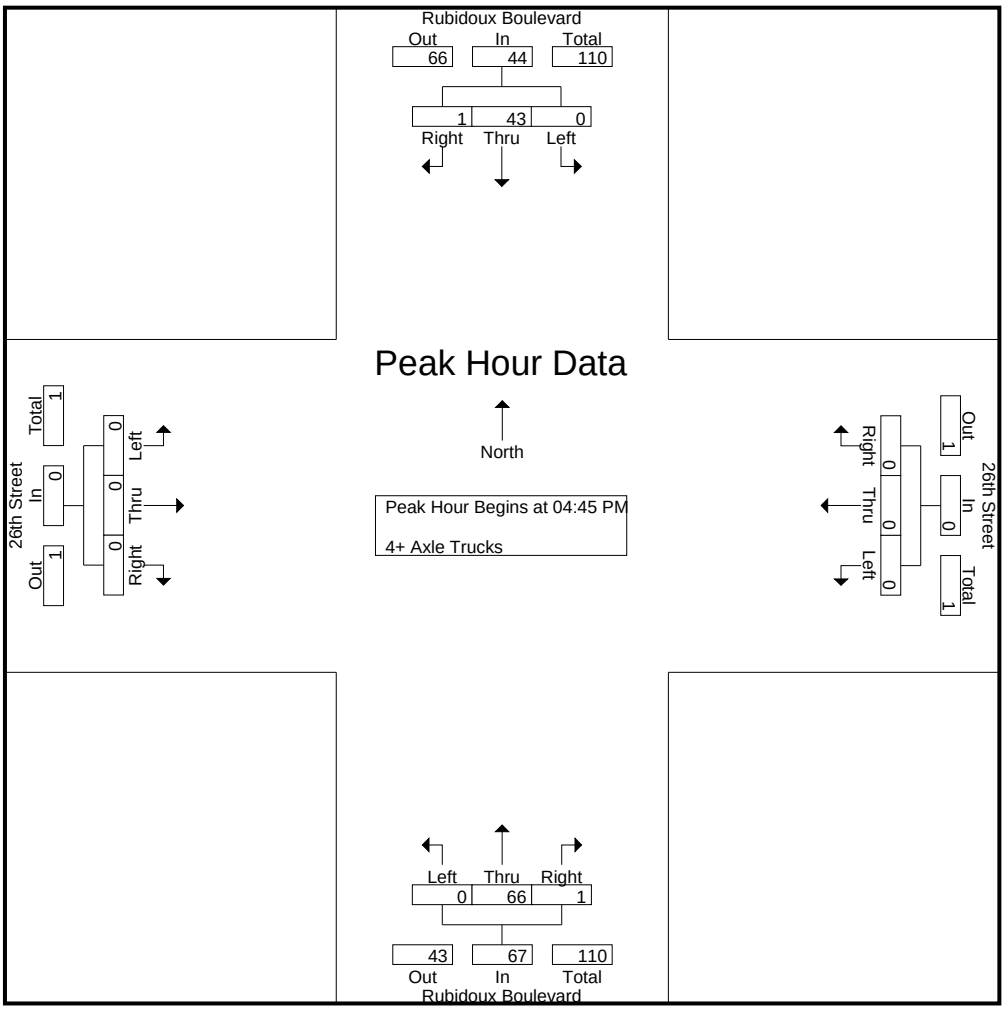

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	11	**1**	12	0	0	0	0	0	**19**	**1**	**20**	0	0	0	0
+15 mins.	0	**15**	0	**15**	0	0	0	0	0	18	0	18	0	0	0	0
+30 mins.	0	8	0	8	0	0	0	0	0	11	0	11	0	0	0	0
+45 mins.	0	9	0	9	0	0	0	0	0	18	0	18	0	0	0	0
Total Volume	0	43	1	44	0	0	0	0	0	66	1	67	0	0	0	0
% App. Total	0	97.7	2.3		0	0	0		0	98.5	1.5		0	0	0	
PHF	.000	.717	.250	.733	.000	.000	.000	.000	.000	.868	.250	.838	.000	.000	.000	.000

Location: Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 26th Street

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Rubidoux Boulevard	East Leg 26th Street	South Leg Rubidoux Boulevard	West Leg 26th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	1	0	0	0	1
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	0	1

	North Leg Rubidoux Boulevard	East Leg 26th Street	South Leg Rubidoux Boulevard	West Leg 26th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	1	0	1
3:45 PM	0	0	1	0	1
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	1	0	0	1
5:15 PM	0	0	0	1	1
5:30 PM	0	1	0	0	1
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	2	2	1	5

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Location: Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 26th Street

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Rubidoux Boulevard			Westbound 26th Street			Northbound Rubidoux Boulevard			Eastbound 26th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	0	0	0	1	2

	Southbound Rubidoux Boulevard			Westbound 26th Street			Northbound Rubidoux Boulevard			Eastbound 26th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	1	0	0	0	0	0	0	0	1	0	0	0	2
TOTAL VOLUMES:	1	2	0	0	0	0	0	0	1	0	0	1	5

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 28th Street
Weather: Clear

File Name : 19_JVY_Rub_28th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Rubidoux Boulevard Southbound					28th Street Westbound					Rubidoux Boulevard Northbound					28th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	1	107	0	0	108	7	0	0	0	7	4	95	8	0	107	6	0	12	5	18	5	240	245
06:45 AM	6	137	1	0	144	10	3	2	2	15	3	121	4	0	128	1	0	5	3	6	5	293	298
Total	7	244	1	0	252	17	3	2	2	22	7	216	12	0	235	7	0	17	8	24	10	533	543
07:00 AM	2	120	2	0	124	10	5	2	2	17	4	110	2	0	116	3	1	7	2	11	4	268	272
07:15 AM	1	143	4	1	148	8	2	2	2	12	0	108	9	0	117	1	1	6	3	8	6	285	291
07:30 AM	3	197	1	0	201	13	5	3	2	21	3	94	9	1	106	5	2	8	2	15	5	343	348
07:45 AM	1	181	5	1	187	13	8	3	2	24	9	133	6	1	148	5	3	3	1	11	5	370	375
Total	7	641	12	2	660	44	20	10	8	74	16	445	26	2	487	14	7	24	8	45	20	1266	1286
08:00 AM	2	143	3	0	148	13	7	1	1	21	9	139	6	0	154	1	9	6	3	16	4	339	343
08:15 AM	3	135	0	0	138	8	9	1	0	18	3	133	8	1	144	3	2	2	2	7	3	307	310
08:30 AM	3	112	1	0	116	5	4	2	1	11	12	127	4	1	143	3	7	7	6	17	8	287	295
08:45 AM	2	90	1	0	93	7	2	3	1	12	9	129	3	0	141	2	2	2	2	6	3	252	255
Total	10	480	5	0	495	33	22	7	3	62	33	528	21	2	582	9	20	17	13	46	18	1185	1203
Grand Total	24	1365	18	2	1407	94	45	19	13	158	56	1189	59	4	1304	30	27	58	29	115	48	2984	3032
Apprch %	1.7	97	1.3			59.5	28.5	12			4.3	91.2	4.5			26.1	23.5	50.4					
Total %	0.8	45.7	0.6		47.2	3.2	1.5	0.6		5.3	1.9	39.8	2		43.7	1	0.9	1.9		3.9	1.6	98.4	
Passenger Vehicles	21	1028	14		1064	74	43	14		142	45	928	50		1027	28	24	26		97	0	0	2330
% Passenger Vehicles	87.5	75.3	77.8	50	75.5	78.7	95.6	73.7	84.6	83	80.4	78	84.7	100	78.5	93.3	88.9	44.8	65.5	67.4	0	0	76.8
Large 2 Axle Vehicles	2	105	3		111	7	1	2		11	2	78	4		84	2	3	14		25	0	0	231
% Large 2 Axle Vehicles	8.3	7.7	16.7	50	7.9	7.4	2.2	10.5	7.7	6.4	3.6	6.6	6.8	0	6.4	6.7	11.1	24.1	20.7	17.4	0	0	7.6
3 Axle Vehicles	1	100	1		102	1	1	0		2	3	59	2		64	0	0	10		12	0	0	180
% 3 Axle Vehicles	4.2	7.3	5.6	0	7.2	1.1	2.2	0	0	1.2	5.4	5	3.4	0	4.9	0	0	17.2	6.9	8.3	0	0	5.9
4+ Axle Trucks	0	132	0		132	12	0	3		16	6	124	3		133	0	0	8		10	0	0	291
% 4+ Axle Trucks	0	9.7	0	0	9.4	12.8	0	15.8	7.7	9.4	10.7	10.4	5.1	0	10.2	0	0	13.8	6.9	6.9	0	0	9.6

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 28th Street
Weather: Clear

File Name : 19_JVY_Rub_28th AM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				28th Street Westbound				Rubidoux Boulevard Northbound				28th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**3**	**197**	1	**201**	**13**	5	**3**	21	3	94	**9**	106	**5**	2	**8**	15	343
07:45 AM	1	181	**5**	187	13	8	3	**24**	**9**	133	6	148	5	3	3	11	**370**
08:00 AM	2	143	3	148	13	7	1	21	9	**139**	6	**154**	1	**9**	6	**16**	339
08:15 AM	3	135	0	138	8	**9**	1	18	3	133	8	144	3	2	2	7	307
Total Volume	9	656	9	674	47	29	8	84	24	499	29	552	14	16	19	49	1359
% App. Total	1.3	97.3	1.3		56	34.5	9.5		4.3	90.4	5.3		28.6	32.7	38.8		
PHF	.750	.832	.450	.838	.904	.806	.667	.875	.667	.897	.806	.896	.700	.444	.594	.766	.918

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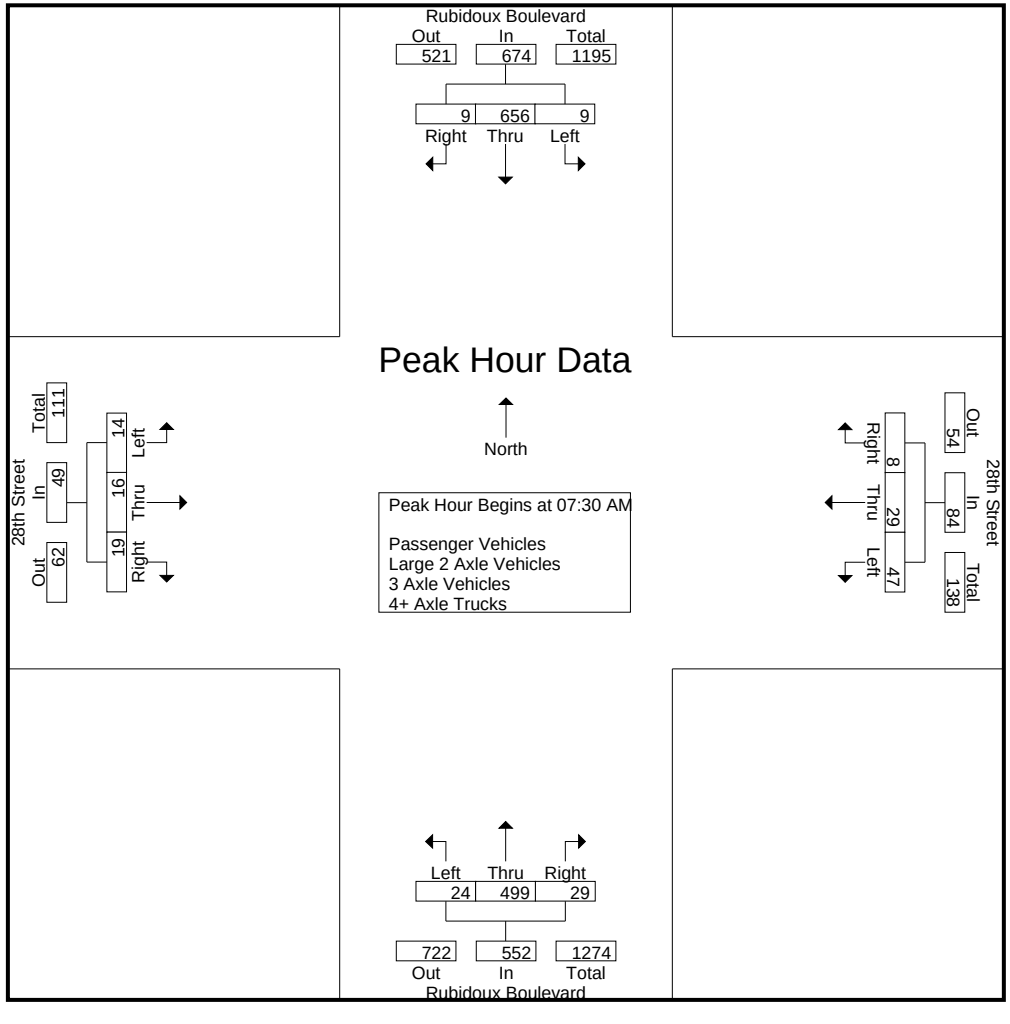
File Name : 19_JVY_Rub_28th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 3



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City of Jurupa Valley
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File Name : 19_JVY_Rub_28th AM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				28th Street Westbound				Rubidoux Boulevard Northbound				28th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:30 AM				07:45 AM				07:45 AM				
+0 mins.	1	143	4	148	**13**	5	**3**	21	9	133	6	148	**5**	3	3	11	
+15 mins.	**3**	**197**	1	**201**	13	8	3	**24**	9	**139**	6	**154**	1	**9**	6	16	
+30 mins.	1	181	**5**	187	13	7	1	21	3	133	**8**	144	3	2	2	7	
+45 mins.	2	143	3	148	8	**9**	1	18	**12**	127	4	143	3	7	**7**	**17**	
Total Volume	7	664	13	684	47	29	8	84	33	532	24	589	12	21	18	51	
% App. Total	1	97.1	1.9		56	34.5	9.5		5.6	90.3	4.1		23.5	41.2	35.3		
PHF	.583	.843	.650	.851	.904	.806	.667	.875	.688	.957	.750	.956	.600	.583	.643	.750	

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Start Date : 10/4/2022
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Groups Printed- Passenger Vehicles

	Rubidoux Boulevard Southbound					28th Street Westbound					Rubidoux Boulevard Northbound					28th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	1	85	0	0	86	7	0	0	0	7	4	78	7	0	89	5	0	2	2	7	2	189	191
06:45 AM	6	102	1	0	109	7	3	2	2	12	3	103	1	0	107	1	0	2	2	3	4	231	235
Total	7	187	1	0	195	14	3	2	2	19	7	181	8	0	196	6	0	4	4	10	6	420	426
07:00 AM	2	90	2	0	94	8	5	2	2	15	3	88	2	0	93	3	1	4	1	8	3	210	213
07:15 AM	1	105	3	0	109	5	2	2	2	9	0	81	9	0	90	1	1	4	3	6	5	214	219
07:30 AM	3	158	0	0	161	11	5	2	2	18	3	70	7	1	80	5	2	4	2	11	5	270	275
07:45 AM	1	147	5	1	153	11	8	1	1	20	7	108	6	1	121	5	2	1	1	8	4	302	306
Total	7	500	10	1	517	35	20	7	7	62	13	347	24	2	384	14	6	13	7	33	17	996	1013
08:00 AM	2	111	3	0	116	10	7	1	1	18	8	110	4	0	122	1	9	3	2	13	3	269	272
08:15 AM	2	105	0	0	107	7	8	1	0	16	2	104	8	1	114	2	2	2	2	6	3	243	246
08:30 AM	1	71	0	0	72	3	3	1	1	7	10	88	4	1	102	3	5	3	3	11	5	192	197
08:45 AM	2	54	0	0	56	5	2	2	0	9	5	98	2	0	105	2	2	1	1	5	1	175	176
Total	7	341	3	0	351	25	20	5	2	50	25	400	18	2	443	8	18	9	8	35	12	879	891
Grand Total	21	1028	14	1	1063	74	43	14	11	131	45	928	50	4	1023	28	24	26	19	78	35	2295	2330
Apprch %	2	96.7	1.3			56.5	32.8	10.7			4.4	90.7	4.9			35.9	30.8	33.3					
Total %	0.9	44.8	0.6		46.3	3.2	1.9	0.6		5.7	2	40.4	2.2		44.6	1.2	1	1.1		3.4	1.5	98.5	

	Rubidoux Boulevard Southbound				28th Street Westbound				Rubidoux Boulevard Northbound				28th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**3**	**158**	0	**161**	**11**	5	**2**	18	3	70	7	80	**5**	2	**4**	11	270
07:45 AM	1	147	**5**	153	11	**8**	1	**20**	7	108	6	121	5	2	1	8	**302**
08:00 AM	2	111	3	116	10	7	1	18	**8**	**110**	4	**122**	1	**9**	3	**13**	269
08:15 AM	2	105	0	107	7	8	1	16	2	104	**8**	114	2	2	2	6	243
Total Volume	8	521	8	537	39	28	5	72	20	392	25	437	13	15	10	38	1084
% App. Total	1.5	97	1.5		54.2	38.9	6.9		4.6	89.7	5.7		34.2	39.5	26.3		
PHF	.667	.824	.400	.834	.886	.875	.625	.900	.625	.891	.781	.895	.650	.417	.625	.731	.897

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File Name : 19_JVY_Rub_28th AM
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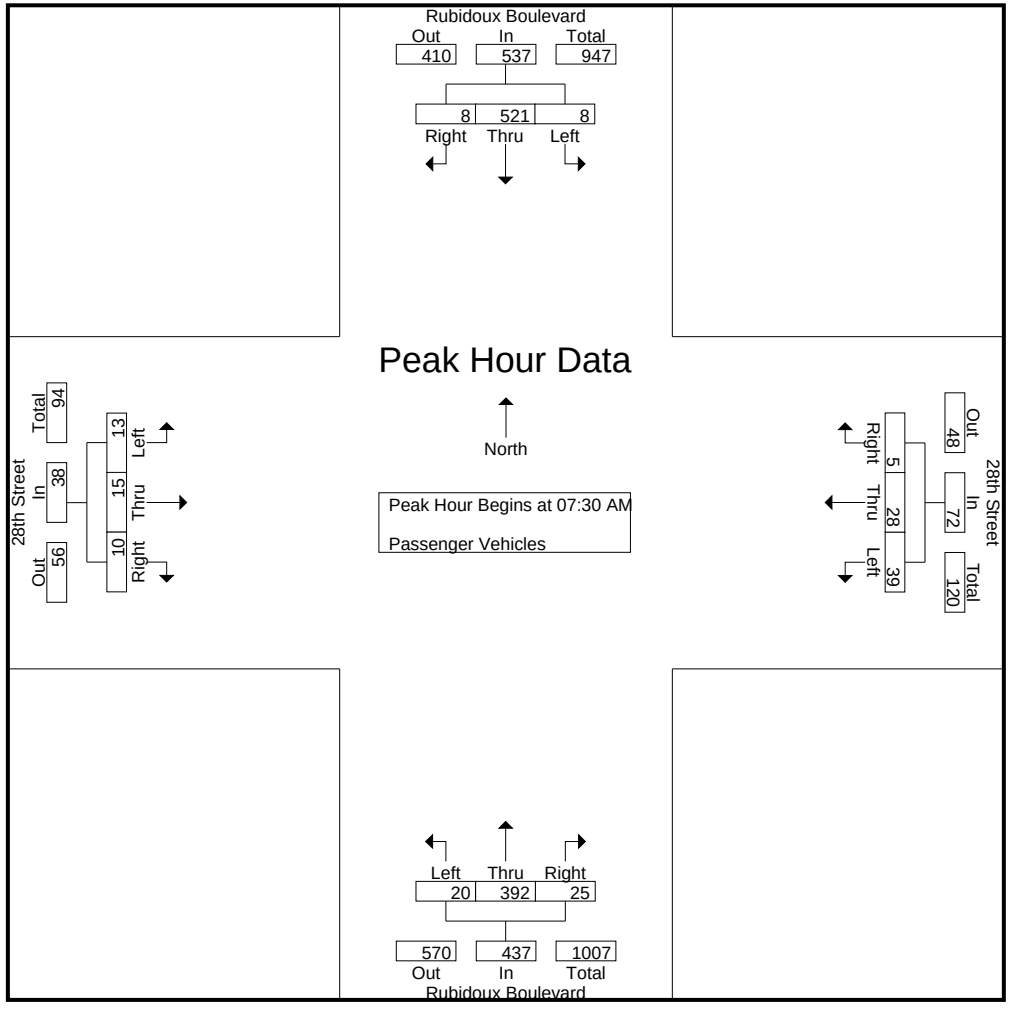
Page No : 2



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File Name : 19_JVY_Rub_28th AM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				28th Street Westbound				Rubidoux Boulevard Northbound				28th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	**3**	**158**	0	**161**	**11**	5	**2**	18	3	70	7	80	**5**	2	**4**	11	
+15 mins.	1	147	**5**	153	11	**8**	1	**20**	7	108	6	121	5	2	1	8	
+30 mins.	2	111	3	116	10	7	1	18	**8**	**110**	4	**122**	1	**9**	3	**13**	
+45 mins.	2	105	0	107	7	8	1	16	2	104	**8**	114	2	2	2	6	
Total Volume	8	521	8	537	39	28	5	72	20	392	25	437	13	15	10	38	
% App. Total	1.5	97	1.5		54.2	38.9	6.9		4.6	89.7	5.7		34.2	39.5	26.3		
PHF	.667	.824	.400	.834	.886	.875	.625	.900	.625	.891	.781	.895	.650	.417	.625	.731	

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City of Jurupa Valley
N/S: Rubidoux Boulevard
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File Name : 19_JVY_Rub_28th AM
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Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Rubidoux Boulevard Southbound					28th Street Westbound					Rubidoux Boulevard Northbound					28th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	5	0	0	5	0	0	0	0	0	0	4	0	0	4	1	0	5	2	6	2	15	17
06:45 AM	0	10	0	0	10	0	0	0	0	0	0	7	1	0	8	0	0	2	1	2	1	20	21
Total	0	15	0	0	15	0	0	0	0	0	0	11	1	0	12	1	0	7	3	8	3	35	38
07:00 AM	0	9	0	0	9	1	0	0	0	1	0	13	0	0	13	0	0	2	1	2	1	25	26
07:15 AM	0	9	1	1	10	2	0	0	0	2	0	11	0	0	11	0	0	0	0	0	1	23	24
07:30 AM	0	16	1	0	17	0	0	0	0	0	0	7	1	0	8	0	0	1	0	1	0	26	26
07:45 AM	0	9	0	0	9	0	0	0	0	0	1	8	0	0	9	0	1	1	0	2	0	20	20
Total	0	43	2	1	45	3	0	0	0	3	1	39	1	0	41	0	1	4	1	5	2	94	96
08:00 AM	0	9	0	0	9	3	0	0	0	3	0	5	2	0	7	0	0	1	1	1	1	20	21
08:15 AM	0	9	0	0	9	0	0	0	0	0	0	5	0	0	5	1	0	0	0	1	0	15	15
08:30 AM	2	14	0	0	16	1	1	1	0	3	0	10	0	0	10	0	2	2	1	4	1	33	34
08:45 AM	0	15	1	0	16	0	0	1	1	1	1	8	0	0	9	0	0	0	0	0	1	26	27
Total	2	47	1	0	50	4	1	2	1	7	1	28	2	0	31	1	2	3	2	6	3	94	97
Grand Total	2	105	3	1	110	7	1	2	1	10	2	78	4	0	84	2	3	14	6	19	8	223	231
Apprch %	1.8	95.5	2.7			70	10	20			2.4	92.9	4.8			10.5	15.8	73.7					
Total %	0.9	47.1	1.3		49.3	3.1	0.4	0.9		4.5	0.9	35	1.8		37.7	0.9	1.3	6.3		8.5	3.5	96.5	

	Rubidoux Boulevard Southbound				28th Street Westbound				Rubidoux Boulevard Northbound				28th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**16**	**1**	**17**	0	0	0	0	0	7	1	8	0	0	**1**	1	**26**
07:45 AM	0	9	0	9	0	0	0	0	**1**	**8**	0	**9**	0	**1**	1	**2**	20
08:00 AM	0	9	0	9	**3**	0	0	**3**	0	5	**2**	7	0	0	1	1	20
08:15 AM	0	9	0	9	0	0	0	0	0	5	0	5	**1**	0	0	1	15
Total Volume	0	43	1	44	3	0	0	3	1	25	3	29	1	1	3	5	81
% App. Total	0	97.7	2.3		100	0	0		3.4	86.2	10.3		20	20	60		
PHF	.000	.672	.250	.647	.250	.000	.000	.250	.250	.781	.375	.806	.250	.250	.750	.625	.779

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
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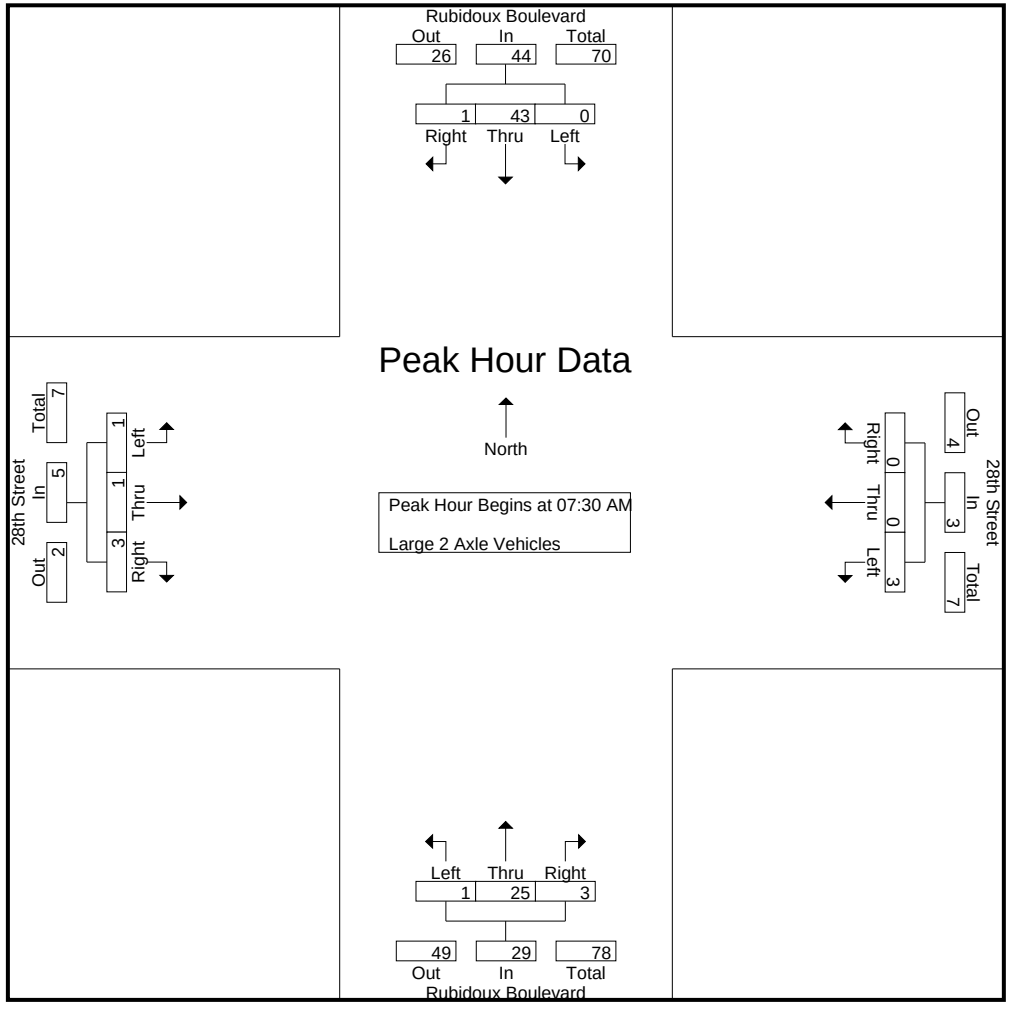
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 28th Street
Weather: Clear

File Name : 19_JVY_Rub_28th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Rubidoux Boulevard
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File Name : 19_JVY_Rub_28th AM
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Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				28th Street Westbound				Rubidoux Boulevard Northbound				28th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	**16**	**1**	**17**	0	0	0	0	0	7	1	8	0	0	**1**	1	
+15 mins.	0	9	0	9	0	0	0	0	**1**	**8**	0	**9**	0	**1**	1	**2**	
+30 mins.	0	9	0	9	**3**	0	0	**3**	0	5	**2**	7	0	0	1	1	
+45 mins.	0	9	0	9	0	0	0	0	0	5	0	5	**1**	0	0	1	
Total Volume	0	43	1	44	3	0	0	3	1	25	3	29	1	1	3	5	
% App. Total	0	97.7	2.3		100	0	0		3.4	86.2	10.3		20	20	60		
PHF	.000	.672	.250	.647	.250	.000	.000	.250	.250	.781	.375	.806	.250	.250	.750	.625	

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City of Jurupa Valley
N/S: Rubidoux Boulevard
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File Name : 19_JVY_Rub_28th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Rubidoux Boulevard Southbound					28th Street Westbound					Rubidoux Boulevard Northbound					28th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	7	0	0	7	0	0	0	0	0	0	3	0	0	3	0	0	2	0	2	0	12	12
06:45 AM	0	10	0	0	10	0	0	0	0	0	0	1	1	0	2	0	0	1	0	1	0	13	13
Total	0	17	0	0	17	0	0	0	0	0	0	4	1	0	5	0	0	3	0	3	0	25	25
07:00 AM	0	14	0	0	14	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	15	15
07:15 AM	0	12	0	0	12	0	0	0	0	0	0	4	0	0	4	0	0	1	0	1	0	17	17
07:30 AM	0	4	0	0	4	1	0	0	0	1	0	10	0	0	10	0	0	1	0	1	0	16	16
07:45 AM	0	11	0	0	11	0	0	0	0	0	0	4	0	0	4	0	0	1	0	1	0	16	16
Total	0	41	0	0	41	1	0	0	0	1	0	19	0	0	19	0	0	3	0	3	0	64	64
08:00 AM	0	11	0	0	11	0	0	0	0	0	1	6	0	0	7	0	0	2	0	2	0	20	20
08:15 AM	1	9	0	0	10	0	1	0	0	1	0	8	0	0	8	0	0	0	0	0	0	19	19
08:30 AM	0	12	1	0	13	0	0	0	0	0	0	11	0	0	11	0	0	1	1	1	1	25	26
08:45 AM	0	10	0	0	10	0	0	0	0	0	2	11	1	0	14	0	0	1	1	1	1	25	26
Total	1	42	1	0	44	0	1	0	0	1	3	36	1	0	40	0	0	4	2	4	2	89	91
Grand Total	1	100	1	0	102	1	1	0	0	2	3	59	2	0	64	0	0	10	2	10	2	178	180
Apprch %	1	98	1			50	50	0			4.7	92.2	3.1			0	0	100					
Total %	0.6	56.2	0.6		57.3	0.6	0.6	0		1.1	1.7	33.1	1.1		36	0	0	5.6		5.6	1.1	98.9	

	Rubidoux Boulevard Southbound				28th Street Westbound				Rubidoux Boulevard Northbound				28th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	4	0	4	**1**	0	0	**1**	0	**10**	0	**10**	0	0	1	1	16
07:45 AM	0	**11**	0	**11**	0	0	0	0	0	4	0	4	0	0	1	1	16
08:00 AM	0	11	0	11	0	0	0	0	**1**	6	0	7	0	0	**2**	**2**	**20**
08:15 AM	**1**	9	0	10	0	**1**	0	1	0	8	0	8	0	0	0	0	19
Total Volume	1	35	0	36	1	1	0	2	1	28	0	29	0	0	4	4	71
% App. Total	2.8	97.2	0		50	50	0		3.4	96.6	0		0	0	100		
PHF	.250	.795	.000	.818	.250	.250	.000	.500	.250	.700	.000	.725	.000	.000	.500	.500	.888

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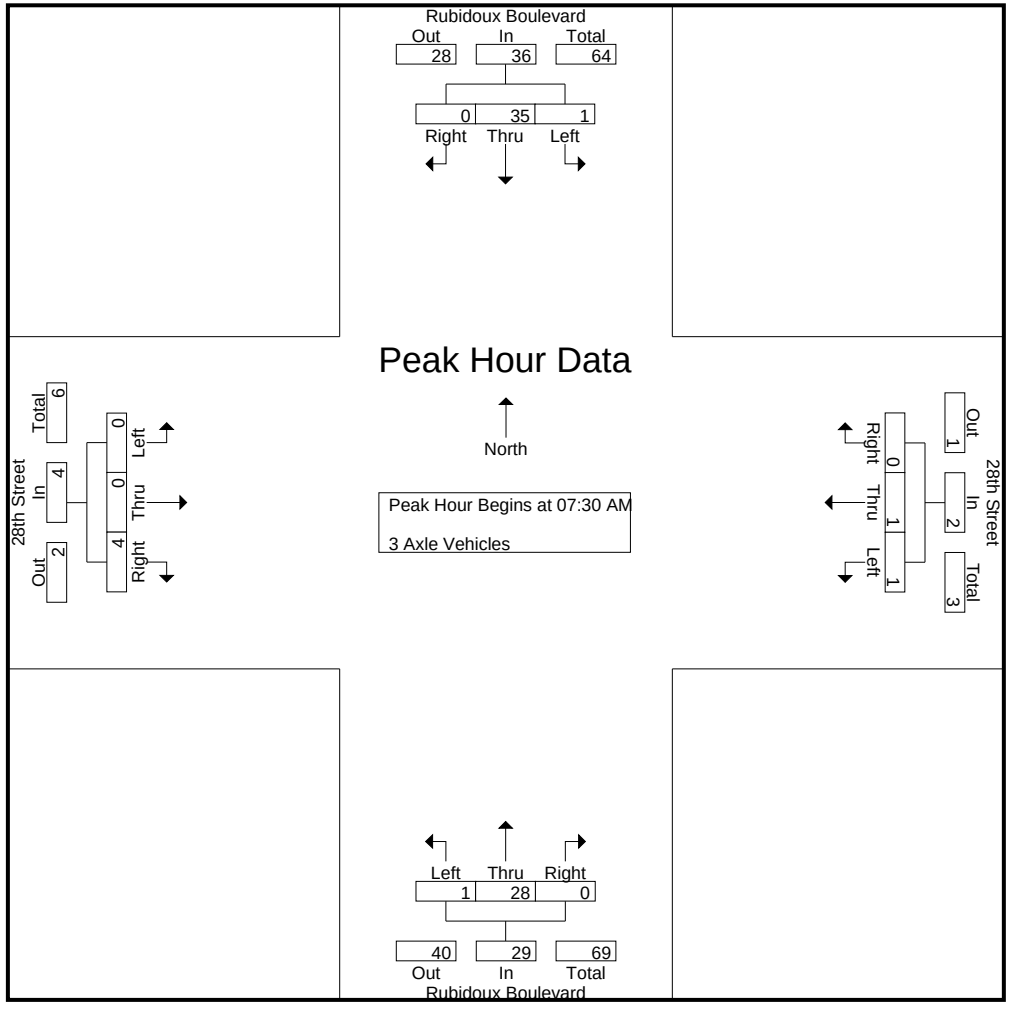
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 28th Street
Weather: Clear

File Name : 19_JVY_Rub_28th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
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Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				28th Street Westbound				Rubidoux Boulevard Northbound				28th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	4	0	4	**1**	0	0	**1**	0	**10**	0	**10**	0	0	1	1	
+15 mins.	0	**11**	0	**11**	0	0	0	0	0	4	0	4	0	0	1	1	
+30 mins.	0	11	0	11	0	0	0	0	**1**	6	0	7	0	0	**2**	**2**	
+45 mins.	**1**	9	0	10	0	**1**	0	1	0	8	0	8	0	0	0	0	
Total Volume	1	35	0	36	1	1	0	2	1	28	0	29	0	0	4	4	
% App. Total	2.8	97.2	0		50	50	0		3.4	96.6	0		0	0	100		
PHF	.250	.795	.000	.818	.250	.250	.000	.500	.250	.700	.000	.725	.000	.000	.500	.500	

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File Name : 19_JVY_Rub_28th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Rubidoux Boulevard Southbound					28th Street Westbound					Rubidoux Boulevard Northbound					28th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	10	0	0	10	0	0	0	0	0	0	10	1	0	11	0	0	3	1	3	1	24	25
06:45 AM	0	15	0	0	15	3	0	0	0	3	0	10	1	0	11	0	0	0	0	0	0	29	29
Total	0	25	0	0	25	3	0	0	0	3	0	20	2	0	22	0	0	3	1	3	1	53	54
07:00 AM	0	7	0	0	7	1	0	0	0	1	1	8	0	0	9	0	0	1	0	1	0	18	18
07:15 AM	0	17	0	0	17	1	0	0	0	1	0	12	0	0	12	0	0	1	0	1	0	31	31
07:30 AM	0	19	0	0	19	1	0	1	0	2	0	7	1	0	8	0	0	2	0	2	0	31	31
07:45 AM	0	14	0	0	14	2	0	2	1	4	1	13	0	0	14	0	0	0	0	0	1	32	33
Total	0	57	0	0	57	5	0	3	1	8	2	40	1	0	43	0	0	4	0	4	1	112	113
08:00 AM	0	12	0	0	12	0	0	0	0	0	0	18	0	0	18	0	0	0	0	0	0	30	30
08:15 AM	0	12	0	0	12	1	0	0	0	1	1	16	0	0	17	0	0	0	0	0	0	30	30
08:30 AM	0	15	0	0	15	1	0	0	0	1	2	18	0	0	20	0	0	1	1	1	1	37	38
08:45 AM	0	11	0	0	11	2	0	0	0	2	1	12	0	0	13	0	0	0	0	0	0	26	26
Total	0	50	0	0	50	4	0	0	0	4	4	64	0	0	68	0	0	1	1	1	1	123	124
Grand Total	0	132	0	0	132	12	0	3	1	15	6	124	3	0	133	0	0	8	2	8	3	288	291
Apprch %	0	100	0			80	0	20			4.5	93.2	2.3			0	0	100					
Total %	0	45.8	0		45.8	4.2	0	1		5.2	2.1	43.1	1		46.2	0	0	2.8		2.8	1	99	

	Rubidoux Boulevard Southbound				28th Street Westbound				Rubidoux Boulevard Northbound				28th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**19**	0	**19**	1	0	1	2	0	7	**1**	8	0	0	**2**	**2**	31
07:45 AM	0	14	0	14	**2**	0	**2**	**4**	**1**	13	0	14	0	0	0	0	**32**
08:00 AM	0	12	0	12	0	0	0	0	0	**18**	0	**18**	0	0	0	0	30
08:15 AM	0	12	0	12	1	0	0	1	1	16	0	17	0	0	0	0	30
Total Volume	0	57	0	57	4	0	3	7	2	54	1	57	0	0	2	2	123
% App. Total	0	100	0		57.1	0	42.9		3.5	94.7	1.8		0	0	100		
PHF	.000	.750	.000	.750	.500	.000	.375	.438	.500	.750	.250	.792	.000	.000	.250	.250	.961

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City of Jurupa Valley
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Site Code : 05122894
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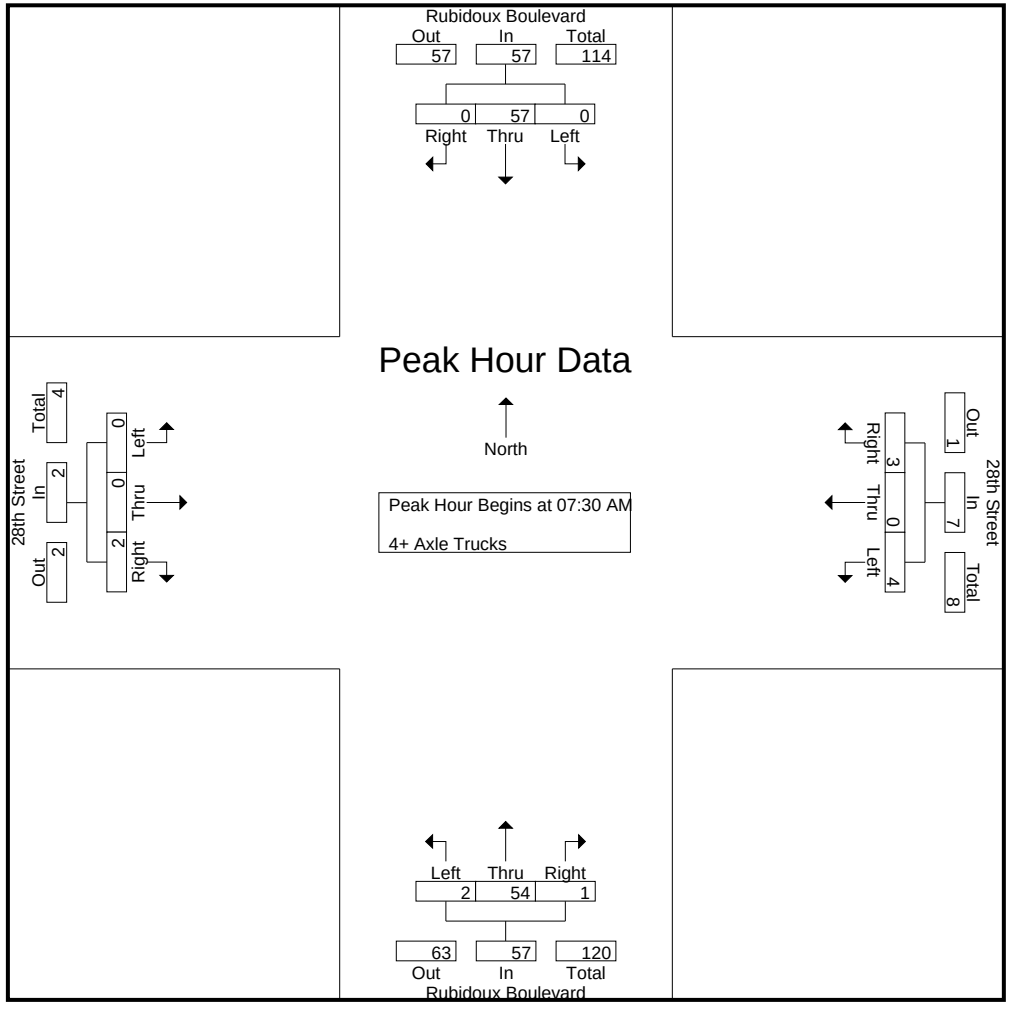
Page No : 2



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	Rubidoux Boulevard Southbound				28th Street Westbound				Rubidoux Boulevard Northbound				28th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	**19**	0	**19**	1	0	1	2	0	7	**1**	8	0	0	**2**	**2**	
+15 mins.	0	14	0	14	**2**	0	**2**	**4**	**1**	13	0	14	0	0	0	0	
+30 mins.	0	12	0	12	0	0	0	0	0	**18**	0	**18**	0	0	0	0	
+45 mins.	0	12	0	12	1	0	0	1	1	16	0	17	0	0	0	0	
Total Volume	0	57	0	57	4	0	3	7	2	54	1	57	0	0	2	2	
% App. Total	0	100	0		57.1	0	42.9		3.5	94.7	1.8		0	0	100		
PHF	.000	.750	.000	.750	.500	.000	.375	.438	.500	.750	.250	.792	.000	.000	.250	.250	

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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Rubidoux Boulevard Southbound					28th Street Westbound					Rubidoux Boulevard Northbound					28th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	6	145	4	0	155	17	6	6	4	29	5	129	12	1	146	4	14	4	2	22	7	352	359
03:45 PM	1	126	2	0	129	16	3	2	2	21	7	141	10	0	158	14	10	5	0	29	2	337	339
Total	7	271	6	0	284	33	9	8	6	50	12	270	22	1	304	18	24	9	2	51	9	689	698
04:00 PM	3	174	1	0	178	21	2	4	3	27	8	121	13	3	142	7	6	11	6	24	12	371	383
04:15 PM	1	158	3	0	162	9	1	2	2	12	12	142	9	0	163	7	3	12	10	22	12	359	371
04:30 PM	5	136	3	0	144	19	3	2	1	24	6	139	13	0	158	5	3	6	4	14	5	340	345
04:45 PM	6	149	9	0	164	9	2	5	3	16	5	135	15	0	155	8	3	9	8	20	11	355	366
Total	15	617	16	0	648	58	8	13	9	79	31	537	50	3	618	27	15	38	28	80	40	1425	1465
05:00 PM	4	169	1	0	174	23	5	2	0	30	7	147	7	0	161	9	5	8	4	22	4	387	391
05:15 PM	4	149	2	0	155	14	6	3	3	23	4	131	9	1	144	6	6	6	0	18	4	340	344
05:30 PM	3	149	3	0	155	7	6	0	0	13	3	162	6	0	171	9	1	6	4	16	4	355	359
05:45 PM	1	131	1	0	133	14	1	0	0	15	2	133	5	1	140	8	5	4	2	17	3	305	308
Total	12	598	7	0	617	58	18	5	3	81	16	573	27	2	616	32	17	24	10	73	15	1387	1402
Grand Total	34	1486	29	0	1549	149	35	26	18	210	59	1380	99	6	1538	77	56	71	40	204	64	3501	3565
Apprch %	2.2	95.9	1.9			71	16.7	12.4			3.8	89.7	6.4			37.7	27.5	34.8					
Total %	1	42.4	0.8		44.2	4.3	1	0.7		6	1.7	39.4	2.8		43.9	2.2	1.6	2		5.8	1.8	98.2	
Passenger Vehicles	29	1253	21		1303	132	35	23		207	42	1038	87		1173	71	54	62		224	0	0	2907
% Passenger Vehicles	85.3	84.3	72.4	0	84.1	88.6	100	88.5	94.4	90.8	71.2	75.2	87.9	100	76	92.2	96.4	87.3	92.5	91.8	0	0	81.5
Large 2 Axle Vehicles	0	67	5		72	7	0	1		9	3	103	7		113	3	2	5		13	0	0	207
% Large 2 Axle Vehicles	0	4.5	17.2	0	4.6	4.7	0	3.8	5.6	3.9	5.1	7.5	7.1	0	7.3	3.9	3.6	7	7.5	5.3	0	0	5.8
3 Axle Vehicles	2	41	1		44	4	0	2		6	8	67	2		77	3	0	3		6	0	0	133
% 3 Axle Vehicles	5.9	2.8	3.4	0	2.8	2.7	0	7.7	0	2.6	13.6	4.9	2	0	5	3.9	0	4.2	0	2.5	0	0	3.7
4+ Axle Trucks	3	125	2		130	6	0	0		6	6	172	3		181	0	0	1		1	0	0	318
% 4+ Axle Trucks	8.8	8.4	6.9	0	8.4	4	0	0	0	2.6	10.2	12.5	3	0	11.7	0	0	1.4	0	0.4	0	0	8.9

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File Name : 19_JVY_Rub_28th PM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				28th Street Westbound				Rubidoux Boulevard Northbound				28th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	1	158	3	162	9	1	2	12	**12**	142	9	**163**	7	3	**12**	**22**	359
04:30 PM	5	136	3	144	19	3	2	24	6	139	13	158	5	3	6	14	340
04:45 PM	**6**	149	**9**	164	9	2	**5**	16	5	135	**15**	155	8	3	9	20	355
05:00 PM	4	**169**	1	**174**	**23**	**5**	2	**30**	7	**147**	7	161	**9**	**5**	8	22	**387**
Total Volume	16	612	16	644	60	11	11	82	30	563	44	637	29	14	35	78	1441
% App. Total	2.5	95	2.5		73.2	13.4	13.4		4.7	88.4	6.9		37.2	17.9	44.9		
PHF	.667	.905	.444	.925	.652	.550	.550	.683	.625	.957	.733	.977	.806	.700	.729	.886	.931

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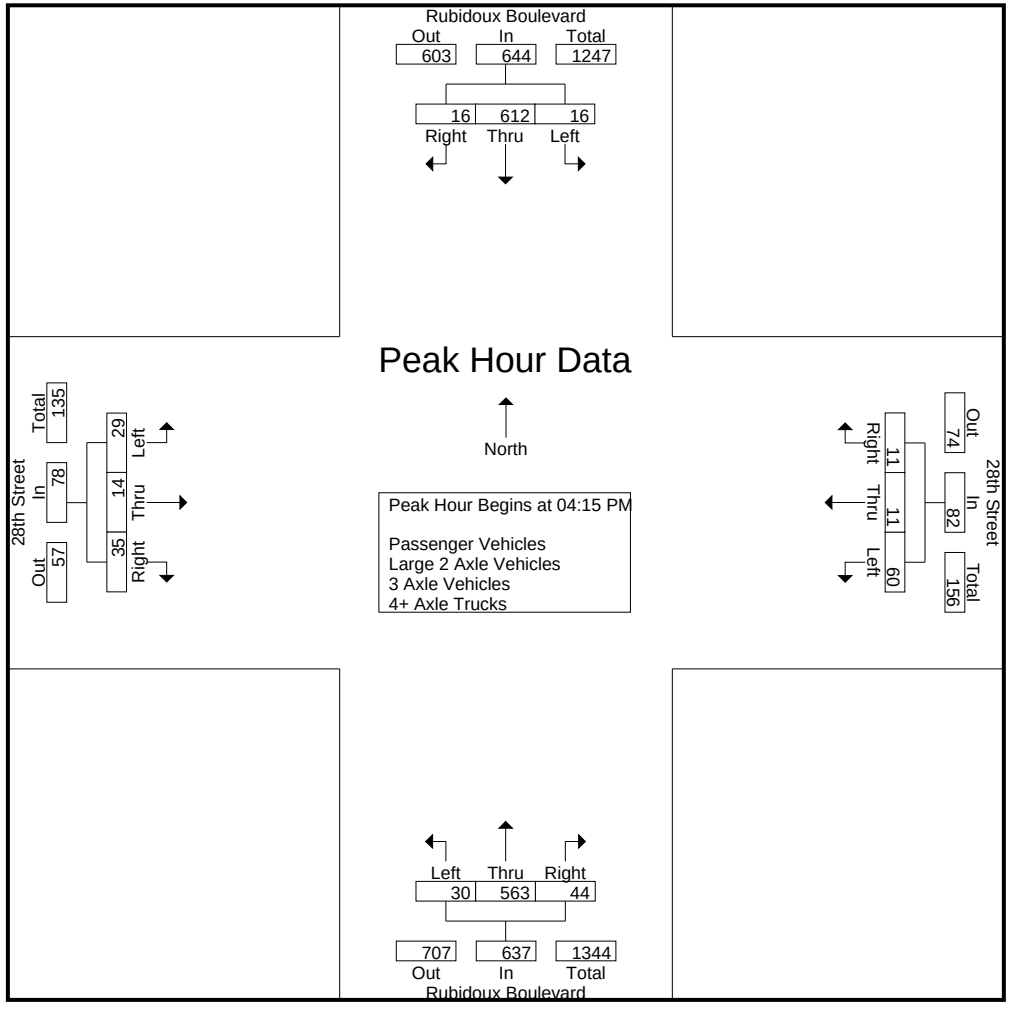
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 28th Street
Weather: Clear

File Name : 19_JVY_Rub_28th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 3



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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 28th Street
Weather: Clear

File Name : 19_JVY_Rub_28th PM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				28th Street Westbound				Rubidoux Boulevard Northbound				28th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:30 PM				04:15 PM				03:30 PM				
+0 mins.	3	**174**	1	**178**	19	3	2	24	**12**	142	9	**163**	4	**14**	4	22	
+15 mins.	1	158	3	162	9	2	**5**	16	6	139	13	158	**14**	10	5	**29**	
+30 mins.	5	136	3	144	**23**	5	2	**30**	5	135	**15**	155	7	6	11	24	
+45 mins.	**6**	149	**9**	164	14	**6**	3	23	7	**147**	7	161	7	3	**12**	22	
Total Volume	15	617	16	648	65	16	12	93	30	563	44	637	32	33	32	97	
% App. Total	2.3	95.2	2.5		69.9	17.2	12.9		4.7	88.4	6.9		33	34	33		
PHF	.625	.886	.444	.910	.707	.667	.600	.775	.625	.957	.733	.977	.571	.589	.667	.836	

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File Name : 19_JVY_Rub_28th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Rubidoux Boulevard Southbound					28th Street Westbound					Rubidoux Boulevard Northbound					28th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	5	113	3	0	121	17	6	5	4	28	3	85	9	1	97	3	13	4	2	20	7	266	273
03:45 PM	1	105	1	0	107	13	3	2	2	18	4	104	9	0	117	12	9	3	0	24	2	266	268
Total	6	218	4	0	228	30	9	7	6	46	7	189	18	1	214	15	22	7	2	44	9	532	541
04:00 PM	2	149	1	0	152	18	2	4	3	24	8	100	12	3	120	6	6	7	4	19	10	315	325
04:15 PM	1	133	1	0	135	9	1	2	2	12	7	109	7	0	123	6	3	10	9	19	11	289	300
04:30 PM	3	113	2	0	118	14	3	1	0	18	3	95	12	0	110	5	3	6	4	14	4	260	264
04:45 PM	6	128	7	0	141	8	2	5	3	15	4	99	14	0	117	8	3	9	8	20	11	293	304
Total	12	523	11	0	546	49	8	12	8	69	22	403	45	3	470	25	15	32	25	72	36	1157	1193
05:00 PM	4	142	1	0	147	20	5	1	0	26	6	113	5	0	124	9	5	8	4	22	4	319	323
05:15 PM	3	126	1	0	130	13	6	3	3	22	3	107	8	1	118	6	6	5	0	17	4	287	291
05:30 PM	3	133	3	0	139	7	6	0	0	13	2	124	6	0	132	9	1	6	4	16	4	300	304
05:45 PM	1	111	1	0	113	13	1	0	0	14	2	102	5	1	109	7	5	4	2	16	3	252	255
Total	11	512	6	0	529	53	18	4	3	75	13	446	24	2	483	31	17	23	10	71	15	1158	1173
Grand Total	29	1253	21	0	1303	132	35	23	17	190	42	1038	87	6	1167	71	54	62	37	187	60	2847	2907
Apprch %	2.2	96.2	1.6			69.5	18.4	12.1			3.6	88.9	7.5			38	28.9	33.2					
Total %	1	44	0.7		45.8	4.6	1.2	0.8		6.7	1.5	36.5	3.1		41	2.5	1.9	2.2		6.6	2.1	97.9	

	Rubidoux Boulevard Southbound				28th Street Westbound				Rubidoux Boulevard Northbound				28th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	1	133	1	135	9	1	2	12	**7**	109	7	123	6	3	**10**	19	289
04:30 PM	3	113	2	118	14	3	1	18	3	95	12	110	5	3	6	14	260
04:45 PM	**6**	128	**7**	141	8	2	**5**	15	4	99	**14**	117	8	3	9	20	293
05:00 PM	4	**142**	1	**147**	**20**	**5**	1	**26**	6	**113**	5	**124**	**9**	**5**	8	**22**	**319**
Total Volume	14	516	11	541	51	11	9	71	20	416	38	474	28	14	33	75	1161
% App. Total	2.6	95.4	2		71.8	15.5	12.7		4.2	87.8	8		37.3	18.7	44		
PHF	.583	.908	.393	.920	.638	.550	.450	.683	.714	.920	.679	.956	.778	.700	.825	.852	.910

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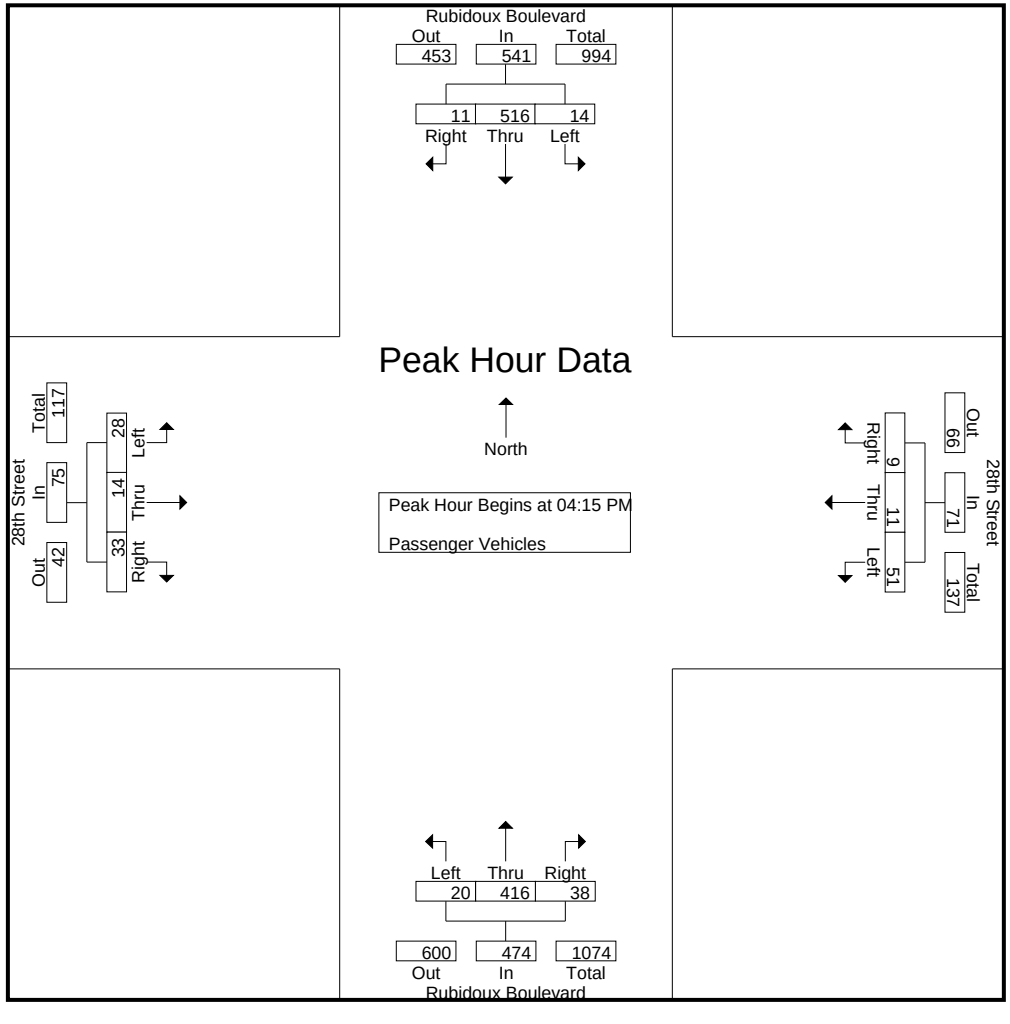
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 28th Street
Weather: Clear

File Name : 19_JVY_Rub_28th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				28th Street Westbound				Rubidoux Boulevard Northbound				28th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	1	133	1	135	9	1	2	12	**7**	109	7	123	6	3	**10**	19	
+15 mins.	3	113	2	118	14	3	1	18	3	95	12	110	5	3	6	14	
+30 mins.	**6**	128	**7**	141	8	2	**5**	15	4	99	**14**	117	8	3	9	20	
+45 mins.	4	**142**	1	**147**	**20**	**5**	1	**26**	6	**113**	5	**124**	**9**	**5**	8	**22**	
Total Volume	14	516	11	541	51	11	9	71	20	416	38	474	28	14	33	75	
% App. Total	2.6	95.4	2		71.8	15.5	12.7		4.2	87.8	8		37.3	18.7	44		
PHF	.583	.908	.393	.920	.638	.550	.450	.683	.714	.920	.679	.956	.778	.700	.825	.852	

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File Name : 19_JVY_Rub_28th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Rubidoux Boulevard Southbound					28th Street Westbound					Rubidoux Boulevard Northbound					28th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	7	1	0	8	0	0	0	0	0	0	18	2	0	20	1	1	0	0	2	0	30	30
03:45 PM	0	3	1	0	4	2	0	0	0	2	1	8	1	0	10	0	1	1	0	2	0	18	18
Total	0	10	2	0	12	2	0	0	0	2	1	26	3	0	30	1	2	1	0	4	0	48	48
04:00 PM	0	9	0	0	9	2	0	0	0	2	0	7	1	0	8	0	0	3	2	3	2	22	24
04:15 PM	0	8	1	0	9	0	0	0	0	0	0	14	2	0	16	1	0	1	1	2	1	27	28
04:30 PM	0	4	1	0	5	1	0	1	1	2	1	12	1	0	14	0	0	0	0	0	1	21	22
04:45 PM	0	6	1	0	7	0	0	0	0	0	1	11	0	0	12	0	0	0	0	0	0	19	19
Total	0	27	3	0	30	3	0	1	1	4	2	44	4	0	50	1	0	4	3	5	4	89	93
05:00 PM	0	6	0	0	6	1	0	0	0	1	0	7	0	0	7	0	0	0	0	0	0	14	14
05:15 PM	0	8	0	0	8	1	0	0	0	1	0	5	0	0	5	0	0	0	0	0	0	14	14
05:30 PM	0	7	0	0	7	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	17	17
05:45 PM	0	9	0	0	9	0	0	0	0	0	0	11	0	0	11	1	0	0	0	1	0	21	21
Total	0	30	0	0	30	2	0	0	0	2	0	33	0	0	33	1	0	0	0	1	0	66	66
Grand Total	0	67	5	0	72	7	0	1	1	8	3	103	7	0	113	3	2	5	3	10	4	203	207
Apprch %	0	93.1	6.9			87.5	0	12.5			2.7	91.2	6.2			30	20	50					
Total %	0	33	2.5		35.5	3.4	0	0.5		3.9	1.5	50.7	3.4		55.7	1.5	1	2.5		4.9	1.9	98.1	

	Rubidoux Boulevard Southbound				28th Street Westbound				Rubidoux Boulevard Northbound				28th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	**8**	**1**	**9**	0	0	0	0	0	**14**	**2**	**16**	**1**	0	**1**	**2**	**27**
04:30 PM	0	4	1	5	**1**	0	**1**	**2**	**1**	12	1	14	0	0	0	0	21
04:45 PM	0	6	1	7	0	0	0	0	1	11	0	12	0	0	0	0	19
05:00 PM	0	6	0	6	1	0	0	1	0	7	0	7	0	0	0	0	14
Total Volume	0	24	3	27	2	0	1	3	2	44	3	49	1	0	1	2	81
% App. Total	0	88.9	11.1		66.7	0	33.3		4.1	89.8	6.1		50	0	50		
PHF	.000	.750	.750	.750	.500	.000	.250	.375	.500	.786	.375	.766	.250	.000	.250	.250	.750

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City of Jurupa Valley
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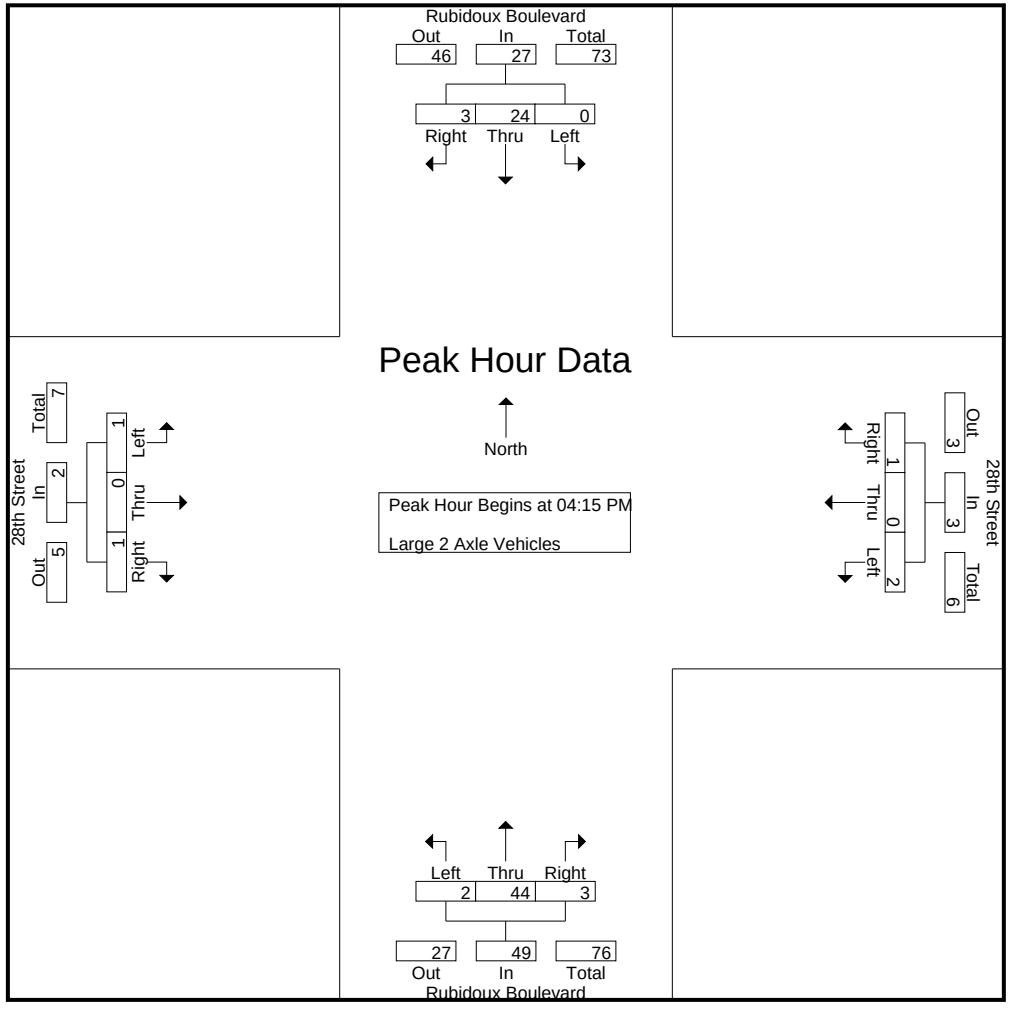

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	Rubidoux Boulevard Southbound				28th Street Westbound				Rubidoux Boulevard Northbound				28th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	**8**	**1**	**9**	0	0	0	0	0	**14**	**2**	**16**	**1**	0	**1**	**2**	
+15 mins.	0	4	1	5	**1**	0	**1**	**2**	**1**	12	1	14	0	0	0	0	
+30 mins.	0	6	1	7	0	0	0	0	1	11	0	12	0	0	0	0	
+45 mins.	0	6	0	6	1	0	0	1	0	7	0	7	0	0	0	0	
Total Volume	0	24	3	27	2	0	1	3	2	44	3	49	1	0	1	2	
% App. Total	0	88.9	11.1		66.7	0	33.3		4.1	89.8	6.1		50	0	50		
PHF	.000	.750	.750	.750	.500	.000	.250	.375	.500	.786	.375	.766	.250	.000	.250	.250	

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File Name : 19_JVY_Rub_28th PM
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Groups Printed- 3 Axle Vehicles

	Rubidoux Boulevard Southbound					28th Street Westbound					Rubidoux Boulevard Northbound					28th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	9	0	0	9	0	0	1	0	1	2	6	0	0	8	0	0	0	0	0	0	18	18
03:45 PM	0	1	0	0	1	0	0	0	0	0	1	9	0	0	10	2	0	0	0	2	0	13	13
Total	0	10	0	0	10	0	0	1	0	1	3	15	0	0	18	2	0	0	0	2	0	31	31
04:00 PM	1	4	0	0	5	0	0	0	0	0	0	1	0	0	1	1	0	1	0	2	0	8	8
04:15 PM	0	7	0	0	7	0	0	0	0	0	2	5	0	0	7	0	0	1	0	1	0	15	15
04:30 PM	0	3	0	0	3	2	0	0	0	2	1	10	0	0	11	0	0	0	0	0	0	16	16
04:45 PM	0	5	0	0	5	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	0	10	10
Total	1	19	0	0	20	3	0	0	0	3	3	20	0	0	23	1	0	2	0	3	0	49	49
05:00 PM	0	6	0	0	6	0	0	1	0	1	0	11	2	0	13	0	0	0	0	0	0	20	20
05:15 PM	1	4	1	0	6	0	0	0	0	0	1	7	0	0	8	0	0	1	0	1	0	15	15
05:30 PM	0	1	0	0	1	0	0	0	0	0	1	8	0	0	9	0	0	0	0	0	0	10	10
05:45 PM	0	1	0	0	1	1	0	0	0	1	0	6	0	0	6	0	0	0	0	0	0	8	8
Total	1	12	1	0	14	1	0	1	0	2	2	32	2	0	36	0	0	1	0	1	0	53	53
Grand Total	2	41	1	0	44	4	0	2	0	6	8	67	2	0	77	3	0	3	0	6	0	133	133
Apprch %	4.5	93.2	2.3			66.7	0	33.3			10.4	87	2.6			50	0	50					
Total %	1.5	30.8	0.8		33.1	3	0	1.5		4.5	6	50.4	1.5		57.9	2.3	0	2.3		4.5	0	100	

	Rubidoux Boulevard Southbound				28th Street Westbound				Rubidoux Boulevard Northbound				28th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	**7**	0	**7**	0	0	0	0	**2**	5	0	7	0	0	**1**	**1**	15
04:30 PM	0	3	0	3	**2**	0	0	**2**	1	10	0	11	0	0	0	0	16
04:45 PM	0	5	0	5	1	0	0	1	0	4	0	4	0	0	0	0	10
05:00 PM	0	6	0	6	0	0	**1**	1	0	**11**	**2**	**13**	0	0	0	0	**20**
Total Volume	0	21	0	21	3	0	1	4	3	30	2	35	0	0	1	1	61
% App. Total	0	100	0		75	0	25		8.6	85.7	5.7		0	0	100		
PHF	.000	.750	.000	.750	.375	.000	.250	.500	.375	.682	.250	.673	.000	.000	.250	.250	.763

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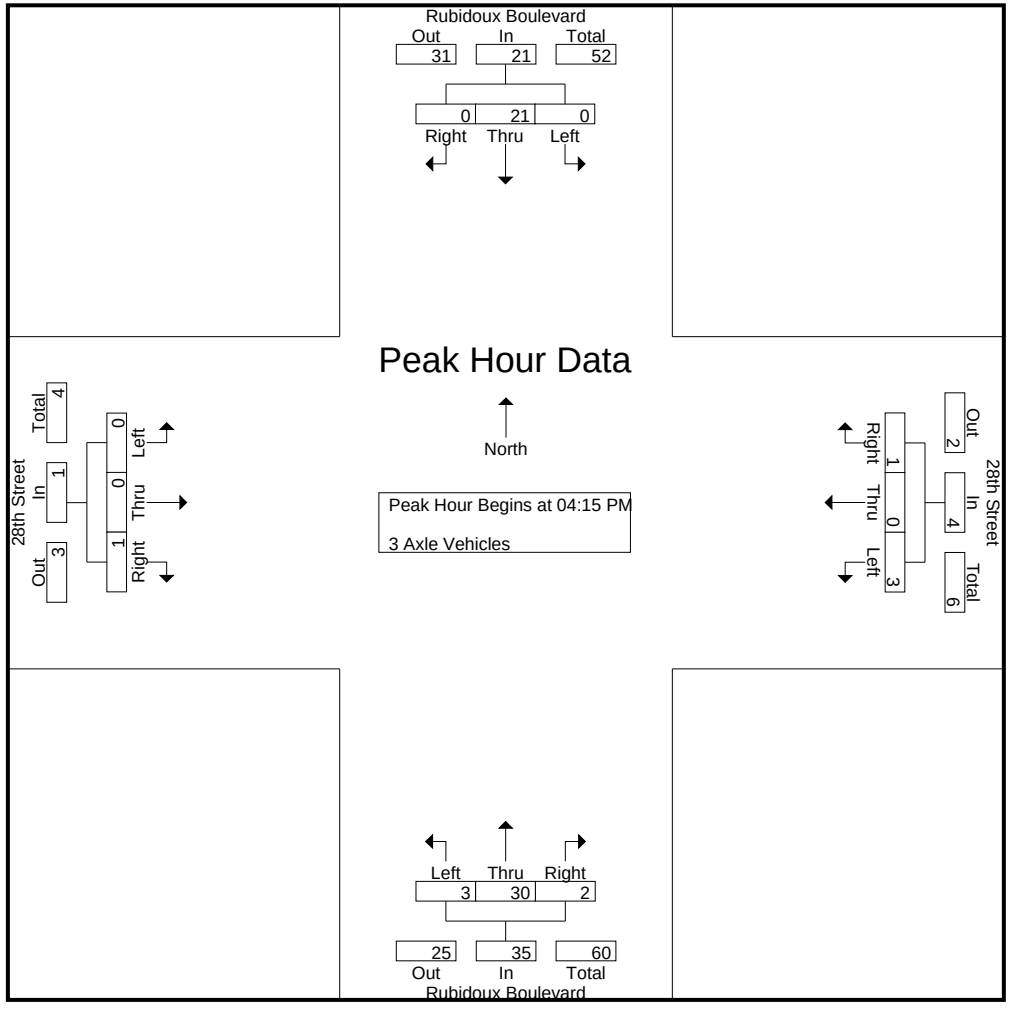

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	Rubidoux Boulevard Southbound				28th Street Westbound				Rubidoux Boulevard Northbound				28th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	**7**	0	**7**	0	0	0	0	**2**	5	0	7	0	0	**1**	**1**	
+15 mins.	0	3	0	3	**2**	0	0	**2**	1	10	0	11	0	0	0	0	
+30 mins.	0	5	0	5	1	0	0	1	0	4	0	4	0	0	0	0	
+45 mins.	0	6	0	6	0	0	**1**	1	0	**11**	**2**	**13**	0	0	0	0	
Total Volume	0	21	0	21	3	0	1	4	3	30	2	35	0	0	1	1	
% App. Total	0	100	0		75	0	25		8.6	85.7	5.7		0	0	100		
PHF	.000	.750	.000	.750	.375	.000	.250	.500	.375	.682	.250	.673	.000	.000	.250	.250	

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 28th Street
Weather: Clear

File Name : 19_JVY_Rub_28th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Rubidoux Boulevard Southbound					28th Street Westbound					Rubidoux Boulevard Northbound					28th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	1	16	0	0	17	0	0	0	0	0	0	20	1	0	21	0	0	0	0	0	0	38	38
03:45 PM	0	17	0	0	17	1	0	0	0	1	1	20	0	0	21	0	0	1	0	1	0	40	40
Total	1	33	0	0	34	1	0	0	0	1	1	40	1	0	42	0	0	1	0	1	0	78	78
04:00 PM	0	12	0	0	12	1	0	0	0	1	0	13	0	0	13	0	0	0	0	0	0	26	26
04:15 PM	0	10	1	0	11	0	0	0	0	0	3	14	0	0	17	0	0	0	0	0	0	28	28
04:30 PM	2	16	0	0	18	2	0	0	0	2	1	22	0	0	23	0	0	0	0	0	0	43	43
04:45 PM	0	10	1	0	11	0	0	0	0	0	0	21	1	0	22	0	0	0	0	0	0	33	33
Total	2	48	2	0	52	3	0	0	0	3	4	70	1	0	75	0	0	0	0	0	0	130	130
05:00 PM	0	15	0	0	15	2	0	0	0	2	1	16	0	0	17	0	0	0	0	0	0	34	34
05:15 PM	0	11	0	0	11	0	0	0	0	0	0	12	1	0	13	0	0	0	0	0	0	24	24
05:30 PM	0	8	0	0	8	0	0	0	0	0	0	20	0	0	20	0	0	0	0	0	0	28	28
05:45 PM	0	10	0	0	10	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	0	24	24
Total	0	44	0	0	44	2	0	0	0	2	1	62	1	0	64	0	0	0	0	0	0	110	110
Grand Total	3	125	2	0	130	6	0	0	0	6	6	172	3	0	181	0	0	1	0	1	0	318	318
Apprch %	2.3	96.2	1.5			100	0	0			3.3	95	1.7			0	0	100					
Total %	0.9	39.3	0.6		40.9	1.9	0	0		1.9	1.9	54.1	0.9		56.9	0	0	0.3		0.3	0	100	

	Rubidoux Boulevard Southbound				28th Street Westbound				Rubidoux Boulevard Northbound				28th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	10	**1**	11	0	0	0	0	**3**	14	0	17	0	0	0	0	28
04:30 PM	**2**	**16**	0	**18**	**2**	0	0	**2**	1	**22**	0	**23**	0	0	0	0	**43**
04:45 PM	0	10	1	11	0	0	0	0	0	21	**1**	22	0	0	0	0	33
05:00 PM	0	15	0	15	2	0	0	2	1	16	0	17	0	0	0	0	34
Total Volume	2	51	2	55	4	0	0	4	5	73	1	79	0	0	0	0	138
% App. Total	3.6	92.7	3.6		100	0	0		6.3	92.4	1.3		0	0	0		
PHF	.250	.797	.500	.764	.500	.000	.000	.500	.417	.830	.250	.859	.000	.000	.000	.000	.802

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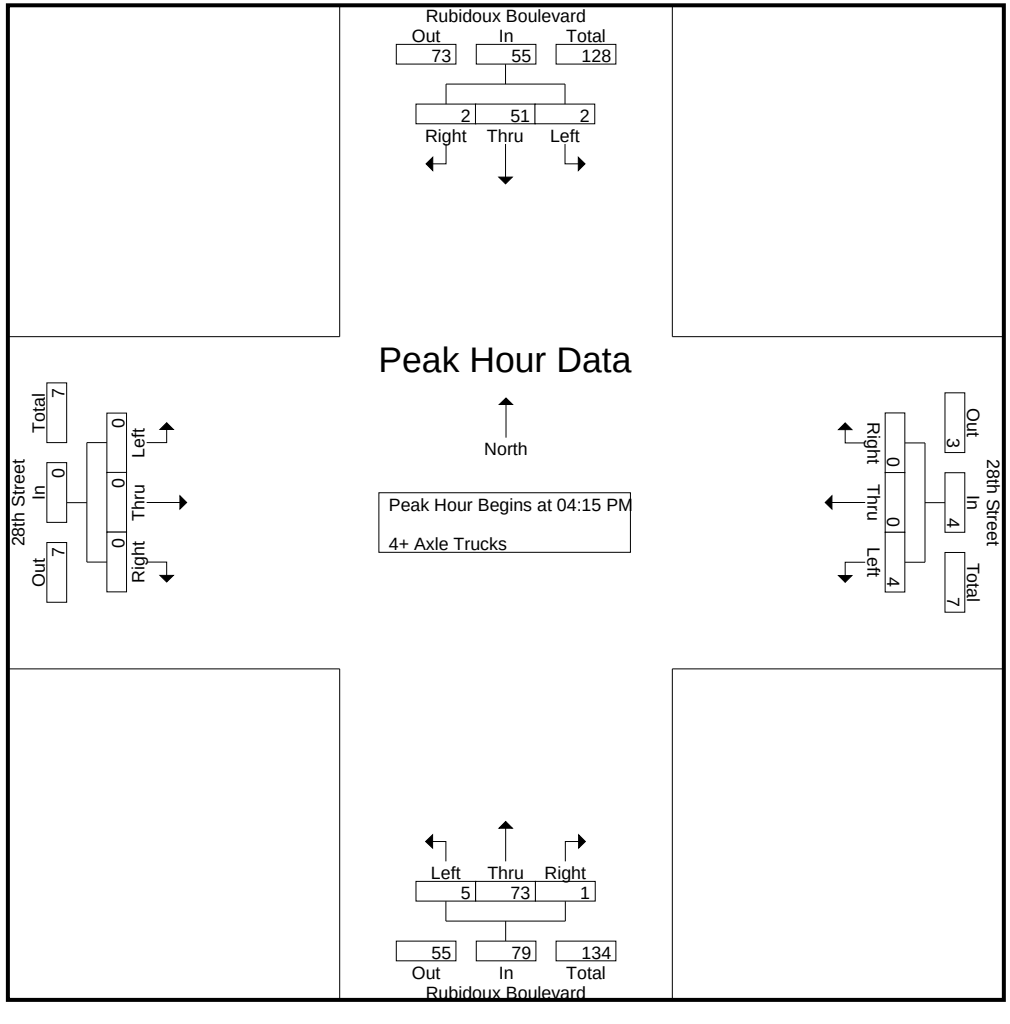
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 28th Street
Weather: Clear

File Name : 19_JVY_Rub_28th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Rubidoux Boulevard
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Weather: Clear

File Name : 19_JVY_Rub_28th PM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				28th Street Westbound				Rubidoux Boulevard Northbound				28th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	10	**1**	11	0	0	0	0	**3**	14	0	17	0	0	0	0	
+15 mins.	**2**	**16**	0	**18**	**2**	0	0	**2**	1	**22**	0	**23**	0	0	0	0	
+30 mins.	0	10	1	11	0	0	0	0	0	21	**1**	22	0	0	0	0	
+45 mins.	0	15	0	15	2	0	0	2	1	16	0	17	0	0	0	0	
Total Volume	2	51	2	55	4	0	0	4	5	73	1	79	0	0	0	0	
% App. Total	3.6	92.7	3.6		100	0	0		6.3	92.4	1.3		0	0	0		
PHF	.250	.797	.500	.764	.500	.000	.000	.500	.417	.830	.250	.859	.000	.000	.000	.000	

Location: Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 28th Street

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Rubidoux Boulevard	East Leg 28th Street	South Leg Rubidoux Boulevard	West Leg 28th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	1	0	0	1
7:30 AM	0	0	0	0	0
7:45 AM	0	2	0	0	2
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	1	0	0	0	1
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	1	3	0	0	4

	North Leg Rubidoux Boulevard	East Leg 28th Street	South Leg Rubidoux Boulevard	West Leg 28th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	1	0	1
5:30 PM	0	2	0	1	3
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	2	1	1	4

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Location: Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 28th Street

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Rubidoux Boulevard			Westbound 28th Street			Northbound Rubidoux Boulevard			Eastbound 28th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:15 AM	0	0	0	2	0	0	0	0	1	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
8:45 AM	0	0	0	1	0	0	0	0	1	0	0	0	2
TOTAL VOLUMES:	0	0	0	3	0	0	0	1	3	0	0	0	7

	Southbound Rubidoux Boulevard			Westbound 28th Street			Northbound Rubidoux Boulevard			Eastbound 28th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	1	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	4	0	0	0	0	0	0	2	1	0	0	7

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 30th St/SR-60 Westbound Off Ramp
Weather: Clear

File Name : 20_JVY_Rub_60W Off AM
Site Code : 05122894
Start Date : 10/4/2022

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Rubidoux Boulevard Southbound					SR-60 Westbound Off Ramp Westbound					Rubidoux Boulevard Northbound					30th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	128	5	3	133	62	15	22	12	99	11	86	0	0	97	1	0	34	15	35	30	364	394
06:45 AM	0	140	5	0	145	45	13	5	1	63	9	116	0	0	125	5	0	35	16	40	17	373	390
Total	0	268	10	3	278	107	28	27	13	162	20	202	0	0	222	6	0	69	31	75	47	737	784
07:00 AM	0	120	5	2	125	51	10	18	3	79	10	104	0	0	114	3	0	37	12	40	17	358	375
07:15 AM	0	170	2	0	172	63	12	9	3	84	12	106	0	0	118	6	0	45	15	51	18	425	443
07:30 AM	0	205	2	0	207	58	21	18	3	97	4	91	0	0	95	1	0	42	16	43	19	442	461
07:45 AM	0	193	4	0	197	103	23	19	6	145	9	129	0	0	138	9	0	55	26	64	32	544	576
Total	0	688	13	2	701	275	66	64	15	405	35	430	0	0	465	19	0	179	69	198	86	1769	1855
08:00 AM	0	172	5	0	177	102	12	22	7	136	13	136	0	0	149	2	0	39	15	41	22	503	525
08:15 AM	0	153	3	1	156	56	13	22	14	91	15	143	0	0	158	2	0	35	18	37	33	442	475
08:30 AM	0	123	3	2	126	60	13	15	4	88	10	137	0	0	147	5	0	36	12	41	18	402	420
08:45 AM	0	109	2	0	111	68	13	14	3	95	15	137	0	0	152	4	0	23	7	27	10	385	395
Total	0	557	13	3	570	286	51	73	28	410	53	553	0	0	606	13	0	133	52	146	83	1732	1815
Grand Total	0	1513	36	8	1549	668	145	164	56	977	108	1185	0	0	1293	38	0	381	152	419	216	4238	4454
Apprch %	0	97.7	2.3			68.4	14.8	16.8			8.4	91.6	0			9.1	0	90.9					
Total %	0	35.7	0.8		36.6	15.8	3.4	3.9		23.1	2.5	28	0		30.5	0.9	0	9		9.9	4.8	95.2	
Passenger Vehicles	0	1142	32		1182	639	141	135		965	99	939	0		1038	32	0	350		528	0	0	3713
% Passenger Vehicles	0	75.5	88.9	100	75.9	95.7	97.2	82.3	89.3	93.4	91.7	79.2	0	0	80.3	84.2	0	91.9	96.1	92.5	0	0	83.4
Large 2 Axle Vehicles	0	119	1		120	19	4	9		36	6	71	0		77	2	0	10		15	0	0	248
% Large 2 Axle Vehicles	0	7.9	2.8	0	7.7	2.8	2.8	5.5	7.1	3.5	5.6	6	0	0	6	5.3	0	2.6	2	2.6	0	0	5.6
3 Axle Vehicles	0	106	3		109	2	0	2		4	3	61	0		64	2	0	9		13	0	0	190
% 3 Axle Vehicles	0	7	8.3	0	7	0.3	0	1.2	0	0.4	2.8	5.1	0	0	4.9	5.3	0	2.4	1.3	2.3	0	0	4.3
4+ Axle Trucks	0	146	0		146	8	0	18		28	0	114	0		114	2	0	12		15	0	0	303
% 4+ Axle Trucks	0	9.6	0	0	9.4	1.2	0	11	3.6	2.7	0	9.6	0	0	8.8	5.3	0	3.1	0.7	2.6	0	0	6.8

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 30th St/SR-60 Westbound Off Ramp
Weather: Clear

File Name : 20_JVY_Rub_60W Off AM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				SR-60 Westbound Off Ramp Westbound				Rubidoux Boulevard Northbound				30th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**205**	2	**207**	58	21	18	97	4	91	0	95	1	0	42	43	442
07:45 AM	0	193	4	197	**103**	**23**	19	**145**	9	129	0	138	**9**	0	**55**	**64**	**544**
08:00 AM	0	172	**5**	177	102	12	**22**	136	13	136	0	149	2	0	39	41	503
08:15 AM	0	153	3	156	56	13	22	91	**15**	**143**	0	**158**	2	0	35	37	442
Total Volume	0	723	14	737	319	69	81	469	41	499	0	540	14	0	171	185	1931
% App. Total	0	98.1	1.9		68	14.7	17.3		7.6	92.4	0		7.6	0	92.4		
PHF	.000	.882	.700	.890	.774	.750	.920	.809	.683	.872	.000	.854	.389	.000	.777	.723	.887

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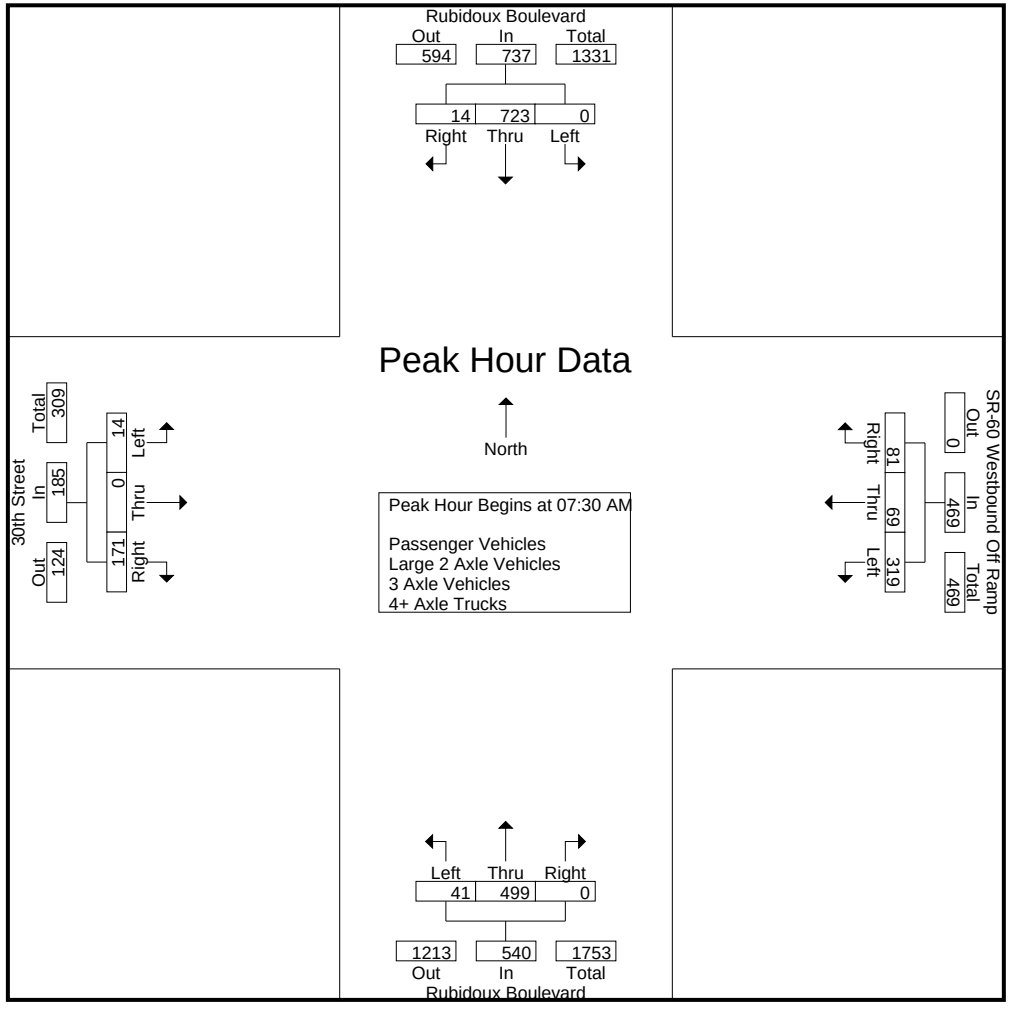
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 30th St/SR-60 Westbound Off Ramp
Weather: Clear

File Name : 20_JVY_Rub_60W Off AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 3



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City of Jurupa Valley
N/S: Rubidoux Boulevard
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Weather: Clear

File Name : 20_JVY_Rub_60W Off AM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				SR-60 Westbound Off Ramp Westbound				Rubidoux Boulevard Northbound				30th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:30 AM				08:00 AM				07:15 AM				
+0 mins.	0	170	2	172	58	21	18	97	13	136	0	149	6	0	45	51	
+15 mins.	0	**205**	2	**207**	**103**	**23**	19	**145**	**15**	**143**	0	**158**	1	0	42	43	
+30 mins.	0	193	4	197	102	12	**22**	136	10	137	0	147	**9**	0	**55**	**64**	
+45 mins.	0	172	**5**	177	56	13	22	91	15	137	0	152	2	0	39	41	
Total Volume	0	740	13	753	319	69	81	469	53	553	0	606	18	0	181	199	
% App. Total	0	98.3	1.7		68	14.7	17.3		8.7	91.3	0		9	0	91		
PHF	.000	.902	.650	.909	.774	.750	.920	.809	.883	.967	.000	.959	.500	.000	.823	.777	

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City of Jurupa Valley
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Weather: Clear

File Name : 20_JVY_Rub_60W Off AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Rubidoux Boulevard Southbound					SR-60 Westbound Off Ramp Westbound					Rubidoux Boulevard Northbound					30th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	96	4	3	100	56	14	20	11	90	9	67	0	0	76	1	0	32	15	33	29	299	328
06:45 AM	0	99	5	0	104	43	13	4	1	60	9	99	0	0	108	3	0	35	16	38	17	310	327
Total	0	195	9	3	204	99	27	24	12	150	18	166	0	0	184	4	0	67	31	71	46	609	655
07:00 AM	0	84	5	2	89	50	10	14	3	74	10	86	0	0	96	2	0	34	12	36	17	295	312
07:15 AM	0	131	2	0	133	61	12	7	1	80	10	83	0	0	93	6	0	43	15	49	16	355	371
07:30 AM	0	170	2	0	172	53	19	13	2	85	3	72	0	0	75	1	0	38	14	39	16	371	387
07:45 AM	0	155	3	0	158	98	22	19	6	139	9	106	0	0	115	8	0	47	25	55	31	467	498
Total	0	540	12	2	552	262	63	53	12	378	32	347	0	0	379	17	0	162	66	179	80	1488	1568
08:00 AM	0	138	3	0	141	100	12	18	6	130	12	107	0	0	119	2	0	37	14	39	20	429	449
08:15 AM	0	120	3	1	123	55	13	20	14	88	15	114	0	0	129	2	0	29	16	31	31	371	402
08:30 AM	0	79	3	2	82	58	13	9	3	80	9	101	0	0	110	3	0	34	12	37	17	309	326
08:45 AM	0	70	2	0	72	65	13	11	3	89	13	104	0	0	117	4	0	21	7	25	10	303	313
Total	0	407	11	3	418	278	51	58	26	387	49	426	0	0	475	11	0	121	49	132	78	1412	1490
Grand Total	0	1142	32	8	1174	639	141	135	50	915	99	939	0	0	1038	32	0	350	146	382	204	3509	3713
Apprch %	0	97.3	2.7			69.8	15.4	14.8			9.5	90.5	0			8.4	0	91.6					
Total %	0	32.5	0.9		33.5	18.2	4	3.8		26.1	2.8	26.8	0		29.6	0.9	0	10		10.9	5.5	94.5	

	Rubidoux Boulevard Southbound				SR-60 Westbound Off Ramp Westbound				Rubidoux Boulevard Northbound				30th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**170**	2	**172**	53	19	13	85	3	72	0	75	1	0	38	39	371
07:45 AM	0	155	**3**	158	98	**22**	19	**139**	9	106	0	115	**8**	0	**47**	**55**	**467**
08:00 AM	0	138	3	141	**100**	12	18	130	12	107	0	119	2	0	37	39	429
08:15 AM	0	120	3	123	55	13	**20**	88	**15**	**114**	0	**129**	2	0	29	31	371
Total Volume	0	583	11	594	306	66	70	442	39	399	0	438	13	0	151	164	1638
% App. Total	0	98.1	1.9		69.2	14.9	15.8		8.9	91.1	0		7.9	0	92.1		
PHF	.000	.857	.917	.863	.765	.750	.875	.795	.650	.875	.000	.849	.406	.000	.803	.745	.877

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PO Box 1178
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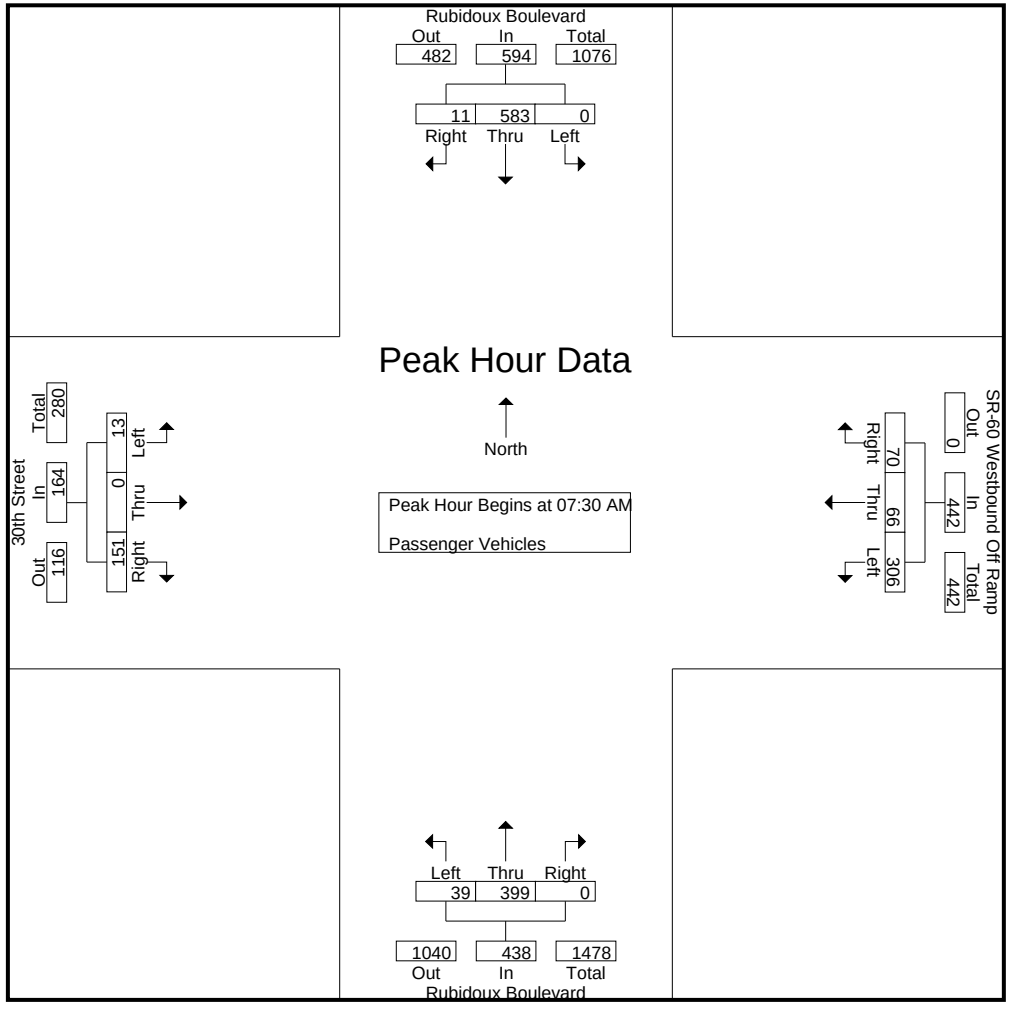
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 30th St/SR-60 Westbound Off Ramp
Weather: Clear

File Name : 20_JVY_Rub_60W Off AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 30th St/SR-60 Westbound Off Ramp
Weather: Clear

File Name : 20_JVY_Rub_60W Off AM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				SR-60 Westbound Off Ramp Westbound				Rubidoux Boulevard Northbound				30th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	**170**	2	**172**	53	19	13	85	3	72	0	75	1	0	38	39	
+15 mins.	0	155	**3**	158	98	**22**	19	**139**	9	106	0	115	**8**	0	**47**	**55**	
+30 mins.	0	138	3	141	**100**	12	18	130	12	107	0	119	2	0	37	39	
+45 mins.	0	120	3	123	55	13	**20**	88	**15**	**114**	0	**129**	2	0	29	31	
Total Volume	0	583	11	594	306	66	70	442	39	399	0	438	13	0	151	164	
% App. Total	0	98.1	1.9		69.2	14.9	15.8		8.9	91.1	0		7.9	0	92.1		
PHF	.000	.857	.917	.863	.765	.750	.875	.795	.650	.875	.000	.849	.406	.000	.803	.745	

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 30th St/SR-60 Westbound Off Ramp
Weather: Clear

File Name : 20_JVY_Rub_60W Off AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Rubidoux Boulevard Southbound					SR-60 Westbound Off Ramp Westbound					Rubidoux Boulevard Northbound					30th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	13	0	0	13	2	1	1	1	4	2	6	0	0	8	0	0	0	0	0	1	25	26
06:45 AM	0	13	0	0	13	2	0	0	0	2	0	6	0	0	6	1	0	0	0	1	0	22	22
Total	0	26	0	0	26	4	1	1	1	6	2	12	0	0	14	1	0	0	0	1	1	47	48
07:00 AM	0	12	0	0	12	1	0	2	0	3	0	8	0	0	8	0	0	0	0	0	0	23	23
07:15 AM	0	9	0	0	9	1	0	2	2	3	2	7	0	0	9	0	0	1	0	1	2	22	24
07:30 AM	0	13	0	0	13	4	2	1	0	7	1	6	0	0	7	0	0	1	1	1	1	28	29
07:45 AM	0	8	0	0	8	3	1	0	0	4	0	6	0	0	6	0	0	5	1	5	1	23	24
Total	0	42	0	0	42	9	3	5	2	17	3	27	0	0	30	0	0	7	2	7	4	96	100
08:00 AM	0	12	1	0	13	1	0	1	1	2	0	6	0	0	6	0	0	1	1	1	2	22	24
08:15 AM	0	10	0	0	10	1	0	0	0	1	0	6	0	0	6	0	0	0	0	0	0	17	17
08:30 AM	0	13	0	0	13	1	0	1	0	2	0	11	0	0	11	1	0	1	0	2	0	28	28
08:45 AM	0	16	0	0	16	3	0	1	0	4	1	9	0	0	10	0	0	1	0	1	0	31	31
Total	0	51	1	0	52	6	0	3	1	9	1	32	0	0	33	1	0	3	1	4	2	98	100
Grand Total	0	119	1	0	120	19	4	9	4	32	6	71	0	0	77	2	0	10	3	12	7	241	248
Apprch %	0	99.2	0.8			59.4	12.5	28.1			7.8	92.2	0			16.7	0	83.3					
Total %	0	49.4	0.4		49.8	7.9	1.7	3.7		13.3	2.5	29.5	0		32	0.8	0	4.1		5	2.8	97.2	

	Rubidoux Boulevard Southbound				SR-60 Westbound Off Ramp Westbound				Rubidoux Boulevard Northbound				30th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**13**	0	**13**	**4**	**2**	**1**	**7**	**1**	**6**	0	**7**	0	0	1	1	**28**
07:45 AM	0	8	0	8	3	1	0	4	0	6	0	6	0	0	**5**	**5**	23
08:00 AM	0	12	**1**	13	1	0	1	2	0	6	0	6	0	0	1	1	22
08:15 AM	0	10	0	10	1	0	0	1	0	6	0	6	0	0	0	0	17
Total Volume	0	43	1	44	9	3	2	14	1	24	0	25	0	0	7	7	90
% App. Total	0	97.7	2.3		64.3	21.4	14.3		4	96	0		0	0	100		
PHF	.000	.827	.250	.846	.563	.375	.500	.500	.250	1.00	.000	.893	.000	.000	.350	.350	.804

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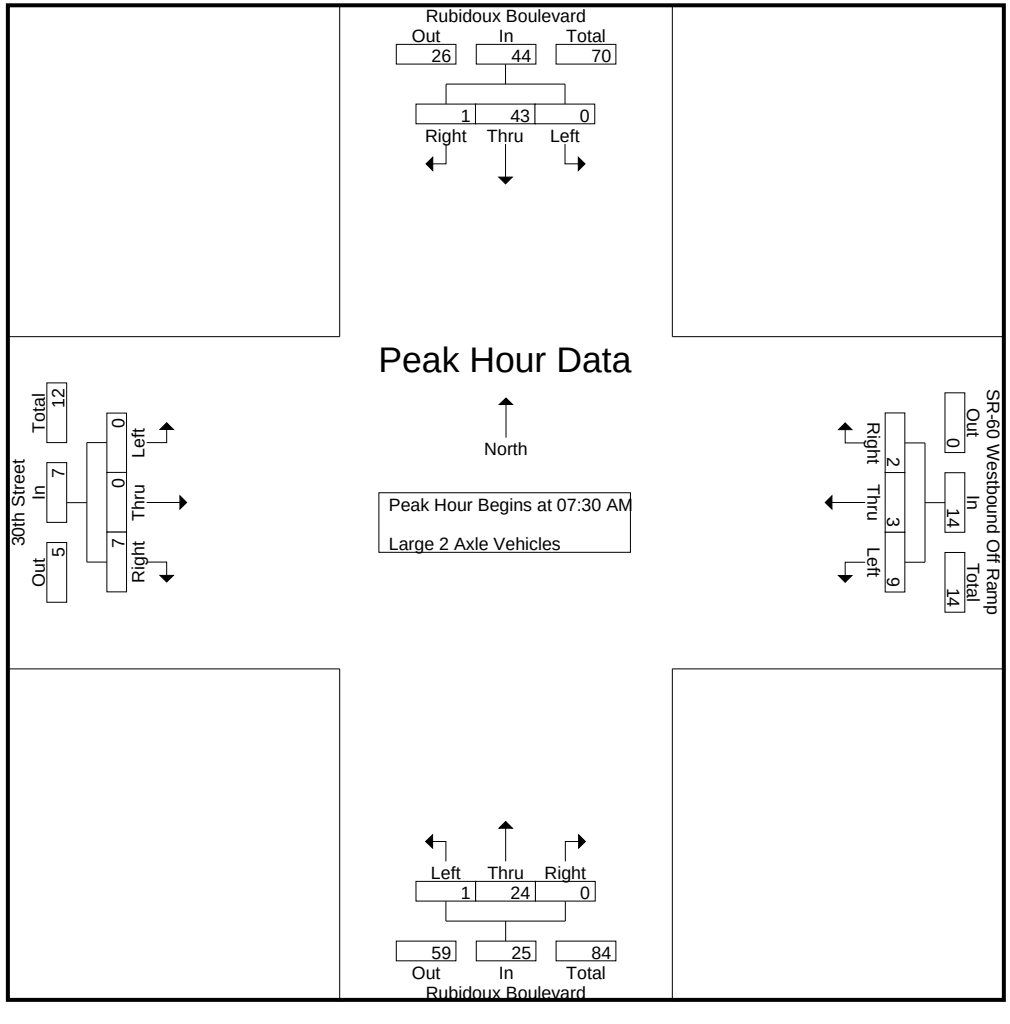
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 30th St/SR-60 Westbound Off Ramp
Weather: Clear

File Name : 20_JVY_Rub_60W Off AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Rubidoux Boulevard
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Weather: Clear

File Name : 20_JVY_Rub_60W Off AM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				SR-60 Westbound Off Ramp Westbound				Rubidoux Boulevard Northbound				30th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	**13**	0	**13**	**4**	**2**	**1**	**7**	**1**	**6**	0	**7**	0	0	1	1	
+15 mins.	0	8	0	8	3	1	0	4	0	6	0	6	0	0	**5**	**5**	
+30 mins.	0	12	**1**	13	1	0	1	2	0	6	0	6	0	0	1	1	
+45 mins.	0	10	0	10	1	0	0	1	0	6	0	6	0	0	0	0	
Total Volume	0	43	1	44	9	3	2	14	1	24	0	25	0	0	7	7	
% App. Total	0	97.7	2.3		64.3	21.4	14.3		4	96	0		0	0	100		
PHF	.000	.827	.250	.846	.563	.375	.500	.500	.250	1.000	.000	.893	.000	.000	.350	.350	

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City of Jurupa Valley
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E/W: 30th St/SR-60 Westbound Off Ramp
Weather: Clear

File Name : 20_JVY_Rub_60W Off AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Rubidoux Boulevard Southbound					SR-60 Westbound Off Ramp Westbound					Rubidoux Boulevard Northbound					30th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	7	1	0	8	1	0	0	0	1	0	3	0	0	3	0	0	1	0	1	0	13	13
06:45 AM	0	12	0	0	12	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	14	14
Total	0	19	1	0	20	1	0	0	0	1	0	4	0	0	4	1	0	1	0	2	0	27	27
07:00 AM	0	13	0	0	13	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	16	16
07:15 AM	0	13	0	0	13	0	0	0	0	0	0	5	0	0	5	0	0	1	0	1	0	19	19
07:30 AM	0	4	0	0	4	0	0	1	0	1	0	7	0	0	7	0	0	1	0	1	0	13	13
07:45 AM	0	14	1	0	15	1	0	0	0	1	0	5	0	0	5	0	0	1	0	1	0	22	22
Total	0	44	1	0	45	1	0	1	0	2	0	19	0	0	19	0	0	4	0	4	0	70	70
08:00 AM	0	10	1	0	11	0	0	1	0	1	1	6	0	0	7	0	0	0	0	0	0	19	19
08:15 AM	0	11	0	0	11	0	0	0	0	0	0	10	0	0	10	0	0	3	2	3	2	24	26
08:30 AM	0	11	0	0	11	0	0	0	0	0	1	8	0	0	9	1	0	0	0	1	0	21	21
08:45 AM	0	11	0	0	11	0	0	0	0	0	1	14	0	0	15	0	0	1	0	1	0	27	27
Total	0	43	1	0	44	0	0	1	0	1	3	38	0	0	41	1	0	4	2	5	2	91	93
Grand Total	0	106	3	0	109	2	0	2	0	4	3	61	0	0	64	2	0	9	2	11	2	188	190
Apprch %	0	97.2	2.8			50	0	50			4.7	95.3	0			18.2	0	81.8					
Total %	0	56.4	1.6		58	1.1	0	1.1		2.1	1.6	32.4	0		34	1.1	0	4.8		5.9	1.1	98.9	

	Rubidoux Boulevard Southbound				SR-60 Westbound Off Ramp Westbound				Rubidoux Boulevard Northbound				30th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	4	0	4	0	0	**1**	**1**	0	7	0	7	0	0	1	1	13
07:45 AM	0	**14**	**1**	**15**	**1**	0	0	1	0	5	0	5	0	0	1	1	22
08:00 AM	0	10	1	11	0	0	1	1	**1**	6	0	7	0	0	0	0	19
08:15 AM	0	11	0	11	0	0	0	0	0	**10**	0	**10**	0	0	**3**	**3**	**24**
Total Volume	0	39	2	41	1	0	2	3	1	28	0	29	0	0	5	5	78
% App. Total	0	95.1	4.9		33.3	0	66.7		3.4	96.6	0		0	0	100		
PHF	.000	.696	.500	.683	.250	.000	.500	.750	.250	.700	.000	.725	.000	.000	.417	.417	.813

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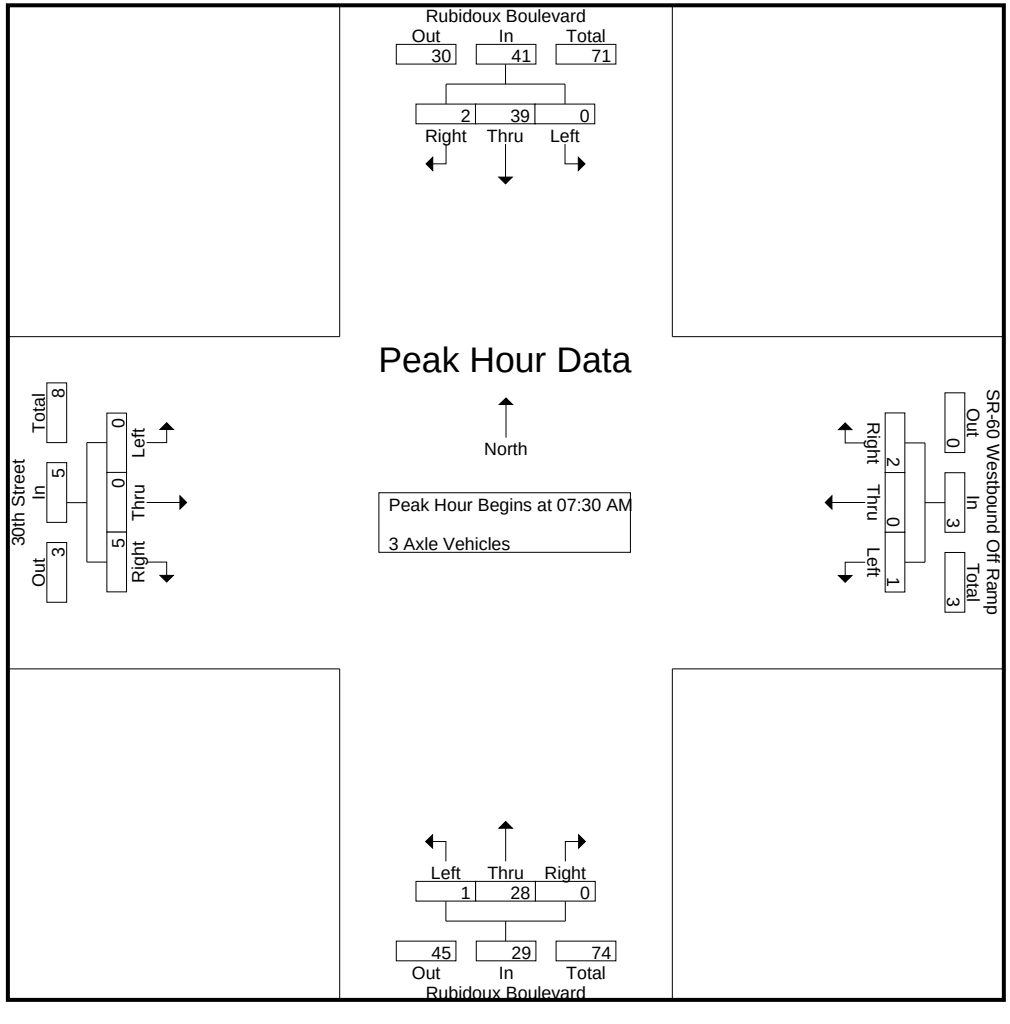
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 30th St/SR-60 Westbound Off Ramp
Weather: Clear

File Name : 20_JVY_Rub_60W Off AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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File Name : 20_JVY_Rub_60W Off AM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				SR-60 Westbound Off Ramp Westbound				Rubidoux Boulevard Northbound				30th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	4	0	4	0	0	**1**	**1**	0	7	0	7	0	0	1	1	
+15 mins.	0	**14**	**1**	**15**	**1**	0	0	1	0	5	0	5	0	0	1	1	
+30 mins.	0	10	1	11	0	0	1	1	**1**	6	0	7	0	0	0	0	
+45 mins.	0	11	0	11	0	0	0	0	0	**10**	0	**10**	0	0	**3**	**3**	
Total Volume	0	39	2	41	1	0	2	3	1	28	0	29	0	0	5	5	
% App. Total	0	95.1	4.9		33.3	0	66.7		3.4	96.6	0		0	0	100		
PHF	.000	.696	.500	.683	.250	.000	.500	.750	.250	.700	.000	.725	.000	.000	.417	.417	

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City of Jurupa Valley
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Weather: Clear

File Name : 20_JVY_Rub_60W Off AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Rubidoux Boulevard Southbound					SR-60 Westbound Off Ramp Westbound					Rubidoux Boulevard Northbound					30th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	12	0	0	12	3	0	1	0	4	0	10	0	0	10	0	0	1	0	1	0	27	27
06:45 AM	0	16	0	0	16	0	0	1	0	1	0	10	0	0	10	0	0	0	0	0	0	27	27
Total	0	28	0	0	28	3	0	2	0	5	0	20	0	0	20	0	0	1	0	1	0	54	54
07:00 AM	0	11	0	0	11	0	0	2	0	2	0	8	0	0	8	1	0	2	0	3	0	24	24
07:15 AM	0	17	0	0	17	1	0	0	0	1	0	11	0	0	11	0	0	0	0	0	0	29	29
07:30 AM	0	18	0	0	18	1	0	3	1	4	0	6	0	0	6	0	0	2	1	2	2	30	32
07:45 AM	0	16	0	0	16	1	0	0	0	1	0	12	0	0	12	1	0	2	0	3	0	32	32
Total	0	62	0	0	62	3	0	5	1	8	0	37	0	0	37	2	0	6	1	8	2	115	117
08:00 AM	0	12	0	0	12	1	0	2	0	3	0	17	0	0	17	0	0	1	0	1	0	33	33
08:15 AM	0	12	0	0	12	0	0	2	0	2	0	13	0	0	13	0	0	3	0	3	0	30	30
08:30 AM	0	20	0	0	20	1	0	5	1	6	0	17	0	0	17	0	0	1	0	1	1	44	45
08:45 AM	0	12	0	0	12	0	0	2	0	2	0	10	0	0	10	0	0	0	0	0	0	24	24
Total	0	56	0	0	56	2	0	11	1	13	0	57	0	0	57	0	0	5	0	5	1	131	132
Grand Total	0	146	0	0	146	8	0	18	2	26	0	114	0	0	114	2	0	12	1	14	3	300	303
Apprch %	0	100	0			30.8	0	69.2			0	100	0			14.3	0	85.7					
Total %	0	48.7	0		48.7	2.7	0	6		8.7	0	38	0		38	0.7	0	4		4.7	1	99	

	Rubidoux Boulevard Southbound				SR-60 Westbound Off Ramp Westbound				Rubidoux Boulevard Northbound				30th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**18**	0	**18**	**1**	0	**3**	**4**	0	6	0	6	0	0	2	2	30
07:45 AM	0	16	0	16	1	0	0	1	0	12	0	12	**1**	0	2	**3**	32
08:00 AM	0	12	0	12	1	0	2	3	0	**17**	0	**17**	0	0	1	1	**33**
08:15 AM	0	12	0	12	0	0	2	2	0	13	0	13	0	0	**3**	3	30
Total Volume	0	58	0	58	3	0	7	10	0	48	0	48	1	0	8	9	125
% App. Total	0	100	0		30	0	70		0	100	0		11.1	0	88.9		
PHF	.000	.806	.000	.806	.750	.000	.583	.625	.000	.706	.000	.706	.250	.000	.667	.750	.947

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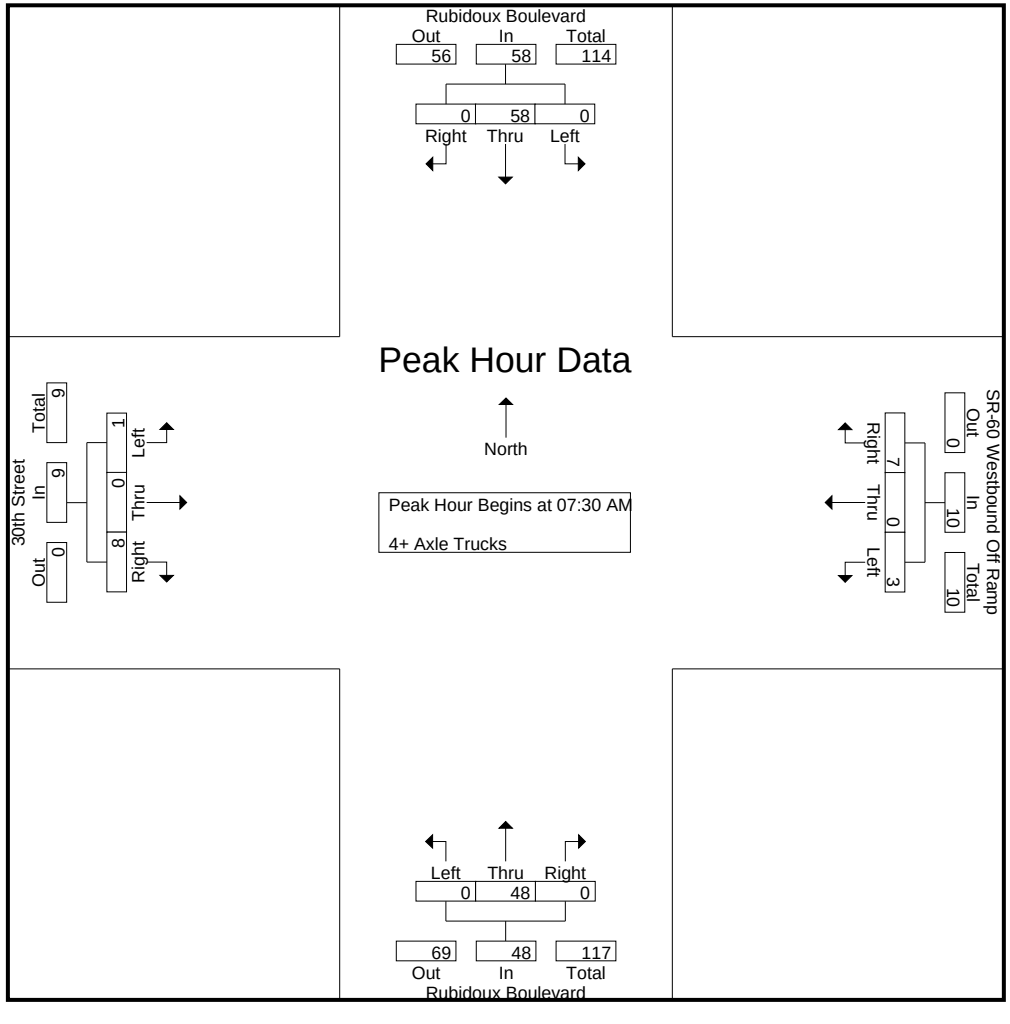
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 30th St/SR-60 Westbound Off Ramp
Weather: Clear

File Name : 20_JVY_Rub_60W Off AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
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Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				SR-60 Westbound Off Ramp Westbound				Rubidoux Boulevard Northbound				30th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	**18**	0	**18**	**1**	0	**3**	**4**	0	6	0	6	0	0	2	2	
+15 mins.	0	16	0	16	1	0	0	1	0	12	0	12	**1**	0	2	**3**	
+30 mins.	0	12	0	12	1	0	2	3	0	**17**	0	**17**	0	0	1	1	
+45 mins.	0	12	0	12	0	0	2	2	0	13	0	13	0	0	**3**	3	
Total Volume	0	58	0	58	3	0	7	10	0	48	0	48	1	0	8	9	
% App. Total	0	100	0		30	0	70		0	100	0		11.1	0	88.9		
PHF	.000	.806	.000	.806	.750	.000	.583	.625	.000	.706	.000	.706	.250	.000	.667	.750	

Counts Unlimited, Inc.
PO Box 1178
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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 30th St/SR-60 Westbound Off Ramp
Weather: Clear

File Name : 20_JVY_Rub_60W Off PM
Site Code : 05122894
Start Date : 10/4/2022

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Rubidoux Boulevard Southbound					SR-60 Westbound Off Ramp Westbound					Rubidoux Boulevard Northbound					30th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	183	4	1	187	104	13	22	10	139	16	132	0	0	148	8	0	38	13	46	24	520	544
03:45 PM	0	148	2	1	150	106	14	22	7	142	14	131	0	0	145	6	0	52	20	58	28	495	523
Total	0	331	6	2	337	210	27	44	17	281	30	263	0	0	293	14	0	90	33	104	52	1015	1067
04:00 PM	0	182	4	2	186	111	28	19	7	158	20	107	0	0	127	5	0	37	18	42	27	513	540
04:15 PM	0	185	6	0	191	87	17	27	11	131	15	139	0	0	154	3	0	36	13	39	24	515	539
04:30 PM	0	176	4	0	180	91	15	17	8	123	8	138	0	0	146	5	0	31	10	36	18	485	503
04:45 PM	0	170	1	0	171	101	25	16	5	142	12	155	0	0	167	2	0	31	11	33	16	513	529
Total	0	713	15	2	728	390	85	79	31	554	55	539	0	0	594	15	0	135	52	150	85	2026	2111
05:00 PM	0	201	4	1	205	119	15	23	9	157	13	150	0	0	163	5	0	39	14	44	24	569	593
05:15 PM	0	158	8	2	166	117	18	12	7	147	6	122	0	0	128	5	0	42	16	47	25	488	513
05:30 PM	0	157	3	0	160	103	25	15	6	143	21	155	0	0	176	6	0	36	16	42	22	521	543
05:45 PM	0	150	6	1	156	103	18	17	7	138	13	133	0	0	146	6	0	47	19	53	27	493	520
Total	0	666	21	4	687	442	76	67	29	585	53	560	0	0	613	22	0	164	65	186	98	2071	2169
Grand Total	0	1710	42	8	1752	1042	188	190	77	1420	138	1362	0	0	1500	51	0	389	150	440	235	5112	5347
Apprch %	0	97.6	2.4			73.4	13.2	13.4			9.2	90.8	0			11.6	0	88.4					
Total %	0	33.5	0.8		34.3	20.4	3.7	3.7		27.8	2.7	26.6	0		29.3	1	0	7.6		8.6	4.4	95.6	
Passenger Vehicles	0	1479	39		1525	1021	186	162		1437	130	1051	0		1181	45	0	374		566	0	0	4709
% Passenger Vehicles	0	86.5	92.9	87.5	86.6	98	98.9	85.3	88.3	96	94.2	77.2	0	0	78.7	88.2	0	96.1	98	95.9	0	0	88.1
Large 2 Axle Vehicles	0	57	1		59	14	1	4		22	7	80	0		87	4	0	4		9	0	0	177
% Large 2 Axle Vehicles	0	3.3	2.4	12.5	3.4	1.3	0.5	2.1	3.9	1.5	5.1	5.9	0	0	5.8	7.8	0	1	0.7	1.5	0	0	3.3
3 Axle Vehicles	0	45	1		46	5	0	8		15	0	69	0		69	1	0	3		5	0	0	135
% 3 Axle Vehicles	0	2.6	2.4	0	2.6	0.5	0	4.2	2.6	1	0	5.1	0	0	4.6	2	0	0.8	0.7	0.8	0	0	2.5
4+ Axle Trucks	0	129	1		130	2	1	16		23	1	162	0		163	1	0	8		10	0	0	326
% 4+ Axle Trucks	0	7.5	2.4	0	7.4	0.2	0.5	8.4	5.2	1.5	0.7	11.9	0	0	10.9	2	0	2.1	0.7	1.7	0	0	6.1

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 30th St/SR-60 Westbound Off Ramp
Weather: Clear

File Name : 20_JVY_Rub_60W Off PM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				SR-60 Westbound Off Ramp Westbound				Rubidoux Boulevard Northbound				30th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	170	1	171	101	**25**	16	142	12	**155**	0	167	2	0	31	33	513
05:00 PM	0	**201**	4	**205**	**119**	15	**23**	**157**	13	150	0	163	5	0	39	44	**569**
05:15 PM	0	158	**8**	166	117	18	12	147	6	122	0	128	5	0	**42**	**47**	488
05:30 PM	0	157	3	160	103	25	15	143	**21**	155	0	**176**	**6**	0	36	42	521
Total Volume	0	686	16	702	440	83	66	589	52	582	0	634	18	0	148	166	2091
% App. Total	0	97.7	2.3		74.7	14.1	11.2		8.2	91.8	0		10.8	0	89.2		
PHF	.000	.853	.500	.856	.924	.830	.717	.938	.619	.939	.000	.901	.750	.000	.881	.883	.919

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City of Jurupa Valley
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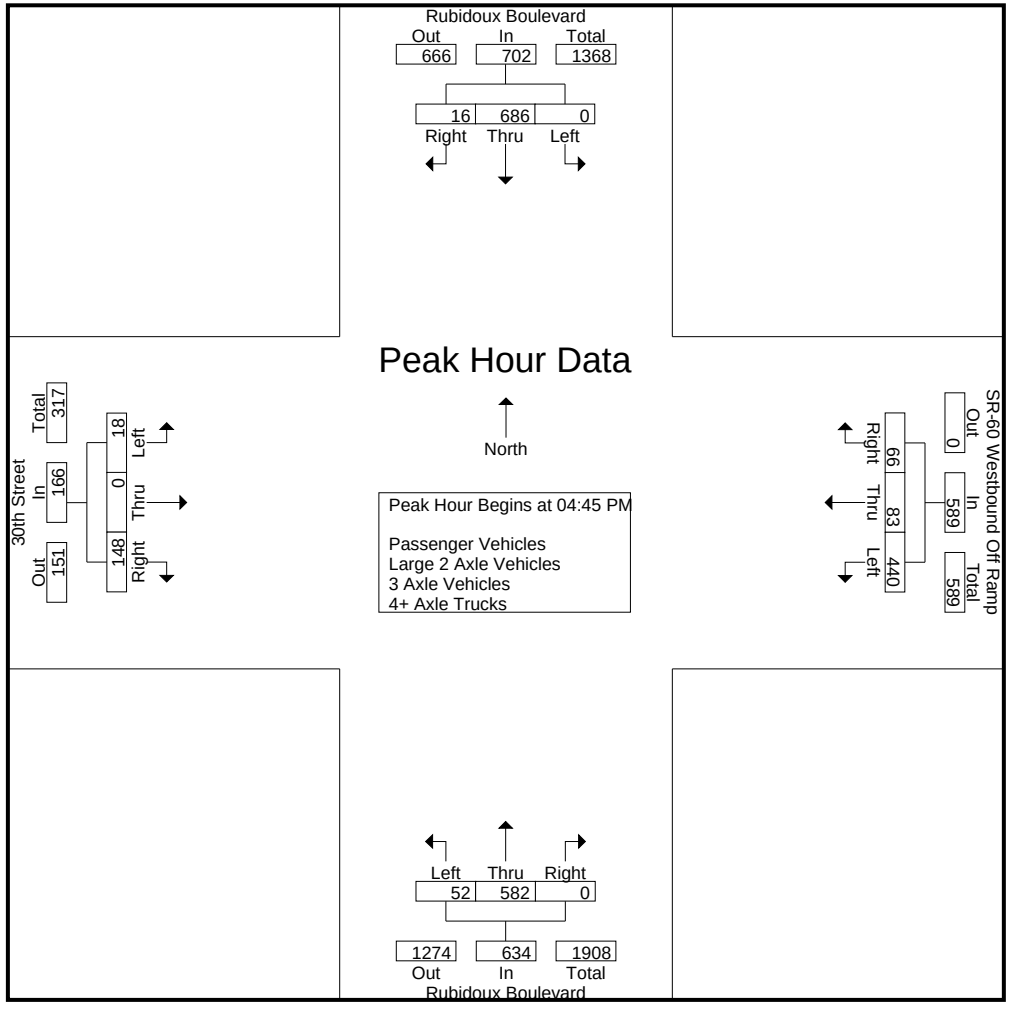
Weather: Clear

File Name : 20_JVY_Rub_60W Off PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 3



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City of Jurupa Valley
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Weather: Clear

File Name : 20_JVY_Rub_60W Off PM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				SR-60 Westbound Off Ramp Westbound				Rubidoux Boulevard Northbound				30th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:45 PM				04:45 PM				05:00 PM				
+0 mins.	0	185	**6**	191	101	**25**	16	142	12	**155**	0	167	5	0	39	44	
+15 mins.	0	176	4	180	**119**	15	**23**	**157**	13	150	0	163	5	0	42	47	
+30 mins.	0	170	1	171	117	18	12	147	6	122	0	128	**6**	0	36	42	
+45 mins.	0	**201**	4	**205**	103	25	15	143	**21**	155	0	**176**	6	0	**47**	**53**	
Total Volume	0	732	15	747	440	83	66	589	52	582	0	634	22	0	164	186	
% App. Total	0	98	2		74.7	14.1	11.2		8.2	91.8	0		11.8	0	88.2		
PHF	.000	.910	.625	.911	.924	.830	.717	.938	.619	.939	.000	.901	.917	.000	.872	.877	

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City of Jurupa Valley
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Weather: Clear

File Name : 20_JVY_Rub_60W Off PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Rubidoux Boulevard Southbound					SR-60 Westbound Off Ramp Westbound					Rubidoux Boulevard Northbound					30th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	151	4	1	155	102	12	19	8	133	13	94	0	0	107	7	0	36	13	43	22	438	460
03:45 PM	0	124	2	1	126	104	14	19	6	137	14	98	0	0	112	4	0	50	19	54	26	429	455
Total	0	275	6	2	281	206	26	38	14	270	27	192	0	0	219	11	0	86	32	97	48	867	915
04:00 PM	0	156	4	2	160	110	28	18	7	156	18	92	0	0	110	5	0	37	18	42	27	468	495
04:15 PM	0	163	5	0	168	83	17	20	9	120	14	109	0	0	123	3	0	35	13	38	22	449	471
04:30 PM	0	148	4	0	152	87	14	16	8	117	7	92	0	0	99	4	0	27	9	31	17	399	416
04:45 PM	0	147	1	0	148	101	25	11	5	137	12	121	0	0	133	2	0	30	11	32	16	450	466
Total	0	614	14	2	628	381	84	65	29	530	51	414	0	0	465	14	0	129	51	143	82	1766	1848
05:00 PM	0	173	4	1	177	117	15	21	8	153	13	117	0	0	130	5	0	38	13	43	22	503	525
05:15 PM	0	138	7	2	145	115	18	8	5	141	5	102	0	0	107	4	0	39	16	43	23	436	459
05:30 PM	0	146	3	0	149	102	25	13	5	140	21	125	0	0	146	5	0	35	16	40	21	475	496
05:45 PM	0	133	5	0	138	100	18	17	7	135	13	101	0	0	114	6	0	47	19	53	26	440	466
Total	0	590	19	3	609	434	76	59	25	569	52	445	0	0	497	20	0	159	64	179	92	1854	1946
Grand Total	0	1479	39	7	1518	1021	186	162	68	1369	130	1051	0	0	1181	45	0	374	147	419	222	4487	4709
Apprch %	0	97.4	2.6			74.6	13.6	11.8			11	89	0			10.7	0	89.3					
Total %	0	33	0.9		33.8	22.8	4.1	3.6		30.5	2.9	23.4	0		26.3	1	0	8.3		9.3	4.7	95.3	

	Rubidoux Boulevard Southbound				SR-60 Westbound Off Ramp Westbound				Rubidoux Boulevard Northbound				30th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	147	1	148	101	**25**	11	137	12	121	0	133	2	0	30	32	450
05:00 PM	0	**173**	4	**177**	**117**	15	**21**	**153**	13	117	0	130	**5**	0	38	**43**	**503**
05:15 PM	0	138	**7**	145	115	18	8	141	5	102	0	107	4	0	**39**	43	436
05:30 PM	0	146	3	149	102	25	13	140	**21**	**125**	0	**146**	5	0	35	40	475
Total Volume	0	604	15	619	435	83	53	571	51	465	0	516	16	0	142	158	1864
% App. Total	0	97.6	2.4		76.2	14.5	9.3		9.9	90.1	0		10.1	0	89.9		
PHF	.000	.873	.536	.874	.929	.830	.631	.933	.607	.930	.000	.884	.800	.000	.910	.919	.926

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City of Jurupa Valley
N/S: Rubidoux Boulevard
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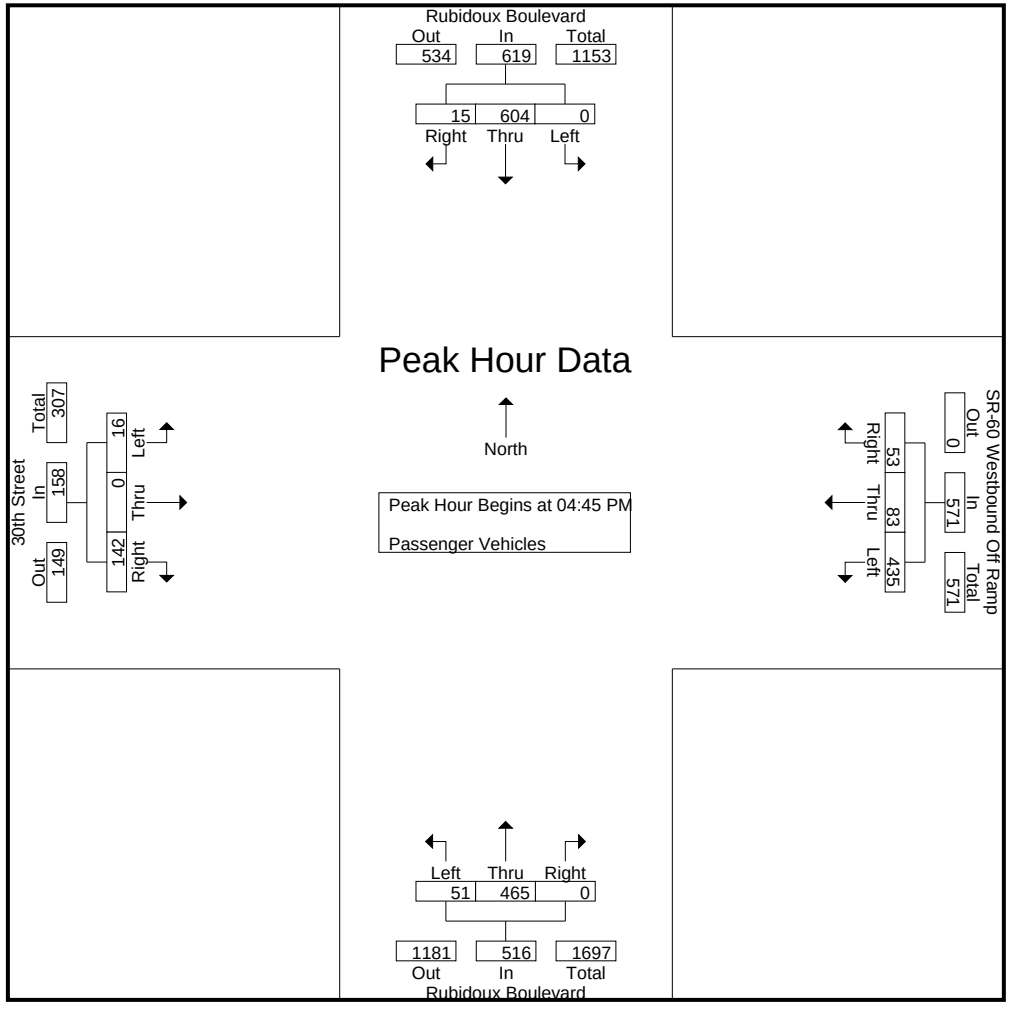
Weather: Clear

File Name : 20_JVY_Rub_60W Off PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				SR-60 Westbound Off Ramp Westbound				Rubidoux Boulevard Northbound				30th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	147	1	148	101	**25**	11	137	12	121	0	133	2	0	30	32	
+15 mins.	0	**173**	4	**177**	**117**	15	**21**	**153**	13	117	0	130	**5**	0	38	**43**	
+30 mins.	0	138	**7**	145	115	18	8	141	5	102	0	107	4	0	**39**	43	
+45 mins.	0	146	3	149	102	25	13	140	**21**	**125**	0	**146**	5	0	35	40	
Total Volume	0	604	15	619	435	83	53	571	51	465	0	516	16	0	142	158	
% App. Total	0	97.6	2.4		76.2	14.5	9.3		9.9	90.1	0		10.1	0	89.9		
PHF	.000	.873	.536	.874	.929	.830	.631	.933	.607	.930	.000	.884	.800	.000	.910	.919	

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City of Jurupa Valley
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File Name : 20_JVY_Rub_60W Off PM
Site Code : 05122894
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Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Rubidoux Boulevard Southbound					SR-60 Westbound Off Ramp Westbound					Rubidoux Boulevard Northbound					30th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	6	0	0	6	2	0	1	1	3	2	12	0	0	14	1	0	0	0	1	1	24	25
03:45 PM	0	4	0	0	4	1	0	0	0	1	0	7	0	0	7	1	0	1	1	2	1	14	15
Total	0	10	0	0	10	3	0	1	1	4	2	19	0	0	21	2	0	1	1	3	2	38	40
04:00 PM	0	8	0	0	8	1	0	0	0	1	2	5	0	0	7	0	0	0	0	0	0	16	16
04:15 PM	0	8	0	0	8	4	0	2	1	6	1	12	0	0	13	0	0	1	0	1	1	28	29
04:30 PM	0	3	0	0	3	2	1	0	0	3	1	12	0	0	13	1	0	1	0	2	0	21	21
04:45 PM	0	5	0	0	5	0	0	0	0	0	0	9	0	0	9	0	0	1	0	1	0	15	15
Total	0	24	0	0	24	7	1	2	1	10	4	38	0	0	42	1	0	3	0	4	1	80	81
05:00 PM	0	6	0	0	6	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	11	11
05:15 PM	0	8	0	0	8	2	0	1	1	3	1	3	0	0	4	1	0	0	0	1	1	16	17
05:30 PM	0	4	0	0	4	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	9	9
05:45 PM	0	5	1	1	6	2	0	0	0	2	0	10	0	0	10	0	0	0	0	0	1	18	19
Total	0	23	1	1	24	4	0	1	1	5	1	23	0	0	24	1	0	0	0	1	2	54	56
Grand Total	0	57	1	1	58	14	1	4	3	19	7	80	0	0	87	4	0	4	1	8	5	172	177
Apprch %	0	98.3	1.7			73.7	5.3	21.1			8	92	0			50	0	50					
Total %	0	33.1	0.6		33.7	8.1	0.6	2.3		11	4.1	46.5	0		50.6	2.3	0	2.3		4.7	2.8	97.2	

	Rubidoux Boulevard Southbound				SR-60 Westbound Off Ramp Westbound				Rubidoux Boulevard Northbound				30th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	5	0	5	0	0	0	0	0	**9**	0	**9**	0	0	**1**	**1**	15
05:00 PM	0	6	0	6	0	0	0	0	0	5	0	5	0	0	0	0	11
05:15 PM	0	**8**	0	**8**	**2**	0	**1**	**3**	**1**	3	0	4	**1**	0	0	1	**16**
05:30 PM	0	4	0	4	0	0	0	0	0	5	0	5	0	0	0	0	9
Total Volume	0	23	0	23	2	0	1	3	1	22	0	23	1	0	1	2	51
% App. Total	0	100	0		66.7	0	33.3		4.3	95.7	0		50	0	50		
PHF	.000	.719	.000	.719	.250	.000	.250	.250	.250	.611	.000	.639	.250	.000	.250	.500	.797

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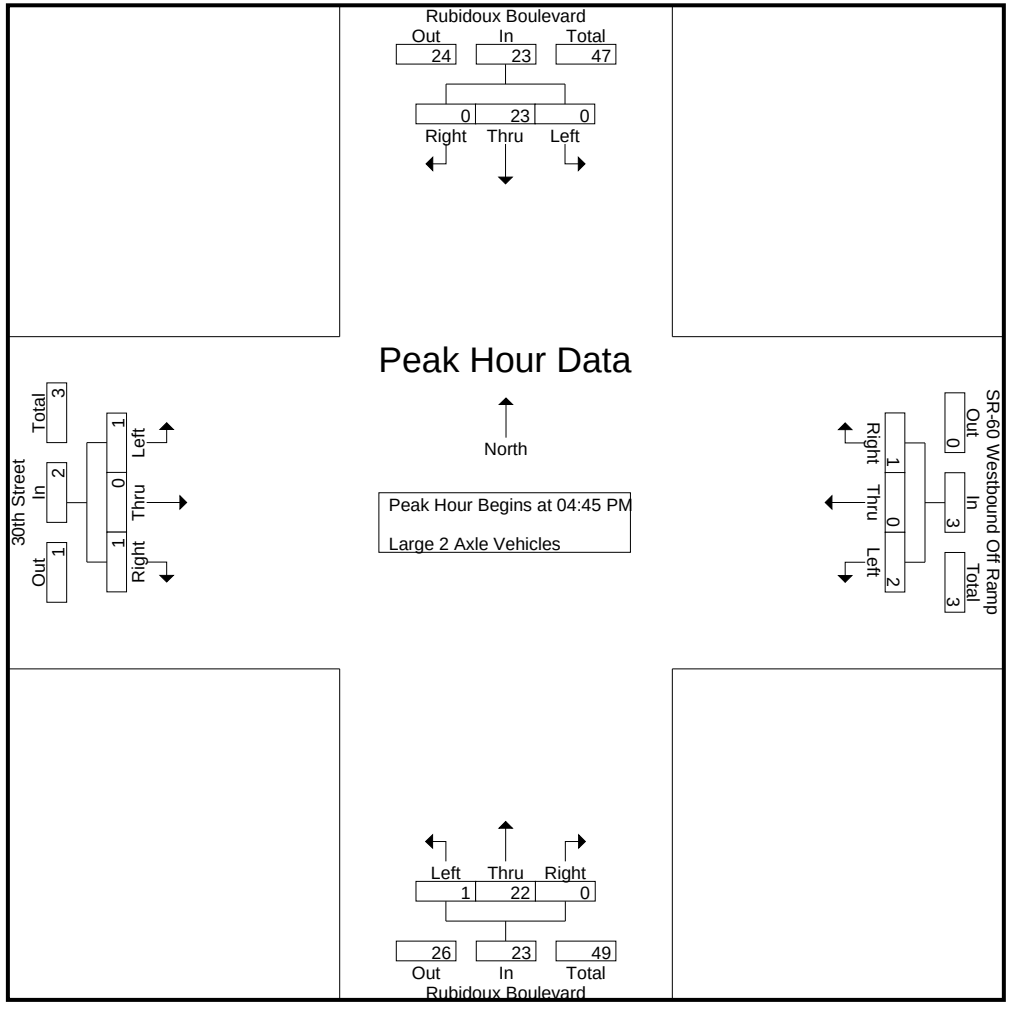
Page No : 2



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	Rubidoux Boulevard Southbound				SR-60 Westbound Off Ramp Westbound				Rubidoux Boulevard Northbound				30th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	5	0	5	0	0	0	0	0	**9**	0	**9**	0	0	**1**	**1**	
+15 mins.	0	6	0	6	0	0	0	0	0	5	0	5	0	0	0	0	
+30 mins.	0	**8**	0	**8**	**2**	0	**1**	**3**	**1**	3	0	4	**1**	0	0	1	
+45 mins.	0	4	0	4	0	0	0	0	0	5	0	5	0	0	0	0	
Total Volume	0	23	0	23	2	0	1	3	1	22	0	23	1	0	1	2	
% App. Total	0	100	0		66.7	0	33.3		4.3	95.7	0		50	0	50		
PHF	.000	.719	.000	.719	.250	.000	.250	.250	.250	.611	.000	.639	.250	.000	.250	.500	

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 30th St/SR-60 Westbound Off Ramp
Weather: Clear

File Name : 20_JVY_Rub_60W Off PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Rubidoux Boulevard Southbound					SR-60 Westbound Off Ramp Westbound					Rubidoux Boulevard Northbound					30th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	9	0	0	9	0	0	1	0	1	0	6	0	0	6	0	0	1	0	1	0	17	17
03:45 PM	0	2	0	0	2	1	0	0	0	1	0	8	0	0	8	0	0	0	0	0	0	11	11
Total	0	11	0	0	11	1	0	1	0	2	0	14	0	0	14	0	0	1	0	1	0	28	28
04:00 PM	0	5	0	0	5	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	6	6
04:15 PM	0	5	1	0	6	0	0	1	0	1	0	5	0	0	5	0	0	0	0	0	0	12	12
04:30 PM	0	8	0	0	8	1	0	1	0	2	0	10	0	0	10	0	0	1	0	1	0	21	21
04:45 PM	0	5	0	0	5	0	0	1	0	1	0	7	0	0	7	0	0	0	0	0	0	13	13
Total	0	23	1	0	24	1	0	3	0	4	0	23	0	0	23	0	0	1	0	1	0	52	52
05:00 PM	0	5	0	0	5	1	0	1	0	2	0	12	0	0	12	0	0	1	1	1	1	20	21
05:15 PM	0	3	0	0	3	0	0	2	1	2	0	7	0	0	7	0	0	0	0	0	1	12	13
05:30 PM	0	1	0	0	1	1	0	1	1	2	0	6	0	0	6	1	0	0	0	1	1	10	11
05:45 PM	0	2	0	0	2	1	0	0	0	1	0	7	0	0	7	0	0	0	0	0	0	10	10
Total	0	11	0	0	11	3	0	4	2	7	0	32	0	0	32	1	0	1	1	2	3	52	55
Grand Total	0	45	1	0	46	5	0	8	2	13	0	69	0	0	69	1	0	3	1	4	3	132	135
Apprch %	0	97.8	2.2			38.5	0	61.5			0	100	0			25	0	75					
Total %	0	34.1	0.8		34.8	3.8	0	6.1		9.8	0	52.3	0		52.3	0.8	0	2.3		3	2.2	97.8	

	Rubidoux Boulevard Southbound				SR-60 Westbound Off Ramp Westbound				Rubidoux Boulevard Northbound				30th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	**5**	0	**5**	0	0	1	1	0	7	0	7	0	0	0	0	13
05:00 PM	0	5	0	5	**1**	0	1	**2**	0	**12**	0	**12**	0	0	**1**	**1**	**20**
05:15 PM	0	3	0	3	0	0	**2**	2	0	7	0	7	0	0	0	0	12
05:30 PM	0	1	0	1	1	0	1	2	0	6	0	6	**1**	0	0	1	10
Total Volume	0	14	0	14	2	0	5	7	0	32	0	32	1	0	1	2	55
% App. Total	0	100	0		28.6	0	71.4		0	100	0		50	0	50		
PHF	.000	.700	.000	.700	.500	.000	.625	.875	.000	.667	.000	.667	.250	.000	.250	.500	.688

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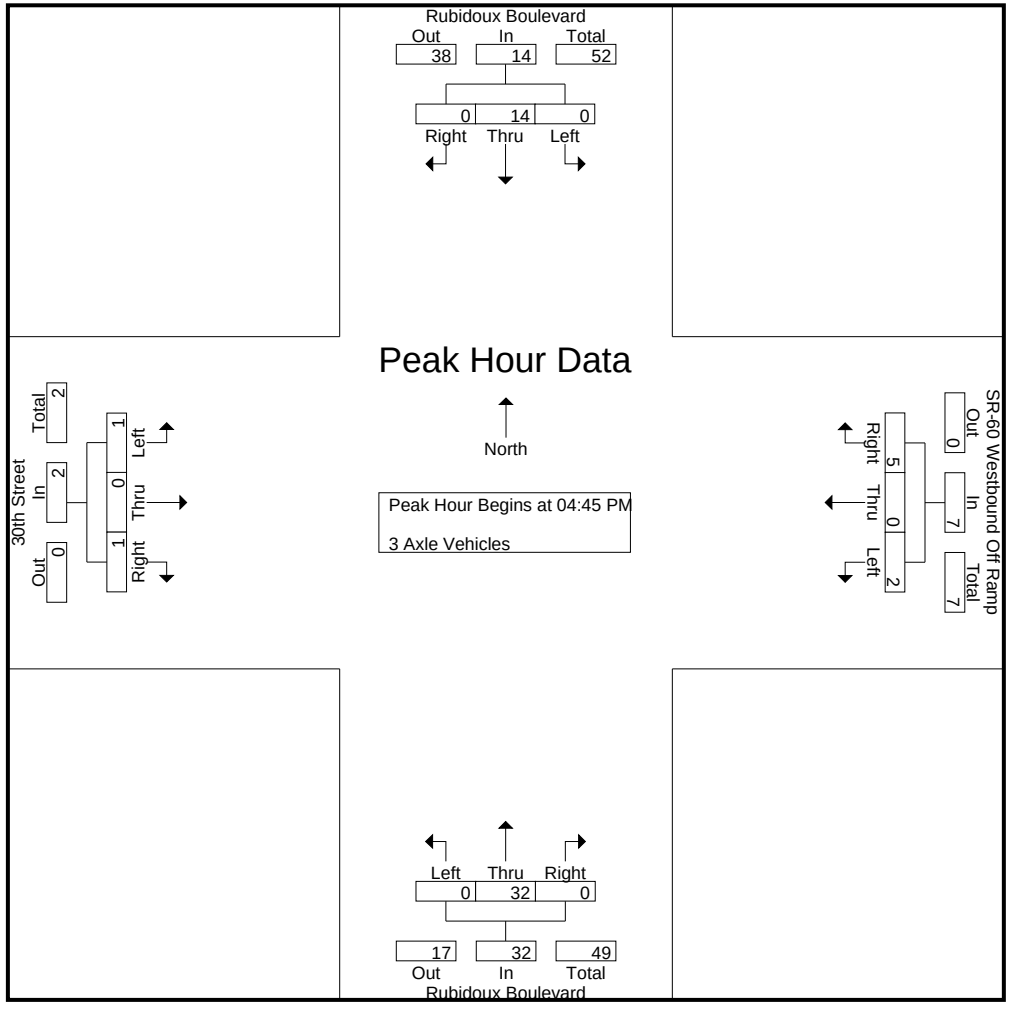
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 30th St/SR-60 Westbound Off Ramp
Weather: Clear

File Name : 20_JVY_Rub_60W Off PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 30th St/SR-60 Westbound Off Ramp
Weather: Clear

File Name : 20_JVY_Rub_60W Off PM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				SR-60 Westbound Off Ramp Westbound				Rubidoux Boulevard Northbound				30th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	**5**	0	**5**	0	0	1	1	0	7	0	7	0	0	0	0	
+15 mins.	0	5	0	5	**1**	0	1	**2**	0	**12**	0	**12**	0	0	**1**	**1**	
+30 mins.	0	3	0	3	0	0	**2**	2	0	7	0	7	0	0	0	0	
+45 mins.	0	1	0	1	1	0	1	2	0	6	0	6	**1**	0	0	1	
Total Volume	0	14	0	14	2	0	5	7	0	32	0	32	1	0	1	2	
% App. Total	0	100	0		28.6	0	71.4		0	100	0		50	0	50		
PHF	.000	.700	.000	.700	.500	.000	.625	.875	.000	.667	.000	.667	.250	.000	.250	.500	

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City of Jurupa Valley
N/S: Rubidoux Boulevard
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Weather: Clear

File Name : 20_JVY_Rub_60W Off PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Rubidoux Boulevard Southbound					SR-60 Westbound Off Ramp Westbound					Rubidoux Boulevard Northbound					30th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	17	0	0	17	0	1	1	1	2	1	20	0	0	21	0	0	1	0	1	1	41	42
03:45 PM	0	18	0	0	18	0	0	3	1	3	0	18	0	0	18	1	0	1	0	2	1	41	42
Total	0	35	0	0	35	0	1	4	2	5	1	38	0	0	39	1	0	2	0	3	2	82	84
04:00 PM	0	13	0	0	13	0	0	1	0	1	0	9	0	0	9	0	0	0	0	0	0	23	23
04:15 PM	0	9	0	0	9	0	0	4	1	4	0	13	0	0	13	0	0	0	0	0	1	26	27
04:30 PM	0	17	0	0	17	1	0	0	0	1	0	24	0	0	24	0	0	2	1	2	1	44	45
04:45 PM	0	13	0	0	13	0	0	4	0	4	0	18	0	0	18	0	0	0	0	0	0	35	35
Total	0	52	0	0	52	1	0	9	1	10	0	64	0	0	64	0	0	2	1	2	2	128	130
05:00 PM	0	17	0	0	17	1	0	1	1	2	0	16	0	0	16	0	0	0	0	0	1	35	36
05:15 PM	0	9	1	0	10	0	0	1	0	1	0	10	0	0	10	0	0	3	0	3	0	24	24
05:30 PM	0	6	0	0	6	0	0	1	0	1	0	19	0	0	19	0	0	1	0	1	0	27	27
05:45 PM	0	10	0	0	10	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	0	25	25
Total	0	42	1	0	43	1	0	3	1	4	0	60	0	0	60	0	0	4	0	4	1	111	112
Grand Total	0	129	1	0	130	2	1	16	4	19	1	162	0	0	163	1	0	8	1	9	5	321	326
Apprch %	0	99.2	0.8			10.5	5.3	84.2			0.6	99.4	0			11.1	0	88.9					
Total %	0	40.2	0.3		40.5	0.6	0.3	5		5.9	0.3	50.5	0		50.8	0.3	0	2.5		2.8	1.5	98.5	

	Rubidoux Boulevard Southbound				SR-60 Westbound Off Ramp Westbound				Rubidoux Boulevard Northbound				30th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	13	0	13	0	0	**4**	**4**	0	18	0	18	0	0	0	0	**35**
05:00 PM	0	**17**	0	**17**	**1**	0	1	2	0	16	0	16	0	0	0	0	35
05:15 PM	0	9	**1**	10	0	0	1	1	0	10	0	10	0	0	**3**	**3**	24
05:30 PM	0	6	0	6	0	0	1	1	0	**19**	0	**19**	0	0	1	1	27
Total Volume	0	45	1	46	1	0	7	8	0	63	0	63	0	0	4	4	121
% App. Total	0	97.8	2.2		12.5	0	87.5		0	100	0		0	0	100		
PHF	.000	.662	.250	.676	.250	.000	.438	.500	.000	.829	.000	.829	.000	.000	.333	.333	.864

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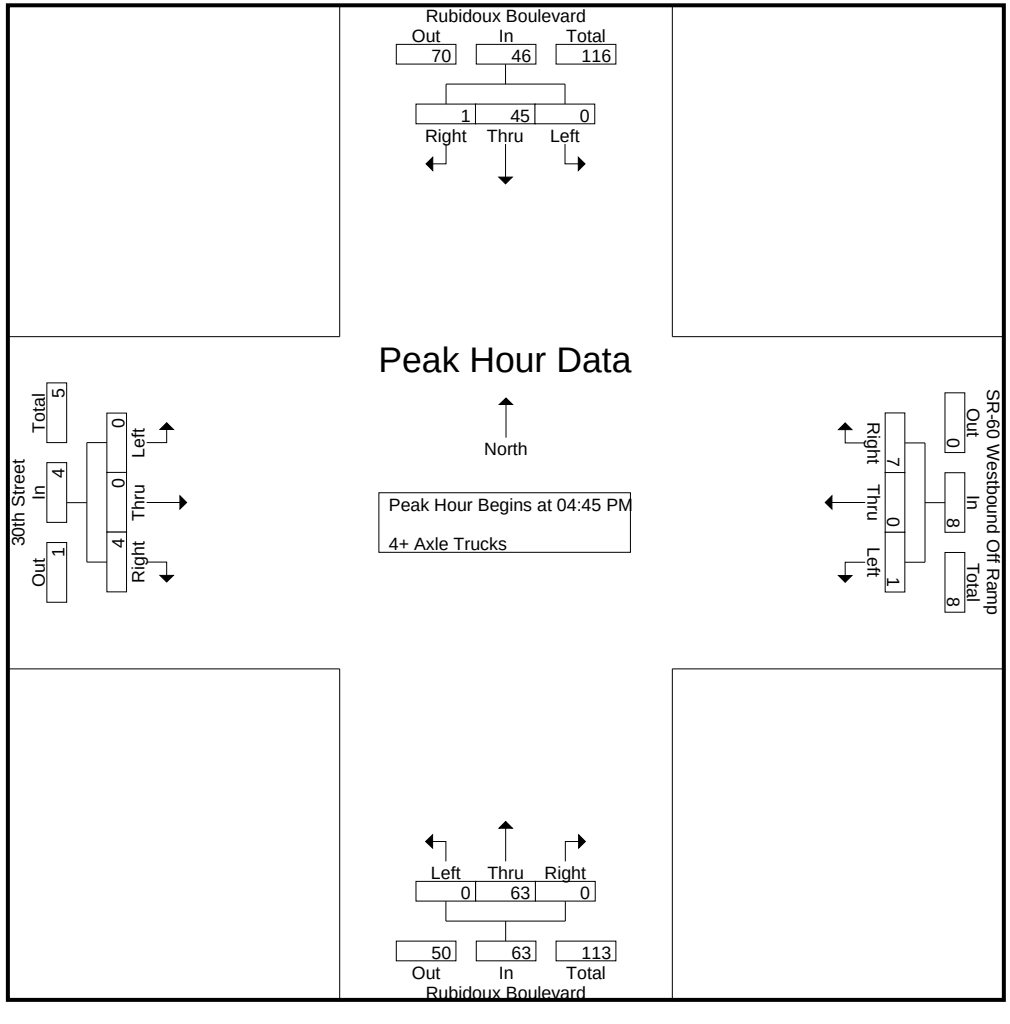
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 30th St/SR-60 Westbound Off Ramp
Weather: Clear

File Name : 20_JVY_Rub_60W Off PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Rubidoux Boulevard
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File Name : 20_JVY_Rub_60W Off PM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				SR-60 Westbound Off Ramp Westbound				Rubidoux Boulevard Northbound				30th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	13	0	13	0	0	**4**	**4**	0	18	0	18	0	0	0	0	
+15 mins.	0	**17**	0	**17**	**1**	0	1	2	0	16	0	16	0	0	0	0	
+30 mins.	0	9	**1**	10	0	0	1	1	0	10	0	10	0	0	**3**	**3**	
+45 mins.	0	6	0	6	0	0	1	1	0	**19**	0	**19**	0	0	1	1	
Total Volume	0	45	1	46	1	0	7	8	0	63	0	63	0	0	4	4	
% App. Total	0	97.8	2.2		12.5	0	87.5		0	100	0		0	0	100		
PHF	.000	.662	.250	.676	.250	.000	.438	.500	.000	.829	.000	.829	.000	.000	.333	.333	

Location: Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 30th St/SR-60 WB Off Ramp

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Rubidoux Boulevard	East Leg SR-60 WB Off Ramp	South Leg Rubidoux Boulevard	West Leg 30th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	1	0	0	1
7:45 AM	0	1	0	0	1
8:00 AM	0	0	0	0	0
8:15 AM	0	1	0	0	1
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	3	0	0	3

	North Leg Rubidoux Boulevard	East Leg SR-60 WB Off Ramp	South Leg Rubidoux Boulevard	West Leg 30th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	1	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	1	1
5:45 PM	1	0	0	0	1
TOTAL VOLUMES:	1	0	0	2	3

Location: Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 30th St/SR-60 WB Off Ramp

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Rubidoux Boulevard			Westbound SR-60 WB Off Ramp			Northbound Rubidoux Boulevard			Eastbound 30th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	1	0	0	0	0	0	2
TOTAL VOLUMES:	0	2	0	0	0	0	1	2	0	0	0	0	5

	Southbound Rubidoux Boulevard			Westbound SR-60 WB Off Ramp			Northbound Rubidoux Boulevard			Eastbound 30th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	1	1	0	0	0	0	1	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	1	0	0	0	0	1	1	0	0	0	5

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 Westbound On Ramp
Weather: Clear

File Name : 21_JVY_Rub_60W On AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Rubidoux Boulevard Southbound			Rubidoux Boulevard Northbound			SR-60 Westbound On Ramp Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
06:30 AM	133	83	216	81	96	177	0	0	0	393
06:45 AM	124	98	222	76	136	212	0	0	0	434
Total	257	181	438	157	232	389	0	0	0	827
07:00 AM	109	90	199	77	108	185	0	0	0	384
07:15 AM	159	120	279	76	121	197	0	0	0	476
07:30 AM	172	132	304	66	103	169	0	0	0	473
07:45 AM	200	148	348	50	131	181	0	0	0	529
Total	640	490	1130	269	463	732	0	0	0	1862
08:00 AM	191	123	314	67	150	217	0	0	0	531
08:15 AM	150	87	237	47	159	206	0	0	0	443
08:30 AM	124	93	217	62	144	206	0	0	0	423
08:45 AM	125	77	202	44	152	196	0	0	0	398
Total	590	380	970	220	605	825	0	0	0	1795
Grand Total	1487	1051	2538	646	1300	1946	0	0	0	4484
Apprch %	58.6	41.4		33.2	66.8		0	0		
Total %	33.2	23.4	56.6	14.4	29	43.4	0	0	0	
Passenger Vehicles	1366	738	2104	627	1039	1666	0	0	0	3770
% Passenger Vehicles	91.9	70.2	82.9	97.1	79.9	85.6	0	0	0	84.1
Large 2 Axle Vehicles	67	83	150	13	77	90	0	0	0	240
% Large 2 Axle Vehicles	4.5	7.9	5.9	2	5.9	4.6	0	0	0	5.4
3 Axle Vehicles	24	97	121	2	66	68	0	0	0	189
% 3 Axle Vehicles	1.6	9.2	4.8	0.3	5.1	3.5	0	0	0	4.2
4+ Axle Trucks	30	133	163	4	118	122	0	0	0	285
% 4+ Axle Trucks	2	12.7	6.4	0.6	9.1	6.3	0	0	0	6.4

	Rubidoux Boulevard Southbound			Rubidoux Boulevard Northbound			SR-60 Westbound On Ramp Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	159	120	279	**76**	121	197	0	0	0	476
07:30 AM	172	132	304	66	103	169	0	0	0	473
07:45 AM	**200**	**148**	**348**	50	131	181	0	0	0	529
08:00 AM	191	123	314	67	**150**	**217**	0	0	0	**531**
Total Volume	722	523	1245	259	505	764	0	0	0	2009
% App. Total	58	42		33.9	66.1		0	0		
PHF	.903	.883	.894	.852	.842	.880	.000	.000	.000	.946

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City of Jurupa Valley
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Weather: Clear

File Name : 21_JVY_Rub_60W On AM
Site Code : 05122894
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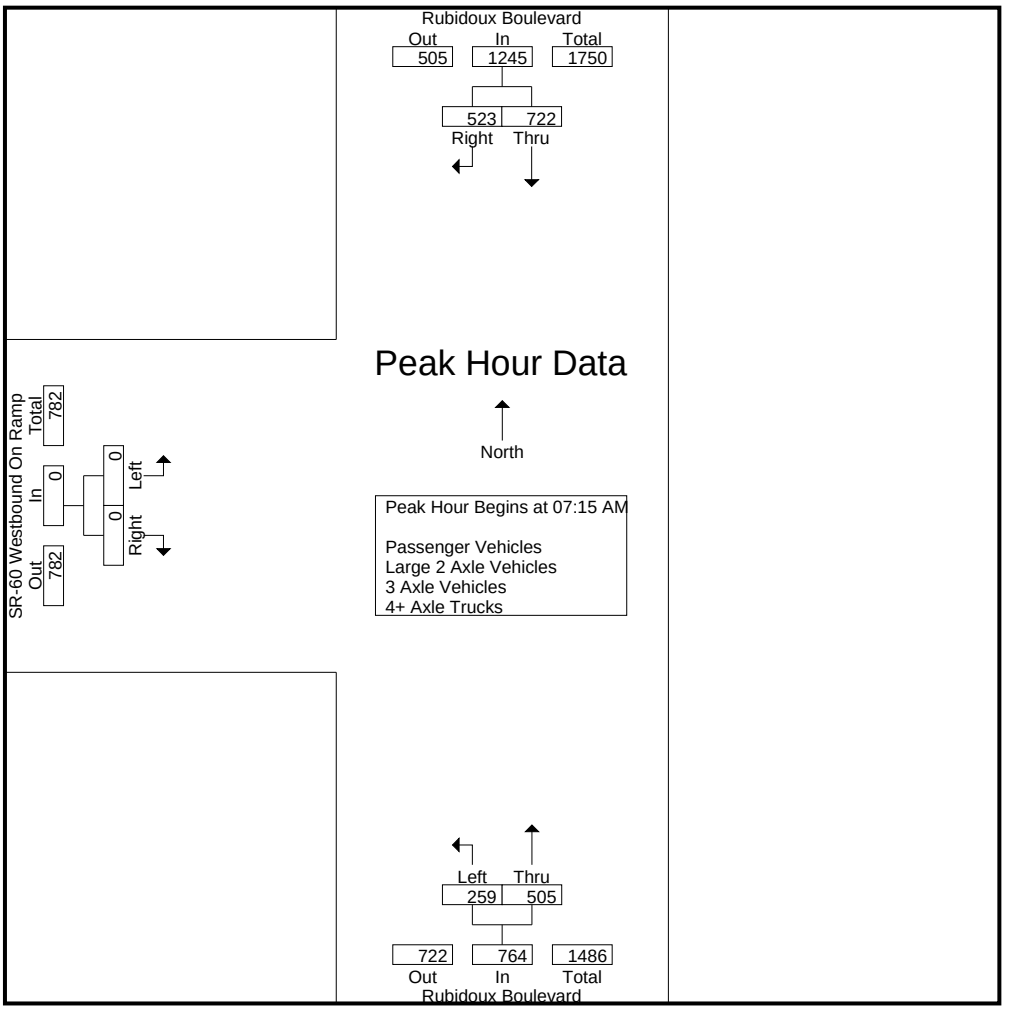

Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			08:00 AM			06:30 AM		
+0 mins.	159	120	279	**67**	150	**217**	0	0	0
+15 mins.	172	132	304	47	**159**	206	0	0	0
+30 mins.	**200**	**148**	**348**	62	144	206	0	0	0
+45 mins.	191	123	314	44	152	196	0	0	0
Total Volume	722	523	1245	220	605	825	0	0	0
% App. Total	58	42		26.7	73.3		0	0	
PHF	.903	.883	.894	.821	.951	.950	.000	.000	.000

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City of Jurupa Valley
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Weather: Clear

File Name : 21_JVY_Rub_60W On AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Rubidoux Boulevard Southbound			Rubidoux Boulevard Northbound			SR-60 Westbound On Ramp Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
06:30 AM	116	61	177	78	74	152	0	0	0	329
06:45 AM	113	66	179	71	118	189	0	0	0	368
Total	229	127	356	149	192	341	0	0	0	697
07:00 AM	100	60	160	75	89	164	0	0	0	324
07:15 AM	146	90	236	75	95	170	0	0	0	406
07:30 AM	155	106	261	63	81	144	0	0	0	405
07:45 AM	185	110	295	50	109	159	0	0	0	454
Total	586	366	952	263	374	637	0	0	0	1589
08:00 AM	179	96	275	64	120	184	0	0	0	459
08:15 AM	141	54	195	46	126	172	0	0	0	367
08:30 AM	114	56	170	62	108	170	0	0	0	340
08:45 AM	117	39	156	43	119	162	0	0	0	318
Total	551	245	796	215	473	688	0	0	0	1484
Grand Total	1366	738	2104	627	1039	1666	0	0	0	3770
Apprch %	64.9	35.1		37.6	62.4		0	0		
Total %	36.2	19.6	55.8	16.6	27.6	44.2	0	0	0	

	Rubidoux Boulevard Southbound			Rubidoux Boulevard Northbound			SR-60 Westbound On Ramp Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	146	90	236	**75**	95	170	0	0	0	406
07:30 AM	155	106	261	63	81	144	0	0	0	405
07:45 AM	**185**	**110**	**295**	50	109	159	0	0	0	454
08:00 AM	179	96	275	64	**120**	**184**	0	0	0	**459**
Total Volume	665	402	1067	252	405	657	0	0	0	1724
% App. Total	62.3	37.7		38.4	61.6		0	0		
PHF	.899	.914	.904	.840	.844	.893	.000	.000	.000	.939

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 Westbound On Ramp
Weather: Clear

File Name : 21_JVY_Rub_60W On AM
Site Code : 05122894
Start Date : 10/4/2022
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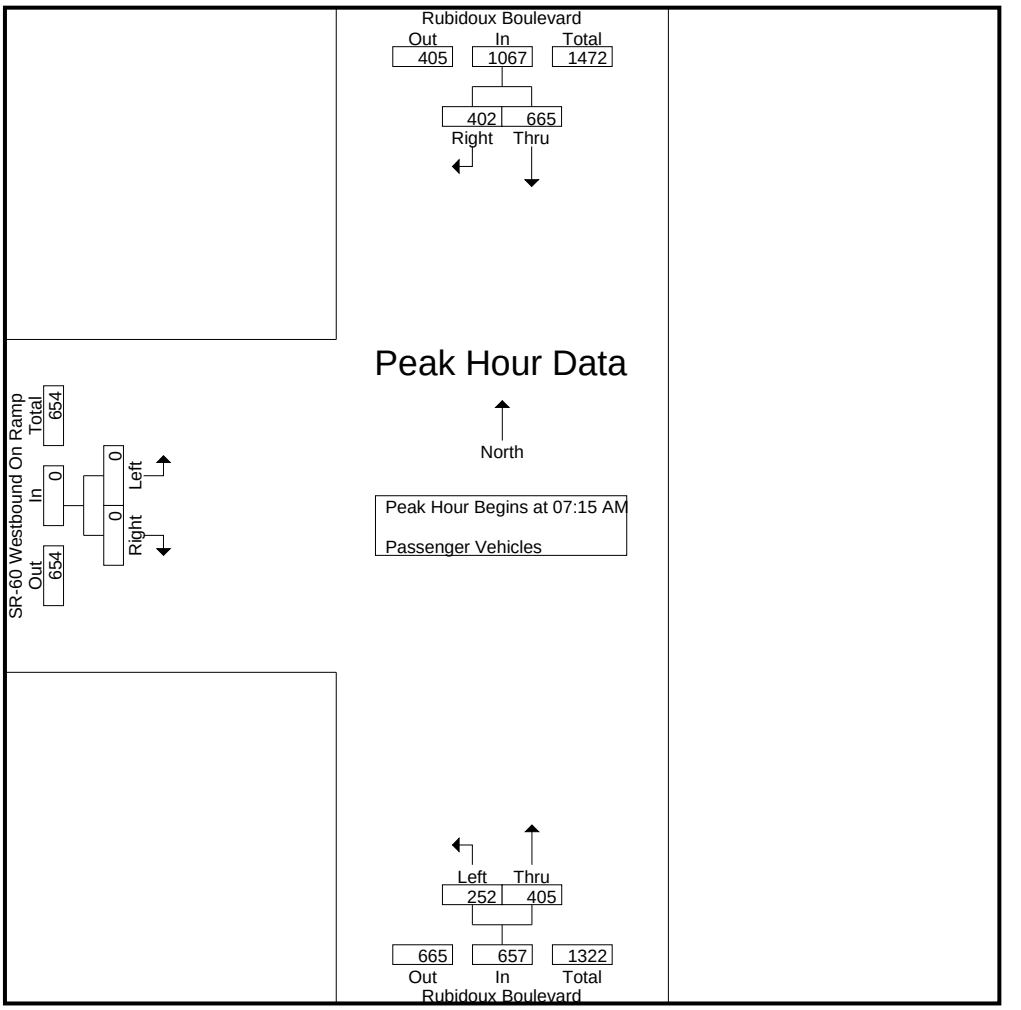

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	146	90	236	**75**	95	170	0	0	0
+15 mins.	155	106	261	63	81	144	0	0	0
+30 mins.	**185**	**110**	**295**	50	109	159	0	0	0
+45 mins.	179	96	275	64	**120**	**184**	0	0	0
Total Volume	665	402	1067	252	405	657	0	0	0
% App. Total	62.3	37.7		38.4	61.6		0	0	
PHF	.899	.914	.904	.840	.844	.893	.000	.000	.000

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N/S: Rubidoux Boulevard
E/W: SR-60 Westbound On Ramp
Weather: Clear

File Name : 21_JVY_Rub_60W On AM
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Groups Printed- Large 2 Axle Vehicles

	Rubidoux Boulevard Southbound			Rubidoux Boulevard Northbound			SR-60 Westbound On Ramp Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
06:30 AM	7	7	14	2	9	11	0	0	0	25
06:45 AM	8	7	15	4	6	10	0	0	0	25
Total	15	14	29	6	15	21	0	0	0	50
07:00 AM	6	6	12	2	9	11	0	0	0	23
07:15 AM	6	5	11	1	10	11	0	0	0	22
07:30 AM	11	8	19	2	7	9	0	0	0	28
07:45 AM	7	10	17	0	6	6	0	0	0	23
Total	30	29	59	5	32	37	0	0	0	96
08:00 AM	7	8	15	1	6	7	0	0	0	22
08:15 AM	4	8	12	1	6	7	0	0	0	19
08:30 AM	6	9	15	0	11	11	0	0	0	26
08:45 AM	5	15	20	0	7	7	0	0	0	27
Total	22	40	62	2	30	32	0	0	0	94
Grand Total	67	83	150	13	77	90	0	0	0	240
Apprch %	44.7	55.3		14.4	85.6		0	0		
Total %	27.9	34.6	62.5	5.4	32.1	37.5	0	0	0	

	Rubidoux Boulevard Southbound			Rubidoux Boulevard Northbound			SR-60 Westbound On Ramp Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	6	5	11	1	**10**	**11**	0	0	0	22
07:30 AM	**11**	8	**19**	**2**	7	9	0	0	0	**28**
07:45 AM	7	**10**	17	0	6	6	0	0	0	23
08:00 AM	7	8	15	1	6	7	0	0	0	22
Total Volume	31	31	62	4	29	33	0	0	0	95
% App. Total	50	50		12.1	87.9		0	0		
PHF	.705	.775	.816	.500	.725	.750	.000	.000	.000	.848

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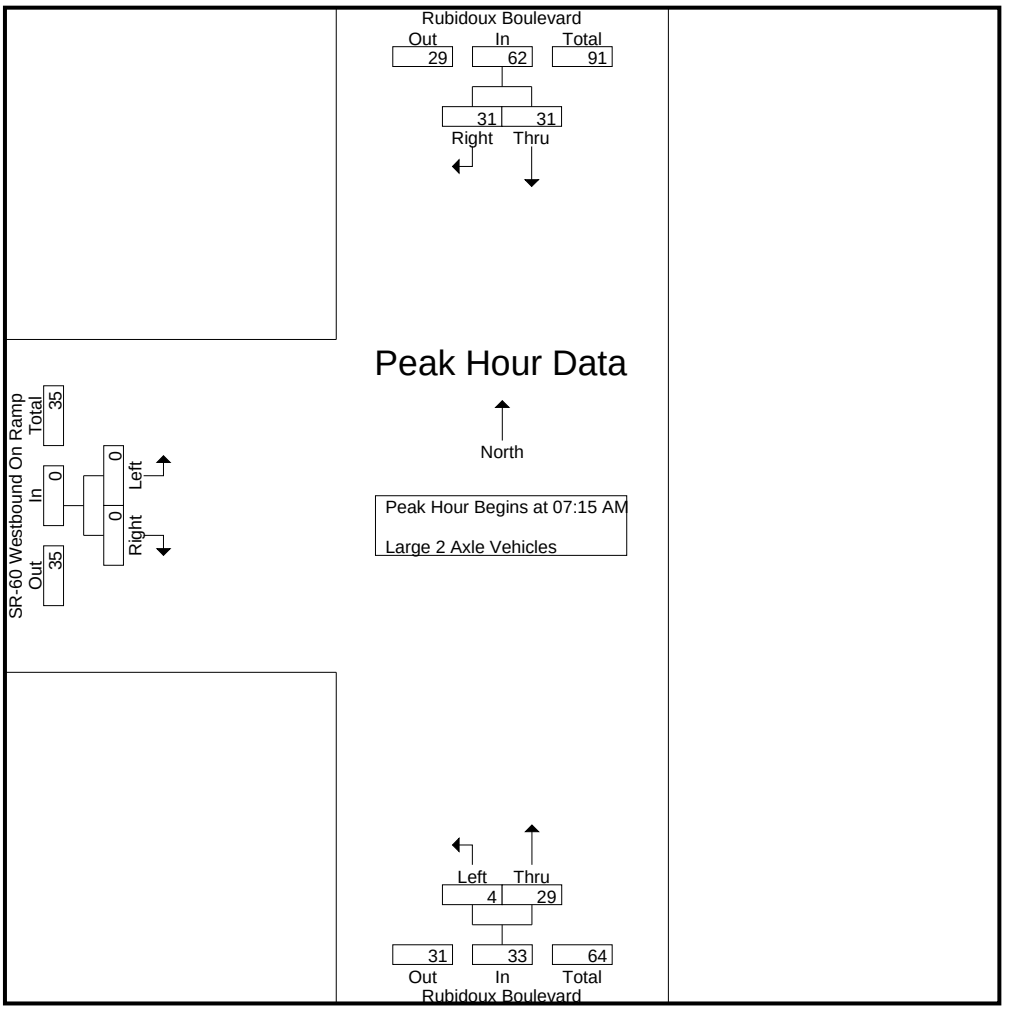

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	6	5	11	1	**10**	**11**	0	0	0
+15 mins.	**11**	8	**19**	**2**	7	9	0	0	0
+30 mins.	7	**10**	17	0	6	6	0	0	0
+45 mins.	7	8	15	1	6	7	0	0	0
Total Volume	31	31	62	4	29	33	0	0	0
% App. Total	50	50		12.1	87.9		0	0	
PHF	.705	.775	.816	.500	.725	.750	.000	.000	.000

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Weather: Clear

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Groups Printed- 3 Axle Vehicles

	Rubidoux Boulevard Southbound			Rubidoux Boulevard Northbound			SR-60 Westbound On Ramp Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
06:30 AM	5	4	9	1	3	4	0	0	0	13
06:45 AM	1	11	12	0	1	1	0	0	0	13
Total	6	15	21	1	4	5	0	0	0	26
07:00 AM	2	12	14	0	2	2	0	0	0	16
07:15 AM	3	12	15	0	5	5	0	0	0	20
07:30 AM	2	3	5	0	9	9	0	0	0	14
07:45 AM	6	11	17	0	4	4	0	0	0	21
Total	13	38	51	0	20	20	0	0	0	71
08:00 AM	3	7	10	0	8	8	0	0	0	18
08:15 AM	1	14	15	0	11	11	0	0	0	26
08:30 AM	0	11	11	0	9	9	0	0	0	20
08:45 AM	1	12	13	1	14	15	0	0	0	28
Total	5	44	49	1	42	43	0	0	0	92
Grand Total	24	97	121	2	66	68	0	0	0	189
Apprch %	19.8	80.2		2.9	97.1		0	0		
Total %	12.7	51.3	64	1.1	34.9	36	0	0	0	

	Rubidoux Boulevard Southbound			Rubidoux Boulevard Northbound			SR-60 Westbound On Ramp Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	3	**12**	15	0	5	5	0	0	0	20
07:30 AM	2	3	5	0	**9**	**9**	0	0	0	14
07:45 AM	**6**	11	**17**	0	4	4	0	0	0	**21**
08:00 AM	3	7	10	0	8	8	0	0	0	18
Total Volume	14	33	47	0	26	26	0	0	0	73
% App. Total	29.8	70.2		0	100		0	0		
PHF	.583	.688	.691	.000	.722	.722	.000	.000	.000	.869

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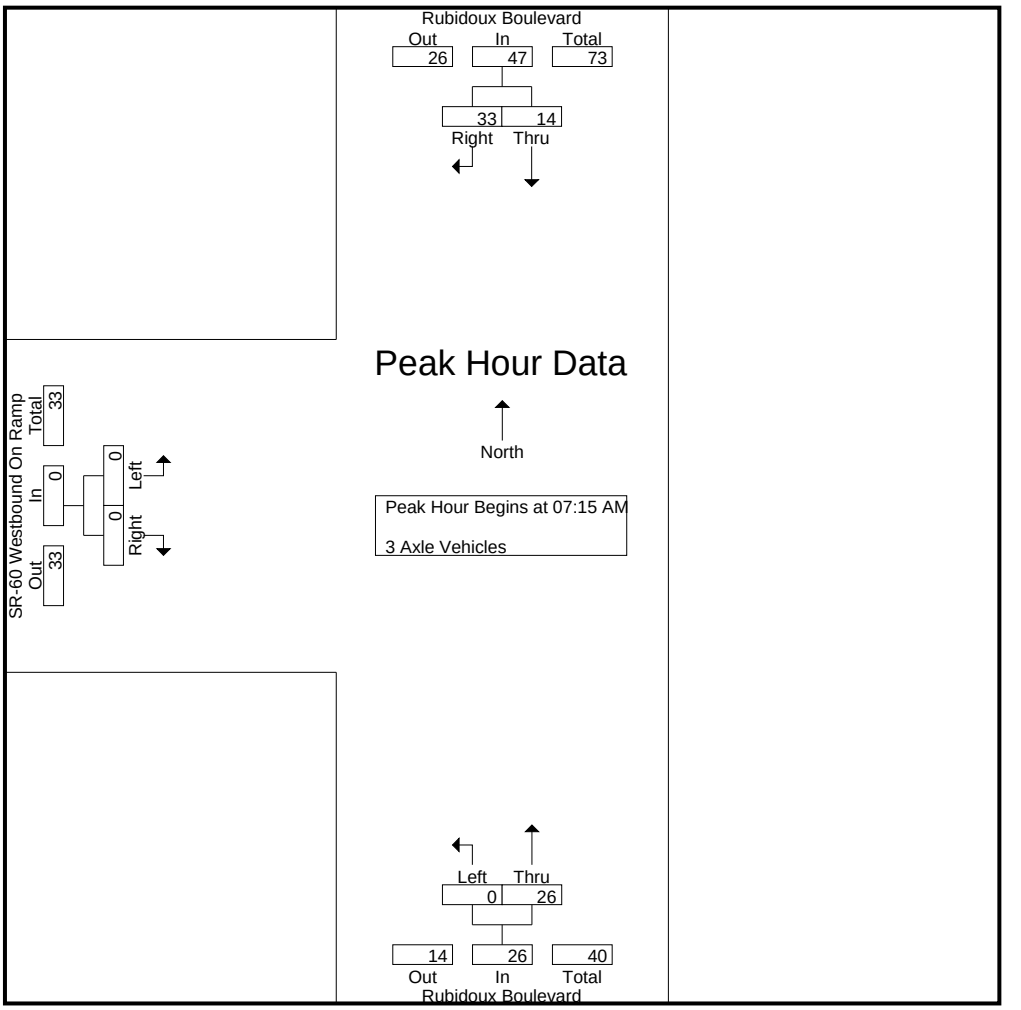

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	3	**12**	15	0	5	5	0	0	0
+15 mins.	2	3	5	0	**9**	**9**	0	0	0
+30 mins.	**6**	11	**17**	0	4	4	0	0	0
+45 mins.	3	7	10	0	8	8	0	0	0
Total Volume	14	33	47	0	26	26	0	0	0
% App. Total	29.8	70.2		0	100		0	0	
PHF	.583	.688	.691	.000	.722	.722	.000	.000	.000

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 Westbound On Ramp
Weather: Clear

File Name : 21_JVY_Rub_60W On AM
Site Code : 05122894
Start Date : 10/4/2022

Groups Printed- 4+ Axle Trucks

	Rubidoux Boulevard Southbound			Rubidoux Boulevard Northbound			SR-60 Westbound On Ramp Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
06:30 AM	5	11	16	0	10	10	0	0	0	26
06:45 AM	2	14	16	1	11	12	0	0	0	28
Total	7	25	32	1	21	22	0	0	0	54
07:00 AM	1	12	13	0	8	8	0	0	0	21
07:15 AM	4	13	17	0	11	11	0	0	0	28
07:30 AM	4	15	19	1	6	7	0	0	0	26
07:45 AM	2	17	19	0	12	12	0	0	0	31
Total	11	57	68	1	37	38	0	0	0	106
08:00 AM	2	12	14	2	16	18	0	0	0	32
08:15 AM	4	11	15	0	16	16	0	0	0	31
08:30 AM	4	17	21	0	16	16	0	0	0	37
08:45 AM	2	11	13	0	12	12	0	0	0	25
Total	12	51	63	2	60	62	0	0	0	125
Grand Total	30	133	163	4	118	122	0	0	0	285
Apprch %	18.4	81.6		3.3	96.7		0	0		
Total %	10.5	46.7	57.2	1.4	41.4	42.8	0	0	0	

	Rubidoux Boulevard Southbound			Rubidoux Boulevard Northbound			SR-60 Westbound On Ramp Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	**4**	13	17	0	11	11	0	0	0	28
07:30 AM	4	15	**19**	1	6	7	0	0	0	26
07:45 AM	2	**17**	19	0	12	12	0	0	0	31
08:00 AM	2	12	14	**2**	**16**	**18**	0	0	0	**32**
Total Volume	12	57	69	3	45	48	0	0	0	117
% App. Total	17.4	82.6		6.2	93.8		0	0		
PHF	.750	.838	.908	.375	.703	.667	.000	.000	.000	.914

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Weather: Clear

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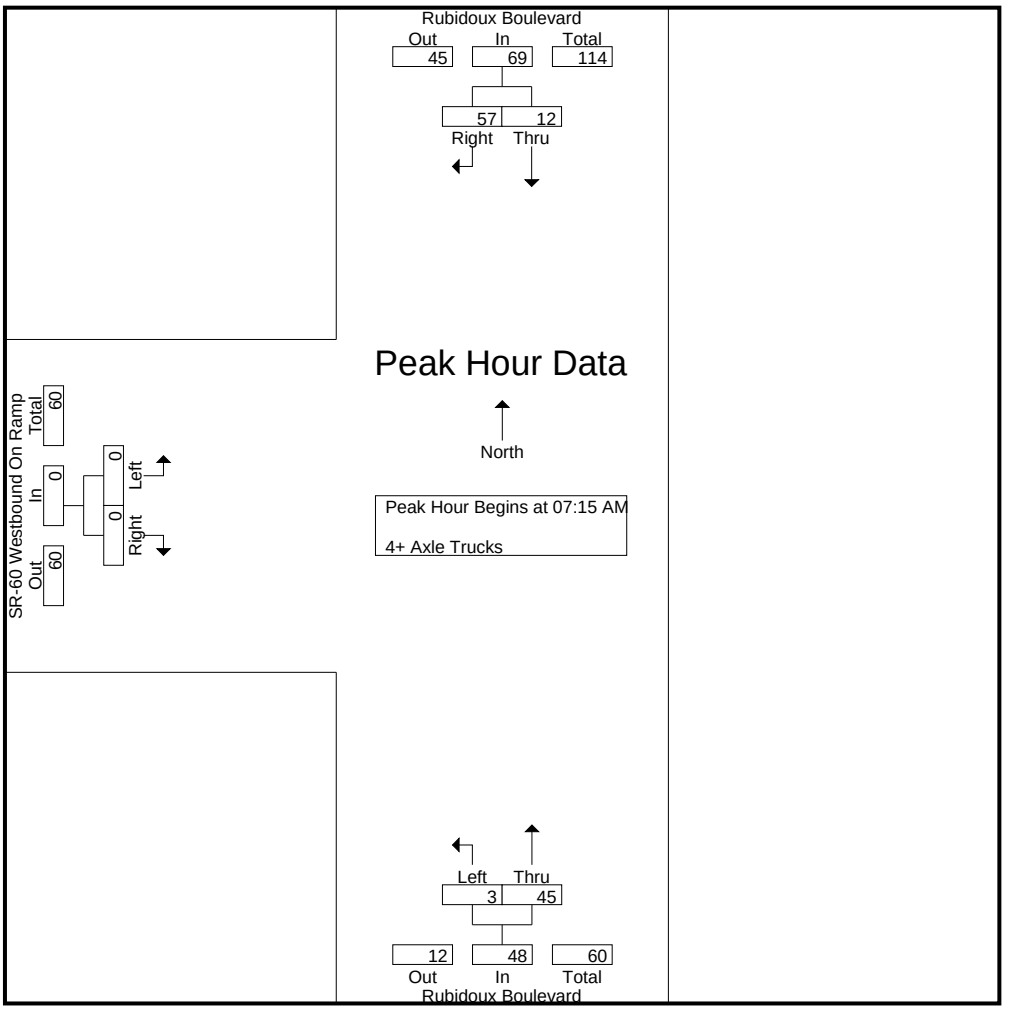

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	**4**	13	17	0	11	11	0	0	0
+15 mins.	4	15	**19**	1	6	7	0	0	0
+30 mins.	2	**17**	19	0	12	12	0	0	0
+45 mins.	2	12	14	**2**	**16**	**18**	0	0	0
Total Volume	12	57	69	3	45	48	0	0	0
% App. Total	17.4	82.6		6.2	93.8		0	0	
PHF	.750	.838	.908	.375	.703	.667	.000	.000	.000

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File Name : 21_JVY_Rub_60W On PM
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Rubidoux Boulevard Southbound				Rubidoux Boulevard Northbound				SR-60 Westbound On Ramp Eastbound						
Start Time	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	216	109	0	325	55	155	0	210	0	0	0	0	0	535	535
03:45 PM	208	95	0	303	45	139	0	184	0	0	0	0	0	487	487
Total	424	204	0	628	100	294	0	394	0	0	0	0	0	1022	1022
04:00 PM	220	109	0	329	45	135	0	180	0	0	0	0	0	509	509
04:15 PM	197	104	0	301	38	152	0	190	0	0	0	0	0	491	491
04:30 PM	191	104	0	295	55	147	0	202	0	0	0	0	0	497	497
04:45 PM	191	105	0	296	41	173	0	214	0	0	0	0	0	510	510
Total	799	422	0	1221	179	607	0	786	0	0	0	0	0	2007	2007
05:00 PM	241	119	0	360	47	161	0	208	0	0	0	0	0	568	568
05:15 PM	208	111	0	319	53	130	0	183	0	0	0	0	0	502	502
05:30 PM	201	93	0	294	54	174	0	228	0	0	0	0	0	522	522
05:45 PM	209	89	0	298	33	135	0	168	0	0	0	0	0	466	466
Total	859	412	0	1271	187	600	0	787	0	0	0	0	0	2058	2058
Grand Total	2082	1038	0	3120	466	1501	0	1967	0	0	0	0	0	5087	5087
Apprch %	66.7	33.3			23.7	76.3			0	0					
Total %	40.9	20.4		61.3	9.2	29.5		38.7	0	0		0	0	100	
Passenger Vehicles	2016	832		2848	460	1168		1628	0	0		0	0	0	4476
% Passenger Vehicles	96.8	80.2	0	91.3	98.7	77.8	0	82.8	0	0	0	0	0	0	88
Large 2 Axle Vehicles	36	43		79	5	90		95	0	0		0	0	0	174
% Large 2 Axle Vehicles	1.7	4.1	0	2.5	1.1	6	0	4.8	0	0	0	0	0	0	3.4
3 Axle Vehicles	15	39		54	1	72		73	0	0		0	0	0	127
% 3 Axle Vehicles	0.7	3.8	0	1.7	0.2	4.8	0	3.7	0	0	0	0	0	0	2.5
4+ Axle Trucks	15	124		139	0	171		171	0	0		0	0	0	310
% 4+ Axle Trucks	0.7	11.9	0	4.5	0	11.4	0	8.7	0	0	0	0	0	0	6.1

	Rubidoux Boulevard Southbound			Rubidoux Boulevard Northbound			SR-60 Westbound On Ramp Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	191	105	296	41	173	214	0	0	0	510
05:00 PM	**241**	**119**	**360**	47	161	208	0	0	0	**568**
05:15 PM	208	111	319	53	130	183	0	0	0	502
05:30 PM	201	93	294	**54**	**174**	**228**	0	0	0	522
Total Volume	841	428	1269	195	638	833	0	0	0	2102
% App. Total	66.3	33.7		23.4	76.6		0	0		
PHF	.872	.899	.881	.903	.917	.913	.000	.000	.000	.925

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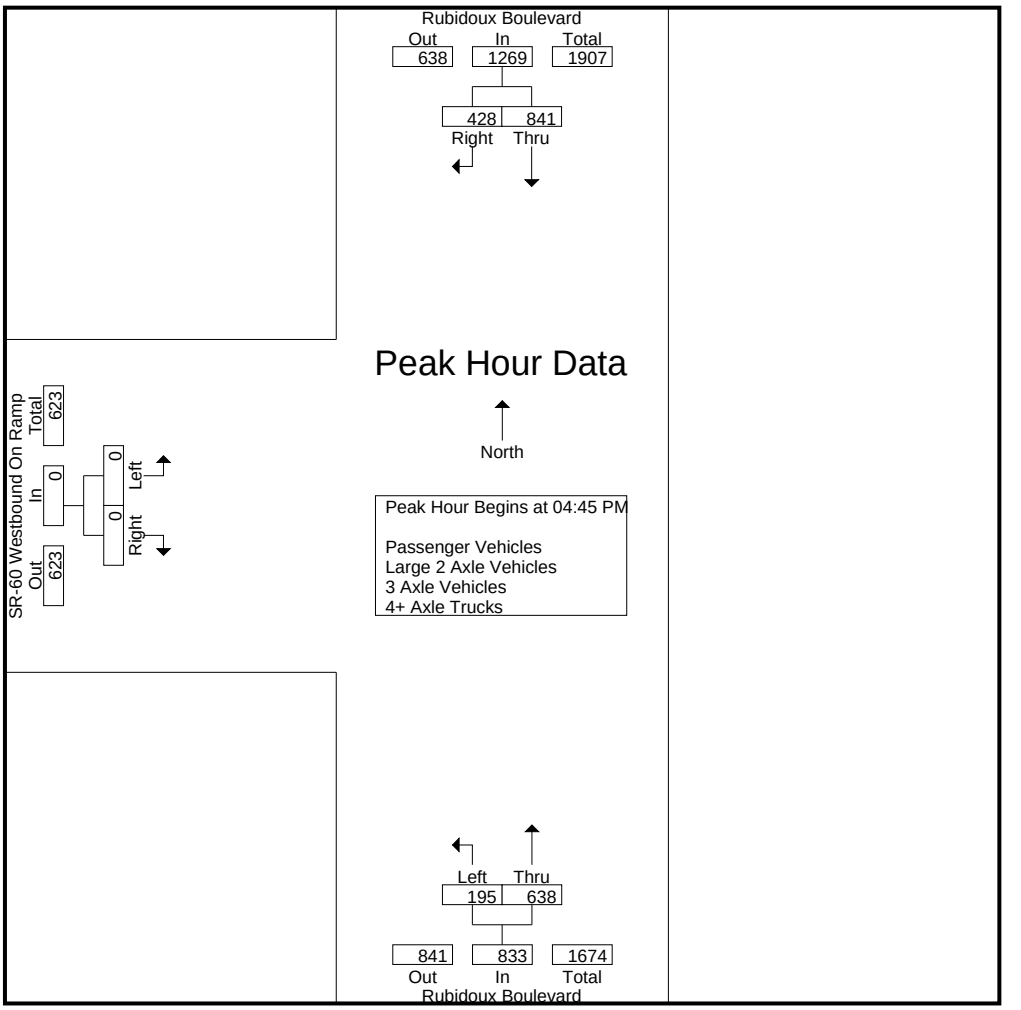

Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM			04:45 PM			03:30 PM		
+0 mins.	**241**	**119**	**360**	41	173	214	0	0	0
+15 mins.	208	111	319	47	161	208	0	0	0
+30 mins.	201	93	294	53	130	183	0	0	0
+45 mins.	209	89	298	**54**	**174**	**228**	0	0	0
Total Volume	859	412	1271	195	638	833	0	0	0
% App. Total	67.6	32.4		23.4	76.6		0	0	
PHF	.891	.866	.883	.903	.917	.913	.000	.000	.000

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Groups Printed- Passenger Vehicles

	Rubidoux Boulevard Southbound				Rubidoux Boulevard Northbound				SR-60 Westbound On Ramp Eastbound						
Start Time	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	206	81	0	287	54	112	0	166	0	0	0	0	0	453	453
03:45 PM	202	75	0	277	44	103	0	147	0	0	0	0	0	424	424
Total	408	156	0	564	98	215	0	313	0	0	0	0	0	877	877
04:00 PM	213	85	0	298	44	117	0	161	0	0	0	0	0	459	459
04:15 PM	189	86	0	275	38	122	0	160	0	0	0	0	0	435	435
04:30 PM	181	78	0	259	55	99	0	154	0	0	0	0	0	413	413
04:45 PM	188	84	0	272	41	137	0	178	0	0	0	0	0	450	450
Total	771	333	0	1104	178	475	0	653	0	0	0	0	0	1757	1757
05:00 PM	236	92	0	328	46	126	0	172	0	0	0	0	0	500	500
05:15 PM	203	92	0	295	52	106	0	158	0	0	0	0	0	453	453
05:30 PM	198	81	0	279	53	141	0	194	0	0	0	0	0	473	473
05:45 PM	200	78	0	278	33	105	0	138	0	0	0	0	0	416	416
Total	837	343	0	1180	184	478	0	662	0	0	0	0	0	1842	1842
Grand Total	2016	832	0	2848	460	1168	0	1628	0	0	0	0	0	4476	4476
Apprch %	70.8	29.2			28.3	71.7			0	0					
Total %	45	18.6		63.6	10.3	26.1		36.4	0	0		0	0	100	

	Rubidoux Boulevard Southbound			Rubidoux Boulevard Northbound			SR-60 Westbound On Ramp Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	188	84	272	41	137	178	0	0	0	450
05:00 PM	**236**	**92**	**328**	46	126	172	0	0	0	**500**
05:15 PM	203	92	295	52	106	158	0	0	0	453
05:30 PM	198	81	279	**53**	**141**	**194**	0	0	0	473
Total Volume	825	349	1174	192	510	702	0	0	0	1876
% App. Total	70.3	29.7		27.4	72.6		0	0		
PHF	.874	.948	.895	.906	.904	.905	.000	.000	.000	.938

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 Westbound On Ramp
Weather: Clear

File Name : 21_JVY_Rub_60W On PM
Site Code : 05122894
Start Date : 10/4/2022
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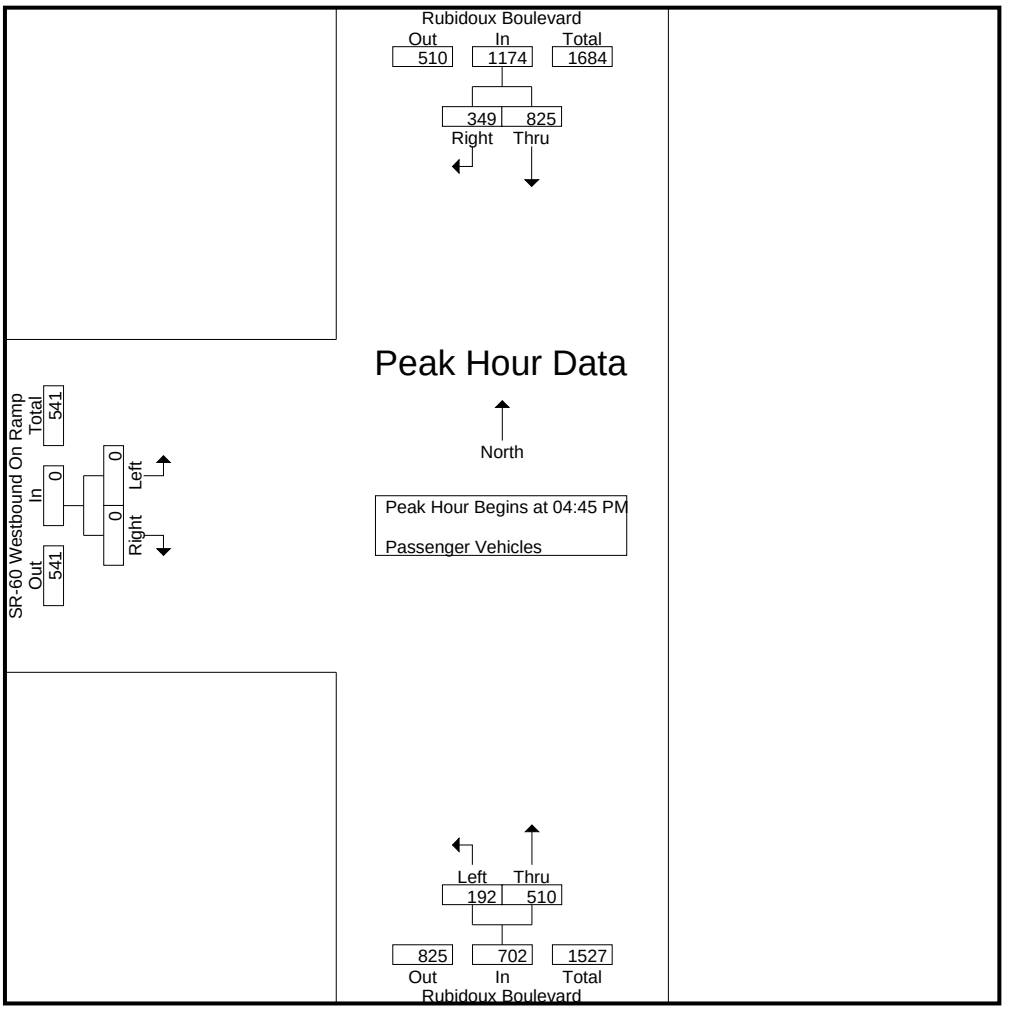

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	188	84	272	41	137	178	0	0	0
+15 mins.	**236**	**92**	**328**	46	126	172	0	0	0
+30 mins.	203	92	295	52	106	158	0	0	0
+45 mins.	198	81	279	**53**	**141**	**194**	0	0	0
Total Volume	825	349	1174	192	510	702	0	0	0
% App. Total	70.3	29.7		27.4	72.6		0	0	
PHF	.874	.948	.895	.906	.904	.905	.000	.000	.000

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 Westbound On Ramp
Weather: Clear

File Name : 21_JVY_Rub_60W On PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Rubidoux Boulevard Southbound				Rubidoux Boulevard Northbound				SR-60 Westbound On Ramp Eastbound						
Start Time	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	5	5	0	10	1	15	0	16	0	0	0	0	0	26	26
03:45 PM	2	3	0	5	1	8	0	9	0	0	0	0	0	14	14
Total	7	8	0	15	2	23	0	25	0	0	0	0	0	40	40
04:00 PM	6	7	0	13	1	7	0	8	0	0	0	0	0	21	21
04:15 PM	6	5	0	11	0	12	0	12	0	0	0	0	0	23	23
04:30 PM	4	2	0	6	0	14	0	14	0	0	0	0	0	20	20
04:45 PM	1	5	0	6	0	9	0	9	0	0	0	0	0	15	15
Total	17	19	0	36	1	42	0	43	0	0	0	0	0	79	79
05:00 PM	1	6	0	7	1	6	0	7	0	0	0	0	0	14	14
05:15 PM	4	6	0	10	0	5	0	5	0	0	0	0	0	15	15
05:30 PM	1	3	0	4	1	5	0	6	0	0	0	0	0	10	10
05:45 PM	6	1	0	7	0	9	0	9	0	0	0	0	0	16	16
Total	12	16	0	28	2	25	0	27	0	0	0	0	0	55	55
Grand Total	36	43	0	79	5	90	0	95	0	0	0	0	0	174	174
Apprch %	45.6	54.4			5.3	94.7			0	0					
Total %	20.7	24.7		45.4	2.9	51.7		54.6	0	0		0	0	100	

	Rubidoux Boulevard Southbound			Rubidoux Boulevard Northbound			SR-60 Westbound On Ramp Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	1	5	6	0	**9**	**9**	0	0	0	**15**
05:00 PM	1	**6**	7	**1**	6	7	0	0	0	14
05:15 PM	**4**	6	**10**	0	5	5	0	0	0	15
05:30 PM	1	3	4	1	5	6	0	0	0	10
Total Volume	7	20	27	2	25	27	0	0	0	54
% App. Total	25.9	74.1		7.4	92.6		0	0		
PHF	.438	.833	.675	.500	.694	.750	.000	.000	.000	.900

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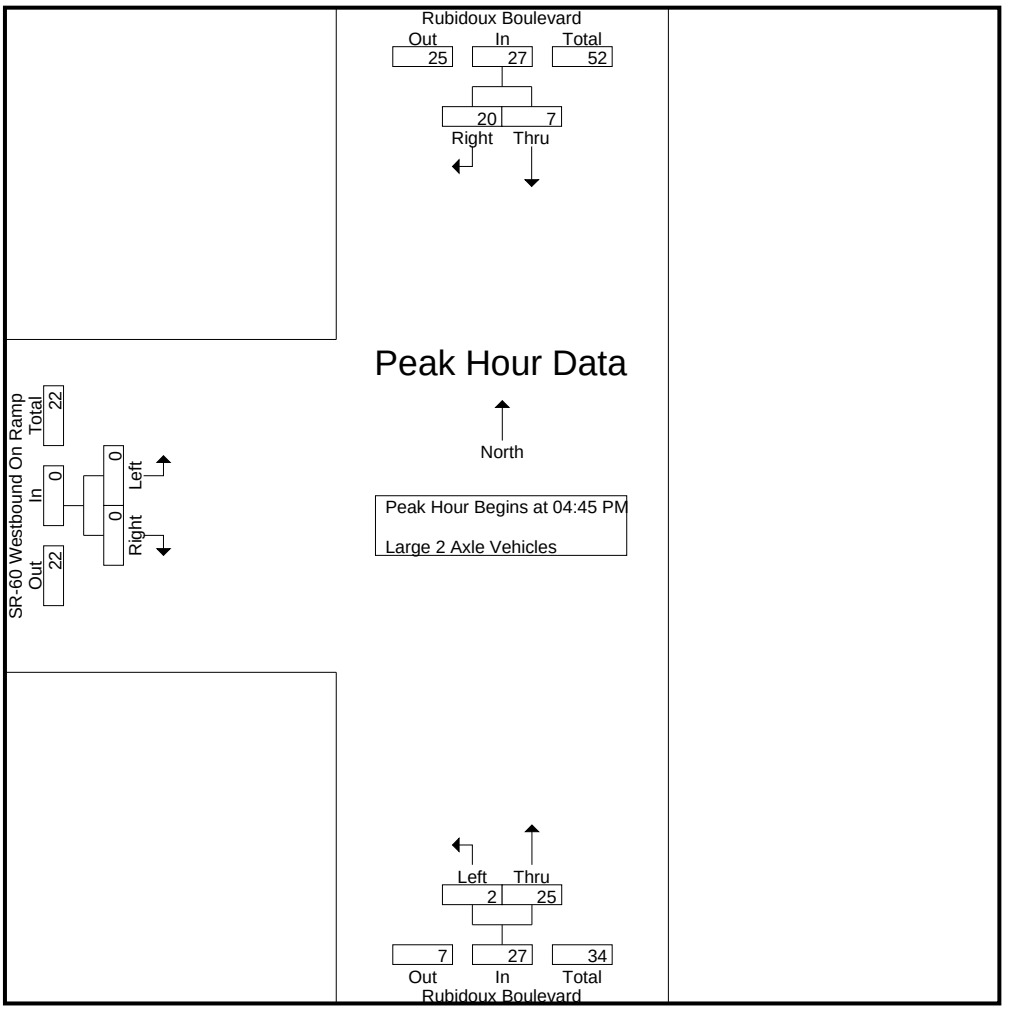
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 Westbound On Ramp
Weather: Clear

File Name : 21_JVY_Rub_60W On PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	1	5	6	0	**9**	**9**	0	0	0
+15 mins.	1	**6**	7	**1**	6	7	0	0	0
+30 mins.	**4**	6	**10**	0	5	5	0	0	0
+45 mins.	1	3	4	1	5	6	0	0	0
Total Volume	7	20	27	2	25	27	0	0	0
% App. Total	25.9	74.1		7.4	92.6		0	0	
PHF	.438	.833	.675	.500	.694	.750	.000	.000	.000

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 Westbound On Ramp
Weather: Clear

File Name : 21_JVY_Rub_60W On PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Rubidoux Boulevard Southbound				Rubidoux Boulevard Northbound				SR-60 Westbound On Ramp Eastbound						
Start Time	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	3	7	0	10	0	6	0	6	0	0	0	0	0	16	16
03:45 PM	1	2	0	3	0	10	0	10	0	0	0	0	0	13	13
Total	4	9	0	13	0	16	0	16	0	0	0	0	0	29	29
04:00 PM	0	5	0	5	0	2	0	2	0	0	0	0	0	7	7
04:15 PM	1	5	0	6	0	4	0	4	0	0	0	0	0	10	10
04:30 PM	3	6	0	9	0	10	0	10	0	0	0	0	0	19	19
04:45 PM	1	5	0	6	0	7	0	7	0	0	0	0	0	13	13
Total	5	21	0	26	0	23	0	23	0	0	0	0	0	49	49
05:00 PM	2	4	0	6	0	13	0	13	0	0	0	0	0	19	19
05:15 PM	1	3	0	4	1	7	0	8	0	0	0	0	0	12	12
05:30 PM	1	1	0	2	0	7	0	7	0	0	0	0	0	9	9
05:45 PM	2	1	0	3	0	6	0	6	0	0	0	0	0	9	9
Total	6	9	0	15	1	33	0	34	0	0	0	0	0	49	49
Grand Total	15	39	0	54	1	72	0	73	0	0	0	0	0	127	127
Apprch %	27.8	72.2			1.4	98.6			0	0					
Total %	11.8	30.7		42.5	0.8	56.7		57.5	0	0		0	0	100	

	Rubidoux Boulevard Southbound			Rubidoux Boulevard Northbound			SR-60 Westbound On Ramp Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	1	**5**	**6**	0	7	7	0	0	0	13
05:00 PM	**2**	4	6	0	**13**	**13**	0	0	0	**19**
05:15 PM	1	3	4	**1**	7	8	0	0	0	12
05:30 PM	1	1	2	0	7	7	0	0	0	9
Total Volume	5	13	18	1	34	35	0	0	0	53
% App. Total	27.8	72.2		2.9	97.1		0	0		
PHF	.625	.650	.750	.250	.654	.673	.000	.000	.000	.697

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 Westbound On Ramp
Weather: Clear

File Name : 21_JVY_Rub_60W On PM
Site Code : 05122894
Start Date : 10/4/2022
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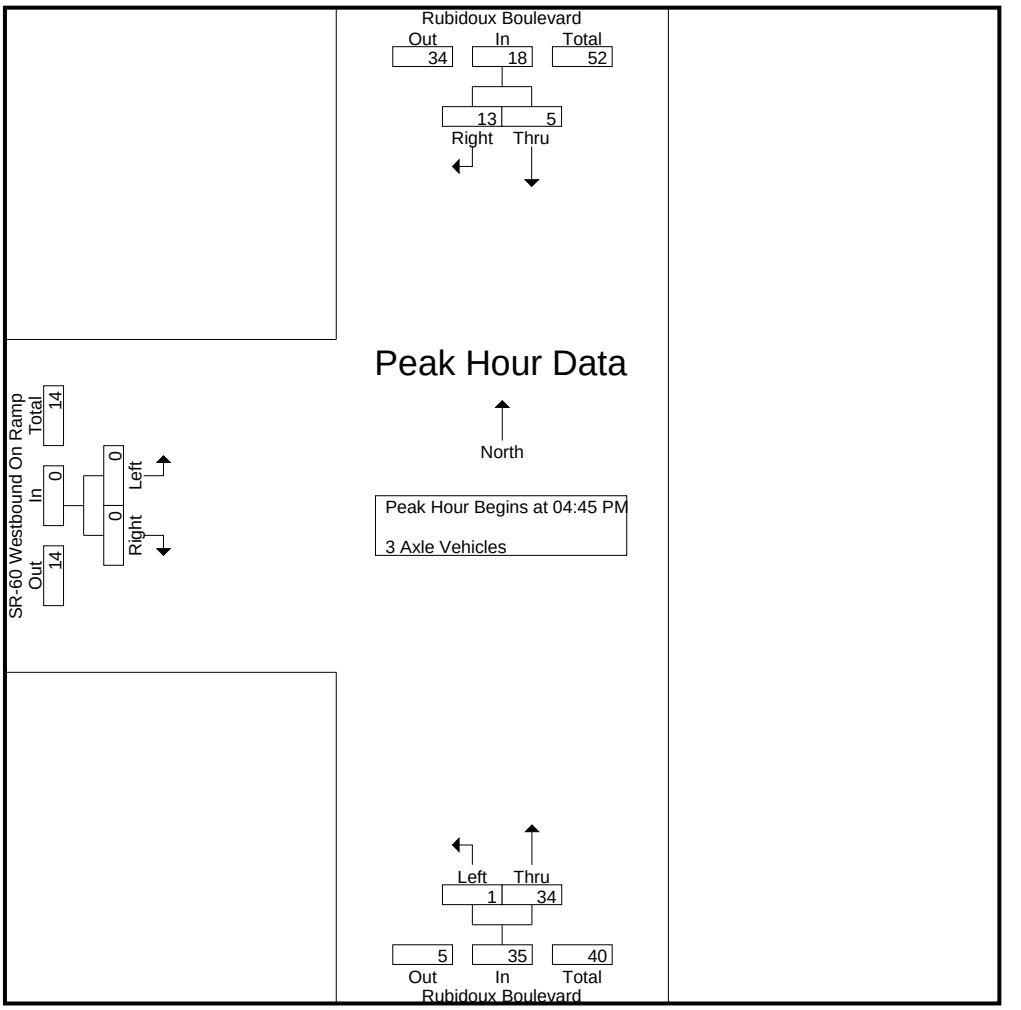

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	1	**5**	**6**	0	7	7	0	0	0
+15 mins.	**2**	4	6	0	**13**	**13**	0	0	0
+30 mins.	1	3	4	**1**	7	8	0	0	0
+45 mins.	1	1	2	0	7	7	0	0	0
Total Volume	5	13	18	1	34	35	0	0	0
% App. Total	27.8	72.2		2.9	97.1		0	0	
PHF	.625	.650	.750	.250	.654	.673	.000	.000	.000

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 Westbound On Ramp
Weather: Clear

File Name : 21_JVY_Rub_60W On PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Rubidoux Boulevard Southbound				Rubidoux Boulevard Northbound				SR-60 Westbound On Ramp Eastbound						
Start Time	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	2	16	0	18	0	22	0	22	0	0	0	0	0	40	40
03:45 PM	3	15	0	18	0	18	0	18	0	0	0	0	0	36	36
Total	5	31	0	36	0	40	0	40	0	0	0	0	0	76	76
04:00 PM	1	12	0	13	0	9	0	9	0	0	0	0	0	22	22
04:15 PM	1	8	0	9	0	14	0	14	0	0	0	0	0	23	23
04:30 PM	3	18	0	21	0	24	0	24	0	0	0	0	0	45	45
04:45 PM	1	11	0	12	0	20	0	20	0	0	0	0	0	32	32
Total	6	49	0	55	0	67	0	67	0	0	0	0	0	122	122
05:00 PM	2	17	0	19	0	16	0	16	0	0	0	0	0	35	35
05:15 PM	0	10	0	10	0	12	0	12	0	0	0	0	0	22	22
05:30 PM	1	8	0	9	0	21	0	21	0	0	0	0	0	30	30
05:45 PM	1	9	0	10	0	15	0	15	0	0	0	0	0	25	25
Total	4	44	0	48	0	64	0	64	0	0	0	0	0	112	112
Grand Total	15	124	0	139	0	171	0	171	0	0	0	0	0	310	310
Apprch %	10.8	89.2			0	100			0	0					
Total %	4.8	40		44.8	0	55.2		55.2	0	0		0	0	100	

	Rubidoux Boulevard Southbound			Rubidoux Boulevard Northbound			SR-60 Westbound On Ramp Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	1	11	12	0	20	20	0	0	0	32
05:00 PM	**2**	**17**	**19**	0	16	16	0	0	0	**35**
05:15 PM	0	10	10	0	12	12	0	0	0	22
05:30 PM	1	8	9	0	**21**	**21**	0	0	0	30
Total Volume	4	46	50	0	69	69	0	0	0	119
% App. Total	8	92		0	100		0	0		
PHF	.500	.676	.658	.000	.821	.821	.000	.000	.000	.850

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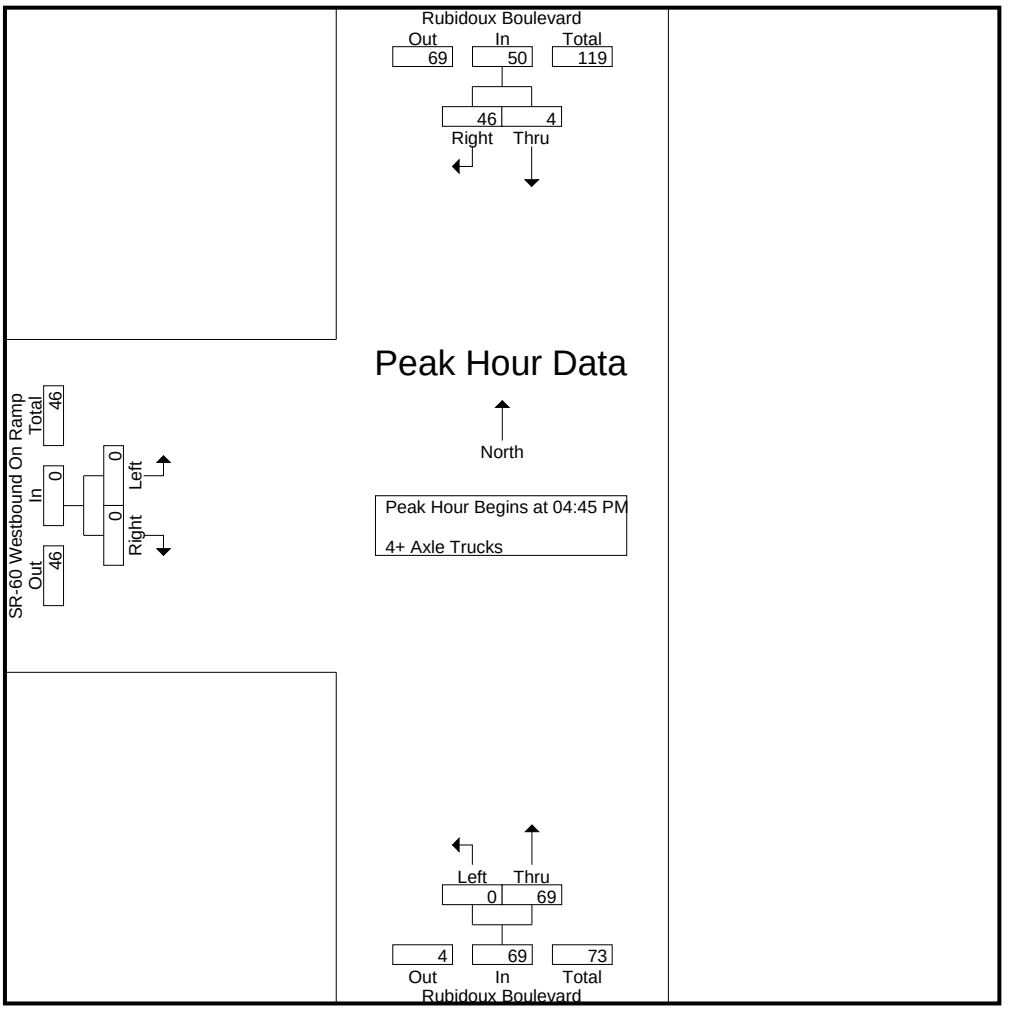
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 Westbound On Ramp
Weather: Clear

File Name : 21_JVY_Rub_60W On PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	1	11	12	0	20	20	0	0	0
+15 mins.	**2**	**17**	**19**	0	16	16	0	0	0
+30 mins.	0	10	10	0	12	12	0	0	0
+45 mins.	1	8	9	0	**21**	**21**	0	0	0
Total Volume	4	46	50	0	69	69	0	0	0
% App. Total	8	92		0	100		0	0	
PHF	.500	.676	.658	.000	.821	.821	.000	.000	.000

Location: Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 WB On Ramp

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Rubidoux Boulevard	East Leg Dead End	South Leg Rubidoux Boulevard	West Leg SR-60 WB On Ramp	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	1	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	1	1

	North Leg Rubidoux Boulevard	East Leg Dead End	South Leg Rubidoux Boulevard	West Leg SR-60 WB On Ramp	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	2	2
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	1	1
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	1	1
5:45 PM	0	0	0	1	1
TOTAL VOLUMES:	0	0	0	5	5

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Location: Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 WB On Ramp

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Rubidoux Boulevard			Westbound Dead End			Northbound Rubidoux Boulevard			Eastbound SR-60 WB On Ramp			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	0	1	0	0	0	0	2
TOTAL VOLUMES:	0	2	0	0	0	0	0	3	0	0	0	0	5

	Southbound Rubidoux Boulevard			Westbound Dead End			Northbound Rubidoux Boulevard			Eastbound SR-60 WB On Ramp			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	0	0	0	0	0	0	0	0	2

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 EB Off Ramp/Frontage Rd
Weather: Clear

File Name : 22_JVY_Rub_60E Off AM
Site Code : 05122894
Start Date : 10/4/2022

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Rubidoux Boulevard Southbound					Frontage Road Westbound					Rubidoux Boulevard Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	45	99	0	0	144	0	0	0	0	0	0	126	109	30	235	54	1	28	12	83	42	462	504
06:45 AM	29	98	0	0	127	1	0	1	1	2	0	138	106	32	244	80	3	28	13	111	46	484	530
Total	74	197	0	0	271	1	0	1	1	2	0	264	215	62	479	134	4	56	25	194	88	946	1034
07:00 AM	35	89	0	0	124	0	0	0	0	0	0	131	104	19	235	60	2	22	10	84	29	443	472
07:15 AM	31	121	0	0	152	2	0	2	1	4	0	138	129	23	267	66	4	52	32	122	56	545	601
07:30 AM	46	129	0	0	175	8	0	1	1	9	0	115	113	25	228	57	5	58	34	120	60	532	592
07:45 AM	44	166	0	0	210	2	0	0	0	2	0	113	116	23	229	76	2	39	12	117	35	558	593
Total	156	505	0	0	661	12	0	3	2	15	0	497	462	90	959	259	13	171	88	443	180	2078	2258
08:00 AM	43	153	0	0	196	2	0	0	0	2	0	133	115	34	248	82	3	38	15	123	49	569	618
08:15 AM	42	109	0	0	151	1	0	3	3	4	0	114	84	25	198	92	3	43	12	138	40	491	531
08:30 AM	36	100	0	0	136	1	0	0	0	1	0	116	101	16	217	95	3	45	26	143	42	497	539
08:45 AM	22	101	0	0	123	2	0	0	0	2	0	102	99	27	201	90	2	37	23	129	50	455	505
Total	143	463	0	0	606	6	0	3	3	9	0	465	399	102	864	359	11	163	76	533	181	2012	2193
Grand Total	373	1165	0	0	1538	19	0	7	6	26	0	1226	1076	254	2302	752	28	390	189	1170	449	5036	5485
Apprch %	24.3	75.7	0			73.1	0	26.9			0	53.3	46.7			64.3	2.4	33.3					
Total %	7.4	23.1	0		30.5	0.4	0	0.1		0.5	0	24.3	21.4		45.7	14.9	0.6	7.7		23.2	8.2	91.8	
Passenger Vehicles	316	1088	0		1404	19	0	6		30	0	1168	1038		2447	520	21	377		1104	0	0	4985
% Passenger Vehicles	84.7	93.4	0	0	91.3	100	0	85.7	83.3	93.8	0	95.3	96.5	94.9	95.7	69.1	75	96.7	98.4	81.2	0	0	90.9
Large 2 Axle Vehicles	21	53	0		74	0	0	0		0	0	40	22		70	58	3	9		71	0	0	215
% Large 2 Axle Vehicles	5.6	4.5	0	0	4.8	0	0	0	0	0	0	3.3	2	3.1	2.7	7.7	10.7	2.3	0.5	5.2	0	0	3.9
3 Axle Vehicles	14	7	0		21	0	0	0		0	0	12	4		18	56	1	2		60	0	0	99
% 3 Axle Vehicles	3.8	0.6	0	0	1.4	0	0	0	0	0	0	1	0.4	0.8	0.7	7.4	3.6	0.5	0.5	4.4	0	0	1.8
4+ Axle Trucks	22	17	0		39	0	0	1		2	0	6	12		21	118	3	2		124	0	0	186
% 4+ Axle Trucks	5.9	1.5	0	0	2.5	0	0	14.3	16.7	6.2	0	0.5	1.1	1.2	0.8	15.7	10.7	0.5	0.5	9.1	0	0	3.4

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 EB Off Ramp/Frontage Rd
Weather: Clear

File Name : 22_JVY_Rub_60E Off AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2

	Rubidoux Boulevard Southbound				Frontage Road Westbound				Rubidoux Boulevard Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	31	121	0	152	2	0	**2**	4	0	**138**	**129**	**267**	66	4	52	122	545
07:30 AM	**46**	129	0	175	**8**	0	1	**9**	0	115	113	228	57	**5**	**58**	120	532
07:45 AM	44	**166**	0	**210**	2	0	0	2	0	113	116	229	76	2	39	117	558
08:00 AM	43	153	0	196	2	0	0	2	0	133	115	248	**82**	3	38	**123**	**569**
Total Volume	164	569	0	733	14	0	3	17	0	499	473	972	281	14	187	482	2204
% App. Total	22.4	77.6	0		82.4	0	17.6		0	51.3	48.7		58.3	2.9	38.8		
PHF	.891	.857	.000	.873	.438	.000	.375	.472	.000	.904	.917	.910	.857	.700	.806	.980	.968

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File Name : 22_JVY_Rub_60E Off AM
Site Code : 05122894
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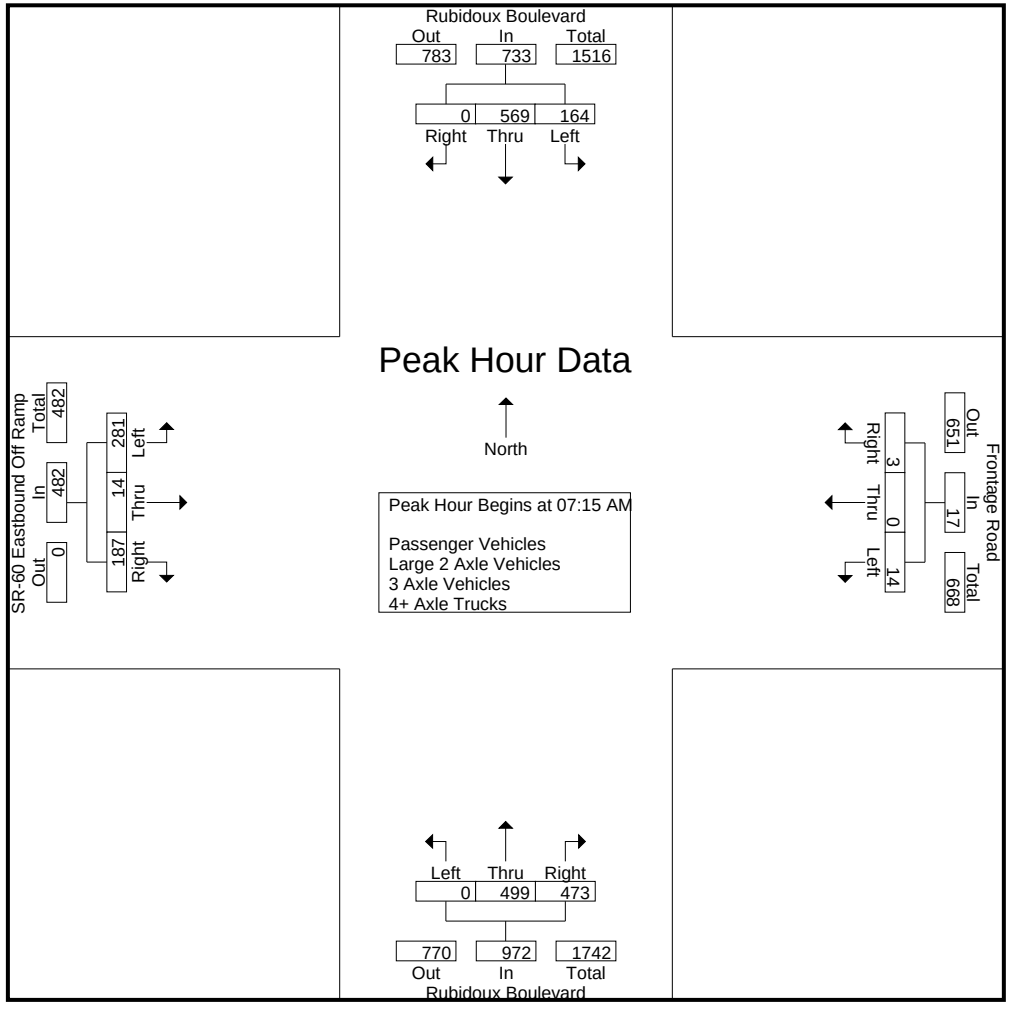
Page No : 3



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File Name : 22_JVY_Rub_60E Off AM
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	Rubidoux Boulevard Southbound				Frontage Road Westbound				Rubidoux Boulevard Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				06:30 AM				08:00 AM				
+0 mins.	31	121	0	152	2	0	**2**	4	0	126	109	235	82	**3**	38	123	
+15 mins.	**46**	129	0	175	**8**	0	1	**9**	0	**138**	106	244	92	3	43	138	
+30 mins.	44	**166**	0	**210**	2	0	0	2	0	131	104	235	**95**	3	**45**	**143**	
+45 mins.	43	153	0	196	2	0	0	2	0	138	**129**	**267**	90	2	37	129	
Total Volume	164	569	0	733	14	0	3	17	0	533	448	981	359	11	163	533	
% App. Total	22.4	77.6	0		82.4	0	17.6		0	54.3	45.7		67.4	2.1	30.6		
PHF	.891	.857	.000	.873	.438	.000	.375	.472	.000	.966	.868	.919	.945	.917	.906	.932	

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City of Jurupa Valley
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Weather: Clear

File Name : 22_JVY_Rub_60E Off AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Rubidoux Boulevard Southbound					Frontage Road Westbound					Rubidoux Boulevard Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	35	91	0	0	126	0	0	0	0	0	0	121	103	26	224	36	1	28	12	65	38	415	453
06:45 AM	25	89	0	0	114	1	0	1	1	2	0	131	105	32	236	62	1	28	13	91	46	443	489
Total	60	180	0	0	240	1	0	1	1	2	0	252	208	58	460	98	2	56	25	156	84	858	942
07:00 AM	29	84	0	0	113	0	0	0	0	0	0	124	100	18	224	43	1	20	10	64	28	401	429
07:15 AM	26	113	0	0	139	2	0	2	1	4	0	130	122	22	252	43	4	51	32	98	55	493	548
07:30 AM	35	118	0	0	153	8	0	0	0	8	0	111	112	25	223	36	4	56	33	96	58	480	538
07:45 AM	41	153	0	0	194	2	0	0	0	2	0	110	111	20	221	57	2	37	12	96	32	513	545
Total	131	468	0	0	599	12	0	2	1	14	0	475	445	85	920	179	11	164	87	354	173	1887	2060
08:00 AM	38	144	0	0	182	2	0	0	0	2	0	126	110	33	236	56	3	36	15	95	48	515	563
08:15 AM	37	107	0	0	144	1	0	3	3	4	0	104	84	25	188	64	1	41	10	106	38	442	480
08:30 AM	30	93	0	0	123	1	0	0	0	1	0	114	98	15	212	64	3	44	26	111	41	447	488
08:45 AM	20	96	0	0	116	2	0	0	0	2	0	97	93	25	190	59	1	36	23	96	48	404	452
Total	125	440	0	0	565	6	0	3	3	9	0	441	385	98	826	243	8	157	74	408	175	1808	1983
Grand Total	316	1088	0	0	1404	19	0	6	5	25	0	1168	1038	241	2206	520	21	377	186	918	432	4553	4985
Apprch %	22.5	77.5	0			76	0	24			0	52.9	47.1			56.6	2.3	41.1					
Total %	6.9	23.9	0		30.8	0.4	0	0.1		0.5	0	25.7	22.8		48.5	11.4	0.5	8.3		20.2	8.7	91.3	

	Rubidoux Boulevard Southbound				Frontage Road Westbound				Rubidoux Boulevard Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	26	113	0	139	2	0	**2**	4	0	**130**	**122**	**252**	43	**4**	51	**98**	493
07:30 AM	35	118	0	153	**8**	0	0	**8**	0	111	112	223	36	4	**56**	96	480
07:45 AM	**41**	**153**	0	**194**	2	0	0	2	0	110	111	221	**57**	2	37	96	513
08:00 AM	38	144	0	182	2	0	0	2	0	126	110	236	56	3	36	95	**515**
Total Volume	140	528	0	668	14	0	2	16	0	477	455	932	192	13	180	385	2001
% App. Total	21	79	0		87.5	0	12.5		0	51.2	48.8		49.9	3.4	46.8		
PHF	.854	.863	.000	.861	.438	.000	.250	.500	.000	.917	.932	.925	.842	.813	.804	.982	.971

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N/S: Rubidoux Boulevard
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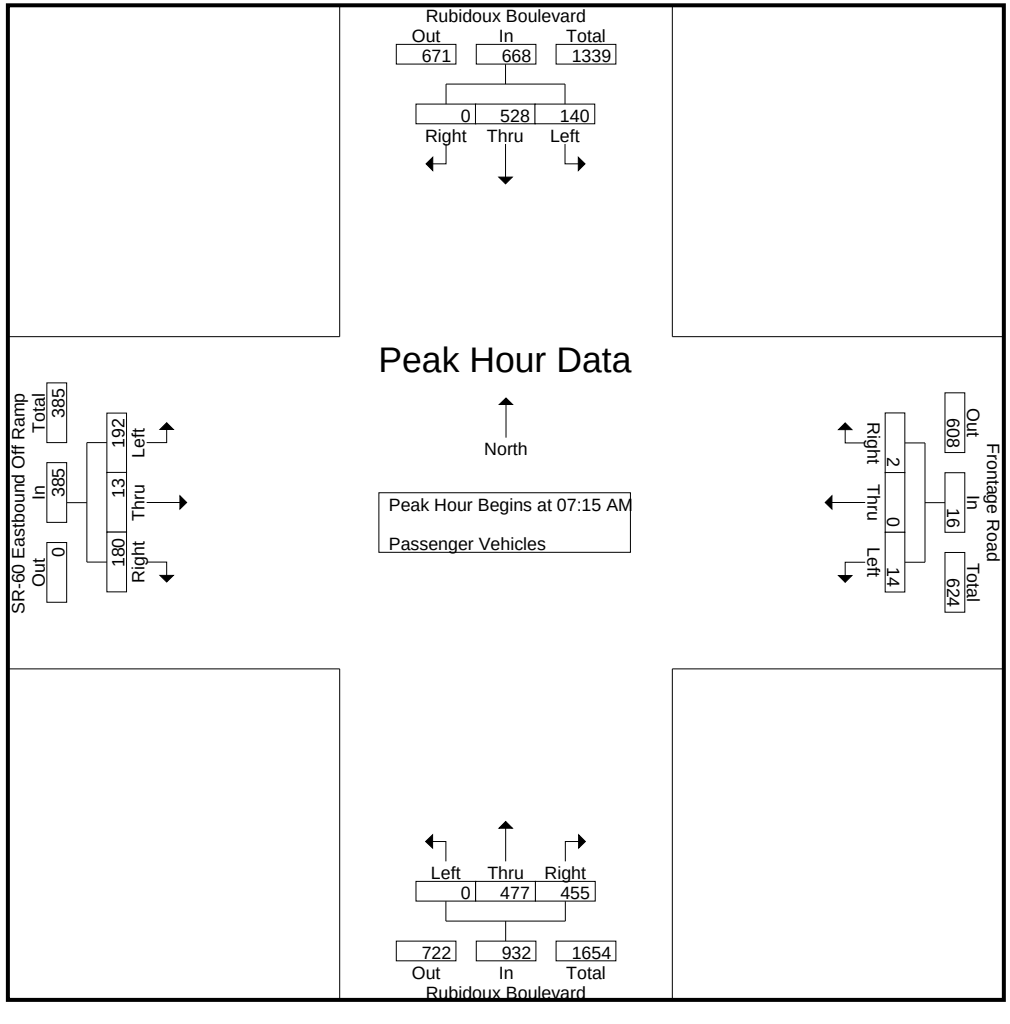
Weather: Clear

File Name : 22_JVY_Rub_60E Off AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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File Name : 22_JVY_Rub_60E Off AM
Site Code : 05122894
Start Date : 10/4/2022
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	Rubidoux Boulevard Southbound				Frontage Road Westbound				Rubidoux Boulevard Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	26	113	0	139	2	0	**2**	4	0	**130**	**122**	**252**	43	**4**	51	**98**	
+15 mins.	35	118	0	153	**8**	0	0	**8**	0	111	112	223	36	4	**56**	96	
+30 mins.	**41**	**153**	0	**194**	2	0	0	2	0	110	111	221	**57**	2	37	96	
+45 mins.	38	144	0	182	2	0	0	2	0	126	110	236	56	3	36	95	
Total Volume	140	528	0	668	14	0	2	16	0	477	455	932	192	13	180	385	
% App. Total	21	79	0		87.5	0	12.5		0	51.2	48.8		49.9	3.4	46.8		
PHF	.854	.863	.000	.861	.438	.000	.250	.500	.000	.917	.932	.925	.842	.813	.804	.982	

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City of Jurupa Valley
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Weather: Clear

File Name : 22_JVY_Rub_60E Off AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Rubidoux Boulevard Southbound					Frontage Road Westbound					Rubidoux Boulevard Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	4	4	0	0	8	0	0	0	0	0	0	3	4	2	7	5	0	0	0	5	2	20	22
06:45 AM	3	6	0	0	9	0	0	0	0	0	0	5	1	0	6	6	1	0	0	7	0	22	22
Total	7	10	0	0	17	0	0	0	0	0	0	8	5	2	13	11	1	0	0	12	2	42	44
07:00 AM	2	4	0	0	6	0	0	0	0	0	0	6	3	1	9	6	1	1	0	8	1	23	24
07:15 AM	0	5	0	0	5	0	0	0	0	0	0	6	5	1	11	7	0	1	0	8	1	24	25
07:30 AM	4	10	0	0	14	0	0	0	0	0	0	3	1	0	4	5	1	1	0	7	0	25	25
07:45 AM	0	8	0	0	8	0	0	0	0	0	0	2	2	2	4	4	0	2	0	6	2	18	20
Total	6	27	0	0	33	0	0	0	0	0	0	17	11	4	28	22	2	5	0	29	4	90	94
08:00 AM	1	7	0	0	8	0	0	0	0	0	0	6	2	0	8	4	0	1	0	5	0	21	21
08:15 AM	2	0	0	0	2	0	0	0	0	0	0	7	0	0	7	4	0	1	1	5	1	14	15
08:30 AM	3	6	0	0	9	0	0	0	0	0	0	1	0	0	1	9	0	1	0	10	0	20	20
08:45 AM	2	3	0	0	5	0	0	0	0	0	0	1	4	2	5	8	0	1	0	9	2	19	21
Total	8	16	0	0	24	0	0	0	0	0	0	15	6	2	21	25	0	4	1	29	3	74	77
Grand Total	21	53	0	0	74	0	0	0	0	0	0	40	22	8	62	58	3	9	1	70	9	206	215
Apprch %	28.4	71.6	0			0	0	0			0	64.5	35.5			82.9	4.3	12.9					
Total %	10.2	25.7	0		35.9	0	0	0		0	0	19.4	10.7		30.1	28.2	1.5	4.4		34	4.2	95.8	

	Rubidoux Boulevard Southbound				Frontage Road Westbound				Rubidoux Boulevard Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	5	0	5	0	0	0	0	0	**6**	**5**	**11**	**7**	0	1	**8**	24
07:30 AM	**4**	**10**	0	**14**	0	0	0	0	0	3	1	4	5	**1**	1	7	**25**
07:45 AM	0	8	0	8	0	0	0	0	0	2	2	4	4	0	**2**	6	18
08:00 AM	1	7	0	8	0	0	0	0	0	6	2	8	4	0	1	5	21
Total Volume	5	30	0	35	0	0	0	0	0	17	10	27	20	1	5	26	88
% App. Total	14.3	85.7	0		0	0	0		0	63	37		76.9	3.8	19.2		
PHF	.313	.750	.000	.625	.000	.000	.000	.000	.000	.708	.500	.614	.714	.250	.625	.813	.880

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Site Code : 05122894
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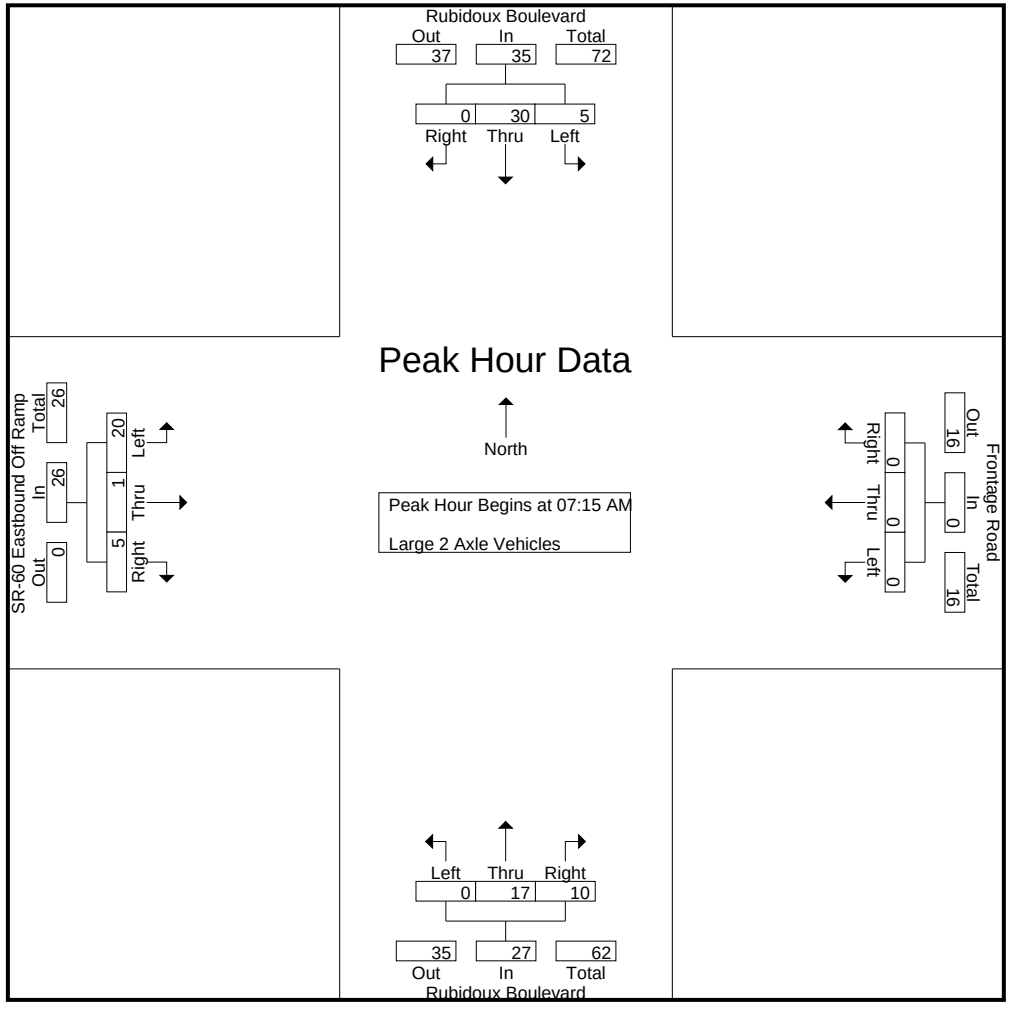

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	Rubidoux Boulevard Southbound				Frontage Road Westbound				Rubidoux Boulevard Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	5	0	5	0	0	0	0	0	**6**	**5**	**11**	**7**	0	1	**8**	
+15 mins.	**4**	**10**	0	**14**	0	0	0	0	0	3	1	4	5	**1**	1	7	
+30 mins.	0	8	0	8	0	0	0	0	0	2	2	4	4	0	**2**	6	
+45 mins.	1	7	0	8	0	0	0	0	0	6	2	8	4	0	1	5	
Total Volume	5	30	0	35	0	0	0	0	0	17	10	27	20	1	5	26	
% App. Total	14.3	85.7	0		0	0	0		0	63	37		76.9	3.8	19.2		
PHF	.313	.750	.000	.625	.000	.000	.000	.000	.000	.708	.500	.614	.714	.250	.625	.813	

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Weather: Clear

File Name : 22_JVY_Rub_60E Off AM
Site Code : 05122894
Start Date : 10/4/2022
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Groups Printed- 3 Axle Vehicles

	Rubidoux Boulevard Southbound					Frontage Road Westbound					Rubidoux Boulevard Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	3	1	0	0	4	0	0	0	0	0	0	1	0	0	1	3	0	0	0	3	0	8	8
06:45 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	2
Total	4	1	0	0	5	0	0	0	0	0	0	1	0	0	1	4	0	0	0	4	0	10	10
07:00 AM	2	0	0	0	2	0	0	0	0	0	0	1	0	0	1	1	0	1	0	2	0	5	5
07:15 AM	2	1	0	0	3	0	0	0	0	0	0	2	1	0	3	3	0	0	0	3	0	9	9
07:30 AM	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	9	0	1	1	10	1	12	13
07:45 AM	1	4	0	0	5	0	0	0	0	0	0	1	0	0	1	3	0	0	0	3	0	9	9
Total	6	5	0	0	11	0	0	0	0	0	0	5	1	0	6	16	0	2	1	18	1	35	36
08:00 AM	3	1	0	0	4	0	0	0	0	0	0	0	2	1	2	6	0	0	0	6	1	12	13
08:15 AM	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	11	0	0	0	11	0	13	13
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	7	0	0	0	7	1	9	10
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	12	1	0	0	13	0	17	17
Total	4	1	0	0	5	0	0	0	0	0	0	6	3	2	9	36	1	0	0	37	2	51	53
Grand Total	14	7	0	0	21	0	0	0	0	0	0	12	4	2	16	56	1	2	1	59	3	96	99
Apprch %	66.7	33.3	0			0	0	0			0	75	25			94.9	1.7	3.4					
Total %	14.6	7.3	0		21.9	0	0	0		0	0	12.5	4.2		16.7	58.3	1	2.1		61.5	3	97	

	Rubidoux Boulevard Southbound				Frontage Road Westbound				Rubidoux Boulevard Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	2	1	0	3	0	0	0	0	0	**2**	1	**3**	3	0	0	3	9
07:30 AM	1	0	0	1	0	0	0	0	0	1	0	1	**9**	0	**1**	**10**	**12**
07:45 AM	1	**4**	0	**5**	0	0	0	0	0	1	0	1	3	0	0	3	9
08:00 AM	**3**	1	0	4	0	0	0	0	0	0	**2**	2	6	0	0	6	12
Total Volume	7	6	0	13	0	0	0	0	0	4	3	7	21	0	1	22	42
% App. Total	53.8	46.2	0		0	0	0		0	57.1	42.9		95.5	0	4.5		
PHF	.583	.375	.000	.650	.000	.000	.000	.000	.000	.500	.375	.583	.583	.000	.250	.550	.875

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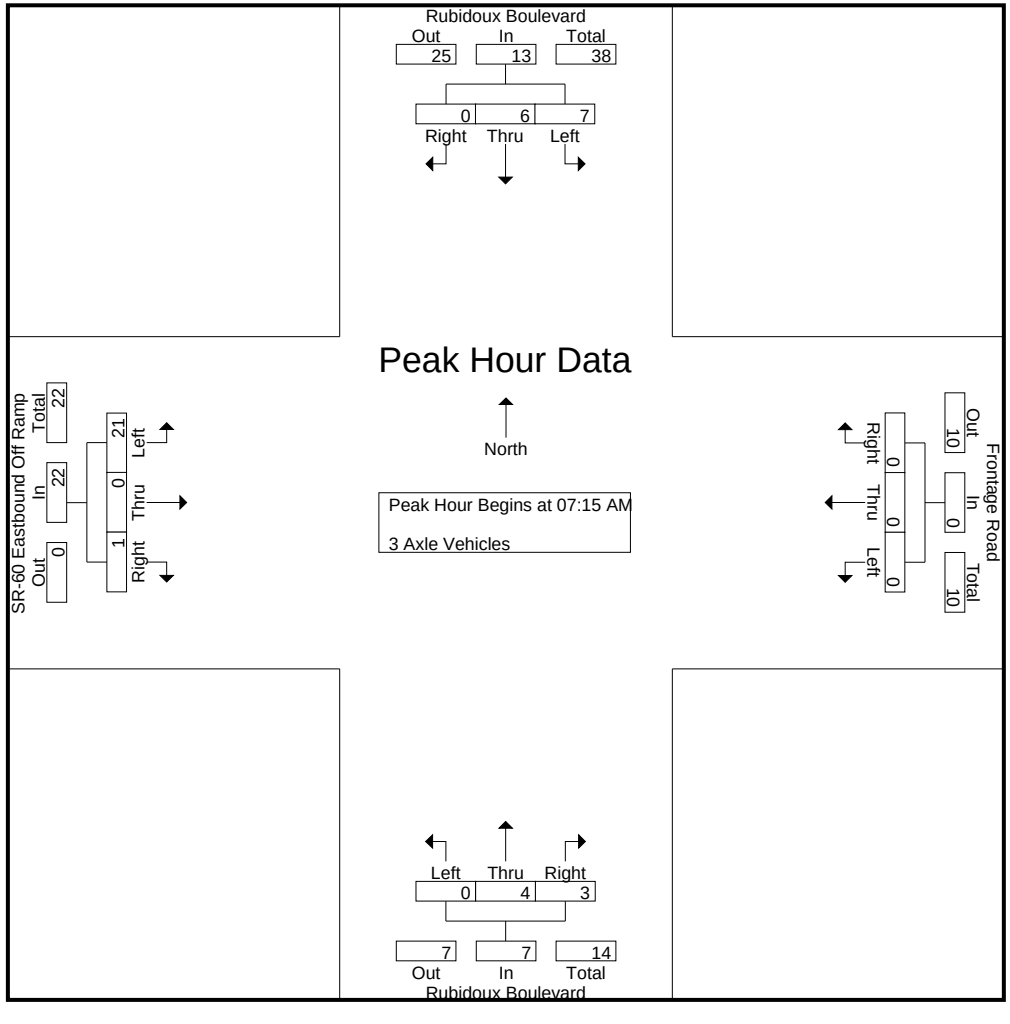
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 EB Off Ramp/Frontage Rd
Weather: Clear

File Name : 22_JVY_Rub_60E Off AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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File Name : 22_JVY_Rub_60E Off AM
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Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				Frontage Road Westbound				Rubidoux Boulevard Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	2	1	0	3	0	0	0	0	0	**2**	1	**3**	3	0	0	3	
+15 mins.	1	0	0	1	0	0	0	0	0	1	0	1	**9**	0	**1**	**10**	
+30 mins.	1	**4**	0	**5**	0	0	0	0	0	1	0	1	3	0	0	3	
+45 mins.	**3**	1	0	4	0	0	0	0	0	0	**2**	2	6	0	0	6	
Total Volume	7	6	0	13	0	0	0	0	0	4	3	7	21	0	1	22	
% App. Total	53.8	46.2	0		0	0	0		0	57.1	42.9		95.5	0	4.5		
PHF	.583	.375	.000	.650	.000	.000	.000	.000	.000	.500	.375	.583	.583	.000	.250	.550	

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Site Code : 05122894
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Groups Printed- 4+ Axle Trucks

	Rubidoux Boulevard Southbound					Frontage Road Westbound					Rubidoux Boulevard Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	3	3	0	0	6	0	0	0	0	0	0	1	2	2	3	10	0	0	0	10	2	19	21
06:45 AM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	11	1	0	0	12	0	17	17
Total	3	6	0	0	9	0	0	0	0	0	0	3	2	2	5	21	1	0	0	22	2	36	38
07:00 AM	2	1	0	0	3	0	0	0	0	0	0	0	1	0	1	10	0	0	0	10	0	14	14
07:15 AM	3	2	0	0	5	0	0	0	0	0	0	0	1	0	1	13	0	0	0	13	0	19	19
07:30 AM	6	1	0	0	7	0	0	1	1	1	0	0	0	0	0	7	0	0	0	7	1	15	16
07:45 AM	2	1	0	0	3	0	0	0	0	0	0	0	3	1	3	12	0	0	0	12	1	18	19
Total	13	5	0	0	18	0	0	1	1	1	0	0	5	1	5	42	0	0	0	42	2	66	68
08:00 AM	1	1	0	0	2	0	0	0	0	0	0	1	1	0	2	16	0	1	0	17	0	21	21
08:15 AM	2	2	0	0	4	0	0	0	0	0	0	2	0	0	2	13	2	1	1	16	1	22	23
08:30 AM	3	1	0	0	4	0	0	0	0	0	0	0	2	0	2	15	0	0	0	15	0	21	21
08:45 AM	0	2	0	0	2	0	0	0	0	0	0	0	2	0	2	11	0	0	0	11	0	15	15
Total	6	6	0	0	12	0	0	0	0	0	0	3	5	0	8	55	2	2	1	59	1	79	80
Grand Total	22	17	0	0	39	0	0	1	1	1	0	6	12	3	18	118	3	2	1	123	5	181	186
Apprch %	56.4	43.6	0			0	0	100			0	33.3	66.7			95.9	2.4	1.6					
Total %	12.2	9.4	0		21.5	0	0	0.6		0.6	0	3.3	6.6		9.9	65.2	1.7	1.1		68	2.7	97.3	

	Rubidoux Boulevard Southbound				Frontage Road Westbound				Rubidoux Boulevard Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	3	**2**	0	5	0	0	0	0	0	0	1	1	13	0	0	13	19
07:30 AM	**6**	1	0	**7**	0	0	**1**	**1**	0	0	0	0	7	0	0	7	15
07:45 AM	2	1	0	3	0	0	0	0	0	0	**3**	**3**	12	0	0	12	18
08:00 AM	1	1	0	2	0	0	0	0	0	**1**	1	2	**16**	0	**1**	**17**	**21**
Total Volume	12	5	0	17	0	0	1	1	0	1	5	6	48	0	1	49	73
% App. Total	70.6	29.4	0		0	0	100		0	16.7	83.3		98	0	2		
PHF	.500	.625	.000	.607	.000	.000	.250	.250	.000	.250	.417	.500	.750	.000	.250	.721	.869

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File Name : 22_JVY_Rub_60E Off AM
Site Code : 05122894
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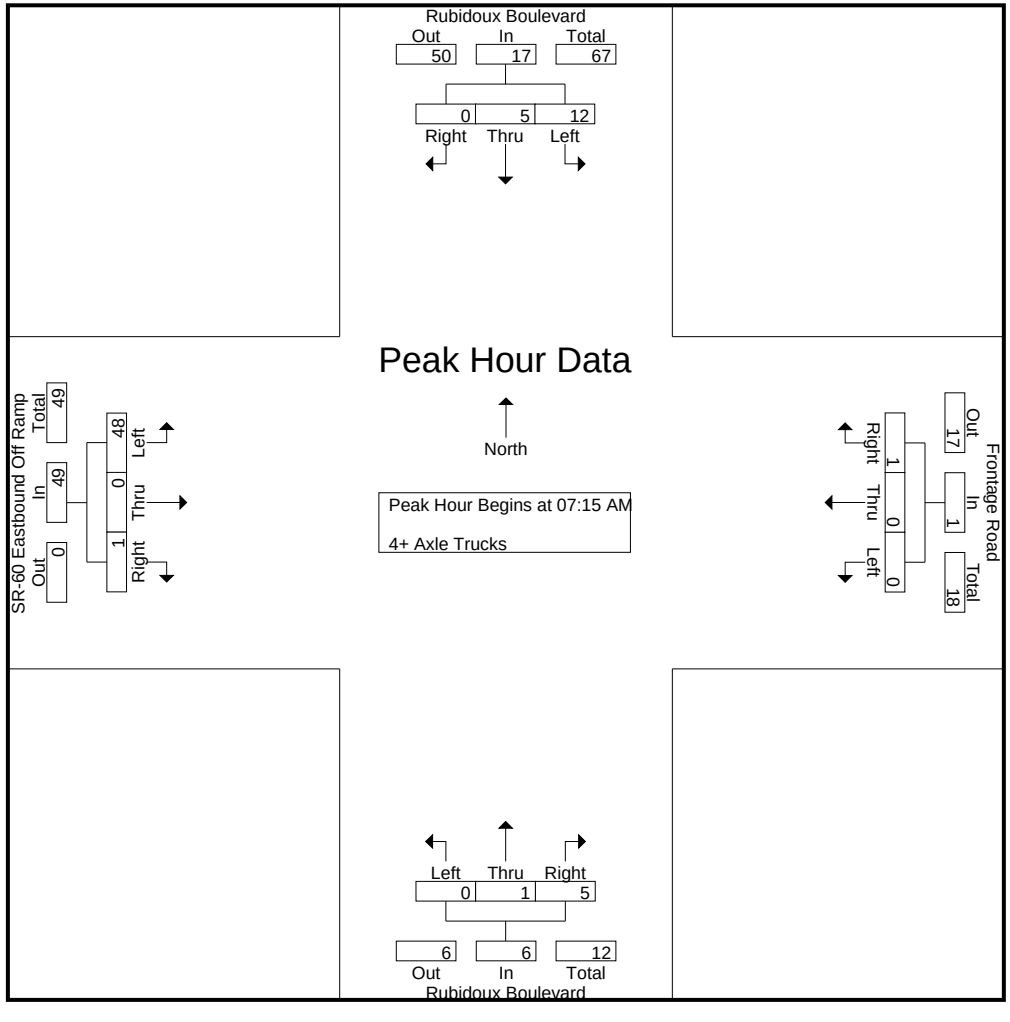

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	Rubidoux Boulevard Southbound				Frontage Road Westbound				Rubidoux Boulevard Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	3	**2**	0	5	0	0	0	0	0	0	1	1	13	0	0	13	
+15 mins.	**6**	1	0	**7**	0	0	**1**	**1**	0	0	0	0	7	0	0	7	
+30 mins.	2	1	0	3	0	0	0	0	0	0	**3**	**3**	12	0	0	12	
+45 mins.	1	1	0	2	0	0	0	0	0	**1**	1	2	**16**	0	**1**	**17**	
Total Volume	12	5	0	17	0	0	1	1	0	1	5	6	48	0	1	49	
% App. Total	70.6	29.4	0		0	0	100		0	16.7	83.3		98	0	2		
PHF	.500	.625	.000	.607	.000	.000	.250	.250	.000	.250	.417	.500	.750	.000	.250	.721	

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Start Date : 10/4/2022
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Rubidoux Boulevard Southbound					Frontage Road Westbound					Rubidoux Boulevard Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	31	189	0	0	220	4	0	0	0	4	0	131	86	22	217	85	10	66	24	161	46	602	648
03:45 PM	27	186	0	0	213	3	0	1	1	4	0	110	56	17	166	73	17	82	23	172	41	555	596
Total	58	375	0	0	433	7	0	1	1	8	0	241	142	39	383	158	27	148	47	333	87	1157	1244
04:00 PM	19	202	0	0	221	2	0	1	1	3	0	102	59	14	161	66	10	61	11	137	26	522	548
04:15 PM	27	175	1	1	203	1	0	1	1	2	0	114	58	10	172	79	7	56	27	142	39	519	558
04:30 PM	21	171	0	0	192	2	0	1	1	3	0	102	53	10	155	93	10	65	19	168	30	518	548
04:45 PM	18	181	0	0	199	1	0	0	0	1	0	110	55	18	165	101	10	80	23	191	41	556	597
Total	85	729	1	1	815	6	0	3	3	9	0	428	225	52	653	339	37	262	80	638	136	2115	2251
05:00 PM	30	207	0	0	237	3	0	1	1	4	0	120	50	7	170	80	3	74	18	157	26	568	594
05:15 PM	16	199	0	0	215	2	0	1	1	3	0	105	63	10	168	74	13	79	20	166	31	552	583
05:30 PM	16	187	0	0	203	5	0	0	0	5	0	120	60	16	180	99	7	102	25	208	41	596	637
05:45 PM	20	194	0	0	214	2	0	0	0	2	0	95	71	13	166	78	10	104	25	192	38	574	612
Total	82	787	0	0	869	12	0	2	2	14	0	440	244	46	684	331	33	359	88	723	136	2290	2426
Grand Total	225	1891	1	1	2117	25	0	6	6	31	0	1109	611	137	1720	828	97	769	215	1694	359	5562	5921
Apprch %	10.6	89.3	0			80.6	0	19.4			0	64.5	35.5			48.9	5.7	45.4					
Total %	4	34	0		38.1	0.4	0	0.1		0.6	0	19.9	11		30.9	14.9	1.7	13.8		30.5	6.1	93.9	
Passenger Vehicles	206	1838	1		2046	24	0	5		34	0	1049	592		1775	604	91	754		1655	0	0	5510
% Passenger Vehicles	91.6	97.2	100	100	96.6	96	0	83.3	83.3	91.9	0	94.6	96.9	97.8	95.6	72.9	93.8	98	95.8	86.7	0	0	93.1
Large 2 Axle Vehicles	8	32	0		40	0	0	0		0	0	38	14		55	60	0	13		80	0	0	175
% Large 2 Axle Vehicles	3.6	1.7	0	0	1.9	0	0	0	0	0	0	3.4	2.3	2.2	3	7.2	0	1.7	3.3	4.2	0	0	3
3 Axle Vehicles	1	14	0		15	1	0	1		3	0	20	2		22	51	1	2		56	0	0	96
% 3 Axle Vehicles	0.4	0.7	0	0	0.7	4	0	16.7	16.7	8.1	0	1.8	0.3	0	1.2	6.2	1	0.3	0.9	2.9	0	0	1.6
4+ Axle Trucks	10	7	0		17	0	0	0		0	0	2	3		5	113	5	0		118	0	0	140
% 4+ Axle Trucks	4.4	0.4	0	0	0.8	0	0	0	0	0	0	0.2	0.5	0	0.3	13.6	5.2	0	0	6.2	0	0	2.4

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Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				Frontage Road Westbound				Rubidoux Boulevard Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**30**	**207**	0	**237**	3	0	**1**	4	0	**120**	50	170	80	3	74	157	568
05:15 PM	16	199	0	215	2	0	1	3	0	105	63	168	74	**13**	79	166	552
05:30 PM	16	187	0	203	**5**	0	0	**5**	0	120	60	**180**	**99**	7	102	**208**	**596**
05:45 PM	20	194	0	214	2	0	0	2	0	95	**71**	166	78	10	**104**	192	574
Total Volume	82	787	0	869	12	0	2	14	0	440	244	684	331	33	359	723	2290
% App. Total	9.4	90.6	0		85.7	0	14.3		0	64.3	35.7		45.8	4.6	49.7		
PHF	.683	.950	.000	.917	.600	.000	.500	.700	.000	.917	.859	.950	.836	.635	.863	.869	.961

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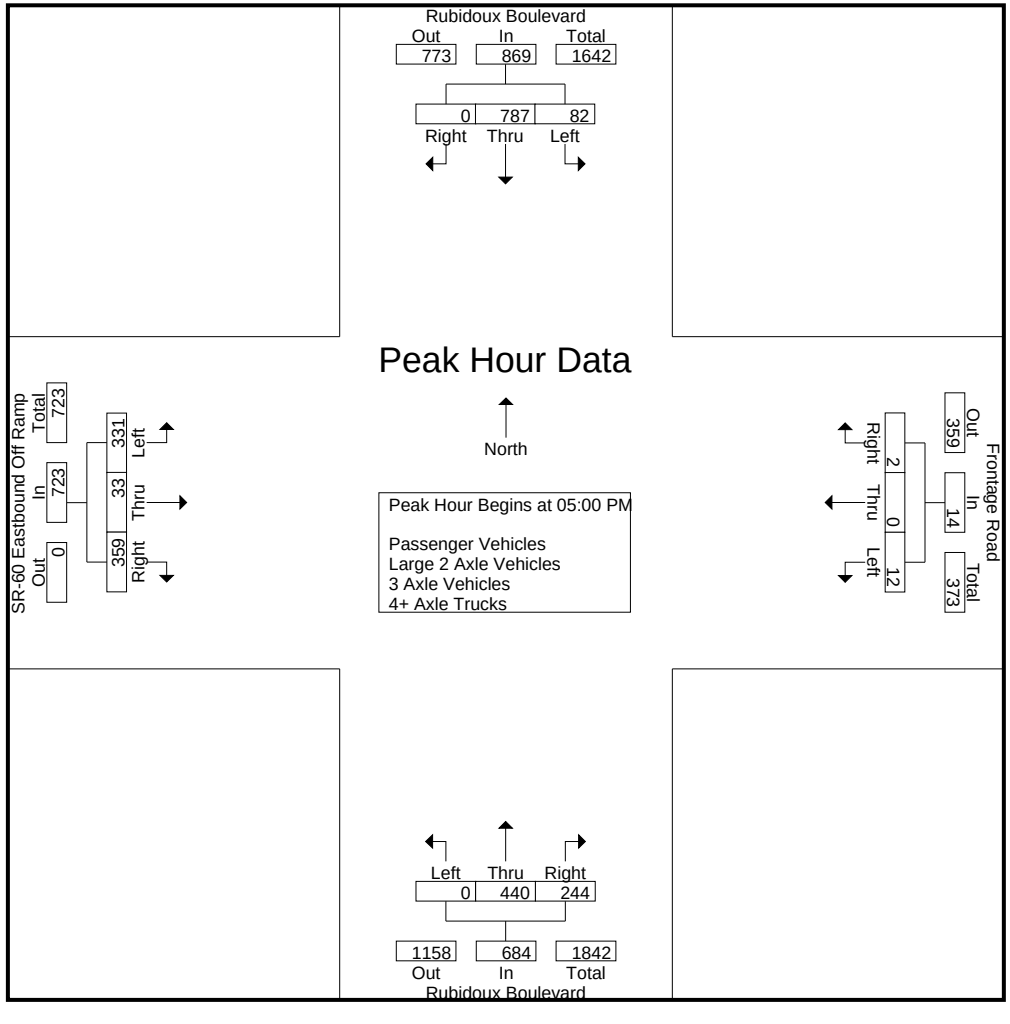

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Page No : 4

	Rubidoux Boulevard Southbound				Frontage Road Westbound				Rubidoux Boulevard Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				03:30 PM				05:00 PM				
+0 mins.	**30**	**207**	0	**237**	3	0	**1**	4	0	**131**	**86**	**217**	80	3	74	157	
+15 mins.	16	199	0	215	2	0	1	3	0	110	56	166	74	**13**	79	166	
+30 mins.	16	187	0	203	**5**	0	0	**5**	0	102	59	161	**99**	7	102	**208**	
+45 mins.	20	194	0	214	2	0	0	2	0	114	58	172	78	10	**104**	192	
Total Volume	82	787	0	869	12	0	2	14	0	457	259	716	331	33	359	723	
% App. Total	9.4	90.6	0		85.7	0	14.3		0	63.8	36.2		45.8	4.6	49.7		
PHF	.683	.950	.000	.917	.600	.000	.500	.700	.000	.872	.753	.825	.836	.635	.863	.869	

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Groups Printed- Passenger Vehicles

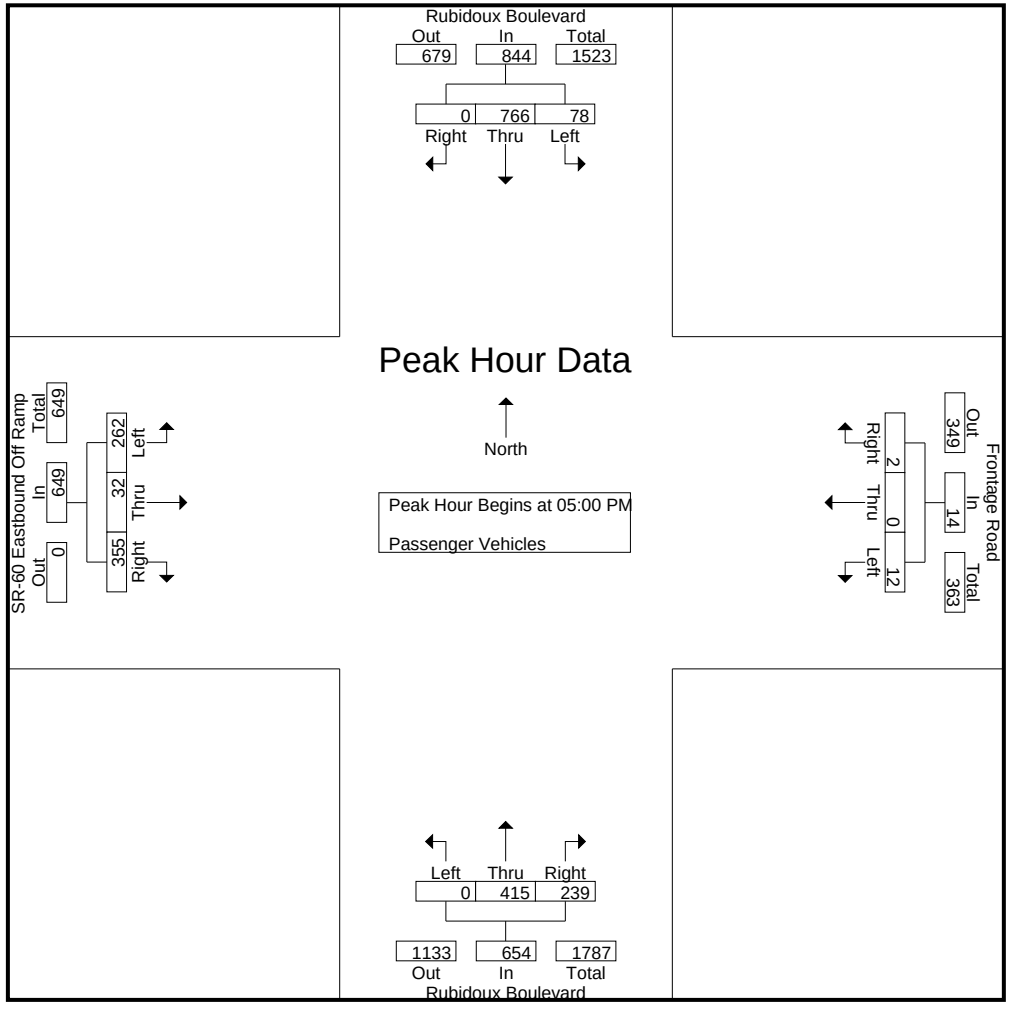
	Rubidoux Boulevard Southbound					Frontage Road Westbound					Rubidoux Boulevard Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	27	182	0	0	209	4	0	0	0	4	0	126	81	22	207	46	10	64	24	120	46	540	586
03:45 PM	23	183	0	0	206	2	0	0	0	2	0	104	53	16	157	45	16	78	20	139	36	504	540
Total	50	365	0	0	415	6	0	0	0	6	0	230	134	38	364	91	26	142	44	259	82	1044	1126
04:00 PM	17	197	0	0	214	2	0	1	1	3	0	96	56	14	152	55	8	60	11	123	26	492	518
04:15 PM	24	168	1	1	193	1	0	1	1	2	0	104	56	10	160	63	6	54	26	123	38	478	516
04:30 PM	20	163	0	0	183	2	0	1	1	3	0	98	53	10	151	56	10	64	18	130	29	467	496
04:45 PM	17	179	0	0	196	1	0	0	0	1	0	106	54	18	160	77	9	79	23	165	41	522	563
Total	78	707	1	1	786	6	0	3	3	9	0	404	219	52	623	251	33	257	78	541	134	1959	2093
05:00 PM	28	203	0	0	231	3	0	1	1	4	0	111	50	7	161	63	3	74	18	140	26	536	562
05:15 PM	16	193	0	0	209	2	0	1	1	3	0	100	62	9	162	58	13	78	19	149	29	523	552
05:30 PM	15	185	0	0	200	5	0	0	0	5	0	114	59	16	173	84	7	101	24	192	40	570	610
05:45 PM	19	185	0	0	204	2	0	0	0	2	0	90	68	12	158	57	9	102	23	168	35	532	567
Total	78	766	0	0	844	12	0	2	2	14	0	415	239	44	654	262	32	355	84	649	130	2161	2291
Grand Total	206	1838	1	1	2045	24	0	5	5	29	0	1049	592	134	1641	604	91	754	206	1449	346	5164	5510
Apprch %	10.1	89.9	0			82.8	0	17.2			0	63.9	36.1			41.7	6.3	52					
Total %	4	35.6	0		39.6	0.5	0	0.1		0.6	0	20.3	11.5		31.8	11.7	1.8	14.6		28.1	6.3	93.7	

	Rubidoux Boulevard Southbound				Frontage Road Westbound				Rubidoux Boulevard Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**28**	**203**	0	**231**	3	0	**1**	4	0	111	50	161	63	3	74	140	536
05:15 PM	16	193	0	209	2	0	1	3	0	100	62	162	58	**13**	78	149	523
05:30 PM	15	185	0	200	**5**	0	0	**5**	0	**114**	59	**173**	**84**	7	101	**192**	**570**
05:45 PM	19	185	0	204	2	0	0	2	0	90	**68**	158	57	9	**102**	168	532
Total Volume	78	766	0	844	12	0	2	14	0	415	239	654	262	32	355	649	2161
% App. Total	9.2	90.8	0		85.7	0	14.3		0	63.5	36.5		40.4	4.9	54.7		
PHF	.696	.943	.000	.913	.600	.000	.500	.700	.000	.910	.879	.945	.780	.615	.870	.845	.948

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 EB Off Ramp/Frontage Rd
Weather: Clear

File Name : 22_JVY_Rub_60E Off PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 EB Off Ramp/Frontage Rd
Weather: Clear

File Name : 22_JVY_Rub_60E Off PM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				Frontage Road Westbound				Rubidoux Boulevard Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	**28**	**203**	0	**231**	3	0	**1**	4	0	111	50	161	63	3	74	140	
+15 mins.	16	193	0	209	2	0	1	3	0	100	62	162	58	**13**	78	149	
+30 mins.	15	185	0	200	**5**	0	0	**5**	0	**114**	59	**173**	**84**	7	101	**192**	
+45 mins.	19	185	0	204	2	0	0	2	0	90	**68**	158	57	9	**102**	168	
Total Volume	78	766	0	844	12	0	2	14	0	415	239	654	262	32	355	649	
% App. Total	9.2	90.8	0		85.7	0	14.3		0	63.5	36.5		40.4	4.9	54.7		
PHF	.696	.943	.000	.913	.600	.000	.500	.700	.000	.910	.879	.945	.780	.615	.870	.845	

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 EB Off Ramp/Frontage Rd
Weather: Clear

File Name : 22_JVY_Rub_60E Off PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Rubidoux Boulevard Southbound					Frontage Road Westbound					Rubidoux Boulevard Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	2	3	0	0	5	0	0	0	0	0	0	4	3	0	7	13	0	2	0	15	0	27	27
03:45 PM	1	2	0	0	3	0	0	0	0	0	0	5	2	1	7	5	0	4	3	9	4	19	23
Total	3	5	0	0	8	0	0	0	0	0	0	9	5	1	14	18	0	6	3	24	4	46	50
04:00 PM	1	5	0	0	6	0	0	0	0	0	0	5	2	0	7	2	0	1	0	3	0	16	16
04:15 PM	1	5	0	0	6	0	0	0	0	0	0	8	1	0	9	6	0	1	0	7	0	22	22
04:30 PM	0	4	0	0	4	0	0	0	0	0	0	3	0	0	3	12	0	1	1	13	1	20	21
04:45 PM	1	0	0	0	1	0	0	0	0	0	0	2	1	0	3	7	0	1	0	8	0	12	12
Total	3	14	0	0	17	0	0	0	0	0	0	18	4	0	22	27	0	4	1	31	1	70	71
05:00 PM	1	0	0	0	1	0	0	0	0	0	0	3	0	0	3	3	0	0	0	3	0	7	7
05:15 PM	0	5	0	0	5	0	0	0	0	0	0	2	1	1	3	4	0	1	1	5	2	13	15
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	0	4	4
05:45 PM	1	7	0	0	8	0	0	0	0	0	0	5	3	1	8	7	0	2	2	9	3	25	28
Total	2	13	0	0	15	0	0	0	0	0	0	11	5	2	16	15	0	3	3	18	5	49	54
Grand Total	8	32	0	0	40	0	0	0	0	0	0	38	14	3	52	60	0	13	7	73	10	165	175
Apprch %	20	80	0			0	0	0			0	73.1	26.9			82.2	0	17.8					
Total %	4.8	19.4	0		24.2	0	0	0		0	0	23	8.5		31.5	36.4	0	7.9		44.2	5.7	94.3	

	Rubidoux Boulevard Southbound				Frontage Road Westbound				Rubidoux Boulevard Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**1**	0	0	1	0	0	0	0	0	3	0	3	3	0	0	3	7
05:15 PM	0	5	0	5	0	0	0	0	0	2	1	3	4	0	1	5	13
05:30 PM	0	1	0	1	0	0	0	0	0	1	1	2	1	0	0	1	4
05:45 PM	1	**7**	0	**8**	0	0	0	0	0	**5**	**3**	**8**	**7**	0	**2**	**9**	**25**
Total Volume	2	13	0	15	0	0	0	0	0	11	5	16	15	0	3	18	49
% App. Total	13.3	86.7	0		0	0	0		0	68.8	31.2		83.3	0	16.7		
PHF	.500	.464	.000	.469	.000	.000	.000	.000	.000	.550	.417	.500	.536	.000	.375	.500	.490

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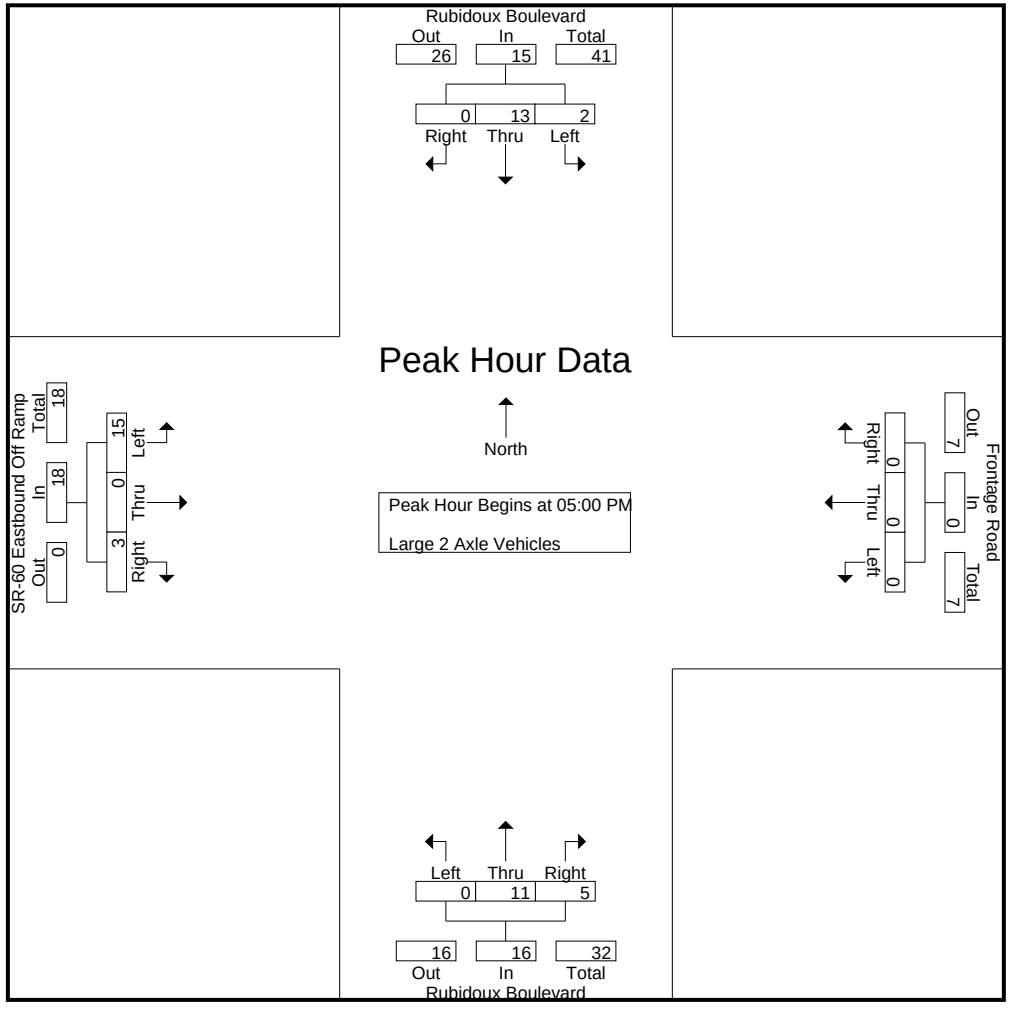
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 EB Off Ramp/Frontage Rd
Weather: Clear

File Name : 22_JVY_Rub_60E Off PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Rubidoux Boulevard
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Weather: Clear

File Name : 22_JVY_Rub_60E Off PM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				Frontage Road Westbound				Rubidoux Boulevard Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	**1**	0	0	1	0	0	0	0	0	3	0	3	3	0	0	3	
+15 mins.	0	5	0	5	0	0	0	0	0	2	1	3	4	0	1	5	
+30 mins.	0	1	0	1	0	0	0	0	0	1	1	2	1	0	0	1	
+45 mins.	1	**7**	0	**8**	0	0	0	0	0	**5**	**3**	**8**	**7**	0	**2**	**9**	
Total Volume	2	13	0	15	0	0	0	0	0	11	5	16	15	0	3	18	
% App. Total	13.3	86.7	0		0	0	0		0	68.8	31.2		83.3	0	16.7		
PHF	.500	.464	.000	.469	.000	.000	.000	.000	.000	.550	.417	.500	.536	.000	.375	.500	

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 EB Off Ramp/Frontage Rd
Weather: Clear

File Name : 22_JVY_Rub_60E Off PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Rubidoux Boulevard Southbound					Frontage Road Westbound					Rubidoux Boulevard Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	3	0	0	3	0	0	0	0	0	0	1	1	0	2	6	0	0	0	6	0	11	11
03:45 PM	0	1	0	0	1	1	0	1	1	2	0	1	0	0	1	7	0	0	0	7	1	11	12
Total	0	4	0	0	4	1	0	1	1	2	0	2	1	0	3	13	0	0	0	13	1	22	23
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	0	0	2	0	3	3
04:15 PM	1	0	0	0	1	0	0	0	0	0	0	2	1	0	3	2	0	1	1	3	1	7	8
04:30 PM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	9	0	0	0	9	0	13	13
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	6	0	0	0	6	0	9	9
Total	1	4	0	0	5	0	0	0	0	0	0	6	1	0	7	18	1	1	1	20	1	32	33
05:00 PM	0	4	0	0	4	0	0	0	0	0	0	6	0	0	6	5	0	0	0	5	0	15	15
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	4	0	0	0	4	0	7	7
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	5	0	1	1	6	1	10	11
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	6	0	0	0	6	0	7	7
Total	0	6	0	0	6	0	0	0	0	0	0	12	0	0	12	20	0	1	1	21	1	39	40
Grand Total	1	14	0	0	15	1	0	1	1	2	0	20	2	0	22	51	1	2	2	54	3	93	96
Apprch %	6.7	93.3	0			50	0	50			0	90.9	9.1			94.4	1.9	3.7					
Total %	1.1	15.1	0		16.1	1.1	0	1.1		2.2	0	21.5	2.2		23.7	54.8	1.1	2.2		58.1	3.1	96.9	

	Rubidoux Boulevard Southbound				Frontage Road Westbound				Rubidoux Boulevard Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	**4**	0	**4**	0	0	0	0	0	**6**	0	**6**	5	0	0	5	**15**
05:15 PM	0	0	0	0	0	0	0	0	0	3	0	3	4	0	0	4	7
05:30 PM	0	1	0	1	0	0	0	0	0	3	0	3	5	0	**1**	**6**	10
05:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	**6**	0	0	6	7
Total Volume	0	6	0	6	0	0	0	0	0	12	0	12	20	0	1	21	39
% App. Total	0	100	0		0	0	0		0	100	0		95.2	0	4.8		
PHF	.000	.375	.000	.375	.000	.000	.000	.000	.000	.500	.000	.500	.833	.000	.250	.875	.650

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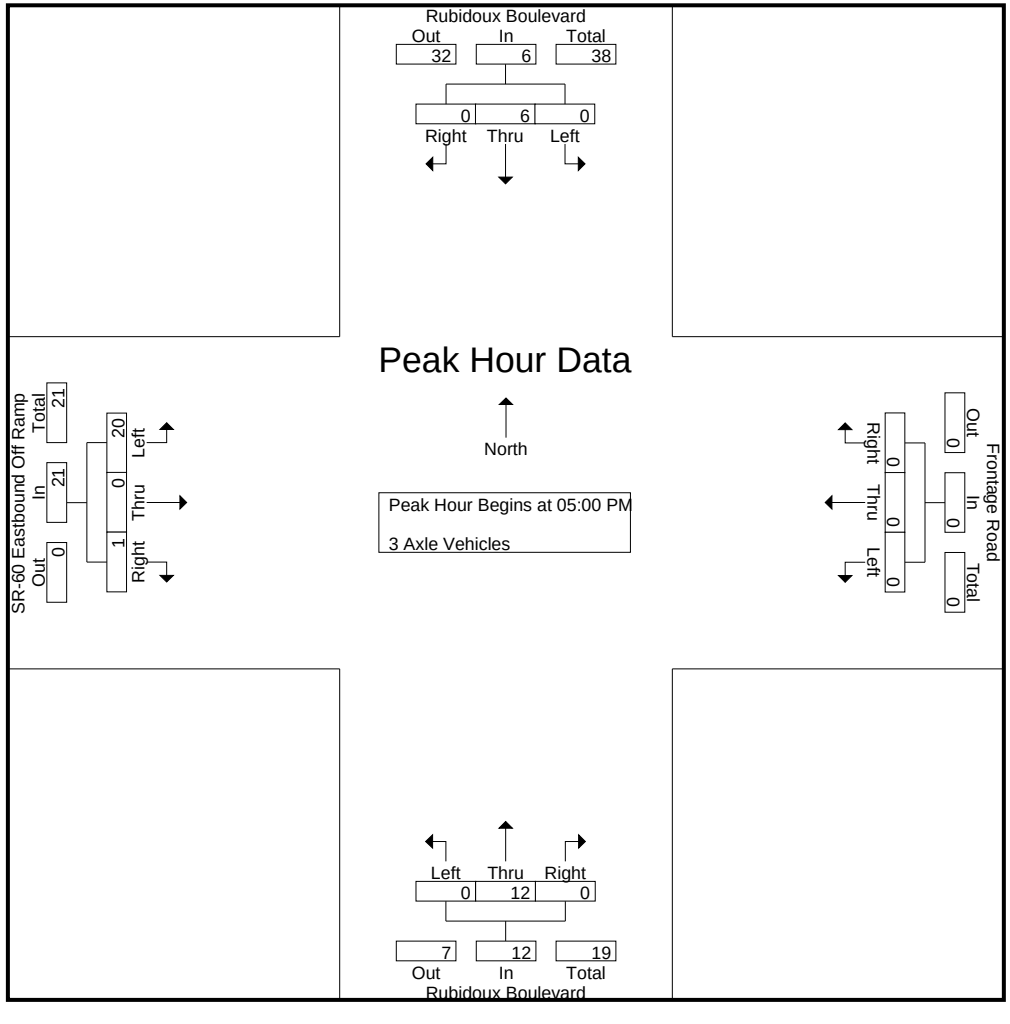
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 EB Off Ramp/Frontage Rd
Weather: Clear

File Name : 22_JVY_Rub_60E Off PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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File Name : 22_JVY_Rub_60E Off PM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				Frontage Road Westbound				Rubidoux Boulevard Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	**4**	0	**4**	0	0	0	0	0	**6**	0	**6**	5	0	0	5	
+15 mins.	0	0	0	0	0	0	0	0	0	3	0	3	4	0	0	4	
+30 mins.	0	1	0	1	0	0	0	0	0	3	0	3	5	0	**1**	**6**	
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	**6**	0	0	6	
Total Volume	0	6	0	6	0	0	0	0	0	12	0	12	20	0	1	21	
% App. Total	0	100	0		0	0	0		0	100	0		95.2	0	4.8		
PHF	.000	.375	.000	.375	.000	.000	.000	.000	.000	.500	.000	.500	.833	.000	.250	.875	

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Weather: Clear

File Name : 22_JVY_Rub_60E Off PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Rubidoux Boulevard Southbound					Frontage Road Westbound					Rubidoux Boulevard Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	2	1	0	0	3	0	0	0	0	0	0	0	1	0	1	20	0	0	0	20	0	24	24
03:45 PM	3	0	0	0	3	0	0	0	0	0	0	0	1	0	1	16	1	0	0	17	0	21	21
Total	5	1	0	0	6	0	0	0	0	0	0	0	2	0	2	36	1	0	0	37	0	45	45
04:00 PM	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	8	1	0	0	9	0	11	11
04:15 PM	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	8	1	0	0	9	0	12	12
04:30 PM	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	16	0	0	0	16	0	18	18
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	11	1	0	0	12	0	13	13
Total	3	4	0	0	7	0	0	0	0	0	0	0	1	0	1	43	3	0	0	46	0	54	54
05:00 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	9	0	0	0	9	0	10	10
05:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	8	0	0	0	8	0	9	9
05:30 PM	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2	9	0	0	0	9	0	12	12
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	8	1	0	0	9	0	10	10
Total	2	2	0	0	4	0	0	0	0	0	0	2	0	0	2	34	1	0	0	35	0	41	41
Grand Total	10	7	0	0	17	0	0	0	0	0	0	2	3	0	5	113	5	0	0	118	0	140	140
Apprch %	58.8	41.2	0			0	0	0			0	40	60			95.8	4.2	0					
Total %	7.1	5	0		12.1	0	0	0		0	0	1.4	2.1		3.6	80.7	3.6	0		84.3	0	100	

	Rubidoux Boulevard Southbound				Frontage Road Westbound				Rubidoux Boulevard Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**1**	0	0	**1**	0	0	0	0	0	0	0	0	**9**	0	0	**9**	10
05:15 PM	0	**1**	0	1	0	0	0	0	0	0	0	0	8	0	0	8	9
05:30 PM	1	0	0	1	0	0	0	0	0	**2**	0	**2**	9	0	0	9	**12**
05:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	8	**1**	0	9	10
Total Volume	2	2	0	4	0	0	0	0	0	2	0	2	34	1	0	35	41
% App. Total	50	50	0		0	0	0		0	100	0		97.1	2.9	0		
PHF	.500	.500	.000	1.00	.000	.000	.000	.000	.000	.250	.000	.250	.944	.250	.000	.972	.854

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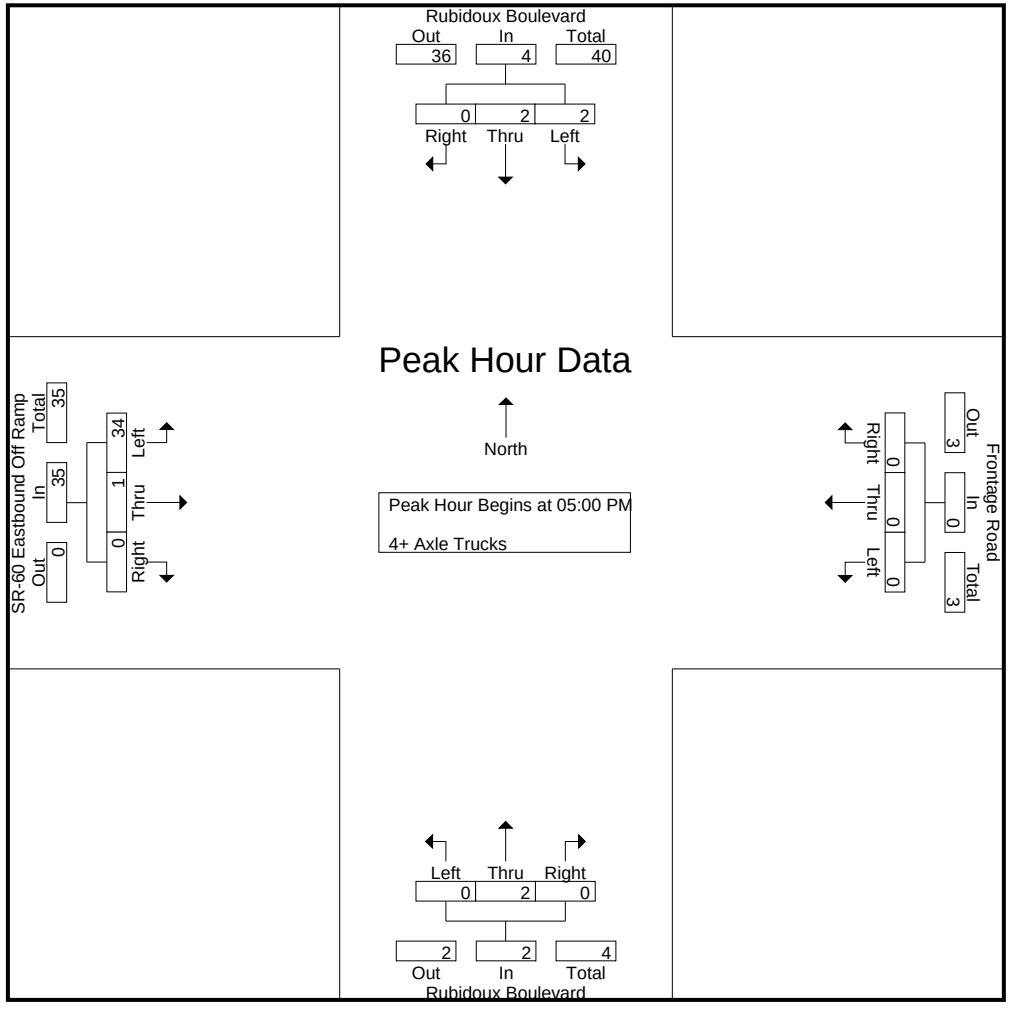
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 EB Off Ramp/Frontage Rd
Weather: Clear

File Name : 22_JVY_Rub_60E Off PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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	Rubidoux Boulevard Southbound				Frontage Road Westbound				Rubidoux Boulevard Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	**1**	0	0	**1**	0	0	0	0	0	0	0	0	**9**	0	0	**9**	
+15 mins.	0	**1**	0	1	0	0	0	0	0	0	0	0	8	0	0	8	
+30 mins.	1	0	0	1	0	0	0	0	0	**2**	0	**2**	9	0	0	9	
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	8	**1**	0	9	
Total Volume	2	2	0	4	0	0	0	0	0	2	0	2	34	1	0	35	
% App. Total	50	50	0		0	0	0		0	100	0		97.1	2.9	0		
PHF	.500	.500	.000	1.000	.000	.000	.000	.000	.000	.250	.000	.250	.944	.250	.000	.972	

Location: Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 EB Off Ramp/Frontage Rd

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Rubidoux Boulevard	East Leg Frontage Road	South Leg Rubidoux Boulevard	West Leg SR-60 EB Off Ramp	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	1	0	1	2
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	1	0	0	1
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	1	3

	North Leg Rubidoux Boulevard	East Leg Frontage Road	South Leg Rubidoux Boulevard	West Leg SR-60 EB Off Ramp	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	1	1
4:00 PM	0	0	0	0	0
4:15 PM	0	0	1	1	2
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	1	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	2	2
5:45 PM	0	0	0	1	1
TOTAL VOLUMES:	0	0	1	6	7

Location: Jurupa Valley
N/S: Rubidoux Boulevard
E/W: SR-60 EB Off Ramp/Frontage Rd

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Rubidoux Boulevard			Westbound Frontage Road			Northbound Rubidoux Boulevard			Eastbound SR-60 EB Off Ramp			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:	0	1	0	0	0	0	0	3	0	0	0	0	4

	Southbound Rubidoux Boulevard			Westbound Frontage Road			Northbound Rubidoux Boulevard			Eastbound SR-60 EB Off Ramp			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	1	0	0	0	0	1	0	0	0	2
TOTAL VOLUMES:	0	2	0	1	0	0	0	2	1	0	0	0	6

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 34th Street
Weather: Clear

File Name : 23_JVY_Rub_34th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Rubidoux Boulevard Southbound					34th Street Westbound					Rubidoux Boulevard Northbound					34th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	11	103	10	6	124	1	2	27	15	30	1	183	2	1	186	38	1	1	1	40	23	380	403
06:45 AM	9	102	15	1	126	0	2	31	26	33	1	177	2	0	180	19	8	3	2	30	29	369	398
Total	20	205	25	7	250	1	4	58	41	63	2	360	4	1	366	57	9	4	3	70	52	749	801
07:00 AM	12	92	13	0	117	4	3	22	18	29	0	164	4	1	168	43	3	4	2	50	21	364	385
07:15 AM	10	150	9	3	169	1	5	37	17	43	5	200	4	0	209	36	3	3	1	42	21	463	484
07:30 AM	11	174	10	1	195	8	5	36	21	49	4	201	8	0	213	39	11	7	3	57	25	514	539
07:45 AM	14	200	10	1	224	11	3	18	7	32	13	201	29	4	243	43	9	6	2	58	14	557	571
Total	47	616	42	5	705	24	16	113	63	153	22	766	45	5	833	161	26	20	8	207	81	1898	1979
08:00 AM	13	171	17	2	201	6	6	25	17	37	8	152	15	2	175	32	7	4	2	43	23	456	479
08:15 AM	6	135	12	3	153	7	6	21	14	34	3	146	11	1	160	24	5	3	3	32	21	379	400
08:30 AM	11	116	10	0	137	3	15	26	11	44	4	160	9	2	173	34	13	4	1	51	14	405	419
08:45 AM	9	133	14	2	156	3	9	11	4	23	4	164	4	1	172	30	10	5	2	45	9	396	405
Total	39	555	53	7	647	19	36	83	46	138	19	622	39	6	680	120	35	16	8	171	67	1636	1703
Grand Total	106	1376	120	19	1602	44	56	254	150	354	43	1748	88	12	1879	338	70	40	19	448	200	4283	4483
Apprch %	6.6	85.9	7.5			12.4	15.8	71.8			2.3	93	4.7			75.4	15.6	8.9					
Total %	2.5	32.1	2.8		37.4	1	1.3	5.9		8.3	1	40.8	2.1		43.9	7.9	1.6	0.9		10.5	4.5	95.5	
Passenger Vehicles	101	1292	116		1527	40	55	250		492	42	1663	85		1802	328	68	39		454	0	0	4275
% Passenger Vehicles	95.3	93.9	96.7	94.7	94.2	90.9	98.2	98.4	98	97.6	97.7	95.1	96.6	100	95.3	97	97.1	97.5	100	97.2	0	0	95.4
Large 2 Axle Vehicles	5	59	2		66	4	1	3		11	1	57	3		61	7	1	1		9	0	0	147
% Large 2 Axle Vehicles	4.7	4.3	1.7	0	4.1	9.1	1.8	1.2	2	2.2	2.3	3.3	3.4	0	3.2	2.1	1.4	2.5	0	1.9	0	0	3.3
3 Axle Vehicles	0	9	1		11	0	0	1		1	0	11	0		11	3	1	0		4	0	0	27
% 3 Axle Vehicles	0	0.7	0.8	5.3	0.7	0	0	0.4	0	0.2	0	0.6	0	0	0.6	0.9	1.4	0	0	0.9	0	0	0.6
4+ Axle Trucks	0	16	1		17	0	0	0		0	0	17	0		17	0	0	0		0	0	0	34
% 4+ Axle Trucks	0	1.2	0.8	0	1	0	0	0	0	0	0	1	0	0	0.9	0	0	0	0	0	0	0	0.8

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 34th Street
Weather: Clear

File Name : 23_JVY_Rub_34th AM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				34th Street Westbound				Rubidoux Boulevard Northbound				34th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	10	150	9	169	1	5	**37**	43	5	200	4	209	36	3	3	42	463
07:30 AM	11	174	10	195	8	5	36	**49**	4	**201**	8	213	39	**11**	**7**	57	514
07:45 AM	**14**	**200**	10	**224**	**11**	3	18	32	**13**	201	**29**	**243**	**43**	9	6	**58**	**557**
08:00 AM	13	171	**17**	201	6	**6**	25	37	8	152	15	175	32	7	4	43	456
Total Volume	48	695	46	789	26	19	116	161	30	754	56	840	150	30	20	200	1990
% App. Total	6.1	88.1	5.8		16.1	11.8	72		3.6	89.8	6.7		75	15	10		
PHF	.857	.869	.676	.881	.591	.792	.784	.821	.577	.938	.483	.864	.872	.682	.714	.862	.893

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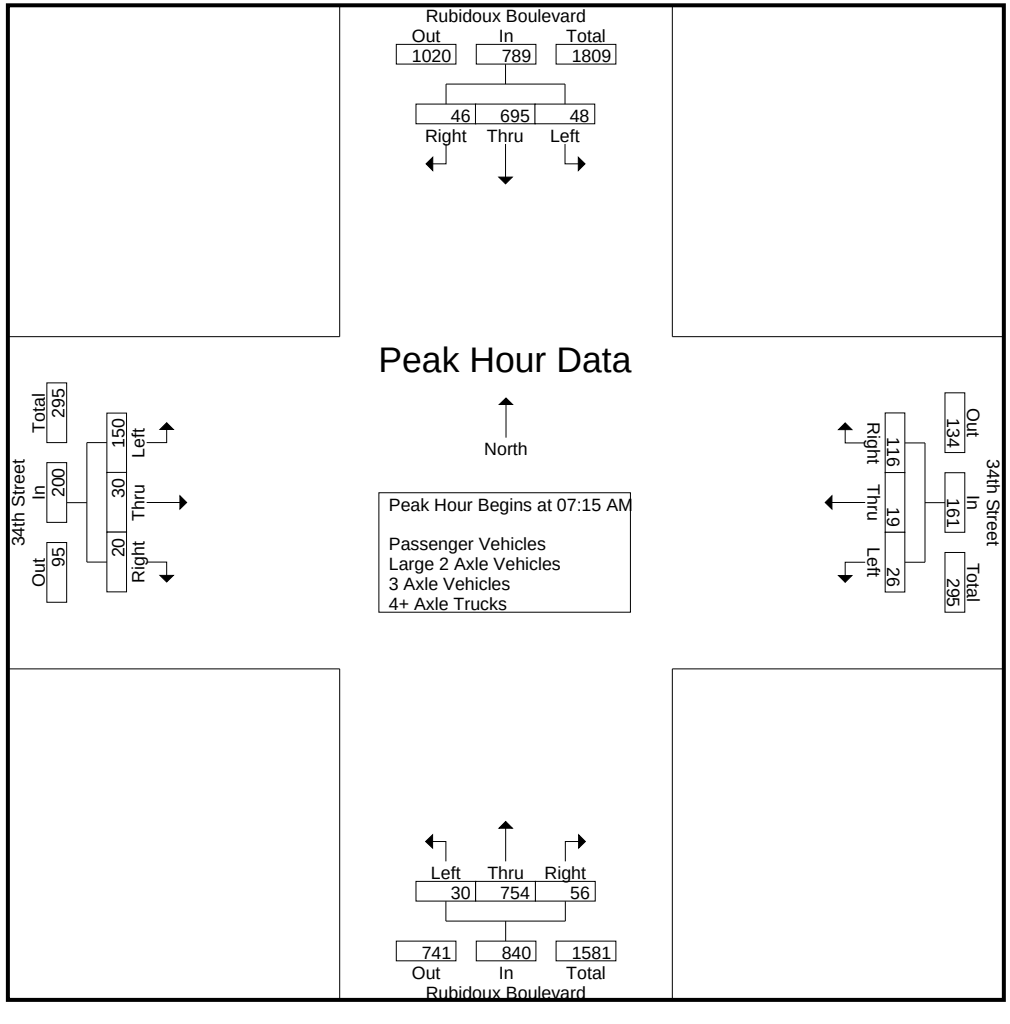
File Name : 23_JVY_Rub_34th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 3



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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 34th Street
Weather: Clear

File Name : 23_JVY_Rub_34th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 4

	Rubidoux Boulevard Southbound				34th Street Westbound				Rubidoux Boulevard Northbound				34th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:00 AM				
+0 mins.	10	150	9	169	1	5	**37**	43	5	200	4	209	**43**	3	4	50	
+15 mins.	11	174	10	195	8	5	36	**49**	4	**201**	8	213	36	3	3	42	
+30 mins.	**14**	**200**	10	**224**	**11**	3	18	32	**13**	201	**29**	**243**	39	**11**	**7**	57	
+45 mins.	13	171	**17**	201	6	**6**	25	37	8	152	15	175	43	9	6	**58**	
Total Volume	48	695	46	789	26	19	116	161	30	754	56	840	161	26	20	207	
% App. Total	6.1	88.1	5.8		16.1	11.8	72		3.6	89.8	6.7		77.8	12.6	9.7		
PHF	.857	.869	.676	.881	.591	.792	.784	.821	.577	.938	.483	.864	.936	.591	.714	.892	

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File Name : 23_JVY_Rub_34th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Rubidoux Boulevard Southbound					34th Street Westbound					Rubidoux Boulevard Northbound					34th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	11	95	10	6	116	1	2	27	15	30	1	173	1	1	175	35	1	1	1	37	23	358	381
06:45 AM	8	94	15	1	117	0	2	30	25	32	1	171	2	0	174	18	8	3	2	29	28	352	380
Total	19	189	25	7	233	1	4	57	40	62	2	344	3	1	349	53	9	4	3	66	51	710	761
07:00 AM	11	88	12	0	111	4	2	20	16	26	0	155	4	1	159	43	2	3	2	48	19	344	363
07:15 AM	10	140	9	3	159	1	5	37	17	43	5	186	4	0	195	35	3	3	1	41	21	438	459
07:30 AM	11	161	9	0	181	7	5	36	21	48	3	195	8	0	206	38	11	7	3	56	24	491	515
07:45 AM	12	186	9	1	207	10	3	18	7	31	13	192	28	4	233	42	8	6	2	56	14	527	541
Total	44	575	39	4	658	22	15	111	61	148	21	728	44	5	793	158	24	19	8	201	78	1800	1878
08:00 AM	13	160	17	2	190	5	6	25	17	36	8	146	15	2	169	31	7	4	2	42	23	437	460
08:15 AM	6	131	12	3	149	7	6	21	14	34	3	137	11	1	151	23	5	3	3	31	21	365	386
08:30 AM	10	107	10	0	127	2	15	26	11	43	4	154	8	2	166	34	13	4	1	51	14	387	401
08:45 AM	9	130	13	2	152	3	9	10	4	22	4	154	4	1	162	29	10	5	2	44	9	380	389
Total	38	528	52	7	618	17	36	82	46	135	19	591	38	6	648	117	35	16	8	168	67	1569	1636
Grand Total	101	1292	116	18	1509	40	55	250	147	345	42	1663	85	12	1790	328	68	39	19	435	196	4079	4275
Apprch %	6.7	85.6	7.7			11.6	15.9	72.5			2.3	92.9	4.7			75.4	15.6	9					
Total %	2.5	31.7	2.8		37	1	1.3	6.1		8.5	1	40.8	2.1		43.9	8	1.7	1		10.7	4.6	95.4	

	Rubidoux Boulevard Southbound				34th Street Westbound				Rubidoux Boulevard Northbound				34th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	10	140	9	159	1	5	**37**	43	5	186	4	195	35	3	3	41	438
07:30 AM	11	161	9	181	7	5	36	**48**	3	**195**	8	206	38	**11**	**7**	**56**	491
07:45 AM	12	**186**	9	**207**	**10**	3	18	31	**13**	192	**28**	**233**	**42**	8	6	56	**527**
08:00 AM	**13**	160	**17**	190	5	**6**	25	36	8	146	15	169	31	7	4	42	437
Total Volume	46	647	44	737	23	19	116	158	29	719	55	803	146	29	20	195	1893
% App. Total	6.2	87.8	6		14.6	12	73.4		3.6	89.5	6.8		74.9	14.9	10.3		
PHF	.885	.870	.647	.890	.575	.792	.784	.823	.558	.922	.491	.862	.869	.659	.714	.871	.898

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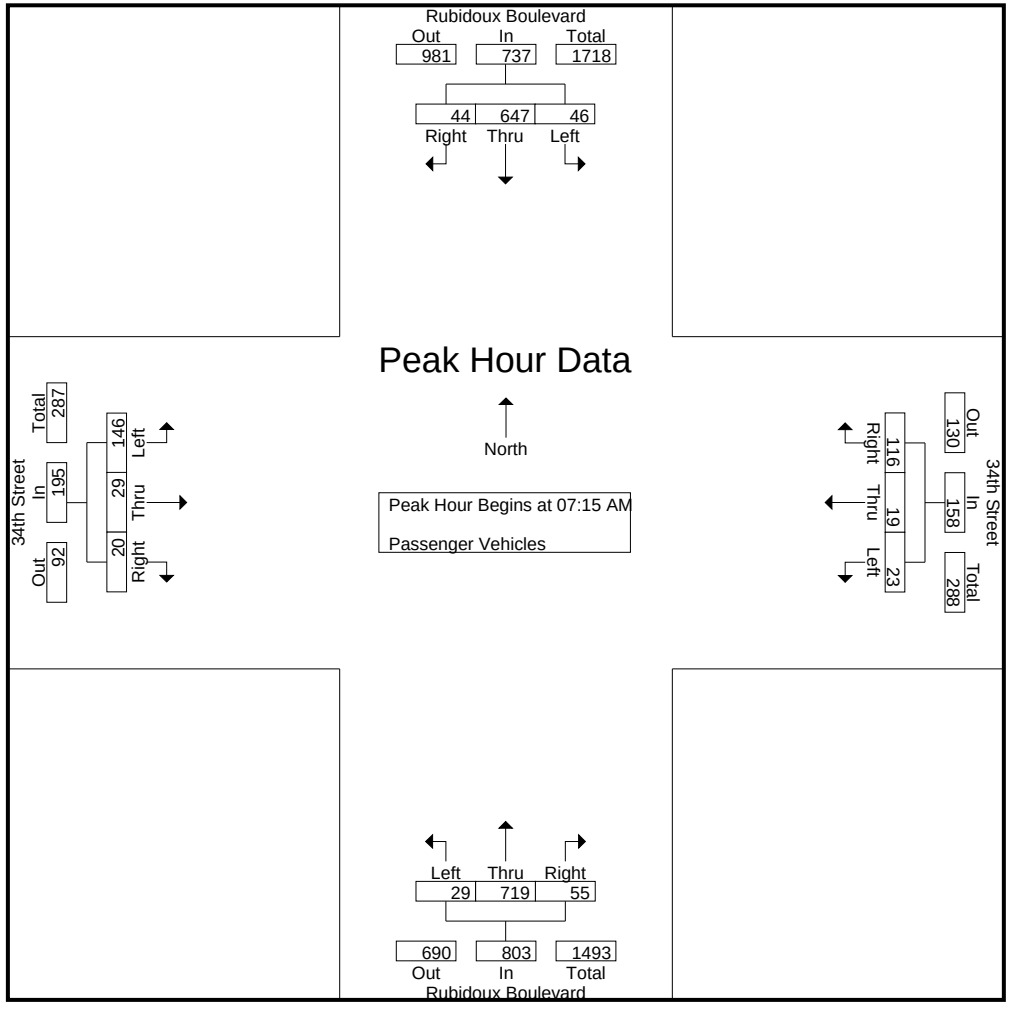
File Name : 23_JVY_Rub_34th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Rubidoux Boulevard
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File Name : 23_JVY_Rub_34th AM
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Page No : 3

	Rubidoux Boulevard Southbound				34th Street Westbound				Rubidoux Boulevard Northbound				34th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	10	140	9	159	1	5	**37**	43	5	186	4	195	35	3	3	41	
+15 mins.	11	161	9	181	7	5	36	**48**	3	**195**	8	206	38	**11**	**7**	**56**	
+30 mins.	12	**186**	9	**207**	**10**	3	18	31	**13**	192	**28**	**233**	**42**	8	6	56	
+45 mins.	**13**	160	**17**	190	5	**6**	25	36	8	146	15	169	31	7	4	42	
Total Volume	46	647	44	737	23	19	116	158	29	719	55	803	146	29	20	195	
% App. Total	6.2	87.8	6		14.6	12	73.4		3.6	89.5	6.8		74.9	14.9	10.3		
PHF	.885	.870	.647	.890	.575	.792	.784	.823	.558	.922	.491	.862	.869	.659	.714	.871	

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City of Jurupa Valley
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File Name : 23_JVY_Rub_34th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Rubidoux Boulevard Southbound					34th Street Westbound					Rubidoux Boulevard Northbound					34th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	5	0	0	5	0	0	0	0	0	0	7	1	0	8	2	0	0	0	2	0	15	15
06:45 AM	1	4	0	0	5	0	0	1	1	1	0	4	0	0	4	1	0	0	0	1	1	11	12
Total	1	9	0	0	10	0	0	1	1	1	0	11	1	0	12	3	0	0	0	3	1	26	27
07:00 AM	1	3	1	0	5	0	1	2	2	3	0	7	0	0	7	0	0	1	0	1	2	16	18
07:15 AM	0	7	0	0	7	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	0	18	18
07:30 AM	0	12	0	0	12	1	0	0	0	1	1	6	0	0	7	1	0	0	0	1	0	21	21
07:45 AM	2	9	1	0	12	1	0	0	0	1	0	6	1	0	7	1	1	0	0	2	0	22	22
Total	3	31	2	0	36	2	1	2	2	5	1	30	1	0	32	2	1	1	0	4	2	77	79
08:00 AM	0	8	0	0	8	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	0	12	12
08:15 AM	0	1	0	0	1	0	0	0	0	0	0	6	0	0	6	1	0	0	0	1	0	8	8
08:30 AM	1	8	0	0	9	1	0	0	0	1	0	2	1	0	3	0	0	0	0	0	0	13	13
08:45 AM	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	1	0	0	0	1	0	8	8
Total	1	19	0	0	20	2	0	0	0	2	0	16	1	0	17	2	0	0	0	2	0	41	41
Grand Total	5	59	2	0	66	4	1	3	3	8	1	57	3	0	61	7	1	1	0	9	3	144	147
Apprch %	7.6	89.4	3			50	12.5	37.5			1.6	93.4	4.9			77.8	11.1	11.1					
Total %	3.5	41	1.4		45.8	2.8	0.7	2.1		5.6	0.7	39.6	2.1		42.4	4.9	0.7	0.7		6.2	2	98	

	Rubidoux Boulevard Southbound				34th Street Westbound				Rubidoux Boulevard Northbound				34th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	7	0	7	0	0	0	0	0	**11**	0	**11**	0	0	0	0	18
07:30 AM	0	**12**	0	**12**	**1**	0	0	**1**	**1**	6	0	7	**1**	0	0	1	21
07:45 AM	**2**	9	**1**	12	1	0	0	1	0	6	**1**	7	1	**1**	0	**2**	**22**
08:00 AM	0	8	0	8	1	0	0	1	0	3	0	3	0	0	0	0	12
Total Volume	2	36	1	39	3	0	0	3	1	26	1	28	2	1	0	3	73
% App. Total	5.1	92.3	2.6		100	0	0		3.6	92.9	3.6		66.7	33.3	0		
PHF	.250	.750	.250	.813	.750	.000	.000	.750	.250	.591	.250	.636	.500	.250	.000	.375	.830

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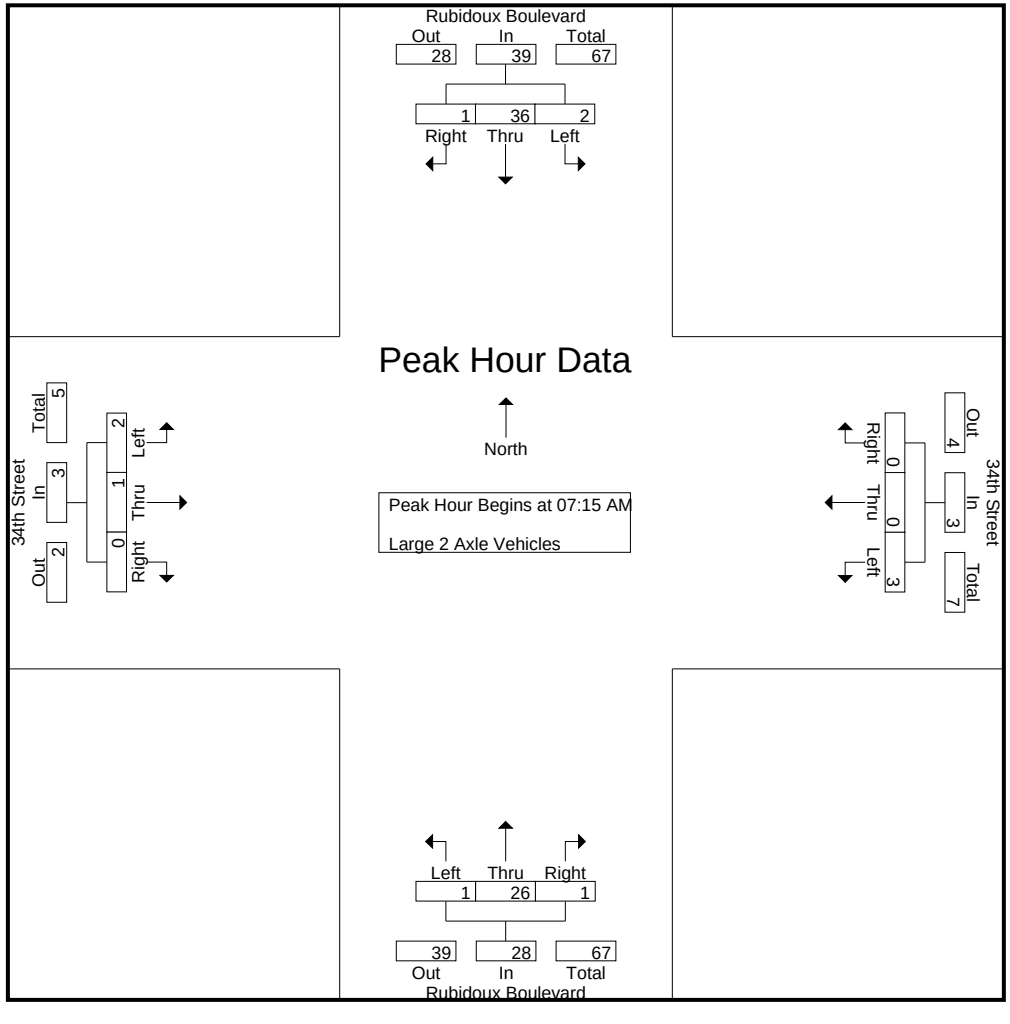
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 34th Street
Weather: Clear

File Name : 23_JVY_Rub_34th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Rubidoux Boulevard
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Weather: Clear

File Name : 23_JVY_Rub_34th AM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				34th Street Westbound				Rubidoux Boulevard Northbound				34th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	7	0	7	0	0	0	0	0	**11**	0	**11**	0	0	0	0	
+15 mins.	0	**12**	0	**12**	**1**	0	0	**1**	**1**	6	0	7	**1**	0	0	1	
+30 mins.	**2**	9	**1**	12	1	0	0	1	0	6	**1**	7	1	**1**	0	**2**	
+45 mins.	0	8	0	8	1	0	0	1	0	3	0	3	0	0	0	0	
Total Volume	2	36	1	39	3	0	0	3	1	26	1	28	2	1	0	3	
% App. Total	5.1	92.3	2.6		100	0	0		3.6	92.9	3.6		66.7	33.3	0		
PHF	.250	.750	.250	.813	.750	.000	.000	.750	.250	.591	.250	.636	.500	.250	.000	.375	

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City of Jurupa Valley
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File Name : 23_JVY_Rub_34th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Rubidoux Boulevard Southbound					34th Street Westbound					Rubidoux Boulevard Northbound					34th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	2
06:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	3	3
07:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	3	3
07:15 AM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	0	5	5
07:30 AM	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
07:45 AM	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
Total	0	6	1	1	7	0	0	0	0	0	0	4	0	0	4	1	1	0	0	2	1	13	14
08:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	3	3
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	2
08:45 AM	0	0	0	0	0	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	0	4	4
Total	0	1	0	0	1	0	0	1	0	1	0	7	0	0	7	1	0	0	0	1	0	10	10
Grand Total	0	9	1	1	10	0	0	1	0	1	0	11	0	0	11	3	1	0	0	4	1	26	27
Apprch %	0	90	10			0	0	100			0	100	0			75	25	0					
Total %	0	34.6	3.8		38.5	0	0	3.8		3.8	0	42.3	0		42.3	11.5	3.8	0		15.4	3.7	96.3	

	Rubidoux Boulevard Southbound				34th Street Westbound				Rubidoux Boulevard Northbound				34th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	1	0	1	0	0	0	0	0	**3**	0	**3**	**1**	0	0	**1**	**5**
07:30 AM	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	**4**	0	**4**	0	0	0	0	0	0	0	0	0	0	0	0	4
08:00 AM	0	1	0	1	0	0	0	0	0	1	0	1	1	0	0	1	3
Total Volume	0	6	1	7	0	0	0	0	0	4	0	4	2	0	0	2	13
% App. Total	0	85.7	14.3		0	0	0		0	100	0		100	0	0		
PHF	.000	.375	.250	.438	.000	.000	.000	.000	.000	.333	.000	.333	.500	.000	.000	.500	.650

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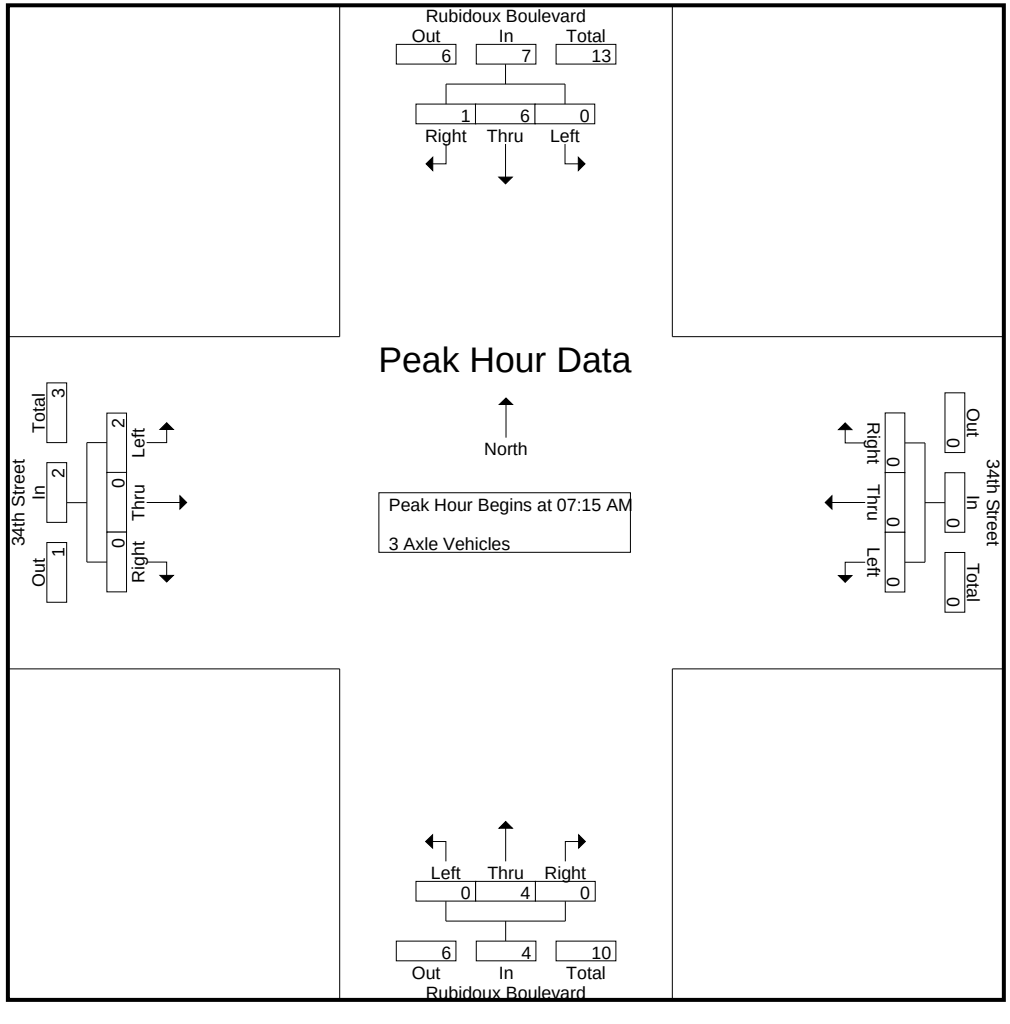
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 34th Street
Weather: Clear

File Name : 23_JVY_Rub_34th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
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	Rubidoux Boulevard Southbound				34th Street Westbound				Rubidoux Boulevard Northbound				34th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	1	0	1	0	0	0	0	0	**3**	0	**3**	**1**	0	0	**1**	
+15 mins.	0	0	**1**	1	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	**4**	0	**4**	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	1	0	1	0	0	0	0	0	1	0	1	1	0	0	1	
Total Volume	0	6	1	7	0	0	0	0	0	4	0	4	2	0	0	2	
% App. Total	0	85.7	14.3		0	0	0		0	100	0		100	0	0		
PHF	.000	.375	.250	.438	.000	.000	.000	.000	.000	.333	.000	.333	.500	.000	.000	.500	

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City of Jurupa Valley
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File Name : 23_JVY_Rub_34th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Rubidoux Boulevard Southbound					34th Street Westbound					Rubidoux Boulevard Northbound					34th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	5	5
06:45 AM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	5	5
Total	0	5	0	0	5	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	10	10
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
07:15 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
07:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
07:45 AM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	4	4
Total	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	8	8
08:00 AM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4	4
08:15 AM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	5	5
08:30 AM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3	3
08:45 AM	0	1	1	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4	4
Total	0	7	1	0	8	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	16	16
Grand Total	0	16	1	0	17	0	0	0	0	0	0	17	0	0	17	0	0	0	0	0	0	34	34
Apprch %	0	94.1	5.9			0	0	0			0	100	0			0	0	0					
Total %	0	47.1	2.9		50	0	0	0		0	0	50	0		50	0	0	0		0	0	100	

	Rubidoux Boulevard Southbound				34th Street Westbound				Rubidoux Boulevard Northbound				34th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**2**	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0	2
07:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	1	0	1	0	0	0	0	0	**3**	0	**3**	0	0	0	0	**4**
08:00 AM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
Total Volume	0	6	0	6	0	0	0	0	0	5	0	5	0	0	0	0	11
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.750	.000	.750	.000	.000	.000	.000	.000	.417	.000	.417	.000	.000	.000	.000	.688

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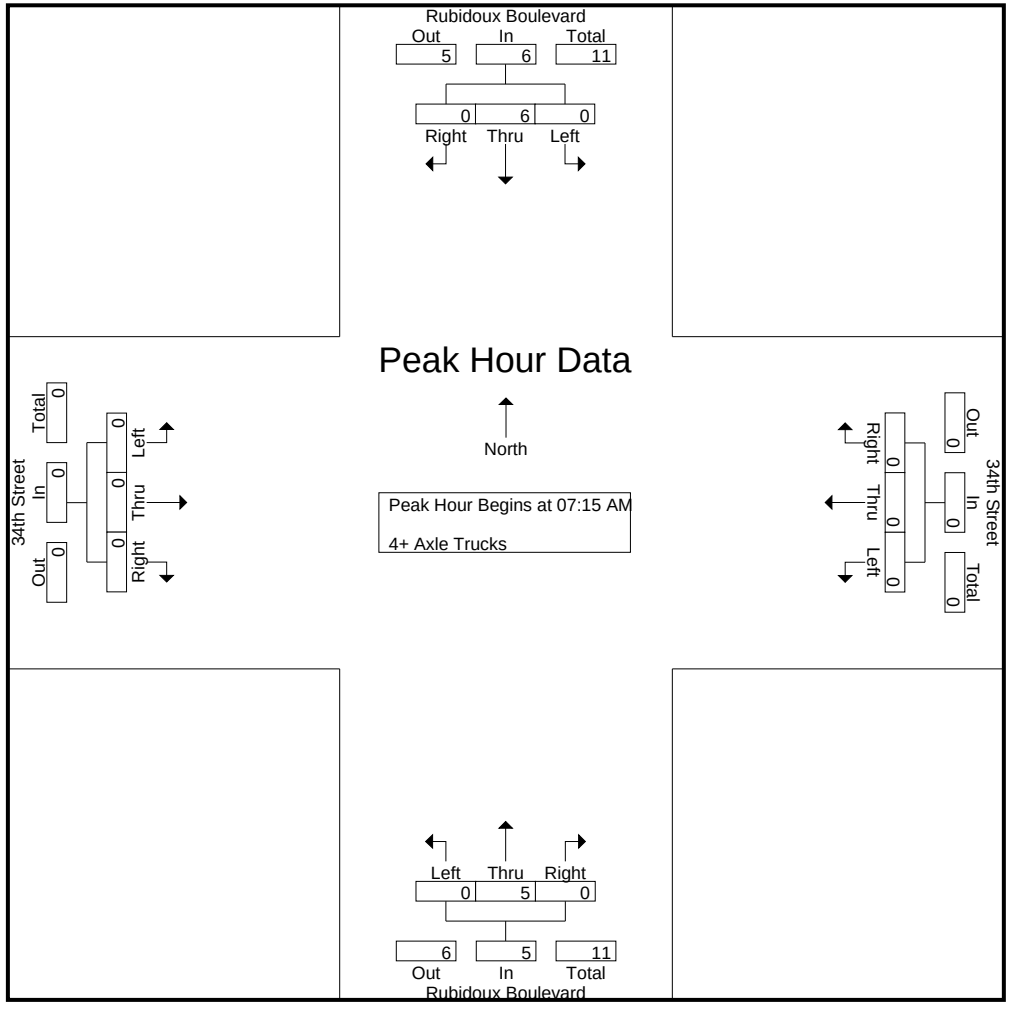
File Name : 23_JVY_Rub_34th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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	Rubidoux Boulevard Southbound				34th Street Westbound				Rubidoux Boulevard Northbound				34th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	**2**	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	1	0	1	0	0	0	0	0	**3**	0	**3**	0	0	0	0	
+45 mins.	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	
Total Volume	0	6	0	6	0	0	0	0	0	5	0	5	0	0	0	0	
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.750	.000	.750	.000	.000	.000	.000	.000	.417	.000	.417	.000	.000	.000	.000	

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Site Code : 05122894
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Rubidoux Boulevard Southbound					34th Street Westbound					Rubidoux Boulevard Northbound					34th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	28	209	26	3	263	7	6	19	7	32	4	157	12	0	173	28	20	8	3	56	13	524	537
03:45 PM	26	210	28	4	264	4	4	12	8	20	6	144	12	1	162	24	18	4	2	46	15	492	507
Total	54	419	54	7	527	11	10	31	15	52	10	301	24	1	335	52	38	12	5	102	28	1016	1044
04:00 PM	47	203	29	1	279	1	1	8	7	10	9	126	15	0	150	25	10	5	4	40	12	479	491
04:15 PM	27	183	26	2	236	9	4	12	3	25	6	135	16	1	157	30	12	6	1	48	7	466	473
04:30 PM	40	183	22	1	245	2	7	14	10	23	2	149	13	0	164	13	11	5	4	29	15	461	476
04:45 PM	37	199	26	2	262	4	4	19	13	27	6	120	18	0	144	29	13	8	4	50	19	483	502
Total	151	768	103	6	1022	16	16	53	33	85	23	530	62	1	615	97	46	24	13	167	53	1889	1942
05:00 PM	51	197	39	11	287	2	4	11	7	17	4	158	23	0	185	27	14	6	0	47	18	536	554
05:15 PM	41	234	25	1	300	6	5	24	16	35	5	152	27	2	184	22	6	4	0	32	19	551	570
05:30 PM	41	220	34	4	295	2	3	20	13	25	5	132	13	0	150	18	10	3	3	31	20	501	521
05:45 PM	52	214	30	2	296	4	3	23	15	30	5	130	16	2	151	21	14	6	3	41	22	518	540
Total	185	865	128	18	1178	14	15	78	51	107	19	572	79	4	670	88	44	19	6	151	79	2106	2185
Grand Total	390	2052	285	31	2727	41	41	162	99	244	52	1403	165	6	1620	237	128	55	24	420	160	5011	5171
Apprch %	14.3	75.2	10.5			16.8	16.8	66.4			3.2	86.6	10.2			56.4	30.5	13.1					
Total %	7.8	40.9	5.7		54.4	0.8	0.8	3.2		4.9	1	28	3.3		32.3	4.7	2.6	1.1		8.4	3.1	96.9	
Passenger Vehicles	381	1989	277		2678	41	41	156		335	52	1334	164		1556	231	128	54		437	0	0	5006
% Passenger Vehicles	97.7	96.9	97.2	100	97.1	100	100	96.3	98	97.7	100	95.1	99.4	100	95.7	97.5	100	98.2	100	98.4	0	0	96.8
Large 2 Axle Vehicles	8	46	7		61	0	0	6		8	0	44	1		45	5	0	1		6	0	0	120
% Large 2 Axle Vehicles	2.1	2.2	2.5	0	2.2	0	0	3.7	2	2.3	0	3.1	0.6	0	2.8	2.1	0	1.8	0	1.4	0	0	2.3
3 Axle Vehicles	1	11	1		13	0	0	0		0	0	20	0		20	1	0	0		1	0	0	34
% 3 Axle Vehicles	0.3	0.5	0.4	0	0.5	0	0	0	0	0	0	1.4	0	0	1.2	0.4	0	0	0	0.2	0	0	0.7
4+ Axle Trucks	0	6	0		6	0	0	0		0	0	5	0		5	0	0	0		0	0	0	11
% 4+ Axle Trucks	0	0.3	0	0	0.2	0	0	0	0	0	0	0.4	0	0	0.3	0	0	0	0	0	0	0	0.2

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File Name : 23_JVY_Rub_34th PM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				34th Street Westbound				Rubidoux Boulevard Northbound				34th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	51	197	**39**	287	2	4	11	17	4	**158**	23	**185**	**27**	**14**	**6**	**47**	536
05:15 PM	41	**234**	25	**300**	**6**	**5**	**24**	**35**	**5**	152	**27**	184	22	6	4	32	**551**
05:30 PM	41	220	34	295	2	3	20	25	5	132	13	150	18	10	3	31	501
05:45 PM	**52**	214	30	296	4	3	23	30	5	130	16	151	21	14	6	41	518
Total Volume	185	865	128	1178	14	15	78	107	19	572	79	670	88	44	19	151	2106
% App. Total	15.7	73.4	10.9		13.1	14	72.9		2.8	85.4	11.8		58.3	29.1	12.6		
PHF	.889	.924	.821	.982	.583	.750	.813	.764	.950	.905	.731	.905	.815	.786	.792	.803	.956

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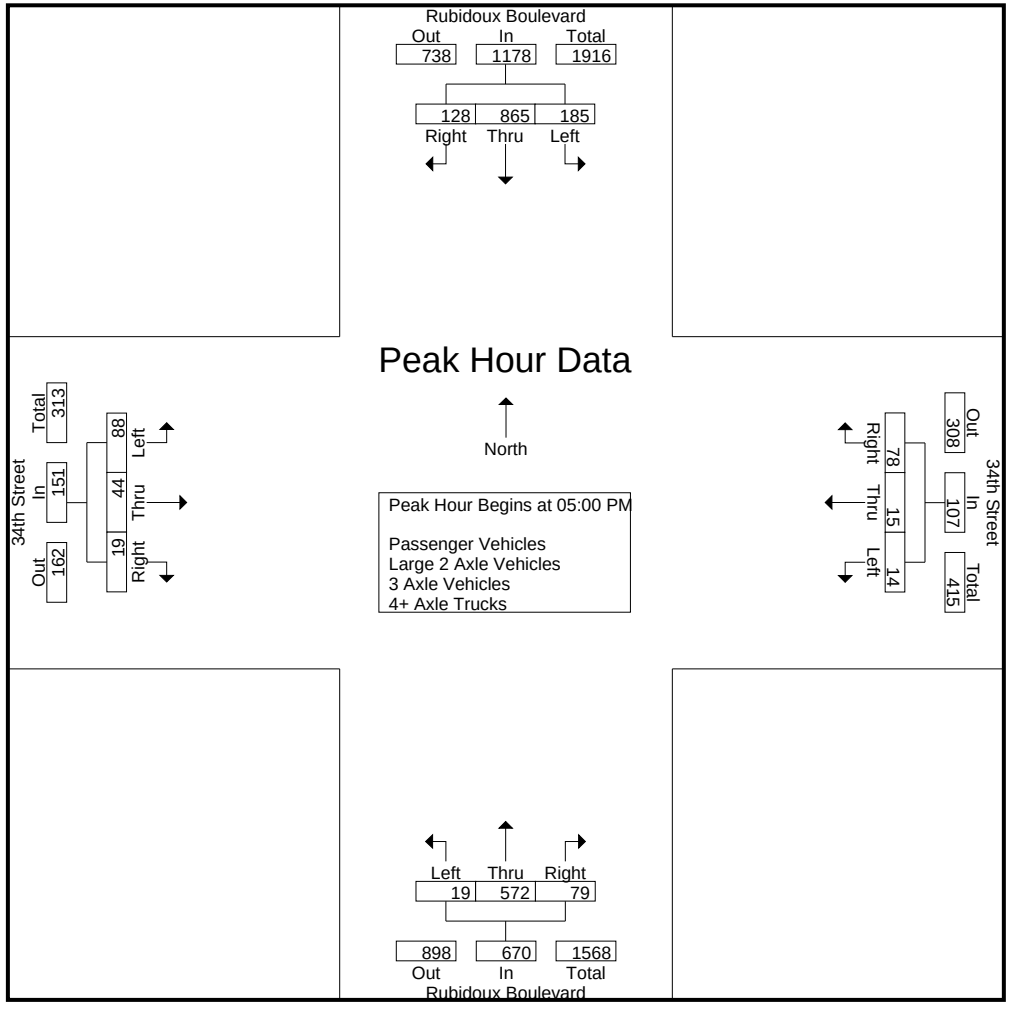

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Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				34th Street Westbound				Rubidoux Boulevard Northbound				34th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				04:30 PM				03:30 PM				
+0 mins.	51	197	**39**	287	2	4	11	17	2	149	13	164	28	**20**	**8**	**56**	
+15 mins.	41	**234**	25	**300**	**6**	**5**	**24**	**35**	**6**	120	18	144	24	18	4	46	
+30 mins.	41	220	34	295	2	3	20	25	4	**158**	23	**185**	25	10	5	40	
+45 mins.	**52**	214	30	296	4	3	23	30	5	152	**27**	184	**30**	12	6	48	
Total Volume	185	865	128	1178	14	15	78	107	17	579	81	677	107	60	23	190	
% App. Total	15.7	73.4	10.9		13.1	14	72.9		2.5	85.5	12		56.3	31.6	12.1		
PHF	.889	.924	.821	.982	.583	.750	.813	.764	.708	.916	.750	.915	.892	.750	.719	.848	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 34th Street
Weather: Clear

File Name : 23_JVY_Rub_34th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Rubidoux Boulevard Southbound					34th Street Westbound					Rubidoux Boulevard Northbound					34th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	28	202	26	3	256	7	6	18	7	31	4	148	12	0	164	28	20	8	3	56	13	507	520
03:45 PM	26	202	27	4	255	4	4	12	8	20	6	136	12	1	154	23	18	4	2	45	15	474	489
Total	54	404	53	7	511	11	10	30	15	51	10	284	24	1	318	51	38	12	5	101	28	981	1009
04:00 PM	45	199	27	1	271	1	1	8	7	10	9	118	15	0	142	24	10	5	4	39	12	462	474
04:15 PM	27	172	25	2	224	9	4	11	3	24	6	126	15	1	147	28	12	5	1	45	7	440	447
04:30 PM	39	176	21	1	236	2	7	14	10	23	2	144	13	0	159	13	11	5	4	29	15	447	462
04:45 PM	37	196	25	2	258	4	4	17	11	25	6	116	18	0	140	29	13	8	4	50	17	473	490
Total	148	743	98	6	989	16	16	50	31	82	23	504	61	1	588	94	46	23	13	163	51	1822	1873
05:00 PM	49	193	39	11	281	2	4	10	7	16	4	150	23	0	177	26	14	6	0	46	18	520	538
05:15 PM	40	228	25	1	293	6	5	24	16	35	5	147	27	2	179	21	6	4	0	31	19	538	557
05:30 PM	39	217	33	4	289	2	3	20	13	25	5	125	13	0	143	18	10	3	3	31	20	488	508
05:45 PM	51	204	29	2	284	4	3	22	15	29	5	124	16	2	145	21	14	6	3	41	22	499	521
Total	179	842	126	18	1147	14	15	76	51	105	19	546	79	4	644	86	44	19	6	149	79	2045	2124
Grand Total	381	1989	277	31	2647	41	41	156	97	238	52	1334	164	6	1550	231	128	54	24	413	158	4848	5006
Apprch %	14.4	75.1	10.5			17.2	17.2	65.5			3.4	86.1	10.6			55.9	31	13.1					
Total %	7.9	41	5.7		54.6	0.8	0.8	3.2		4.9	1.1	27.5	3.4		32	4.8	2.6	1.1		8.5	3.2	96.8	

	Rubidoux Boulevard Southbound				34th Street Westbound				Rubidoux Boulevard Northbound				34th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	49	193	**39**	281	2	4	10	16	4	**150**	23	177	**26**	**14**	**6**	**46**	520
05:15 PM	40	**228**	25	**293**	**6**	**5**	**24**	**35**	**5**	147	**27**	**179**	21	6	4	31	**538**
05:30 PM	39	217	33	289	2	3	20	25	5	125	13	143	18	10	3	31	488
05:45 PM	**51**	204	29	284	4	3	22	29	5	124	16	145	21	14	6	41	499
Total Volume	179	842	126	1147	14	15	76	105	19	546	79	644	86	44	19	149	2045
% App. Total	15.6	73.4	11		13.3	14.3	72.4		3	84.8	12.3		57.7	29.5	12.8		
PHF	.877	.923	.808	.979	.583	.750	.792	.750	.950	.910	.731	.899	.827	.786	.792	.810	.950

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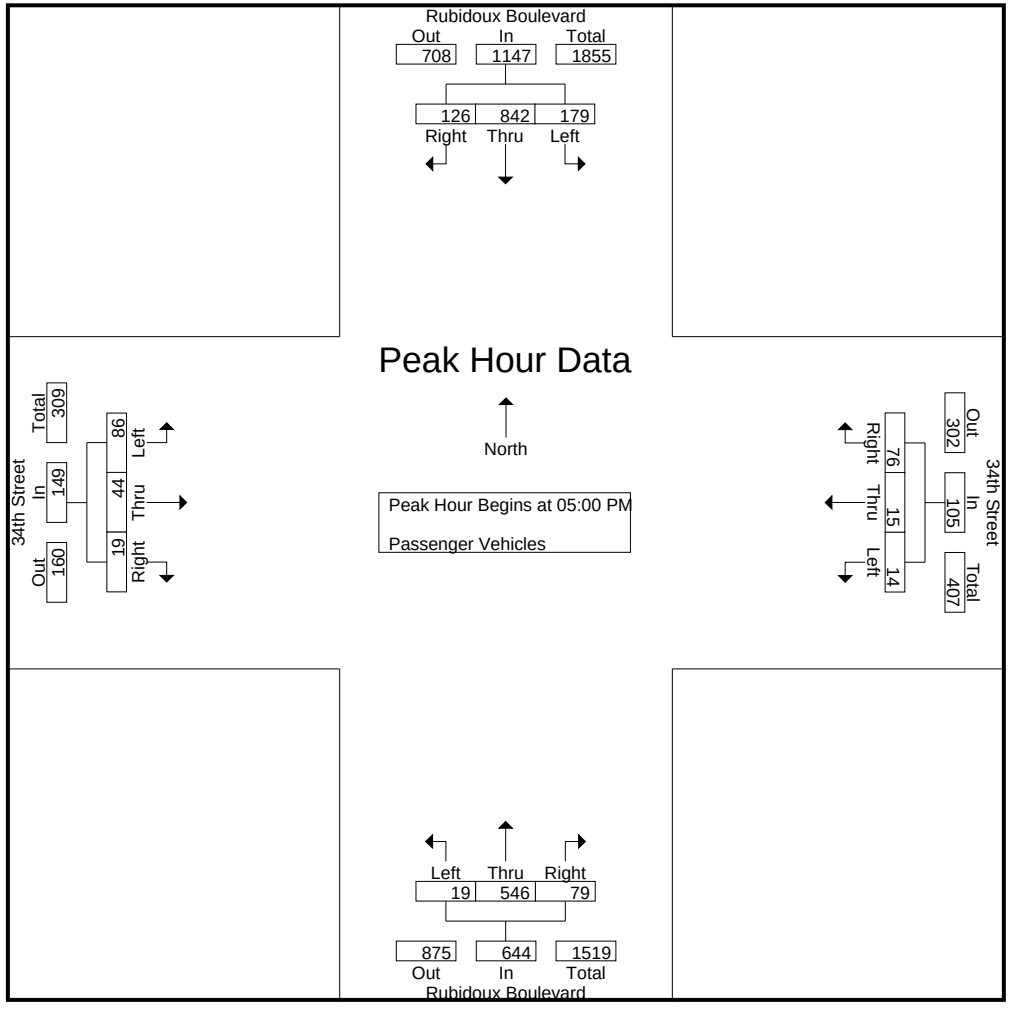
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 34th Street
Weather: Clear

File Name : 23_JVY_Rub_34th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Rubidoux Boulevard
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Weather: Clear

File Name : 23_JVY_Rub_34th PM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				34th Street Westbound				Rubidoux Boulevard Northbound				34th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	49	193	**39**	281	2	4	10	16	4	**150**	23	177	**26**	**14**	**6**	**46**	
+15 mins.	40	**228**	25	**293**	**6**	**5**	**24**	**35**	**5**	147	**27**	**179**	21	6	4	31	
+30 mins.	39	217	33	289	2	3	20	25	5	125	13	143	18	10	3	31	
+45 mins.	**51**	204	29	284	4	3	22	29	5	124	16	145	21	14	6	41	
Total Volume	179	842	126	1147	14	15	76	105	19	546	79	644	86	44	19	149	
% App. Total	15.6	73.4	11		13.3	14.3	72.4		3	84.8	12.3		57.7	29.5	12.8		
PHF	.877	.923	.808	.979	.583	.750	.792	.750	.950	.910	.731	.899	.827	.786	.792	.810	

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City of Jurupa Valley
N/S: Rubidoux Boulevard
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File Name : 23_JVY_Rub_34th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Rubidoux Boulevard Southbound					34th Street Westbound					Rubidoux Boulevard Northbound					34th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	4	0	0	4	0	0	1	0	1	0	6	0	0	6	0	0	0	0	0	0	11	11
03:45 PM	0	7	1	0	8	0	0	0	0	0	0	6	0	0	6	1	0	0	0	1	0	15	15
Total	0	11	1	0	12	0	0	1	0	1	0	12	0	0	12	1	0	0	0	1	0	26	26
04:00 PM	2	4	2	0	8	0	0	0	0	0	0	6	0	0	6	1	0	0	0	1	0	15	15
04:15 PM	0	10	1	0	11	0	0	1	0	1	0	6	1	0	7	2	0	1	0	3	0	22	22
04:30 PM	1	2	1	0	4	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	9	9
04:45 PM	0	1	1	0	2	0	0	2	2	2	0	2	0	0	2	0	0	0	0	0	2	6	8
Total	3	17	5	0	25	0	0	3	2	3	0	19	1	0	20	3	0	1	0	4	2	52	54
05:00 PM	1	1	0	0	2	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	0	6	6
05:15 PM	1	5	0	0	6	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	8	8
05:30 PM	2	3	0	0	5	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	8	8
05:45 PM	1	9	1	0	11	0	0	1	0	1	0	6	0	0	6	0	0	0	0	0	0	18	18
Total	5	18	1	0	24	0	0	2	0	2	0	13	0	0	13	1	0	0	0	1	0	40	40
Grand Total	8	46	7	0	61	0	0	6	2	6	0	44	1	0	45	5	0	1	0	6	2	118	120
Apprch %	13.1	75.4	11.5			0	0	100			0	97.8	2.2			83.3	0	16.7					
Total %	6.8	39	5.9		51.7	0	0	5.1		5.1	0	37.3	0.8		38.1	4.2	0	0.8		5.1	1.7	98.3	

	Rubidoux Boulevard Southbound				34th Street Westbound				Rubidoux Boulevard Northbound				34th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	1	1	0	2	0	0	**1**	**1**	0	3	0	3	0	0	0	0	6
05:15 PM	1	5	0	6	0	0	0	0	0	1	0	1	**1**	0	0	**1**	8
05:30 PM	**2**	3	0	5	0	0	0	0	0	3	0	3	0	0	0	0	8
05:45 PM	1	**9**	**1**	**11**	0	0	1	1	0	**6**	0	**6**	0	0	0	0	**18**
Total Volume	5	18	1	24	0	0	2	2	0	13	0	13	1	0	0	1	40
% App. Total	20.8	75	4.2		0	0	100		0	100	0		100	0	0		
PHF	.625	.500	.250	.545	.000	.000	.500	.500	.000	.542	.000	.542	.250	.000	.000	.250	.556

Counts Unlimited, Inc.
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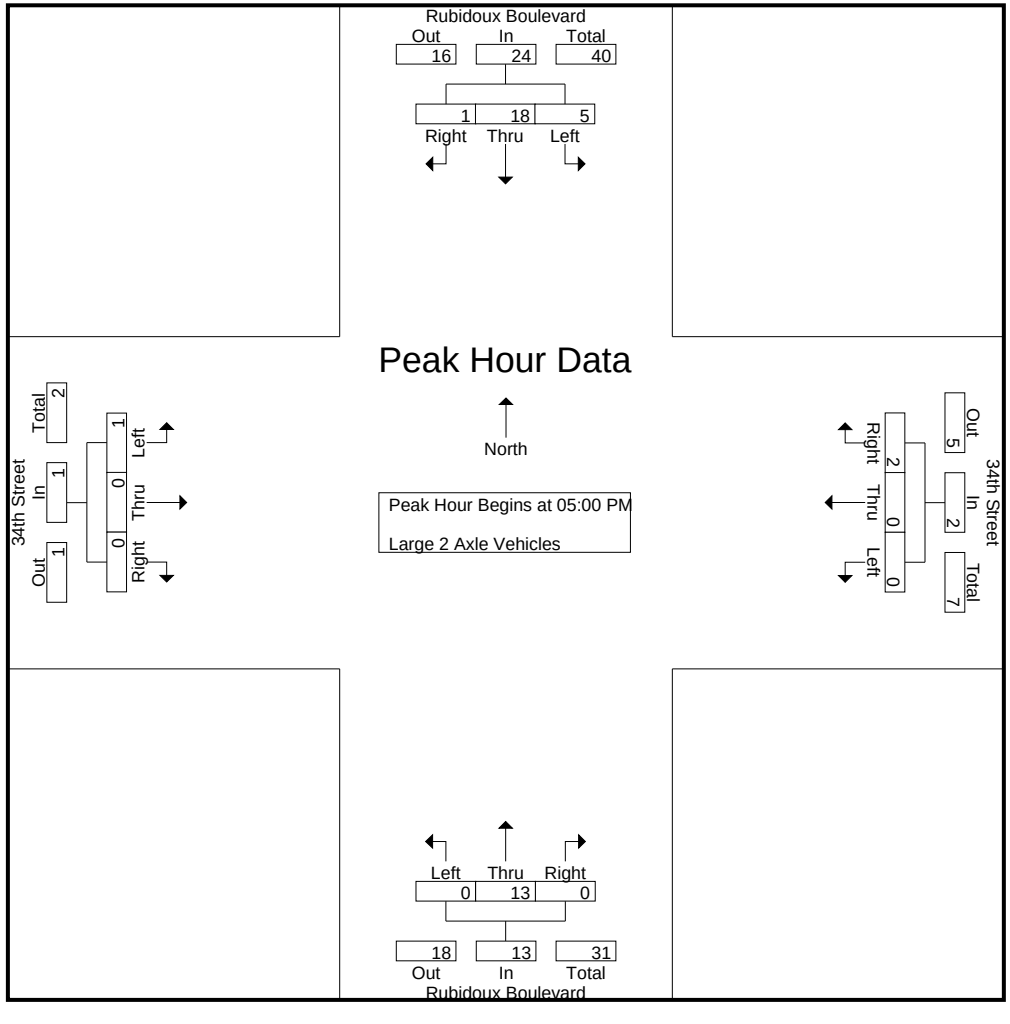
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 34th Street
Weather: Clear

File Name : 23_JVY_Rub_34th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 34th Street
Weather: Clear

File Name : 23_JVY_Rub_34th PM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				34th Street Westbound				Rubidoux Boulevard Northbound				34th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	1	1	0	2	0	0	**1**	**1**	0	3	0	3	0	0	0	0	
+15 mins.	1	5	0	6	0	0	0	0	0	1	0	1	**1**	0	0	**1**	
+30 mins.	**2**	3	0	5	0	0	0	0	0	3	0	3	0	0	0	0	
+45 mins.	1	**9**	**1**	**11**	0	0	1	1	0	**6**	0	**6**	0	0	0	0	
Total Volume	5	18	1	24	0	0	2	2	0	13	0	13	1	0	0	1	
% App. Total	20.8	75	4.2		0	0	100		0	100	0		100	0	0		
PHF	.625	.500	.250	.545	.000	.000	.500	.500	.000	.542	.000	.542	.250	.000	.000	.250	

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 34th Street
Weather: Clear

File Name : 23_JVY_Rub_34th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Rubidoux Boulevard Southbound					34th Street Westbound					Rubidoux Boulevard Northbound					34th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4	4
03:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
Total	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	6	6
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
04:15 PM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	4	4
04:30 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3	3
Total	0	5	0	0	5	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	11	11
05:00 PM	1	2	0	0	3	0	0	0	0	0	0	5	0	0	5	1	0	0	0	1	0	9	9
05:15 PM	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	5	5
05:30 PM	0	0	1	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	3	1	0	5	0	0	0	0	0	0	11	0	0	11	1	0	0	0	1	0	17	17
Grand Total	1	11	1	0	13	0	0	0	0	0	0	20	0	0	20	1	0	0	0	1	0	34	34
Apprch %	7.7	84.6	7.7			0	0	0			0	100	0			100	0	0					
Total %	2.9	32.4	2.9		38.2	0	0	0		0	0	58.8	0		58.8	2.9	0	0		2.9	0	100	

	Rubidoux Boulevard Southbound				34th Street Westbound				Rubidoux Boulevard Northbound				34th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**1**	**2**	0	**3**	0	0	0	0	0	**5**	0	**5**	**1**	0	0	**1**	**9**
05:15 PM	0	1	0	1	0	0	0	0	0	4	0	4	0	0	0	0	5
05:30 PM	0	0	**1**	1	0	0	0	0	0	2	0	2	0	0	0	0	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	3	1	5	0	0	0	0	0	11	0	11	1	0	0	1	17
% App. Total	20	60	20		0	0	0		0	100	0		100	0	0		
PHF	.250	.375	.250	.417	.000	.000	.000	.000	.000	.550	.000	.550	.250	.000	.000	.250	.472

Counts Unlimited, Inc.
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City of Jurupa Valley
N/S: Rubidoux Boulevard
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Weather: Clear

File Name : 23_JVY_Rub_34th PM
Site Code : 05122894
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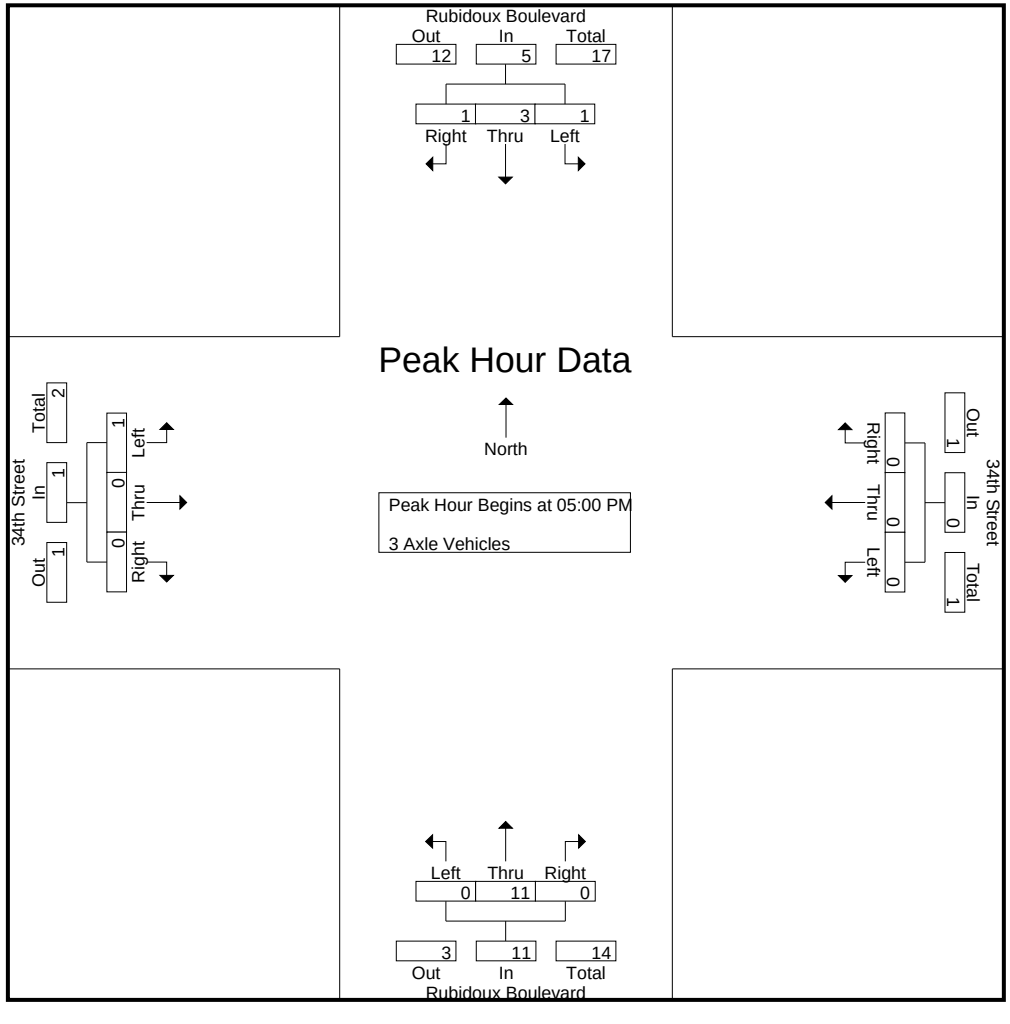
Page No : 2



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City of Jurupa Valley
N/S: Rubidoux Boulevard
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File Name : 23_JVY_Rub_34th PM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				34th Street Westbound				Rubidoux Boulevard Northbound				34th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	**1**	**2**	0	**3**	0	0	0	0	0	**5**	0	**5**	**1**	0	0	**1**	
+15 mins.	0	1	0	1	0	0	0	0	0	4	0	4	0	0	0	0	
+30 mins.	0	0	**1**	1	0	0	0	0	0	2	0	2	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	1	3	1	5	0	0	0	0	0	11	0	11	1	0	0	1	
% App. Total	20	60	20		0	0	0		0	100	0		100	0	0		
PHF	.250	.375	.250	.417	.000	.000	.000	.000	.000	.550	.000	.550	.250	.000	.000	.250	

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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 34th Street
Weather: Clear

File Name : 23_JVY_Rub_34th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Rubidoux Boulevard Southbound					34th Street Westbound					Rubidoux Boulevard Northbound					34th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
Total	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3	3
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	4
05:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	2
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4	4
Grand Total	0	6	0	0	6	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	11	11
Apprch %	0	100	0			0	0	0			0	100	0			0	0	0					
Total %	0	54.5	0		54.5	0	0	0		0	0	45.5	0		45.5	0	0	0		0	0	100	

	Rubidoux Boulevard Southbound				34th Street Westbound				Rubidoux Boulevard Northbound				34th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	**2**	0	**2**	0	0	0	0	**2**
05:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.500

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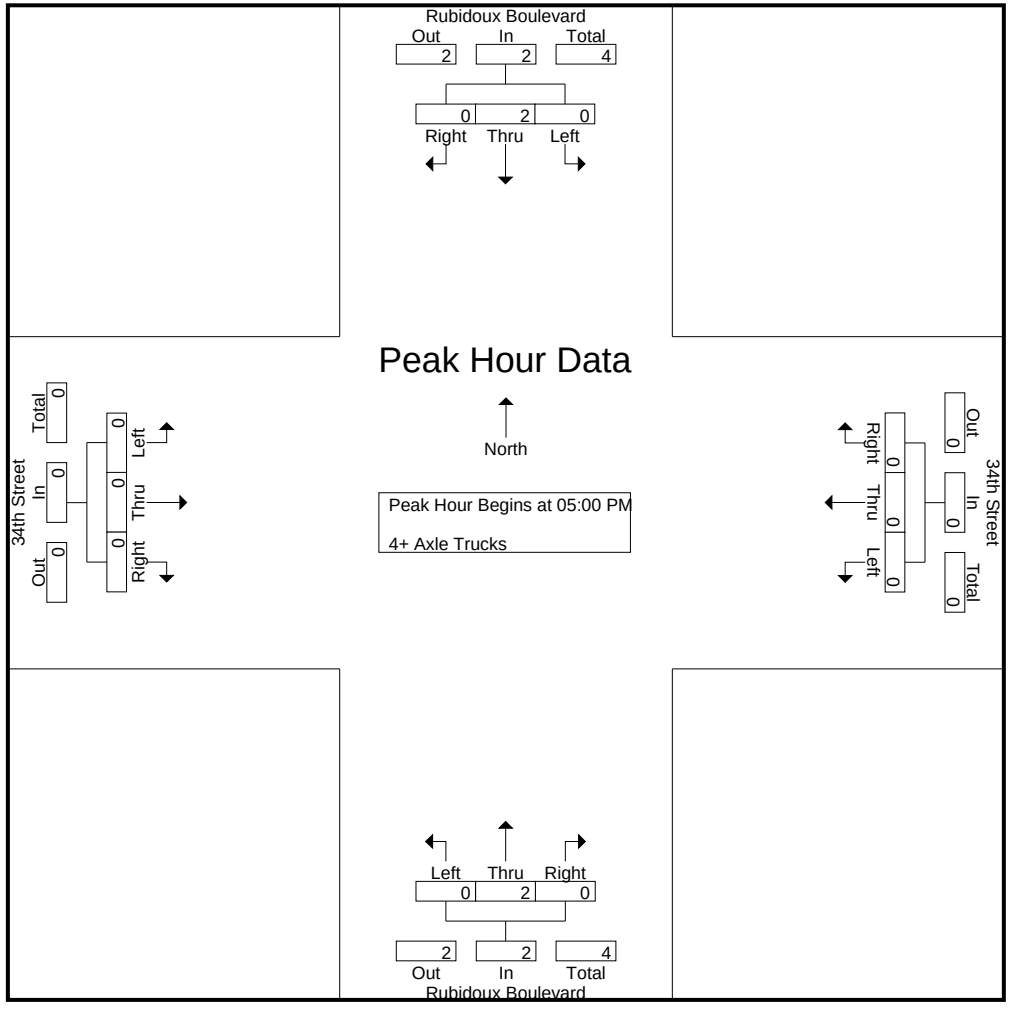
City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 34th Street
Weather: Clear

File Name : 23_JVY_Rub_34th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 34th Street
Weather: Clear

File Name : 23_JVY_Rub_34th PM
Site Code : 05122894
Start Date : 10/4/2022

	Rubidoux Boulevard Southbound				34th Street Westbound				Rubidoux Boulevard Northbound				34th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	**2**	0	**2**	0	0	0	0	
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	

Location: Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 34th Street

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Rubidoux Boulevard	East Leg 34th Street	South Leg Rubidoux Boulevard	West Leg 34th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	1	1	0	2
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	1	9	0	10
7:30 AM	0	2	11	0	13
7:45 AM	0	0	8	0	8
8:00 AM	0	0	0	0	0
8:15 AM	0	1	0	0	1
8:30 AM	0	0	1	0	1
8:45 AM	0	0	1	0	1
TOTAL VOLUMES:	0	5	31	0	36

	North Leg Rubidoux Boulevard	East Leg 34th Street	South Leg Rubidoux Boulevard	West Leg 34th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	1	0	0	1
4:00 PM	0	0	0	0	0
4:15 PM	0	0	2	0	2
4:30 PM	1	0	0	1	2
4:45 PM	1	0	0	0	1
5:00 PM	0	0	1	0	1
5:15 PM	1	0	3	2	6
5:30 PM	0	0	1	1	2
5:45 PM	1	0	3	0	4
TOTAL VOLUMES:	4	1	10	4	19

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Location: Jurupa Valley
N/S: Rubidoux Boulevard
E/W: 34th Street

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Rubidoux Boulevard			Westbound 34th Street			Northbound Rubidoux Boulevard			Eastbound 34th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	0	1	0	1	0	0	0	0	3

	Southbound Rubidoux Boulevard			Westbound 34th Street			Northbound Rubidoux Boulevard			Eastbound 34th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	2	0	0	0	0	0	1	0	0	2	0	5

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City of Jurupa Valley
N/S: 30th Street
E/W: Frontage Rd/SR-60 EB On Ramp
Weather: Clear

File Name : 24_JVY_30th_60E On AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	SR-60 Eastbound On Ramp Westbound			30th Street Northbound			Frontage Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:30 AM	0	0	0	0	6	6	151	1	152	158
06:45 AM	0	0	0	2	9	11	134	7	141	152
Total	0	0	0	2	15	17	285	8	293	310
07:00 AM	0	0	0	1	8	9	131	9	140	149
07:15 AM	0	0	0	7	3	10	152	13	165	175
07:30 AM	0	0	0	8	11	19	145	13	158	177
07:45 AM	0	0	0	3	7	10	147	16	163	173
Total	0	0	0	19	29	48	575	51	626	674
08:00 AM	0	0	0	2	6	8	139	16	155	163
08:15 AM	0	0	0	4	4	8	129	9	138	146
08:30 AM	0	0	0	1	6	7	128	4	132	139
08:45 AM	0	0	0	2	2	4	115	3	118	122
Total	0	0	0	9	18	27	511	32	543	570
Grand Total	0	0	0	30	62	92	1371	91	1462	1554
Apprch %	0	0		32.6	67.4		93.8	6.2		
Total %	0	0	0	1.9	4	5.9	88.2	5.9	94.1	
Passenger Vehicles	0	0	0	29	56	85	1273	83	1356	1441
% Passenger Vehicles	0	0	0	96.7	90.3	92.4	92.9	91.2	92.7	92.7
Large 2 Axle Vehicles	0	0	0	0	1	1	49	6	55	56
% Large 2 Axle Vehicles	0	0	0	0	1.6	1.1	3.6	6.6	3.8	3.6
3 Axle Vehicles	0	0	0	0	0	0	19	0	19	19
% 3 Axle Vehicles	0	0	0	0	0	0	1.4	0	1.3	1.2
4+ Axle Trucks	0	0	0	1	5	6	30	2	32	38
% 4+ Axle Trucks	0	0	0	3.3	8.1	6.5	2.2	2.2	2.2	2.4

	SR-60 Eastbound On Ramp Westbound			30th Street Northbound			Frontage Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	0	0	7	3	10	**152**	13	**165**	175
07:30 AM	0	0	0	**8**	**11**	**19**	145	13	158	**177**
07:45 AM	0	0	0	3	7	10	147	**16**	163	173
08:00 AM	0	0	0	2	6	8	139	16	155	163
Total Volume	0	0	0	20	27	47	583	58	641	688
% App. Total	0	0		42.6	57.4		91	9		
PHF	.000	.000	.000	.625	.614	.618	.959	.906	.971	.972

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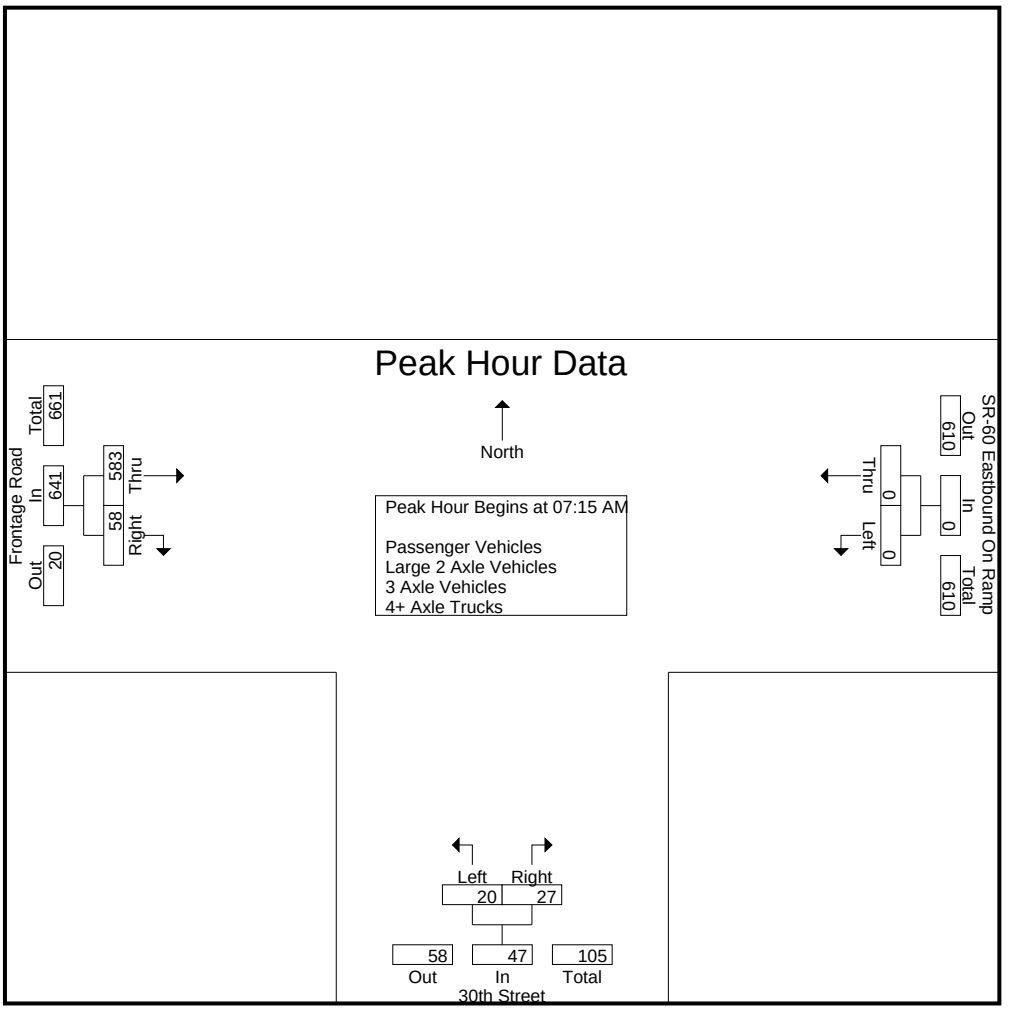
City of Jurupa Valley
N/S: 30th Street
E/W: Frontage Rd/SR-60 EB On Ramp
Weather: Clear

File Name : 24_JVY_30th_60E On AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	06:30 AM			06:45 AM			07:15 AM		
+0 mins.	0	0	0	2	9	11	**152**	13	**165**
+15 mins.	0	0	0	1	8	9	145	13	158
+30 mins.	0	0	0	7	3	10	147	**16**	163
+45 mins.	0	0	0	**8**	**11**	**19**	139	16	155
Total Volume	0	0	0	18	31	49	583	58	641
% App. Total	0	0		36.7	63.3		91	9	
PHF	.000	.000	.000	.563	.705	.645	.959	.906	.971

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City of Jurupa Valley
N/S: 30th Street
E/W: Frontage Rd/SR-60 EB On Ramp
Weather: Clear

File Name : 24_JVY_30th_60E On AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	SR-60 Eastbound On Ramp Westbound			30th Street Northbound			Frontage Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:30 AM	0	0	0	0	6	6	137	1	138	144
06:45 AM	0	0	0	2	9	11	125	5	130	141
Total	0	0	0	2	15	17	262	6	268	285
07:00 AM	0	0	0	1	6	7	120	8	128	135
07:15 AM	0	0	0	6	3	9	141	13	154	163
07:30 AM	0	0	0	8	10	18	133	12	145	163
07:45 AM	0	0	0	3	7	10	139	16	155	165
Total	0	0	0	18	26	44	533	49	582	626
08:00 AM	0	0	0	2	4	6	129	15	144	150
08:15 AM	0	0	0	4	4	8	123	6	129	137
08:30 AM	0	0	0	1	5	6	118	4	122	128
08:45 AM	0	0	0	2	2	4	108	3	111	115
Total	0	0	0	9	15	24	478	28	506	530
Grand Total	0	0	0	29	56	85	1273	83	1356	1441
Apprch %	0	0		34.1	65.9		93.9	6.1		
Total %	0	0	0	2	3.9	5.9	88.3	5.8	94.1	

	SR-60 Eastbound On Ramp Westbound			30th Street Northbound			Frontage Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	0	0	6	3	9	**141**	13	154	163
07:30 AM	0	0	0	**8**	**10**	**18**	133	12	145	163
07:45 AM	0	0	0	3	7	10	139	**16**	**155**	**165**
08:00 AM	0	0	0	2	4	6	129	15	144	150
Total Volume	0	0	0	19	24	43	542	56	598	641
% App. Total	0	0		44.2	55.8		90.6	9.4		
PHF	.000	.000	.000	.594	.600	.597	.961	.875	.965	.971

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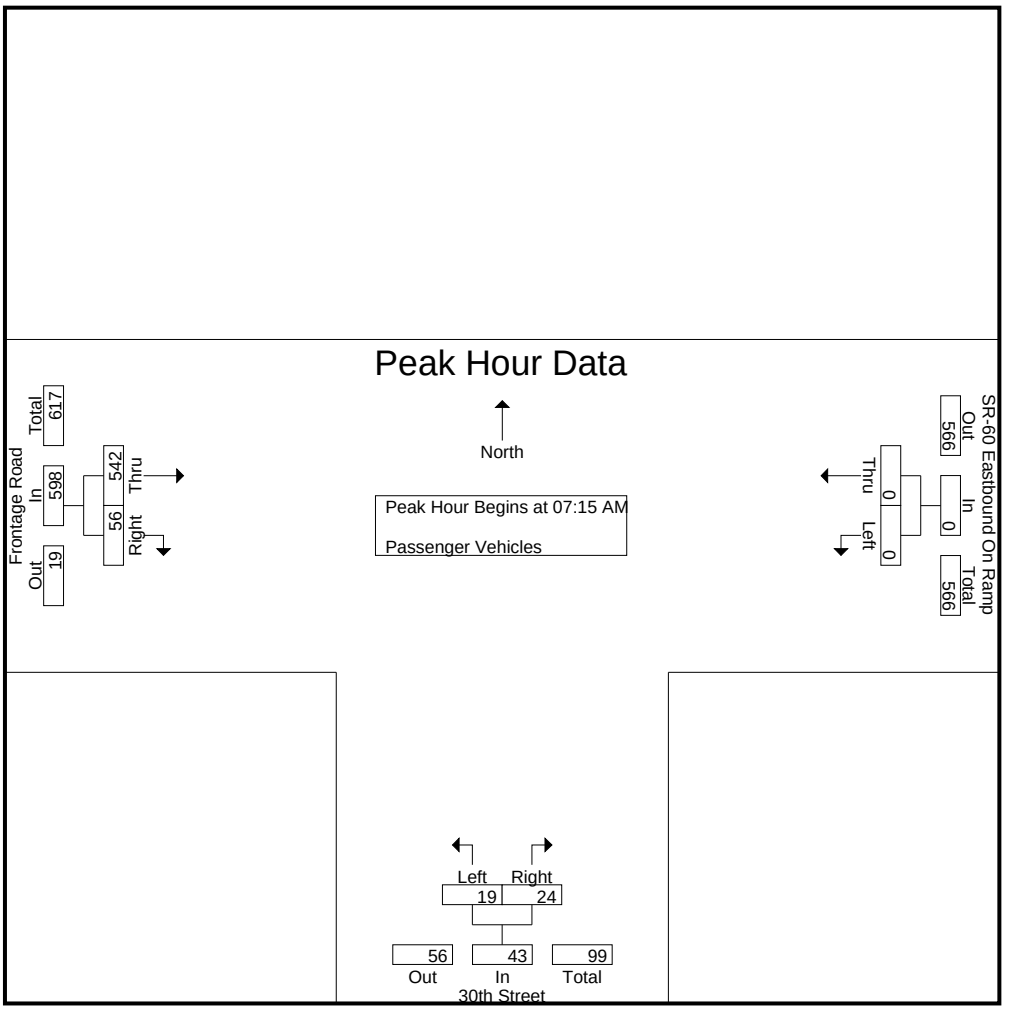
City of Jurupa Valley
N/S: 30th Street
E/W: Frontage Rd/SR-60 EB On Ramp
Weather: Clear

File Name : 24_JVY_30th_60E On AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	0	0	6	3	9	**141**	13	154
+15 mins.	0	0	0	**8**	**10**	**18**	133	12	145
+30 mins.	0	0	0	3	7	10	139	**16**	**155**
+45 mins.	0	0	0	2	4	6	129	15	144
Total Volume	0	0	0	19	24	43	542	56	598
% App. Total	0	0		44.2	55.8		90.6	9.4	
PHF	.000	.000	.000	.594	.600	.597	.961	.875	.965

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City of Jurupa Valley
N/S: 30th Street
E/W: Frontage Rd/SR-60 EB On Ramp
Weather: Clear

File Name : 24_JVY_30th_60E On AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	SR-60 Eastbound On Ramp Westbound			30th Street Northbound			Frontage Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:30 AM	0	0	0	0	0	0	8	0	8	8
06:45 AM	0	0	0	0	0	0	4	2	6	6
Total	0	0	0	0	0	0	12	2	14	14
07:00 AM	0	0	0	0	0	0	8	1	9	9
07:15 AM	0	0	0	0	0	0	5	0	5	5
07:30 AM	0	0	0	0	1	1	7	1	8	9
07:45 AM	0	0	0	0	0	0	4	0	4	4
Total	0	0	0	0	1	1	24	2	26	27
08:00 AM	0	0	0	0	0	0	3	1	4	4
08:15 AM	0	0	0	0	0	0	2	1	3	3
08:30 AM	0	0	0	0	0	0	4	0	4	4
08:45 AM	0	0	0	0	0	0	4	0	4	4
Total	0	0	0	0	0	0	13	2	15	15
Grand Total	0	0	0	0	1	1	49	6	55	56
Apprch %	0	0		0	100		89.1	10.9		
Total %	0	0	0	0	1.8	1.8	87.5	10.7	98.2	

	SR-60 Eastbound On Ramp Westbound			30th Street Northbound			Frontage Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	0	0	0	0	0	5	0	5	5
07:30 AM	0	0	0	0	**1**	**1**	**7**	**1**	**8**	**9**
07:45 AM	0	0	0	0	0	0	4	0	4	4
08:00 AM	0	0	0	0	0	0	3	1	4	4
Total Volume	0	0	0	0	1	1	19	2	21	22
% App. Total	0	0		0	100		90.5	9.5		
PHF	.000	.000	.000	.000	.250	.250	.679	.500	.656	.611

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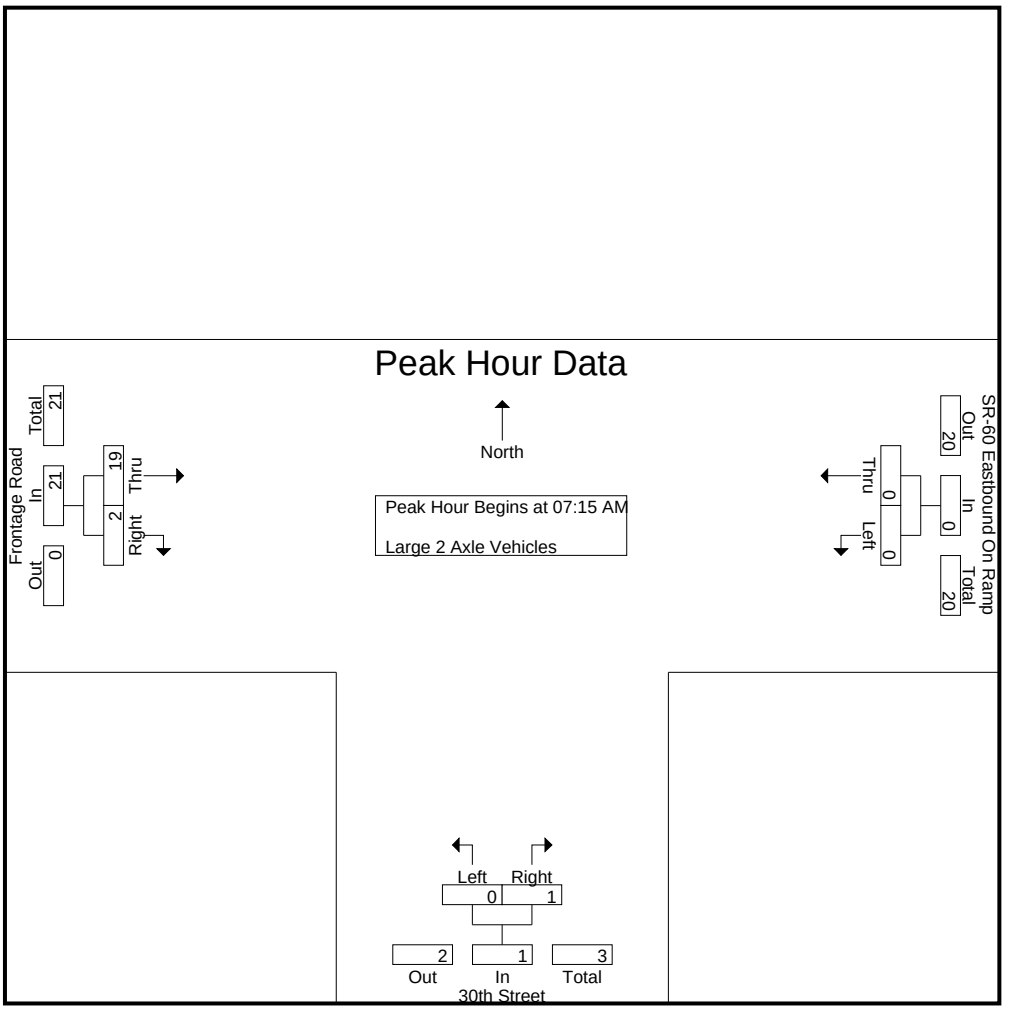

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	0	0	0	0	0	5	0	5
+15 mins.	0	0	0	0	**1**	**1**	**7**	**1**	**8**
+30 mins.	0	0	0	0	0	0	4	0	4
+45 mins.	0	0	0	0	0	0	3	1	4
Total Volume	0	0	0	0	1	1	19	2	21
% App. Total	0	0		0	100		90.5	9.5	
PHF	.000	.000	.000	.000	.250	.250	.679	.500	.656

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City of Jurupa Valley
N/S: 30th Street
E/W: Frontage Rd/SR-60 EB On Ramp
Weather: Clear

File Name : 24_JVY_30th_60E On AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	SR-60 Eastbound On Ramp Westbound			30th Street Northbound			Frontage Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:30 AM	0	0	0	0	0	0	4	0	4	4
06:45 AM	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	5	0	5	5
07:00 AM	0	0	0	0	0	0	1	0	1	1
07:15 AM	0	0	0	0	0	0	4	0	4	4
07:30 AM	0	0	0	0	0	0	1	0	1	1
07:45 AM	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	7	0	7	7
08:00 AM	0	0	0	0	0	0	3	0	3	3
08:15 AM	0	0	0	0	0	0	2	0	2	2
08:30 AM	0	0	0	0	0	0	1	0	1	1
08:45 AM	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	7	0	7	7
Grand Total	0	0	0	0	0	0	19	0	19	19
Apprch %	0	0		0	0		100	0		
Total %	0	0	0	0	0	0	100	0	100	

	SR-60 Eastbound On Ramp Westbound			30th Street Northbound			Frontage Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	0	0	0	0	0	**4**	0	**4**	**4**
07:30 AM	0	0	0	0	0	0	1	0	1	1
07:45 AM	0	0	0	0	0	0	1	0	1	1
08:00 AM	0	0	0	0	0	0	3	0	3	3
Total Volume	0	0	0	0	0	0	9	0	9	9
% App. Total	0	0		0	0		100	0		
PHF	.000	.000	.000	.000	.000	.000	.563	.000	.563	.563

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Weather: Clear

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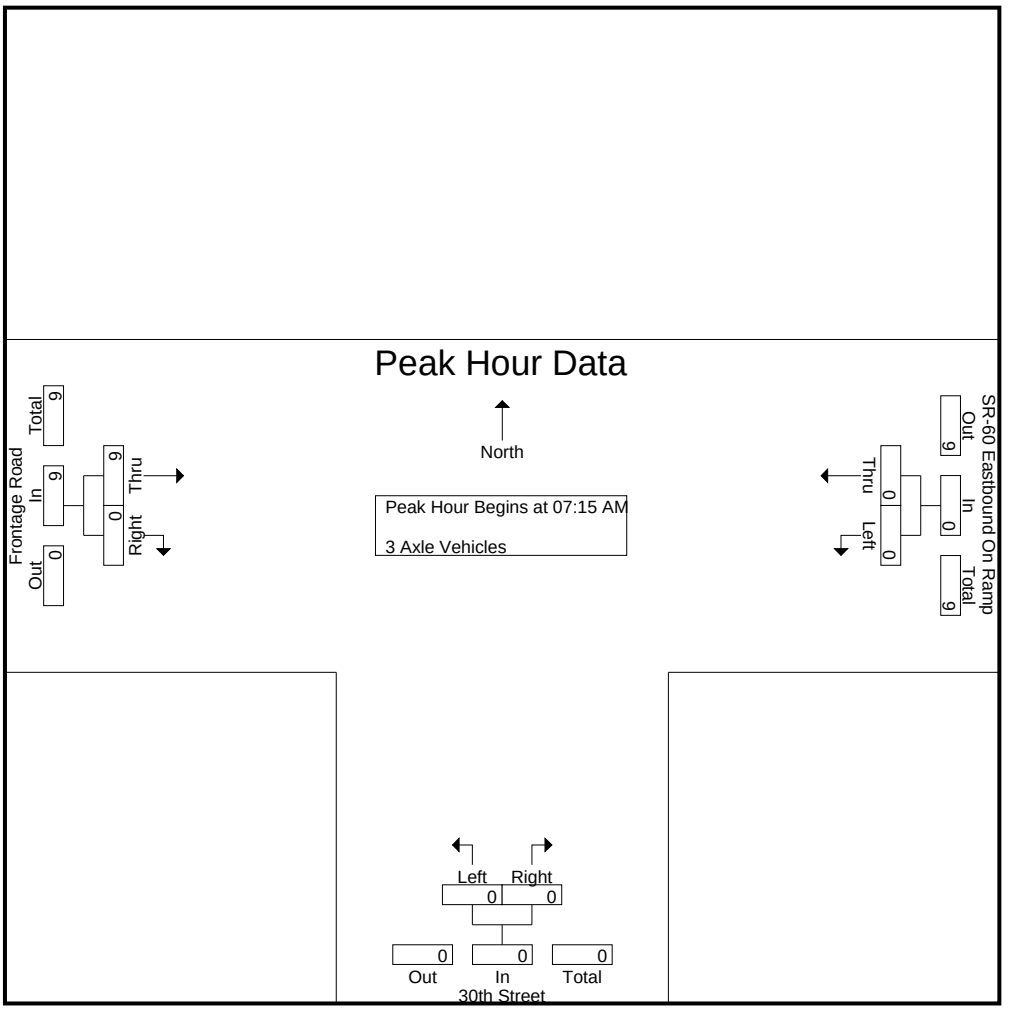

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	0	0	0	0	0	**4**	0	**4**
+15 mins.	0	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	0	3	0	3
Total Volume	0	0	0	0	0	0	9	0	9
% App. Total	0	0		0	0		100	0	
PHF	.000	.000	.000	.000	.000	.000	.563	.000	.563

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Groups Printed- 4+ Axle Trucks

	SR-60 Eastbound On Ramp Westbound			30th Street Northbound			Frontage Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:30 AM	0	0	0	0	0	0	2	0	2	2
06:45 AM	0	0	0	0	0	0	4	0	4	4
Total	0	0	0	0	0	0	6	0	6	6
07:00 AM	0	0	0	0	2	2	2	0	2	4
07:15 AM	0	0	0	1	0	1	2	0	2	3
07:30 AM	0	0	0	0	0	0	4	0	4	4
07:45 AM	0	0	0	0	0	0	3	0	3	3
Total	0	0	0	1	2	3	11	0	11	14
08:00 AM	0	0	0	0	2	2	4	0	4	6
08:15 AM	0	0	0	0	0	0	2	2	4	4
08:30 AM	0	0	0	0	1	1	5	0	5	6
08:45 AM	0	0	0	0	0	0	2	0	2	2
Total	0	0	0	0	3	3	13	2	15	18
Grand Total	0	0	0	1	5	6	30	2	32	38
Apprch %	0	0		16.7	83.3		93.8	6.2		
Total %	0	0	0	2.6	13.2	15.8	78.9	5.3	84.2	

	SR-60 Eastbound On Ramp Westbound			30th Street Northbound			Frontage Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	0	0	**1**	0	1	2	0	2	3
07:30 AM	0	0	0	0	0	0	**4**	0	**4**	4
07:45 AM	0	0	0	0	0	0	3	0	3	3
08:00 AM	0	0	0	0	**2**	**2**	4	0	4	**6**
Total Volume	0	0	0	1	2	3	13	0	13	16
% App. Total	0	0		33.3	66.7		100	0		
PHF	.000	.000	.000	.250	.250	.375	.813	.000	.813	.667

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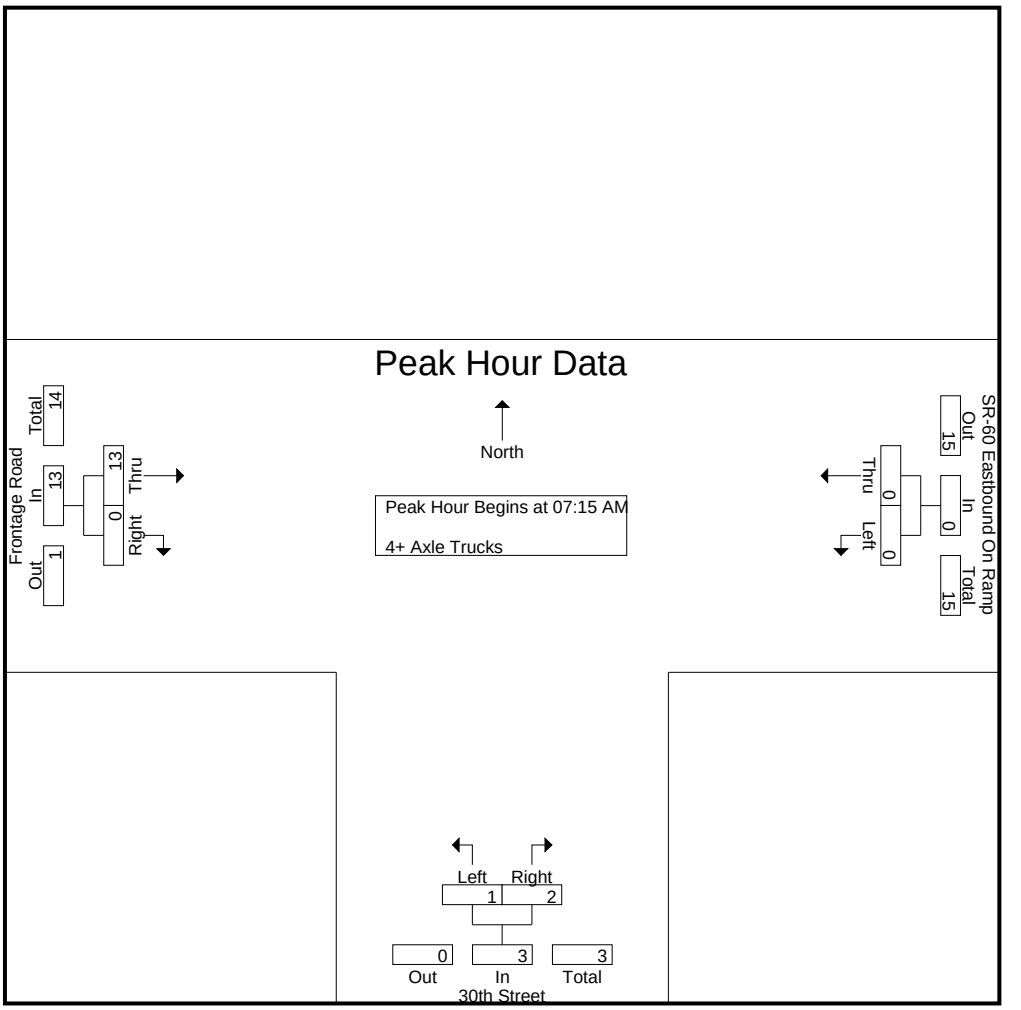

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	0	0	**1**	0	1	2	0	2
+15 mins.	0	0	0	0	0	0	**4**	0	**4**
+30 mins.	0	0	0	0	0	0	3	0	3
+45 mins.	0	0	0	0	**2**	**2**	4	0	4
Total Volume	0	0	0	1	2	3	13	0	13
% App. Total	0	0		33.3	66.7		100	0	
PHF	.000	.000	.000	.250	.250	.375	.813	.000	.813

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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	SR-60 Eastbound On Ramp Westbound			30th Street Northbound			Frontage Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
03:30 PM	0	0	0	4	0	4	97	21	118	122
03:45 PM	0	0	0	4	3	7	85	21	106	113
Total	0	0	0	8	3	11	182	42	224	235
04:00 PM	0	0	0	3	6	9	70	15	85	94
04:15 PM	0	0	0	2	3	5	78	15	93	98
04:30 PM	0	0	0	4	3	7	71	18	89	96
04:45 PM	0	0	0	1	2	3	70	16	86	89
Total	0	0	0	10	14	24	289	64	353	377
05:00 PM	0	0	0	5	5	10	60	19	79	89
05:15 PM	0	0	0	2	2	4	74	17	91	95
05:30 PM	0	0	0	5	2	7	63	23	86	93
05:45 PM	0	0	0	2	1	3	75	28	103	106
Total	0	0	0	14	10	24	272	87	359	383
Grand Total	0	0	0	32	27	59	743	193	936	995
Apprch %	0	0		54.2	45.8		79.4	20.6		
Total %	0	0	0	3.2	2.7	5.9	74.7	19.4	94.1	
Passenger Vehicles	0	0	0	31	26	57	698	186	884	941
% Passenger Vehicles	0	0	0	96.9	96.3	96.6	93.9	96.4	94.4	94.6
Large 2 Axle Vehicles	0	0	0	0	0	0	29	1	30	30
% Large 2 Axle Vehicles	0	0	0	0	0	0	3.9	0.5	3.2	3
3 Axle Vehicles	0	0	0	1	0	1	4	0	4	5
% 3 Axle Vehicles	0	0	0	3.1	0	1.7	0.5	0	0.4	0.5
4+ Axle Trucks	0	0	0	0	1	1	12	6	18	19
% 4+ Axle Trucks	0	0	0	0	3.7	1.7	1.6	3.1	1.9	1.9

	SR-60 Eastbound On Ramp Westbound			30th Street Northbound			Frontage Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:30 PM										
03:30 PM	0	0	0	**4**	0	4	**97**	**21**	**118**	**122**
03:45 PM	0	0	0	4	3	7	85	21	106	113
04:00 PM	0	0	0	3	**6**	**9**	70	15	85	94
04:15 PM	0	0	0	2	3	5	78	15	93	98
Total Volume	0	0	0	13	12	25	330	72	402	427
% App. Total	0	0		52	48		82.1	17.9		
PHF	.000	.000	.000	.813	.500	.694	.851	.857	.852	.875

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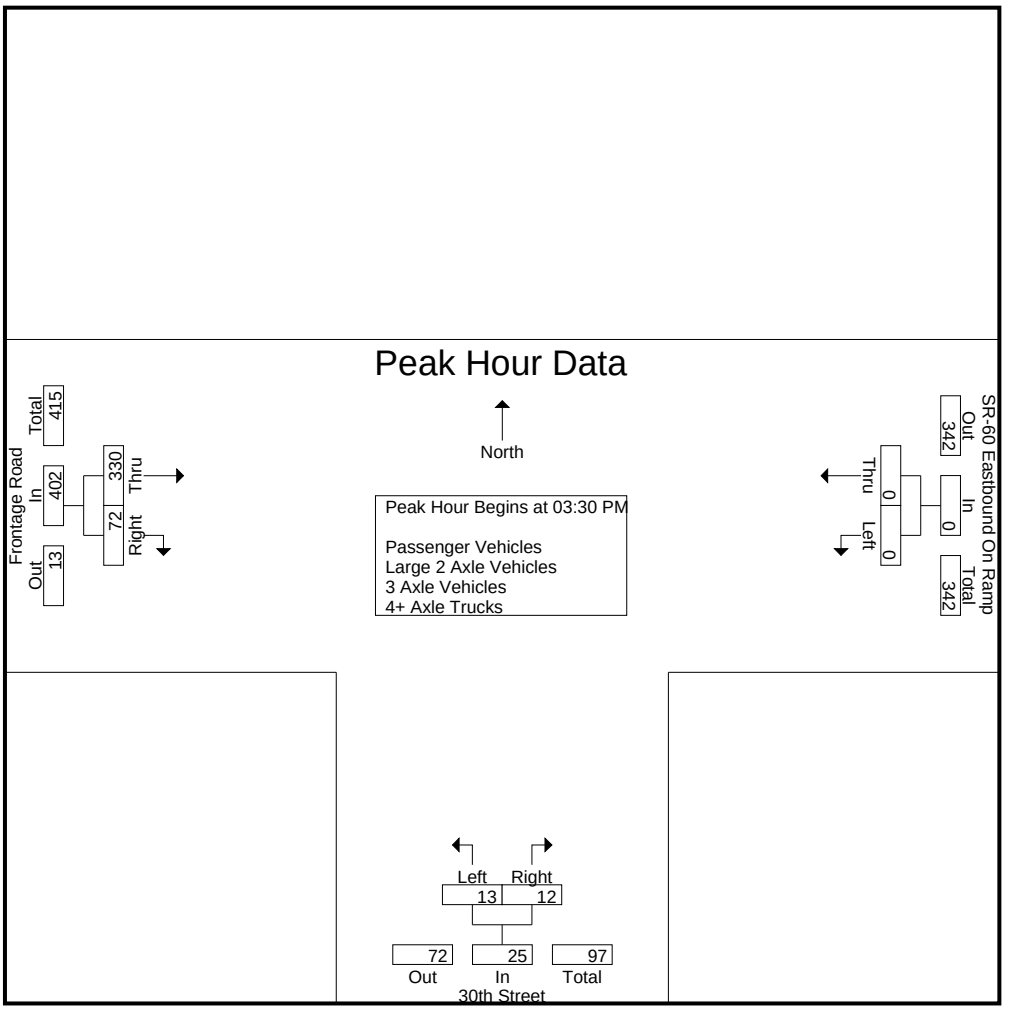

Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM			03:45 PM			03:30 PM		
+0 mins.	0	0	0	**4**	3	7	**97**	**21**	**118**
+15 mins.	0	0	0	3	**6**	**9**	85	21	106
+30 mins.	0	0	0	2	3	5	70	15	85
+45 mins.	0	0	0	4	3	7	78	15	93
Total Volume	0	0	0	13	15	28	330	72	402
% App. Total	0	0		46.4	53.6		82.1	17.9	
PHF	.000	.000	.000	.813	.625	.778	.851	.857	.852

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Groups Printed- Passenger Vehicles

	SR-60 Eastbound On Ramp Westbound			30th Street Northbound			Frontage Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
03:30 PM	0	0	0	4	0	4	90	21	111	115
03:45 PM	0	0	0	3	3	6	76	20	96	102
Total	0	0	0	7	3	10	166	41	207	217
04:00 PM	0	0	0	3	5	8	64	13	77	85
04:15 PM	0	0	0	2	3	5	71	15	86	91
04:30 PM	0	0	0	4	3	7	69	18	87	94
04:45 PM	0	0	0	1	2	3	67	15	82	85
Total	0	0	0	10	13	23	271	61	332	355
05:00 PM	0	0	0	5	5	10	58	19	77	87
05:15 PM	0	0	0	2	2	4	74	16	90	94
05:30 PM	0	0	0	5	2	7	59	23	82	89
05:45 PM	0	0	0	2	1	3	70	26	96	99
Total	0	0	0	14	10	24	261	84	345	369
Grand Total	0	0	0	31	26	57	698	186	884	941
Apprch %	0	0		54.4	45.6		79	21		
Total %	0	0	0	3.3	2.8	6.1	74.2	19.8	93.9	

	SR-60 Eastbound On Ramp Westbound			30th Street Northbound			Frontage Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:30 PM										
03:30 PM	0	0	0	**4**	0	4	**90**	**21**	**111**	**115**
03:45 PM	0	0	0	3	3	6	76	20	96	102
04:00 PM	0	0	0	3	**5**	**8**	64	13	77	85
04:15 PM	0	0	0	2	3	5	71	15	86	91
Total Volume	0	0	0	12	11	23	301	69	370	393
% App. Total	0	0		52.2	47.8		81.4	18.6		
PHF	.000	.000	.000	.750	.550	.719	.836	.821	.833	.854

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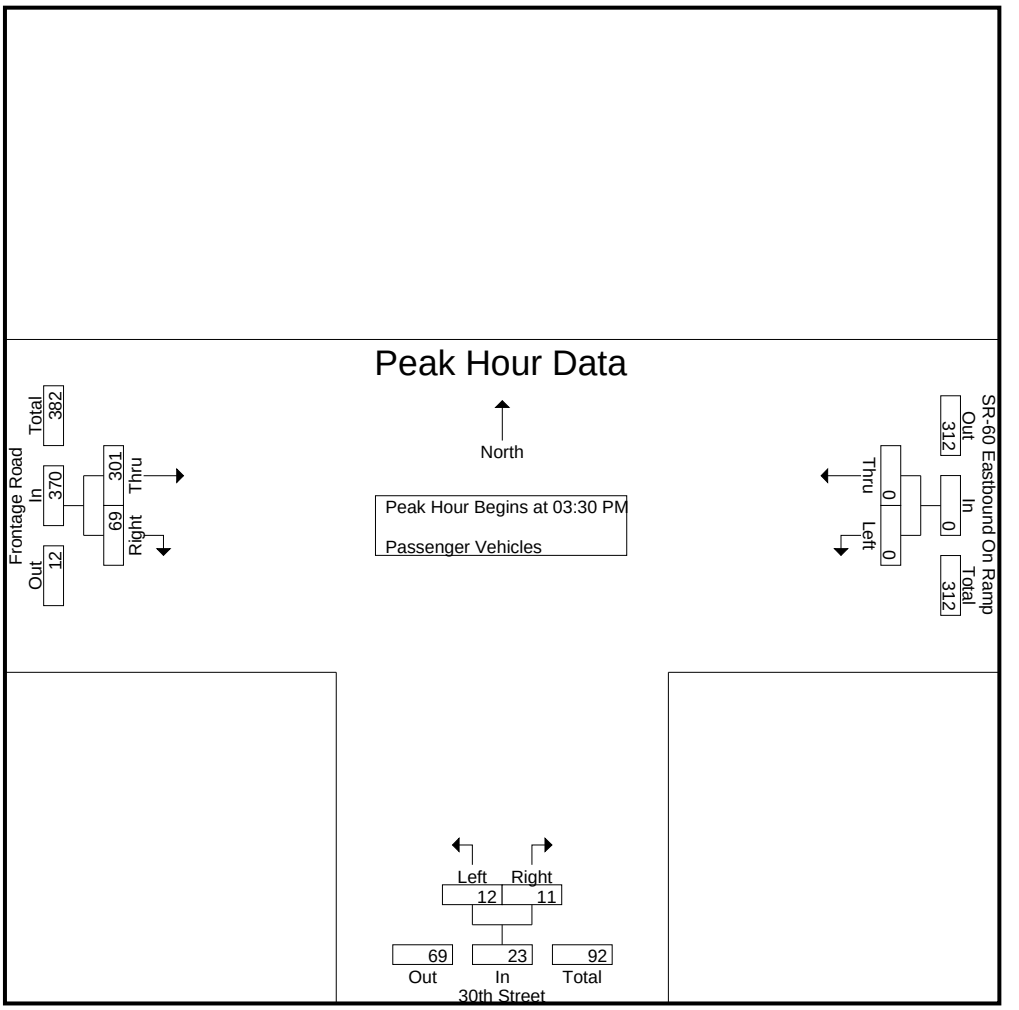

Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM			03:30 PM			03:30 PM		
+0 mins.	0	0	0	**4**	0	4	**90**	**21**	**111**
+15 mins.	0	0	0	3	3	6	76	20	96
+30 mins.	0	0	0	3	**5**	**8**	64	13	77
+45 mins.	0	0	0	2	3	5	71	15	86
Total Volume	0	0	0	12	11	23	301	69	370
% App. Total	0	0		52.2	47.8		81.4	18.6	
PHF	.000	.000	.000	.750	.550	.719	.836	.821	.833

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Groups Printed- Large 2 Axle Vehicles

	SR-60 Eastbound On Ramp Westbound			30th Street Northbound			Frontage Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
03:30 PM	0	0	0	0	0	0	6	0	6	6
03:45 PM	0	0	0	0	0	0	3	0	3	3
Total	0	0	0	0	0	0	9	0	9	9
04:00 PM	0	0	0	0	0	0	4	0	4	4
04:15 PM	0	0	0	0	0	0	4	0	4	4
04:30 PM	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	2	0	2	2
Total	0	0	0	0	0	0	11	0	11	11
05:00 PM	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	0	0	1	1	1
05:30 PM	0	0	0	0	0	0	3	0	3	3
05:45 PM	0	0	0	0	0	0	5	0	5	5
Total	0	0	0	0	0	0	9	1	10	10
Grand Total	0	0	0	0	0	0	29	1	30	30
Apprch %	0	0		0	0		96.7	3.3		
Total %	0	0	0	0	0	0	96.7	3.3	100	

	SR-60 Eastbound On Ramp Westbound			30th Street Northbound			Frontage Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:30 PM										
03:30 PM	0	0	0	0	0	0	**6**	0	**6**	**6**
03:45 PM	0	0	0	0	0	0	3	0	3	3
04:00 PM	0	0	0	0	0	0	4	0	4	4
04:15 PM	0	0	0	0	0	0	4	0	4	4
Total Volume	0	0	0	0	0	0	17	0	17	17
% App. Total	0	0		0	0		100	0		
PHF	.000	.000	.000	.000	.000	.000	.708	.000	.708	.708

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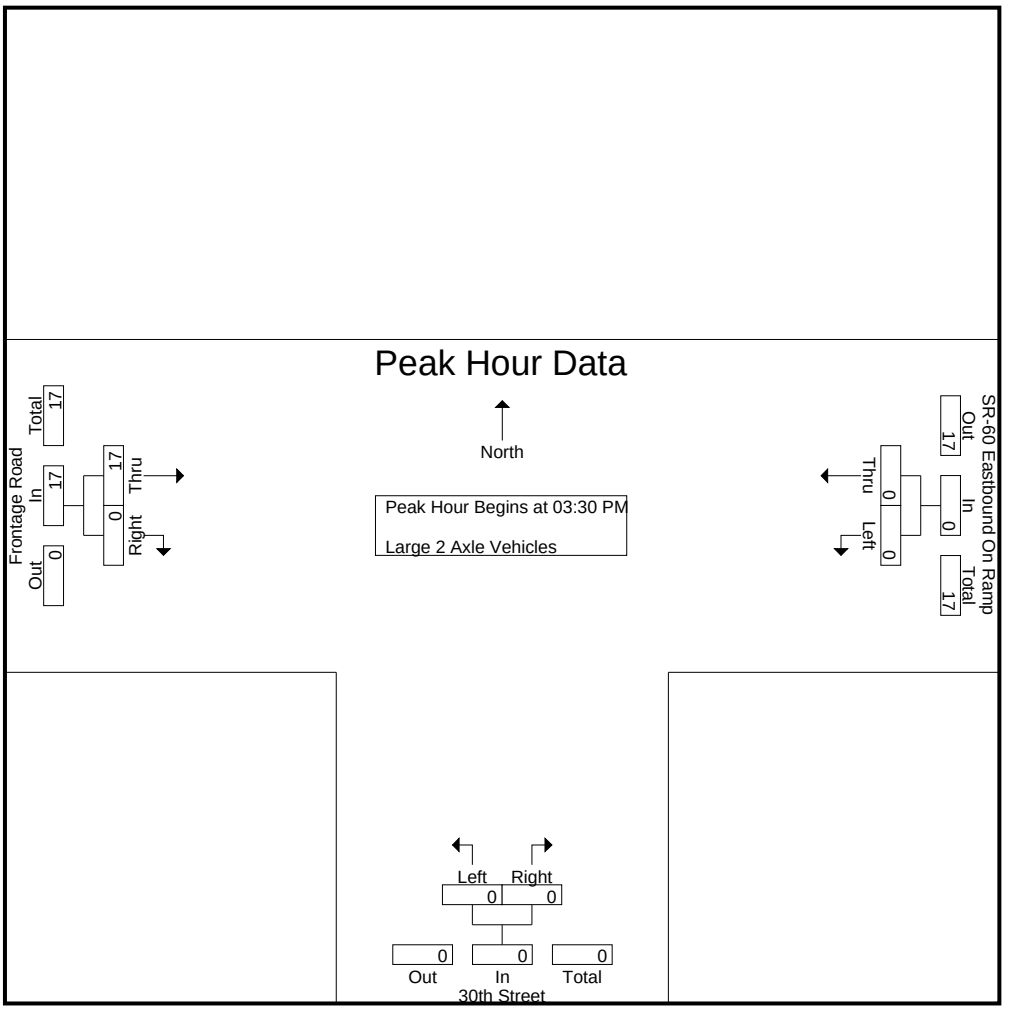

Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM			03:30 PM			03:30 PM		
+0 mins.	0	0	0	0	0	0	**6**	0	**6**
+15 mins.	0	0	0	0	0	0	3	0	3
+30 mins.	0	0	0	0	0	0	4	0	4
+45 mins.	0	0	0	0	0	0	4	0	4
Total Volume	0	0	0	0	0	0	17	0	17
% App. Total	0	0		0	0		100	0	
PHF	.000	.000	.000	.000	.000	.000	.708	.000	.708

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Groups Printed- 3 Axle Vehicles

	SR-60 Eastbound On Ramp Westbound			30th Street Northbound			Frontage Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
03:30 PM	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	1	0	1	1	0	1	2
Total	0	0	0	1	0	1	1	0	1	2
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	2	0	2	2
04:30 PM	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	3	0	3	3
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	1	0	1	4	0	4	5
Apprch %	0	0		100	0		100	0		
Total %	0	0	0	20	0	20	80	0	80	

	SR-60 Eastbound On Ramp Westbound			30th Street Northbound			Frontage Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:30 PM										
03:30 PM	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	**1**	0	**1**	1	0	1	**2**
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	**2**	0	**2**	2
Total Volume	0	0	0	1	0	1	3	0	3	4
% App. Total	0	0		100	0		100	0		
PHF	.000	.000	.000	.250	.000	.250	.375	.000	.375	.500

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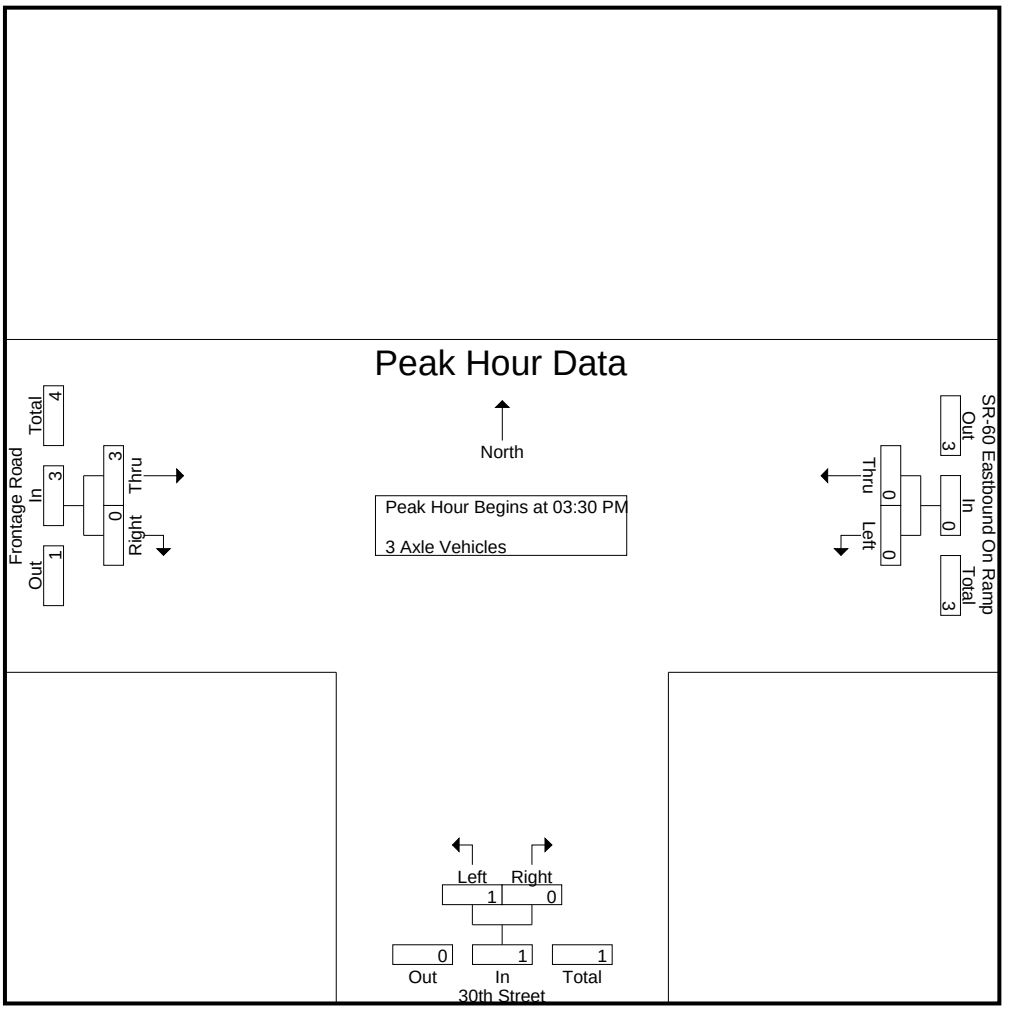

Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM			03:30 PM			03:30 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	**1**	0	**1**	1	0	1
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	**2**	0	**2**
Total Volume	0	0	0	1	0	1	3	0	3
% App. Total	0	0		100	0		100	0	
PHF	.000	.000	.000	.250	.000	.250	.375	.000	.375

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E/W: Frontage Rd/SR-60 EB On Ramp
Weather: Clear

File Name : 24_JVY_30th_60E On PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	SR-60 Eastbound On Ramp Westbound			30th Street Northbound			Frontage Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
03:30 PM	0	0	0	0	0	0	1	0	1	1
03:45 PM	0	0	0	0	0	0	5	1	6	6
Total	0	0	0	0	0	0	6	1	7	7
04:00 PM	0	0	0	0	1	1	2	2	4	5
04:15 PM	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	1	1	2	2
Total	0	0	0	0	1	1	4	3	7	8
05:00 PM	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	1	0	1	1
05:45 PM	0	0	0	0	0	0	0	2	2	2
Total	0	0	0	0	0	0	2	2	4	4
Grand Total	0	0	0	0	1	1	12	6	18	19
Apprch %	0	0		0	100		66.7	33.3		
Total %	0	0	0	0	5.3	5.3	63.2	31.6	94.7	

	SR-60 Eastbound On Ramp Westbound			30th Street Northbound			Frontage Road Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:30 PM										
03:30 PM	0	0	0	0	0	0	1	0	1	1
03:45 PM	0	0	0	0	0	0	**5**	1	**6**	**6**
04:00 PM	0	0	0	0	**1**	**1**	2	**2**	4	5
04:15 PM	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	1	1	9	3	12	13
% App. Total	0	0		0	100		75	25		
PHF	.000	.000	.000	.000	.250	.250	.450	.375	.500	.542

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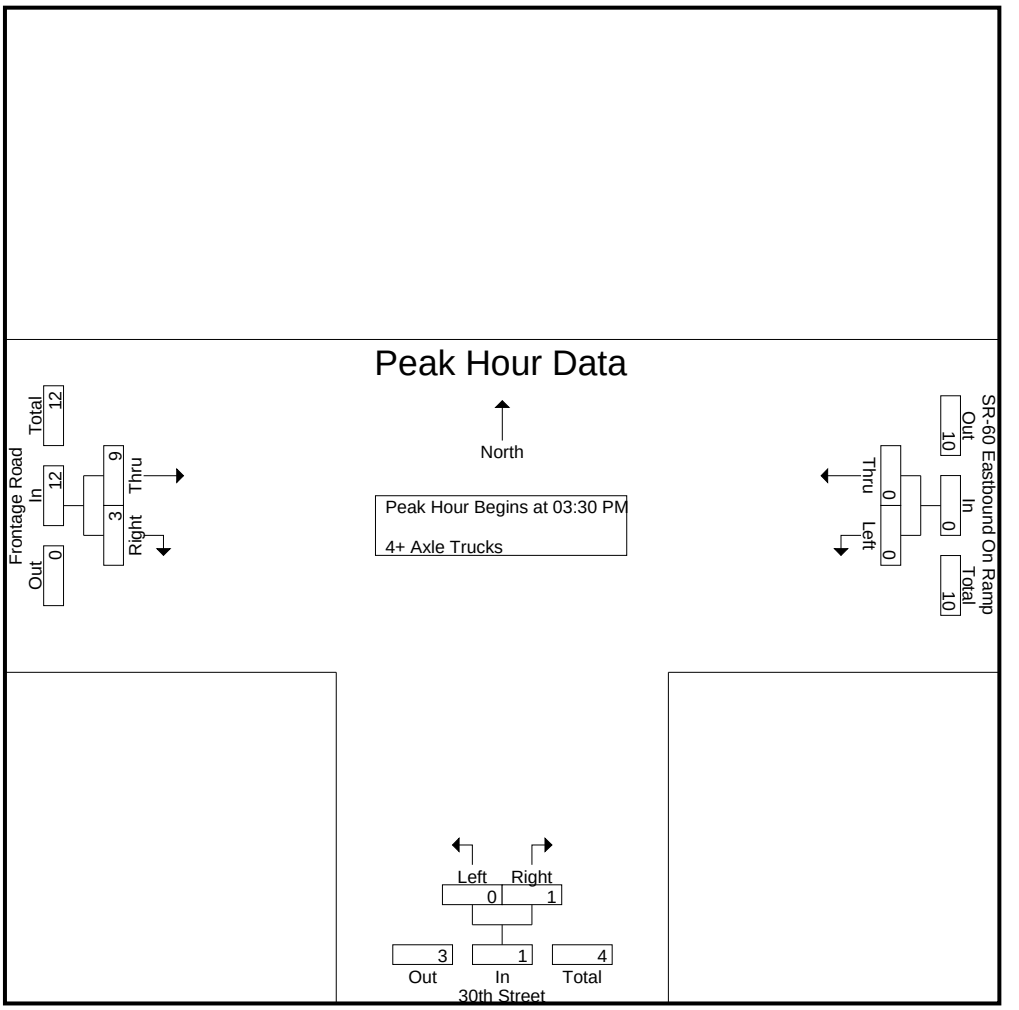
City of Jurupa Valley
N/S: 30th Street
E/W: Frontage Rd/SR-60 EB On Ramp
Weather: Clear

File Name : 24_JVY_30th_60E On PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM			03:30 PM			03:30 PM		
+0 mins.	0	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	0	**5**	1	**6**
+30 mins.	0	0	0	0	**1**	**1**	2	**2**	4
+45 mins.	0	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	1	1	9	3	12
% App. Total	0	0		0	100		75	25	
PHF	.000	.000	.000	.000	.250	.250	.450	.375	.500

Location: Jurupa Valley
N/S: 30th Street
E/W: Frontage Rd/SR-60 EB On Ramp

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Dead End	East Leg SR-60 EB On Ramp	South Leg 30th Street	West Leg Frontage Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Dead End	East Leg SR-60 EB On Ramp	South Leg 30th Street	West Leg Frontage Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: Jurupa Valley
N/S: 30th Street
E/W: Frontage Rd/SR-60 EB On Ramp

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Dead End			Westbound SR-60 EB On Ramp			Northbound 30th Street			Eastbound Frontage Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Dead End			Westbound SR-60 EB On Ramp			Northbound 30th Street			Eastbound Frontage Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	0	0	1	0	0	0	0	0	1

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City of Jurupa Valley
N/S: Agua Mansa Road
E/W: Market Street
Weather: Clear

File Name : 25_JVY_Agua M_Mark AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Agua Mansa Road Southbound					Market Street Westbound					Commercail Driveway Northbound					Market Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	22	0	33	18	55	0	93	31	7	124	3	0	3	2	6	46	111	3	2	160	29	345	374
06:45 AM	28	0	33	16	61	0	75	36	19	111	1	0	0	0	1	53	83	2	1	138	36	311	347
Total	50	0	66	34	116	0	168	67	26	235	4	0	3	2	7	99	194	5	3	298	65	656	721
07:00 AM	13	2	30	17	45	0	83	20	5	103	1	1	0	0	2	46	85	1	0	132	22	282	304
07:15 AM	19	0	37	18	56	0	81	21	8	102	2	0	2	0	4	53	87	3	0	143	26	305	331
07:30 AM	27	2	47	24	76	1	90	35	6	126	1	1	0	0	2	46	94	2	1	142	31	346	377
07:45 AM	17	1	41	17	59	1	75	30	12	106	3	1	1	1	5	63	79	2	1	144	31	314	345
Total	76	5	155	76	236	2	329	106	31	437	7	3	3	1	13	208	345	8	2	561	110	1247	1357
08:00 AM	32	1	46	22	79	0	110	19	4	129	4	0	2	0	6	63	106	1	1	170	27	384	411
08:15 AM	18	1	41	22	60	1	97	34	13	132	1	0	2	1	3	54	95	1	0	150	36	345	381
08:30 AM	25	0	32	17	57	5	93	33	6	131	1	0	1	0	2	37	98	0	0	135	23	325	348
08:45 AM	26	2	29	20	57	5	86	33	8	124	0	0	6	2	6	51	88	1	0	140	30	327	357
Total	101	4	148	81	253	11	386	119	31	516	6	0	11	3	17	205	387	3	1	595	116	1381	1497
Grand Total	227	9	369	191	605	13	883	292	88	1188	17	3	17	6	37	512	926	16	6	1454	291	3284	3575
Apprch %	37.5	1.5	61			1.1	74.3	24.6			45.9	8.1	45.9			35.2	63.7	1.1					
Total %	6.9	0.3	11.2		18.4	0.4	26.9	8.9		36.2	0.5	0.1	0.5		1.1	15.6	28.2	0.5		44.3	8.1	91.9	
Passenger Vehicles	153	0	212		487	3	789	223		1078	7	2	1		10	371	817	8		1199	0	0	2774
% Passenger Vehicles	67.4	0	57.5	63.9	61.2	23.1	89.4	76.4	71.6	84.5	41.2	66.7	5.9	0	23.3	72.5	88.2	50	50	82.1	0	0	77.6
Large 2 Axle Vehicles	19	0	34		70	0	30	8		41	0	1	2		5	30	50	2		83	0	0	199
% Large 2 Axle Vehicles	8.4	0	9.2	8.9	8.8	0	3.4	2.7	3.4	3.2	0	33.3	11.8	33.3	11.6	5.9	5.4	12.5	16.7	5.7	0	0	5.6
3 Axle Vehicles	21	0	29		62	8	30	19		64	1	0	9		13	29	17	3		50	0	0	189
% 3 Axle Vehicles	9.3	0	7.9	6.3	7.8	61.5	3.4	6.5	8	5	5.9	0	52.9	50	30.2	5.7	1.8	18.8	16.7	3.4	0	0	5.3
4+ Axle Trucks	34	9	94		177	2	34	42		93	9	0	5		15	82	42	3		128	0	0	413
% 4+ Axle Trucks	15	100	25.5	20.9	22.2	15.4	3.9	14.4	17	7.3	52.9	0	29.4	16.7	34.9	16	4.5	18.8	16.7	8.8	0	0	11.6

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City of Jurupa Valley
N/S: Agua Mansa Road
E/W: Market Street
Weather: Clear

File Name : 25_JVY_Agua M_Mark AM
Site Code : 05122894
Start Date : 10/4/2022

	Agua Mansa Road Southbound				Market Street Westbound				Commercail Driveway Northbound				Market Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	27	**2**	**47**	76	**1**	90	**35**	126	1	**1**	0	2	46	94	**2**	142	346
07:45 AM	17	1	41	59	1	75	30	106	3	1	1	5	**63**	79	2	144	314
08:00 AM	**32**	1	46	**79**	0	**110**	19	129	**4**	0	**2**	**6**	63	**106**	1	**170**	**384**
08:15 AM	18	1	41	60	1	97	34	**132**	1	0	2	3	54	95	1	150	345
Total Volume	94	5	175	274	3	372	118	493	9	2	5	16	226	374	6	606	1389
% App. Total	34.3	1.8	63.9		0.6	75.5	23.9		56.2	12.5	31.2		37.3	61.7	1		
PHF	.734	.625	.931	.867	.750	.845	.843	.934	.563	.500	.625	.667	.897	.882	.750	.891	.904

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City of Jurupa Valley
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File Name : 25_JVY_Agua M_Mark AM
Site Code : 05122894
Start Date : 10/4/2022
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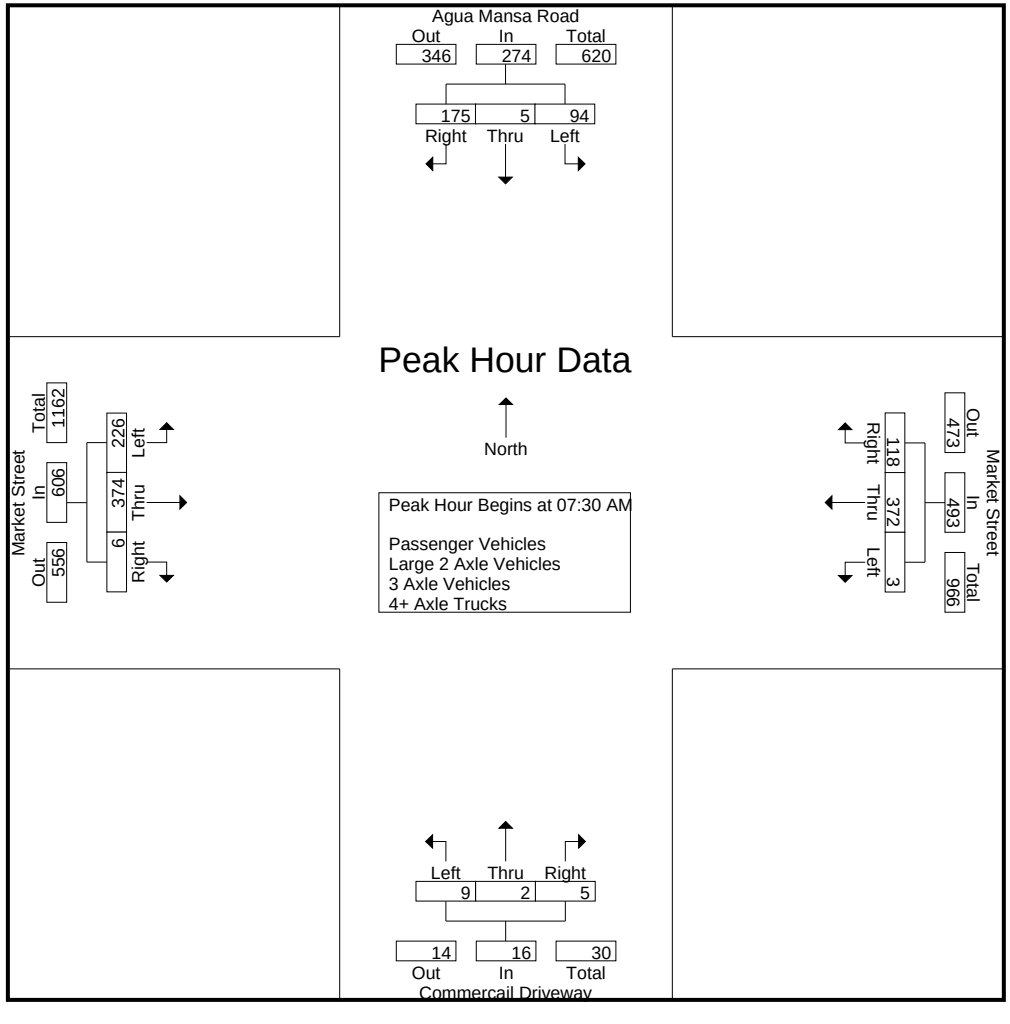

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City of Jurupa Valley
N/S: Agua Mansa Road
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Weather: Clear

File Name : 25_JVY_Agua M_Mark AM
Site Code : 05122894
Start Date : 10/4/2022

	Agua Mansa Road Southbound				Market Street Westbound				Commercail Driveway Northbound				Market Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				08:00 AM				07:15 AM				07:30 AM				
+0 mins.	27	**2**	**47**	76	0	**110**	19	129	2	0	**2**	4	46	94	**2**	142	
+15 mins.	17	1	41	59	1	97	**34**	**132**	1	**1**	0	2	**63**	79	2	144	
+30 mins.	**32**	1	46	**79**	**5**	93	33	131	3	1	1	5	63	**106**	1	**170**	
+45 mins.	18	1	41	60	5	86	33	124	**4**	0	2	**6**	54	95	1	150	
Total Volume	94	5	175	274	11	386	119	516	10	2	5	17	226	374	6	606	
% App. Total	34.3	1.8	63.9		2.1	74.8	23.1		58.8	11.8	29.4		37.3	61.7	1		
PHF	.734	.625	.931	.867	.550	.877	.875	.977	.625	.500	.625	.708	.897	.882	.750	.891	

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Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Agua Mansa Road Southbound					Market Street Westbound					Commercail Driveway Northbound					Market Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	10	0	15	7	25	0	80	23	5	103	2	0	0	0	2	37	94	2	2	133	14	263	277
06:45 AM	15	0	16	9	31	0	69	27	12	96	1	0	0	0	1	44	73	0	0	117	21	245	266
Total	25	0	31	16	56	0	149	50	17	199	3	0	0	0	3	81	167	2	2	250	35	508	543
07:00 AM	10	0	19	9	29	0	76	14	4	90	0	0	0	0	0	38	72	0	0	110	13	229	242
07:15 AM	15	0	20	12	35	0	73	19	7	92	0	0	0	0	0	37	76	3	0	116	19	243	262
07:30 AM	22	0	30	20	52	1	77	30	4	108	1	1	0	0	2	34	86	0	0	120	24	282	306
07:45 AM	15	0	26	11	41	1	67	23	9	91	1	1	0	0	2	48	73	2	1	123	21	257	278
Total	62	0	95	52	157	2	293	86	24	381	2	2	0	0	4	157	307	5	1	469	77	1011	1088
08:00 AM	24	0	31	20	55	0	99	13	2	112	2	0	0	0	2	51	95	0	0	146	22	315	337
08:15 AM	15	0	23	13	38	0	87	25	9	112	0	0	1	0	1	38	86	0	0	124	22	275	297
08:30 AM	16	0	15	8	31	0	89	26	5	115	0	0	0	0	0	20	89	0	0	109	13	255	268
08:45 AM	11	0	17	13	28	1	72	23	6	96	0	0	0	0	0	24	73	1	0	98	19	222	241
Total	66	0	86	54	152	1	347	87	22	435	2	0	1	0	3	133	343	1	0	477	76	1067	1143
Grand Total	153	0	212	122	365	3	789	223	63	1015	7	2	1	0	10	371	817	8	3	1196	188	2586	2774
Apprch %	41.9	0	58.1			0.3	77.7	22			70	20	10			31	68.3	0.7					
Total %	5.9	0	8.2		14.1	0.1	30.5	8.6		39.2	0.3	0.1	0		0.4	14.3	31.6	0.3		46.2	6.8	93.2	

	Agua Mansa Road Southbound				Market Street Westbound				Commercail Driveway Northbound				Market Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	22	0	30	52	**1**	77	**30**	108	1	**1**	0	**2**	34	86	0	120	282
07:45 AM	15	0	26	41	1	67	23	91	1	1	0	2	48	73	**2**	123	257
08:00 AM	**24**	0	**31**	**55**	0	**99**	13	**112**	**2**	0	0	2	**51**	**95**	0	**146**	**315**
08:15 AM	15	0	23	38	0	87	25	112	0	0	**1**	1	38	86	0	124	275
Total Volume	76	0	110	186	2	330	91	423	4	2	1	7	171	340	2	513	1129
% App. Total	40.9	0	59.1		0.5	78	21.5		57.1	28.6	14.3		33.3	66.3	0.4		
PHF	.792	.000	.887	.845	.500	.833	.758	.944	.500	.500	.250	.875	.838	.895	.250	.878	.896

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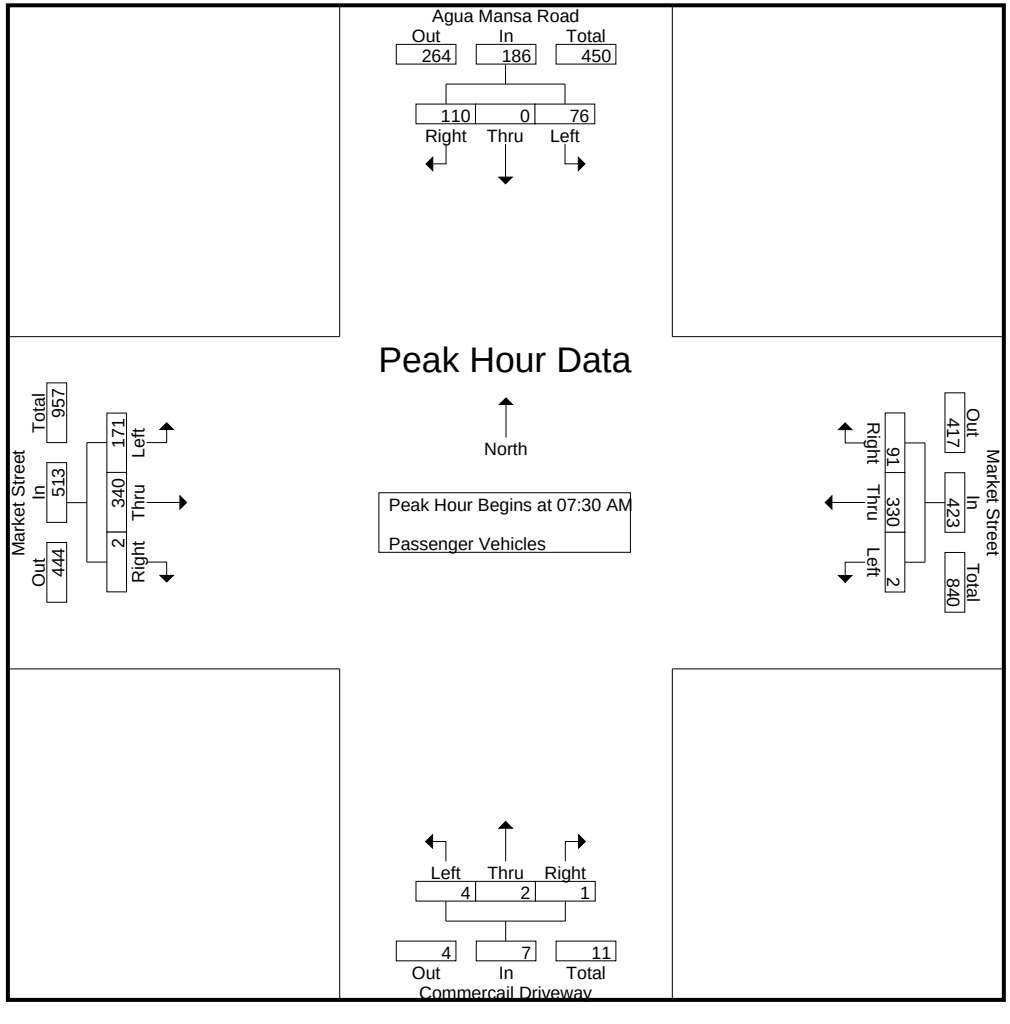

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City of Jurupa Valley
N/S: Agua Mansa Road
E/W: Market Street
Weather: Clear

File Name : 25_JVY_Agua M_Mark AM
Site Code : 05122894
Start Date : 10/4/2022

	Agua Mansa Road Southbound				Market Street Westbound				Commercail Driveway Northbound				Market Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	22	0	30	52	**1**	77	**30**	108	1	**1**	0	**2**	34	86	0	120	
+15 mins.	15	0	26	41	1	67	23	91	1	1	0	2	48	73	**2**	123	
+30 mins.	**24**	0	**31**	**55**	0	**99**	13	**112**	**2**	0	0	2	**51**	**95**	0	**146**	
+45 mins.	15	0	23	38	0	87	25	112	0	0	**1**	1	38	86	0	124	
Total Volume	76	0	110	186	2	330	91	423	4	2	1	7	171	340	2	513	
% App. Total	40.9	0	59.1		0.5	78	21.5		57.1	28.6	14.3		33.3	66.3	0.4		
PHF	.792	.000	.887	.845	.500	.833	.758	.944	.500	.500	.250	.875	.838	.895	.250	.878	

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(951)268-6268

City of Jurupa Valley
N/S: Agua Mansa Road
E/W: Market Street
Weather: Clear

File Name : 25_JVY_Agua M_Mark AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Agua Mansa Road Southbound					Market Street Westbound					Commercail Driveway Northbound					Market Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	0	5	4	5	0	4	0	0	4	0	0	0	0	0	1	7	0	0	8	4	17	21
06:45 AM	3	0	5	2	8	0	1	1	0	2	0	0	0	0	0	1	4	0	0	5	2	15	17
Total	3	0	10	6	13	0	5	1	0	6	0	0	0	0	0	2	11	0	0	13	6	32	38
07:00 AM	1	0	1	1	2	0	4	2	0	6	0	1	0	0	1	4	6	1	0	11	1	20	21
07:15 AM	2	0	5	2	7	0	2	0	0	2	0	0	0	0	0	5	5	0	0	10	2	19	21
07:30 AM	1	0	5	3	6	0	3	1	0	4	0	0	0	0	0	1	2	0	0	3	3	13	16
07:45 AM	0	0	2	1	2	0	4	1	1	5	0	0	1	1	1	4	3	0	0	7	3	15	18
Total	4	0	13	7	17	0	13	4	1	17	0	1	1	1	2	14	16	1	0	31	9	67	76
08:00 AM	1	0	2	0	3	0	4	0	0	4	0	0	0	0	0	2	5	1	1	8	1	15	16
08:15 AM	2	0	4	1	6	0	3	1	1	4	0	0	1	1	1	2	6	0	0	8	3	19	22
08:30 AM	4	0	4	2	8	0	2	0	0	2	0	0	0	0	0	6	6	0	0	12	2	22	24
08:45 AM	5	0	1	1	6	0	3	2	1	5	0	0	0	0	0	4	6	0	0	10	2	21	23
Total	12	0	11	4	23	0	12	3	2	15	0	0	1	1	1	14	23	1	1	38	8	77	85
Grand Total	19	0	34	17	53	0	30	8	3	38	0	1	2	2	3	30	50	2	1	82	23	176	199
Apprch %	35.8	0	64.2			0	78.9	21.1			0	33.3	66.7			36.6	61	2.4					
Total %	10.8	0	19.3		30.1	0	17	4.5		21.6	0	0.6	1.1		1.7	17	28.4	1.1		46.6	11.6	88.4	

	Agua Mansa Road Southbound				Market Street Westbound				Commercail Driveway Northbound				Market Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	0	**5**	**6**	0	3	**1**	4	0	0	0	0	1	2	0	3	13
07:45 AM	0	0	2	2	0	**4**	1	**5**	0	0	**1**	**1**	**4**	3	0	7	15
08:00 AM	1	0	2	3	0	4	0	4	0	0	0	0	2	5	**1**	**8**	15
08:15 AM	**2**	0	4	6	0	3	1	4	0	0	1	1	2	**6**	0	8	**19**
Total Volume	4	0	13	17	0	14	3	17	0	0	2	2	9	16	1	26	62
% App. Total	23.5	0	76.5		0	82.4	17.6		0	0	100		34.6	61.5	3.8		
PHF	.500	.000	.650	.708	.000	.875	.750	.850	.000	.000	.500	.500	.563	.667	.250	.813	.816

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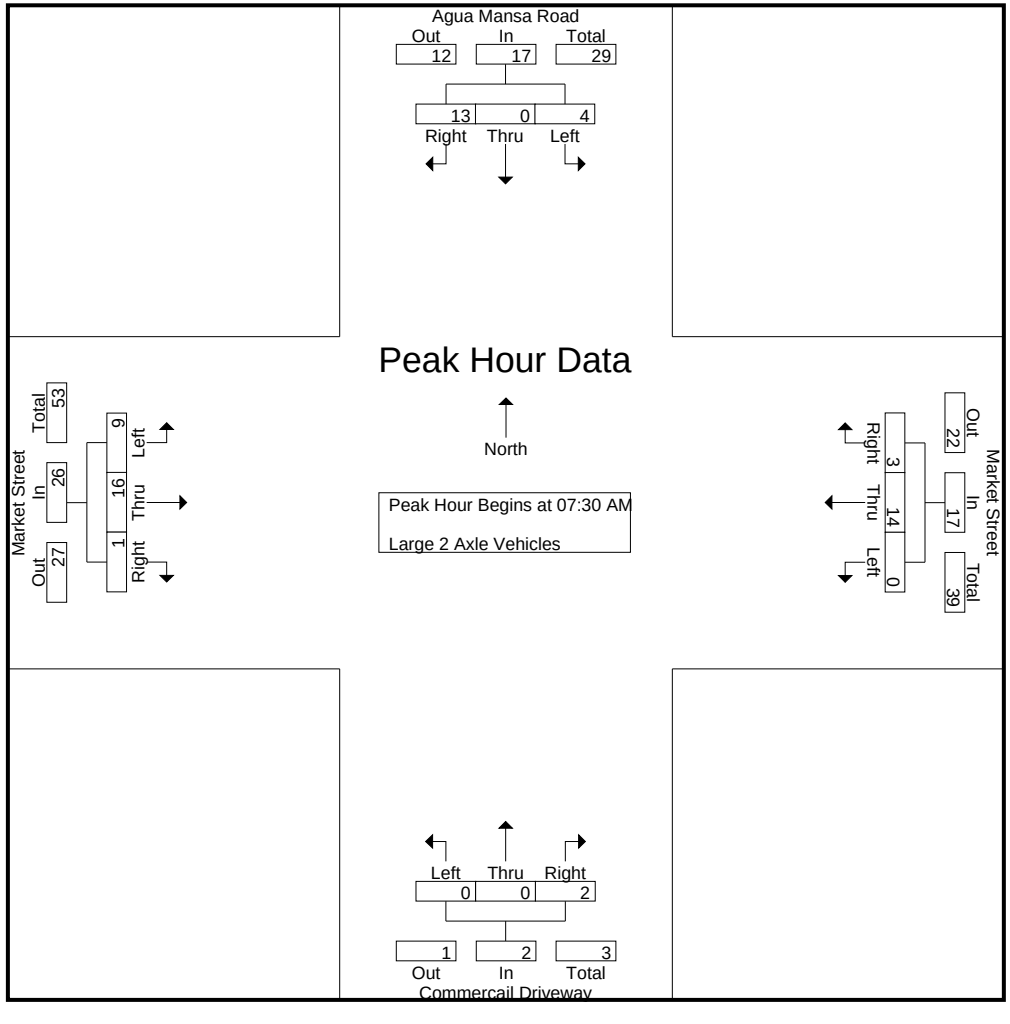
City of Jurupa Valley
N/S: Agua Mansa Road
E/W: Market Street
Weather: Clear

File Name : 25_JVY_Agua M_Mark AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Agua Mansa Road
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Weather: Clear

File Name : 25_JVY_Agua M_Mark AM
Site Code : 05122894
Start Date : 10/4/2022

	Agua Mansa Road Southbound				Market Street Westbound				Commercail Driveway Northbound				Market Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	1	0	**5**	**6**	0	3	**1**	4	0	0	0	0	1	2	0	3	
+15 mins.	0	0	2	2	0	**4**	1	**5**	0	0	**1**	**1**	**4**	3	0	7	
+30 mins.	1	0	2	3	0	4	0	4	0	0	0	0	2	5	**1**	**8**	
+45 mins.	**2**	0	4	6	0	3	1	4	0	0	1	1	2	**6**	0	8	
Total Volume	4	0	13	17	0	14	3	17	0	0	2	2	9	16	1	26	
% App. Total	23.5	0	76.5		0	82.4	17.6		0	0	100		34.6	61.5	3.8		
PHF	.500	.000	.650	.708	.000	.875	.750	.850	.000	.000	.500	.500	.563	.667	.250	.813	

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City of Jurupa Valley
N/S: Agua Mansa Road
E/W: Market Street
Weather: Clear

File Name : 25_JVY_Agua M_Mark AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Agua Mansa Road Southbound					Market Street Westbound					Commercail Driveway Northbound					Market Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	3	0	4	2	7	0	5	2	2	7	0	0	1	1	1	1	6	0	0	7	5	22	27
06:45 AM	2	0	2	1	4	0	4	1	1	5	0	0	0	0	0	1	0	0	0	1	2	10	12
Total	5	0	6	3	11	0	9	3	3	12	0	0	1	1	1	2	6	0	0	8	7	32	39
07:00 AM	1	0	3	2	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	5	7
07:15 AM	1	0	2	0	3	0	3	0	0	3	0	0	0	0	0	2	2	0	0	4	0	10	10
07:30 AM	2	0	2	0	4	0	2	4	2	6	0	0	0	0	0	5	0	2	1	7	3	17	20
07:45 AM	2	0	3	2	5	0	1	3	1	4	0	0	0	0	0	5	1	0	0	6	3	15	18
Total	6	0	10	4	16	0	6	7	3	13	0	0	0	0	0	13	3	2	1	18	8	47	55
08:00 AM	5	0	4	0	9	0	4	0	0	4	1	0	2	0	3	2	1	0	0	3	0	19	19
08:15 AM	0	0	3	2	3	1	5	2	0	8	0	0	0	0	0	3	1	1	0	5	2	16	18
08:30 AM	1	0	3	2	4	4	2	3	1	9	0	0	1	0	1	0	3	0	0	3	3	17	20
08:45 AM	4	0	3	1	7	3	4	4	0	11	0	0	5	2	5	9	3	0	0	12	3	35	38
Total	10	0	13	5	23	8	15	9	1	32	1	0	8	2	9	14	8	1	0	23	8	87	95
Grand Total	21	0	29	12	50	8	30	19	7	57	1	0	9	3	10	29	17	3	1	49	23	166	189
Apprch %	42	0	58			14	52.6	33.3			10	0	90			59.2	34.7	6.1					
Total %	12.7	0	17.5		30.1	4.8	18.1	11.4		34.3	0.6	0	5.4		6	17.5	10.2	1.8		29.5	12.2	87.8	

	Agua Mansa Road Southbound				Market Street Westbound				Commercail Driveway Northbound				Market Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	2	0	2	4	0	2	**4**	6	0	0	0	0	**5**	0	**2**	**7**	17
07:45 AM	2	0	3	5	0	1	3	4	0	0	0	0	5	**1**	0	6	15
08:00 AM	**5**	0	**4**	**9**	0	4	0	4	**1**	0	**2**	**3**	2	1	0	3	**19**
08:15 AM	0	0	3	3	**1**	**5**	2	**8**	0	0	0	0	3	1	1	5	16
Total Volume	9	0	12	21	1	12	9	22	1	0	2	3	15	3	3	21	67
% App. Total	42.9	0	57.1		4.5	54.5	40.9		33.3	0	66.7		71.4	14.3	14.3		
PHF	.450	.000	.750	.583	.250	.600	.563	.688	.250	.000	.250	.250	.750	.750	.375	.750	.882

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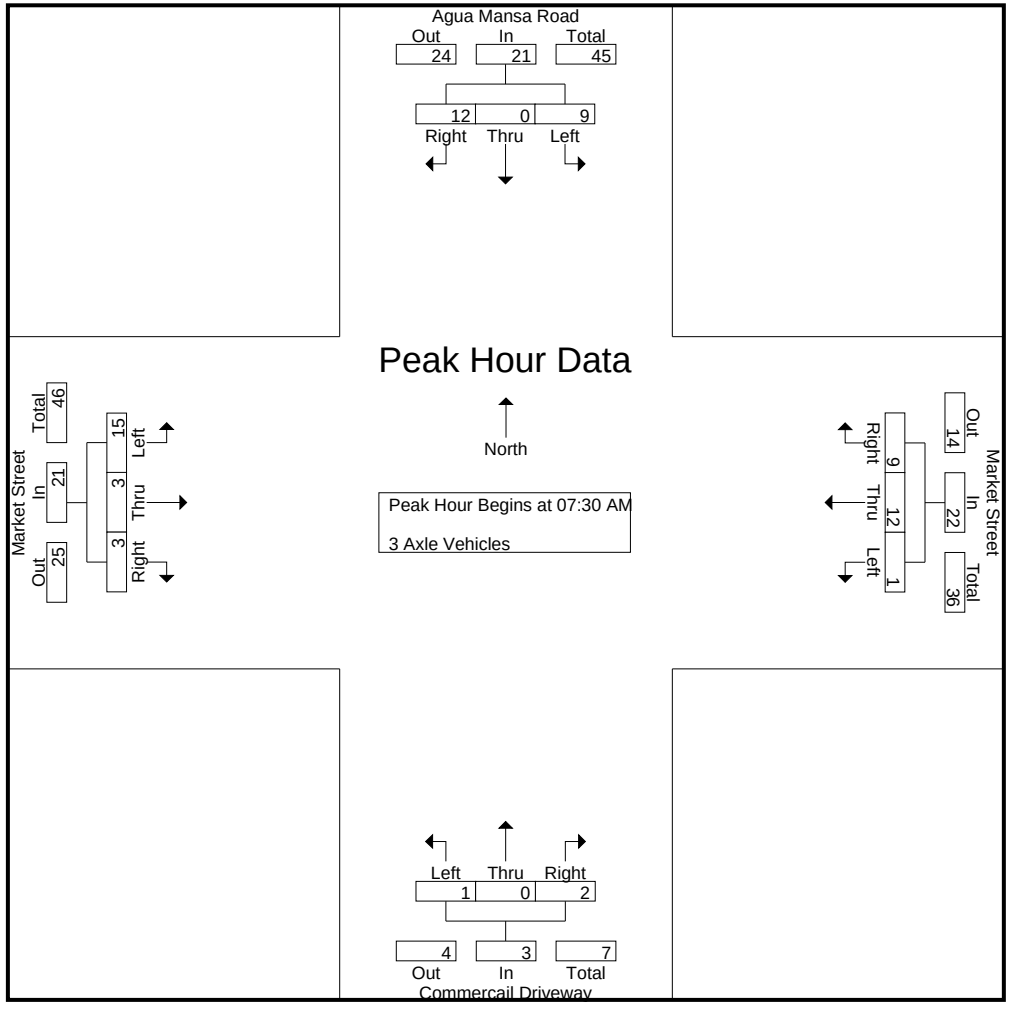
City of Jurupa Valley
N/S: Agua Mansa Road
E/W: Market Street
Weather: Clear

File Name : 25_JVY_Agua M_Mark AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Agua Mansa Road
E/W: Market Street
Weather: Clear

File Name : 25_JVY_Agua M_Mark AM
Site Code : 05122894
Start Date : 10/4/2022

	Agua Mansa Road Southbound				Market Street Westbound				Commercail Driveway Northbound				Market Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	2	0	2	4	0	2	**4**	6	0	0	0	0	**5**	0	**2**	**7**	
+15 mins.	2	0	3	5	0	1	3	4	0	0	0	0	5	**1**	0	6	
+30 mins.	**5**	0	**4**	**9**	0	4	0	4	**1**	0	**2**	**3**	2	1	0	3	
+45 mins.	0	0	3	3	**1**	**5**	2	**8**	0	0	0	0	3	1	1	5	
Total Volume	9	0	12	21	1	12	9	22	1	0	2	3	15	3	3	21	
% App. Total	42.9	0	57.1		4.5	54.5	40.9		33.3	0	66.7		71.4	14.3	14.3		
PHF	.450	.000	.750	.583	.250	.600	.563	.688	.250	.000	.250	.250	.750	.750	.375	.750	

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City of Jurupa Valley
N/S: Agua Mansa Road
E/W: Market Street
Weather: Clear

File Name : 25_JVY_Agua M_Mark AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Agua Mansa Road Southbound					Market Street Westbound					Commercail Driveway Northbound					Market Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	9	0	9	5	18	0	4	6	0	10	1	0	2	1	3	7	4	1	0	12	6	43	49
06:45 AM	8	0	10	4	18	0	1	7	6	8	0	0	0	0	0	7	6	2	1	15	11	41	52
Total	17	0	19	9	36	0	5	13	6	18	1	0	2	1	3	14	10	3	1	27	17	84	101
07:00 AM	1	2	7	5	10	0	3	4	1	7	1	0	0	0	1	3	7	0	0	10	6	28	34
07:15 AM	1	0	10	4	11	0	3	2	1	5	2	0	2	0	4	9	4	0	0	13	5	33	38
07:30 AM	2	2	10	1	14	0	8	0	0	8	0	0	0	0	0	6	6	0	0	12	1	34	35
07:45 AM	0	1	10	3	11	0	3	3	1	6	2	0	0	0	2	6	2	0	0	8	4	27	31
Total	4	5	37	13	46	0	17	9	3	26	5	0	2	0	7	24	19	0	0	43	16	122	138
08:00 AM	2	1	9	2	12	0	3	6	2	9	1	0	0	0	1	8	5	0	0	13	4	35	39
08:15 AM	1	1	11	6	13	0	2	6	3	8	1	0	0	0	1	11	2	0	0	13	9	35	44
08:30 AM	4	0	10	5	14	1	0	4	0	5	1	0	0	0	1	11	0	0	0	11	5	31	36
08:45 AM	6	2	8	5	16	1	7	4	1	12	0	0	1	0	1	14	6	0	0	20	6	49	55
Total	13	4	38	18	55	2	12	20	6	34	3	0	1	0	4	44	13	0	0	57	24	150	174
Grand Total	34	9	94	40	137	2	34	42	15	78	9	0	5	1	14	82	42	3	1	127	57	356	413
Apprch %	24.8	6.6	68.6			2.6	43.6	53.8			64.3	0	35.7			64.6	33.1	2.4					
Total %	9.6	2.5	26.4		38.5	0.6	9.6	11.8		21.9	2.5	0	1.4		3.9	23	11.8	0.8		35.7	13.8	86.2	

	Agua Mansa Road Southbound				Market Street Westbound				Commercail Driveway Northbound				Market Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**2**	**2**	10	**14**	0	**8**	0	8	0	0	0	0	6	**6**	0	12	34
07:45 AM	0	1	10	11	0	3	3	6	**2**	0	0	**2**	6	2	0	8	27
08:00 AM	2	1	9	12	0	3	**6**	**9**	1	0	0	1	8	5	0	**13**	**35**
08:15 AM	1	1	**11**	13	0	2	6	8	1	0	0	1	**11**	2	0	13	35
Total Volume	5	5	40	50	0	16	15	31	4	0	0	4	31	15	0	46	131
% App. Total	10	10	80		0	51.6	48.4		100	0	0		67.4	32.6	0		
PHF	.625	.625	.909	.893	.000	.500	.625	.861	.500	.000	.000	.500	.705	.625	.000	.885	.936

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City of Jurupa Valley
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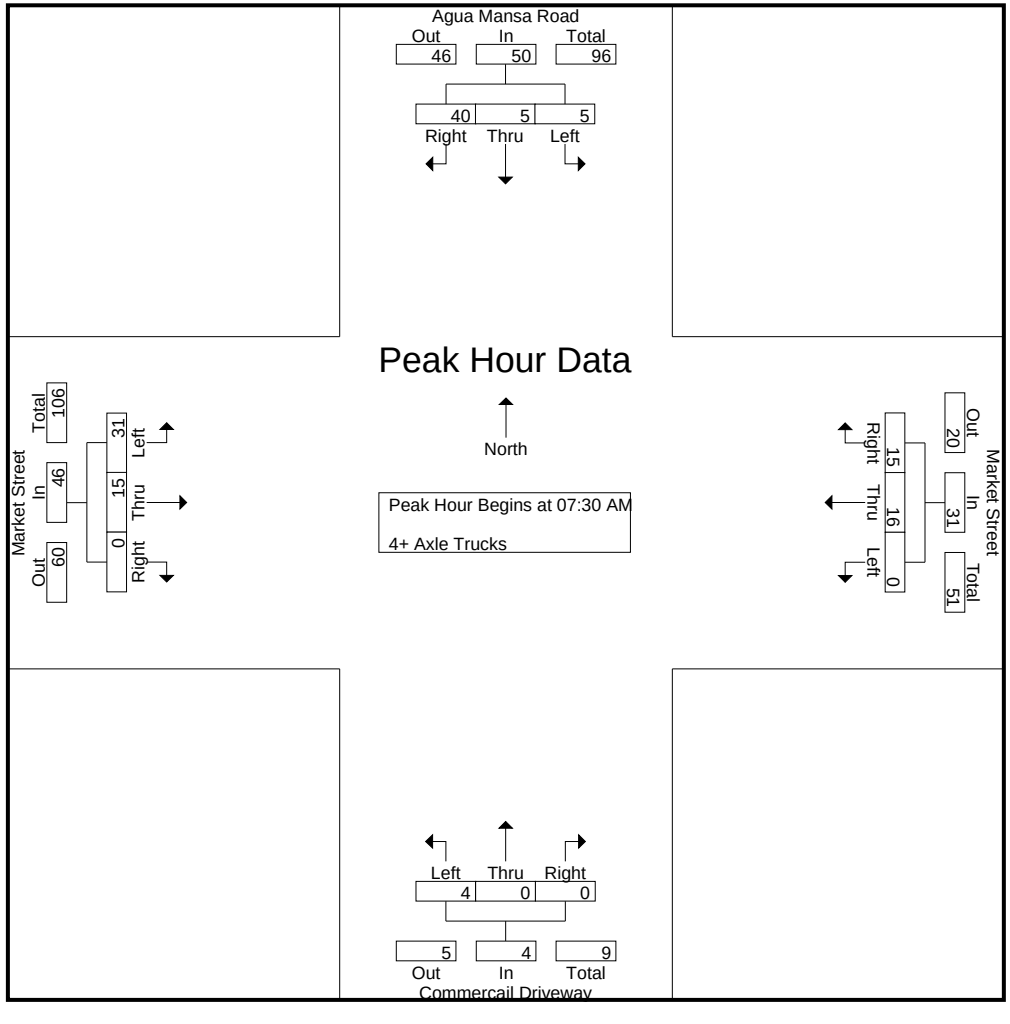
File Name : 25_JVY_Agua M_Mark AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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N/S: Agua Mansa Road
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	Agua Mansa Road Southbound				Market Street Westbound				Commercail Driveway Northbound				Market Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	**2**	**2**	10	**14**	0	**8**	0	8	0	0	0	0	6	**6**	0	12	
+15 mins.	0	1	10	11	0	3	3	6	**2**	0	0	**2**	6	2	0	8	
+30 mins.	2	1	9	12	0	3	**6**	**9**	1	0	0	1	8	5	0	**13**	
+45 mins.	1	1	**11**	13	0	2	6	8	1	0	0	1	**11**	2	0	13	
Total Volume	5	5	40	50	0	16	15	31	4	0	0	4	31	15	0	46	
% App. Total	10	10	80		0	51.6	48.4		100	0	0		67.4	32.6	0		
PHF	.625	.625	.909	.893	.000	.500	.625	.861	.500	.000	.000	.500	.705	.625	.000	.885	

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Weather: Clear

File Name : 25_JVY_Agua M_Mark PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Agua Mansa Road Southbound					Market Street Westbound					Commercial Driveway Northbound					Market Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	54	0	59	30	113	0	85	38	14	123	1	0	0	0	1	74	103	0	0	177	44	414	458
03:45 PM	36	0	47	28	83	0	113	32	13	145	0	0	1	1	1	69	92	1	0	162	42	391	433
Total	90	0	106	58	196	0	198	70	27	268	1	0	1	1	2	143	195	1	0	339	86	805	891
04:00 PM	35	0	59	32	94	0	89	35	10	124	0	0	1	0	1	60	88	2	0	150	42	369	411
04:15 PM	27	2	51	38	80	0	104	30	13	134	0	0	0	0	0	83	117	0	0	200	51	414	465
04:30 PM	41	0	57	26	98	0	99	19	7	118	0	0	0	0	0	82	92	0	0	174	33	390	423
04:45 PM	19	0	58	26	77	0	102	21	5	123	0	2	0	0	2	94	96	3	1	193	32	395	427
Total	122	2	225	122	349	0	394	105	35	499	0	2	1	0	3	319	393	5	1	717	158	1568	1726
05:00 PM	38	0	63	34	101	0	123	31	11	154	0	1	0	0	1	85	92	1	0	178	45	434	479
05:15 PM	27	0	55	28	82	0	119	25	5	144	0	0	0	0	0	69	101	0	0	170	33	396	429
05:30 PM	28	0	41	17	69	0	115	28	5	143	0	2	0	0	2	85	95	1	0	181	22	395	417
05:45 PM	13	0	42	29	55	0	82	24	7	106	0	0	0	0	0	91	107	0	0	198	36	359	395
Total	106	0	201	108	307	0	439	108	28	547	0	3	0	0	3	330	395	2	0	727	136	1584	1720
Grand Total	318	2	532	288	852	0	1031	283	90	1314	1	5	2	1	8	792	983	8	1	1783	380	3957	4337
Apprch %	37.3	0.2	62.4			0	78.5	21.5			12.5	62.5	25			44.4	55.1	0.4					
Total %	8	0.1	13.4		21.5	0	26.1	7.2		33.2	0	0.1	0.1		0.2	20	24.8	0.2		45.1	8.8	91.2	
Passenger Vehicles	267	2	406		903	0	948	162		1155	1	5	2		9	560	934	8		1503	0	0	3570
% Passenger Vehicles	84	100	76.3	79.2	79.2	0	91.9	57.2	50	82.3	100	100	100	100	100	70.7	95	100	100	84.2	0	0	82.3
Large 2 Axle Vehicles	12	0	20		43	0	37	33		83	0	0	0		0	46	22	0		68	0	0	194
% Large 2 Axle Vehicles	3.8	0	3.8	3.8	3.8	0	3.6	11.7	14.4	5.9	0	0	0	0	0	5.8	2.2	0	0	3.8	0	0	4.5
3 Axle Vehicles	18	0	23		51	0	8	57		91	0	0	0		0	51	10	0		61	0	0	203
% 3 Axle Vehicles	5.7	0	4.3	3.5	4.5	0	0.8	20.1	28.9	6.5	0	0	0	0	0	6.4	1	0	0	3.4	0	0	4.7
4+ Axle Trucks	21	0	83		143	0	38	31		75	0	0	0		0	135	17	0		152	0	0	370
% 4+ Axle Trucks	6.6	0	15.6	13.5	12.5	0	3.7	11	6.7	5.3	0	0	0	0	0	17	1.7	0	0	8.5	0	0	8.5

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City of Jurupa Valley
N/S: Agua Mansa Road
E/W: Market Street
Weather: Clear

File Name : 25_JVY_Agua M_Mark PM
Site Code : 05122894
Start Date : 10/4/2022

	Agua Mansa Road Southbound				Market Street Westbound				Commercial Driveway Northbound				Market Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	27	**2**	51	80	0	104	30	134	0	0	0	0	83	**117**	0	**200**	414
04:30 PM	**41**	0	57	98	0	99	19	118	0	0	0	0	82	92	0	174	390
04:45 PM	19	0	58	77	0	102	21	123	0	**2**	0	**2**	**94**	96	**3**	193	395
05:00 PM	38	0	**63**	**101**	0	**123**	**31**	**154**	0	1	0	1	85	92	1	178	**434**
Total Volume	125	2	229	356	0	428	101	529	0	3	0	3	344	397	4	745	1633
% App. Total	35.1	0.6	64.3		0	80.9	19.1		0	100	0		46.2	53.3	0.5		
PHF	.762	.250	.909	.881	.000	.870	.815	.859	.000	.375	.000	.375	.915	.848	.333	.931	.941

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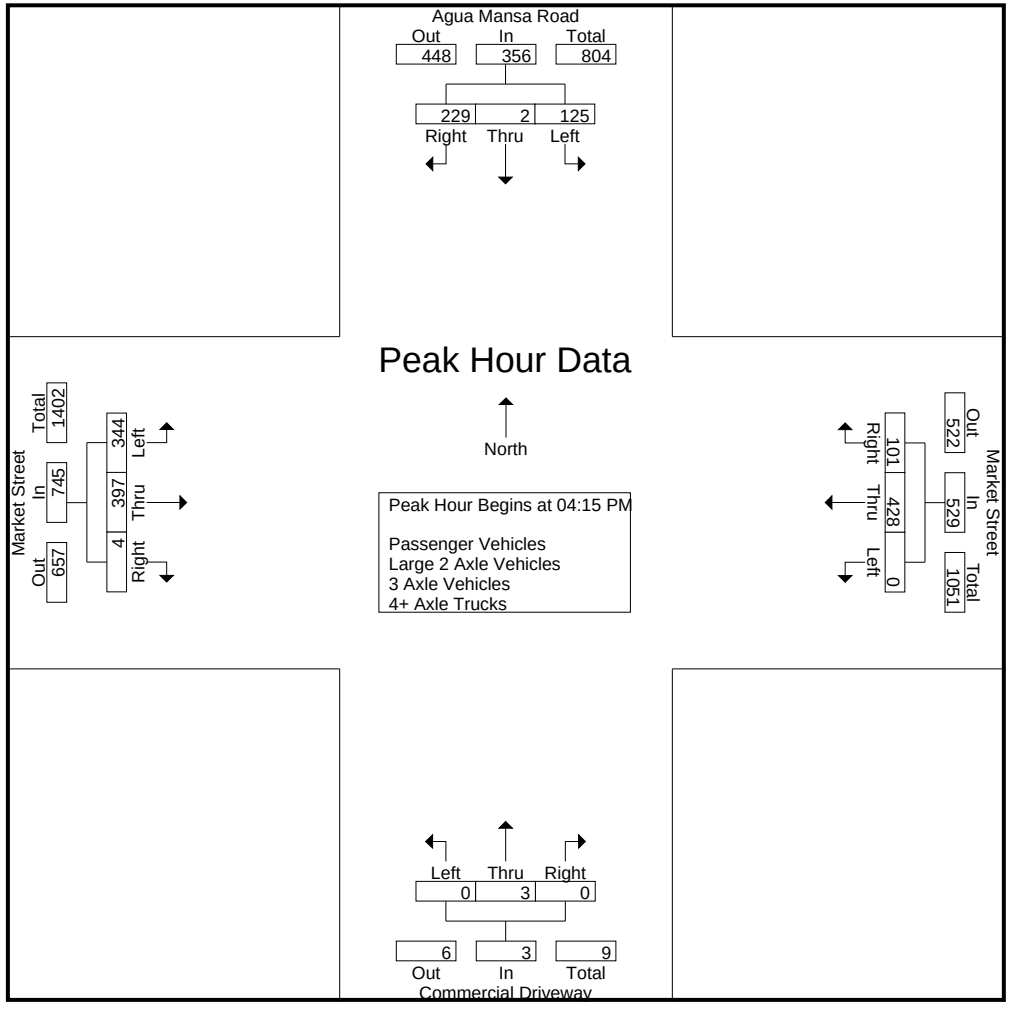
File Name : 25_JVY_Agua M_Mark PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 3



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City of Jurupa Valley
N/S: Agua Mansa Road
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Weather: Clear

File Name : 25_JVY_Agua M_Mark PM
Site Code : 05122894
Start Date : 10/4/2022

	Agua Mansa Road Southbound				Market Street Westbound				Commercial Driveway Northbound				Market Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	03:30 PM				04:45 PM				04:45 PM				04:15 PM				
+0 mins.	**54**	0	**59**	**113**	0	102	21	123	0	**2**	0	**2**	83	**117**	0	**200**	
+15 mins.	36	0	47	83	0	**123**	**31**	**154**	0	1	0	1	82	92	0	174	
+30 mins.	35	0	59	94	0	119	25	144	0	0	0	0	**94**	96	**3**	193	
+45 mins.	27	**2**	51	80	0	115	28	143	0	2	0	2	85	92	1	178	
Total Volume	152	2	216	370	0	459	105	564	0	5	0	5	344	397	4	745	
% App. Total	41.1	0.5	58.4		0	81.4	18.6		0	100	0		46.2	53.3	0.5		
PHF	.704	.250	.915	.819	.000	.933	.847	.916	.000	.625	.000	.625	.915	.848	.333	.931	

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City of Jurupa Valley
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Weather: Clear

File Name : 25_JVY_Agua M_Mark PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Agua Mansa Road Southbound					Market Street Westbound					Commercial Driveway Northbound					Market Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	47	0	40	23	87	0	73	17	7	90	1	0	0	0	1	38	98	0	0	136	30	314	344
03:45 PM	19	0	32	21	51	0	102	20	7	122	0	0	1	1	1	52	87	1	0	140	29	314	343
Total	66	0	72	44	138	0	175	37	14	212	1	0	1	1	2	90	185	1	0	276	59	628	687
04:00 PM	33	0	50	29	83	0	81	16	3	97	0	0	1	0	1	43	83	2	0	128	32	309	341
04:15 PM	20	2	42	29	64	0	97	17	6	114	0	0	0	0	0	68	106	0	0	174	35	352	387
04:30 PM	37	0	41	17	78	0	88	10	3	98	0	0	0	0	0	50	88	0	0	138	20	314	334
04:45 PM	17	0	42	20	59	0	94	12	2	106	0	2	0	0	2	61	90	3	1	154	23	321	344
Total	107	2	175	95	284	0	360	55	14	415	0	2	1	0	3	222	367	5	1	594	110	1296	1406
05:00 PM	37	0	47	25	84	0	116	17	6	133	0	1	0	0	1	60	90	1	0	151	31	369	400
05:15 PM	24	0	44	24	68	0	111	17	4	128	0	0	0	0	0	55	94	0	0	149	28	345	373
05:30 PM	25	0	33	15	58	0	107	23	4	130	0	2	0	0	2	68	95	1	0	164	19	354	373
05:45 PM	8	0	35	25	43	0	79	13	3	92	0	0	0	0	0	65	103	0	0	168	28	303	331
Total	94	0	159	89	253	0	413	70	17	483	0	3	0	0	3	248	382	2	0	632	106	1371	1477
Grand Total	267	2	406	228	675	0	948	162	45	1110	1	5	2	1	8	560	934	8	1	1502	275	3295	3570
Apprch %	39.6	0.3	60.1			0	85.4	14.6			12.5	62.5	25			37.3	62.2	0.5					
Total %	8.1	0.1	12.3		20.5	0	28.8	4.9		33.7	0	0.2	0.1		0.2	17	28.3	0.2		45.6	7.7	92.3	

	Agua Mansa Road Southbound				Market Street Westbound				Commercial Driveway Northbound				Market Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	20	**2**	42	64	0	97	**17**	114	0	0	0	0	**68**	**106**	0	**174**	352
04:30 PM	**37**	0	41	78	0	88	10	98	0	0	0	0	50	88	0	138	314
04:45 PM	17	0	42	59	0	94	12	106	0	**2**	0	**2**	61	90	**3**	154	321
05:00 PM	37	0	**47**	**84**	0	**116**	17	**133**	0	1	0	1	60	90	1	151	**369**
Total Volume	111	2	172	285	0	395	56	451	0	3	0	3	239	374	4	617	1356
% App. Total	38.9	0.7	60.4		0	87.6	12.4		0	100	0		38.7	60.6	0.6		
PHF	.750	.250	.915	.848	.000	.851	.824	.848	.000	.375	.000	.375	.879	.882	.333	.886	.919

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City of Jurupa Valley
N/S: Agua Mansa Road
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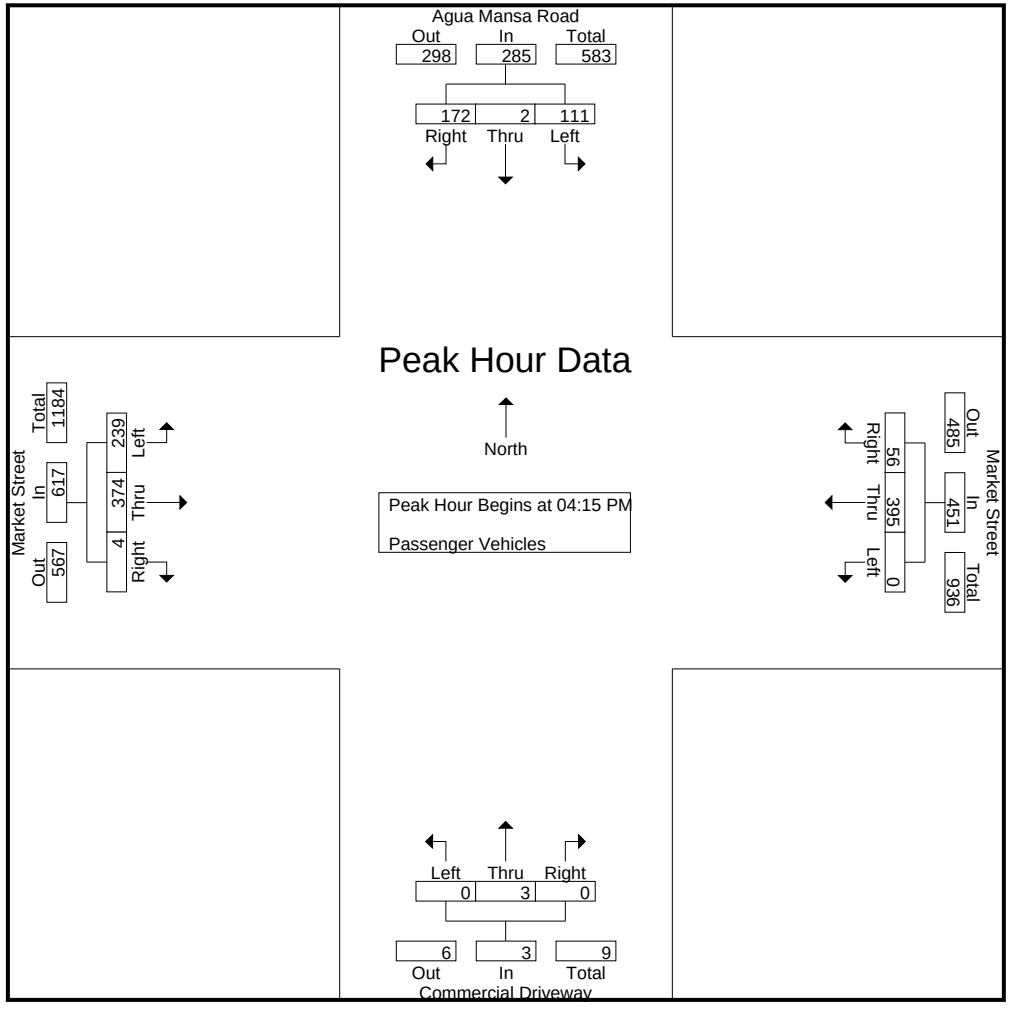
Weather: Clear

File Name : 25_JVY_Agua M_Mark PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Agua Mansa Road
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File Name : 25_JVY_Agua M_Mark PM
Site Code : 05122894
Start Date : 10/4/2022

	Agua Mansa Road Southbound				Market Street Westbound				Commercial Driveway Northbound				Market Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	20	**2**	42	64	0	97	**17**	114	0	0	0	0	**68**	**106**	0	**174**	
+15 mins.	**37**	0	41	78	0	88	10	98	0	0	0	0	50	88	0	138	
+30 mins.	17	0	42	59	0	94	12	106	0	**2**	0	**2**	61	90	**3**	154	
+45 mins.	37	0	**47**	**84**	0	**116**	17	**133**	0	1	0	1	60	90	1	151	
Total Volume	111	2	172	285	0	395	56	451	0	3	0	3	239	374	4	617	
% App. Total	38.9	0.7	60.4		0	87.6	12.4		0	100	0		38.7	60.6	0.6		
PHF	.750	.250	.915	.848	.000	.851	.824	.848	.000	.375	.000	.375	.879	.882	.333	.886	

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City of Jurupa Valley
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File Name : 25_JVY_Agua M_Mark PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Agua Mansa Road Southbound					Market Street Westbound					Commercial Driveway Northbound					Market Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	2	0	5	2	7	0	5	11	4	16	0	0	0	0	0	10	4	0	0	14	6	37	43
03:45 PM	5	0	1	0	6	0	4	4	2	8	0	0	0	0	0	1	3	0	0	4	2	18	20
Total	7	0	6	2	13	0	9	15	6	24	0	0	0	0	0	11	7	0	0	18	8	55	63
04:00 PM	1	0	2	0	3	0	3	3	1	6	0	0	0	0	0	5	2	0	0	7	1	16	17
04:15 PM	0	0	1	1	1	0	2	4	2	6	0	0	0	0	0	3	6	0	0	9	3	16	19
04:30 PM	0	0	1	1	1	0	4	2	1	6	0	0	0	0	0	6	2	0	0	8	2	15	17
04:45 PM	2	0	4	3	6	0	4	4	2	8	0	0	0	0	0	13	2	0	0	15	5	29	34
Total	3	0	8	5	11	0	13	13	6	26	0	0	0	0	0	27	12	0	0	39	11	76	87
05:00 PM	1	0	4	3	5	0	5	3	1	8	0	0	0	0	0	1	1	0	0	2	4	15	19
05:15 PM	0	0	1	0	1	0	6	1	0	7	0	0	0	0	0	1	1	0	0	2	0	10	10
05:30 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	3
05:45 PM	1	0	1	1	2	0	1	1	0	2	0	0	0	0	0	6	1	0	0	7	1	11	12
Total	2	0	6	4	8	0	15	5	1	20	0	0	0	0	0	8	3	0	0	11	5	39	44
Grand Total	12	0	20	11	32	0	37	33	13	70	0	0	0	0	0	46	22	0	0	68	24	170	194
Apprch %	37.5	0	62.5			0	52.9	47.1			0	0	0			67.6	32.4	0					
Total %	7.1	0	11.8		18.8	0	21.8	19.4		41.2	0	0	0		0	27.1	12.9	0		40	12.4	87.6	

	Agua Mansa Road Southbound				Market Street Westbound				Commercial Driveway Northbound				Market Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	1	1	0	2	**4**	6	0	0	0	0	3	**6**	0	9	16
04:30 PM	0	0	1	1	0	4	2	6	0	0	0	0	6	2	0	8	15
04:45 PM	**2**	0	**4**	**6**	0	4	4	**8**	0	0	0	0	**13**	2	0	**15**	**29**
05:00 PM	1	0	4	5	0	**5**	3	8	0	0	0	0	1	1	0	2	15
Total Volume	3	0	10	13	0	15	13	28	0	0	0	0	23	11	0	34	75
% App. Total	23.1	0	76.9		0	53.6	46.4		0	0	0		67.6	32.4	0		
PHF	.375	.000	.625	.542	.000	.750	.813	.875	.000	.000	.000	.000	.442	.458	.000	.567	.647

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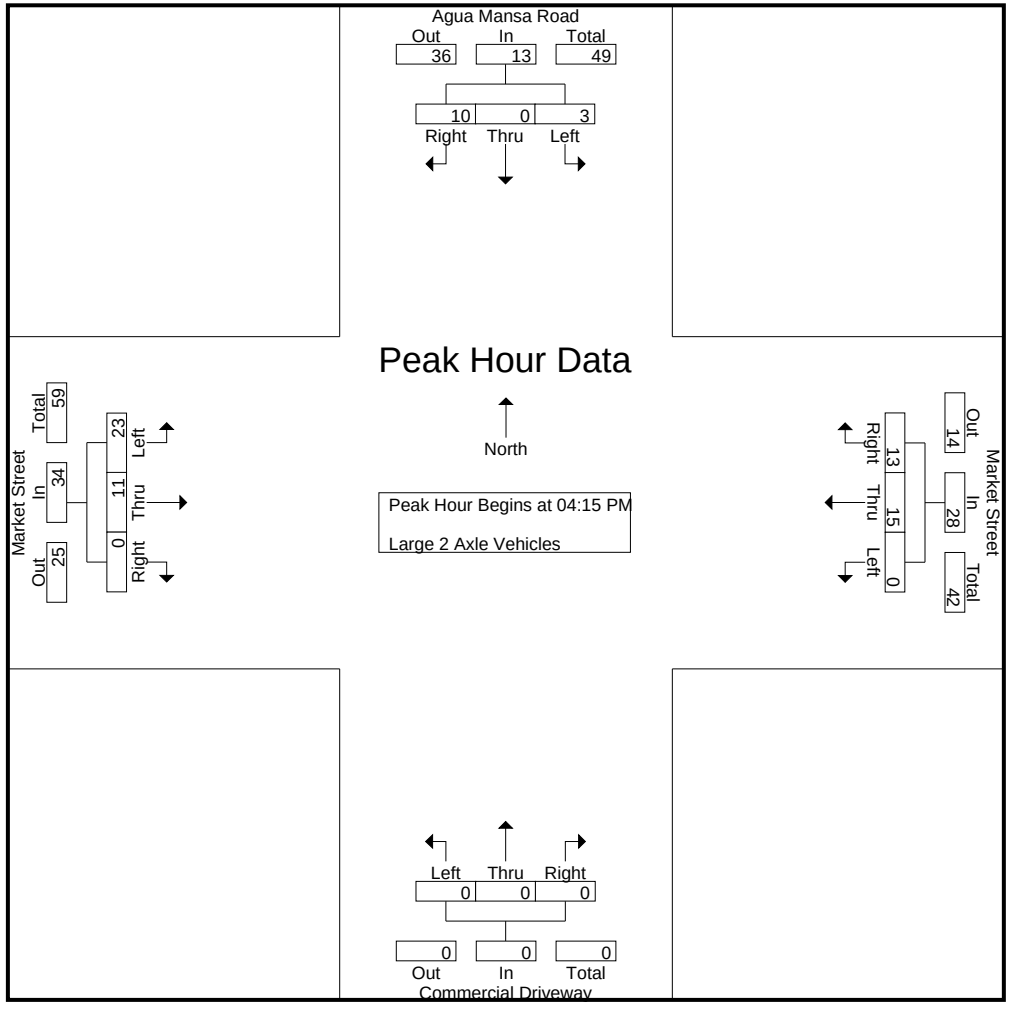
Page No : 2



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File Name : 25_JVY_Agua M_Mark PM
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	Agua Mansa Road Southbound				Market Street Westbound				Commercial Driveway Northbound				Market Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	0	1	1	0	2	**4**	6	0	0	0	0	3	**6**	0	9	
+15 mins.	0	0	1	1	0	4	2	6	0	0	0	0	6	2	0	8	
+30 mins.	**2**	0	**4**	**6**	0	4	4	**8**	0	0	0	0	**13**	2	0	**15**	
+45 mins.	1	0	4	5	0	**5**	3	8	0	0	0	0	1	1	0	2	
Total Volume	3	0	10	13	0	15	13	28	0	0	0	0	23	11	0	34	
% App. Total	23.1	0	76.9		0	53.6	46.4		0	0	0		67.6	32.4	0		
PHF	.375	.000	.625	.542	.000	.750	.813	.875	.000	.000	.000	.000	.442	.458	.000	.567	

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Weather: Clear

File Name : 25_JVY_Agua M_Mark PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Agua Mansa Road Southbound					Market Street Westbound					Commercial Driveway Northbound					Market Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	3	0	4	1	7	0	1	8	2	9	0	0	0	0	0	5	0	0	0	5	3	21	24
03:45 PM	7	0	3	1	10	0	1	5	4	6	0	0	0	0	0	4	1	0	0	5	5	21	26
Total	10	0	7	2	17	0	2	13	6	15	0	0	0	0	0	9	1	0	0	10	8	42	50
04:00 PM	0	0	0	0	0	0	3	12	5	15	0	0	0	0	0	3	1	0	0	4	5	19	24
04:15 PM	5	0	4	4	9	0	0	7	4	7	0	0	0	0	0	2	1	0	0	3	8	19	27
04:30 PM	3	0	5	1	8	0	1	5	2	6	0	0	0	0	0	7	1	0	0	8	3	22	25
04:45 PM	0	0	3	1	3	0	0	3	1	3	0	0	0	0	0	4	1	0	0	5	2	11	13
Total	8	0	12	6	20	0	4	27	12	31	0	0	0	0	0	16	4	0	0	20	18	71	89
05:00 PM	0	0	1	1	1	0	0	8	4	8	0	0	0	0	0	7	0	0	0	7	5	16	21
05:15 PM	0	0	3	1	3	0	0	3	0	3	0	0	0	0	0	7	3	0	0	10	1	16	17
05:30 PM	0	0	0	0	0	0	1	1	1	2	0	0	0	0	0	8	0	0	0	8	1	10	11
05:45 PM	0	0	0	0	0	0	1	5	3	6	0	0	0	0	0	4	2	0	0	6	3	12	15
Total	0	0	4	2	4	0	2	17	8	19	0	0	0	0	0	26	5	0	0	31	10	54	64
Grand Total	18	0	23	10	41	0	8	57	26	65	0	0	0	0	0	51	10	0	0	61	36	167	203
Apprch %	43.9	0	56.1			0	12.3	87.7			0	0	0			83.6	16.4	0					
Total %	10.8	0	13.8		24.6	0	4.8	34.1		38.9	0	0	0		0	30.5	6	0		36.5	17.7	82.3	

	Agua Mansa Road Southbound				Market Street Westbound				Commercial Driveway Northbound				Market Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	**5**	0	4	**9**	0	0	7	7	0	0	0	0	2	**1**	0	3	19
04:30 PM	3	0	**5**	8	0	**1**	5	6	0	0	0	0	**7**	1	0	**8**	**22**
04:45 PM	0	0	3	3	0	0	3	3	0	0	0	0	4	1	0	5	11
05:00 PM	0	0	1	1	0	0	**8**	**8**	0	0	0	0	7	0	0	7	16
Total Volume	8	0	13	21	0	1	23	24	0	0	0	0	20	3	0	23	68
% App. Total	38.1	0	61.9		0	4.2	95.8		0	0	0		87	13	0		
PHF	.400	.000	.650	.583	.000	.250	.719	.750	.000	.000	.000	.000	.714	.750	.000	.719	.773

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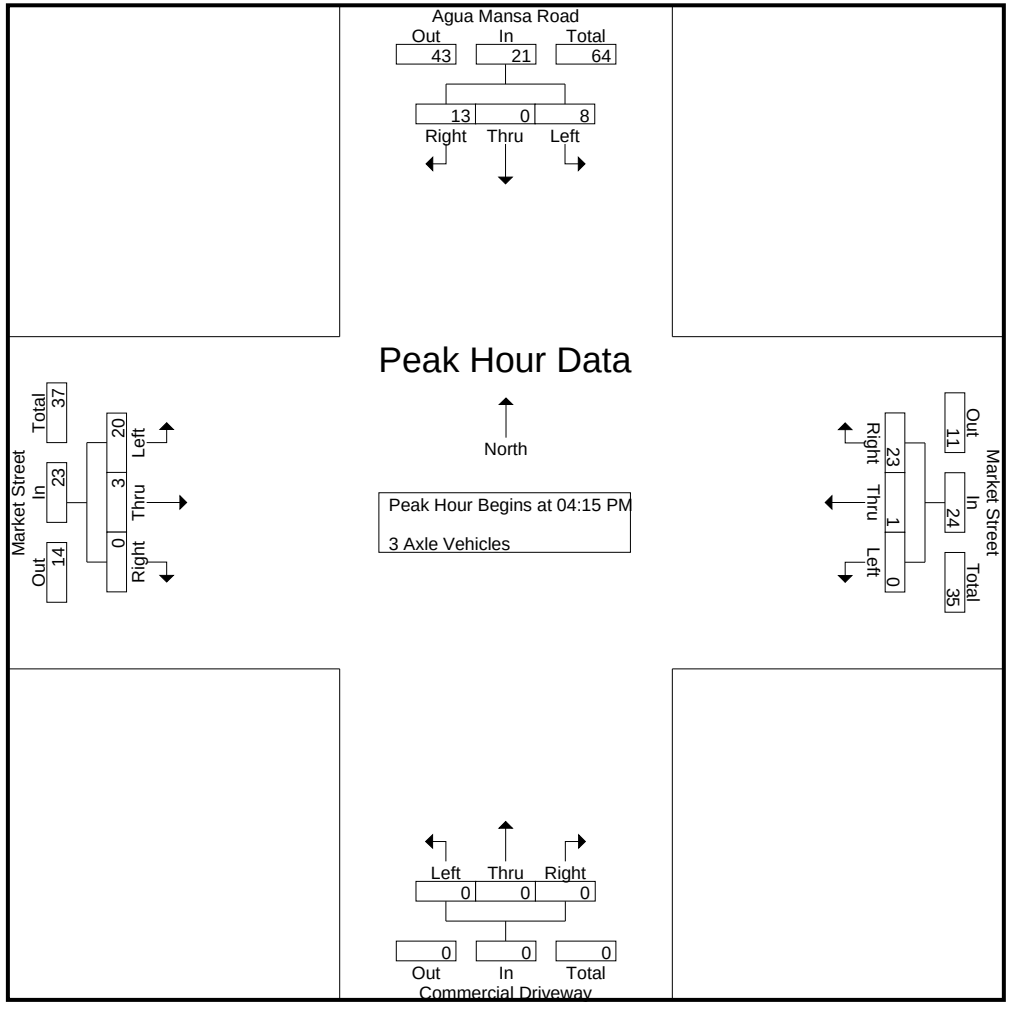
City of Jurupa Valley
N/S: Agua Mansa Road
E/W: Market Street
Weather: Clear

File Name : 25_JVY_Agua M_Mark PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Agua Mansa Road
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Weather: Clear

File Name : 25_JVY_Agua M_Mark PM
Site Code : 05122894
Start Date : 10/4/2022

	Agua Mansa Road Southbound				Market Street Westbound				Commercial Driveway Northbound				Market Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	**5**	0	4	**9**	0	0	7	7	0	0	0	0	2	**1**	0	3	
+15 mins.	3	0	**5**	8	0	**1**	5	6	0	0	0	0	**7**	1	0	**8**	
+30 mins.	0	0	3	3	0	0	3	3	0	0	0	0	4	1	0	5	
+45 mins.	0	0	1	1	0	0	**8**	**8**	0	0	0	0	7	0	0	7	
Total Volume	8	0	13	21	0	1	23	24	0	0	0	0	20	3	0	23	
% App. Total	38.1	0	61.9		0	4.2	95.8		0	0	0		87	13	0		
PHF	.400	.000	.650	.583	.000	.250	.719	.750	.000	.000	.000	.000	.714	.750	.000	.719	

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City of Jurupa Valley
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File Name : 25_JVY_Agua M_Mark PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Agua Mansa Road Southbound					Market Street Westbound					Commercial Driveway Northbound					Market Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	2	0	10	4	12	0	6	2	1	8	0	0	0	0	0	21	1	0	0	22	5	42	47
03:45 PM	5	0	11	6	16	0	6	3	0	9	0	0	0	0	0	12	1	0	0	13	6	38	44
Total	7	0	21	10	28	0	12	5	1	17	0	0	0	0	0	33	2	0	0	35	11	80	91
04:00 PM	1	0	7	3	8	0	2	4	1	6	0	0	0	0	0	9	2	0	0	11	4	25	29
04:15 PM	2	0	4	4	6	0	5	2	1	7	0	0	0	0	0	10	4	0	0	14	5	27	32
04:30 PM	1	0	10	7	11	0	6	2	1	8	0	0	0	0	0	19	1	0	0	20	8	39	47
04:45 PM	0	0	9	2	9	0	4	2	0	6	0	0	0	0	0	16	3	0	0	19	2	34	36
Total	4	0	30	16	34	0	17	10	3	27	0	0	0	0	0	54	10	0	0	64	19	125	144
05:00 PM	0	0	11	5	11	0	2	3	0	5	0	0	0	0	0	17	1	0	0	18	5	34	39
05:15 PM	3	0	7	3	10	0	2	4	1	6	0	0	0	0	0	6	3	0	0	9	4	25	29
05:30 PM	3	0	8	2	11	0	4	4	0	8	0	0	0	0	0	9	0	0	0	9	2	28	30
05:45 PM	4	0	6	3	10	0	1	5	1	6	0	0	0	0	0	16	1	0	0	17	4	33	37
Total	10	0	32	13	42	0	9	16	2	25	0	0	0	0	0	48	5	0	0	53	15	120	135
Grand Total	21	0	83	39	104	0	38	31	6	69	0	0	0	0	0	135	17	0	0	152	45	325	370
Apprch %	20.2	0	79.8			0	55.1	44.9			0	0	0			88.8	11.2	0					
Total %	6.5	0	25.5		32	0	11.7	9.5		21.2	0	0	0		0	41.5	5.2	0		46.8	12.2	87.8	

	Agua Mansa Road Southbound				Market Street Westbound				Commercial Driveway Northbound				Market Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	**2**	0	4	6	0	5	2	7	0	0	0	0	10	**4**	0	14	27
04:30 PM	1	0	10	**11**	0	**6**	2	**8**	0	0	0	0	**19**	1	0	**20**	**39**
04:45 PM	0	0	9	9	0	4	2	6	0	0	0	0	16	3	0	19	34
05:00 PM	0	0	**11**	11	0	2	**3**	5	0	0	0	0	17	1	0	18	34
Total Volume	3	0	34	37	0	17	9	26	0	0	0	0	62	9	0	71	134
% App. Total	8.1	0	91.9		0	65.4	34.6		0	0	0		87.3	12.7	0		
PHF	.375	.000	.773	.841	.000	.708	.750	.813	.000	.000	.000	.000	.816	.563	.000	.888	.859

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City of Jurupa Valley
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File Name : 25_JVY_Agua M_Mark PM
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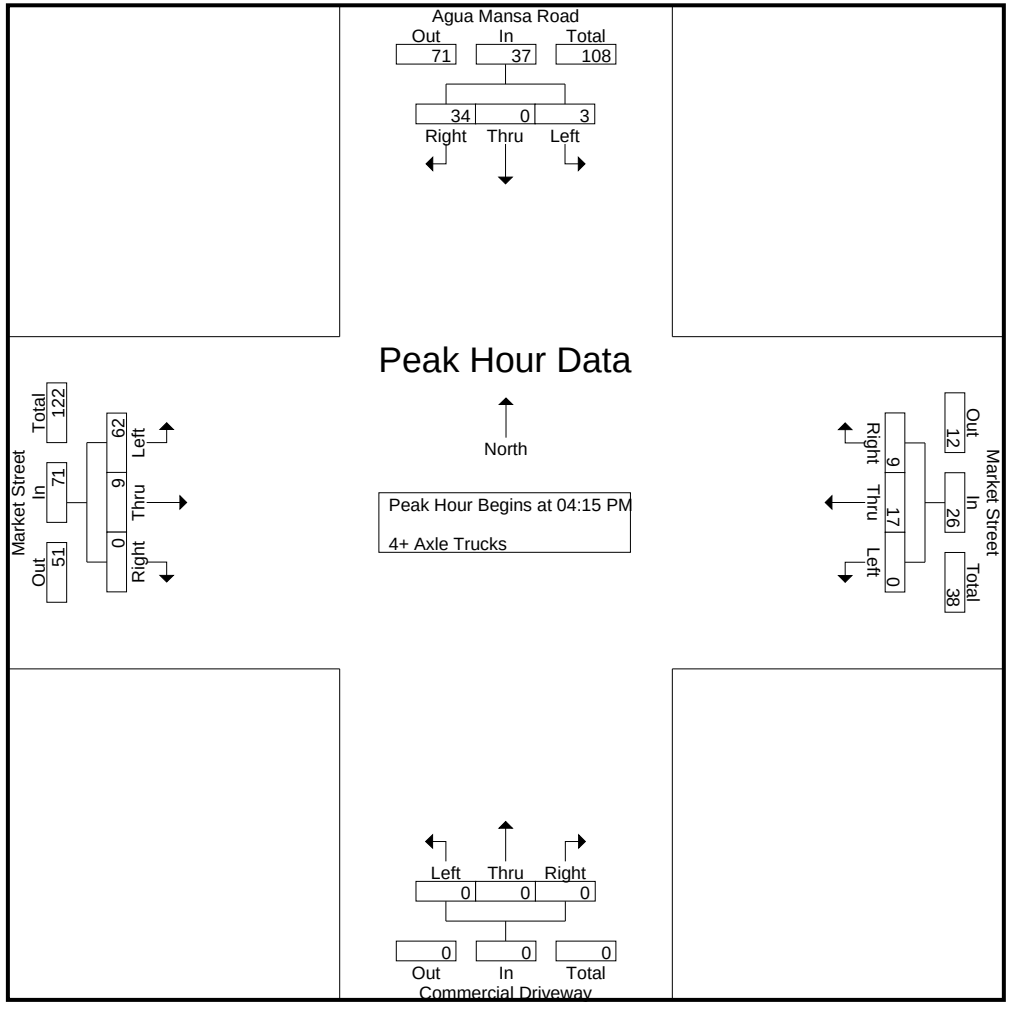

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File Name : 25_JVY_Agua M_Mark PM
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	Agua Mansa Road Southbound				Market Street Westbound				Commercial Driveway Northbound				Market Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	**2**	0	4	6	0	5	2	7	0	0	0	0	10	**4**	0	14	
+15 mins.	1	0	10	**11**	0	**6**	2	**8**	0	0	0	0	**19**	1	0	**20**	
+30 mins.	0	0	9	9	0	4	2	6	0	0	0	0	16	3	0	19	
+45 mins.	0	0	**11**	11	0	2	**3**	5	0	0	0	0	17	1	0	18	
Total Volume	3	0	34	37	0	17	9	26	0	0	0	0	62	9	0	71	
% App. Total	8.1	0	91.9		0	65.4	34.6		0	0	0		87.3	12.7	0		
PHF	.375	.000	.773	.841	.000	.708	.750	.813	.000	.000	.000	.000	.816	.563	.000	.888	

Location: Jurupa Valley
N/S: Agua Mansa Road
E/W: Market Street

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Agua Mansa Road	East Leg Market Street	South Leg Agua Mansa Road	West Leg Market Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	1	1	0	2
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	1	0	0	0	1
8:30 AM	0	0	1	1	2
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	1	1	2	1	5

	North Leg Agua Mansa Road	East Leg Market Street	South Leg Agua Mansa Road	West Leg Market Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	1	0	0	1	2
TOTAL VOLUMES:	1	0	0	1	2

Location: Jurupa Valley
N/S: Agua Mansa Road
E/W: Market Street

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Agua Mansa Road			Westbound Market Street			Northbound Agua Mansa Road			Eastbound Market Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Agua Mansa Road			Westbound Market Street			Northbound Agua Mansa Road			Eastbound Market Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	0	1	0	0	0	0	0	0	2

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City of Jurupa Valley
N/S: Hall Avenue
E/W: 24th Street
Weather: Clear

File Name : 26_JVY_Hall_24th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Hall Avenue Southbound				24th Street Westbound				Hall Avenue Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	1	1	3	5	2	7	1	10	1	1	3	5	0	8	1	9	29
06:45 AM	0	7	2	9	3	6	0	9	0	1	3	4	2	23	1	26	48
Total	1	8	5	14	5	13	1	19	1	2	6	9	2	31	2	35	77
07:00 AM	2	3	0	5	1	5	2	8	1	2	5	8	0	11	1	12	33
07:15 AM	0	5	0	5	4	3	2	9	0	4	11	15	1	40	0	41	70
07:30 AM	0	6	1	7	5	4	0	9	2	5	15	22	1	44	0	45	83
07:45 AM	1	4	0	5	4	7	0	11	1	2	11	14	3	37	1	41	71
Total	3	18	1	22	14	19	4	37	4	13	42	59	5	132	2	139	257
08:00 AM	0	1	1	2	4	3	3	10	1	2	7	10	1	23	1	25	47
08:15 AM	0	7	0	7	3	4	1	8	5	3	5	13	1	22	1	24	52
08:30 AM	0	4	0	4	5	3	1	9	1	4	6	11	1	7	0	8	32
08:45 AM	4	3	2	9	6	5	1	12	2	2	4	8	1	14	2	17	46
Total	4	15	3	22	18	15	6	39	9	11	22	42	4	66	4	74	177
Grand Total	8	41	9	58	37	47	11	95	14	26	70	110	11	229	8	248	511
Apprch %	13.8	70.7	15.5		38.9	49.5	11.6		12.7	23.6	63.6		4.4	92.3	3.2		
Total %	1.6	8	1.8	11.4	7.2	9.2	2.2	18.6	2.7	5.1	13.7	21.5	2.2	44.8	1.6	48.5	
Passenger Vehicles	3	36	8	47	34	43	4	81	11	24	67	102	7	211	8	226	456
% Passenger Vehicles	37.5	87.8	88.9	81	91.9	91.5	36.4	85.3	78.6	92.3	95.7	92.7	63.6	92.1	100	91.1	89.2
Large 2 Axle Vehicles	3	3	1	7	3	3	1	7	3	2	3	8	1	9	0	10	32
% Large 2 Axle Vehicles	37.5	7.3	11.1	12.1	8.1	6.4	9.1	7.4	21.4	7.7	4.3	7.3	9.1	3.9	0	4	6.3
3 Axle Vehicles	0	0	0	0	0	1	1	2	0	0	0	0	2	1	0	3	5
% 3 Axle Vehicles	0	0	0	0	0	2.1	9.1	2.1	0	0	0	0	18.2	0.4	0	1.2	1
4+ Axle Trucks	2	2	0	4	0	0	5	5	0	0	0	0	1	8	0	9	18
% 4+ Axle Trucks	25	4.9	0	6.9	0	0	45.5	5.3	0	0	0	0	9.1	3.5	0	3.6	3.5

	Hall Avenue Southbound				24th Street Westbound				Hall Avenue Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	5	0	5	4	3	2	9	0	4	11	15	1	40	0	41	70
07:30 AM	0	**6**	**1**	**7**	**5**	4	0	9	**2**	**5**	**15**	**22**	1	**44**	0	**45**	**83**
07:45 AM	**1**	4	0	5	4	**7**	0	**11**	1	2	11	14	**3**	37	**1**	41	71
08:00 AM	0	1	1	2	4	3	**3**	10	1	2	7	10	1	23	1	25	47
Total Volume	1	16	2	19	17	17	5	39	4	13	44	61	6	144	2	152	271
% App. Total	5.3	84.2	10.5		43.6	43.6	12.8		6.6	21.3	72.1		3.9	94.7	1.3		
PHF	.250	.667	.500	.679	.850	.607	.417	.886	.500	.650	.733	.693	.500	.818	.500	.844	.816

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City of Jurupa Valley
N/S: Hall Avenue
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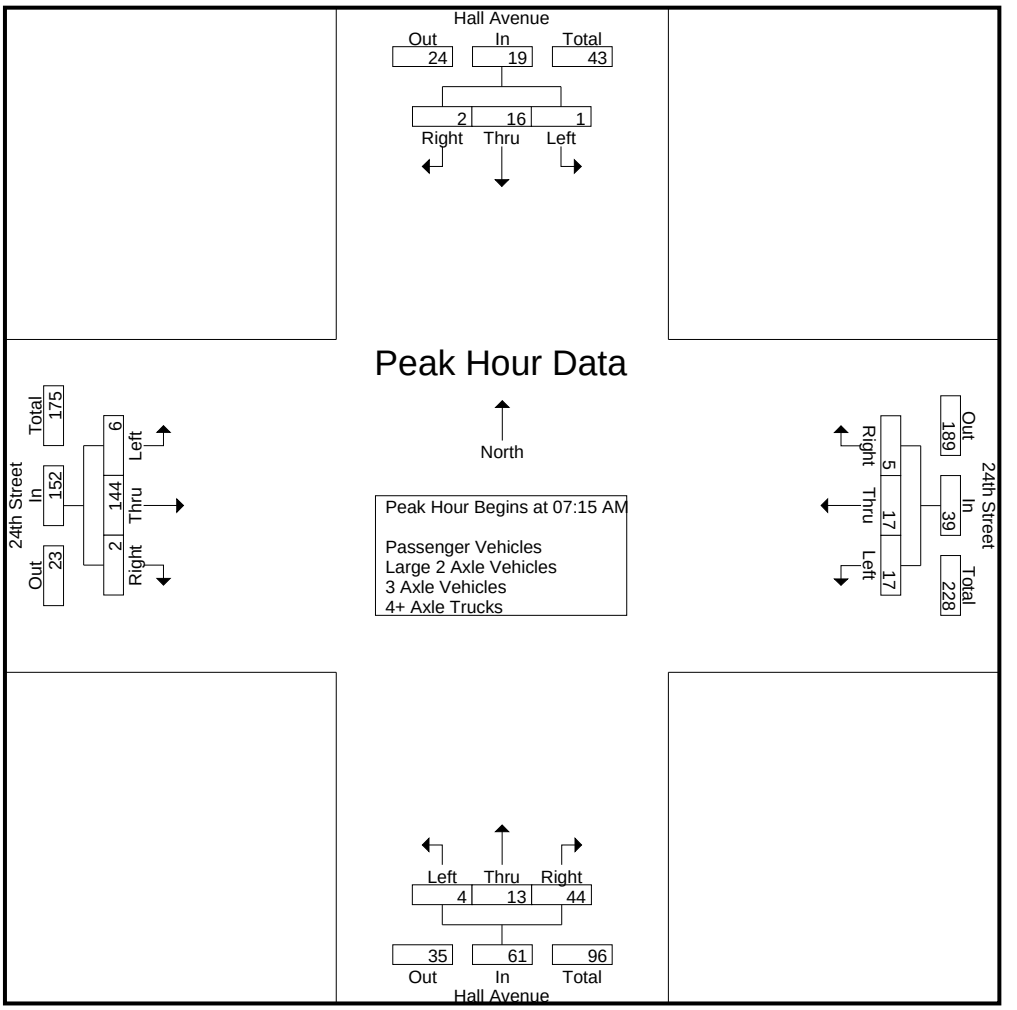
File Name : 26_JVY_Hall_24th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	06:45 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	**7**	**2**	**9**	4	3	2	9	0	4	11	15	1	40	0	41
+15 mins.	**2**	3	0	5	**5**	4	0	9	**2**	**5**	**15**	**22**	1	**44**	0	**45**
+30 mins.	0	5	0	5	4	**7**	0	**11**	1	2	11	14	**3**	37	**1**	41
+45 mins.	0	6	1	7	4	3	**3**	10	1	2	7	10	1	23	1	25
Total Volume	2	21	3	26	17	17	5	39	4	13	44	61	6	144	2	152
% App. Total	7.7	80.8	11.5		43.6	43.6	12.8		6.6	21.3	72.1		3.9	94.7	1.3	
PHF	.250	.750	.375	.722	.850	.607	.417	.886	.500	.650	.733	.693	.500	.818	.500	.844

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City of Jurupa Valley
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Weather: Clear

File Name : 26_JVY_Hall_24th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Hall Avenue Southbound				24th Street Westbound				Hall Avenue Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	1	2	3	2	7	0	9	1	1	3	5	0	7	1	8	25
06:45 AM	0	4	2	6	1	6	0	7	0	1	3	4	1	21	1	23	40
Total	0	5	4	9	3	13	0	16	1	2	6	9	1	28	2	31	65
07:00 AM	0	3	0	3	1	4	1	6	0	2	5	7	0	10	1	11	27
07:15 AM	0	5	0	5	4	3	0	7	0	4	11	15	1	37	0	38	65
07:30 AM	0	6	1	7	5	4	0	9	2	4	15	21	1	42	0	43	80
07:45 AM	0	4	0	4	4	7	0	11	1	2	10	13	2	35	1	38	66
Total	0	18	1	19	14	18	1	33	3	12	41	56	4	124	2	130	238
08:00 AM	0	1	1	2	4	2	1	7	1	2	6	9	0	21	1	22	40
08:15 AM	0	6	0	6	2	4	0	6	4	3	5	12	1	21	1	23	47
08:30 AM	0	4	0	4	5	2	1	8	1	3	5	9	1	6	0	7	28
08:45 AM	3	2	2	7	6	4	1	11	1	2	4	7	0	11	2	13	38
Total	3	13	3	19	17	12	3	32	7	10	20	37	2	59	4	65	153
Grand Total	3	36	8	47	34	43	4	81	11	24	67	102	7	211	8	226	456
Apprch %	6.4	76.6	17		42	53.1	4.9		10.8	23.5	65.7		3.1	93.4	3.5		
Total %	0.7	7.9	1.8	10.3	7.5	9.4	0.9	17.8	2.4	5.3	14.7	22.4	1.5	46.3	1.8	49.6	

	Hall Avenue Southbound				24th Street Westbound				Hall Avenue Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	5	0	5	4	3	0	7	0	**4**	11	15	1	37	0	38	65
07:30 AM	0	**6**	**1**	**7**	**5**	4	0	9	**2**	4	**15**	**21**	1	**42**	0	**43**	**80**
07:45 AM	0	4	0	4	4	**7**	0	**11**	1	2	10	13	**2**	35	**1**	38	66
08:00 AM	0	1	1	2	4	2	**1**	7	1	2	6	9	0	21	1	22	40
Total Volume	0	16	2	18	17	16	1	34	4	12	42	58	4	135	2	141	251
% App. Total	0	88.9	11.1		50	47.1	2.9		6.9	20.7	72.4		2.8	95.7	1.4		
PHF	.000	.667	.500	.643	.850	.571	.250	.773	.500	.750	.700	.690	.500	.804	.500	.820	.784

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City of Jurupa Valley
N/S: Hall Avenue
E/W: 24th Street
Weather: Clear

File Name : 26_JVY_Hall_24th AM
Site Code : 05122894
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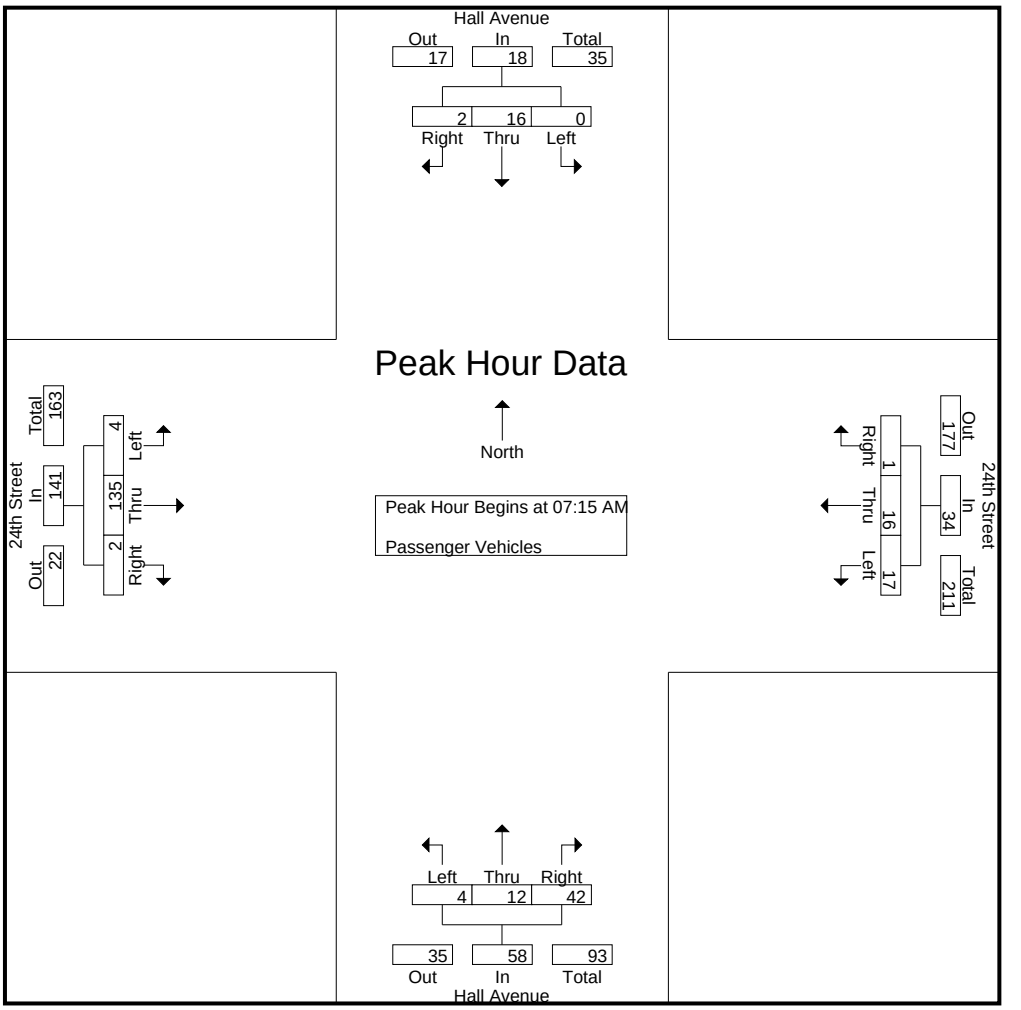

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	5	0	5	4	3	0	7	0	**4**	11	15	1	37	0	38
+15 mins.	0	**6**	**1**	**7**	**5**	4	0	9	**2**	4	**15**	**21**	1	**42**	0	**43**
+30 mins.	0	4	0	4	4	**7**	0	**11**	1	2	10	13	**2**	35	**1**	38
+45 mins.	0	1	1	2	4	2	**1**	7	1	2	6	9	0	21	1	22
Total Volume	0	16	2	18	17	16	1	34	4	12	42	58	4	135	2	141
% App. Total	0	88.9	11.1		50	47.1	2.9		6.9	20.7	72.4		2.8	95.7	1.4	
PHF	.000	.667	.500	.643	.850	.571	.250	.773	.500	.750	.700	.690	.500	.804	.500	.820

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City of Jurupa Valley
N/S: Hall Avenue
E/W: 24th Street
Weather: Clear

File Name : 26_JVY_Hall_24th AM
Site Code : 05122894
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Groups Printed- Large 2 Axle Vehicles

	Hall Avenue Southbound				24th Street Westbound				Hall Avenue Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
06:45 AM	0	1	0	1	2	0	0	2	0	0	0	0	0	1	0	1	4
Total	1	1	1	3	2	0	0	2	0	0	0	0	0	1	0	1	6
07:00 AM	1	0	0	1	0	1	1	2	1	0	0	1	0	1	0	1	5
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
07:45 AM	1	0	0	1	0	0	0	0	0	0	1	1	1	0	0	1	3
Total	2	0	0	2	0	1	1	2	1	1	1	3	1	3	0	4	11
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
08:15 AM	0	1	0	1	1	0	0	1	1	0	0	1	0	1	0	1	4
08:30 AM	0	0	0	0	0	1	0	1	0	1	1	2	0	1	0	1	4
08:45 AM	0	1	0	1	0	1	0	1	1	0	0	1	0	3	0	3	6
Total	0	2	0	2	1	2	0	3	2	1	2	5	0	5	0	5	15
Grand Total	3	3	1	7	3	3	1	7	3	2	3	8	1	9	0	10	32
Apprch %	42.9	42.9	14.3		42.9	42.9	14.3		37.5	25	37.5		10	90	0		
Total %	9.4	9.4	3.1	21.9	9.4	9.4	3.1	21.9	9.4	6.2	9.4	25	3.1	28.1	0	31.2	

	Hall Avenue Southbound				24th Street Westbound				Hall Avenue Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**	1
07:30 AM	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	1	0	1	2
07:45 AM	**1**	0	0	**1**	0	0	0	0	0	0	**1**	1	**1**	0	0	1	**3**
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total Volume	1	0	0	1	0	0	0	0	0	1	2	3	1	2	0	3	7
% App. Total	100	0	0		0	0	0		0	33.3	66.7		33.3	66.7	0		
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.000	.250	.500	.750	.250	.500	.000	.750	.583

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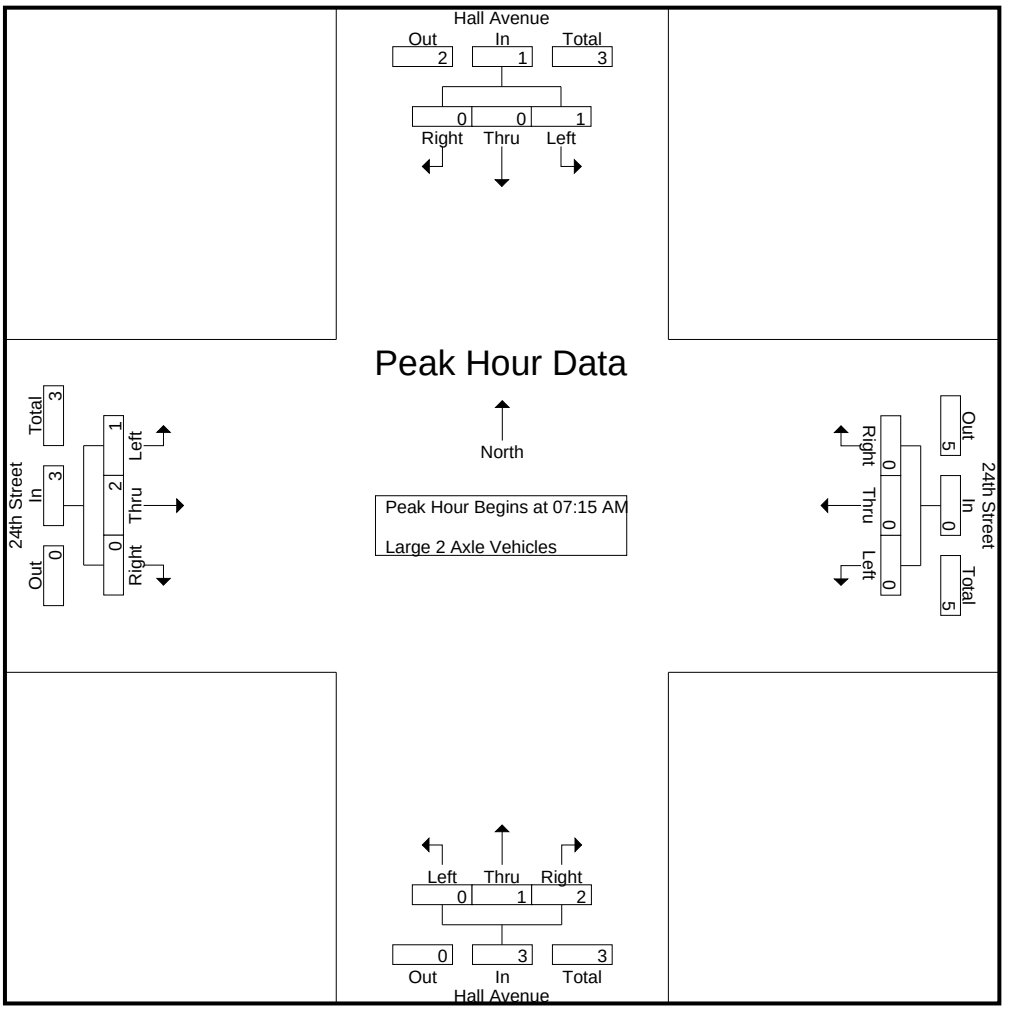

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**
+15 mins.	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	1	0	1
+30 mins.	**1**	0	0	**1**	0	0	0	0	0	0	**1**	1	**1**	0	0	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Total Volume	1	0	0	1	0	0	0	0	0	1	2	3	1	2	0	3
% App. Total	100	0	0		0	0	0		0	33.3	66.7		33.3	66.7	0	
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.000	.250	.500	.750	.250	.500	.000	.750

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File Name : 26_JVY_Hall_24th AM
Site Code : 05122894
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Groups Printed- 3 Axle Vehicles

	Hall Avenue Southbound				24th Street Westbound				Hall Avenue Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:00 AM	0	0	0	0	0	1	1	2	0	0	0	0	1	0	0	1	3
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	1	1	2	0	0	0	0	2	0	0	2	4
Grand Total	0	0	0	0	0	1	1	2	0	0	0	0	2	1	0	3	5
Apprch %	0	0	0		0	50	50		0	0	0		66.7	33.3	0		
Total %	0	0	0	0	0	20	20	40	0	0	0	0	40	20	0	60	

	Hall Avenue Southbound				24th Street Westbound				Hall Avenue Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	**1**	**1**	**2**	0	0	0	0	**1**	0	0	1	**3**
Total Volume	0	0	0	0	0	1	1	2	0	0	0	0	1	1	0	2	4
% App. Total	0	0	0		0	50	50		0	0	0		50	50	0		
PHF	.000	.000	.000	.000	.000	.250	.250	.250	.000	.000	.000	.000	.250	.250	.000	.500	.333

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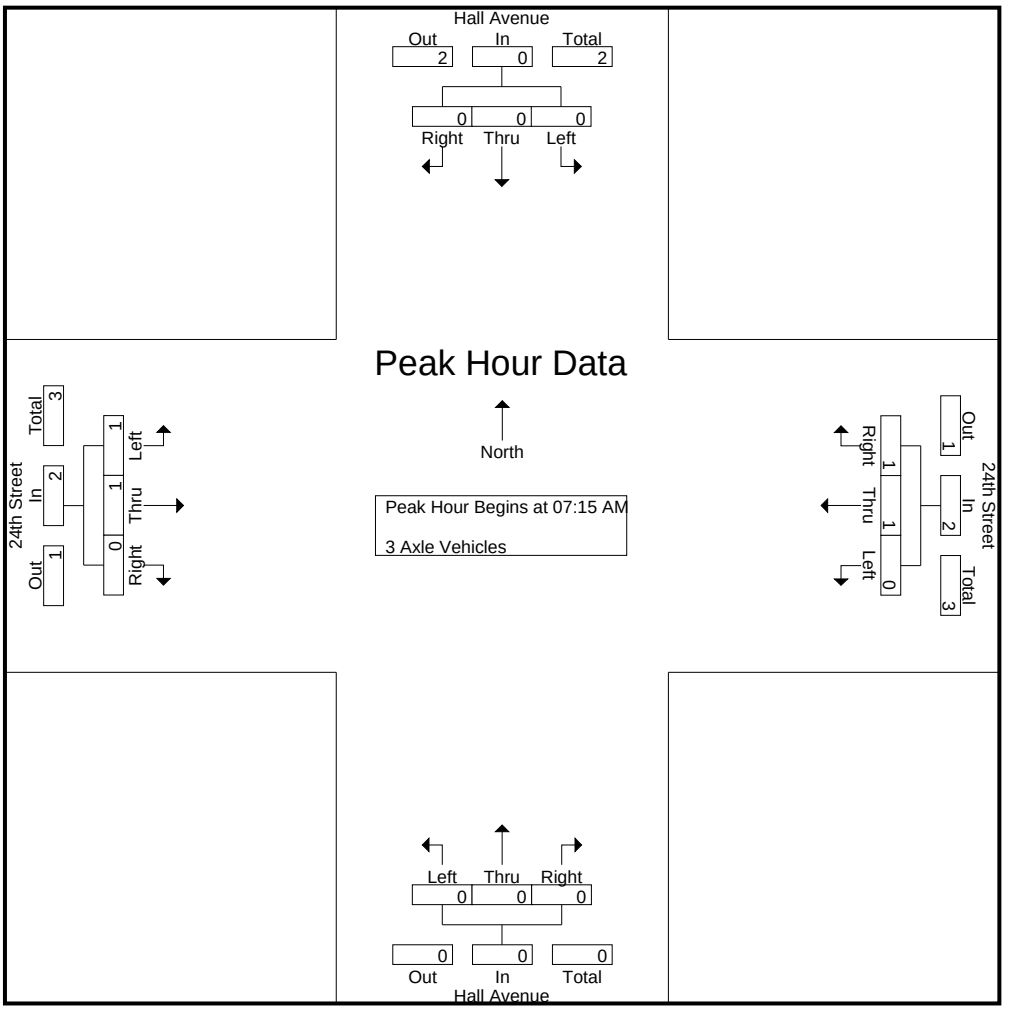

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	**1**	**1**	**2**	0	0	0	0	**1**	0	0	1
Total Volume	0	0	0	0	0	1	1	2	0	0	0	0	1	1	0	2
% App. Total	0	0	0		0	50	50		0	0	0		50	50	0	
PHF	.000	.000	.000	.000	.000	.250	.250	.250	.000	.000	.000	.000	.250	.250	.000	.500

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Weather: Clear

File Name : 26_JVY_Hall_24th AM
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Groups Printed- 4+ Axle Trucks

	Hall Avenue Southbound				24th Street Westbound				Hall Avenue Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1	2
06:45 AM	0	2	0	2	0	0	0	0	0	0	0	0	1	1	0	2	4
Total	0	2	0	2	0	0	1	1	0	0	0	0	1	2	0	3	6
07:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	2	2	0	0	0	0	0	1	0	1	3
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	1	0	0	1	0	0	2	2	0	0	0	0	0	4	0	4	7
08:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0	2	3
08:15 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	1	0	0	2	2	0	0	0	0	0	2	0	2	5
Grand Total	2	2	0	4	0	0	5	5	0	0	0	0	1	8	0	9	18
Apprch %	50	50	0		0	0	100		0	0	0		11.1	88.9	0		
Total %	11.1	11.1	0	22.2	0	0	27.8	27.8	0	0	0	0	5.6	44.4	0	50	

	Hall Avenue Southbound				24th Street Westbound				Hall Avenue Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	**2**	**2**	0	0	0	0	0	1	0	1	**3**
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	0	**2**	2
08:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0	2	3
Total Volume	0	0	0	0	0	0	3	3	0	0	0	0	0	6	0	6	9
% App. Total	0	0	0		0	0	100		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.000	.375	.375	.000	.000	.000	.000	.000	.750	.000	.750	.750

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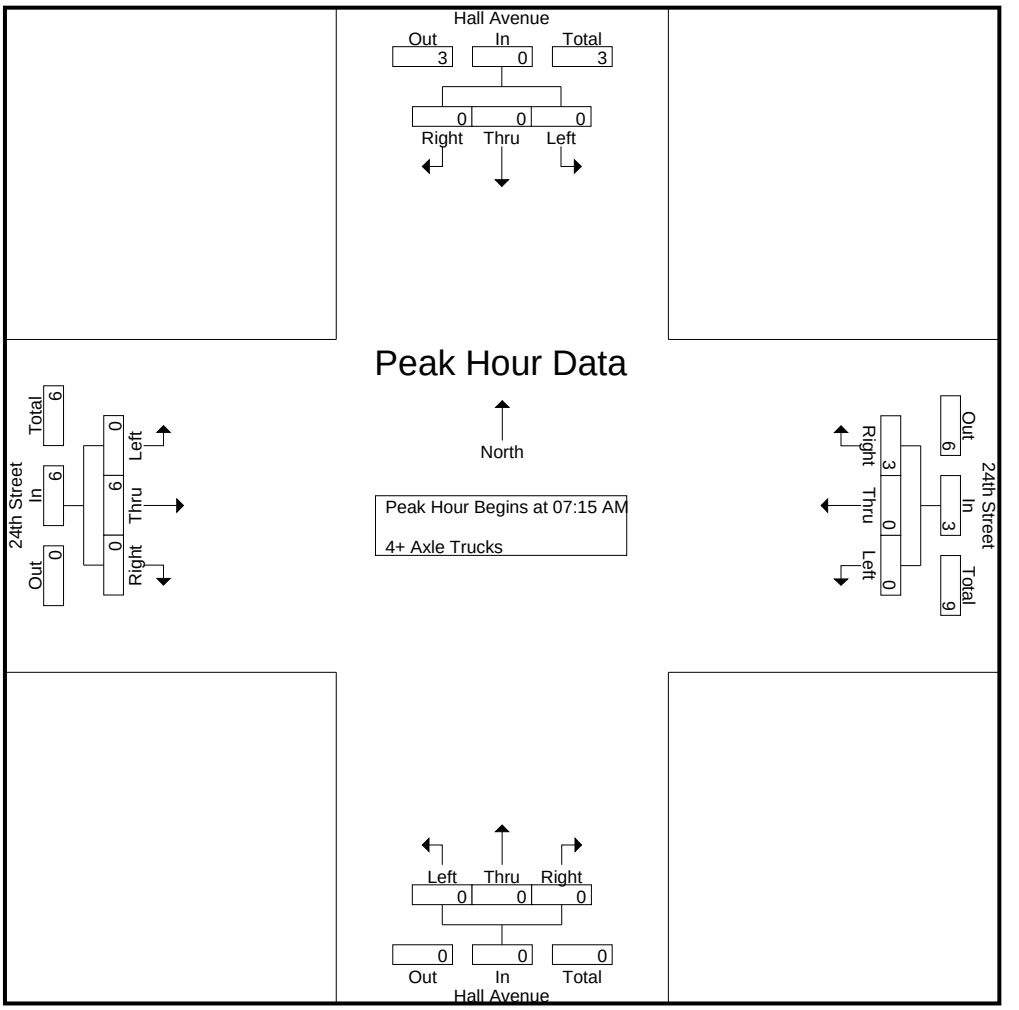

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	**2**	**2**	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	0	**2**
+45 mins.	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0	2
Total Volume	0	0	0	0	0	0	3	3	0	0	0	0	0	6	0	6
% App. Total	0	0	0		0	0	100		0	0	0		0	100	0	
PHF	.000	.000	.000	.000	.000	.000	.375	.375	.000	.000	.000	.000	.000	.750	.000	.750

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City of Jurupa Valley
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Hall Avenue Southbound				24th Street Westbound				Hall Avenue Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	1	9	3	13	16	3	1	20	2	5	20	27	0	41	5	46	106
03:45 PM	1	12	0	13	16	9	0	25	4	8	22	34	0	29	1	30	102
Total	2	21	3	26	32	12	1	45	6	13	42	61	0	70	6	76	208
04:00 PM	0	4	3	7	7	4	0	11	2	2	16	20	2	41	2	45	83
04:15 PM	1	11	1	13	12	2	0	14	2	4	10	16	0	47	4	51	94
04:30 PM	0	6	1	7	10	3	0	13	0	1	17	18	3	54	1	58	96
04:45 PM	0	7	1	8	5	4	1	10	1	2	15	18	0	54	2	56	92
Total	1	28	6	35	34	13	1	48	5	9	58	72	5	196	9	210	365
05:00 PM	2	6	0	8	17	4	0	21	6	4	23	33	0	45	1	46	108
05:15 PM	0	7	2	9	9	4	0	13	0	0	17	17	1	40	1	42	81
05:30 PM	1	12	0	13	8	7	0	15	2	7	12	21	2	27	4	33	82
05:45 PM	1	7	1	9	9	3	2	14	2	5	15	22	0	30	5	35	80
Total	4	32	3	39	43	18	2	63	10	16	67	93	3	142	11	156	351
Grand Total	7	81	12	100	109	43	4	156	21	38	167	226	8	408	26	442	924
Apprch %	7	81	12		69.9	27.6	2.6		9.3	16.8	73.9		1.8	92.3	5.9		
Total %	0.8	8.8	1.3	10.8	11.8	4.7	0.4	16.9	2.3	4.1	18.1	24.5	0.9	44.2	2.8	47.8	
Passenger Vehicles	4	74	11	89	98	38	3	139	18	35	164	217	6	381	25	412	857
% Passenger Vehicles	57.1	91.4	91.7	89	89.9	88.4	75	89.1	85.7	92.1	98.2	96	75	93.4	96.2	93.2	92.7
Large 2 Axle Vehicles	2	1	1	4	5	1	1	7	2	1	1	4	1	15	0	16	31
% Large 2 Axle Vehicles	28.6	1.2	8.3	4	4.6	2.3	25	4.5	9.5	2.6	0.6	1.8	12.5	3.7	0	3.6	3.4
3 Axle Vehicles	0	1	0	1	2	0	0	2	0	2	1	3	1	2	0	3	9
% 3 Axle Vehicles	0	1.2	0	1	1.8	0	0	1.3	0	5.3	0.6	1.3	12.5	0.5	0	0.7	1
4+ Axle Trucks	1	5	0	6	4	4	0	8	1	0	1	2	0	10	1	11	27
% 4+ Axle Trucks	14.3	6.2	0	6	3.7	9.3	0	5.1	4.8	0	0.6	0.9	0	2.5	3.8	2.5	2.9

	Hall Avenue Southbound				24th Street Westbound				Hall Avenue Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	1	**11**	**1**	**13**	12	2	0	14	2	**4**	10	16	0	47	**4**	51	94
04:30 PM	0	6	1	7	10	3	0	13	0	1	17	18	**3**	**54**	1	**58**	96
04:45 PM	0	7	1	8	5	**4**	**1**	10	1	2	15	18	0	54	2	56	92
05:00 PM	**2**	6	0	8	**17**	4	0	**21**	**6**	4	**23**	**33**	0	45	1	46	**108**
Total Volume	3	30	3	36	44	13	1	58	9	11	65	85	3	200	8	211	390
% App. Total	8.3	83.3	8.3		75.9	22.4	1.7		10.6	12.9	76.5		1.4	94.8	3.8		
PHF	.375	.682	.750	.692	.647	.813	.250	.690	.375	.688	.707	.644	.250	.926	.500	.909	.903

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City of Jurupa Valley
N/S: Hall Avenue
E/W: 24th Street
Weather: Clear

File Name : 26_JVY_Hall_24th PM
Site Code : 05122894
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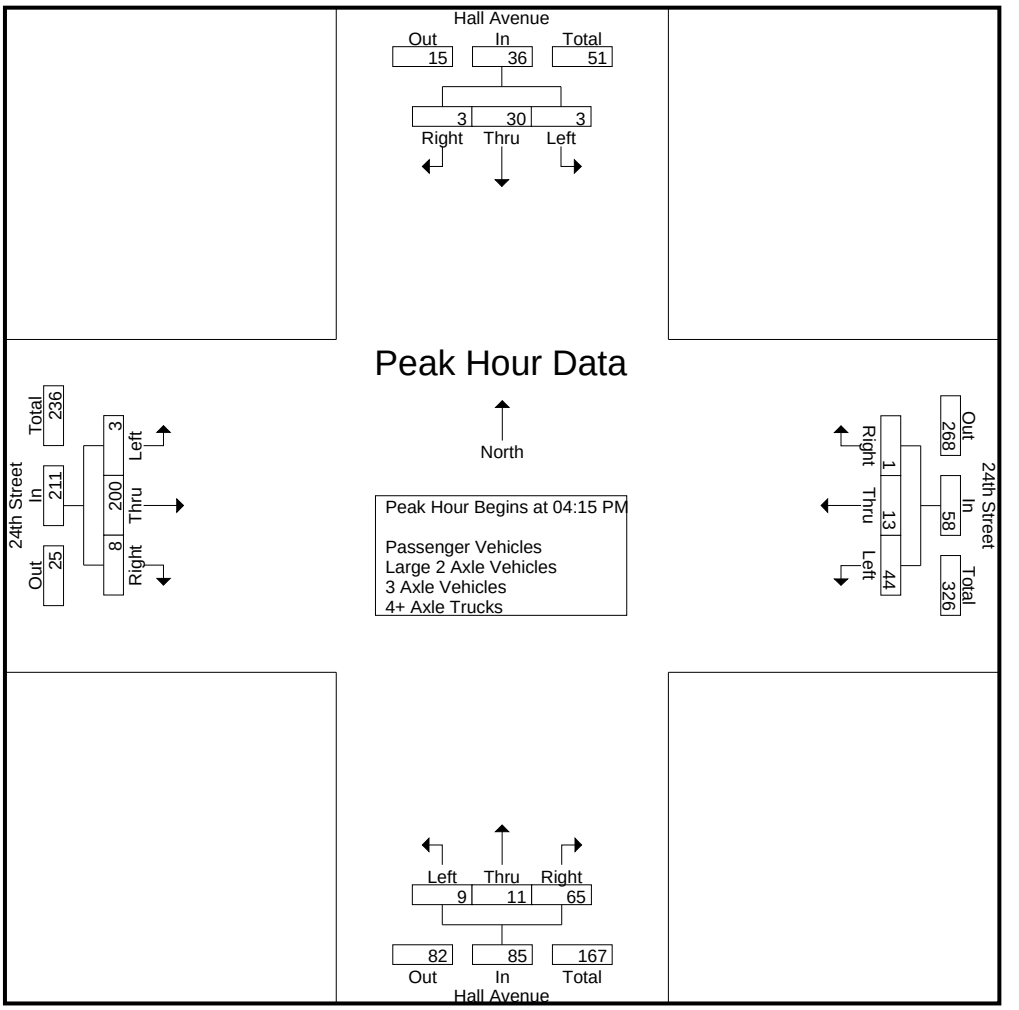

Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM				03:30 PM				03:30 PM				04:15 PM			
+0 mins.	**1**	9	**3**	**13**	**16**	3	**1**	20	2	5	20	27	0	47	**4**	51
+15 mins.	1	**12**	0	13	16	**9**	0	**25**	**4**	**8**	**22**	**34**	**3**	**54**	1	**58**
+30 mins.	0	4	3	7	7	4	0	11	2	2	16	20	0	54	2	56
+45 mins.	1	11	1	13	12	2	0	14	2	4	10	16	0	45	1	46
Total Volume	3	36	7	46	51	18	1	70	10	19	68	97	3	200	8	211
% App. Total	6.5	78.3	15.2		72.9	25.7	1.4		10.3	19.6	70.1		1.4	94.8	3.8	
PHF	.750	.750	.583	.885	.797	.500	.250	.700	.625	.594	.773	.713	.250	.926	.500	.909

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City of Jurupa Valley
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File Name : 26_JVY_Hall_24th PM
Site Code : 05122894
Start Date : 10/4/2022
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Groups Printed- Passenger Vehicles

	Hall Avenue Southbound				24th Street Westbound				Hall Avenue Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	9	3	12	14	3	1	18	2	4	20	26	0	37	5	42	98
03:45 PM	0	9	0	9	14	9	0	23	2	8	21	31	0	24	1	25	88
Total	0	18	3	21	28	12	1	41	4	12	41	57	0	61	6	67	186
04:00 PM	0	4	3	7	6	3	0	9	2	2	16	20	1	39	2	42	78
04:15 PM	1	10	1	12	11	1	0	12	2	3	10	15	0	43	4	47	86
04:30 PM	0	6	1	7	8	3	0	11	0	1	16	17	2	51	0	53	88
04:45 PM	0	7	1	8	5	4	0	9	1	2	15	18	0	52	2	54	89
Total	1	27	6	34	30	11	0	41	5	8	57	70	3	185	8	196	341
05:00 PM	1	6	0	7	16	4	0	20	6	3	22	31	0	43	1	44	102
05:15 PM	0	6	2	8	9	3	0	12	0	0	17	17	1	39	1	41	78
05:30 PM	1	12	0	13	7	6	0	13	1	7	12	20	2	23	4	29	75
05:45 PM	1	5	0	6	8	2	2	12	2	5	15	22	0	30	5	35	75
Total	3	29	2	34	40	15	2	57	9	15	66	90	3	135	11	149	330
Grand Total	4	74	11	89	98	38	3	139	18	35	164	217	6	381	25	412	857
Apprch %	4.5	83.1	12.4		70.5	27.3	2.2		8.3	16.1	75.6		1.5	92.5	6.1		
Total %	0.5	8.6	1.3	10.4	11.4	4.4	0.4	16.2	2.1	4.1	19.1	25.3	0.7	44.5	2.9	48.1	

	Hall Avenue Southbound				24th Street Westbound				Hall Avenue Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	**1**	**10**	**1**	**12**	11	1	0	12	2	**3**	10	15	0	43	**4**	47	86
04:30 PM	0	6	1	7	8	3	0	11	0	1	16	17	**2**	51	0	53	88
04:45 PM	0	7	1	8	5	**4**	0	9	1	2	15	18	0	**52**	2	**54**	89
05:00 PM	1	6	0	7	**16**	4	0	**20**	**6**	3	**22**	**31**	0	43	1	44	**102**
Total Volume	2	29	3	34	40	12	0	52	9	9	63	81	2	189	7	198	365
% App. Total	5.9	85.3	8.8		76.9	23.1	0		11.1	11.1	77.8		1	95.5	3.5		
PHF	.500	.725	.750	.708	.625	.750	.000	.650	.375	.750	.716	.653	.250	.909	.438	.917	.895

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File Name : 26_JVY_Hall_24th PM
Site Code : 05122894
Start Date : 10/4/2022
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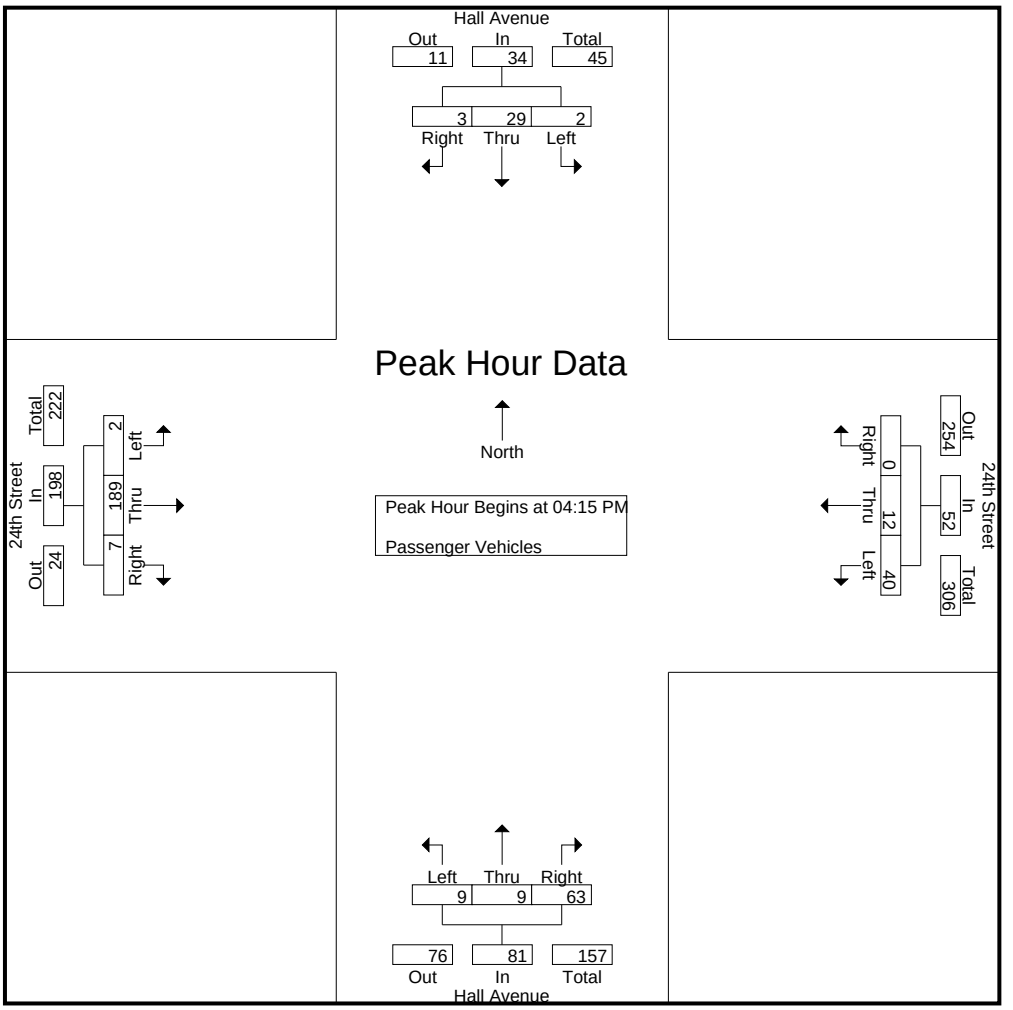

Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	**1**	**10**	**1**	**12**	11	1	0	12	2	**3**	10	15	0	43	**4**	47
+15 mins.	0	6	1	7	8	3	0	11	0	1	16	17	**2**	51	0	53
+30 mins.	0	7	1	8	5	**4**	0	9	1	2	15	18	0	**52**	2	**54**
+45 mins.	1	6	0	7	**16**	4	0	**20**	**6**	3	**22**	**31**	0	43	1	44
Total Volume	2	29	3	34	40	12	0	52	9	9	63	81	2	189	7	198
% App. Total	5.9	85.3	8.8		76.9	23.1	0		11.1	11.1	77.8		1	95.5	3.5	
PHF	.500	.725	.750	.708	.625	.750	.000	.650	.375	.750	.716	.653	.250	.909	.438	.917

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City of Jurupa Valley
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Weather: Clear

File Name : 26_JVY_Hall_24th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Hall Avenue Southbound				24th Street Westbound				Hall Avenue Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	1	0	0	1	1	0	0	1	0	0	0	0	0	4	0	4	6
03:45 PM	0	1	0	1	1	0	0	1	2	0	0	2	0	3	0	3	7
Total	1	1	0	2	2	0	0	2	2	0	0	2	0	7	0	7	13
04:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	1	0	1	0	1	0	1	0	3	0	3	5
04:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	2	3
04:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	1	1	1	3	0	1	1	2	1	4	0	5	10
05:00 PM	1	0	0	1	1	0	0	1	0	0	0	0	0	1	0	1	3
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	2	0	2	3
05:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	1	2	2	0	0	2	0	0	0	0	0	4	0	4	8
Grand Total	2	1	1	4	5	1	1	7	2	1	1	4	1	15	0	16	31
Apprch %	50	25	25		71.4	14.3	14.3		50	25	25		6.2	93.8	0		
Total %	6.5	3.2	3.2	12.9	16.1	3.2	3.2	22.6	6.5	3.2	3.2	12.9	3.2	48.4	0	51.6	

	Hall Avenue Southbound				24th Street Westbound				Hall Avenue Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	**1**	0	**1**	0	**1**	0	**1**	0	**3**	0	**3**	**5**
04:30 PM	0	0	0	0	0	0	0	0	0	0	**1**	1	**1**	1	0	2	3
04:45 PM	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	1
05:00 PM	**1**	0	0	**1**	**1**	0	0	1	0	0	0	0	0	1	0	1	3
Total Volume	1	0	0	1	1	1	1	3	0	1	1	2	1	5	0	6	12
% App. Total	100	0	0		33.3	33.3	33.3		0	50	50		16.7	83.3	0		
PHF	.250	.000	.000	.250	.250	.250	.250	.750	.000	.250	.250	.500	.250	.417	.000	.500	.600

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Site Code : 05122894
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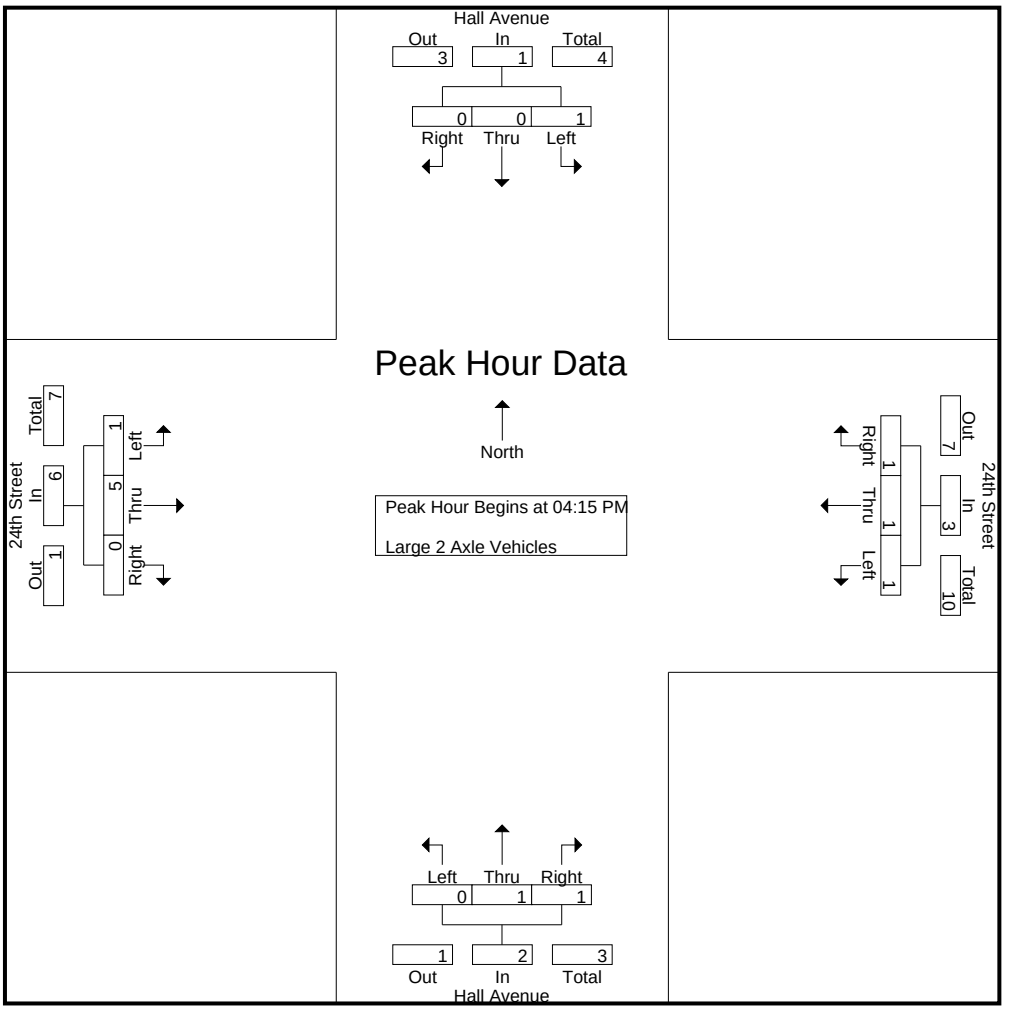

Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	0	**1**	0	**1**	0	**1**	0	**1**	0	**3**	0	**3**
+15 mins.	0	0	0	0	0	0	0	0	0	0	**1**	1	**1**	1	0	2
+30 mins.	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0
+45 mins.	**1**	0	0	**1**	**1**	0	0	1	0	0	0	0	0	1	0	1
Total Volume	1	0	0	1	1	1	1	3	0	1	1	2	1	5	0	6
% App. Total	100	0	0		33.3	33.3	33.3		0	50	50		16.7	83.3	0	
PHF	.250	.000	.000	.250	.250	.250	.250	.750	.000	.250	.250	.500	.250	.417	.000	.500

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File Name : 26_JVY_Hall_24th PM
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Groups Printed- 3 Axle Vehicles

	Hall Avenue Southbound				24th Street Westbound				Hall Avenue Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
03:45 PM	0	1	0	1	1	0	0	1	0	0	0	0	0	1	0	1	3
Total	0	1	0	1	1	0	0	1	0	1	0	1	0	1	0	1	4
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	1	0	0	0	0	1	1	0	2	3
05:00 PM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	2
Grand Total	0	1	0	1	2	0	0	2	0	2	1	3	1	2	0	3	9
Apprch %	0	100	0		100	0	0		0	66.7	33.3		33.3	66.7	0		
Total %	0	11.1	0	11.1	22.2	0	0	22.2	0	22.2	11.1	33.3	11.1	22.2	0	33.3	

	Hall Avenue Southbound				24th Street Westbound				Hall Avenue Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	**1**	0	0	**1**	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	**1**	**1**	**2**	0	0	0	0	**2**
Total Volume	0	0	0	0	1	0	0	1	0	1	1	2	0	0	0	0	3
% App. Total	0	0	0		100	0	0		0	50	50		0	0	0		
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.250	.250	.250	.000	.000	.000	.000	.375

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City of Jurupa Valley
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File Name : 26_JVY_Hall_24th PM
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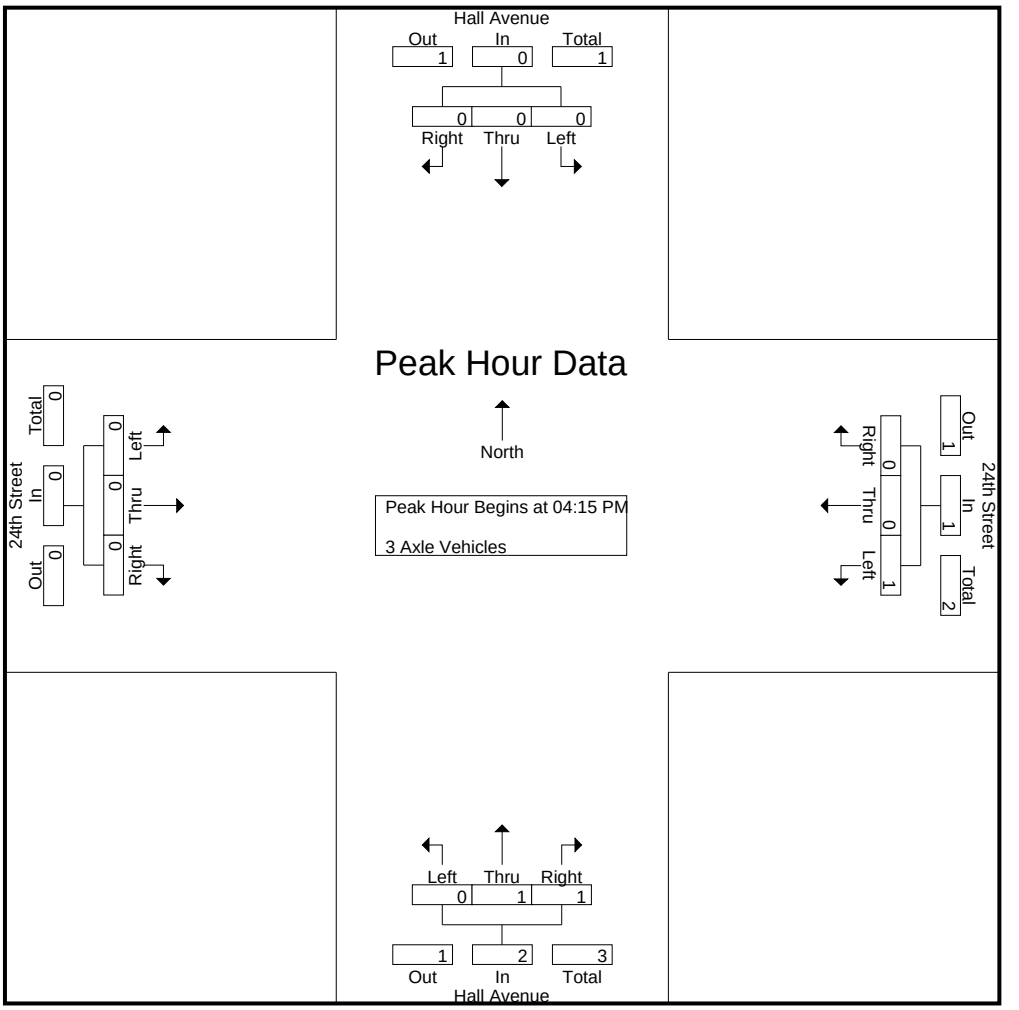

Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	**1**	0	0	**1**	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	**1**	**1**	**2**	0	0	0	0
Total Volume	0	0	0	0	1	0	0	1	0	1	1	2	0	0	0	0
% App. Total	0	0	0		100	0	0		0	50	50		0	0	0	
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.250	.250	.250	.000	.000	.000	.000

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File Name : 26_JVY_Hall_24th PM
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Groups Printed- 4+ Axle Trucks

	Hall Avenue Southbound				24th Street Westbound				Hall Avenue Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
03:45 PM	1	1	0	2	0	0	0	0	0	0	1	1	0	1	0	1	4
Total	1	1	0	2	1	0	0	1	0	0	1	1	0	1	0	1	5
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:15 PM	0	1	0	1	1	0	0	1	0	0	0	0	0	1	0	1	3
04:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	2	1	3	4
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	0	1	0	1	2	1	0	3	0	0	0	0	0	6	1	7	11
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
05:30 PM	0	0	0	0	0	1	0	1	1	0	0	1	0	2	0	2	4
05:45 PM	0	2	0	2	1	1	0	2	0	0	0	0	0	0	0	0	4
Total	0	3	0	3	1	3	0	4	1	0	0	1	0	3	0	3	11
Grand Total	1	5	0	6	4	4	0	8	1	0	1	2	0	10	1	11	27
Apprch %	16.7	83.3	0		50	50	0		50	0	50		0	90.9	9.1		
Total %	3.7	18.5	0	22.2	14.8	14.8	0	29.6	3.7	0	3.7	7.4	0	37	3.7	40.7	

	Hall Avenue Southbound				24th Street Westbound				Hall Avenue Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	**1**	0	**1**	**1**	0	0	**1**	0	0	0	0	0	1	0	1	3
04:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	**2**	**1**	**3**	**4**
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	1	0	1	2	0	0	2	0	0	0	0	0	6	1	7	10
% App. Total	0	100	0		100	0	0		0	0	0		0	85.7	14.3		
PHF	.000	.250	.000	.250	.500	.000	.000	.500	.000	.000	.000	.000	.000	.750	.250	.583	.625

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City of Jurupa Valley
N/S: Hall Avenue
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Weather: Clear

File Name : 26_JVY_Hall_24th PM
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Start Date : 10/4/2022
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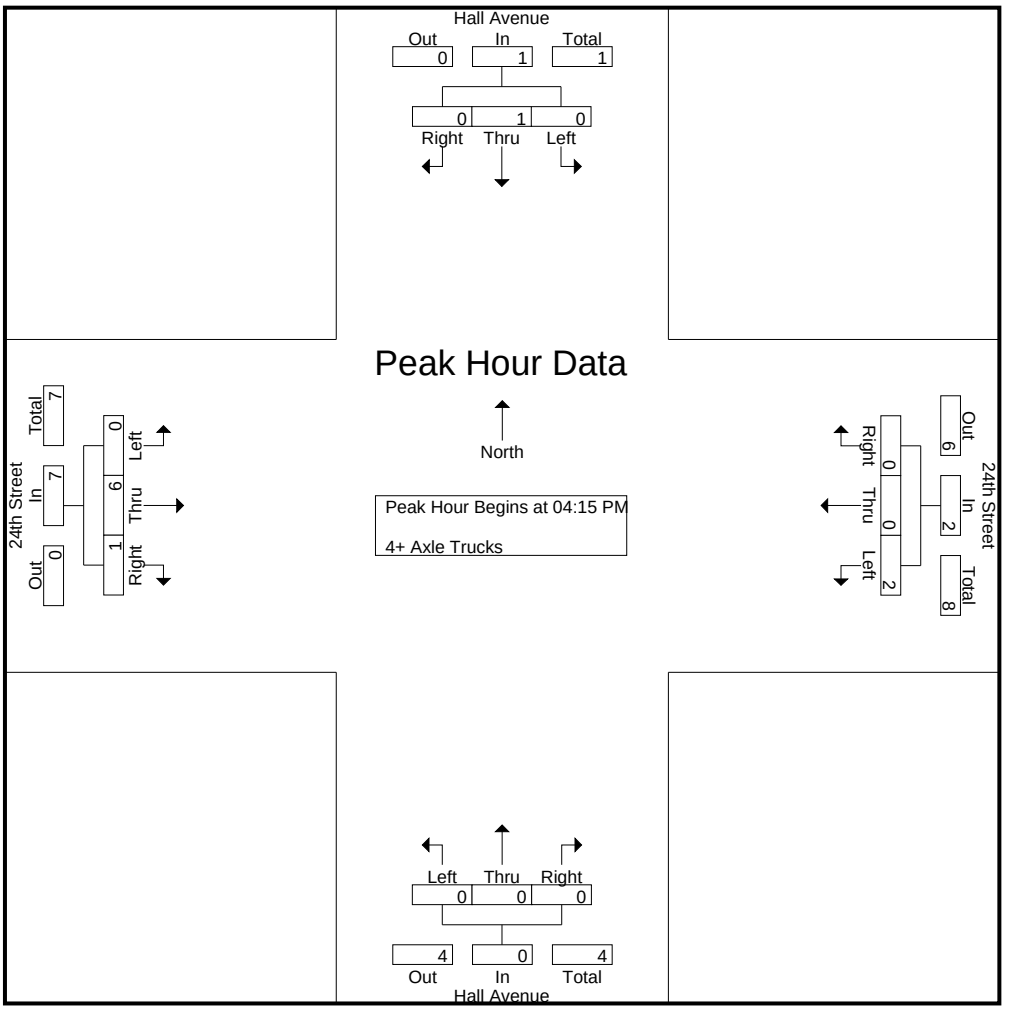

Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	**1**	0	**1**	**1**	0	0	**1**	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	**2**	**1**	**3**
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total Volume	0	1	0	1	2	0	0	2	0	0	0	0	0	6	1	7
% App. Total	0	100	0		100	0	0		0	0	0		0	85.7	14.3	
PHF	.000	.250	.000	.250	.500	.000	.000	.500	.000	.000	.000	.000	.000	.750	.250	.583

Location: Jurupa Valley
N/S: Hall Avenue
E/W: 24th Street

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Hall Avenue Pedestrians	East Leg 24th Street Pedestrians	South Leg Hall Avenue Pedestrians	West Leg 24th Street Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	4	0	0	4
8:15 AM	0	8	0	0	8
8:30 AM	0	0	0	0	0
8:45 AM	1	0	0	0	1
TOTAL VOLUMES:	1	12	0	0	13

	North Leg Hall Avenue Pedestrians	East Leg 24th Street Pedestrians	South Leg Hall Avenue Pedestrians	West Leg 24th Street Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	1	3	0	4
4:00 PM	0	0	0	0	0
4:15 PM	0	2	0	1	3
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	1	1
5:00 PM	0	2	2	0	4
5:15 PM	0	0	0	1	1
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	5	5	3	13

Location: Jurupa Valley
N/S: Hall Avenue
E/W: 24th Street

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Hall Avenue			Westbound 24th Street			Northbound Hall Avenue			Eastbound 24th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	1	0	0	0	1	0	0	0	2
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	1	0	0	0	0	0	0	1	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	2	1	0	0	0	1	0	1	0	5

	Southbound Hall Avenue			Westbound 24th Street			Northbound Hall Avenue			Eastbound 24th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	2	0	0	0	0	1	0	0	0	3
3:45 PM	0	0	0	0	0	0	0	0	3	0	0	0	3
4:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	3	0	0	0	0	6	0	1	0	10

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City of Jurupa Valley
N/S: Hall Avenue
E/W: 26th Street
Weather: Clear

File Name : 27_JVY_Hall_26th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Hall Avenue Southbound				26th Street Westbound				Hall Avenue Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	4	0	4	1	0	2	3	0	4	0	4	1	0	2	3	14
06:45 AM	0	18	1	19	2	0	0	2	1	3	0	4	1	0	1	2	27
Total	0	22	1	23	3	0	2	5	1	7	0	8	2	0	3	5	41
07:00 AM	1	13	1	15	2	2	2	6	1	8	1	10	0	0	1	1	32
07:15 AM	0	10	2	12	2	0	0	2	2	13	2	17	0	0	1	1	32
07:30 AM	1	25	1	27	4	0	3	7	1	20	0	21	0	0	1	1	56
07:45 AM	0	17	0	17	6	0	1	7	1	19	1	21	2	0	2	4	49
Total	2	65	4	71	14	2	6	22	5	60	4	69	2	0	5	7	169
08:00 AM	0	16	0	16	1	0	0	1	1	17	4	22	0	0	1	1	40
08:15 AM	0	8	1	9	3	0	1	4	1	9	0	10	0	0	3	3	26
08:30 AM	1	9	1	11	0	0	2	2	0	10	0	10	0	0	3	3	26
08:45 AM	0	11	0	11	2	0	0	2	2	8	1	11	0	0	0	0	24
Total	1	44	2	47	6	0	3	9	4	44	5	53	0	0	7	7	116
Grand Total	3	131	7	141	23	2	11	36	10	111	9	130	4	0	15	19	326
Apprch %	2.1	92.9	5		63.9	5.6	30.6		7.7	85.4	6.9		21.1	0	78.9		
Total %	0.9	40.2	2.1	43.3	7.1	0.6	3.4	11	3.1	34	2.8	39.9	1.2	0	4.6	5.8	
Passenger Vehicles	3	119	4	126	22	2	11	35	7	102	7	116	2	0	10	12	289
% Passenger Vehicles	100	90.8	57.1	89.4	95.7	100	100	97.2	70	91.9	77.8	89.2	50	0	66.7	63.2	88.7
Large 2 Axle Vehicles	0	10	3	13	1	0	0	1	2	9	2	13	2	0	2	4	31
% Large 2 Axle Vehicles	0	7.6	42.9	9.2	4.3	0	0	2.8	20	8.1	22.2	10	50	0	13.3	21.1	9.5
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	2	0	2	0	0	0	0	1	0	0	1	0	0	3	3	6
% 4+ Axle Trucks	0	1.5	0	1.4	0	0	0	0	10	0	0	0.8	0	0	20	15.8	1.8

	Hall Avenue Southbound				26th Street Westbound				Hall Avenue Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	10	**2**	12	2	0	0	2	**2**	13	2	17	0	0	1	1	32
07:30 AM	**1**	**25**	1	**27**	4	0	**3**	**7**	1	**20**	0	21	0	0	1	1	**56**
07:45 AM	0	17	0	17	**6**	0	1	7	1	19	1	21	**2**	0	**2**	**4**	49
08:00 AM	0	16	0	16	1	0	0	1	1	17	**4**	**22**	0	0	1	1	40
Total Volume	1	68	3	72	13	0	4	17	5	69	7	81	2	0	5	7	177
% App. Total	1.4	94.4	4.2		76.5	0	23.5		6.2	85.2	8.6		28.6	0	71.4		
PHF	.250	.680	.375	.667	.542	.000	.333	.607	.625	.863	.438	.920	.250	.000	.625	.438	.790

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City of Jurupa Valley
N/S: Hall Avenue
E/W: 26th Street
Weather: Clear

File Name : 27_JVY_Hall_26th AM
Site Code : 05122894
Start Date : 10/4/2022
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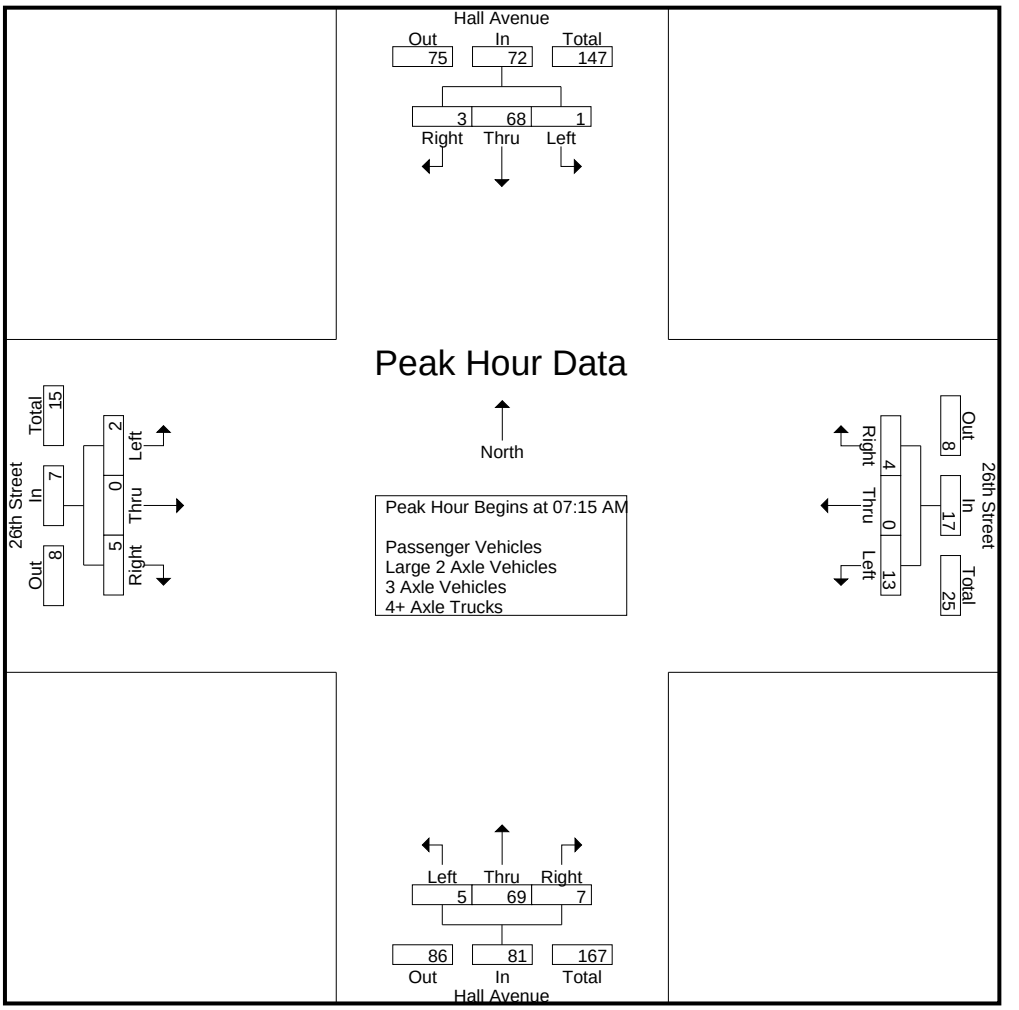

Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	06:45 AM				07:00 AM				07:15 AM				07:45 AM			
+0 mins.	0	18	1	19	2	**2**	2	6	**2**	13	2	17	**2**	0	2	**4**
+15 mins.	**1**	13	1	15	2	0	0	2	1	**20**	0	21	0	0	1	1
+30 mins.	0	10	**2**	12	4	0	**3**	**7**	1	19	1	21	0	0	**3**	3
+45 mins.	1	**25**	1	**27**	**6**	0	1	7	1	17	**4**	**22**	0	0	3	3
Total Volume	2	66	5	73	14	2	6	22	5	69	7	81	2	0	9	11
% App. Total	2.7	90.4	6.8		63.6	9.1	27.3		6.2	85.2	8.6		18.2	0	81.8	
PHF	.500	.660	.625	.676	.583	.250	.500	.786	.625	.863	.438	.920	.250	.000	.750	.688

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File Name : 27_JVY_Hall_26th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Hall Avenue Southbound				26th Street Westbound				Hall Avenue Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	4	0	4	1	0	2	3	0	4	0	4	0	0	2	2	13
06:45 AM	0	15	0	15	2	0	0	2	1	3	0	4	1	0	1	2	23
Total	0	19	0	19	3	0	2	5	1	7	0	8	1	0	3	4	36
07:00 AM	1	12	0	13	2	2	2	6	0	7	0	7	0	0	1	1	27
07:15 AM	0	9	1	10	1	0	0	1	1	13	2	16	0	0	0	0	27
07:30 AM	1	24	1	26	4	0	3	7	1	18	0	19	0	0	1	1	53
07:45 AM	0	17	0	17	6	0	1	7	1	18	1	20	1	0	2	3	47
Total	2	62	2	66	13	2	6	21	3	56	3	62	1	0	4	5	154
08:00 AM	0	13	0	13	1	0	0	1	1	15	3	19	0	0	0	0	33
08:15 AM	0	7	1	8	3	0	1	4	0	8	0	8	0	0	2	2	22
08:30 AM	1	8	1	10	0	0	2	2	0	9	0	9	0	0	1	1	22
08:45 AM	0	10	0	10	2	0	0	2	2	7	1	10	0	0	0	0	22
Total	1	38	2	41	6	0	3	9	3	39	4	46	0	0	3	3	99
Grand Total	3	119	4	126	22	2	11	35	7	102	7	116	2	0	10	12	289
Apprch %	2.4	94.4	3.2		62.9	5.7	31.4		6	87.9	6		16.7	0	83.3		
Total %	1	41.2	1.4	43.6	7.6	0.7	3.8	12.1	2.4	35.3	2.4	40.1	0.7	0	3.5	4.2	

	Hall Avenue Southbound				26th Street Westbound				Hall Avenue Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	9	**1**	10	1	0	0	1	**1**	13	2	16	0	0	0	0	27
07:30 AM	**1**	**24**	1	**26**	4	0	**3**	**7**	1	**18**	0	19	0	0	1	1	**53**
07:45 AM	0	17	0	17	**6**	0	1	7	1	18	1	**20**	**1**	0	**2**	**3**	47
08:00 AM	0	13	0	13	1	0	0	1	1	15	**3**	19	0	0	0	0	33
Total Volume	1	63	2	66	12	0	4	16	4	64	6	74	1	0	3	4	160
% App. Total	1.5	95.5	3		75	0	25		5.4	86.5	8.1		25	0	75		
PHF	.250	.656	.500	.635	.500	.000	.333	.571	1.00	.889	.500	.925	.250	.000	.375	.333	.755

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City of Jurupa Valley
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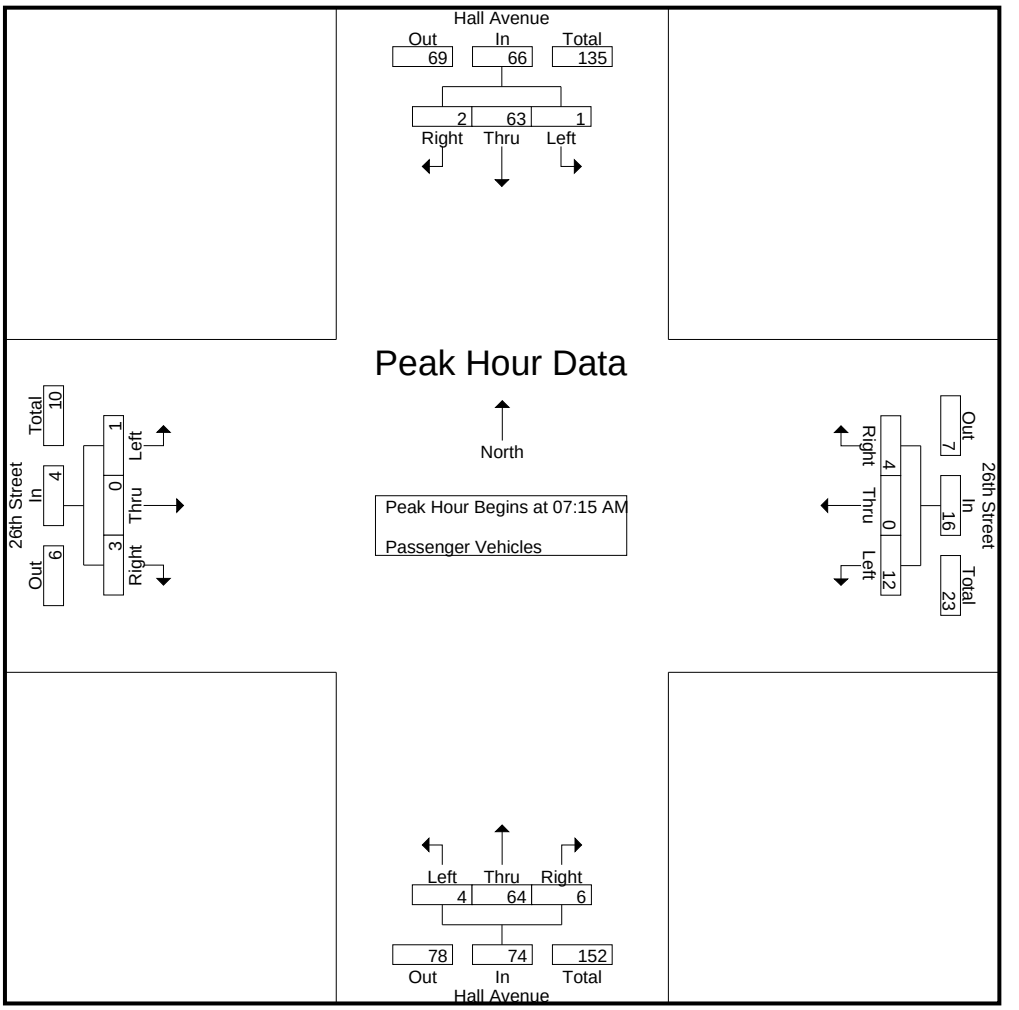

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	9	**1**	10	1	0	0	1	**1**	13	2	16	0	0	0	0
+15 mins.	**1**	**24**	1	**26**	4	0	**3**	**7**	1	**18**	0	19	0	0	1	1
+30 mins.	0	17	0	17	**6**	0	1	7	1	18	1	**20**	**1**	0	**2**	**3**
+45 mins.	0	13	0	13	1	0	0	1	1	15	**3**	19	0	0	0	0
Total Volume	1	63	2	66	12	0	4	16	4	64	6	74	1	0	3	4
% App. Total	1.5	95.5	3		75	0	25		5.4	86.5	8.1		25	0	75	
PHF	.250	.656	.500	.635	.500	.000	.333	.571	1.000	.889	.500	.925	.250	.000	.375	.333

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City of Jurupa Valley
N/S: Hall Avenue
E/W: 26th Street
Weather: Clear

File Name : 27_JVY_Hall_26th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Hall Avenue Southbound				26th Street Westbound				Hall Avenue Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
06:45 AM	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	1	1	2	0	0	0	0	0	0	0	0	1	0	0	1	3
07:00 AM	0	1	1	2	0	0	0	0	1	1	1	3	0	0	0	0	5
07:15 AM	0	1	1	2	1	0	0	1	1	0	0	1	0	0	1	1	5
07:30 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	2
Total	0	3	2	5	1	0	0	1	2	4	1	7	1	0	1	2	15
08:00 AM	0	3	0	3	0	0	0	0	0	2	1	3	0	0	0	0	6
08:15 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
08:30 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	1	1	3
08:45 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	6	0	6	0	0	0	0	0	5	1	6	0	0	1	1	13
Grand Total	0	10	3	13	1	0	0	1	2	9	2	13	2	0	2	4	31
Apprch %	0	76.9	23.1		100	0	0		15.4	69.2	15.4		50	0	50		
Total %	0	32.3	9.7	41.9	3.2	0	0	3.2	6.5	29	6.5	41.9	6.5	0	6.5	12.9	

	Hall Avenue Southbound				26th Street Westbound				Hall Avenue Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	1	**1**	2	**1**	0	0	**1**	**1**	0	0	1	0	0	**1**	**1**	5
07:30 AM	0	1	0	1	0	0	0	0	0	**2**	0	2	0	0	0	0	3
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	**1**	0	0	1	2
08:00 AM	0	**3**	0	**3**	0	0	0	0	0	2	**1**	**3**	0	0	0	0	**6**
Total Volume	0	5	1	6	1	0	0	1	1	5	1	7	1	0	1	2	16
% App. Total	0	83.3	16.7		100	0	0		14.3	71.4	14.3		50	0	50		
PHF	.000	.417	.250	.500	.250	.000	.000	.250	.250	.625	.250	.583	.250	.000	.250	.500	.667

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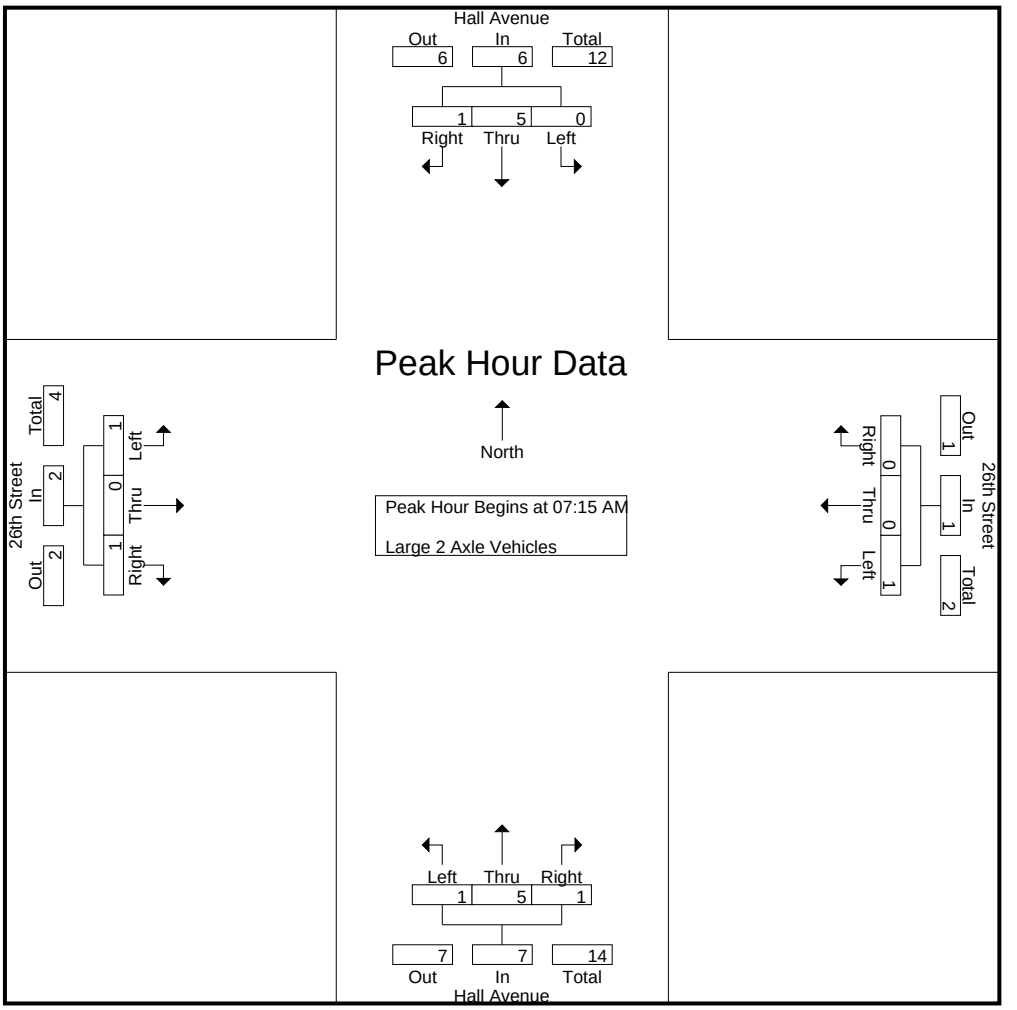
City of Jurupa Valley
N/S: Hall Avenue
E/W: 26th Street
Weather: Clear

File Name : 27_JVY_Hall_26th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	1	**1**	2	**1**	0	0	**1**	**1**	0	0	1	0	0	**1**	**1**
+15 mins.	0	1	0	1	0	0	0	0	0	**2**	0	2	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	1	0	1	**1**	0	0	1
+45 mins.	0	**3**	0	**3**	0	0	0	0	0	2	**1**	**3**	0	0	0	0
Total Volume	0	5	1	6	1	0	0	1	1	5	1	7	1	0	1	2
% App. Total	0	83.3	16.7		100	0	0		14.3	71.4	14.3		50	0	50	
PHF	.000	.417	.250	.500	.250	.000	.000	.250	.250	.625	.250	.583	.250	.000	.250	.500

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City of Jurupa Valley
N/S: Hall Avenue
E/W: 26th Street
Weather: Clear

File Name : 27_JVY_Hall_26th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Hall Avenue Southbound				26th Street Westbound				Hall Avenue Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

	Hall Avenue Southbound				26th Street Westbound				Hall Avenue Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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City of Jurupa Valley
N/S: Hall Avenue
E/W: 26th Street
Weather: Clear

File Name : 27_JVY_Hall_26th AM
Site Code : 05122894
Start Date : 10/4/2022
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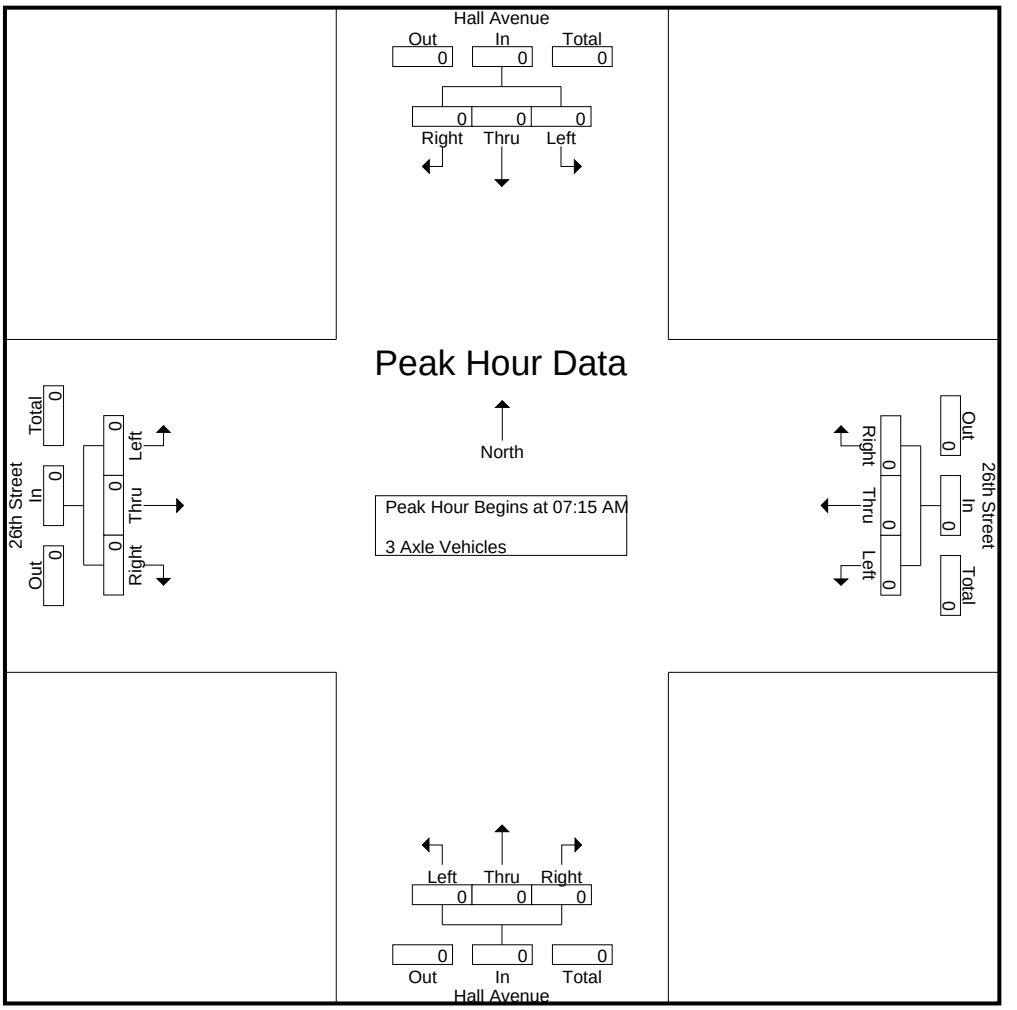

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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Weather: Clear

File Name : 27_JVY_Hall_26th AM
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Start Date : 10/4/2022
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Groups Printed- 4+ Axle Trucks

	Hall Avenue Southbound				26th Street Westbound				Hall Avenue Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	1	0	0	1	0	0	3	3	4
Grand Total	0	2	0	2	0	0	0	0	1	0	0	1	0	0	3	3	6
Apprch %	0	100	0		0	0	0		100	0	0		0	0	100		
Total %	0	33.3	0	33.3	0	0	0	0	16.7	0	0	16.7	0	0	50	50	

	Hall Avenue Southbound				26th Street Westbound				Hall Avenue Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	**1**	**1**
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
% App. Total	0	0	0		0	0	0		0	0	0		0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.250

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City of Jurupa Valley
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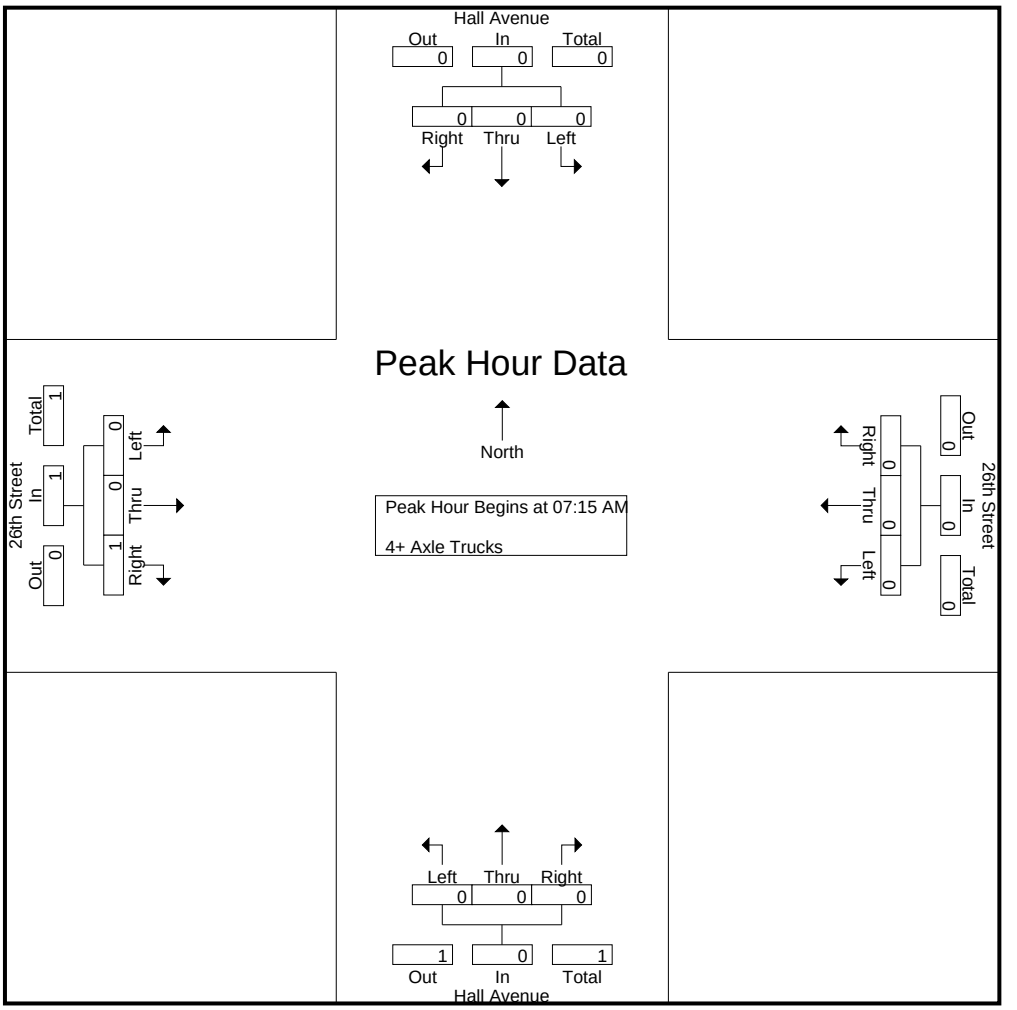

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	**1**
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
% App. Total	0	0	0		0	0	0		0	0	0		0	0	100	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250

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City of Jurupa Valley
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File Name : 27_JVY_Hall_26th PM
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Hall Avenue Southbound				26th Street Westbound				Hall Avenue Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	2	24	3	29	0	1	0	1	2	33	1	36	3	0	1	4	70
03:45 PM	3	21	3	27	1	0	1	2	0	31	3	34	3	1	2	6	69
Total	5	45	6	56	1	1	1	3	2	64	4	70	6	1	3	10	139
04:00 PM	1	19	1	21	5	0	0	5	0	26	3	29	0	0	2	2	57
04:15 PM	6	12	1	19	1	0	0	1	0	20	0	20	4	0	0	4	44
04:30 PM	1	16	1	18	0	0	1	1	0	19	1	20	2	1	4	7	46
04:45 PM	2	13	0	15	0	1	1	2	2	21	1	24	3	0	3	6	47
Total	10	60	3	73	6	1	2	9	2	86	5	93	9	1	9	19	194
05:00 PM	2	18	1	21	2	0	1	3	2	24	1	27	8	0	1	9	60
05:15 PM	0	16	3	19	1	0	2	3	1	25	2	28	1	0	0	1	51
05:30 PM	3	19	0	22	1	0	0	1	0	25	1	26	2	0	1	3	52
05:45 PM	1	16	1	18	1	0	0	1	1	33	0	34	4	1	2	7	60
Total	6	69	5	80	5	0	3	8	4	107	4	115	15	1	4	20	223
Grand Total	21	174	14	209	12	2	6	20	8	257	13	278	30	3	16	49	556
Apprch %	10	83.3	6.7		60	10	30		2.9	92.4	4.7		61.2	6.1	32.7		
Total %	3.8	31.3	2.5	37.6	2.2	0.4	1.1	3.6	1.4	46.2	2.3	50	5.4	0.5	2.9	8.8	
Passenger Vehicles	20	160	9	189	12	2	6	20	7	247	13	267	28	3	15	46	522
% Passenger Vehicles	95.2	92	64.3	90.4	100	100	100	100	87.5	96.1	100	96	93.3	100	93.8	93.9	93.9
Large 2 Axle Vehicles	1	5	1	7	0	0	0	0	0	6	0	6	1	0	0	1	14
% Large 2 Axle Vehicles	4.8	2.9	7.1	3.3	0	0	0	0	0	2.3	0	2.2	3.3	0	0	2	2.5
3 Axle Vehicles	0	4	0	4	0	0	0	0	0	2	0	2	1	0	0	1	7
% 3 Axle Vehicles	0	2.3	0	1.9	0	0	0	0	0	0.8	0	0.7	3.3	0	0	2	1.3
4+ Axle Trucks	0	5	4	9	0	0	0	0	1	2	0	3	0	0	1	1	13
% 4+ Axle Trucks	0	2.9	28.6	4.3	0	0	0	0	12.5	0.8	0	1.1	0	0	6.2	2	2.3

	Hall Avenue Southbound				26th Street Westbound				Hall Avenue Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	2	**24**	**3**	**29**	0	**1**	0	1	**2**	**33**	1	**36**	3	0	1	4	**70**
03:45 PM	3	21	3	27	1	0	**1**	2	0	31	**3**	34	3	**1**	**2**	**6**	69
04:00 PM	1	19	1	21	**5**	0	0	**5**	0	26	3	29	0	0	2	2	57
04:15 PM	**6**	12	1	19	1	0	0	1	0	20	0	20	**4**	0	0	4	44
Total Volume	12	76	8	96	7	1	1	9	2	110	7	119	10	1	5	16	240
% App. Total	12.5	79.2	8.3		77.8	11.1	11.1		1.7	92.4	5.9		62.5	6.2	31.2		
PHF	.500	.792	.667	.828	.350	.250	.250	.450	.250	.833	.583	.826	.625	.250	.625	.667	.857

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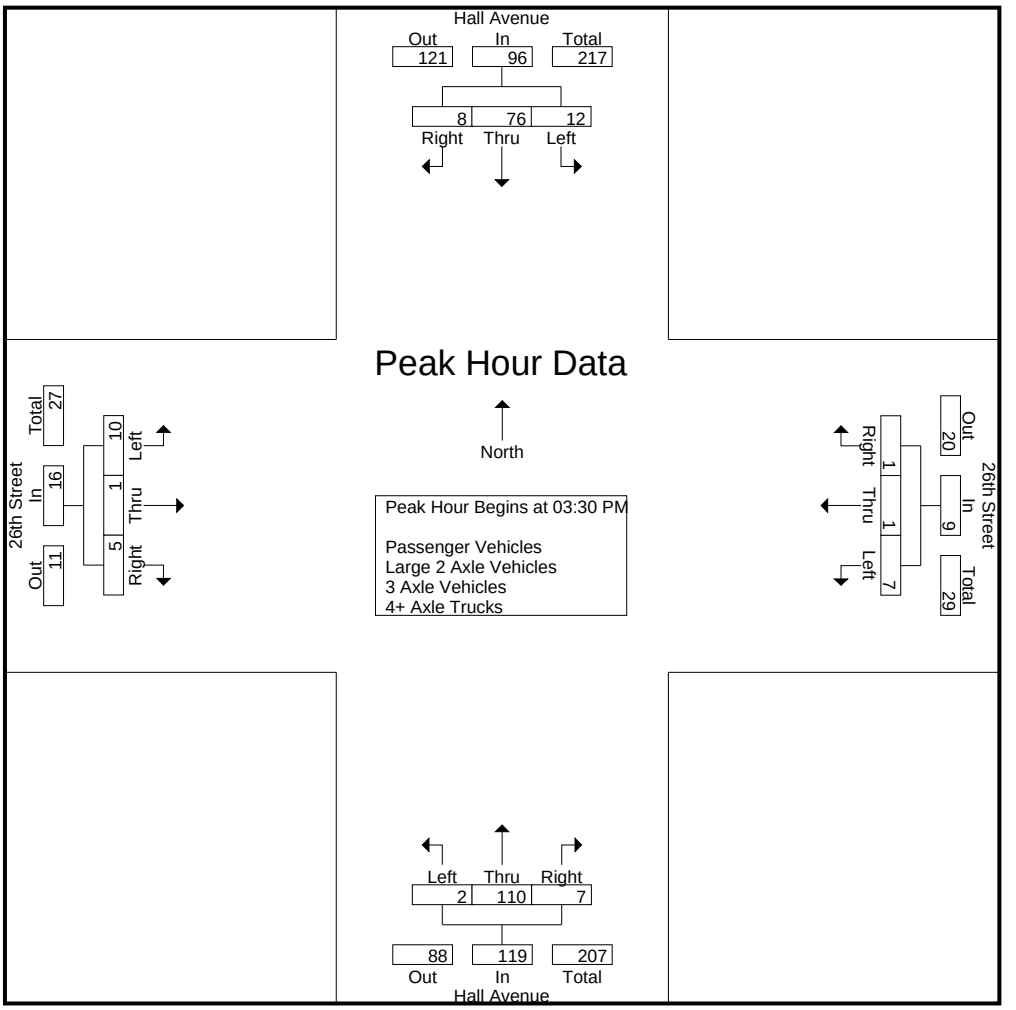

Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM				03:30 PM				03:30 PM				04:15 PM			
+0 mins.	2	**24**	**3**	**29**	0	**1**	0	1	**2**	**33**	1	**36**	4	0	0	4
+15 mins.	3	21	3	27	1	0	**1**	2	0	31	**3**	34	2	**1**	**4**	7
+30 mins.	1	19	1	21	**5**	0	0	**5**	0	26	3	29	3	0	3	6
+45 mins.	**6**	12	1	19	1	0	0	1	0	20	0	20	**8**	0	1	**9**
Total Volume	12	76	8	96	7	1	1	9	2	110	7	119	17	1	8	26
% App. Total	12.5	79.2	8.3		77.8	11.1	11.1		1.7	92.4	5.9		65.4	3.8	30.8	
PHF	.500	.792	.667	.828	.350	.250	.250	.450	.250	.833	.583	.826	.531	.250	.500	.722

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City of Jurupa Valley
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File Name : 27_JVY_Hall_26th PM
Site Code : 05122894
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Groups Printed- Passenger Vehicles

	Hall Avenue Southbound				26th Street Westbound				Hall Avenue Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	2	23	2	27	0	1	0	1	1	31	1	33	3	0	1	4	65
03:45 PM	2	19	1	22	1	0	1	2	0	29	3	32	3	1	1	5	61
Total	4	42	3	49	1	1	1	3	1	60	4	65	6	1	2	9	126
04:00 PM	1	17	1	19	5	0	0	5	0	25	3	28	0	0	2	2	54
04:15 PM	6	10	1	17	1	0	0	1	0	18	0	18	3	0	0	3	39
04:30 PM	1	13	0	14	0	0	1	1	0	19	1	20	2	1	4	7	42
04:45 PM	2	13	0	15	0	1	1	2	2	21	1	24	3	0	3	6	47
Total	10	53	2	65	6	1	2	9	2	83	5	90	8	1	9	18	182
05:00 PM	2	17	1	20	2	0	1	3	2	23	1	26	7	0	1	8	57
05:15 PM	0	15	2	17	1	0	2	3	1	24	2	27	1	0	0	1	48
05:30 PM	3	19	0	22	1	0	0	1	0	24	1	25	2	0	1	3	51
05:45 PM	1	14	1	16	1	0	0	1	1	33	0	34	4	1	2	7	58
Total	6	65	4	75	5	0	3	8	4	104	4	112	14	1	4	19	214
Grand Total	20	160	9	189	12	2	6	20	7	247	13	267	28	3	15	46	522
Apprch %	10.6	84.7	4.8		60	10	30		2.6	92.5	4.9		60.9	6.5	32.6		
Total %	3.8	30.7	1.7	36.2	2.3	0.4	1.1	3.8	1.3	47.3	2.5	51.1	5.4	0.6	2.9	8.8	

	Hall Avenue Southbound				26th Street Westbound				Hall Avenue Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	2	**23**	**2**	**27**	0	**1**	0	1	**1**	**31**	1	**33**	**3**	0	1	4	**65**
03:45 PM	2	19	1	22	1	0	**1**	2	0	29	**3**	32	3	**1**	1	**5**	61
04:00 PM	1	17	1	19	**5**	0	0	**5**	0	25	3	28	0	0	**2**	2	54
04:15 PM	**6**	10	1	17	1	0	0	1	0	18	0	18	3	0	0	3	39
Total Volume	11	69	5	85	7	1	1	9	1	103	7	111	9	1	4	14	219
% App. Total	12.9	81.2	5.9		77.8	11.1	11.1		0.9	92.8	6.3		64.3	7.1	28.6		
PHF	.458	.750	.625	.787	.350	.250	.250	.450	.250	.831	.583	.841	.750	.250	.500	.700	.842

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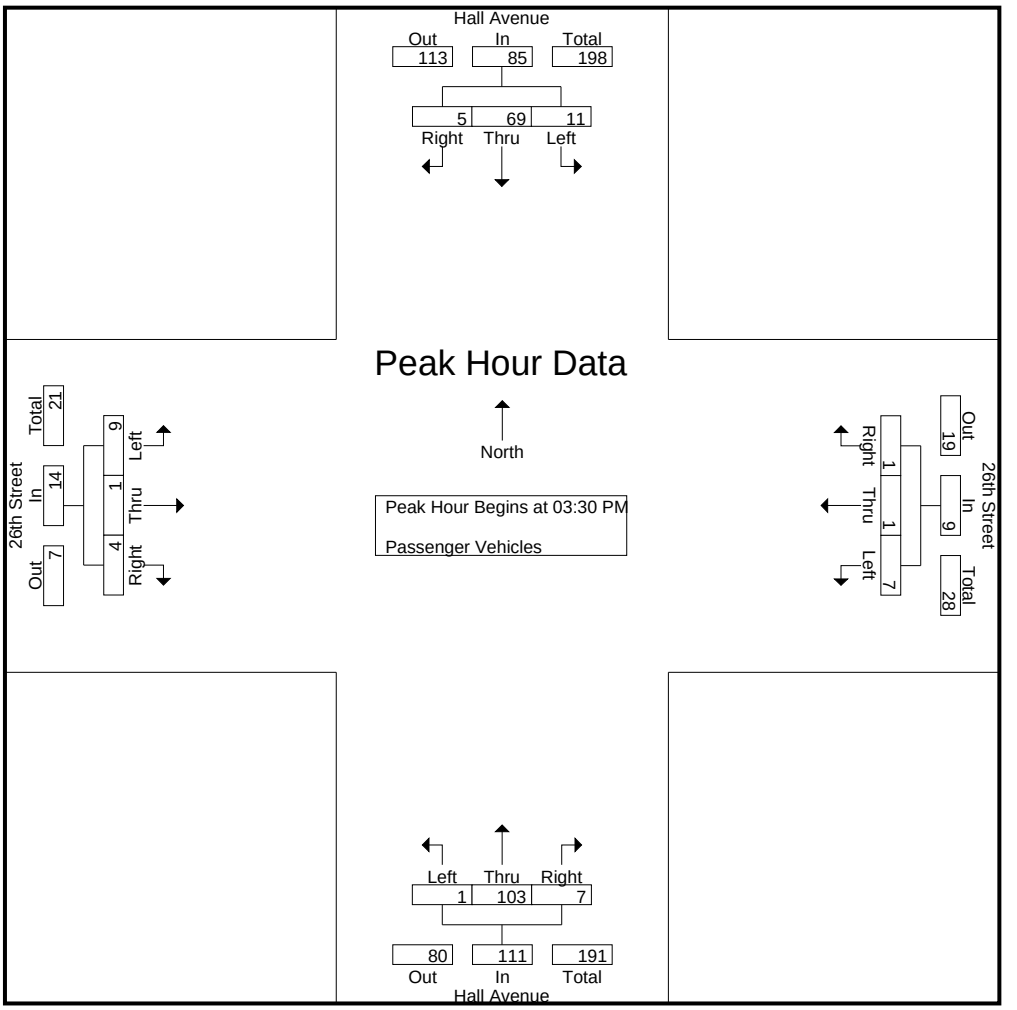

Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM				03:30 PM				03:30 PM				03:30 PM			
+0 mins.	2	**23**	**2**	**27**	0	**1**	0	1	**1**	**31**	1	**33**	**3**	0	1	4
+15 mins.	2	19	1	22	1	0	**1**	2	0	29	**3**	32	3	**1**	1	**5**
+30 mins.	1	17	1	19	**5**	0	0	**5**	0	25	3	28	0	0	**2**	2
+45 mins.	**6**	10	1	17	1	0	0	1	0	18	0	18	3	0	0	3
Total Volume	11	69	5	85	7	1	1	9	1	103	7	111	9	1	4	14
% App. Total	12.9	81.2	5.9		77.8	11.1	11.1		0.9	92.8	6.3		64.3	7.1	28.6	
PHF	.458	.750	.625	.787	.350	.250	.250	.450	.250	.831	.583	.841	.750	.250	.500	.700

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City of Jurupa Valley
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File Name : 27_JVY_Hall_26th PM
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Groups Printed- Large 2 Axle Vehicles

	Hall Avenue Southbound				26th Street Westbound				Hall Avenue Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
03:45 PM	1	0	1	2	0	0	0	0	0	1	0	1	0	0	0	0	3
Total	1	1	1	3	0	0	0	0	0	2	0	2	0	0	0	0	5
04:00 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
04:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	1	0	0	1	3
04:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	0	3	0	0	0	0	0	3	0	3	1	0	0	1	7
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Grand Total	1	5	1	7	0	0	0	0	0	6	0	6	1	0	0	1	14
Apprch %	14.3	71.4	14.3		0	0	0		0	100	0		100	0	0		
Total %	7.1	35.7	7.1	50	0	0	0	0	0	42.9	0	42.9	7.1	0	0	7.1	

	Hall Avenue Southbound				26th Street Westbound				Hall Avenue Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
03:45 PM	**1**	0	**1**	**2**	0	0	0	0	0	1	0	1	0	0	0	0	**3**
04:00 PM	0	**2**	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
04:15 PM	0	0	0	0	0	0	0	0	0	**2**	0	**2**	**1**	0	0	**1**	3
Total Volume	1	3	1	5	0	0	0	0	0	5	0	5	1	0	0	1	11
% App. Total	20	60	20		0	0	0		0	100	0		100	0	0		
PHF	.250	.375	.250	.625	.000	.000	.000	.000	.000	.625	.000	.625	.250	.000	.000	.250	.917

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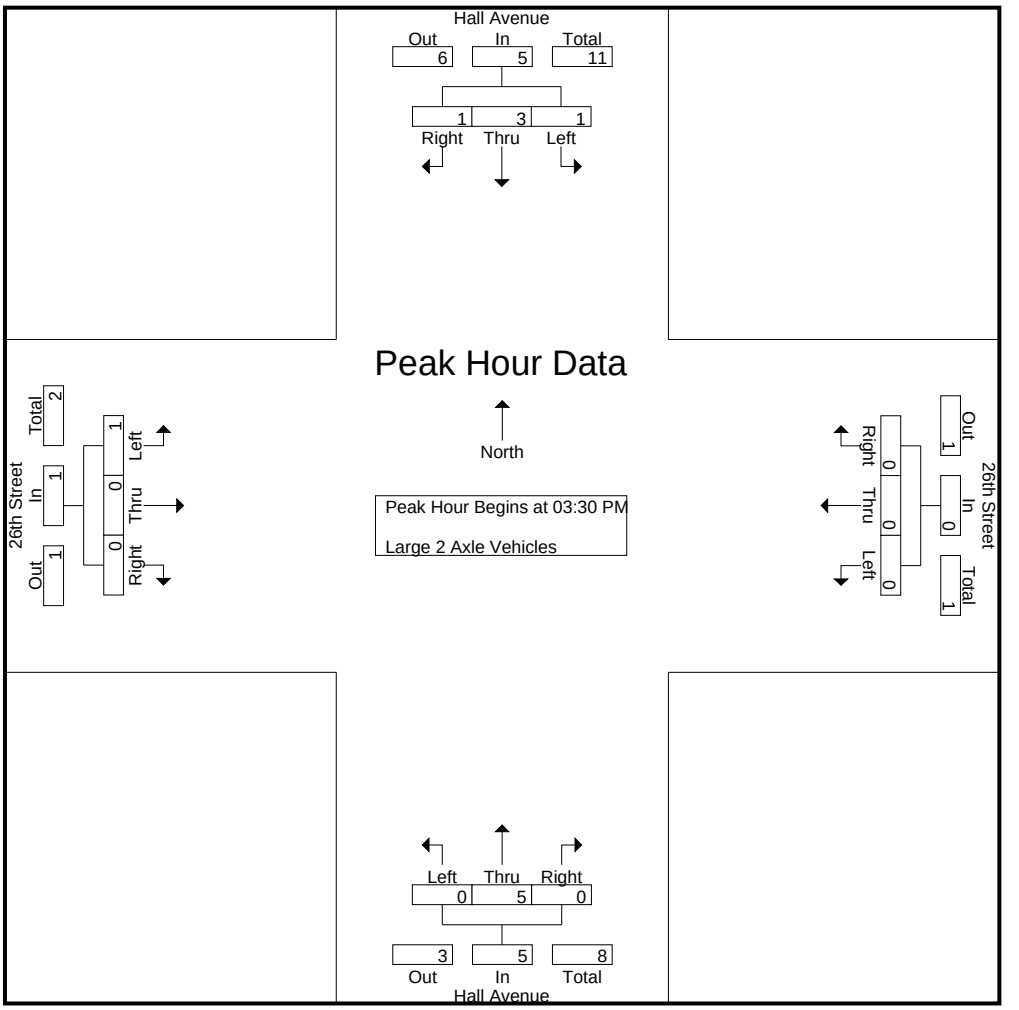
City of Jurupa Valley
N/S: Hall Avenue
E/W: 26th Street
Weather: Clear

File Name : 27_JVY_Hall_26th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM				03:30 PM				03:30 PM				03:30 PM			
+0 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
+15 mins.	**1**	0	**1**	**2**	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	**2**	0	2	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	**2**	0	**2**	**1**	0	0	**1**
Total Volume	1	3	1	5	0	0	0	0	0	5	0	5	1	0	0	1
% App. Total	20	60	20		0	0	0		0	100	0		100	0	0	
PHF	.250	.375	.250	.625	.000	.000	.000	.000	.000	.625	.000	.625	.250	.000	.000	.250

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City of Jurupa Valley
N/S: Hall Avenue
E/W: 26th Street
Weather: Clear

File Name : 27_JVY_Hall_26th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Hall Avenue Southbound				26th Street Westbound				Hall Avenue Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
03:45 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	1	0	1	0	0	0	0	0	1	0	1	1	0	0	1	3
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	1	0	1	1	0	0	1	3
Grand Total	0	4	0	4	0	0	0	0	0	2	0	2	1	0	0	1	7
Apprch %	0	100	0		0	0	0		0	100	0		100	0	0		
Total %	0	57.1	0	57.1	0	0	0	0	0	28.6	0	28.6	14.3	0	0	14.3	

	Hall Avenue Southbound				26th Street Westbound				Hall Avenue Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0	1
03:45 PM	0	**2**	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0	**2**
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.375

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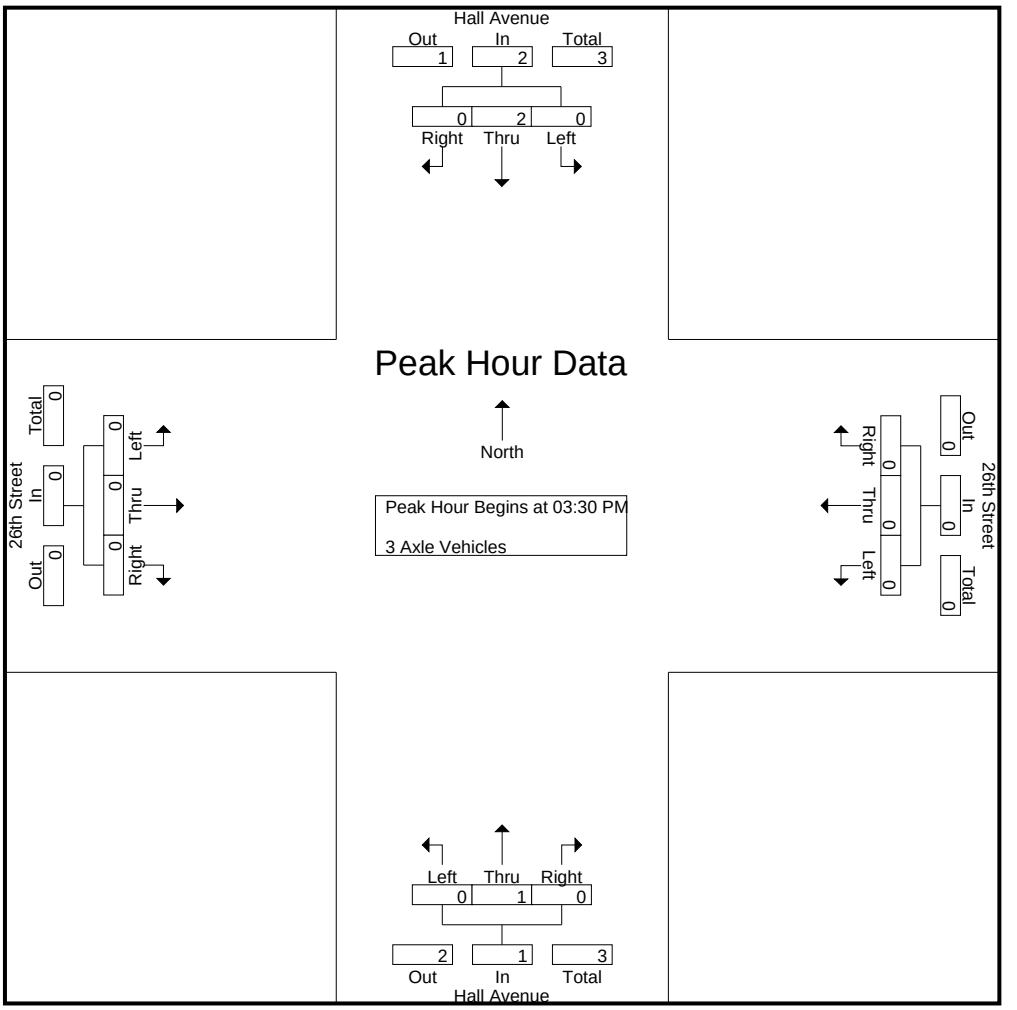
City of Jurupa Valley
N/S: Hall Avenue
E/W: 26th Street
Weather: Clear

File Name : 27_JVY_Hall_26th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM				03:30 PM				03:30 PM				03:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+15 mins.	0	**2**	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000

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City of Jurupa Valley
N/S: Hall Avenue
E/W: 26th Street
Weather: Clear

File Name : 27_JVY_Hall_26th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Hall Avenue Southbound				26th Street Westbound				Hall Avenue Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	0	1	1	0	0	0	0	1	0	0	1	0	0	0	0	2
03:45 PM	0	0	1	1	0	0	0	0	0	1	0	1	0	0	1	1	3
Total	0	0	2	2	0	0	0	0	1	1	0	2	0	0	1	1	5
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:30 PM	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	1	4	0	0	0	0	0	0	0	0	0	0	0	0	4
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:45 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	2	1	3	0	0	0	0	0	1	0	1	0	0	0	0	4
Grand Total	0	5	4	9	0	0	0	0	1	2	0	3	0	0	1	1	13
Apprch %	0	55.6	44.4		0	0	0		33.3	66.7	0		0	0	100		
Total %	0	38.5	30.8	69.2	0	0	0	0	7.7	15.4	0	23.1	0	0	7.7	7.7	

	Hall Avenue Southbound				26th Street Westbound				Hall Avenue Northbound				26th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	0	0	**1**	1	0	0	0	0	**1**	0	0	**1**	0	0	0	0	2
03:45 PM	0	0	1	1	0	0	0	0	0	**1**	0	1	0	0	**1**	**1**	**3**
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	**2**	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	2	2	4	0	0	0	0	1	1	0	2	0	0	1	1	7
% App. Total	0	50	50		0	0	0		50	50	0		0	0	100		
PHF	.000	.250	.500	.500	.000	.000	.000	.000	.250	.250	.000	.500	.000	.000	.250	.250	.583

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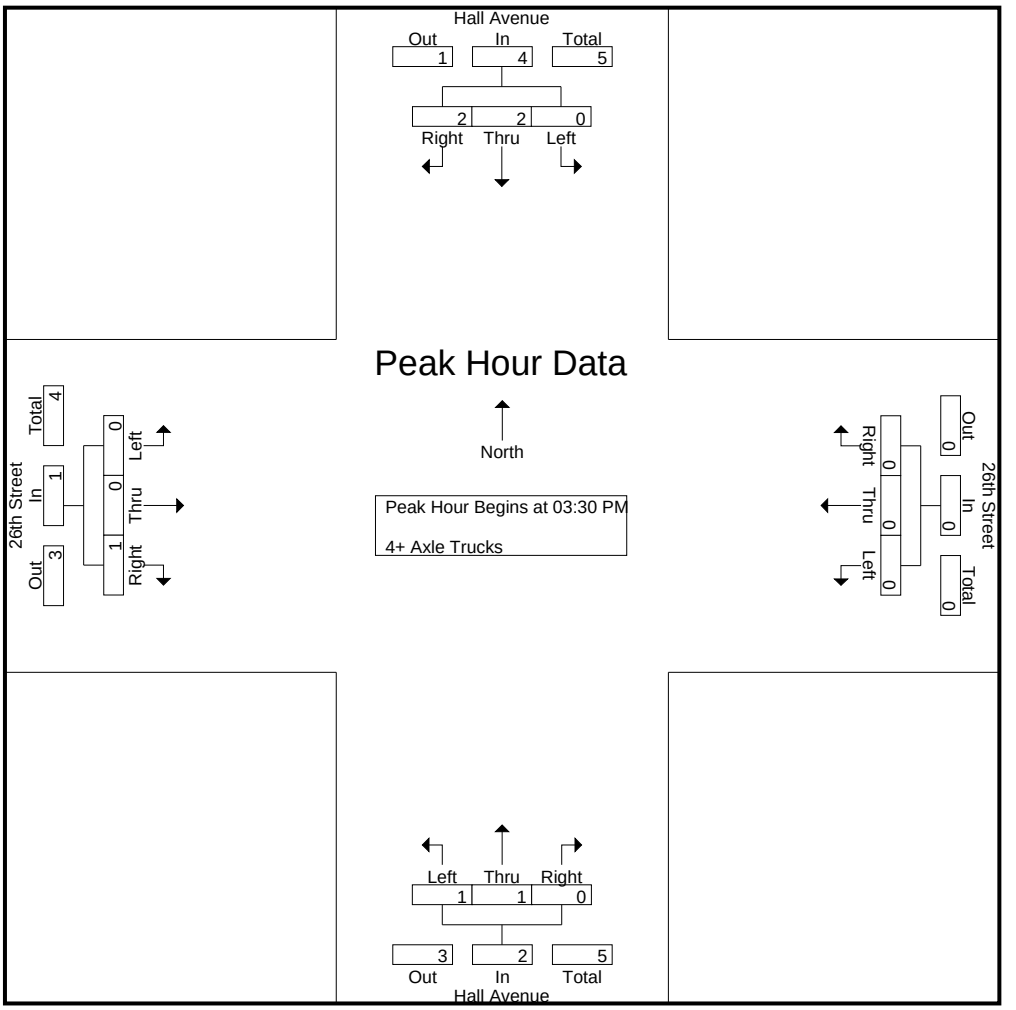
City of Jurupa Valley
N/S: Hall Avenue
E/W: 26th Street
Weather: Clear

File Name : 27_JVY_Hall_26th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM				03:30 PM				03:30 PM				03:30 PM			
+0 mins.	0	0	**1**	1	0	0	0	0	**1**	0	0	**1**	0	0	0	0
+15 mins.	0	0	1	1	0	0	0	0	0	**1**	0	1	0	0	**1**	**1**
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	**2**	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	2	4	0	0	0	0	1	1	0	2	0	0	1	1
% App. Total	0	50	50		0	0	0		50	50	0		0	0	100	
PHF	.000	.250	.500	.500	.000	.000	.000	.000	.250	.250	.000	.500	.000	.000	.250	.250

Location: Jurupa Valley
N/S: Hall Avenue
E/W: 26th Street

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Hall Avenue	East Leg 26th Street	South Leg Hall Avenue	West Leg 26th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	1	0	1	0	2
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	1	0	1	0	2

	North Leg Hall Avenue	East Leg 26th Street	South Leg Hall Avenue	West Leg 26th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0
4:00 PM	0	1	0	0	1
4:15 PM	0	0	0	0	0
4:30 PM	0	1	0	0	1
4:45 PM	0	2	1	0	3
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	4	1	0	5

Location: Jurupa Valley
N/S: Hall Avenue
E/W: 26th Street

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Hall Avenue			Westbound 26th Street			Northbound Hall Avenue			Eastbound 26th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:	0	1	0	0	0	1	0	1	0	0	0	0	3

	Southbound Hall Avenue			Westbound 26th Street			Northbound Hall Avenue			Eastbound 26th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	1	0	0	0	0	1	0	0	0	0	0	0	2
TOTAL VOLUMES:	1	2	0	0	0	1	0	1	0	0	0	0	5

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City of Jurupa Valley
N/S: Market Street
E/W: 24th Street/Via Cerro
Weather: Clear

File Name : 28_JVY_Mark_24th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Market Street Southbound					Via Cerro Westbound					Market Street Northbound					24th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	2	134	0	0	136	29	3	8	3	40	8	128	32	11	168	0	5	9	7	14	21	358	379
06:45 AM	6	98	0	0	104	9	3	2	2	14	6	98	44	9	148	0	8	23	13	31	24	297	321
Total	8	232	0	0	240	38	6	10	5	54	14	226	76	20	316	0	13	32	20	45	45	655	700
07:00 AM	0	107	0	0	107	11	2	4	3	17	7	107	35	4	149	1	8	16	14	25	21	298	319
07:15 AM	2	105	3	1	110	17	2	1	0	20	7	106	22	3	135	1	5	41	24	47	28	312	340
07:30 AM	4	105	0	0	109	15	2	1	0	18	5	125	32	1	162	2	3	63	32	68	33	357	390
07:45 AM	3	105	0	0	108	14	1	1	0	16	10	110	31	7	151	1	9	45	28	55	35	330	365
Total	9	422	3	1	434	57	7	7	3	71	29	448	120	15	597	5	25	165	98	195	117	1297	1414
08:00 AM	5	138	1	0	144	15	2	1	1	18	9	130	30	3	169	0	6	23	12	29	16	360	376
08:15 AM	2	108	1	0	111	11	3	1	0	15	5	124	33	10	162	0	8	21	16	29	26	317	343
08:30 AM	5	126	0	0	131	16	2	2	0	20	9	139	20	4	168	0	1	13	12	14	16	333	349
08:45 AM	3	124	0	0	127	13	2	2	0	17	12	130	22	3	164	0	2	21	14	23	17	331	348
Total	15	496	2	0	513	55	9	6	1	70	35	523	105	20	663	0	17	78	54	95	75	1341	1416
Grand Total	32	1150	5	1	1187	150	22	23	9	195	78	1197	301	55	1576	5	55	275	172	335	237	3293	3530
Apprch %	2.7	96.9	0.4			76.9	11.3	11.8			4.9	76	19.1			1.5	16.4	82.1					
Total %	1	34.9	0.2		36	4.6	0.7	0.7		5.9	2.4	36.3	9.1		47.9	0.2	1.7	8.4		10.2	6.7	93.3	
Passenger Vehicles	19	946	3		969	86	19	16		130	63	1012	256		1381	3	46	257		466	0	0	2946
% Passenger Vehicles	59.4	82.3	60	100	81.6	57.3	86.4	69.6	100	63.7	80.8	84.5	85	90.9	84.7	60	83.6	93.5	93	91.9	0	0	83.5
Large 2 Axle Vehicles	2	72	0		74	17	2	4		23	9	45	11		67	2	2	12		26	0	0	190
% Large 2 Axle Vehicles	6.2	6.3	0	0	6.2	11.3	9.1	17.4	0	11.3	11.5	3.8	3.7	3.6	4.1	40	3.6	4.4	5.8	5.1	0	0	5.4
3 Axle Vehicles	1	55	2		58	5	0	1		6	2	60	12		76	0	1	0		1	0	0	141
% 3 Axle Vehicles	3.1	4.8	40	0	4.9	3.3	0	4.3	0	2.9	2.6	5	4	3.6	4.7	0	1.8	0	0	0.2	0	0	4
4+ Axle Trucks	10	77	0		87	42	1	2		45	4	80	22		107	0	6	6		14	0	0	253
% 4+ Axle Trucks	31.2	6.7	0	0	7.3	28	4.5	8.7	0	22.1	5.1	6.7	7.3	1.8	6.6	0	10.9	2.2	1.2	2.8	0	0	7.2

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(951)268-6268

City of Jurupa Valley
N/S: Market Street
E/W: 24th Street/Via Cerro
Weather: Clear

File Name : 28_JVY_Mark_24th AM
Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				Via Cerro Westbound				Market Street Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	4	105	0	109	**15**	2	**1**	**18**	5	125	32	162	**2**	3	**63**	**68**	357
07:45 AM	3	105	0	108	14	1	1	16	**10**	110	31	151	1	**9**	45	55	330
08:00 AM	**5**	**138**	**1**	**144**	15	2	1	18	9	**130**	30	**169**	0	6	23	29	**360**
08:15 AM	2	108	1	111	11	**3**	1	15	5	124	**33**	162	0	8	21	29	317
Total Volume	14	456	2	472	55	8	4	67	29	489	126	644	3	26	152	181	1364
% App. Total	3	96.6	0.4		82.1	11.9	6		4.5	75.9	19.6		1.7	14.4	84		
PHF	.700	.826	.500	.819	.917	.667	1.00	.931	.725	.940	.955	.953	.375	.722	.603	.665	.947

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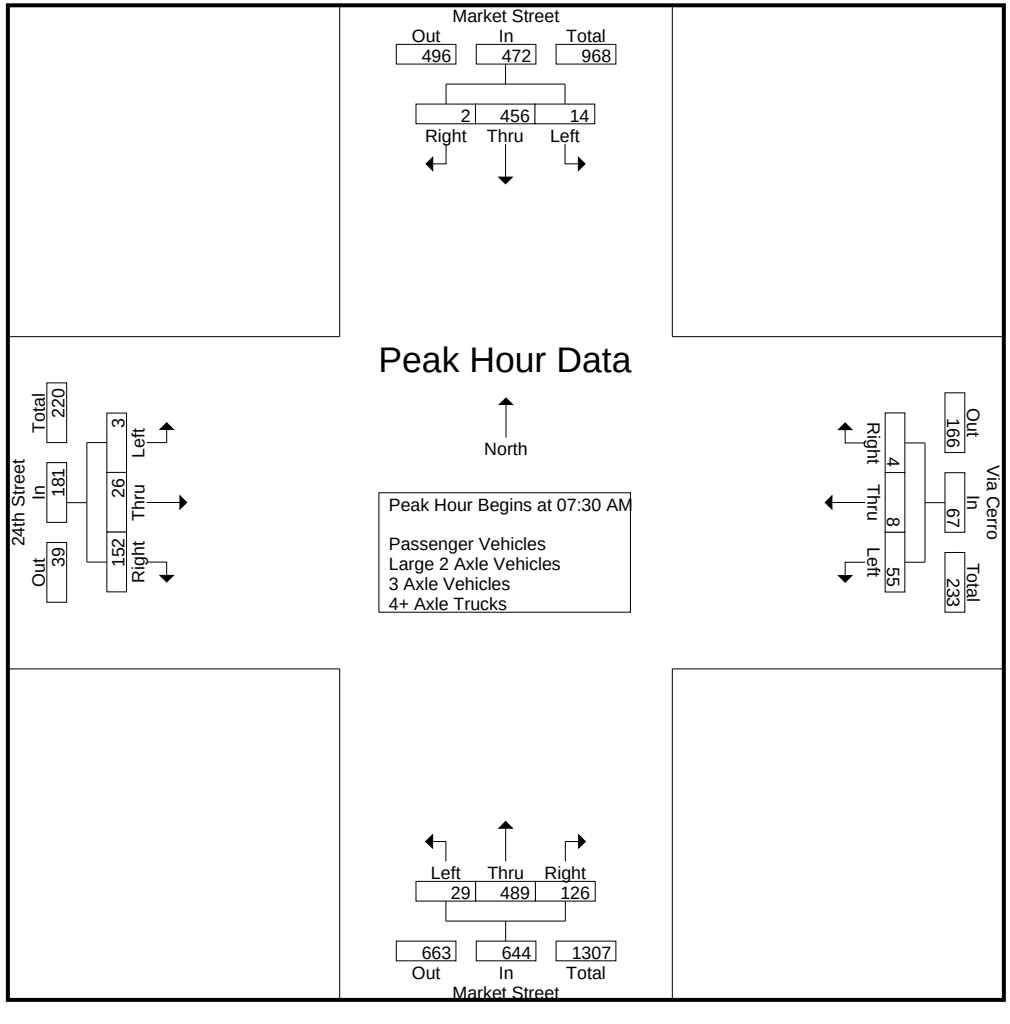
File Name : 28_JVY_Mark_24th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 3



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City of Jurupa Valley
N/S: Market Street
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Weather: Clear

File Name : 28_JVY_Mark_24th AM
Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				Via Cerro Westbound				Market Street Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	08:00 AM				06:30 AM				08:00 AM				07:15 AM				
+0 mins.	**5**	**138**	**1**	**144**	**29**	**3**	**8**	**40**	9	130	30	**169**	1	5	41	47	
+15 mins.	2	108	1	111	9	3	2	14	5	124	**33**	162	**2**	3	**63**	**68**	
+30 mins.	5	126	0	131	11	2	4	17	9	**139**	20	168	1	**9**	45	55	
+45 mins.	3	124	0	127	17	2	1	20	**12**	130	22	164	0	6	23	29	
Total Volume	15	496	2	513	66	10	15	91	35	523	105	663	4	23	172	199	
% App. Total	2.9	96.7	0.4		72.5	11	16.5		5.3	78.9	15.8		2	11.6	86.4		
PHF	.750	.899	.500	.891	.569	.833	.469	.569	.729	.941	.795	.981	.500	.639	.683	.732	

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City of Jurupa Valley
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File Name : 28_JVY_Mark_24th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Market Street Southbound					Via Cerro Westbound					Market Street Northbound					24th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	2	99	0	0	101	24	3	7	3	34	7	109	31	11	147	0	4	8	6	12	20	294	314
06:45 AM	5	76	0	0	81	4	2	2	2	8	4	81	42	8	127	0	7	21	12	28	22	244	266
Total	7	175	0	0	182	28	5	9	5	42	11	190	73	19	274	0	11	29	18	40	42	538	580
07:00 AM	0	88	0	0	88	4	1	3	3	8	6	95	33	4	134	0	6	16	14	22	21	252	273
07:15 AM	0	89	2	1	91	12	2	1	0	15	4	89	19	3	112	1	4	40	24	45	28	263	291
07:30 AM	0	95	0	0	95	7	2	0	0	9	5	105	28	1	138	2	2	60	30	64	31	306	337
07:45 AM	1	93	0	0	94	7	1	0	0	8	10	95	26	5	131	0	8	42	25	50	30	283	313
Total	1	365	2	1	368	30	6	4	3	40	25	384	106	13	515	3	20	158	93	181	110	1104	1214
08:00 AM	3	118	0	0	121	7	2	1	1	10	7	113	21	3	141	0	5	21	11	26	15	298	313
08:15 AM	2	95	1	0	98	6	3	0	0	9	3	107	23	9	133	0	7	20	16	27	25	267	292
08:30 AM	4	106	0	0	110	10	1	1	0	12	6	119	17	3	142	0	1	12	11	13	14	277	291
08:45 AM	2	87	0	0	89	5	2	1	0	8	11	99	16	3	126	0	2	17	11	19	14	242	256
Total	11	406	1	0	418	28	8	3	1	39	27	438	77	18	542	0	15	70	49	85	68	1084	1152
Grand Total	19	946	3	1	968	86	19	16	9	121	63	1012	256	50	1331	3	46	257	160	306	220	2726	2946
Apprch %	2	97.7	0.3			71.1	15.7	13.2			4.7	76	19.2			1	15	84					
Total %	0.7	34.7	0.1		35.5	3.2	0.7	0.6		4.4	2.3	37.1	9.4		48.8	0.1	1.7	9.4		11.2	7.5	92.5	

	Market Street Southbound				Via Cerro Westbound				Market Street Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	95	0	95	**7**	2	0	9	5	105	**28**	138	**2**	2	**60**	**64**	**306**
07:45 AM	1	93	0	94	7	1	0	8	**10**	95	26	131	0	**8**	42	50	283
08:00 AM	**3**	**118**	0	**121**	7	2	**1**	**10**	7	**113**	21	**141**	0	5	21	26	298
08:15 AM	2	95	**1**	98	6	**3**	0	9	3	107	23	133	0	7	20	27	267
Total Volume	6	401	1	408	27	8	1	36	25	420	98	543	2	22	143	167	1154
% App. Total	1.5	98.3	0.2		75	22.2	2.8		4.6	77.3	18		1.2	13.2	85.6		
PHF	.500	.850	.250	.843	.964	.667	.250	.900	.625	.929	.875	.963	.250	.688	.596	.652	.943

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City of Jurupa Valley
N/S: Market Street
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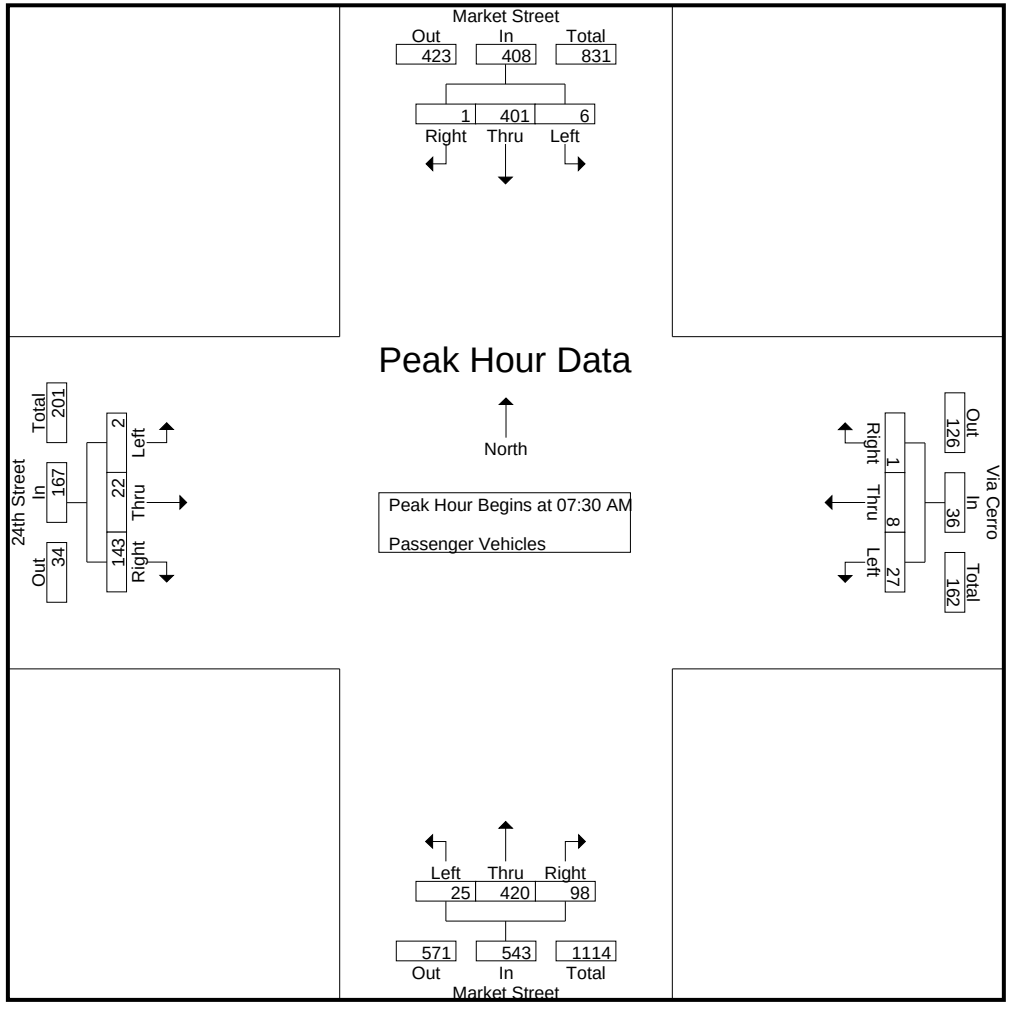
Weather: Clear

File Name : 28_JVY_Mark_24th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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File Name : 28_JVY_Mark_24th AM
Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				Via Cerro Westbound				Market Street Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	95	0	95	**7**	2	0	9	5	105	**28**	138	**2**	2	**60**	**64**	
+15 mins.	1	93	0	94	7	1	0	8	**10**	95	26	131	0	**8**	42	50	
+30 mins.	**3**	**118**	0	**121**	7	2	**1**	**10**	7	**113**	21	**141**	0	5	21	26	
+45 mins.	2	95	**1**	98	6	**3**	0	9	3	107	23	133	0	7	20	27	
Total Volume	6	401	1	408	27	8	1	36	25	420	98	543	2	22	143	167	
% App. Total	1.5	98.3	0.2		75	22.2	2.8		4.6	77.3	18		1.2	13.2	85.6		
PHF	.500	.850	.250	.843	.964	.667	.250	.900	.625	.929	.875	.963	.250	.688	.596	.652	

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City of Jurupa Valley
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File Name : 28_JVY_Mark_24th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Market Street Southbound					Via Cerro Westbound					Market Street Northbound					24th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	7	0	0	7	3	0	1	0	4	0	4	0	0	4	0	0	1	1	1	1	16	17
06:45 AM	0	7	0	0	7	0	0	0	0	0	2	2	0	0	4	0	0	1	1	1	1	12	13
Total	0	14	0	0	14	3	0	1	0	4	2	6	0	0	8	0	0	2	2	2	2	28	30
07:00 AM	0	8	0	0	8	1	1	0	0	2	1	7	0	0	8	1	1	0	0	2	0	20	20
07:15 AM	1	6	0	0	7	0	0	0	0	0	1	5	0	0	6	0	0	1	0	1	0	14	14
07:30 AM	1	5	0	0	6	6	0	1	0	7	0	6	1	0	7	0	0	2	2	2	2	22	24
07:45 AM	0	4	0	0	4	1	0	1	0	2	0	5	2	1	7	1	0	1	1	2	2	15	17
Total	2	23	0	0	25	8	1	2	0	11	2	23	3	1	28	2	1	4	3	7	4	71	75
08:00 AM	0	8	0	0	8	1	0	0	0	1	0	3	3	0	6	0	0	1	1	1	1	16	17
08:15 AM	0	7	0	0	7	2	0	0	0	2	1	4	3	1	8	0	1	1	0	2	1	19	20
08:30 AM	0	10	0	0	10	2	1	0	0	3	3	4	0	0	7	0	0	1	1	1	1	21	22
08:45 AM	0	10	0	0	10	1	0	1	0	2	1	5	2	0	8	0	0	3	3	3	3	23	26
Total	0	35	0	0	35	6	1	1	0	8	5	16	8	1	29	0	1	6	5	7	6	79	85
Grand Total	2	72	0	0	74	17	2	4	0	23	9	45	11	2	65	2	2	12	10	16	12	178	190
Apprch %	2.7	97.3	0			73.9	8.7	17.4			13.8	69.2	16.9			12.5	12.5	75					
Total %	1.1	40.4	0		41.6	9.6	1.1	2.2		12.9	5.1	25.3	6.2		36.5	1.1	1.1	6.7		9	6.3	93.7	

	Market Street Southbound				Via Cerro Westbound				Market Street Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**1**	5	0	6	**6**	0	**1**	**7**	0	**6**	1	7	0	0	**2**	**2**	**22**
07:45 AM	0	4	0	4	1	0	1	2	0	5	2	7	**1**	0	1	2	15
08:00 AM	0	**8**	0	**8**	1	0	0	1	0	3	**3**	6	0	0	1	1	16
08:15 AM	0	7	0	7	2	0	0	2	**1**	4	3	**8**	0	**1**	1	2	19
Total Volume	1	24	0	25	10	0	2	12	1	18	9	28	1	1	5	7	72
% App. Total	4	96	0		83.3	0	16.7		3.6	64.3	32.1		14.3	14.3	71.4		
PHF	.250	.750	.000	.781	.417	.000	.500	.429	.250	.750	.750	.875	.250	.250	.625	.875	.818

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Site Code : 05122894
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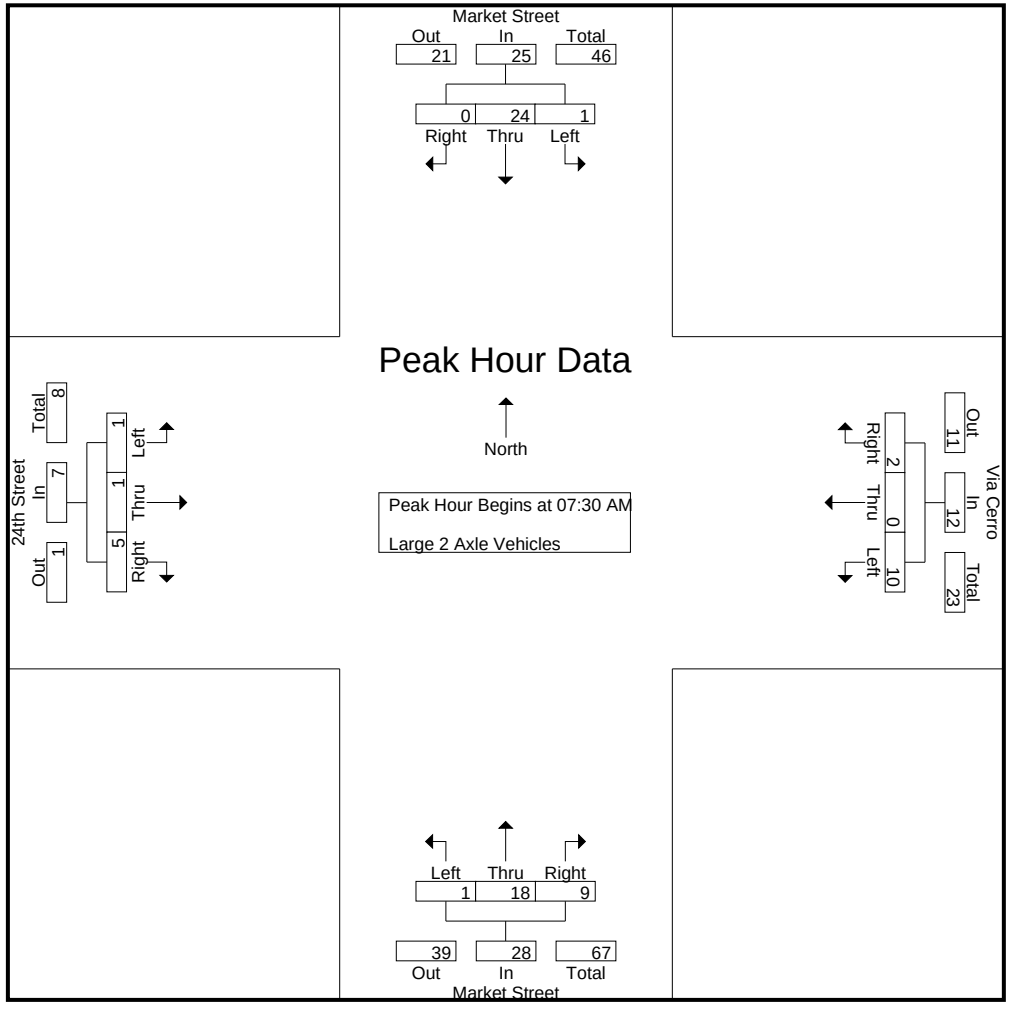

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Start Date : 10/4/2022

	Market Street Southbound				Via Cerro Westbound				Market Street Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	**1**	5	0	6	**6**	0	**1**	**7**	0	**6**	1	7	0	0	**2**	**2**	
+15 mins.	0	4	0	4	1	0	1	2	0	5	2	7	**1**	0	1	2	
+30 mins.	0	**8**	0	**8**	1	0	0	1	0	3	**3**	6	0	0	1	1	
+45 mins.	0	7	0	7	2	0	0	2	**1**	4	3	**8**	0	**1**	1	2	
Total Volume	1	24	0	25	10	0	2	12	1	18	9	28	1	1	5	7	
% App. Total	4	96	0		83.3	0	16.7		3.6	64.3	32.1		14.3	14.3	71.4		
PHF	.250	.750	.000	.781	.417	.000	.500	.429	.250	.750	.750	.875	.250	.250	.625	.875	

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File Name : 28_JVY_Mark_24th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Market Street Southbound					Via Cerro Westbound					Market Street Northbound					24th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	13	0	0	13	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	0	20	20
06:45 AM	0	1	0	0	1	0	0	0	0	0	0	5	2	1	7	0	0	0	0	0	1	8	9
Total	0	14	0	0	14	0	0	0	0	0	0	11	3	1	14	0	0	0	0	0	1	28	29
07:00 AM	0	2	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	3
07:15 AM	0	3	1	0	4	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	7	7
07:30 AM	0	2	0	0	2	1	0	0	0	1	0	8	3	0	11	0	1	0	0	1	0	15	15
07:45 AM	0	4	0	0	4	0	0	0	0	0	0	5	1	1	6	0	0	0	0	0	1	10	11
Total	0	11	1	0	12	2	0	0	0	2	0	16	4	1	20	0	1	0	0	1	1	35	36
08:00 AM	0	7	1	0	8	1	0	0	0	1	1	3	1	0	5	0	0	0	0	0	0	14	14
08:15 AM	0	3	0	0	3	0	0	1	0	1	1	6	3	0	10	0	0	0	0	0	0	14	14
08:30 AM	1	5	0	0	6	1	0	0	0	1	0	10	1	0	11	0	0	0	0	0	0	18	18
08:45 AM	0	15	0	0	15	1	0	0	0	1	0	14	0	0	14	0	0	0	0	0	0	30	30
Total	1	30	1	0	32	3	0	1	0	4	2	33	5	0	40	0	0	0	0	0	0	76	76
Grand Total	1	55	2	0	58	5	0	1	0	6	2	60	12	2	74	0	1	0	0	1	2	139	141
Apprch %	1.7	94.8	3.4			83.3	0	16.7			2.7	81.1	16.2			0	100	0					
Total %	0.7	39.6	1.4		41.7	3.6	0	0.7		4.3	1.4	43.2	8.6		53.2	0	0.7	0		0.7	1.4	98.6	

	Market Street Southbound				Via Cerro Westbound				Market Street Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	2	0	2	**1**	0	0	**1**	0	**8**	**3**	**11**	0	**1**	0	**1**	**15**
07:45 AM	0	4	0	4	0	0	0	0	0	5	1	6	0	0	0	0	10
08:00 AM	0	**7**	**1**	**8**	1	0	0	1	**1**	3	1	5	0	0	0	0	14
08:15 AM	0	3	0	3	0	0	**1**	1	1	6	3	10	0	0	0	0	14
Total Volume	0	16	1	17	2	0	1	3	2	22	8	32	0	1	0	1	53
% App. Total	0	94.1	5.9		66.7	0	33.3		6.2	68.8	25		0	100	0		
PHF	.000	.571	.250	.531	.500	.000	.250	.750	.500	.688	.667	.727	.000	.250	.000	.250	.883

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Start Date : 10/4/2022
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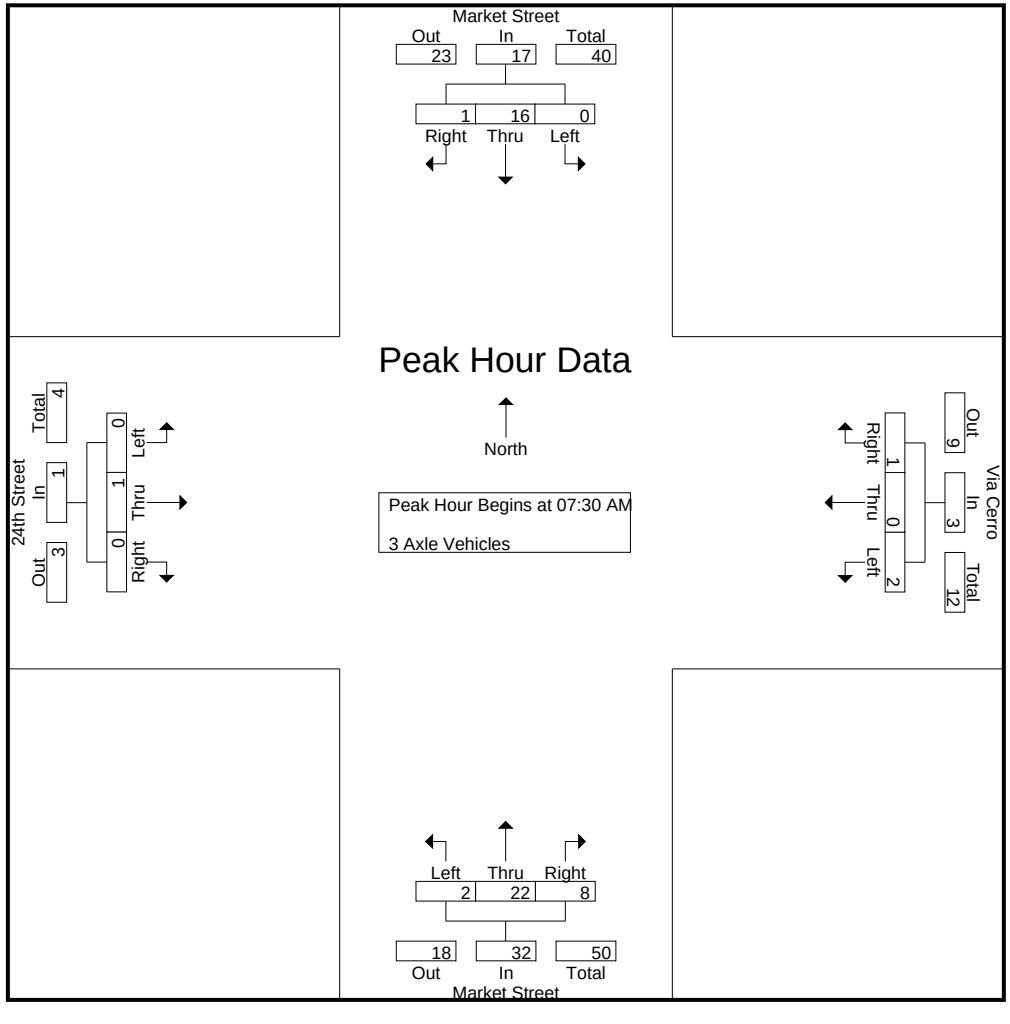

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Jurupa Valley
N/S: Market Street
E/W: 24th Street/Via Cerro
Weather: Clear

File Name : 28_JVY_Mark_24th AM
Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				Via Cerro Westbound				Market Street Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	2	0	2	**1**	0	0	**1**	0	**8**	**3**	**11**	0	**1**	0	**1**	
+15 mins.	0	4	0	4	0	0	0	0	0	5	1	6	0	0	0	0	
+30 mins.	0	**7**	**1**	**8**	1	0	0	1	**1**	3	1	5	0	0	0	0	
+45 mins.	0	3	0	3	0	0	**1**	1	1	6	3	10	0	0	0	0	
Total Volume	0	16	1	17	2	0	1	3	2	22	8	32	0	1	0	1	
% App. Total	0	94.1	5.9		66.7	0	33.3		6.2	68.8	25		0	100	0		
PHF	.000	.571	.250	.531	.500	.000	.250	.750	.500	.688	.667	.727	.000	.250	.000	.250	

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File Name : 28_JVY_Mark_24th AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Market Street Southbound					Via Cerro Westbound					Market Street Northbound					24th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	15	0	0	15	2	0	0	0	2	1	9	0	0	10	0	1	0	0	1	0	28	28
06:45 AM	1	14	0	0	15	5	1	0	0	6	0	10	0	0	10	0	1	1	0	2	0	33	33
Total	1	29	0	0	30	7	1	0	0	8	1	19	0	0	20	0	2	1	0	3	0	61	61
07:00 AM	0	9	0	0	9	5	0	1	0	6	0	5	2	0	7	0	1	0	0	1	0	23	23
07:15 AM	1	7	0	0	8	5	0	0	0	5	2	9	3	0	14	0	1	0	0	1	0	28	28
07:30 AM	3	3	0	0	6	1	0	0	0	1	0	6	0	0	6	0	0	1	0	1	0	14	14
07:45 AM	2	4	0	0	6	6	0	0	0	6	0	5	2	0	7	0	1	2	2	3	2	22	24
Total	6	23	0	0	29	17	0	1	0	18	2	25	7	0	34	0	3	3	2	6	2	87	89
08:00 AM	2	5	0	0	7	6	0	0	0	6	1	11	5	0	17	0	1	1	0	2	0	32	32
08:15 AM	0	3	0	0	3	3	0	0	0	3	0	7	4	0	11	0	0	0	0	0	0	17	17
08:30 AM	0	5	0	0	5	3	0	1	0	4	0	6	2	1	8	0	0	0	0	0	1	17	18
08:45 AM	1	12	0	0	13	6	0	0	0	6	0	12	4	0	16	0	0	1	0	1	0	36	36
Total	3	25	0	0	28	18	0	1	0	19	1	36	15	1	52	0	1	2	0	3	1	102	103
Grand Total	10	77	0	0	87	42	1	2	0	45	4	80	22	1	106	0	6	6	2	12	3	250	253
Apprch %	11.5	88.5	0			93.3	2.2	4.4			3.8	75.5	20.8			0	50	50					
Total %	4	30.8	0		34.8	16.8	0.4	0.8		18	1.6	32	8.8		42.4	0	2.4	2.4		4.8	1.2	98.8	

	Market Street Southbound				Via Cerro Westbound				Market Street Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**3**	3	0	6	1	0	0	1	0	6	0	6	0	0	1	1	14
07:45 AM	2	4	0	6	**6**	0	0	**6**	0	5	2	7	0	**1**	**2**	**3**	22
08:00 AM	2	**5**	0	**7**	6	0	0	6	**1**	**11**	**5**	**17**	0	1	1	2	**32**
08:15 AM	0	3	0	3	3	0	0	3	0	7	4	11	0	0	0	0	17
Total Volume	7	15	0	22	16	0	0	16	1	29	11	41	0	2	4	6	85
% App. Total	31.8	68.2	0		100	0	0		2.4	70.7	26.8		0	33.3	66.7		
PHF	.583	.750	.000	.786	.667	.000	.000	.667	.250	.659	.550	.603	.000	.500	.500	.500	.664

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Site Code : 05122894
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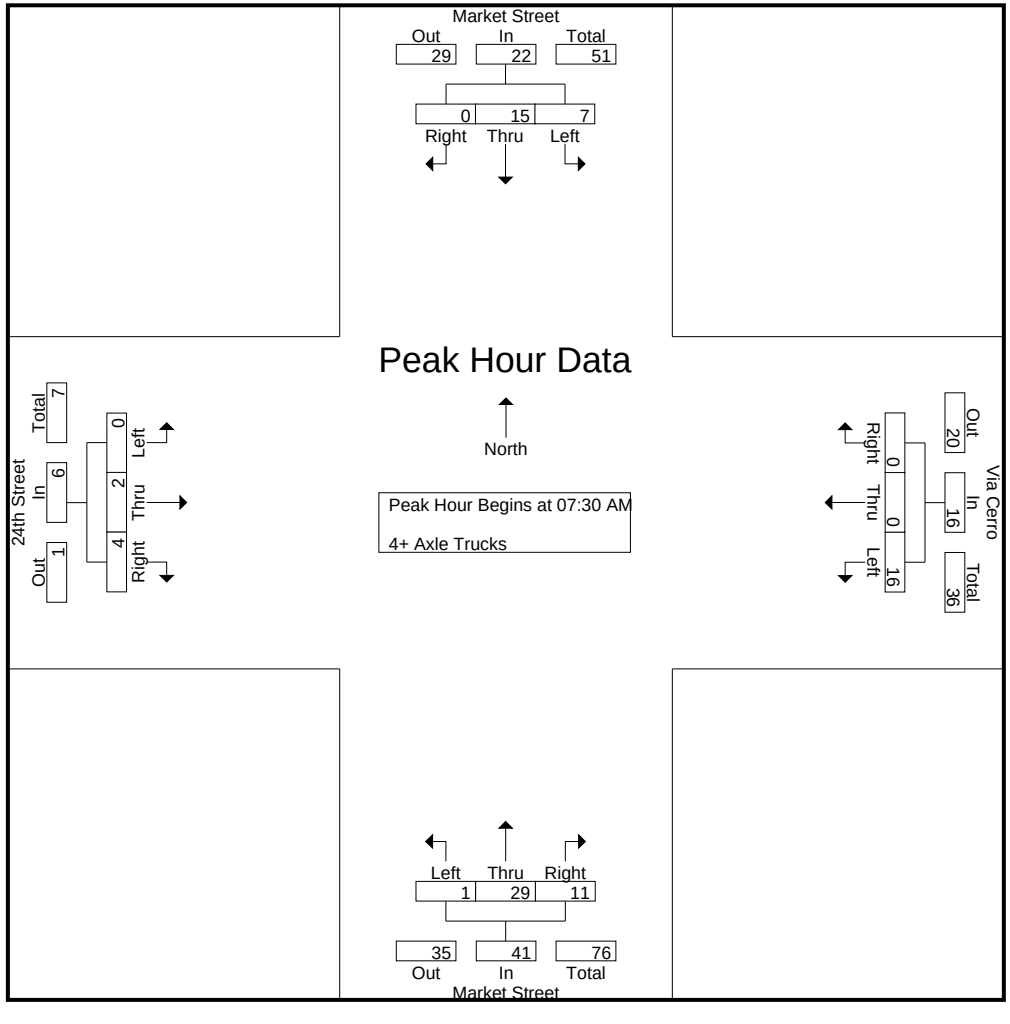

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Start Date : 10/4/2022

	Market Street Southbound				Via Cerro Westbound				Market Street Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	**3**	3	0	6	1	0	0	1	0	6	0	6	0	0	1	1	
+15 mins.	2	4	0	6	**6**	0	0	**6**	0	5	2	7	0	**1**	**2**	**3**	
+30 mins.	2	**5**	0	**7**	6	0	0	6	**1**	**11**	**5**	**17**	0	1	1	2	
+45 mins.	0	3	0	3	3	0	0	3	0	7	4	11	0	0	0	0	
Total Volume	7	15	0	22	16	0	0	16	1	29	11	41	0	2	4	6	
% App. Total	31.8	68.2	0		100	0	0		2.4	70.7	26.8		0	33.3	66.7		
PHF	.583	.750	.000	.786	.667	.000	.000	.667	.250	.659	.550	.603	.000	.500	.500	.500	

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Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Market Street Southbound					Via Cerro Westbound					Market Street Northbound					24th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	1	163	2	1	166	78	10	3	1	91	9	126	14	5	149	1	6	46	26	53	33	459	492
03:45 PM	1	132	0	0	133	43	11	5	1	59	15	137	9	1	161	1	9	39	14	49	16	402	418
Total	2	295	2	1	299	121	21	8	2	150	24	263	23	6	310	2	15	85	40	102	49	861	910
04:00 PM	0	119	0	0	119	49	6	3	2	58	8	132	10	2	150	0	5	39	27	44	31	371	402
04:15 PM	2	134	0	0	136	24	2	2	1	28	8	122	10	0	140	0	4	55	26	59	27	363	390
04:30 PM	3	127	0	0	130	34	5	4	0	43	7	111	10	0	128	0	6	60	16	66	16	367	383
04:45 PM	1	124	1	0	126	29	3	7	4	39	9	126	8	1	143	0	3	66	22	69	27	377	404
Total	6	504	1	0	511	136	16	16	7	168	32	491	38	3	561	0	18	220	91	238	101	1478	1579
05:00 PM	0	132	1	0	133	37	6	8	4	51	15	153	3	0	171	2	4	63	26	69	30	424	454
05:15 PM	1	137	0	0	138	32	5	2	0	39	13	145	9	0	167	1	3	54	10	58	10	402	412
05:30 PM	0	138	0	0	138	21	2	2	0	25	13	146	3	1	162	0	1	36	16	37	17	362	379
05:45 PM	0	127	0	0	127	19	1	4	2	24	10	106	7	0	123	1	6	36	5	43	7	317	324
Total	1	534	1	0	536	109	14	16	6	139	51	550	22	1	623	4	14	189	57	207	64	1505	1569
Grand Total	9	1333	4	1	1346	366	51	40	15	457	107	1304	83	10	1494	6	47	494	188	547	214	3844	4058
Apprch %	0.7	99	0.3			80.1	11.2	8.8			7.2	87.3	5.6			1.1	8.6	90.3					
Total %	0.2	34.7	0.1		35	9.5	1.3	1		11.9	2.8	33.9	2.2		38.9	0.2	1.2	12.9		14.2	5.3	94.7	
Passenger Vehicles	6	1233	3		1243	334	42	37		427	96	1105	57		1267	3	37	477		695	0	0	3632
% Passenger Vehicles	66.7	92.5	75	100	92.3	91.3	82.4	92.5	93.3	90.5	89.7	84.7	68.7	90	84.2	50	78.7	96.6	94.7	94.6	0	0	89.5
Large 2 Axle Vehicles	1	35	1		37	3	1	1		6	6	69	1		76	2	1	11		22	0	0	141
% Large 2 Axle Vehicles	11.1	2.6	25	0	2.7	0.8	2	2.5	6.7	1.3	5.6	5.3	1.2	0	5.1	33.3	2.1	2.2	4.3	3	0	0	3.5
3 Axle Vehicles	0	32	0		32	4	2	0		6	1	58	5		64	1	1	1		4	0	0	106
% 3 Axle Vehicles	0	2.4	0	0	2.4	1.1	3.9	0	0	1.3	0.9	4.4	6	0	4.3	16.7	2.1	0.2	0.5	0.5	0	0	2.6
4+ Axle Trucks	2	33	0		35	25	6	2		33	4	72	20		97	0	8	5		14	0	0	179
% 4+ Axle Trucks	22.2	2.5	0	0	2.6	6.8	11.8	5	0	7	3.7	5.5	24.1	10	6.4	0	17	1	0.5	1.9	0	0	4.4

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N/S: Market Street
E/W: 24th Street/Via Cerro
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File Name : 28_JVY_Mark_24th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2

	Market Street Southbound				Via Cerro Westbound				Market Street Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	1	**163**	**2**	**166**	**78**	10	3	**91**	9	126	**14**	149	**1**	6	46	53	**459**
03:45 PM	1	132	0	133	43	**11**	**5**	59	**15**	**137**	9	**161**	1	**9**	39	49	402
04:00 PM	0	119	0	119	49	6	3	58	8	132	10	150	0	5	39	44	371
04:15 PM	**2**	134	0	136	24	2	2	28	8	122	10	140	0	4	**55**	**59**	363
Total Volume	4	548	2	554	194	29	13	236	40	517	43	600	2	24	179	205	1595
% App. Total	0.7	98.9	0.4		82.2	12.3	5.5		6.7	86.2	7.2		1	11.7	87.3		
PHF	.500	.840	.250	.834	.622	.659	.650	.648	.667	.943	.768	.932	.500	.667	.814	.869	.869

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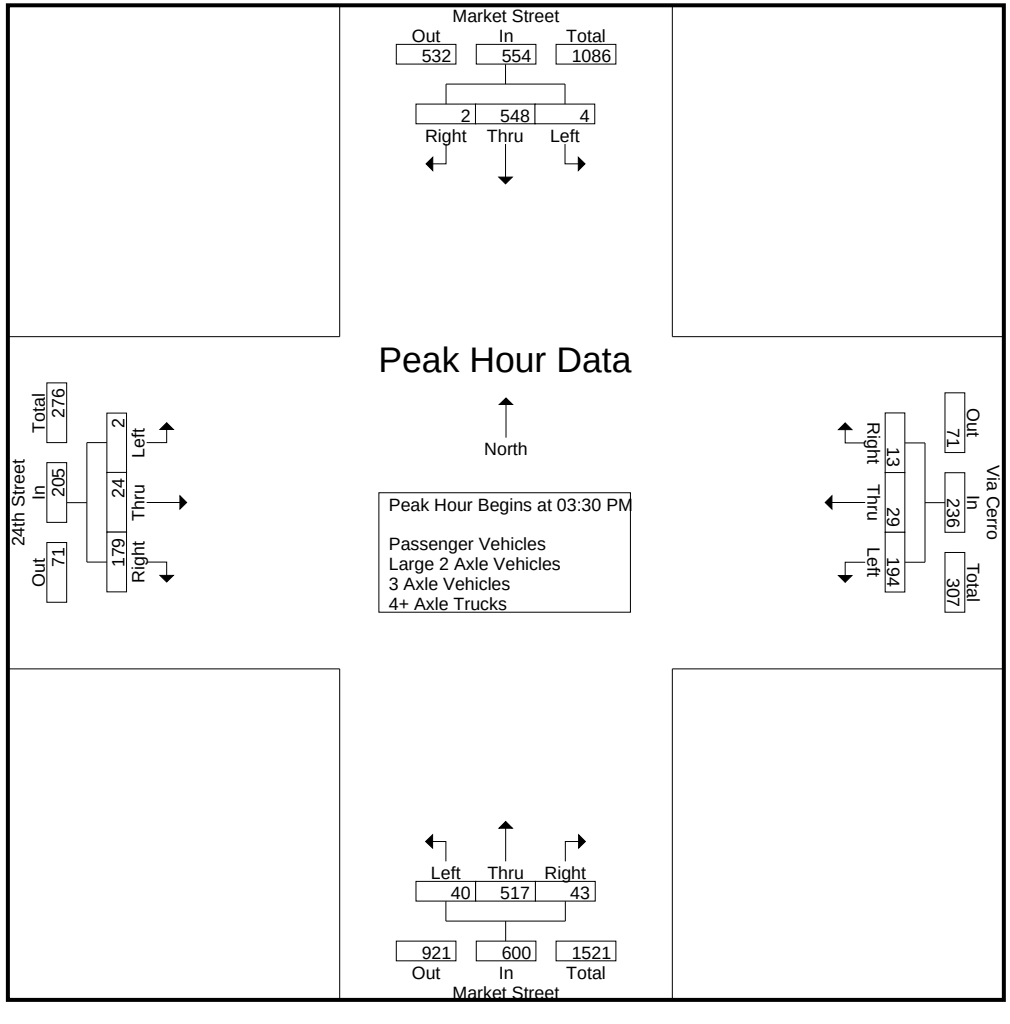

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	Market Street Southbound				Via Cerro Westbound				Market Street Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	03:30 PM				03:30 PM				04:45 PM				04:15 PM				
+0 mins.	1	**163**	**2**	**166**	**78**	10	3	**91**	9	126	8	143	0	4	55	59	
+15 mins.	1	132	0	133	43	**11**	**5**	59	**15**	**153**	3	**171**	0	**6**	60	66	
+30 mins.	0	119	0	119	49	6	3	58	13	145	**9**	167	0	3	**66**	**69**	
+45 mins.	**2**	134	0	136	24	2	2	28	13	146	3	162	**2**	4	63	69	
Total Volume	4	548	2	554	194	29	13	236	50	570	23	643	2	17	244	263	
% App. Total	0.7	98.9	0.4		82.2	12.3	5.5		7.8	88.6	3.6		0.8	6.5	92.8		
PHF	.500	.840	.250	.834	.622	.659	.650	.648	.833	.931	.639	.940	.250	.708	.924	.953	

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Page No : 1

Groups Printed- Passenger Vehicles

	Market Street Southbound					Via Cerro Westbound					Market Street Northbound					24th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	1	144	1	1	146	74	9	3	1	86	8	95	9	4	112	0	6	45	25	51	31	395	426
03:45 PM	1	113	0	0	114	40	9	4	1	53	14	115	5	1	134	1	7	35	13	43	15	344	359
Total	2	257	1	1	260	114	18	7	2	139	22	210	14	5	246	1	13	80	38	94	46	739	785
04:00 PM	0	111	0	0	111	45	4	3	2	52	7	104	7	2	118	0	5	38	26	43	30	324	354
04:15 PM	1	120	0	0	121	19	2	2	1	23	7	106	4	0	117	0	2	51	23	53	24	314	338
04:30 PM	2	119	0	0	121	33	3	4	0	40	6	93	6	0	105	0	4	58	15	62	15	328	343
04:45 PM	0	117	1	0	118	25	3	6	3	34	8	108	7	1	123	0	1	66	22	67	26	342	368
Total	3	467	1	0	471	122	12	15	6	149	28	411	24	3	463	0	12	213	86	225	95	1308	1403
05:00 PM	0	127	1	0	128	35	6	7	4	48	14	133	3	0	150	0	3	62	25	65	29	391	420
05:15 PM	1	129	0	0	130	30	5	2	0	37	12	130	7	0	149	1	3	54	10	58	10	374	384
05:30 PM	0	133	0	0	133	17	1	2	0	20	10	131	2	1	143	0	1	33	14	34	15	330	345
05:45 PM	0	120	0	0	120	16	0	4	2	20	10	90	7	0	107	1	5	35	5	41	7	288	295
Total	1	509	1	0	511	98	12	15	6	125	46	484	19	1	549	2	12	184	54	198	61	1383	1444
Grand Total	6	1233	3	1	1242	334	42	37	14	413	96	1105	57	9	1258	3	37	477	178	517	202	3430	3632
Apprch %	0.5	99.3	0.2			80.9	10.2	9			7.6	87.8	4.5			0.6	7.2	92.3					
Total %	0.2	35.9	0.1		36.2	9.7	1.2	1.1		12	2.8	32.2	1.7		36.7	0.1	1.1	13.9		15.1	5.6	94.4	

	Market Street Southbound				Via Cerro Westbound				Market Street Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	**1**	**144**	**1**	**146**	**74**	**9**	3	**86**	8	95	**9**	112	0	6	45	51	**395**
03:45 PM	1	113	0	114	40	9	**4**	53	**14**	**115**	5	**134**	**1**	**7**	35	43	344
04:00 PM	0	111	0	111	45	4	3	52	7	104	7	118	0	5	38	43	324
04:15 PM	1	120	0	121	19	2	2	23	7	106	4	117	0	2	**51**	**53**	314
Total Volume	3	488	1	492	178	24	12	214	36	420	25	481	1	20	169	190	1377
% App. Total	0.6	99.2	0.2		83.2	11.2	5.6		7.5	87.3	5.2		0.5	10.5	88.9		
PHF	.750	.847	.250	.842	.601	.667	.750	.622	.643	.913	.694	.897	.250	.714	.828	.896	.872

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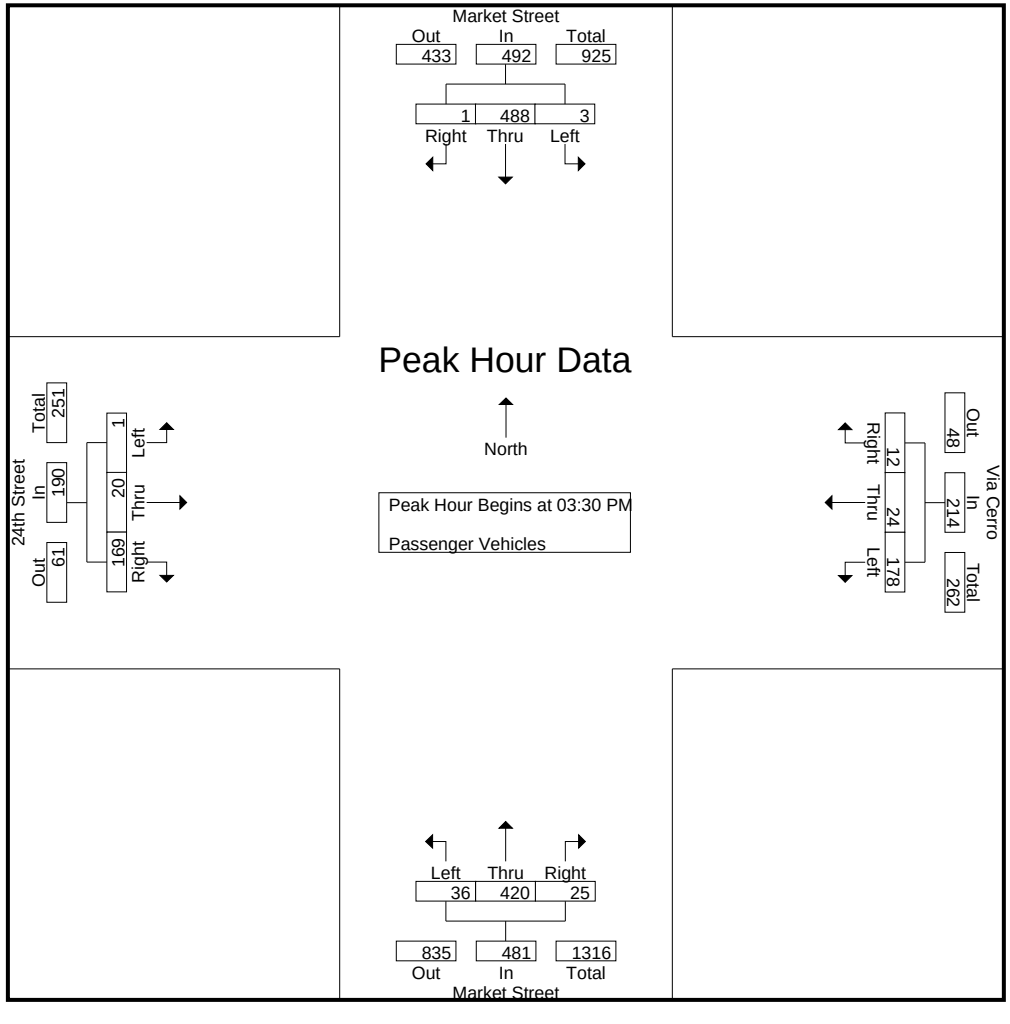

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	Market Street Southbound				Via Cerro Westbound				Market Street Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	03:30 PM				03:30 PM				03:30 PM				03:30 PM				
+0 mins.	**1**	**144**	**1**	**146**	**74**	**9**	3	**86**	8	95	**9**	112	0	6	45	51	
+15 mins.	1	113	0	114	40	9	**4**	53	**14**	**115**	5	**134**	**1**	**7**	35	43	
+30 mins.	0	111	0	111	45	4	3	52	7	104	7	118	0	5	38	43	
+45 mins.	1	120	0	121	19	2	2	23	7	106	4	117	0	2	**51**	**53**	
Total Volume	3	488	1	492	178	24	12	214	36	420	25	481	1	20	169	190	
% App. Total	0.6	99.2	0.2		83.2	11.2	5.6		7.5	87.3	5.2		0.5	10.5	88.9		
PHF	.750	.847	.250	.842	.601	.667	.750	.622	.643	.913	.694	.897	.250	.714	.828	.896	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Jurupa Valley
N/S: Market Street
E/W: 24th Street/Via Cerro
Weather: Clear

File Name : 28_JVY_Mark_24th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

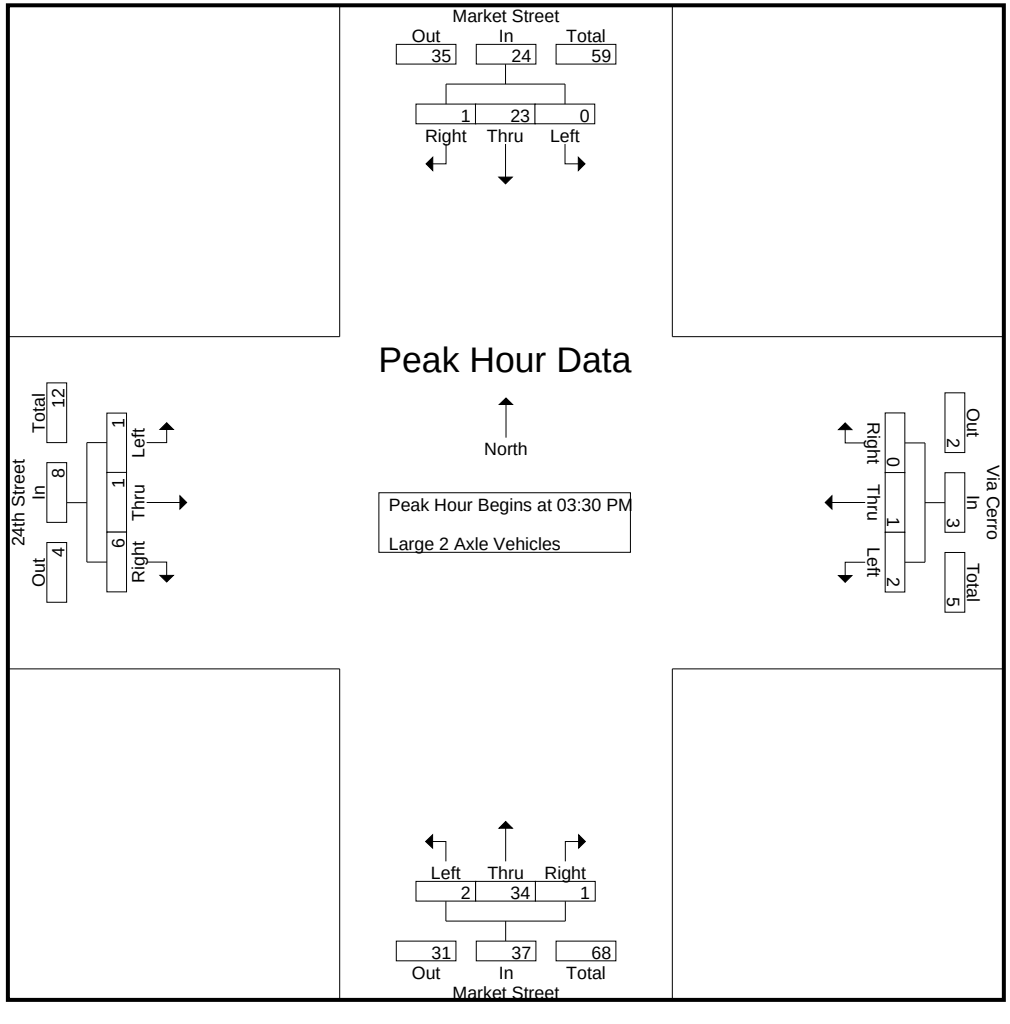
	Market Street Southbound					Via Cerro Westbound					Market Street Northbound					24th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	8	1	0	9	1	0	0	0	1	0	15	0	0	15	1	0	1	1	2	1	27	28
03:45 PM	0	7	0	0	7	0	0	0	0	0	1	8	0	0	9	0	0	3	1	3	1	19	20
Total	0	15	1	0	16	1	0	0	0	1	1	23	0	0	24	1	0	4	2	5	2	46	48
04:00 PM	0	3	0	0	3	1	1	0	0	2	1	6	0	0	7	0	0	0	0	0	0	12	12
04:15 PM	0	5	0	0	5	0	0	0	0	0	0	5	1	0	6	0	1	2	2	3	2	14	16
04:30 PM	1	2	0	0	3	1	0	0	0	1	1	5	0	0	6	0	0	2	1	2	1	12	13
04:45 PM	0	3	0	0	3	0	0	1	1	1	1	9	0	0	10	0	0	0	0	0	1	14	15
Total	1	13	0	0	14	2	1	1	1	4	3	25	1	0	29	0	1	4	3	5	4	52	56
05:00 PM	0	4	0	0	4	0	0	0	0	0	1	9	0	0	10	1	0	1	1	2	1	16	17
05:15 PM	0	1	0	0	1	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	8	8
05:30 PM	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	0	0	2	2	2	2	5	7
05:45 PM	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	5	5
Total	0	7	0	0	7	0	0	0	0	0	2	21	0	0	23	1	0	3	3	4	3	34	37
Grand Total	1	35	1	0	37	3	1	1	1	5	6	69	1	0	76	2	1	11	8	14	9	132	141
Apprch %	2.7	94.6	2.7			60	20	20			7.9	90.8	1.3			14.3	7.1	78.6					
Total %	0.8	26.5	0.8		28	2.3	0.8	0.8		3.8	4.5	52.3	0.8		57.6	1.5	0.8	8.3		10.6	6.4	93.6	

	Market Street Southbound				Via Cerro Westbound				Market Street Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	0	**8**	**1**	**9**	**1**	0	0	1	0	**15**	0	**15**	**1**	0	1	2	**27**
03:45 PM	0	7	0	7	0	0	0	0	**1**	8	0	9	0	0	**3**	**3**	19
04:00 PM	0	3	0	3	1	**1**	0	**2**	1	6	0	7	0	0	0	0	12
04:15 PM	0	5	0	5	0	0	0	0	0	5	**1**	6	0	**1**	2	3	14
Total Volume	0	23	1	24	2	1	0	3	2	34	1	37	1	1	6	8	72
% App. Total	0	95.8	4.2		66.7	33.3	0		5.4	91.9	2.7		12.5	12.5	75		
PHF	.000	.719	.250	.667	.500	.250	.000	.375	.500	.567	.250	.617	.250	.250	.500	.667	.667

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Jurupa Valley
N/S: Market Street
E/W: 24th Street/Via Cerro
Weather: Clear

File Name : 28_JVY_Mark_24th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Market Street
E/W: 24th Street/Via Cerro
Weather: Clear

File Name : 28_JVY_Mark_24th PM
Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				Via Cerro Westbound				Market Street Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	03:30 PM				03:30 PM				03:30 PM				03:30 PM				
+0 mins.	0	**8**	**1**	**9**	**1**	0	0	1	0	**15**	0	**15**	**1**	0	1	2	
+15 mins.	0	7	0	7	0	0	0	0	**1**	8	0	9	0	0	**3**	**3**	
+30 mins.	0	3	0	3	1	**1**	0	**2**	1	6	0	7	0	0	0	0	
+45 mins.	0	5	0	5	0	0	0	0	0	5	**1**	6	0	**1**	2	3	
Total Volume	0	23	1	24	2	1	0	3	2	34	1	37	1	1	6	8	
% App. Total	0	95.8	4.2		66.7	33.3	0		5.4	91.9	2.7		12.5	12.5	75		
PHF	.000	.719	.250	.667	.500	.250	.000	.375	.500	.567	.250	.617	.250	.250	.500	.667	

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City of Jurupa Valley
N/S: Market Street
E/W: 24th Street/Via Cerro
Weather: Clear

File Name : 28_JVY_Mark_24th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

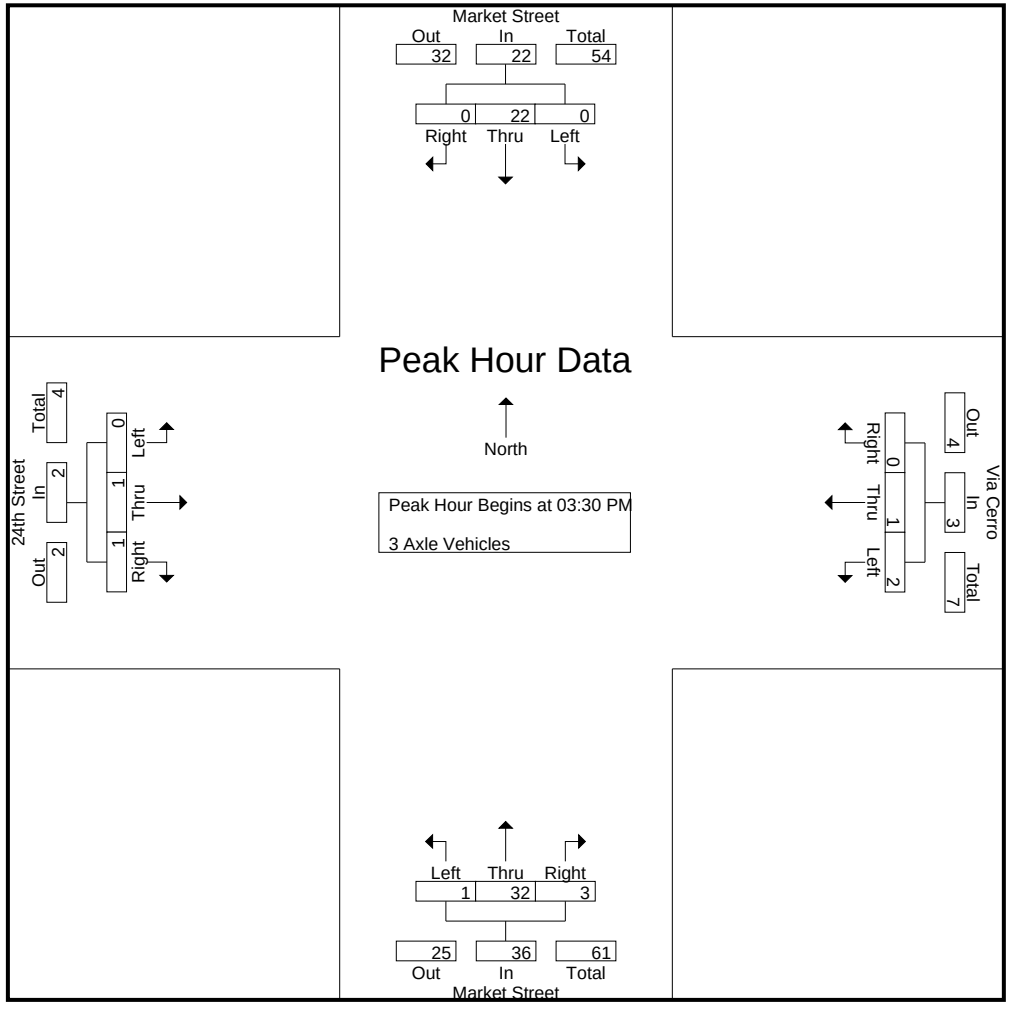
	Market Street Southbound					Via Cerro Westbound					Market Street Northbound					24th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	8	0	0	8	1	0	0	0	1	1	8	1	0	10	0	0	0	0	0	0	19	19
03:45 PM	0	7	0	0	7	1	1	0	0	2	0	5	0	0	5	0	1	0	0	1	0	15	15
Total	0	15	0	0	15	2	1	0	0	3	1	13	1	0	15	0	1	0	0	1	0	34	34
04:00 PM	0	1	0	0	1	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	0	14	14
04:15 PM	0	6	0	0	6	0	0	0	0	0	0	6	2	0	8	0	0	1	1	1	1	15	16
04:30 PM	0	4	0	0	4	0	1	0	0	1	0	5	1	0	6	0	0	0	0	0	0	11	11
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	4	4
Total	0	12	0	0	12	0	1	0	0	1	0	27	3	0	30	0	0	1	1	1	1	44	45
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	7	0	0	7	1	0	0	0	1	0	8	8
05:15 PM	0	2	0	0	2	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	0	6	6
05:30 PM	0	2	0	0	2	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	5	5
05:45 PM	0	1	0	0	1	1	0	0	0	1	0	6	0	0	6	0	0	0	0	0	0	8	8
Total	0	5	0	0	5	2	0	0	0	2	0	18	1	0	19	1	0	0	0	1	0	27	27
Grand Total	0	32	0	0	32	4	2	0	0	6	1	58	5	0	64	1	1	1	1	3	1	105	106
Apprch %	0	100	0			66.7	33.3	0			1.6	90.6	7.8			33.3	33.3	33.3					
Total %	0	30.5	0		30.5	3.8	1.9	0		5.7	1	55.2	4.8		61	1	1	1		2.9	0.9	99.1	

	Market Street Southbound				Via Cerro Westbound				Market Street Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	0	**8**	0	**8**	**1**	0	0	1	**1**	8	1	10	0	0	0	0	**19**
03:45 PM	0	7	0	7	1	**1**	0	**2**	0	5	0	5	0	**1**	0	**1**	15
04:00 PM	0	1	0	1	0	0	0	0	0	**13**	0	**13**	0	0	0	0	14
04:15 PM	0	6	0	6	0	0	0	0	0	6	**2**	8	0	0	**1**	1	15
Total Volume	0	22	0	22	2	1	0	3	1	32	3	36	0	1	1	2	63
% App. Total	0	100	0		66.7	33.3	0		2.8	88.9	8.3		0	50	50		
PHF	.000	.688	.000	.688	.500	.250	.000	.375	.250	.615	.375	.692	.000	.250	.250	.500	.829

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Jurupa Valley
N/S: Market Street
E/W: 24th Street/Via Cerro
Weather: Clear

File Name : 28_JVY_Mark_24th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Jurupa Valley
N/S: Market Street
E/W: 24th Street/Via Cerro
Weather: Clear

File Name : 28_JVY_Mark_24th PM
Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				Via Cerro Westbound				Market Street Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	03:30 PM				03:30 PM				03:30 PM				03:30 PM				
+0 mins.	0	**8**	0	**8**	**1**	0	0	1	**1**	8	1	10	0	0	0	0	
+15 mins.	0	7	0	7	1	**1**	0	**2**	0	5	0	5	0	**1**	0	**1**	
+30 mins.	0	1	0	1	0	0	0	0	0	**13**	0	**13**	0	0	0	0	
+45 mins.	0	6	0	6	0	0	0	0	0	6	**2**	8	0	0	**1**	1	
Total Volume	0	22	0	22	2	1	0	3	1	32	3	36	0	1	1	2	
% App. Total	0	100	0		66.7	33.3	0		2.8	88.9	8.3		0	50	50		
PHF	.000	.688	.000	.688	.500	.250	.000	.375	.250	.615	.375	.692	.000	.250	.250	.500	

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City of Jurupa Valley
N/S: Market Street
E/W: 24th Street/Via Cerro
Weather: Clear

File Name : 28_JVY_Mark_24th PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Market Street Southbound					Via Cerro Westbound					Market Street Northbound					24th Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	3	0	0	3	2	1	0	0	3	0	8	4	1	12	0	0	0	0	0	1	18	19
03:45 PM	0	5	0	0	5	2	1	1	0	4	0	9	4	0	13	0	1	1	0	2	0	24	24
Total	0	8	0	0	8	4	2	1	0	7	0	17	8	1	25	0	1	1	0	2	1	42	43
04:00 PM	0	4	0	0	4	3	1	0	0	4	0	9	3	0	12	0	0	1	1	1	1	21	22
04:15 PM	1	3	0	0	4	5	0	0	0	5	1	5	3	0	9	0	1	1	0	2	0	20	20
04:30 PM	0	2	0	0	2	0	1	0	0	1	0	8	3	0	11	0	2	0	0	2	0	16	16
04:45 PM	1	3	0	0	4	4	0	0	0	4	0	6	1	0	7	0	2	0	0	2	0	17	17
Total	2	12	0	0	14	12	2	0	0	14	1	28	10	0	39	0	5	2	1	7	1	74	75
05:00 PM	0	1	0	0	1	2	0	1	0	3	0	4	0	0	4	0	1	0	0	1	0	9	9
05:15 PM	0	5	0	0	5	2	0	0	0	2	1	5	1	0	7	0	0	0	0	0	0	14	14
05:30 PM	0	3	0	0	3	3	1	0	0	4	2	11	1	0	14	0	0	1	0	1	0	22	22
05:45 PM	0	4	0	0	4	2	1	0	0	3	0	7	0	0	7	0	1	1	0	2	0	16	16
Total	0	13	0	0	13	9	2	1	0	12	3	27	2	0	32	0	2	2	0	4	0	61	61
Grand Total	2	33	0	0	35	25	6	2	0	33	4	72	20	1	96	0	8	5	1	13	2	177	179
Apprch %	5.7	94.3	0			75.8	18.2	6.1			4.2	75	20.8			0	61.5	38.5					
Total %	1.1	18.6	0		19.8	14.1	3.4	1.1		18.6	2.3	40.7	11.3		54.2	0	4.5	2.8		7.3	1.1	98.9	

	Market Street Southbound				Via Cerro Westbound				Market Street Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:30 PM																	
03:30 PM	0	3	0	3	2	**1**	0	3	0	8	**4**	12	0	0	0	0	18
03:45 PM	0	**5**	0	**5**	2	1	**1**	4	0	**9**	4	**13**	0	**1**	**1**	**2**	**24**
04:00 PM	0	4	0	4	3	1	0	4	0	9	3	12	0	0	1	1	21
04:15 PM	**1**	3	0	4	**5**	0	0	**5**	**1**	5	3	9	0	1	1	2	20
Total Volume	1	15	0	16	12	3	1	16	1	31	14	46	0	2	3	5	83
% App. Total	6.2	93.8	0		75	18.8	6.2		2.2	67.4	30.4		0	40	60		
PHF	.250	.750	.000	.800	.600	.750	.250	.800	.250	.861	.875	.885	.000	.500	.750	.625	.865

Counts Unlimited, Inc.
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City of Jurupa Valley
N/S: Market Street
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File Name : 28_JVY_Mark_24th PM
Site Code : 05122894
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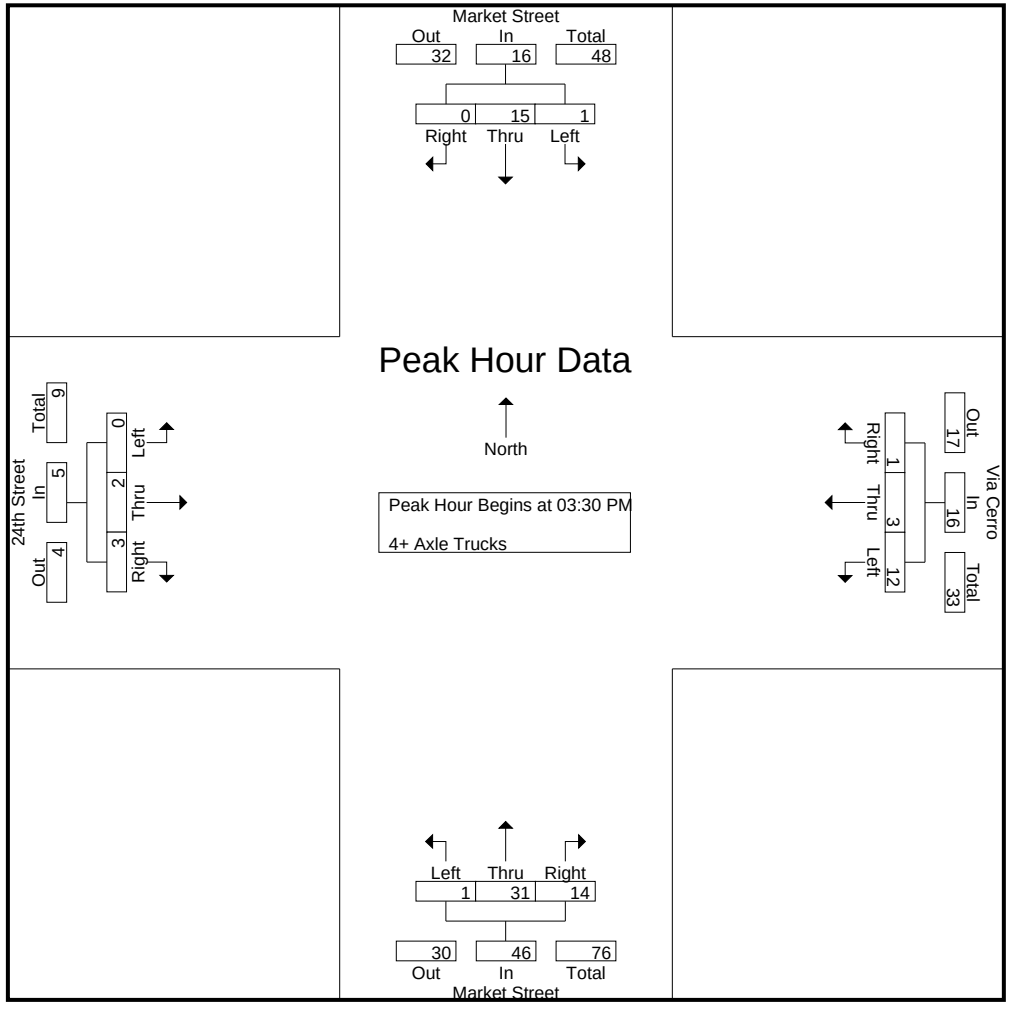
Page No : 2



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N/S: Market Street
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File Name : 28_JVY_Mark_24th PM
Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				Via Cerro Westbound				Market Street Northbound				24th Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 04:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	03:30 PM				03:30 PM				03:30 PM				03:30 PM				
+0 mins.	0	3	0	3	2	**1**	0	3	0	8	**4**	12	0	0	0	0	
+15 mins.	0	**5**	0	**5**	2	1	**1**	4	0	**9**	4	**13**	0	**1**	**1**	**2**	
+30 mins.	0	4	0	4	3	1	0	4	0	9	3	12	0	0	1	1	
+45 mins.	**1**	3	0	4	**5**	0	0	**5**	**1**	5	3	9	0	1	1	2	
Total Volume	1	15	0	16	12	3	1	16	1	31	14	46	0	2	3	5	
% App. Total	6.2	93.8	0		75	18.8	6.2		2.2	67.4	30.4		0	40	60		
PHF	.250	.750	.000	.800	.600	.750	.250	.800	.250	.861	.875	.885	.000	.500	.750	.625	

Location: Jurupa Valley
N/S: Market Street
E/W: 24th St/Via Cerro

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Market Street	East Leg Via Cerro	South Leg Market Street	West Leg 24th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	1	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	1	0	0	1
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	1	1	0	2

	North Leg Market Street	East Leg Via Cerro	South Leg Market Street	West Leg 24th Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	0	3	0	3
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	1	0	1
5:00 PM	0	0	1	0	1
5:15 PM	0	0	2	1	3
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	7	1	8

Counts Unlimited, Inc.
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951-268-6268

Location: Jurupa Valley
N/S: Market Street
E/W: 24th St/Via Cerro

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Market Street			Westbound Via Cerro			Northbound Market Street			Eastbound 24th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	1	0	0	0	1	2
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
8:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	1	0	0	2	4

	Southbound Market Street			Westbound Via Cerro			Northbound Market Street			Eastbound 24th Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	1	0	0	0	1	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	1	0	0	1	1	0	1	0	3	7

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City of Riverside
N/S: Market Street
E/W: Rivera Street
Weather: Clear

File Name : 29_RIV_Mark_Rivera AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Market Street Southbound					Rivera Street Westbound					Market Street Northbound					Riverside County Flood Control Driveway Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	4	158	0	0	162	33	1	3	1	37	14	149	20	6	183	1	1	9	6	11	13	393	406
06:45 AM	8	117	1	0	126	36	1	6	5	43	17	152	22	4	191	1	0	3	3	4	12	364	376
Total	12	275	1	0	288	69	2	9	6	80	31	301	42	10	374	2	1	12	9	15	25	757	782
07:00 AM	6	131	1	1	138	43	2	8	6	53	17	133	29	8	179	0	0	3	1	3	16	373	389
07:15 AM	9	151	0	0	160	59	0	9	8	68	9	124	45	18	178	0	0	2	2	2	28	408	436
07:30 AM	6	152	0	0	158	76	0	12	6	88	7	149	58	16	214	0	0	5	5	5	27	465	492
07:45 AM	10	164	0	0	174	79	0	9	6	88	6	142	84	32	232	0	0	3	3	3	41	497	538
Total	31	598	1	1	630	257	2	38	26	297	39	548	216	74	803	0	0	13	11	13	112	1743	1855
08:00 AM	10	152	0	0	162	78	0	11	6	89	3	137	78	32	218	0	0	5	4	5	42	474	516
08:15 AM	10	152	1	0	163	60	0	12	5	72	5	170	73	23	248	0	0	2	2	2	30	485	515
08:30 AM	13	137	0	0	150	44	0	5	3	49	1	143	46	17	190	1	0	8	4	9	24	398	422
08:45 AM	13	135	0	0	148	52	0	4	3	56	4	161	51	11	216	0	0	1	1	1	15	421	436
Total	46	576	1	0	623	234	0	32	17	266	13	611	248	83	872	1	0	16	11	17	111	1778	1889
Grand Total	89	1449	3	1	1541	560	4	79	49	643	83	1460	506	167	2049	3	1	41	31	45	248	4278	4526
Apprch %	5.8	94	0.2			87.1	0.6	12.3			4.1	71.3	24.7			6.7	2.2	91.1					
Total %	2.1	33.9	0.1		36	13.1	0.1	1.8		15	1.9	34.1	11.8		47.9	0.1	0	1		1.1	5.5	94.5	
Passenger Vehicles	87	1184	3		1275	542	4	76		670	81	1239	491		1977	2	1	26		50	0	0	3972
% Passenger Vehicles	97.8	81.7	100	100	82.7	96.8	100	96.2	98	96.8	97.6	84.9	97	99.4	89.2	66.7	100	63.4	67.7	65.8	0	0	87.8
Large 2 Axle Vehicles	2	88	0		90	16	0	3		20	2	48	15		66	1	0	14		24	0	0	200
% Large 2 Axle Vehicles	2.2	6.1	0	0	5.8	2.9	0	3.8	2	2.9	2.4	3.3	3	0.6	3	33.3	0	34.1	29	31.6	0	0	4.4
3 Axle Vehicles	0	57	0		57	1	0	0		1	0	66	0		66	0	0	1		2	0	0	126
% 3 Axle Vehicles	0	3.9	0	0	3.7	0.2	0	0	0	0.1	0	4.5	0	0	3	0	0	2.4	3.2	2.6	0	0	2.8
4+ Axle Trucks	0	120	0		120	1	0	0		1	0	107	0		107	0	0	0		0	0	0	228
% 4+ Axle Trucks	0	8.3	0	0	7.8	0.2	0	0	0	0.1	0	7.3	0	0	4.8	0	0	0	0	0	0	0	5

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Site Code : 05122894
Start Date : 10/4/2022
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	Market Street Southbound				Rivera Street Westbound				Market Street Northbound				Riverside County Flood Control Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	6	152	0	158	76	0	**12**	88	**7**	149	58	214	0	0	**5**	**5**	465
07:45 AM	**10**	**164**	0	**174**	**79**	0	9	88	6	142	**84**	232	0	0	3	3	**497**
08:00 AM	10	152	0	162	78	0	11	**89**	3	137	78	218	0	0	5	5	474
08:15 AM	10	152	**1**	163	60	0	12	72	5	**170**	73	**248**	0	0	2	2	485
Total Volume	36	620	1	657	293	0	44	337	21	598	293	912	0	0	15	15	1921
% App. Total	5.5	94.4	0.2		86.9	0	13.1		2.3	65.6	32.1		0	0	100		
PHF	.900	.945	.250	.944	.927	.000	.917	.947	.750	.879	.872	.919	.000	.000	.750	.750	.966

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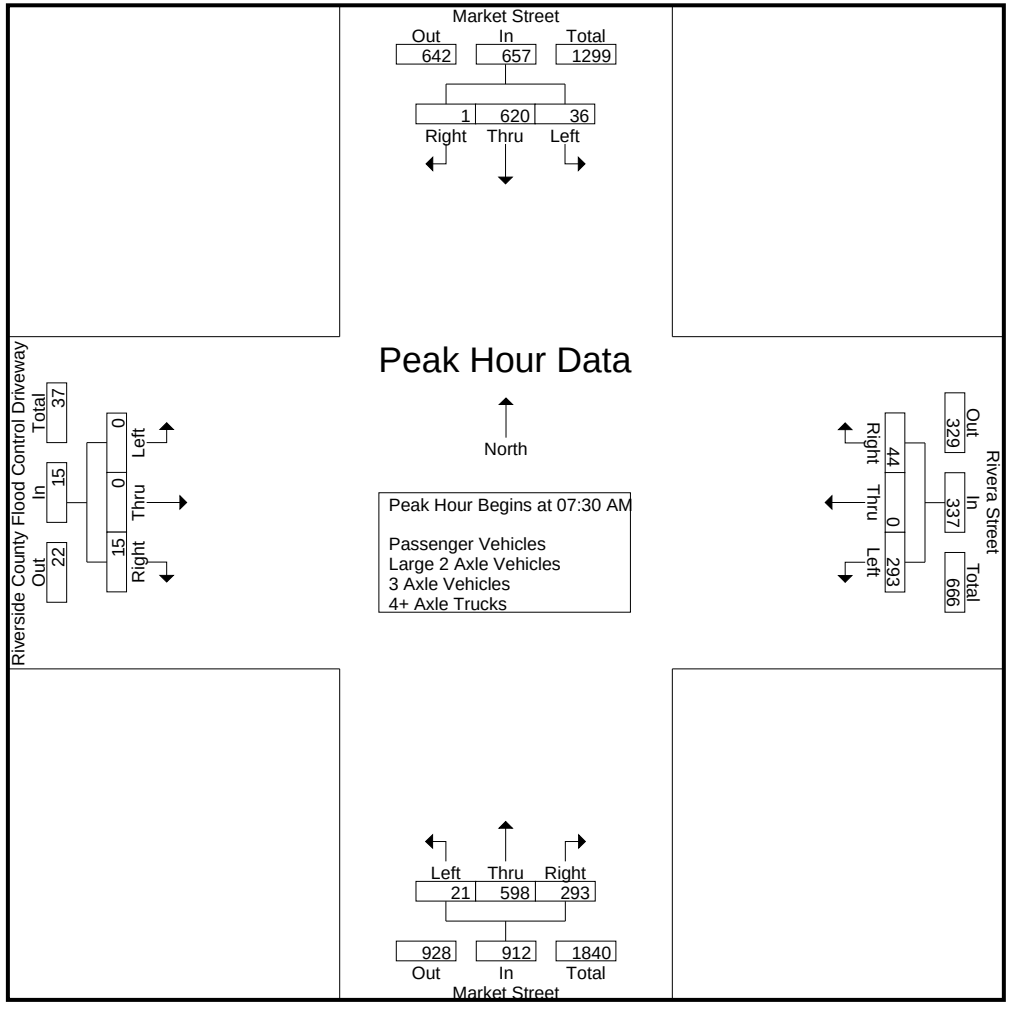
Page No : 3



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File Name : 29_RIV_Mark_Rivera AM
Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				Rivera Street Westbound				Market Street Northbound				Riverside County Flood Control Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				06:30 AM				
+0 mins.	6	152	0	158	76	0	**12**	88	**7**	149	58	214	**1**	**1**	**9**	**11**	
+15 mins.	**10**	**164**	0	**174**	**79**	0	9	88	6	142	**84**	232	1	0	3	4	
+30 mins.	10	152	0	162	78	0	11	**89**	3	137	78	218	0	0	3	3	
+45 mins.	10	152	**1**	163	60	0	12	72	5	**170**	73	**248**	0	0	2	2	
Total Volume	36	620	1	657	293	0	44	337	21	598	293	912	2	1	17	20	
% App. Total	5.5	94.4	0.2		86.9	0	13.1		2.3	65.6	32.1		10	5	85		
PHF	.900	.945	.250	.944	.927	.000	.917	.947	.750	.879	.872	.919	.500	.250	.472	.455	

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Groups Printed- Passenger Vehicles

	Market Street Southbound					Rivera Street Westbound					Market Street Northbound					Riverside County Flood Control Driveway Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	4	122	0	0	126	32	1	3	1	36	14	128	20	6	162	0	1	3	2	4	9	328	337
06:45 AM	8	88	1	0	97	35	1	6	5	42	17	135	22	4	174	1	0	1	1	2	10	315	325
Total	12	210	1	0	223	67	2	9	6	78	31	263	42	10	336	1	1	4	3	6	19	643	662
07:00 AM	5	107	1	1	113	42	2	8	6	52	17	119	27	8	163	0	0	1	0	1	15	329	344
07:15 AM	9	128	0	0	137	55	0	8	7	63	9	105	43	18	157	0	0	2	2	2	27	359	386
07:30 AM	6	139	0	0	145	76	0	10	6	86	7	130	58	16	195	0	0	4	4	4	26	430	456
07:45 AM	10	146	0	0	156	79	0	9	6	88	6	122	82	32	210	0	0	3	3	3	41	457	498
Total	30	520	1	1	551	252	2	35	25	289	39	476	210	74	725	0	0	10	9	10	109	1575	1684
08:00 AM	10	124	0	0	134	77	0	11	6	88	3	109	75	32	187	0	0	3	3	3	41	412	453
08:15 AM	9	130	1	0	140	57	0	12	5	69	3	139	71	22	213	0	0	2	2	2	29	424	453
08:30 AM	13	111	0	0	124	40	0	5	3	45	1	124	46	17	171	1	0	6	3	7	23	347	370
08:45 AM	13	89	0	0	102	49	0	4	3	53	4	128	47	11	179	0	0	1	1	1	15	335	350
Total	45	454	1	0	500	223	0	32	17	255	11	500	239	82	750	1	0	12	9	13	108	1518	1626
Grand Total	87	1184	3	1	1274	542	4	76	48	622	81	1239	491	166	1811	2	1	26	21	29	236	3736	3972
Apprch %	6.8	92.9	0.2			87.1	0.6	12.2			4.5	68.4	27.1			6.9	3.4	89.7					
Total %	2.3	31.7	0.1		34.1	14.5	0.1	2		16.6	2.2	33.2	13.1		48.5	0.1	0	0.7		0.8	5.9	94.1	

	Market Street Southbound				Rivera Street Westbound				Market Street Northbound				Riverside County Flood Control Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	6	139	0	145	76	0	10	86	**7**	130	58	195	0	0	**4**	**4**	430
07:45 AM	**10**	**146**	0	**156**	**79**	0	9	**88**	6	122	**82**	210	0	0	3	3	**457**
08:00 AM	10	124	0	134	77	0	11	88	3	109	75	187	0	0	3	3	412
08:15 AM	9	130	**1**	140	57	0	**12**	69	3	**139**	71	**213**	0	0	2	2	424
Total Volume	35	539	1	575	289	0	42	331	19	500	286	805	0	0	12	12	1723
% App. Total	6.1	93.7	0.2		87.3	0	12.7		2.4	62.1	35.5		0	0	100		
PHF	.875	.923	.250	.921	.915	.000	.875	.940	.679	.899	.872	.945	.000	.000	.750	.750	.943

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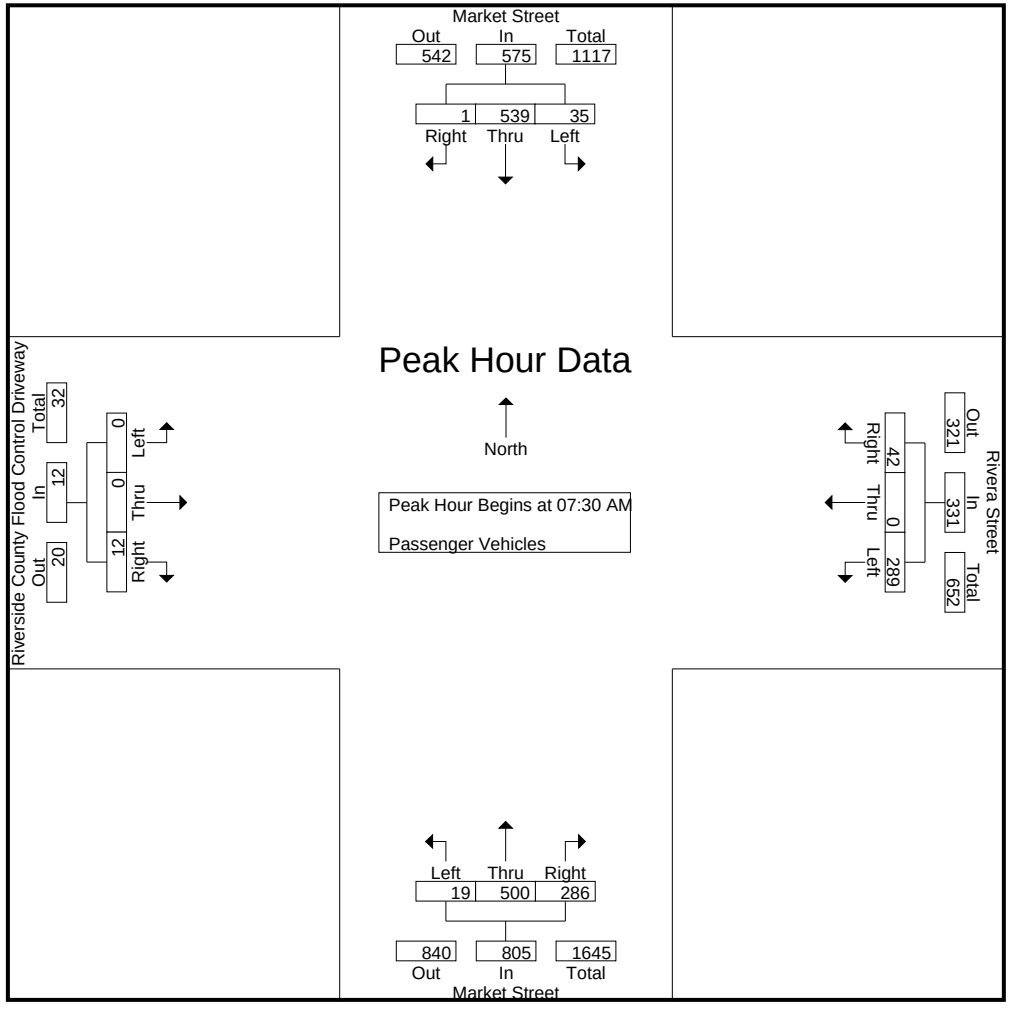
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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	Market Street Southbound				Rivera Street Westbound				Market Street Northbound				Riverside County Flood Control Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	6	139	0	145	76	0	10	86	**7**	130	58	195	0	0	**4**	**4**	
+15 mins.	**10**	**146**	0	**156**	**79**	0	9	**88**	6	122	**82**	210	0	0	3	3	
+30 mins.	10	124	0	134	77	0	11	88	3	109	75	187	0	0	3	3	
+45 mins.	9	130	**1**	140	57	0	**12**	69	3	**139**	71	**213**	0	0	2	2	
Total Volume	35	539	1	575	289	0	42	331	19	500	286	805	0	0	12	12	
% App. Total	6.1	93.7	0.2		87.3	0	12.7		2.4	62.1	35.5		0	0	100		
PHF	.875	.923	.250	.921	.915	.000	.875	.940	.679	.899	.872	.945	.000	.000	.750	.750	

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Groups Printed- Large 2 Axle Vehicles

	Market Street Southbound					Rivera Street Westbound					Market Street Northbound					Riverside County Flood Control Driveway Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	9	0	0	9	0	0	0	0	0	0	3	0	0	3	1	0	6	4	7	4	19	23
06:45 AM	0	5	0	0	5	1	0	0	0	1	0	2	0	0	2	0	0	1	1	1	1	9	10
Total	0	14	0	0	14	1	0	0	0	1	0	5	0	0	5	1	0	7	5	8	5	28	33
07:00 AM	1	11	0	0	12	0	0	0	0	0	0	6	2	0	8	0	0	2	1	2	1	22	23
07:15 AM	0	7	0	0	7	4	0	1	1	5	0	2	2	0	4	0	0	0	0	0	1	16	17
07:30 AM	0	5	0	0	5	0	0	2	0	2	0	2	0	0	2	0	0	1	1	1	1	10	11
07:45 AM	0	7	0	0	7	0	0	0	0	0	0	6	2	0	8	0	0	0	0	0	0	15	15
Total	1	30	0	0	31	4	0	3	1	7	0	16	6	0	22	0	0	3	2	3	3	63	66
08:00 AM	0	7	0	0	7	1	0	0	0	1	0	8	3	0	11	0	0	2	1	2	1	21	22
08:15 AM	1	10	0	0	11	3	0	0	0	3	2	10	2	1	14	0	0	0	0	0	1	28	29
08:30 AM	0	13	0	0	13	4	0	0	0	4	0	3	0	0	3	0	0	2	1	2	1	22	23
08:45 AM	0	14	0	0	14	3	0	0	0	3	0	6	4	0	10	0	0	0	0	0	0	27	27
Total	1	44	0	0	45	11	0	0	0	11	2	27	9	1	38	0	0	4	2	4	3	98	101
Grand Total	2	88	0	0	90	16	0	3	1	19	2	48	15	1	65	1	0	14	9	15	11	189	200
Apprch %	2.2	97.8	0			84.2	0	15.8			3.1	73.8	23.1			6.7	0	93.3					
Total %	1.1	46.6	0		47.6	8.5	0	1.6		10.1	1.1	25.4	7.9		34.4	0.5	0	7.4		7.9	5.5	94.5	

	Market Street Southbound				Rivera Street Westbound				Market Street Northbound				Riverside County Flood Control Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	5	0	5	0	0	**2**	2	0	2	0	2	0	0	1	1	10
07:45 AM	0	7	0	7	0	0	0	0	0	6	2	8	0	0	0	0	15
08:00 AM	0	7	0	7	1	0	0	1	0	8	**3**	11	0	0	**2**	**2**	21
08:15 AM	**1**	**10**	0	**11**	**3**	0	0	**3**	**2**	**10**	2	**14**	0	0	0	0	**28**
Total Volume	1	29	0	30	4	0	2	6	2	26	7	35	0	0	3	3	74
% App. Total	3.3	96.7	0		66.7	0	33.3		5.7	74.3	20		0	0	100		
PHF	.250	.725	.000	.682	.333	.000	.250	.500	.250	.650	.583	.625	.000	.000	.375	.375	.661

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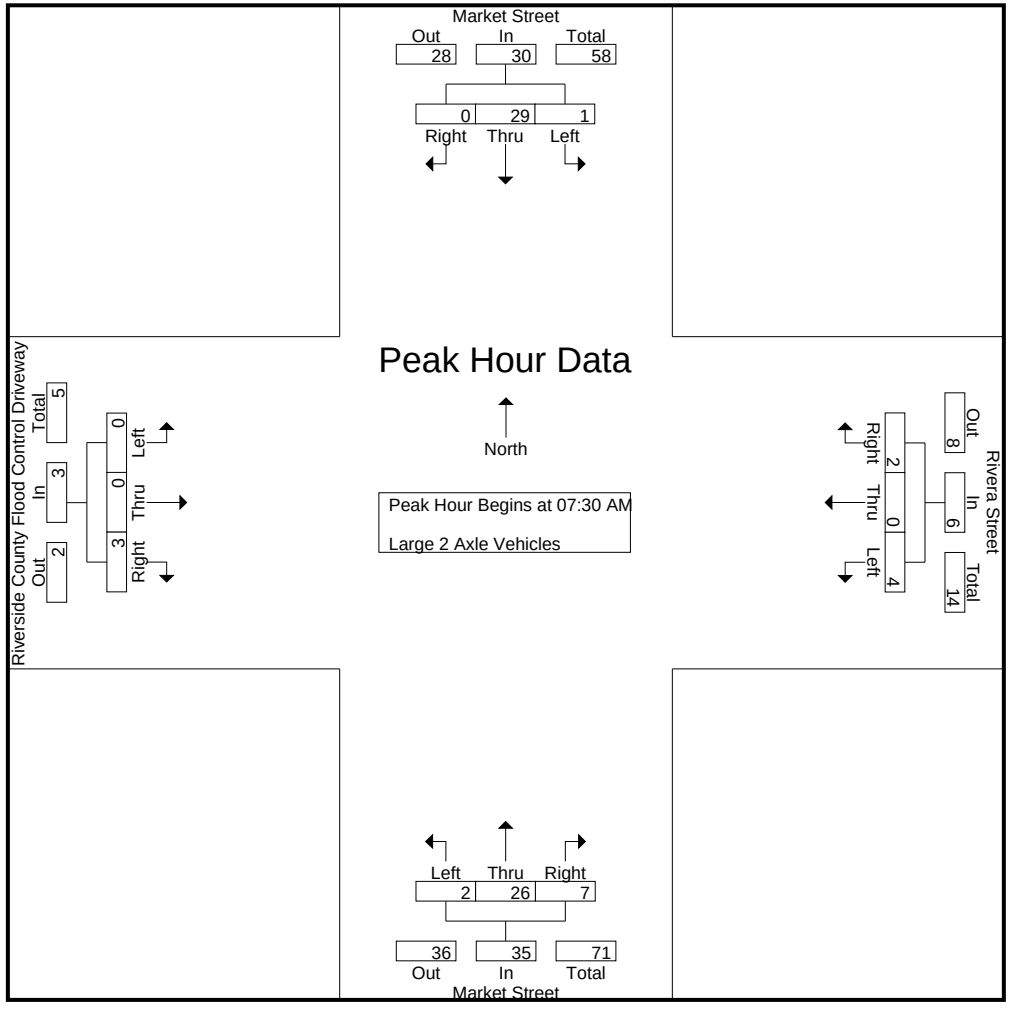

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	Market Street Southbound				Rivera Street Westbound				Market Street Northbound				Riverside County Flood Control Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	5	0	5	0	0	**2**	2	0	2	0	2	0	0	1	1	
+15 mins.	0	7	0	7	0	0	0	0	0	6	2	8	0	0	0	0	
+30 mins.	0	7	0	7	1	0	0	1	0	8	**3**	11	0	0	**2**	**2**	
+45 mins.	**1**	**10**	0	**11**	**3**	0	0	**3**	**2**	**10**	2	**14**	0	0	0	0	
Total Volume	1	29	0	30	4	0	2	6	2	26	7	35	0	0	3	3	
% App. Total	3.3	96.7	0		66.7	0	33.3		5.7	74.3	20		0	0	100		
PHF	.250	.725	.000	.682	.333	.000	.250	.500	.250	.650	.583	.625	.000	.000	.375	.375	

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City of Riverside
N/S: Market Street
E/W: Rivera Street
Weather: Clear

File Name : 29_RIV_Mark_Rivera AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Market Street Southbound					Rivera Street Westbound					Market Street Northbound					Riverside County Flood Control Driveway Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	13	0	0	13	1	0	0	0	1	0	8	0	0	8	0	0	0	0	0	0	22	22
06:45 AM	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	0	0	1	1	1	1	9	10
Total	0	16	0	0	16	1	0	0	0	1	0	13	0	0	13	0	0	1	1	1	1	31	32
07:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
07:15 AM	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	7	7
07:30 AM	0	1	0	0	1	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	10	10
07:45 AM	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	7	7
Total	0	8	0	0	8	0	0	0	0	0	0	17	0	0	17	0	0	0	0	0	0	25	25
08:00 AM	0	8	0	0	8	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	13	13
08:15 AM	0	4	0	0	4	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	13	13
08:30 AM	0	5	0	0	5	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	14	14
08:45 AM	0	16	0	0	16	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	0	29	29
Total	0	33	0	0	33	0	0	0	0	0	0	36	0	0	36	0	0	0	0	0	0	69	69
Grand Total	0	57	0	0	57	1	0	0	0	1	0	66	0	0	66	0	0	1	1	1	1	125	126
Apprch %	0	100	0			100	0	0			0	100	0			0	0	100					
Total %	0	45.6	0		45.6	0.8	0	0		0.8	0	52.8	0		52.8	0	0	0.8		0.8	0.8	99.2	

	Market Street Southbound				Rivera Street Westbound				Market Street Northbound				Riverside County Flood Control Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	1	0	1	0	0	0	0	0	**9**	0	**9**	0	0	0	0	10
07:45 AM	0	3	0	3	0	0	0	0	0	4	0	4	0	0	0	0	7
08:00 AM	0	**8**	0	**8**	0	0	0	0	0	5	0	5	0	0	0	0	**13**
08:15 AM	0	4	0	4	0	0	0	0	0	9	0	9	0	0	0	0	13
Total Volume	0	16	0	16	0	0	0	0	0	27	0	27	0	0	0	0	43
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.827

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City of Riverside
N/S: Market Street
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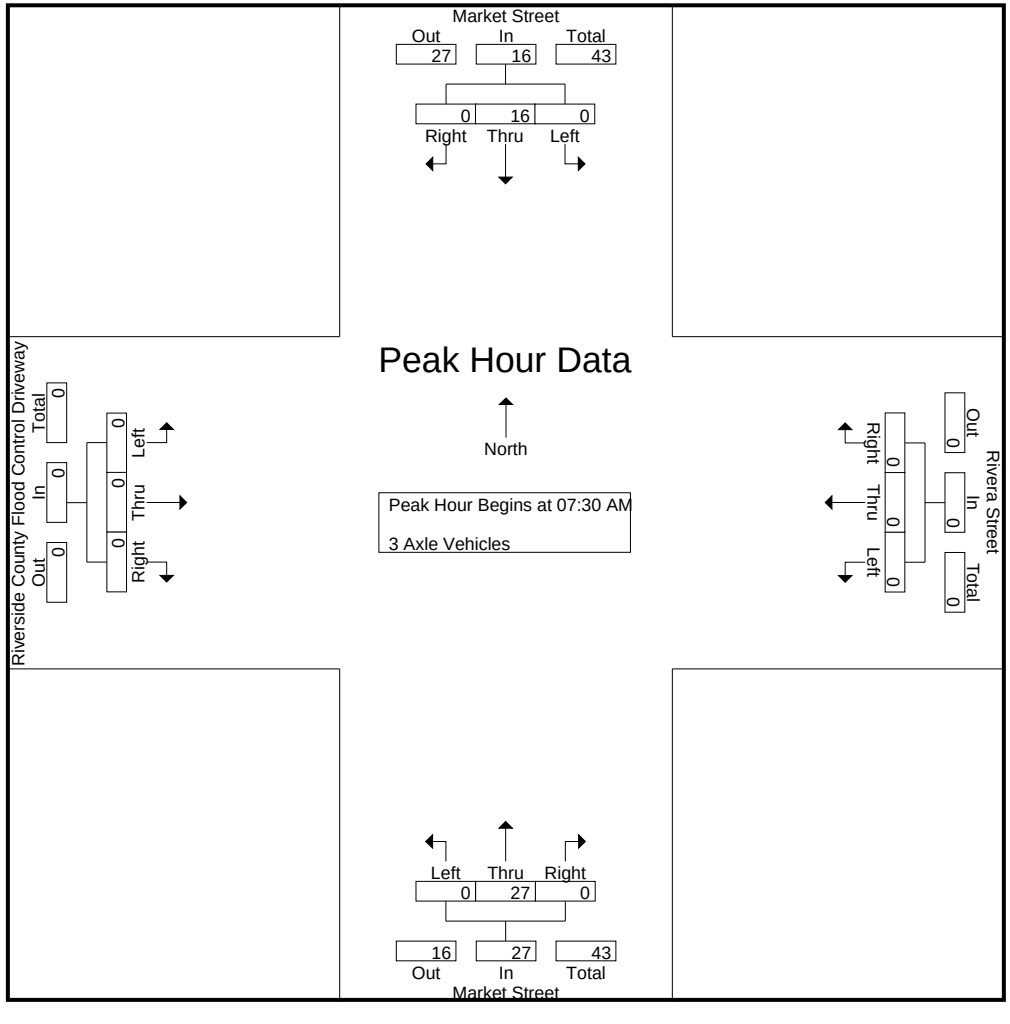
Weather: Clear

File Name : 29_RIV_Mark_Rivera AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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File Name : 29_RIV_Mark_Rivera AM
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Start Date : 10/4/2022

	Market Street Southbound				Rivera Street Westbound				Market Street Northbound				Riverside County Flood Control Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	1	0	1	0	0	0	0	0	**9**	0	**9**	0	0	0	0	
+15 mins.	0	3	0	3	0	0	0	0	0	4	0	4	0	0	0	0	
+30 mins.	0	**8**	0	**8**	0	0	0	0	0	5	0	5	0	0	0	0	
+45 mins.	0	4	0	4	0	0	0	0	0	9	0	9	0	0	0	0	
Total Volume	0	16	0	16	0	0	0	0	0	27	0	27	0	0	0	0	
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	

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File Name : 29_RIV_Mark_Rivera AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Market Street Southbound					Rivera Street Westbound					Market Street Northbound					Riverside County Flood Control Driveway Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	14	0	0	14	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	24	24
06:45 AM	0	21	0	0	21	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	31	31
Total	0	35	0	0	35	0	0	0	0	0	0	20	0	0	20	0	0	0	0	0	0	55	55
07:00 AM	0	12	0	0	12	1	0	0	0	1	0	8	0	0	8	0	0	0	0	0	0	21	21
07:15 AM	0	13	0	0	13	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	0	26	26
07:30 AM	0	7	0	0	7	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	15	15
07:45 AM	0	8	0	0	8	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	18	18
Total	0	40	0	0	40	1	0	0	0	1	0	39	0	0	39	0	0	0	0	0	0	80	80
08:00 AM	0	13	0	0	13	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	0	28	28
08:15 AM	0	8	0	0	8	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	0	20	20
08:30 AM	0	8	0	0	8	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	15	15
08:45 AM	0	16	0	0	16	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	0	30	30
Total	0	45	0	0	45	0	0	0	0	0	0	48	0	0	48	0	0	0	0	0	0	93	93
Grand Total	0	120	0	0	120	1	0	0	0	1	0	107	0	0	107	0	0	0	0	0	0	228	228
Apprch %	0	100	0			100	0	0			0	100	0			0	0	0					
Total %	0	52.6	0		52.6	0.4	0	0		0.4	0	46.9	0		46.9	0	0	0		0	0	100	

	Market Street Southbound				Rivera Street Westbound				Market Street Northbound				Riverside County Flood Control Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	7	0	7	0	0	0	0	0	8	0	8	0	0	0	0	15
07:45 AM	0	8	0	8	0	0	0	0	0	10	0	10	0	0	0	0	18
08:00 AM	0	**13**	0	**13**	0	0	0	0	0	**15**	0	**15**	0	0	0	0	**28**
08:15 AM	0	8	0	8	0	0	0	0	0	12	0	12	0	0	0	0	20
Total Volume	0	36	0	36	0	0	0	0	0	45	0	45	0	0	0	0	81
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.692	.000	.692	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.723

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Site Code : 05122894
Start Date : 10/4/2022
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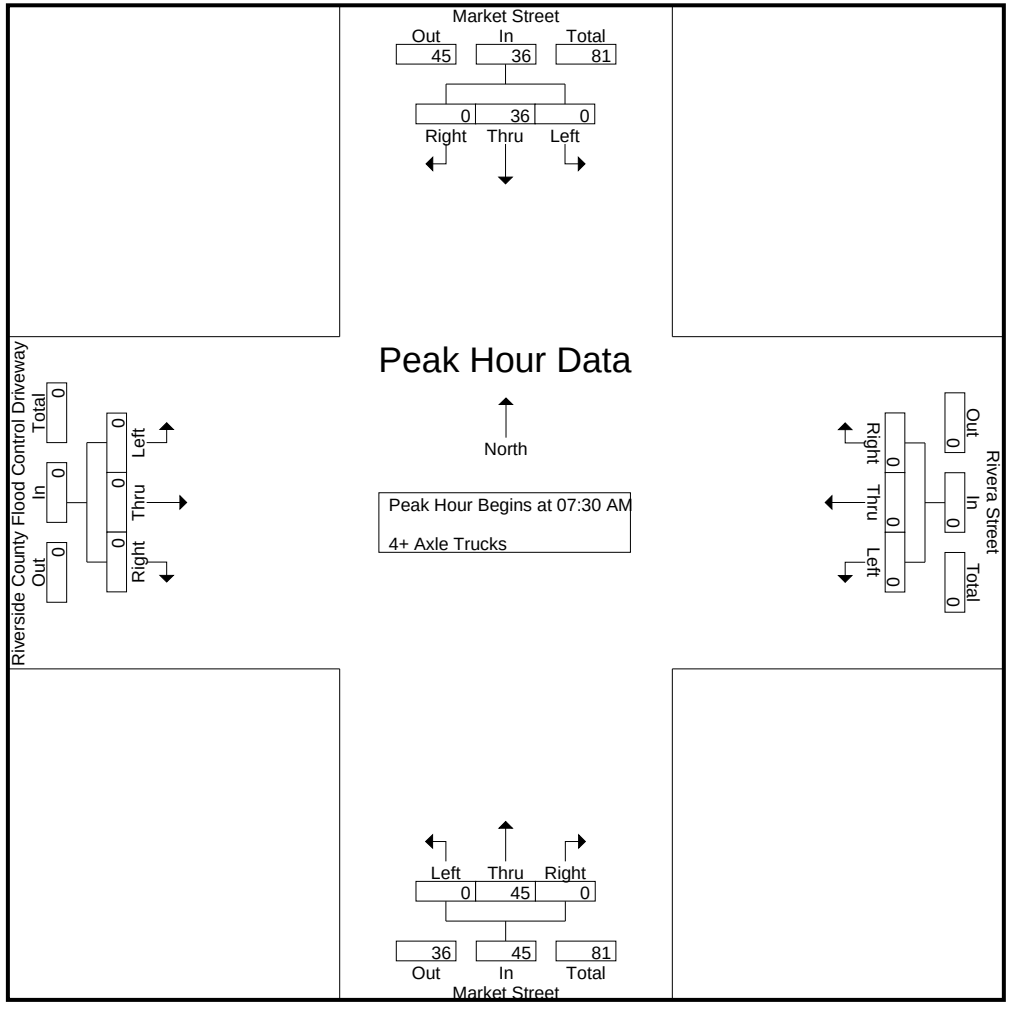

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	Market Street Southbound				Rivera Street Westbound				Market Street Northbound				Riverside County Flood Control Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	7	0	7	0	0	0	0	0	8	0	8	0	0	0	0	
+15 mins.	0	8	0	8	0	0	0	0	0	10	0	10	0	0	0	0	
+30 mins.	0	**13**	0	**13**	0	0	0	0	0	**15**	0	**15**	0	0	0	0	
+45 mins.	0	8	0	8	0	0	0	0	0	12	0	12	0	0	0	0	
Total Volume	0	36	0	36	0	0	0	0	0	45	0	45	0	0	0	0	
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.692	.000	.692	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	

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Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Market Street Southbound					Rivera Street Westbound					Market Street Northbound					Riverside County Flood Control Driveway Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	18	239	3	0	260	39	2	4	2	45	6	135	57	19	198	1	0	4	4	5	25	508	533
03:45 PM	14	208	2	1	224	43	2	12	6	57	8	145	60	14	213	1	2	8	7	11	28	505	533
Total	32	447	5	1	484	82	4	16	8	102	14	280	117	33	411	2	2	12	11	16	53	1013	1066
04:00 PM	17	208	0	0	225	64	0	3	2	67	1	139	52	25	192	0	0	6	6	6	33	490	523
04:15 PM	25	184	0	0	209	52	2	8	4	62	1	134	55	27	190	2	6	14	9	22	40	483	523
04:30 PM	35	209	0	0	244	47	0	5	4	52	1	123	51	24	175	2	6	33	17	41	45	512	557
04:45 PM	29	182	0	0	211	50	0	7	4	57	1	140	79	28	220	2	0	11	10	13	42	501	543
Total	106	783	0	0	889	213	2	23	14	238	4	536	237	104	777	6	12	64	42	82	160	1986	2146
05:00 PM	27	211	0	0	238	71	0	12	6	83	1	143	44	19	188	0	1	13	6	14	31	523	554
05:15 PM	17	194	0	0	211	47	0	10	6	57	1	153	46	19	200	0	1	6	3	7	28	475	503
05:30 PM	21	191	0	0	212	52	0	10	6	62	0	151	43	22	194	1	6	14	5	21	33	489	522
05:45 PM	25	174	0	0	199	36	0	10	9	46	0	108	45	9	153	0	0	4	2	4	20	402	422
Total	90	770	0	0	860	206	0	42	27	248	2	555	178	69	735	1	8	37	16	46	112	1889	2001
Grand Total	228	2000	5	1	2233	501	6	81	49	588	20	1371	532	206	1923	9	22	113	69	144	325	4888	5213
Apprch %	10.2	89.6	0.2			85.2	1	13.8			1	71.3	27.7			6.2	15.3	78.5					
Total %	4.7	40.9	0.1		45.7	10.2	0.1	1.7		12	0.4	28	10.9		39.3	0.2	0.5	2.3		2.9	6.2	93.8	
Passenger Vehicles	221	1863	3		2087	499	4	76		626	13	1146	520		1879	8	22	113		212	0	0	4804
% Passenger Vehicles	96.9	93.2	60	0	93.4	99.6	66.7	93.8	95.9	98.3	65	83.6	97.7	97.1	88.3	88.9	100	100	100	99.5	0	0	92.2
Large 2 Axle Vehicles	7	39	2		49	2	2	1		5	7	73	9		94	1	0	0		1	0	0	149
% Large 2 Axle Vehicles	3.1	2	40	100	2.2	0.4	33.3	1.2	0	0.8	35	5.3	1.7	2.4	4.4	11.1	0	0	0	0.5	0	0	2.9
3 Axle Vehicles	0	35	0		35	0	0	2		3	0	58	1		59	0	0	0		0	0	0	97
% 3 Axle Vehicles	0	1.8	0	0	1.6	0	0	2.5	2	0.5	0	4.2	0.2	0	2.8	0	0	0	0	0	0	0	1.9
4+ Axle Trucks	0	63	0		63	0	0	2		3	0	94	2		97	0	0	0		0	0	0	163
% 4+ Axle Trucks	0	3.2	0	0	2.8	0	0	2.5	2	0.5	0	6.9	0.4	0.5	4.6	0	0	0	0	0	0	0	3.1

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Site Code : 05122894
Start Date : 10/4/2022
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	Market Street Southbound				Rivera Street Westbound				Market Street Northbound				Riverside County Flood Control Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	25	184	0	209	52	**2**	8	62	**1**	134	55	190	**2**	**6**	14	22	483
04:30 PM	**35**	209	0	**244**	47	0	5	52	1	123	51	175	2	6	**33**	**41**	512
04:45 PM	29	182	0	211	50	0	7	57	1	140	**79**	**220**	2	0	11	13	501
05:00 PM	27	**211**	0	238	**71**	0	**12**	**83**	1	**143**	44	188	0	1	13	14	**523**
Total Volume	116	786	0	902	220	2	32	254	4	540	229	773	6	13	71	90	2019
% App. Total	12.9	87.1	0		86.6	0.8	12.6		0.5	69.9	29.6		6.7	14.4	78.9		
PHF	.829	.931	.000	.924	.775	.250	.667	.765	1.00	.944	.725	.878	.750	.542	.538	.549	.965

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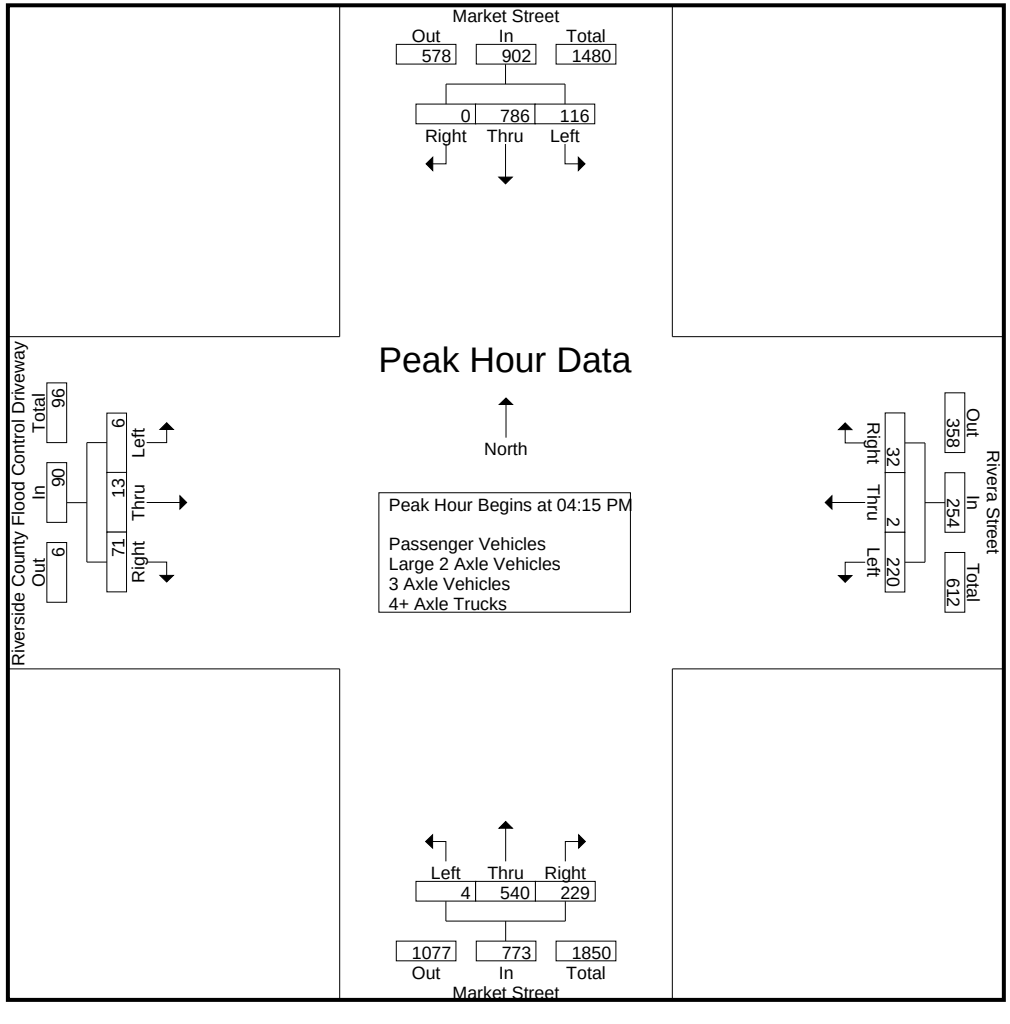

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	Market Street Southbound				Rivera Street Westbound				Market Street Northbound				Riverside County Flood Control Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	03:30 PM				04:45 PM				04:45 PM				04:15 PM				
+0 mins.	18	**239**	**3**	**260**	50	0	7	57	**1**	140	**79**	**220**	**2**	**6**	14	22	
+15 mins.	14	208	2	224	**71**	0	**12**	**83**	1	143	44	188	2	6	**33**	**41**	
+30 mins.	17	208	0	225	47	0	10	57	1	**153**	46	200	2	0	11	13	
+45 mins.	**25**	184	0	209	52	0	10	62	0	151	43	194	0	1	13	14	
Total Volume	74	839	5	918	220	0	39	259	3	587	212	802	6	13	71	90	
% App. Total	8.1	91.4	0.5		84.9	0	15.1		0.4	73.2	26.4		6.7	14.4	78.9		
PHF	.740	.878	.417	.883	.775	.000	.813	.780	.750	.959	.671	.911	.750	.542	.538	.549	

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Groups Printed- Passenger Vehicles

	Market Street Southbound					Rivera Street Westbound					Market Street Northbound					Riverside County Flood Control Driveway Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	17	219	3	0	239	38	0	3	2	41	1	99	55	18	155	0	0	4	4	4	24	439	463
03:45 PM	13	186	0	0	199	43	2	11	5	56	6	120	57	13	183	1	2	8	7	11	25	449	474
Total	30	405	3	0	438	81	2	14	7	97	7	219	112	31	338	1	2	12	11	15	49	888	937
04:00 PM	17	192	0	0	209	64	0	3	2	67	1	113	51	24	165	0	0	6	6	6	32	447	479
04:15 PM	22	170	0	0	192	51	2	7	4	60	1	111	54	26	166	2	6	14	9	22	39	440	479
04:30 PM	34	194	0	0	228	47	0	4	3	51	1	100	49	23	150	2	6	33	17	41	43	470	513
04:45 PM	29	172	0	0	201	50	0	7	4	57	1	121	78	27	200	2	0	11	10	13	41	471	512
Total	102	728	0	0	830	212	2	21	13	235	4	445	232	100	681	6	12	64	42	82	155	1828	1983
05:00 PM	27	203	0	0	230	71	0	11	6	82	1	124	43	19	168	0	1	13	6	14	31	494	525
05:15 PM	17	185	0	0	202	47	0	10	6	57	1	136	45	19	182	0	1	6	3	7	28	448	476
05:30 PM	21	178	0	0	199	52	0	10	6	62	0	131	43	22	174	1	6	14	5	21	33	456	489
05:45 PM	24	164	0	0	188	36	0	10	9	46	0	91	45	9	136	0	0	4	2	4	20	374	394
Total	89	730	0	0	819	206	0	41	27	247	2	482	176	69	660	1	8	37	16	46	112	1772	1884
Grand Total	221	1863	3	0	2087	499	4	76	47	579	13	1146	520	200	1679	8	22	113	69	143	316	4488	4804
Apprch %	10.6	89.3	0.1			86.2	0.7	13.1			0.8	68.3	31			5.6	15.4	79					
Total %	4.9	41.5	0.1		46.5	11.1	0.1	1.7		12.9	0.3	25.5	11.6		37.4	0.2	0.5	2.5		3.2	6.6	93.4	

	Market Street Southbound				Rivera Street Westbound				Market Street Northbound				Riverside County Flood Control Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	22	170	0	192	51	**2**	7	60	**1**	111	54	166	**2**	**6**	14	22	440
04:30 PM	**34**	194	0	228	47	0	4	51	1	100	49	150	2	6	**33**	**41**	470
04:45 PM	29	172	0	201	50	0	7	57	1	121	**78**	**200**	2	0	11	13	471
05:00 PM	27	**203**	0	**230**	**71**	0	**11**	**82**	1	**124**	43	168	0	1	13	14	**494**
Total Volume	112	739	0	851	219	2	29	250	4	456	224	684	6	13	71	90	1875
% App. Total	13.2	86.8	0		87.6	0.8	11.6		0.6	66.7	32.7		6.7	14.4	78.9		
PHF	.824	.910	.000	.925	.771	.250	.659	.762	1.00	.919	.718	.855	.750	.542	.538	.549	.949

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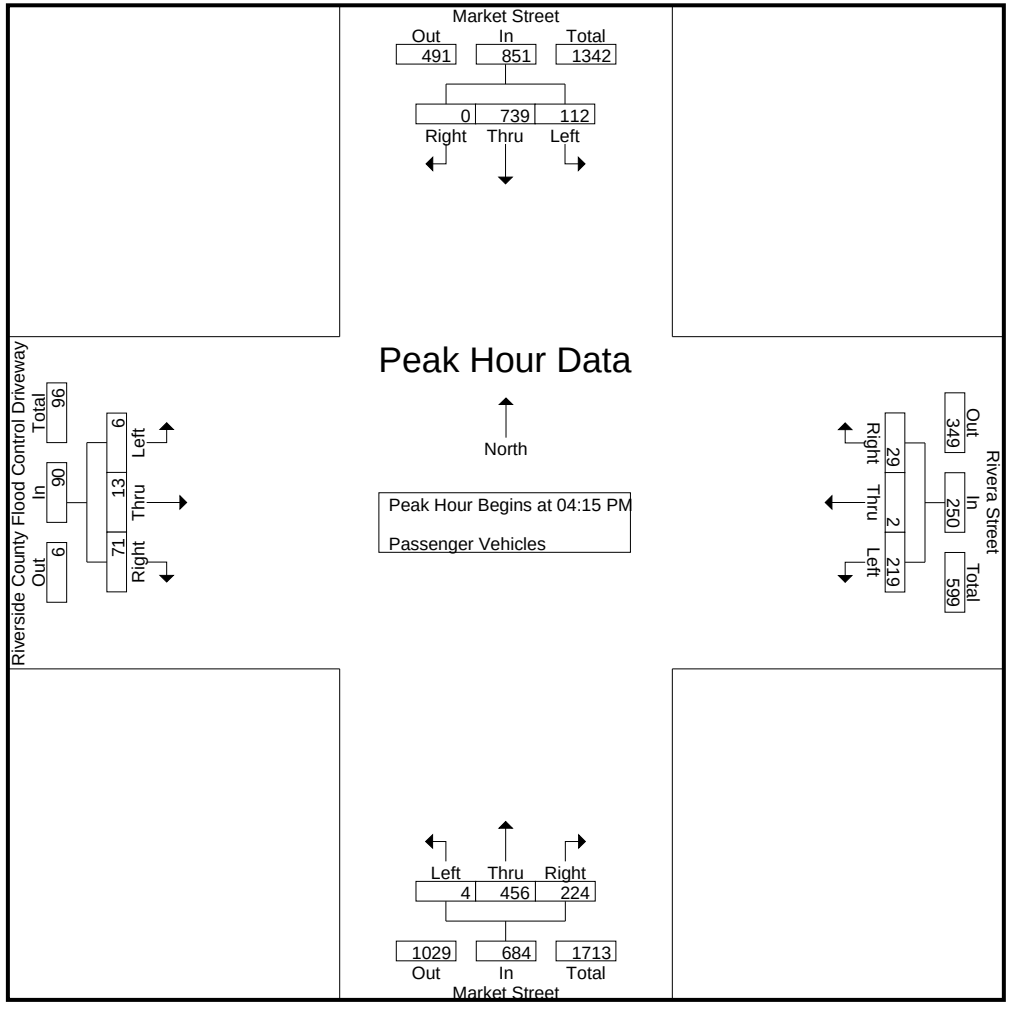
City of Riverside
N/S: Market Street
E/W: Rivera Street
Weather: Clear

File Name : 29_RIV_Mark_Rivera PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Riverside
N/S: Market Street
E/W: Rivera Street
Weather: Clear

File Name : 29_RIV_Mark_Rivera PM
Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				Rivera Street Westbound				Market Street Northbound				Riverside County Flood Control Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	22	170	0	192	51	**2**	7	60	**1**	111	54	166	**2**	**6**	14	22	
+15 mins.	**34**	194	0	228	47	0	4	51	1	100	49	150	2	6	**33**	**41**	
+30 mins.	29	172	0	201	50	0	7	57	1	121	**78**	**200**	2	0	11	13	
+45 mins.	27	**203**	0	**230**	**71**	0	**11**	**82**	1	**124**	43	168	0	1	13	14	
Total Volume	112	739	0	851	219	2	29	250	4	456	224	684	6	13	71	90	
% App. Total	13.2	86.8	0		87.6	0.8	11.6		0.6	66.7	32.7		6.7	14.4	78.9		
PHF	.824	.910	.000	.925	.771	.250	.659	.762	1.000	.919	.718	.855	.750	.542	.538	.549	

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City of Riverside
N/S: Market Street
E/W: Rivera Street
Weather: Clear

File Name : 29_RIV_Mark_Rivera PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Market Street Southbound					Rivera Street Westbound					Market Street Northbound					Riverside County Flood Control Driveway Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	1	8	0	0	9	1	2	0	0	3	5	17	1	0	23	1	0	0	0	1	0	36	36
03:45 PM	1	8	2	1	11	0	0	0	0	0	2	8	3	1	13	0	0	0	0	0	2	24	26
Total	2	16	2	1	20	1	2	0	0	3	7	25	4	1	36	1	0	0	0	1	2	60	62
04:00 PM	0	5	0	0	5	0	0	0	0	0	0	5	1	1	6	0	0	0	0	0	1	11	12
04:15 PM	3	4	0	0	7	1	0	1	0	2	0	4	1	1	5	0	0	0	0	0	1	14	15
04:30 PM	1	3	0	0	4	0	0	0	0	0	0	5	1	1	6	0	0	0	0	0	1	10	11
04:45 PM	0	3	0	0	3	0	0	0	0	0	0	10	1	1	11	0	0	0	0	0	1	14	15
Total	4	15	0	0	19	1	0	1	0	2	0	24	4	4	28	0	0	0	0	0	4	49	53
05:00 PM	0	4	0	0	4	0	0	0	0	0	0	11	1	0	12	0	0	0	0	0	0	16	16
05:15 PM	0	1	0	0	1	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	7	7
05:30 PM	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	6	6
05:45 PM	1	1	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	5	5
Total	1	8	0	0	9	0	0	0	0	0	0	24	1	0	25	0	0	0	0	0	0	34	34
Grand Total	7	39	2	1	48	2	2	1	0	5	7	73	9	5	89	1	0	0	0	1	6	143	149
Apprch %	14.6	81.2	4.2			40	40	20			7.9	82	10.1			100	0	0					
Total %	4.9	27.3	1.4		33.6	1.4	1.4	0.7		3.5	4.9	51	6.3		62.2	0.7	0	0		0.7	4	96	

	Market Street Southbound				Rivera Street Westbound				Market Street Northbound				Riverside County Flood Control Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	**3**	**4**	0	**7**	**1**	0	**1**	**2**	0	4	**1**	5	0	0	0	0	14
04:30 PM	1	3	0	4	0	0	0	0	0	5	1	6	0	0	0	0	10
04:45 PM	0	3	0	3	0	0	0	0	0	10	1	11	0	0	0	0	14
05:00 PM	0	4	0	4	0	0	0	0	0	**11**	1	**12**	0	0	0	0	**16**
Total Volume	4	14	0	18	1	0	1	2	0	30	4	34	0	0	0	0	54
% App. Total	22.2	77.8	0		50	0	50		0	88.2	11.8		0	0	0		
PHF	.333	.875	.000	.643	.250	.000	.250	.250	.000	.682	1.00	.708	.000	.000	.000	.000	.844

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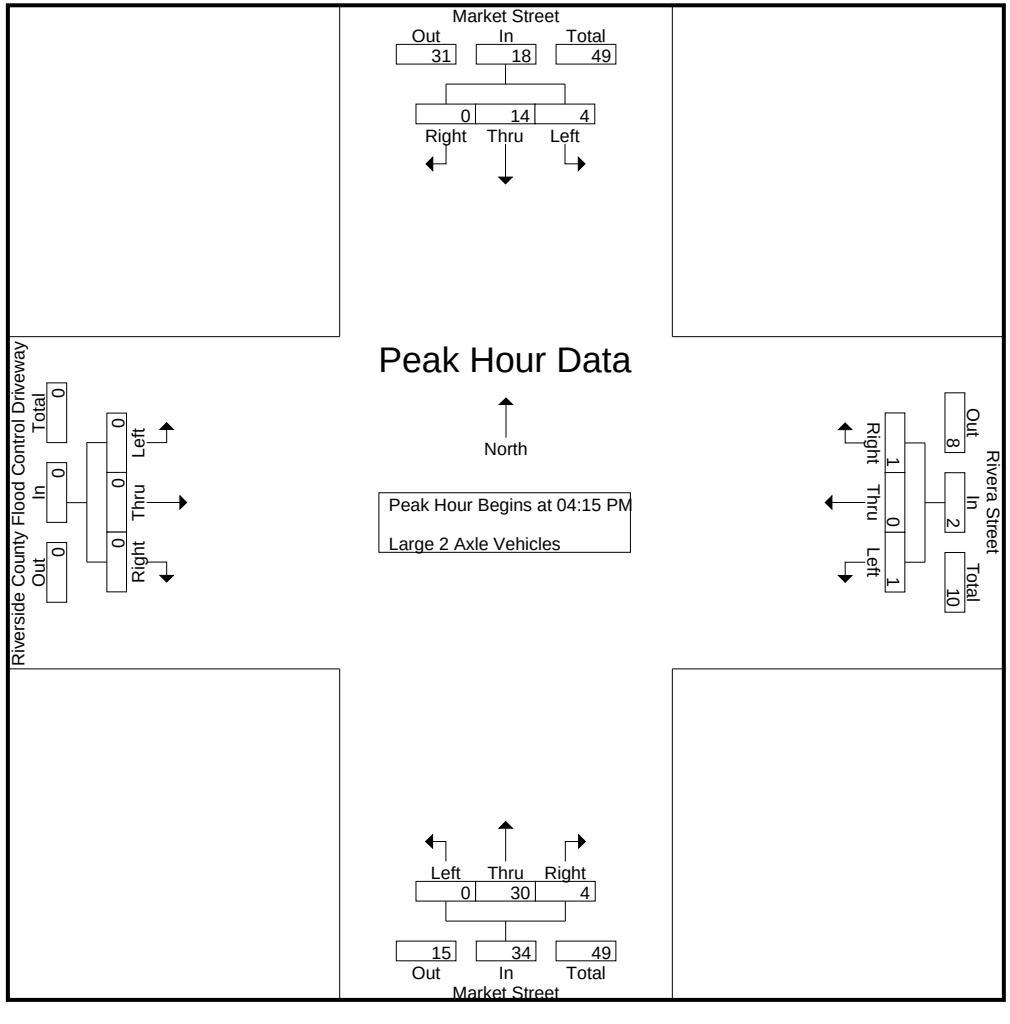
City of Riverside
N/S: Market Street
E/W: Rivera Street
Weather: Clear

File Name : 29_RIV_Mark_Rivera PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Riverside
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Weather: Clear

File Name : 29_RIV_Mark_Rivera PM
Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				Rivera Street Westbound				Market Street Northbound				Riverside County Flood Control Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	**3**	**4**	0	**7**	**1**	0	**1**	**2**	0	4	**1**	5	0	0	0	0	
+15 mins.	1	3	0	4	0	0	0	0	0	5	1	6	0	0	0	0	
+30 mins.	0	3	0	3	0	0	0	0	0	10	1	11	0	0	0	0	
+45 mins.	0	4	0	4	0	0	0	0	0	**11**	1	**12**	0	0	0	0	
Total Volume	4	14	0	18	1	0	1	2	0	30	4	34	0	0	0	0	
% App. Total	22.2	77.8	0		50	0	50		0	88.2	11.8		0	0	0		
PHF	.333	.875	.000	.643	.250	.000	.250	.250	.000	.682	1.000	.708	.000	.000	.000	.000	

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City of Riverside
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Weather: Clear

File Name : 29_RIV_Mark_Rivera PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Market Street Southbound					Rivera Street Westbound					Market Street Northbound					Riverside County Flood Control Driveway Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	6	0	0	6	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	13	13
03:45 PM	0	8	0	0	8	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	14	14
Total	0	14	0	0	14	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	0	27	27
04:00 PM	0	2	0	0	2	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	12	12
04:15 PM	0	3	0	0	3	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	0	14	14
04:30 PM	0	8	0	0	8	0	0	1	1	1	0	5	1	0	6	0	0	0	0	0	1	15	16
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	4	4
Total	0	14	0	0	14	0	0	1	1	1	0	29	1	0	30	0	0	0	0	0	1	45	46
05:00 PM	0	0	0	0	0	0	0	1	0	1	0	5	0	0	5	0	0	0	0	0	0	6	6
05:15 PM	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	5	5
05:30 PM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	5	5
05:45 PM	0	2	0	0	2	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	8	8
Total	0	7	0	0	7	0	0	1	0	1	0	16	0	0	16	0	0	0	0	0	0	24	24
Grand Total	0	35	0	0	35	0	0	2	1	2	0	58	1	0	59	0	0	0	0	0	1	96	97
Apprch %	0	100	0			0	0	100			0	98.3	1.7			0	0	0					
Total %	0	36.5	0		36.5	0	0	2.1		2.1	0	60.4	1		61.5	0	0	0		0	1	99	

	Market Street Southbound				Rivera Street Westbound				Market Street Northbound				Riverside County Flood Control Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	3	0	3	0	0	0	0	0	**11**	0	**11**	0	0	0	0	14
04:30 PM	0	**8**	0	**8**	0	0	**1**	**1**	0	5	**1**	6	0	0	0	0	**15**
04:45 PM	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
05:00 PM	0	0	0	0	0	0	1	1	0	5	0	5	0	0	0	0	6
Total Volume	0	12	0	12	0	0	2	2	0	24	1	25	0	0	0	0	39
% App. Total	0	100	0		0	0	100		0	96	4		0	0	0		
PHF	.000	.375	.000	.375	.000	.000	.500	.500	.000	.545	.250	.568	.000	.000	.000	.000	.650

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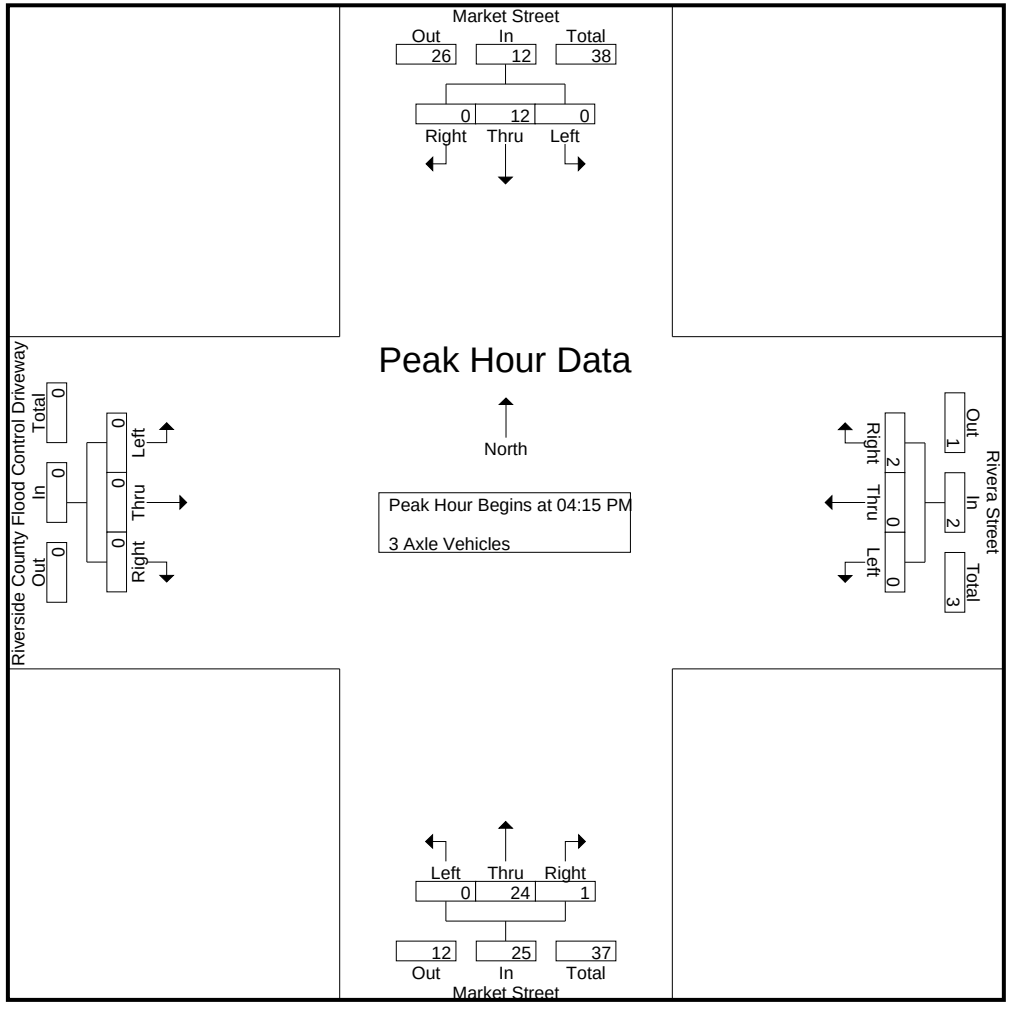
City of Riverside
N/S: Market Street
E/W: Rivera Street
Weather: Clear

File Name : 29_RIV_Mark_Rivera PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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	Market Street Southbound				Rivera Street Westbound				Market Street Northbound				Riverside County Flood Control Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	3	0	3	0	0	0	0	0	**11**	0	**11**	0	0	0	0	
+15 mins.	0	**8**	0	**8**	0	0	**1**	**1**	0	5	**1**	6	0	0	0	0	
+30 mins.	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	
+45 mins.	0	0	0	0	0	0	1	1	0	5	0	5	0	0	0	0	
Total Volume	0	12	0	12	0	0	2	2	0	24	1	25	0	0	0	0	
% App. Total	0	100	0		0	0	100		0	96	4		0	0	0		
PHF	.000	.375	.000	.375	.000	.000	.500	.500	.000	.545	.250	.568	.000	.000	.000	.000	

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Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Market Street Southbound					Rivera Street Westbound					Market Street Northbound					Riverside County Flood Control Driveway Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	6	0	0	6	0	0	1	0	1	0	12	1	1	13	0	0	0	0	0	1	20	21
03:45 PM	0	6	0	0	6	0	0	1	1	1	0	11	0	0	11	0	0	0	0	0	1	18	19
Total	0	12	0	0	12	0	0	2	1	2	0	23	1	1	24	0	0	0	0	0	2	38	40
04:00 PM	0	9	0	0	9	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	0	20	20
04:15 PM	0	7	0	0	7	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	15	15
04:30 PM	0	4	0	0	4	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	0	17	17
04:45 PM	0	6	0	0	6	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	12	12
Total	0	26	0	0	26	0	0	0	0	0	0	38	0	0	38	0	0	0	0	0	0	64	64
05:00 PM	0	4	0	0	4	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	7	7
05:15 PM	0	6	0	0	6	0	0	0	0	0	0	8	1	0	9	0	0	0	0	0	0	15	15
05:30 PM	0	8	0	0	8	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	0	22	22
05:45 PM	0	7	0	0	7	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	15	15
Total	0	25	0	0	25	0	0	0	0	0	0	33	1	0	34	0	0	0	0	0	0	59	59
Grand Total	0	63	0	0	63	0	0	2	1	2	0	94	2	1	96	0	0	0	0	0	2	161	163
Apprch %	0	100	0			0	0	100			0	97.9	2.1			0	0	0					
Total %	0	39.1	0		39.1	0	0	1.2		1.2	0	58.4	1.2		59.6	0	0	0		0	1.2	98.8	

	Market Street Southbound				Rivera Street Westbound				Market Street Northbound				Riverside County Flood Control Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	**7**	0	**7**	0	0	0	0	0	8	0	8	0	0	0	0	15
04:30 PM	0	4	0	4	0	0	0	0	0	**13**	0	**13**	0	0	0	0	**17**
04:45 PM	0	6	0	6	0	0	0	0	0	6	0	6	0	0	0	0	12
05:00 PM	0	4	0	4	0	0	0	0	0	3	0	3	0	0	0	0	7
Total Volume	0	21	0	21	0	0	0	0	0	30	0	30	0	0	0	0	51
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.750	.000	.750	.000	.000	.000	.000	.000	.577	.000	.577	.000	.000	.000	.000	.750

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City of Riverside
N/S: Market Street
E/W: Rivera Street
Weather: Clear

File Name : 29_RIV_Mark_Rivera PM
Site Code : 05122894
Start Date : 10/4/2022
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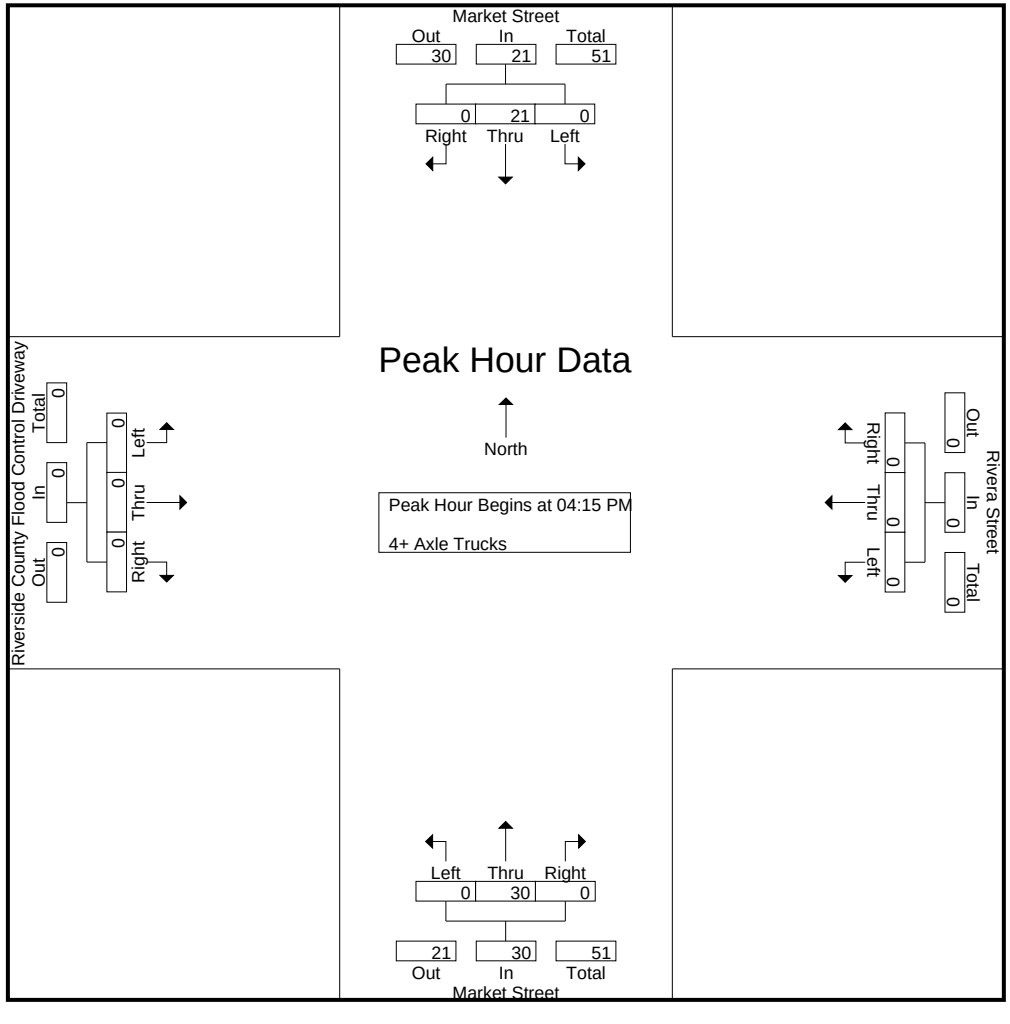

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City of Riverside
N/S: Market Street
E/W: Rivera Street
Weather: Clear

File Name : 29_RIV_Mark_Rivera PM
Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				Rivera Street Westbound				Market Street Northbound				Riverside County Flood Control Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	**7**	0	**7**	0	0	0	0	0	8	0	8	0	0	0	0	
+15 mins.	0	4	0	4	0	0	0	0	0	**13**	0	**13**	0	0	0	0	
+30 mins.	0	6	0	6	0	0	0	0	0	6	0	6	0	0	0	0	
+45 mins.	0	4	0	4	0	0	0	0	0	3	0	3	0	0	0	0	
Total Volume	0	21	0	21	0	0	0	0	0	30	0	30	0	0	0	0	
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.750	.000	.750	.000	.000	.000	.000	.000	.577	.000	.577	.000	.000	.000	.000	

Location: Riverside
N/S: Market Street
E/W: Rivera Street

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Market Street	East Leg Rivera Street	South Leg Market Street	West Leg County Flood Control DW	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	3	0	0	3
8:00 AM	1	2	0	0	3
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	1	5	0	0	6

	North Leg Market Street	East Leg Rivera Street	South Leg Market Street	West Leg County Flood Control DW	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0
4:00 PM	2	1	0	0	3
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	1	0	0	0	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	3	1	0	0	4

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Location: Riverside
N/S: Market Street
E/W: Rivera Street

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Market Street			Westbound Rivera Street			Northbound Market Street			Eastbound County Flood Control DW			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	1	0	0	0	0	0	1	0	0	0	0	2
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	1	2	0	0	0	1	0	3	0	0	0	0	7

	Southbound Market Street			Westbound Rivera Street			Northbound Market Street			Eastbound County Flood Control DW			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	2	0	0	0	0	0	0	2
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	1	0	0	0	3	0	2	0	0	0	0	6

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City of Riverside
N/S: Market Street
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 30_RIV_Mark_60W AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Market Street Southbound				SR-60 Westbound Off Ramp Westbound				Market Street Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	178	21	199	6	0	148	154	33	36	0	69	0	0	0	0	422
06:45 AM	0	137	27	164	8	0	123	131	40	67	0	107	0	0	0	0	402
Total	0	315	48	363	14	0	271	285	73	103	0	176	0	0	0	0	824
07:00 AM	0	146	30	176	8	0	121	129	43	58	0	101	0	0	0	0	406
07:15 AM	0	179	33	212	6	0	128	134	48	63	0	111	0	0	0	0	457
07:30 AM	0	195	40	235	14	0	135	149	52	70	0	122	0	0	0	0	506
07:45 AM	0	221	36	257	16	0	179	195	40	63	0	103	0	0	0	0	555
Total	0	741	139	880	44	0	563	607	183	254	0	437	0	0	0	0	1924
08:00 AM	0	190	46	236	11	0	159	170	53	71	0	124	0	0	0	0	530
08:15 AM	0	190	29	219	15	0	170	185	33	78	0	111	0	0	0	0	515
08:30 AM	0	161	28	189	14	0	125	139	29	75	0	104	0	0	0	0	432
08:45 AM	0	162	31	193	15	0	141	156	27	66	0	93	0	0	0	0	442
Total	0	703	134	837	55	0	595	650	142	290	0	432	0	0	0	0	1919
Grand Total	0	1759	321	2080	113	0	1429	1542	398	647	0	1045	0	0	0	0	4667
Apprch %	0	84.6	15.4		7.3	0	92.7		38.1	61.9	0		0	0	0		
Total %	0	37.7	6.9	44.6	2.4	0	30.6	33	8.5	13.9	0	22.4	0	0	0	0	
Passenger Vehicles	0	1511	265	1776	109	0	1237	1346	381	593	0	974	0	0	0	0	4096
% Passenger Vehicles	0	85.9	82.6	85.4	96.5	0	86.6	87.3	95.7	91.7	0	93.2	0	0	0	0	87.8
Large 2 Axle Vehicles	0	98	10	108	2	0	40	42	14	24	0	38	0	0	0	0	188
% Large 2 Axle Vehicles	0	5.6	3.1	5.2	1.8	0	2.8	2.7	3.5	3.7	0	3.6	0	0	0	0	4
3 Axle Vehicles	0	49	6	55	2	0	54	56	0	17	0	17	0	0	0	0	128
% 3 Axle Vehicles	0	2.8	1.9	2.6	1.8	0	3.8	3.6	0	2.6	0	1.6	0	0	0	0	2.7
4+ Axle Trucks	0	101	40	141	0	0	98	98	3	13	0	16	0	0	0	0	255
% 4+ Axle Trucks	0	5.7	12.5	6.8	0	0	6.9	6.4	0.8	2	0	1.5	0	0	0	0	5.5

	Market Street Southbound				SR-60 Westbound Off Ramp Westbound				Market Street Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	195	40	235	14	0	135	149	52	70	0	122	0	0	0	0	506
07:45 AM	0	**221**	36	**257**	**16**	0	**179**	**195**	40	63	0	103	0	0	0	0	**555**
08:00 AM	0	190	**46**	236	11	0	159	170	**53**	71	0	**124**	0	0	0	0	530
08:15 AM	0	190	29	219	15	0	170	185	33	**78**	0	111	0	0	0	0	515
Total Volume	0	796	151	947	56	0	643	699	178	282	0	460	0	0	0	0	2106
% App. Total	0	84.1	15.9		8	0	92		38.7	61.3	0		0	0	0		
PHF	.000	.900	.821	.921	.875	.000	.898	.896	.840	.904	.000	.927	.000	.000	.000	.000	.949

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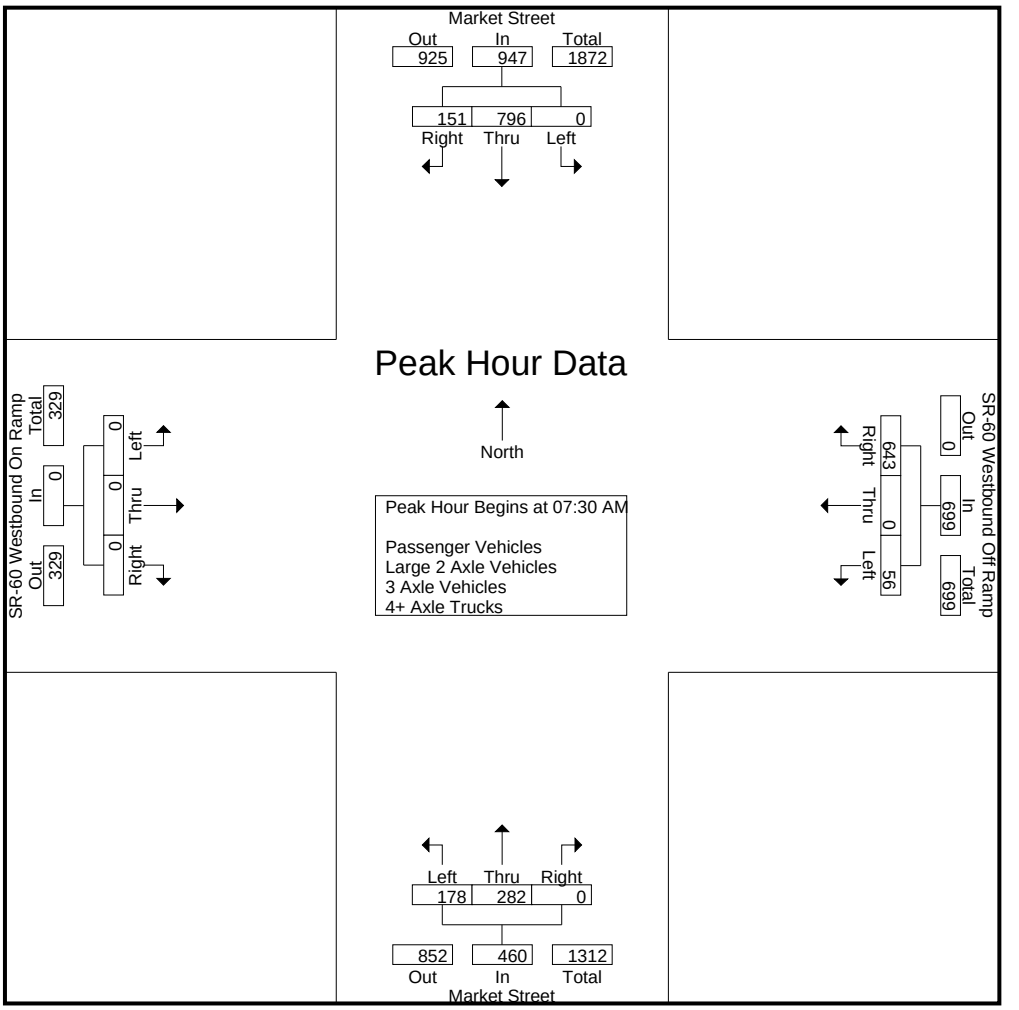
City of Riverside
N/S: Market Street
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 30_RIV_Mark_60W AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:15 AM				06:30 AM			
+0 mins.	0	195	40	235	14	0	135	149	48	63	0	111	0	0	0	0
+15 mins.	0	**221**	36	**257**	**16**	0	**179**	**195**	52	70	0	122	0	0	0	0
+30 mins.	0	190	**46**	236	11	0	159	170	40	63	0	103	0	0	0	0
+45 mins.	0	190	29	219	15	0	170	185	**53**	**71**	0	**124**	0	0	0	0
Total Volume	0	796	151	947	56	0	643	699	193	267	0	460	0	0	0	0
% App. Total	0	84.1	15.9		8	0	92		42	58	0		0	0	0	
PHF	.000	.900	.821	.921	.875	.000	.898	.896	.910	.940	.000	.927	.000	.000	.000	.000

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City of Riverside
N/S: Market Street
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 30_RIV_Mark_60W AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Market Street Southbound				SR-60 Westbound Off Ramp Westbound				Market Street Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	138	17	155	6	0	130	136	31	33	0	64	0	0	0	0	355
06:45 AM	0	110	19	129	7	0	106	113	38	65	0	103	0	0	0	0	345
Total	0	248	36	284	13	0	236	249	69	98	0	167	0	0	0	0	700
07:00 AM	0	123	24	147	8	0	110	118	41	53	0	94	0	0	0	0	359
07:15 AM	0	158	27	185	6	0	110	116	46	59	0	105	0	0	0	0	406
07:30 AM	0	180	37	217	14	0	119	133	51	67	0	118	0	0	0	0	468
07:45 AM	0	205	34	239	15	0	160	175	38	60	0	98	0	0	0	0	512
Total	0	666	122	788	43	0	499	542	176	239	0	415	0	0	0	0	1745
08:00 AM	0	165	39	204	11	0	136	147	51	60	0	111	0	0	0	0	462
08:15 AM	0	171	22	193	14	0	146	160	32	67	0	99	0	0	0	0	452
08:30 AM	0	136	22	158	14	0	108	122	27	71	0	98	0	0	0	0	378
08:45 AM	0	125	24	149	14	0	112	126	26	58	0	84	0	0	0	0	359
Total	0	597	107	704	53	0	502	555	136	256	0	392	0	0	0	0	1651
Grand Total	0	1511	265	1776	109	0	1237	1346	381	593	0	974	0	0	0	0	4096
Apprch %	0	85.1	14.9		8.1	0	91.9		39.1	60.9	0		0	0	0		
Total %	0	36.9	6.5	43.4	2.7	0	30.2	32.9	9.3	14.5	0	23.8	0	0	0	0	

	Market Street Southbound				SR-60 Westbound Off Ramp Westbound				Market Street Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	180	37	217	14	0	119	133	**51**	**67**	0	**118**	0	0	0	0	468
07:45 AM	0	**205**	34	**239**	**15**	0	**160**	**175**	38	60	0	98	0	0	0	0	**512**
08:00 AM	0	165	**39**	204	11	0	136	147	51	60	0	111	0	0	0	0	462
08:15 AM	0	171	22	193	14	0	146	160	32	67	0	99	0	0	0	0	452
Total Volume	0	721	132	853	54	0	561	615	172	254	0	426	0	0	0	0	1894
% App. Total	0	84.5	15.5		8.8	0	91.2		40.4	59.6	0		0	0	0		
PHF	.000	.879	.846	.892	.900	.000	.877	.879	.843	.948	.000	.903	.000	.000	.000	.000	.925

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City of Riverside
N/S: Market Street
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 30_RIV_Mark_60W AM
Site Code : 05122894
Start Date : 10/4/2022
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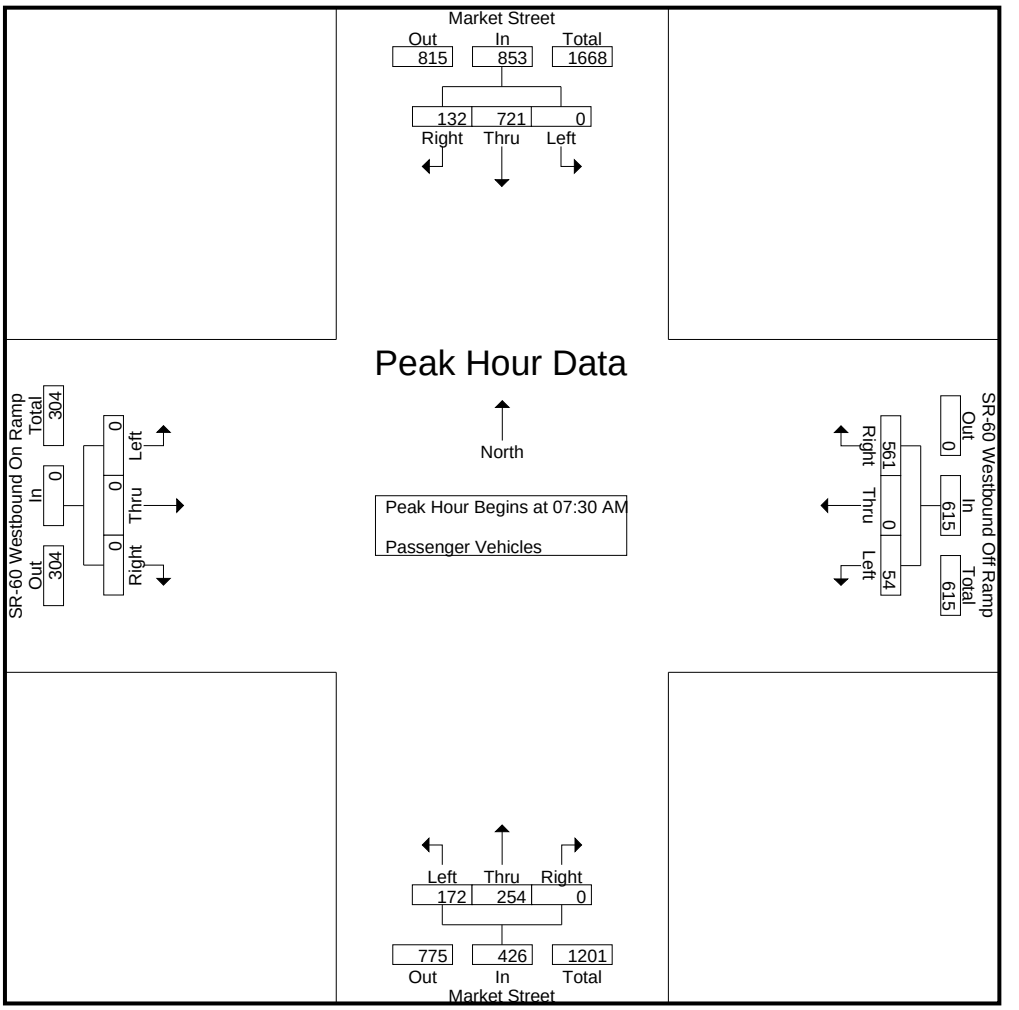

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	180	37	217	14	0	119	133	**51**	**67**	0	**118**	0	0	0	0
+15 mins.	0	**205**	34	**239**	**15**	0	**160**	**175**	38	60	0	98	0	0	0	0
+30 mins.	0	165	**39**	204	11	0	136	147	51	60	0	111	0	0	0	0
+45 mins.	0	171	22	193	14	0	146	160	32	67	0	99	0	0	0	0
Total Volume	0	721	132	853	54	0	561	615	172	254	0	426	0	0	0	0
% App. Total	0	84.5	15.5		8.8	0	91.2		40.4	59.6	0		0	0	0	
PHF	.000	.879	.846	.892	.900	.000	.877	.879	.843	.948	.000	.903	.000	.000	.000	.000

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City of Riverside
N/S: Market Street
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 30_RIV_Mark_60W AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Market Street Southbound				SR-60 Westbound Off Ramp Westbound				Market Street Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	11	1	12	0	0	2	2	2	1	0	3	0	0	0	0	17
06:45 AM	0	6	0	6	0	0	3	3	2	0	0	2	0	0	0	0	11
Total	0	17	1	18	0	0	5	5	4	1	0	5	0	0	0	0	28
07:00 AM	0	12	1	13	0	0	3	3	1	5	0	6	0	0	0	0	22
07:15 AM	0	7	3	10	0	0	2	2	2	2	0	4	0	0	0	0	16
07:30 AM	0	9	0	9	0	0	2	2	1	0	0	1	0	0	0	0	12
07:45 AM	0	5	0	5	1	0	6	7	2	1	0	3	0	0	0	0	15
Total	0	33	4	37	1	0	13	14	6	8	0	14	0	0	0	0	65
08:00 AM	0	9	0	9	0	0	6	6	2	7	0	9	0	0	0	0	24
08:15 AM	0	10	2	12	1	0	6	7	1	5	0	6	0	0	0	0	25
08:30 AM	0	17	1	18	0	0	4	4	1	1	0	2	0	0	0	0	24
08:45 AM	0	12	2	14	0	0	6	6	0	2	0	2	0	0	0	0	22
Total	0	48	5	53	1	0	22	23	4	15	0	19	0	0	0	0	95
Grand Total	0	98	10	108	2	0	40	42	14	24	0	38	0	0	0	0	188
Apprch %	0	90.7	9.3		4.8	0	95.2		36.8	63.2	0		0	0	0		
Total %	0	52.1	5.3	57.4	1.1	0	21.3	22.3	7.4	12.8	0	20.2	0	0	0	0	

	Market Street Southbound				SR-60 Westbound Off Ramp Westbound				Market Street Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	9	0	9	0	0	2	2	1	0	0	1	0	0	0	0	12
07:45 AM	0	5	0	5	**1**	0	**6**	**7**	**2**	1	0	3	0	0	0	0	15
08:00 AM	0	9	0	9	0	0	6	6	2	**7**	0	**9**	0	0	0	0	24
08:15 AM	0	**10**	**2**	**12**	1	0	6	7	1	5	0	6	0	0	0	0	**25**
Total Volume	0	33	2	35	2	0	20	22	6	13	0	19	0	0	0	0	76
% App. Total	0	94.3	5.7		9.1	0	90.9		31.6	68.4	0		0	0	0		
PHF	.000	.825	.250	.729	.500	.000	.833	.786	.750	.464	.000	.528	.000	.000	.000	.000	.760

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City of Riverside
N/S: Market Street
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 30_RIV_Mark_60W AM
Site Code : 05122894
Start Date : 10/4/2022
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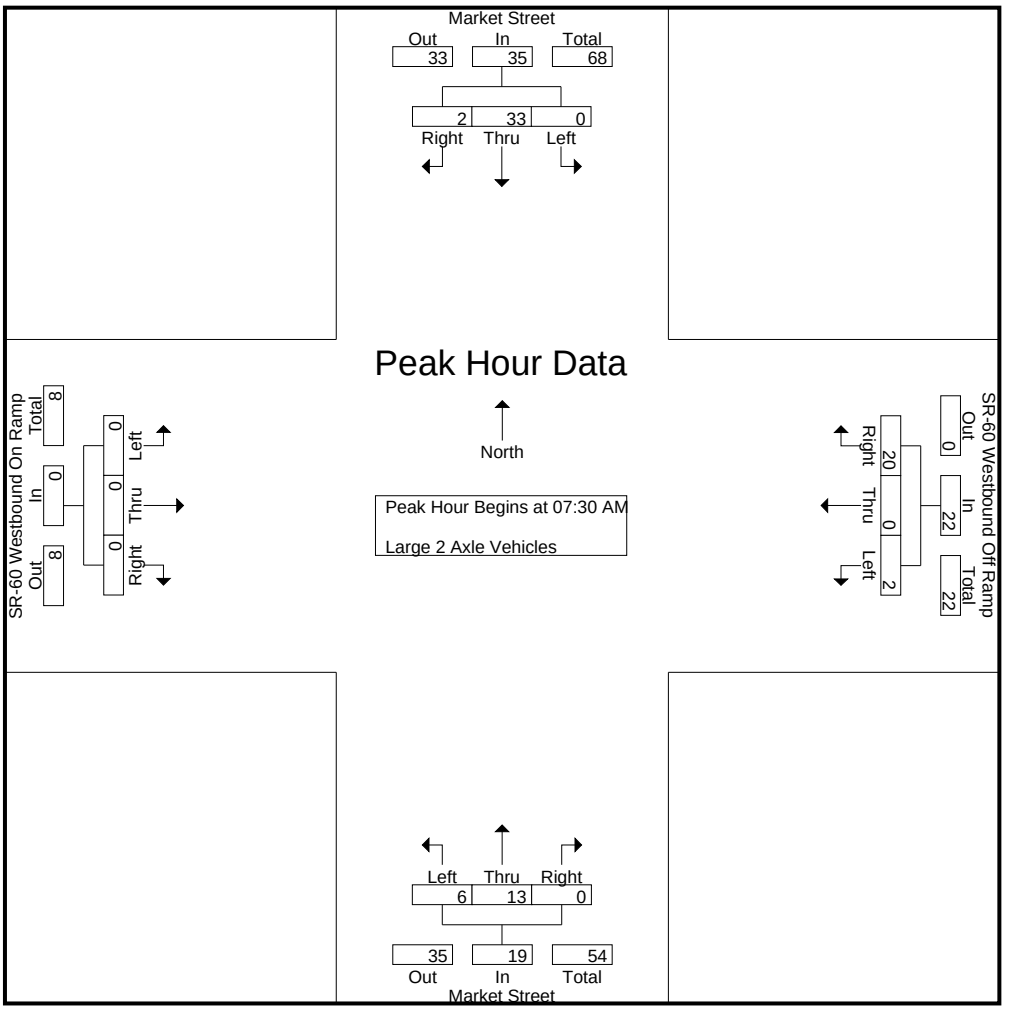

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	9	0	9	0	0	2	2	1	0	0	1	0	0	0	0
+15 mins.	0	5	0	5	**1**	0	**6**	**7**	**2**	1	0	3	0	0	0	0
+30 mins.	0	9	0	9	0	0	6	6	2	**7**	0	**9**	0	0	0	0
+45 mins.	0	**10**	**2**	**12**	1	0	6	7	1	5	0	6	0	0	0	0
Total Volume	0	33	2	35	2	0	20	22	6	13	0	19	0	0	0	0
% App. Total	0	94.3	5.7		9.1	0	90.9		31.6	68.4	0		0	0	0	
PHF	.000	.825	.250	.729	.500	.000	.833	.786	.750	.464	.000	.528	.000	.000	.000	.000

Counts Unlimited, Inc.
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City of Riverside
N/S: Market Street
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 30_RIV_Mark_60W AM
Site Code : 05122894
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Groups Printed- 3 Axle Vehicles

	Market Street Southbound				SR-60 Westbound Off Ramp Westbound				Market Street Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	13	1	14	0	0	5	5	0	2	0	2	0	0	0	0	21
06:45 AM	0	3	1	4	1	0	5	6	0	1	0	1	0	0	0	0	11
Total	0	16	2	18	1	0	10	11	0	3	0	3	0	0	0	0	32
07:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15 AM	0	1	1	2	0	0	4	4	0	1	0	1	0	0	0	0	7
07:30 AM	0	0	1	1	0	0	5	5	0	3	0	3	0	0	0	0	9
07:45 AM	0	3	0	3	0	0	4	4	0	1	0	1	0	0	0	0	8
Total	0	5	2	7	0	0	13	13	0	5	0	5	0	0	0	0	25
08:00 AM	0	7	0	7	0	0	4	4	0	2	0	2	0	0	0	0	13
08:15 AM	0	4	1	5	0	0	7	7	0	4	0	4	0	0	0	0	16
08:30 AM	0	5	0	5	0	0	8	8	0	1	0	1	0	0	0	0	14
08:45 AM	0	12	1	13	1	0	12	13	0	2	0	2	0	0	0	0	28
Total	0	28	2	30	1	0	31	32	0	9	0	9	0	0	0	0	71
Grand Total	0	49	6	55	2	0	54	56	0	17	0	17	0	0	0	0	128
Apprch %	0	89.1	10.9		3.6	0	96.4		0	100	0		0	0	0		
Total %	0	38.3	4.7	43	1.6	0	42.2	43.8	0	13.3	0	13.3	0	0	0	0	

	Market Street Southbound				SR-60 Westbound Off Ramp Westbound				Market Street Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	**1**	1	0	0	5	5	0	3	0	3	0	0	0	0	9
07:45 AM	0	3	0	3	0	0	4	4	0	1	0	1	0	0	0	0	8
08:00 AM	0	**7**	0	**7**	0	0	4	4	0	2	0	2	0	0	0	0	13
08:15 AM	0	4	1	5	0	0	**7**	**7**	0	**4**	0	**4**	0	0	0	0	**16**
Total Volume	0	14	2	16	0	0	20	20	0	10	0	10	0	0	0	0	46
% App. Total	0	87.5	12.5		0	0	100		0	100	0		0	0	0		
PHF	.000	.500	.500	.571	.000	.000	.714	.714	.000	.625	.000	.625	.000	.000	.000	.000	.719

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City of Riverside
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File Name : 30_RIV_Mark_60W AM
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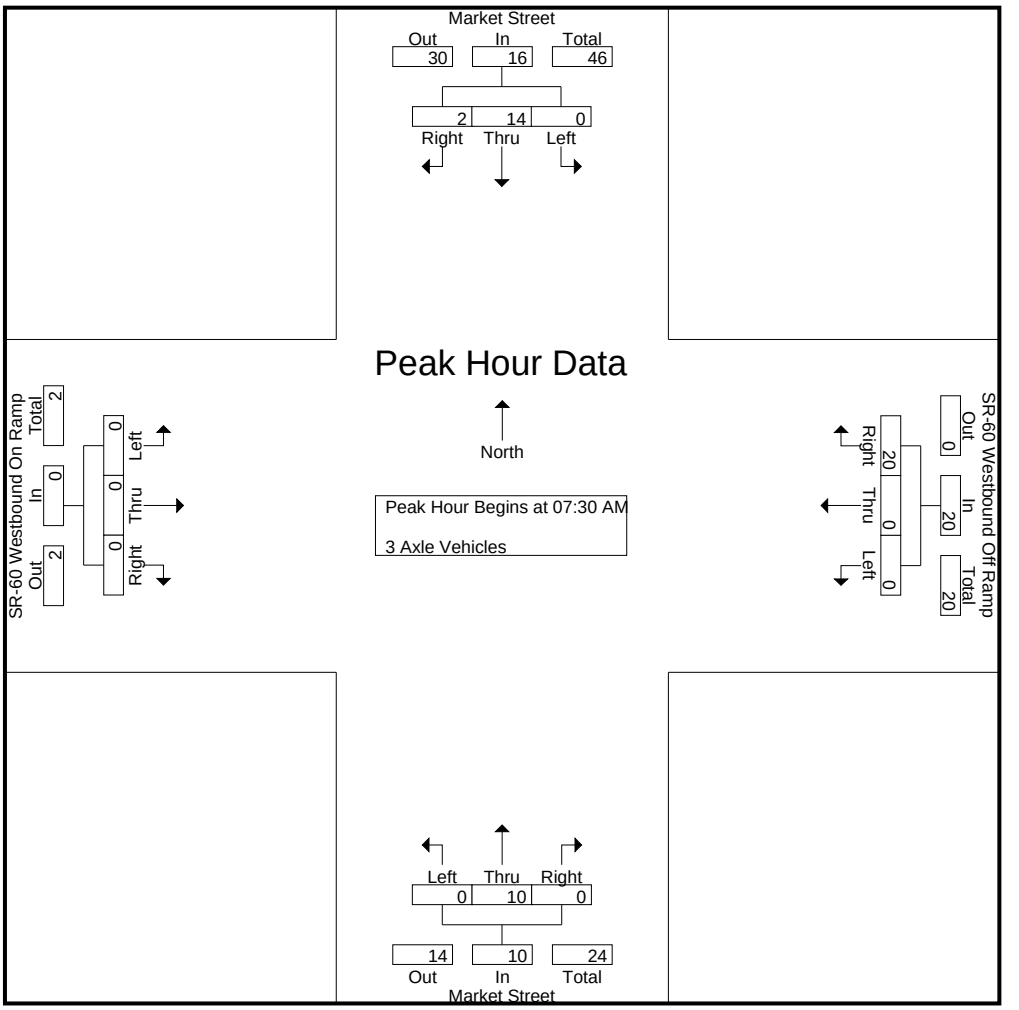

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	**1**	1	0	0	5	5	0	3	0	3	0	0	0	0
+15 mins.	0	3	0	3	0	0	4	4	0	1	0	1	0	0	0	0
+30 mins.	0	**7**	0	**7**	0	0	4	4	0	2	0	2	0	0	0	0
+45 mins.	0	4	1	5	0	0	**7**	**7**	0	**4**	0	**4**	0	0	0	0
Total Volume	0	14	2	16	0	0	20	20	0	10	0	10	0	0	0	0
% App. Total	0	87.5	12.5		0	0	100		0	100	0		0	0	0	
PHF	.000	.500	.500	.571	.000	.000	.714	.714	.000	.625	.000	.625	.000	.000	.000	.000

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Groups Printed- 4+ Axle Trucks

	Market Street Southbound				SR-60 Westbound Off Ramp Westbound				Market Street Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	0	16	2	18	0	0	11	11	0	0	0	0	0	0	0	0	29
06:45 AM	0	18	7	25	0	0	9	9	0	1	0	1	0	0	0	0	35
Total	0	34	9	43	0	0	20	20	0	1	0	1	0	0	0	0	64
07:00 AM	0	10	5	15	0	0	8	8	1	0	0	1	0	0	0	0	24
07:15 AM	0	13	2	15	0	0	12	12	0	1	0	1	0	0	0	0	28
07:30 AM	0	6	2	8	0	0	9	9	0	0	0	0	0	0	0	0	17
07:45 AM	0	8	2	10	0	0	9	9	0	1	0	1	0	0	0	0	20
Total	0	37	11	48	0	0	38	38	1	2	0	3	0	0	0	0	89
08:00 AM	0	9	7	16	0	0	13	13	0	2	0	2	0	0	0	0	31
08:15 AM	0	5	4	9	0	0	11	11	0	2	0	2	0	0	0	0	22
08:30 AM	0	3	5	8	0	0	5	5	1	2	0	3	0	0	0	0	16
08:45 AM	0	13	4	17	0	0	11	11	1	4	0	5	0	0	0	0	33
Total	0	30	20	50	0	0	40	40	2	10	0	12	0	0	0	0	102
Grand Total	0	101	40	141	0	0	98	98	3	13	0	16	0	0	0	0	255
Apprch %	0	71.6	28.4		0	0	100		18.8	81.2	0		0	0	0		
Total %	0	39.6	15.7	55.3	0	0	38.4	38.4	1.2	5.1	0	6.3	0	0	0	0	

	Market Street Southbound				SR-60 Westbound Off Ramp Westbound				Market Street Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	6	2	8	0	0	9	9	0	0	0	0	0	0	0	0	17
07:45 AM	0	8	2	10	0	0	9	9	0	1	0	1	0	0	0	0	20
08:00 AM	0	**9**	**7**	**16**	0	0	**13**	**13**	0	**2**	0	**2**	0	0	0	0	**31**
08:15 AM	0	5	4	9	0	0	11	11	0	2	0	2	0	0	0	0	22
Total Volume	0	28	15	43	0	0	42	42	0	5	0	5	0	0	0	0	90
% App. Total	0	65.1	34.9		0	0	100		0	100	0		0	0	0		
PHF	.000	.778	.536	.672	.000	.000	.808	.808	.000	.625	.000	.625	.000	.000	.000	.000	.726

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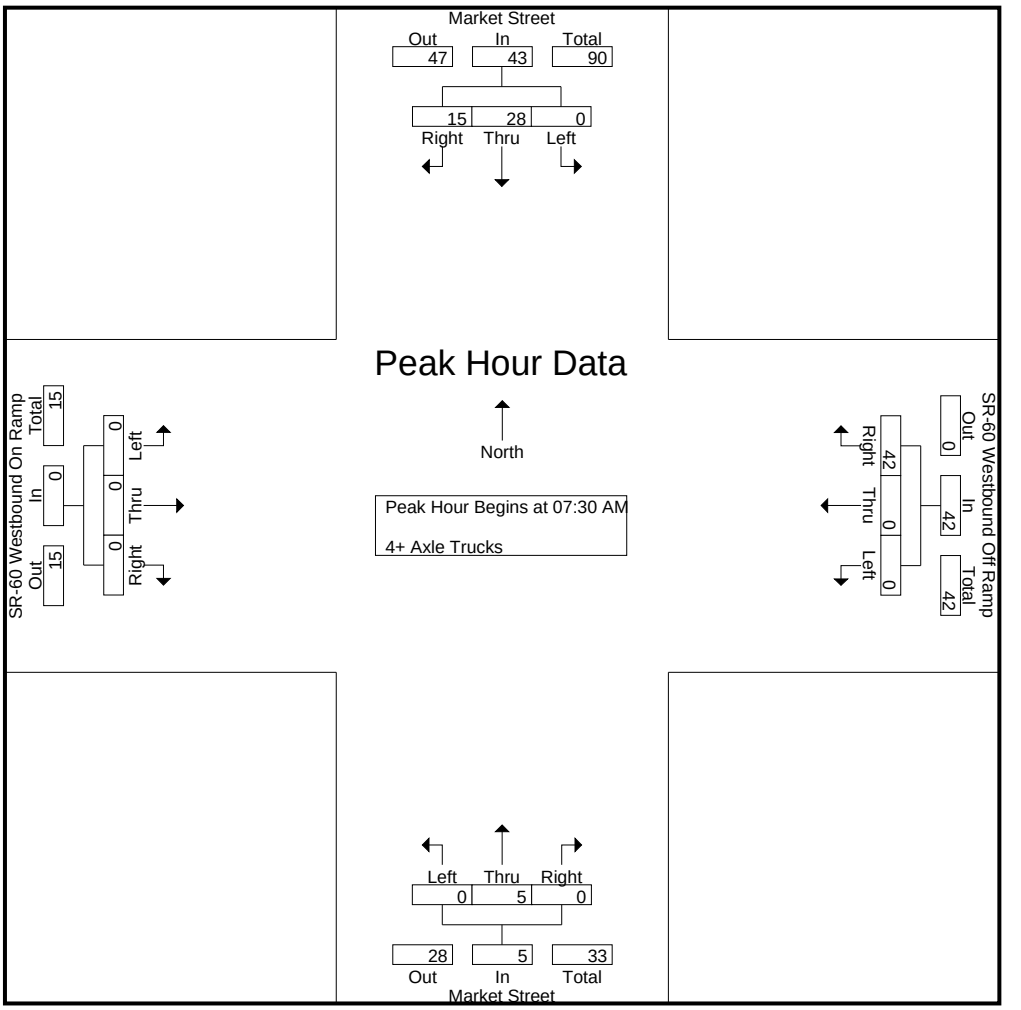

Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	6	2	8	0	0	9	9	0	0	0	0	0	0	0	0
+15 mins.	0	8	2	10	0	0	9	9	0	1	0	1	0	0	0	0
+30 mins.	0	**9**	**7**	**16**	0	0	**13**	**13**	0	**2**	0	**2**	0	0	0	0
+45 mins.	0	5	4	9	0	0	11	11	0	2	0	2	0	0	0	0
Total Volume	0	28	15	43	0	0	42	42	0	5	0	5	0	0	0	0
% App. Total	0	65.1	34.9		0	0	100		0	100	0		0	0	0	
PHF	.000	.778	.536	.672	.000	.000	.808	.808	.000	.625	.000	.625	.000	.000	.000	.000

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City of Riverside
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Market Street Southbound				SR-60 Westbound Off Ramp Westbound				Market Street Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	246	36	282	13	1	135	149	62	70	0	132	0	0	0	0	563
03:45 PM	0	233	42	275	18	0	130	148	59	88	0	147	0	0	0	0	570
Total	0	479	78	557	31	1	265	297	121	158	0	279	0	0	0	0	1133
04:00 PM	0	227	44	271	9	0	102	111	63	83	0	146	0	0	0	0	528
04:15 PM	0	232	25	257	16	1	124	141	67	68	0	135	0	0	0	0	533
04:30 PM	0	254	45	299	18	0	114	132	58	61	0	119	0	0	0	0	550
04:45 PM	0	226	33	259	16	2	134	152	90	88	0	178	0	0	0	0	589
Total	0	939	147	1086	59	3	474	536	278	300	0	578	0	0	0	0	2200
05:00 PM	0	250	44	294	19	0	126	145	85	67	0	152	0	0	0	0	591
05:15 PM	0	219	36	255	22	0	131	153	109	81	0	190	0	0	0	0	598
05:30 PM	0	214	37	251	24	1	113	138	103	69	0	172	0	0	0	0	561
05:45 PM	0	198	19	217	30	0	96	126	65	65	0	130	0	0	0	0	473
Total	0	881	136	1017	95	1	466	562	362	282	0	644	0	0	0	0	2223
Grand Total	0	2299	361	2660	185	5	1205	1395	761	740	0	1501	0	0	0	0	5556
Apprch %	0	86.4	13.6		13.3	0.4	86.4		50.7	49.3	0		0	0	0		
Total %	0	41.4	6.5	47.9	3.3	0.1	21.7	25.1	13.7	13.3	0	27	0	0	0	0	
Passenger Vehicles	0	2178	338	2516	181	3	990	1174	742	702	0	1444	0	0	0	0	5134
% Passenger Vehicles	0	94.7	93.6	94.6	97.8	60	82.2	84.2	97.5	94.9	0	96.2	0	0	0	0	92.4
Large 2 Axle Vehicles	0	40	3	43	4	1	70	75	11	17	0	28	0	0	0	0	146
% Large 2 Axle Vehicles	0	1.7	0.8	1.6	2.2	20	5.8	5.4	1.4	2.3	0	1.9	0	0	0	0	2.6
3 Axle Vehicles	0	31	5	36	0	0	47	47	1	17	0	18	0	0	0	0	101
% 3 Axle Vehicles	0	1.3	1.4	1.4	0	0	3.9	3.4	0.1	2.3	0	1.2	0	0	0	0	1.8
4+ Axle Trucks	0	50	15	65	0	1	98	99	7	4	0	11	0	0	0	0	175
% 4+ Axle Trucks	0	2.2	4.2	2.4	0	20	8.1	7.1	0.9	0.5	0	0.7	0	0	0	0	3.1

	Market Street Southbound				SR-60 Westbound Off Ramp Westbound				Market Street Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	226	33	259	16	**2**	**134**	152	90	**88**	0	178	0	0	0	0	589
05:00 PM	0	**250**	**44**	**294**	19	0	126	145	85	67	0	152	0	0	0	0	591
05:15 PM	0	219	36	255	22	0	131	**153**	**109**	81	0	**190**	0	0	0	0	**598**
05:30 PM	0	214	37	251	**24**	1	113	138	103	69	0	172	0	0	0	0	561
Total Volume	0	909	150	1059	81	3	504	588	387	305	0	692	0	0	0	0	2339
% App. Total	0	85.8	14.2		13.8	0.5	85.7		55.9	44.1	0		0	0	0		
PHF	.000	.909	.852	.901	.844	.375	.940	.961	.888	.866	.000	.911	.000	.000	.000	.000	.978

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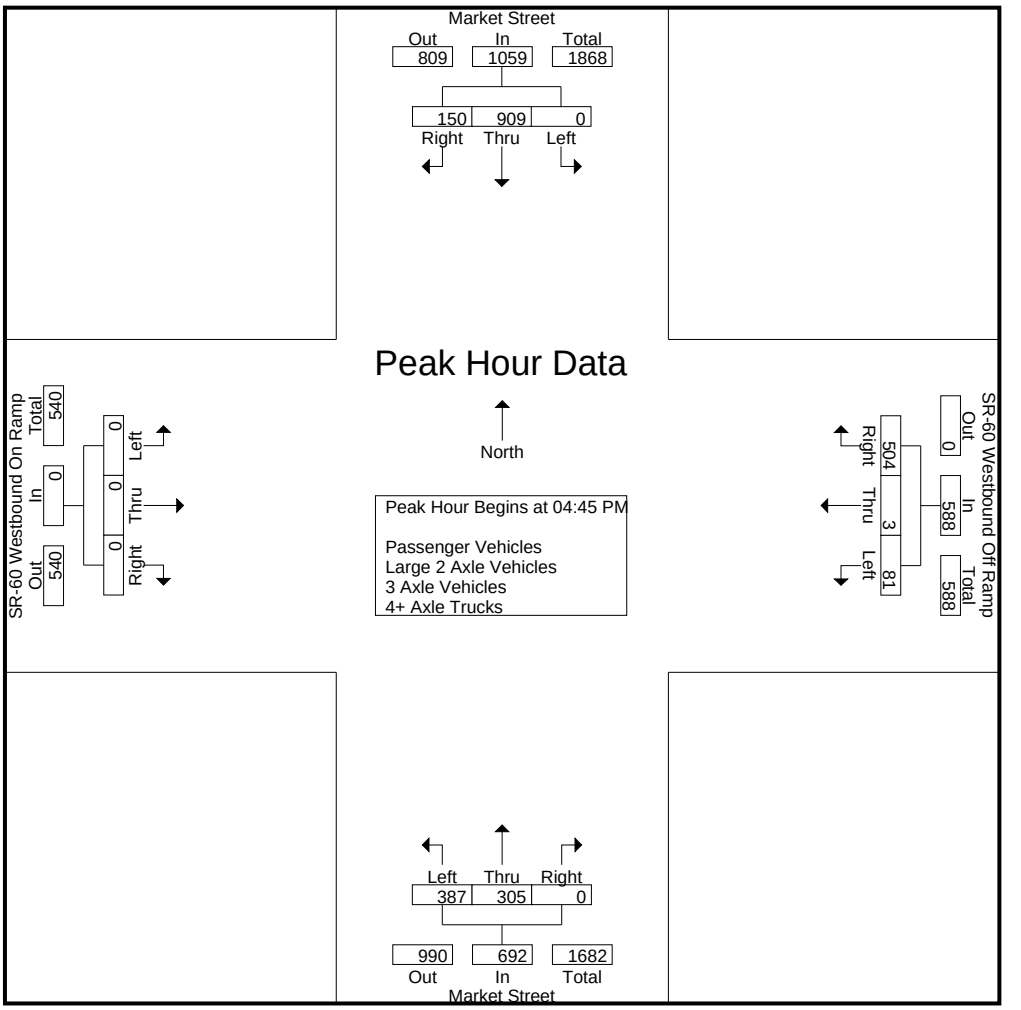

Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:45 PM				04:45 PM				03:30 PM			
+0 mins.	0	232	25	257	16	**2**	**134**	152	90	**88**	0	178	0	0	0	0
+15 mins.	0	**254**	**45**	**299**	19	0	126	145	85	67	0	152	0	0	0	0
+30 mins.	0	226	33	259	22	0	131	**153**	**109**	81	0	**190**	0	0	0	0
+45 mins.	0	250	44	294	**24**	1	113	138	103	69	0	172	0	0	0	0
Total Volume	0	962	147	1109	81	3	504	588	387	305	0	692	0	0	0	0
% App. Total	0	86.7	13.3		13.8	0.5	85.7		55.9	44.1	0		0	0	0	
PHF	.000	.947	.817	.927	.844	.375	.940	.961	.888	.866	.000	.911	.000	.000	.000	.000

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Groups Printed- Passenger Vehicles

	Market Street Southbound				SR-60 Westbound Off Ramp Westbound				Market Street Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	230	32	262	13	0	96	109	62	64	0	126	0	0	0	0	497
03:45 PM	0	212	38	250	18	0	107	125	56	82	0	138	0	0	0	0	513
Total	0	442	70	512	31	0	203	234	118	146	0	264	0	0	0	0	1010
04:00 PM	0	213	41	254	8	0	81	89	58	73	0	131	0	0	0	0	474
04:15 PM	0	218	24	242	16	1	102	119	65	64	0	129	0	0	0	0	490
04:30 PM	0	241	44	285	17	0	91	108	58	58	0	116	0	0	0	0	509
04:45 PM	0	218	31	249	15	1	119	135	88	83	0	171	0	0	0	0	555
Total	0	890	140	1030	56	2	393	451	269	278	0	547	0	0	0	0	2028
05:00 PM	0	244	42	286	18	0	107	125	83	65	0	148	0	0	0	0	559
05:15 PM	0	209	35	244	22	0	110	132	108	81	0	189	0	0	0	0	565
05:30 PM	0	203	35	238	24	1	97	122	100	68	0	168	0	0	0	0	528
05:45 PM	0	190	16	206	30	0	80	110	64	64	0	128	0	0	0	0	444
Total	0	846	128	974	94	1	394	489	355	278	0	633	0	0	0	0	2096
Grand Total	0	2178	338	2516	181	3	990	1174	742	702	0	1444	0	0	0	0	5134
Apprch %	0	86.6	13.4		15.4	0.3	84.3		51.4	48.6	0		0	0	0		
Total %	0	42.4	6.6	49	3.5	0.1	19.3	22.9	14.5	13.7	0	28.1	0	0	0	0	

	Market Street Southbound				SR-60 Westbound Off Ramp Westbound				Market Street Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	218	31	249	15	**1**	**119**	**135**	88	**83**	0	171	0	0	0	0	555
05:00 PM	0	**244**	**42**	**286**	18	0	107	125	83	65	0	148	0	0	0	0	559
05:15 PM	0	209	35	244	22	0	110	132	**108**	81	0	**189**	0	0	0	0	**565**
05:30 PM	0	203	35	238	**24**	1	97	122	100	68	0	168	0	0	0	0	528
Total Volume	0	874	143	1017	79	2	433	514	379	297	0	676	0	0	0	0	2207
% App. Total	0	85.9	14.1		15.4	0.4	84.2		56.1	43.9	0		0	0	0		
PHF	.000	.895	.851	.889	.823	.500	.910	.952	.877	.895	.000	.894	.000	.000	.000	.000	.977

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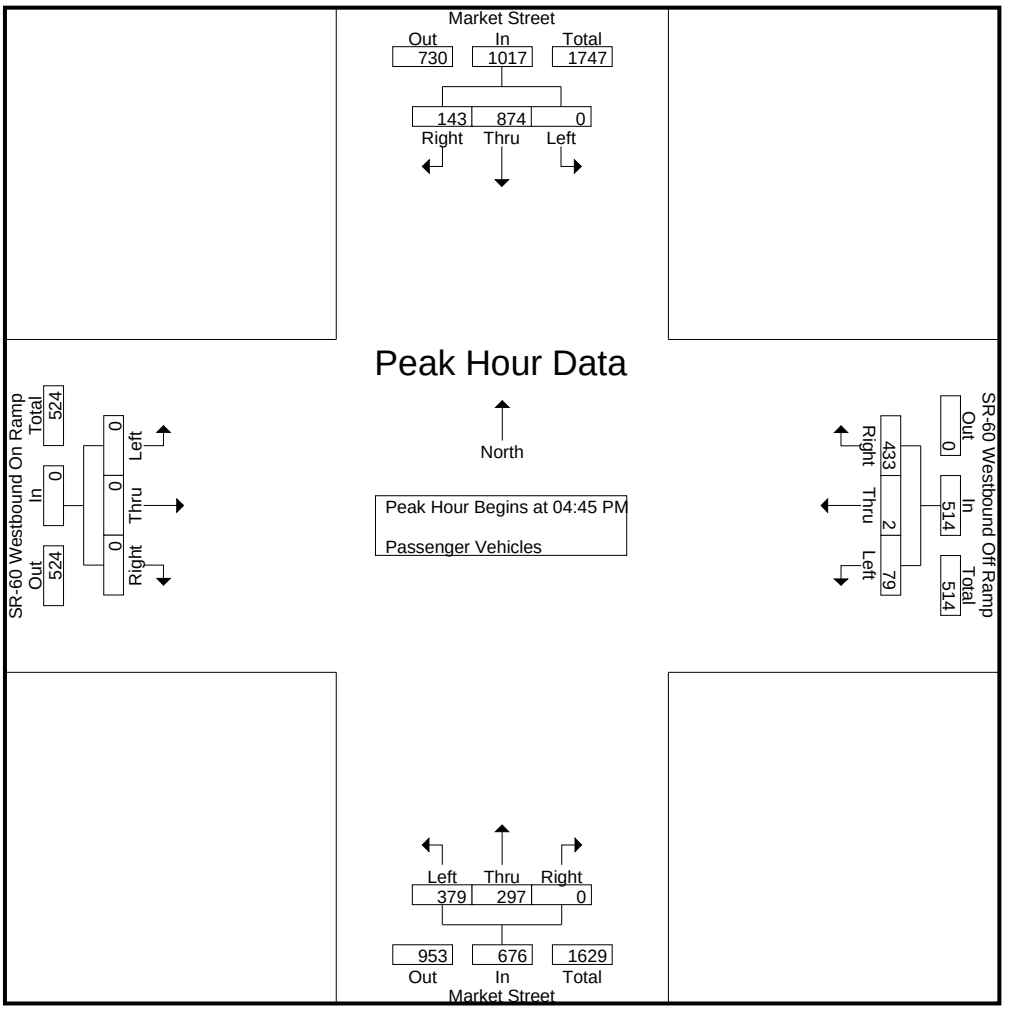

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	218	31	249	15	**1**	**119**	**135**	88	**83**	0	171	0	0	0	0
+15 mins.	0	**244**	**42**	**286**	18	0	107	125	83	65	0	148	0	0	0	0
+30 mins.	0	209	35	244	22	0	110	132	**108**	81	0	**189**	0	0	0	0
+45 mins.	0	203	35	238	**24**	1	97	122	100	68	0	168	0	0	0	0
Total Volume	0	874	143	1017	79	2	433	514	379	297	0	676	0	0	0	0
% App. Total	0	85.9	14.1		15.4	0.4	84.2		56.1	43.9	0		0	0	0	
PHF	.000	.895	.851	.889	.823	.500	.910	.952	.877	.895	.000	.894	.000	.000	.000	.000

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Riverside
N/S: Market Street
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 30_RIV_Mark_60W PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Market Street Southbound				SR-60 Westbound Off Ramp Westbound				Market Street Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	7	1	8	0	1	18	19	0	4	0	4	0	0	0	0	31
03:45 PM	0	6	1	7	0	0	7	7	3	4	0	7	0	0	0	0	21
Total	0	13	2	15	0	1	25	26	3	8	0	11	0	0	0	0	52
04:00 PM	0	4	1	5	1	0	6	7	3	1	0	4	0	0	0	0	16
04:15 PM	0	5	0	5	0	0	5	5	1	1	0	2	0	0	0	0	12
04:30 PM	0	3	0	3	1	0	6	7	0	1	0	1	0	0	0	0	11
04:45 PM	0	3	0	3	1	0	6	7	2	4	0	6	0	0	0	0	16
Total	0	15	1	16	3	0	23	26	6	7	0	13	0	0	0	0	55
05:00 PM	0	5	0	5	1	0	9	10	1	2	0	3	0	0	0	0	18
05:15 PM	0	2	0	2	0	0	7	7	0	0	0	0	0	0	0	0	9
05:30 PM	0	3	0	3	0	0	3	3	0	0	0	0	0	0	0	0	6
05:45 PM	0	2	0	2	0	0	3	3	1	0	0	1	0	0	0	0	6
Total	0	12	0	12	1	0	22	23	2	2	0	4	0	0	0	0	39
Grand Total	0	40	3	43	4	1	70	75	11	17	0	28	0	0	0	0	146
Apprch %	0	93	7		5.3	1.3	93.3		39.3	60.7	0		0	0	0		
Total %	0	27.4	2.1	29.5	2.7	0.7	47.9	51.4	7.5	11.6	0	19.2	0	0	0	0	

	Market Street Southbound				SR-60 Westbound Off Ramp Westbound				Market Street Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	3	0	3	**1**	0	6	7	**2**	**4**	0	**6**	0	0	0	0	16
05:00 PM	0	**5**	0	**5**	1	0	**9**	**10**	1	2	0	3	0	0	0	0	**18**
05:15 PM	0	2	0	2	0	0	7	7	0	0	0	0	0	0	0	0	9
05:30 PM	0	3	0	3	0	0	3	3	0	0	0	0	0	0	0	0	6
Total Volume	0	13	0	13	2	0	25	27	3	6	0	9	0	0	0	0	49
% App. Total	0	100	0		7.4	0	92.6		33.3	66.7	0		0	0	0		
PHF	.000	.650	.000	.650	.500	.000	.694	.675	.375	.375	.000	.375	.000	.000	.000	.000	.681

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City of Riverside
N/S: Market Street
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 30_RIV_Mark_60W PM
Site Code : 05122894
Start Date : 10/4/2022
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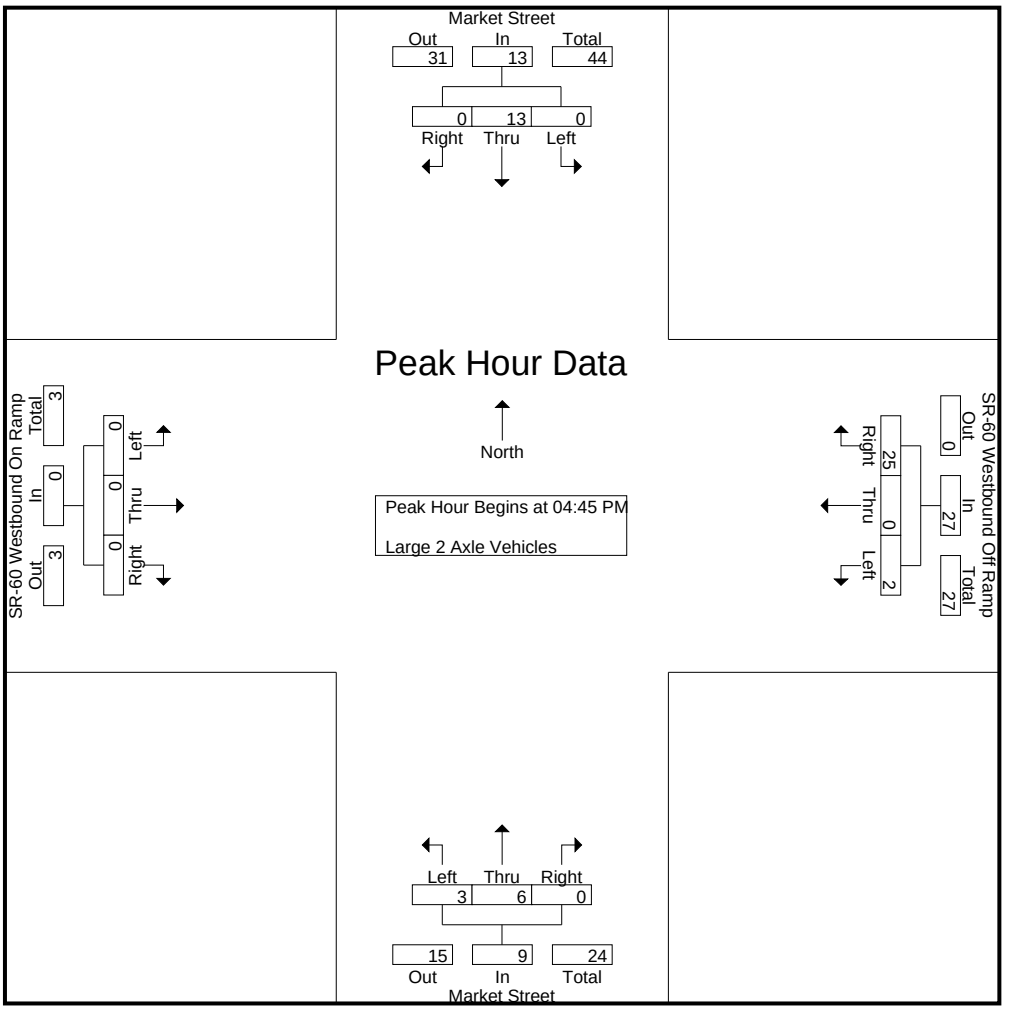

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	3	0	3	**1**	0	6	7	**2**	**4**	0	**6**	0	0	0	0
+15 mins.	0	**5**	0	**5**	1	0	**9**	**10**	1	2	0	3	0	0	0	0
+30 mins.	0	2	0	2	0	0	7	7	0	0	0	0	0	0	0	0
+45 mins.	0	3	0	3	0	0	3	3	0	0	0	0	0	0	0	0
Total Volume	0	13	0	13	2	0	25	27	3	6	0	9	0	0	0	0
% App. Total	0	100	0		7.4	0	92.6		33.3	66.7	0		0	0	0	
PHF	.000	.650	.000	.650	.500	.000	.694	.675	.375	.375	.000	.375	.000	.000	.000	.000

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City of Riverside
N/S: Market Street
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 30_RIV_Mark_60W PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Market Street Southbound				SR-60 Westbound Off Ramp Westbound				Market Street Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	3	3	6	0	0	8	8	0	1	0	1	0	0	0	0	15
03:45 PM	0	9	0	9	0	0	3	3	0	2	0	2	0	0	0	0	14
Total	0	12	3	15	0	0	11	11	0	3	0	3	0	0	0	0	29
04:00 PM	0	2	0	2	0	0	4	4	1	8	0	9	0	0	0	0	15
04:15 PM	0	3	0	3	0	0	7	7	0	2	0	2	0	0	0	0	12
04:30 PM	0	8	0	8	0	0	6	6	0	2	0	2	0	0	0	0	16
04:45 PM	0	1	0	1	0	0	4	4	0	1	0	1	0	0	0	0	6
Total	0	14	0	14	0	0	21	21	1	13	0	14	0	0	0	0	49
05:00 PM	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	5
05:15 PM	0	2	0	2	0	0	4	4	0	0	0	0	0	0	0	0	6
05:30 PM	0	2	1	3	0	0	1	1	0	0	0	0	0	0	0	0	4
05:45 PM	0	1	1	2	0	0	5	5	0	1	0	1	0	0	0	0	8
Total	0	5	2	7	0	0	15	15	0	1	0	1	0	0	0	0	23
Grand Total	0	31	5	36	0	0	47	47	1	17	0	18	0	0	0	0	101
Apprch %	0	86.1	13.9		0	0	100		5.6	94.4	0		0	0	0		
Total %	0	30.7	5	35.6	0	0	46.5	46.5	1	16.8	0	17.8	0	0	0	0	

	Market Street Southbound				SR-60 Westbound Off Ramp Westbound				Market Street Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	1	0	1	0	0	4	4	0	**1**	0	**1**	0	0	0	0	**6**
05:00 PM	0	0	0	0	0	0	**5**	**5**	0	0	0	0	0	0	0	0	5
05:15 PM	0	**2**	0	2	0	0	4	4	0	0	0	0	0	0	0	0	6
05:30 PM	0	2	**1**	**3**	0	0	1	1	0	0	0	0	0	0	0	0	4
Total Volume	0	5	1	6	0	0	14	14	0	1	0	1	0	0	0	0	21
% App. Total	0	83.3	16.7		0	0	100		0	100	0		0	0	0		
PHF	.000	.625	.250	.500	.000	.000	.700	.700	.000	.250	.000	.250	.000	.000	.000	.000	.875

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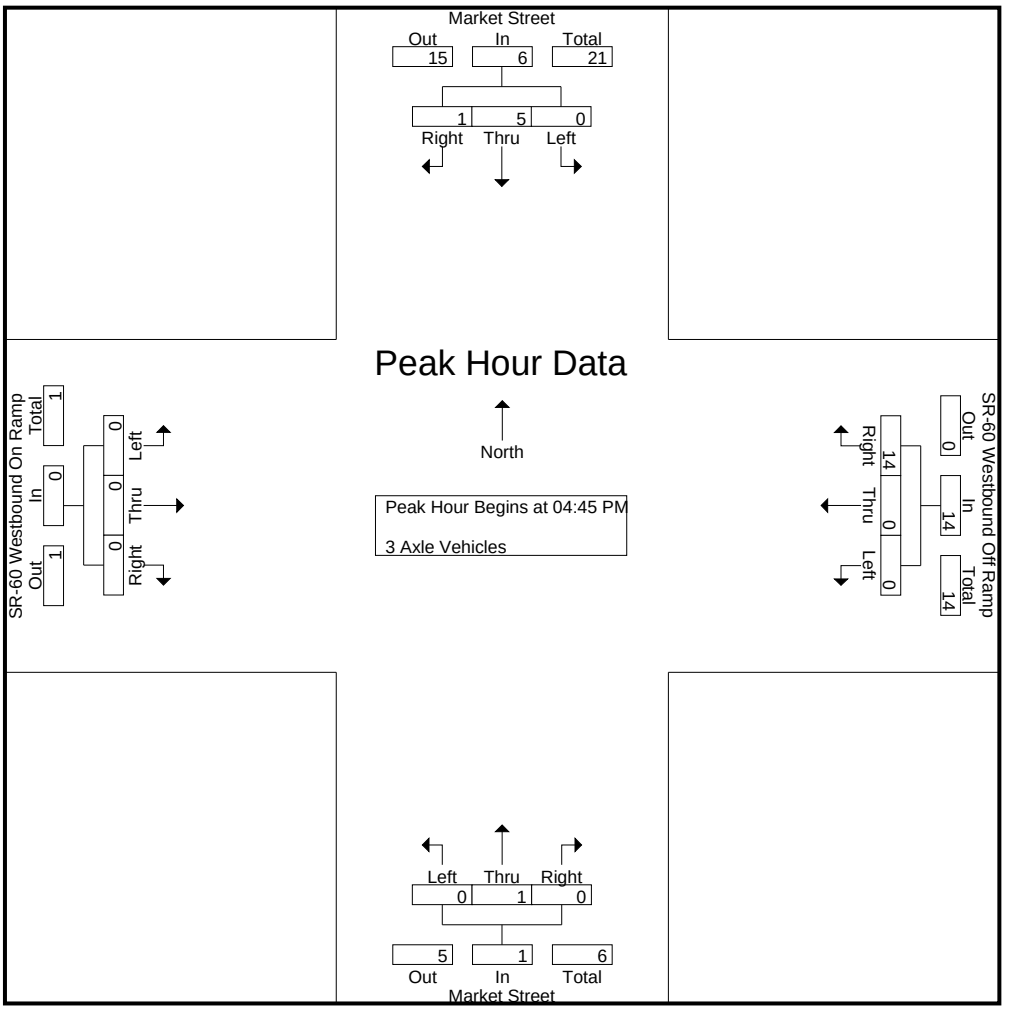
City of Riverside
N/S: Market Street
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 30_RIV_Mark_60W PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	1	0	1	0	0	4	4	0	**1**	0	**1**	0	0	0	0
+15 mins.	0	0	0	0	0	0	**5**	**5**	0	0	0	0	0	0	0	0
+30 mins.	0	**2**	0	2	0	0	4	4	0	0	0	0	0	0	0	0
+45 mins.	0	2	**1**	**3**	0	0	1	1	0	0	0	0	0	0	0	0
Total Volume	0	5	1	6	0	0	14	14	0	1	0	1	0	0	0	0
% App. Total	0	83.3	16.7		0	0	100		0	100	0		0	0	0	
PHF	.000	.625	.250	.500	.000	.000	.700	.700	.000	.250	.000	.250	.000	.000	.000	.000

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City of Riverside
N/S: Market Street
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 30_RIV_Mark_60W PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Market Street Southbound				SR-60 Westbound Off Ramp Westbound				Market Street Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:30 PM	0	6	0	6	0	0	13	13	0	1	0	1	0	0	0	0	20
03:45 PM	0	6	3	9	0	0	13	13	0	0	0	0	0	0	0	0	22
Total	0	12	3	15	0	0	26	26	0	1	0	1	0	0	0	0	42
04:00 PM	0	8	2	10	0	0	11	11	1	1	0	2	0	0	0	0	23
04:15 PM	0	6	1	7	0	0	10	10	1	1	0	2	0	0	0	0	19
04:30 PM	0	2	1	3	0	0	11	11	0	0	0	0	0	0	0	0	14
04:45 PM	0	4	2	6	0	1	5	6	0	0	0	0	0	0	0	0	12
Total	0	20	6	26	0	1	37	38	2	2	0	4	0	0	0	0	68
05:00 PM	0	1	2	3	0	0	5	5	1	0	0	1	0	0	0	0	9
05:15 PM	0	6	1	7	0	0	10	10	1	0	0	1	0	0	0	0	18
05:30 PM	0	6	1	7	0	0	12	12	3	1	0	4	0	0	0	0	23
05:45 PM	0	5	2	7	0	0	8	8	0	0	0	0	0	0	0	0	15
Total	0	18	6	24	0	0	35	35	5	1	0	6	0	0	0	0	65
Grand Total	0	50	15	65	0	1	98	99	7	4	0	11	0	0	0	0	175
Apprch %	0	76.9	23.1		0	1	99		63.6	36.4	0		0	0	0		
Total %	0	28.6	8.6	37.1	0	0.6	56	56.6	4	2.3	0	6.3	0	0	0	0	

	Market Street Southbound				SR-60 Westbound Off Ramp Westbound				Market Street Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	4	**2**	6	0	**1**	5	6	0	0	0	0	0	0	0	0	12
05:00 PM	0	1	2	3	0	0	5	5	1	0	0	1	0	0	0	0	9
05:15 PM	0	**6**	1	**7**	0	0	10	10	1	0	0	1	0	0	0	0	18
05:30 PM	0	6	1	7	0	0	**12**	**12**	**3**	**1**	0	**4**	0	0	0	0	**23**
Total Volume	0	17	6	23	0	1	32	33	5	1	0	6	0	0	0	0	62
% App. Total	0	73.9	26.1		0	3	97		83.3	16.7	0		0	0	0		
PHF	.000	.708	.750	.821	.000	.250	.667	.688	.417	.250	.000	.375	.000	.000	.000	.000	.674

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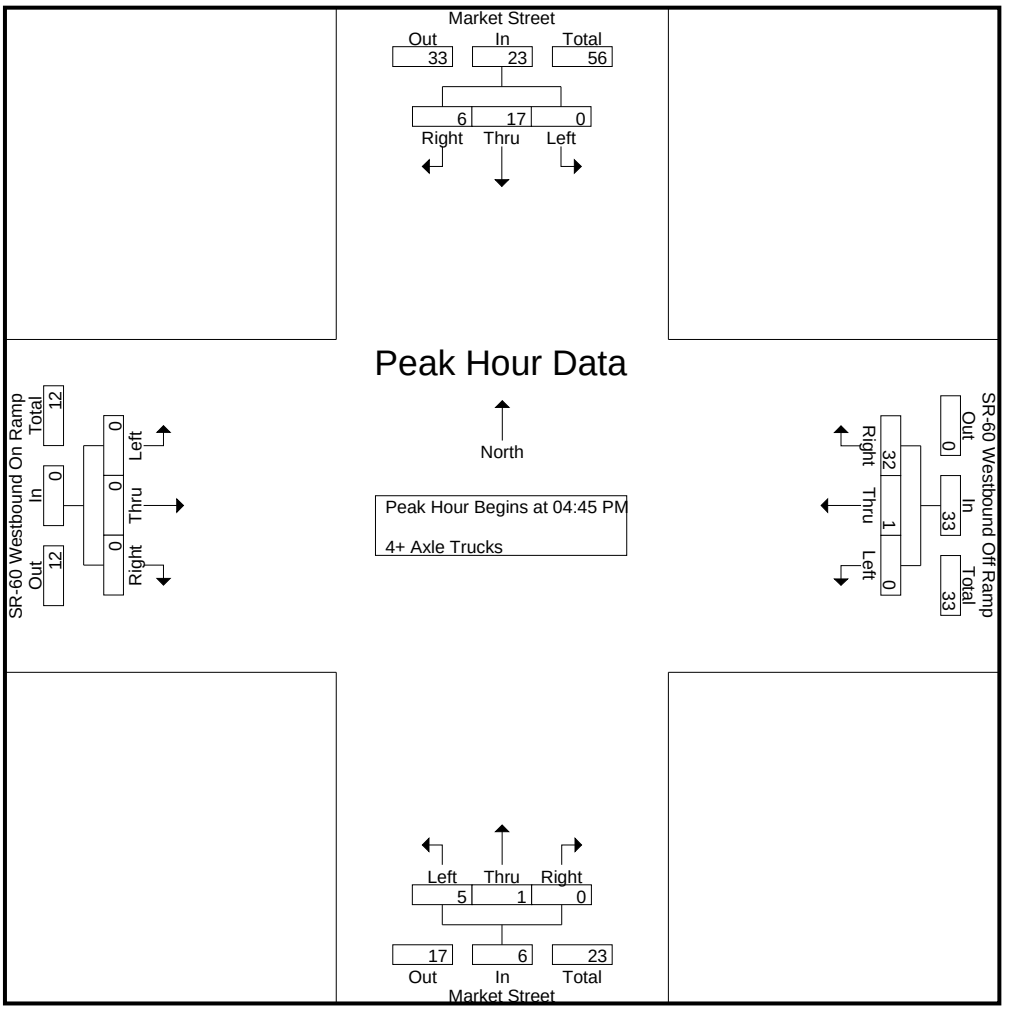
City of Riverside
N/S: Market Street
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 30_RIV_Mark_60W PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	4	**2**	6	0	**1**	5	6	0	0	0	0	0	0	0	0
+15 mins.	0	1	2	3	0	0	5	5	1	0	0	1	0	0	0	0
+30 mins.	0	**6**	1	**7**	0	0	10	10	1	0	0	1	0	0	0	0
+45 mins.	0	6	1	7	0	0	**12**	**12**	**3**	**1**	0	**4**	0	0	0	0
Total Volume	0	17	6	23	0	1	32	33	5	1	0	6	0	0	0	0
% App. Total	0	73.9	26.1		0	3	97		83.3	16.7	0		0	0	0	
PHF	.000	.708	.750	.821	.000	.250	.667	.688	.417	.250	.000	.375	.000	.000	.000	.000

Location: Riverside
N/S: Market Street
E/W: SR-60 WB Ramps

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Market Street	East Leg SR-60 WB Ramps	South Leg Market Street	West Leg SR-60 WB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	3	0	0	3
8:00 AM	0	2	0	0	2
8:15 AM	0	1	0	0	1
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	1	1
TOTAL VOLUMES:	0	6	0	1	7

	North Leg Market Street	East Leg SR-60 WB Ramps	South Leg Market Street	West Leg SR-60 WB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

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Location: Riverside
N/S: Market Street
E/W: SR-60 WB Ramps

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Market Street			Westbound SR-60 WB Ramps			Northbound Market Street			Eastbound SR-60 WB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	1	0	0	0	0	0	2	0	0	0	0	3
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	0	0	0	4	0	0	0	0	6

	Southbound Market Street			Westbound SR-60 WB Ramps			Northbound Market Street			Eastbound SR-60 WB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
TOTAL VOLUMES:	0	4	0	0	0	0	0	1	0	0	0	0	5

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City of Riverside
N/S: Market Street
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 31_RIV_Mark_60E AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Market Street Southbound					SR-60 Eastbound On Ramp Westbound					Market Street Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	104	75	0	0	179	0	0	0	0	0	0	63	24	0	87	7	0	62	47	69	47	335	382
06:45 AM	92	65	0	0	157	0	0	0	0	0	0	83	31	0	114	25	1	109	73	135	73	406	479
Total	196	140	0	0	336	0	0	0	0	0	0	146	55	0	201	32	1	171	120	204	120	741	861
07:00 AM	98	54	0	0	152	0	0	0	0	0	0	86	15	0	101	20	0	110	66	130	66	383	449
07:15 AM	88	92	0	0	180	0	0	0	0	0	0	86	6	0	92	22	1	110	61	133	61	405	466
07:30 AM	107	102	0	0	209	0	0	0	0	0	0	95	16	0	111	26	0	124	81	150	81	470	551
07:45 AM	108	126	0	0	234	0	0	0	0	0	0	87	20	0	107	20	0	114	55	134	55	475	530
Total	401	374	0	0	775	0	0	0	0	0	0	354	57	0	411	88	1	458	263	547	263	1733	1996
08:00 AM	114	95	0	0	209	0	0	0	0	0	0	99	14	0	113	29	0	119	65	148	65	470	535
08:15 AM	122	87	0	0	209	0	0	0	0	0	0	76	22	0	98	35	0	109	59	144	59	451	510
08:30 AM	87	83	0	0	170	0	0	0	0	0	0	80	9	0	89	24	0	76	43	100	43	359	402
08:45 AM	96	78	0	0	174	0	0	0	0	0	0	75	13	0	88	23	0	75	35	98	35	360	395
Total	419	343	0	0	762	0	0	0	0	0	0	330	58	0	388	111	0	379	202	490	202	1640	1842
Grand Total	1016	857	0	0	1873	0	0	0	0	0	0	830	170	0	1000	231	2	1008	585	1241	585	4114	4699
Apprch %	54.2	45.8	0			0	0	0			0	83	17			18.6	0.2	81.2					
Total %	24.7	20.8	0		45.5	0	0	0		0	0	20.2	4.1		24.3	5.6	0	24.5		30.2	12.4	87.6	
Passenger Vehicles	794	807	0		1601	0	0	0		0	0	781	159		940	200	1	970		1736	0	0	4277
% Passenger Vehicles	78.1	94.2	0	0	85.5	0	0	0	0	0	0	94.1	93.5	0	94	86.6	50	96.2	96.6	95.1	0	0	91
Large 2 Axle Vehicles	105	37	0		142	0	0	0		0	0	36	10		46	12	1	27		57	0	0	245
% Large 2 Axle Vehicles	10.3	4.3	0	0	7.6	0	0	0	0	0	0	4.3	5.9	0	4.6	5.2	50	2.7	2.9	3.1	0	0	5.2
3 Axle Vehicles	36	11	0		47	0	0	0		0	0	10	0		10	7	0	5		13	0	0	70
% 3 Axle Vehicles	3.5	1.3	0	0	2.5	0	0	0	0	0	0	1.2	0	0	1	3	0	0.5	0.2	0.7	0	0	1.5
4+ Axle Trucks	81	2	0		83	0	0	0		0	0	3	1		4	12	0	6		20	0	0	107
% 4+ Axle Trucks	8	0.2	0	0	4.4	0	0	0	0	0	0	0.4	0.6	0	0.4	5.2	0	0.6	0.3	1.1	0	0	2.3

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PO Box 1178
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(951)268-6268

City of Riverside
N/S: Market Street
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 31_RIV_Mark_60E AM
Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				SR-60 Eastbound On Ramp Westbound				Market Street Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	107	102	0	209	0	0	0	0	0	95	16	111	26	0	**124**	**150**	470
07:45 AM	108	**126**	0	**234**	0	0	0	0	0	87	20	107	20	0	114	134	**475**
08:00 AM	114	95	0	209	0	0	0	0	0	**99**	14	**113**	29	0	119	148	470
08:15 AM	**122**	87	0	209	0	0	0	0	0	76	**22**	98	**35**	0	109	144	451
Total Volume	451	410	0	861	0	0	0	0	0	357	72	429	110	0	466	576	1866
% App. Total	52.4	47.6	0		0	0	0		0	83.2	16.8		19.1	0	80.9		
PHF	.924	.813	.000	.920	.000	.000	.000	.000	.000	.902	.818	.949	.786	.000	.940	.960	.982

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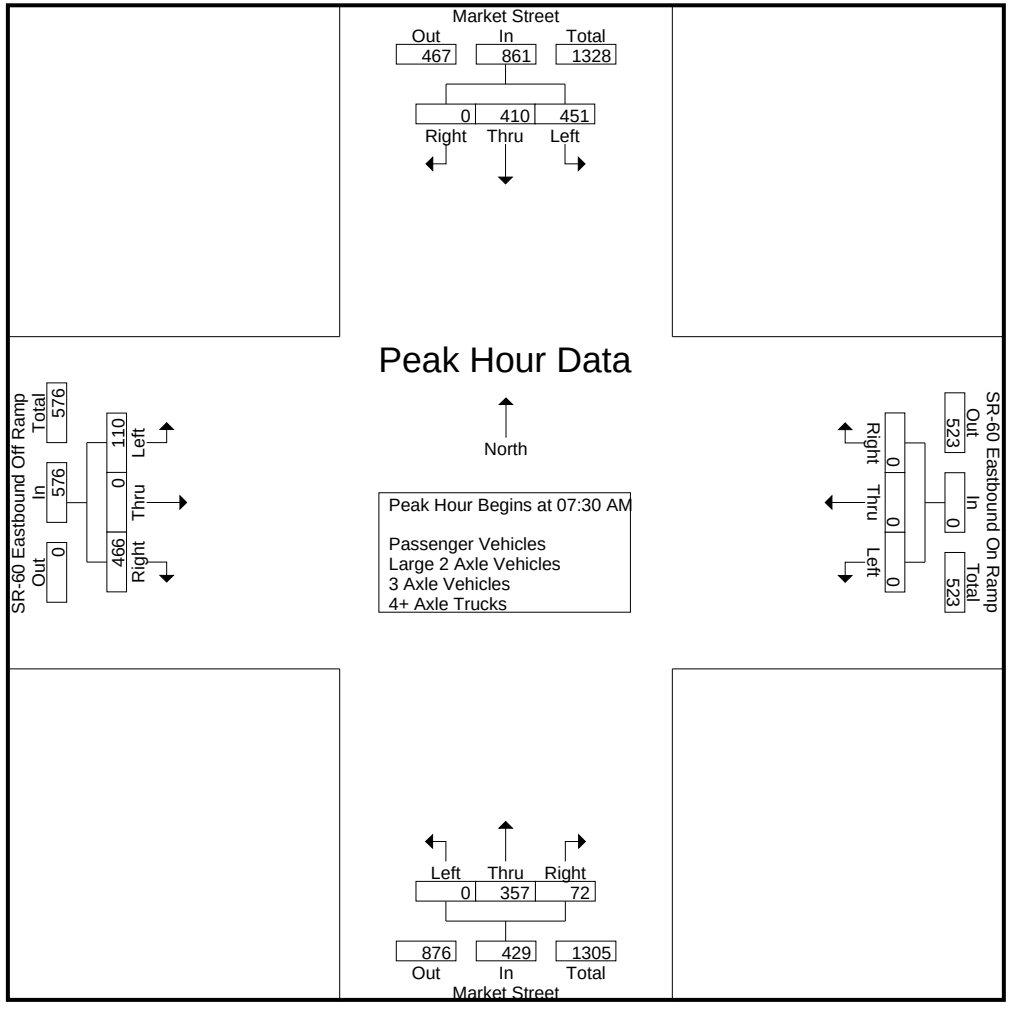
Weather: Clear

File Name : 31_RIV_Mark_60E AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 3



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City of Riverside
N/S: Market Street
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 31_RIV_Mark_60E AM
Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				SR-60 Eastbound On Ramp Westbound				Market Street Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				06:30 AM				07:30 AM				07:30 AM				
+0 mins.	107	102	0	209	0	0	0	0	0	95	16	111	26	0	**124**	**150**	
+15 mins.	108	**126**	0	**234**	0	0	0	0	0	87	20	107	20	0	114	134	
+30 mins.	114	95	0	209	0	0	0	0	0	**99**	14	**113**	29	0	119	148	
+45 mins.	**122**	87	0	209	0	0	0	0	0	76	**22**	98	**35**	0	109	144	
Total Volume	451	410	0	861	0	0	0	0	0	357	72	429	110	0	466	576	
% App. Total	52.4	47.6	0		0	0	0		0	83.2	16.8		19.1	0	80.9		
PHF	.924	.813	.000	.920	.000	.000	.000	.000	.000	.902	.818	.949	.786	.000	.940	.960	

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City of Riverside
N/S: Market Street
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 31_RIV_Mark_60E AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Market Street Southbound					SR-60 Eastbound On Ramp Westbound					Market Street Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	64	72	0	0	136	0	0	0	0	0	0	59	22	0	81	6	0	57	43	63	43	280	323
06:45 AM	67	60	0	0	127	0	0	0	0	0	0	81	26	0	107	23	0	108	72	131	72	365	437
Total	131	132	0	0	263	0	0	0	0	0	0	140	48	0	188	29	0	165	115	194	115	645	760
07:00 AM	76	53	0	0	129	0	0	0	0	0	0	76	14	0	90	20	0	108	65	128	65	347	412
07:15 AM	70	89	0	0	159	0	0	0	0	0	0	81	6	0	87	20	1	102	58	123	58	369	427
07:30 AM	91	97	0	0	188	0	0	0	0	0	0	90	15	0	105	26	0	121	80	147	80	440	520
07:45 AM	92	122	0	0	214	0	0	0	0	0	0	83	20	0	103	17	0	111	53	128	53	445	498
Total	329	361	0	0	690	0	0	0	0	0	0	330	55	0	385	83	1	442	256	526	256	1601	1857
08:00 AM	93	90	0	0	183	0	0	0	0	0	0	93	14	0	107	21	0	113	61	134	61	424	485
08:15 AM	105	82	0	0	187	0	0	0	0	0	0	72	22	0	94	27	0	105	58	132	58	413	471
08:30 AM	71	70	0	0	141	0	0	0	0	0	0	76	8	0	84	22	0	73	41	95	41	320	361
08:45 AM	65	72	0	0	137	0	0	0	0	0	0	70	12	0	82	18	0	72	34	90	34	309	343
Total	334	314	0	0	648	0	0	0	0	0	0	311	56	0	367	88	0	363	194	451	194	1466	1660
Grand Total	794	807	0	0	1601	0	0	0	0	0	0	781	159	0	940	200	1	970	565	1171	565	3712	4277
Apprch %	49.6	50.4	0			0	0	0			0	83.1	16.9			17.1	0.1	82.8					
Total %	21.4	21.7	0		43.1	0	0	0		0	0	21	4.3		25.3	5.4	0	26.1		31.5	13.2	86.8	

	Market Street Southbound				SR-60 Eastbound On Ramp Westbound				Market Street Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	91	97	0	188	0	0	0	0	0	90	15	105	26	0	**121**	**147**	440
07:45 AM	92	**122**	0	**214**	0	0	0	0	0	83	20	103	17	0	111	128	**445**
08:00 AM	93	90	0	183	0	0	0	0	0	**93**	14	**107**	21	0	113	134	424
08:15 AM	**105**	82	0	187	0	0	0	0	0	72	**22**	94	**27**	0	105	132	413
Total Volume	381	391	0	772	0	0	0	0	0	338	71	409	91	0	450	541	1722
% App. Total	49.4	50.6	0		0	0	0		0	82.6	17.4		16.8	0	83.2		
PHF	.907	.801	.000	.902	.000	.000	.000	.000	.000	.909	.807	.956	.843	.000	.930	.920	.967

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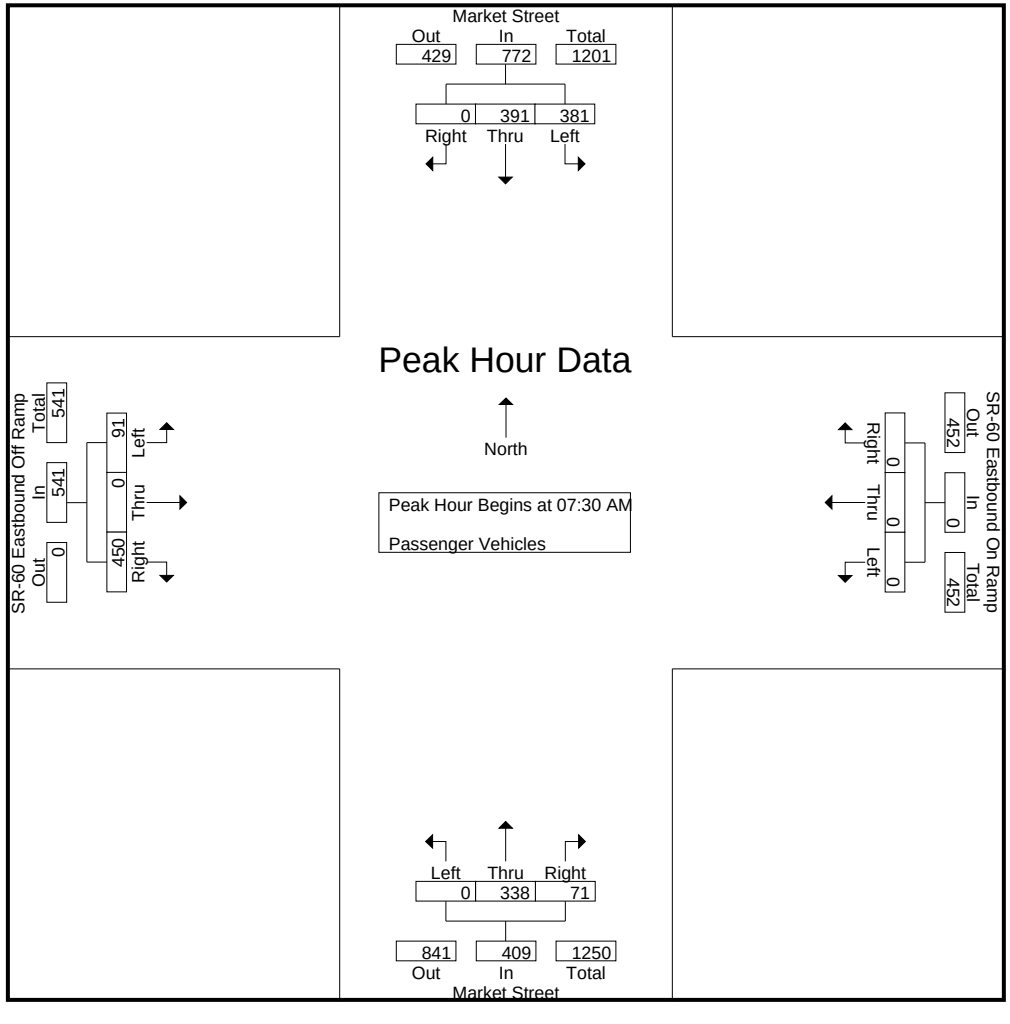
City of Riverside
N/S: Market Street
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 31_RIV_Mark_60E AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Riverside
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File Name : 31_RIV_Mark_60E AM
Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				SR-60 Eastbound On Ramp Westbound				Market Street Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	91	97	0	188	0	0	0	0	0	90	15	105	26	0	**121**	**147**	
+15 mins.	92	**122**	0	**214**	0	0	0	0	0	83	20	103	17	0	111	128	
+30 mins.	93	90	0	183	0	0	0	0	0	**93**	14	**107**	21	0	113	134	
+45 mins.	**105**	82	0	187	0	0	0	0	0	72	**22**	94	**27**	0	105	132	
Total Volume	381	391	0	772	0	0	0	0	0	338	71	409	91	0	450	541	
% App. Total	49.4	50.6	0		0	0	0		0	82.6	17.4		16.8	0	83.2		
PHF	.907	.801	.000	.902	.000	.000	.000	.000	.000	.909	.807	.956	.843	.000	.930	.920	

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City of Riverside
N/S: Market Street
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Weather: Clear

File Name : 31_RIV_Mark_60E AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Market Street Southbound					SR-60 Eastbound On Ramp Westbound					Market Street Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	19	2	0	0	21	0	0	0	0	0	0	3	2	0	5	0	0	4	4	4	4	30	34
06:45 AM	6	1	0	0	7	0	0	0	0	0	0	2	4	0	6	0	1	1	1	2	1	15	16
Total	25	3	0	0	28	0	0	0	0	0	0	5	6	0	11	0	1	5	5	6	5	45	50
07:00 AM	12	0	0	0	12	0	0	0	0	0	0	9	1	0	10	0	0	2	1	2	1	24	25
07:15 AM	10	2	0	0	12	0	0	0	0	0	0	4	0	0	4	1	0	7	3	8	3	24	27
07:30 AM	11	5	0	0	16	0	0	0	0	0	0	2	1	0	3	0	0	3	1	3	1	22	23
07:45 AM	7	3	0	0	10	0	0	0	0	0	0	3	0	0	3	2	0	1	1	3	1	16	17
Total	40	10	0	0	50	0	0	0	0	0	0	18	2	0	20	3	0	13	6	16	6	86	92
08:00 AM	10	5	0	0	15	0	0	0	0	0	0	6	0	0	6	3	0	2	2	5	2	26	28
08:15 AM	8	5	0	0	13	0	0	0	0	0	0	3	0	0	3	4	0	2	1	6	1	22	23
08:30 AM	11	11	0	0	22	0	0	0	0	0	0	2	1	0	3	0	0	3	2	3	2	28	30
08:45 AM	11	3	0	0	14	0	0	0	0	0	0	2	1	0	3	2	0	2	1	4	1	21	22
Total	40	24	0	0	64	0	0	0	0	0	0	13	2	0	15	9	0	9	6	18	6	97	103
Grand Total	105	37	0	0	142	0	0	0	0	0	0	36	10	0	46	12	1	27	17	40	17	228	245
Apprch %	73.9	26.1	0			0	0	0			0	78.3	21.7			30	2.5	67.5					
Total %	46.1	16.2	0		62.3	0	0	0		0	0	15.8	4.4		20.2	5.3	0.4	11.8		17.5	6.9	93.1	

	Market Street Southbound				SR-60 Eastbound On Ramp Westbound				Market Street Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**11**	**5**	0	**16**	0	0	0	0	0	2	**1**	3	0	0	**3**	3	22
07:45 AM	7	3	0	10	0	0	0	0	0	3	0	3	2	0	1	3	16
08:00 AM	10	5	0	15	0	0	0	0	0	**6**	0	**6**	3	0	2	5	**26**
08:15 AM	8	5	0	13	0	0	0	0	0	3	0	3	**4**	0	2	**6**	22
Total Volume	36	18	0	54	0	0	0	0	0	14	1	15	9	0	8	17	86
% App. Total	66.7	33.3	0		0	0	0		0	93.3	6.7		52.9	0	47.1		
PHF	.818	.900	.000	.844	.000	.000	.000	.000	.000	.583	.250	.625	.563	.000	.667	.708	.827

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City of Riverside
N/S: Market Street
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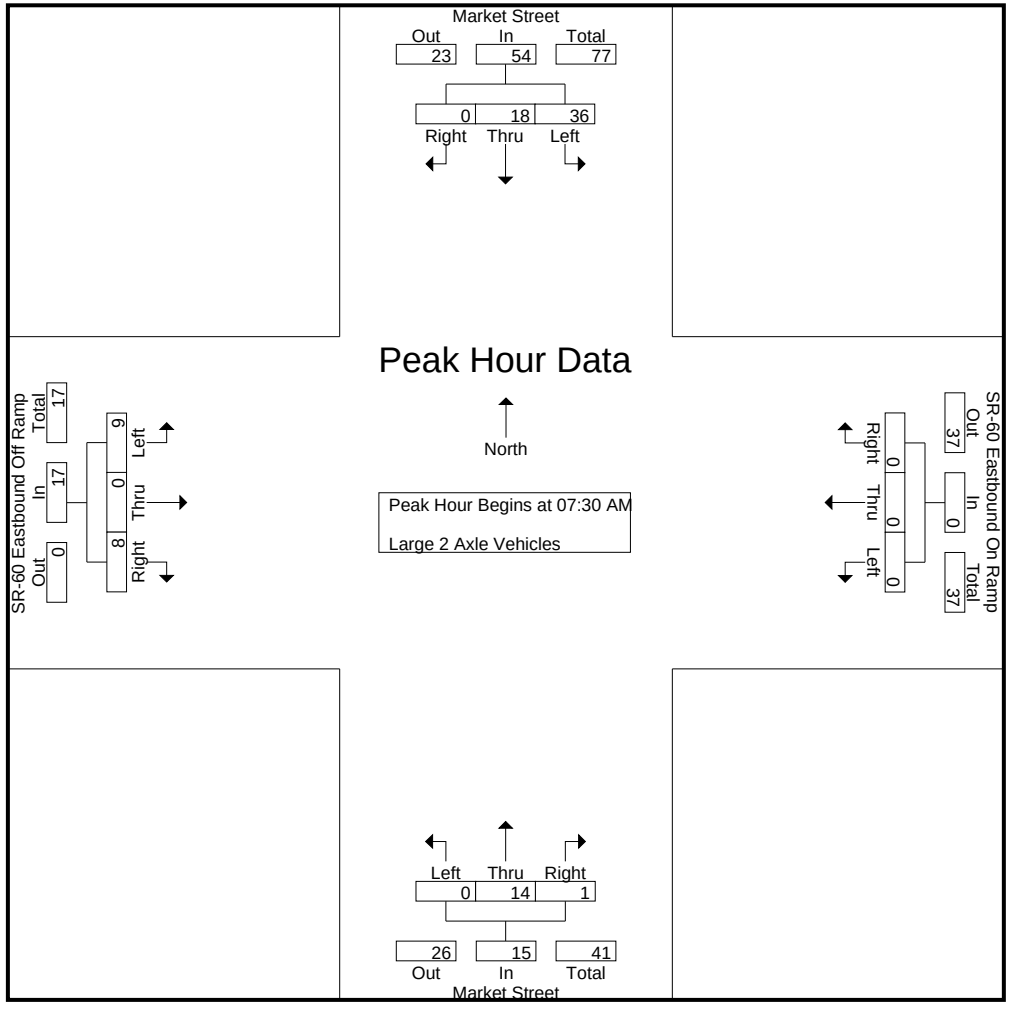
File Name : 31_RIV_Mark_60E AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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File Name : 31_RIV_Mark_60E AM
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Page No : 3

	Market Street Southbound				SR-60 Eastbound On Ramp Westbound				Market Street Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	**11**	**5**	0	**16**	0	0	0	0	0	2	**1**	3	0	0	**3**	3	
+15 mins.	7	3	0	10	0	0	0	0	0	3	0	3	2	0	1	3	
+30 mins.	10	5	0	15	0	0	0	0	0	**6**	0	**6**	3	0	2	5	
+45 mins.	8	5	0	13	0	0	0	0	0	3	0	3	**4**	0	2	**6**	
Total Volume	36	18	0	54	0	0	0	0	0	14	1	15	9	0	8	17	
% App. Total	66.7	33.3	0		0	0	0		0	93.3	6.7		52.9	0	47.1		
PHF	.818	.900	.000	.844	.000	.000	.000	.000	.000	.583	.250	.625	.563	.000	.667	.708	

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City of Riverside
N/S: Market Street
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Weather: Clear

File Name : 31_RIV_Mark_60E AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Market Street Southbound					SR-60 Eastbound On Ramp Westbound					Market Street Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	10	1	0	0	11	0	0	0	0	0	0	1	0	0	1	1	0	1	0	2	0	14	14
06:45 AM	3	3	0	0	6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	7	7
Total	13	4	0	0	17	0	0	0	0	0	0	1	0	0	1	2	0	1	0	3	0	21	21
07:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
07:15 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	3	3
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	3	3
07:45 AM	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	1	1	1	1	4	5
Total	1	3	0	0	4	0	0	0	0	0	0	5	0	0	5	0	0	2	1	2	1	11	12
08:00 AM	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0	3	0	1	0	4	0	11	11
08:15 AM	3	0	0	0	3	0	0	0	0	0	0	1	0	0	1	2	0	1	0	3	0	7	7
08:30 AM	3	2	0	0	5	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	6	6
08:45 AM	9	2	0	0	11	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	13	13
Total	22	4	0	0	26	0	0	0	0	0	0	4	0	0	4	5	0	2	0	7	0	37	37
Grand Total	36	11	0	0	47	0	0	0	0	0	0	10	0	0	10	7	0	5	1	12	1	69	70
Apprch %	76.6	23.4	0			0	0	0			0	100	0			58.3	0	41.7					
Total %	52.2	15.9	0		68.1	0	0	0		0	0	14.5	0		14.5	10.1	0	7.2		17.4	1.4	98.6	

	Market Street Southbound				SR-60 Eastbound On Ramp Westbound				Market Street Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	**3**	0	**3**	0	0	0	0	3
07:45 AM	1	**1**	0	2	0	0	0	0	0	1	0	1	0	0	**1**	1	4
08:00 AM	**7**	0	0	**7**	0	0	0	0	0	0	0	0	**3**	0	1	**4**	**11**
08:15 AM	3	0	0	3	0	0	0	0	0	1	0	1	2	0	1	3	7
Total Volume	11	1	0	12	0	0	0	0	0	5	0	5	5	0	3	8	25
% App. Total	91.7	8.3	0		0	0	0		0	100	0		62.5	0	37.5		
PHF	.393	.250	.000	.429	.000	.000	.000	.000	.000	.417	.000	.417	.417	.000	.750	.500	.568

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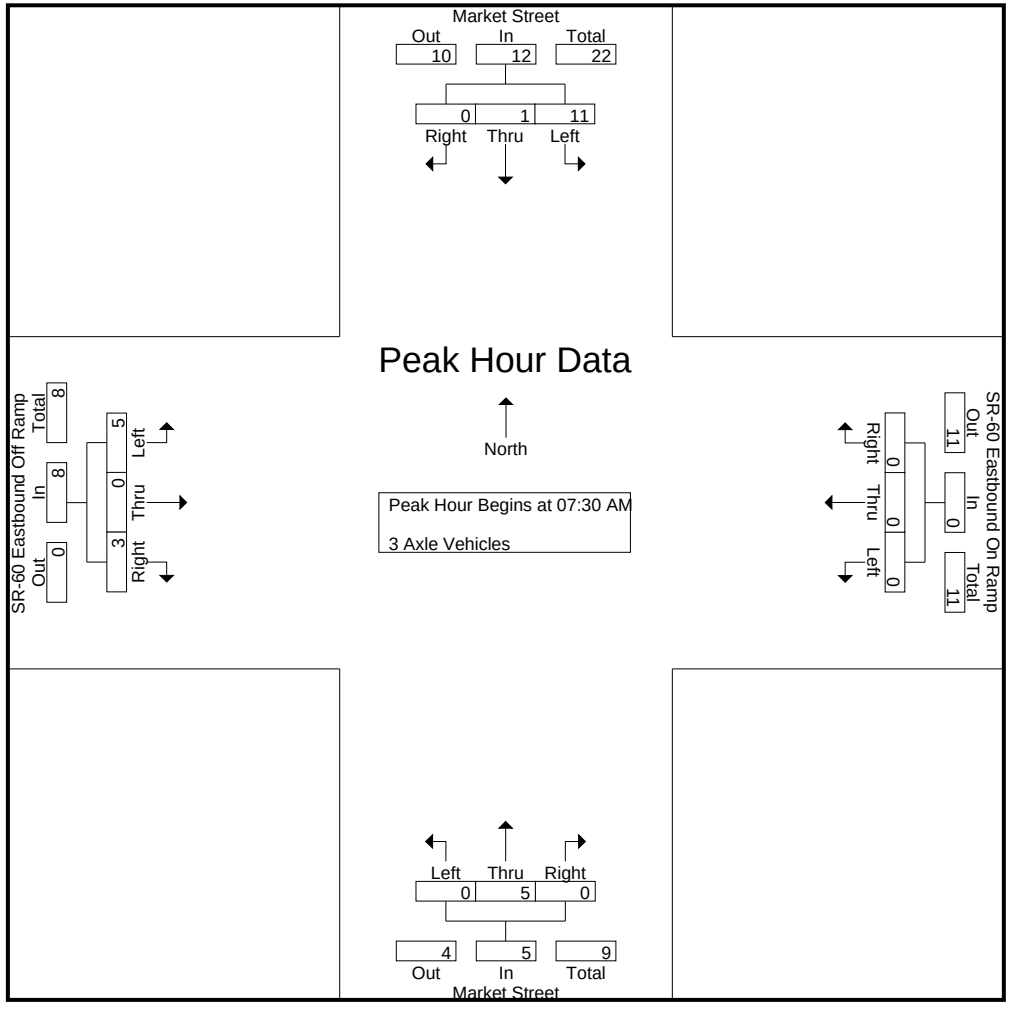
City of Riverside
N/S: Market Street
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 31_RIV_Mark_60E AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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	Market Street Southbound				SR-60 Eastbound On Ramp Westbound				Market Street Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	**3**	0	**3**	0	0	0	0	
+15 mins.	1	**1**	0	2	0	0	0	0	0	1	0	1	0	0	**1**	1	
+30 mins.	**7**	0	0	**7**	0	0	0	0	0	0	0	0	**3**	0	1	**4**	
+45 mins.	3	0	0	3	0	0	0	0	0	1	0	1	2	0	1	3	
Total Volume	11	1	0	12	0	0	0	0	0	5	0	5	5	0	3	8	
% App. Total	91.7	8.3	0		0	0	0		0	100	0		62.5	0	37.5		
PHF	.393	.250	.000	.429	.000	.000	.000	.000	.000	.417	.000	.417	.417	.000	.750	.500	

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Groups Printed- 4+ Axle Trucks

	Market Street Southbound					SR-60 Eastbound On Ramp Westbound					Market Street Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	11	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	11
06:45 AM	16	1	0	0	17	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	19	19
Total	27	1	0	0	28	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	30	30
07:00 AM	10	0	0	0	10	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	11	11
07:15 AM	8	0	0	0	8	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	9	9
07:30 AM	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5
07:45 AM	8	0	0	0	8	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	10	10
Total	31	0	0	0	31	0	0	0	0	0	0	1	0	0	1	2	0	1	0	3	0	35	35
08:00 AM	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	2	0	3	2	5	2	9	11
08:15 AM	6	0	0	0	6	0	0	0	0	0	0	0	0	0	0	2	0	1	0	3	0	9	9
08:30 AM	2	0	0	0	2	0	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	5	5
08:45 AM	11	1	0	0	12	0	0	0	0	0	0	1	0	0	1	3	0	1	0	4	0	17	17
Total	23	1	0	0	24	0	0	0	0	0	0	2	0	0	2	9	0	5	2	14	2	40	42
Grand Total	81	2	0	0	83	0	0	0	0	0	0	3	1	0	4	12	0	6	2	18	2	105	107
Apprch %	97.6	2.4	0			0	0	0			0	75	25			66.7	0	33.3					
Total %	77.1	1.9	0		79	0	0	0		0	0	2.9	1		3.8	11.4	0	5.7		17.1	1.9	98.1	

	Market Street Southbound				SR-60 Eastbound On Ramp Westbound				Market Street Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
07:45 AM	**8**	0	0	**8**	0	0	0	0	0	0	0	0	1	0	1	2	**10**
08:00 AM	4	0	0	4	0	0	0	0	0	0	0	0	**2**	0	**3**	**5**	9
08:15 AM	6	0	0	6	0	0	0	0	0	0	0	0	2	0	1	3	9
Total Volume	23	0	0	23	0	0	0	0	0	0	0	0	5	0	5	10	33
% App. Total	100	0	0		0	0	0		0	0	0		50	0	50		
PHF	.719	.000	.000	.719	.000	.000	.000	.000	.000	.000	.000	.000	.625	.000	.417	.500	.825

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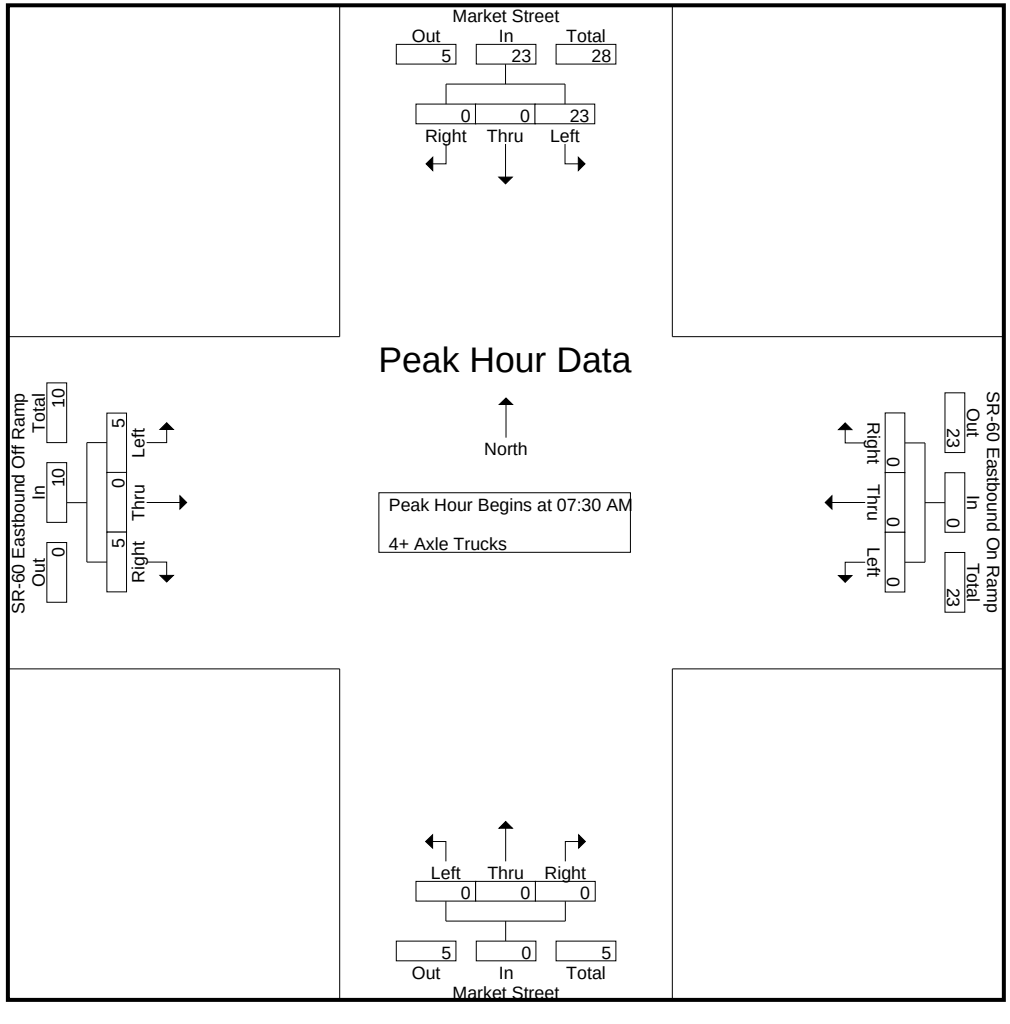

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	Market Street Southbound				SR-60 Eastbound On Ramp Westbound				Market Street Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	**8**	0	0	**8**	0	0	0	0	0	0	0	0	1	0	1	2	
+30 mins.	4	0	0	4	0	0	0	0	0	0	0	0	**2**	0	**3**	**5**	
+45 mins.	6	0	0	6	0	0	0	0	0	0	0	0	2	0	1	3	
Total Volume	23	0	0	23	0	0	0	0	0	0	0	0	5	0	5	10	
% App. Total	100	0	0		0	0	0		0	0	0		50	0	50		
PHF	.719	.000	.000	.719	.000	.000	.000	.000	.000	.000	.000	.000	.625	.000	.417	.500	

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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Market Street Southbound					SR-60 Eastbound On Ramp Westbound					Market Street Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	137	122	0	0	259	0	0	0	0	0	0	120	7	0	127	17	1	116	77	134	77	520	597
03:45 PM	100	137	0	0	237	0	0	0	0	0	0	130	13	0	143	18	1	130	93	149	93	529	622
Total	237	259	0	0	496	0	0	0	0	0	0	250	20	0	270	35	2	246	170	283	170	1049	1219
04:00 PM	120	132	0	0	252	0	0	0	0	0	0	130	5	0	135	18	0	104	65	122	65	509	574
04:15 PM	95	160	0	0	255	0	0	0	0	0	0	113	7	0	120	23	1	123	94	147	94	522	616
04:30 PM	114	158	0	0	272	0	0	0	0	0	0	113	6	0	119	21	0	146	88	167	88	558	646
04:45 PM	104	125	0	0	229	0	0	0	0	0	0	138	3	0	141	26	0	182	95	208	95	578	673
Total	433	575	0	0	1008	0	0	0	0	0	0	494	21	0	515	88	1	555	342	644	342	2167	2509
05:00 PM	102	187	0	0	289	0	0	0	0	0	0	141	16	0	157	19	1	138	82	158	82	604	686
05:15 PM	100	154	0	0	254	0	0	0	0	0	0	164	14	0	178	15	0	134	74	149	74	581	655
05:30 PM	74	155	0	0	229	0	0	0	0	0	0	155	12	0	167	19	1	176	118	196	118	592	710
05:45 PM	89	135	0	0	224	0	0	0	0	0	0	125	7	0	132	14	0	124	86	138	86	494	580
Total	365	631	0	0	996	0	0	0	0	0	0	585	49	0	634	67	2	572	360	641	360	2271	2631
Grand Total	1035	1465	0	0	2500	0	0	0	0	0	0	1329	90	0	1419	190	5	1373	872	1568	872	5487	6359
Apprch %	41.4	58.6	0			0	0	0			0	93.7	6.3			12.1	0.3	87.6					
Total %	18.9	26.7	0		45.6	0	0	0		0	0	24.2	1.6		25.9	3.5	0.1	25		28.6	13.7	86.3	
Passenger Vehicles	943	1421	0		2364	0	0	0		0	0	1275	88		1363	181	4	1326		2354	0	0	6081
% Passenger Vehicles	91.1	97	0	0	94.6	0	0	0	0	0	0	95.9	97.8	0	96.1	95.3	80	96.6	96.7	96.5	0	0	95.6
Large 2 Axle Vehicles	26	34	0		60	0	0	0		0	0	28	2		30	5	0	37		66	0	0	156
% Large 2 Axle Vehicles	2.5	2.3	0	0	2.4	0	0	0	0	0	0	2.1	2.2	0	2.1	2.6	0	2.7	2.8	2.7	0	0	2.5
3 Axle Vehicles	23	8	0		31	0	0	0		0	0	18	0		18	0	1	5		8	0	0	57
% 3 Axle Vehicles	2.2	0.5	0	0	1.2	0	0	0	0	0	0	1.4	0	0	1.3	0	20	0.4	0.2	0.3	0	0	0.9
4+ Axle Trucks	43	2	0		45	0	0	0		0	0	8	0		8	4	0	5		12	0	0	65
% 4+ Axle Trucks	4.2	0.1	0	0	1.8	0	0	0	0	0	0	0.6	0	0	0.6	2.1	0	0.4	0.3	0.5	0	0	1

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File Name : 31_RIV_Mark_60E PM
Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				SR-60 Eastbound On Ramp Westbound				Market Street Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**104**	125	0	229	0	0	0	0	0	138	3	141	**26**	0	**182**	**208**	578
05:00 PM	102	**187**	0	**289**	0	0	0	0	0	141	**16**	157	19	**1**	138	158	**604**
05:15 PM	100	154	0	254	0	0	0	0	0	**164**	14	**178**	15	0	134	149	581
05:30 PM	74	155	0	229	0	0	0	0	0	155	12	167	19	1	176	196	592
Total Volume	380	621	0	1001	0	0	0	0	0	598	45	643	79	2	630	711	2355
% App. Total	38	62	0		0	0	0		0	93	7		11.1	0.3	88.6		
PHF	.913	.830	.000	.866	.000	.000	.000	.000	.000	.912	.703	.903	.760	.500	.865	.855	.975

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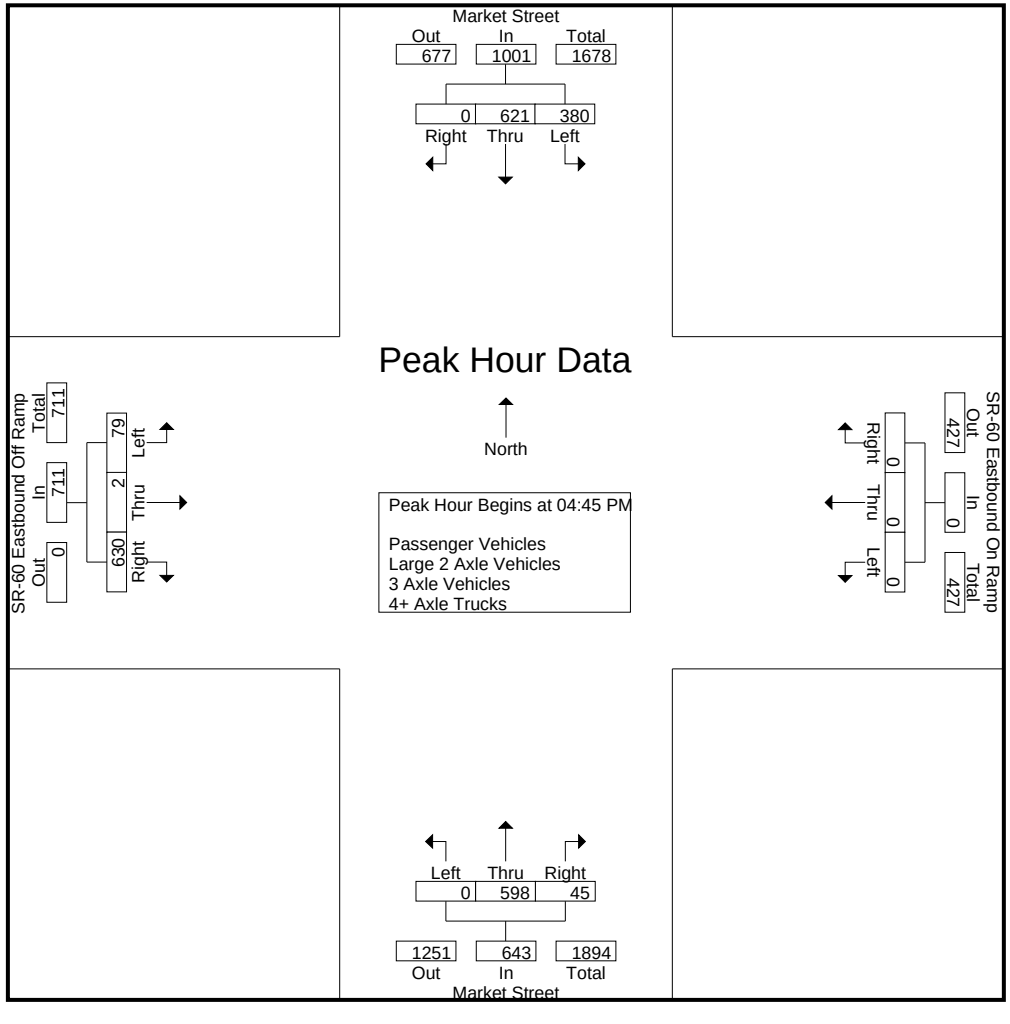

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	Market Street Southbound				SR-60 Eastbound On Ramp Westbound				Market Street Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				03:30 PM				04:45 PM				04:45 PM				
+0 mins.	95	160	0	255	0	0	0	0	0	138	3	141	**26**	0	**182**	**208**	
+15 mins.	**114**	158	0	272	0	0	0	0	0	141	**16**	157	19	**1**	138	158	
+30 mins.	104	125	0	229	0	0	0	0	0	**164**	14	**178**	15	0	134	149	
+45 mins.	102	**187**	0	**289**	0	0	0	0	0	155	12	167	19	1	176	196	
Total Volume	415	630	0	1045	0	0	0	0	0	598	45	643	79	2	630	711	
% App. Total	39.7	60.3	0		0	0	0		0	93	7		11.1	0.3	88.6		
PHF	.910	.842	.000	.904	.000	.000	.000	.000	.000	.912	.703	.903	.760	.500	.865	.855	

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Groups Printed- Passenger Vehicles

	Market Street Southbound					SR-60 Eastbound On Ramp Westbound					Market Street Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	121	119	0	0	240	0	0	0	0	0	0	112	7	0	119	17	1	113	75	131	75	490	565
03:45 PM	86	130	0	0	216	0	0	0	0	0	0	121	13	0	134	16	1	126	90	143	90	493	583
Total	207	249	0	0	456	0	0	0	0	0	0	233	20	0	253	33	2	239	165	274	165	983	1148
04:00 PM	108	126	0	0	234	0	0	0	0	0	0	117	5	0	122	16	0	100	63	116	63	472	535
04:15 PM	86	155	0	0	241	0	0	0	0	0	0	108	7	0	115	21	1	118	91	140	91	496	587
04:30 PM	104	152	0	0	256	0	0	0	0	0	0	111	5	0	116	20	0	141	86	161	86	533	619
04:45 PM	99	121	0	0	220	0	0	0	0	0	0	130	3	0	133	25	0	174	91	199	91	552	643
Total	397	554	0	0	951	0	0	0	0	0	0	466	20	0	486	82	1	533	331	616	331	2053	2384
05:00 PM	96	185	0	0	281	0	0	0	0	0	0	138	16	0	154	19	1	134	80	154	80	589	669
05:15 PM	92	152	0	0	244	0	0	0	0	0	0	163	14	0	177	15	0	129	69	144	69	565	634
05:30 PM	70	148	0	0	218	0	0	0	0	0	0	151	12	0	163	18	0	171	115	189	115	570	685
05:45 PM	81	133	0	0	214	0	0	0	0	0	0	124	6	0	130	14	0	120	83	134	83	478	561
Total	339	618	0	0	957	0	0	0	0	0	0	576	48	0	624	66	1	554	347	621	347	2202	2549
Grand Total	943	1421	0	0	2364	0	0	0	0	0	0	1275	88	0	1363	181	4	1326	843	1511	843	5238	6081
Apprch %	39.9	60.1	0			0	0	0			0	93.5	6.5			12	0.3	87.8					
Total %	18	27.1	0		45.1	0	0	0		0	0	24.3	1.7		26	3.5	0.1	25.3		28.8	13.9	86.1	

	Market Street Southbound				SR-60 Eastbound On Ramp Westbound				Market Street Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**99**	121	0	220	0	0	0	0	0	130	3	133	**25**	0	**174**	**199**	552
05:00 PM	96	**185**	0	**281**	0	0	0	0	0	138	**16**	154	19	**1**	134	154	**589**
05:15 PM	92	152	0	244	0	0	0	0	0	**163**	14	**177**	15	0	129	144	565
05:30 PM	70	148	0	218	0	0	0	0	0	151	12	163	18	0	171	189	570
Total Volume	357	606	0	963	0	0	0	0	0	582	45	627	77	1	608	686	2276
% App. Total	37.1	62.9	0		0	0	0		0	92.8	7.2		11.2	0.1	88.6		
PHF	.902	.819	.000	.857	.000	.000	.000	.000	.000	.893	.703	.886	.770	.250	.874	.862	.966

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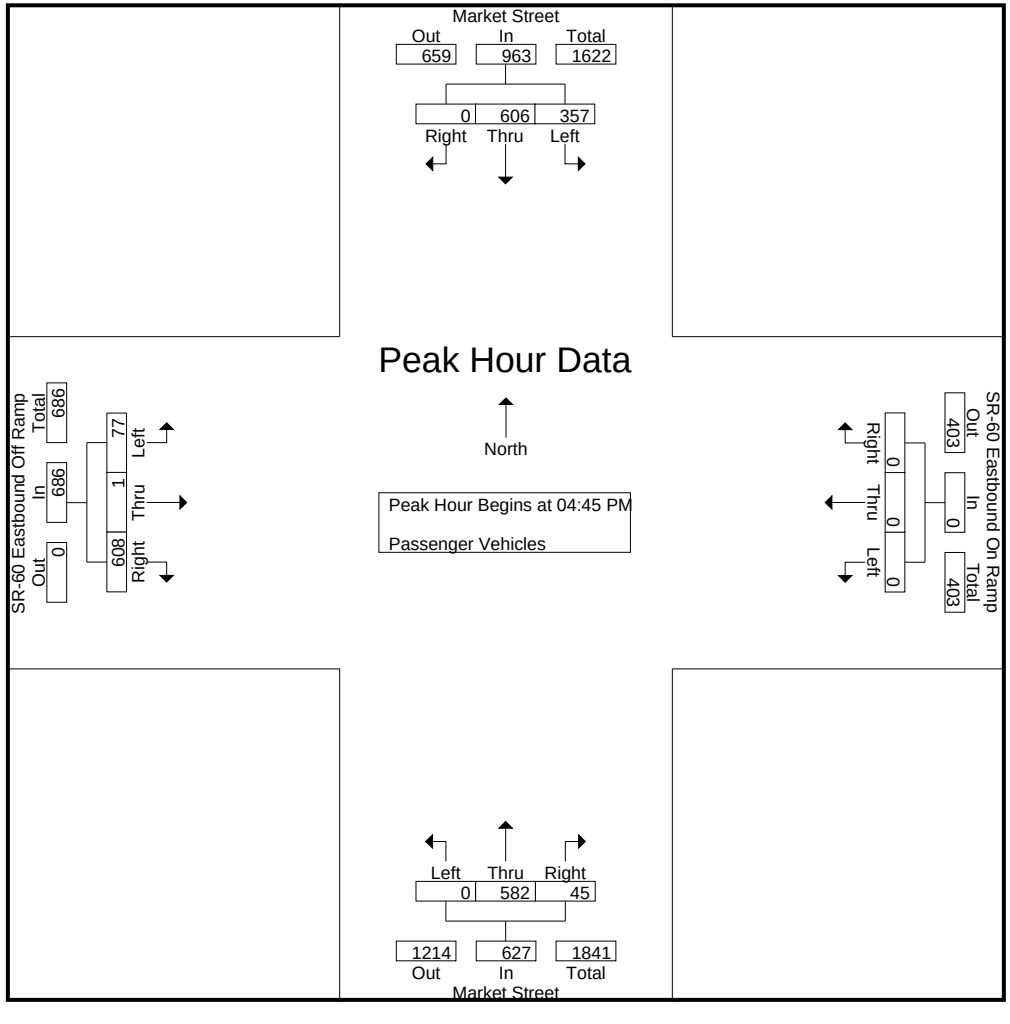
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 31_RIV_Mark_60E PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Riverside
N/S: Market Street
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 31_RIV_Mark_60E PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 3

	Market Street Southbound				SR-60 Eastbound On Ramp Westbound				Market Street Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	**99**	121	0	220	0	0	0	0	0	130	3	133	**25**	0	**174**	**199**	
+15 mins.	96	**185**	0	**281**	0	0	0	0	0	138	**16**	154	19	**1**	134	154	
+30 mins.	92	152	0	244	0	0	0	0	0	**163**	14	**177**	15	0	129	144	
+45 mins.	70	148	0	218	0	0	0	0	0	151	12	163	18	0	171	189	
Total Volume	357	606	0	963	0	0	0	0	0	582	45	627	77	1	608	686	
% App. Total	37.1	62.9	0		0	0	0		0	92.8	7.2		11.2	0.1	88.6		
PHF	.902	.819	.000	.857	.000	.000	.000	.000	.000	.893	.703	.886	.770	.250	.874	.862	

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City of Riverside
N/S: Market Street
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 31_RIV_Mark_60E PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

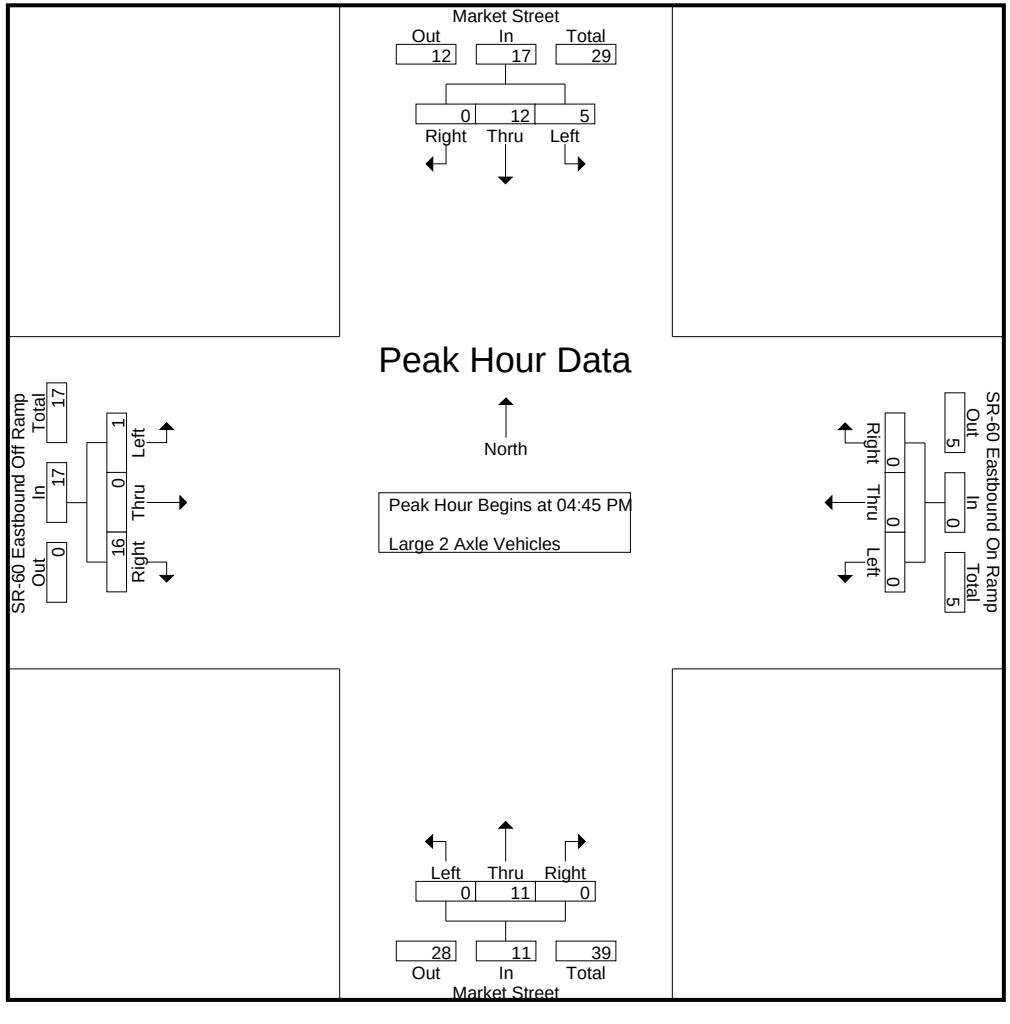
	Market Street Southbound					SR-60 Eastbound On Ramp Westbound					Market Street Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	11	2	0	0	13	0	0	0	0	0	0	6	0	0	6	0	0	3	2	3	2	22	24
03:45 PM	2	4	0	0	6	0	0	0	0	0	0	6	0	0	6	1	0	4	3	5	3	17	20
Total	13	6	0	0	19	0	0	0	0	0	0	12	0	0	12	1	0	7	5	8	5	39	44
04:00 PM	4	5	0	0	9	0	0	0	0	0	0	3	0	0	3	1	0	3	1	4	1	16	17
04:15 PM	1	5	0	0	6	0	0	0	0	0	0	2	0	0	2	1	0	5	3	6	3	14	17
04:30 PM	1	5	0	0	6	0	0	0	0	0	0	0	1	0	1	1	0	2	1	3	1	10	11
04:45 PM	1	4	0	0	5	0	0	0	0	0	0	7	0	0	7	1	0	6	3	7	3	19	22
Total	7	19	0	0	26	0	0	0	0	0	0	12	1	0	13	4	0	16	8	20	8	59	67
05:00 PM	4	2	0	0	6	0	0	0	0	0	0	3	0	0	3	0	0	2	1	2	1	11	12
05:15 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4	4	4	4	6	10
05:30 PM	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	4	3	4	3	9	12
05:45 PM	2	1	0	0	3	0	0	0	0	0	0	0	1	0	1	0	0	4	3	4	3	8	11
Total	6	9	0	0	15	0	0	0	0	0	0	4	1	0	5	0	0	14	11	14	11	34	45
Grand Total	26	34	0	0	60	0	0	0	0	0	0	28	2	0	30	5	0	37	24	42	24	132	156
Apprch %	43.3	56.7	0			0	0	0			0	93.3	6.7			11.9	0	88.1					
Total %	19.7	25.8	0		45.5	0	0	0		0	0	21.2	1.5		22.7	3.8	0	28		31.8	15.4	84.6	

	Market Street Southbound				SR-60 Eastbound On Ramp Westbound				Market Street Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	1	**4**	0	5	0	0	0	0	0	**7**	0	**7**	**1**	0	**6**	**7**	**19**
05:00 PM	**4**	2	0	**6**	0	0	0	0	0	3	0	3	0	0	2	2	11
05:15 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	4	4	6
05:30 PM	0	4	0	4	0	0	0	0	0	1	0	1	0	0	4	4	9
Total Volume	5	12	0	17	0	0	0	0	0	11	0	11	1	0	16	17	45
% App. Total	29.4	70.6	0		0	0	0		0	100	0		5.9	0	94.1		
PHF	.313	.750	.000	.708	.000	.000	.000	.000	.000	.393	.000	.393	.250	.000	.667	.607	.592

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Riverside
N/S: Market Street
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 31_RIV_Mark_60E PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Riverside
N/S: Market Street
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 31_RIV_Mark_60E PM
Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				SR-60 Eastbound On Ramp Westbound				Market Street Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	1	**4**	0	5	0	0	0	0	0	**7**	0	**7**	**1**	0	**6**	**7**	
+15 mins.	**4**	2	0	**6**	0	0	0	0	0	3	0	3	0	0	2	2	
+30 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	4	4	
+45 mins.	0	4	0	4	0	0	0	0	0	1	0	1	0	0	4	4	
Total Volume	5	12	0	17	0	0	0	0	0	11	0	11	1	0	16	17	
% App. Total	29.4	70.6	0		0	0	0		0	100	0		5.9	0	94.1		
PHF	.313	.750	.000	.708	.000	.000	.000	.000	.000	.393	.000	.393	.250	.000	.667	.607	

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City of Riverside
N/S: Market Street
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 31_RIV_Mark_60E PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Market Street Southbound					SR-60 Eastbound On Ramp Westbound					Market Street Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	2	1	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	4
03:45 PM	6	3	0	0	9	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	11	11
Total	8	4	0	0	12	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	15	15
04:00 PM	1	1	0	0	2	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	11	11
04:15 PM	3	0	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	5	5
04:30 PM	7	1	0	0	8	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	11	11
04:45 PM	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	2	1	2	1	4	5
Total	12	2	0	0	14	0	0	0	0	0	0	14	0	0	14	0	0	3	1	3	1	31	32
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	3	4
05:30 PM	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	4	4
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
Total	3	2	0	0	5	0	0	0	0	0	0	1	0	0	1	0	1	2	1	3	1	9	10
Grand Total	23	8	0	0	31	0	0	0	0	0	0	18	0	0	18	0	1	5	2	6	2	55	57
Apprch %	74.2	25.8	0			0	0	0			0	100	0			0	16.7	83.3					
Total %	41.8	14.5	0		56.4	0	0	0		0	0	32.7	0		32.7	0	1.8	9.1		10.9	3.5	96.5	

	Market Street Southbound				SR-60 Eastbound On Ramp Westbound				Market Street Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	1	0	0	1	0	0	0	0	0	**1**	0	**1**	0	0	**2**	**2**	**4**
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	**2**	0	0	**2**	0	0	0	0	0	0	0	0	0	0	1	1	3
05:30 PM	1	**1**	0	2	0	0	0	0	0	0	0	0	0	**1**	1	2	4
Total Volume	4	1	0	5	0	0	0	0	0	1	0	1	0	1	4	5	11
% App. Total	80	20	0		0	0	0		0	100	0		0	20	80		
PHF	.500	.250	.000	.625	.000	.000	.000	.000	.000	.250	.000	.250	.000	.250	.500	.625	.688

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Riverside
N/S: Market Street
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 31_RIV_Mark_60E PM
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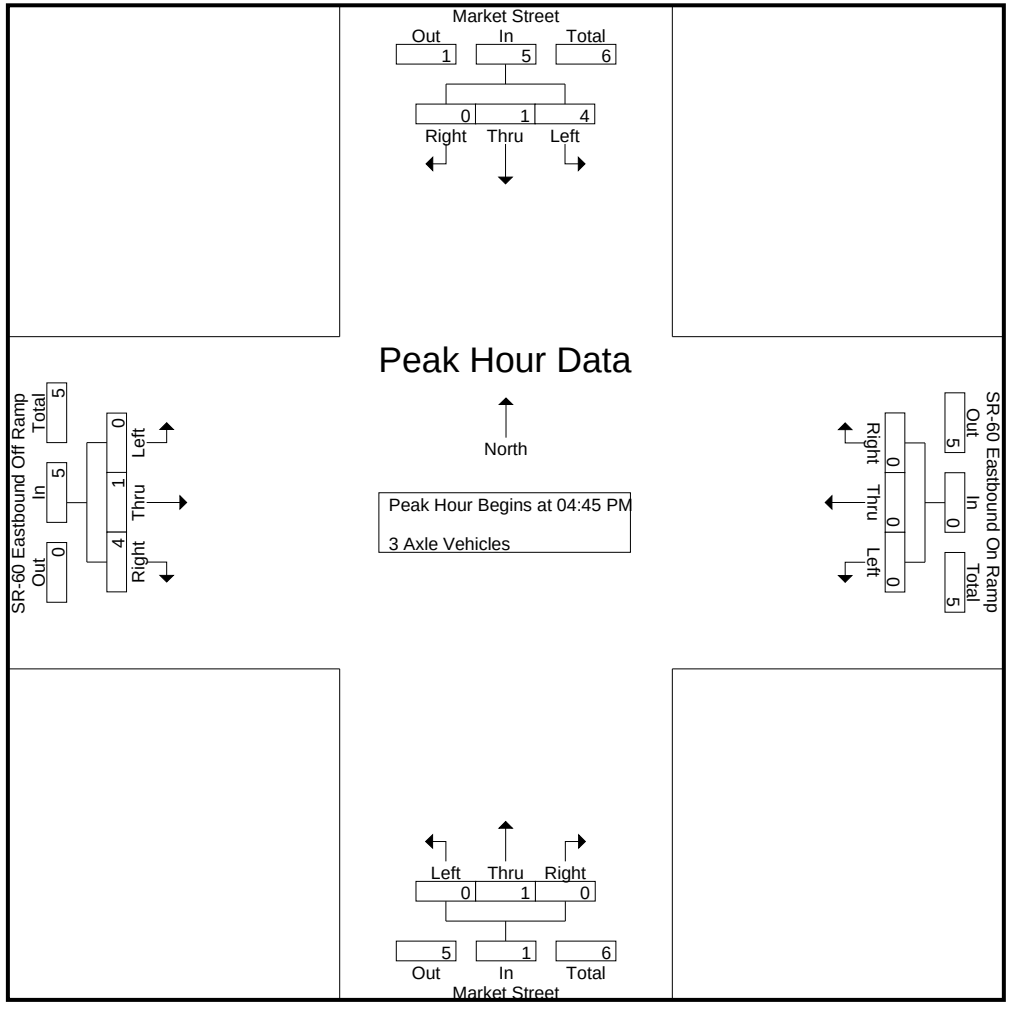

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City of Riverside
N/S: Market Street
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 31_RIV_Mark_60E PM
Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				SR-60 Eastbound On Ramp Westbound				Market Street Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	1	0	0	1	0	0	0	0	0	**1**	0	**1**	0	0	**2**	**2**	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	**2**	0	0	**2**	0	0	0	0	0	0	0	0	0	0	1	1	
+45 mins.	1	**1**	0	2	0	0	0	0	0	0	0	0	0	**1**	1	2	
Total Volume	4	1	0	5	0	0	0	0	0	1	0	1	0	1	4	5	
% App. Total	80	20	0		0	0	0		0	100	0		0	20	80		
PHF	.500	.250	.000	.625	.000	.000	.000	.000	.000	.250	.000	.250	.000	.250	.500	.625	

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N/S: Market Street
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File Name : 31_RIV_Mark_60E PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Market Street Southbound					SR-60 Eastbound On Ramp Westbound					Market Street Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	3	0	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	4
03:45 PM	6	0	0	0	6	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	8	8
Total	9	0	0	0	9	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	0	12	12
04:00 PM	7	0	0	0	7	0	0	0	0	0	0	1	0	0	1	1	0	1	1	2	1	10	11
04:15 PM	5	0	0	0	5	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	7	7
04:30 PM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	1	2	1	4	5
04:45 PM	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Total	17	0	0	0	17	0	0	0	0	0	0	2	0	0	2	2	0	3	2	5	2	24	26
05:00 PM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	1	2	1	4	5
05:15 PM	6	0	0	0	6	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	7	7
05:30 PM	3	2	0	0	5	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	0	9	9
05:45 PM	6	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6
Total	17	2	0	0	19	0	0	0	0	0	0	4	0	0	4	1	0	2	1	3	1	26	27
Grand Total	43	2	0	0	45	0	0	0	0	0	0	8	0	0	8	4	0	5	3	9	3	62	65
Apprch %	95.6	4.4	0			0	0	0			0	100	0			44.4	0	55.6					
Total %	69.4	3.2	0		72.6	0	0	0		0	0	12.9	0		12.9	6.5	0	8.1		14.5	4.6	95.4	

	Market Street Southbound				SR-60 Eastbound On Ramp Westbound				Market Street Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:00 PM	2	0	0	2	0	0	0	0	0	0	0	0	0	0	**2**	**2**	4
05:15 PM	**6**	0	0	**6**	0	0	0	0	0	1	0	1	0	0	0	0	7
05:30 PM	3	**2**	0	5	0	0	0	0	0	**3**	0	**3**	**1**	0	0	1	**9**
Total Volume	14	2	0	16	0	0	0	0	0	4	0	4	1	0	2	3	23
% App. Total	87.5	12.5	0		0	0	0		0	100	0		33.3	0	66.7		
PHF	.583	.250	.000	.667	.000	.000	.000	.000	.000	.333	.000	.333	.250	.000	.250	.375	.639

Counts Unlimited, Inc.
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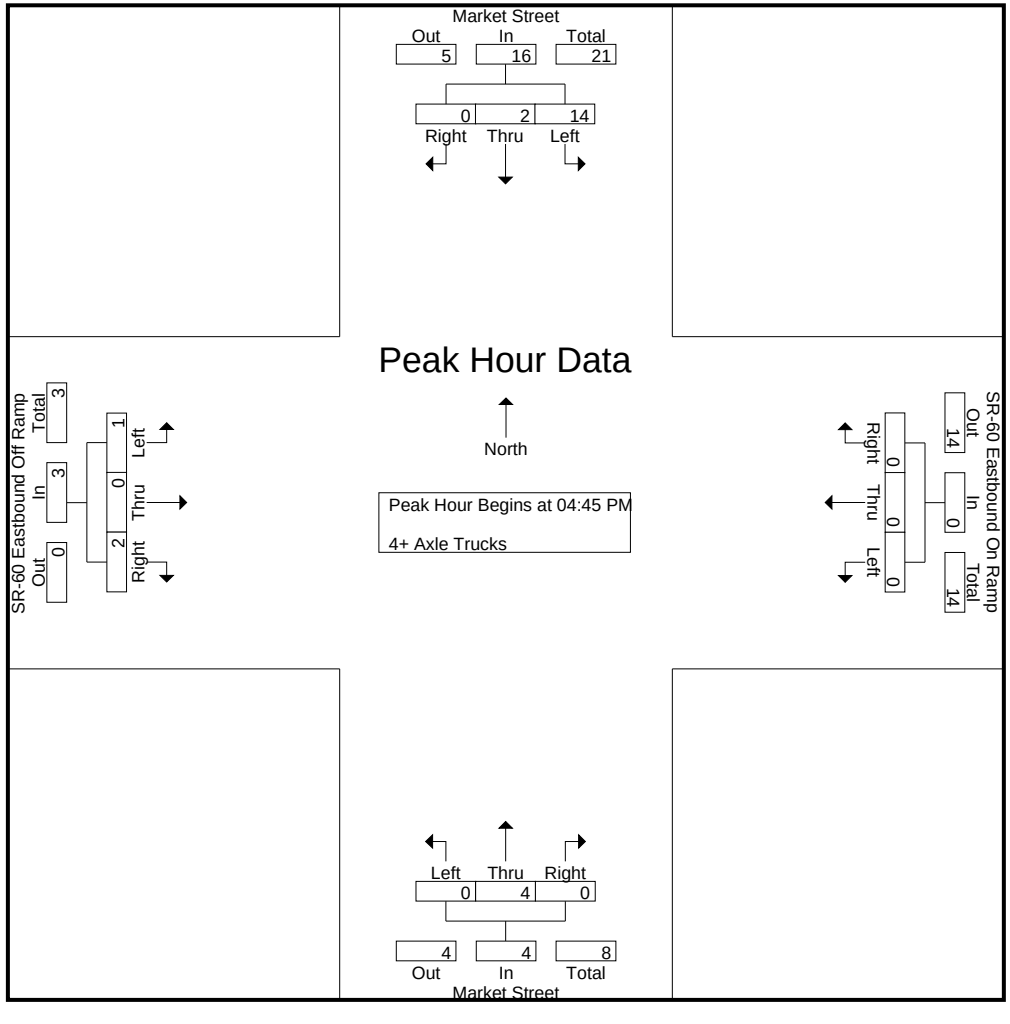

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	Market Street Southbound				SR-60 Eastbound On Ramp Westbound				Market Street Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	2	0	0	2	0	0	0	0	0	0	0	0	0	0	**2**	**2**	
+30 mins.	**6**	0	0	**6**	0	0	0	0	0	1	0	1	0	0	0	0	
+45 mins.	3	**2**	0	5	0	0	0	0	0	**3**	0	**3**	**1**	0	0	1	
Total Volume	14	2	0	16	0	0	0	0	0	4	0	4	1	0	2	3	
% App. Total	87.5	12.5	0		0	0	0		0	100	0		33.3	0	66.7		
PHF	.583	.250	.000	.667	.000	.000	.000	.000	.000	.333	.000	.333	.250	.000	.250	.375	

Location: Riverside
N/S: Market Street
E/W: SR-60 EB Ramps

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Market Street	East Leg SR-60 EB Ramps	South Leg Market Street	West Leg SR-60 EB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	1	1
TOTAL VOLUMES:	0	0	0	1	1

	North Leg Market Street	East Leg SR-60 EB Ramps	South Leg Market Street	West Leg SR-60 EB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: Riverside
N/S: Market Street
E/W: SR-60 EB Ramps

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Market Street			Westbound SR-60 EB Ramps			Northbound Market Street			Eastbound SR-60 EB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	3	0	0	0	0	4

	Southbound Market Street			Westbound SR-60 EB Ramps			Northbound Market Street			Eastbound SR-60 EB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	3	0	0	0	0	0	0	0	0	0	0	3
TOTAL VOLUMES:	0	6	0	0	0	0	0	2	0	0	0	0	8

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City of Riverside
N/S: Market Street
E/W: Redwood Drive
Weather: Clear

File Name : 32_RIV_Mark_Red AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Market Street Southbound					Market Street Gateway Driveway Westbound					Market Street Northbound					Redwood Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	24	97	6	0	127	0	0	0	0	0	1	65	1	0	67	3	0	0	0	3	0	197	197
06:45 AM	17	146	5	0	168	0	0	1	0	1	2	103	0	0	105	6	0	1	0	7	0	281	281
Total	41	243	11	0	295	0	0	1	0	1	3	168	1	0	172	9	0	1	0	10	0	478	478
07:00 AM	11	146	6	0	163	0	0	1	0	1	2	89	0	0	91	6	0	1	0	7	0	262	262
07:15 AM	13	185	4	0	202	0	0	0	0	0	1	92	0	0	93	5	0	6	0	11	0	306	306
07:30 AM	28	186	6	0	220	0	0	1	0	1	5	100	2	0	107	2	0	5	0	7	0	335	335
07:45 AM	34	194	12	0	240	0	0	1	0	1	1	94	0	0	95	6	1	2	0	9	0	345	345
Total	86	711	28	0	825	0	0	3	0	3	9	375	2	0	386	19	1	14	0	34	0	1248	1248
08:00 AM	28	175	8	0	211	0	0	3	0	3	2	110	2	0	114	9	0	1	0	10	0	338	338
08:15 AM	31	164	4	0	199	0	0	2	0	2	7	88	0	0	95	9	0	0	0	9	0	305	305
08:30 AM	6	140	12	0	158	0	0	0	0	0	4	89	0	0	93	7	0	3	0	10	0	261	261
08:45 AM	12	113	12	0	137	0	0	2	0	2	4	88	0	0	92	7	1	3	0	11	0	242	242
Total	77	592	36	0	705	0	0	7	0	7	17	375	2	0	394	32	1	7	0	40	0	1146	1146
Grand Total	204	1546	75	0	1825	0	0	11	0	11	29	918	5	0	952	60	2	22	0	84	0	2872	2872
Apprch %	11.2	84.7	4.1			0	0	100			3	96.4	0.5			71.4	2.4	26.2					
Total %	7.1	53.8	2.6		63.5	0	0	0.4		0.4	1	32	0.2		33.1	2.1	0.1	0.8		2.9	0	100	
Passenger Vehicles	199	1469	73		1741	0	0	9		9	27	856	4		887	59	2	22		83	0	0	2720
% Passenger Vehicles	97.5	95	97.3	0	95.4	0	0	81.8	0	81.8	93.1	93.2	80	0	93.2	98.3	100	100	0	98.8	0	0	94.7
Large 2 Axle Vehicles	3	54	1		58	0	0	2		2	2	50	1		53	1	0	0		1	0	0	114
% Large 2 Axle Vehicles	1.5	3.5	1.3	0	3.2	0	0	18.2	0	18.2	6.9	5.4	20	0	5.6	1.7	0	0	0	1.2	0	0	4
3 Axle Vehicles	1	17	1		19	0	0	0		0	0	8	0		8	0	0	0		0	0	0	27
% 3 Axle Vehicles	0.5	1.1	1.3	0	1	0	0	0	0	0	0	0.9	0	0	0.8	0	0	0	0	0	0	0	0.9
4+ Axle Trucks	1	6	0		7	0	0	0		0	0	4	0		4	0	0	0		0	0	0	11
% 4+ Axle Trucks	0.5	0.4	0	0	0.4	0	0	0	0	0	0	0.4	0	0	0.4	0	0	0	0	0	0	0	0.4

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City of Riverside
N/S: Market Street
E/W: Redwood Drive
Weather: Clear

File Name : 32_RIV_Mark_Red AM
Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				Market Street Gateway Driveway Westbound				Market Street Northbound				Redwood Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	13	185	4	202	0	0	0	0	1	92	0	93	5	0	**6**	**11**	306
07:30 AM	28	186	6	220	0	0	1	1	**5**	100	**2**	107	2	0	5	7	335
07:45 AM	**34**	**194**	**12**	**240**	0	0	1	1	1	94	0	95	6	**1**	2	9	**345**
08:00 AM	28	175	8	211	0	0	**3**	**3**	2	**110**	2	**114**	**9**	0	1	10	338
Total Volume	103	740	30	873	0	0	5	5	9	396	4	409	22	1	14	37	1324
% App. Total	11.8	84.8	3.4		0	0	100		2.2	96.8	1		59.5	2.7	37.8		
PHF	.757	.954	.625	.909	.000	.000	.417	.417	.450	.900	.500	.897	.611	.250	.583	.841	.959

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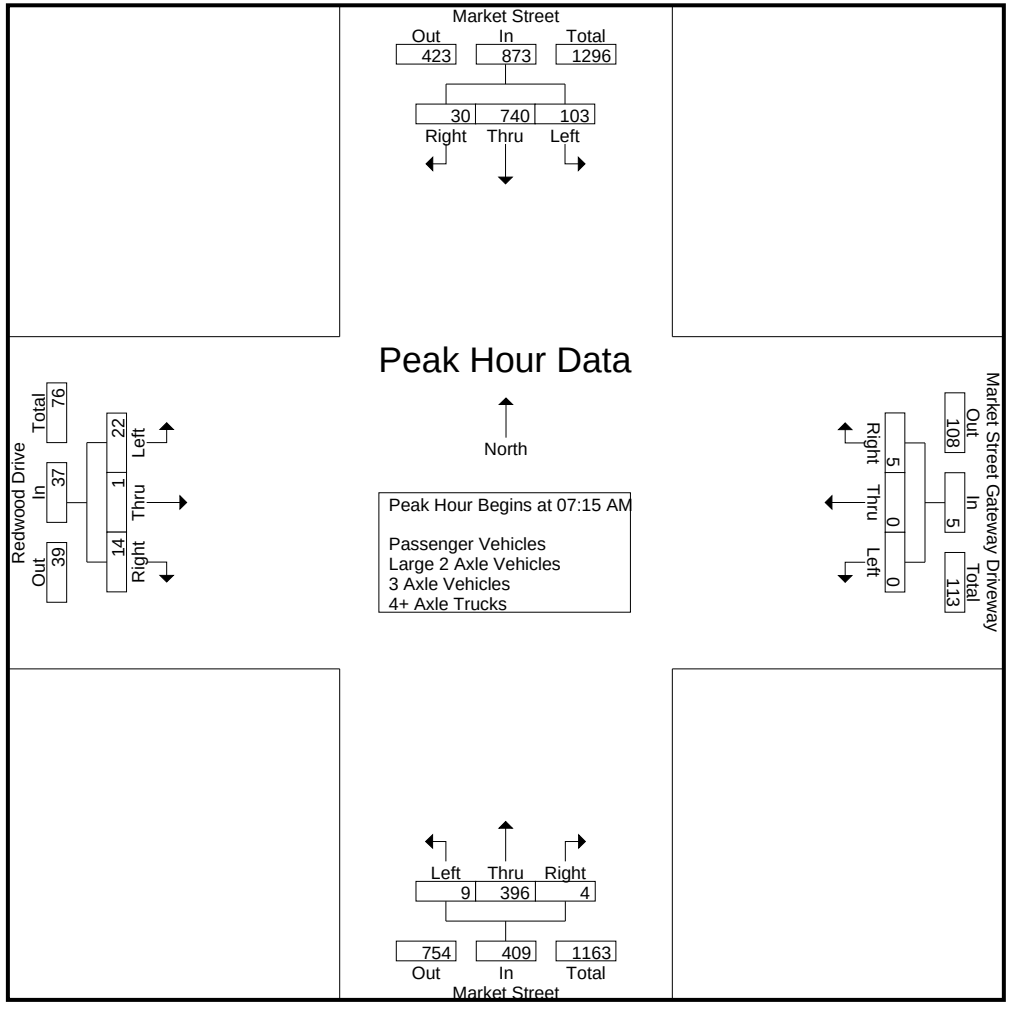
Site Code : 05122894
Start Date : 10/4/2022
Page No : 3



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City of Riverside
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E/W: Redwood Drive
Weather: Clear

File Name : 32_RIV_Mark_Red AM
Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				Market Street Gateway Driveway Westbound				Market Street Northbound				Redwood Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:30 AM				07:30 AM				08:00 AM				
+0 mins.	13	185	4	202	0	0	1	1	5	100	**2**	107	**9**	0	1	10	
+15 mins.	28	186	6	220	0	0	1	1	1	94	0	95	9	0	0	9	
+30 mins.	**34**	**194**	**12**	**240**	0	0	**3**	**3**	2	**110**	2	**114**	7	0	**3**	10	
+45 mins.	28	175	8	211	0	0	2	2	**7**	88	0	95	7	**1**	3	**11**	
Total Volume	103	740	30	873	0	0	7	7	15	392	4	411	32	1	7	40	
% App. Total	11.8	84.8	3.4		0	0	100		3.6	95.4	1		80	2.5	17.5		
PHF	.757	.954	.625	.909	.000	.000	.583	.583	.536	.891	.500	.901	.889	.250	.583	.909	

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Page No : 1

Groups Printed- Passenger Vehicles

	Market Street Southbound					Market Street Gateway Driveway Westbound					Market Street Northbound					Redwood Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	23	90	6	0	119	0	0	0	0	0	1	60	1	0	62	3	0	0	0	3	0	184	184
06:45 AM	17	140	5	0	162	0	0	1	0	1	2	95	0	0	97	6	0	1	0	7	0	267	267
Total	40	230	11	0	281	0	0	1	0	1	3	155	1	0	159	9	0	1	0	10	0	451	451
07:00 AM	11	143	6	0	160	0	0	1	0	1	2	77	0	0	79	5	0	1	0	6	0	246	246
07:15 AM	13	175	4	0	192	0	0	0	0	0	1	88	0	0	89	5	0	6	0	11	0	292	292
07:30 AM	27	180	6	0	213	0	0	1	0	1	4	96	2	0	102	2	0	5	0	7	0	323	323
07:45 AM	34	187	12	0	233	0	0	1	0	1	1	91	0	0	92	6	1	2	0	9	0	335	335
Total	85	685	28	0	798	0	0	3	0	3	8	352	2	0	362	18	1	14	0	33	0	1196	1196
08:00 AM	28	165	8	0	201	0	0	3	0	3	2	103	1	0	106	9	0	1	0	10	0	320	320
08:15 AM	31	156	4	0	191	0	0	1	0	1	7	83	0	0	90	9	0	0	0	9	0	291	291
08:30 AM	5	126	12	0	143	0	0	0	0	0	3	82	0	0	85	7	0	3	0	10	0	238	238
08:45 AM	10	107	10	0	127	0	0	1	0	1	4	81	0	0	85	7	1	3	0	11	0	224	224
Total	74	554	34	0	662	0	0	5	0	5	16	349	1	0	366	32	1	7	0	40	0	1073	1073
Grand Total	199	1469	73	0	1741	0	0	9	0	9	27	856	4	0	887	59	2	22	0	83	0	2720	2720
Apprch %	11.4	84.4	4.2			0	0	100			3	96.5	0.5			71.1	2.4	26.5					
Total %	7.3	54	2.7		64	0	0	0.3		0.3	1	31.5	0.1		32.6	2.2	0.1	0.8		3.1	0	100	

	Market Street Southbound				Market Street Gateway Driveway Westbound				Market Street Northbound				Redwood Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	13	175	4	192	0	0	0	0	1	88	0	89	5	0	**6**	**11**	292
07:30 AM	27	180	6	213	0	0	1	1	**4**	96	**2**	102	2	0	5	7	323
07:45 AM	**34**	**187**	**12**	**233**	0	0	1	1	1	91	0	92	6	**1**	2	9	**335**
08:00 AM	28	165	8	201	0	0	**3**	**3**	2	**103**	1	**106**	**9**	0	1	10	320
Total Volume	102	707	30	839	0	0	5	5	8	378	3	389	22	1	14	37	1270
% App. Total	12.2	84.3	3.6		0	0	100		2.1	97.2	0.8		59.5	2.7	37.8		
PHF	.750	.945	.625	.900	.000	.000	.417	.417	.500	.917	.375	.917	.611	.250	.583	.841	.948

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City of Riverside
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File Name : 32_RIV_Mark_Red AM
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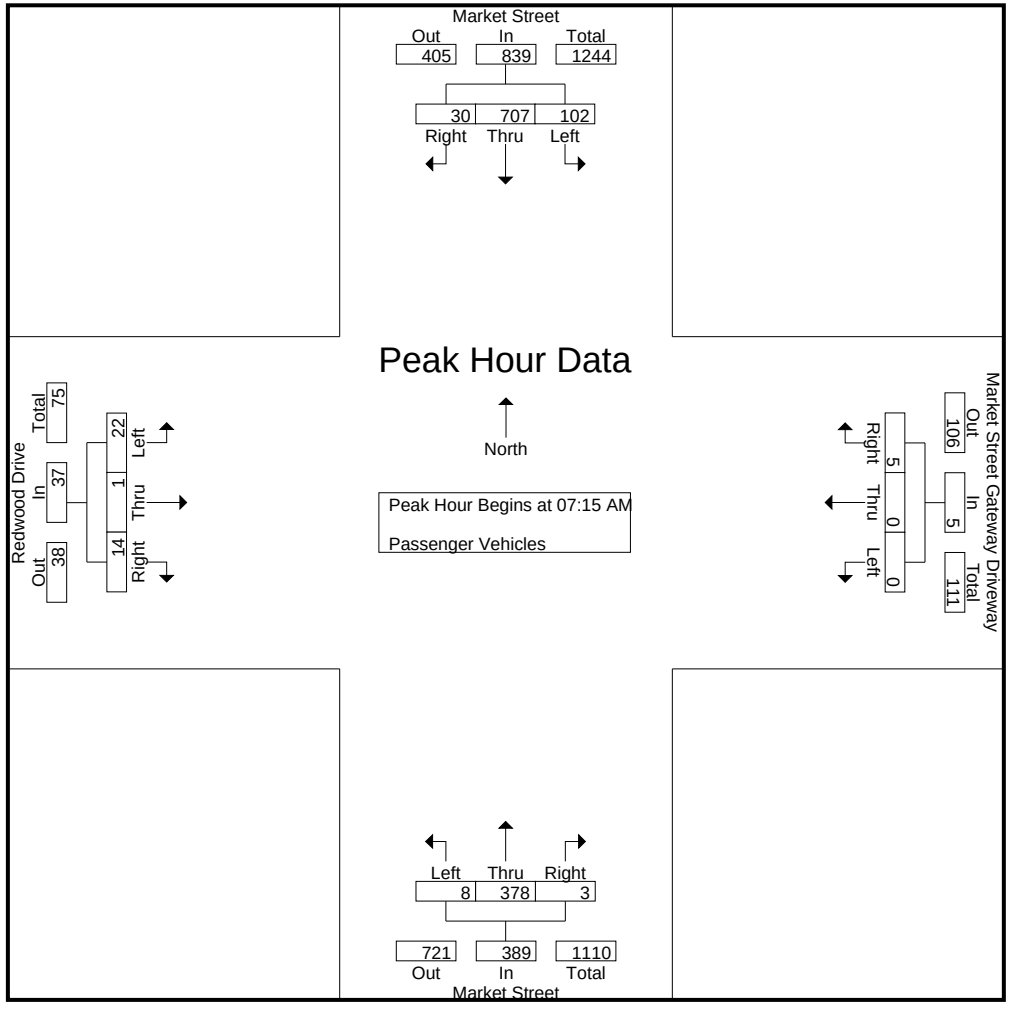
Page No : 2



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	Market Street Southbound				Market Street Gateway Driveway Westbound				Market Street Northbound				Redwood Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	13	175	4	192	0	0	0	0	1	88	0	89	5	0	**6**	**11**	
+15 mins.	27	180	6	213	0	0	1	1	**4**	96	**2**	102	2	0	5	7	
+30 mins.	**34**	**187**	**12**	**233**	0	0	1	1	1	91	0	92	6	**1**	2	9	
+45 mins.	28	165	8	201	0	0	**3**	**3**	2	**103**	1	**106**	**9**	0	1	10	
Total Volume	102	707	30	839	0	0	5	5	8	378	3	389	22	1	14	37	
% App. Total	12.2	84.3	3.6		0	0	100		2.1	97.2	0.8		59.5	2.7	37.8		
PHF	.750	.945	.625	.900	.000	.000	.417	.417	.500	.917	.375	.917	.611	.250	.583	.841	

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Groups Printed- Large 2 Axle Vehicles

	Market Street Southbound					Market Street Gateway Driveway Westbound					Market Street Northbound					Redwood Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	1	5	0	0	6	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	10	10
06:45 AM	0	2	0	0	2	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	9	9
Total	1	7	0	0	8	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	0	19	19
07:00 AM	0	1	0	0	1	0	0	0	0	0	0	11	0	0	11	1	0	0	0	1	0	13	13
07:15 AM	0	9	0	0	9	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	13	13
07:30 AM	1	6	0	0	7	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	9	9
07:45 AM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	5	5
Total	1	19	0	0	20	0	0	0	0	0	1	18	0	0	19	1	0	0	0	1	0	40	40
08:00 AM	0	5	0	0	5	0	0	0	0	0	0	7	1	0	8	0	0	0	0	0	0	13	13
08:15 AM	0	6	0	0	6	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	0	11	11
08:30 AM	1	12	0	0	13	0	0	0	0	0	1	5	0	0	6	0	0	0	0	0	0	19	19
08:45 AM	0	5	1	0	6	0	0	1	0	1	0	5	0	0	5	0	0	0	0	0	0	12	12
Total	1	28	1	0	30	0	0	2	0	2	1	21	1	0	23	0	0	0	0	0	0	55	55
Grand Total	3	54	1	0	58	0	0	2	0	2	2	50	1	0	53	1	0	0	0	1	0	114	114
Apprch %	5.2	93.1	1.7			0	0	100			3.8	94.3	1.9			100	0	0					
Total %	2.6	47.4	0.9		50.9	0	0	1.8		1.8	1.8	43.9	0.9		46.5	0.9	0	0		0.9	0	100	

	Market Street Southbound				Market Street Gateway Driveway Westbound				Market Street Northbound				Redwood Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**9**	0	**9**	0	0	0	0	0	4	0	4	0	0	0	0	**13**
07:30 AM	**1**	6	0	7	0	0	0	0	**1**	1	0	2	0	0	0	0	9
07:45 AM	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
08:00 AM	0	5	0	5	0	0	0	0	0	**7**	**1**	**8**	0	0	0	0	13
Total Volume	1	23	0	24	0	0	0	0	1	14	1	16	0	0	0	0	40
% App. Total	4.2	95.8	0		0	0	0		6.2	87.5	6.2		0	0	0		
PHF	.250	.639	.000	.667	.000	.000	.000	.000	.250	.500	.250	.500	.000	.000	.000	.000	.769

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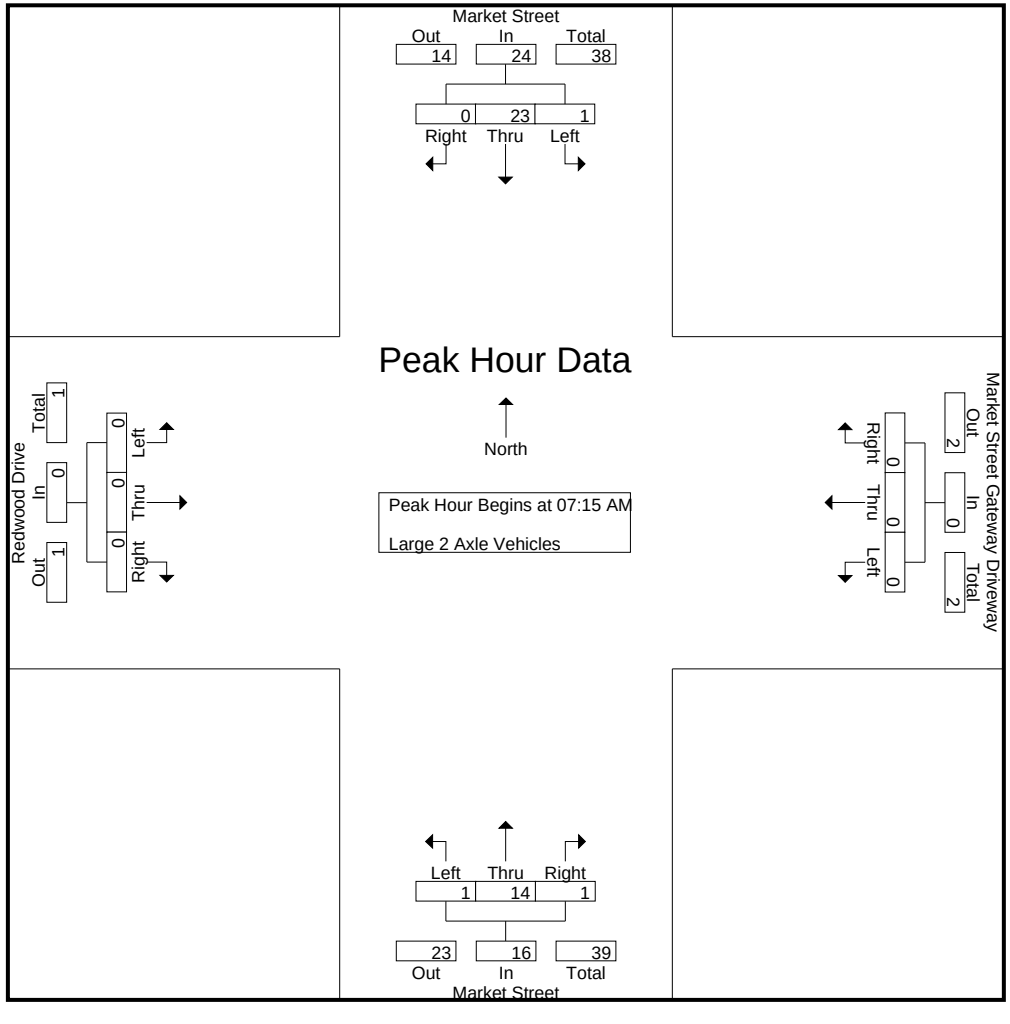

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	Market Street Southbound				Market Street Gateway Driveway Westbound				Market Street Northbound				Redwood Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	**9**	0	**9**	0	0	0	0	0	4	0	4	0	0	0	0	
+15 mins.	**1**	6	0	7	0	0	0	0	**1**	1	0	2	0	0	0	0	
+30 mins.	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0	
+45 mins.	0	5	0	5	0	0	0	0	0	**7**	**1**	**8**	0	0	0	0	
Total Volume	1	23	0	24	0	0	0	0	1	14	1	16	0	0	0	0	
% App. Total	4.2	95.8	0		0	0	0		6.2	87.5	6.2		0	0	0		
PHF	.250	.639	.000	.667	.000	.000	.000	.000	.250	.500	.250	.500	.000	.000	.000	.000	

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City of Riverside
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E/W: Redwood Drive
Weather: Clear

File Name : 32_RIV_Mark_Red AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Market Street Southbound					Market Street Gateway Driveway Westbound					Market Street Northbound					Redwood Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	3
06:45 AM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Total	0	5	0	0	5	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	6	6
07:00 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
07:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	3	3
07:45 AM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	4
Total	0	6	0	0	6	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	10	10
08:00 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
08:15 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
08:30 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	3
08:45 AM	1	1	1	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	4
Total	1	6	1	0	8	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	11	11
Grand Total	1	17	1	0	19	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	27	27
Apprch %	5.3	89.5	5.3			0	0	0			0	100	0			0	0	0					
Total %	3.7	63	3.7		70.4	0	0	0		0	0	29.6	0		29.6	0	0	0		0	0	100	

	Market Street Southbound				Market Street Gateway Driveway Westbound				Market Street Northbound				Redwood Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	**3**	0	**3**	0	0	0	0	3
07:45 AM	0	**3**	0	**3**	0	0	0	0	0	1	0	1	0	0	0	0	**4**
08:00 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	6	0	6	0	0	0	0	0	4	0	4	0	0	0	0	10
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.333	.000	.333	.000	.000	.000	.000	.625

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File Name : 32_RIV_Mark_Red AM
Site Code : 05122894
Start Date : 10/4/2022
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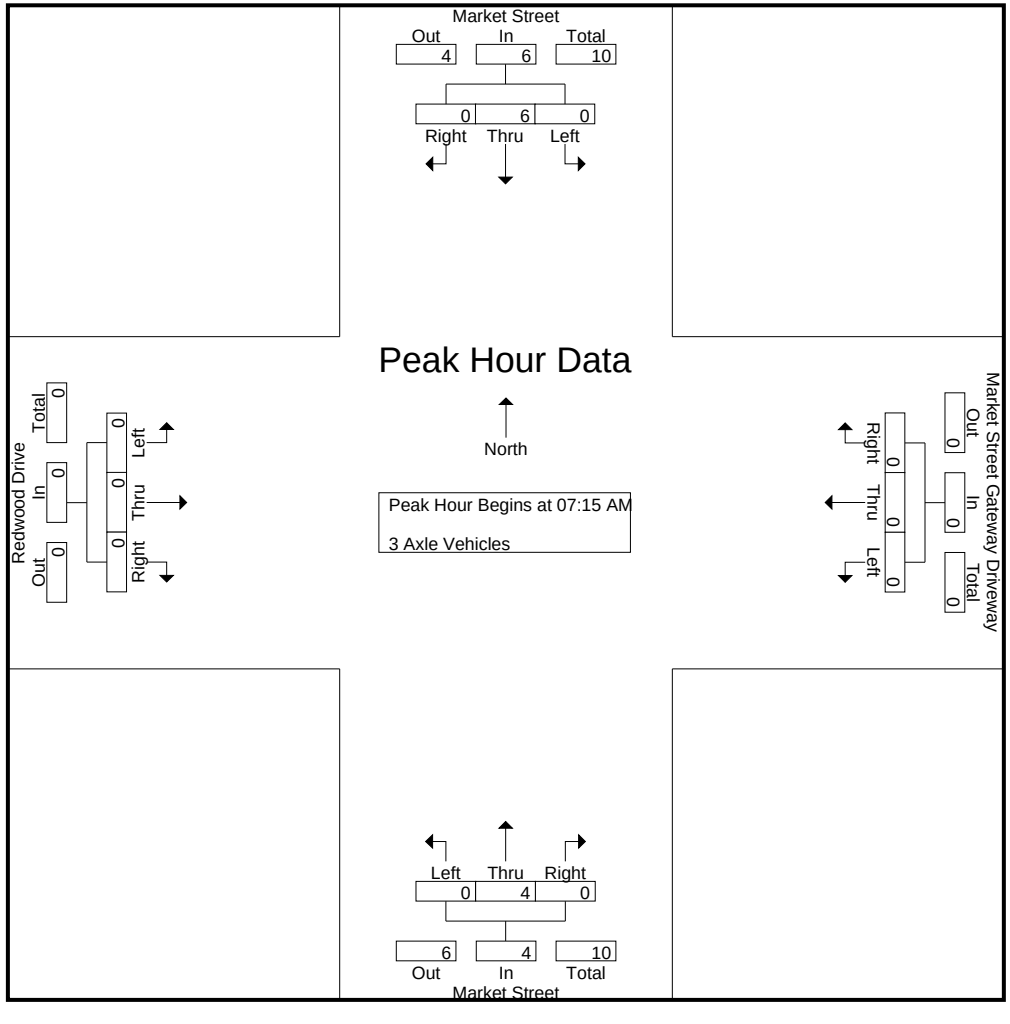

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Start Date : 10/4/2022

	Market Street Southbound				Market Street Gateway Driveway Westbound				Market Street Northbound				Redwood Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	**3**	0	**3**	0	0	0	0	
+30 mins.	0	**3**	0	**3**	0	0	0	0	0	1	0	1	0	0	0	0	
+45 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	6	0	6	0	0	0	0	0	4	0	4	0	0	0	0	
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.333	.000	.333	.000	.000	.000	.000	

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Groups Printed- 4+ Axle Trucks

	Market Street Southbound					Market Street Gateway Driveway Westbound					Market Street Northbound					Redwood Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
Total	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
08:00 AM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
08:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
08:45 AM	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
Total	1	4	0	0	5	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	7	7
Grand Total	1	6	0	0	7	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	11	11
Apprch %	14.3	85.7	0			0	0	0			0	100	0			0	0	0					
Total %	9.1	54.5	0		63.6	0	0	0		0	0	36.4	0		36.4	0	0	0		0	0	100	

	Market Street Southbound				Market Street Gateway Driveway Westbound				Market Street Northbound				Redwood Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 AM	0	**3**	0	**3**	0	0	0	0	0	0	0	0	0	0	0	0	**3**
Total Volume	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.333	.000	.333	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.333

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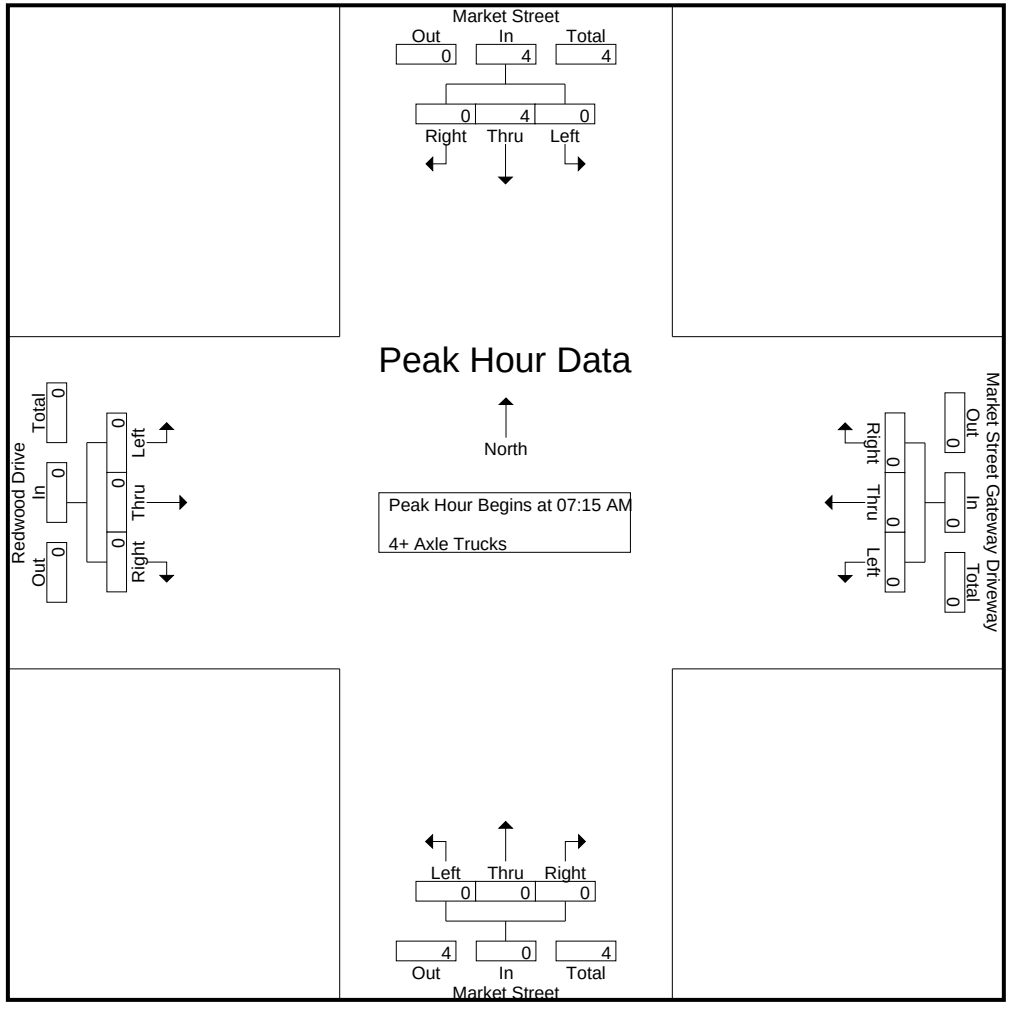
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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	Market Street Southbound				Market Street Gateway Driveway Westbound				Market Street Northbound				Redwood Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	**3**	0	**3**	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.333	.000	.333	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

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Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Market Street Southbound					Market Street Gateway Driveway Westbound					Market Street Northbound					Redwood Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	4	218	15	0	237	2	0	1	0	3	2	118	0	0	120	9	0	7	0	16	0	376	376
03:45 PM	2	244	20	0	266	0	0	3	0	3	7	134	0	0	141	8	0	9	0	17	0	427	427
Total	6	462	35	0	503	2	0	4	0	6	9	252	0	0	261	17	0	16	0	33	0	803	803
04:00 PM	1	207	18	0	226	1	0	4	0	5	7	133	0	0	140	5	0	5	0	10	0	381	381
04:15 PM	1	262	17	0	280	0	0	4	0	4	12	115	1	0	128	7	0	5	0	12	0	424	424
04:30 PM	2	281	20	0	303	2	0	4	0	6	5	111	0	0	116	5	0	8	0	13	0	438	438
04:45 PM	1	286	13	0	300	1	1	4	0	6	5	142	0	0	147	2	0	3	0	5	0	458	458
Total	5	1036	68	0	1109	4	1	16	0	21	29	501	1	0	531	19	0	21	0	40	0	1701	1701
05:00 PM	8	285	24	0	317	0	0	6	0	6	12	147	0	0	159	10	0	2	0	12	0	494	494
05:15 PM	3	255	27	0	285	0	0	2	0	2	9	166	0	0	175	13	0	12	0	25	0	487	487
05:30 PM	4	291	23	0	318	0	0	2	0	2	13	158	0	0	171	5	0	13	0	18	0	509	509
05:45 PM	3	237	22	0	262	0	0	3	0	3	7	121	0	0	128	8	0	14	0	22	0	415	415
Total	18	1068	96	0	1182	0	0	13	0	13	41	592	0	0	633	36	0	41	0	77	0	1905	1905
Grand Total	29	2566	199	0	2794	6	1	33	0	40	79	1345	1	0	1425	72	0	78	0	150	0	4409	4409
Apprch %	1	91.8	7.1			15	2.5	82.5			5.5	94.4	0.1			48	0	52					
Total %	0.7	58.2	4.5		63.4	0.1	0	0.7		0.9	1.8	30.5	0		32.3	1.6	0	1.8		3.4	0	100	
Passenger Vehicles	27	2490	196		2713	6	1	32		39	76	1293	1		1370	72	0	78		150	0	0	4272
% Passenger Vehicles	93.1	97	98.5	0	97.1	100	100	97	0	97.5	96.2	96.1	100	0	96.1	100	0	100	0	100	0	0	96.9
Large 2 Axle Vehicles	2	57	3		62	0	0	1		1	3	26	0		29	0	0	0		0	0	0	92
% Large 2 Axle Vehicles	6.9	2.2	1.5	0	2.2	0	0	3	0	2.5	3.8	1.9	0	0	2	0	0	0	0	0	0	0	2.1
3 Axle Vehicles	0	13	0		13	0	0	0		0	0	18	0		18	0	0	0		0	0	0	31
% 3 Axle Vehicles	0	0.5	0	0	0.5	0	0	0	0	0	0	1.3	0	0	1.3	0	0	0	0	0	0	0	0.7
4+ Axle Trucks	0	6	0		6	0	0	0		0	0	8	0		8	0	0	0		0	0	0	14
% 4+ Axle Trucks	0	0.2	0	0	0.2	0	0	0	0	0	0	0.6	0	0	0.6	0	0	0	0	0	0	0	0.3

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Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				Market Street Gateway Driveway Westbound				Market Street Northbound				Redwood Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	1	286	13	300	**1**	**1**	4	**6**	5	142	0	147	2	0	3	5	458
05:00 PM	**8**	285	24	317	0	0	**6**	6	12	147	0	159	10	0	2	12	494
05:15 PM	3	255	**27**	285	0	0	2	2	9	**166**	0	**175**	**13**	0	12	**25**	487
05:30 PM	4	**291**	23	**318**	0	0	2	2	**13**	158	0	171	5	0	**13**	18	**509**
Total Volume	16	1117	87	1220	1	1	14	16	39	613	0	652	30	0	30	60	1948
% App. Total	1.3	91.6	7.1		6.2	6.2	87.5		6	94	0		50	0	50		
PHF	.500	.960	.806	.959	.250	.250	.583	.667	.750	.923	.000	.931	.577	.000	.577	.600	.957

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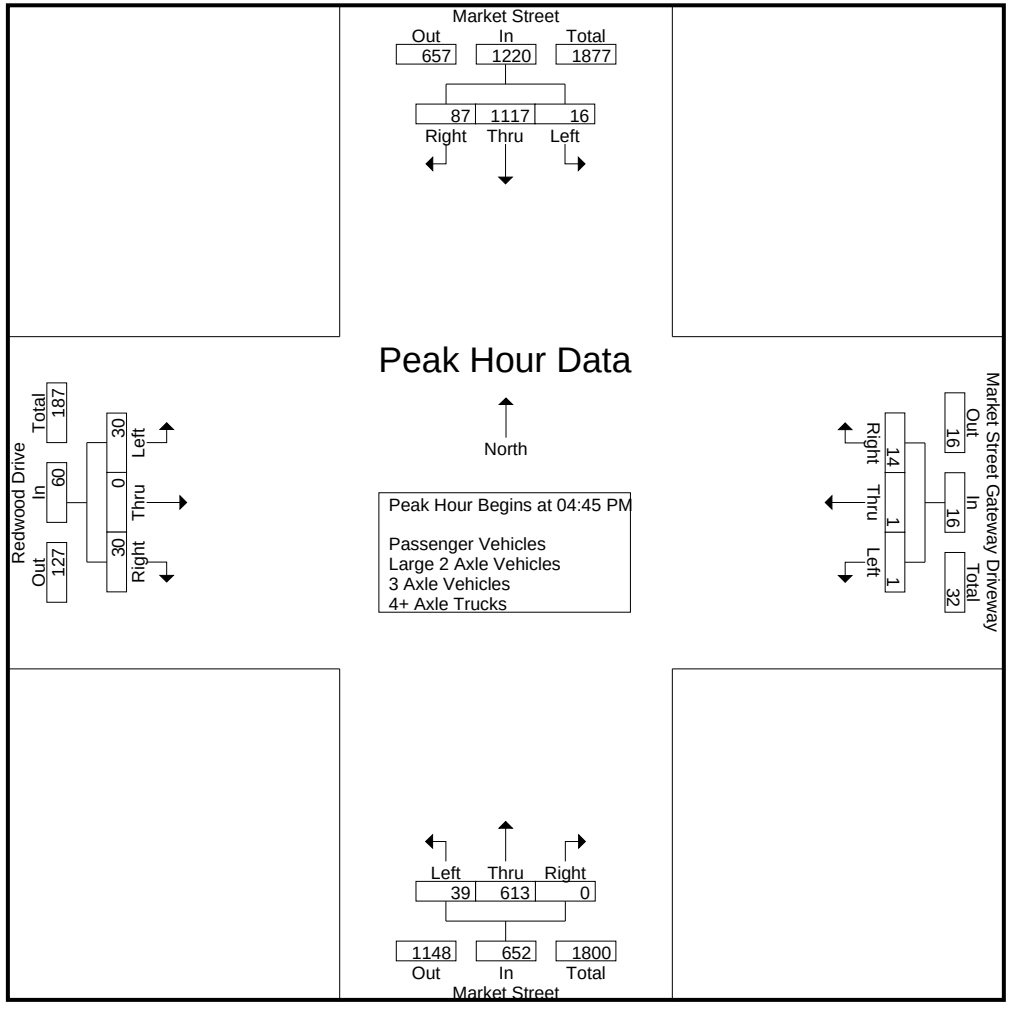

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File Name : 32_RIV_Mark_Red PM
Site Code : 05122894
Start Date : 10/4/2022
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	Market Street Southbound				Market Street Gateway Driveway Westbound				Market Street Northbound				Redwood Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:15 PM				04:45 PM				05:00 PM				
+0 mins.	1	286	13	300	0	0	4	4	5	142	0	147	10	0	2	12	
+15 mins.	**8**	285	24	317	**2**	0	4	**6**	12	147	0	159	**13**	0	12	**25**	
+30 mins.	3	255	**27**	285	1	**1**	4	6	9	**166**	0	**175**	5	0	13	18	
+45 mins.	4	**291**	23	**318**	0	0	**6**	6	**13**	158	0	171	8	0	**14**	22	
Total Volume	16	1117	87	1220	3	1	18	22	39	613	0	652	36	0	41	77	
% App. Total	1.3	91.6	7.1		13.6	4.5	81.8		6	94	0		46.8	0	53.2		
PHF	.500	.960	.806	.959	.375	.250	.750	.917	.750	.923	.000	.931	.692	.000	.732	.770	

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Groups Printed- Passenger Vehicles

	Market Street Southbound					Market Street Gateway Driveway Westbound					Market Street Northbound					Redwood Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	4	213	15	0	232	2	0	1	0	3	2	112	0	0	114	9	0	7	0	16	0	365	365
03:45 PM	2	234	20	0	256	0	0	3	0	3	7	125	0	0	132	8	0	9	0	17	0	408	408
Total	6	447	35	0	488	2	0	4	0	6	9	237	0	0	246	17	0	16	0	33	0	773	773
04:00 PM	1	199	18	0	218	1	0	4	0	5	7	119	0	0	126	5	0	5	0	10	0	359	359
04:15 PM	1	252	16	0	269	0	0	4	0	4	10	111	1	0	122	7	0	5	0	12	0	407	407
04:30 PM	1	273	20	0	294	2	0	4	0	6	5	109	0	0	114	5	0	8	0	13	0	427	427
04:45 PM	1	277	12	0	290	1	1	4	0	6	5	135	0	0	140	2	0	3	0	5	0	441	441
Total	4	1001	66	0	1071	4	1	16	0	21	27	474	1	0	502	19	0	21	0	40	0	1634	1634
05:00 PM	8	280	23	0	311	0	0	6	0	6	12	143	0	0	155	10	0	2	0	12	0	484	484
05:15 PM	3	247	27	0	277	0	0	2	0	2	9	165	0	0	174	13	0	12	0	25	0	478	478
05:30 PM	3	283	23	0	309	0	0	2	0	2	12	155	0	0	167	5	0	13	0	18	0	496	496
05:45 PM	3	232	22	0	257	0	0	2	0	2	7	119	0	0	126	8	0	14	0	22	0	407	407
Total	17	1042	95	0	1154	0	0	12	0	12	40	582	0	0	622	36	0	41	0	77	0	1865	1865
Grand Total	27	2490	196	0	2713	6	1	32	0	39	76	1293	1	0	1370	72	0	78	0	150	0	4272	4272
Apprch %	1	91.8	7.2			15.4	2.6	82.1			5.5	94.4	0.1			48	0	52					
Total %	0.6	58.3	4.6		63.5	0.1	0	0.7		0.9	1.8	30.3	0		32.1	1.7	0	1.8		3.5	0	100	

	Market Street Southbound				Market Street Gateway Driveway Westbound				Market Street Northbound				Redwood Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	1	277	12	290	**1**	**1**	4	**6**	5	135	0	140	2	0	3	5	441
05:00 PM	**8**	280	23	**311**	0	0	**6**	6	**12**	143	0	155	10	0	2	12	484
05:15 PM	3	247	**27**	277	0	0	2	2	9	**165**	0	**174**	**13**	0	12	**25**	478
05:30 PM	3	**283**	23	309	0	0	2	2	12	155	0	167	5	0	**13**	18	**496**
Total Volume	15	1087	85	1187	1	1	14	16	38	598	0	636	30	0	30	60	1899
% App. Total	1.3	91.6	7.2		6.2	6.2	87.5		6	94	0		50	0	50		
PHF	.469	.960	.787	.954	.250	.250	.583	.667	.792	.906	.000	.914	.577	.000	.577	.600	.957

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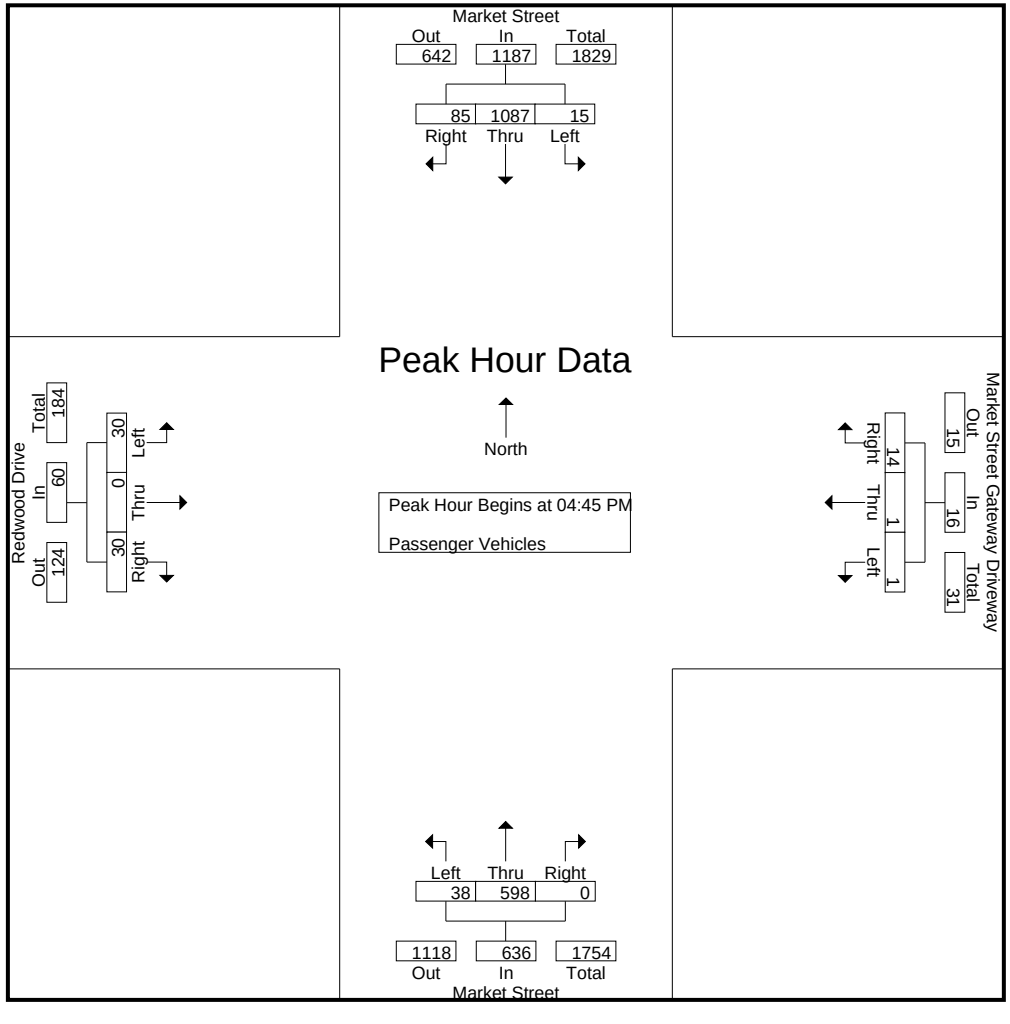
City of Riverside
N/S: Market Street
E/W: Redwood Drive
Weather: Clear

File Name : 32_RIV_Mark_Red PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Riverside
N/S: Market Street
E/W: Redwood Drive
Weather: Clear

File Name : 32_RIV_Mark_Red PM
Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				Market Street Gateway Driveway Westbound				Market Street Northbound				Redwood Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	1	277	12	290	**1**	**1**	4	**6**	5	135	0	140	2	0	3	5	
+15 mins.	**8**	280	23	**311**	0	0	**6**	6	**12**	143	0	155	10	0	2	12	
+30 mins.	3	247	**27**	277	0	0	2	2	9	**165**	0	**174**	**13**	0	12	**25**	
+45 mins.	3	**283**	23	309	0	0	2	2	12	155	0	167	5	0	**13**	18	
Total Volume	15	1087	85	1187	1	1	14	16	38	598	0	636	30	0	30	60	
% App. Total	1.3	91.6	7.2		6.2	6.2	87.5		6	94	0		50	0	50		
PHF	.469	.960	.787	.954	.250	.250	.583	.667	.792	.906	.000	.914	.577	.000	.577	.600	

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File Name : 32_RIV_Mark_Red PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Market Street Southbound					Market Street Gateway Driveway Westbound					Market Street Northbound					Redwood Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	8	8
03:45 PM	0	7	0	0	7	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	13	13
Total	0	11	0	0	11	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	21	21
04:00 PM	0	6	0	0	6	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	10	10
04:15 PM	0	10	1	0	11	0	0	0	0	0	2	1	0	0	3	0	0	0	0	0	0	14	14
04:30 PM	1	4	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5
04:45 PM	0	8	1	0	9	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	15	15
Total	1	28	2	0	31	0	0	0	0	0	2	11	0	0	13	0	0	0	0	0	0	44	44
05:00 PM	0	2	1	0	3	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	7	7
05:15 PM	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7
05:30 PM	1	5	0	0	6	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	7	7
05:45 PM	0	4	0	0	4	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	6	6
Total	1	18	1	0	20	0	0	1	0	1	1	5	0	0	6	0	0	0	0	0	0	27	27
Grand Total	2	57	3	0	62	0	0	1	0	1	3	26	0	0	29	0	0	0	0	0	0	92	92
Apprch %	3.2	91.9	4.8			0	0	100			10.3	89.7	0			0	0	0					
Total %	2.2	62	3.3		67.4	0	0	1.1		1.1	3.3	28.3	0		31.5	0	0	0		0	0	100	

	Market Street Southbound				Market Street Gateway Driveway Westbound				Market Street Northbound				Redwood Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	**8**	**1**	**9**	0	0	0	0	0	**6**	0	**6**	0	0	0	0	**15**
05:00 PM	0	2	1	3	0	0	0	0	0	4	0	4	0	0	0	0	7
05:15 PM	0	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
05:30 PM	**1**	5	0	6	0	0	0	0	**1**	0	0	1	0	0	0	0	7
Total Volume	1	22	2	25	0	0	0	0	1	10	0	11	0	0	0	0	36
% App. Total	4	88	8		0	0	0		9.1	90.9	0		0	0	0		
PHF	.250	.688	.500	.694	.000	.000	.000	.000	.250	.417	.000	.458	.000	.000	.000	.000	.600

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City of Riverside
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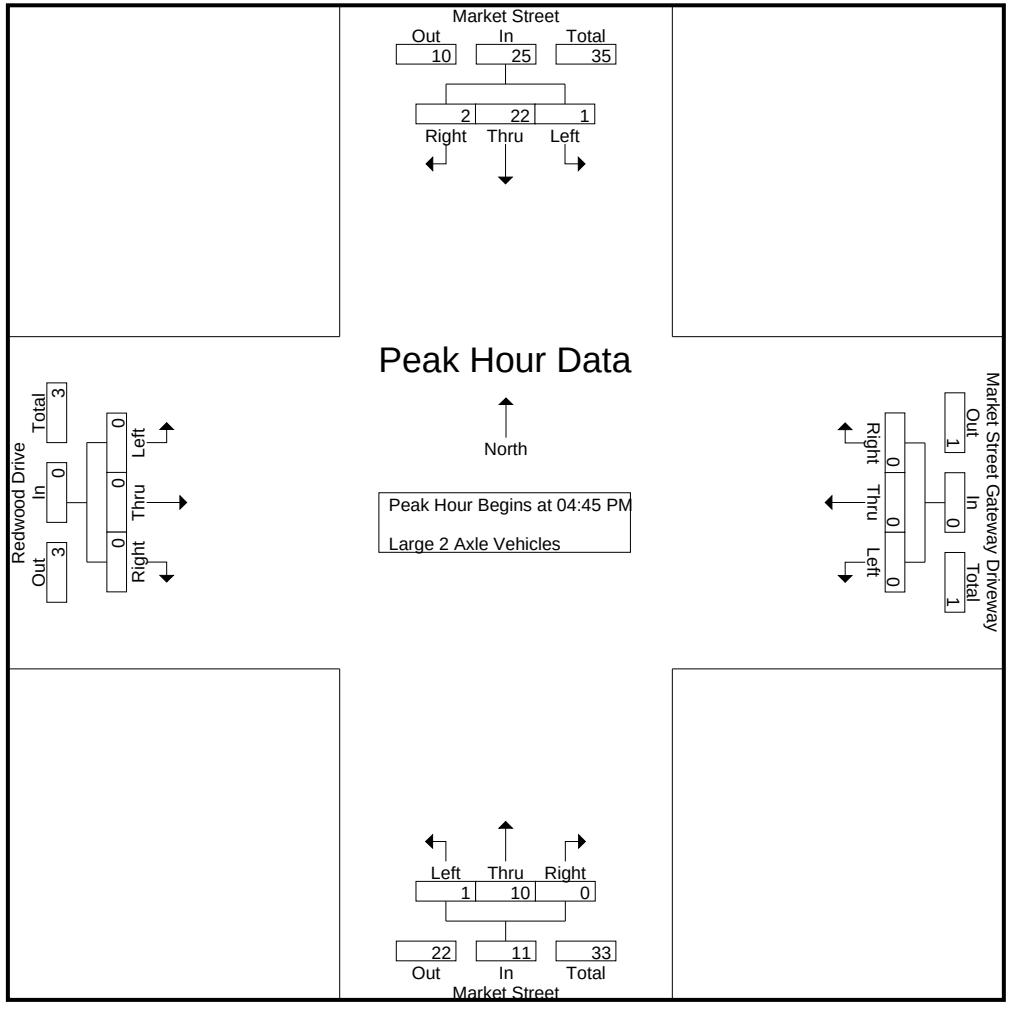
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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Start Date : 10/4/2022

	Market Street Southbound				Market Street Gateway Driveway Westbound				Market Street Northbound				Redwood Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	**8**	**1**	**9**	0	0	0	0	0	**6**	0	**6**	0	0	0	0	
+15 mins.	0	2	1	3	0	0	0	0	0	4	0	4	0	0	0	0	
+30 mins.	0	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	**1**	5	0	6	0	0	0	0	**1**	0	0	1	0	0	0	0	
Total Volume	1	22	2	25	0	0	0	0	1	10	0	11	0	0	0	0	
% App. Total	4	88	8		0	0	0		9.1	90.9	0		0	0	0		
PHF	.250	.688	.500	.694	.000	.000	.000	.000	.250	.417	.000	.458	.000	.000	.000	.000	

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File Name : 32_RIV_Mark_Red PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Market Street Southbound					Market Street Gateway Driveway Westbound					Market Street Northbound					Redwood Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
03:45 PM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	5	5
Total	0	4	0	0	4	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	7	7
04:00 PM	0	1	0	0	1	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	10	10
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	2
04:30 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4	4
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
Total	0	4	0	0	4	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	0	18	18
05:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:30 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
Total	0	5	0	0	5	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	6	6
Grand Total	0	13	0	0	13	0	0	0	0	0	0	18	0	0	18	0	0	0	0	0	0	31	31
Apprch %	0	100	0			0	0	0			0	100	0			0	0	0					
Total %	0	41.9	0		41.9	0	0	0		0	0	58.1	0		58.1	0	0	0		0	0	100	

	Market Street Southbound				Market Street Gateway Driveway Westbound				Market Street Northbound				Redwood Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	1	0	1	0	0	0	0	0	**1**	0	**1**	0	0	0	0	**2**
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	**2**	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	5	0	5	0	0	0	0	0	1	0	1	0	0	0	0	6
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.625	.000	.625	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.750

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City of Riverside
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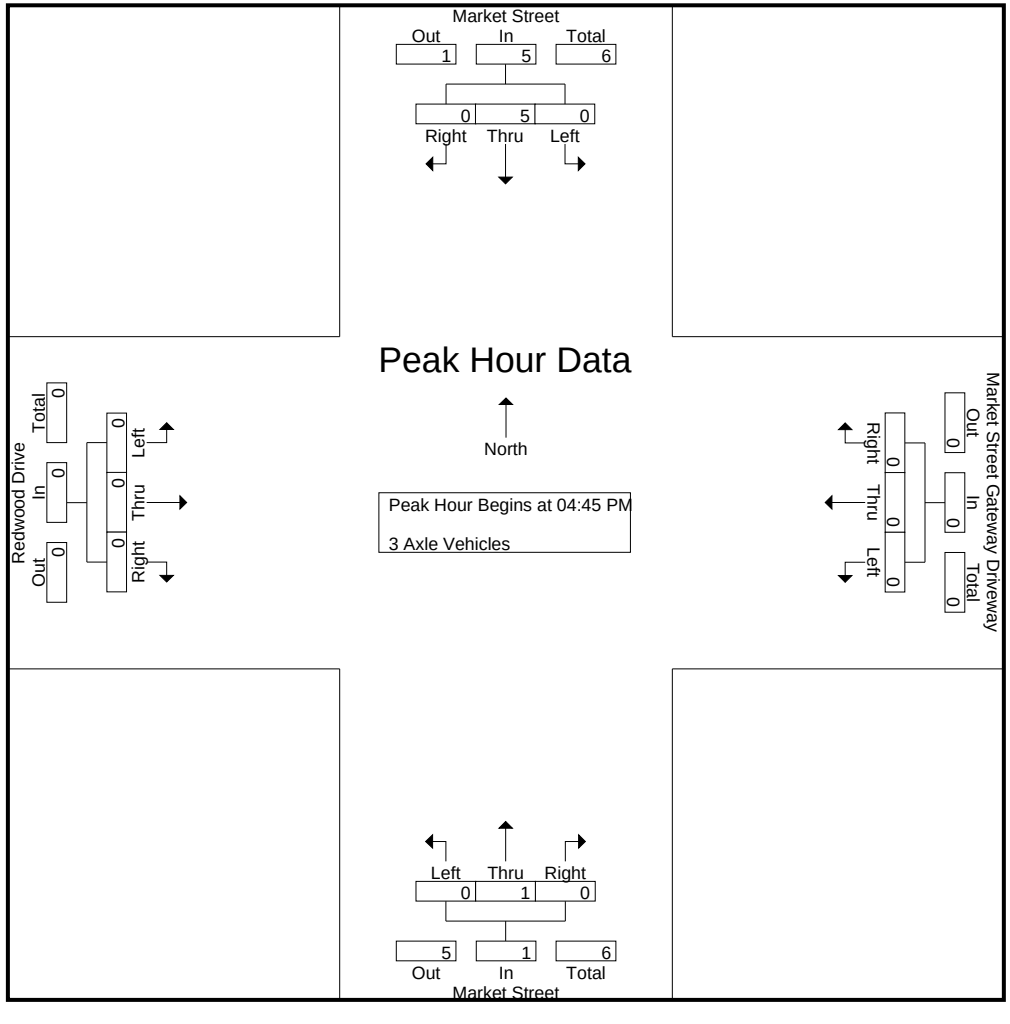
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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	Market Street Southbound				Market Street Gateway Driveway Westbound				Market Street Northbound				Redwood Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	1	0	1	0	0	0	0	0	**1**	0	**1**	0	0	0	0	
+15 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	**2**	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	5	0	5	0	0	0	0	0	1	0	1	0	0	0	0	
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.625	.000	.625	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	

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Groups Printed- 4+ Axle Trucks

	Market Street Southbound					Market Street Gateway Driveway Westbound					Market Street Northbound					Redwood Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	2
04:00 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
04:30 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	5	5
05:00 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	4	4
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	7	7
Grand Total	0	6	0	0	6	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	14	14
Apprch %	0	100	0			0	0	0			0	100	0			0	0	0					
Total %	0	42.9	0		42.9	0	0	0		0	0	57.1	0		57.1	0	0	0		0	0	100	

	Market Street Southbound				Market Street Gateway Driveway Westbound				Market Street Northbound				Redwood Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	**2**	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:30 PM	0	1	0	1	0	0	0	0	0	**3**	0	**3**	0	0	0	0	**4**
Total Volume	0	3	0	3	0	0	0	0	0	4	0	4	0	0	0	0	7
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.375	.000	.375	.000	.000	.000	.000	.000	.333	.000	.333	.000	.000	.000	.000	.438

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Start Date : 10/4/2022
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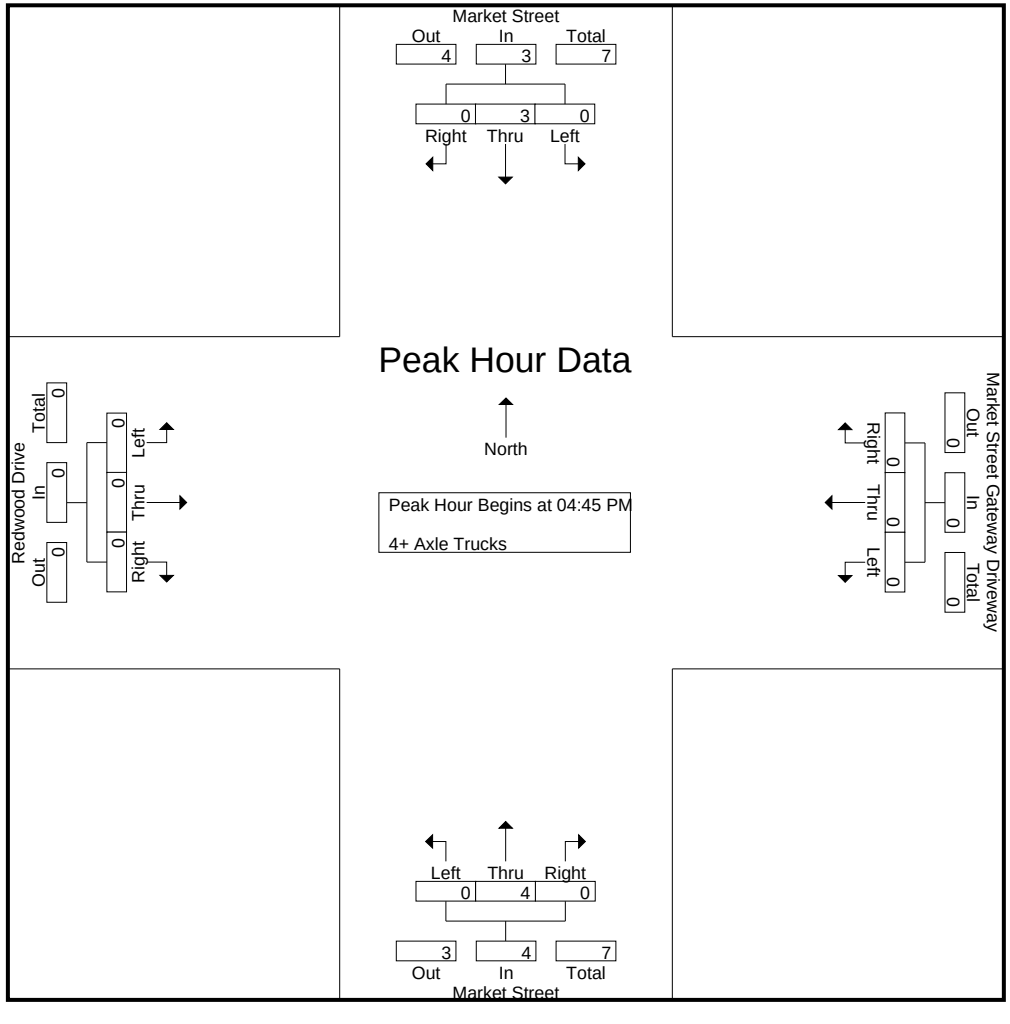

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City of Riverside
N/S: Market Street
E/W: Redwood Drive
Weather: Clear

File Name : 32_RIV_Mark_Red PM
Site Code : 05122894
Start Date : 10/4/2022

	Market Street Southbound				Market Street Gateway Driveway Westbound				Market Street Northbound				Redwood Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	**2**	0	**2**	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	
+45 mins.	0	1	0	1	0	0	0	0	0	**3**	0	**3**	0	0	0	0	
Total Volume	0	3	0	3	0	0	0	0	0	4	0	4	0	0	0	0	
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.375	.000	.375	.000	.000	.000	.000	.000	.333	.000	.333	.000	.000	.000	.000	

Location: Riverside
N/S: Market Street
E/W: Redwood Drive

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Market Street	East Leg Market St Gateway DW	South Leg Market Street	West Leg Redwood Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	1	0	0	1
7:45 AM	0	1	0	0	1
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	1	0	0	1
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	3	0	0	3

	North Leg Market Street	East Leg Market St Gateway DW	South Leg Market Street	West Leg Redwood Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	2	2
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	1	0	0	1
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	2	3

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Location: Riverside
N/S: Market Street
E/W: Redwood Drive

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Market Street			Westbound Market St Gateway DW			Northbound Market Street			Eastbound Redwood Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	1	0	0	0	0	0	1	0	0	0	0	2
6:45 AM	0	1	0	0	0	0	0	0	0	1	0	0	2
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	0	0	0	1	0	2	0	0	5

	Southbound Market Street			Westbound Market St Gateway DW			Northbound Market Street			Eastbound Redwood Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	0	1	1	1	4

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County of San Bernardino
N/S: Agua Mansa Road
E/W: El Rivino Road
Weather: Clear

File Name : 33_CSB_Agua M_El Riv AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Agua Mansa Road Southbound			Agua Mansa Road Northbound			El Rivino Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
06:30 AM	66	25	91	7	60	67	45	7	52	210
06:45 AM	83	38	121	6	63	69	34	12	46	236
Total	149	63	212	13	123	136	79	19	98	446
07:00 AM	58	17	75	4	42	46	27	10	37	158
07:15 AM	78	17	95	0	66	66	30	3	33	194
07:30 AM	79	19	98	5	75	80	31	10	41	219
07:45 AM	82	26	108	3	66	69	42	14	56	233
Total	297	79	376	12	249	261	130	37	167	804
08:00 AM	82	35	117	5	58	63	42	9	51	231
08:15 AM	59	27	86	4	59	63	35	10	45	194
08:30 AM	48	45	93	9	55	64	16	11	27	184
08:45 AM	68	49	117	5	45	50	35	11	46	213
Total	257	156	413	23	217	240	128	41	169	822
Grand Total	703	298	1001	48	589	637	337	97	434	2072
Apprch %	70.2	29.8		7.5	92.5		77.6	22.4		
Total %	33.9	14.4	48.3	2.3	28.4	30.7	16.3	4.7	20.9	
Passenger Vehicles	486	285	771	39	344	383	283	84	367	1521
% Passenger Vehicles	69.1	95.6	77	81.2	58.4	60.1	84	86.6	84.6	73.4
Large 2 Axle Vehicles	47	9	56	2	35	37	35	7	42	135
% Large 2 Axle Vehicles	6.7	3	5.6	4.2	5.9	5.8	10.4	7.2	9.7	6.5
3 Axle Vehicles	65	3	68	6	88	94	7	5	12	174
% 3 Axle Vehicles	9.2	1	6.8	12.5	14.9	14.8	2.1	5.2	2.8	8.4
4+ Axle Trucks	105	1	106	1	122	123	12	1	13	242
% 4+ Axle Trucks	14.9	0.3	10.6	2.1	20.7	19.3	3.6	1	3	11.7

	Agua Mansa Road Southbound			Agua Mansa Road Northbound			El Rivino Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	78	17	95	0	66	66	30	3	33	194
07:30 AM	79	19	98	**5**	**75**	**80**	31	10	41	219
07:45 AM	**82**	26	108	3	66	69	**42**	**14**	**56**	**233**
08:00 AM	82	**35**	**117**	5	58	63	42	9	51	231
Total Volume	321	97	418	13	265	278	145	36	181	877
% App. Total	76.8	23.2		4.7	95.3		80.1	19.9		
PHF	.979	.693	.893	.650	.883	.869	.863	.643	.808	.941

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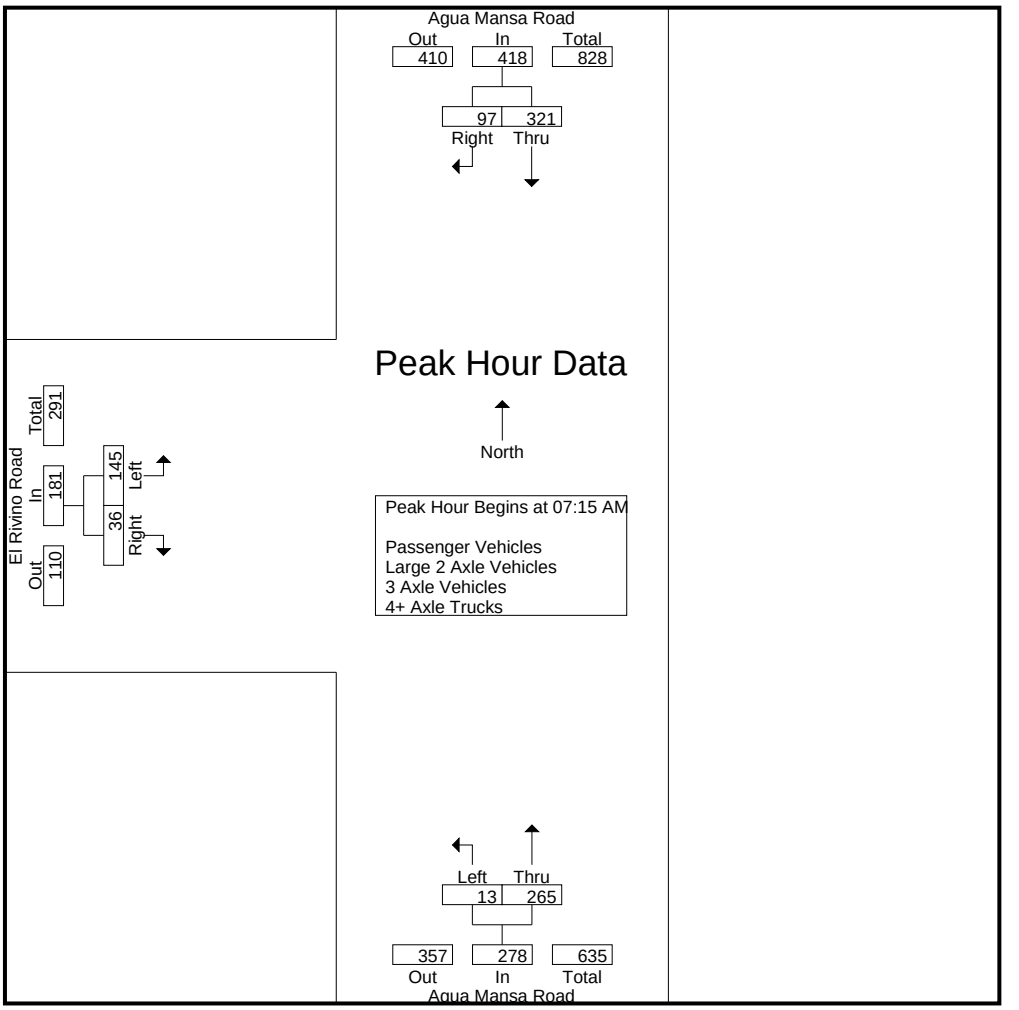
County of San Bernardino
N/S: Agua Mansa Road
E/W: El Rivino Road
Weather: Clear

File Name : 33_CSB_Agua M_El Riv AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:30 AM		
+0 mins.	78	17	95	0	66	66	31	10	41
+15 mins.	79	19	98	**5**	**75**	**80**	**42**	**14**	**56**
+30 mins.	**82**	26	108	3	66	69	42	9	51
+45 mins.	82	**35**	**117**	5	58	63	35	10	45
Total Volume	321	97	418	13	265	278	150	43	193
% App. Total	76.8	23.2		4.7	95.3		77.7	22.3	
PHF	.979	.693	.893	.650	.883	.869	.893	.768	.862

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County of San Bernardino
N/S: Agua Mansa Road
E/W: El Rivino Road
Weather: Clear

File Name : 33_CSB_Agua M_El Riv AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Agua Mansa Road Southbound			Agua Mansa Road Northbound			El Rivino Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
06:30 AM	41	24	65	6	35	41	44	5	49	155
06:45 AM	57	37	94	6	32	38	28	11	39	171
Total	98	61	159	12	67	79	72	16	88	326
07:00 AM	43	15	58	4	22	26	18	7	25	109
07:15 AM	54	16	70	0	38	38	21	2	23	131
07:30 AM	58	17	75	2	59	61	28	9	37	173
07:45 AM	66	24	90	1	44	45	36	13	49	184
Total	221	72	293	7	163	170	103	31	134	597
08:00 AM	56	34	90	5	35	40	38	8	46	176
08:15 AM	39	26	65	2	34	36	27	9	36	137
08:30 AM	26	44	70	8	24	32	14	9	23	125
08:45 AM	46	48	94	5	21	26	29	11	40	160
Total	167	152	319	20	114	134	108	37	145	598
Grand Total	486	285	771	39	344	383	283	84	367	1521
Apprch %	63	37		10.2	89.8		77.1	22.9		
Total %	32	18.7	50.7	2.6	22.6	25.2	18.6	5.5	24.1	

	Agua Mansa Road Southbound			Agua Mansa Road Northbound			El Rivino Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	54	16	70	0	38	38	21	2	23	131
07:30 AM	58	17	75	2	**59**	**61**	28	9	37	173
07:45 AM	**66**	24	**90**	1	44	45	36	**13**	**49**	**184**
08:00 AM	56	**34**	90	**5**	35	40	**38**	8	46	176
Total Volume	234	91	325	8	176	184	123	32	155	664
% App. Total	72	28		4.3	95.7		79.4	20.6		
PHF	.886	.669	.903	.400	.746	.754	.809	.615	.791	.902

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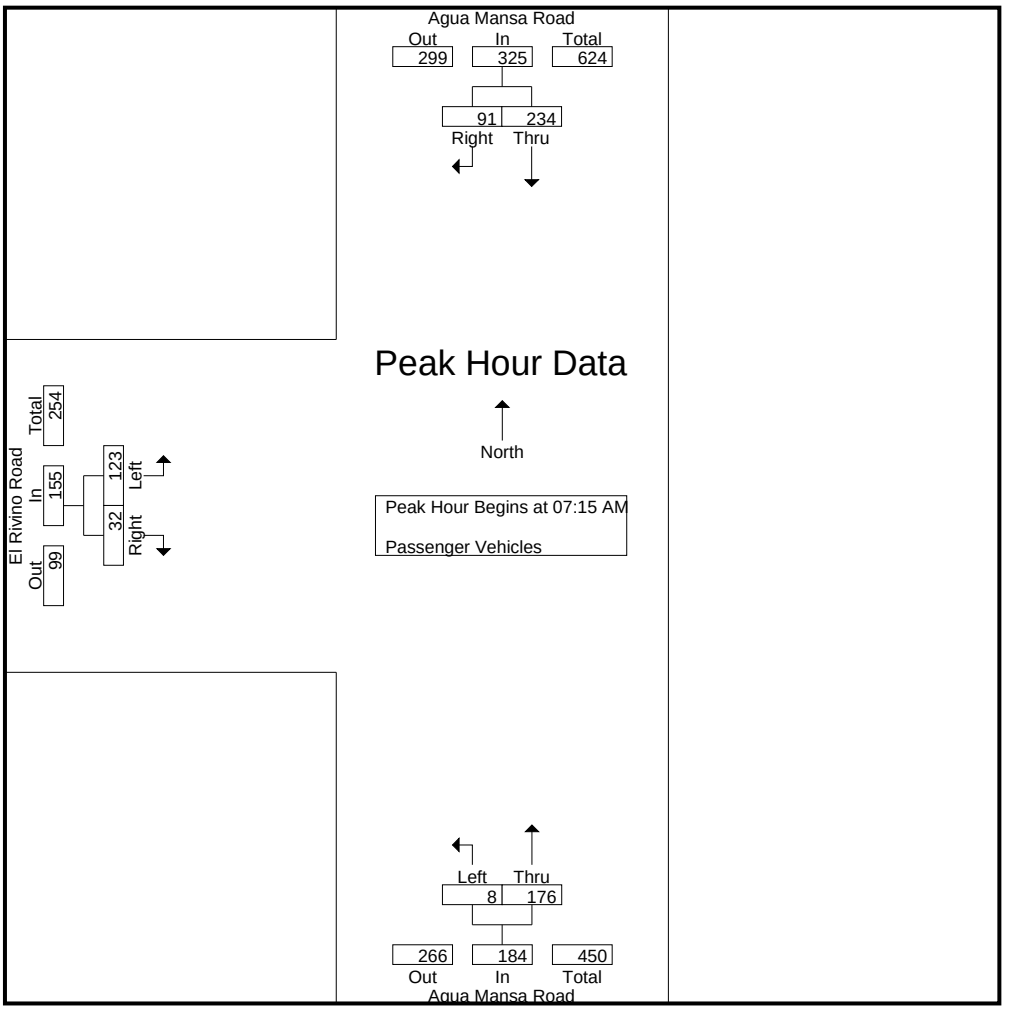
County of San Bernardino
N/S: Agua Mansa Road
E/W: El Rivino Road
Weather: Clear

File Name : 33_CSB_Agua M_El Riv AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	54	16	70	0	38	38	21	2	23
+15 mins.	58	17	75	2	**59**	**61**	28	9	37
+30 mins.	**66**	24	**90**	1	44	45	36	**13**	**49**
+45 mins.	56	**34**	90	**5**	35	40	**38**	8	46
Total Volume	234	91	325	8	176	184	123	32	155
% App. Total	72	28		4.3	95.7		79.4	20.6	
PHF	.886	.669	.903	.400	.746	.754	.809	.615	.791

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County of San Bernardino
N/S: Agua Mansa Road
E/W: El Rivino Road
Weather: Clear

File Name : 33_CSB_Agua M_El Riv AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Agua Mansa Road Southbound			Agua Mansa Road Northbound			El Rivino Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
06:30 AM	7	0	7	0	3	3	0	1	1	11
06:45 AM	6	0	6	0	5	5	3	1	4	15
Total	13	0	13	0	8	8	3	2	5	26
07:00 AM	4	2	6	0	3	3	9	3	12	21
07:15 AM	8	1	9	0	7	7	9	0	9	25
07:30 AM	4	1	5	1	3	4	3	1	4	13
07:45 AM	2	2	4	0	3	3	2	0	2	9
Total	18	6	24	1	16	17	23	4	27	68
08:00 AM	5	1	6	0	2	2	2	0	2	10
08:15 AM	2	0	2	0	2	2	2	0	2	6
08:30 AM	5	1	6	1	4	5	1	1	2	13
08:45 AM	4	1	5	0	3	3	4	0	4	12
Total	16	3	19	1	11	12	9	1	10	41
Grand Total	47	9	56	2	35	37	35	7	42	135
Apprch %	83.9	16.1		5.4	94.6		83.3	16.7		
Total %	34.8	6.7	41.5	1.5	25.9	27.4	25.9	5.2	31.1	

	Agua Mansa Road Southbound			Agua Mansa Road Northbound			El Rivino Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	**8**	1	**9**	0	**7**	**7**	**9**	0	**9**	**25**
07:30 AM	4	1	5	**1**	3	4	3	**1**	4	13
07:45 AM	2	**2**	4	0	3	3	2	0	2	9
08:00 AM	5	1	6	0	2	2	2	0	2	10
Total Volume	19	5	24	1	15	16	16	1	17	57
% App. Total	79.2	20.8		6.2	93.8		94.1	5.9		
PHF	.594	.625	.667	.250	.536	.571	.444	.250	.472	.570

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County of San Bernardino
N/S: Agua Mansa Road
E/W: El Rivino Road
Weather: Clear

File Name : 33_CSB_Agua M_El Riv AM
Site Code : 05122894
Start Date : 10/4/2022
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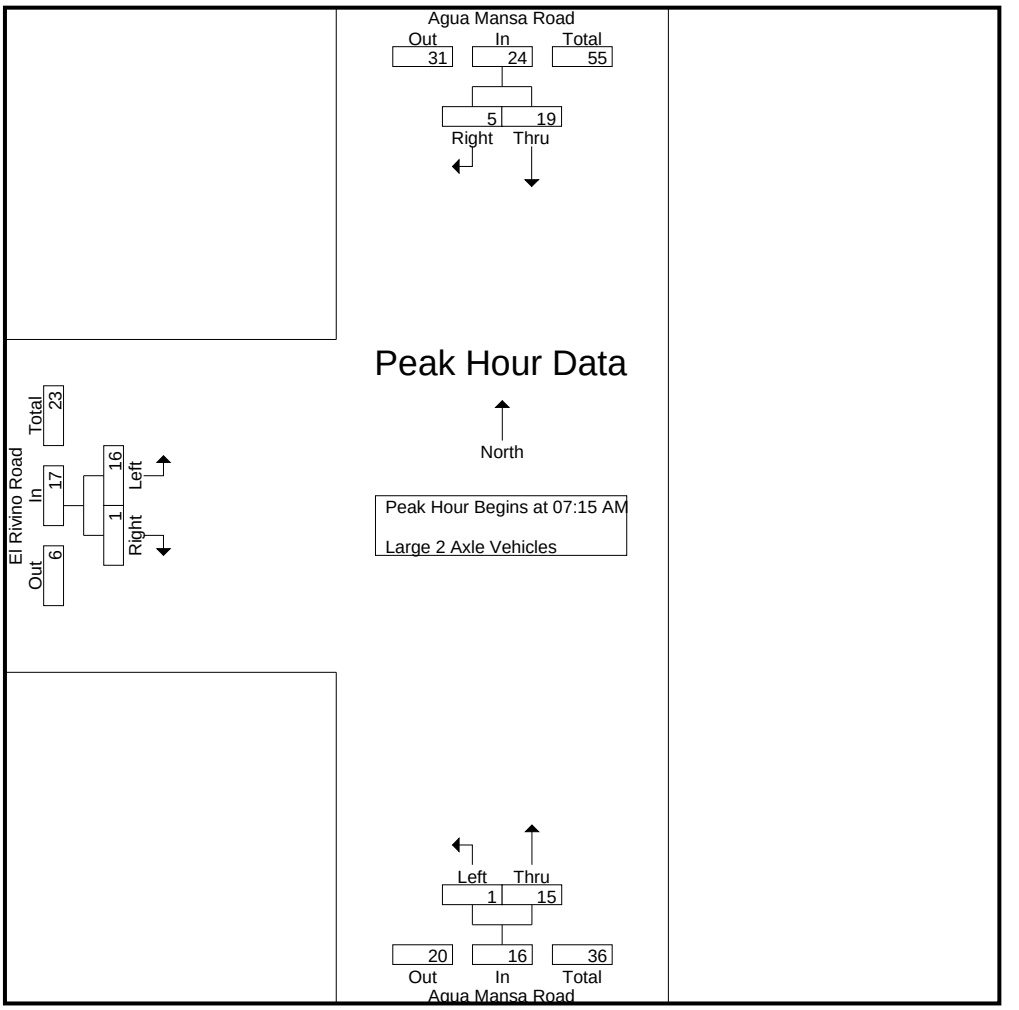

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	**8**	1	**9**	0	**7**	**7**	**9**	0	**9**
+15 mins.	4	1	5	**1**	3	4	3	**1**	4
+30 mins.	2	**2**	4	0	3	3	2	0	2
+45 mins.	5	1	6	0	2	2	2	0	2
Total Volume	19	5	24	1	15	16	16	1	17
% App. Total	79.2	20.8		6.2	93.8		94.1	5.9	
PHF	.594	.625	.667	.250	.536	.571	.444	.250	.472

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County of San Bernardino
N/S: Agua Mansa Road
E/W: El Rivino Road
Weather: Clear

File Name : 33_CSB_Agua M_El Riv AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Agua Mansa Road Southbound			Agua Mansa Road Northbound			El Rivino Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
06:30 AM	7	1	8	0	4	4	0	1	1	13
06:45 AM	8	1	9	0	9	9	1	0	1	19
Total	15	2	17	0	13	13	1	1	2	32
07:00 AM	5	0	5	0	10	10	0	0	0	15
07:15 AM	8	0	8	0	10	10	0	1	1	19
07:30 AM	5	1	6	2	6	8	0	0	0	14
07:45 AM	6	0	6	2	9	11	3	1	4	21
Total	24	1	25	4	35	39	3	2	5	69
08:00 AM	9	0	9	0	10	10	2	1	3	22
08:15 AM	5	0	5	2	11	13	1	1	2	20
08:30 AM	5	0	5	0	10	10	0	0	0	15
08:45 AM	7	0	7	0	9	9	0	0	0	16
Total	26	0	26	2	40	42	3	2	5	73
Grand Total	65	3	68	6	88	94	7	5	12	174
Apprch %	95.6	4.4		6.4	93.6		58.3	41.7		
Total %	37.4	1.7	39.1	3.4	50.6	54	4	2.9	6.9	

	Agua Mansa Road Southbound			Agua Mansa Road Northbound			El Rivino Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	8	0	8	0	**10**	10	0	**1**	1	19
07:30 AM	5	**1**	6	**2**	6	8	0	0	0	14
07:45 AM	6	0	6	2	9	**11**	**3**	1	**4**	21
08:00 AM	**9**	0	**9**	0	10	10	2	1	3	**22**
Total Volume	28	1	29	4	35	39	5	3	8	76
% App. Total	96.6	3.4		10.3	89.7		62.5	37.5		
PHF	.778	.250	.806	.500	.875	.886	.417	.750	.500	.864

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County of San Bernardino
N/S: Agua Mansa Road
E/W: El Rivino Road
Weather: Clear

File Name : 33_CSB_Agua M_El Riv AM
Site Code : 05122894
Start Date : 10/4/2022
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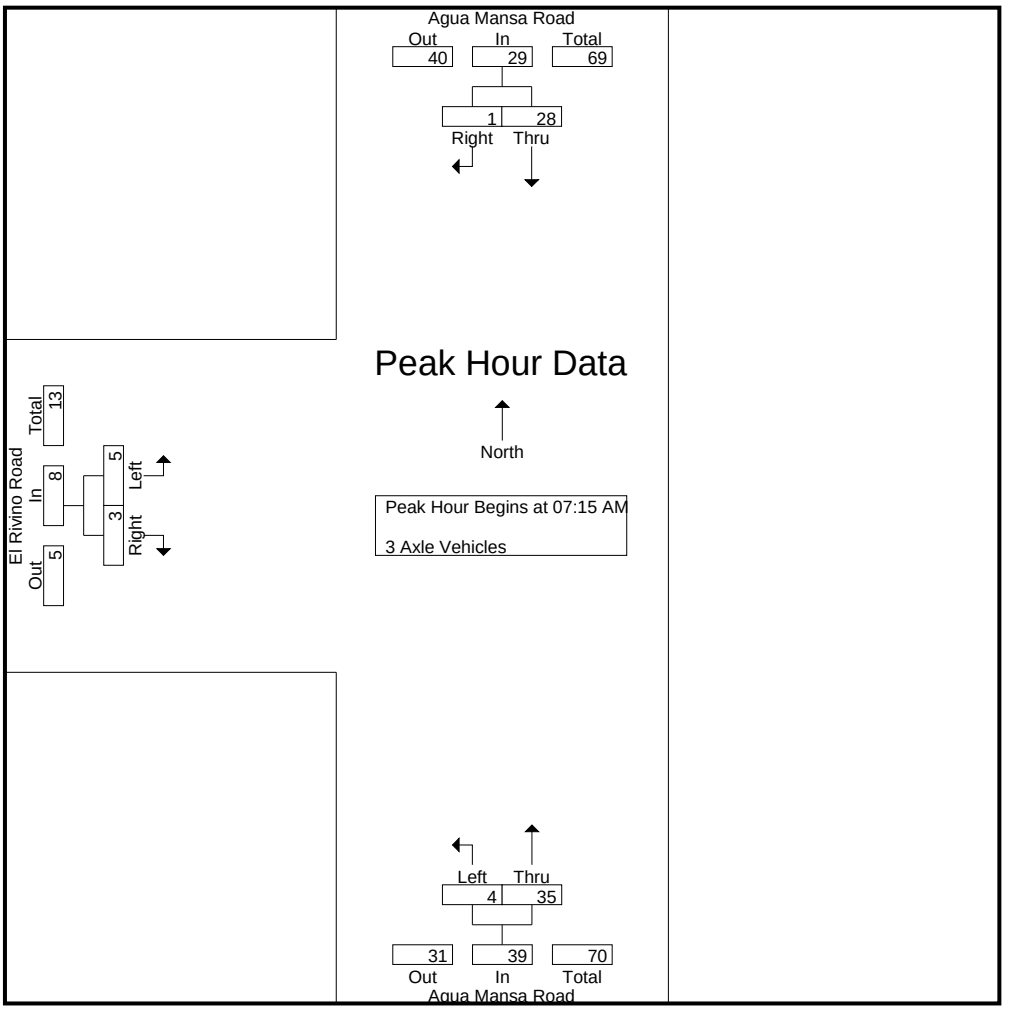

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	8	0	8	0	**10**	10	0	**1**	1
+15 mins.	5	**1**	6	**2**	6	8	0	0	0
+30 mins.	6	0	6	2	9	**11**	**3**	1	**4**
+45 mins.	**9**	0	**9**	0	10	10	2	1	3
Total Volume	28	1	29	4	35	39	5	3	8
% App. Total	96.6	3.4		10.3	89.7		62.5	37.5	
PHF	.778	.250	.806	.500	.875	.886	.417	.750	.500

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Corona, CA 92878
(951)268-6268

County of San Bernardino
N/S: Agua Mansa Road
E/W: El Rivino Road
Weather: Clear

File Name : 33_CSB_Agua M_El Riv AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Agua Mansa Road Southbound			Agua Mansa Road Northbound			El Rivino Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
06:30 AM	11	0	11	1	18	19	1	0	1	31
06:45 AM	12	0	12	0	17	17	2	0	2	31
Total	23	0	23	1	35	36	3	0	3	62
07:00 AM	6	0	6	0	7	7	0	0	0	13
07:15 AM	8	0	8	0	11	11	0	0	0	19
07:30 AM	12	0	12	0	7	7	0	0	0	19
07:45 AM	8	0	8	0	10	10	1	0	1	19
Total	34	0	34	0	35	35	1	0	1	70
08:00 AM	12	0	12	0	11	11	0	0	0	23
08:15 AM	13	1	14	0	12	12	5	0	5	31
08:30 AM	12	0	12	0	17	17	1	1	2	31
08:45 AM	11	0	11	0	12	12	2	0	2	25
Total	48	1	49	0	52	52	8	1	9	110
Grand Total	105	1	106	1	122	123	12	1	13	242
Apprch %	99.1	0.9		0.8	99.2		92.3	7.7		
Total %	43.4	0.4	43.8	0.4	50.4	50.8	5	0.4	5.4	

	Agua Mansa Road Southbound			Agua Mansa Road Northbound			El Rivino Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	8	0	8	0	**11**	**11**	0	0	0	19
07:30 AM	**12**	0	**12**	0	7	7	0	0	0	19
07:45 AM	8	0	8	0	10	10	**1**	0	**1**	19
08:00 AM	12	0	12	0	11	11	0	0	0	**23**
Total Volume	40	0	40	0	39	39	1	0	1	80
% App. Total	100	0		0	100		100	0		
PHF	.833	.000	.833	.000	.886	.886	.250	.000	.250	.870

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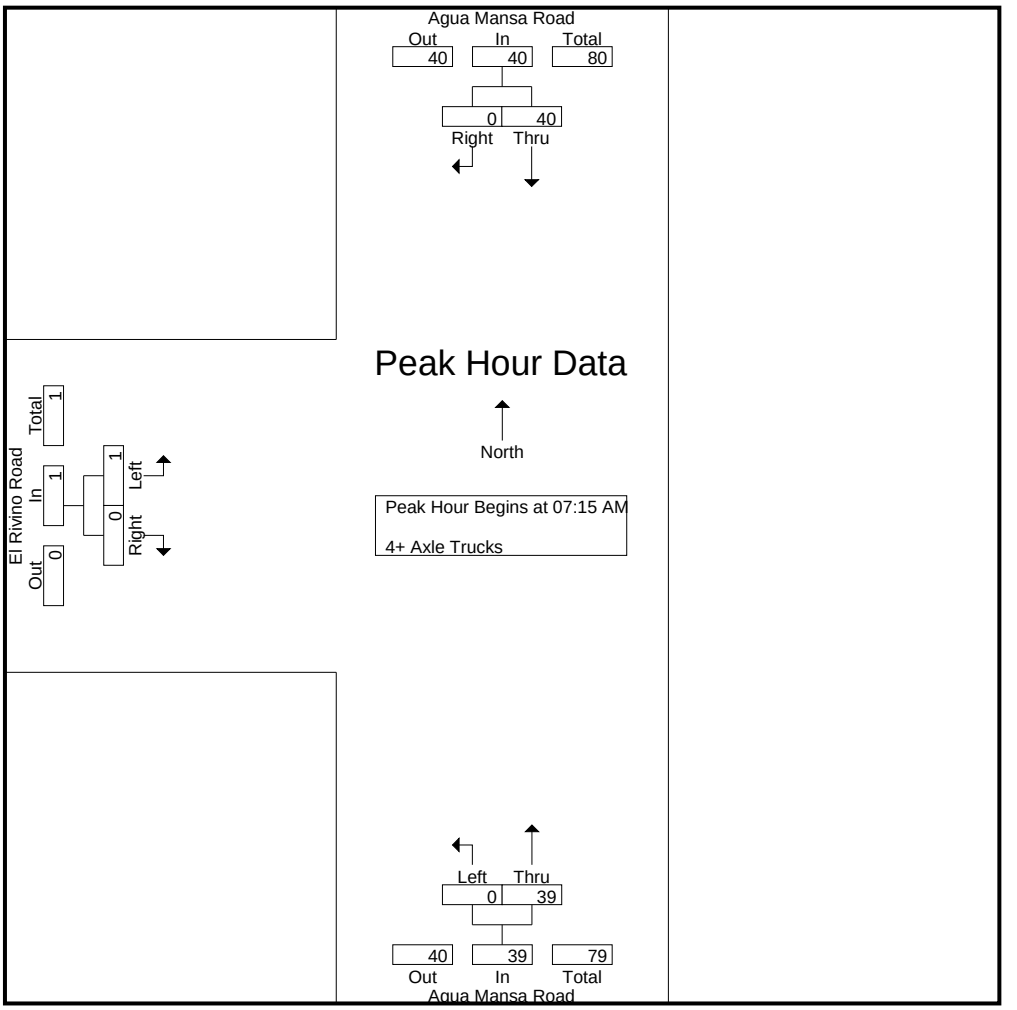

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	8	0	8	0	**11**	**11**	0	0	0
+15 mins.	**12**	0	**12**	0	7	7	0	0	0
+30 mins.	8	0	8	0	10	10	**1**	0	**1**
+45 mins.	12	0	12	0	11	11	0	0	0
Total Volume	40	0	40	0	39	39	1	0	1
% App. Total	100	0		0	100		100	0	
PHF	.833	.000	.833	.000	.886	.886	.250	.000	.250

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File Name : 33_CSB_Agua M_El Riv PM
Site Code : 05122894
Start Date : 10/4/2022
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Agua Mansa Road Southbound			Agua Mansa Road Northbound			El Rivino Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
03:30 PM	64	48	112	17	137	154	33	6	39	305
03:45 PM	63	37	100	11	115	126	47	3	50	276
Total	127	85	212	28	252	280	80	9	89	581
04:00 PM	56	32	88	4	97	101	74	11	85	274
04:15 PM	56	33	89	10	128	138	56	10	66	293
04:30 PM	67	29	96	9	132	141	55	11	66	303
04:45 PM	41	37	78	7	111	118	53	8	61	257
Total	220	131	351	30	468	498	238	40	278	1127
05:00 PM	58	28	86	11	125	136	53	12	65	287
05:15 PM	63	33	96	6	106	112	40	10	50	258
05:30 PM	62	43	105	13	160	173	74	10	84	362
05:45 PM	37	20	57	2	78	80	36	4	40	177
Total	220	124	344	32	469	501	203	36	239	1084
Grand Total	567	340	907	90	1189	1279	521	85	606	2792
Apprch %	62.5	37.5		7	93		86	14		
Total %	20.3	12.2	32.5	3.2	42.6	45.8	18.7	3	21.7	
Passenger Vehicles	399	314	713	72	926	998	492	69	561	2272
% Passenger Vehicles	70.4	92.4	78.6	80	77.9	78	94.4	81.2	92.6	81.4
Large 2 Axle Vehicles	23	19	42	13	41	54	16	2	18	114
% Large 2 Axle Vehicles	4.1	5.6	4.6	14.4	3.4	4.2	3.1	2.4	3	4.1
3 Axle Vehicles	49	5	54	3	63	66	6	13	19	139
% 3 Axle Vehicles	8.6	1.5	6	3.3	5.3	5.2	1.2	15.3	3.1	5
4+ Axle Trucks	96	2	98	2	159	161	7	1	8	267
% 4+ Axle Trucks	16.9	0.6	10.8	2.2	13.4	12.6	1.3	1.2	1.3	9.6

	Agua Mansa Road Southbound			Agua Mansa Road Northbound			El Rivino Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	41	37	78	7	111	118	53	8	61	257
05:00 PM	58	28	86	11	125	136	53	**12**	65	287
05:15 PM	**63**	33	96	6	106	112	40	10	50	258
05:30 PM	62	**43**	**105**	**13**	**160**	**173**	**74**	10	**84**	**362**
Total Volume	224	141	365	37	502	539	220	40	260	1164
% App. Total	61.4	38.6		6.9	93.1		84.6	15.4		
PHF	.889	.820	.869	.712	.784	.779	.743	.833	.774	.804

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File Name : 33_CSB_Agua M_El Riv PM
Site Code : 05122894
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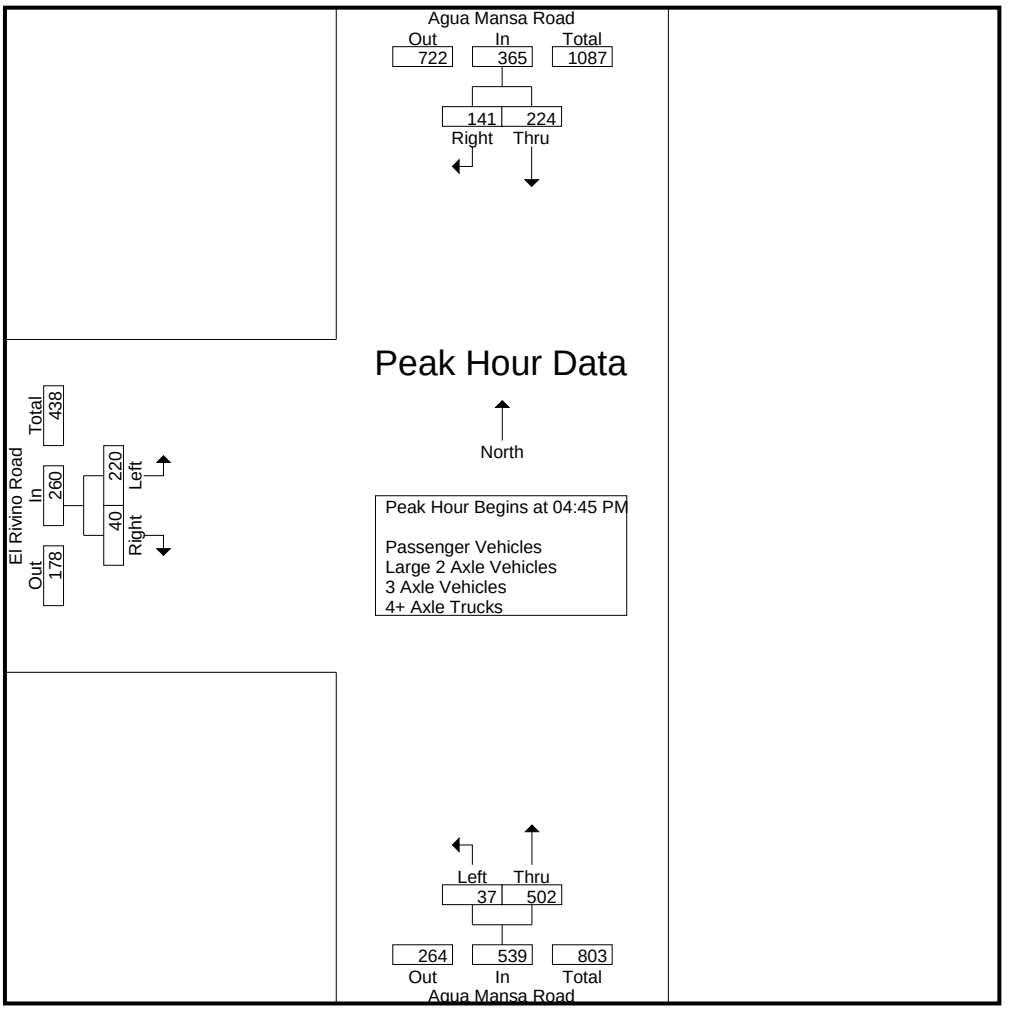

Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM			04:45 PM			04:00 PM		
+0 mins.	**64**	**48**	**112**	7	111	118	**74**	**11**	**85**
+15 mins.	63	37	100	11	125	136	56	10	66
+30 mins.	56	32	88	6	106	112	55	11	66
+45 mins.	56	33	89	**13**	**160**	**173**	53	8	61
Total Volume	239	150	389	37	502	539	238	40	278
% App. Total	61.4	38.6		6.9	93.1		85.6	14.4	
PHF	.934	.781	.868	.712	.784	.779	.804	.909	.818

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File Name : 33_CSB_Agua M_El Riv PM
Site Code : 05122894
Start Date : 10/4/2022
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Groups Printed- Passenger Vehicles

	Agua Mansa Road Southbound			Agua Mansa Road Northbound			El Rivino Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
03:30 PM	41	41	82	13	107	120	31	5	36	238
03:45 PM	44	33	77	6	92	98	43	2	45	220
Total	85	74	159	19	199	218	74	7	81	458
04:00 PM	39	27	66	3	81	84	68	10	78	228
04:15 PM	43	32	75	9	101	110	52	8	60	245
04:30 PM	48	27	75	7	94	101	54	10	64	240
04:45 PM	29	36	65	6	77	83	50	8	58	206
Total	159	122	281	25	353	378	224	36	260	919
05:00 PM	41	26	67	10	99	109	50	10	60	236
05:15 PM	42	32	74	6	87	93	37	7	44	211
05:30 PM	45	41	86	10	131	141	72	5	77	304
05:45 PM	27	19	46	2	57	59	35	4	39	144
Total	155	118	273	28	374	402	194	26	220	895
Grand Total	399	314	713	72	926	998	492	69	561	2272
Apprch %	56	44		7.2	92.8		87.7	12.3		
Total %	17.6	13.8	31.4	3.2	40.8	43.9	21.7	3	24.7	

	Agua Mansa Road Southbound			Agua Mansa Road Northbound			El Rivino Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	29	36	65	6	77	83	50	8	58	206
05:00 PM	41	26	67	**10**	99	109	50	**10**	60	236
05:15 PM	42	32	74	6	87	93	37	7	44	211
05:30 PM	**45**	**41**	**86**	10	**131**	**141**	**72**	5	**77**	**304**
Total Volume	157	135	292	32	394	426	209	30	239	957
% App. Total	53.8	46.2		7.5	92.5		87.4	12.6		
PHF	.872	.823	.849	.800	.752	.755	.726	.750	.776	.787

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File Name : 33_CSB_Agua M_El Riv PM
Site Code : 05122894
Start Date : 10/4/2022
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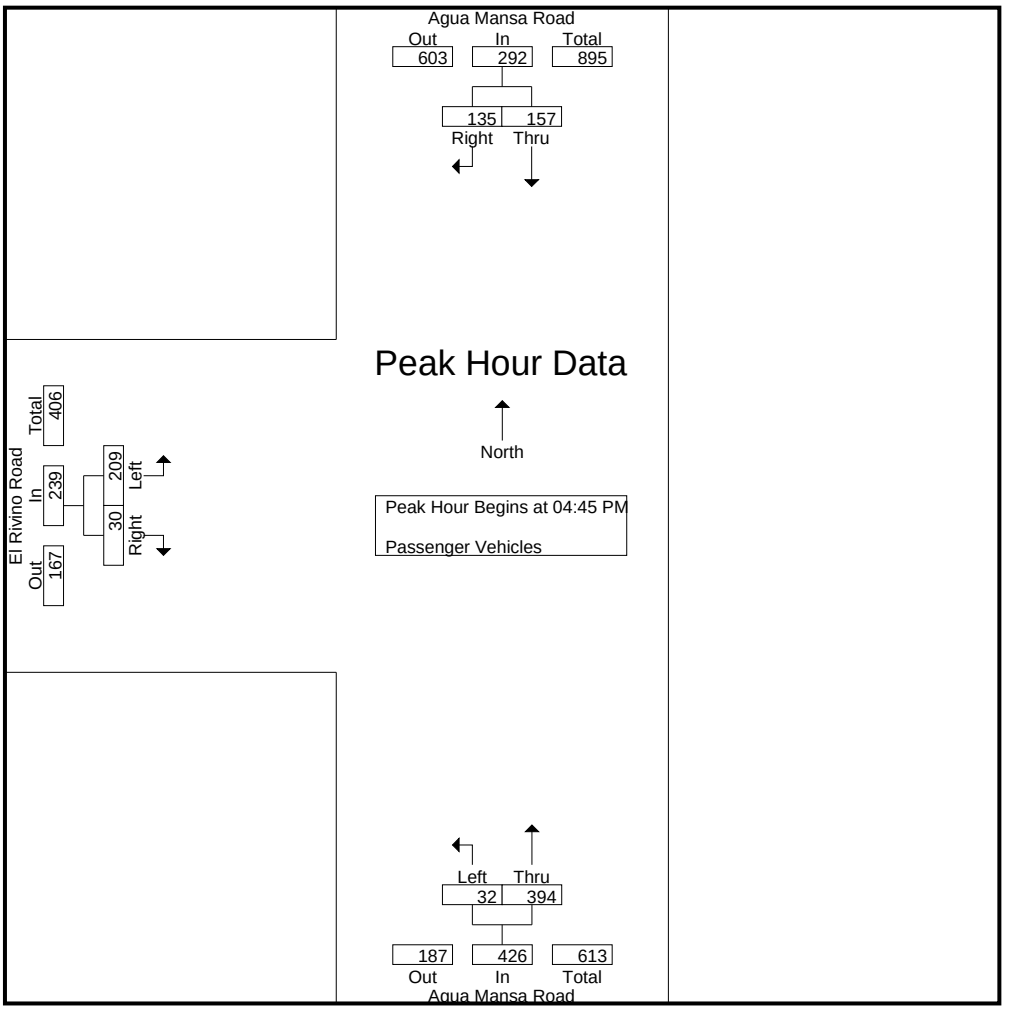

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	29	36	65	6	77	83	50	8	58
+15 mins.	41	26	67	**10**	99	109	50	**10**	60
+30 mins.	42	32	74	6	87	93	37	7	44
+45 mins.	**45**	**41**	**86**	10	**131**	**141**	**72**	5	**77**
Total Volume	157	135	292	32	394	426	209	30	239
% App. Total	53.8	46.2		7.5	92.5		87.4	12.6	
PHF	.872	.823	.849	.800	.752	.755	.726	.750	.776

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County of San Bernardino
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Weather: Clear

File Name : 33_CSB_Agua M_El Riv PM
Site Code : 05122894
Start Date : 10/4/2022
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Groups Printed- Large 2 Axle Vehicles

	Agua Mansa Road Southbound			Agua Mansa Road Northbound			El Rivino Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
03:30 PM	4	4	8	3	3	6	1	0	1	15
03:45 PM	2	4	6	4	1	5	1	0	1	12
Total	6	8	14	7	4	11	2	0	2	27
04:00 PM	1	5	6	1	3	4	3	1	4	14
04:15 PM	1	1	2	1	4	5	2	1	3	10
04:30 PM	1	1	2	1	1	2	0	0	0	4
04:45 PM	2	0	2	0	12	12	3	0	3	17
Total	5	7	12	3	20	23	8	2	10	45
05:00 PM	4	2	6	1	6	7	3	0	3	16
05:15 PM	4	1	5	0	4	4	2	0	2	11
05:30 PM	4	0	4	2	3	5	1	0	1	10
05:45 PM	0	1	1	0	4	4	0	0	0	5
Total	12	4	16	3	17	20	6	0	6	42
Grand Total	23	19	42	13	41	54	16	2	18	114
Apprch %	54.8	45.2		24.1	75.9		88.9	11.1		
Total %	20.2	16.7	36.8	11.4	36	47.4	14	1.8	15.8	

	Agua Mansa Road Southbound			Agua Mansa Road Northbound			El Rivino Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	2	0	2	0	**12**	**12**	**3**	0	**3**	**17**
05:00 PM	**4**	**2**	**6**	1	6	7	3	0	3	16
05:15 PM	4	1	5	0	4	4	2	0	2	11
05:30 PM	4	0	4	**2**	3	5	1	0	1	10
Total Volume	14	3	17	3	25	28	9	0	9	54
% App. Total	82.4	17.6		10.7	89.3		100	0		
PHF	.875	.375	.708	.375	.521	.583	.750	.000	.750	.794

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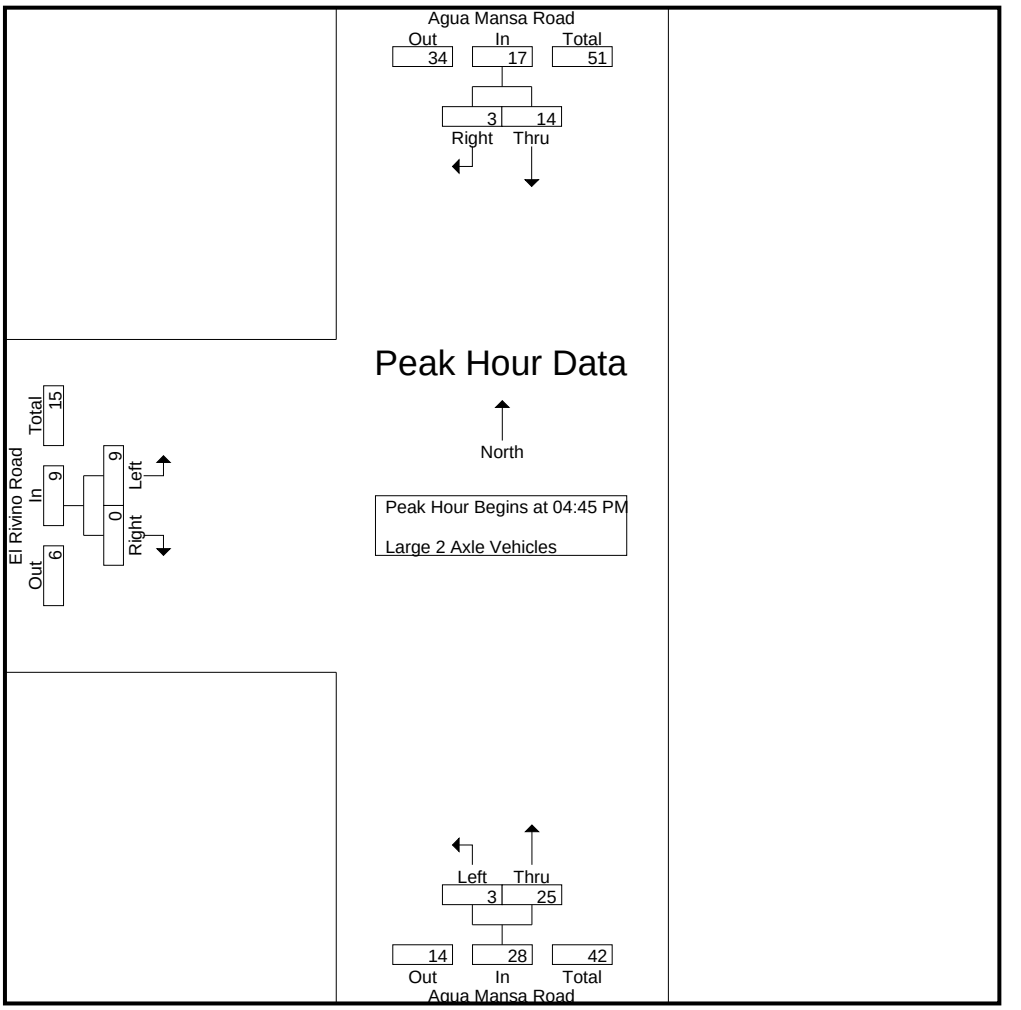

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	2	0	2	0	**12**	**12**	**3**	0	**3**
+15 mins.	**4**	**2**	**6**	1	6	7	3	0	3
+30 mins.	4	1	5	0	4	4	2	0	2
+45 mins.	4	0	4	**2**	3	5	1	0	1
Total Volume	14	3	17	3	25	28	9	0	9
% App. Total	82.4	17.6		10.7	89.3		100	0	
PHF	.875	.375	.708	.375	.521	.583	.750	.000	.750

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File Name : 33_CSB_Agua M_El Riv PM
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Groups Printed- 3 Axle Vehicles

	Agua Mansa Road Southbound			Agua Mansa Road Northbound			El Rivino Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
03:30 PM	5	1	6	1	6	7	0	1	1	14
03:45 PM	5	0	5	0	7	7	1	1	2	14
Total	10	1	11	1	13	14	1	2	3	28
04:00 PM	8	0	8	0	4	4	1	0	1	13
04:15 PM	7	0	7	0	7	7	1	1	2	16
04:30 PM	7	1	8	0	15	15	0	1	1	24
04:45 PM	1	1	2	1	3	4	0	0	0	6
Total	23	2	25	1	29	30	2	2	4	59
05:00 PM	3	0	3	0	4	4	0	1	1	8
05:15 PM	5	0	5	0	5	5	1	3	4	14
05:30 PM	4	2	6	1	6	7	1	5	6	19
05:45 PM	4	0	4	0	6	6	1	0	1	11
Total	16	2	18	1	21	22	3	9	12	52
Grand Total	49	5	54	3	63	66	6	13	19	139
Apprch %	90.7	9.3		4.5	95.5		31.6	68.4		
Total %	35.3	3.6	38.8	2.2	45.3	47.5	4.3	9.4	13.7	

	Agua Mansa Road Southbound			Agua Mansa Road Northbound			El Rivino Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	1	1	2	**1**	3	4	0	0	0	6
05:00 PM	3	0	3	0	4	4	0	1	1	8
05:15 PM	**5**	0	5	0	5	5	**1**	3	4	14
05:30 PM	4	**2**	**6**	1	**6**	**7**	1	**5**	**6**	**19**
Total Volume	13	3	16	2	18	20	2	9	11	47
% App. Total	81.2	18.8		10	90		18.2	81.8		
PHF	.650	.375	.667	.500	.750	.714	.500	.450	.458	.618

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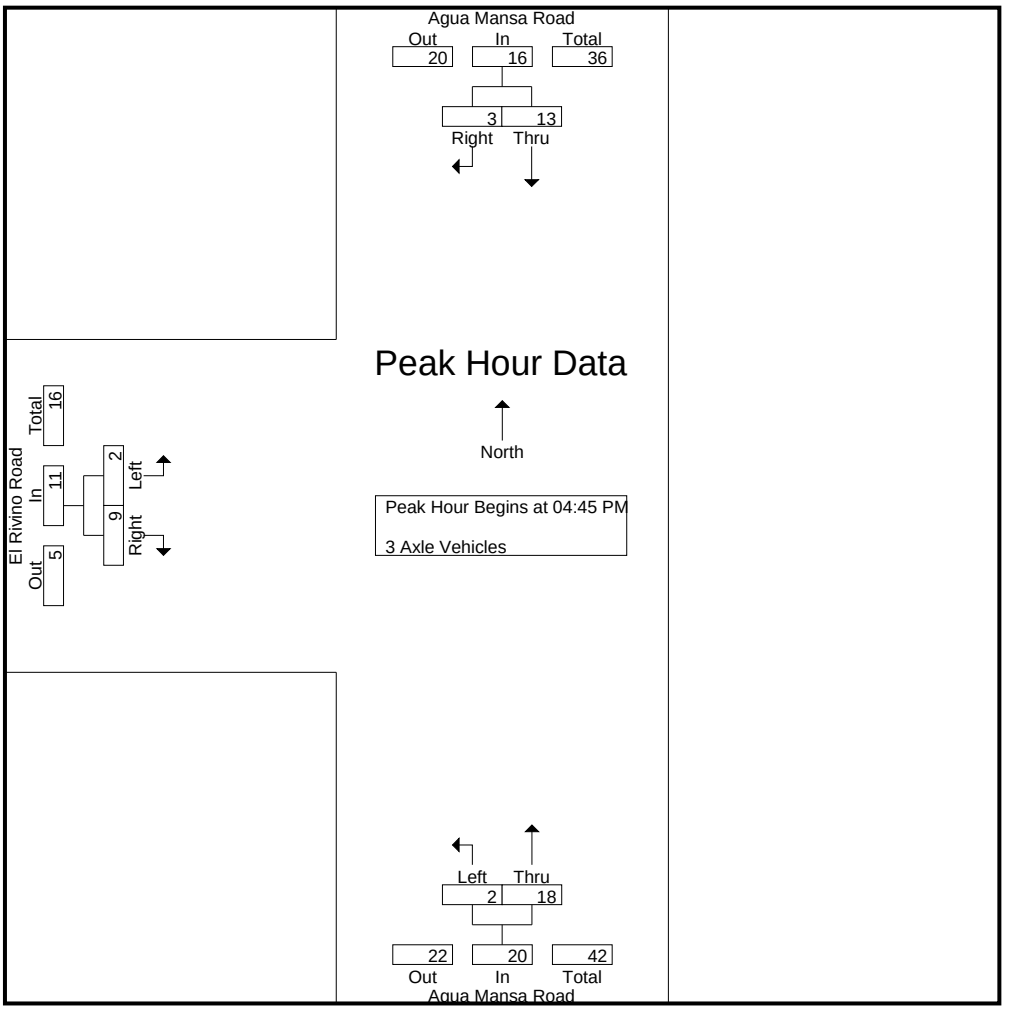

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	1	1	2	**1**	3	4	0	0	0
+15 mins.	3	0	3	0	4	4	0	1	1
+30 mins.	**5**	0	5	0	5	5	**1**	3	4
+45 mins.	4	**2**	**6**	1	**6**	**7**	1	**5**	**6**
Total Volume	13	3	16	2	18	20	2	9	11
% App. Total	81.2	18.8		10	90		18.2	81.8	
PHF	.650	.375	.667	.500	.750	.714	.500	.450	.458

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File Name : 33_CSB_Agua M_El Riv PM
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Groups Printed- 4+ Axle Trucks

	Agua Mansa Road Southbound			Agua Mansa Road Northbound			El Rivino Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
03:30 PM	14	2	16	0	21	21	1	0	1	38
03:45 PM	12	0	12	1	15	16	2	0	2	30
Total	26	2	28	1	36	37	3	0	3	68
04:00 PM	8	0	8	0	9	9	2	0	2	19
04:15 PM	5	0	5	0	16	16	1	0	1	22
04:30 PM	11	0	11	1	22	23	1	0	1	35
04:45 PM	9	0	9	0	19	19	0	0	0	28
Total	33	0	33	1	66	67	4	0	4	104
05:00 PM	10	0	10	0	16	16	0	1	1	27
05:15 PM	12	0	12	0	10	10	0	0	0	22
05:30 PM	9	0	9	0	20	20	0	0	0	29
05:45 PM	6	0	6	0	11	11	0	0	0	17
Total	37	0	37	0	57	57	0	1	1	95
Grand Total	96	2	98	2	159	161	7	1	8	267
Apprch %	98	2		1.2	98.8		87.5	12.5		
Total %	36	0.7	36.7	0.7	59.6	60.3	2.6	0.4	3	

	Agua Mansa Road Southbound			Agua Mansa Road Northbound			El Rivino Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	9	0	9	0	19	19	0	0	0	28
05:00 PM	10	0	10	0	16	16	0	**1**	**1**	27
05:15 PM	**12**	0	**12**	0	10	10	0	0	0	22
05:30 PM	9	0	9	0	**20**	**20**	0	0	0	**29**
Total Volume	40	0	40	0	65	65	0	1	1	106
% App. Total	100	0		0	100		0	100		
PHF	.833	.000	.833	.000	.813	.813	.000	.250	.250	.914

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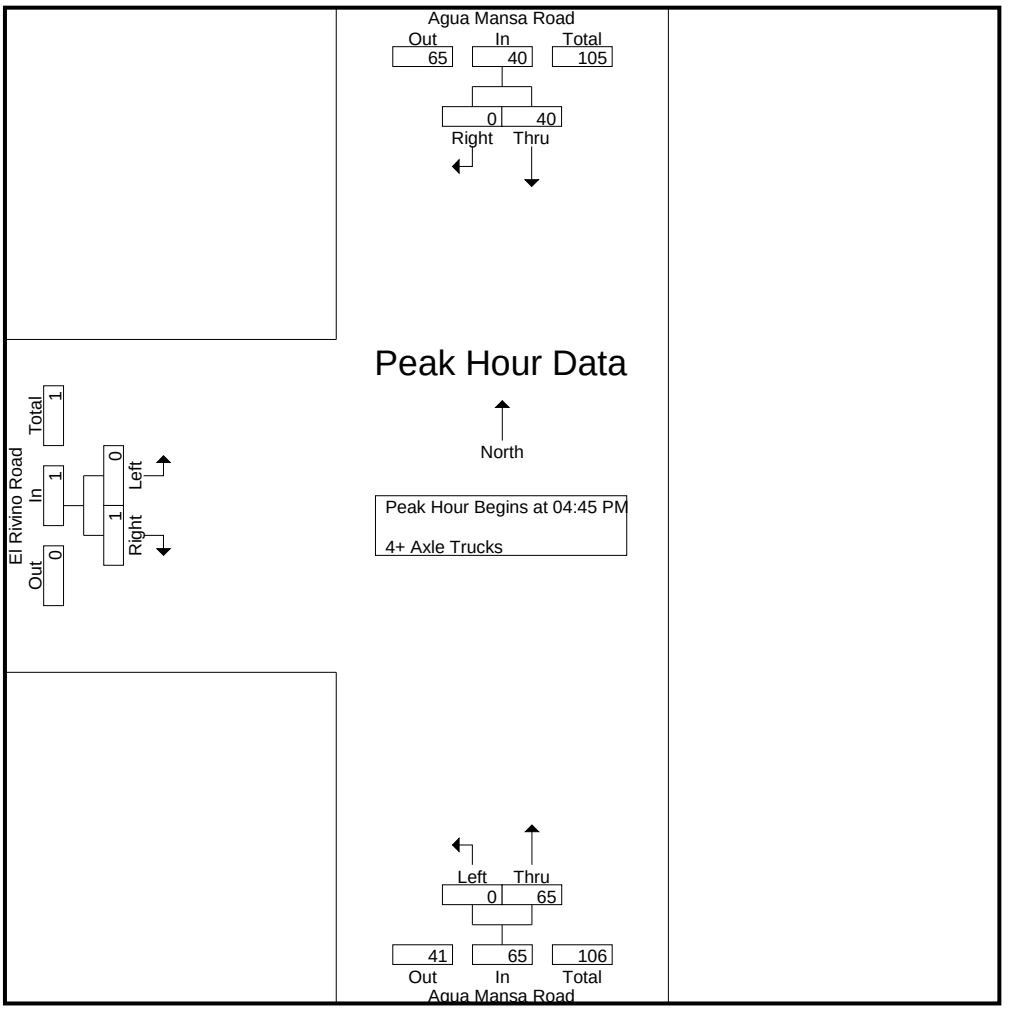
County of San Bernardino
N/S: Agua Mansa Road
E/W: El Rivino Road
Weather: Clear

File Name : 33_CSB_Agua M_El Riv PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	9	0	9	0	19	19	0	0	0
+15 mins.	10	0	10	0	16	16	0	**1**	**1**
+30 mins.	**12**	0	**12**	0	10	10	0	0	0
+45 mins.	9	0	9	0	**20**	**20**	0	0	0
Total Volume	40	0	40	0	65	65	0	1	1
% App. Total	100	0		0	100		0	100	
PHF	.833	.000	.833	.000	.813	.813	.000	.250	.250

Location: County of San Bernardino
N/S: Agua Mansa Road
E/W: El Rivino Road

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Agua Mansa Road	East Leg Dead End	South Leg Agua Mansa Road	West Leg El Rivino Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Agua Mansa Road	East Leg Dead End	South Leg Agua Mansa Road	West Leg El Rivino Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	2	2
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	2	2

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Location: County of San Bernardino
N/S: Agua Mansa Road
E/W: El Rivino Road

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Agua Mansa Road			Westbound Dead End			Northbound Agua Mansa Road			Eastbound El Rivino Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	0	0	0	0	1

	Southbound Agua Mansa Road			Westbound Dead End			Northbound Agua Mansa Road			Eastbound El Rivino Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	0	0	0	0	0	0	0	0	1

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City of Rialto
N/S: Riverside Avenue
E/W: Agua Mansa Road
Weather: Clear

File Name : 34_RLT_Riv_Agua M AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Riverside Avenue Southbound					Agua Mansa Road Westbound					Riverside Avenue Northbound					Agua Mansa Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	15	101	16	4	132	16	49	5	1	70	38	100	16	2	154	12	50	29	20	91	27	447	474
06:45 AM	7	98	17	3	122	28	102	13	5	143	31	79	13	1	123	16	39	24	6	79	15	467	482
Total	22	199	33	7	254	44	151	18	6	213	69	179	29	3	277	28	89	53	26	170	42	914	956
07:00 AM	9	107	14	0	130	22	54	16	12	92	25	77	11	1	113	8	38	10	5	56	18	391	409
07:15 AM	11	121	14	7	146	22	64	13	6	99	23	78	5	0	106	11	45	22	5	78	18	429	447
07:30 AM	6	117	10	3	133	34	56	10	4	100	34	83	9	0	126	8	54	31	12	93	19	452	471
07:45 AM	6	140	15	4	161	30	68	5	3	103	24	91	15	2	130	17	45	26	21	88	30	482	512
Total	32	485	53	14	570	108	242	44	25	394	106	329	40	3	475	44	182	89	43	315	85	1754	1839
08:00 AM	6	103	11	4	120	38	77	13	10	128	35	101	8	2	144	15	53	37	22	105	38	497	535
08:15 AM	7	97	7	3	111	22	67	8	4	97	32	81	9	1	122	12	32	34	22	78	30	408	438
08:30 AM	3	96	8	1	107	34	60	17	6	111	49	73	11	0	133	19	30	21	13	70	20	421	441
08:45 AM	2	88	10	3	100	21	61	8	5	90	36	87	18	1	141	18	43	18	7	79	16	410	426
Total	18	384	36	11	438	115	265	46	25	426	152	342	46	4	540	64	158	110	64	332	104	1736	1840
Grand Total	72	1068	122	32	1262	267	658	108	56	1033	327	850	115	10	1292	136	429	252	133	817	231	4404	4635
Apprch %	5.7	84.6	9.7			25.8	63.7	10.5			25.3	65.8	8.9			16.6	52.5	30.8					
Total %	1.6	24.3	2.8		28.7	6.1	14.9	2.5		23.5	7.4	19.3	2.6		29.3	3.1	9.7	5.7		18.6	5	95	
Passenger Vehicles	44	893	73		1037	239	525	58		854	256	679	85		1026	83	296	198		693	0	0	3610
% Passenger Vehicles	61.1	83.6	59.8	84.4	80.1	89.5	79.8	53.7	57.1	78.4	78.3	79.9	73.9	60	78.8	61	69	78.6	87.2	72.9	0	0	77.9
Large 2 Axle Vehicles	3	72	16		91	13	31	3		47	26	42	7		75	15	42	12		74	0	0	287
% Large 2 Axle Vehicles	4.2	6.7	13.1	0	7	4.9	4.7	2.8	0	4.3	8	4.9	6.1	0	5.8	11	9.8	4.8	3.8	7.8	0	0	6.2
3 Axle Vehicles	3	19	9		31	4	26	8		43	14	35	8		58	9	23	19		55	0	0	187
% 3 Axle Vehicles	4.2	1.8	7.4	0	2.4	1.5	4	7.4	8.9	3.9	4.3	4.1	7	10	4.5	6.6	5.4	7.5	3	5.8	0	0	4
4+ Axle Trucks	22	84	24		135	11	76	39		145	31	94	15		143	29	68	23		128	0	0	551
% 4+ Axle Trucks	30.6	7.9	19.7	15.6	10.4	4.1	11.6	36.1	33.9	13.3	9.5	11.1	13	30	11	21.3	15.9	9.1	6	13.5	0	0	11.9

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City of Rialto
N/S: Riverside Avenue
E/W: Agua Mansa Road
Weather: Clear

File Name : 34_RLT_Riv_Agua M AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2

	Riverside Avenue Southbound				Agua Mansa Road Westbound				Riverside Avenue Northbound				Agua Mansa Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**11**	121	14	146	22	64	**13**	99	23	78	5	106	11	45	22	78	429
07:30 AM	6	117	10	133	34	56	10	100	34	83	9	126	8	**54**	31	93	452
07:45 AM	6	**140**	**15**	**161**	30	68	5	103	24	91	**15**	130	**17**	45	26	88	482
08:00 AM	6	103	11	120	**38**	**77**	13	**128**	**35**	**101**	8	**144**	15	53	**37**	**105**	**497**
Total Volume	29	481	50	560	124	265	41	430	116	353	37	506	51	197	116	364	1860
% App. Total	5.2	85.9	8.9		28.8	61.6	9.5		22.9	69.8	7.3		14	54.1	31.9		
PHF	.659	.859	.833	.870	.816	.860	.788	.840	.829	.874	.617	.878	.750	.912	.784	.867	.936

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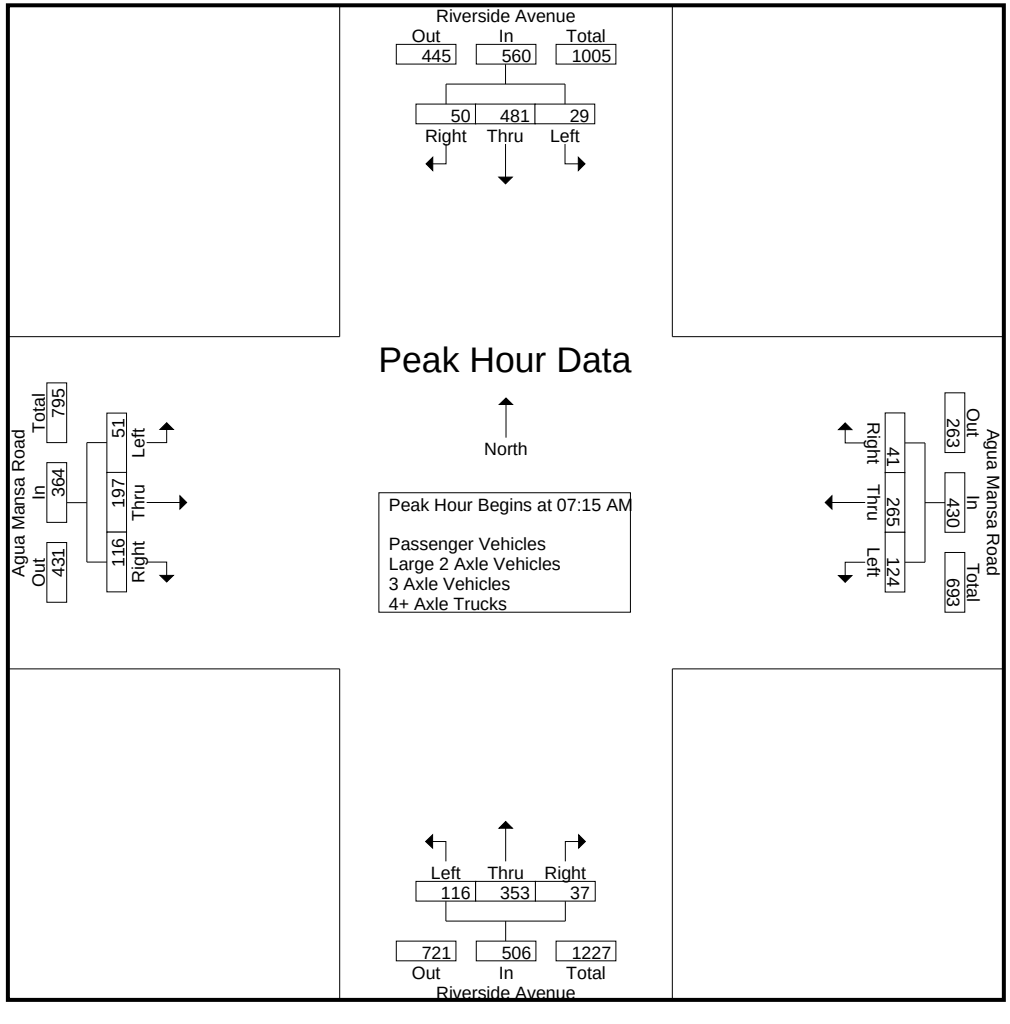
File Name : 34_RLT_Riv_Agua M AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 3



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City of Rialto
N/S: Riverside Avenue
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Weather: Clear

File Name : 34_RLT_Riv_Agua M AM
Site Code : 05122894
Start Date : 10/4/2022

	Riverside Avenue Southbound				Agua Mansa Road Westbound				Riverside Avenue Northbound				Agua Mansa Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:45 AM				08:00 AM				07:15 AM				
+0 mins.	9	107	14	130	30	68	5	103	35	**101**	8	**144**	11	45	22	78	
+15 mins.	**11**	121	14	146	**38**	**77**	13	**128**	32	81	9	122	8	**54**	31	93	
+30 mins.	6	117	10	133	22	67	8	97	**49**	73	11	133	**17**	45	26	88	
+45 mins.	6	**140**	**15**	**161**	34	60	**17**	111	36	87	**18**	141	15	53	**37**	**105**	
Total Volume	32	485	53	570	124	272	43	439	152	342	46	540	51	197	116	364	
% App. Total	5.6	85.1	9.3		28.2	62	9.8		28.1	63.3	8.5		14	54.1	31.9		
PHF	.727	.866	.883	.885	.816	.883	.632	.857	.776	.847	.639	.938	.750	.912	.784	.867	

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File Name : 34_RLT_Riv_Agua M AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Riverside Avenue Southbound					Agua Mansa Road Westbound					Riverside Avenue Northbound					Agua Mansa Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	9	90	10	4	109	11	36	2	1	49	30	78	14	2	122	7	39	27	20	73	27	353	380
06:45 AM	6	84	10	1	100	27	86	8	3	121	21	65	11	0	97	10	25	18	5	53	9	371	380
Total	15	174	20	5	209	38	122	10	4	170	51	143	25	2	219	17	64	45	25	126	36	724	760
07:00 AM	6	83	5	0	94	20	41	5	5	66	17	64	5	0	86	5	23	8	5	36	10	282	292
07:15 AM	7	108	12	7	127	21	51	10	4	82	14	65	3	0	82	6	33	13	3	52	14	343	357
07:30 AM	4	105	5	3	114	28	48	7	2	83	27	65	7	0	99	5	43	28	12	76	17	372	389
07:45 AM	3	129	8	3	140	29	56	2	1	87	22	69	12	2	103	12	31	23	19	66	25	396	421
Total	20	425	30	13	475	98	196	24	12	318	80	263	27	2	370	28	130	72	39	230	66	1393	1459
08:00 AM	6	90	9	4	105	38	63	9	7	110	28	80	6	1	114	9	41	31	21	81	33	410	443
08:15 AM	2	71	6	3	79	19	52	0	0	71	26	62	6	0	94	10	15	25	16	50	19	294	313
08:30 AM	1	67	3	0	71	29	45	11	5	85	39	61	7	0	107	10	16	14	10	40	15	303	318
08:45 AM	0	66	5	2	71	17	47	4	4	68	32	70	14	1	116	9	30	11	5	50	12	305	317
Total	9	294	23	9	326	103	207	24	16	334	125	273	33	2	431	38	102	81	52	221	79	1312	1391
Grand Total	44	893	73	27	1010	239	525	58	32	822	256	679	85	6	1020	83	296	198	116	577	181	3429	3610
Apprch %	4.4	88.4	7.2			29.1	63.9	7.1			25.1	66.6	8.3			14.4	51.3	34.3					
Total %	1.3	26	2.1		29.5	7	15.3	1.7		24	7.5	19.8	2.5		29.7	2.4	8.6	5.8		16.8	5	95	

	Riverside Avenue Southbound				Agua Mansa Road Westbound				Riverside Avenue Northbound				Agua Mansa Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**7**	108	**12**	127	21	51	**10**	82	14	65	3	82	6	33	13	52	343
07:30 AM	4	105	5	114	28	48	7	83	27	65	7	99	5	**43**	28	76	372
07:45 AM	3	**129**	8	**140**	29	56	2	87	22	69	**12**	103	**12**	31	23	66	396
08:00 AM	6	90	9	105	**38**	**63**	9	**110**	**28**	**80**	6	**114**	9	41	**31**	**81**	**410**
Total Volume	20	432	34	486	116	218	28	362	91	279	28	398	32	148	95	275	1521
% App. Total	4.1	88.9	7		32	60.2	7.7		22.9	70.1	7		11.6	53.8	34.5		
PHF	.714	.837	.708	.868	.763	.865	.700	.823	.813	.872	.583	.873	.667	.860	.766	.849	.927

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City of Rialto
N/S: Riverside Avenue
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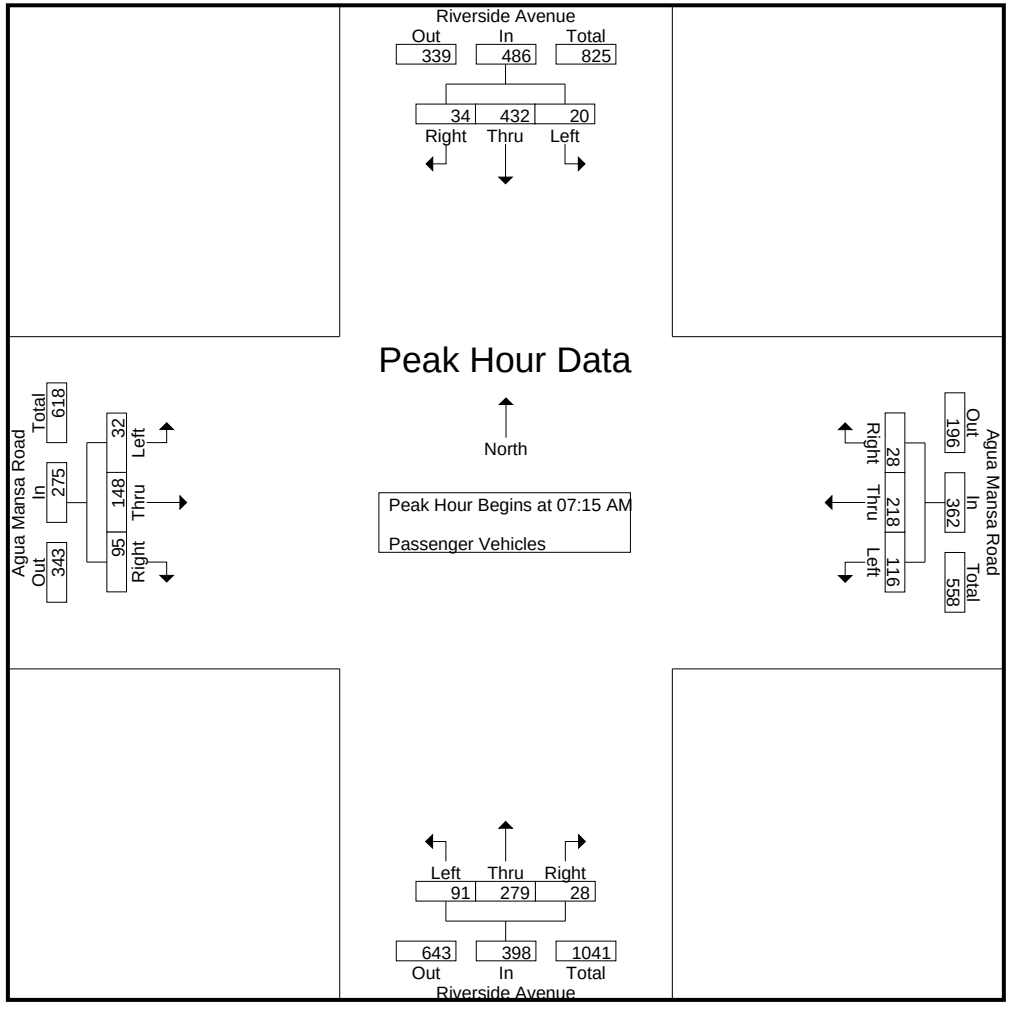
File Name : 34_RLT_Riv_Agua M AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Rialto
N/S: Riverside Avenue
E/W: Agua Mansa Road
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File Name : 34_RLT_Riv_Agua M AM
Site Code : 05122894
Start Date : 10/4/2022

	Riverside Avenue Southbound				Agua Mansa Road Westbound				Riverside Avenue Northbound				Agua Mansa Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	**7**	108	**12**	127	21	51	**10**	82	14	65	3	82	6	33	13	52	
+15 mins.	4	105	5	114	28	48	7	83	27	65	7	99	5	**43**	28	76	
+30 mins.	3	**129**	8	**140**	29	56	2	87	22	69	**12**	103	**12**	31	23	66	
+45 mins.	6	90	9	105	**38**	**63**	9	**110**	**28**	**80**	6	**114**	9	41	**31**	**81**	
Total Volume	20	432	34	486	116	218	28	362	91	279	28	398	32	148	95	275	
% App. Total	4.1	88.9	7		32	60.2	7.7		22.9	70.1	7		11.6	53.8	34.5		
PHF	.714	.837	.708	.868	.763	.865	.700	.823	.813	.872	.583	.873	.667	.860	.766	.849	

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City of Rialto
N/S: Riverside Avenue
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File Name : 34_RLT_Riv_Agua M AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Riverside Avenue Southbound					Agua Mansa Road Westbound					Riverside Avenue Northbound					Agua Mansa Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	1	4	2	0	7	2	1	1	0	4	3	7	0	0	10	2	2	0	0	4	0	25	25
06:45 AM	0	2	1	0	3	0	7	0	0	7	2	5	0	0	7	0	7	0	0	7	0	24	24
Total	1	6	3	0	10	2	8	1	0	11	5	12	0	0	17	2	9	0	0	11	0	49	49
07:00 AM	0	11	3	0	14	1	8	1	0	10	4	4	2	0	10	1	5	0	0	6	0	40	40
07:15 AM	0	5	2	0	7	1	3	0	0	4	5	4	0	0	9	2	6	5	2	13	2	33	35
07:30 AM	2	4	3	0	9	4	2	0	0	6	1	7	1	0	9	0	3	1	0	4	0	28	28
07:45 AM	0	2	2	0	4	1	2	0	0	3	1	5	1	0	7	2	4	0	0	6	0	20	20
Total	2	22	10	0	34	7	15	1	0	23	11	20	4	0	35	5	18	6	2	29	2	121	123
08:00 AM	0	0	0	0	0	0	2	0	0	2	1	4	0	0	5	2	5	1	1	8	1	15	16
08:15 AM	0	12	0	0	12	0	3	0	0	3	1	4	1	0	6	0	4	0	0	4	0	25	25
08:30 AM	0	17	2	0	19	2	1	0	0	3	5	1	2	0	8	3	3	3	1	9	1	39	40
08:45 AM	0	15	1	0	16	2	2	1	0	5	3	1	0	0	4	3	3	2	1	8	1	33	34
Total	0	44	3	0	47	4	8	1	0	13	10	10	3	0	23	8	15	6	3	29	3	112	115
Grand Total	3	72	16	0	91	13	31	3	0	47	26	42	7	0	75	15	42	12	5	69	5	282	287
Apprch %	3.3	79.1	17.6			27.7	66	6.4			34.7	56	9.3			21.7	60.9	17.4					
Total %	1.1	25.5	5.7		32.3	4.6	11	1.1		16.7	9.2	14.9	2.5		26.6	5.3	14.9	4.3		24.5	1.7	98.3	

	Riverside Avenue Southbound				Agua Mansa Road Westbound				Riverside Avenue Northbound				Agua Mansa Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**5**	2	7	1	**3**	0	4	**5**	4	0	**9**	**2**	**6**	**5**	**13**	**33**
07:30 AM	**2**	4	**3**	**9**	**4**	2	0	**6**	1	**7**	**1**	9	0	3	1	4	28
07:45 AM	0	2	2	4	1	2	0	3	1	5	1	7	2	4	0	6	20
08:00 AM	0	0	0	0	0	2	0	2	1	4	0	5	2	5	1	8	15
Total Volume	2	11	7	20	6	9	0	15	8	20	2	30	6	18	7	31	96
% App. Total	10	55	35		40	60	0		26.7	66.7	6.7		19.4	58.1	22.6		
PHF	.250	.550	.583	.556	.375	.750	.000	.625	.400	.714	.500	.833	.750	.750	.350	.596	.727

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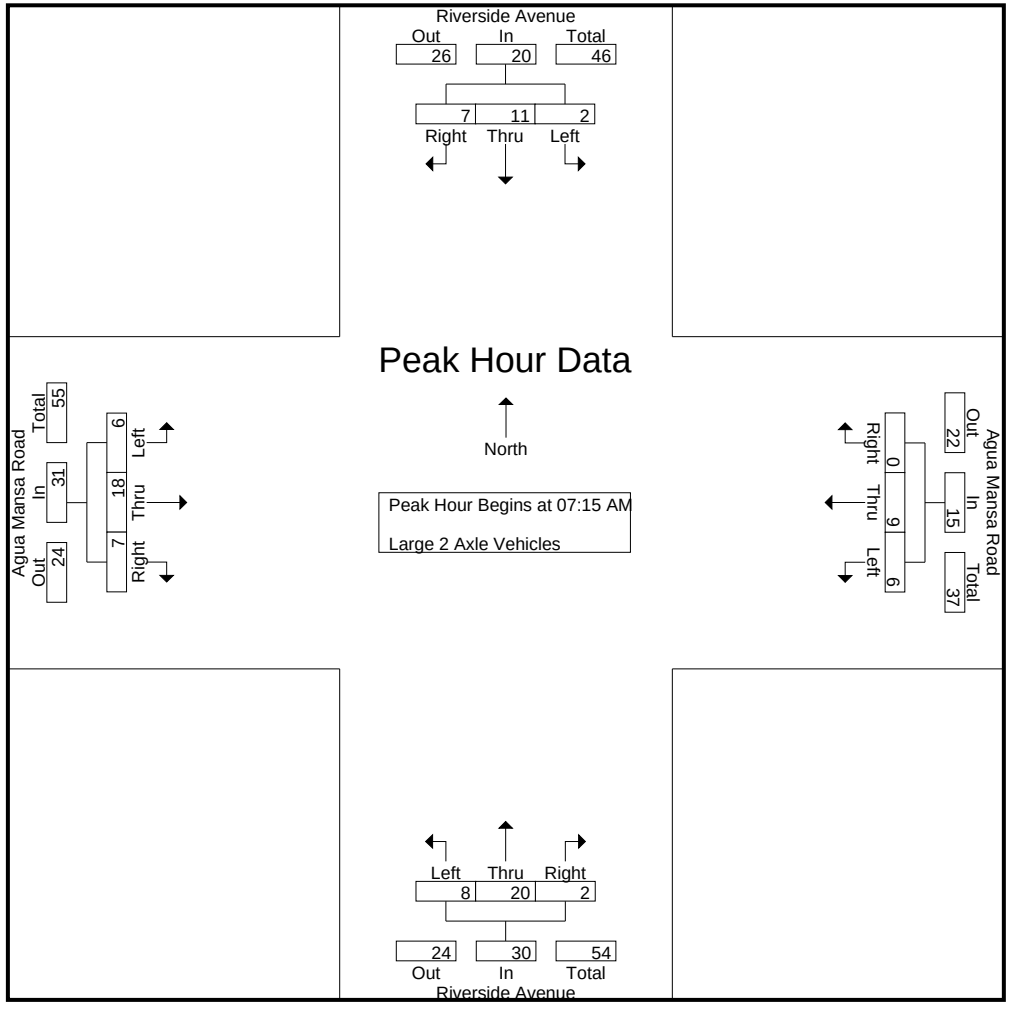
City of Rialto
N/S: Riverside Avenue
E/W: Agua Mansa Road
Weather: Clear

File Name : 34_RLT_Riv_Agua M AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Rialto
N/S: Riverside Avenue
E/W: Agua Mansa Road
Weather: Clear

File Name : 34_RLT_Riv_Agua M AM
Site Code : 05122894
Start Date : 10/4/2022

	Riverside Avenue Southbound				Agua Mansa Road Westbound				Riverside Avenue Northbound				Agua Mansa Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	**5**	2	7	1	**3**	0	4	**5**	4	0	**9**	**2**	**6**	**5**	**13**	
+15 mins.	**2**	4	**3**	**9**	**4**	2	0	**6**	1	**7**	**1**	9	0	3	1	4	
+30 mins.	0	2	2	4	1	2	0	3	1	5	1	7	2	4	0	6	
+45 mins.	0	0	0	0	0	2	0	2	1	4	0	5	2	5	1	8	
Total Volume	2	11	7	20	6	9	0	15	8	20	2	30	6	18	7	31	
% App. Total	10	55	35		40	60	0		26.7	66.7	6.7		19.4	58.1	22.6		
PHF	.250	.550	.583	.556	.375	.750	.000	.625	.400	.714	.500	.833	.750	.750	.350	.596	

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City of Rialto
N/S: Riverside Avenue
E/W: Agua Mansa Road
Weather: Clear

File Name : 34_RLT_Riv_Agua M AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Riverside Avenue Southbound					Agua Mansa Road Westbound					Riverside Avenue Northbound					Agua Mansa Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	0	0	1	0	1	2	4	1	0	7	2	7	0	0	9	0	2	1	0	3	0	20	20
06:45 AM	0	4	1	0	5	0	2	0	0	2	3	1	0	0	4	1	3	3	0	7	0	18	18
Total	0	4	2	0	6	2	6	1	0	9	5	8	0	0	13	1	5	4	0	10	0	38	38
07:00 AM	0	1	2	0	3	0	0	2	1	2	2	2	1	0	5	1	2	2	0	5	1	15	16
07:15 AM	0	3	0	0	3	0	4	0	0	4	2	5	0	0	7	0	2	2	0	4	0	18	18
07:30 AM	0	2	1	0	3	0	1	1	1	2	1	1	1	0	3	1	2	1	0	4	1	12	13
07:45 AM	0	1	3	0	4	0	2	1	1	3	1	4	1	0	6	1	4	3	2	8	3	21	24
Total	0	7	6	0	13	0	7	4	3	11	6	12	3	0	21	3	10	8	2	21	5	66	71
08:00 AM	0	2	0	0	2	0	4	0	0	4	1	2	1	0	4	2	1	3	0	6	0	16	16
08:15 AM	2	3	0	0	5	0	2	0	0	2	1	3	2	1	6	2	3	1	1	6	2	19	21
08:30 AM	1	3	0	0	4	1	2	2	1	5	1	3	1	0	5	1	2	1	0	4	1	18	19
08:45 AM	0	0	1	0	1	1	5	1	1	7	0	7	1	0	8	0	2	2	1	4	2	20	22
Total	3	8	1	0	12	2	13	3	2	18	3	15	5	1	23	5	8	7	2	20	5	73	78
Grand Total	3	19	9	0	31	4	26	8	5	38	14	35	8	1	57	9	23	19	4	51	10	177	187
Apprch %	9.7	61.3	29			10.5	68.4	21.1			24.6	61.4	14			17.6	45.1	37.3					
Total %	1.7	10.7	5.1		17.5	2.3	14.7	4.5		21.5	7.9	19.8	4.5		32.2	5.1	13	10.7		28.8	5.3	94.7	

	Riverside Avenue Southbound				Agua Mansa Road Westbound				Riverside Avenue Northbound				Agua Mansa Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**3**	0	3	0	**4**	0	**4**	**2**	**5**	0	**7**	0	2	2	4	18
07:30 AM	0	2	1	3	0	1	**1**	2	1	1	**1**	3	1	2	1	4	12
07:45 AM	0	1	**3**	**4**	0	2	1	3	1	4	1	6	1	**4**	**3**	**8**	**21**
08:00 AM	0	2	0	2	0	4	0	4	1	2	1	4	**2**	1	3	6	16
Total Volume	0	8	4	12	0	11	2	13	5	12	3	20	4	9	9	22	67
% App. Total	0	66.7	33.3		0	84.6	15.4		25	60	15		18.2	40.9	40.9		
PHF	.000	.667	.333	.750	.000	.688	.500	.813	.625	.600	.750	.714	.500	.563	.750	.688	.798

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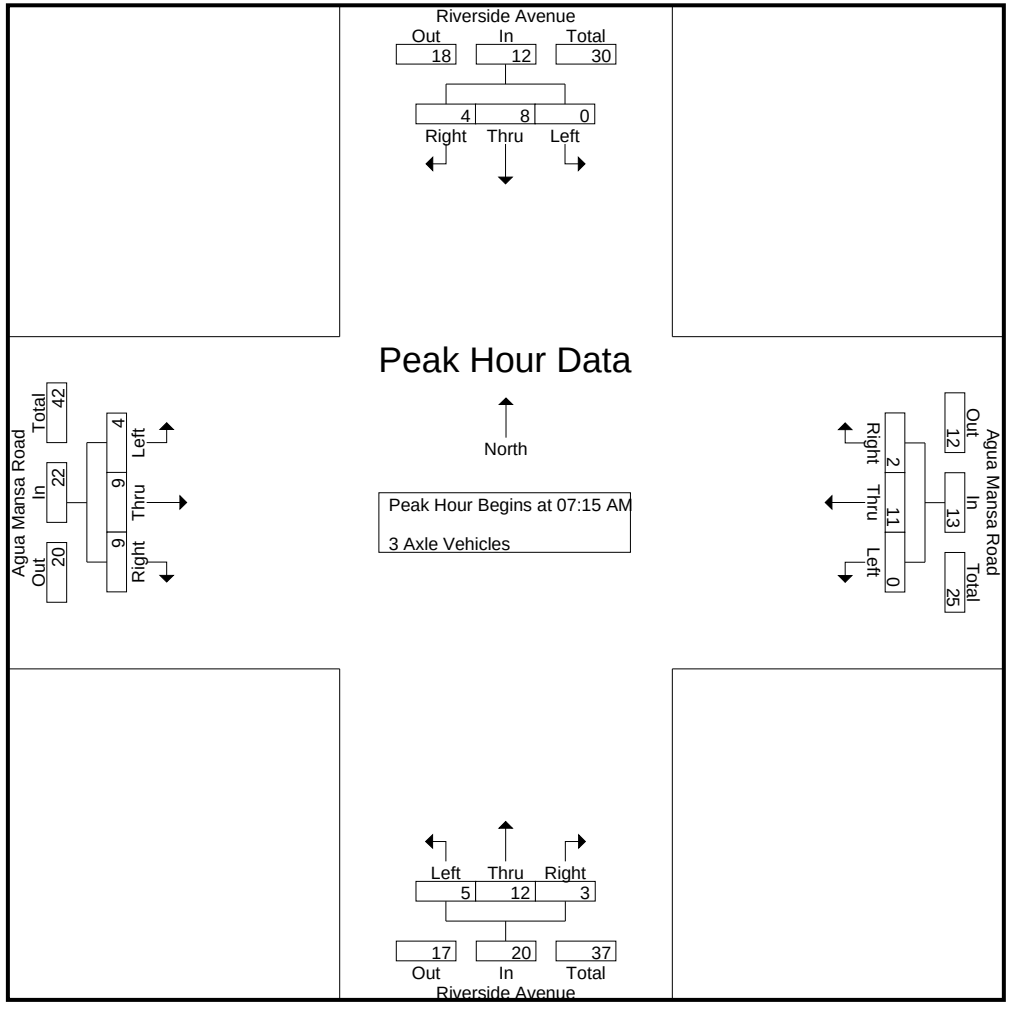
City of Rialto
N/S: Riverside Avenue
E/W: Agua Mansa Road
Weather: Clear

File Name : 34_RLT_Riv_Agua M AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Rialto
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File Name : 34_RLT_Riv_Agua M AM
Site Code : 05122894
Start Date : 10/4/2022

	Riverside Avenue Southbound				Agua Mansa Road Westbound				Riverside Avenue Northbound				Agua Mansa Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	**3**	0	3	0	**4**	0	**4**	**2**	**5**	0	**7**	0	2	2	4	
+15 mins.	0	2	1	3	0	1	**1**	2	1	1	**1**	3	1	2	1	4	
+30 mins.	0	1	**3**	**4**	0	2	1	3	1	4	1	6	1	**4**	**3**	**8**	
+45 mins.	0	2	0	2	0	4	0	4	1	2	1	4	**2**	1	3	6	
Total Volume	0	8	4	12	0	11	2	13	5	12	3	20	4	9	9	22	
% App. Total	0	66.7	33.3		0	84.6	15.4		25	60	15		18.2	40.9	40.9		
PHF	.000	.667	.333	.750	.000	.688	.500	.813	.625	.600	.750	.714	.500	.563	.750	.688	

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City of Rialto
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Weather: Clear

File Name : 34_RLT_Riv_Agua M AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Riverside Avenue Southbound					Agua Mansa Road Westbound					Riverside Avenue Northbound					Agua Mansa Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
06:30 AM	5	7	3	0	15	1	8	1	0	10	3	8	2	0	13	3	7	1	0	11	0	49	49
06:45 AM	1	8	5	2	14	1	7	5	2	13	5	8	2	1	15	5	4	3	1	12	6	54	60
Total	6	15	8	2	29	2	15	6	2	23	8	16	4	1	28	8	11	4	1	23	6	103	109
07:00 AM	3	12	4	0	19	1	5	8	6	14	2	7	3	1	12	1	8	0	0	9	7	54	61
07:15 AM	4	5	0	0	9	0	6	3	2	9	2	4	2	0	8	3	4	2	0	9	2	35	37
07:30 AM	0	6	1	0	7	2	5	2	1	9	5	10	0	0	15	2	6	1	0	9	1	40	41
07:45 AM	3	8	2	1	13	0	8	2	1	10	0	13	1	0	14	2	6	0	0	8	2	45	47
Total	10	31	7	1	48	3	24	15	10	42	9	34	6	1	49	8	24	3	0	35	12	174	186
08:00 AM	0	11	2	0	13	0	8	4	3	12	5	15	1	1	21	2	6	2	0	10	4	56	60
08:15 AM	3	11	1	0	15	3	10	8	4	21	4	12	0	0	16	0	10	8	5	18	9	70	79
08:30 AM	1	9	3	1	13	2	12	4	0	18	4	8	1	0	13	5	9	3	2	17	3	61	64
08:45 AM	2	7	3	1	12	1	7	2	0	10	1	9	3	0	13	6	8	3	0	17	1	52	53
Total	6	38	9	2	53	6	37	18	7	61	14	44	5	1	63	13	33	16	7	62	17	239	256
Grand Total	22	84	24	5	130	11	76	39	19	126	31	94	15	3	140	29	68	23	8	120	35	516	551
Apprch %	16.9	64.6	18.5			8.7	60.3	31			22.1	67.1	10.7			24.2	56.7	19.2					
Total %	4.3	16.3	4.7		25.2	2.1	14.7	7.6		24.4	6	18.2	2.9		27.1	5.6	13.2	4.5		23.3	6.4	93.6	

	Riverside Avenue Southbound				Agua Mansa Road Westbound				Riverside Avenue Northbound				Agua Mansa Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**4**	5	0	9	0	6	3	9	2	4	**2**	8	**3**	4	**2**	9	35
07:30 AM	0	6	1	7	**2**	5	2	9	**5**	10	0	15	2	**6**	1	9	40
07:45 AM	3	8	**2**	**13**	0	**8**	2	10	0	13	1	14	2	6	0	8	45
08:00 AM	0	**11**	2	13	0	8	**4**	**12**	5	**15**	1	**21**	2	6	2	**10**	**56**
Total Volume	7	30	5	42	2	27	11	40	12	42	4	58	9	22	5	36	176
% App. Total	16.7	71.4	11.9		5	67.5	27.5		20.7	72.4	6.9		25	61.1	13.9		
PHF	.438	.682	.625	.808	.250	.844	.688	.833	.600	.700	.500	.690	.750	.917	.625	.900	.786

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City of Rialto
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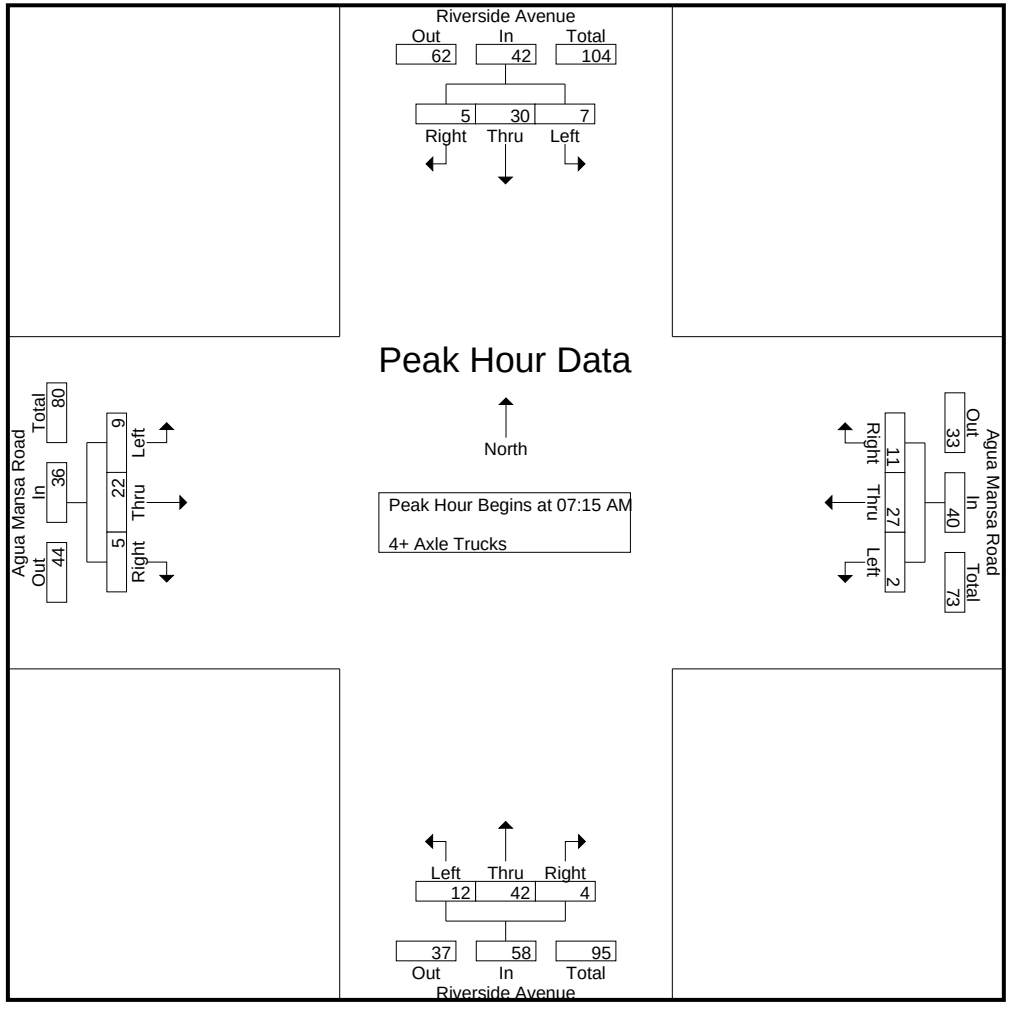
File Name : 34_RLT_Riv_Agua M AM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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Site Code : 05122894
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	Riverside Avenue Southbound				Agua Mansa Road Westbound				Riverside Avenue Northbound				Agua Mansa Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	**4**	5	0	9	0	6	3	9	2	4	**2**	8	**3**	4	**2**	9	
+15 mins.	0	6	1	7	**2**	5	2	9	**5**	10	0	15	2	**6**	1	9	
+30 mins.	3	8	**2**	**13**	0	**8**	2	10	0	13	1	14	2	6	0	8	
+45 mins.	0	**11**	2	13	0	8	**4**	**12**	5	**15**	1	**21**	2	6	2	**10**	
Total Volume	7	30	5	42	2	27	11	40	12	42	4	58	9	22	5	36	
% App. Total	16.7	71.4	11.9		5	67.5	27.5		20.7	72.4	6.9		25	61.1	13.9		
PHF	.438	.682	.625	.808	.250	.844	.688	.833	.600	.700	.500	.690	.750	.917	.625	.900	

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File Name : 34_RLT_Riv_Agua M PM
Site Code : 05122894
Start Date : 10/4/2022
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Riverside Avenue Southbound					Agua Mansa Road Westbound					Riverside Avenue Northbound					Agua Mansa Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	12	106	7	3	125	38	57	21	4	116	40	110	37	5	187	12	76	51	27	139	39	567	606
03:45 PM	20	105	4	3	129	16	42	6	0	64	46	96	37	2	179	10	90	43	21	143	26	515	541
Total	32	211	11	6	254	54	99	27	4	180	86	206	74	7	366	22	166	94	48	282	65	1082	1147
04:00 PM	15	113	4	2	132	13	44	12	4	69	32	114	24	1	170	14	90	45	25	149	32	520	552
04:15 PM	10	78	3	0	91	14	28	7	5	49	24	77	14	1	115	18	60	32	14	110	20	365	385
04:30 PM	19	117	3	2	139	18	48	3	1	69	27	91	37	3	155	16	95	46	25	157	31	520	551
04:45 PM	15	111	4	1	130	22	36	12	6	70	32	99	19	0	150	16	84	44	21	144	28	494	522
Total	59	419	14	5	492	67	156	34	16	257	115	381	94	5	590	64	329	167	85	560	111	1899	2010
05:00 PM	21	121	5	2	147	15	45	9	3	69	40	97	25	1	162	10	86	53	26	149	32	527	559
05:15 PM	8	107	9	3	124	13	42	5	4	60	38	122	27	2	187	7	66	41	22	114	31	485	516
05:30 PM	4	127	4	0	135	7	50	3	2	60	29	100	21	2	150	15	107	51	21	173	25	518	543
05:45 PM	8	116	9	1	133	15	28	11	7	54	35	95	16	1	146	25	81	31	17	137	26	470	496
Total	41	471	27	6	539	50	165	28	16	243	142	414	89	6	645	57	340	176	86	573	114	2000	2114
Grand Total	132	1101	52	17	1285	171	420	89	36	680	343	1001	257	18	1601	143	835	437	219	1415	290	4981	5271
Apprch %	10.3	85.7	4			25.1	61.8	13.1			21.4	62.5	16.1			10.1	59	30.9					
Total %	2.7	22.1	1		25.8	3.4	8.4	1.8		13.7	6.9	20.1	5.2		32.1	2.9	16.8	8.8		28.4	5.5	94.5	
Passenger Vehicles	97	974	31		1114	142	306	56		531	245	884	239		1384	92	754	386		1427	0	0	4456
% Passenger Vehicles	73.5	88.5	59.6	70.6	85.6	83	72.9	62.9	75	74.2	71.4	88.3	93	88.9	85.5	64.3	90.3	88.3	89	87.3	0	0	84.5
Large 2 Axle Vehicles	3	33	3		40	13	31	4		49	54	34	2		90	6	14	14		42	0	0	221
% Large 2 Axle Vehicles	2.3	3	5.8	5.9	3.1	7.6	7.4	4.5	2.8	6.8	15.7	3.4	0.8	0	5.6	4.2	1.7	3.2	3.7	2.6	0	0	4.2
3 Axle Vehicles	4	28	2		35	6	23	6		37	10	24	4		39	9	19	18		56	0	0	167
% 3 Axle Vehicles	3	2.5	3.8	5.9	2.7	3.5	5.5	6.7	5.6	5.2	2.9	2.4	1.6	5.6	2.4	6.3	2.3	4.1	4.6	3.4	0	0	3.2
4+ Axle Trucks	28	66	16		113	10	60	23		99	34	59	12		106	36	48	19		109	0	0	427
% 4+ Axle Trucks	21.2	6	30.8	17.6	8.7	5.8	14.3	25.8	16.7	13.8	9.9	5.9	4.7	5.6	6.5	25.2	5.7	4.3	2.7	6.7	0	0	8.1

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City of Rialto
N/S: Riverside Avenue
E/W: Agua Mansa Road
Weather: Clear

File Name : 34_RLT_Riv_Agua M PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2

	Riverside Avenue Southbound				Agua Mansa Road Westbound				Riverside Avenue Northbound				Agua Mansa Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	19	117	3	139	18	**48**	3	69	27	91	**37**	155	**16**	**95**	46	**157**	520
04:45 PM	15	111	4	130	**22**	36	**12**	**70**	32	99	19	150	16	84	44	144	494
05:00 PM	**21**	**121**	5	**147**	15	45	9	69	**40**	97	25	162	10	86	**53**	149	**527**
05:15 PM	8	107	**9**	124	13	42	5	60	38	**122**	27	**187**	7	66	41	114	485
Total Volume	63	456	21	540	68	171	29	268	137	409	108	654	49	331	184	564	2026
% App. Total	11.7	84.4	3.9		25.4	63.8	10.8		20.9	62.5	16.5		8.7	58.7	32.6		
PHF	.750	.942	.583	.918	.773	.891	.604	.957	.856	.838	.730	.874	.766	.871	.868	.898	.961

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City of Rialto
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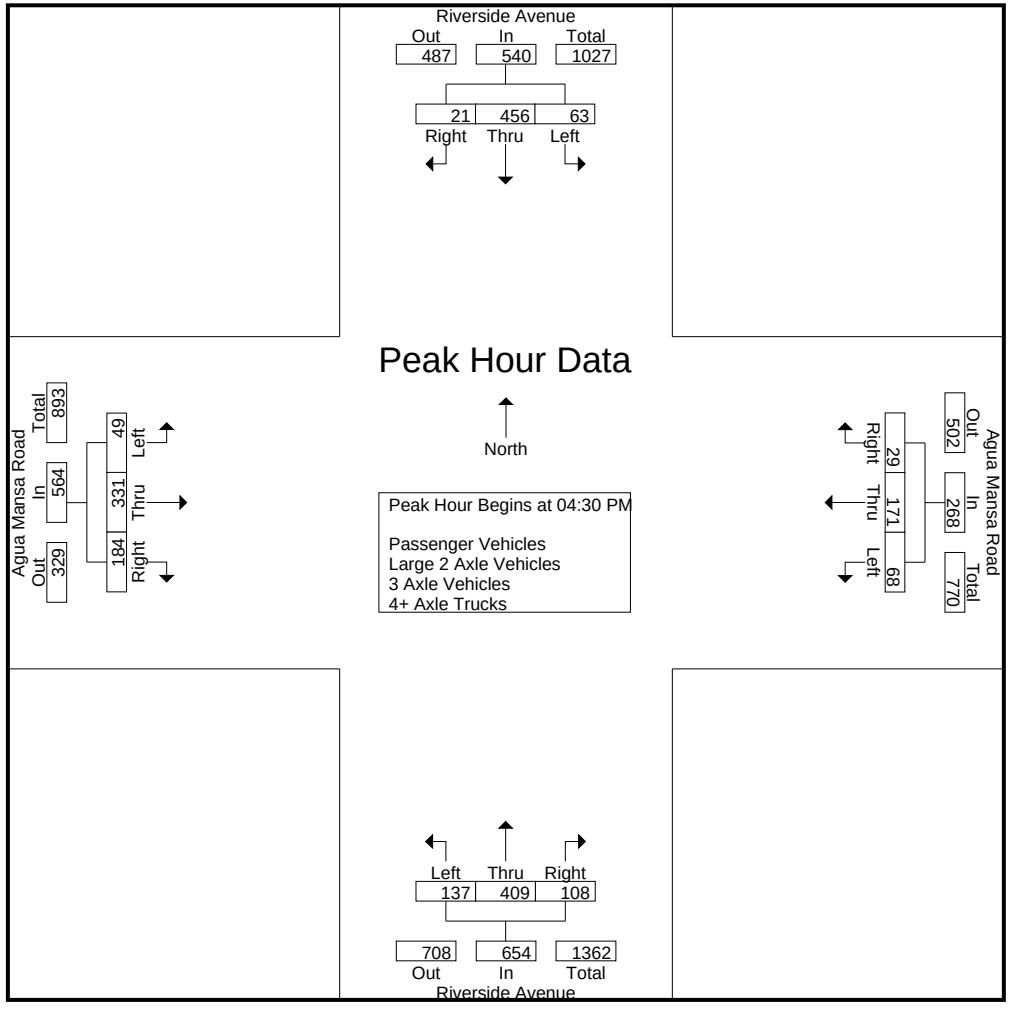
File Name : 34_RLT_Riv_Agua M PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 3



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City of Rialto
N/S: Riverside Avenue
E/W: Agua Mansa Road
Weather: Clear

File Name : 34_RLT_Riv_Agua M PM
Site Code : 05122894
Start Date : 10/4/2022

	Riverside Avenue Southbound				Agua Mansa Road Westbound				Riverside Avenue Northbound				Agua Mansa Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:30 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				03:30 PM				04:30 PM				04:45 PM				
+0 mins.	19	117	3	139	**38**	**57**	**21**	**116**	27	91	**37**	155	**16**	84	44	144	
+15 mins.	15	111	4	130	16	42	6	64	32	99	19	150	10	86	**53**	149	
+30 mins.	**21**	**121**	5	**147**	13	44	12	69	**40**	97	25	162	7	66	41	114	
+45 mins.	8	107	**9**	124	14	28	7	49	38	**122**	27	**187**	15	**107**	51	**173**	
Total Volume	63	456	21	540	81	171	46	298	137	409	108	654	48	343	189	580	
% App. Total	11.7	84.4	3.9		27.2	57.4	15.4		20.9	62.5	16.5		8.3	59.1	32.6		
PHF	.750	.942	.583	.918	.533	.750	.548	.642	.856	.838	.730	.874	.750	.801	.892	.838	

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City of Rialto
N/S: Riverside Avenue
E/W: Agua Mansa Road
Weather: Clear

File Name : 34_RLT_Riv_Agua M PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Passenger Vehicles

	Riverside Avenue Southbound					Agua Mansa Road Westbound					Riverside Avenue Northbound					Agua Mansa Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	10	93	2	2	105	33	36	17	4	86	30	101	35	5	166	9	66	43	23	118	34	475	509
03:45 PM	14	88	4	3	106	13	33	2	0	48	31	79	34	2	144	7	87	36	19	130	24	428	452
Total	24	181	6	5	211	46	69	19	4	134	61	180	69	7	310	16	153	79	42	248	58	903	961
04:00 PM	11	97	2	1	110	10	28	8	3	46	17	96	23	0	136	13	80	40	21	133	25	425	450
04:15 PM	8	66	3	0	77	11	22	3	2	36	21	70	12	1	103	10	58	27	11	95	14	311	325
04:30 PM	13	110	2	2	125	17	37	1	0	55	20	81	34	3	135	10	86	40	23	136	28	451	479
04:45 PM	10	96	1	0	107	17	30	9	6	56	25	86	19	0	130	3	73	37	16	113	22	406	428
Total	42	369	8	3	419	55	117	21	11	193	83	333	88	4	504	36	297	144	71	477	89	1593	1682
05:00 PM	17	111	3	1	131	10	34	5	2	49	27	83	24	1	134	6	77	50	26	133	30	447	477
05:15 PM	4	96	4	2	104	11	27	3	3	41	28	113	24	2	165	6	56	35	20	97	27	407	434
05:30 PM	4	116	4	0	124	6	38	1	1	45	19	88	20	2	127	12	98	48	19	158	22	454	476
05:45 PM	6	101	6	1	113	14	21	7	6	42	27	87	14	0	128	16	73	30	17	119	24	402	426
Total	31	424	17	4	472	41	120	16	12	177	101	371	82	5	554	40	304	163	82	507	103	1710	1813
Grand Total	97	974	31	12	1102	142	306	56	27	504	245	884	239	16	1368	92	754	386	195	1232	250	4206	4456
Apprch %	8.8	88.4	2.8			28.2	60.7	11.1			17.9	64.6	17.5			7.5	61.2	31.3					
Total %	2.3	23.2	0.7		26.2	3.4	7.3	1.3		12	5.8	21	5.7		32.5	2.2	17.9	9.2		29.3	5.6	94.4	

	Riverside Avenue Southbound				Agua Mansa Road Westbound				Riverside Avenue Northbound				Agua Mansa Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	13	110	2	125	**17**	**37**	1	55	20	81	**34**	135	**10**	**86**	40	**136**	**451**
04:45 PM	10	96	1	107	17	30	**9**	**56**	25	86	19	130	3	73	37	113	406
05:00 PM	**17**	**111**	3	**131**	10	34	5	49	27	83	24	134	6	77	**50**	133	447
05:15 PM	4	96	**4**	104	11	27	3	41	**28**	**113**	24	**165**	6	56	35	97	407
Total Volume	44	413	10	467	55	128	18	201	100	363	101	564	25	292	162	479	1711
% App. Total	9.4	88.4	2.1		27.4	63.7	9		17.7	64.4	17.9		5.2	61	33.8		
PHF	.647	.930	.625	.891	.809	.865	.500	.897	.893	.803	.743	.855	.625	.849	.810	.881	.948

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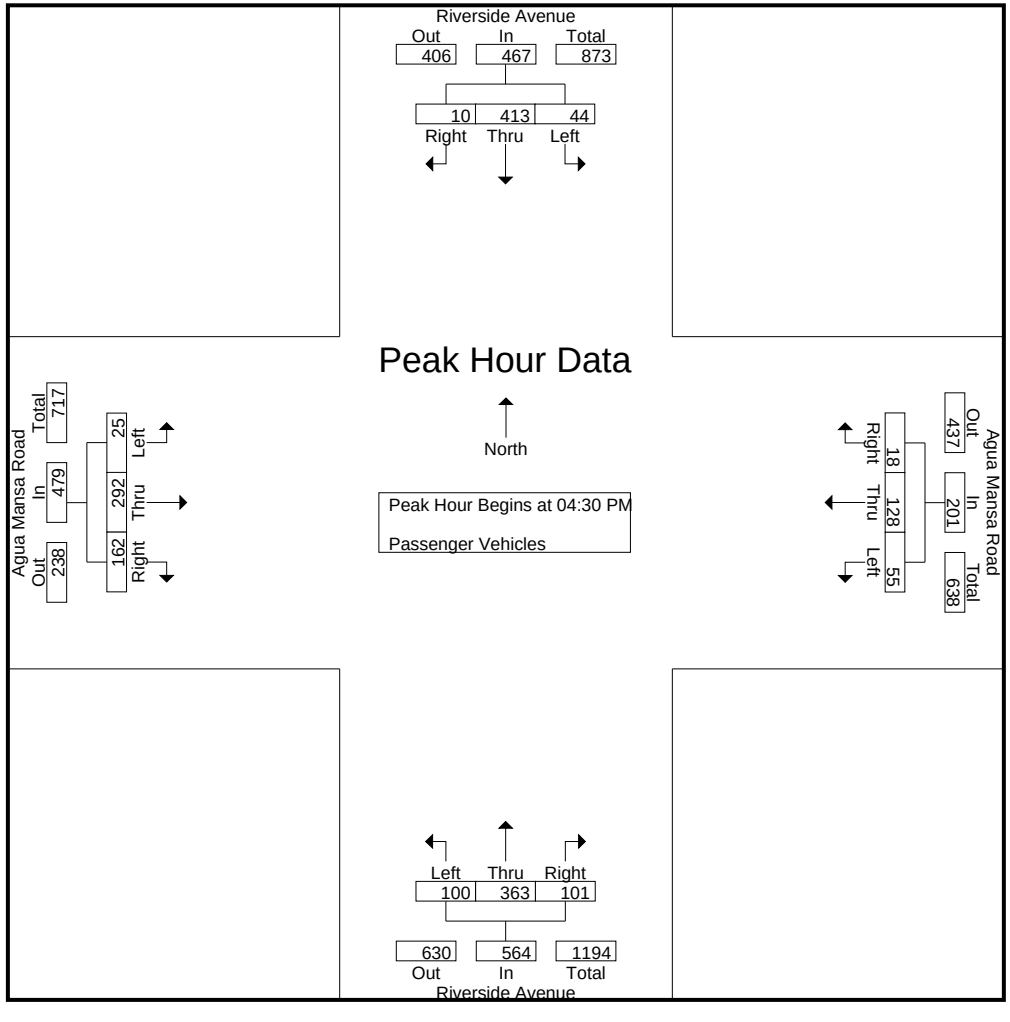
City of Rialto
N/S: Riverside Avenue
E/W: Agua Mansa Road
Weather: Clear

File Name : 34_RLT_Riv_Agua M PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Rialto
N/S: Riverside Avenue
E/W: Agua Mansa Road
Weather: Clear

File Name : 34_RLT_Riv_Agua M PM
Site Code : 05122894
Start Date : 10/4/2022

	Riverside Avenue Southbound				Agua Mansa Road Westbound				Riverside Avenue Northbound				Agua Mansa Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	13	110	2	125	**17**	**37**	1	55	20	81	**34**	135	**10**	**86**	40	**136**	
+15 mins.	10	96	1	107	17	30	**9**	**56**	25	86	19	130	3	73	37	113	
+30 mins.	**17**	**111**	3	**131**	10	34	5	49	27	83	24	134	6	77	**50**	133	
+45 mins.	4	96	**4**	104	11	27	3	41	**28**	**113**	24	**165**	6	56	35	97	
Total Volume	44	413	10	467	55	128	18	201	100	363	101	564	25	292	162	479	
% App. Total	9.4	88.4	2.1		27.4	63.7	9		17.7	64.4	17.9		5.2	61	33.8		
PHF	.647	.930	.625	.891	.809	.865	.500	.897	.893	.803	.743	.855	.625	.849	.810	.881	

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City of Rialto
N/S: Riverside Avenue
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Weather: Clear

File Name : 34_RLT_Riv_Agua M PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Riverside Avenue Southbound					Agua Mansa Road Westbound					Riverside Avenue Northbound					Agua Mansa Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	5	1	1	6	3	9	0	0	12	4	3	1	0	8	0	1	1	1	2	2	28	30
03:45 PM	0	6	0	0	6	1	1	0	0	2	7	5	0	0	12	0	0	1	1	1	1	21	22
Total	0	11	1	1	12	4	10	0	0	14	11	8	1	0	20	0	1	2	2	3	3	49	52
04:00 PM	0	4	0	0	4	3	3	0	0	6	7	6	0	0	13	0	1	2	1	3	1	26	27
04:15 PM	0	3	0	0	3	2	1	0	0	3	1	2	0	0	3	0	1	1	1	2	1	11	12
04:30 PM	1	0	0	0	1	1	1	1	0	3	4	2	0	0	6	1	1	1	1	3	1	13	14
04:45 PM	0	3	0	0	3	0	2	0	0	2	4	2	0	0	6	2	3	3	2	8	2	19	21
Total	1	10	0	0	11	6	7	1	0	14	16	12	0	0	28	3	6	7	5	16	5	69	74
05:00 PM	1	2	0	0	3	2	3	3	1	8	10	4	1	0	15	1	3	1	0	5	1	31	32
05:15 PM	1	4	1	0	6	0	5	0	0	5	6	4	0	0	10	1	2	2	0	5	0	26	26
05:30 PM	0	3	0	0	3	1	4	0	0	5	7	3	0	0	10	0	0	1	1	1	1	19	20
05:45 PM	0	3	1	0	4	0	2	0	0	2	4	3	0	0	7	1	2	1	0	4	0	17	17
Total	2	12	2	0	16	3	14	3	1	20	27	14	1	0	42	3	7	5	1	15	2	93	95
Grand Total	3	33	3	1	39	13	31	4	1	48	54	34	2	0	90	6	14	14	8	34	10	211	221
Apprch %	7.7	84.6	7.7			27.1	64.6	8.3			60	37.8	2.2			17.6	41.2	41.2					
Total %	1.4	15.6	1.4		18.5	6.2	14.7	1.9		22.7	25.6	16.1	0.9		42.7	2.8	6.6	6.6		16.1	4.5	95.5	

	Riverside Avenue Southbound				Agua Mansa Road Westbound				Riverside Avenue Northbound				Agua Mansa Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**1**	0	0	1	1	1	1	3	4	2	0	6	1	1	1	3	13
04:45 PM	0	3	0	3	0	2	0	2	4	2	0	6	**2**	**3**	**3**	**8**	19
05:00 PM	1	2	0	3	**2**	3	**3**	**8**	**10**	**4**	**1**	**15**	1	3	1	5	**31**
05:15 PM	1	**4**	**1**	**6**	0	**5**	0	5	6	4	0	10	1	2	2	5	26
Total Volume	3	9	1	13	3	11	4	18	24	12	1	37	5	9	7	21	89
% App. Total	23.1	69.2	7.7		16.7	61.1	22.2		64.9	32.4	2.7		23.8	42.9	33.3		
PHF	.750	.563	.250	.542	.375	.550	.333	.563	.600	.750	.250	.617	.625	.750	.583	.656	.718

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City of Rialto
N/S: Riverside Avenue
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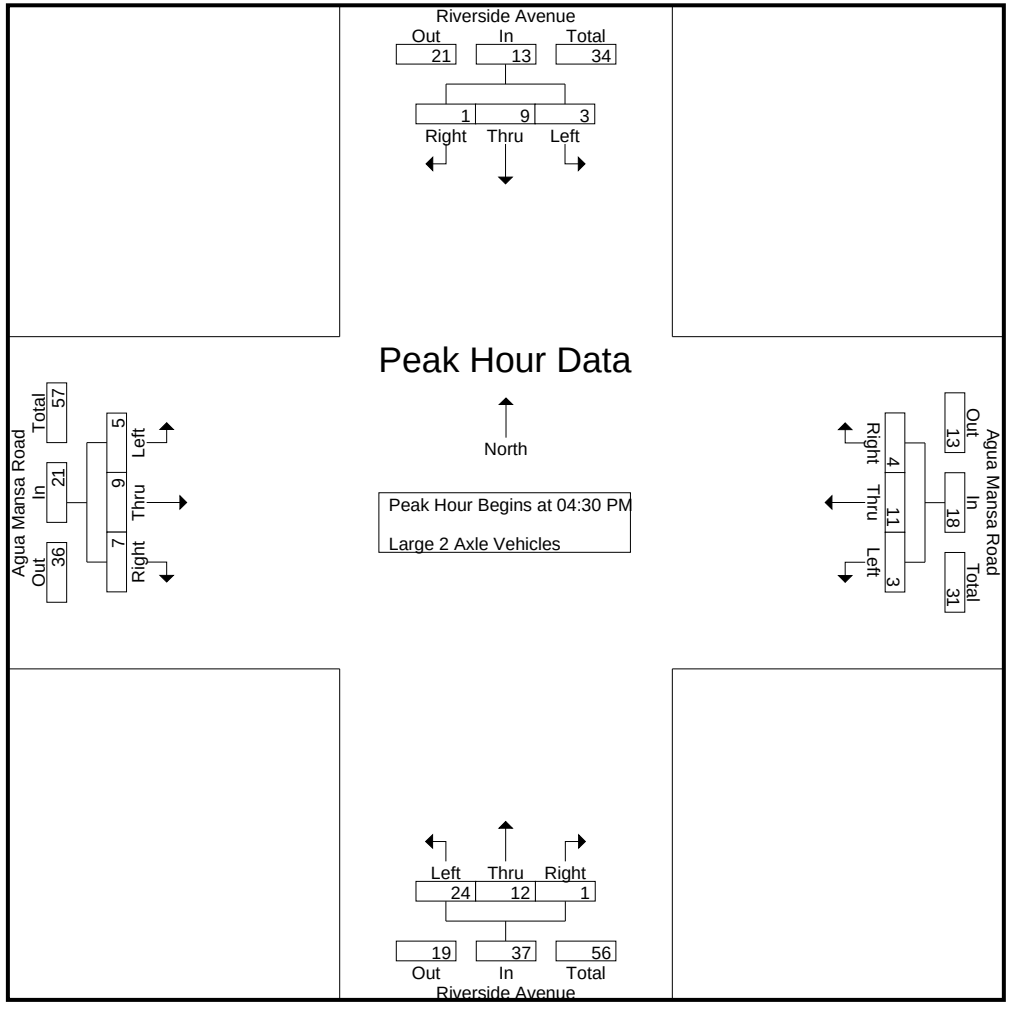
File Name : 34_RLT_Riv_Agua M PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Rialto
N/S: Riverside Avenue
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Weather: Clear

File Name : 34_RLT_Riv_Agua M PM
Site Code : 05122894
Start Date : 10/4/2022

	Riverside Avenue Southbound				Agua Mansa Road Westbound				Riverside Avenue Northbound				Agua Mansa Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	**1**	0	0	1	1	1	1	3	4	2	0	6	1	1	1	3	
+15 mins.	0	3	0	3	0	2	0	2	4	2	0	6	**2**	**3**	**3**	**8**	
+30 mins.	1	2	0	3	**2**	3	**3**	**8**	**10**	**4**	**1**	**15**	1	3	1	5	
+45 mins.	1	**4**	**1**	**6**	0	**5**	0	5	6	4	0	10	1	2	2	5	
Total Volume	3	9	1	13	3	11	4	18	24	12	1	37	5	9	7	21	
% App. Total	23.1	69.2	7.7		16.7	61.1	22.2		64.9	32.4	2.7		23.8	42.9	33.3		
PHF	.750	.563	.250	.542	.375	.550	.333	.563	.600	.750	.250	.617	.625	.750	.583	.656	

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City of Rialto
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Weather: Clear

File Name : 34_RLT_Riv_Agua M PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

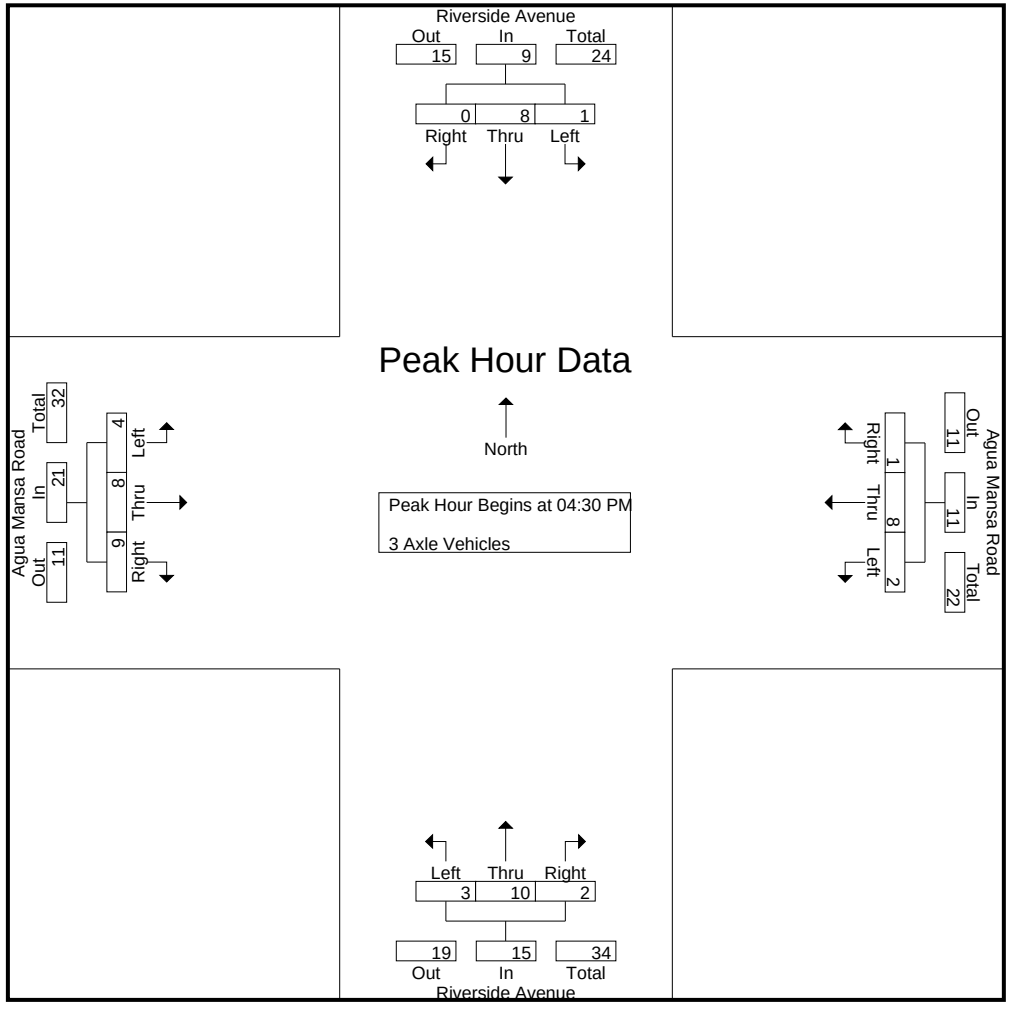
	Riverside Avenue Southbound					Agua Mansa Road Westbound					Riverside Avenue Northbound					Agua Mansa Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	0	2	0	0	2	2	2	0	0	4	0	2	0	0	2	0	2	3	1	5	1	13	14
03:45 PM	0	4	0	0	4	1	2	0	0	3	0	2	0	0	2	0	1	2	0	3	0	12	12
Total	0	6	0	0	6	3	4	0	0	7	0	4	0	0	4	0	3	5	1	8	1	25	26
04:00 PM	1	5	2	1	8	0	7	1	0	8	3	5	1	1	9	0	2	1	1	3	3	28	31
04:15 PM	1	4	0	0	5	0	1	1	1	2	1	1	1	0	3	2	0	3	2	5	3	15	18
04:30 PM	0	4	0	0	4	0	3	0	0	3	1	3	1	0	5	0	3	2	1	5	1	17	18
04:45 PM	1	2	0	0	3	2	1	1	0	4	0	4	0	0	4	4	4	3	3	11	3	22	25
Total	3	15	2	1	20	2	12	3	1	17	5	13	3	1	21	6	9	9	7	24	10	82	92
05:00 PM	0	1	0	0	1	0	2	0	0	2	0	2	0	0	2	0	0	0	0	0	0	5	5
05:15 PM	0	1	0	0	1	0	2	0	0	2	2	1	1	0	4	0	1	4	2	5	2	12	14
05:30 PM	0	2	0	0	2	0	3	0	0	3	1	2	0	0	3	0	3	0	0	3	0	11	11
05:45 PM	1	3	0	0	4	1	0	3	1	4	2	2	0	0	4	3	3	0	0	6	1	18	19
Total	1	7	0	0	8	1	7	3	1	11	5	7	1	0	13	3	7	4	2	14	3	46	49
Grand Total	4	28	2	1	34	6	23	6	2	35	10	24	4	1	38	9	19	18	10	46	14	153	167
Apprch %	11.8	82.4	5.9			17.1	65.7	17.1			26.3	63.2	10.5			19.6	41.3	39.1					
Total %	2.6	18.3	1.3		22.2	3.9	15	3.9		22.9	6.5	15.7	2.6		24.8	5.9	12.4	11.8		30.1	8.4	91.6	

	Riverside Avenue Southbound				Agua Mansa Road Westbound				Riverside Avenue Northbound				Agua Mansa Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	**4**	0	**4**	0	**3**	0	3	1	3	**1**	**5**	0	3	2	5	17
04:45 PM	**1**	2	0	3	**2**	1	**1**	**4**	0	**4**	0	4	**4**	**4**	3	**11**	**22**
05:00 PM	0	1	0	1	0	2	0	2	0	2	0	2	0	0	0	0	5
05:15 PM	0	1	0	1	0	2	0	2	**2**	1	1	4	0	1	**4**	5	12
Total Volume	1	8	0	9	2	8	1	11	3	10	2	15	4	8	9	21	56
% App. Total	11.1	88.9	0		18.2	72.7	9.1		20	66.7	13.3		19	38.1	42.9		
PHF	.250	.500	.000	.563	.250	.667	.250	.688	.375	.625	.500	.750	.250	.500	.563	.477	.636

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Rialto
N/S: Riverside Avenue
E/W: Agua Mansa Road
Weather: Clear

File Name : 34_RLT_Riv_Agua M PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Rialto
N/S: Riverside Avenue
E/W: Agua Mansa Road
Weather: Clear

File Name : 34_RLT_Riv_Agua M PM
Site Code : 05122894
Start Date : 10/4/2022

	Riverside Avenue Southbound				Agua Mansa Road Westbound				Riverside Avenue Northbound				Agua Mansa Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	**4**	0	**4**	0	**3**	0	3	1	3	**1**	**5**	0	3	2	5	
+15 mins.	**1**	2	0	3	**2**	1	**1**	**4**	0	**4**	0	4	**4**	**4**	3	**11**	
+30 mins.	0	1	0	1	0	2	0	2	0	2	0	2	0	0	0	0	
+45 mins.	0	1	0	1	0	2	0	2	**2**	1	1	4	0	1	**4**	5	
Total Volume	1	8	0	9	2	8	1	11	3	10	2	15	4	8	9	21	
% App. Total	11.1	88.9	0		18.2	72.7	9.1		20	66.7	13.3		19	38.1	42.9		
PHF	.250	.500	.000	.563	.250	.667	.250	.688	.375	.625	.500	.750	.250	.500	.563	.477	

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City of Rialto
N/S: Riverside Avenue
E/W: Agua Mansa Road
Weather: Clear

File Name : 34_RLT_Riv_Agua M PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Riverside Avenue Southbound					Agua Mansa Road Westbound					Riverside Avenue Northbound					Agua Mansa Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
03:30 PM	2	6	4	0	12	0	10	4	0	14	6	4	1	0	11	3	7	4	2	14	2	51	53
03:45 PM	6	7	0	0	13	1	6	4	0	11	8	10	3	0	21	3	2	4	1	9	1	54	55
Total	8	13	4	0	25	1	16	8	0	25	14	14	4	0	32	6	9	8	3	23	3	105	108
04:00 PM	3	7	0	0	10	0	6	3	1	9	5	7	0	0	12	1	7	2	2	10	3	41	44
04:15 PM	1	5	0	0	6	1	4	3	2	8	1	4	1	0	6	6	1	1	0	8	2	28	30
04:30 PM	5	3	1	0	9	0	7	1	1	8	2	5	2	0	9	5	5	3	0	13	1	39	40
04:45 PM	4	10	3	1	17	3	3	2	0	8	3	7	0	0	10	7	4	1	0	12	1	47	48
Total	13	25	4	1	42	4	20	9	4	33	11	23	3	0	37	19	17	7	2	43	7	155	162
05:00 PM	3	7	2	1	12	3	6	1	0	10	3	8	0	0	11	3	6	2	0	11	1	44	45
05:15 PM	3	6	4	1	13	2	8	2	1	12	2	4	2	0	8	0	7	0	0	7	2	40	42
05:30 PM	0	6	0	0	6	0	5	2	1	7	2	7	1	0	10	3	6	2	1	11	2	34	36
05:45 PM	1	9	2	0	12	0	5	1	0	6	2	3	2	1	7	5	3	0	0	8	1	33	34
Total	7	28	8	2	43	5	24	6	2	35	9	22	5	1	36	11	22	4	1	37	6	151	157
Grand Total	28	66	16	3	110	10	60	23	6	93	34	59	12	1	105	36	48	19	6	103	16	411	427
Apprch %	25.5	60	14.5			10.8	64.5	24.7			32.4	56.2	11.4			35	46.6	18.4					
Total %	6.8	16.1	3.9		26.8	2.4	14.6	5.6		22.6	8.3	14.4	2.9		25.5	8.8	11.7	4.6		25.1	3.7	96.3	

	Riverside Avenue Southbound				Agua Mansa Road Westbound				Riverside Avenue Northbound				Agua Mansa Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**5**	3	1	9	0	7	1	8	2	5	**2**	9	5	5	**3**	**13**	39
04:45 PM	4	**10**	3	**17**	**3**	3	**2**	8	**3**	7	0	10	**7**	4	1	12	**47**
05:00 PM	3	7	2	12	3	6	1	10	3	**8**	0	**11**	3	6	2	11	44
05:15 PM	3	6	**4**	13	2	**8**	2	**12**	2	4	2	8	0	**7**	0	7	40
Total Volume	15	26	10	51	8	24	6	38	10	24	4	38	15	22	6	43	170
% App. Total	29.4	51	19.6		21.1	63.2	15.8		26.3	63.2	10.5		34.9	51.2	14		
PHF	.750	.650	.625	.750	.667	.750	.750	.792	.833	.750	.500	.864	.536	.786	.500	.827	.904

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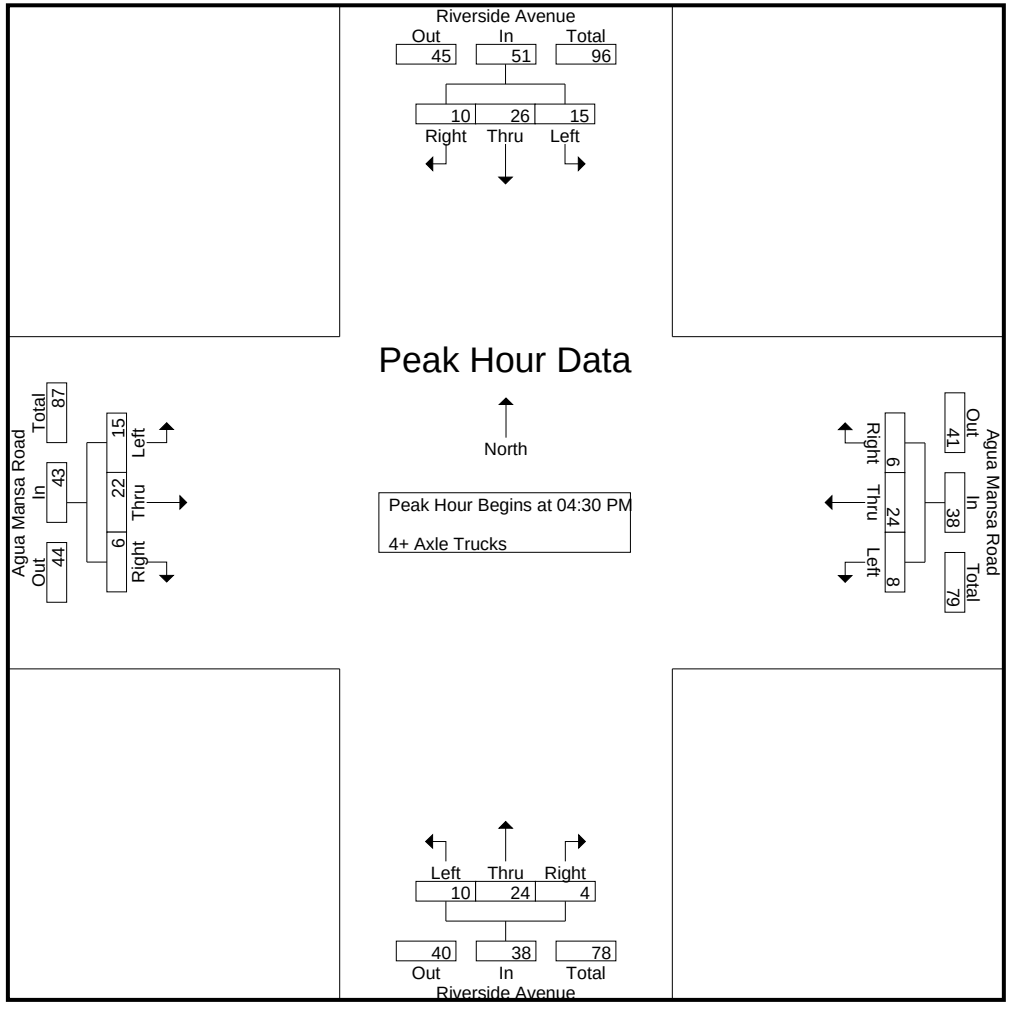
City of Rialto
N/S: Riverside Avenue
E/W: Agua Mansa Road
Weather: Clear

File Name : 34_RLT_Riv_Agua M PM
Site Code : 05122894
Start Date : 10/4/2022
Page No : 2



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City of Rialto
N/S: Riverside Avenue
E/W: Agua Mansa Road
Weather: Clear

File Name : 34_RLT_Riv_Agua M PM
Site Code : 05122894
Start Date : 10/4/2022

	Riverside Avenue Southbound				Agua Mansa Road Westbound				Riverside Avenue Northbound				Agua Mansa Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	**5**	3	1	9	0	7	1	8	2	5	**2**	9	5	5	**3**	**13**	
+15 mins.	4	**10**	3	**17**	**3**	3	**2**	8	**3**	7	0	10	**7**	4	1	12	
+30 mins.	3	7	2	12	3	6	1	10	3	**8**	0	**11**	3	6	2	11	
+45 mins.	3	6	**4**	13	2	**8**	2	**12**	2	4	2	8	0	**7**	0	7	
Total Volume	15	26	10	51	8	24	6	38	10	24	4	38	15	22	6	43	
% App. Total	29.4	51	19.6		21.1	63.2	15.8		26.3	63.2	10.5		34.9	51.2	14		
PHF	.750	.650	.625	.750	.667	.750	.750	.792	.833	.750	.500	.864	.536	.786	.500	.827	

Location: Rialto
N/S: Riverside Avenue
E/W: Agua Mansa Road

Date: 10/4/2022
Day: Tuesday

PEDESTRIANS

	North Leg Riverside Avenue	East Leg Agua Mansa Road	South Leg Riverside Avenue	West Leg Agua Mansa Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	2	2
7:00 AM	1	0	0	0	1
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	1	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	1	1
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	4	5

	North Leg Riverside Avenue	East Leg Agua Mansa Road	South Leg Riverside Avenue	West Leg Agua Mansa Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
3:30 PM	0	0	0	1	1
3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	1	0	0	1	2
4:45 PM	0	0	3	1	4
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	2	2
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	1	0	3	5	9

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Location: Rialto
N/S: Riverside Avenue
E/W: Agua Mansa Road

Date: 10/4/2022
Day: Tuesday

BICYCLES

	Southbound Riverside Avenue			Westbound Agua Mansa Road			Northbound Riverside Avenue			Eastbound Agua Mansa Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Riverside Avenue			Westbound Agua Mansa Road			Northbound Riverside Avenue			Eastbound Agua Mansa Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
3:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	0	0	1

Counts Unlimited, Inc.
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County of San Bernardino
Cedar Avenue
S/ Slover Avenue
24 Hour Directional Classification Count

CSB005
Site Code: 051-19339

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/23/19	2	67	17	0	5	1	0	1	5	0	2	0	0	100
01:00	1	47	21	0	6	0	0	0	0	0	**4**	**2**	0	81
02:00	0	36	18	0	3	3	0	1	5	0	0	0	0	66
03:00	2	59	29	1	11	4	0	0	4	0	3	0	0	113
04:00	2	162	58	4	36	4	0	4	11	0	2	0	0	283
05:00	6	204	85	3	61	8	0	2	4	0	4	0	0	377
06:00	4	325	112	6	68	11	0	9	11	0	3	1	0	550
07:00	3	**522**	**155**	11	72	4	0	9	9	0	3	0	0	**788**
08:00	6	351	137	10	62	18	0	7	11	0	3	0	0	605
09:00	6	273	124	7	61	**19**	0	7	**12**	0	2	0	0	511
10:00	**11**	308	128	7	53	14	0	10	10	0	1	1	0	543
11:00	2	319	120	**13**	**80**	10	0	**11**	11	0	1	0	**1**	568
12 PM	11	349	122	**8**	57	**17**	0	2	7	0	**5**	0	0	578
13:00	3	409	143	5	**83**	6	0	**10**	**14**	0	3	0	0	676
14:00	8	448	**214**	6	71	12	0	5	10	0	0	0	0	**774**
15:00	30	458	168	8	55	11	0	9	7	**1**	0	0	0	747
16:00	**46**	440	154	4	52	5	0	6	6	0	0	0	0	713
17:00	33	**496**	154	4	51	8	0	6	4	0	1	0	0	757
18:00	12	396	136	1	39	4	0	6	7	0	5	0	0	606
19:00	4	296	121	3	41	3	0	2	5	0	0	0	0	475
20:00	4	296	100	1	26	4	0	2	3	0	0	**1**	0	437
21:00	2	276	58	1	19	2	0	0	3	0	2	0	0	363
22:00	1	220	54	1	12	1	0	2	2	0	0	0	0	293
23:00	1	117	37	2	6	0	0	0	4	0	0	0	0	167
Total	200	6874	2465	106	1030	169	0	111	165	1	44	5	1	11171
Percent	1.8%	61.5%	22.1%	0.9%	9.2%	1.5%	0.0%	1.0%	1.5%	0.0%	0.4%	0.0%	0.0%	
AM Peak	10:00	07:00	07:00	11:00	11:00	09:00		11:00	09:00		01:00	01:00	11:00	07:00
Vol.	11	522	155	13	80	19		11	12		4	2	1	788
PM Peak	16:00	17:00	14:00	12:00	13:00	12:00		13:00	13:00	15:00	12:00	20:00		14:00
Vol.	46	496	214	8	83	17		10	14	1	5	1		774
Grand Total	200	6874	2465	106	1030	169	0	111	165	1	44	5	1	11171
Percent	1.8%	61.5%	22.1%	0.9%	9.2%	1.5%	0.0%	1.0%	1.5%	0.0%	0.4%	0.0%	0.0%	

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County of San Bernardino
Cedar Avenue
S/ Slover Avenue
24 Hour Directional Classification Count

CSB005
Site Code: 051-19339

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/23/19	0	75	12	0	6	0	0	2	1	0	1	0	0	97
01:00	1	52	9	0	2	2	0	0	0	0	0	0	0	66
02:00	0	52	10	0	3	0	0	0	2	0	0	0	0	67
03:00	0	106	37	0	14	2	0	1	1	0	0	0	0	161
04:00	0	184	62	2	31	1	0	0	1	0	0	0	0	281
05:00	3	269	123	2	47	5	0	2	3	0	3	**1**	0	458
06:00	5	406	122	5	49	8	0	6	3	0	3	0	0	607
07:00	2	**561**	**149**	3	47	8	0	10	11	0	1	0	0	**792**
08:00	**8**	387	111	**10**	48	11	**2**	5	13	0	**4**	0	0	599
09:00	3	343	98	9	**56**	10	1	**12**	12	0	1	0	0	545
10:00	5	313	85	6	45	7	1	5	**19**	0	2	0	0	488
11:00	4	342	98	7	41	**15**	2	7	17	0	2	0	0	535
12 PM	**4**	389	114	6	48	11	1	7	13	0	4	0	**1**	598
13:00	1	423	120	5	55	**15**	1	9	13	0	1	0	0	643
14:00	2	473	129	6	55	5	**5**	**14**	**16**	**1**	2	0	0	708
15:00	2	542	**170**	**8**	56	6	0	9	7	0	3	0	1	**804**
16:00	2	528	161	6	**63**	8	0	7	5	0	**5**	0	0	785
17:00	2	**572**	132	7	34	12	0	7	5	0	1	0	0	772
18:00	0	407	110	3	34	6	0	2	1	0	2	0	0	565
19:00	4	366	91	3	16	4	0	4	5	0	1	0	0	494
20:00	1	372	71	0	21	1	0	4	2	0	0	0	0	472
21:00	1	293	59	0	15	4	0	0	3	0	0	0	0	375
22:00	4	239	39	1	7	3	0	1	2	0	0	0	0	296
23:00	0	148	25	0	6	0	0	0	2	1	1	0	0	183
Total	54	7842	2137	89	799	144	13	114	157	2	37	1	2	11391
Percent	0.5%	68.8%	18.8%	0.8%	7.0%	1.3%	0.1%	1.0%	1.4%	0.0%	0.3%	0.0%	0.0%	
AM Peak	08:00	07:00	07:00	08:00	09:00	11:00	08:00	09:00	10:00		08:00	05:00		07:00
Vol.	8	561	149	10	56	15	2	12	19		4	1		792
PM Peak	12:00	17:00	15:00	15:00	16:00	13:00	14:00	14:00	14:00	14:00	16:00		12:00	15:00
Vol.	4	572	170	8	63	15	5	14	16	1	5		1	804
Grand Total	54	7842	2137	89	799	144	13	114	157	2	37	1	2	11391
Percent	0.5%	68.8%	18.8%	0.8%	7.0%	1.3%	0.1%	1.0%	1.4%	0.0%	0.3%	0.0%	0.0%	

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County of San Bernardino
Cedar Avenue
S/ Slover Avenue
24 Hour Directional Classification Count

CSB005
Site Code: 051-19339

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/23/19	2	142	29	0	11	1	0	3	6	0	3	0	0	197
01:00	2	99	30	0	8	2	0	0	0	0	4	**2**	0	147
02:00	0	88	28	0	6	3	0	1	7	0	0	0	0	133
03:00	2	165	66	1	25	6	0	1	5	0	3	0	0	274
04:00	2	346	120	6	67	5	0	4	12	0	2	0	0	564
05:00	9	473	208	5	108	13	0	4	7	0	**7**	1	0	835
06:00	9	731	234	11	117	19	0	15	14	0	6	1	0	1157
07:00	5	**1083**	**304**	14	119	12	0	**19**	20	0	4	0	0	**1580**
08:00	14	738	248	**20**	110	**29**	**2**	12	24	0	7	0	0	1204
09:00	9	616	222	16	117	29	1	19	24	0	3	0	0	1056
10:00	**16**	621	213	13	98	21	1	15	**29**	0	3	1	0	1031
11:00	6	661	218	20	**121**	25	2	18	28	0	3	0	**1**	1103
12 PM	15	738	236	14	105	**28**	1	9	20	0	**9**	0	**1**	1176
13:00	4	832	263	10	**138**	21	1	**19**	**27**	0	4	0	0	1319
14:00	10	921	**343**	12	126	17	**5**	19	26	**1**	2	0	0	1482
15:00	32	1000	338	**16**	111	17	0	18	14	1	3	0	1	**1551**
16:00	**48**	968	315	10	115	13	0	13	11	0	5	0	0	1498
17:00	35	**1068**	286	11	85	20	0	13	9	0	2	0	0	1529
18:00	12	803	246	4	73	10	0	8	8	0	7	0	0	1171
19:00	8	662	212	6	57	7	0	6	10	0	1	0	0	969
20:00	5	668	171	1	47	5	0	6	5	0	0	**1**	0	909
21:00	3	569	117	1	34	6	0	0	6	0	2	0	0	738
22:00	5	459	93	2	19	4	0	3	4	0	0	0	0	589
23:00	1	265	62	2	12	0	0	0	6	1	1	0	0	350
Total	254	14716	4602	195	1829	313	13	225	322	3	81	6	3	22562
Percent	1.1%	65.2%	20.4%	0.9%	8.1%	1.4%	0.1%	1.0%	1.4%	0.0%	0.4%	0.0%	0.0%	
AM Peak	10:00	07:00	07:00	08:00	11:00	08:00	08:00	07:00	10:00		05:00	01:00	11:00	07:00
Vol.	16	1083	304	20	121	29	2	19	29		7	2	1	1580
PM Peak	16:00	17:00	14:00	15:00	13:00	12:00	14:00	13:00	13:00	14:00	12:00	20:00	12:00	15:00
Vol.	48	1068	343	16	138	28	5	19	27	1	9	1	1	1551
Grand Total	254	14716	4602	195	1829	313	13	225	322	3	81	6	3	22562
Percent	1.1%	65.2%	20.4%	0.9%	8.1%	1.4%	0.1%	1.0%	1.4%	0.0%	0.4%	0.0%	0.0%	

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Ciy of Jurupa Valley
Van Dell Road
S/ 20th Street
24 Hour Directional Classification Count

JVY001
Site Code: 051-19339

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/23/19	1	**6**	**5**	0	1	1	0	0	0	0	0	0	**1**	15
01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:00	2	2	4	0	0	1	0	0	2	0	0	0	0	11
03:00	**4**	1	2	**2**	2	**3**	0	0	**9**	0	0	0	1	**24**
04:00	1	4	2	0	0	2	0	0	4	0	0	0	0	13
05:00	1	1	1	0	1	1	0	0	1	0	0	0	0	6
06:00	1	1	1	0	2	1	0	0	1	0	0	0	0	7
07:00	2	1	2	0	2	1	**1**	0	1	0	0	0	0	10
08:00	0	1	0	0	2	0	0	0	2	0	0	0	0	5
09:00	2	4	2	0	**5**	1	0	0	1	0	0	0	0	15
10:00	1	3	1	0	4	1	0	0	0	0	0	0	0	10
11:00	0	3	1	0	1	0	0	0	2	**1**	0	0	0	8
12 PM	1	6	3	0	1	1	0	0	0	0	0	0	0	12
13:00	1	3	5	0	1	1	0	0	1	**1**	0	0	**2**	15
14:00	**2**	6	5	0	3	**3**	0	0	**4**	0	0	0	0	23
15:00	0	9	**8**	0	**9**	0	0	0	3	0	0	0	0	**29**
16:00	2	8	5	0	1	1	0	0	3	1	0	0	0	21
17:00	0	7	3	0	3	1	**1**	0	0	0	0	0	0	15
18:00	0	4	1	**1**	0	0	0	0	0	0	0	0	0	6
19:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
20:00	0	3	2	0	1	0	0	0	0	0	0	0	0	6
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	2	1	0	0	0	0	0	1	0	0	0	0	4
23:00	0	**13**	3	0	4	0	0	0	0	0	0	0	0	20
Total	21	88	60	3	43	19	2	0	35	3	0	0	4	278
Percent	7.6%	31.7%	21.6%	1.1%	15.5%	6.8%	0.7%	0.0%	12.6%	1.1%	0.0%	0.0%	1.4%	
AM Peak	03:00	00:00	00:00	03:00	09:00	03:00	07:00		03:00	11:00			00:00	03:00
Vol.	4	6	5	2	5	3	1		9	1			1	24
PM Peak	14:00	23:00	15:00	18:00	15:00	14:00	17:00		14:00	13:00			13:00	15:00
Vol.	2	13	8	1	9	3	1		4	1			2	29
Grand Total	21	88	60	3	43	19	2	0	35	3	0	0	4	278
Percent	7.6%	31.7%	21.6%	1.1%	15.5%	6.8%	0.7%	0.0%	12.6%	1.1%	0.0%	0.0%	1.4%	

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Ciy of Jurupa Valley
Van Dell Road
S/ 20th Street
24 Hour Directional Classification Count

JVY001
Site Code: 051-19339

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/23/19	0	1	0	0	0	0	0	0	**4**	0	0	0	0	5
01:00	**3**	2	0	0	0	**2**	**1**	0	1	0	0	0	0	9
02:00	1	3	1	0	1	1	0	**1**	0	0	0	0	0	8
03:00	1	**9**	**7**	0	1	1	0	0	2	0	0	0	0	**21**
04:00	1	3	1	0	1	1	0	1	0	0	0	0	0	8
05:00	0	4	4	0	1	0	0	0	2	0	0	0	0	11
06:00	1	3	4	**1**	3	1	0	0	0	0	0	0	0	13
07:00	0	1	5	0	2	0	0	0	2	0	0	0	0	10
08:00	0	5	2	0	1	1	0	0	2	0	0	0	0	11
09:00	0	2	1	0	**6**	0	0	0	2	0	0	0	0	11
10:00	2	4	0	0	2	2	0	1	0	0	0	0	0	11
11:00	1	5	4	0	1	1	0	0	2	0	0	0	0	14
12 PM	1	0	3	**2**	**4**	1	0	0	2	0	0	0	0	13
13:00	1	**9**	3	0	4	**2**	0	0	4	0	0	0	0	23
14:00	0	5	3	2	2	0	0	0	4	0	0	0	**1**	17
15:00	**2**	6	**6**	0	2	2	0	**1**	**6**	0	0	0	0	**25**
16:00	1	7	5	1	3	1	0	0	1	0	0	0	1	20
17:00	2	9	4	0	3	2	0	0	0	0	0	0	0	20
18:00	0	7	2	1	1	1	0	0	0	0	0	0	0	12
19:00	0	3	2	0	1	0	0	0	0	0	0	0	0	6
20:00	0	2	2	0	0	0	0	0	0	0	0	0	0	4
21:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
22:00	0	3	0	0	0	0	0	0	2	0	0	0	0	5
23:00	2	4	1	0	0	1	**1**	0	1	0	0	0	0	10
Total	19	99	61	7	39	20	2	4	37	0	0	0	2	290
Percent	6.6%	34.1%	21.0%	2.4%	13.4%	6.9%	0.7%	1.4%	12.8%	0.0%	0.0%	0.0%	0.7%	
AM Peak	01:00	03:00	03:00	06:00	09:00	01:00	01:00	02:00	00:00					03:00
Vol.	3	9	7	1	6	2	1	1	4					21
PM Peak	15:00	13:00	15:00	12:00	12:00	13:00	23:00	15:00	15:00				14:00	15:00
Vol.	2	9	6	2	4	2	1	1	6				1	25
Grand Total	19	99	61	7	39	20	2	4	37	0	0	0	2	290
Percent	6.6%	34.1%	21.0%	2.4%	13.4%	6.9%	0.7%	1.4%	12.8%	0.0%	0.0%	0.0%	0.7%	

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24 Hour Directional Classification Count

JVY001
Site Code: 051-19339

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/23/19	1	7	5	0	1	1	0	0	4	0	0	0	**1**	20
01:00	3	2	1	0	0	2	**1**	0	1	0	0	0	0	10
02:00	3	5	5	0	1	2	0	**1**	2	0	0	0	0	19
03:00	**5**	**10**	**9**	**2**	3	**4**	0	0	**11**	0	0	0	1	**45**
04:00	2	7	3	0	1	3	0	1	4	0	0	0	0	21
05:00	1	5	5	0	2	1	0	0	3	0	0	0	0	17
06:00	2	4	5	1	5	2	0	0	1	0	0	0	0	20
07:00	2	2	7	0	4	1	1	0	3	0	0	0	0	20
08:00	0	6	2	0	3	1	0	0	4	0	0	0	0	16
09:00	2	6	3	0	**11**	1	0	0	3	0	0	0	0	26
10:00	3	7	1	0	6	3	0	1	0	0	0	0	0	21
11:00	1	8	5	0	2	1	0	0	4	**1**	0	0	0	22
12 PM	2	6	6	**2**	5	2	0	0	2	0	0	0	0	25
13:00	2	12	8	0	5	**3**	0	0	5	**1**	0	0	**2**	38
14:00	2	11	8	2	5	3	0	0	8	0	0	0	1	40
15:00	2	15	**14**	0	**11**	2	0	**1**	**9**	0	0	0	0	**54**
16:00	**3**	15	10	1	4	2	0	0	4	1	0	0	1	41
17:00	2	16	7	0	6	3	**1**	0	0	0	0	0	0	35
18:00	0	11	3	2	1	1	0	0	0	0	0	0	0	18
19:00	0	3	4	0	1	0	0	0	0	0	0	0	0	8
20:00	0	5	4	0	1	0	0	0	0	0	0	0	0	10
21:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
22:00	0	5	1	0	0	0	0	0	3	0	0	0	0	9
23:00	2	**17**	4	0	4	1	1	0	1	0	0	0	0	30
Total	40	187	121	10	82	39	4	4	72	3	0	0	6	568
Percent	7.0%	32.9%	21.3%	1.8%	14.4%	6.9%	0.7%	0.7%	12.7%	0.5%	0.0%	0.0%	1.1%	
AM Peak	03:00	03:00	03:00	03:00	09:00	03:00	01:00	02:00	03:00	11:00			00:00	03:00
Vol.	5	10	9	2	11	4	1	1	11	1			1	45
PM Peak	16:00	23:00	15:00	12:00	15:00	13:00	17:00	15:00	15:00	13:00			13:00	15:00
Vol.	3	17	14	2	11	3	1	1	9	1			2	54
Grand Total	40	187	121	10	82	39	4	4	72	3	0	0	6	568
Percent	7.0%	32.9%	21.3%	1.8%	14.4%	6.9%	0.7%	0.7%	12.7%	0.5%	0.0%	0.0%	1.1%	

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Ciy of Jurupa Valley
26th Street
E/ Avalon Street
24 Hour Directional Classification Count

JVY002
Site Code: 051-19339

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/23/19	0	1	1	0	0	0	0	0	0	0	0	0	0	2
01:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
02:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
03:00	0	0	0	**1**	0	0	0	0	0	0	0	0	0	1
04:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	**3**	0	0	0	0	0	0	0	0	0	0	0	3
07:00	0	0	**4**	1	1	0	0	0	0	0	0	0	0	6
08:00	0	2	3	0	1	0	0	0	0	0	0	0	0	6
09:00	0	0	2	0	2	0	0	0	0	0	0	0	0	4
10:00	0	1	4	0	1	0	0	0	0	0	**1**	0	0	7
11:00	0	2	2	0	**4**	0	0	0	0	0	0	0	0	**8**
12 PM	**1**	3	4	0	1	**2**	0	0	0	0	0	0	0	11
13:00	1	1	2	0	3	0	0	0	0	0	0	0	0	7
14:00	1	4	3	**1**	3	0	0	0	0	0	0	0	0	12
15:00	0	**12**	**5**	0	**8**	0	0	0	0	0	0	0	0	**25**
16:00	1	2	3	0	4	0	0	0	0	0	0	0	0	10
17:00	0	1	4	0	0	1	0	0	**1**	0	0	0	0	7
18:00	0	4	2	0	0	0	0	0	0	0	0	0	0	6
19:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
20:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
21:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Total	4	44	46	3	29	3	0	0	1	0	1	0	0	131
Percent	3.1%	33.6%	35.1%	2.3%	22.1%	2.3%	0.0%	0.0%	0.8%	0.0%	0.8%	0.0%	0.0%	
AM Peak		06:00	07:00	03:00	11:00						10:00			11:00
Vol.		3	4	1	4						1			8
PM Peak	12:00	15:00	15:00	14:00	15:00	12:00			17:00					15:00
Vol.	1	12	5	1	8	2			1					25
Grand Total	4	44	46	3	29	3	0	0	1	0	1	0	0	131
Percent	3.1%	33.6%	35.1%	2.3%	22.1%	2.3%	0.0%	0.0%	0.8%	0.0%	0.8%	0.0%	0.0%	

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24 Hour Directional Classification Count

JVY002
Site Code: 051-19339

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/23/19	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	**3**	3	0	0	0	0	0	0	0	0	0	0	6
05:00	0	3	**7**	0	**3**	0	0	0	0	0	0	0	0	**13**
06:00	0	1	1	**1**	2	0	0	0	0	0	0	0	0	5
07:00	0	2	3	0	0	0	0	0	0	0	0	0	0	5
08:00	0	0	2	1	1	0	0	0	0	0	0	0	0	4
09:00	0	1	0	0	1	0	0	0	0	0	**1**	0	0	3
10:00	0	2	1	0	1	0	0	**1**	0	0	0	0	0	5
11:00	0	2	4	1	1	0	**1**	0	**1**	0	0	0	0	10
12 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	4
13:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
14:00	1	5	1	0	1	0	0	0	0	0	0	0	0	8
15:00	1	**7**	**2**	0	1	0	0	**1**	0	0	0	0	0	**12**
16:00	**2**	4	2	0	**2**	0	0	0	**1**	0	0	0	0	11
17:00	0	1	1	0	1	0	0	0	0	0	0	0	0	3
18:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
19:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
Total	4	42	34	3	14	0	1	2	2	0	1	0	0	103
Percent	3.9%	40.8%	33.0%	2.9%	13.6%	0.0%	1.0%	1.9%	1.9%	0.0%	1.0%	0.0%	0.0%	
AM Peak		04:00	05:00	06:00	05:00		11:00	10:00	11:00		09:00			05:00
Vol.		3	7	1	3		1	1	1		1			13
PM Peak	16:00	15:00	15:00		16:00			15:00	16:00					15:00
Vol.	2	7	2		2			1	1					12
Grand Total	4	42	34	3	14	0	1	2	2	0	1	0	0	103
Percent	3.9%	40.8%	33.0%	2.9%	13.6%	0.0%	1.0%	1.9%	1.9%	0.0%	1.0%	0.0%	0.0%	

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Eastbound, Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/23/19	0	2	1	0	0	0	0	0	0	0	0	0	0	3
01:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
02:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
03:00	0	0	1	**1**	0	0	0	0	0	0	0	0	0	2
04:00	0	**4**	3	0	1	0	0	0	0	0	0	0	0	8
05:00	0	3	**7**	0	3	0	0	0	0	0	0	0	0	13
06:00	0	4	1	1	2	0	0	0	0	0	0	0	0	8
07:00	0	2	7	1	1	0	0	0	0	0	0	0	0	11
08:00	0	2	5	1	2	0	0	0	0	0	0	0	0	10
09:00	0	1	2	0	3	0	0	0	0	0	**1**	0	0	7
10:00	0	3	5	0	2	0	0	**1**	0	0	1	0	0	12
11:00	0	4	6	1	**5**	0	**1**	0	**1**	0	0	0	0	**18**
12 PM	1	6	5	0	1	**2**	0	0	0	0	0	0	0	15
13:00	1	4	3	0	3	0	0	0	0	0	0	0	0	11
14:00	2	9	4	**1**	4	0	0	0	0	0	0	0	0	20
15:00	1	**19**	**7**	0	**9**	0	0	**1**	0	0	0	0	0	**37**
16:00	**3**	6	5	0	6	0	0	0	**1**	0	0	0	0	21
17:00	0	2	5	0	1	1	0	0	1	0	0	0	0	10
18:00	0	4	4	0	0	0	0	0	0	0	0	0	0	8
19:00	0	4	2	0	0	0	0	0	0	0	0	0	0	6
20:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
21:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
Total	8	86	80	6	43	3	1	2	3	0	2	0	0	234
Percent	3.4%	36.8%	34.2%	2.6%	18.4%	1.3%	0.4%	0.9%	1.3%	0.0%	0.9%	0.0%	0.0%	
AM Peak		04:00	05:00	03:00	11:00		11:00	10:00	11:00		09:00			11:00
Vol.		4	7	1	5		1	1	1		1			18
PM Peak	16:00	15:00	15:00	14:00	15:00	12:00		15:00	16:00					15:00
Vol.	3	19	7	1	9	2		1	1					37
Grand Total	8	86	80	6	43	3	1	2	3	0	2	0	0	234
Percent	3.4%	36.8%	34.2%	2.6%	18.4%	1.3%	0.4%	0.9%	1.3%	0.0%	0.9%	0.0%	0.0%	

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Ciy of Jurupa Valley
Avalon Street
S/ 26th Street
24 Hour Directional Classification Count

JVY003
Site Code: 051-19339

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/23/19	0	4	0	0	0	0	0	0	0	0	0	0	0	4
01:00	1	5	0	0	0	0	0	0	0	0	0	0	0	6
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	7	2	0	0	1	0	0	0	0	0	0	0	10
04:00	**4**	12	8	**1**	1	**2**	0	0	0	0	0	0	0	28
05:00	0	14	5	0	2	2	0	0	0	0	0	0	0	23
06:00	0	17	4	0	**7**	0	0	0	0	0	0	0	0	28
07:00	0	18	7	0	0	0	0	**1**	0	0	0	0	0	26
08:00	1	14	5	0	0	2	0	1	0	0	0	0	0	23
09:00	1	17	8	0	1	2	0	0	0	0	0	0	0	29
10:00	1	16	6	0	1	1	**1**	1	0	0	0	0	0	27
11:00	3	**22**	**9**	0	3	2	0	0	0	0	0	0	0	**39**
12 PM	**2**	23	12	0	3	2	0	0	0	0	0	0	0	42
13:00	1	24	11	0	**4**	**3**	0	**1**	**1**	0	0	0	0	45
14:00	0	18	11	0	2	2	0	0	0	0	0	0	0	33
15:00	0	27	7	0	4	1	0	0	0	0	0	0	0	39
16:00	0	**35**	**15**	0	1	2	0	0	0	0	0	0	0	**53**
17:00	0	24	11	0	2	3	0	0	1	0	0	0	0	41
18:00	0	25	3	0	1	0	0	0	0	0	0	0	0	29
19:00	1	13	3	0	0	1	0	0	0	0	0	0	0	18
20:00	0	12	1	0	1	0	0	0	0	0	0	0	0	14
21:00	1	10	0	0	0	0	0	0	0	0	0	0	0	11
22:00	0	6	1	0	1	0	0	0	0	0	0	0	0	8
23:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
Total	16	368	130	1	34	26	1	4	2	0	0	0	0	582
Percent	2.7%	63.2%	22.3%	0.2%	5.8%	4.5%	0.2%	0.7%	0.3%	0.0%	0.0%	0.0%	0.0%	
AM Peak	04:00	11:00	11:00	04:00	06:00	04:00	10:00	07:00						11:00
Vol.	4	22	9	1	7	2	1	1						39
PM Peak	12:00	16:00	16:00		13:00	13:00		13:00	13:00					16:00
Vol.	2	35	15		4	3		1	1					53
Grand Total	16	368	130	1	34	26	1	4	2	0	0	0	0	582
Percent	2.7%	63.2%	22.3%	0.2%	5.8%	4.5%	0.2%	0.7%	0.3%	0.0%	0.0%	0.0%	0.0%	

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Ciy of Jurupa Valley
Avalon Street
S/ 26th Street
24 Hour Directional Classification Count

JVY003
Site Code: 051-19339

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/23/19	0	9	2	0	0	0	0	0	0	0	0	0	0	11
01:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	4	2	**1**	2	0	0	0	**1**	0	0	0	0	10
05:00	0	5	1	0	1	1	0	0	0	0	0	0	0	8
06:00	**1**	11	7	1	**7**	1	0	**2**	0	0	0	0	0	30
07:00	0	**14**	**11**	1	0	0	0	0	0	0	0	0	0	26
08:00	1	11	8	1	3	1	**2**	0	1	0	0	0	0	28
09:00	0	10	4	0	3	**2**	0	0	0	0	0	0	0	19
10:00	0	13	7	1	6	1	0	1	0	0	0	0	0	29
11:00	0	13	10	1	6	0	0	2	1	0	0	0	0	**33**
12 PM	0	19	5	0	4	0	0	0	0	0	0	0	0	28
13:00	1	38	**21**	0	3	**7**	0	0	**1**	0	0	0	0	71
14:00	**2**	26	15	**2**	10	3	0	0	0	0	0	0	0	58
15:00	0	**47**	12	0	**13**	1	0	0	0	0	0	0	0	**73**
16:00	0	30	11	1	6	1	0	**1**	0	0	0	0	0	50
17:00	0	37	16	1	8	1	0	0	0	0	0	0	0	63
18:00	0	26	5	0	1	1	0	0	0	0	0	0	0	33
19:00	0	12	3	0	1	0	0	0	0	0	0	0	0	16
20:00	1	11	1	0	2	0	0	0	0	0	0	0	0	15
21:00	0	7	1	0	1	0	0	0	0	0	0	0	0	9
22:00	0	8	3	0	2	0	0	0	1	0	0	0	0	14
23:00	0	3	3	0	0	0	0	0	0	0	0	0	0	6
Total	6	361	148	10	79	20	2	6	5	0	0	0	0	637
Percent	0.9%	56.7%	23.2%	1.6%	12.4%	3.1%	0.3%	0.9%	0.8%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	07:00	07:00	04:00	06:00	09:00	08:00	06:00	04:00					11:00
Vol.	1	14	11	1	7	2	2	2	1					33
PM Peak	14:00	15:00	13:00	14:00	15:00	13:00		16:00	13:00					15:00
Vol.	2	47	21	2	13	7		1	1					73
Grand Total	6	361	148	10	79	20	2	6	5	0	0	0	0	637
Percent	0.9%	56.7%	23.2%	1.6%	12.4%	3.1%	0.3%	0.9%	0.8%	0.0%	0.0%	0.0%	0.0%	

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Ciy of Jurupa Valley
Avalon Street
S/ 26th Street
24 Hour Directional Classification Count

JVY003
Site Code: 051-19339

Eastbound, Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/23/19	0	13	2	0	0	0	0	0	0	0	0	0	0	15
01:00	1	8	0	0	0	0	0	0	0	0	0	0	0	9
02:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
03:00	0	9	2	0	0	1	0	0	0	0	0	0	0	12
04:00	**4**	16	10	**2**	3	2	0	0	**1**	0	0	0	0	38
05:00	0	19	6	0	3	3	0	0	0	0	0	0	0	31
06:00	1	28	11	1	**14**	1	0	**2**	0	0	0	0	0	58
07:00	0	32	18	1	0	0	0	1	0	0	0	0	0	52
08:00	2	25	13	1	3	3	**2**	1	1	0	0	0	0	51
09:00	1	27	12	0	4	**4**	0	0	0	0	0	0	0	48
10:00	1	29	13	1	7	2	1	2	0	0	0	0	0	56
11:00	3	**35**	**19**	1	9	2	0	2	1	0	0	0	0	**72**
12 PM	**2**	42	17	0	7	2	0	0	0	0	0	0	0	70
13:00	2	62	**32**	0	7	**10**	0	**1**	**2**	0	0	0	0	**116**
14:00	2	44	26	**2**	12	5	0	0	0	0	0	0	0	91
15:00	0	**74**	19	0	**17**	2	0	0	0	0	0	0	0	112
16:00	0	65	26	1	7	3	0	1	0	0	0	0	0	103
17:00	0	61	27	1	10	4	0	0	1	0	0	0	0	104
18:00	0	51	8	0	2	1	0	0	0	0	0	0	0	62
19:00	1	25	6	0	1	1	0	0	0	0	0	0	0	34
20:00	1	23	2	0	3	0	0	0	0	0	0	0	0	29
21:00	1	17	1	0	1	0	0	0	0	0	0	0	0	20
22:00	0	14	4	0	3	0	0	0	1	0	0	0	0	22
23:00	0	6	4	0	0	0	0	0	0	0	0	0	0	10
Total	22	729	278	11	113	46	3	10	7	0	0	0	0	1219
Percent	1.8%	59.8%	22.8%	0.9%	9.3%	3.8%	0.2%	0.8%	0.6%	0.0%	0.0%	0.0%	0.0%	
AM Peak	04:00	11:00	11:00	04:00	06:00	09:00	08:00	06:00	04:00					11:00
Vol.	4	35	19	2	14	4	2	2	1					72
PM Peak	12:00	15:00	13:00	14:00	15:00	13:00		13:00	13:00					13:00
Vol.	2	74	32	2	17	10		1	2					116
Grand Total	22	729	278	11	113	46	3	10	7	0	0	0	0	1219
Percent	1.8%	59.8%	22.8%	0.9%	9.3%	3.8%	0.2%	0.8%	0.6%	0.0%	0.0%	0.0%	0.0%	

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Ciy of Jurupa Valley
Rubidoux Boulevard
N/ 30th Street
24 Hour Directional Classification Count

JVY004
Site Code: 051-19339

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/23/19	2	67	15	3	0	4	0	7	8	1	1	3	0	111
01:00	1	30	8	1	3	6	0	5	11	0	1	3	0	69
02:00	1	45	14	2	3	13	1	1	7	0	3	2	0	92
03:00	1	91	39	1	5	7	0	3	8	0	1	1	0	157
04:00	1	124	55	2	12	10	0	0	8	1	1	1	0	215
05:00	2	241	101	3	42	13	1	4	3	0	3	0	0	413
06:00	2	246	92	10	39	15	0	8	14	1	0	1	0	428
07:00	5	270	79	11	52	25	1	8	12	0	3	**4**	0	470
08:00	4	**279**	**104**	10	40	40	**3**	12	**32**	**2**	0	0	**1**	**527**
09:00	3	215	95	12	36	**41**	2	10	18	0	1	1	0	434
10:00	**6**	232	71	19	41	35	3	11	26	1	1	1	1	448
11:00	5	241	88	**20**	**58**	31	0	**14**	30	0	**4**	1	1	493
12 PM	5	235	93	12	57	31	3	13	26	1	**2**	0	0	478
13:00	8	270	93	15	75	35	3	13	**29**	1	1	0	1	544
14:00	9	339	109	**22**	62	26	2	24	25	3	1	0	**2**	624
15:00	5	384	150	14	67	30	**4**	22	13	**5**	0	0	1	695
16:00	7	455	**161**	7	72	29	3	22	22	2	0	0	1	781
17:00	**13**	**490**	126	13	**76**	**36**	1	**32**	16	0	2	1	0	**806**
18:00	8	381	98	15	57	28	0	16	25	1	1	1	2	633
19:00	4	220	75	4	25	15	1	17	11	1	0	1	1	375
20:00	4	166	39	4	19	13	0	10	20	1	0	2	0	278
21:00	4	171	41	5	13	9	0	14	13	0	2	0	0	272
22:00	2	143	21	5	17	9	0	10	6	0	2	**4**	0	219
23:00	1	104	13	4	4	9	0	7	2	0	1	1	0	146
Total	103	5439	1780	214	875	510	28	283	385	21	31	28	11	9708
Percent	1.1%	56.0%	18.3%	2.2%	9.0%	5.3%	0.3%	2.9%	4.0%	0.2%	0.3%	0.3%	0.1%	
AM Peak	10:00	08:00	08:00	11:00	11:00	09:00	08:00	11:00	08:00	08:00	11:00	07:00	08:00	08:00
Vol.	6	279	104	20	58	41	3	14	32	2	4	4	1	527
PM Peak	17:00	17:00	16:00	14:00	17:00	17:00	15:00	17:00	13:00	15:00	12:00	22:00	14:00	17:00
Vol.	13	490	161	22	76	36	4	32	29	5	2	4	2	806
Grand Total	103	5439	1780	214	875	510	28	283	385	21	31	28	11	9708
Percent	1.1%	56.0%	18.3%	2.2%	9.0%	5.3%	0.3%	2.9%	4.0%	0.2%	0.3%	0.3%	0.1%	

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Ciy of Jurupa Valley
Rubidoux Boulevard
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24 Hour Directional Classification Count

JVY004
Site Code: 051-19339

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/23/19	0	70	17	2	4	3	0	6	8	0	2	0	0	112
01:00	0	46	7	0	4	3	0	4	11	0	0	1	0	76
02:00	0	34	5	1	2	1	0	2	16	0	3	2	0	66
03:00	1	78	25	5	6	12	0	2	20	0	0	**6**	1	156
04:00	2	112	49	8	22	15	0	15	23	0	**6**	2	0	254
05:00	2	170	66	9	29	28	0	9	26	0	2	1	1	343
06:00	2	217	99	9	37	38	0	21	**38**	0	2	1	0	464
07:00	2	**372**	**111**	11	40	21	**5**	**22**	26	**1**	3	1	0	**615**
08:00	**5**	256	85	14	45	29	5	18	29	0	3	0	0	489
09:00	5	253	93	15	**54**	30	0	21	26	1	1	0	1	500
10:00	3	229	87	**19**	38	30	1	21	27	0	2	1	**2**	460
11:00	5	221	99	10	43	**39**	0	20	31	0	2	1	2	473
12 PM	3	279	91	**13**	41	31	1	7	**38**	1	1	0	0	506
13:00	**7**	277	107	8	37	**44**	**2**	**30**	34	1	1	1	0	549
14:00	7	398	**137**	12	46	38	0	17	26	0	2	0	0	683
15:00	5	425	122	13	**58**	21	0	20	23	1	2	0	0	690
16:00	7	**467**	133	6	37	21	1	20	20	1	1	0	0	**714**
17:00	4	433	123	3	41	13	1	11	14	0	0	1	0	644
18:00	1	264	84	4	27	8	0	17	14	0	0	2	0	421
19:00	1	202	58	4	16	7	0	9	20	0	2	0	0	319
20:00	3	210	41	2	21	7	0	17	8	**2**	1	1	0	313
21:00	0	153	31	1	12	11	0	13	12	1	0	2	0	236
22:00	1	127	24	4	8	4	0	13	10	0	2	**4**	0	197
23:00	0	108	18	2	7	0	0	6	8	0	**3**	4	0	156
Total	66	5401	1712	175	675	454	16	341	508	9	41	31	7	9436
Percent	0.7%	57.2%	18.1%	1.9%	7.2%	4.8%	0.2%	3.6%	5.4%	0.1%	0.4%	0.3%	0.1%	
AM Peak	08:00	07:00	07:00	10:00	09:00	11:00	07:00	07:00	06:00	07:00	04:00	03:00	10:00	07:00
Vol.	5	372	111	19	54	39	5	22	38	1	6	6	2	615
PM Peak	13:00	16:00	14:00	12:00	15:00	13:00	13:00	13:00	12:00	20:00	23:00	22:00		16:00
Vol.	7	467	137	13	58	44	2	30	38	2	3	4		714
Grand Total	66	5401	1712	175	675	454	16	341	508	9	41	31	7	9436
Percent	0.7%	57.2%	18.1%	1.9%	7.2%	4.8%	0.2%	3.6%	5.4%	0.1%	0.4%	0.3%	0.1%	

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24 Hour Directional Classification Count

JVY004
Site Code: 051-19339

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/23/19	2	137	32	5	4	7	0	13	16	1	3	3	0	223
01:00	1	76	15	1	7	9	0	9	22	0	1	4	0	145
02:00	1	79	19	3	5	14	1	3	23	0	6	4	0	158
03:00	2	169	64	6	11	19	0	5	28	0	1	**7**	1	313
04:00	3	236	104	10	34	25	0	15	31	1	**7**	3	0	469
05:00	4	411	167	12	71	41	1	13	29	0	5	1	1	756
06:00	4	463	**191**	19	76	53	0	29	52	1	2	2	0	892
07:00	7	**642**	190	22	92	46	6	30	38	1	6	5	0	**1085**
08:00	9	535	189	24	85	69	**8**	30	**61**	**2**	3	0	1	1016
09:00	8	468	188	27	90	**71**	2	31	44	1	2	1	1	934
10:00	9	461	158	**38**	79	65	4	32	53	1	3	2	**3**	908
11:00	**10**	462	187	30	**101**	70	0	**34**	61	0	6	2	3	966
12 PM	8	514	184	25	98	62	4	20	**64**	2	3	0	0	984
13:00	15	547	200	23	112	**79**	**5**	**43**	63	2	2	1	1	1093
14:00	16	737	246	**34**	108	64	2	41	51	3	3	0	**2**	1307
15:00	10	809	272	27	**125**	51	4	42	36	**6**	2	0	1	1385
16:00	14	922	**294**	13	109	50	4	42	42	3	1	0	1	**1495**
17:00	**17**	**923**	249	16	117	49	2	43	30	0	2	2	0	1450
18:00	9	645	182	19	84	36	0	33	39	1	1	3	2	1054
19:00	5	422	133	8	41	22	1	26	31	1	2	1	1	694
20:00	7	376	80	6	40	20	0	27	28	3	1	3	0	591
21:00	4	324	72	6	25	20	0	27	25	1	2	2	0	508
22:00	3	270	45	9	25	13	0	23	16	0	**4**	**8**	0	416
23:00	1	212	31	6	11	9	0	13	10	0	4	5	0	302
Total	169	10840	3492	389	1550	964	44	624	893	30	72	59	18	19144
Percent	0.9%	56.6%	18.2%	2.0%	8.1%	5.0%	0.2%	3.3%	4.7%	0.2%	0.4%	0.3%	0.1%	
AM Peak	11:00	07:00	06:00	10:00	11:00	09:00	08:00	11:00	08:00	08:00	04:00	03:00	10:00	07:00
Vol.	10	642	191	38	101	71	8	34	61	2	7	7	3	1085
PM Peak	17:00	17:00	16:00	14:00	15:00	13:00	13:00	13:00	12:00	15:00	22:00	22:00	14:00	16:00
Vol.	17	923	294	34	125	79	5	43	64	6	4	8	2	1495
Grand Total	169	10840	3492	389	1550	964	44	624	893	30	72	59	18	19144
Percent	0.9%	56.6%	18.2%	2.0%	8.1%	5.0%	0.2%	3.3%	4.7%	0.2%	0.4%	0.3%	0.1%	

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City of Riverside
Market Street
N/ Rivera Street
24 Hour Directional Classification Count

RIV006
Site Code: 051-19339

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/23/19	2	47	16	0	7	2	0	2	6	0	3	**2**	0	87
01:00	3	53	7	0	5	4	0	2	4	0	2	1	0	81
02:00	0	46	15	0	5	2	0	2	7	0	0	1	0	78
03:00	6	131	39	1	12	5	0	0	15	0	**5**	2	0	216
04:00	8	196	82	1	52	7	0	3	10	0	3	0	0	362
05:00	10	322	115	5	**74**	12	0	3	15	0	1	1	0	558
06:00	3	359	**120**	8	73	16	0	5	32	0	0	0	0	616
07:00	6	**369**	118	11	50	22	0	11	43	0	0	0	0	**630**
08:00	**11**	271	104	16	42	24	0	8	34	0	1	1	0	512
09:00	4	180	84	13	49	32	**4**	11	46	0	0	1	0	424
10:00	11	186	93	15	54	**50**	3	7	45	0	3	2	**1**	470
11:00	7	200	85	**19**	55	37	2	**12**	**49**	**1**	3	1	1	472
12 PM	**12**	264	117	**24**	60	33	3	11	40	0	**4**	0	0	568
13:00	8	295	129	14	65	20	0	**17**	**51**	0	2	0	0	601
14:00	9	309	**131**	22	55	**35**	1	17	30	0	2	**1**	0	**612**
15:00	5	281	124	8	**66**	35	**4**	14	26	0	0	0	0	563
16:00	7	343	97	12	49	30	2	14	21	0	1	1	0	577
17:00	3	**349**	104	7	44	7	0	12	7	0	1	0	0	534
18:00	4	263	84	3	27	7	0	6	18	0	2	0	0	414
19:00	4	219	53	4	20	7	0	4	10	0	0	0	0	321
20:00	8	188	41	5	13	8	0	8	10	0	0	0	0	281
21:00	8	186	49	3	8	9	0	6	5	0	4	0	0	278
22:00	3	140	25	5	7	5	0	2	10	0	2	0	0	199
23:00	5	79	18	1	3	6	0	0	7	0	2	0	0	121
Total	147	5276	1850	197	895	415	19	177	541	1	41	14	2	9575
Percent	1.5%	55.1%	19.3%	2.1%	9.3%	4.3%	0.2%	1.8%	5.7%	0.0%	0.4%	0.1%	0.0%	
AM Peak	08:00	07:00	06:00	11:00	05:00	10:00	09:00	11:00	11:00	11:00	03:00	00:00	10:00	07:00
Vol.	11	369	120	19	74	50	4	12	49	1	5	2	1	630
PM Peak	12:00	17:00	14:00	12:00	15:00	14:00	15:00	13:00	13:00		12:00	14:00		14:00
Vol.	12	349	131	24	66	35	4	17	51		4	1		612
Grand Total	147	5276	1850	197	895	415	19	177	541	1	41	14	2	9575
Percent	1.5%	55.1%	19.3%	2.1%	9.3%	4.3%	0.2%	1.8%	5.7%	0.0%	0.4%	0.1%	0.0%	

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City of Riverside
Market Street
N/ Rivera Street
24 Hour Directional Classification Count

RIV006
Site Code: 051-19339

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/23/19	3	56	10	0	6	5	0	0	3	0	0	0	0	83
01:00	4	63	7	0	2	4	0	0	1	0	**3**	0	0	84
02:00	2	41	10	0	2	4	0	1	4	0	0	0	0	64
03:00	4	49	14	1	6	4	0	0	6	0	1	0	**1**	86
04:00	3	106	33	6	14	5	0	4	19	0	3	0	0	193
05:00	4	162	81	9	37	36	0	9	21	**1**	3	0	0	363
06:00	5	233	92	17	35	12	0	18	24	0	0	0	0	436
07:00	14	**413**	**143**	15	**69**	9	0	14	22	0	0	0	0	**699**
08:00	11	302	99	14	50	18	0	**19**	30	0	1	0	0	544
09:00	10	208	79	**18**	51	21	0	14	31	0	0	**1**	0	433
10:00	3	203	83	12	53	37	**1**	9	**49**	0	1	0	0	451
11:00	**15**	189	98	10	52	**41**	0	17	34	0	3	0	0	459
12 PM	5	246	95	**18**	55	**34**	0	**18**	25	0	0	0	0	496
13:00	5	268	118	11	68	22	0	9	**32**	0	1	0	0	534
14:00	9	428	155	16	65	19	0	11	29	0	1	0	0	733
15:00	**15**	554	176	12	91	23	0	9	12	0	0	0	0	892
16:00	3	**590**	**222**	5	**99**	24	0	9	11	**1**	1	0	0	**965**
17:00	4	588	160	6	57	5	0	5	9	0	**2**	0	0	836
18:00	4	309	118	1	33	5	0	2	7	0	0	0	0	479
19:00	6	181	47	4	20	6	0	3	2	0	1	0	0	270
20:00	8	160	51	2	13	5	0	2	10	0	0	**1**	0	252
21:00	2	133	36	2	11	4	0	1	5	0	0	0	0	194
22:00	1	141	33	3	7	3	0	2	5	0	1	0	0	196
23:00	0	79	23	2	9	0	0	0	3	0	0	0	0	116
Total	140	5702	1983	184	905	346	1	176	394	2	22	2	1	9858
Percent	1.4%	57.8%	20.1%	1.9%	9.2%	3.5%	0.0%	1.8%	4.0%	0.0%	0.2%	0.0%	0.0%	
AM Peak	11:00	07:00	07:00	09:00	07:00	11:00	10:00	08:00	10:00	05:00	01:00	09:00	03:00	07:00
Vol.	15	413	143	18	69	41	1	19	49	1	3	1	1	699
PM Peak	15:00	16:00	16:00	12:00	16:00	12:00		12:00	13:00	16:00	17:00	20:00		16:00
Vol.	15	590	222	18	99	34		18	32	1	2	1		965
Grand Total	140	5702	1983	184	905	346	1	176	394	2	22	2	1	9858
Percent	1.4%	57.8%	20.1%	1.9%	9.2%	3.5%	0.0%	1.8%	4.0%	0.0%	0.2%	0.0%	0.0%	

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RIV006
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Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/23/19	5	103	26	0	13	7	0	2	9	0	3	**2**	0	170
01:00	7	116	14	0	7	8	0	2	5	0	5	1	0	165
02:00	2	87	25	0	7	6	0	3	11	0	0	1	0	142
03:00	10	180	53	2	18	9	0	0	21	0	**6**	2	**1**	302
04:00	11	302	115	7	66	12	0	7	29	0	6	0	0	555
05:00	14	484	196	14	111	48	0	12	36	**1**	4	1	0	921
06:00	8	592	212	25	108	28	0	23	56	0	0	0	0	1052
07:00	20	**782**	**261**	26	**119**	31	0	25	65	0	0	0	0	**1329**
08:00	**22**	573	203	30	92	42	0	27	64	0	2	1	0	1056
09:00	14	388	163	**31**	100	53	**4**	25	77	0	0	2	0	857
10:00	14	389	176	27	107	**87**	4	16	**94**	0	4	2	1	921
11:00	22	389	183	29	107	78	2	**29**	83	1	6	1	1	931
12 PM	17	510	212	**42**	115	**67**	3	**29**	65	0	**4**	0	0	1064
13:00	13	563	247	25	133	42	0	26	**83**	0	3	0	0	1135
14:00	18	737	286	38	120	54	1	28	59	0	3	**1**	0	1345
15:00	**20**	835	300	20	**157**	58	**4**	23	38	0	0	0	0	1455
16:00	10	933	**319**	17	148	54	2	23	32	**1**	2	1	0	**1542**
17:00	7	**937**	264	13	101	12	0	17	16	0	3	0	0	1370
18:00	8	572	202	4	60	12	0	8	25	0	2	0	0	893
19:00	10	400	100	8	40	13	0	7	12	0	1	0	0	591
20:00	16	348	92	7	26	13	0	10	20	0	0	1	0	533
21:00	10	319	85	5	19	13	0	7	10	0	4	0	0	472
22:00	4	281	58	8	14	8	0	4	15	0	3	0	0	395
23:00	5	158	41	3	12	6	0	0	10	0	2	0	0	237
Total	287	10978	3833	381	1800	761	20	353	935	3	63	16	3	19433
Percent	1.5%	56.5%	19.7%	2.0%	9.3%	3.9%	0.1%	1.8%	4.8%	0.0%	0.3%	0.1%	0.0%	
AM Peak	08:00	07:00	07:00	09:00	07:00	10:00	09:00	11:00	10:00	05:00	03:00	00:00	03:00	07:00
Vol.	22	782	261	31	119	87	4	29	94	1	6	2	1	1329
PM Peak	15:00	17:00	16:00	12:00	15:00	12:00	15:00	12:00	13:00	16:00	12:00	14:00		16:00
Vol.	20	937	319	42	157	67	4	29	83	1	4	1		1542
Grand Total	287	10978	3833	381	1800	761	20	353	935	3	63	16	3	19433
Percent	1.5%	56.5%	19.7%	2.0%	9.3%	3.9%	0.1%	1.8%	4.8%	0.0%	0.3%	0.1%	0.0%	

APPENDIX 3.2: EXISTING (2022) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	79	4	42	150	4	59
Future Vol, veh/h	79	4	42	150	4	59
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	96	5	51	183	5	72

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	101	0	381	96
Stage 1	-	-	-	-	96	-
Stage 2	-	-	-	-	285	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1504	-	625	966
Stage 1	-	-	-	-	933	-
Stage 2	-	-	-	-	768	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1504	-	601	966
Mov Cap-2 Maneuver	-	-	-	-	601	-
Stage 1	-	-	-	-	933	-
Stage 2	-	-	-	-	739	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	930	-	-	1504	-
HCM Lane V/C Ratio	0.083	-	-	0.034	-
HCM Control Delay (s)	9.2	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	121	31	12	131	0	50	8	15	2	18	24
Future Vol, veh/h	5	121	31	12	131	0	50	8	15	2	18	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	149	38	15	162	0	62	10	19	2	22	30

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	162	0	0	187	0	0	398	372	168	387	391	162
Stage 1	-	-	-	-	-	-	180	180	-	192	192	-
Stage 2	-	-	-	-	-	-	218	192	-	195	199	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1429	-	-	1399	-	-	566	561	881	575	548	888
Stage 1	-	-	-	-	-	-	826	754	-	814	745	-
Stage 2	-	-	-	-	-	-	789	745	-	811	740	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1429	-	-	1399	-	-	523	551	881	548	539	888
Mov Cap-2 Maneuver	-	-	-	-	-	-	523	551	-	548	539	-
Stage 1	-	-	-	-	-	-	822	750	-	810	736	-
Stage 2	-	-	-	-	-	-	731	736	-	780	736	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.6	12.4	10.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	574	1429	-	-	1399	-	-	687
HCM Lane V/C Ratio	0.157	0.004	-	-	0.011	-	-	0.079
HCM Control Delay (s)	12.4	7.5	0	-	7.6	0	-	10.7
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	30	43	1	16	45
Future Vol, veh/h	3	30	43	1	16	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	100	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	35	50	1	19	52

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	141	51	0	0	51	0
Stage 1	51	-	-	-	-	-
Stage 2	90	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	857	1023	-	-	1568	-
Stage 1	977	-	-	-	-	-
Stage 2	939	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	847	1023	-	-	1568	-
Mov Cap-2 Maneuver	847	-	-	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	928	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	1.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	847	1023	1568	-
HCM Lane V/C Ratio	-	-	0.004	0.034	0.012	-
HCM Control Delay (s)	-	-	9.3	8.6	7.3	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.1	0	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	12	0	5	0	34	2	9	57	0
Future Vol, veh/h	0	0	0	12	0	5	0	34	2	9	57	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	14	0	6	0	40	2	11	68	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	134	132	68	131	131	41	68	0	0	42	0	0
Stage 1	90	90	-	41	41	-	-	-	-	-	-	-
Stage 2	44	42	-	90	90	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	842	762	1001	846	763	1036	1546	-	-	1580	-	-
Stage 1	922	824	-	979	865	-	-	-	-	-	-	-
Stage 2	975	864	-	922	824	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	833	757	1001	842	758	1036	1546	-	-	1580	-	-
Mov Cap-2 Maneuver	833	757	-	842	758	-	-	-	-	-	-	-
Stage 1	922	818	-	979	865	-	-	-	-	-	-	-
Stage 2	969	864	-	916	818	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.1	0	1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1546	-	-	-	891	1580	-	-
HCM Lane V/C Ratio	-	-	-	-	0.023	0.007	-	-
HCM Control Delay (s)	0	-	-	0	9.1	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	380	232	1113	1418	580
Future Volume (vph)	0	380	232	1113	1418	580
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	42.0	42.0	24.0	68.0	44.0	44.0
Total Split (%)	38.2%	38.2%	21.8%	61.8%	40.0%	40.0%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	34.6	34.6	18.2	66.9	44.6	44.6
Actuated g/C Ratio	0.31	0.31	0.17	0.61	0.41	0.41
v/c Ratio	0.89	0.67	0.81	0.53	0.70	0.60
Control Delay	50.8	31.8	70.4	9.6	30.6	4.8
Queue Delay	16.6	0.0	0.0	0.4	21.7	0.0
Total Delay	67.4	31.8	70.4	9.9	52.3	4.8
LOS	E	C	E	A	D	A
Approach Delay	52.8			20.4	38.5	
Approach LOS	D			C	D	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 35.5	Intersection LOS: D
Intersection Capacity Utilization 93.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	454	0	380	232	1113	0	0	1418	580
Future Volume (veh/h)	0	0	0	454	0	380	232	1113	0	0	1418	580
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				473	0	290	242	1159	0	0	1477	338
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				528	0	470	269	2278	0	0	2314	718
Arrive On Green				0.29	0.00	0.29	0.30	1.00	0.00	0.00	0.45	0.45
Sat Flow, veh/h				1810	0	1610	1810	3705	0	0	5358	1610
Grp Volume(v), veh/h				473	0	290	242	1159	0	0	1477	338
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1729	1610
Q Serve(g_s), s				27.6	0.0	17.1	14.1	0.0	0.0	0.0	24.3	16.2
Cycle Q Clear(g_c), s				27.6	0.0	17.1	14.1	0.0	0.0	0.0	24.3	16.2
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				528	0	470	269	2278	0	0	2314	718
V/C Ratio(X)				0.90	0.00	0.62	0.90	0.51	0.00	0.00	0.64	0.47
Avail Cap(c_a), veh/h				625	0	556	329	2278	0	0	2314	718
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.59	0.59	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				37.4	0.0	33.7	37.9	0.0	0.0	0.0	23.6	21.4
Incr Delay (d2), s/veh				14.0	0.0	1.5	15.5	0.5	0.0	0.0	1.4	2.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				13.6	0.0	6.6	6.2	0.2	0.0	0.0	9.6	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				51.4	0.0	35.2	53.3	0.5	0.0	0.0	25.0	23.6
LnGrp LOS				D	A	D	D	A	A	A	C	C
Approach Vol, veh/h					763			1401			1815	
Approach Delay, s/veh					45.2			9.6			24.7	
Approach LOS					D			A			C	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		73.9			20.3	53.6		36.1				
Change Period (Y+Rc), s		4.5			4.0	4.5		4.0				
Max Green Setting (Gmax), s		63.5			20.0	39.5		38.0				
Max Q Clear Time (g_c+I1), s		2.0			16.1	26.3		29.6				
Green Ext Time (p_c), s		10.7			0.2	8.7		2.5				

Intersection Summary												
HCM 6th Ctrl Delay			23.3									
HCM 6th LOS			C									

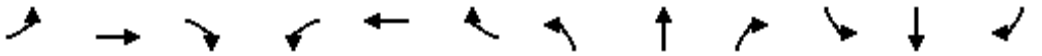
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	485	0	859	479	470	1402
Future Volume (vph)	485	0	859	479	470	1402
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	44.0	44.0	27.0	27.0	39.0	66.0
Total Split (%)	40.0%	40.0%	24.5%	24.5%	35.5%	60.0%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	39.0	39.0	26.8	26.8	33.2	63.5
Actuated g/C Ratio	0.35	0.35	0.24	0.24	0.30	0.58
v/c Ratio	0.77	0.94	0.73	0.67	0.93	0.72
Control Delay	41.2	56.4	47.7	20.7	52.1	14.2
Queue Delay	0.0	0.0	0.0	0.0	48.1	48.4
Total Delay	41.2	56.4	47.7	20.7	100.2	62.6
LOS	D	E	D	C	F	E
Approach Delay		49.4	38.0			72.0
Approach LOS		D	D			E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 55.9	Intersection LOS: E
Intersection Capacity Utilization 93.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	485	0	459	0	0	0	0	859	479	470	1402	0
Future Volume (veh/h)	485	0	459	0	0	0	0	859	479	470	1402	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	482	56	442				0	924	241	505	1508	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	603	61	485				0	1050	325	651	2161	0
Arrive On Green	0.33	0.33	0.33				0.00	0.07	0.07	0.24	0.40	0.00
Sat Flow, veh/h	1810	184	1454				0	5358	1606	1810	3705	0
Grp Volume(v), veh/h	482	0	498				0	924	241	505	1508	0
Grp Sat Flow(s),veh/h/ln	1810	0	1638				0	1729	1606	1810	1805	0
Q Serve(g_s), s	26.6	0.0	32.0				0.0	19.4	16.2	28.7	38.2	0.0
Cycle Q Clear(g_c), s	26.6	0.0	32.0				0.0	19.4	16.2	28.7	38.2	0.0
Prop In Lane	1.00		0.89				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	603	0	546				0	1050	325	651	2161	0
V/C Ratio(X)	0.80	0.00	0.91				0.00	0.88	0.74	0.78	0.70	0.00
Avail Cap(c_a), veh/h	666	0	603				0	1085	336	651	2161	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.74	0.74	0.65	0.65	0.00
Uniform Delay (d), s/veh	33.3	0.0	35.1				0.0	50.0	48.5	37.6	24.7	0.0
Incr Delay (d2), s/veh	6.3	0.0	17.3				0.0	8.1	10.8	3.5	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.1	0.0	14.6				0.0	9.8	7.9	13.7	17.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.6	0.0	52.4				0.0	58.1	59.3	41.1	25.9	0.0
LnGrp LOS	D	A	D				A	E	E	D	C	A
Approach Vol, veh/h		980						1165			2013	
Approach Delay, s/veh		46.1						58.4			29.7	
Approach LOS		D						E			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	43.6	26.3		40.2		69.8
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	35.5	* 23		40.5		62.0
Max Q Clear Time (g_c+I1), s	30.7	21.4		34.0		40.2
Green Ext Time (p_c), s	0.4	0.8		2.6		7.9

Intersection Summary	
HCM 6th Ctrl Delay	41.6
HCM 6th LOS	D

Notes

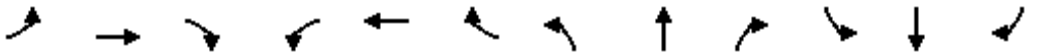
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	231	4	6	3	6	970	166	1283	412
Future Volume (vph)	231	4	6	3	6	970	166	1283	412
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases		4		8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	30.0	30.0	10.2	10.2	16.2	28.2	16.2	28.2	28.2
Total Split (s)	36.0	36.0	36.0	36.0	16.2	57.2	16.8	57.8	57.8
Total Split (%)	32.7%	32.7%	32.7%	32.7%	14.7%	52.0%	15.3%	52.5%	52.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	3.0	4.7	3.0	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.0	5.7	4.0	5.7	5.7
Lead/Lag					Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min	C-Min
Act Effct Green (s)	26.7	26.7	26.7	26.7	65.1	57.8	73.3	69.6	69.6
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.59	0.53	0.67	0.63	0.63
v/c Ratio	0.90	0.06	0.02	0.30	0.03	0.57	0.52	0.62	0.41
Control Delay	72.8	14.5	29.7	7.0	7.2	20.6	9.6	11.6	2.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.8	14.5	29.7	7.0	7.2	20.6	9.6	11.6	2.4
LOS	E	B	C	A	A	C	A	B	A
Approach Delay		67.7		8.0		20.5		9.4	
Approach LOS		E		A		C		A	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 68.3 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 17.3	Intersection LOS: B
Intersection Capacity Utilization 78.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 10: Cedar Av. & Orange St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	231	4	18	6	3	137	6	970	4	166	1283	412
Future Volume (veh/h)	231	4	18	6	3	137	6	970	4	166	1283	412
Initial Q (Qb), veh	0	0	0	0	0	0	0	44	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	254	4	15	7	3	64	7	1066	4	182	1410	362
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	343	83	311	389	17	368	148	2051	7	327	2212	984
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.00	0.38	0.38	0.02	0.20	0.20
Sat Flow, veh/h	1355	350	1311	1412	73	1549	1810	3689	14	1810	3610	1606
Grp Volume(v), veh/h	254	0	19	7	0	67	7	522	548	182	1410	362
Grp Sat Flow(s),veh/h/ln	1355	0	1660	1412	0	1621	1810	1805	1898	1810	1805	1606
Q Serve(g_s), s	20.2	0.0	1.0	0.4	0.0	3.6	0.2	24.6	24.6	4.3	39.3	21.4
Cycle Q Clear(g_c), s	23.8	0.0	1.0	1.4	0.0	3.6	0.2	24.6	24.6	4.3	39.3	21.4
Prop In Lane	1.00		0.79	1.00		0.96	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	343	0	394	389	0	385	148	1003	1055	327	2212	984
V/C Ratio(X)	0.74	0.00	0.05	0.02	0.00	0.17	0.05	0.52	0.52	0.56	0.64	0.37
Avail Cap(c_a), veh/h	391	0	453	438	0	442	336	1011	1063	456	2212	984
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.83	0.83	0.83	0.62	0.62	0.62
Uniform Delay (d), s/veh	42.8	0.0	32.3	32.9	0.0	33.3	15.7	25.2	25.1	18.0	32.7	25.5
Incr Delay (d2), s/veh	6.4	0.0	0.0	0.0	0.0	0.2	0.1	1.6	1.5	0.9	0.9	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2	6.5	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	0.4	0.1	0.0	1.5	0.1	16.4	16.8	2.4	19.1	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.2	0.0	32.4	32.9	0.0	33.6	15.8	34.1	33.2	18.9	33.6	26.2
LnGrp LOS	D	A	C	C	A	C	B	C	C	B	C	C
Approach Vol, veh/h		273			74			1077			1954	
Approach Delay, s/veh		48.1			33.5			33.5			30.8	
Approach LOS		D			C			C			C	

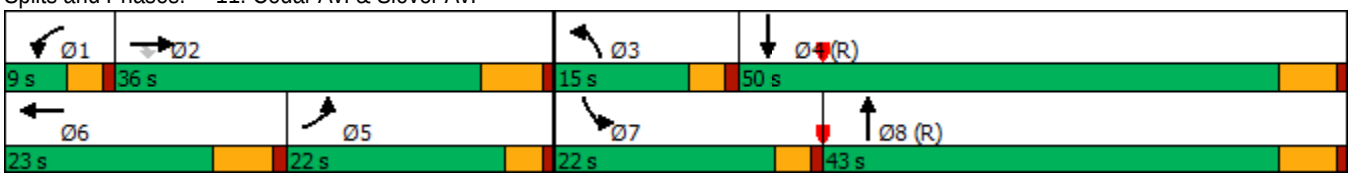
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.5	67.3		32.1	4.8	73.1		32.1				
Change Period (Y+Rc), s	4.0	5.7		6.0	4.0	5.7		6.0				
Max Green Setting (Gmax), s	12.8	51.5		30.0	12.2	52.1		30.0				
Max Q Clear Time (g_c+I1), s	6.3	26.6		25.8	2.2	41.3		5.6				
Green Ext Time (p_c), s	0.2	7.1		0.4	0.0	7.4		0.3				

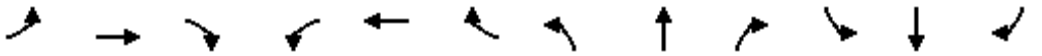
Intersection Summary												
HCM 6th Ctrl Delay			33.1									
HCM 6th LOS			C									

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	213	120	79	21	154	130	667	165	1045
Future Volume (vph)	213	120	79	21	154	130	667	165	1045
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2		1	6	3	8	7	4
Permitted Phases			2						
Detector Phase	5	2	2	1	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	29.0	29.0	8.0	23.0	8.0	32.7	8.0	24.7
Total Split (s)	22.0	36.0	36.0	9.0	23.0	15.0	43.0	22.0	50.0
Total Split (%)	20.0%	32.7%	32.7%	8.2%	20.9%	13.6%	39.1%	20.0%	45.5%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	4.7	3.0	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	4.0	5.7	4.0	5.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	17.5	29.0	29.0	5.6	11.1	11.6	46.7	14.9	50.0
Actuated g/C Ratio	0.16	0.26	0.26	0.05	0.10	0.11	0.42	0.14	0.45
v/c Ratio	0.77	0.13	0.15	0.24	0.60	0.71	0.47	0.69	0.72
Control Delay	62.1	30.7	0.7	57.0	33.7	60.2	50.1	65.4	26.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.1	30.7	0.7	57.0	33.7	60.2	50.1	65.4	26.1
LOS	E	C	A	E	C	E	D	E	C
Approach Delay		41.2			35.5		51.7		31.0
Approach LOS		D			D		D		C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 39.0	Intersection LOS: D
Intersection Capacity Utilization 74.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 11: Cedar Av. & Slover Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	213	120	79	21	154	101	130	667	23	165	1045	97
Future Volume (veh/h)	213	120	79	21	154	101	130	667	23	165	1045	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	220	124	59	22	159	73	134	688	22	170	1077	99
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	251	832	370	32	223	98	162	1644	53	203	1614	148
Arrive On Green	0.14	0.23	0.23	0.02	0.09	0.09	0.09	0.46	0.46	0.08	0.32	0.32
Sat Flow, veh/h	1810	3610	1606	1810	2440	1072	1810	3570	114	1810	3342	307
Grp Volume(v), veh/h	220	124	59	22	116	116	134	348	362	170	581	595
Grp Sat Flow(s),veh/h/ln	1810	1805	1606	1810	1805	1707	1810	1805	1879	1810	1805	1844
Q Serve(g_s), s	13.1	3.0	3.2	1.3	6.8	7.3	8.0	14.2	14.2	10.2	30.6	30.6
Cycle Q Clear(g_c), s	13.1	3.0	3.2	1.3	6.8	7.3	8.0	14.2	14.2	10.2	30.6	30.6
Prop In Lane	1.00		1.00	1.00		0.63	1.00		0.06	1.00		0.17
Lane Grp Cap(c), veh/h	251	832	370	32	165	156	162	831	865	203	872	890
V/C Ratio(X)	0.88	0.15	0.16	0.68	0.70	0.75	0.83	0.42	0.42	0.84	0.67	0.67
Avail Cap(c_a), veh/h	296	985	438	82	279	264	181	831	865	296	872	890
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.83	0.83	0.83	0.75	0.75	0.75
Uniform Delay (d), s/veh	46.4	33.7	33.8	53.7	48.5	48.7	49.2	19.8	19.8	49.9	29.6	29.6
Incr Delay (d2), s/veh	21.8	0.1	0.2	22.5	5.3	6.9	20.5	1.3	1.2	10.1	3.0	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	1.3	1.2	0.8	3.3	3.4	4.4	5.9	6.1	5.2	14.4	14.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.3	33.8	34.0	76.2	53.8	55.6	69.7	21.1	21.1	59.9	32.6	32.6
LnGrp LOS	E	C	C	E	D	E	E	C	C	E	C	C
Approach Vol, veh/h		403			254			844			1346	
Approach Delay, s/veh		52.7			56.6			28.8			36.1	
Approach LOS		D			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	31.4	13.9	58.8	21.3	16.1	16.3	56.4
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	6.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	5.0	30.0	11.0	44.3	18.0	* 17	18.0	37.3
Max Q Clear Time (g_c+I1), s	3.3	5.2	10.0	32.6	15.1	9.3	12.2	16.2
Green Ext Time (p_c), s	0.0	0.8	0.0	5.6	0.2	0.8	0.2	3.9

Intersection Summary	
HCM 6th Ctrl Delay	38.1
HCM 6th LOS	D

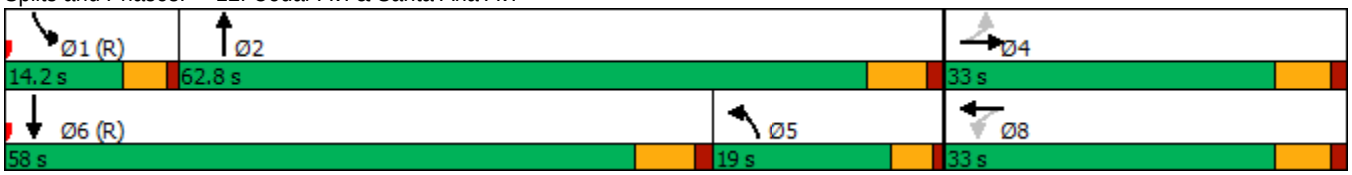
Notes

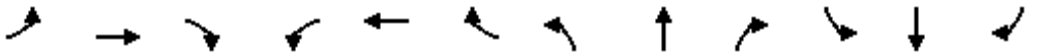
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	47	69	53	67	102	723	40	1016
Future Volume (vph)	47	69	53	67	102	723	40	1016
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	9.5	27.5	9.5	27.5
Total Split (s)	33.0	33.0	33.0	33.0	19.0	62.8	14.2	58.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	17.3%	57.1%	12.9%	52.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	4.5	6.5	4.5	6.5
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min
Act Effct Green (s)		18.5		18.5	10.9	47.2	27.2	63.6
Actuated g/C Ratio		0.17		0.17	0.10	0.43	0.25	0.58
v/c Ratio		0.75		0.76	0.62	0.53	0.10	0.55
Control Delay		54.8		60.8	61.8	21.7	31.0	37.2
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		54.8		60.8	61.8	21.7	31.0	37.2
LOS		D		E	E	C	C	D
Approach Delay		54.8		60.8		26.5		37.0
Approach LOS		D		E		C		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 90 (82%), Referenced to phase 1:SBL and 6:SBT, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 36.1	Intersection LOS: D
Intersection Capacity Utilization 63.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 12: Cedar Av. & Santa Ana Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	69	68	53	67	34	102	723	31	40	1016	44
Future Volume (veh/h)	47	69	68	53	67	34	102	723	31	40	1016	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	51	75	33	58	73	25	111	786	30	43	1104	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	97	114	44	107	110	33	485	1593	61	477	1518	55
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.54	0.90	0.90	0.09	0.14	0.14
Sat Flow, veh/h	407	864	333	470	829	248	1810	3545	135	1810	3553	129
Grp Volume(v), veh/h	159	0	0	156	0	0	111	400	416	43	561	583
Grp Sat Flow(s),veh/h/ln	1604	0	0	1546	0	0	1810	1805	1875	1810	1805	1877
Q Serve(g_s), s	0.0	0.0	0.0	0.3	0.0	0.0	3.6	4.4	4.4	2.4	32.7	32.7
Cycle Q Clear(g_c), s	10.5	0.0	0.0	10.8	0.0	0.0	3.6	4.4	4.4	2.4	32.7	32.7
Prop In Lane	0.32		0.21	0.37		0.16	1.00		0.07	1.00		0.07
Lane Grp Cap(c), veh/h	256	0	0	250	0	0	485	811	843	477	771	802
V/C Ratio(X)	0.62	0.00	0.00	0.63	0.00	0.00	0.23	0.49	0.49	0.09	0.73	0.73
Avail Cap(c_a), veh/h	437	0	0	428	0	0	485	924	960	477	845	879
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.93	0.93	0.93	0.68	0.68	0.68
Uniform Delay (d), s/veh	45.8	0.0	0.0	45.9	0.0	0.0	19.5	3.3	3.3	38.1	41.1	41.1
Incr Delay (d2), s/veh	3.5	0.0	0.0	3.6	0.0	0.0	0.1	1.6	1.5	0.0	4.1	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	0.0	4.3	0.0	0.0	1.4	1.4	1.4	1.0	16.6	17.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.3	0.0	0.0	49.5	0.0	0.0	19.6	4.9	4.8	38.1	45.2	45.1
LnGrp LOS	D	A	A	D	A	A	B	A	A	D	D	D
Approach Vol, veh/h		159			156			927			1187	
Approach Delay, s/veh		49.3			49.5			6.6			44.9	
Approach LOS		D			D			A			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	33.5	55.9		20.6	36.0	53.5		20.6				
Change Period (Y+Rc), s	4.5	6.5		6.0	6.5	* 6.5		6.0				
Max Green Setting (Gmax), s	9.7	56.3		27.0	14.5	* 52		27.0				
Max Q Clear Time (g_c+I1), s	4.4	6.4		12.5	5.6	34.7		12.8				
Green Ext Time (p_c), s	0.0	15.9		0.9	0.1	12.3		0.9				

Intersection Summary			
HCM 6th Ctrl Delay		30.9	
HCM 6th LOS		C	

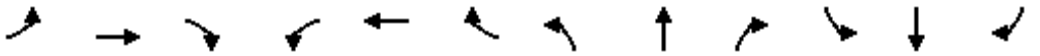
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	55	71	28	56	75	131	25	658	87	1028
Future Volume (vph)	55	71	28	56	75	131	25	658	87	1028
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	32.0	32.0	32.0	32.0	32.0	32.0	17.0	58.0	20.0	61.0
Total Split (%)	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%	15.5%	52.7%	18.2%	55.5%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)		16.7	16.7		16.7	16.7	30.1	65.9	11.4	47.2
Actuated g/C Ratio		0.15	0.15		0.15	0.15	0.27	0.60	0.10	0.43
v/c Ratio		0.73	0.10		0.74	0.40	0.06	0.37	0.52	0.75
Control Delay		65.7	0.6		65.6	9.6	34.7	12.5	39.8	43.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		65.7	0.6		65.6	9.6	34.7	12.5	39.8	43.2
LOS		E	A		E	A	C	B	D	D
Approach Delay		53.9			37.5			13.2		43.0
Approach LOS		D			D			B		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 33.5	Intersection LOS: C
Intersection Capacity Utilization 62.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	71	28	56	75	131	25	658	53	87	1028	18
Future Volume (veh/h)	55	71	28	56	75	131	25	658	53	87	1028	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	61	79	12	62	83	80	28	731	48	97	1142	16
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	47	45	388	47	46	383	371	1873	123	125	1489	21
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.41	1.00	1.00	0.02	0.13	0.13
Sat Flow, veh/h	0	186	1610	0	192	1589	1810	3438	226	1810	3645	51
Grp Volume(v), veh/h	140	0	12	145	0	80	28	384	395	97	566	592
Grp Sat Flow(s),veh/h/ln	186	0	1610	192	0	1589	1810	1805	1859	1810	1805	1891
Q Serve(g_s), s	0.0	0.0	0.6	0.0	0.0	4.4	1.0	0.0	0.0	5.9	33.3	33.3
Cycle Q Clear(g_c), s	26.5	0.0	0.6	26.5	0.0	4.4	1.0	0.0	0.0	5.9	33.3	33.3
Prop In Lane	0.44		1.00	0.43		1.00	1.00		0.12	1.00		0.03
Lane Grp Cap(c), veh/h	92	0	388	93	0	383	371	983	1013	125	738	773
V/C Ratio(X)	1.53	0.00	0.03	1.56	0.00	0.21	0.08	0.39	0.39	0.78	0.77	0.77
Avail Cap(c_a), veh/h	92	0	388	93	0	383	371	983	1013	255	903	945
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.98	0.98	0.98	0.81	0.81	0.81
Uniform Delay (d), s/veh	42.7	0.0	31.9	42.5	0.0	33.4	26.1	0.0	0.0	52.9	42.5	42.5
Incr Delay (d2), s/veh	284.4	0.0	0.0	297.7	0.0	0.4	0.1	1.1	1.1	8.1	3.1	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.7	0.0	0.2	10.2	0.0	1.7	0.4	0.3	0.3	3.0	16.6	17.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	327.1	0.0	32.0	340.2	0.0	33.8	26.2	1.1	1.1	61.0	45.6	45.4
LnGrp LOS	F	A	C	F	A	C	C	A	A	E	D	D
Approach Vol, veh/h		152			225			807			1255	
Approach Delay, s/veh		303.8			231.3			2.0			46.7	
Approach LOS		F			F			A			D	

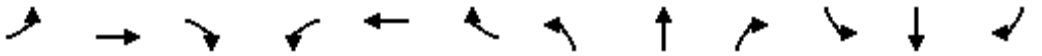
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.1	65.9		32.0	27.1	50.9		32.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	15.5	52.0		26.5	12.5	55.0		26.5				
Max Q Clear Time (g_c+I1), s	7.9	2.0		28.5	3.0	35.3		28.5				
Green Ext Time (p_c), s	0.1	7.7		0.0	0.0	9.7		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		65.0	
HCM 6th LOS		E	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	34	7	25	8	63	638	22	1028
Future Volume (vph)	34	7	25	8	63	638	22	1028
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	10.0	10.0	9.5	24.0	9.5	24.0
Total Split (s)	30.0	30.0	30.0	30.0	17.0	68.0	12.0	63.0
Total Split (%)	27.3%	27.3%	27.3%	27.3%	15.5%	61.8%	10.9%	57.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)		10.8		10.9	9.4	83.1	7.0	76.4
Actuated g/C Ratio		0.10		0.10	0.09	0.76	0.06	0.69
v/c Ratio		0.69		0.54	0.43	0.25	0.20	0.44
Control Delay		24.7		62.1	55.6	5.6	72.4	3.1
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		24.7		62.1	55.6	5.6	72.4	3.1
LOS		C		E	E	A	E	A
Approach Delay		24.7		62.1		10.1		4.6
Approach LOS		C		E		B		A

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 74 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 9.6	Intersection LOS: A
Intersection Capacity Utilization 58.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 14: Rubidoux Bl./Cedar Av. & 7th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	7	156	25	8	9	63	638	5	22	1028	19
Future Volume (veh/h)	34	7	156	25	8	9	63	638	5	22	1028	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	36	7	72	26	8	1	66	672	4	23	1082	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	79	19	92	140	37	4	86	2741	16	42	2612	48
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.05	0.74	0.74	0.02	0.72	0.72
Sat Flow, veh/h	394	205	1003	914	408	39	1810	3679	22	1810	3626	67
Grp Volume(v), veh/h	115	0	0	35	0	0	66	330	346	23	539	563
Grp Sat Flow(s),veh/h/ln	1602	0	0	1360	0	0	1810	1805	1896	1810	1805	1888
Q Serve(g_s), s	5.2	0.0	0.0	0.0	0.0	0.0	4.0	6.3	6.3	1.4	13.1	13.1
Cycle Q Clear(g_c), s	7.7	0.0	0.0	2.5	0.0	0.0	4.0	6.3	6.3	1.4	13.1	13.1
Prop In Lane	0.31		0.63	0.74		0.03	1.00		0.01	1.00		0.04
Lane Grp Cap(c), veh/h	189	0	0	181	0	0	86	1345	1412	42	1300	1360
V/C Ratio(X)	0.61	0.00	0.00	0.19	0.00	0.00	0.77	0.25	0.25	0.55	0.41	0.41
Avail Cap(c_a), veh/h	401	0	0	377	0	0	206	1345	1412	123	1300	1360
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.92	0.92	0.92	0.60	0.60	0.60
Uniform Delay (d), s/veh	48.8	0.0	0.0	46.4	0.0	0.0	51.8	4.4	4.4	53.2	6.1	6.1
Incr Delay (d2), s/veh	4.4	0.0	0.0	0.7	0.0	0.0	12.4	0.4	0.4	6.8	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	0.0	0.9	0.0	0.0	2.0	1.8	1.8	0.7	4.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.3	0.0	0.0	47.2	0.0	0.0	64.2	4.8	4.8	59.9	6.7	6.7
LnGrp LOS	D	A	A	D	A	A	E	A	A	E	A	A
Approach Vol, veh/h		115			35			742			1125	
Approach Delay, s/veh		53.3			47.2			10.1			7.8	
Approach LOS		D			D			B			A	

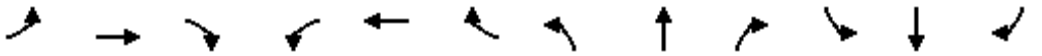
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	87.9		15.0	9.7	85.2		15.0				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	7.5	62.0		25.0	12.5	57.0		25.0				
Max Q Clear Time (g_c+I1), s	3.4	8.3		9.7	6.0	15.1		4.5				
Green Ext Time (p_c), s	0.0	6.1		0.7	0.1	12.4		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		11.9	
HCM 6th LOS		B	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	17	8	104	1	82	2	550	159	999
Future Volume (vph)	17	8	104	1	82	2	550	159	999
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	35.0	35.0	35.0	9.5	24.0	9.5	24.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.6	34.0	21.0	45.4
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%	10.7%	37.8%	23.3%	50.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	5.0	4.5	6.0	4.5	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min
Act Effct Green (s)		12.8		13.7	13.7	5.8	27.2	11.5	38.3
Actuated g/C Ratio		0.22		0.23	0.23	0.10	0.46	0.20	0.65
v/c Ratio		0.15		0.36	0.18	0.01	0.43	0.47	0.45
Control Delay		13.8		25.1	1.6	34.5	17.8	30.6	10.3
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		13.8		25.1	1.6	34.5	17.8	30.6	10.3
LOS		B		C	A	C	B	C	B
Approach Delay		13.8		14.8			17.8		13.0
Approach LOS		B		B			B		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 58.7	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.47	
Intersection Signal Delay: 14.8	Intersection LOS: B
Intersection Capacity Utilization 57.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 15: Rubidoux Bl. & Tarragona Dr./El Rivino Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	8	25	104	1	82	2	550	124	159	999	11
Future Volume (veh/h)	17	8	25	104	1	82	2	550	124	159	999	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	18	8	17	109	1	54	2	579	124	167	1052	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	162	52	58	358	2	183	5	1128	241	223	1835	21
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.00	0.38	0.38	0.12	0.50	0.50
Sat Flow, veh/h	319	458	508	1601	15	1610	1810	2959	632	1810	3656	42
Grp Volume(v), veh/h	43	0	0	110	0	54	2	353	350	167	519	545
Grp Sat Flow(s),veh/h/ln	1285	0	0	1615	0	1610	1810	1805	1786	1810	1805	1892
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	1.2	0.0	6.1	6.1	3.6	8.2	8.2
Cycle Q Clear(g_c), s	2.4	0.0	0.0	2.3	0.0	1.2	0.0	6.1	6.1	3.6	8.2	8.2
Prop In Lane	0.42		0.40	0.99		1.00	1.00		0.35	1.00		0.02
Lane Grp Cap(c), veh/h	272	0	0	360	0	183	5	688	681	223	906	950
V/C Ratio(X)	0.16	0.00	0.00	0.31	0.00	0.30	0.40	0.51	0.51	0.75	0.57	0.57
Avail Cap(c_a), veh/h	1236	0	0	1243	0	1191	227	1246	1233	736	1753	1838
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.4	0.0	0.0	17.0	0.0	16.5	20.2	9.7	9.7	17.2	7.1	7.1
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.7	0.0	1.3	45.1	0.8	0.9	5.0	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.9	0.0	0.5	0.1	1.6	1.6	1.4	1.5	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.7	0.0	0.0	17.7	0.0	17.8	65.3	10.5	10.5	22.1	7.9	7.9
LnGrp LOS	B	A	A	B	A	B	E	B	B	C	A	A
Approach Vol, veh/h		43			164			705			1231	
Approach Delay, s/veh		16.7			17.7			10.7			9.8	
Approach LOS		B			B			B			A	

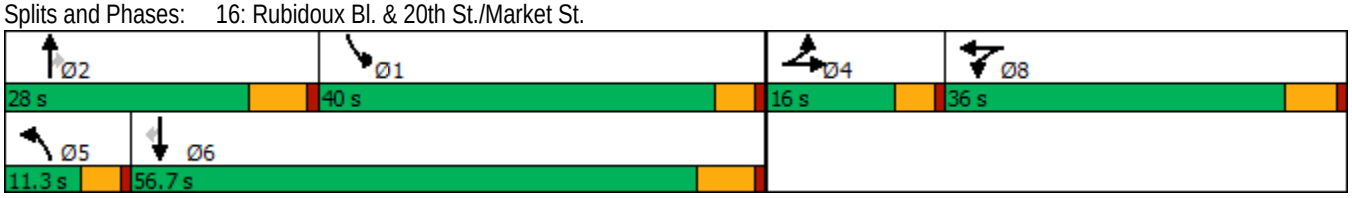
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	21.5		9.6	4.6	26.4		9.6				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	16.5	28.0		30.0	5.1	39.4		30.0				
Max Q Clear Time (g_c+I1), s	5.6	8.1		4.4	2.0	10.2		4.3				
Green Ext Time (p_c), s	0.3	5.3		0.2	0.0	10.2		1.1				

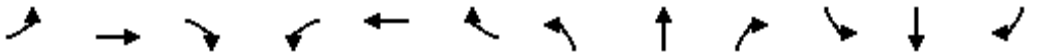
Intersection Summary			
HCM 6th Ctrl Delay		10.8	
HCM 6th LOS		B	

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	83	68	74	391	37	224	280	385	702	70
Future Volume (vph)	83	68	74	391	37	224	280	385	702	70
Turn Type	Split	NA	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4	8		5	2		1	6	
Permitted Phases				Free			2			6
Detector Phase	4	4	8		5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	14.6	14.6	15.8		9.6	16.2	16.2	9.6	35.2	35.2
Total Split (s)	16.0	16.0	36.0		11.3	28.0	28.0	40.0	56.7	56.7
Total Split (%)	13.3%	13.3%	30.0%		9.4%	23.3%	23.3%	33.3%	47.3%	47.3%
Yellow Time (s)	3.6	3.6	4.8		3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	5.8		4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag					Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None		None	None	None	None	None	None
Act Effct Green (s)	11.0	11.0	22.3	92.7	6.1	12.6	12.6	24.9	36.2	36.2
Actuated g/C Ratio	0.12	0.12	0.24	1.00	0.07	0.14	0.14	0.27	0.39	0.39
v/c Ratio	0.40	0.52	0.77	0.25	0.32	0.47	0.62	0.82	0.51	0.11
Control Delay	49.6	43.9	46.8	0.4	54.8	43.0	11.5	47.5	24.6	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.6	43.9	46.8	0.4	54.8	43.0	11.5	47.5	24.6	1.8
LOS	D	D	D	A	D	D	B	D	C	A
Approach Delay		46.3	21.5			27.5			30.8	
Approach LOS		D	C			C			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 92.7	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 28.8	Intersection LOS: C
Intersection Capacity Utilization 68.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	68	49	254	74	391	37	224	280	385	702	70
Future Volume (veh/h)	83	68	49	254	74	391	37	224	280	385	702	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	86	70	36	262	76	0	38	231	201	397	724	41
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	209	137	70	309	90		63	574	256	438	1389	619
Arrive On Green	0.12	0.12	0.12	0.22	0.22	0.00	0.03	0.16	0.16	0.24	0.38	0.38
Sat Flow, veh/h	1810	1182	608	1418	411	1610	1810	3610	1610	1810	3610	1608
Grp Volume(v), veh/h	86	0	106	338	0	0	38	231	201	397	724	41
Grp Sat Flow(s),veh/h/ln	1810	0	1791	1829	0	1610	1810	1805	1610	1810	1805	1608
Q Serve(g_s), s	3.8	0.0	4.8	15.2	0.0	0.0	1.8	4.9	10.3	18.3	13.2	1.4
Cycle Q Clear(g_c), s	3.8	0.0	4.8	15.2	0.0	0.0	1.8	4.9	10.3	18.3	13.2	1.4
Prop In Lane	1.00		0.34	0.78		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	209	0	207	398	0		63	574	256	438	1389	619
V/C Ratio(X)	0.41	0.00	0.51	0.85	0.00		0.60	0.40	0.79	0.91	0.52	0.07
Avail Cap(c_a), veh/h	241	0	238	644	0		141	918	410	747	2127	947
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.2	0.0	35.6	32.2	0.0	0.0	40.8	32.4	34.6	31.5	20.3	16.6
Incr Delay (d2), s/veh	1.3	0.0	2.0	5.9	0.0	0.0	3.4	0.5	5.3	4.9	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	2.2	6.9	0.0	0.0	0.8	2.0	4.1	7.8	5.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.5	0.0	37.6	38.1	0.0	0.0	44.2	32.8	39.9	36.5	20.6	16.7
LnGrp LOS	D	A	D	D	A		D	C	D	D	C	B
Approach Vol, veh/h		192			338			470			1162	
Approach Delay, s/veh		37.1			38.1			36.8			25.9	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	26.9	19.8		14.5	7.6	39.2		24.5				
Change Period (Y+Rc), s	6.2	* 6.2		4.6	4.6	6.2		5.8				
Max Green Setting (Gmax), s	35.4	* 22		11.4	6.7	50.5		30.2				
Max Q Clear Time (g_c+I1), s	20.3	12.3		6.8	3.8	15.2		17.2				
Green Ext Time (p_c), s	0.5	1.3		0.3	0.0	5.0		1.5				

Intersection Summary	
HCM 6th Ctrl Delay	31.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↕			↕	
Traffic Vol, veh/h	1	5	11	14	12	8	16	553	29	139	865	5
Future Vol, veh/h	1	5	11	14	12	8	16	553	29	139	865	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	5	12	15	13	9	17	601	32	151	940	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1586	1913	473	1427	1899	318	945	0	0	634	0	0
Stage 1	1245	1245	-	652	652	-	-	-	-	-	-	-
Stage 2	341	668	-	775	1247	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	74	69	543	97	70	684	734	-	-	959	-	-
Stage 1	187	248	-	428	467	-	-	-	-	-	-	-
Stage 2	653	459	-	361	247	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	42	44	543	62	45	683	734	-	-	958	-	-
Mov Cap-2 Maneuver	42	44	-	62	45	-	-	-	-	-	-	-
Stage 1	180	165	-	412	450	-	-	-	-	-	-	-
Stage 2	603	442	-	228	165	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	45.1	111.2	0.5	2.3
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	734	-	-	108	67	958	-	-
HCM Lane V/C Ratio	0.024	-	-	0.171	0.552	0.158	-	-
HCM Control Delay (s)	10	0.2	-	45.1	111.2	9.5	1.2	-
HCM Lane LOS	B	A	-	E	F	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	2.3	0.6	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1	5	3	1	6	13	636	15	8	828	0
Future Vol, veh/h	0	1	5	3	1	6	13	636	15	8	828	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	110	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1	5	3	1	7	14	691	16	9	900	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1292	1653	450	1196	1645	354	900	0	0	707	0	0
Stage 1	918	918	-	727	727	-	-	-	-	-	-	-
Stage 2	374	735	-	469	918	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	122	99	562	144	101	648	763	-	-	901	-	-
Stage 1	296	353	-	386	432	-	-	-	-	-	-	-
Stage 2	624	428	-	549	353	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	118	96	562	139	98	648	763	-	-	901	-	-
Mov Cap-2 Maneuver	224	216	-	262	215	-	-	-	-	-	-	-
Stage 1	291	349	-	379	424	-	-	-	-	-	-	-
Stage 2	605	420	-	537	349	-	-	-	-	-	-	-

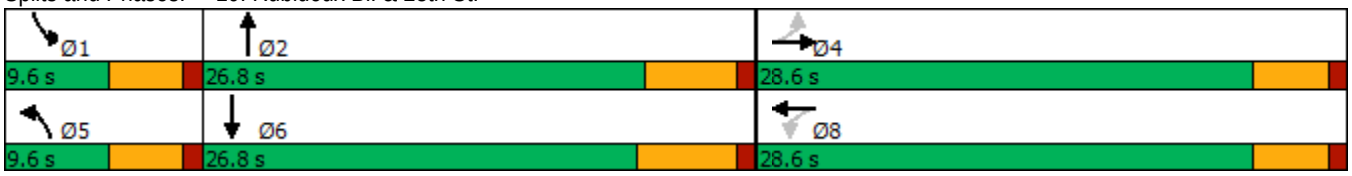
Approach	EB	WB	NB	SB
HCM Control Delay, s	13.2	14.4	0.2	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	763	-	-	444	394	901	-	-
HCM Lane V/C Ratio	0.019	-	-	0.015	0.028	0.01	-	-
HCM Control Delay (s)	9.8	-	-	13.2	14.4	9	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0	0.1	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	15	17	58	30	30	648	10	827
Future Volume (vph)	15	17	58	30	30	648	10	827
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	28.6	28.6	28.6	28.6	9.6	24.4	9.6	22.8
Total Split (s)	28.6	28.6	28.6	28.6	9.6	26.8	9.6	26.8
Total Split (%)	44.0%	44.0%	44.0%	44.0%	14.8%	41.2%	14.8%	41.2%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.4	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		14.9		14.9	6.6	25.3	6.6	23.7
Actuated g/C Ratio		0.40		0.40	0.18	0.67	0.18	0.63
v/c Ratio		0.10		0.19	0.10	0.31	0.03	0.40
Control Delay		9.4		13.0	24.0	8.5	24.1	11.2
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		9.4		13.0	24.0	8.5	24.1	11.2
LOS		A		B	C	A	C	B
Approach Delay		9.4		13.0		9.2		11.3
Approach LOS		A		B		A		B

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 37.5	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.40	
Intersection Signal Delay: 10.5	Intersection LOS: B
Intersection Capacity Utilization 44.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 19: Rubidoux Bl. & 28th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	17	29	58	30	14	30	648	33	10	827	10
Future Volume (veh/h)	15	17	29	58	30	14	30	648	33	10	827	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	16	18	23	63	33	10	33	704	33	11	899	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	171	137	123	290	130	27	71	1376	64	26	1346	15
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.04	0.39	0.39	0.01	0.37	0.37
Sat Flow, veh/h	246	759	680	733	717	151	1810	3507	164	1810	3657	41
Grp Volume(v), veh/h	57	0	0	106	0	0	33	362	375	11	444	465
Grp Sat Flow(s),veh/h/ln	1686	0	0	1602	0	0	1810	1805	1866	1810	1805	1893
Q Serve(g_s), s	0.0	0.0	0.0	0.6	0.0	0.0	0.6	5.5	5.6	0.2	7.5	7.5
Cycle Q Clear(g_c), s	1.0	0.0	0.0	1.9	0.0	0.0	0.6	5.5	5.6	0.2	7.5	7.5
Prop In Lane	0.28		0.40	0.59		0.09	1.00		0.09	1.00		0.02
Lane Grp Cap(c), veh/h	431	0	0	447	0	0	71	709	732	26	664	697
V/C Ratio(X)	0.13	0.00	0.00	0.24	0.00	0.00	0.47	0.51	0.51	0.42	0.67	0.67
Avail Cap(c_a), veh/h	1205	0	0	1183	0	0	249	1062	1098	249	1042	1093
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.6	0.0	0.0	13.0	0.0	0.0	17.1	8.4	8.4	17.8	9.6	9.6
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.3	0.0	0.0	1.8	0.6	0.6	3.9	1.2	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.7	0.0	0.0	0.2	1.4	1.4	0.1	1.7	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.8	0.0	0.0	13.2	0.0	0.0	18.9	9.0	9.0	21.7	10.8	10.7
LnGrp LOS	B	A	A	B	A	A	B	A	A	C	B	B
Approach Vol, veh/h		57			106			770			920	
Approach Delay, s/veh		12.8			13.2			9.4			10.9	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	20.1		11.2	6.0	19.2		11.2				
Change Period (Y+Rc), s	4.6	* 5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	5.0	* 21		24.0	5.0	21.0		24.0				
Max Q Clear Time (g_c+I1), s	2.2	7.6		3.0	2.6	9.5		3.9				
Green Ext Time (p_c), s	0.0	3.6		0.2	0.0	3.9		0.5				

Intersection Summary		
HCM 6th Ctrl Delay		10.5
HCM 6th LOS		B

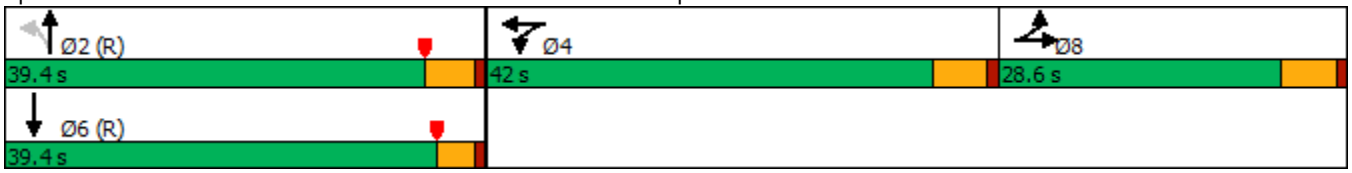
Notes

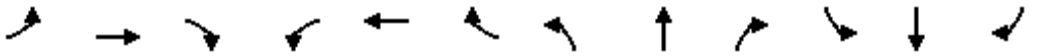
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	16	0	71	43	639	941
Future Volume (vph)	16	0	71	43	639	941
Turn Type	Split	NA	NA	Perm	NA	NA
Protected Phases	8	8	4		2	6
Permitted Phases				2		
Detector Phase	8	8	4	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.6	28.6	42.0	39.4	39.4	39.4
Total Split (%)	26.0%	26.0%	38.2%	35.8%	35.8%	35.8%
Yellow Time (s)	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	13.6	13.6	36.0	44.3	44.3	45.3
Actuated g/C Ratio	0.12	0.12	0.33	0.40	0.40	0.41
v/c Ratio	0.08	0.73	0.96	0.56	0.49	0.73
Control Delay	39.5	32.8	65.3	40.6	17.2	32.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.5	32.8	65.3	40.6	17.2	32.0
LOS	D	C	E	D	B	C
Approach Delay		33.2	65.3		18.6	32.0
Approach LOS		C	E		B	C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 35.5	Intersection LOS: D
Intersection Capacity Utilization 90.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	0	203	341	71	98	43	639	0	0	941	17
Future Volume (veh/h)	16	0	203	341	71	98	43	639	0	0	941	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	18	0	144	383	80	76	48	718	0	0	1057	18
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	202	0	179	406	85	81	165	1531	0	0	1540	26
Arrive On Green	0.11	0.00	0.11	0.32	0.32	0.32	0.85	0.85	0.00	0.00	0.42	0.42
Sat Flow, veh/h	1810	0	1610	1273	266	253	533	3705	0	0	3725	62
Grp Volume(v), veh/h	18	0	144	539	0	0	48	718	0	0	525	550
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1791	0	0	533	1805	0	0	1805	1887
Q Serve(g_s), s	1.0	0.0	9.6	32.3	0.0	0.0	7.5	5.5	0.0	0.0	26.0	26.0
Cycle Q Clear(g_c), s	1.0	0.0	9.6	32.3	0.0	0.0	33.6	5.5	0.0	0.0	26.0	26.0
Prop In Lane	1.00		1.00	0.71		0.14	1.00		0.00	0.00		0.03
Lane Grp Cap(c), veh/h	202	0	179	571	0	0	165	1531	0	0	766	800
V/C Ratio(X)	0.09	0.00	0.80	0.94	0.00	0.00	0.29	0.47	0.00	0.00	0.69	0.69
Avail Cap(c_a), veh/h	380	0	338	594	0	0	165	1531	0	0	766	800
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.92	0.92
Uniform Delay (d), s/veh	43.9	0.0	47.7	36.5	0.0	0.0	17.3	5.2	0.0	0.0	25.7	25.7
Incr Delay (d2), s/veh	0.2	0.0	9.6	23.6	0.0	0.0	4.4	1.0	0.0	0.0	4.6	4.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	4.3	17.0	0.0	0.0	0.9	1.6	0.0	0.0	11.5	12.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.1	0.0	57.3	60.1	0.0	0.0	21.7	6.3	0.0	0.0	30.3	30.1
LnGrp LOS	D	A	E	E	A	A	C	A	A	A	C	C
Approach Vol, veh/h		162			539			766			1075	
Approach Delay, s/veh		55.8			60.1			7.2			30.2	
Approach LOS		E			E			A			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		51.7		40.6		51.7		17.8				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		34.4		36.5		* 35		23.1				
Max Q Clear Time (g_c+I1), s		35.6		34.3		28.0		11.6				
Green Ext Time (p_c), s		0.0		0.8		4.2		0.7				

Intersection Summary												
HCM 6th Ctrl Delay			31.2									
HCM 6th LOS			C									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	267	682	799	686
Future Vol, veh/h	0	0	267	682	799	686
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	281	718	841	722

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	783	1564	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	0	*801	494	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	-	*801	493	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	6.1	0
HCM LOS	A		

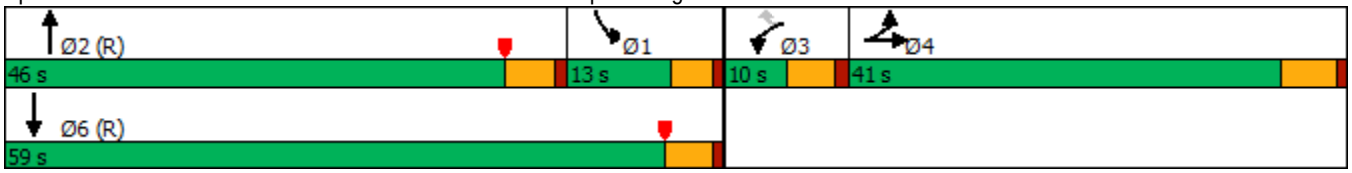
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	493	-	-	-	-
HCM Lane V/C Ratio	0.57	-	-	-	-
HCM Control Delay (s)	21.5	-	0	-	-
HCM Lane LOS	C	-	A	-	-
HCM 95th %tile Q(veh)	3.5	-	-	-	-

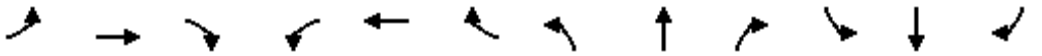
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	15	17	5	524	199	600
Future Volume (vph)	15	17	5	524	199	600
Turn Type	NA	Prot	Perm	NA	Prot	NA
Protected Phases	4	3		2	1	6
Permitted Phases			3			
Detector Phase	4	3	3	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	10.0	10.0	45.0	9.5	30.0
Total Split (s)	41.0	10.0	10.0	46.0	13.0	59.0
Total Split (%)	37.3%	9.1%	9.1%	41.8%	11.8%	53.6%
Yellow Time (s)	4.5	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	41.5	5.0	5.0	34.8	14.7	54.0
Actuated g/C Ratio	0.38	0.05	0.05	0.32	0.13	0.49
v/c Ratio	0.97	0.22	0.03	0.87	0.86	0.35
Control Delay	61.4	57.2	0.2	35.2	65.6	11.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.4	57.2	0.2	35.2	65.6	11.7
LOS	E	E	A	D	E	B
Approach Delay	61.4			35.2		25.1
Approach LOS	E			D		C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 38.7	Intersection LOS: D
Intersection Capacity Utilization 99.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	420	15	193	17	0	5	0	524	491	199	600	0
Future Volume (veh/h)	420	15	193	17	0	5	0	524	491	199	600	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	438	16	104	18	0	3	0	546	402	207	625	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	449	16	107	0	0	0	0	610	449	407	2100	0
Arrive On Green	0.32	0.32	0.32	0.00	0.00	0.00	0.00	0.31	0.31	0.45	1.00	0.00
Sat Flow, veh/h	1390	51	330		0		0	2055	1443	1810	3705	0
Grp Volume(v), veh/h	558	0	0		0.0		0	503	445	207	625	0
Grp Sat Flow(s),veh/h/ln	1771	0	0				0	1805	1598	1810	1805	0
Q Serve(g_s), s	34.3	0.0	0.0				0.0	29.2	29.2	9.0	0.0	0.0
Cycle Q Clear(g_c), s	34.3	0.0	0.0				0.0	29.2	29.2	9.0	0.0	0.0
Prop In Lane	0.78		0.19				0.00		0.90	1.00		0.00
Lane Grp Cap(c), veh/h	572	0	0				0	562	498	407	2100	0
V/C Ratio(X)	0.98	0.00	0.00				0.00	0.89	0.89	0.51	0.30	0.00
Avail Cap(c_a), veh/h	572	0	0				0	673	596	407	2100	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.74	0.74	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.8	0.0	0.0				0.0	36.2	36.2	25.9	0.0	0.0
Incr Delay (d2), s/veh	31.4	0.0	0.0				0.0	15.2	16.8	0.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.9	0.0	0.0				0.0	14.7	13.2	3.3	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.3	0.0	0.0				0.0	51.4	52.9	26.3	0.4	0.0
LnGrp LOS	E	A	A				A	D	D	C	A	A
Approach Vol, veh/h		558						948			832	
Approach Delay, s/veh		68.3						52.1			6.8	
Approach LOS		E						D			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	29.7	39.3		41.0		69.0
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0
Max Green Setting (Gmax), s	8.5	* 41		35.5		54.0
Max Q Clear Time (g_c+I1), s	11.0	31.2		36.3		2.0
Green Ext Time (p_c), s	0.0	2.9		0.0		2.8

Intersection Summary		
HCM 6th Ctrl Delay		39.8
HCM 6th LOS		D

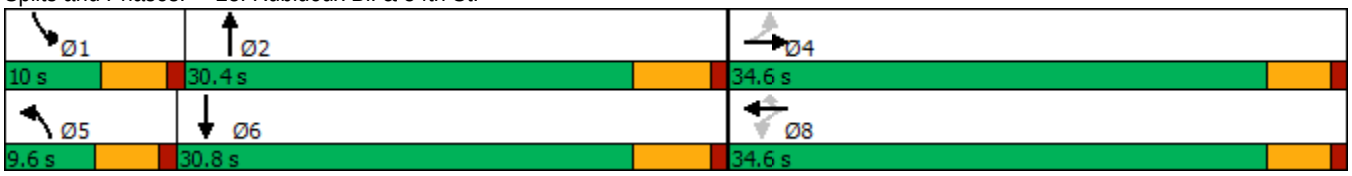
Notes

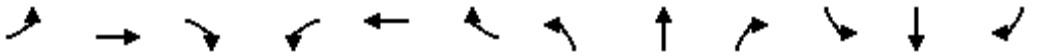
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	153	31	28	19	116	31	781	49	731
Future Volume (vph)	153	31	28	19	116	31	781	49	731
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	30.6	30.6	34.6	34.6	34.6	9.6	29.4	9.6	22.4
Total Split (s)	34.6	34.6	34.6	34.6	34.6	9.6	30.4	10.0	30.8
Total Split (%)	46.1%	46.1%	46.1%	46.1%	46.1%	12.8%	40.5%	13.3%	41.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	4.6	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		16.0		16.0	16.0	5.6	19.9	5.8	21.9
Actuated g/C Ratio		0.31		0.31	0.31	0.11	0.38	0.11	0.42
v/c Ratio		0.53		0.11	0.22	0.18	0.69	0.27	0.58
Control Delay		21.0		15.8	4.5	31.5	18.2	32.1	15.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		21.0		15.8	4.5	31.5	18.2	32.1	15.0
LOS		C		B	A	C	B	C	B
Approach Delay		21.0		7.8			18.7		16.0
Approach LOS		C		A			B		B

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 52	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 17.0	Intersection LOS: B
Intersection Capacity Utilization 61.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 23: Rubidoux Bl. & 34th St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	153	31	20	28	19	116	31	781	57	49	731	48
Future Volume (veh/h)	153	31	20	28	19	116	31	781	57	49	731	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.98		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	172	35	13	31	21	60	35	878	57	55	821	46
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	409	76	22	352	210	425	71	1252	81	99	1321	74
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.36	0.36	0.05	0.38	0.38
Sat Flow, veh/h	1021	289	82	862	795	1610	1810	3435	223	1810	3475	195
Grp Volume(v), veh/h	220	0	0	52	0	60	35	461	474	55	426	441
Grp Sat Flow(s),veh/h/ln	1392	0	0	1657	0	1610	1810	1805	1853	1810	1805	1865
Q Serve(g_s), s	5.5	0.0	0.0	0.0	0.0	1.3	0.9	10.1	10.1	1.4	8.8	8.8
Cycle Q Clear(g_c), s	6.5	0.0	0.0	1.0	0.0	1.3	0.9	10.1	10.1	1.4	8.8	8.8
Prop In Lane	0.78		0.06	0.60		1.00	1.00		0.12	1.00		0.10
Lane Grp Cap(c), veh/h	507	0	0	562	0	425	71	658	676	99	686	709
V/C Ratio(X)	0.43	0.00	0.00	0.09	0.00	0.14	0.49	0.70	0.70	0.55	0.62	0.62
Avail Cap(c_a), veh/h	1054	0	0	1152	0	1047	196	978	1004	212	994	1027
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.9	0.0	0.0	12.8	0.0	13.0	21.7	12.5	12.5	21.2	11.6	11.6
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.1	0.0	0.2	2.0	1.4	1.3	1.8	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.0	0.4	0.0	0.4	0.4	3.2	3.3	0.5	2.7	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.5	0.0	0.0	12.9	0.0	13.1	23.7	13.9	13.8	23.0	12.5	12.5
LnGrp LOS	B	A	A	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		220			112			970			922	
Approach Delay, s/veh		15.5			13.0			14.2			13.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	22.2		16.8	6.4	22.9		16.8				
Change Period (Y+Rc), s	4.6	5.4		4.6	4.6	5.4		4.6				
Max Green Setting (Gmax), s	5.4	25.0		30.0	5.0	25.4		30.0				
Max Q Clear Time (g_c+I1), s	3.4	12.1		8.5	2.9	10.8		3.3				
Green Ext Time (p_c), s	0.0	4.6		1.3	0.0	4.5		0.4				

Intersection Summary												
HCM 6th Ctrl Delay			13.8									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	628	59	0	0	22	32
Future Vol, veh/h	628	59	0	0	22	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	647	61	0	0	23	33

Major/Minor	Major1			Minor1	
Conflicting Flow All	0	0		678	678
Stage 1	-	-		678	-
Stage 2	-	-		0	-
Critical Hdwy	-	-		6.4	6.2
Critical Hdwy Stg 1	-	-		5.4	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	-		3.5	3.3
Pot Cap-1 Maneuver	-	-		421	456
Stage 1	-	-		508	-
Stage 2	-	-		-	-
Platoon blocked, %	-	-			
Mov Cap-1 Maneuver	-	-		421	456
Mov Cap-2 Maneuver	-	-		421	-
Stage 1	-	-		508	-
Stage 2	-	-		-	-

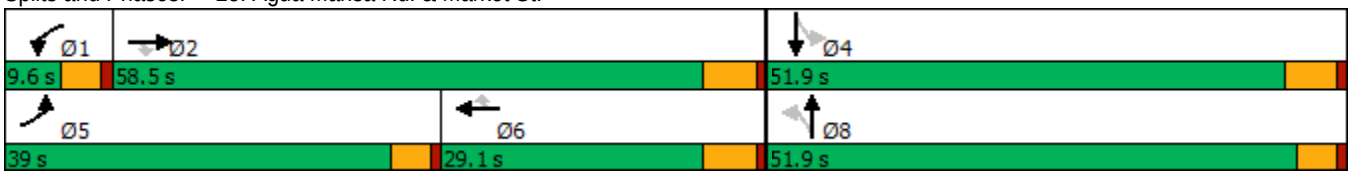
Approach	EB	NB
HCM Control Delay, s	0	14.3
HCM LOS		B

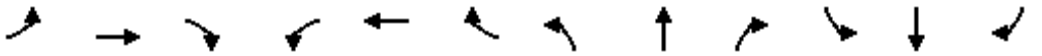
Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	441	-	-
HCM Lane V/C Ratio	0.126	-	-
HCM Control Delay (s)	14.3	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.4	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	308	415	10	4	424	159	18	2	115	15
Future Volume (vph)	308	415	10	4	424	159	18	2	115	15
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	5	2		1	6			8		4
Permitted Phases			2			6	8		4	
Detector Phase	5	2	2	1	6	6	8	8	4	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	31.8	31.8	9.6	26.8	26.8	14.6	14.6	43.8	43.8
Total Split (s)	39.0	58.5	58.5	9.6	29.1	29.1	51.9	51.9	51.9	51.9
Total Split (%)	32.5%	48.8%	48.8%	8.0%	24.3%	24.3%	43.3%	43.3%	43.3%	43.3%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None
Act Effct Green (s)	22.1	54.0	54.0	5.1	28.7	28.7		29.5		28.3
Actuated g/C Ratio	0.23	0.56	0.56	0.05	0.30	0.30		0.31		0.30
v/c Ratio	0.82	0.23	0.01	0.04	0.44	0.30		0.07		0.86
Control Delay	51.6	13.0	0.0	51.2	32.6	7.2		17.8		40.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	51.6	13.0	0.0	51.2	32.6	7.2		17.8		40.5
LOS	D	B	A	D	C	A		B		D
Approach Delay		29.1			25.8			17.8		40.5
Approach LOS		C			C			B		D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 95.6	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 30.4	Intersection LOS: C
Intersection Capacity Utilization 72.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	308	415	10	4	424	159	18	2	8	115	15	277
Future Volume (veh/h)	308	415	10	4	424	159	18	2	8	115	15	277
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	342	461	8	4	471	138	20	2	7	128	17	214
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	380	2022	902	10	1283	572	236	30	64	186	32	245
Arrive On Green	0.21	0.56	0.56	0.01	0.36	0.36	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1810	3610	1610	1810	3610	1608	652	115	244	510	122	932
Grp Volume(v), veh/h	342	461	8	4	471	138	29	0	0	359	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1608	1011	0	0	1564	0	0
Q Serve(g_s), s	17.3	6.1	0.2	0.2	9.1	5.7	0.0	0.0	0.0	18.7	0.0	0.0
Cycle Q Clear(g_c), s	17.3	6.1	0.2	0.2	9.1	5.7	1.4	0.0	0.0	20.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.69		0.24	0.36		0.60
Lane Grp Cap(c), veh/h	380	2022	902	10	1283	572	330	0	0	463	0	0
V/C Ratio(X)	0.90	0.23	0.01	0.42	0.37	0.24	0.09	0.00	0.00	0.78	0.00	0.00
Avail Cap(c_a), veh/h	661	2022	902	96	1283	572	639	0	0	815	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	36.2	10.4	9.2	46.7	22.5	21.4	26.0	0.0	0.0	33.1	0.0	0.0
Incr Delay (d2), s/veh	4.4	0.3	0.0	10.5	0.8	1.0	0.1	0.0	0.0	2.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	2.2	0.1	0.1	3.7	2.2	0.5	0.0	0.0	7.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.6	10.7	9.2	57.2	23.3	22.4	26.1	0.0	0.0	35.9	0.0	0.0
LnGrp LOS	D	B	A	E	C	C	C	A	A	D	A	A
Approach Vol, veh/h		811			613			29			359	
Approach Delay, s/veh		23.3			23.3			26.1			35.9	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	58.5		30.5	24.3	39.3		30.5				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	52.7		46.1	34.4	23.3		* 47				
Max Q Clear Time (g_c+I1), s	2.2	8.1		22.6	19.3	11.1		3.4				
Green Ext Time (p_c), s	0.0	3.0		2.1	0.4	2.6		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		25.9	
HCM 6th LOS		C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	158	2	17	18	12	4	14	45	2	16	2
Future Vol, veh/h	8	158	2	17	18	12	4	14	45	2	16	2
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	193	2	21	22	15	5	17	55	2	20	2
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	9.2	7.9	7.6	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	6%	5%	0%	49%	0%	10%
Vol Thru, %	22%	95%	0%	51%	0%	80%
Vol Right, %	71%	0%	100%	0%	100%	10%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	63	166	2	35	12	20
LT Vol	4	8	0	17	0	2
Through Vol	14	158	0	18	0	16
RT Vol	45	0	2	0	12	2
Lane Flow Rate	77	202	2	43	15	24
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.089	0.266	0.003	0.061	0.017	0.031
Departure Headway (Hd)	4.158	4.732	4.007	5.133	4.186	4.59
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	867	751	882	700	858	783
Service Time	2.161	2.509	1.783	2.846	1.899	2.597
HCM Lane V/C Ratio	0.089	0.269	0.002	0.061	0.017	0.031
HCM Control Delay	7.6	9.2	6.8	8.2	7	7.7
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.3	1.1	0	0.2	0.1	0.1

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	3	0	8	14	0	4	6	72	8	1	71	4
Future Vol, veh/h	3	0	8	14	0	4	6	72	8	1	71	4
Conflicting Peds, #/hr	0	0	1	0	0	1	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	0	10	18	0	5	8	91	10	1	90	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	211	212	94	213	209	97	95	0	0	101	0	0
Stage 1	95	95	-	112	112	-	-	-	-	-	-	-
Stage 2	116	117	-	101	97	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	750	689	968	748	692	965	1512	-	-	1504	-	-
Stage 1	917	820	-	898	807	-	-	-	-	-	-	-
Stage 2	894	803	-	910	819	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	741	684	967	735	687	964	1512	-	-	1504	-	-
Mov Cap-2 Maneuver	741	684	-	735	687	-	-	-	-	-	-	-
Stage 1	911	819	-	893	802	-	-	-	-	-	-	-
Stage 2	883	798	-	899	818	-	-	-	-	-	-	-

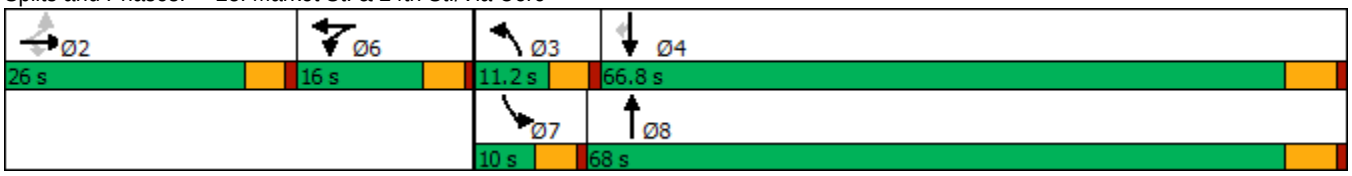
Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	9.8	0.5	0.1
HCM LOS	A	A		

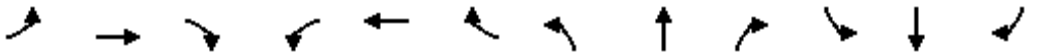
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1512	-	-	893	776	1504	-	-
HCM Lane V/C Ratio	0.005	-	-	0.016	0.029	0.001	-	-
HCM Control Delay (s)	7.4	0	-	9.1	9.8	7.4	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	4	32	163	94	8	34	578	29	514	3
Future Volume (vph)	4	32	163	94	8	34	578	29	514	3
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	26.0	26.0	26.0	16.0	16.0	11.2	68.0	10.0	66.8	66.8
Total Split (%)	21.7%	21.7%	21.7%	13.3%	13.3%	9.3%	56.7%	8.3%	55.7%	55.7%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		11.9	11.9	10.8	10.8	6.0	62.5	5.3	61.9	61.9
Actuated g/C Ratio		0.11	0.11	0.10	0.10	0.06	0.59	0.05	0.58	0.58
v/c Ratio		0.44	0.52	0.54	0.08	0.35	0.72	0.35	0.49	0.00
Control Delay		61.3	12.7	58.7	36.2	60.4	21.4	62.5	16.3	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		61.3	12.7	58.7	36.2	60.4	21.4	62.5	16.3	0.0
LOS		E	B	E	D	E	C	E	B	A
Approach Delay		21.5			55.9		23.2		18.7	
Approach LOS		C			E		C		B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 106	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 23.6	Intersection LOS: C
Intersection Capacity Utilization 60.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	32	163	94	8	6	34	578	161	29	514	3
Future Volume (veh/h)	4	32	163	94	8	6	34	578	161	29	514	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	4	34	79	99	8	5	36	608	147	31	541	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	19	159	151	167	101	63	56	883	213	51	1130	957
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.03	0.60	0.60	0.03	0.59	0.59
Sat Flow, veh/h	199	1691	1605	1810	1094	683	1810	1478	357	1810	1900	1610
Grp Volume(v), veh/h	38	0	79	99	0	13	36	0	755	31	541	3
Grp Sat Flow(s),veh/h/ln	1890	0	1605	1810	0	1777	1810	0	1835	1810	1900	1610
Q Serve(g_s), s	1.9	0.0	4.9	5.5	0.0	0.7	2.0	0.0	29.3	1.8	16.8	0.1
Cycle Q Clear(g_c), s	1.9	0.0	4.9	5.5	0.0	0.7	2.0	0.0	29.3	1.8	16.8	0.1
Prop In Lane	0.11		1.00	1.00		0.38	1.00		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	178	0	151	167	0	164	56	0	1096	51	1130	957
V/C Ratio(X)	0.21	0.00	0.52	0.59	0.00	0.08	0.64	0.00	0.69	0.60	0.48	0.00
Avail Cap(c_a), veh/h	388	0	330	198	0	194	115	0	1096	94	1130	957
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.6	0.0	45.0	45.4	0.0	43.2	49.9	0.0	14.4	50.0	12.0	8.6
Incr Delay (d2), s/veh	0.6	0.0	2.8	3.3	0.0	0.2	4.5	0.0	3.5	4.2	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	2.0	2.6	0.0	0.3	1.0	0.0	11.5	0.8	6.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.2	0.0	47.8	48.7	0.0	43.4	54.3	0.0	17.9	54.2	13.4	8.6
LnGrp LOS	D	A	D	D	A	D	D	A	B	D	B	A
Approach Vol, veh/h		117			112			791			575	
Approach Delay, s/veh		46.6			48.1			19.6			15.6	
Approach LOS		D			D			B			B	

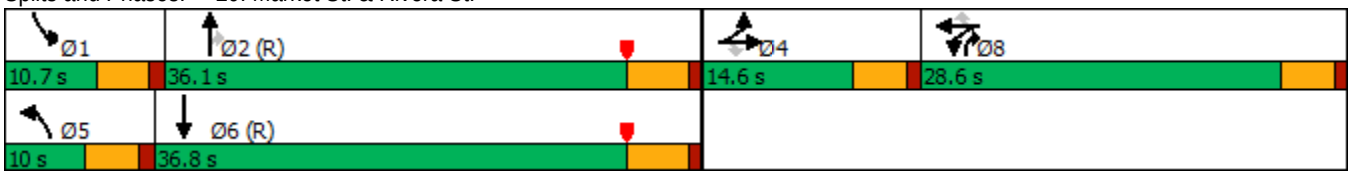
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.4	7.8	67.7		14.2	7.6	68.0				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		21.4	6.6	61.0		11.4	5.4	62.2				
Max Q Clear Time (g_c+I1), s		6.9	4.0	18.8		7.5	3.8	31.3				
Green Ext Time (p_c), s		0.3	0.0	3.5		0.1	0.0	5.6				

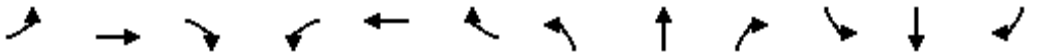
Intersection Summary												
HCM 6th Ctrl Delay			22.1									
HCM 6th LOS			C									

Lane Group	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	17	305	0	45	22	748	302	37	762
Future Volume (vph)	17	305	0	45	22	748	302	37	762
Turn Type	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases		8	8		5	2	8	1	6
Permitted Phases	4			8			2		
Detector Phase	4	8	8	8	5	2	8	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	14.6	28.6	28.6	28.6	9.6	35.1	28.6	9.6	29.1
Total Split (s)	14.6	28.6	28.6	28.6	10.0	36.1	28.6	10.7	36.8
Total Split (%)	16.2%	31.8%	31.8%	31.8%	11.1%	40.1%	31.8%	11.9%	40.9%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.1	3.6	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	5.1	4.6	4.6	5.1
Lead/Lag					Lead	Lag		Lead	Lag
Lead-Lag Optimize?					Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	10.0	16.0	16.0	16.0	5.5	51.8	68.3	6.0	54.3
Actuated g/C Ratio	0.11	0.18	0.18	0.18	0.06	0.58	0.76	0.07	0.60
v/c Ratio	0.05	0.52	0.52	0.12	0.21	0.37	0.24	0.32	0.36
Control Delay	0.2	38.4	38.4	0.6	41.3	16.7	0.8	47.1	13.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0
Total Delay	0.2	38.4	38.4	0.6	41.3	16.9	0.9	47.1	13.8
LOS	A	D	D	A	D	B	A	D	B
Approach Delay			33.6			12.9			15.3
Approach LOS			C			B			B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 2 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 16.9	Intersection LOS: B
Intersection Capacity Utilization 49.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 29: Market St. & Rivera St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	17	305	0	45	22	748	302	37	762	1
Future Volume (veh/h)	0	0	17	305	0	45	22	748	302	37	762	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	0	4	314	0	22	23	771	205	38	786	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	0	20	17	424	0	184	44	2268	1199	62	2360	3
Arrive On Green	0.00	0.00	0.01	0.12	0.00	0.12	0.05	1.00	1.00	0.03	0.64	0.64
Sat Flow, veh/h	0	1900	1610	3619	0	1573	1810	3610	1609	1810	3699	5
Grp Volume(v), veh/h	0	0	4	314	0	22	23	771	205	38	384	403
Grp Sat Flow(s),veh/h/ln	0	1900	1610	1810	0	1573	1810	1805	1609	1810	1805	1899
Q Serve(g_s), s	0.0	0.0	0.2	7.5	0.0	1.1	1.1	0.0	0.0	1.9	8.8	8.8
Cycle Q Clear(g_c), s	0.0	0.0	0.2	7.5	0.0	1.1	1.1	0.0	0.0	1.9	8.8	8.8
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	20	17	424	0	184	44	2268	1199	62	1151	1211
V/C Ratio(X)	0.00	0.00	0.23	0.74	0.00	0.12	0.52	0.34	0.17	0.62	0.33	0.33
Avail Cap(c_a), veh/h	0	211	179	965	0	419	109	2268	1199	123	1151	1211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	0.93	0.93	0.93	0.86	0.86	0.86
Uniform Delay (d), s/veh	0.0	0.0	44.2	38.4	0.0	35.6	42.3	0.0	0.0	42.9	7.5	7.5
Incr Delay (d2), s/veh	0.0	0.0	6.9	2.6	0.0	0.3	3.3	0.4	0.3	3.2	0.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	3.4	0.0	0.4	0.5	0.1	0.1	0.9	2.9	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	51.0	41.0	0.0	35.9	45.6	0.4	0.3	46.1	8.2	8.1
LnGrp LOS	A	A	D	D	A	D	D	A	A	D	A	A
Approach Vol, veh/h		4			336			999			825	
Approach Delay, s/veh		51.0			40.6			1.4			9.9	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	61.6		5.6	6.8	62.5		15.2				
Change Period (Y+Rc), s	4.6	5.1		4.6	4.6	5.1		4.6				
Max Green Setting (Gmax), s	6.1	31.0		10.0	5.4	31.7		24.0				
Max Q Clear Time (g_c+I1), s	3.9	2.0		2.2	3.1	10.8		9.5				
Green Ext Time (p_c), s	0.0	6.1		0.0	0.0	4.4		1.0				

Intersection Summary			
HCM 6th Ctrl Delay		10.8	
HCM 6th LOS		B	

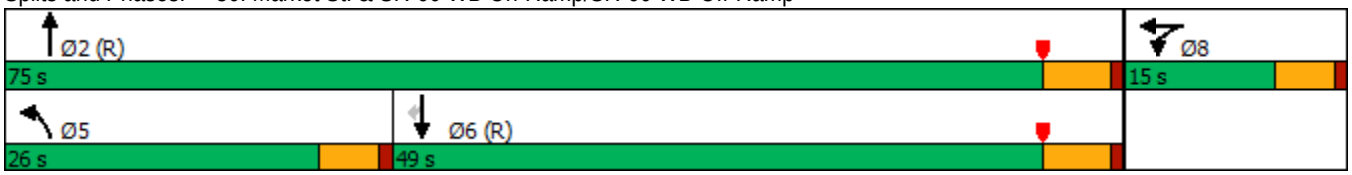
Notes

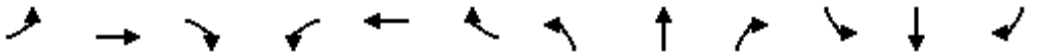
User approved volume balancing among the lanes for turning movement.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	758	185	314	900	184
Future Volume (vph)	0	758	185	314	900	184
Turn Type	NA	Free	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		Free				6
Detector Phase	8		5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	10.0		10.0	24.5	10.5	10.5
Total Split (s)	15.0		26.0	75.0	49.0	49.0
Total Split (%)	16.7%		28.9%	83.3%	54.4%	54.4%
Yellow Time (s)	4.0		4.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	C-Min	C-Min	C-Min
Act Effct Green (s)	8.5	90.0	14.9	74.2	53.2	53.2
Actuated g/C Ratio	0.09	1.00	0.17	0.82	0.59	0.59
v/c Ratio	0.37	0.49	0.65	0.11	0.44	0.19
Control Delay	43.6	1.1	28.1	5.3	10.4	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.2	0.0
Total Delay	43.6	1.1	28.1	5.3	10.5	2.2
LOS	D	A	C	A	B	A
Approach Delay	4.1			13.8	9.1	
Approach LOS	A			B	A	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 8.4	Intersection LOS: A
Intersection Capacity Utilization 62.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 30: Market St. & SR-60 WB On-Ramp/SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	59	0	758	185	314	0	0	900	184
Future Volume (veh/h)	0	0	0	59	0	758	185	314	0	0	900	184
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				62	0	0	195	331	0	0	947	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				81	0		231	3027	0	0	2366	
Arrive On Green				0.04	0.00	0.00	0.25	1.00	0.00	0.00	1.00	0.00
Sat Flow, veh/h				1810	0	1610	1810	3705	0	0	3705	1610
Grp Volume(v), veh/h				62	0	0	195	331	0	0	947	0
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1805	1610
Q Serve(g_s), s				3.1	0.0	0.0	9.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				3.1	0.0	0.0	9.2	0.0	0.0	0.0	0.0	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				81	0		231	3027	0	0	2366	
V/C Ratio(X)				0.76	0.00		0.85	0.11	0.00	0.00	0.40	
Avail Cap(c_a), veh/h				201	0		422	3027	0	0	2366	
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	0.00	0.00	0.93	0.93	0.00	0.00	0.93	0.00
Uniform Delay (d), s/veh				42.5	0.0	0.0	32.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				13.8	0.0	0.0	7.7	0.1	0.0	0.0	0.5	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.6	0.0	0.0	3.9	0.0	0.0	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				56.3	0.0	0.0	40.4	0.1	0.0	0.0	0.5	0.0
LnGrp LOS				E	A		D	A	A	A	A	
Approach Vol, veh/h					62			526			947	
Approach Delay, s/veh					56.3			15.0			0.5	
Approach LOS					E			B			A	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		81.0			16.5	64.5		9.0				
Change Period (Y+Rc), s		5.5			5.0	5.5		5.0				
Max Green Setting (Gmax), s		69.5			21.0	43.5		10.0				
Max Q Clear Time (g_c+I1), s		2.0			11.2	2.0		5.1				
Green Ext Time (p_c), s		2.2			0.3	7.3		0.1				

Intersection Summary		
HCM 6th Ctrl Delay	7.7	
HCM 6th LOS	A	

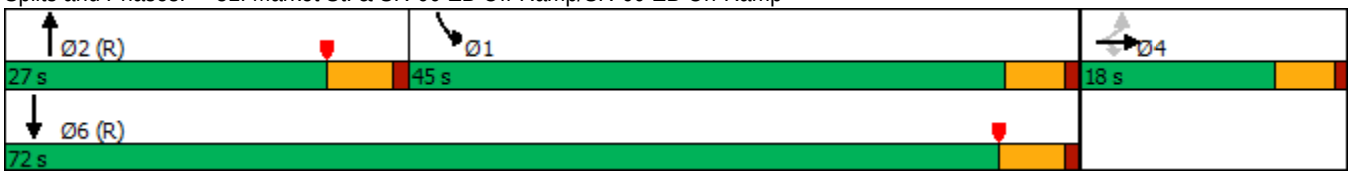
Notes

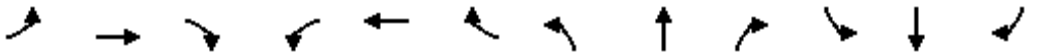
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	0	485	369	538	420
Future Volume (vph)	0	485	369	538	420
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	24.5	10.0	10.5
Total Split (s)	18.0	18.0	27.0	45.0	72.0
Total Split (%)	20.0%	20.0%	30.0%	50.0%	80.0%
Yellow Time (s)	4.0	4.0	4.5	4.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.0	5.5
Lead/Lag			Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Min	None	C-Min
Act Effct Green (s)	11.5	11.5	30.1	32.8	68.0
Actuated g/C Ratio	0.13	0.13	0.33	0.36	0.76
v/c Ratio	0.58	0.62	0.38	0.83	0.16
Control Delay	46.7	7.2	24.8	34.9	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	46.7	7.2	24.8	34.9	3.9
LOS	D	A	C	C	A
Approach Delay	15.6		24.8		21.3
Approach LOS	B		C		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 15 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 20.3	Intersection LOS: C
Intersection Capacity Utilization 62.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 31: Market St. & SR-60 EB Off-Ramp/SR-60 EB On-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	0	485	0	0	0	0	369	73	538	420	0
Future Volume (veh/h)	130	0	485	0	0	0	0	369	73	538	420	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	133	0	230				0	377	0	549	429	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	194	0	305				0	507		1039	2801	0
Arrive On Green	0.11	0.00	0.11				0.00	0.14	0.00	0.96	1.00	0.00
Sat Flow, veh/h	1810	0	2834				0	3800	0	1810	3705	0
Grp Volume(v), veh/h	133	0	230				0	377	0	549	429	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1805	0	1810	1805	0
Q Serve(g_s), s	6.4	0.0	7.1				0.0	9.0	0.0	2.3	0.0	0.0
Cycle Q Clear(g_c), s	6.4	0.0	7.1				0.0	9.0	0.0	2.3	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	194	0	305				0	507		1039	2801	0
V/C Ratio(X)	0.68	0.00	0.76				0.00	0.74		0.53	0.15	0.00
Avail Cap(c_a), veh/h	261	0	409				0	862		1039	2801	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.90	0.90	0.00
Uniform Delay (d), s/veh	38.7	0.0	39.0				0.0	37.1	0.0	0.8	0.0	0.0
Incr Delay (d2), s/veh	4.5	0.0	5.4				0.0	9.5	0.0	0.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	2.6				0.0	4.5	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.2	0.0	44.5				0.0	46.7	0.0	1.3	0.1	0.0
LnGrp LOS	D	A	D				A	D		A	A	A
Approach Vol, veh/h		363						377			978	
Approach Delay, s/veh		44.0						46.7			0.8	
Approach LOS		D						D			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	57.2	18.1		14.7		75.3
Change Period (Y+Rc), s	5.5	* 5.5		5.0		5.5
Max Green Setting (Gmax), s	40.0	* 22		13.0		66.5
Max Q Clear Time (g_c+I1), s	4.3	11.0		9.1		2.0
Green Ext Time (p_c), s	1.8	1.6		0.6		2.9

Intersection Summary		
HCM 6th Ctrl Delay		20.0
HCM 6th LOS		B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	1	14	0	0	5	10	415	5	104	772	30
Future Vol, veh/h	22	1	14	0	0	5	10	415	5	104	772	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	145	-	-	140	-	110
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	23	1	15	0	0	5	10	432	5	108	804	31

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1256	1479	402	1076	1508	221	835	0	0	439	0	0
Stage 1	1020	1020	-	457	457	-	-	-	-	-	-	-
Stage 2	236	459	-	619	1051	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	302	210	*774	*457	199	789	*1162	-	-	1132	-	-
Stage 1	551	519	-	*558	571	-	-	-	-	-	-	-
Stage 2	752	570	-	*730	497	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	276	188	*774	*411	178	787	*1162	-	-	1130	-	-
Mov Cap-2 Maneuver	392	297	-	*454	305	-	-	-	-	-	-	-
Stage 1	546	469	-	*552	565	-	-	-	-	-	-	-
Stage 2	741	564	-	*646	449	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.2	9.6	0.2	1
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 1162	-	-	477	787	1130	-	-
HCM Lane V/C Ratio	0.009	-	-	0.081	0.007	0.096	-	-
HCM Control Delay (s)	8.1	-	-	13.2	9.6	8.5	-	-
HCM Lane LOS	A	-	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	160	40	18	386	439	101
Future Vol, veh/h	160	40	18	386	439	101
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	170	43	19	411	467	107

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	765	521	574	0	-	0
Stage 1	521	-	-	-	-	-
Stage 2	244	-	-	-	-	-
Critical Hdwy	6.6	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	359	559	1009	-	-	-
Stage 1	600	-	-	-	-	-
Stage 2	780	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	352	559	1009	-	-	-
Mov Cap-2 Maneuver	461	-	-	-	-	-
Stage 1	589	-	-	-	-	-
Stage 2	780	-	-	-	-	-

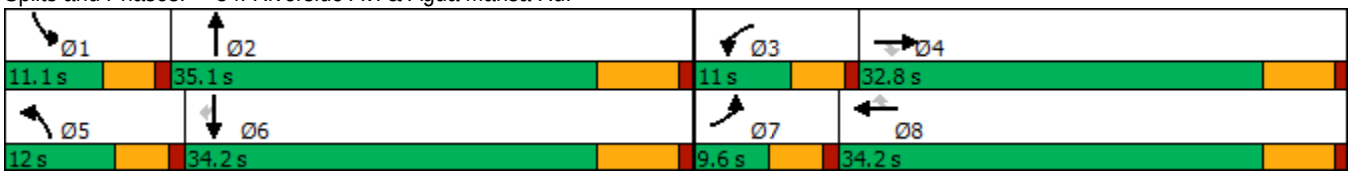
Approach	EB	NB	SB
HCM Control Delay, s	18.4	0.4	0
HCM LOS	C		

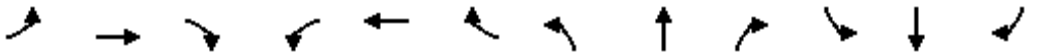
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1009	-	478	-	-
HCM Lane V/C Ratio	0.019	-	0.445	-	-
HCM Control Delay (s)	8.6	-	18.4	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	2.3	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	76	259	139	131	335	65	149	459	44	555	68
Future Volume (vph)	76	259	139	131	335	65	149	459	44	555	68
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	9.6	32.8	32.8	11.0	34.2	34.2	12.0	35.1	11.1	34.2	34.2
Total Split (%)	10.7%	36.4%	36.4%	12.2%	38.0%	38.0%	13.3%	39.0%	12.3%	38.0%	38.0%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	5.1	17.1	17.1	6.6	18.5	18.5	7.6	23.9	6.0	17.7	17.7
Actuated g/C Ratio	0.07	0.24	0.24	0.09	0.26	0.26	0.11	0.34	0.08	0.25	0.25
v/c Ratio	0.62	0.60	0.29	0.84	0.72	0.13	0.83	0.45	0.31	0.66	0.14
Control Delay	59.1	30.4	5.6	75.6	33.2	0.5	69.6	21.4	40.3	28.0	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.1	30.4	5.6	75.6	33.2	0.5	69.6	21.4	40.3	28.0	0.6
LOS	E	C	A	E	C	A	E	C	D	C	A
Approach Delay		27.7			39.7			32.4		26.1	
Approach LOS		C			D			C		C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 70.9	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 31.3	Intersection LOS: C
Intersection Capacity Utilization 63.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	259	139	131	335	65	149	459	49	44	555	68
Future Volume (veh/h)	76	259	139	131	335	65	149	459	49	44	555	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	81	276	84	139	356	45	159	488	48	47	590	53
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	111	383	325	177	452	383	200	999	98	82	850	379
Arrive On Green	0.06	0.20	0.20	0.10	0.24	0.24	0.11	0.30	0.30	0.05	0.24	0.24
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3320	325	1810	3610	1610
Grp Volume(v), veh/h	81	276	84	139	356	45	159	265	271	47	590	53
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1841	1810	1805	1610
Q Serve(g_s), s	2.7	8.2	2.7	4.6	10.7	1.3	5.2	7.3	7.3	1.5	9.1	1.6
Cycle Q Clear(g_c), s	2.7	8.2	2.7	4.6	10.7	1.3	5.2	7.3	7.3	1.5	9.1	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	111	383	325	177	452	383	200	543	554	82	850	379
V/C Ratio(X)	0.73	0.72	0.26	0.79	0.79	0.12	0.79	0.49	0.49	0.58	0.69	0.14
Avail Cap(c_a), veh/h	149	846	717	191	890	754	221	851	868	194	1649	735
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.0	22.6	20.4	26.7	21.7	18.1	26.3	17.4	17.4	28.4	21.2	18.3
Incr Delay (d2), s/veh	6.6	2.6	0.4	16.1	3.1	0.1	14.6	0.7	0.7	2.4	1.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	3.5	0.9	2.5	4.5	0.4	2.7	2.5	2.6	0.6	3.2	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.6	25.2	20.8	42.8	24.8	18.2	40.9	18.0	18.0	30.8	22.2	18.5
LnGrp LOS	C	C	C	D	C	B	D	B	B	C	C	B
Approach Vol, veh/h		441			540			695			690	
Approach Delay, s/veh		26.1			28.9			23.3			22.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	24.8	10.5	18.0	11.3	20.8	8.3	20.2
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	6.5	28.6	6.4	27.0	7.4	27.7	5.0	28.4
Max Q Clear Time (g_c+I1), s	3.5	9.3	6.6	10.2	7.2	11.1	4.7	12.7
Green Ext Time (p_c), s	0.0	2.5	0.0	1.5	0.0	3.2	0.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay	24.8
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	0	0	0	0	1
Future Vol, veh/h	4	0	0	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	92	92	92	92	62
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	0	0	0	0	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1	1	2	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	1027	1090	1634	-	-	-
Stage 1	1028	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1027	1090	1634	-	-	-
Mov Cap-2 Maneuver	1027	-	-	-	-	-
Stage 1	1028	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1634	-	1027	-	-
HCM Lane V/C Ratio	-	-	0.006	-	-
HCM Control Delay (s)	0	-	8.5	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	67	0	25	42	2	26
Future Vol, veh/h	67	0	25	42	2	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	86	0	32	54	3	33

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	86	0	204	86
Stage 1	-	-	-	-	86	-
Stage 2	-	-	-	-	118	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1523	-	789	978
Stage 1	-	-	-	-	942	-
Stage 2	-	-	-	-	912	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1523	-	772	978
Mov Cap-2 Maneuver	-	-	-	-	772	-
Stage 1	-	-	-	-	942	-
Stage 2	-	-	-	-	892	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.8	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	960	-	-	1523	-
HCM Lane V/C Ratio	0.037	-	-	0.021	-
HCM Control Delay (s)	8.9	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	7	79	38	24	47	3	17	8	27	1	13	3
Future Vol, veh/h	7	79	38	24	47	3	17	8	27	1	13	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	96	46	29	57	4	21	10	33	1	16	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	61	0	0	142	0	0	267	256	119	276	277	62
Stage 1	-	-	-	-	-	-	137	137	-	117	117	-
Stage 2	-	-	-	-	-	-	130	119	-	159	160	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1555	-	-	1453	-	-	690	651	938	680	634	1009
Stage 1	-	-	-	-	-	-	871	787	-	892	803	-
Stage 2	-	-	-	-	-	-	878	801	-	848	769	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1555	-	-	1453	-	-	658	633	938	635	617	1006
Mov Cap-2 Maneuver	-	-	-	-	-	-	658	633	-	635	617	-
Stage 1	-	-	-	-	-	-	866	782	-	887	786	-
Stage 2	-	-	-	-	-	-	837	784	-	803	764	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	2.4	10.1	10.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	773	1555	-	-	1453	-	-	663
HCM Lane V/C Ratio	0.082	0.005	-	-	0.02	-	-	0.031
HCM Control Delay (s)	10.1	7.3	0	-	7.5	0	-	10.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	19	34	8	20	55
Future Vol, veh/h	11	19	34	8	20	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	100	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	13	22	40	9	23	64

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	155	45	0	0	49	0
Stage 1	45	-	-	-	-	-
Stage 2	110	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	841	1031	-	-	1571	-
Stage 1	983	-	-	-	-	-
Stage 2	920	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	828	1031	-	-	1571	-
Mov Cap-2 Maneuver	828	-	-	-	-	-
Stage 1	983	-	-	-	-	-
Stage 2	906	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	828	1031	1571	-
HCM Lane V/C Ratio	-	-	0.015	0.021	0.015	-
HCM Control Delay (s)	-	-	9.4	8.6	7.3	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.1	0	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	2	0	9	0	33	6	10	57	0
Future Vol, veh/h	0	0	0	2	0	9	0	33	6	10	57	0
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	2	0	10	0	36	7	11	63	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	131	129	65	126	126	40	64	0	0	43	0	0
Stage 1	86	86	-	40	40	-	-	-	-	-	-	-
Stage 2	45	43	-	86	86	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	846	765	1005	852	768	1037	1551	-	-	1579	-	-
Stage 1	927	827	-	980	866	-	-	-	-	-	-	-
Stage 2	974	863	-	927	827	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	832	759	1003	847	762	1037	1550	-	-	1579	-	-
Mov Cap-2 Maneuver	832	759	-	847	762	-	-	-	-	-	-	-
Stage 1	926	820	-	980	866	-	-	-	-	-	-	-
Stage 2	965	863	-	920	820	-	-	-	-	-	-	-

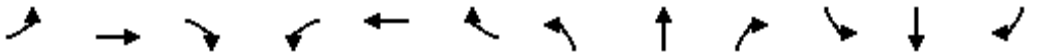
Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8.7	0	1.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1550	-	-	-	996	1579	-	-
HCM Lane V/C Ratio	-	-	-	-	0.012	0.007	-	-
HCM Control Delay (s)	0	-	-	0	8.7	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	5	369	159	1287	1212	469
Future Volume (vph)	5	369	159	1287	1212	469
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	41.0	41.0	22.0	69.0	47.0	47.0
Total Split (%)	37.3%	37.3%	20.0%	62.7%	42.7%	42.7%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	29.3	29.3	14.9	72.2	53.3	53.3
Actuated g/C Ratio	0.27	0.27	0.14	0.66	0.48	0.48
v/c Ratio	0.81	0.74	0.70	0.58	0.52	0.50
Control Delay	50.2	40.4	73.2	6.2	22.1	3.9
Queue Delay	0.7	0.0	0.0	0.1	0.0	0.0
Total Delay	50.8	40.4	73.2	6.3	22.1	3.9
LOS	D	D	E	A	C	A
Approach Delay	45.9			13.7	17.0	
Approach LOS	D			B	B	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 20.7	Intersection LOS: C
Intersection Capacity Utilization 74.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	279	5	369	159	1287	0	0	1212	469
Future Volume (veh/h)	0	0	0	279	5	369	159	1287	0	0	1212	469
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				300	47	333	171	1384	0	0	1303	317
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				378	59	386	200	2465	0	0	2781	859
Arrive On Green				0.24	0.24	0.24	0.22	1.00	0.00	0.00	0.54	0.54
Sat Flow, veh/h				1575	247	1610	1810	3705	0	0	5358	1603
Grp Volume(v), veh/h				347	0	333	171	1384	0	0	1303	317
Grp Sat Flow(s),veh/h/ln				1821	0	1610	1810	1805	0	0	1729	1603
Q Serve(g_s), s				19.7	0.0	21.8	10.0	0.0	0.0	0.0	17.1	12.6
Cycle Q Clear(g_c), s				19.7	0.0	21.8	10.0	0.0	0.0	0.0	17.1	12.6
Prop In Lane				0.86		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				437	0	386	200	2465	0	0	2781	859
V/C Ratio(X)				0.79	0.00	0.86	0.86	0.56	0.00	0.00	0.47	0.37
Avail Cap(c_a), veh/h				613	0	542	296	2465	0	0	2781	859
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.81	0.81	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				39.2	0.0	40.1	42.0	0.0	0.0	0.0	15.8	14.8
Incr Delay (d2), s/veh				4.8	0.0	9.9	12.4	0.8	0.0	0.0	0.6	1.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.0	0.0	9.3	4.6	0.3	0.0	0.0	6.4	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				44.1	0.0	50.0	54.4	0.8	0.0	0.0	16.4	16.0
LnGrp LOS				D	A	D	D	A	A	A	B	B
Approach Vol, veh/h					680			1555			1620	
Approach Delay, s/veh					47.0			6.7			16.3	
Approach LOS					D			A			B	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		79.6			16.1	63.5		30.4				
Change Period (Y+Rc), s		4.5			4.0	4.5		4.0				
Max Green Setting (Gmax), s		64.5			18.0	42.5		37.0				
Max Q Clear Time (g_c+I1), s		2.0			12.0	19.1		23.8				
Green Ext Time (p_c), s		14.6			0.2	11.1		2.6				

Intersection Summary												
HCM 6th Ctrl Delay			17.8									
HCM 6th LOS			B									

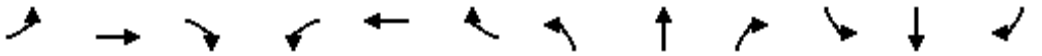
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	506	5	941	392	393	1098
Future Volume (vph)	506	5	941	392	393	1098
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	37.1	37.1	32.8	32.8	40.1	72.9
Total Split (%)	33.7%	33.7%	29.8%	29.8%	36.5%	66.3%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	27.3	27.3	42.9	42.9	28.8	75.2
Actuated g/C Ratio	0.25	0.25	0.39	0.39	0.26	0.68
v/c Ratio	0.80	0.74	0.47	0.47	0.85	0.45
Control Delay	52.9	43.8	37.0	17.0	51.1	4.4
Queue Delay	0.0	0.0	0.0	0.0	1.4	0.3
Total Delay	52.9	43.8	37.0	17.0	52.6	4.7
LOS	D	D	D	B	D	A
Approach Delay		48.5	31.1			17.3
Approach LOS		D	C			B

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 28.4	Intersection LOS: C
Intersection Capacity Utilization 74.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	506	5	140	0	0	0	0	941	392	393	1098	0
Future Volume (veh/h)	506	5	140	0	0	0	0	941	392	393	1098	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	327	270	133				0	960	195	401	1120	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	459	305	150				0	1170	361	753	2448	0
Arrive On Green	0.25	0.25	0.25				0.00	0.07	0.07	0.42	0.68	0.00
Sat Flow, veh/h	1810	1202	592				0	5358	1599	1810	3705	0
Grp Volume(v), veh/h	327	0	403				0	960	195	401	1120	0
Grp Sat Flow(s),veh/h/ln	1810	0	1793				0	1729	1599	1810	1805	0
Q Serve(g_s), s	18.1	0.0	23.8				0.0	20.1	12.9	18.3	15.9	0.0
Cycle Q Clear(g_c), s	18.1	0.0	23.8				0.0	20.1	12.9	18.3	15.9	0.0
Prop In Lane	1.00		0.33				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	459	0	455				0	1170	361	753	2448	0
V/C Ratio(X)	0.71	0.00	0.89				0.00	0.82	0.54	0.53	0.46	0.00
Avail Cap(c_a), veh/h	553	0	548				0	1358	419	753	2448	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.82	0.82	0.84	0.84	0.00
Uniform Delay (d), s/veh	37.4	0.0	39.5				0.0	48.7	45.4	24.1	8.3	0.0
Incr Delay (d2), s/veh	3.4	0.0	14.1				0.0	5.4	4.7	0.3	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	0.0	11.8				0.0	9.8	6.0	7.5	5.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.8	0.0	53.6				0.0	54.1	50.1	24.4	8.8	0.0
LnGrp LOS	D	A	D				A	D	D	C	A	A
Approach Vol, veh/h		730						1155			1521	
Approach Delay, s/veh		47.9						53.4			12.9	
Approach LOS		D						D			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	49.8	28.8		31.4		78.6
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	36.6	* 29		33.6		68.9
Max Q Clear Time (g_c+I1), s	20.3	22.1		25.8		17.9
Green Ext Time (p_c), s	0.5	2.7		2.1		5.9

Intersection Summary	
HCM 6th Ctrl Delay	34.1
HCM 6th LOS	C

Notes

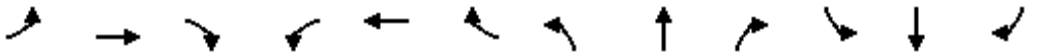
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	209	2	2	2	14	970	42	955	241
Future Volume (vph)	209	2	2	2	14	970	42	955	241
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases		4		8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	30.0	30.0	10.2	10.2	16.2	28.2	16.2	28.2	28.2
Total Split (s)	40.0	40.0	40.0	40.0	16.2	53.8	16.2	53.8	53.8
Total Split (%)	36.4%	36.4%	36.4%	36.4%	14.7%	48.9%	14.7%	48.9%	48.9%
Yellow Time (s)	5.0	5.0	5.0	5.0	3.0	4.7	3.0	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.0	5.7	4.0	5.7	5.7
Lead/Lag					Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min	C-Min
Act Effct Green (s)	25.4	25.4	25.4	25.4	70.7	64.3	73.4	68.8	68.8
Actuated g/C Ratio	0.23	0.23	0.23	0.23	0.64	0.58	0.67	0.63	0.63
v/c Ratio	0.84	0.05	0.01	0.33	0.04	0.48	0.13	0.44	0.24
Control Delay	65.6	13.2	27.5	6.5	6.3	12.1	4.8	12.3	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.6	13.2	27.5	6.5	6.3	12.1	4.8	12.3	3.8
LOS	E	B	C	A	A	B	A	B	A
Approach Delay		61.4		6.8		12.0		10.4	
Approach LOS		E		A		B		B	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 68.3 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 15.2	Intersection LOS: B
Intersection Capacity Utilization 69.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 10: Cedar Av. & Orange St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	209	2	16	2	2	154	14	970	2	42	955	241
Future Volume (veh/h)	209	2	16	2	2	154	14	970	2	42	955	241
Initial Q (Qb), veh	0	0	0	0	0	0	0	44	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	218	2	12	2	2	114	15	1010	2	44	995	190
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	307	57	345	404	7	389	260	2164	4	395	2162	942
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.03	1.00	1.00	0.01	0.20	0.20
Sat Flow, veh/h	1296	235	1408	1419	28	1587	1810	3696	7	1810	3610	1573
Grp Volume(v), veh/h	218	0	14	2	0	116	15	493	519	44	995	190
Grp Sat Flow(s),veh/h/ln	1296	0	1643	1419	0	1614	1810	1805	1899	1810	1805	1573
Q Serve(g_s), s	18.1	0.0	0.7	0.1	0.0	6.4	0.4	0.0	0.0	1.1	26.8	11.1
Cycle Q Clear(g_c), s	24.5	0.0	0.7	0.8	0.0	6.4	0.4	0.0	0.0	1.1	26.8	11.1
Prop In Lane	1.00		0.86	1.00		0.98	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	307	0	402	404	0	395	260	1057	1112	395	2162	942
V/C Ratio(X)	0.71	0.00	0.03	0.00	0.00	0.29	0.06	0.47	0.47	0.11	0.46	0.20
Avail Cap(c_a), veh/h	390	0	508	495	0	499	437	1057	1112	597	2162	942
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.82	0.82	0.82	0.89	0.89	0.89
Uniform Delay (d), s/veh	43.8	0.0	31.6	31.9	0.0	33.8	11.8	0.0	0.0	11.6	28.4	22.2
Incr Delay (d2), s/veh	4.3	0.0	0.0	0.0	0.0	0.4	0.1	1.2	1.2	0.1	0.6	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	5.3	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	0.0	0.3	0.0	0.0	2.6	0.1	2.1	2.0	0.4	13.0	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.0	0.0	31.7	31.9	0.0	34.2	11.8	7.1	6.4	11.7	29.1	22.6
LnGrp LOS	D	A	C	C	A	C	B	A	A	B	C	C
Approach Vol, veh/h		232			118			1027			1229	
Approach Delay, s/veh		47.0			34.2			6.8			27.4	
Approach LOS		D			C			A			C	

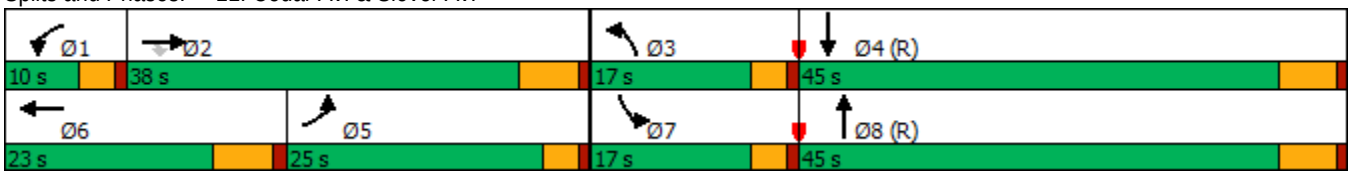
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	70.1		32.9	5.5	71.6		32.9				
Change Period (Y+Rc), s	4.0	5.7		6.0	4.0	5.7		6.0				
Max Green Setting (Gmax), s	12.2	48.1		34.0	12.2	48.1		34.0				
Max Q Clear Time (g_c+I1), s	3.1	2.0		26.5	2.4	28.8		8.4				
Green Ext Time (p_c), s	0.0	7.4		0.5	0.0	7.3		0.7				

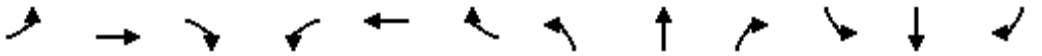
Intersection Summary			
HCM 6th Ctrl Delay		21.4	
HCM 6th LOS		C	

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	206	356	170	28	234	108	641	102	799
Future Volume (vph)	206	356	170	28	234	108	641	102	799
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2		1	6	3	8	7	4
Permitted Phases			2						
Detector Phase	5	2	2	1	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	29.0	29.0	8.0	23.0	8.0	32.7	8.0	24.7
Total Split (s)	25.0	38.0	38.0	10.0	23.0	17.0	45.0	17.0	45.0
Total Split (%)	22.7%	34.5%	34.5%	9.1%	20.9%	15.5%	40.9%	15.5%	40.9%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	4.7	3.0	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	4.0	5.7	4.0	5.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	17.8	30.3	30.3	6.2	14.8	11.3	46.7	11.1	46.5
Actuated g/C Ratio	0.16	0.28	0.28	0.06	0.13	0.10	0.42	0.10	0.42
v/c Ratio	0.76	0.39	0.32	0.29	0.75	0.63	0.47	0.60	0.62
Control Delay	60.9	33.5	6.0	57.5	43.8	54.2	51.6	79.9	19.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.9	33.5	6.0	57.5	43.8	54.2	51.6	79.9	19.8
LOS	E	C	A	E	D	D	D	E	B
Approach Delay		34.8			44.8		52.0		26.1
Approach LOS		C			D		D		C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 37.9	Intersection LOS: D
Intersection Capacity Utilization 69.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 11: Cedar Av. & Slover Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	356	170	28	234	139	108	641	31	102	799	73
Future Volume (veh/h)	206	356	170	28	234	139	108	641	31	102	799	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	222	383	139	30	252	95	116	689	31	110	859	70
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	255	939	413	39	318	117	144	1632	73	136	1551	126
Arrive On Green	0.14	0.26	0.26	0.02	0.12	0.12	0.08	0.46	0.46	0.15	0.92	0.92
Sat Flow, veh/h	1810	3610	1589	1810	2585	949	1810	3518	158	1810	3376	275
Grp Volume(v), veh/h	222	383	139	30	174	173	116	353	367	110	459	470
Grp Sat Flow(s),veh/h/ln	1810	1805	1589	1810	1805	1729	1810	1805	1872	1810	1805	1846
Q Serve(g_s), s	13.2	9.7	7.8	1.8	10.3	10.7	6.9	14.4	14.4	6.5	4.6	4.6
Cycle Q Clear(g_c), s	13.2	9.7	7.8	1.8	10.3	10.7	6.9	14.4	14.4	6.5	4.6	4.6
Prop In Lane	1.00		1.00	1.00		0.55	1.00		0.08	1.00		0.15
Lane Grp Cap(c), veh/h	255	939	413	39	222	213	144	837	868	136	829	848
V/C Ratio(X)	0.87	0.41	0.34	0.76	0.78	0.81	0.81	0.42	0.42	0.81	0.55	0.55
Avail Cap(c_a), veh/h	345	1050	462	99	279	267	214	837	868	214	829	848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.73	0.73	0.73	0.90	0.90	0.90
Uniform Delay (d), s/veh	46.3	33.7	33.0	53.5	46.8	47.0	49.8	19.7	19.7	46.0	2.6	2.6
Incr Delay (d2), s/veh	16.4	0.3	0.5	25.2	10.8	14.2	9.6	1.1	1.1	10.8	2.4	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	4.1	3.0	1.1	5.3	5.5	3.4	5.9	6.1	3.1	1.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.7	34.0	33.5	78.8	57.6	61.2	59.4	20.8	20.8	56.7	5.0	5.0
LnGrp LOS	E	C	C	E	E	E	E	C	C	E	A	A
Approach Vol, veh/h		744			377			836			1039	
Approach Delay, s/veh		42.4			60.9			26.1			10.5	
Approach LOS		D			E			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	34.6	12.8	56.2	21.5	19.5	12.3	56.7
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	6.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	6.0	32.0	13.0	39.3	21.0	* 17	13.0	39.3
Max Q Clear Time (g_c+I1), s	3.8	11.7	8.9	6.6	15.2	12.7	8.5	16.4
Green Ext Time (p_c), s	0.0	2.5	0.1	6.3	0.3	0.8	0.1	4.0

Intersection Summary	
HCM 6th Ctrl Delay	29.1
HCM 6th LOS	C

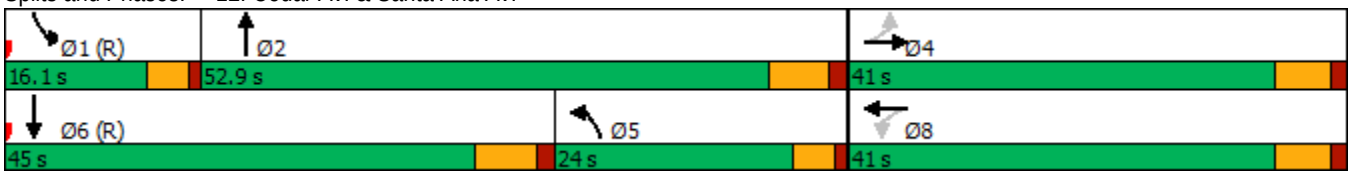
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	65	132	41	125	161	700	60	756
Future Volume (vph)	65	132	41	125	161	700	60	756
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	9.5	27.5	9.5	27.5
Total Split (s)	41.0	41.0	41.0	41.0	24.0	52.9	16.1	45.0
Total Split (%)	37.3%	37.3%	37.3%	37.3%	21.8%	48.1%	14.6%	40.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	4.5	6.5	4.5	6.5
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min
Act Effct Green (s)		26.7		26.7	14.8	39.0	27.4	51.5
Actuated g/C Ratio		0.24		0.24	0.13	0.35	0.25	0.47
v/c Ratio		0.84		0.59	0.70	0.64	0.14	0.51
Control Delay		55.8		40.7	51.3	22.3	31.4	36.7
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		55.8		40.7	51.3	22.3	31.4	36.7
LOS		E		D	D	C	C	D
Approach Delay		55.8		40.7		27.3		36.3
Approach LOS		E		D		C		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 90 (82%), Referenced to phase 1:SBL and 6:SBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 35.6	Intersection LOS: D
Intersection Capacity Utilization 68.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 12: Cedar Av. & Santa Ana Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	132	103	41	125	38	161	700	69	60	756	48
Future Volume (veh/h)	65	132	103	41	125	38	161	700	69	60	756	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	68	139	65	43	132	0	169	737	71	63	796	44
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	106	177	76	92	255	0	591	1115	107	574	1069	59
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.00	0.65	0.67	0.67	0.10	0.10	0.10
Sat Flow, veh/h	339	917	394	264	1317	0	1810	3327	320	1810	3477	192
Grp Volume(v), veh/h	272	0	0	175	0	0	169	400	408	63	413	427
Grp Sat Flow(s),veh/h/ln	1650	0	0	1582	0	0	1810	1805	1842	1810	1805	1865
Q Serve(g_s), s	7.1	0.0	0.0	0.0	0.0	0.0	4.4	14.4	14.5	3.5	24.5	24.5
Cycle Q Clear(g_c), s	17.4	0.0	0.0	10.4	0.0	0.0	4.4	14.4	14.5	3.5	24.5	24.5
Prop In Lane	0.25		0.24	0.25		0.00	1.00		0.17	1.00		0.10
Lane Grp Cap(c), veh/h	360	0	0	347	0	0	591	605	617	574	555	573
V/C Ratio(X)	0.76	0.00	0.00	0.50	0.00	0.00	0.29	0.66	0.66	0.11	0.74	0.74
Avail Cap(c_a), veh/h	562	0	0	554	0	0	591	761	777	574	632	653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.89	0.89	0.89	0.80	0.80	0.80
Uniform Delay (d), s/veh	42.7	0.0	0.0	39.6	0.0	0.0	13.6	14.5	14.5	35.2	45.2	45.2
Incr Delay (d2), s/veh	4.6	0.0	0.0	1.6	0.0	0.0	0.1	4.0	3.9	0.0	7.1	6.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	0.0	4.3	0.0	0.0	1.6	4.4	4.5	1.5	12.8	13.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.3	0.0	0.0	41.2	0.0	0.0	13.7	18.5	18.4	35.2	52.3	52.1
LnGrp LOS	D	A	A	D	A	A	B	B	B	D	D	D
Approach Vol, veh/h		272			175			977			903	
Approach Delay, s/veh		47.3			41.2			17.6			51.0	
Approach LOS		D			D			B			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	39.4	43.3		27.3	42.4	40.3		27.3				
Change Period (Y+Rc), s	4.5	6.5		6.0	6.5	* 6.5		6.0				
Max Green Setting (Gmax), s	11.6	46.4		35.0	19.5	* 39		35.0				
Max Q Clear Time (g_c+I1), s	5.5	16.5		19.4	6.4	26.5		12.4				
Green Ext Time (p_c), s	0.0	12.9		1.8	0.2	7.4		1.2				

Intersection Summary	
HCM 6th Ctrl Delay	35.8
HCM 6th LOS	D

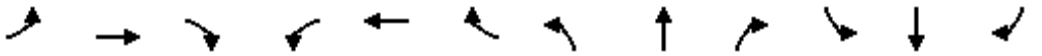
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	49	157	47	61	89	57	70	781	128	779
Future Volume (vph)	49	157	47	61	89	57	70	781	128	779
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	19.0	51.0	24.0	56.0
Total Split (%)	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	17.3%	46.4%	21.8%	50.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)		20.9	20.9		20.9	20.9	34.6	59.4	13.7	38.5
Actuated g/C Ratio		0.19	0.19		0.19	0.19	0.31	0.54	0.12	0.35
v/c Ratio		0.80	0.13		0.90	0.16	0.13	0.47	0.62	0.72
Control Delay		62.6	0.7		86.9	0.9	47.5	9.6	31.5	46.0
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		62.6	0.7		86.9	0.9	47.5	9.6	31.5	46.0
LOS		E	A		F	A	D	A	C	D
Approach Delay		51.1			63.2			12.5		44.0
Approach LOS		D			E			B		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 34.3	Intersection LOS: C
Intersection Capacity Utilization 68.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	157	47	61	89	57	70	781	52	128	779	50
Future Volume (veh/h)	49	157	47	61	89	57	70	781	52	128	779	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	53	171	26	66	97	16	76	849	44	139	847	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	40	109	426	46	51	424	475	1716	89	172	1124	65
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.52	0.98	0.98	0.03	0.11	0.11
Sat Flow, veh/h	0	408	1588	0	189	1579	1810	3491	181	1810	3468	201
Grp Volume(v), veh/h	224	0	26	163	0	16	76	439	454	139	441	455
Grp Sat Flow(s),veh/h/ln	408	0	1588	189	0	1579	1810	1805	1867	1810	1805	1864
Q Serve(g_s), s	0.0	0.0	1.3	0.0	0.0	0.8	2.4	0.9	0.9	8.4	26.1	26.1
Cycle Q Clear(g_c), s	29.5	0.0	1.3	29.5	0.0	0.8	2.4	0.9	0.9	8.4	26.1	26.1
Prop In Lane	0.24		1.00	0.40		1.00	1.00		0.10	1.00		0.11
Lane Grp Cap(c), veh/h	150	0	426	97	0	424	475	887	918	172	585	604
V/C Ratio(X)	1.49	0.00	0.06	1.69	0.00	0.04	0.16	0.49	0.49	0.81	0.75	0.75
Avail Cap(c_a), veh/h	150	0	426	97	0	424	475	887	918	321	820	847
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.91	0.91	0.91	0.85	0.85	0.85
Uniform Delay (d), s/veh	35.8	0.0	29.9	40.3	0.0	29.8	19.9	0.5	0.5	52.3	44.9	44.9
Incr Delay (d2), s/veh	254.4	0.0	0.1	348.8	0.0	0.1	0.1	1.8	1.7	7.5	2.8	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.7	0.0	0.5	12.0	0.0	0.3	1.0	0.6	0.6	4.3	13.0	13.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	290.2	0.0	30.0	389.1	0.0	29.8	20.0	2.3	2.2	59.8	47.7	47.6
LnGrp LOS	F	A	C	F	A	C	B	A	A	E	D	D
Approach Vol, veh/h		250			179			969			1035	
Approach Delay, s/veh		263.1			357.0			3.6			49.3	
Approach LOS		F			F			A			D	

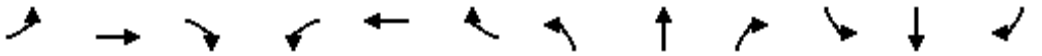
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.0	60.0		35.0	33.4	41.6		35.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	19.5	45.0		29.5	14.5	50.0		29.5				
Max Q Clear Time (g_c+I1), s	10.4	2.9		31.5	4.4	28.1		31.5				
Green Ext Time (p_c), s	0.2	9.1		0.0	0.1	7.5		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			75.7									
HCM 6th LOS			E									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	68	44	32	26	129	754	67	729
Future Volume (vph)	68	44	32	26	129	754	67	729
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	10.0	10.0	9.5	24.0	9.5	24.0
Total Split (s)	41.0	41.0	41.0	41.0	23.0	53.0	16.0	46.0
Total Split (%)	37.3%	37.3%	37.3%	37.3%	20.9%	48.2%	14.5%	41.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)		25.1		23.4	13.8	61.9	9.6	55.6
Actuated g/C Ratio		0.23		0.21	0.13	0.56	0.09	0.51
v/c Ratio		0.80		0.31	0.62	0.42	0.47	0.45
Control Delay		42.5		29.2	57.1	16.9	51.7	18.9
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		42.5		29.2	57.1	16.9	51.7	18.9
LOS		D		C	E	B	D	B
Approach Delay		42.5		29.2		22.6		21.6
Approach LOS		D		C		C		C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 74 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 25.4	Intersection LOS: C
Intersection Capacity Utilization 61.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 14: Rubidoux Bl./Cedar Av. & 7th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	44	202	32	26	18	129	754	18	67	729	30
Future Volume (veh/h)	68	44	202	32	26	18	129	754	18	67	729	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	74	48	138	35	28	10	140	820	20	73	792	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	117	70	164	143	107	32	171	2223	54	94	2034	82
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.09	0.62	0.62	0.05	0.58	0.58
Sat Flow, veh/h	394	371	865	497	564	169	1810	3599	88	1810	3536	143
Grp Volume(v), veh/h	260	0	0	73	0	0	140	411	429	73	404	420
Grp Sat Flow(s),veh/h/ln	1630	0	0	1230	0	0	1810	1805	1882	1810	1805	1874
Q Serve(g_s), s	12.0	0.0	0.0	0.0	0.0	0.0	8.4	12.4	12.4	4.4	13.5	13.5
Cycle Q Clear(g_c), s	16.8	0.0	0.0	4.8	0.0	0.0	8.4	12.4	12.4	4.4	13.5	13.5
Prop In Lane	0.28		0.53	0.48		0.14	1.00		0.05	1.00		0.08
Lane Grp Cap(c), veh/h	351	0	0	281	0	0	171	1115	1162	94	1038	1078
V/C Ratio(X)	0.74	0.00	0.00	0.26	0.00	0.00	0.82	0.37	0.37	0.77	0.39	0.39
Avail Cap(c_a), veh/h	569	0	0	484	0	0	304	1115	1162	189	1038	1078
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.73	0.73	0.73	0.67	0.67	0.67
Uniform Delay (d), s/veh	42.8	0.0	0.0	37.8	0.0	0.0	48.9	10.4	10.4	51.5	12.8	12.8
Incr Delay (d2), s/veh	4.4	0.0	0.0	0.7	0.0	0.0	6.9	0.7	0.7	8.7	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	0.0	0.0	1.7	0.0	0.0	4.0	4.4	4.6	2.2	5.1	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.1	0.0	0.0	38.5	0.0	0.0	55.8	11.1	11.1	60.1	13.5	13.5
LnGrp LOS	D	A	A	D	A	A	E	B	B	E	B	B
Approach Vol, veh/h		260			73			980			897	
Approach Delay, s/veh		47.1			38.5			17.5			17.3	
Approach LOS		D			D			B			B	

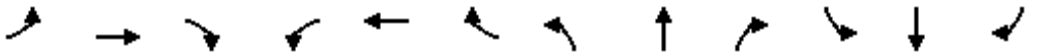
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.2	73.9		25.8	14.9	69.3		25.8				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	11.5	47.0		36.0	18.5	40.0		36.0				
Max Q Clear Time (g_c+I1), s	6.4	14.4		18.8	10.4	15.5		6.8				
Green Ext Time (p_c), s	0.0	7.7		2.0	0.2	7.1		0.5				

Intersection Summary			
HCM 6th Ctrl Delay		21.6	
HCM 6th LOS		C	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	9	7	183	5	194	12	702	167	778
Future Volume (vph)	9	7	183	5	194	12	702	167	778
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	35.0	35.0	35.0	9.5	24.0	9.5	24.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.6	35.0	20.0	45.4
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%	10.7%	38.9%	22.2%	50.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	5.0	4.5	6.0	4.5	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min
Act Effct Green (s)		13.0		17.4	17.4	5.4	23.4	11.7	38.4
Actuated g/C Ratio		0.19		0.25	0.25	0.08	0.34	0.17	0.56
v/c Ratio		0.08		0.56	0.35	0.09	0.70	0.55	0.40
Control Delay		17.3		30.4	5.6	38.7	23.9	36.9	11.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		17.3		30.4	5.6	38.7	23.9	36.9	11.0
LOS		B		C	A	D	C	D	B
Approach Delay		17.3		17.8			24.1		15.5
Approach LOS		B		B			C		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 68.8	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 19.2	Intersection LOS: B
Intersection Capacity Utilization 63.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 15: Rubidoux Bl. & Tarragona Dr./El Rivino Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	7	10	183	5	194	12	702	142	167	778	23
Future Volume (veh/h)	9	7	10	183	5	194	12	702	142	167	778	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	9	7	6	185	5	121	12	709	136	169	786	22
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	143	106	57	409	8	373	28	1061	203	220	1646	46
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.02	0.35	0.35	0.12	0.46	0.46
Sat Flow, veh/h	202	457	247	1186	34	1610	1810	3010	577	1810	3587	100
Grp Volume(v), veh/h	22	0	0	190	0	121	12	425	420	169	396	412
Grp Sat Flow(s),veh/h/ln	905	0	0	1220	0	1610	1810	1805	1782	1810	1805	1882
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	3.3	0.3	10.5	10.5	4.8	8.0	8.0
Cycle Q Clear(g_c), s	8.3	0.0	0.0	8.3	0.0	3.3	0.3	10.5	10.5	4.8	8.0	8.0
Prop In Lane	0.41		0.27	0.97		1.00	1.00		0.32	1.00		0.05
Lane Grp Cap(c), veh/h	306	0	0	417	0	373	28	636	628	220	828	864
V/C Ratio(X)	0.07	0.00	0.00	0.46	0.00	0.32	0.43	0.67	0.67	0.77	0.48	0.48
Avail Cap(c_a), veh/h	822	0	0	902	0	917	175	994	981	533	1350	1408
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.0	0.0	0.0	18.7	0.0	16.8	25.7	14.4	14.4	22.4	9.9	9.9
Incr Delay (d2), s/veh	0.1	0.0	0.0	1.1	0.0	0.7	10.4	1.7	1.8	5.5	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	2.1	0.0	1.2	0.2	3.5	3.4	2.0	2.2	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.2	0.0	0.0	19.8	0.0	17.5	36.1	16.2	16.2	27.9	10.5	10.5
LnGrp LOS	B	A	A	B	A	B	D	B	B	C	B	B
Approach Vol, veh/h		22			311			857			977	
Approach Delay, s/veh		16.2			18.9			16.5			13.5	
Approach LOS		B			B			B			B	

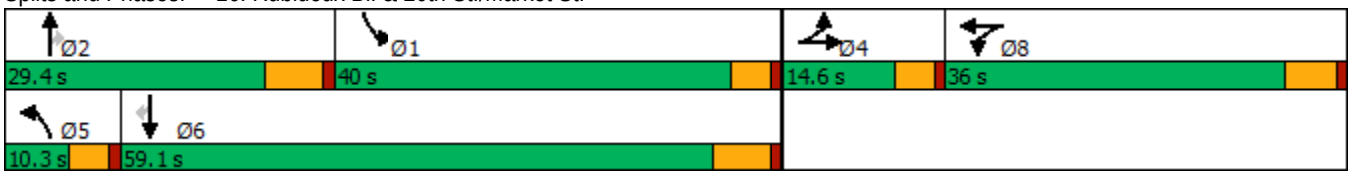
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.9	24.6		17.2	5.3	30.2		17.2				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	15.5	29.0		30.0	5.1	39.4		30.0				
Max Q Clear Time (g_c+I1), s	6.8	12.5		10.3	2.3	10.0		10.3				
Green Ext Time (p_c), s	0.3	6.1		0.1	0.0	7.1		2.1				

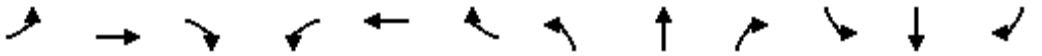
Intersection Summary			
HCM 6th Ctrl Delay		15.5	
HCM 6th LOS		B	

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	40	83	43	437	22	296	428	422	519	34
Future Volume (vph)	40	83	43	437	22	296	428	422	519	34
Turn Type	Split	NA	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4	8		5	2		1	6	
Permitted Phases				Free			2			6
Detector Phase	4	4	8		5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	14.6	14.6	15.8		9.6	16.2	16.2	9.6	35.2	35.2
Total Split (s)	14.6	14.6	36.0		10.3	29.4	29.4	40.0	59.1	59.1
Total Split (%)	12.2%	12.2%	30.0%		8.6%	24.5%	24.5%	33.3%	49.3%	49.3%
Yellow Time (s)	3.6	3.6	4.8		3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	5.8		4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag					Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None		None	None	None	None	None	None
Act Effct Green (s)	10.3	10.3	24.3	99.9	5.5	15.5	15.5	27.9	44.7	44.7
Actuated g/C Ratio	0.10	0.10	0.24	1.00	0.06	0.16	0.16	0.28	0.45	0.45
v/c Ratio	0.22	0.52	0.81	0.28	0.22	0.54	0.71	0.86	0.33	0.05
Control Delay	50.8	55.0	52.2	0.4	57.4	44.3	11.0	52.3	19.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.8	55.0	52.2	0.4	57.4	44.3	11.0	52.3	19.6	0.1
LOS	D	D	D	A	E	D	B	D	B	A
Approach Delay		53.8	23.4			25.5			33.0	
Approach LOS		D	C			C			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 99.9	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 29.2	Intersection LOS: C
Intersection Capacity Utilization 71.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	83	18	306	43	437	22	296	428	422	519	34
Future Volume (veh/h)	40	83	18	306	43	437	22	296	428	422	519	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	41	85	12	312	44	0	22	302	306	431	530	19
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	171	154	22	352	50		41	759	338	464	1657	738
Arrive On Green	0.09	0.09	0.09	0.22	0.22	0.00	0.02	0.21	0.21	0.26	0.46	0.46
Sat Flow, veh/h	1810	1629	230	1595	225	1610	1810	3610	1610	1810	3610	1608
Grp Volume(v), veh/h	41	0	97	356	0	0	22	302	306	431	530	19
Grp Sat Flow(s),veh/h/ln	1810	0	1859	1820	0	1610	1810	1805	1610	1810	1805	1608
Q Serve(g_s), s	2.2	0.0	5.2	19.7	0.0	0.0	1.3	7.5	19.3	24.2	9.7	0.7
Cycle Q Clear(g_c), s	2.2	0.0	5.2	19.7	0.0	0.0	1.3	7.5	19.3	24.2	9.7	0.7
Prop In Lane	1.00		0.12	0.88		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	171	0	175	401	0		41	759	338	464	1657	738
V/C Ratio(X)	0.24	0.00	0.55	0.89	0.00		0.54	0.40	0.90	0.93	0.32	0.03
Avail Cap(c_a), veh/h	174	0	178	528	0		99	804	359	615	1834	817
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	0.0	45.1	39.3	0.0	0.0	50.4	35.4	40.1	37.8	17.9	15.4
Incr Delay (d2), s/veh	0.7	0.0	3.6	13.6	0.0	0.0	4.0	0.3	24.6	15.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	2.6	9.9	0.0	0.0	0.6	3.2	9.5	12.0	3.7	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.4	0.0	48.6	52.9	0.0	0.0	54.4	35.8	64.7	53.3	18.0	15.4
LnGrp LOS	D	A	D	D	A		D	D	E	D	B	B
Approach Vol, veh/h		138			356			630			980	
Approach Delay, s/veh		47.4			52.9			50.5			33.5	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	32.9	28.1		14.4	7.0	54.0		28.8				
Change Period (Y+Rc), s	6.2	* 6.2		4.6	4.6	6.2		5.8				
Max Green Setting (Gmax), s	35.4	* 23		10.0	5.7	52.9		30.2				
Max Q Clear Time (g_c+I1), s	26.2	21.3		7.2	3.3	11.7		21.7				
Green Ext Time (p_c), s	0.5	0.6		0.1	0.0	3.4		1.2				

Intersection Summary			
HCM 6th Ctrl Delay		42.8	
HCM 6th LOS		D	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↕			↕	
Traffic Vol, veh/h	2	18	8	16	7	6	19	700	73	143	790	4
Future Vol, veh/h	2	18	8	16	7	6	19	700	73	143	790	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	18	8	16	7	6	19	714	74	146	806	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1499	1927	405	1494	1892	395	810	0	0	789	0	0
Stage 1	1100	1100	-	790	790	-	-	-	-	-	-	-
Stage 2	399	827	-	704	1102	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	86	67	601	87	71	610	825	-	-	840	-	-
Stage 1	230	290	-	354	404	-	-	-	-	-	-	-
Stage 2	604	389	-	398	290	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	55	44	601	43	46	609	825	-	-	839	-	-
Mov Cap-2 Maneuver	55	44	-	43	46	-	-	-	-	-	-	-
Stage 1	220	198	-	339	387	-	-	-	-	-	-	-
Stage 2	562	372	-	243	198	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	107.9	133.6	0.4	2.6
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	825	-	-	61	54	839	-	-
HCM Lane V/C Ratio	0.024	-	-	0.468	0.548	0.174	-	-
HCM Control Delay (s)	9.5	0.2	-	107.9	133.6	10.2	1.2	-
HCM Lane LOS	A	A	-	F	F	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1.8	2.1	0.6	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	2	7	4	3	6	3	786	16	7	740	5
Future Vol, veh/h	1	2	7	4	3	6	3	786	16	7	740	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	110	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	2	8	4	3	7	3	864	18	8	813	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1273	1723	410	1305	1716	443	819	0	0	884	0	0
Stage 1	833	833	-	881	881	-	-	-	-	-	-	-
Stage 2	440	890	-	424	835	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	126	90	596	120	91	568	818	-	-	774	-	-
Stage 1	334	386	-	312	367	-	-	-	-	-	-	-
Stage 2	571	364	-	584	386	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	122	88	595	116	89	567	817	-	-	773	-	-
Mov Cap-2 Maneuver	240	208	-	229	210	-	-	-	-	-	-	-
Stage 1	332	382	-	310	365	-	-	-	-	-	-	-
Stage 2	557	362	-	567	382	-	-	-	-	-	-	-

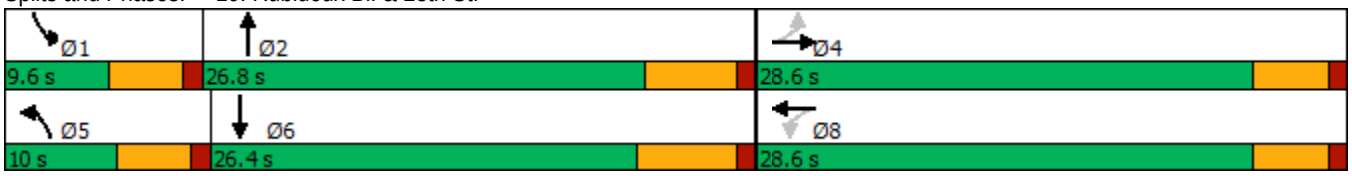
Approach	EB	WB	NB	SB
HCM Control Delay, s	14.5	17.3	0	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	817	-	-	391	307	773	-	-
HCM Lane V/C Ratio	0.004	-	-	0.028	0.047	0.01	-	-
HCM Control Delay (s)	9.4	-	-	14.5	17.3	9.7	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	30	14	72	11	44	761	20	747
Future Volume (vph)	30	14	72	11	44	761	20	747
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	28.6	28.6	28.6	28.6	9.6	24.4	9.6	22.8
Total Split (s)	28.6	28.6	28.6	28.6	10.0	26.8	9.6	26.4
Total Split (%)	44.0%	44.0%	44.0%	44.0%	15.4%	41.2%	14.8%	40.6%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.4	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		14.9		14.9	6.9	25.3	6.7	23.6
Actuated g/C Ratio		0.40		0.40	0.18	0.68	0.18	0.63
v/c Ratio		0.14		0.19	0.14	0.36	0.07	0.36
Control Delay		9.5		13.0	23.2	8.9	24.1	10.8
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		9.5		13.0	23.2	8.9	24.1	10.8
LOS		A		B	C	A	C	B
Approach Delay		9.5		13.0		9.6		11.2
Approach LOS		A		B		A		B

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 37.3	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.36	
Intersection Signal Delay: 10.5	Intersection LOS: B
Intersection Capacity Utilization 49.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 19: Rubidoux Bl. & 28th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	14	37	72	11	13	44	761	50	20	747	22
Future Volume (veh/h)	30	14	37	72	11	13	44	761	50	20	747	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	32	15	12	77	12	8	47	818	54	22	803	24
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	269	116	58	373	55	22	95	1277	84	50	1243	37
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.05	0.37	0.37	0.03	0.35	0.35
Sat Flow, veh/h	638	665	333	1088	314	126	1810	3432	227	1810	3579	107
Grp Volume(v), veh/h	59	0	0	97	0	0	47	430	442	22	405	422
Grp Sat Flow(s),veh/h/ln	1636	0	0	1528	0	0	1810	1805	1853	1810	1805	1881
Q Serve(g_s), s	0.0	0.0	0.0	0.8	0.0	0.0	0.9	6.9	6.9	0.4	6.6	6.6
Cycle Q Clear(g_c), s	1.0	0.0	0.0	1.8	0.0	0.0	0.9	6.9	6.9	0.4	6.6	6.6
Prop In Lane	0.54		0.20	0.79		0.08	1.00		0.12	1.00		0.06
Lane Grp Cap(c), veh/h	443	0	0	450	0	0	95	672	690	50	627	653
V/C Ratio(X)	0.13	0.00	0.00	0.22	0.00	0.00	0.50	0.64	0.64	0.44	0.65	0.65
Avail Cap(c_a), veh/h	1232	0	0	1195	0	0	278	1098	1127	257	1057	1101
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.4	0.0	0.0	12.7	0.0	0.0	16.2	9.1	9.1	16.8	9.7	9.7
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.0	1.5	1.0	1.0	2.3	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.6	0.0	0.0	0.3	1.8	1.8	0.2	1.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.5	0.0	0.0	12.9	0.0	0.0	17.7	10.1	10.1	19.1	10.8	10.7
LnGrp LOS	B	A	A	B	A	A	B	B	B	B	B	B
Approach Vol, veh/h		59			97			919			849	
Approach Delay, s/veh		12.5			12.9			10.5			11.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.6	18.9		10.7	6.4	18.0		10.7				
Change Period (Y+Rc), s	4.6	* 5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	5.0	* 21		24.0	5.4	20.6		24.0				
Max Q Clear Time (g_c+I1), s	2.4	8.9		3.0	2.9	8.6		3.8				
Green Ext Time (p_c), s	0.0	4.2		0.2	0.0	3.6		0.4				

Intersection Summary			
HCM 6th Ctrl Delay		10.9	
HCM 6th LOS		B	

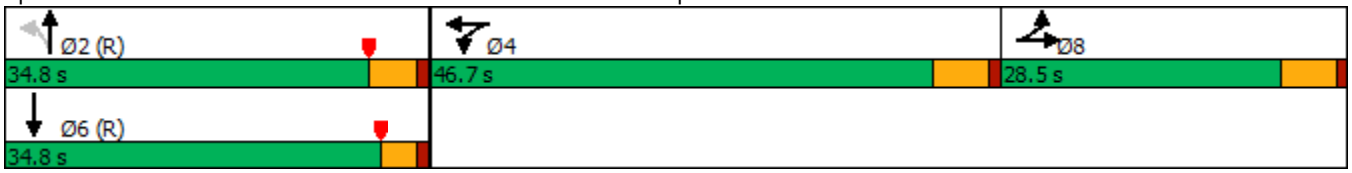
Notes

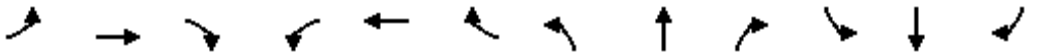
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	20	0	83	53	770	847
Future Volume (vph)	20	0	83	53	770	847
Turn Type	Split	NA	NA	Perm	NA	NA
Protected Phases	8	8	4		2	6
Permitted Phases				2		
Detector Phase	8	8	4	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.5	28.5	46.7	34.8	34.8	34.8
Total Split (%)	25.9%	25.9%	42.5%	31.6%	31.6%	31.6%
Yellow Time (s)	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	11.9	11.9	42.1	40.0	40.0	41.0
Actuated g/C Ratio	0.11	0.11	0.38	0.36	0.36	0.37
v/c Ratio	0.11	0.63	0.98	0.62	0.64	0.70
Control Delay	41.7	26.9	64.9	39.1	20.2	33.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.7	26.9	64.9	39.1	20.2	33.8
LOS	D	C	E	D	C	C
Approach Delay		28.6	64.9		21.4	33.8
Approach LOS		C	E		C	C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay: 37.2	Intersection LOS: D
Intersection Capacity Utilization 98.2%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	0	161	459	83	86	53	770	0	0	847	18
Future Volume (veh/h)	20	0	161	459	83	86	53	770	0	0	847	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	22	0	113	499	90	64	58	837	0	0	921	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	165	0	147	515	93	66	175	1404	0	0	1411	26
Arrive On Green	0.09	0.00	0.09	0.37	0.37	0.37	0.78	0.78	0.00	0.00	0.39	0.39
Sat Flow, veh/h	1810	0	1610	1375	248	176	606	3705	0	0	3721	67
Grp Volume(v), veh/h	22	0	113	653	0	0	58	837	0	0	458	480
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1799	0	0	606	1805	0	0	1805	1888
Q Serve(g_s), s	1.2	0.0	7.5	39.2	0.0	0.0	8.3	10.6	0.0	0.0	22.9	22.9
Cycle Q Clear(g_c), s	1.2	0.0	7.5	39.2	0.0	0.0	31.2	10.6	0.0	0.0	22.9	22.9
Prop In Lane	1.00		1.00	0.76		0.10	1.00		0.00	0.00		0.04
Lane Grp Cap(c), veh/h	165	0	147	674	0	0	175	1404	0	0	702	734
V/C Ratio(X)	0.13	0.00	0.77	0.97	0.00	0.00	0.33	0.60	0.00	0.00	0.65	0.65
Avail Cap(c_a), veh/h	378	0	337	674	0	0	175	1404	0	0	702	734
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.94	0.94
Uniform Delay (d), s/veh	46.0	0.0	48.9	33.8	0.0	0.0	19.9	8.6	0.0	0.0	27.5	27.5
Incr Delay (d2), s/veh	0.4	0.0	9.8	27.1	0.0	0.0	5.0	1.9	0.0	0.0	4.4	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	3.5	21.0	0.0	0.0	1.2	2.9	0.0	0.0	10.3	10.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.4	0.0	58.7	60.9	0.0	0.0	24.9	10.5	0.0	0.0	31.9	31.7
LnGrp LOS	D	A	E	E	A	A	C	B	A	A	C	C
Approach Vol, veh/h		135			653			895			938	
Approach Delay, s/veh		56.7			60.9			11.4			31.8	
Approach LOS		E			E			B			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		47.8		46.7		47.8		15.5				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		29.8		41.2		* 31		23.0				
Max Q Clear Time (g_c+I1), s		33.2		41.2		24.9		9.5				
Green Ext Time (p_c), s		0.0		0.0		3.1		0.6				

Intersection Summary												
HCM 6th Ctrl Delay			33.4									
HCM 6th LOS			C									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	197	823	821	545
Future Vol, veh/h	0	0	197	823	821	545
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	212	885	883	586

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	736	1470	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	0	*801	552	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	-	*801	551	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	3	0
HCM LOS	A		

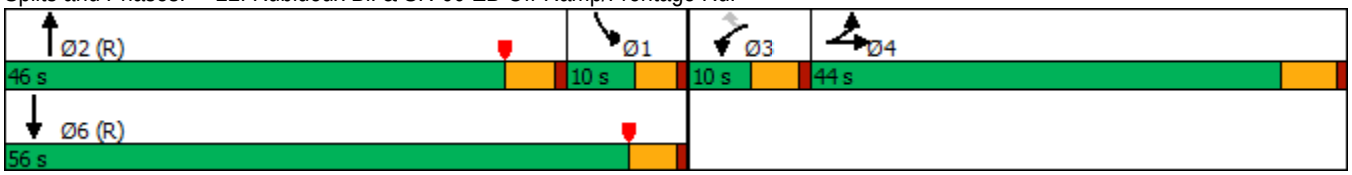
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	551	-	-	-	-
HCM Lane V/C Ratio	0.384	-	-	-	-
HCM Control Delay (s)	15.6	-	0	-	-
HCM Lane LOS	C	-	A	-	-
HCM 95th %tile Q(veh)	1.8	-	-	-	-

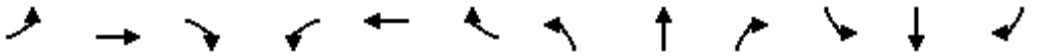
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	45	13	2	499	111	811
Future Volume (vph)	45	13	2	499	111	811
Turn Type	NA	Prot	Perm	NA	Prot	NA
Protected Phases	4	3		2	1	6
Permitted Phases			3			
Detector Phase	4	3	3	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	10.0	10.0	45.0	9.5	30.0
Total Split (s)	44.0	10.0	10.0	46.0	10.0	56.0
Total Split (%)	40.0%	9.1%	9.1%	41.8%	9.1%	50.9%
Yellow Time (s)	4.5	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	47.6	5.1	5.1	29.7	13.8	47.9
Actuated g/C Ratio	0.43	0.05	0.05	0.27	0.13	0.44
v/c Ratio	1.25	0.17	0.01	0.81	0.52	0.54
Control Delay	150.0	55.3	0.0	38.4	47.1	17.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	150.0	55.3	0.0	38.4	47.1	17.3
LOS	F	E	A	D	D	B
Approach Delay	150.0			38.4		20.9
Approach LOS	F			D		C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.25	
Intersection Signal Delay: 71.5	Intersection LOS: E
Intersection Capacity Utilization 101.4%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	519	45	362	13	0	2	0	499	282	111	811	0
Future Volume (veh/h)	519	45	362	13	0	2	0	499	282	111	811	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	541	47	285	14	0	0	0	520	246	116	845	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	378	33	199	0	0	0	0	601	283	464	2002	0
Arrive On Green	0.35	0.35	0.35	0.00	0.00	0.00	0.00	0.25	0.25	0.51	1.00	0.00
Sat Flow, veh/h	1080	94	569		0		0	2476	1122	1810	3705	0
Grp Volume(v), veh/h	873	0	0		0.0		0	394	372	116	845	0
Grp Sat Flow(s),veh/h/ln	1744	0	0				0	1805	1698	1810	1805	0
Q Serve(g_s), s	38.5	0.0	0.0				0.0	22.9	23.1	3.9	0.0	0.0
Cycle Q Clear(g_c), s	38.5	0.0	0.0				0.0	22.9	23.1	3.9	0.0	0.0
Prop In Lane	0.62		0.33				0.00		0.66	1.00		0.00
Lane Grp Cap(c), veh/h	610	0	0				0	456	429	464	2002	0
V/C Ratio(X)	1.43	0.00	0.00				0.00	0.86	0.87	0.25	0.42	0.00
Avail Cap(c_a), veh/h	610	0	0				0	673	633	464	2002	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.82	0.82	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.8	0.0	0.0				0.0	39.3	39.4	20.9	0.0	0.0
Incr Delay (d2), s/veh	203.1	0.0	0.0				0.0	16.2	17.5	0.1	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	49.7	0.0	0.0				0.0	11.9	11.4	1.5	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	238.9	0.0	0.0				0.0	55.5	56.8	21.0	0.7	0.0
LnGrp LOS	F	A	A				A	E	E	C	A	A
Approach Vol, veh/h		873						766			961	
Approach Delay, s/veh		238.9						56.2			3.1	
Approach LOS		F						E			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	33.2	32.8		44.0		66.0
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0
Max Green Setting (Gmax), s	5.5	* 41		38.5		51.0
Max Q Clear Time (g_c+I1), s	5.9	25.1		40.5		2.0
Green Ext Time (p_c), s	0.0	2.7		0.0		4.0

Intersection Summary		
HCM 6th Ctrl Delay		97.9
HCM 6th LOS		F

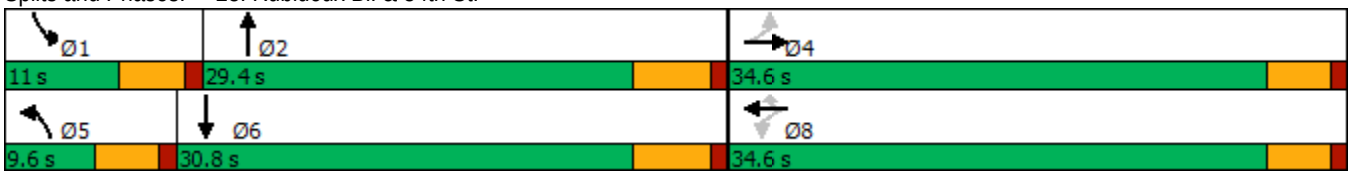
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	90	44	14	15	79	19	594	189	881
Future Volume (vph)	90	44	14	15	79	19	594	189	881
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	30.6	30.6	34.6	34.6	34.6	9.6	29.4	9.6	22.4
Total Split (s)	34.6	34.6	34.6	34.6	34.6	9.6	29.4	11.0	30.8
Total Split (%)	46.1%	46.1%	46.1%	46.1%	46.1%	12.8%	39.2%	14.7%	41.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	4.6	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		14.2		14.2	14.2	5.6	16.1	7.1	29.1
Actuated g/C Ratio		0.29		0.29	0.29	0.12	0.33	0.15	0.60
v/c Ratio		0.36		0.07	0.15	0.10	0.59	0.74	0.49
Control Delay		17.2		14.7	3.4	27.9	17.1	47.5	12.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		17.2		14.7	3.4	27.9	17.1	47.5	12.0
LOS		B		B	A	C	B	D	B
Approach Delay		17.2		6.5			17.4		17.6
Approach LOS		B		A			B		B

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 48.4	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 16.9	Intersection LOS: B
Intersection Capacity Utilization 61.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 23: Rubidoux Bl. & 34th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	44	19	14	15	79	19	594	79	189	881	130
Future Volume (veh/h)	90	44	19	14	15	79	19	594	79	189	881	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	94	46	14	15	16	29	20	619	78	197	918	116
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	312	136	31	261	235	350	45	962	121	249	1321	167
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.02	0.30	0.30	0.14	0.41	0.41
Sat Flow, veh/h	802	625	143	617	1079	1606	1810	3226	406	1810	3214	406
Grp Volume(v), veh/h	154	0	0	31	0	29	20	346	351	197	516	518
Grp Sat Flow(s),veh/h/ln	1570	0	0	1696	0	1606	1810	1805	1827	1810	1805	1815
Q Serve(g_s), s	2.1	0.0	0.0	0.0	0.0	0.6	0.5	7.0	7.0	4.4	9.9	9.9
Cycle Q Clear(g_c), s	3.4	0.0	0.0	0.5	0.0	0.6	0.5	7.0	7.0	4.4	9.9	9.9
Prop In Lane	0.61		0.09	0.48		1.00	1.00		0.22	1.00		0.22
Lane Grp Cap(c), veh/h	479	0	0	496	0	350	45	538	545	249	742	746
V/C Ratio(X)	0.32	0.00	0.00	0.06	0.00	0.08	0.45	0.64	0.64	0.79	0.69	0.69
Avail Cap(c_a), veh/h	1232	0	0	1281	0	1143	215	1028	1040	275	1088	1094
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.2	0.0	0.0	13.1	0.0	13.1	20.3	12.8	12.8	17.6	10.2	10.2
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.1	0.0	0.1	2.6	1.3	1.3	11.7	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	0.2	0.0	0.2	0.2	2.3	2.3	2.3	2.8	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.5	0.0	0.0	13.2	0.0	13.2	22.8	14.1	14.1	29.3	11.4	11.4
LnGrp LOS	B	A	A	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		154			60			717			1231	
Approach Delay, s/veh		14.5			13.2			14.4			14.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.4	18.0		13.8	5.6	22.7		13.8				
Change Period (Y+Rc), s	4.6	5.4		4.6	4.6	5.4		4.6				
Max Green Setting (Gmax), s	6.4	24.0		30.0	5.0	25.4		30.0				
Max Q Clear Time (g_c+I1), s	6.4	9.0		5.4	2.5	11.9		2.6				
Green Ext Time (p_c), s	0.0	3.5		0.9	0.0	5.3		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			14.3									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	360	78	0	0	15	14
Future Vol, veh/h	360	78	0	0	15	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	409	89	0	0	17	16

Major/Minor	Major1			Minor1	
Conflicting Flow All	0	0		454	454
Stage 1	-	-		454	-
Stage 2	-	-		0	-
Critical Hdwy	-	-		6.4	6.2
Critical Hdwy Stg 1	-	-		5.4	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	-		3.5	3.3
Pot Cap-1 Maneuver	-	-		568	610
Stage 1	-	-		644	-
Stage 2	-	-		-	-
Platoon blocked, %	-	-			
Mov Cap-1 Maneuver	-	-		568	610
Mov Cap-2 Maneuver	-	-		568	-
Stage 1	-	-		644	-
Stage 2	-	-		-	-

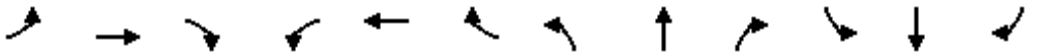
Approach	EB	NB
HCM Control Delay, s	0	11.5
HCM LOS		B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	588	-	-
HCM Lane V/C Ratio	0.056	-	-
HCM Control Delay (s)	11.5	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-

Lane Group	EBL	EBT	EBR	WBT	WBR	NBT	SBL	SBT	Ø1
Lane Configurations									
Traffic Volume (vph)	505	425	4	741	149	3	141	2	
Future Volume (vph)	505	425	4	741	149	3	141	2	
Turn Type	Prot	NA	Perm	NA	Perm	NA	Perm	NA	
Protected Phases	5	2		6		8		4	1
Permitted Phases			2		6		4		
Detector Phase	5	2	2	6	6	8	4	4	
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	31.8	31.8	26.8	26.8	14.6	43.8	43.8	9.6
Total Split (s)	42.0	66.6	66.6	34.2	34.2	43.8	43.8	43.8	9.6
Total Split (%)	35.0%	55.5%	55.5%	28.5%	28.5%	36.5%	36.5%	36.5%	8%
Yellow Time (s)	3.6	4.8	4.8	4.8	4.8	3.6	4.8	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.6	5.8	5.8	5.8	5.8	4.6		5.8	
Lead/Lag	Lead	Lag	Lag	Lag	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				Yes
Recall Mode	None	Max	Max	Max	Max	None	None	None	None
Act Effct Green (s)	35.8	69.1	69.1	28.6	28.6	35.2		34.0	
Actuated g/C Ratio	0.31	0.60	0.60	0.25	0.25	0.31		0.30	
v/c Ratio	0.95	0.21	0.00	0.88	0.31	0.01		0.93	
Control Delay	67.7	11.2	0.0	54.5	7.4	27.3		56.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	67.7	11.2	0.0	54.5	7.4	27.3		56.9	
LOS	E	B	A	D	A	C		E	
Approach Delay		41.7		46.6		27.3		56.9	
Approach LOS		D		D		C		E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 114.7	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 46.6	Intersection LOS: D
Intersection Capacity Utilization 95.9%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	505	425	4	0	741	149	0	3	0	141	2	315
Future Volume (veh/h)	505	425	4	0	741	149	0	3	0	141	2	315
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	537	452	3	0	788	121	0	3	0	150	2	203
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	567	2279	1016	2	987	440	0	488	0	209	10	226
Arrive On Green	0.31	0.63	0.63	0.00	0.27	0.27	0.00	0.26	0.00	0.26	0.26	0.26
Sat Flow, veh/h	1810	3610	1610	1810	3610	1610	0	1900	0	622	38	881
Grp Volume(v), veh/h	537	452	3	0	788	121	0	3	0	355	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1610	0	1900	0	1541	0	0
Q Serve(g_s), s	30.1	5.5	0.1	0.0	21.1	6.1	0.0	0.1	0.0	22.0	0.0	0.0
Cycle Q Clear(g_c), s	30.1	5.5	0.1	0.0	21.1	6.1	0.0	0.1	0.0	23.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.00		0.00	0.42		0.57
Lane Grp Cap(c), veh/h	567	2279	1016	2	987	440	0	488	0	445	0	0
V/C Ratio(X)	0.95	0.20	0.00	0.00	0.80	0.27	0.00	0.01	0.00	0.80	0.00	0.00
Avail Cap(c_a), veh/h	652	2279	1016	87	987	440	0	717	0	612	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	34.8	8.1	7.1	0.0	35.1	29.6	0.0	28.7	0.0	37.2	0.0	0.0
Incr Delay (d2), s/veh	20.5	0.2	0.0	0.0	6.7	1.5	0.0	0.0	0.0	5.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.7	1.9	0.0	0.0	9.7	2.5	0.0	0.1	0.0	8.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.3	8.3	7.1	0.0	41.8	31.2	0.0	28.7	0.0	42.3	0.0	0.0
LnGrp LOS	E	A	A	A	D	C	A	C	A	D	A	A
Approach Vol, veh/h		992			909			3			355	
Approach Delay, s/veh		33.7			40.4			28.7			42.3	
Approach LOS		C			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	71.4		32.5	37.2	34.2		32.5				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	60.8		38.0	37.4	28.4		* 39				
Max Q Clear Time (g_c+I1), s	0.0	7.5		25.1	32.1	23.1		2.1				
Green Ext Time (p_c), s	0.0	3.0		1.6	0.5	2.4		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		37.8
HCM 6th LOS		D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	215	10	50	14	2	9	13	67	4	32	3
Future Vol, veh/h	4	215	10	50	14	2	9	13	67	4	32	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	239	11	56	16	2	10	14	74	4	36	3
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	9.9	8.7	8	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	10%	2%	0%	78%	0%	10%
Vol Thru, %	15%	98%	0%	22%	0%	82%
Vol Right, %	75%	0%	100%	0%	100%	8%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	89	219	10	64	2	39
LT Vol	9	4	0	50	0	4
Through Vol	13	215	0	14	0	32
RT Vol	67	0	10	0	2	3
Lane Flow Rate	99	243	11	71	2	43
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.119	0.331	0.013	0.107	0.003	0.058
Departure Headway (Hd)	4.342	4.902	4.19	5.436	4.34	4.811
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	827	735	854	660	824	745
Service Time	2.365	2.628	1.916	3.167	2.07	2.838
HCM Lane V/C Ratio	0.12	0.331	0.013	0.108	0.002	0.058
HCM Control Delay	8	10	7	8.8	7.1	8.1
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.4	1.4	0	0.4	0	0.2

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	11	1	7	7	1	1	4	116	7	13	84	13
Future Vol, veh/h	11	1	7	7	1	1	4	116	7	13	84	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	13	1	8	8	1	1	5	135	8	15	98	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	286	290	106	290	293	140	113	0	0	144	0	0
Stage 1	136	136	-	150	150	-	-	-	-	-	-	-
Stage 2	150	154	-	140	143	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	670	624	954	666	621	913	1489	-	-	1451	-	-
Stage 1	872	788	-	857	777	-	-	-	-	-	-	-
Stage 2	857	774	-	868	782	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	661	614	954	651	611	912	1489	-	-	1450	-	-
Mov Cap-2 Maneuver	661	614	-	651	611	-	-	-	-	-	-	-
Stage 1	869	779	-	853	773	-	-	-	-	-	-	-
Stage 2	851	770	-	850	773	-	-	-	-	-	-	-

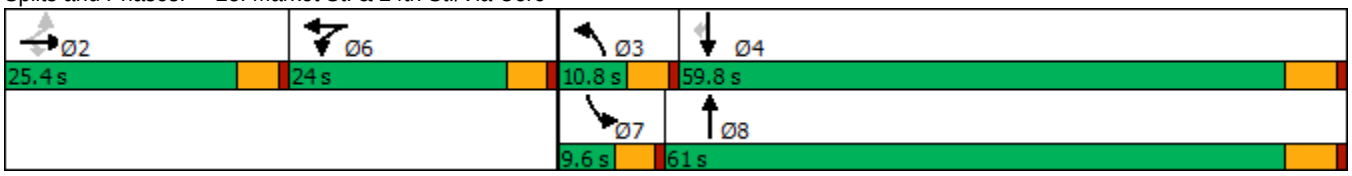
Approach	EB	WB	NB	SB
HCM Control Delay, s	10	10.5	0.2	0.9
HCM LOS	B	B		

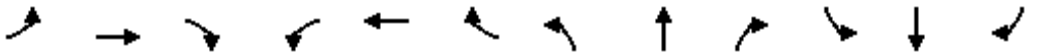
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1489	-	-	742	667	1450	-	-
HCM Lane V/C Ratio	0.003	-	-	0.03	0.016	0.01	-	-
HCM Control Delay (s)	7.4	0	-	10	10.5	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	3	30	189	221	37	44	628	6	612	3
Future Volume (vph)	3	30	189	221	37	44	628	6	612	3
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	25.4	25.4	25.4	24.0	24.0	10.8	61.0	9.6	59.8	59.8
Total Split (%)	21.2%	21.2%	21.2%	20.0%	20.0%	9.0%	50.8%	8.0%	49.8%	49.8%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		11.8	11.8	18.4	18.4	6.0	61.2	5.0	54.6	54.6
Actuated g/C Ratio		0.11	0.11	0.17	0.17	0.06	0.57	0.05	0.50	0.50
v/c Ratio		0.42	0.62	0.83	0.19	0.52	0.76	0.08	0.73	0.00
Control Delay		60.4	16.7	67.1	34.1	70.5	25.4	54.7	28.5	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		60.4	16.7	67.1	34.1	70.5	25.4	54.7	28.5	0.0
LOS		E	B	E	C	E	C	D	C	A
Approach Delay		23.0			60.8		28.1		28.6	
Approach LOS		C			E		C		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 108.2	
Natural Cycle: 105	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 32.5	Intersection LOS: C
Intersection Capacity Utilization 69.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	30	189	221	37	15	44	628	75	6	612	3
Future Volume (veh/h)	3	30	189	221	37	15	44	628	75	6	612	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	3	34	132	254	43	8	51	722	85	7	703	3
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	16	184	169	288	248	46	67	899	106	16	973	825
Arrive On Green	0.11	0.11	0.11	0.16	0.16	0.16	0.04	0.54	0.54	0.01	0.51	0.51
Sat Flow, veh/h	153	1739	1597	1810	1558	290	1810	1664	196	1810	1900	1610
Grp Volume(v), veh/h	37	0	132	254	0	51	51	0	807	7	703	3
Grp Sat Flow(s),veh/h/ln	1892	0	1597	1810	0	1848	1810	0	1860	1810	1900	1610
Q Serve(g_s), s	1.9	0.0	8.5	14.5	0.0	2.5	2.9	0.0	37.2	0.4	30.2	0.1
Cycle Q Clear(g_c), s	1.9	0.0	8.5	14.5	0.0	2.5	2.9	0.0	37.2	0.4	30.2	0.1
Prop In Lane	0.08		1.00	1.00		0.16	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	201	0	169	288	0	294	67	0	1004	16	973	825
V/C Ratio(X)	0.18	0.00	0.78	0.88	0.00	0.17	0.77	0.00	0.80	0.44	0.72	0.00
Avail Cap(c_a), veh/h	373	0	315	333	0	340	106	0	1004	86	973	825
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.0	0.0	45.9	43.4	0.0	38.3	50.3	0.0	19.7	52.0	19.9	12.6
Incr Delay (d2), s/veh	0.4	0.0	7.6	21.0	0.0	0.3	6.7	0.0	6.8	6.9	4.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	3.6	8.2	0.0	1.2	1.4	0.0	16.0	0.2	13.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.4	0.0	53.5	64.3	0.0	38.6	57.0	0.0	26.5	58.9	24.6	12.6
LnGrp LOS	D	A	D	E	A	D	E	A	C	E	C	B
Approach Vol, veh/h		169			305			858			713	
Approach Delay, s/veh		51.3			60.0			28.3			24.9	
Approach LOS		D			E			C			C	

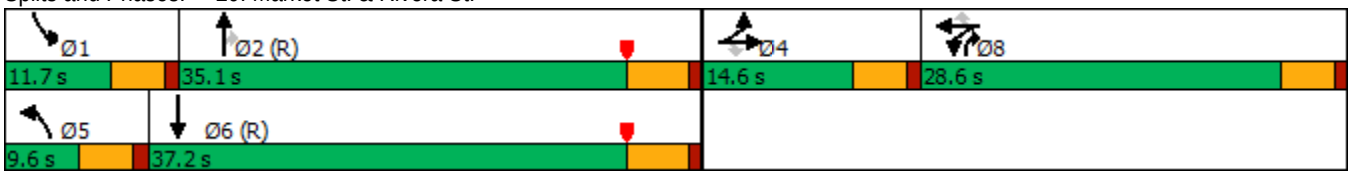
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		15.8	8.5	59.8		21.4	5.5	62.8				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		20.8	6.2	54.0		19.4	5.0	55.2				
Max Q Clear Time (g_c+I1), s		10.5	4.9	32.2		16.5	2.4	39.2				
Green Ext Time (p_c), s		0.4	0.0	4.5		0.3	0.0	4.9				

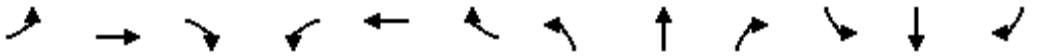
Intersection Summary	
HCM 6th Ctrl Delay	33.7
HCM 6th LOS	C

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	13	71	221	2	35	4	671	243	118	851
Future Volume (vph)	13	71	221	2	35	4	671	243	118	851
Turn Type	NA	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	4		8	8		5	2	8	1	6
Permitted Phases		4			8			2		
Detector Phase	4	4	8	8	8	5	2	8	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	14.6	14.6	28.6	28.6	28.6	9.6	35.1	28.6	9.6	29.1
Total Split (s)	14.6	14.6	28.6	28.6	28.6	9.6	35.1	28.6	11.7	37.2
Total Split (%)	16.2%	16.2%	31.8%	31.8%	31.8%	10.7%	39.0%	31.8%	13.0%	41.3%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.1	3.6	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	4.6	5.1	4.6	4.6	5.1
Lead/Lag						Lead	Lag		Lead	Lag
Lead-Lag Optimize?						Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	10.0	10.0	14.3	14.3	14.3	5.0	39.8	55.5	10.0	52.4
Actuated g/C Ratio	0.11	0.11	0.16	0.16	0.16	0.06	0.44	0.62	0.11	0.58
v/c Ratio	0.09	0.24	0.42	0.42	0.10	0.04	0.43	0.23	0.61	0.42
Control Delay	37.2	2.4	37.3	37.5	0.5	37.8	23.0	1.1	53.6	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Total Delay	37.2	2.4	37.3	37.5	0.5	37.8	23.2	1.1	53.6	13.9
LOS	D	A	D	D	A	D	C	A	D	B
Approach Delay	9.6			32.4			17.4			18.8
Approach LOS	A			C			B			B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 2 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 19.4	Intersection LOS: B
Intersection Capacity Utilization 52.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 29: Market St. & Rivera St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	13	71	221	2	35	4	671	243	118	851	0
Future Volume (veh/h)	6	13	71	221	2	35	4	671	243	118	851	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	6	13	30	229	0	17	4	692	150	122	877	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	46	100	126	408	0	181	10	1876	1019	143	2142	0
Arrive On Green	0.08	0.08	0.08	0.11	0.00	0.11	0.01	1.00	1.00	0.08	0.59	0.00
Sat Flow, veh/h	591	1280	1610	3619	0	1603	1810	3610	1610	1810	3705	0
Grp Volume(v), veh/h	19	0	30	229	0	17	4	692	150	122	877	0
Grp Sat Flow(s),veh/h/ln	1870	0	1610	1810	0	1603	1810	1805	1610	1810	1805	0
Q Serve(g_s), s	0.9	0.0	1.6	5.4	0.0	0.9	0.2	0.0	0.0	6.0	11.7	0.0
Cycle Q Clear(g_c), s	0.9	0.0	1.6	5.4	0.0	0.9	0.2	0.0	0.0	6.0	11.7	0.0
Prop In Lane	0.32		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	147	0	126	408	0	181	10	1876	1019	143	2142	0
V/C Ratio(X)	0.13	0.00	0.24	0.56	0.00	0.09	0.42	0.37	0.15	0.85	0.41	0.00
Avail Cap(c_a), veh/h	208	0	179	965	0	427	101	1876	1019	143	2142	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.97	0.97	0.97	0.60	0.60	0.00
Uniform Delay (d), s/veh	38.6	0.0	38.9	37.8	0.0	35.8	44.4	0.0	0.0	40.9	9.8	0.0
Incr Delay (d2), s/veh	0.4	0.0	1.0	1.2	0.0	0.2	10.1	0.5	0.3	23.9	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.6	2.4	0.0	0.3	0.1	0.1	0.1	3.5	3.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.0	0.0	39.9	39.0	0.0	36.0	54.5	0.5	0.3	64.8	10.2	0.0
LnGrp LOS	D	A	D	D	A	D	D	A	A	E	B	A
Approach Vol, veh/h		49			246			846			999	
Approach Delay, s/veh		39.5			38.8			0.8			16.8	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.7	51.9		11.7	5.1	58.5		14.8				
Change Period (Y+Rc), s	4.6	5.1		4.6	4.6	5.1		4.6				
Max Green Setting (Gmax), s	7.1	30.0		10.0	5.0	32.1		24.0				
Max Q Clear Time (g_c+I1), s	8.0	2.0		3.6	2.2	13.7		7.4				
Green Ext Time (p_c), s	0.0	5.1		0.0	0.0	5.4		0.7				

Intersection Summary			
HCM 6th Ctrl Delay		13.5	
HCM 6th LOS		B	

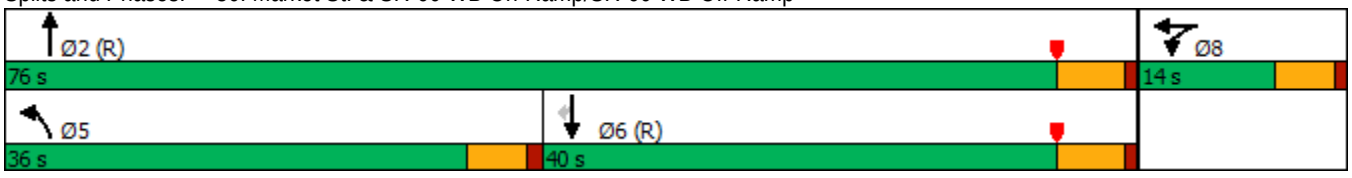
Notes

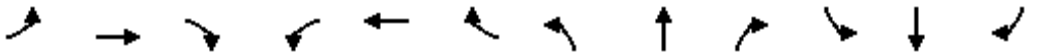
User approved volume balancing among the lanes for turning movement.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	5	606	399	312	979	164
Future Volume (vph)	5	606	399	312	979	164
Turn Type	NA	Free	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		Free				6
Detector Phase	8		5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	10.0		10.0	24.5	10.5	10.5
Total Split (s)	14.0		36.0	76.0	40.0	40.0
Total Split (%)	15.6%		40.0%	84.4%	44.4%	44.4%
Yellow Time (s)	4.0		4.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	C-Min	C-Min	C-Min
Act Effct Green (s)	8.4	90.0	25.0	74.4	43.3	43.3
Actuated g/C Ratio	0.09	1.00	0.28	0.83	0.48	0.48
v/c Ratio	0.53	0.38	0.81	0.11	0.58	0.19
Control Delay	50.4	0.7	42.8	6.0	14.5	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0
Total Delay	50.4	0.7	42.8	6.0	14.7	3.2
LOS	D	A	D	A	B	A
Approach Delay	7.0			26.6	13.0	
Approach LOS	A			C	B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 15.2	Intersection LOS: B
Intersection Capacity Utilization 66.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 30: Market St. & SR-60 WB On-Ramp/SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	83	5	606	399	312	0	0	979	164
Future Volume (veh/h)	0	0	0	83	5	606	399	312	0	0	979	164
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				85	5	0	407	318	0	0	999	0
Peak Hour Factor				0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				110	6		444	2957	0	0	1871	
Arrive On Green				0.06	0.06	0.00	0.41	1.00	0.00	0.00	1.00	0.00
Sat Flow, veh/h				1714	101	1610	1810	3705	0	0	3705	1610
Grp Volume(v), veh/h				90	0	0	407	318	0	0	999	0
Grp Sat Flow(s),veh/h/ln				1814	0	1610	1810	1805	0	0	1805	1610
Q Serve(g_s), s				4.4	0.0	0.0	19.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				4.4	0.0	0.0	19.1	0.0	0.0	0.0	0.0	0.0
Prop In Lane				0.94		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				117	0		444	2957	0	0	1871	
V/C Ratio(X)				0.77	0.00		0.92	0.11	0.00	0.00	0.53	
Avail Cap(c_a), veh/h				181	0		623	2957	0	0	1871	
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	0.00	0.00	0.88	0.88	0.00	0.00	0.92	0.00
Uniform Delay (d), s/veh				41.5	0.0	0.0	25.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				10.3	0.0	0.0	13.3	0.1	0.0	0.0	1.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.2	0.0	0.0	7.6	0.0	0.0	0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				51.7	0.0	0.0	39.0	0.1	0.0	0.0	1.0	0.0
LnGrp LOS				D	A		D	A	A	A	A	
Approach Vol, veh/h					90			725			999	
Approach Delay, s/veh					51.7			21.9			1.0	
Approach LOS					D			C			A	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		79.2			27.1	52.2		10.8				
Change Period (Y+Rc), s		5.5			5.0	5.5		5.0				
Max Green Setting (Gmax), s		70.5			31.0	34.5		9.0				
Max Q Clear Time (g_c+I1), s		2.0			21.1	2.0		6.4				
Green Ext Time (p_c), s		2.1			0.9	7.6		0.1				

Intersection Summary		
HCM 6th Ctrl Delay	11.9	
HCM 6th LOS	B	

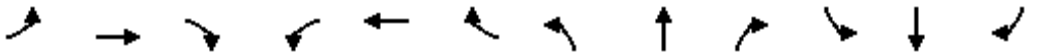
Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	3	646	629	424	638
Future Volume (vph)	3	646	629	424	638
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	24.5	10.0	10.5
Total Split (s)	21.0	21.0	32.0	37.0	69.0
Total Split (%)	23.3%	23.3%	35.6%	41.1%	76.7%
Yellow Time (s)	4.0	4.0	4.5	4.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.0	5.5
Lead/Lag			Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Min	None	C-Min
Act Effct Green (s)	11.1	11.1	37.2	26.2	68.4
Actuated g/C Ratio	0.12	0.12	0.41	0.29	0.76
v/c Ratio	0.39	0.77	0.47	0.82	0.24
Control Delay	40.3	12.2	22.2	52.8	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	40.3	12.2	22.2	52.8	3.3
LOS	D	B	C	D	A
Approach Delay	15.5		22.2		23.1
Approach LOS	B		C		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 15 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 20.6	Intersection LOS: C
Intersection Capacity Utilization 66.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 31: Market St. & SR-60 EB Off-Ramp/SR-60 EB On-Ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	3	646	0	0	0	0	629	45	424	638	0
Future Volume (veh/h)	83	3	646	0	0	0	0	629	45	424	638	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	85	3	394				0	642	0	433	651	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	284	10	459				0	799		794	2604	0
Arrive On Green	0.16	0.16	0.16				0.00	0.22	0.00	0.88	1.00	0.00
Sat Flow, veh/h	1751	62	2834				0	3800	0	1810	3705	0
Grp Volume(v), veh/h	88	0	394				0	642	0	433	651	0
Grp Sat Flow(s),veh/h/ln	1812	0	1417				0	1805	0	1810	1805	0
Q Serve(g_s), s	3.8	0.0	12.2				0.0	15.2	0.0	5.1	0.0	0.0
Cycle Q Clear(g_c), s	3.8	0.0	12.2				0.0	15.2	0.0	5.1	0.0	0.0
Prop In Lane	0.97		1.00				0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	294	0	459				0	799		794	2604	0
V/C Ratio(X)	0.30	0.00	0.86				0.00	0.80		0.55	0.25	0.00
Avail Cap(c_a), veh/h	322	0	504				0	1063		794	2604	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.79	0.79	0.00
Uniform Delay (d), s/veh	33.2	0.0	36.7				0.0	33.2	0.0	3.4	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	12.9				0.0	8.4	0.0	0.6	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	4.8				0.0	7.2	0.0	1.2	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.8	0.0	49.6				0.0	41.6	0.0	4.0	0.2	0.0
LnGrp LOS	C	A	D				A	D		A	A	A
Approach Vol, veh/h		482						642			1084	
Approach Delay, s/veh		46.7						41.6			1.7	
Approach LOS		D						D			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	45.0	25.4		19.6		70.4
Change Period (Y+Rc), s	5.5	* 5.5		5.0		5.5
Max Green Setting (Gmax), s	32.0	* 27		16.0		63.5
Max Q Clear Time (g_c+I1), s	7.1	17.2		14.2		2.0
Green Ext Time (p_c), s	1.3	2.8		0.4		4.8

Intersection Summary		
HCM 6th Ctrl Delay		23.1
HCM 6th LOS		C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	0	30	1	1	14	40	630	0	17	1177	91
Future Vol, veh/h	30	0	30	1	1	14	40	630	0	17	1177	91
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	145	-	-	140	-	110
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	31	0	31	1	1	15	42	656	0	18	1226	95

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1675	2003	613	1390	2098	329	1321	0	0	657	0	0
Stage 1	1262	1262	-	741	741	-	-	-	-	-	-	-
Stage 2	413	741	-	649	1357	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	*213	*104	*603	*492	82	673	*905	-	-	940	-	-
Stage 1	*569	*498	-	*379	426	-	-	-	-	-	-	-
Stage 2	*592	*426	-	*569	483	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	*198	*97	*603	*442	77	672	*905	-	-	939	-	-
Mov Cap-2 Maneuver	*336	*241	-	*496	226	-	-	-	-	-	-	-
Stage 1	*542	*488	-	*361	406	-	-	-	-	-	-	-
Stage 2	*551	*406	-	*529	474	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.7	11.3	0.5	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 905	-	-	432	587	939	-	-
HCM Lane V/C Ratio	0.046	-	-	0.145	0.028	0.019	-	-
HCM Control Delay (s)	9.2	-	-	14.7	11.3	8.9	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.1	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	10.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	227	51	41	663	324	146
Future Vol, veh/h	227	51	41	663	324	146
Conflicting Peds, #/hr	0	0	0	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	284	64	51	829	405	183

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1016	499	590	0	-	0
Stage 1	499	-	-	-	-	-
Stage 2	517	-	-	-	-	-
Critical Hdwy	6.6	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	~ 251	576	995	-	-	-
Stage 1	614	-	-	-	-	-
Stage 2	569	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 237	575	993	-	-	-
Mov Cap-2 Maneuver	370	-	-	-	-	-
Stage 1	581	-	-	-	-	-
Stage 2	568	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	52.5	0.5	0
HCM LOS	F		

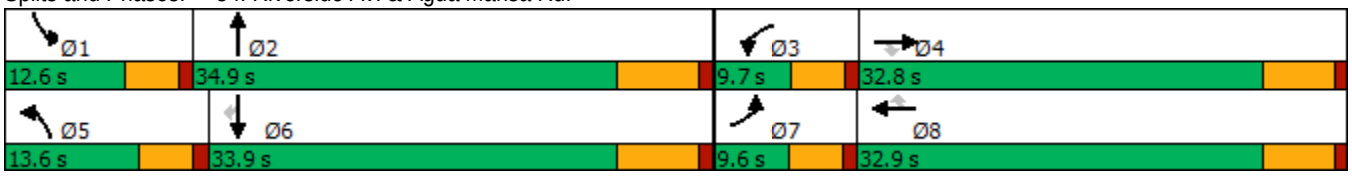
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	993	-	396	-	-
HCM Lane V/C Ratio	0.052	-	0.878	-	-
HCM Control Delay (s)	8.8	-	52.5	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q(veh)	0.2	-	8.8	-	-

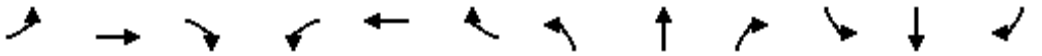
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	86	388	209	88	233	44	172	473	96	521	42
Future Volume (vph)	86	388	209	88	233	44	172	473	96	521	42
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	9.6	32.8	32.8	9.7	32.9	32.9	13.6	34.9	12.6	33.9	33.9
Total Split (%)	10.7%	36.4%	36.4%	10.8%	36.6%	36.6%	15.1%	38.8%	14.0%	37.7%	37.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	5.1	20.5	20.5	5.2	20.6	20.6	9.2	22.1	7.3	17.7	17.7
Actuated g/C Ratio	0.07	0.27	0.27	0.07	0.28	0.28	0.12	0.30	0.10	0.24	0.24
v/c Ratio	0.73	0.77	0.37	0.73	0.46	0.08	0.81	0.58	0.56	0.63	0.09
Control Delay	72.8	36.6	5.4	72.4	26.2	0.3	63.8	25.1	48.9	29.4	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.8	36.6	5.4	72.4	26.2	0.3	63.8	25.1	48.9	29.4	0.4
LOS	E	D	A	E	C	A	E	C	D	C	A
Approach Delay		31.6			34.2			33.8		30.4	
Approach LOS		C			C			C		C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 74.6	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 32.3	Intersection LOS: C
Intersection Capacity Utilization 67.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	388	209	88	233	44	172	473	119	96	521	42
Future Volume (veh/h)	86	388	209	88	233	44	172	473	119	96	521	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	90	404	120	92	243	31	179	493	118	100	543	36
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	116	504	425	118	506	429	221	775	185	129	784	348
Arrive On Green	0.06	0.27	0.27	0.07	0.27	0.27	0.12	0.27	0.27	0.07	0.22	0.22
Sat Flow, veh/h	1810	1900	1605	1810	1900	1608	1810	2893	688	1810	3610	1603
Grp Volume(v), veh/h	90	404	120	92	243	31	179	307	304	100	543	36
Grp Sat Flow(s),veh/h/ln	1810	1900	1605	1810	1900	1608	1810	1805	1776	1810	1805	1603
Q Serve(g_s), s	3.2	12.9	3.9	3.3	7.0	0.9	6.3	9.8	9.9	3.5	9.0	1.2
Cycle Q Clear(g_c), s	3.2	12.9	3.9	3.3	7.0	0.9	6.3	9.8	9.9	3.5	9.0	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.39	1.00		1.00
Lane Grp Cap(c), veh/h	116	504	425	118	506	429	221	484	476	129	784	348
V/C Ratio(X)	0.78	0.80	0.28	0.78	0.48	0.07	0.81	0.63	0.64	0.77	0.69	0.10
Avail Cap(c_a), veh/h	139	787	665	142	790	669	250	787	774	222	1518	674
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.0	22.3	19.0	30.0	20.1	17.9	27.9	21.0	21.1	29.7	23.5	20.4
Incr Delay (d2), s/veh	16.4	3.3	0.4	16.2	0.7	0.1	14.1	1.4	1.4	3.7	1.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	5.4	1.3	1.8	2.8	0.3	3.2	3.6	3.6	1.5	3.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.4	25.7	19.4	46.1	20.8	17.9	42.0	22.4	22.5	33.4	24.6	20.6
LnGrp LOS	D	C	B	D	C	B	D	C	C	C	C	C
Approach Vol, veh/h		614			366			790			679	
Approach Delay, s/veh		27.5			26.9			26.9			25.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	24.0	8.9	23.1	12.6	20.6	8.8	23.2
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	8.0	28.4	5.1	27.0	9.0	27.4	5.0	27.1
Max Q Clear Time (g_c+I1), s	5.5	11.9	5.3	14.9	8.3	11.0	5.2	9.0
Green Ext Time (p_c), s	0.0	2.9	0.0	2.1	0.0	2.9	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	26.7
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	0	0	0	0	8
Future Vol, veh/h	4	0	0	0	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	92	92	92	92	50
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	8	0	0	0	0	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	8	8	16	0	-	0
Stage 1	8	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	1018	1080	1615	-	-	-
Stage 1	1020	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1018	1080	1615	-	-	-
Mov Cap-2 Maneuver	1018	-	-	-	-	-
Stage 1	1020	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1615	-	1018	-	-
HCM Lane V/C Ratio	-	-	0.008	-	-
HCM Control Delay (s)	0	-	8.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

APPENDIX 3.3: EXISTING (2022) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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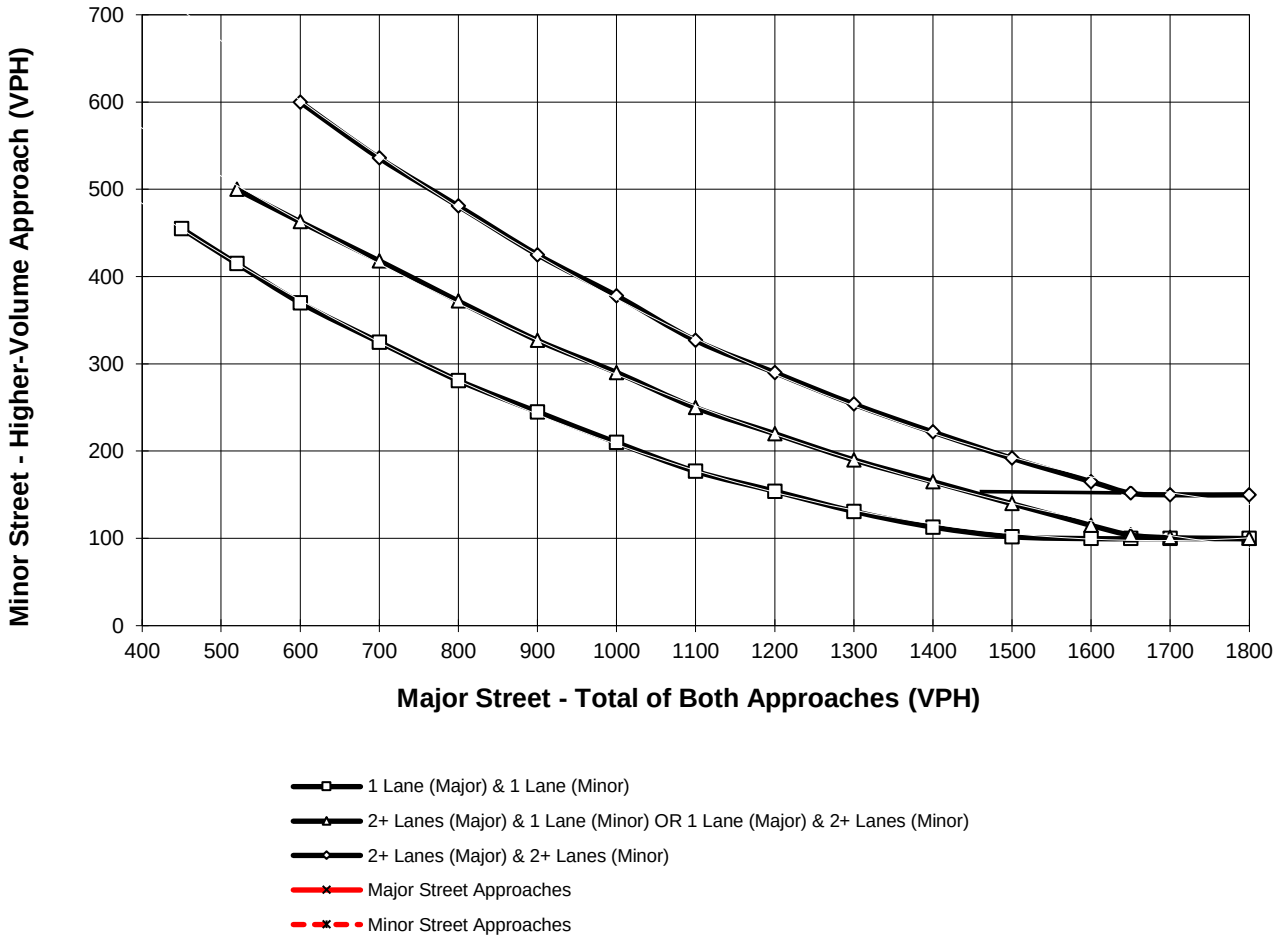
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2022) Conditions - Weekday AM Peak Hour**

Major Street Name = **20th St.**
Total of Both Approaches (VPH) = **275**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Van Dell Rd.**
High Volume Approach (VPH) = **63**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

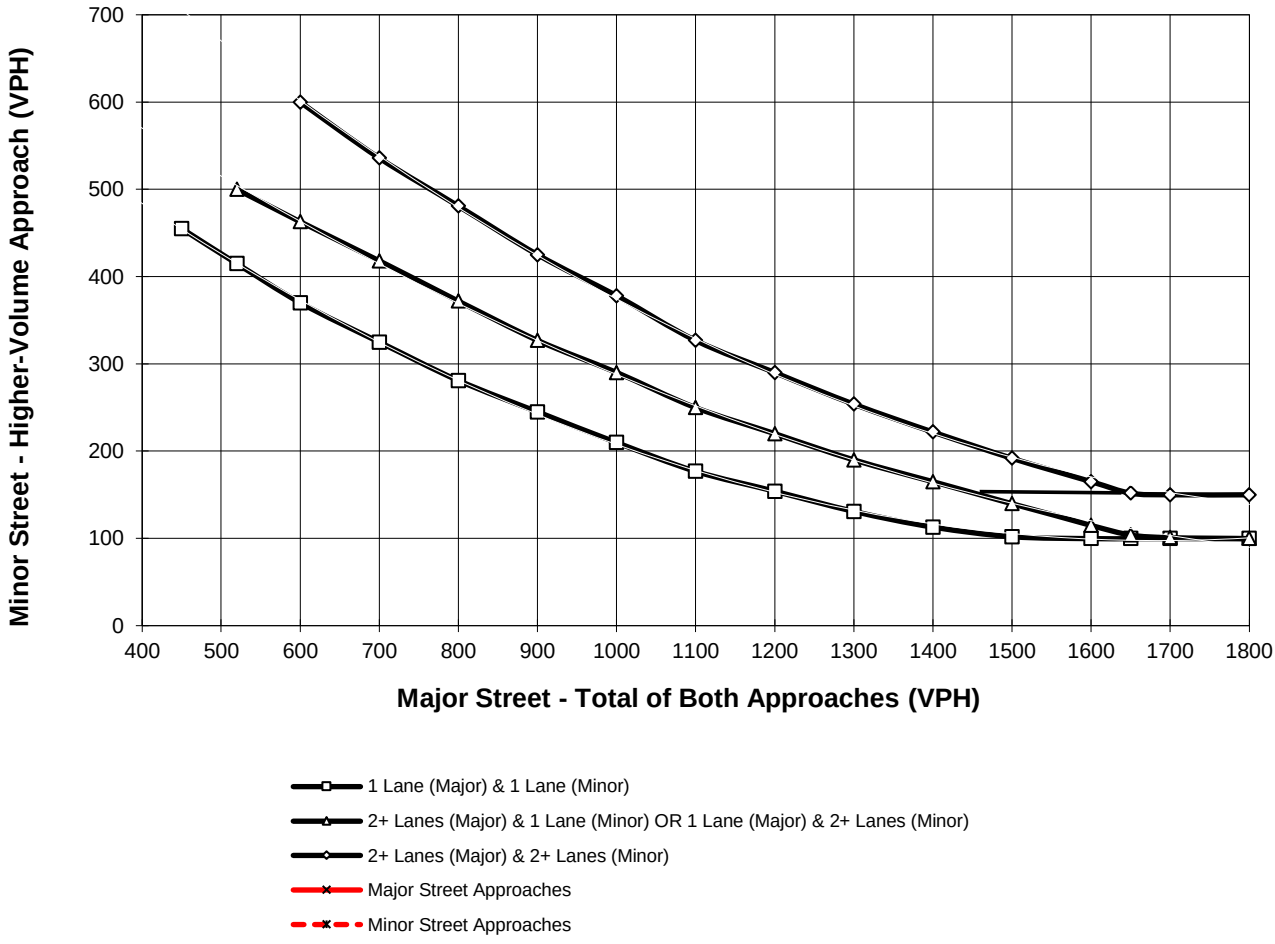
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2022) Conditions - Weekday AM Peak Hour**

Major Street Name = **20th St.**
Total of Both Approaches (VPH) = **300**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Avalon St.**
High Volume Approach (VPH) = **73**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

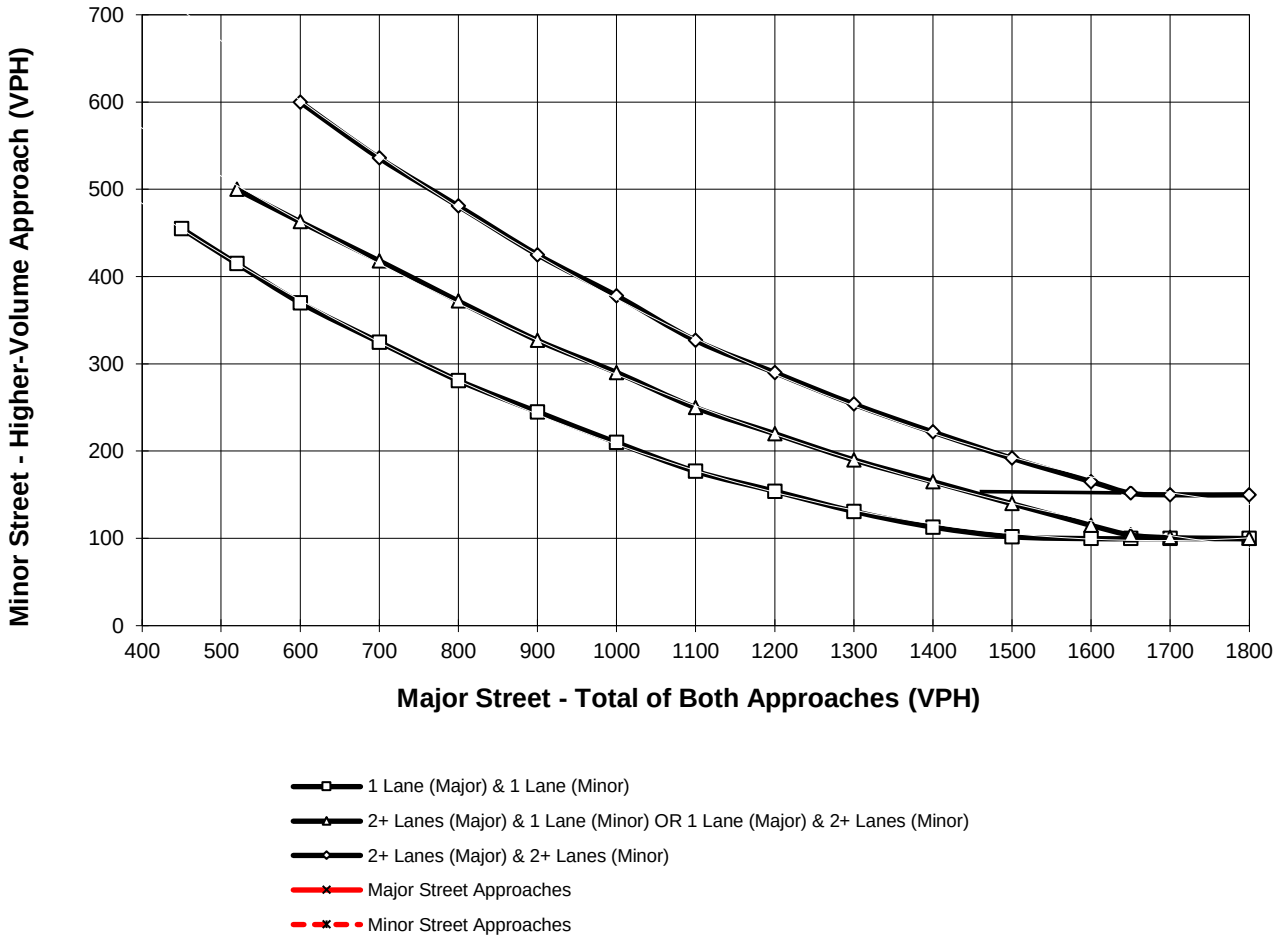
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2022) Conditions - Weekday AM Peak Hour**

Major Street Name = **Avalon St.**
Total of Both Approaches (VPH) = **105**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **24th St.**
High Volume Approach (VPH) = **33**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

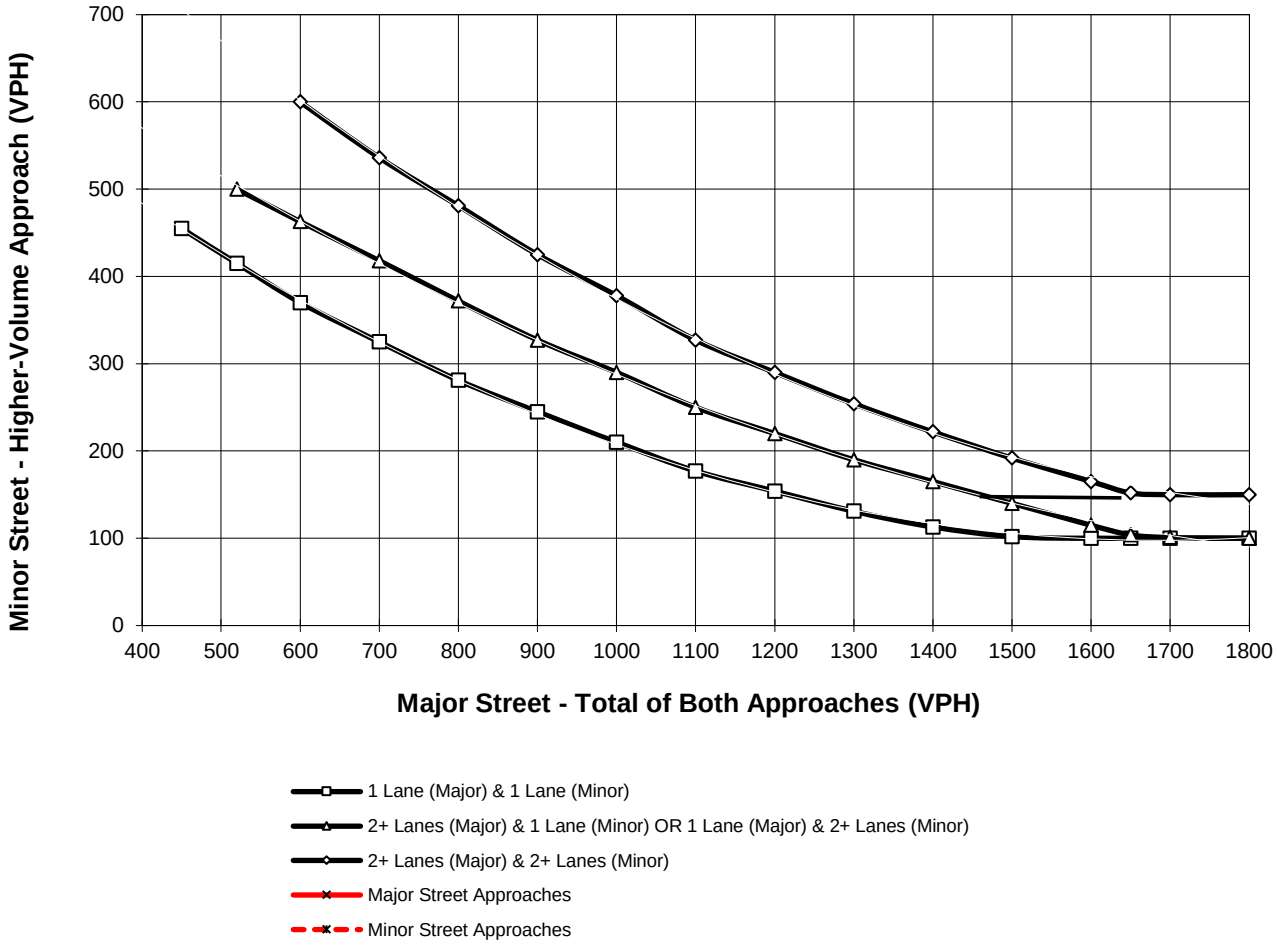
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2022) Conditions - Weekday AM Peak Hour**

Major Street Name = **Avalon St.**
Total of Both Approaches (VPH) = **102**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **26th St.**
High Volume Approach (VPH) = **17**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

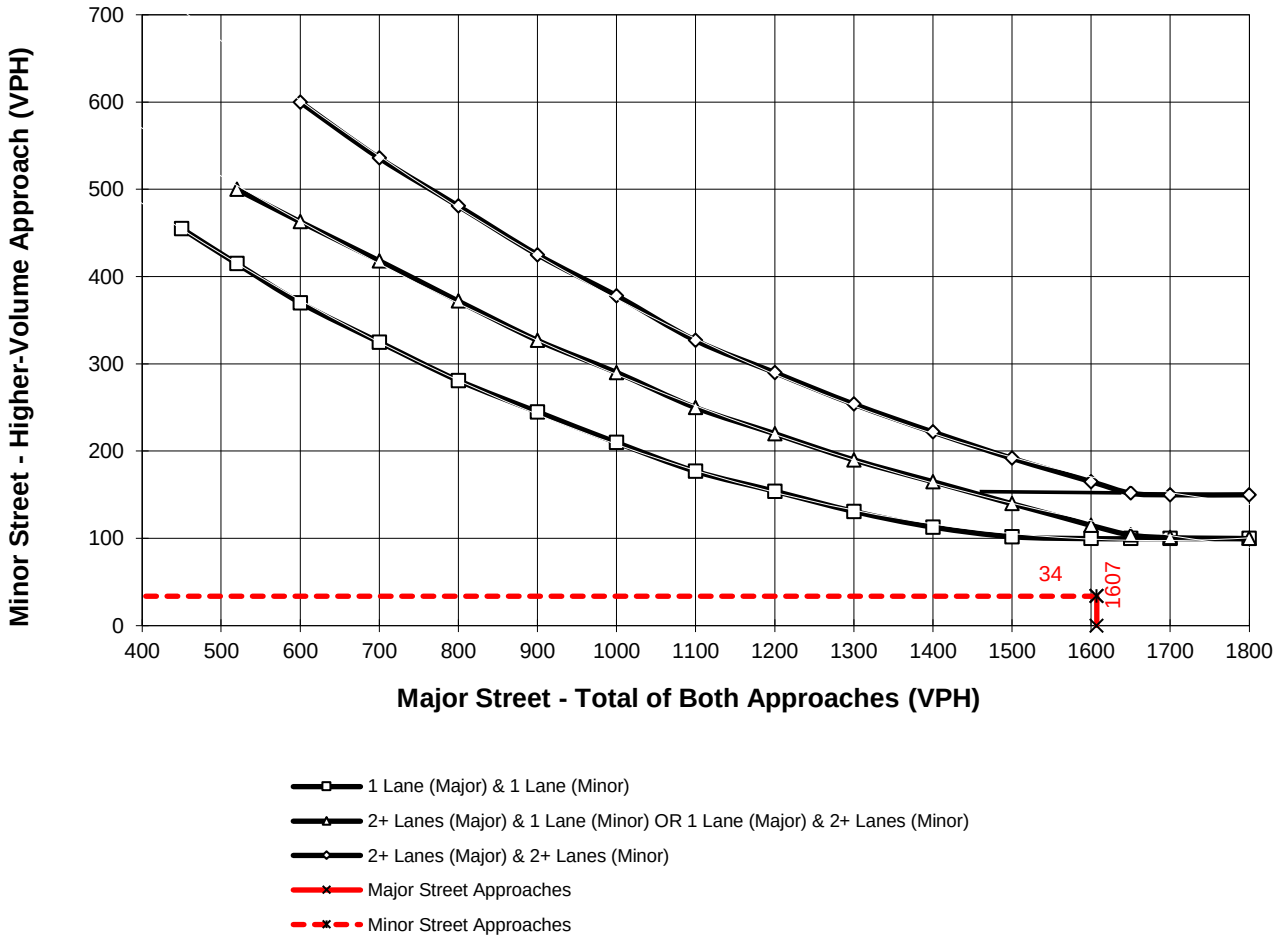
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2022) Conditions - Weekday AM Peak Hour**

Major Street Name = **Rubidoux St.**
Total of Both Approaches (VPH) = **1607**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **24th St.**
High Volume Approach (VPH) = **34**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

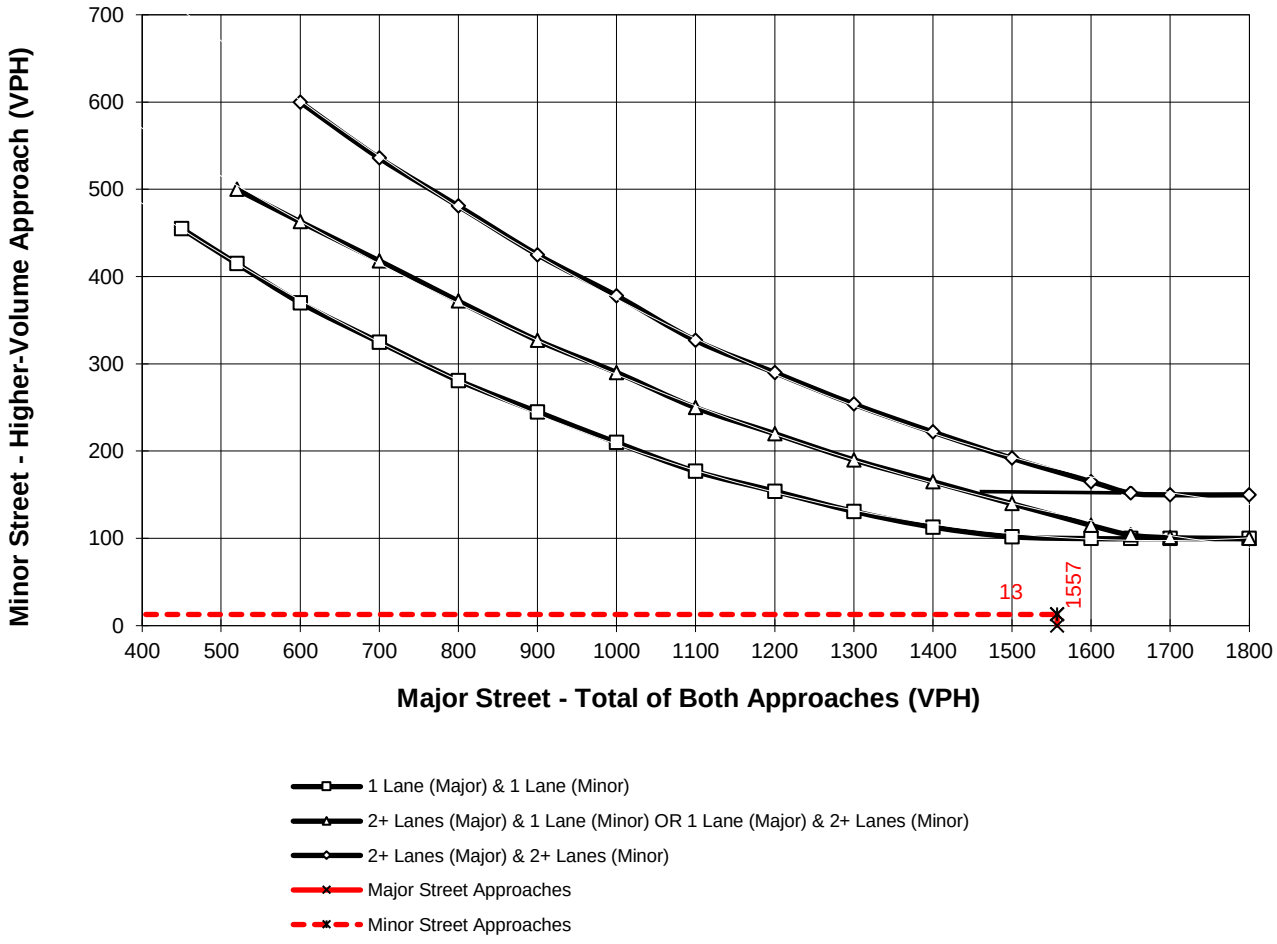
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2022) Conditions - Weekday PM Peak Hour**

Major Street Name = **Rubidoux St.**
Total of Both Approaches (VPH) = **1557**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **26th St.**
High Volume Approach (VPH) = **13**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

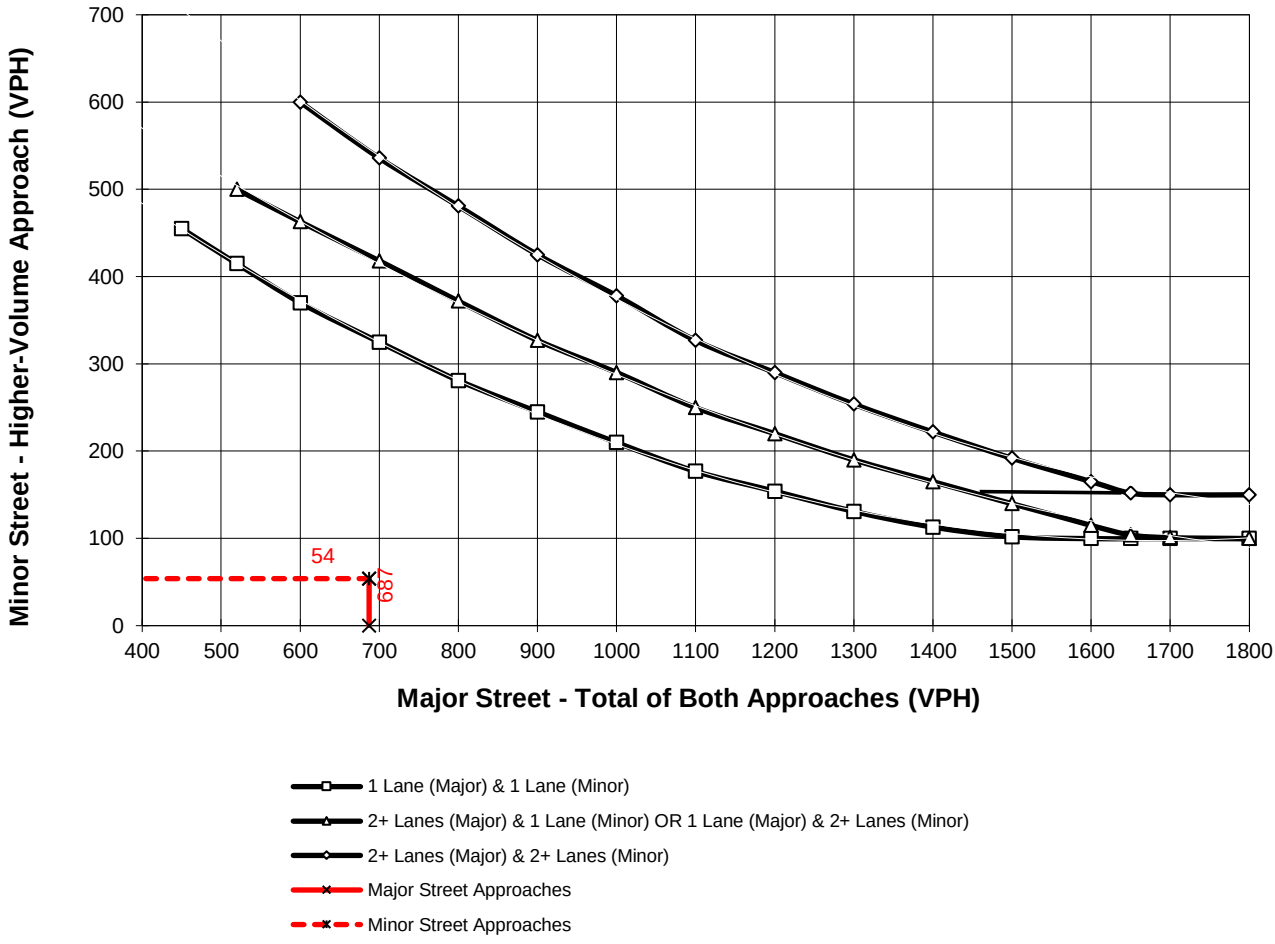
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2022) Conditions - Weekday AM Peak Hour**

Major Street Name = **Frontage Rd.**
Total of Both Approaches (VPH) = **687**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Hall Av.**
High Volume Approach (VPH) = **54**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

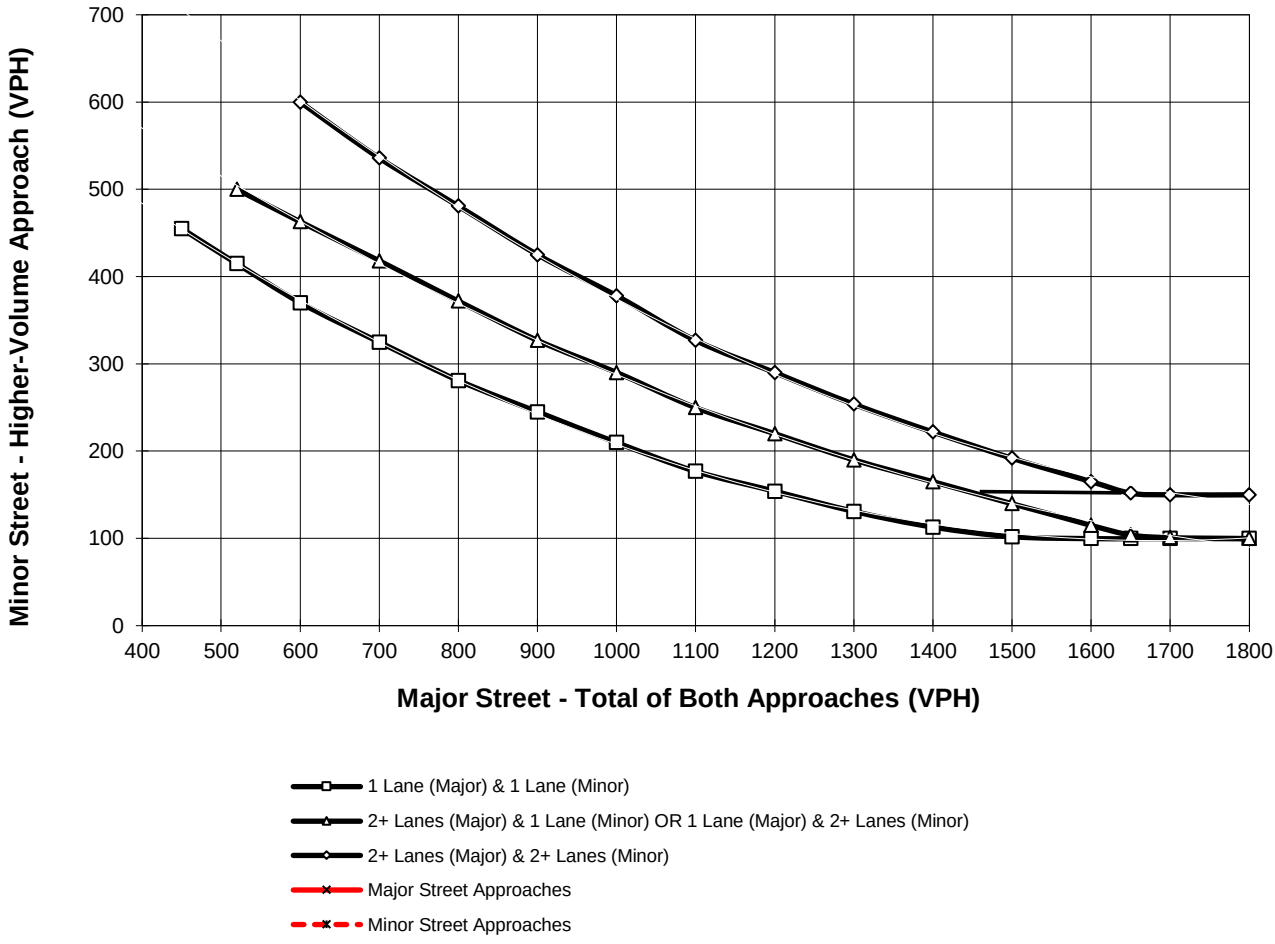
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2022) Conditions - Weekday PM Peak Hour**

Major Street Name = **24th St.**
Total of Both Approaches (VPH) = **295**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Hall Av.**
High Volume Approach (VPH) = **89**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2022) Conditions - Weekday PM Peak Hour**

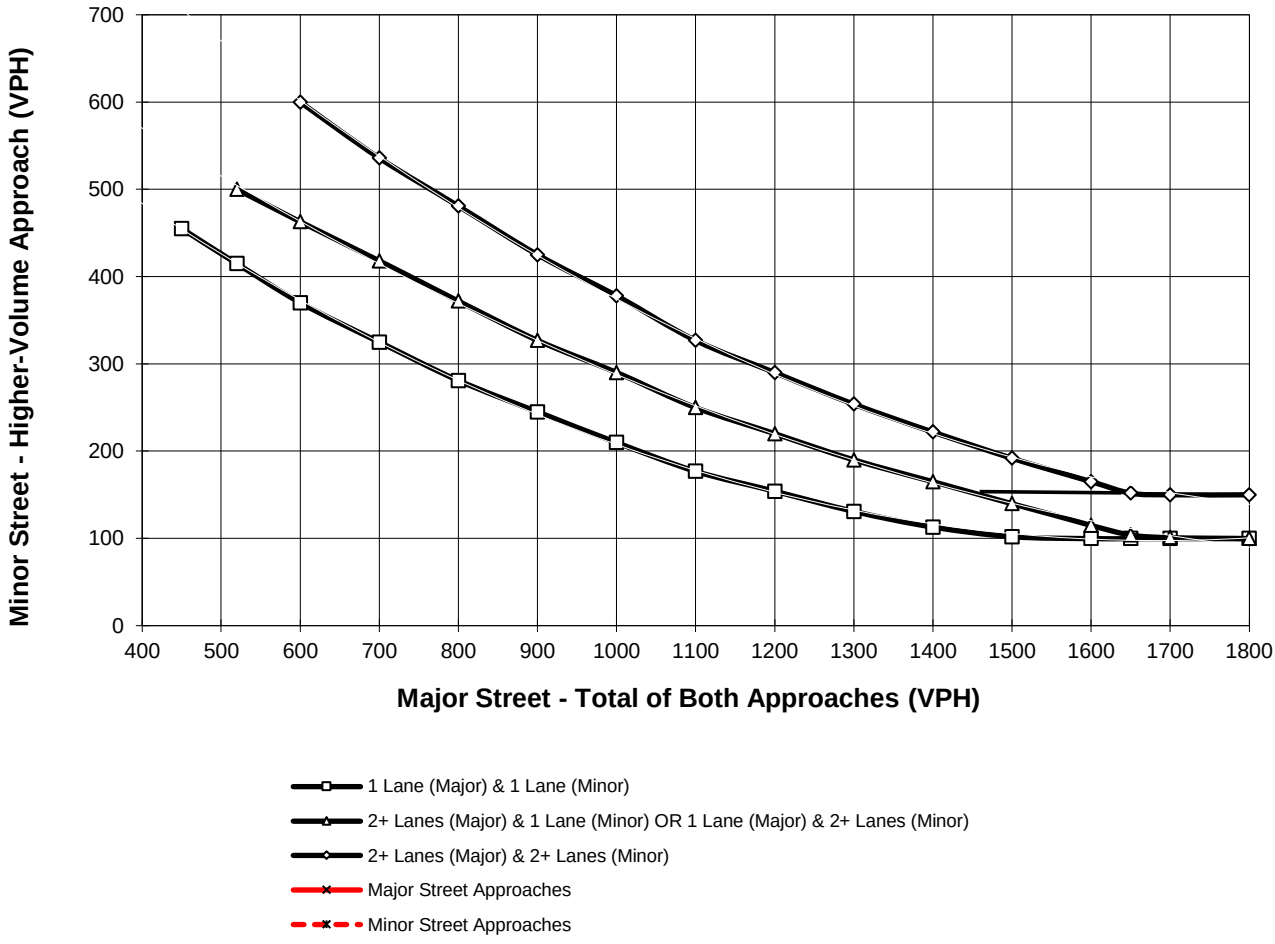
Major Street Name = **Hall Av.**

Total of Both Approaches (VPH) = **237**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **26th St.**

High Volume Approach (VPH) = **19**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

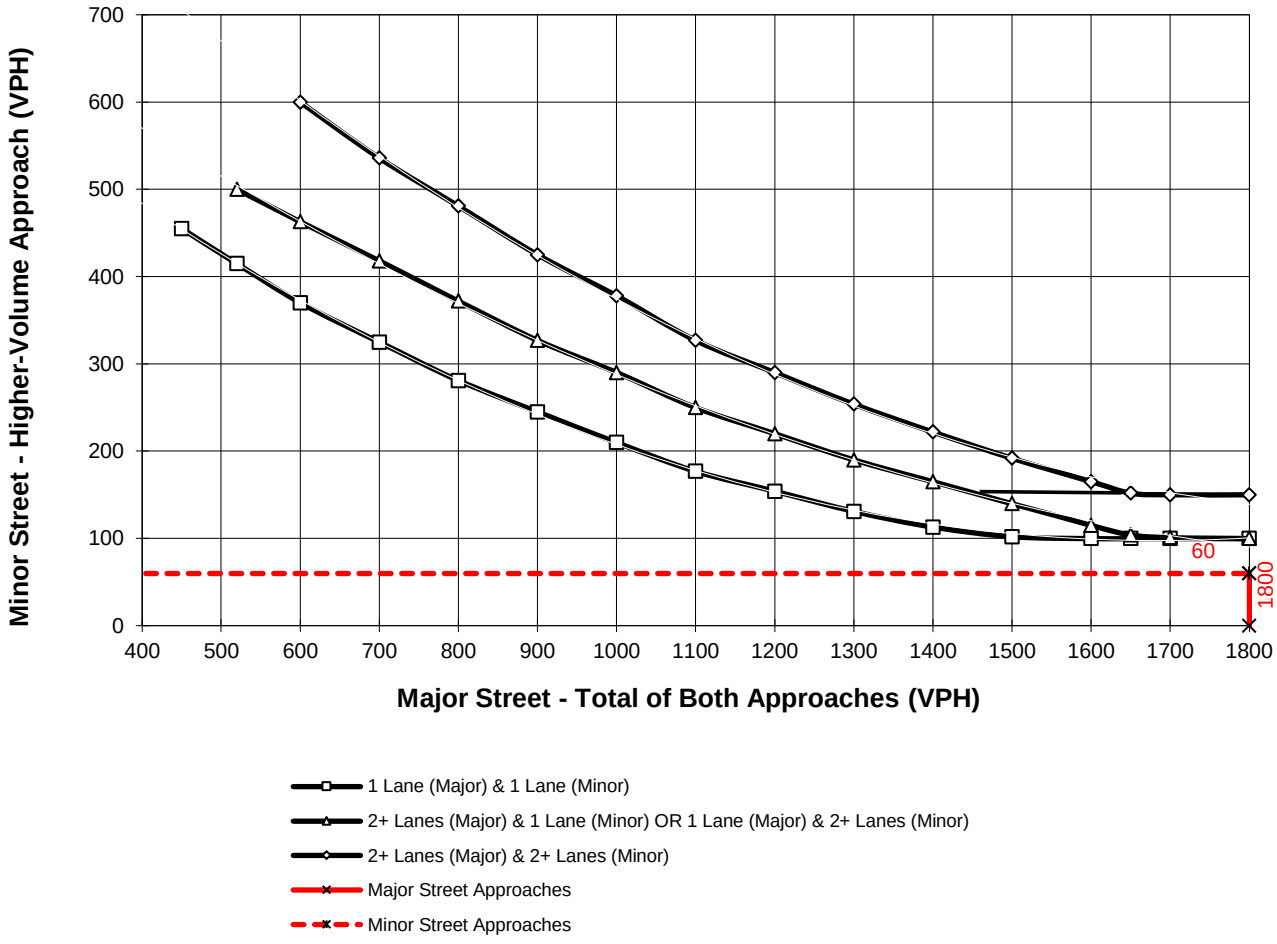
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2022) Conditions - Weekday PM Peak Hour**

Major Street Name = **Market St.**
Total of Both Approaches (VPH) = **1955**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Redwood Dr.**
High Volume Approach (VPH) = **60**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

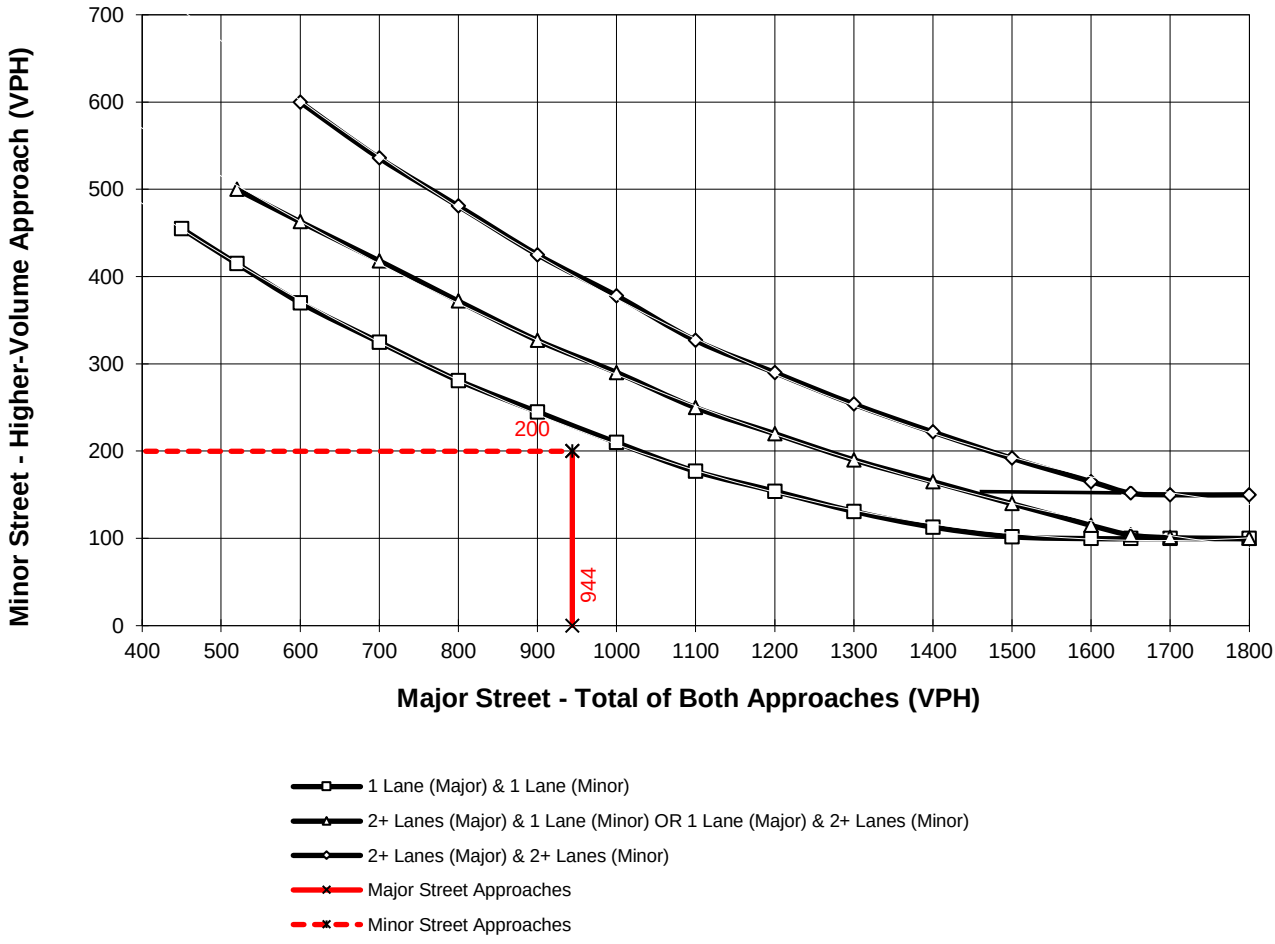
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2022) Conditions - Weekday PM Peak Hour**

Major Street Name = **Agua Mansa Rd.**
Total of Both Approaches (VPH) = **944**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **El Rivino Rd.**
High Volume Approach (VPH) = **200**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

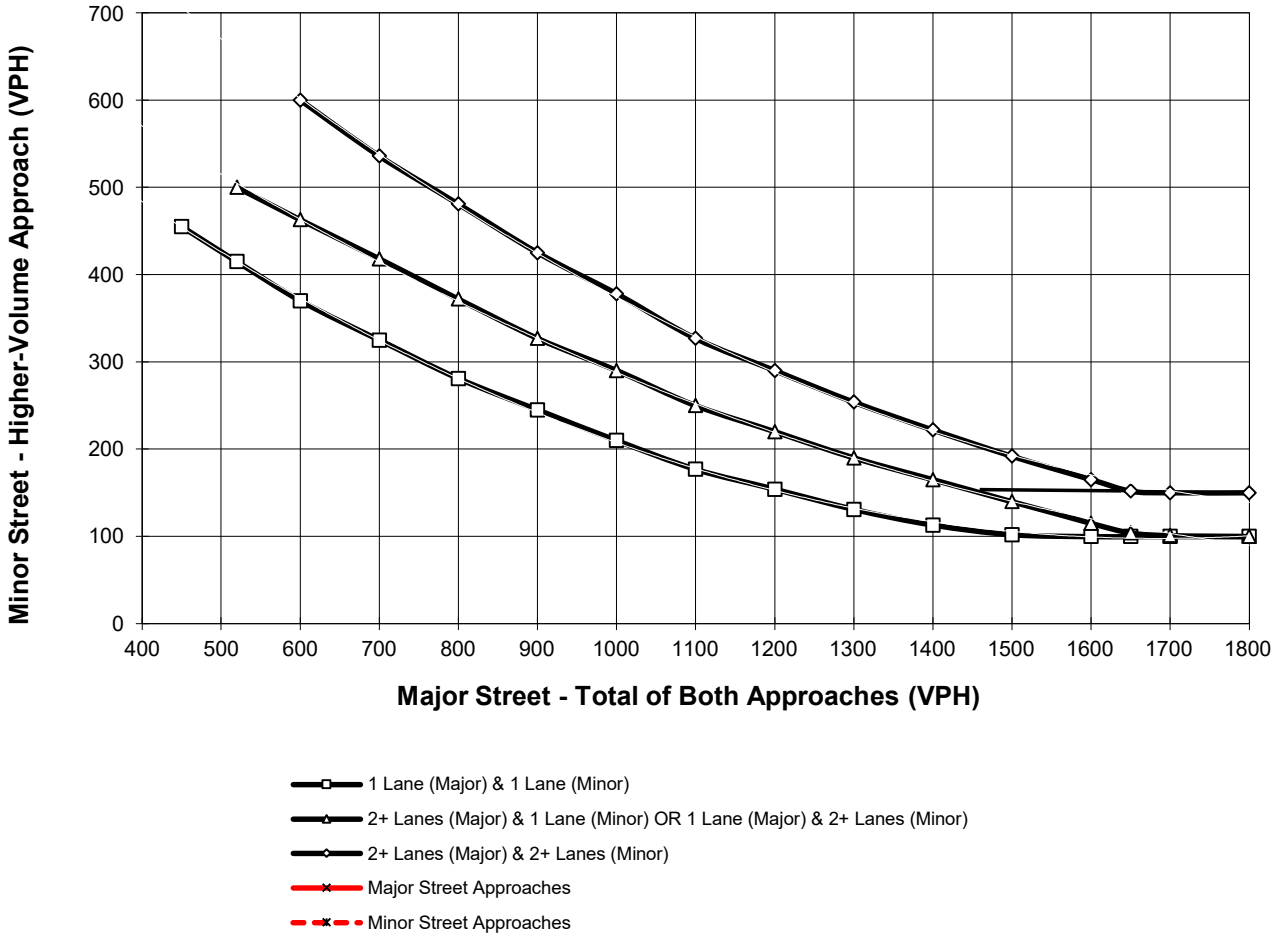
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2022) Conditions - Weekday PM Peak Hour**

Major Street Name = **Van Dell Rd.**
Total of Both Approaches (VPH) = **8**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **25th St.**
High Volume Approach (VPH) = **4**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

APPENDIX 3.4: EXISTING (2022) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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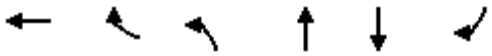


Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	513	356	242	1159	1477	604
v/c Ratio	0.89	0.67	0.81	0.53	0.70	0.60
Control Delay	50.8	31.8	70.4	9.6	30.6	4.8
Queue Delay	16.6	0.0	0.0	0.4	21.7	0.0
Total Delay	67.4	31.8	70.4	9.9	52.3	4.8
Queue Length 50th (ft)	314	174	155	90	338	0
Queue Length 95th (ft)	#500	282	m233	m138	398	77
Internal Link Dist (ft)	1745			340	476	
Turn Bay Length (ft)		480				
Base Capacity (vph)	625	577	329	2194	2103	1014
Starvation Cap Reductn	0	0	0	479	0	0
Spillback Cap Reductn	109	0	0	0	672	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.99	0.62	0.74	0.68	1.03	0.60

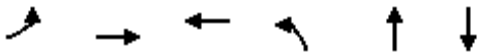
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	470	546	924	515	505	1508
v/c Ratio	0.77	0.94	0.73	0.67	0.93	0.72
Control Delay	41.2	56.4	47.7	20.7	52.1	14.2
Queue Delay	0.0	0.0	0.0	0.0	48.1	48.4
Total Delay	41.2	56.4	47.7	20.7	100.2	62.6
Queue Length 50th (ft)	301	351	235	179	347	482
Queue Length 95th (ft)	435	#577	#292	m246	m#518	577
Internal Link Dist (ft)		2158	960			340
Turn Bay Length (ft)	340			555	400	
Base Capacity (vph)	631	603	1263	774	582	2083
Starvation Cap Reductn	0	0	0	0	121	745
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.91	0.73	0.67	1.10	1.13

Intersection Summary

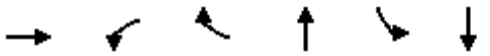
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	18	228	573	48	718	1076
v/c Ratio	0.08	0.73	0.96	0.56	0.49	0.73
Control Delay	39.5	32.8	65.3	40.6	17.2	32.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.5	32.8	65.3	40.6	17.2	32.0
Queue Length 50th (ft)	12	66	386	21	156	327
Queue Length 95th (ft)	30	134	#599	m38	m232	#505
Internal Link Dist (ft)		471	1307		110	1510
Turn Bay Length (ft)				75		
Base Capacity (vph)	379	441	602	85	1455	1484
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.52	0.95	0.56	0.49	0.73

Intersection Summary

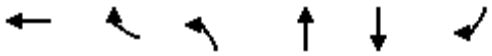
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	655	18	5	1057	207	625
v/c Ratio	0.97	0.22	0.03	0.87	0.86	0.35
Control Delay	61.4	57.2	0.2	35.2	65.6	11.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.4	57.2	0.2	35.2	65.6	11.7
Queue Length 50th (ft)	408	13	0	291	152	82
Queue Length 95th (ft)	#753	37	0	351	m#304	m98
Internal Link Dist (ft)	1049			1396		322
Turn Bay Length (ft)			25		90	
Base Capacity (vph)	678	82	191	1387	241	1772
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.97	0.22	0.03	0.76	0.86	0.35

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

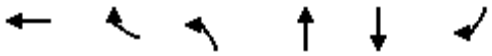


Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	62	798	195	331	947	194
v/c Ratio	0.37	0.49	0.65	0.11	0.44	0.19
Control Delay	43.6	1.1	28.1	5.3	10.4	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.2	0.0
Total Delay	43.6	1.1	28.1	5.3	10.5	2.2
Queue Length 50th (ft)	34	0	110	52	207	6
Queue Length 95th (ft)	71	0	189	111	178	19
Internal Link Dist (ft)	1457			561	315	
Turn Bay Length (ft)			125			
Base Capacity (vph)	206	1615	421	2989	2141	1037
Starvation Cap Reductn	0	0	0	0	404	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.49	0.46	0.11	0.55	0.19

Intersection Summary

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	133	495	451	549	429
v/c Ratio	0.58	0.62	0.38	0.83	0.16
Control Delay	46.7	7.2	24.8	34.9	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	46.7	7.2	24.8	34.9	3.9
Queue Length 50th (ft)	71	0	98	142	27
Queue Length 95th (ft)	129	46	160	351	75
Internal Link Dist (ft)	1642		355		561
Turn Bay Length (ft)		350		125	
Base Capacity (vph)	266	842	1197	803	2738
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.50	0.59	0.38	0.68	0.16

Intersection Summary



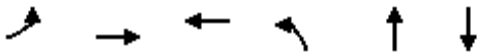
Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	369	333	171	1384	1303	504
v/c Ratio	0.81	0.74	0.70	0.58	0.52	0.50
Control Delay	50.2	40.4	73.2	6.2	22.1	3.9
Queue Delay	0.7	0.0	0.0	0.1	0.0	0.0
Total Delay	50.8	40.4	73.2	6.3	22.1	3.9
Queue Length 50th (ft)	248	189	107	70	229	0
Queue Length 95th (ft)	335	274	m180	126	323	66
Internal Link Dist (ft)	1745			340	476	
Turn Bay Length (ft)		480				
Base Capacity (vph)	575	552	295	2370	2513	1014
Starvation Cap Reductn	0	0	0	219	0	0
Spillback Cap Reductn	46	0	0	0	125	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.60	0.58	0.64	0.55	0.50

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	341	323	960	400	401	1120
v/c Ratio	0.80	0.74	0.47	0.47	0.85	0.45
Control Delay	52.9	43.8	37.0	17.0	51.1	4.4
Queue Delay	0.0	0.0	0.0	0.0	1.4	0.3
Total Delay	52.9	43.8	37.0	17.0	52.6	4.7
Queue Length 50th (ft)	236	195	224	132	275	15
Queue Length 95th (ft)	327	284	291	201	376	387
Internal Link Dist (ft)		2158	960			340
Turn Bay Length (ft)	340			555	400	
Base Capacity (vph)	523	527	2023	855	600	2467
Starvation Cap Reductn	0	0	0	0	75	693
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.61	0.47	0.47	0.76	0.63

Intersection Summary



Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	22	175	682	58	837	941
v/c Ratio	0.11	0.63	0.98	0.62	0.64	0.70
Control Delay	41.7	26.9	64.9	39.1	20.2	33.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.7	26.9	64.9	39.1	20.2	33.8
Queue Length 50th (ft)	15	41	~476	25	187	280
Queue Length 95th (ft)	34	98	#730	m#57	m279	#467
Internal Link Dist (ft)		471	1307		110	1510
Turn Bay Length (ft)				75		
Base Capacity (vph)	377	428	693	93	1311	1341
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.41	0.98	0.62	0.64	0.70

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

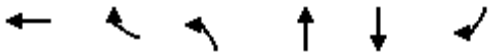
Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	965	14	2	814	116	845
v/c Ratio	1.25	0.17	0.01	0.81	0.52	0.54
Control Delay	150.0	55.3	0.0	38.4	47.1	17.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	150.0	55.3	0.0	38.4	47.1	17.3
Queue Length 50th (ft)	~799	10	0	248	81	145
Queue Length 95th (ft)	#1197	31	0	277	m#152	m167
Internal Link Dist (ft)	1049			1396		322
Turn Bay Length (ft)			25		90	
Base Capacity (vph)	775	83	192	1344	225	1673
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.25	0.17	0.01	0.61	0.52	0.51

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	90	618	407	318	999	167
v/c Ratio	0.53	0.38	0.81	0.11	0.58	0.19
Control Delay	50.4	0.7	42.8	6.0	14.5	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0
Total Delay	50.4	0.7	42.8	6.0	14.7	3.2
Queue Length 50th (ft)	49	0	254	15	252	18
Queue Length 95th (ft)	98	0	347	123	132	7
Internal Link Dist (ft)	1457			561	315	
Turn Bay Length (ft)			125			
Base Capacity (vph)	184	1615	621	2989	1735	863
Starvation Cap Reductn	0	0	0	0	139	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.38	0.66	0.11	0.63	0.19

Intersection Summary

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	88	659	688	433	651
v/c Ratio	0.39	0.77	0.47	0.82	0.24
Control Delay	40.3	12.2	22.2	52.8	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	40.3	12.2	22.2	52.8	3.3
Queue Length 50th (ft)	47	23	144	271	0
Queue Length 95th (ft)	87	76	237	365	115
Internal Link Dist (ft)	1642		355		561
Turn Bay Length (ft)		350		125	
Base Capacity (vph)	322	982	1479	641	2744
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.27	0.67	0.47	0.68	0.24

Intersection Summary

APPENDIX 4.1: POST PROCESSING WORKSHEETS

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Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/22/22

LOCATION: Cedar Avenue / I-10 Westbound Ramps
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	232	240	9	4%	159	214	55	35%
	Through	1,113	1,159	47	4%	1,287	1,398	111	9%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	1,344	1,399	55	4%	1,446	1,612	166	11%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	1,418	1,535	118	8%	1,212	1,335	123	10%
	Right	580	570	-10	-2%	469	463	-6	-1%
	SB Total	1,997	2,105	108	5%	1,681	1,798	118	7%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	454	445	-9	-2%	279	299	20	7%
	Through	0	0	0	#DIV/0!	5	5	0	0%
	Right	380	341	-39	-10%	369	286	-83	-22%
	WB Total	834	786	-48	-6%	653	590	-63	-10%
TOTAL ENTERING VOLUME		4,175	4,290	115.5	3%	3,780	4,000	221	6%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	2,105	1,798			
North Leg	Outbound	1,500	1,684			
North Leg	**TOTAL**	**3,605**	**3,482**	**10%**	**10%**	**35,504**
South Leg	Inbound	1,399	1,612			
South Leg	Outbound	1,980	1,634			
South Leg	**TOTAL**	**3,379**	**3,246**	**10%**	**10%**	**33,021**
East Leg	Inbound	786	590			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**786**	**590**	**16%**	**12%**	**5,068**
West Leg	Inbound	0	0			
West Leg	Outbound	810	682			
West Leg	**TOTAL**	**810**	**682**	**13%**	**11%**	**6,193**
OVERALL TOTAL		***8,580***	***8,000***	**11%**	***10%***	***79,785***

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Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/23/22

LOCATION: Cedar Avenue / I-10 Eastbound Ramps
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	859	1,004	145	17%	941	1,296	356	38%
	Right	479	524	45	9%	392	505	113	29%
	NB Total	1,338	1,528	190	14%	1,333	1,801	469	35%
SOUTH BOUND	Left	470	406	-64	-14%	393	411	18	5%
	Through	1,402	1,576	175	12%	1,098	1,219	121	11%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	1,871	1,982	111	6%	1,491	1,630	139	9%
EAST BOUND	Left	485	386	-99	-20%	506	358	-148	-29%
	Through	0	0	0	#DIV/0!	5	3	-2	-40%
	Right	459	444	-15	-3%	140	98	-42	-30%
	EB Total	944	830	-114	-12%	651	459	-192	-29%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		4,153	4,340	187.5	5%	3,474	3,890	416	12%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,982	1,630			
North Leg	Outbound	1,390	1,654			
North Leg	**TOTAL**	**3,372**	**3,284**	**10%**	**10%**	**33,021**
South Leg	Inbound	1,528	1,801			
South Leg	Outbound	2,020	1,317			
South Leg	**TOTAL**	**3,548**	**3,118**	**12%**	**10%**	**30,842**
East Leg	Inbound	0	0			
East Leg	Outbound	930	919			
East Leg	**TOTAL**	**930**	**919**	**12%**	**12%**	**7,716**
West Leg	Inbound	830	459			
West Leg	Outbound	0	0			
West Leg	**TOTAL**	**830**	**459**	**21%**	**12%**	**3,893**
OVERALL TOTAL		***8,680***	***7,780***	**12%**	***10%***	***75,471***

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Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year With Project	Analyst:	CS
		Date:	11/22/22

LOCATION: Cedar Avenue / Orange Street
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	6	5	-1	-17%	14	15	1	7%
	Through	970	1,154	184	19%	970	1,437	468	48%
	Right	4	4	0	0%	2	2	0	0%
	NB Total	980	1,163	183	19%	986	1,454	469	48%
SOUTH BOUND	Left	166	163	-3	-2%	42	46	4	10%
	Through	1,283	1,478	196	15%	955	977	22	2%
	Right	412	363	-49	-12%	241	244	3	1%
	SB Total	1,860	2,004	144	8%	1,238	1,267	29	2%
EAST BOUND	Left	231	233	2	1%	209	202	-7	-3%
	Through	4	3	-1	-25%	2	1	-1	-50%
	Right	18	16	-2	-9%	16	11	-5	-31%
	EB Total	253	252	-1	0%	227	214	-13	-6%
WEST BOUND	Left	6	6	0	0%	2	1	-1	-50%
	Through	3	2	-1	-33%	2	1	-1	-50%
	Right	137	143	6	4%	154	161	7	5%
	WB Total	146	151	5	3%	158	163	5	3%
TOTAL ENTERING VOLUME		3,239	3,570	331.5	10%	2,609	3,098	490	19%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	2,004	1,267			
North Leg	Outbound	1,530	1,800			
North Leg	**TOTAL**	**3,534**	**3,067**	**11%**	**10%**	**30,842**
South Leg	Inbound	1,163	1,454			
South Leg	Outbound	1,500	989			
South Leg	**TOTAL**	**2,663**	**2,443**	**11%**	**10%**	**23,619**
East Leg	Inbound	151	163			
East Leg	Outbound	170	49			
East Leg	**TOTAL**	**321**	**212**	**14%**	**10%**	**2,218**
West Leg	Inbound	252	214			
West Leg	Outbound	370	260			
West Leg	**TOTAL**	**622**	**474**	**16%**	**12%**	**3,903**
OVERALL TOTAL		***7,140***	***6,196***	**12%**	***10%***	***60,582***

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Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/22/22

LOCATION: Cedar Avenue / Slover Avenue
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	130	96	-34	-26%	108	94	-14	-13%
	Through	667	751	85	13%	641	949	308	48%
	Right	23	23	0	0%	31	67	37	120%
	NB Total	820	870	51	6%	780	1,110	331	42%
SOUTH BOUND	Left	165	280	116	70%	102	186	85	83%
	Through	1,045	1,082	37	4%	799	821	23	3%
	Right	97	124	28	28%	73	52	-21	-29%
	SB Total	1,306	1,486	180	14%	973	1,059	86	9%
EAST BOUND	Left	213	244	31	15%	206	193	-13	-6%
	Through	120	120	1	0%	356	497	142	40%
	Right	79	48	-31	-39%	170	133	-37	-22%
	EB Total	411	412	1	0%	731	823	93	13%
WEST BOUND	Left	21	18	-3	-14%	28	46	19	67%
	Through	154	163	9	6%	234	274	40	17%
	Right	101	162	62	61%	139	278	139	100%
	WB Total	276	343	68	25%	401	598	198	49%
TOTAL ENTERING VOLUME		2,812	3,111	299	11%	2,884	3,590	707	25%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,486	1,059			
North Leg	Outbound	1,157	1,420			
North Leg	**TOTAL**	**2,643**	**2,479**	**11%**	**10%**	**23,619**
South Leg	Inbound	870	1,110			
South Leg	Outbound	1,148	1,000			
South Leg	**TOTAL**	**2,018**	**2,110**	**8%**	**8%**	**25,357**
East Leg	Inbound	343	598			
East Leg	Outbound	423	750			
East Leg	**TOTAL**	**766**	**1,348**	**7%**	**12%**	**11,204**
West Leg	Inbound	412	823			
West Leg	Outbound	383	420			
West Leg	**TOTAL**	**795**	**1,243**	**7%**	**11%**	**10,904**
OVERALL TOTAL		***6,222***	***7,180***	**9%**	***10%***	***71,084***

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Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/22/22

LOCATION: Cedar Avenue / Santa Ana Avenue
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	102	104	3	2%	161	145	-16	-10%
	Through	723	732	10	1%	700	832	133	19%
	Right	31	24	-7	-23%	69	42	-27	-39%
	NB Total	855	860	5	1%	929	1,019	90	10%
SOUTH BOUND	Left	40	30	-10	-24%	60	57	-3	-4%
	Through	1,016	1,026	11	1%	756	726	-30	-4%
	Right	44	44	0	0%	48	68	20	42%
	SB Total	1,099	1,100	1	0%	864	851	-13	-1%
EAST BOUND	Left	47	89	43	91%	65	184	120	185%
	Through	69	99	30	43%	132	193	62	47%
	Right	68	131	64	94%	103	152	49	48%
	EB Total	183	319	136	74%	299	529	230	77%
WEST BOUND	Left	53	52	-1	-2%	41	29	-12	-28%
	Through	67	65	-2	-3%	125	130	6	4%
	Right	34	32	-2	-4%	38	52	15	39%
	WB Total	154	149	-5	-3%	203	211	9	4%
TOTAL ENTERING VOLUME		2,291	2,428	137.5	6%	2,294	2,610	316	14%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,100	851			
North Leg	Outbound	853	1,068			
North Leg	**TOTAL**	**1,953**	**1,919**	**11%**	**10%**	**18,393**
South Leg	Inbound	860	1,019			
South Leg	Outbound	1,209	907			
South Leg	**TOTAL**	**2,069**	**1,926**	**11%**	**10%**	**19,315**
East Leg	Inbound	149	211			
East Leg	Outbound	153	292			
East Leg	**TOTAL**	**302**	**503**	**6%**	**10%**	**5,286**
West Leg	Inbound	319	529			
West Leg	Outbound	213	343			
West Leg	**TOTAL**	**532**	**872**	**6%**	**9%**	**9,185**
OVERALL TOTAL		***4,856***	***5,220***	**9%**	***10%***	***52,178***

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Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/22/22

LOCATION: Cedar Avenue / Jurupa Avenue
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	25	45	21	84%	70	156	87	124%
	Through	658	666	9	1%	781	900	119	15%
	Right	53	72	20	37%	52	85	33	63%
	NB Total	735	783	49	7%	903	1,141	239	26%
SOUTH BOUND	Left	87	52	-35	-40%	128	112	-16	-12%
	Through	1,028	1,207	180	17%	779	796	17	2%
	Right	18	15	-3	-17%	50	60	10	20%
	SB Total	1,133	1,274	142	12%	957	968	12	1%
EAST BOUND	Left	55	77	23	41%	49	63	14	29%
	Through	71	135	65	91%	157	287	130	83%
	Right	28	105	77	275%	47	101	54	115%
	EB Total	153	317	164	107%	253	451	198	78%
WEST BOUND	Left	56	108	53	95%	61	82	22	36%
	Through	75	100	26	34%	89	142	53	60%
	Right	131	97	-34	-26%	57	47	-10	-18%
	WB Total	261	305	44	17%	207	271	65	31%
TOTAL ENTERING VOLUME		2,281	2,679	398	17%	2,319	2,831	513	22%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,274	968			
North Leg	Outbound	840	1,010			
North Leg	**TOTAL**	**2,114**	**1,978**	**11%**	**10%**	**19,984**
South Leg	Inbound	783	1,141			
South Leg	Outbound	1,420	979			
South Leg	**TOTAL**	**2,203**	**2,120**	**10%**	**9%**	**22,803**
East Leg	Inbound	305	271			
East Leg	Outbound	259	484			
East Leg	**TOTAL**	**564**	**755**	**7%**	**10%**	**7,795**
West Leg	Inbound	317	451			
West Leg	Outbound	160	358			
West Leg	**TOTAL**	**477**	**809**	**6%**	**10%**	**8,181**
OVERALL TOTAL		***5,358***	***5,662***	**9%**	***10%***	***58,763***

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Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/22/22

LOCATION: Cedar Avenue / 7th Street
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	63	95	33	52%	129	294	165	128%
	Through	638	652	15	2%	754	1,155	401	53%
	Right	5	4	-1	-11%	18	25	8	43%
	NB Total	705	751	47	7%	901	1,474	574	64%
SOUTH BOUND	Left	22	17	-5	-23%	67	58	-9	-13%
	Through	1,028	1,352	325	32%	729	765	36	5%
	Right	19	26	7	37%	30	42	12	40%
	SB Total	1,069	1,395	327	31%	826	865	40	5%
EAST BOUND	Left	34	52	18	53%	68	79	12	17%
	Through	7	9	2	29%	44	48	4	9%
	Right	156	333	177	113%	202	265	64	32%
	EB Total	197	394	197	100%	313	392	79	25%
WEST BOUND	Left	25	25	1	2%	32	31	-1	-2%
	Through	8	9	1	13%	26	34	8	31%
	Right	9	7	-2	-22%	18	16	-2	-11%
	WB Total	42	41	-1	-1%	76	81	6	7%
TOTAL ENTERING VOLUME		2,012	2,581	569.5	28%	2,115	2,812	698	33%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,395	865			
North Leg	Outbound	711	1,250			
North Leg	**TOTAL**	**2,106**	**2,115**	**10%**	**10%**	**21,798**
South Leg	Inbound	751	1,474			
South Leg	Outbound	1,710	1,061			
South Leg	**TOTAL**	**2,461**	**2,535**	**9%**	**9%**	**26,978**
East Leg	Inbound	41	81			
East Leg	Outbound	30	131			
East Leg	**TOTAL**	**71**	**212**	**3%**	**10%**	**2,218**
West Leg	Inbound	394	392			
West Leg	Outbound	130	370			
West Leg	**TOTAL**	**524**	**762**	**4%**	**6%**	**12,870**
OVERALL TOTAL		***5,162***	***5,624***	***8%***	***9%***	***63,863***

Z:\Shared\UcJobs_14600-15000_15000\15001\02_LOS\Post Processing\[14 Cedar_7th.xls]Output (3)

Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/22/22

LOCATION: Cedar Avenue / El Rivino Road
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	2	2	0	0%	12	14	2	17%
	Through	550	631	82	15%	702	728	26	4%
	Right	124	187	63	51%	142	226	84	59%
	NB Total	676	820	145	21%	856	968	112	13%
SOUTH BOUND	Left	159	193	34	21%	167	198	32	19%
	Through	999	985	-14	-1%	778	835	57	7%
	Right	11	7	-4	-36%	23	20	-3	-11%
	SB Total	1,169	1,185	17	1%	967	1,053	86	9%
EAST BOUND	Left	17	16	-1	-3%	9	8	-1	-11%
	Through	8	9	2	20%	7	10	3	43%
	Right	25	30	5	20%	10	12	2	20%
	EB Total	49	55	6	12%	26	30	4	15%
WEST BOUND	Left	104	139	36	34%	183	292	109	60%
	Through	1	1	0	0%	5	7	2	40%
	Right	82	103	22	26%	194	222	29	15%
	WB Total	186	243	57	31%	382	521	140	37%
TOTAL ENTERING VOLUME		2,079	2,303	224	11%	2,231	2,572	342	15%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,185	1,053			
North Leg	Outbound	750	958			
North Leg	**TOTAL**	**1,935**	**2,011**	**9%**	**10%**	**20,473**
South Leg	Inbound	820	968			
South Leg	Outbound	1,154	1,139			
South Leg	**TOTAL**	**1,974**	**2,107**	**10%**	**10%**	**20,288**
East Leg	Inbound	243	521			
East Leg	Outbound	389	434			
East Leg	**TOTAL**	**632**	**955**	**7%**	**10%**	**9,142**
West Leg	Inbound	55	30			
West Leg	Outbound	10	41			
West Leg	**TOTAL**	**65**	**71**	**9%**	**10%**	**706**
OVERALL TOTAL		***4,606***	***5,144***	**9%**	***10%***	***50,609***

Z:\Shared\UcJobs_14600-15000_15000\15001\02_LOS\Post Processing\[15 Cedar_El Rivino.xls]Output (3)

Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/23/22

LOCATION: Rubidoux Boulevard & Market Street
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	37	30	-7	-18%	22	17	-5	-23%
	Through	224	155	-69	-31%	296	180	-116	-39%
	Right	280	345	65	23%	428	481	53	12%
	NB Total	540	530	-10	-2%	746	678	-68	-9%
SOUTH BOUND	Left	385	564	180	47%	422	673	251	59%
	Through	702	528	-174	-25%	519	382	-137	-26%
	Right	70	68	-2	-3%	34	36	3	7%
	SB Total	1,156	1,160	4	0%	975	1,091	117	12%
EAST BOUND	Left	83	110	28	33%	40	33	-7	-16%
	Through	68	160	93	137%	83	127	44	53%
	Right	49	35	-13	-28%	18	13	-5	-28%
	EB Total	199	305	107	54%	141	173	33	23%
WEST BOUND	Left	254	316	63	25%	306	375	70	23%
	Through	74	120	46	62%	43	77	34	79%
	Right	391	534	143	37%	437	628	191	44%
	WB Total	719	970	252	35%	786	1,080	295	37%
TOTAL ENTERING VOLUME		2,613	2,965	352.027778	13%	2,647	3,022	376	14%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,160	1,091			
North Leg	Outbound	799	841			
North Leg	**TOTAL**	**1,959**	**1,932**	**10%**	**10%**	**19,171**
South Leg	Inbound	530	678			
South Leg	Outbound	879	770			
South Leg	**TOTAL**	**1,409**	**1,448**	**12%**	**12%**	**11,959**
East Leg	Inbound	970	1,080			
East Leg	Outbound	1,069	1,281			
East Leg	**TOTAL**	**2,039**	**2,361**	**9%**	**11%**	**22,324**
West Leg	Inbound	305	173			
West Leg	Outbound	218	130			
West Leg	**TOTAL**	**523**	**303**	**20%**	**11%**	**2,666**
OVERALL TOTAL		***5,930***	***6,044***	**11%**	***11%***	***56,120***

Z:\Shared\UcJobs_14600-15000_15000\15001\02_LOS\Post Processing\[16 Rubidoux_Market.xls]Output (3)

Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/23/22

LOCATION: Rubidoux Boulevard & 24th Street
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	16	22	6	38%	19	24	6	30%
	Through	553	547	-6	-1%	700	667	-33	-5%
	Right	29	48	20	68%	73	88	15	21%
	NB Total	597	617	20	3%	791	779	-12	-2%
SOUTH BOUND	Left	139	88	-51	-36%	143	95	-48	-33%
	Through	865	822	-43	-5%	790	783	-7	-1%
	Right	5	2	-3	-56%	4	3	-1	-25%
	SB Total	1,008	912	-96	-9%	936	881	-55	-6%
EAST BOUND	Left	1	1	0	0%	2	2	0	0%
	Through	5	4	-1	-11%	18	17	-1	-3%
	Right	11	17	6	50%	8	12	4	50%
	EB Total	17	22	5	30%	28	31	4	13%
WEST BOUND	Left	14	12	-2	-11%	16	13	-3	-19%
	Through	12	6	-6	-50%	7	4	-3	-43%
	Right	8	3	-5	-60%	6	2	-4	-64%
	WB Total	33	21	-12	-36%	29	19	-10	-33%
TOTAL ENTERING VOLUME		1,654	1,572	-82.5	-5%	1,783	1,710	-73	-4%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	912	881			
North Leg	Outbound	551	671			
North Leg	**TOTAL**	**1,463**	**1,552**	**12%**	**13%**	**12,373**
South Leg	Inbound	617	779			
South Leg	Outbound	851	808			
South Leg	**TOTAL**	**1,468**	**1,587**	**11%**	**12%**	**13,059**
East Leg	Inbound	21	19			
East Leg	Outbound	140	200			
East Leg	**TOTAL**	**161**	**219**	**9%**	**12%**	**1,842**
West Leg	Inbound	22	31			
West Leg	Outbound	30	31			
West Leg	**TOTAL**	**52**	**62**	**10%**	**11%**	**541**
OVERALL TOTAL		***3,143***	***3,420***	**11%**	***12%***	***27,815***

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Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/23/22

LOCATION: Rubidoux Boulevard & SR-60 WB Ramps
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	43	23	-20	-46%	53	28	-25	-47%
	Through	639	598	-41	-6%	770	713	-57	-7%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	682	621	-61	-9%	823	741	-82	-10%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	941	891	-50	-5%	847	804	-43	-5%
	Right	17	20	4	21%	18	19	1	6%
	SB Total	958	911	-47	-5%	865	823	-42	-5%
EAST BOUND	Left	16	33	17	106%	20	34	15	74%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	203	183	-20	-10%	161	145	-16	-10%
	EB Total	219	216	-3	-1%	180	179	-1	-1%
WEST BOUND	Left	341	352	12	3%	459	540	81	18%
	Through	71	93	23	32%	83	106	23	28%
	Right	98	225	127	130%	86	192	107	125%
	WB Total	509	670	161	32%	628	838	211	34%
TOTAL ENTERING VOLUME		2,367	2,418	51.4439252	2%	2,495	2,581	87	3%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	911	823			
North Leg	Outbound	856	939			
North Leg	**TOTAL**	**1,767**	**1,762**	**10%**	**10%**	**18,458**
South Leg	Inbound	621	741			
South Leg	Outbound	1,426	1,489			
South Leg	**TOTAL**	**2,047**	**2,230**	**11%**	**12%**	**18,982**
East Leg	Inbound	670	838			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**670**	**838**	**7%**	**9%**	**9,040**
West Leg	Inbound	216	179			
West Leg	Outbound	136	153			
West Leg	**TOTAL**	**352**	**332**	**10%**	**9%**	**3,530**
OVERALL TOTAL		***4,836***	***5,162***	**10%**	***10%***	***50,010***

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Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/23/22

LOCATION: Rubidoux Boulevard & SR-60 EB Ramps
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	524	506	-18	-3%	499	490	-9	-2%
	Right	491	504	13	3%	282	290	8	3%
	NB Total	1,015	1,010	-5	0%	781	780	-1	0%
SOUTH BOUND	Left	199	258	60	30%	111	133	23	20%
	Through	600	552	-48	-8%	811	866	56	7%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	799	810	12	1%	921	999	78	8%
EAST BOUND	Left	420	507	87	21%	519	536	17	3%
	Through	15	19	5	31%	45	49	4	9%
	Right	193	184	-9	-5%	362	345	-17	-5%
	EB Total	627	710	83	13%	926	930	5	0%
WEST BOUND	Left	17	115	98	576%	13	103	90	692%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	5	45	40	800%	2	17	15	750%
	WB Total	22	160	138	627%	15	120	105	700%
TOTAL ENTERING VOLUME		2,462	2,690	227.713693	9%	2,642	2,829	187	7%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	810	999			
North Leg	Outbound	1,058	1,043			
North Leg	**TOTAL**	**1,868**	**2,042**	**10%**	**10%**	**19,652**
South Leg	Inbound	1,010	780			
South Leg	Outbound	851	1,314			
South Leg	**TOTAL**	**1,861**	**2,094**	**8%**	**9%**	**22,052**
East Leg	Inbound	160	120			
East Leg	Outbound	781	472			
East Leg	**TOTAL**	**941**	**592**	**16%**	**10%**	**5,992**
West Leg	Inbound	710	930			
West Leg	Outbound	0	0			
West Leg	**TOTAL**	**710**	**930**	**7%**	**9%**	**9,934**
OVERALL TOTAL		***5,379***	***5,658***	**9%**	***10%***	***57,629***

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Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/23/22

LOCATION: Rubidoux Boulevard & 34th Street
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	31	36	6	18%	19	22	3	16%
	Through	781	773	-8	-1%	594	610	17	3%
	Right	57	65	9	15%	79	117	38	48%
	NB Total	868	874	6	1%	692	749	58	8%
SOUTH BOUND	Left	49	44	-5	-10%	189	271	83	44%
	Through	731	760	29	4%	881	907	26	3%
	Right	48	44	-4	-7%	130	143	14	10%
	SB Total	828	848	21	2%	1,199	1,321	122	10%
EAST BOUND	Left	153	177	24	16%	90	78	-12	-13%
	Through	31	41	11	34%	44	55	11	25%
	Right	20	18	-2	-11%	19	17	-2	-11%
	EB Total	204	236	32	16%	153	150	-3	-2%
WEST BOUND	Left	28	33	6	20%	14	14	0	0%
	Through	19	21	2	11%	15	17	2	13%
	Right	116	106	-10	-9%	79	79	0	0%
	WB Total	163	160	-3	-2%	108	110	2	2%
TOTAL ENTERING VOLUME		2,062	2,118	56.3947368	3%	2,151	2,330	179	8%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	848	1,321			
North Leg	Outbound	1,056	767			
North Leg	**TOTAL**	**1,904**	**2,088**	**9%**	**9%**	**22,179**
South Leg	Inbound	874	749			
South Leg	Outbound	811	938			
South Leg	**TOTAL**	**1,685**	**1,687**	**9%**	**9%**	**18,794**
East Leg	Inbound	160	110			
East Leg	Outbound	150	443			
East Leg	**TOTAL**	**310**	**553**	**6%**	**11%**	**4,867**
West Leg	Inbound	236	150			
West Leg	Outbound	101	182			
West Leg	**TOTAL**	**337**	**332**	**9%**	**9%**	**3,829**
OVERALL TOTAL		***4,236***	***4,660***	**9%**	***9%***	***49,669***

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Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/23/22

LOCATION: 30th Street & Frontage Road/SR-60 EB On-Ramp
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	22	160	138	627%	15	120	105	700%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	32	12	-20	-62%	14	3	-11	-79%
	NB Total	54	172	119	221%	29	123	94	324%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	628	758	131	21%	360	447	88	24%
	Right	59	45	-14	-23%	78	60	-18	-23%
	EB Total	687	803	117	17%	438	507	70	16%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		740	975	235.384615	32%	467	630	164	35%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	0	0			
North Leg	Outbound	0	0			
North Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
South Leg	Inbound	172	123			
South Leg	Outbound	45	60			
South Leg	**TOTAL**	**217**	**183**	**50%**	**42%**	**435**
East Leg	Inbound	0	0			
East Leg	Outbound	770	450			
East Leg	**TOTAL**	**770**	**450**	**16%**	**10%**	**4,695**
West Leg	Inbound	803	507			
West Leg	Outbound	160	120			
West Leg	**TOTAL**	**963**	**627**	**16%**	**10%**	**5,992**
OVERALL TOTAL		***1,951***	***1,260***	**#DIV/0!**	***#DIV/0!***	***#DIV/0!***

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Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/23/22

LOCATION: Agua Mansa Road & Market Street
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	18	13	-5	-28%	0	0	0	#DIV/0!
	Through	2	2	0	0%	3	0	-3	-100%
	Right	8	15	7	88%	0	0	0	#DIV/0!
	NB Total	28	30	2	7%	3	0	-3	-100%
SOUTH BOUND	Left	115	193	78	68%	141	190	50	35%
	Through	15	12	-3	-20%	2	3	1	50%
	Right	277	175	-102	-37%	315	283	-32	-10%
	SB Total	407	380	-27	-7%	458	476	19	4%
EAST BOUND	Left	308	256	-52	-17%	505	438	-67	-13%
	Through	415	771	356	86%	425	850	426	100%
	Right	10	17	7	75%	4	7	3	75%
	EB Total	732	1,044	312	43%	933	1,295	362	39%
WEST BOUND	Left	4	10	6	150%	0	0	0	#DIV/0!
	Through	424	813	389	92%	471	787	317	67%
	Right	159	361	203	128%	149	162	14	9%
	WB Total	587	1,184	598	102%	619	949	330	53%
TOTAL ENTERING VOLUME		1,753	2,638	884.625	50%	2,013	2,720	708	35%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	380	476			
North Leg	Outbound	619	600			
North Leg	**TOTAL**	**999**	**1,076**	**13%**	**14%**	**7,914**
South Leg	Inbound	30	0			
South Leg	Outbound	39	10			
South Leg	**TOTAL**	**69**	**10**	**69%**	**10%**	**99**
East Leg	Inbound	1,184	949			
East Leg	Outbound	979	1,040			
East Leg	**TOTAL**	**2,163**	**1,989**	**10%**	**9%**	**21,272**
West Leg	Inbound	1,044	1,295			
West Leg	Outbound	1,001	1,070			
West Leg	**TOTAL**	**2,045**	**2,365**	**9%**	**11%**	**22,324**
OVERALL TOTAL		***5,275***	***5,440***	**10%**	***11%***	***51,610***

Z:\Shared\UcJobs_14600-15000_15000\15001\02_LOS\Post Processing\[25 Agua Mansa_Market.xls]Output (3)

Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/23/22

LOCATION: Hall Avenue & 24th Street
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	4	8	4	100%	9	19	10	111%
	Through	14	32	19	137%	13	18	6	44%
	Right	45	57	12	27%	67	100	34	50%
	NB Total	63	97	35	55%	88	137	49	56%
SOUTH BOUND	Left	2	0	-2	-100%	4	0	-4	-100%
	Through	16	31	15	94%	32	50	18	56%
	Right	2	0	-2	-100%	3	0	-3	-100%
	SB Total	20	31	12	59%	39	50	12	30%
EAST BOUND	Left	8	7	-1	-7%	4	2	-2	-43%
	Through	158	83	-75	-47%	215	99	-116	-54%
	Right	2	16	14	700%	10	80	70	700%
	EB Total	168	106	-62	-37%	228	181	-47	-21%
WEST BOUND	Left	17	29	12	71%	50	30	-20	-39%
	Through	18	1	-17	-94%	14	1	-13	-93%
	Right	12	1	-11	-92%	2	0	-2	-100%
	WB Total	47	31	-16	-34%	65	31	-34	-52%
TOTAL ENTERING VOLUME		297	265	-31.5	-11%	419	399	-20	-5%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	31	50			
North Leg	Outbound	40	20			
North Leg	**TOTAL**	**71**	**70**	**9%**	**9%**	**790**
South Leg	Inbound	97	137			
South Leg	Outbound	76	160			
South Leg	**TOTAL**	**173**	**297**	**4%**	**7%**	**4,179**
East Leg	Inbound	31	31			
East Leg	Outbound	140	199			
East Leg	**TOTAL**	**171**	**230**	**8%**	**11%**	**2,112**
West Leg	Inbound	106	181			
West Leg	Outbound	9	20			
West Leg	**TOTAL**	**115**	**201**	**7%**	**12%**	**1,630**
OVERALL TOTAL		***530***	***798***	**6%**	***9%***	***8,712***

Z:\Shared\UcJobs_14600-15000_15000\15001\02_LOS\Post Processing\[26 Hall_24th.xls]Output (3)

Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/23/22

LOCATION: Hall Avenue & 26th Street
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	6	13	8	136%	4	12	8	200%
	Through	72	116	45	62%	116	163	48	41%
	Right	8	9	2	20%	7	10	3	43%
	NB Total	85	138	54	63%	127	185	59	46%
SOUTH BOUND	Left	1	1	0	0%	13	8	-5	-36%
	Through	71	157	87	123%	84	159	76	90%
	Right	4	7	4	100%	13	17	5	36%
	SB Total	75	165	90	120%	109	184	76	70%
EAST BOUND	Left	3	7	5	180%	11	20	10	90%
	Through	0	0	0	#DIV/0!	1	2	1	100%
	Right	8	41	33	443%	7	38	31	443%
	EB Total	10	48	38	377%	19	60	42	224%
WEST BOUND	Left	14	37	24	174%	7	18	11	157%
	Through	0	0	0	#DIV/0!	1	2	1	100%
	Right	4	7	3	75%	1	1	0	0%
	WB Total	18	44	27	151%	9	21	12	133%
TOTAL ENTERING VOLUME		187	395	207.714286	111%	263	450	188	71%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	165	184			
North Leg	Outbound	130	184			
North Leg	**TOTAL**	**295**	**368**	**5%**	**7%**	**5,431**
South Leg	Inbound	138	185			
South Leg	Outbound	235	215			
South Leg	**TOTAL**	**373**	**400**	**7%**	**8%**	**5,291**
East Leg	Inbound	44	21			
East Leg	Outbound	10	20			
East Leg	**TOTAL**	**54**	**41**	**9%**	**7%**	**587**
West Leg	Inbound	48	60			
West Leg	Outbound	20	31			
West Leg	**TOTAL**	**68**	**91**	**1%**	**2%**	**4,694**
OVERALL TOTAL		***789***	***900***	**5%**	***6%***	***16,003***

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Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/23/22

LOCATION: Market Street & Via Cerro/24th Street
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	34	4	-30	-88%	44	16	-28	-64%
	Through	578	1,056	478	83%	628	919	291	46%
	Right	161	5	-156	-97%	75	41	-34	-45%
	NB Total	772	1,065	293	38%	747	976	230	31%
SOUTH BOUND	Left	29	19	-10	-33%	6	28	22	367%
	Through	514	796	282	55%	612	1,017	406	66%
	Right	3	9	6	200%	3	8	6	220%
	SB Total	546	824	279	51%	620	1,053	433	70%
EAST BOUND	Left	4	44	41	1157%	3	9	7	260%
	Through	32	6	-26	-81%	30	41	12	39%
	Right	163	79	-83	-51%	189	92	-97	-51%
	EB Total	198	129	-68	-35%	221	142	-79	-36%
WEST BOUND	Left	94	39	-55	-59%	221	80	-141	-64%
	Through	8	7	-1	-13%	37	26	-11	-29%
	Right	6	69	63	1050%	15	41	26	173%
	WB Total	108	115	7	6%	273	147	-126	-46%
TOTAL ENTERING VOLUME		1,623	2,133	510.100529	31%	1,860	2,318	458	25%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	824	1,053			
North Leg	Outbound	1,169	969			
North Leg	**TOTAL**	**1,993**	**2,022**	**9%**	**9%**	**22,360**
South Leg	Inbound	1,065	976			
South Leg	Outbound	914	1,189			
South Leg	**TOTAL**	**1,979**	**2,165**	**10%**	**11%**	**19,566**
East Leg	Inbound	115	147			
East Leg	Outbound	30	110			
East Leg	**TOTAL**	**145**	**257**	**#DIV/0!**	**#DIV/0!**	**-**
West Leg	Inbound	129	142			
West Leg	Outbound	20	50			
West Leg	**TOTAL**	**149**	**192**	**8%**	**11%**	**1,793**
OVERALL TOTAL		***4,266***	***4,636***	**10%**	***11%***	***43,719***

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Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/23/22

LOCATION: Market Street & Rivera Street
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	22	19	-3	-14%	4	7	3	75%
	Through	748	871	123	16%	671	744	73	11%
	Right	302	271	-31	-10%	243	234	-9	-4%
	NB Total	1,072	1,161	90	8%	918	985	67	7%
SOUTH BOUND	Left	37	39	3	7%	118	143	25	21%
	Through	762	899	138	18%	851	984	133	16%
	Right	1	1	0	0%	0	0	0	#DIV/0!
	SB Total	799	939	140	18%	969	1,127	158	16%
EAST BOUND	Left	0	0	0	#DIV/0!	6	7	1	17%
	Through	0	0	0	#DIV/0!	13	13	0	0%
	Right	17	17	0	-3%	71	69	-2	-3%
	EB Total	17	17	0	-3%	90	89	-1	-1%
WEST BOUND	Left	305	281	-24	-8%	221	207	-14	-6%
	Through	0	0	0	#DIV/0!	2	3	1	50%
	Right	45	49	4	9%	35	39	5	13%
	WB Total	350	330	-20	-6%	257	249	-8	-3%
TOTAL ENTERING VOLUME		2,238	2,447	209.021127	9%	2,234	2,450	216	10%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	939	1,127			
North Leg	Outbound	920	790			
North Leg	**TOTAL**	**1,859**	**1,917**	**8%**	**8%**	**22,771**
South Leg	Inbound	1,161	985			
South Leg	Outbound	1,197	1,260			
South Leg	**TOTAL**	**2,358**	**2,245**	**10%**	**10%**	**22,676**
East Leg	Inbound	330	249			
East Leg	Outbound	310	390			
East Leg	**TOTAL**	**640**	**639**	**10%**	**10%**	**6,188**
West Leg	Inbound	17	89			
West Leg	Outbound	20	10			
West Leg	**TOTAL**	**37**	**99**	**3%**	**9%**	**1,059**
OVERALL TOTAL		***4,893***	***4,900***	**9%**	***9%***	***52,693***

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Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/23/22

LOCATION: Market Street & SR-60 WB Ramps
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	185	291	107	58%	399	548	149	37%
	Through	314	247	-67	-21%	312	276	-36	-12%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	499	538	40	8%	711	824	113	16%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	900	1,003	104	12%	979	1,090	112	11%
	Right	184	210	26	14%	164	183	19	12%
	SB Total	1,084	1,213	130	12%	1,143	1,273	131	11%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	#DIV/0!	#DIV/0!	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	#DIV/0!	#DIV/0!	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	59	141	83	141%	83	150	67	81%
	Through	0	0	0	#DIV/0!	5	9	4	80%
	Right	758	928	171	23%	606	704	98	16%
	WB Total	816	1,069	253	31%	694	863	169	24%
TOTAL ENTERING VOLUME		2,398	#DIV/0!	#DIV/0!	#DIV/0!	2,548	2,960	413	16%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,213	1,273			
North Leg	Outbound	1,175	980			
North Leg	**TOTAL**	**2,388**	**2,253**	**11%**	**10%**	**22,676**
South Leg	Inbound	538	824			
South Leg	Outbound	#DIV/0!	1,240			
South Leg	**TOTAL**	**#DIV/0!**	**2,064**	**#DIV/0!**	**9%**	**22,626**
East Leg	Inbound	1,069	863			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**1,069**	**863**	**13%**	**10%**	**8,446**
West Leg	Inbound	#DIV/0!	0			
West Leg	Outbound	501	740			
West Leg	**TOTAL**	**#DIV/0!**	**740**	**#DIV/0!**	**8%**	**8,712**
OVERALL TOTAL		***#DIV/0!***	***5,920***	**#DIV/0!**	***9%***	***62,459***

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Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/23/22

LOCATION: Market Street & SR-60 EB Ramps
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	369	408	39	11%	629	742	114	18%
	Right	73	101	29	39%	45	58	13	29%
	NB Total	442	509	68	15%	674	800	127	19%
SOUTH BOUND	Left	538	709	171	32%	424	530	107	25%
	Through	420	432	12	3%	638	710	72	11%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	958	1,141	183	19%	1,062	1,240	179	17%
EAST BOUND	Left	130	132	3	2%	83	96	14	16%
	Through	0	0	0	#DIV/0!	3	4	1	33%
	Right	485	548	63	13%	646	730	84	13%
	EB Total	615	680	66	11%	732	830	99	13%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		2,014	2,330	316.065015	16%	2,467	2,870	404	16%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,141	1,240			
North Leg	Outbound	540	838			
North Leg	**TOTAL**	**1,681**	**2,078**	**7%**	**9%**	**22,626**
South Leg	Inbound	509	800			
South Leg	Outbound	980	1,440			
South Leg	**TOTAL**	**1,489**	**2,240**	**6%**	**9%**	**26,253**
East Leg	Inbound	0	0			
East Leg	Outbound	810	592			
East Leg	**TOTAL**	**810**	**592**	**13%**	**10%**	**6,045**
West Leg	Inbound	680	830			
West Leg	Outbound	0	0			
West Leg	**TOTAL**	**680**	**830**	**8%**	**9%**	**9,043**
OVERALL TOTAL		***4,660***	***5,740***	***7%***	***9%***	***63,966***

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Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/23/22

LOCATION: Agua Mansa Road & El Rivino Road
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	18	23	6	31%	41	62	22	53%
	Through	386	462	77	20%	663	804	142	21%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	403	485	82	20%	703	866	163	23%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	439	558	120	27%	324	359	35	11%
	Right	101	97	-4	-3%	146	146	1	0%
	SB Total	539	655	116	22%	470	505	36	8%
EAST BOUND	Left	160	198	38	24%	227	213	-14	-6%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	40	52	12	31%	51	67	16	31%
	EB Total	200	250	50	25%	278	280	3	1%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		1,142	1,390	248.392157	22%	1,450	1,651	201	14%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	655	505			
North Leg	Outbound	660	1,017			
North Leg	**TOTAL**	**1,315**	**1,522**	**9%**	**10%**	**14,809**
South Leg	Inbound	485	866			
South Leg	Outbound	610	426			
South Leg	**TOTAL**	**1,095**	**1,292**	**10%**	**12%**	**11,053**
East Leg	Inbound	0	0			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**
West Leg	Inbound	250	280			
West Leg	Outbound	120	208			
West Leg	**TOTAL**	**370**	**488**	**6%**	**8%**	**5,867**
OVERALL TOTAL		***2,780***	***3,302***	**#DIV/0!**	***#DIV/0!***	***#DIV/0!***

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Project:	Rubidoux Warehouse	Job #:	15001
Scenario:	Horizon Year Without Project	Analyst:	CS
		Date:	11/23/22

LOCATION: Riverside Avenue & Agua Mansa Road
FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	149	115	-34	-23%	172	134	-38	-22%
	Through	459	600	141	31%	473	586	113	24%
	Right	49	57	8	16%	119	142	24	20%
	NB Total	657	772	115	18%	764	862	99	13%
SOUTH BOUND	Left	44	92	48	109%	96	207	112	117%
	Through	555	681	127	23%	521	697	177	34%
	Right	68	94	27	39%	42	59	18	42%
	SB Total	666	867	201	30%	658	963	306	46%
EAST BOUND	Left	76	114	38	50%	86	117	32	37%
	Through	259	347	88	34%	388	511	124	32%
	Right	139	113	-26	-18%	209	170	-39	-18%
	EB Total	474	574	100	21%	682	798	117	17%
WEST BOUND	Left	131	153	22	17%	88	103	16	18%
	Through	335	443	109	32%	233	288	56	24%
	Right	65	145	80	123%	44	87	43	98%
	WB Total	531	741	211	40%	364	478	114	31%
TOTAL ENTERING VOLUME		2,327	2,954	626.925659	27%	2,467	3,101	635	26%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	867	963			
North Leg	Outbound	859	790			
North Leg	**TOTAL**	**1,726**	**1,753**	**11%**	**11%**	**15,434**
South Leg	Inbound	772	862			
South Leg	Outbound	947	970			
South Leg	**TOTAL**	**1,719**	**1,832**	**10%**	**10%**	**17,526**
East Leg	Inbound	741	478			
East Leg	Outbound	496	860			
East Leg	**TOTAL**	**1,237**	**1,338**	**10%**	**11%**	**12,212**
West Leg	Inbound	574	798			
West Leg	Outbound	652	481			
West Leg	**TOTAL**	**1,226**	**1,279**	**10%**	**11%**	**12,166**
OVERALL TOTAL		***5,908***	***6,202***	**10%**	***11%***	***57,339***

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APPENDIX 4.2: ADDED CUMULATIVE PROJECTS TRIP GENERATION SUMMARY

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Table Appendix 4.2

Cumulative Trip Generation Summary (PCE)

Land Use[1]	ITE Code	Units[2]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
RV Storage	--[3]	TSF	0.094	0.028	0.122	0.046	0.119	0.165	2.129
Mini-Warehouse	151	Units	0.617	0.593	1.210	0.840	0.840	1.680	17.960
Multifamily Residential (Low-Rise)	220	DU	0.096	0.304	0.400	0.321	0.189	0.510	6.740
Single Family Attached	215	DU	0.149	0.331	0.480	0.325	0.245	0.570	7.200
Single Family Detached Residential	210	DU	0.182	0.518	0.700	0.592	0.348	0.940	9.430
Off-Campus Student Apartment	225	DU	0.046	0.074	0.120	0.120	0.120	0.240	3.570
Senior Adult Housing - Single-Family	251	DU	0.079	0.161	0.240	0.183	0.117	0.300	4.310
Medical Clinic	630	TSF	2.228	0.523	2.750	1.107	2.583	3.690	37.600
General Office Building	710	TSF	1.338	0.182	1.520	0.245	1.195	1.440	10.840
Medical-Dental Office Building	720	TSF	2.449	0.651	3.100	1.179	2.751	3.930	36.000
Free-Standing Discount Superstore	813	TSF	1.042	0.818	1.860	2.122	2.208	4.330	50.520
Shopping Center	820	TSF	0.58	0.36	0.94	1.83	1.98	3.81	37.75
Shopping Center (40-150 TSF)	821	TSF	1.073	0.657	1.730	2.543	2.647	5.190	67.520
Strip Retail Plaza (<40k)	822	TSF	1.416	0.944	2.360	3.295	3.295	6.590	54.450
Automobile Saled (Used)	841	TSF	1.619	0.511	2.130	1.763	1.988	3.750	27.060
Tire Store	848	TSF	1.670	0.940	2.610	1.613	2.138	3.750	27.690
Fast Food w/ Drive Thru	934	TSF	22.75	21.86	44.61	17.18	15.85	33.03	467.48
Business Park (PCE)	770	TSF	1.148	0.202	1.350	0.193	0.227	0.420	12.440
Passenger Cars			1.141	0.193	1.334	0.311	0.893	1.204	10.338
2-Axle Trucks (PCE = 1.5)			0.002	0.002	0.004	0.002	0.002	0.004	0.527
3-Axle Trucks (PCE = 2.0)			0.003	0.004	0.007	0.003	0.004	0.007	0.870
4+-Axle Trucks (PCE = 3.0)			0.013	0.016	0.030	0.011	0.019	0.030	3.948
High-Cube Fulfillment Center Warehouse[4] (PCE)	--[4]	TSF	0.089	0.033	0.122	0.050	0.115	0.165	2.129
Passenger Cars			0.079	0.024	0.103	0.040	0.104	0.144	1.750
2-4 Axle Trucks (PCE = 2.0)			0.008	0.008	0.016	0.010	0.012	0.022	0.324
5+-Axle Trucks (PCE = 3.0)			0.016	0.017	0.033	0.014	0.016	0.030	0.651
General Light Industrial[3] (PCE)	110	TSF	0.651	0.089	0.740	0.091	0.559	0.650	4.870
Passenger Cars			0.645	0.085	0.730	0.086	0.554	0.640	4.620
2-Axle Trucks (PCE = 1.5)			0.002	0.001	0.003	0.002	0.001	0.003	0.063
3-Axle Trucks (PCE = 2.0)			0.002	0.002	0.004	0.002	0.002	0.004	0.104
4+-Axle Trucks (PCE = 3.0)			0.012	0.007	0.019	0.009	0.010	0.019	0.470
Warehousing[3]	150	TSF	0.131	0.039	0.170	0.050	0.130	0.180	1.710
Passenger Cars			0.120	0.030	0.150	0.034	0.116	0.150	1.110
2-Axle Trucks (PCE = 1.5)			0.003	0.002	0.005	0.005	0.003	0.008	0.150
3-Axle Trucks (PCE = 2.0)			0.004	0.004	0.008	0.006	0.006	0.012	0.248
4+-Axle Trucks (PCE = 3.0)			0.021	0.017	0.038	0.030	0.026	0.056	1.127

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).

[2] TSF = thousand square feet

[3] Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.

Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.

Inbound and outbound split source: ITE Trip Generation Manual, Eleventh Edition (2021) for ITE Land Use Code 154.

[4] Vehicle Mix Source: High Cube Warehouse Trip Generation Study, WSP, January 29, 2019.

Table Appendix 4.2

Cumulative Trip Generation Summary (PCE)

ID	Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
JV1	Emerald Ridge South									
	Single Family Residential	97	DU	18	50	68	57	34	91	915
	Condo/Townhomes	118	DU	18	39	57	38	29	67	850
	Emerald Ridge South Total			**36**	**89**	**125**	**95**	**63**	**158**	**1,765**
JV2	Highland Park & Highland Park II									
	Single Family Residential	432	DU	**79**	**224**	**303**	**256**	**150**	**406**	**4,074**
JV3	Rio Vista Specific Plan[2]									
	Single-Family Detached Housing	1,133	DU	206	587	793	671	394	1,065	10,684
	Single-Family Attached Housing	144	DU	17	52	69	48	34	82	1,037
	Multifamily Housing	420	DU	40	128	168	135	79	214	2,831
	Elementary School	330	STU	248	211	459	46	54	100	1,407
	Middle School	620	STU	119	102	221	24	26	50	825
	Public Park	18.4	AC	0	0	0	1	1	2	14
	Technical School	10,000	STU	891	209	1,100	616	484	1,100	11,500
	Business Park	559.310	TSF	642	113	755	177	505	682	6,958
	General Light Industrial	380.932	TSF	248	34	282	35	213	248	1,855
	Ancillary Warehouse	888.842	TSF	116	35	151	45	115	160	1,520
	Rio Vista Specific Plan Total			**2,643**	**1,494**	**4,138**	**1,826**	**2,011**	**3,837**	**39,775**
JV4	Pick-a-Part									
	Car Auction	16	TSF	**26**	**8**	**34**	**28**	**32**	**60**	**433**
JV5	Boureston Medical Clinic									
	Medical Clinic	40	TSF	**89**	**21**	**110**	**44**	**103**	**147**	**1,504**
JV6	Emerald Ridge South									
	Residential	215	DU	**32**	**71**	**103**	**70**	**53**	**123**	**1,548**
JV7	Northtown Housing Development Group									
	Apartments	68	DU	7	21	28	22	13	35	458
	Commercial Retail	31	TSF	44	30	74	103	103	206	1,708
	Northtown Housing Development Group Total			**51**	**51**	**102**	**125**	**116**	**241**	**2,166**
JV8	Carson Companies	334.523	TSF							
	Passenger Cars:			27	8	35	13	35	48	586
	Truck Trips:									
	2-4 axle:			4	1	5	2	5	7	108
	5+-axle:			9	3	12	3	7	10	218
	- Net Truck Trips			13	4	17	5	12	17	326
	Carson Companies Total (PCE)[3]			**40**	**12**	**52**	**18**	**47**	**65**	**912**
JV9	NWC of Hall Av. & Agua Mansa	334.523	TSF							
	Warehouse - Passenger Cars:			40	10	50	12	39	50	372
	Warehouse - Truck Trips:									
	2-axle:			1	1	2	2	1	3	50
	3-axle:			1	1	3	2	2	4	83
	4+-axle:			7	6	13	10	9	19	377
	NWC of Hall Av. & Agua Mansa Total			**49**	**18**	**67**	**25**	**51**	**76**	**882**
JV10	SEC of Opal St. and Canal St.									
	Single Family Residential	41	DU	**7**	**21**	**28**	**24**	**14**	**38**	**387**

Table Appendix 4.2

Cumulative Trip Generation Summary (PCE)

JV11	SEC of Camino Real and Limonite Av.									
	Multifamily Housing	121	DU	**12**	**37**	**49**	**39**	**23**	**62**	**816**
	Agua Mansa Commerce Park Specific Plan									
	Warehouse	4,277.000	TSF							
	Warehouse - Passenger Cars:			339	101	441	172	443	616	7,486
	Warehouse - Truck Trips:									
	2-4 Axle Trucks (PCE = 2.0)			2	2	4	2	3	5	74
	5+-Axle Trucks (PCE = 3.0)			2	3	5	2	2	4	98
JV12	General Light Industrial	150.000	TSF							
	General Light Industrial - Passenger Cars:			97	13	110	13	83	96	694
	General Light Industrial - Truck Trips:									
	2-axle:			0	0	0	0	0	0	10
	3-axle:			0	0	1	0	0	1	16
	4+-axle:			2	1	3	1	1	3	72
	Agua Mansa Commerce Park Specific Plan Total			**442**	**120**	**562**	**192**	**533**	**725**	**8,450**
JV13	Pearl Community									
	Single Family Residential	74	DU	**13**	**38**	**51**	**44**	**26**	**70**	**698**
JV14	Home Development (TTM37211 & CZ17003)									
	Single Family Residential	48	DU	**9**	**25**	**34**	**28**	**17**	**45**	**453**
JV15	Mobile Home Park									
	Single Family Residential	39	DU	**9**	**25**	**34**	**28**	**17**	**45**	**453**
	General & Clay Industrial Park	328.056	TSF							
	Warehouse - Passenger Cars:			39	10	49	11	38	49	366
	Warehouse - Truck Trips:									
JV16	2-axle:			1	1	2	1	1	2	49
	3-axle:			1	1	3	2	2	4	81
	4+-axle:			7	5	12	10	9	18	370
	Warehouse			**49**	**17**	**66**	**25**	**50**	**74**	**866**
JV17	Kiewit Industrial Park	--[5]		**30**	**9**	**39**	**13**	**29**	**42**	**248**
	Midland Carriers	42.132	TSF							
	Passenger Cars:			4	1	5	2	5	7	50
	Truck Trips:									
JV18	2-axle:			0	0	0	0	0	0	4
	3-axle:			0	0	0	0	0	0	6
	4+-axle:			1	0	1	0	1	1	16
	- Net Truck Trips			1	0	1	0	1	1	26
	Midland Carriers Total (Actual Vehicles)			**5**	**1**	**6**	**2**	**6**	**8**	**76**
	Midland Carriers (PCE)	42.132	TSF							
	Passenger Cars:			4	1	5	2	5	7	50
	Truck Trips:									
JV18	2-axle:			0	0	0	0	0	0	6
	3-axle:			1	0	1	0	1	1	10
	4+-axle:			3	1	4	1	2	3	44
	- Net Truck Trips			4	1	5	1	3	4	60
	Midland Carriers Total (PCE)[3]			**8**	**2**	**10**	**3**	**8**	**11**	**110**
	Rubidoux Commercial Development LLC	307	TSF							
	General Light Industrial - Passenger Cars:			198	26	224	26	170	196	1,418
	General Light Industrial - Truck Trips:									
JV19	2-axle:			0	0	1	0	0	1	19
	3-axle:			1	1	1	1	1	1	32
	4+-axle:			4	2	6	3	3	6	144
	Rubidoux Commercial Development LLC Total			**203**	**29**	**232**	**30**	**174**	**204**	**1,613**

Table Appendix 4.2

Cumulative Trip Generation Summary (PCE)

JV20	6250 Morton Av. Retail	9.800	TSF	**14**	**9**	**23**	**32**	**32**	**64**	**534**
JV21	NEC of Mission & Wallace Retail	12.180	TSF	**17**	**11**	**28**	**40**	**40**	**80**	**663**
JV22	SWC of Mission & Valley Fast-Food Restaurant	8.300	TSF	**189**	**181**	**370**	**143**	**132**	**275**	**3,880**
JV23	Madone Collection Single Family Residential	35	DU	**6**	**18**	**24**	**21**	**12**	**33**	**330**
JV24	APN 174-040-019 Single Family Residential	75	DU	**14**	**39**	**53**	**44**	**26**	**70**	**707**
JV25	The District @ Jurupa (Actual) Total	--[4]		**818**	**444**	**1,262**	**660**	**879**	**1,539**	**20,119**
JV25	The District @ Jurupa (PCE) Total	--[4]		**928**	**474**	**1,402**	**707**	**988**	**1,695**	**21,628**
JV26	Avalon Court (TTM 33649) Single Family Residential	24	DU	**4**	**12**	**16**	**14**	**8**	**22**	**226**
JV27	Shadow Rock Single Family Residential	398	DU	**72**	**206**	**278**	**236**	**138**	**374**	**3,753**
SB1	Slover Av. between Locust Av. and Laurel Av.	344.000	TSF							
	Warehouse - Passenger Cars:			27	8	35	14	36	50	602
	Warehouse - Truck Trips:									
	2-4 Axle Trucks (PCE = 2.0)			1	1	3	2	2	4	56
	5+-Axle Trucks (PCE = 3.0)			2	2	4	2	2	3	76
	Slover Av. between Locust Av. and Laurel Av. Total			**30**	**11**	**42**	**17**	**39**	**57**	**734**
SB2	West of Agua Mansa Rd. and North of El Rivino Rd.	506.000	TSF							
	Warehouse - Passenger Cars:			40	12	52	20	52	73	886
	Warehouse - Truck Trips:									
	2-4 Axle Trucks (PCE = 2.0)			2	2	4	3	3	6	82
	5+-Axle Trucks (PCE = 3.0)			3	3	6	2	3	5	110
	West of Agua Mansa Rd. and North of El Rivino Rd. Total			**45**	**17**	**62**	**25**	**58**	**83**	**1,078**
SB3	NWC of Cedar Av. and Jurupa Av.	677.000	TSF							
	Warehouse - Passenger Cars:			54	16	70	27	70	97	1,186
	Warehouse - Truck Trips:									
	2-4 Axle Trucks (PCE = 2.0)			3	3	5	4	4	7	110
	5+-Axle Trucks (PCE = 3.0)			4	4	7	3	4	7	148
	NWC of Cedar Av. and Jurupa Av. Total			**60**	**23**	**83**	**34**	**78**	**112**	**1,444**
SB4	Locust Av. and 7th St. Single Family Residential	198	DU	**36**	**103**	**139**	**117**	**69**	**186**	**1,867**
SB5	NEC and NWC of Cedar Av. and Orange St.	395.000	TSF							
	Warehouse - Passenger Cars:			47	12	59	14	46	59	440
	Warehouse - Truck Trips:									
	2-axle:			1	1	2	2	1	3	59
	3-axle:			2	2	3	2	3	5	98
	4+-axle:			8	7	15	12	10	22	445
	NEC and NWC of Cedar Av. and Orange St. Total			**58**	**21**	**79**	**30**	**60**	**89**	**1,043**
SB6	Holly Street Truck Terminal	450.000	TSF							
	Warehouse - Passenger Cars:			36	11	46	18	47	65	788
	Warehouse - Truck Trips:									
	2-4 Axle Trucks (PCE = 2.0)			3	3	5	4	4	7	110
	5+-Axle Trucks (PCE = 3.0)			4	4	7	3	4	7	148
	Holly Street Truck Terminal Total			**42**	**17**	**59**	**25**	**54**	**79**	**1,046**
SB7	Bloomington Commerce Center	--[4]		**187**	**185**	**372**	**161**	**159**	**320**	**6,410**

Table Appendix 4.2

Cumulative Trip Generation Summary (PCE)

	Slover and Cactus Warehouse	257.855	TSF							
	Warehouse - Passenger Cars:			31	8	39	9	30	39	288
	Warehouse - Truck Trips:									
SB8	2-axle:			1	1	1	1	1	2	39
	3-axle:			1	1	2	2	2	3	64
	4+-axle:			5	4	10	8	7	15	291
	Slover and Cactus Warehouse Total			**38**	**14**	**52**	**19**	**39**	**58**	**681**
SB9	Cedar Truck Yard (Actual)	--[4]		**26**	**39**	**65**	**29**	**29**	**58**	**716**
SB9	Cedar Truck Yard (PCE)	--[4]		**67**	**101**	**168**	**75**	**75**	**150**	**1,860**
SB10	Cedar & Slover Retail	--[4]		**148**	**140**	**288**	**146**	**133**	**279**	**3,428**
	West Valley Logistics Center									
	Warehouse	290.590	TSF							
	Warehouse - Passenger Cars:			35	9	44	10	34	44	324
	Warehouse - Truck Trips:									
	2-axle:			1	1	1	1	1	2	44
	3-axle:			1	1	2	2	2	4	72
F1	4+-axle:			6	5	11	9	8	16	327
	High-Cube Warehouse	3,183.100	TSF							
	Warehouse - Passenger Cars:			252	75	328	128	330	458	5,572
	Warehouse - Truck Trips:									
	2-4 Axle Trucks (PCE = 2.0)			12	13	25	16	19	35	516
	5+-Axle Trucks (PCE = 3.0)			17	18	35	15	17	32	692
	West Valley Logistics Center Total			**325**	**122**	**447**	**182**	**409**	**591**	**7,547**
	Panattoni I-10 (Cactus Av. & El Rivino Rd.)	2,475.745	TSF							
	Warehouse - Passenger Cars:			297	75	371	85	286	371	2,750
	Warehouse - Truck Trips:									
RIA1	2-axle:			7	5	12	11	7	19	372
	3-axle:			10	11	20	15	16	31	615
	4+-axle:			52	41	93	74	65	139	2,790
	Panattoni I-10 (Cactus Av. & El Rivino Rd.) Total			**366**	**131**	**497**	**185**	**375**	**560**	**6,527**
	CapRock III	582.000	TSF							
	Warehouse - Passenger Cars:			70	18	87	20	67	87	648
	Warehouse - Truck Trips:									
RIA2	2-axle:			2	1	3	3	2	4	88
	3-axle:			2	2	5	3	4	7	146
	4+-axle:			12	10	22	17	15	33	656
	CapRock III Total			**86**	**31**	**117**	**44**	**88**	**132**	**1,538**
	Newmark Merrill Companies									
	Discount Super Store	198.000	TSF	206	162	368	420	437	857	10,003
RIA3	Tire Store	9.861	TSF	16	9	25	16	21	37	273
	Retail	25.436	TSF	36	24	60	84	84	168	1,385
	Fast Food w/ Drive-Thru	5.484	TSF	125	120	245	94	87	181	2,564
	Newmark Merrill Companies Total			**383**	**315**	**698**	**614**	**629**	**1,243**	**14,225**
RIA4	Kore Infrastructure									
	Biosolids Facility	288	TPD	**11**	**11**	**22**	**23**	**23**	**45**	**287**
	2036, 2053 Miguel Bustamante Pkwy.	299.584	TSF							
	Warehouse - Passenger Cars:			36	9	45	10	35	45	334
	Warehouse - Truck Trips:									
COL1	2-axle:			1	1	2	1	1	2	46
	3-axle:			1	1	2	2	2	4	76
	4+-axle:			6	5	11	9	8	17	338
	2036, 2053 Miguel Bustamante Pkwy. Total			**44**	**16**	**60**	**22**	**45**	**68**	**794**

Table Appendix 4.2

Cumulative Trip Generation Summary (PCE)

COL2	Roquet Ranch	--[6]	--	**238**	**581**	**819**	**617**	**374**	**991**	**10,022**
COL3	2163 Riverside Av.	447.330	TSF							
	Warehouse - Passenger Cars:			35	11	46	18	46	64	784
	Warehouse - Truck Trips:									
	2-4 Axle Trucks (PCE = 2.0)			2	2	4	2	3	5	74
	5+-Axle Trucks (PCE = 3.0)			2	3	5	2	2	4	98
	High Cube Warehouse			**40**	**15**	**55**	**22**	**51**	**74**	**956**
R1	P06-0782 (Tract Map 34908) (1006 & 1008 Clark St.)									
	Single Family Residential	15	DU	**3**	**8**	**11**	**9**	**5**	**14**	**141**
R2	P05-0269 & P08-0416 (Tract Map 33550) (3719 Strong St.)									
	Single Family Residential	9	DU	**2**	**5**	**7**	**5**	**3**	**8**	**85**
R3	P06-1031 (Tract Map 31825) (1562 Orange St.)									
	Single Family Residential	7	DU	**1**	**4**	**5**	**4**	**2**	**6**	**66**
R4	P13-0087 P13-0262 (2450 Market St.)									
	Senior Housing	67	DU	**5**	**11**	**16**	**12**	**8**	**20**	**289**
R5	P14-0183 (Centerpointe Apartments) (3105 Market St.)									
	Apartments	146	DU	**14**	**44**	**58**	**47**	**28**	**75**	**984**
R6	P09-0835 P10-0002 (3372 University Av.)									
	General Office	132.136	TSF	**177**	**24**	**201**	**32**	**158**	**190**	**1,432**
R7	P06-1237 (Jacobs Medical Office) (14th and Brockton Av.)									
	Medical Office	65.281	TSF	**160**	**42**	**202**	**77**	**180**	**257**	**2,350**
R8	P12-0799 & P12-0800 (Tract Map 36516)									
	Single Family Residential	7	DU	**1**	**4**	**5**	**4**	**2**	**6**	**66**
R9	P09-0808 & P08-0809 (2340 14th St.)									
	Senior Housing	134	DU	**11**	**22**	**33**	**25**	**16**	**41**	**578**
R10	P08-0980 & P09-0095 (3549 Iowa Av.)									
	Student Housing	114	DU	**5**	**8**	**13**	**14**	**14**	**28**	**407**
R11	P09-0717 & P09-0718 (807 Blaine St.)									
	Apartments	55	DU	**5**	**17**	**22**	**18**	**10**	**28**	**371**

BOLD = Total volume for the corresponding cumulative project.

[1] TSF = thousand square feet

[2] Trip generation provided by the City.

[4] Trip generation from project's Traffic Impact Analysis

[5] Trip generation from project's Trip Generation Analysis

[6] Trip generation source: Roquet Ranch Specific Plan

APPENDIX 5.1: E+P CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	10.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	79	4	736	150	4	219
Future Vol, veh/h	79	4	736	150	4	219
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	96	5	898	183	5	267

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	101	0	2075	96
Stage 1	-	-	-	-	96	-
Stage 2	-	-	-	-	1979	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1504	-	60	966
Stage 1	-	-	-	-	933	-
Stage 2	-	-	-	-	119	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1504	-	20	966
Mov Cap-2 Maneuver	-	-	-	-	20	-
Stage 1	-	-	-	-	933	-
Stage 2	-	-	-	-	40	-

Approach	EB	WB	NB
HCM Control Delay, s	0	9	19.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	523	-	-	1504	-
HCM Lane V/C Ratio	0.52	-	-	0.597	-
HCM Control Delay (s)	19.1	-	-	10.9	0
HCM Lane LOS	C	-	-	B	A
HCM 95th %tile Q(veh)	3	-	-	4.2	-

Intersection	
Int Delay, s/veh	8.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	281	31	13	825	0	50	8	15	2	18	24
Future Vol, veh/h	5	281	31	13	825	0	50	8	15	2	18	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	347	38	16	1019	0	62	10	19	2	22	30

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1019	0	0	385	0	0	1455	1429	366	1444	1448	1019
Stage 1	-	-	-	-	-	-	378	378	-	1051	1051	-
Stage 2	-	-	-	-	-	-	1077	1051	-	393	397	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	689	-	-	1185	-	-	109	136	684	111	133	290
Stage 1	-	-	-	-	-	-	648	619	-	277	306	-
Stage 2	-	-	-	-	-	-	268	306	-	636	607	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	689	-	-	1185	-	-	82	130	684	99	127	290
Mov Cap-2 Maneuver	-	-	-	-	-	-	82	130	-	99	127	-
Stage 1	-	-	-	-	-	-	641	612	-	274	297	-
Stage 2	-	-	-	-	-	-	216	297	-	602	600	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.1	126.8	33.4
HCM LOS			F	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	105	689	-	-	1185	-	-	180
HCM Lane V/C Ratio	0.858	0.009	-	-	0.014	-	-	0.302
HCM Control Delay (s)	126.8	10.3	0	-	8.1	0	-	33.4
HCM Lane LOS	F	B	A	-	A	A	-	D
HCM 95th %tile Q(veh)	5	0	-	-	0	-	-	1.2

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	30	43	1	16	46
Future Vol, veh/h	3	30	43	1	16	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	100	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	35	50	1	19	53

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	142	51	0	0	51	0
Stage 1	51	-	-	-	-	-
Stage 2	91	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	856	1023	-	-	1568	-
Stage 1	977	-	-	-	-	-
Stage 2	938	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	846	1023	-	-	1568	-
Mov Cap-2 Maneuver	846	-	-	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	927	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	1.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	846	1023	1568	-
HCM Lane V/C Ratio	-	-	0.004	0.034	0.012	-
HCM Control Delay (s)	-	-	9.3	8.6	7.3	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.1	0	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	33	0	5	0	34	7	9	58	0
Future Vol, veh/h	0	0	0	33	0	5	0	34	7	9	58	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	39	0	6	0	40	8	11	69	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	138	139	69	135	135	44	69	0	0	48	0	0
Stage 1	91	91	-	44	44	-	-	-	-	-	-	-
Stage 2	47	48	-	91	91	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	837	756	1000	841	760	1032	1545	-	-	1572	-	-
Stage 1	921	823	-	975	862	-	-	-	-	-	-	-
Stage 2	972	859	-	921	823	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	828	751	1000	837	755	1032	1545	-	-	1572	-	-
Mov Cap-2 Maneuver	828	751	-	837	755	-	-	-	-	-	-	-
Stage 1	921	817	-	975	862	-	-	-	-	-	-	-
Stage 2	966	859	-	915	817	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.4	0	1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1545	-	-	-	858	1572	-	-
HCM Lane V/C Ratio	-	-	-	-	0.053	0.007	-	-
HCM Control Delay (s)	0	-	-	0	9.4	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	0	0	36	69	22
Future Vol, veh/h	5	0	0	36	69	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	0	0	39	75	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	126	87	99	0	-	0
Stage 1	87	-	-	-	-	-
Stage 2	39	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	874	977	1507	-	-	-
Stage 1	941	-	-	-	-	-
Stage 2	989	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	874	977	1507	-	-	-
Mov Cap-2 Maneuver	874	-	-	-	-	-
Stage 1	941	-	-	-	-	-
Stage 2	989	-	-	-	-	-

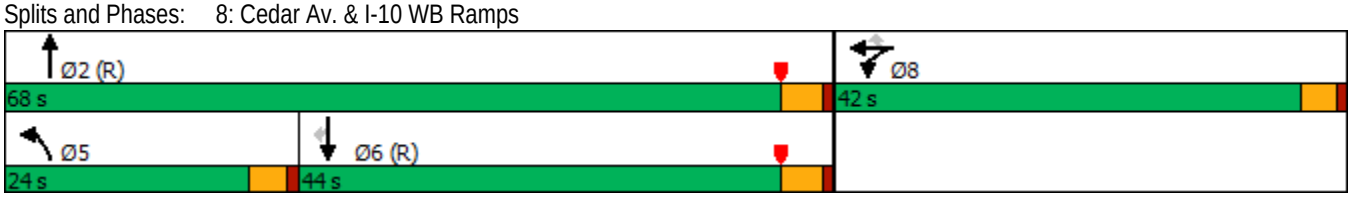
Approach	EB	NB	SB
HCM Control Delay, s	9.1	0	0
HCM LOS	A		

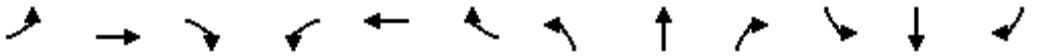
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1507	-	874	-	-
HCM Lane V/C Ratio	-	-	0.006	-	-
HCM Control Delay (s)	0	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	380	261	1119	1445	580
Future Volume (vph)	0	380	261	1119	1445	580
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	42.0	42.0	24.0	68.0	44.0	44.0
Total Split (%)	38.2%	38.2%	21.8%	61.8%	40.0%	40.0%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	37.6	37.6	19.1	63.9	40.8	40.8
Actuated g/C Ratio	0.34	0.34	0.17	0.58	0.37	0.37
v/c Ratio	0.97	0.62	0.87	0.56	0.78	0.62
Control Delay	62.3	29.4	69.2	12.2	34.5	5.1
Queue Delay	42.5	0.0	0.0	0.5	48.6	0.0
Total Delay	104.8	29.4	69.2	12.7	83.1	5.1
LOS	F	C	E	B	F	A
Approach Delay	76.7			23.4	60.8	
Approach LOS	E			C	E	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 52.2	Intersection LOS: D
Intersection Capacity Utilization 98.5%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	537	0	380	261	1119	0	0	1445	580
Future Volume (veh/h)	0	0	0	537	0	380	261	1119	0	0	1445	580
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				559	0	290	272	1166	0	0	1505	338
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				597	0	531	297	2140	0	0	2035	632
Arrive On Green				0.33	0.00	0.33	0.33	1.00	0.00	0.00	0.39	0.39
Sat Flow, veh/h				1810	0	1610	1810	3705	0	0	5358	1610
Grp Volume(v), veh/h				559	0	290	272	1166	0	0	1505	338
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1729	1610
Q Serve(g_s), s				32.9	0.0	16.2	15.9	0.0	0.0	0.0	27.3	17.8
Cycle Q Clear(g_c), s				32.9	0.0	16.2	15.9	0.0	0.0	0.0	27.3	17.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				597	0	531	297	2140	0	0	2035	632
V/C Ratio(X)				0.94	0.00	0.55	0.92	0.54	0.00	0.00	0.74	0.54
Avail Cap(c_a), veh/h				625	0	556	329	2140	0	0	2035	632
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.45	0.45	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				35.7	0.0	30.1	36.2	0.0	0.0	0.0	28.6	25.7
Incr Delay (d2), s/veh				21.2	0.0	1.0	15.4	0.5	0.0	0.0	2.5	3.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				17.2	0.0	6.1	6.8	0.1	0.0	0.0	11.2	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				57.0	0.0	31.1	51.6	0.5	0.0	0.0	31.1	28.9
LnGrp LOS				E	A	C	D	A	A	A	C	C
Approach Vol, veh/h					849			1438			1843	
Approach Delay, s/veh					48.1			10.1			30.7	
Approach LOS					D			B			C	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	69.7		22.1	47.7		40.3						
Change Period (Y+Rc), s	4.5		4.0	4.5		4.0						
Max Green Setting (Gmax), s	63.5		20.0	39.5		38.0						
Max Q Clear Time (g_c+I1), s	2.0		17.9	29.3		34.9						
Green Ext Time (p_c), s	10.8		0.2	7.2		1.3						

Intersection Summary		
HCM 6th Ctrl Delay	27.1	
HCM 6th LOS	C	

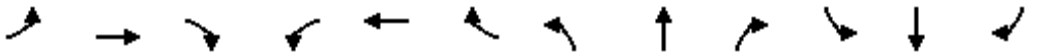
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	485	0	894	497	470	1513
Future Volume (vph)	485	0	894	497	470	1513
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	44.0	44.0	27.0	27.0	39.0	66.0
Total Split (%)	40.0%	40.0%	24.5%	24.5%	35.5%	60.0%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	43.0	43.0	22.8	22.8	33.2	59.5
Actuated g/C Ratio	0.39	0.39	0.21	0.21	0.30	0.54
v/c Ratio	0.70	1.09	0.89	0.71	0.93	0.83
Control Delay	35.8	92.4	53.3	20.8	48.6	18.0
Queue Delay	0.0	0.0	0.0	0.0	49.1	48.1
Total Delay	35.8	92.4	53.3	20.8	97.6	66.2
LOS	D	F	D	C	F	E
Approach Delay		69.5	41.7			73.6
Approach LOS		E	D			E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.09	
Intersection Signal Delay: 62.6	Intersection LOS: E
Intersection Capacity Utilization 98.5%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	485	0	592	0	0	0	0	894	497	470	1513	0
Future Volume (veh/h)	485	0	592	0	0	0	0	894	497	470	1513	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	522	0	585				0	961	260	505	1627	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	666	0	593				0	1069	331	581	2035	0
Arrive On Green	0.37	0.00	0.37				0.00	0.07	0.07	0.32	0.56	0.00
Sat Flow, veh/h	1810	0	1610				0	5358	1606	1810	3705	0
Grp Volume(v), veh/h	522	0	585				0	961	260	505	1627	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1729	1606	1810	1805	0
Q Serve(g_s), s	28.2	0.0	39.7				0.0	20.2	17.5	28.9	39.4	0.0
Cycle Q Clear(g_c), s	28.2	0.0	39.7				0.0	20.2	17.5	28.9	39.4	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	666	0	593				0	1069	331	581	2035	0
V/C Ratio(X)	0.78	0.00	0.99				0.00	0.90	0.79	0.87	0.80	0.00
Avail Cap(c_a), veh/h	666	0	593				0	1085	336	584	2035	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.71	0.71	0.53	0.53	0.00
Uniform Delay (d), s/veh	30.9	0.0	34.5				0.0	50.1	48.9	35.2	19.1	0.0
Incr Delay (d2), s/veh	6.1	0.0	33.5				0.0	8.9	12.5	7.3	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.7	0.0	20.0				0.0	10.2	8.7	13.4	15.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.9	0.0	68.0				0.0	59.0	61.4	42.4	20.9	0.0
LnGrp LOS	D	A	E				A	E	E	D	C	A
Approach Vol, veh/h		1107						1221			2132	
Approach Delay, s/veh		53.3						59.5			26.0	
Approach LOS		D						E			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	39.3	26.7		44.0		66.0
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	35.5	* 23		40.5		62.0
Max Q Clear Time (g_c+I1), s	30.9	22.2		41.7		41.4
Green Ext Time (p_c), s	0.4	0.4		0.0		8.6

Intersection Summary		
HCM 6th Ctrl Delay		42.0
HCM 6th LOS		D

Notes

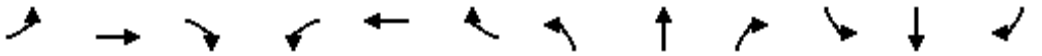
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	231	4	6	3	6	1023	166	1526	412
Future Volume (vph)	231	4	6	3	6	1023	166	1526	412
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases		4		8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	30.0	30.0	10.2	10.2	16.2	28.2	16.2	28.2	28.2
Total Split (s)	36.0	36.0	36.0	36.0	16.2	57.2	16.8	57.8	57.8
Total Split (%)	32.7%	32.7%	32.7%	32.7%	14.7%	52.0%	15.3%	52.5%	52.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	3.0	4.7	3.0	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.0	5.7	4.0	5.7	5.7
Lead/Lag					Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min	C-Min
Act Effct Green (s)	26.7	26.7	26.7	26.7	65.1	57.8	73.3	69.6	69.6
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.59	0.53	0.67	0.63	0.63
v/c Ratio	0.90	0.06	0.02	0.30	0.04	0.60	0.55	0.73	0.42
Control Delay	72.8	14.5	29.7	7.0	7.2	20.1	10.2	14.9	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Total Delay	72.8	14.5	29.7	7.0	7.2	20.1	10.2	15.0	3.5
LOS	E	B	C	A	A	C	B	B	A
Approach Delay		67.7		8.0		20.0		12.4	
Approach LOS		E		A		C		B	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 68.3 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 18.4	Intersection LOS: B
Intersection Capacity Utilization 85.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 10: Cedar Av. & Orange St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	231	4	18	6	3	137	6	1023	4	166	1526	412
Future Volume (veh/h)	231	4	18	6	3	137	6	1023	4	166	1526	412
Initial Q (Qb), veh	0	0	0	0	0	0	0	44	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	254	4	15	7	3	64	7	1124	4	182	1677	362
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	343	83	311	389	17	368	123	2049	6	312	2212	984
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.00	0.37	0.37	0.04	0.41	0.41
Sat Flow, veh/h	1355	350	1311	1412	73	1549	1810	3690	13	1810	3610	1606
Grp Volume(v), veh/h	254	0	19	7	0	67	7	550	578	182	1677	362
Grp Sat Flow(s),veh/h/ln	1355	0	1660	1412	0	1621	1810	1805	1898	1810	1805	1606
Q Serve(g_s), s	20.2	0.0	1.0	0.4	0.0	3.6	0.2	26.3	26.3	4.4	43.7	17.2
Cycle Q Clear(g_c), s	23.8	0.0	1.0	1.4	0.0	3.6	0.2	26.3	26.3	4.4	43.7	17.2
Prop In Lane	1.00		0.79	1.00		0.96	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	343	0	394	389	0	385	123	1002	1054	312	2212	984
V/C Ratio(X)	0.74	0.00	0.05	0.02	0.00	0.17	0.06	0.55	0.55	0.58	0.76	0.37
Avail Cap(c_a), veh/h	391	0	453	438	0	442	311	1010	1062	438	2212	984
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.81	0.81	0.81	0.44	0.44	0.44
Uniform Delay (d), s/veh	42.8	0.0	32.3	32.9	0.0	33.3	17.2	25.8	25.7	18.4	25.5	17.6
Incr Delay (d2), s/veh	6.4	0.0	0.0	0.0	0.0	0.2	0.2	1.8	1.7	0.8	1.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7	7.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	0.4	0.1	0.0	1.5	0.1	17.4	17.8	2.3	19.6	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.2	0.0	32.4	32.9	0.0	33.6	17.4	35.3	34.3	19.2	26.6	18.1
LnGrp LOS	D	A	C	C	A	C	B	D	C	B	C	B
Approach Vol, veh/h		273			74			1135			2221	
Approach Delay, s/veh		48.1			33.5			34.7			24.6	
Approach LOS		D			C			C			C	

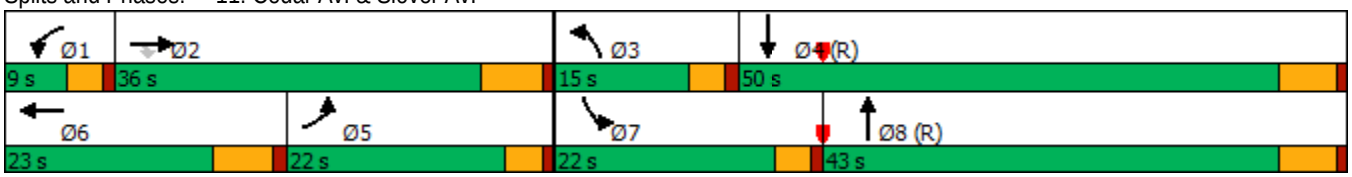
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.6	67.3		32.1	4.8	73.1		32.1				
Change Period (Y+Rc), s	4.0	5.7		6.0	4.0	5.7		6.0				
Max Green Setting (Gmax), s	12.8	51.5		30.0	12.2	52.1		30.0				
Max Q Clear Time (g_c+I1), s	6.4	28.3		25.8	2.2	45.7		5.6				
Green Ext Time (p_c), s	0.2	7.5		0.4	0.0	5.3		0.3				

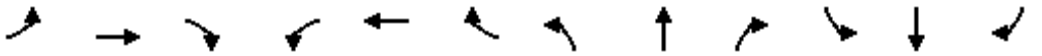
Intersection Summary			
HCM 6th Ctrl Delay		29.6	
HCM 6th LOS		C	

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	213	120	99	35	154	134	720	165	1288
Future Volume (vph)	213	120	99	35	154	134	720	165	1288
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2		1	6	3	8	7	4
Permitted Phases			2						
Detector Phase	5	2	2	1	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	29.0	29.0	8.0	23.0	8.0	32.7	8.0	24.7
Total Split (s)	22.0	36.0	36.0	9.0	23.0	15.0	43.0	22.0	50.0
Total Split (%)	20.0%	32.7%	32.7%	8.2%	20.9%	13.6%	39.1%	20.0%	45.5%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	4.7	3.0	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	4.0	5.7	4.0	5.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	17.5	27.2	27.2	5.0	11.1	11.8	46.7	14.9	49.8
Actuated g/C Ratio	0.16	0.25	0.25	0.05	0.10	0.11	0.42	0.14	0.45
v/c Ratio	0.77	0.14	0.20	0.44	0.60	0.71	0.50	0.69	0.88
Control Delay	62.1	32.1	2.6	67.9	33.7	62.3	46.9	60.1	34.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.1	32.1	2.6	67.9	33.7	62.3	46.9	60.1	34.2
LOS	E	C	A	E	C	E	D	E	C
Approach Delay		40.1			37.8		49.3		36.9
Approach LOS		D			D		D		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 40.9	Intersection LOS: D
Intersection Capacity Utilization 81.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 11: Cedar Av. & Slover Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	213	120	99	35	154	101	134	720	26	165	1288	97
Future Volume (veh/h)	213	120	99	35	154	101	134	720	26	165	1288	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	220	124	80	36	159	73	138	742	25	170	1328	99
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	251	805	358	46	223	98	166	1639	55	204	1637	122
Arrive On Green	0.14	0.22	0.22	0.03	0.09	0.09	0.09	0.46	0.46	0.04	0.16	0.16
Sat Flow, veh/h	1810	3610	1606	1810	2440	1072	1810	3563	120	1810	3406	253
Grp Volume(v), veh/h	220	124	80	36	116	116	138	376	391	170	702	725
Grp Sat Flow(s),veh/h/ln	1810	1805	1606	1810	1805	1707	1810	1805	1878	1810	1805	1854
Q Serve(g_s), s	13.1	3.0	4.5	2.2	6.8	7.3	8.2	15.6	15.6	10.3	41.3	41.6
Cycle Q Clear(g_c), s	13.1	3.0	4.5	2.2	6.8	7.3	8.2	15.6	15.6	10.3	41.3	41.6
Prop In Lane	1.00		1.00	1.00		0.63	1.00		0.06	1.00		0.14
Lane Grp Cap(c), veh/h	251	805	358	46	165	156	166	830	864	204	868	891
V/C Ratio(X)	0.88	0.15	0.22	0.78	0.70	0.75	0.83	0.45	0.45	0.83	0.81	0.81
Avail Cap(c_a), veh/h	296	985	438	82	279	264	181	830	864	296	868	891
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.86	0.86	0.61	0.61	0.61
Uniform Delay (d), s/veh	46.4	34.4	35.0	53.3	48.5	48.7	49.1	20.3	20.3	51.9	41.4	41.5
Incr Delay (d2), s/veh	21.8	0.1	0.3	24.7	5.3	6.9	22.0	1.5	1.5	8.1	5.1	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	1.3	1.7	1.3	3.3	3.4	4.6	6.5	6.8	5.3	21.1	21.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.3	34.5	35.3	78.0	53.8	55.6	71.1	21.8	21.7	60.0	46.5	46.6
LnGrp LOS	E	C	D	E	D	E	E	C	C	E	D	D
Approach Vol, veh/h		424			268			905			1597	
Approach Delay, s/veh		52.2			57.8			29.3			48.0	
Approach LOS		D			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	30.5	14.1	58.6	21.3	16.1	16.4	56.3
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	6.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	5.0	30.0	11.0	44.3	18.0	* 17	18.0	37.3
Max Q Clear Time (g_c+I1), s	4.2	6.5	10.2	43.6	15.1	9.3	12.3	17.6
Green Ext Time (p_c), s	0.0	0.8	0.0	0.6	0.2	0.8	0.2	4.2

Intersection Summary	
HCM 6th Ctrl Delay	44.1
HCM 6th LOS	D

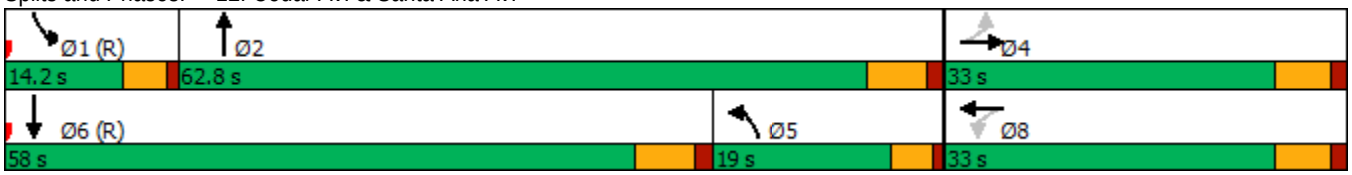
Notes

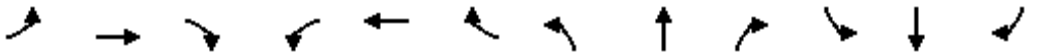
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	47	69	60	67	105	783	40	1293
Future Volume (vph)	47	69	60	67	105	783	40	1293
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	9.5	27.5	9.5	27.5
Total Split (s)	33.0	33.0	33.0	33.0	19.0	62.8	14.2	58.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	17.3%	57.1%	12.9%	52.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	4.5	6.5	4.5	6.5
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min
Act Effct Green (s)		19.4		19.4	11.0	54.0	19.6	62.6
Actuated g/C Ratio		0.18		0.18	0.10	0.49	0.18	0.57
v/c Ratio		0.75		0.80	0.63	0.50	0.13	0.71
Control Delay		52.3		64.3	59.0	15.9	32.8	41.4
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		52.3		64.3	59.0	15.9	32.8	41.4
LOS		D		E	E	B	C	D
Approach Delay		52.3		64.3		20.8		41.1
Approach LOS		D		E		C		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 90 (82%), Referenced to phase 1:SBL and 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 36.3	Intersection LOS: D
Intersection Capacity Utilization 72.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 12: Cedar Av. & Santa Ana Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	69	82	60	67	34	105	783	32	40	1293	44
Future Volume (veh/h)	47	69	82	60	67	34	105	783	32	40	1293	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	51	75	48	65	73	25	114	851	31	43	1405	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	95	113	63	115	108	32	404	1746	64	383	1656	47
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.45	0.98	0.98	0.07	0.15	0.15
Sat Flow, veh/h	368	794	443	486	761	226	1810	3552	129	1810	3585	102
Grp Volume(v), veh/h	174	0	0	163	0	0	114	432	450	43	707	738
Grp Sat Flow(s),veh/h/ln	1605	0	0	1474	0	0	1810	1805	1877	1810	1805	1882
Q Serve(g_s), s	0.0	0.0	0.0	0.5	0.0	0.0	4.4	0.9	0.9	2.5	41.9	42.0
Cycle Q Clear(g_c), s	11.5	0.0	0.0	12.0	0.0	0.0	4.4	0.9	0.9	2.5	41.9	42.0
Prop In Lane	0.29		0.28	0.40		0.15	1.00		0.07	1.00		0.05
Lane Grp Cap(c), veh/h	271	0	0	255	0	0	404	887	922	383	834	869
V/C Ratio(X)	0.64	0.00	0.00	0.64	0.00	0.00	0.28	0.49	0.49	0.11	0.85	0.85
Avail Cap(c_a), veh/h	437	0	0	416	0	0	404	924	960	383	845	881
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.92	0.92	0.92	0.45	0.45	0.45
Uniform Delay (d), s/veh	45.2	0.0	0.0	45.3	0.0	0.0	24.9	0.5	0.5	41.5	42.9	42.9
Incr Delay (d2), s/veh	3.6	0.0	0.0	3.7	0.0	0.0	0.1	1.4	1.3	0.0	5.0	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	0.0	4.5	0.0	0.0	1.7	0.5	0.5	1.1	21.2	22.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.8	0.0	0.0	49.1	0.0	0.0	25.0	1.9	1.8	41.5	47.9	47.8
LnGrp LOS	D	A	A	D	A	A	C	A	A	D	D	D
Approach Vol, veh/h		174			163			996			1488	
Approach Delay, s/veh		48.8			49.1			4.5			47.7	
Approach LOS		D			D			A			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	27.8	60.6		21.6	31.1	57.3		21.6				
Change Period (Y+Rc), s	4.5	6.5		6.0	6.5	* 6.5		6.0				
Max Green Setting (Gmax), s	9.7	56.3		27.0	14.5	* 52		27.0				
Max Q Clear Time (g_c+I1), s	4.5	2.9		13.5	6.4	44.0		14.0				
Green Ext Time (p_c), s	0.0	18.2		1.0	0.1	6.8		0.9				

Intersection Summary			
HCM 6th Ctrl Delay		32.6	
HCM 6th LOS		C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	55	71	35	70	75	131	26	722	87	1326
Future Volume (vph)	55	71	35	70	75	131	26	722	87	1326
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	32.0	32.0	32.0	32.0	32.0	32.0	17.0	58.0	20.0	61.0
Total Split (%)	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%	15.5%	52.7%	18.2%	55.5%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)		18.7	18.7		18.7	18.7	19.7	63.9	11.4	55.6
Actuated g/C Ratio		0.17	0.17		0.17	0.17	0.18	0.58	0.10	0.51
v/c Ratio		0.68	0.12		0.73	0.37	0.09	0.42	0.52	0.82
Control Delay		58.5	2.5		61.3	8.7	56.9	12.6	40.9	39.9
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		58.5	2.5		61.3	8.7	56.9	12.6	40.9	39.9
LOS		E	A		E	A	E	B	D	D
Approach Delay		46.3			36.3			14.0		40.0
Approach LOS		D			D			B		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 32.2	Intersection LOS: C
Intersection Capacity Utilization 71.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	71	35	70	75	131	26	722	56	87	1326	18
Future Volume (veh/h)	55	71	35	70	75	131	26	722	56	87	1326	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	61	79	20	78	83	80	29	802	51	97	1473	16
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	47	45	388	49	37	383	246	1877	119	125	1748	19
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.27	1.00	1.00	0.02	0.16	0.16
Sat Flow, veh/h	0	186	1610	0	153	1589	1810	3446	219	1810	3658	40
Grp Volume(v), veh/h	140	0	20	161	0	80	29	420	433	97	726	763
Grp Sat Flow(s),veh/h/ln	186	0	1610	153	0	1589	1810	1805	1860	1810	1805	1893
Q Serve(g_s), s	0.0	0.0	1.1	0.0	0.0	4.4	1.3	0.0	0.0	5.9	43.0	43.1
Cycle Q Clear(g_c), s	26.5	0.0	1.1	26.5	0.0	4.4	1.3	0.0	0.0	5.9	43.0	43.1
Prop In Lane	0.44		1.00	0.48		1.00	1.00		0.12	1.00		0.02
Lane Grp Cap(c), veh/h	92	0	388	85	0	383	246	983	1013	125	862	904
V/C Ratio(X)	1.53	0.00	0.05	1.89	0.00	0.21	0.12	0.43	0.43	0.78	0.84	0.84
Avail Cap(c_a), veh/h	92	0	388	85	0	383	246	983	1013	255	903	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.97	0.97	0.97	0.64	0.64	0.64
Uniform Delay (d), s/veh	42.7	0.0	32.1	44.0	0.0	33.4	35.1	0.0	0.0	52.9	42.3	42.3
Incr Delay (d2), s/veh	284.4	0.0	0.1	439.7	0.0	0.4	0.2	1.3	1.3	6.5	4.9	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.7	0.0	0.4	12.7	0.0	1.7	0.6	0.4	0.4	2.9	21.8	22.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	327.1	0.0	32.2	483.8	0.0	33.8	35.3	1.3	1.3	59.4	47.2	47.0
LnGrp LOS	F	A	C	F	A	C	D	A	A	E	D	D
Approach Vol, veh/h		160			241			882			1586	
Approach Delay, s/veh		290.2			334.4			2.4			47.8	
Approach LOS		F			F			A			D	

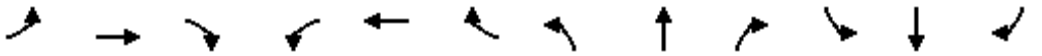
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.1	65.9		32.0	19.4	58.6		32.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	15.5	52.0		26.5	12.5	55.0		26.5				
Max Q Clear Time (g_c+I1), s	7.9	2.0		28.5	3.3	45.1		28.5				
Green Ext Time (p_c), s	0.1	8.8		0.0	0.0	7.5		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			71.5									
HCM 6th LOS			E									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	34	7	25	8	64	706	22	1346
Future Volume (vph)	34	7	25	8	64	706	22	1346
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	10.0	10.0	9.5	24.0	9.5	24.0
Total Split (s)	30.0	30.0	30.0	30.0	17.0	68.0	12.0	63.0
Total Split (%)	27.3%	27.3%	27.3%	27.3%	15.5%	61.8%	10.9%	57.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)		11.5		11.5	9.4	82.4	7.0	75.7
Actuated g/C Ratio		0.10		0.10	0.09	0.75	0.06	0.69
v/c Ratio		0.70		0.51	0.44	0.28	0.20	0.58
Control Delay		26.6		57.8	55.7	6.1	69.2	7.2
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		26.6		57.8	55.7	6.1	69.2	7.2
LOS		C		E	E	A	E	A
Approach Delay		26.6		57.8		10.2		8.2
Approach LOS		C		E		B		A

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 74 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 67.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 14: Rubidoux Bl./Cedar Av. & 7th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	7	163	25	8	9	64	706	5	22	1346	19
Future Volume (veh/h)	34	7	163	25	8	9	64	706	5	22	1346	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	36	7	80	26	8	1	67	743	4	23	1417	20
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	77	19	101	143	38	4	87	2721	15	42	2601	37
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.05	0.74	0.74	0.02	0.71	0.71
Sat Flow, veh/h	362	197	1040	881	390	37	1810	3682	20	1810	3644	51
Grp Volume(v), veh/h	123	0	0	35	0	0	67	364	383	23	701	736
Grp Sat Flow(s),veh/h/ln	1599	0	0	1308	0	0	1810	1805	1896	1810	1805	1891
Q Serve(g_s), s	5.7	0.0	0.0	0.0	0.0	0.0	4.0	7.3	7.3	1.4	20.0	20.0
Cycle Q Clear(g_c), s	8.2	0.0	0.0	2.6	0.0	0.0	4.0	7.3	7.3	1.4	20.0	20.0
Prop In Lane	0.29		0.65	0.74		0.03	1.00		0.01	1.00		0.03
Lane Grp Cap(c), veh/h	198	0	0	184	0	0	87	1334	1401	42	1288	1350
V/C Ratio(X)	0.62	0.00	0.00	0.19	0.00	0.00	0.77	0.27	0.27	0.55	0.54	0.55
Avail Cap(c_a), veh/h	401	0	0	371	0	0	206	1334	1401	123	1288	1350
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.90	0.90	0.90	0.50	0.50	0.50
Uniform Delay (d), s/veh	48.5	0.0	0.0	45.9	0.0	0.0	51.7	4.7	4.7	53.2	7.4	7.4
Incr Delay (d2), s/veh	4.5	0.0	0.0	0.7	0.0	0.0	12.0	0.5	0.4	5.7	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	0.0	0.9	0.0	0.0	2.1	2.1	2.2	0.7	6.2	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.0	0.0	0.0	46.6	0.0	0.0	63.8	5.2	5.1	58.8	8.2	8.2
LnGrp LOS	D	A	A	D	A	A	E	A	A	E	A	A
Approach Vol, veh/h		123			35			814			1460	
Approach Delay, s/veh		53.0			46.6			10.0			9.0	
Approach LOS		D			D			A			A	

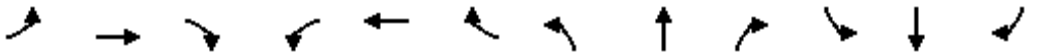
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	87.3		15.7	9.8	84.5		15.7				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	7.5	62.0		25.0	12.5	57.0		25.0				
Max Q Clear Time (g_c+I1), s	3.4	9.3		10.2	6.0	22.0		4.6				
Green Ext Time (p_c), s	0.0	7.0		0.7	0.1	17.4		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		12.1	
HCM 6th LOS		B	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	17	8	104	1	82	2	619	159	1324
Future Volume (vph)	17	8	104	1	82	2	619	159	1324
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	35.0	35.0	35.0	9.5	24.0	9.5	24.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.6	34.0	21.0	45.4
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%	10.7%	37.8%	23.3%	50.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	5.0	4.5	6.0	4.5	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min
Act Effct Green (s)		12.7		13.7	13.7	5.6	29.1	11.5	40.3
Actuated g/C Ratio		0.21		0.22	0.22	0.09	0.48	0.19	0.66
v/c Ratio		0.15		0.37	0.18	0.01	0.46	0.49	0.59
Control Delay		14.2		26.1	1.6	35.5	18.2	31.8	12.4
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		14.2		26.1	1.6	35.5	18.2	31.8	12.4
LOS		B		C	A	D	B	C	B
Approach Delay		14.2		15.4			18.3		14.5
Approach LOS		B		B			B		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 61.2	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 15.7	Intersection LOS: B
Intersection Capacity Utilization 66.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 15: Rubidoux Bl. & Tarragona Dr./El Rivino Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	8	25	104	1	82	2	619	124	159	1324	11
Future Volume (veh/h)	17	8	25	104	1	82	2	619	124	159	1324	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	18	8	17	109	1	54	2	652	124	167	1394	12
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	136	52	56	320	2	174	5	1381	262	220	2110	18
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.00	0.46	0.46	0.12	0.58	0.58
Sat Flow, veh/h	301	483	513	1612	15	1610	1810	3027	575	1810	3668	32
Grp Volume(v), veh/h	43	0	0	110	0	54	2	388	388	167	686	720
Grp Sat Flow(s),veh/h/ln	1297	0	0	1626	0	1610	1810	1805	1797	1810	1805	1894
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	1.5	0.1	7.4	7.4	4.4	12.9	12.9
Cycle Q Clear(g_c), s	2.9	0.0	0.0	2.8	0.0	1.5	0.1	7.4	7.4	4.4	12.9	12.9
Prop In Lane	0.42		0.40	0.99		1.00	1.00		0.32	1.00		0.02
Lane Grp Cap(c), veh/h	244	0	0	321	0	174	5	824	820	220	1038	1090
V/C Ratio(X)	0.18	0.00	0.00	0.34	0.00	0.31	0.40	0.47	0.47	0.76	0.66	0.66
Avail Cap(c_a), veh/h	1013	0	0	1025	0	978	187	1023	1018	604	1440	1511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.1	0.0	0.0	20.9	0.0	20.3	24.6	9.3	9.3	21.0	7.2	7.2
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.9	0.0	1.4	45.4	0.6	0.6	5.3	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	1.2	0.0	0.6	0.1	2.0	2.0	1.8	2.6	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.6	0.0	0.0	21.8	0.0	21.7	70.0	9.9	9.9	26.3	8.2	8.2
LnGrp LOS	C	A	A	C	A	C	E	A	A	C	A	A
Approach Vol, veh/h		43			164			778			1573	
Approach Delay, s/veh		20.6			21.8			10.1			10.1	
Approach LOS		C			C			B			B	

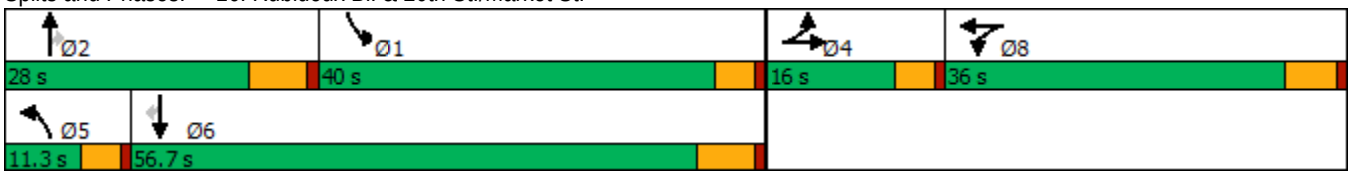
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.5	28.5		10.3	4.6	34.4		10.3				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	16.5	28.0		30.0	5.1	39.4		30.0				
Max Q Clear Time (g_c+I1), s	6.4	9.4		4.9	2.1	14.9		4.8				
Green Ext Time (p_c), s	0.3	5.8		0.2	0.0	13.5		1.1				

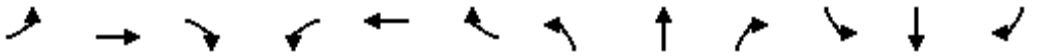
Intersection Summary			
HCM 6th Ctrl Delay		11.0	
HCM 6th LOS		B	

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	150	119	286	391	205	226	281	385	712	385
Future Volume (vph)	150	119	286	391	205	226	281	385	712	385
Turn Type	Split	NA	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4	8		5	2		1	6	
Permitted Phases				Free			2			6
Detector Phase	4	4	8		5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	14.6	14.6	15.8		9.6	16.2	16.2	9.6	35.2	35.2
Total Split (s)	16.0	16.0	36.0		11.3	28.0	28.0	40.0	56.7	56.7
Total Split (%)	13.3%	13.3%	30.0%		9.4%	23.3%	23.3%	33.3%	47.3%	47.3%
Yellow Time (s)	3.6	3.6	4.8		3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	5.8		4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag					Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None		None	None	None	None	None	None
Act Effct Green (s)	11.5	11.5	30.4	102.1	6.8	12.7	12.7	26.2	32.1	32.1
Actuated g/C Ratio	0.11	0.11	0.30	1.00	0.07	0.12	0.12	0.26	0.31	0.31
v/c Ratio	0.76	0.98	1.01	0.25	1.77	0.52	0.64	0.86	0.65	0.52
Control Delay	70.8	98.0	79.1	0.4	411.1	47.2	12.2	54.9	32.4	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.8	98.0	79.1	0.4	411.1	47.2	12.2	54.9	32.4	4.9
LOS	E	F	E	A	F	D	B	D	C	A
Approach Delay		86.7	46.1			138.0			31.1	
Approach LOS		F	D			F			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 102.1	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.77	
Intersection Signal Delay: 62.7	Intersection LOS: E
Intersection Capacity Utilization 90.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	119	92	256	286	391	205	226	281	385	712	385
Future Volume (veh/h)	150	119	92	256	286	391	205	226	281	385	712	385
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	155	123	80	264	295	0	211	233	202	397	734	366
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	196	116	76	251	281		115	546	244	430	1229	547
Arrive On Green	0.11	0.11	0.11	0.29	0.29	0.00	0.06	0.15	0.15	0.24	0.34	0.34
Sat Flow, veh/h	1810	1075	699	877	980	1610	1810	3610	1610	1810	3610	1608
Grp Volume(v), veh/h	155	0	203	559	0	0	211	233	202	397	734	366
Grp Sat Flow(s),veh/h/ln	1810	0	1774	1856	0	1610	1810	1805	1610	1810	1805	1608
Q Serve(g_s), s	8.8	0.0	11.4	30.2	0.0	0.0	6.7	6.2	12.8	22.6	17.7	20.5
Cycle Q Clear(g_c), s	8.8	0.0	11.4	30.2	0.0	0.0	6.7	6.2	12.8	22.6	17.7	20.5
Prop In Lane	1.00		0.39	0.47		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	196	0	192	532	0		115	546	244	430	1229	547
V/C Ratio(X)	0.79	0.00	1.06	1.05	0.00		1.83	0.43	0.83	0.92	0.60	0.67
Avail Cap(c_a), veh/h	196	0	192	532	0		115	747	333	608	1730	771
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.8	0.0	47.0	37.6	0.0	0.0	49.3	40.6	43.4	39.2	28.8	29.7
Incr Delay (d2), s/veh	19.5	0.0	81.0	53.0	0.0	0.0	406.9	0.5	11.9	13.3	0.5	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.0	9.4	20.7	0.0	0.0	15.9	2.7	5.7	11.0	7.2	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.3	0.0	128.0	90.6	0.0	0.0	456.2	41.1	55.3	52.5	29.2	31.1
LnGrp LOS	E	A	F	F	A		F	D	E	D	C	C
Approach Vol, veh/h		358			559			646			1497	
Approach Delay, s/veh		100.8			90.6			181.1			35.9	
Approach LOS		F			F			F			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	31.2	22.1		16.0	11.3	42.1		36.0				
Change Period (Y+Rc), s	6.2	* 6.2		4.6	4.6	6.2		5.8				
Max Green Setting (Gmax), s	35.4	* 22		11.4	6.7	50.5		30.2				
Max Q Clear Time (g_c+I1), s	24.6	14.8		13.4	8.7	22.5		32.2				
Green Ext Time (p_c), s	0.4	1.1		0.0	0.0	6.3		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		84.1
HCM 6th LOS		F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	7.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	5	11	14	12	8	16	724	29	139	919	5
Future Vol, veh/h	1	5	11	14	12	8	16	724	29	139	919	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	5	12	15	13	9	17	787	32	151	999	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1738	2158	502	1642	2144	411	1004	0	0	820	0	0
Stage 1	1304	1304	-	838	838	-	-	-	-	-	-	-
Stage 2	434	854	-	804	1306	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	57	48	520	67	49	596	698	-	-	818	-	-
Stage 1	172	232	-	331	384	-	-	-	-	-	-	-
Stage 2	576	378	-	347	232	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	24	27	520	37	27	595	698	-	-	817	-	-
Mov Cap-2 Maneuver	24	27	-	37	27	-	-	-	-	-	-	-
Stage 1	164	135	-	316	366	-	-	-	-	-	-	-
Stage 2	523	361	-	189	135	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	75.3	260.6	0.4	2.8
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	698	-	-	69	41	817	-	-
HCM Lane V/C Ratio	0.025	-	-	0.268	0.901	0.185	-	-
HCM Control Delay (s)	10.3	0.2	-	75.3	260.6	10.4	1.7	-
HCM Lane LOS	B	A	-	F	F	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1	3.5	0.7	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	2	6	3	5	6	18	804	15	8	871	12
Future Vol, veh/h	3	2	6	3	5	6	18	804	15	8	871	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	110	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	2	7	3	5	7	20	874	16	9	947	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1452	1902	480	1415	1900	445	960	0	0	890	0	0
Stage 1	972	972	-	922	922	-	-	-	-	-	-	-
Stage 2	480	930	-	493	978	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	93	70	537	99	70	566	725	-	-	770	-	-
Stage 1	275	333	-	295	352	-	-	-	-	-	-	-
Stage 2	541	349	-	532	331	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	87	67	537	94	67	566	725	-	-	770	-	-
Mov Cap-2 Maneuver	194	181	-	205	178	-	-	-	-	-	-	-
Stage 1	267	329	-	287	342	-	-	-	-	-	-	-
Stage 2	512	339	-	516	327	-	-	-	-	-	-	-

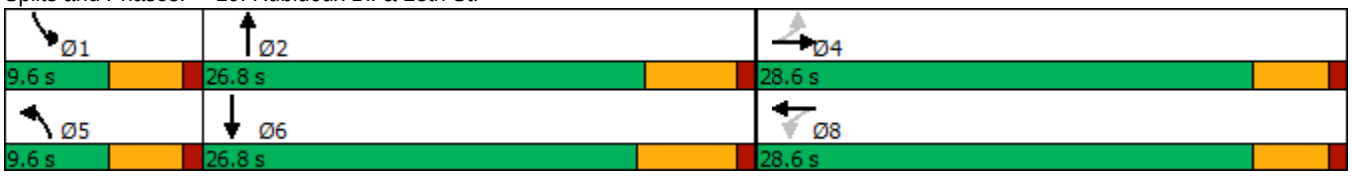
Approach	EB	WB	NB	SB
HCM Control Delay, s	17.9	19.5	0.2	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	725	-	-	292	263	770	-	-
HCM Lane V/C Ratio	0.027	-	-	0.041	0.058	0.011	-	-
HCM Control Delay (s)	10.1	-	-	17.9	19.5	9.7	-	-
HCM Lane LOS	B	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.2	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	15	17	58	30	30	821	10	871
Future Volume (vph)	15	17	58	30	30	821	10	871
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	28.6	28.6	28.6	28.6	9.6	24.4	9.6	22.8
Total Split (s)	28.6	28.6	28.6	28.6	9.6	26.8	9.6	26.8
Total Split (%)	44.0%	44.0%	44.0%	44.0%	14.8%	41.2%	14.8%	41.2%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.4	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		14.8		14.8	6.6	25.9	6.6	24.3
Actuated g/C Ratio		0.39		0.39	0.17	0.68	0.17	0.64
v/c Ratio		0.10		0.19	0.11	0.38	0.04	0.42
Control Delay		9.5		13.3	24.2	9.3	24.2	11.6
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		9.5		13.3	24.2	9.3	24.2	11.6
LOS		A		B	C	A	C	B
Approach Delay		9.5		13.3		9.8		11.7
Approach LOS		A		B		A		B

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 38	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.42	
Intersection Signal Delay: 10.9	Intersection LOS: B
Intersection Capacity Utilization 44.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 19: Rubidoux Bl. & 28th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	17	29	58	30	14	30	821	33	10	871	10
Future Volume (veh/h)	15	17	29	58	30	14	30	821	33	10	871	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	16	18	23	63	33	10	33	892	33	11	947	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	168	136	122	286	128	27	70	1429	53	26	1386	15
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.04	0.40	0.40	0.01	0.38	0.38
Sat Flow, veh/h	246	760	680	735	715	151	1810	3546	131	1810	3659	39
Grp Volume(v), veh/h	57	0	0	106	0	0	33	454	471	11	467	490
Grp Sat Flow(s),veh/h/ln	1686	0	0	1601	0	0	1810	1805	1873	1810	1805	1893
Q Serve(g_s), s	0.0	0.0	0.0	0.7	0.0	0.0	0.7	7.5	7.5	0.2	8.1	8.1
Cycle Q Clear(g_c), s	1.0	0.0	0.0	2.0	0.0	0.0	0.7	7.5	7.5	0.2	8.1	8.1
Prop In Lane	0.28		0.40	0.59		0.09	1.00		0.07	1.00		0.02
Lane Grp Cap(c), veh/h	426	0	0	441	0	0	70	728	755	26	683	717
V/C Ratio(X)	0.13	0.00	0.00	0.24	0.00	0.00	0.47	0.62	0.62	0.42	0.68	0.68
Avail Cap(c_a), veh/h	1179	0	0	1158	0	0	243	1039	1078	243	1020	1069
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.9	0.0	0.0	13.3	0.0	0.0	17.5	8.8	8.8	18.2	9.7	9.7
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.3	0.0	0.0	1.8	0.9	0.9	4.0	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.7	0.0	0.0	0.3	1.9	2.0	0.1	1.9	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.1	0.0	0.0	13.6	0.0	0.0	19.3	9.7	9.7	22.1	10.9	10.8
LnGrp LOS	B	A	A	B	A	A	B	A	A	C	B	B
Approach Vol, veh/h		57			106			958			968	
Approach Delay, s/veh		13.1			13.6			10.0			11.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	20.8		11.3	6.0	19.9		11.3				
Change Period (Y+Rc), s	4.6	* 5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	5.0	* 21		24.0	5.0	21.0		24.0				
Max Q Clear Time (g_c+I1), s	2.2	9.5		3.0	2.7	10.1		4.0				
Green Ext Time (p_c), s	0.0	4.3		0.2	0.0	4.0		0.5				

Intersection Summary		
HCM 6th Ctrl Delay		10.7
HCM 6th LOS		B

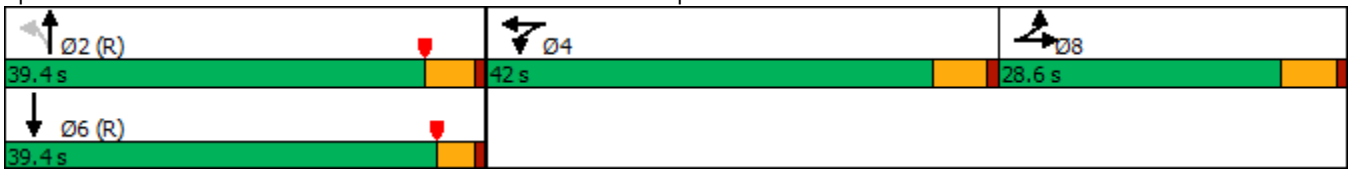
Notes

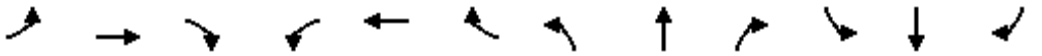
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	16	0	71	43	776	985
Future Volume (vph)	16	0	71	43	776	985
Turn Type	Split	NA	NA	Perm	NA	NA
Protected Phases	8	8	4		2	6
Permitted Phases				2		
Detector Phase	8	8	4	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.6	28.6	42.0	39.4	39.4	39.4
Total Split (%)	26.0%	26.0%	38.2%	35.8%	35.8%	35.8%
Yellow Time (s)	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	13.7	13.7	36.9	43.4	43.4	44.4
Actuated g/C Ratio	0.12	0.12	0.34	0.39	0.39	0.40
v/c Ratio	0.08	0.73	1.01	0.71	0.61	0.77
Control Delay	39.4	33.0	75.6	52.6	19.5	34.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.4	33.0	75.6	52.6	19.5	34.1
LOS	D	C	E	D	B	C
Approach Delay		33.5	75.6		21.2	34.1
Approach LOS		C	E		C	C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 38.7	Intersection LOS: D
Intersection Capacity Utilization 92.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	0	203	341	71	134	43	776	0	0	985	17
Future Volume (veh/h)	16	0	203	341	71	134	43	776	0	0	985	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	18	0	144	383	80	117	48	872	0	0	1107	18
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	202	0	179	389	81	119	143	1485	0	0	1494	24
Arrive On Green	0.11	0.00	0.11	0.33	0.33	0.33	0.82	0.82	0.00	0.00	0.41	0.41
Sat Flow, veh/h	1810	0	1610	1173	245	358	509	3705	0	0	3729	59
Grp Volume(v), veh/h	18	0	144	580	0	0	48	872	0	0	550	575
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1777	0	0	509	1805	0	0	1805	1888
Q Serve(g_s), s	1.0	0.0	9.6	35.6	0.0	0.0	8.9	9.1	0.0	0.0	28.4	28.4
Cycle Q Clear(g_c), s	1.0	0.0	9.6	35.6	0.0	0.0	37.2	9.1	0.0	0.0	28.4	28.4
Prop In Lane	1.00		1.00	0.66		0.20	1.00		0.00	0.00		0.03
Lane Grp Cap(c), veh/h	202	0	179	590	0	0	143	1485	0	0	742	776
V/C Ratio(X)	0.09	0.00	0.80	0.98	0.00	0.00	0.33	0.59	0.00	0.00	0.74	0.74
Avail Cap(c_a), veh/h	380	0	338	590	0	0	143	1485	0	0	742	776
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.91	0.91
Uniform Delay (d), s/veh	43.9	0.0	47.7	36.5	0.0	0.0	21.2	6.6	0.0	0.0	27.4	27.4
Incr Delay (d2), s/veh	0.2	0.0	9.6	32.8	0.0	0.0	6.2	1.7	0.0	0.0	6.0	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	4.3	19.9	0.0	0.0	1.1	2.4	0.0	0.0	12.8	13.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.1	0.0	57.3	69.3	0.0	0.0	27.4	8.3	0.0	0.0	33.4	33.2
LnGrp LOS	D	A	E	E	A	A	C	A	A	A	C	C
Approach Vol, veh/h		162			580			920			1125	
Approach Delay, s/veh		55.8			69.3			9.3			33.3	
Approach LOS		E			E			A			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		50.2		42.0		50.2		17.8				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		34.4		36.5		* 35		23.1				
Max Q Clear Time (g_c+I1), s		39.2		37.6		30.4		11.6				
Green Ext Time (p_c), s		0.0		0.0		3.2		0.7				

Intersection Summary												
HCM 6th Ctrl Delay			34.2									
HCM 6th LOS			C									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	267	819	813	716
Future Vol, veh/h	0	0	267	819	813	716
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	281	862	856	754

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	806	1611	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	0	781	467	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	-	780	467	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

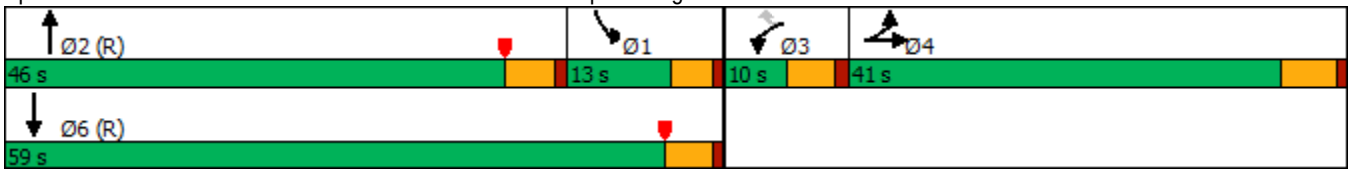
Approach	EB	NB	SB
HCM Control Delay, s	0	5.8	0
HCM LOS	A		

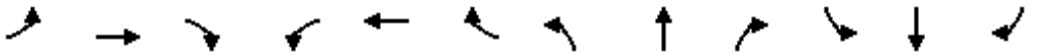
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	467	-	-	-	-
HCM Lane V/C Ratio	0.602	-	-	-	-
HCM Control Delay (s)	23.7	-	0	-	-
HCM Lane LOS	C	-	A	-	-
HCM 95th %tile Q(veh)	3.9	-	-	-	-

Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	15	17	5	551	207	606
Future Volume (vph)	15	17	5	551	207	606
Turn Type	NA	Prot	Perm	NA	Prot	NA
Protected Phases	4	3		2	1	6
Permitted Phases			3			
Detector Phase	4	3	3	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	10.0	10.0	45.0	9.5	30.0
Total Split (s)	41.0	10.0	10.0	46.0	13.0	59.0
Total Split (%)	37.3%	9.1%	9.1%	41.8%	11.8%	53.6%
Yellow Time (s)	4.5	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	41.5	5.0	5.0	35.7	13.8	54.0
Actuated g/C Ratio	0.38	0.05	0.05	0.32	0.13	0.49
v/c Ratio	1.14	0.22	0.03	0.88	0.95	0.36
Control Delay	110.8	57.2	0.2	36.1	79.4	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	110.8	57.2	0.2	36.1	79.4	11.0
LOS	F	E	A	D	E	B
Approach Delay	110.8			36.1		28.4
Approach LOS	F			D		C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.14	
Intersection Signal Delay: 54.9	Intersection LOS: D
Intersection Capacity Utilization 105.9%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	530	15	193	17	0	5	0	551	491	207	606	0
Future Volume (veh/h)	530	15	193	17	0	5	0	551	491	207	606	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	552	16	104	18	0	3	0	574	402	216	631	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	471	14	89	0	0	0	0	638	447	395	2100	0
Arrive On Green	0.32	0.32	0.32	0.00	0.00	0.00	0.00	0.32	0.32	0.44	1.00	0.00
Sat Flow, veh/h	1460	42	275		0		0	2101	1405	1810	3705	0
Grp Volume(v), veh/h	672	0	0		0.0		0	516	460	216	631	0
Grp Sat Flow(s),veh/h/ln	1777	0	0				0	1805	1607	1810	1805	0
Q Serve(g_s), s	35.5	0.0	0.0				0.0	30.1	30.1	9.7	0.0	0.0
Cycle Q Clear(g_c), s	35.5	0.0	0.0				0.0	30.1	30.1	9.7	0.0	0.0
Prop In Lane	0.82		0.15				0.00		0.87	1.00		0.00
Lane Grp Cap(c), veh/h	574	0	0				0	574	511	395	2100	0
V/C Ratio(X)	1.17	0.00	0.00				0.00	0.90	0.90	0.55	0.30	0.00
Avail Cap(c_a), veh/h	574	0	0				0	673	599	395	2100	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.72	0.72	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.3	0.0	0.0				0.0	35.8	35.8	27.0	0.0	0.0
Incr Delay (d2), s/veh	94.6	0.0	0.0				0.0	15.1	16.6	0.9	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	29.6	0.0	0.0				0.0	15.1	13.6	3.6	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	131.9	0.0	0.0				0.0	50.9	52.4	27.9	0.4	0.0
LnGrp LOS	F	A	A				A	D	D	C	A	A
Approach Vol, veh/h		672						976			847	
Approach Delay, s/veh		131.9						51.6			7.4	
Approach LOS		F						D			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	29.0	40.0		41.0		69.0
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0
Max Green Setting (Gmax), s	8.5	* 41		35.5		54.0
Max Q Clear Time (g_c+I1), s	11.7	32.1		37.5		2.0
Green Ext Time (p_c), s	0.0	2.9		0.0		2.8

Intersection Summary		
HCM 6th Ctrl Delay		58.2
HCM 6th LOS		E

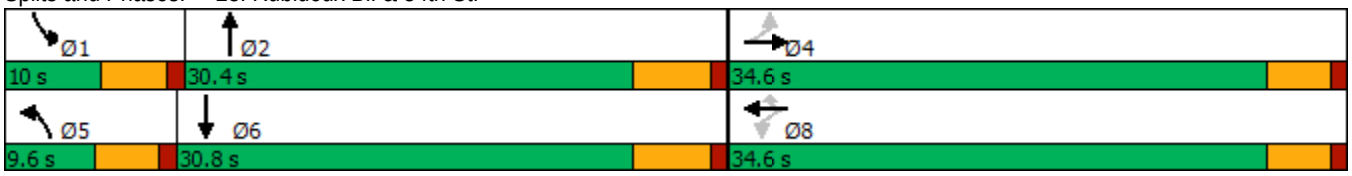
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	153	31	28	19	116	31	808	49	737
Future Volume (vph)	153	31	28	19	116	31	808	49	737
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	30.6	30.6	34.6	34.6	34.6	9.6	29.4	9.6	22.4
Total Split (s)	34.6	34.6	34.6	34.6	34.6	9.6	30.4	10.0	30.8
Total Split (%)	46.1%	46.1%	46.1%	46.1%	46.1%	12.8%	40.5%	13.3%	41.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	4.6	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		16.0		16.0	16.0	5.5	20.3	5.8	22.3
Actuated g/C Ratio		0.31		0.31	0.31	0.10	0.39	0.11	0.43
v/c Ratio		0.53		0.11	0.22	0.18	0.70	0.28	0.58
Control Delay		21.3		15.9	4.5	31.6	18.6	32.3	14.9
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		21.3		15.9	4.5	31.6	18.6	32.3	14.9
LOS		C		B	A	C	B	C	B
Approach Delay		21.3		7.8			19.1		16.0
Approach LOS		C		A			B		B

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 52.4	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 17.2	Intersection LOS: B
Intersection Capacity Utilization 62.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 23: Rubidoux Bl. & 34th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	153	31	20	28	19	116	31	808	57	49	737	48
Future Volume (veh/h)	153	31	20	28	19	116	31	808	57	49	737	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.98		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	172	35	13	31	21	60	35	908	57	55	828	46
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	404	75	21	349	208	421	71	1278	80	99	1344	75
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.37	0.37	0.05	0.39	0.39
Sat Flow, veh/h	1020	288	82	862	793	1610	1810	3443	216	1810	3477	193
Grp Volume(v), veh/h	220	0	0	52	0	60	35	476	489	55	430	444
Grp Sat Flow(s),veh/h/ln	1390	0	0	1655	0	1610	1810	1805	1855	1810	1805	1865
Q Serve(g_s), s	5.6	0.0	0.0	0.0	0.0	1.3	0.9	10.5	10.5	1.4	9.0	9.0
Cycle Q Clear(g_c), s	6.6	0.0	0.0	1.0	0.0	1.3	0.9	10.5	10.5	1.4	9.0	9.0
Prop In Lane	0.78		0.06	0.60		1.00	1.00		0.12	1.00		0.10
Lane Grp Cap(c), veh/h	501	0	0	556	0	421	71	670	688	99	698	721
V/C Ratio(X)	0.44	0.00	0.00	0.09	0.00	0.14	0.50	0.71	0.71	0.56	0.62	0.62
Avail Cap(c_a), veh/h	1040	0	0	1137	0	1034	194	966	992	209	981	1014
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.2	0.0	0.0	13.1	0.0	13.2	22.0	12.5	12.5	21.5	11.5	11.5
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.1	0.0	0.2	2.0	1.4	1.4	1.8	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.0	0.4	0.0	0.4	0.4	3.4	3.5	0.6	2.8	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.8	0.0	0.0	13.2	0.0	13.4	24.0	14.0	13.9	23.4	12.4	12.4
LnGrp LOS	B	A	A	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		220			112			1000			929	
Approach Delay, s/veh		15.8			13.3			14.3			13.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	22.7		16.8	6.4	23.5		16.8				
Change Period (Y+Rc), s	4.6	5.4		4.6	4.6	5.4		4.6				
Max Green Setting (Gmax), s	5.4	25.0		30.0	5.0	25.4		30.0				
Max Q Clear Time (g_c+I1), s	3.4	12.5		8.6	2.9	11.0		3.3				
Green Ext Time (p_c), s	0.0	4.7		1.3	0.0	4.5		0.4				

Intersection Summary			
HCM 6th Ctrl Delay		13.9	
HCM 6th LOS		B	

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	636	59	0	0	22	32
Future Vol, veh/h	636	59	0	0	22	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	656	61	0	0	23	33

Major/Minor	Major1			Minor1	
Conflicting Flow All	0	0		687	687
Stage 1	-	-		687	-
Stage 2	-	-		0	-
Critical Hdwy	-	-		6.4	6.2
Critical Hdwy Stg 1	-	-		5.4	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	-		3.5	3.3
Pot Cap-1 Maneuver	-	-		416	450
Stage 1	-	-		503	-
Stage 2	-	-		-	-
Platoon blocked, %	-	-			
Mov Cap-1 Maneuver	-	-		416	450
Mov Cap-2 Maneuver	-	-		416	-
Stage 1	-	-		503	-
Stage 2	-	-		-	-

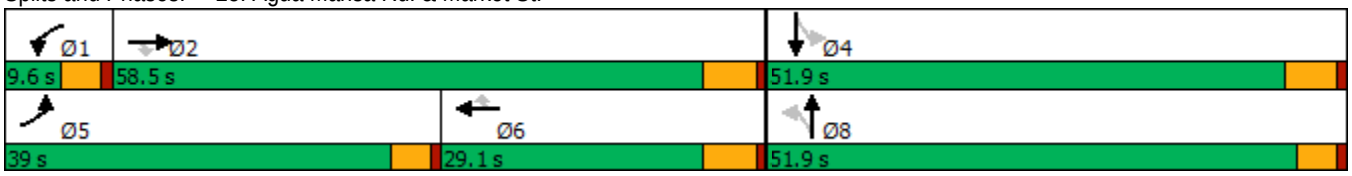
Approach	EB	NB
HCM Control Delay, s	0	14.5
HCM LOS		B

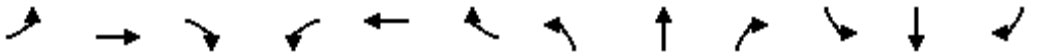
Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	435	-	-
HCM Lane V/C Ratio	0.128	-	-
HCM Control Delay (s)	14.5	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.4	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	325	450	10	4	567	159	18	2	115	15
Future Volume (vph)	325	450	10	4	567	159	18	2	115	15
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	5	2		1	6			8		4
Permitted Phases			2			6	8		4	
Detector Phase	5	2	2	1	6	6	8	8	4	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	31.8	31.8	9.6	26.8	26.8	14.6	14.6	43.8	43.8
Total Split (s)	39.0	58.5	58.5	9.6	29.1	29.1	51.9	51.9	51.9	51.9
Total Split (%)	32.5%	48.8%	48.8%	8.0%	24.3%	24.3%	43.3%	43.3%	43.3%	43.3%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None
Act Effct Green (s)	24.1	54.6	54.6	5.1	27.5	27.5		34.1		32.9
Actuated g/C Ratio	0.24	0.54	0.54	0.05	0.27	0.27		0.34		0.33
v/c Ratio	0.84	0.26	0.01	0.04	0.64	0.32		0.07		0.90
Control Delay	54.6	14.8	0.0	53.8	39.6	7.6		17.6		43.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	54.6	14.8	0.0	53.8	39.6	7.6		17.6		43.3
LOS	D	B	A	D	D	A		B		D
Approach Delay		31.1			32.7			17.6		43.3
Approach LOS		C			C			B		D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 100.9	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 34.4	Intersection LOS: C
Intersection Capacity Utilization 77.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	450	10	4	567	159	18	2	8	115	15	349
Future Volume (veh/h)	325	450	10	4	567	159	18	2	8	115	15	349
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	361	500	8	4	630	138	20	2	7	128	17	294
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	396	1889	843	10	1118	498	234	30	65	176	32	327
Arrive On Green	0.22	0.52	0.52	0.01	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1810	3610	1610	1810	3610	1608	558	96	208	418	102	1053
Grp Volume(v), veh/h	361	500	8	4	630	138	29	0	0	439	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1608	861	0	0	1573	0	0
Q Serve(g_s), s	19.6	7.7	0.2	0.2	14.7	6.5	0.0	0.0	0.0	24.3	0.0	0.0
Cycle Q Clear(g_c), s	19.6	7.7	0.2	0.2	14.7	6.5	1.4	0.0	0.0	26.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.69		0.24	0.29		0.67
Lane Grp Cap(c), veh/h	396	1889	843	10	1118	498	328	0	0	535	0	0
V/C Ratio(X)	0.91	0.26	0.01	0.42	0.56	0.28	0.09	0.00	0.00	0.82	0.00	0.00
Avail Cap(c_a), veh/h	618	1889	843	90	1118	498	521	0	0	764	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	38.4	13.3	11.5	49.9	29.1	26.2	24.3	0.0	0.0	33.1	0.0	0.0
Incr Delay (d2), s/veh	9.0	0.3	0.0	10.6	2.1	1.4	0.1	0.0	0.0	4.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	2.9	0.1	0.1	6.3	2.6	0.5	0.0	0.0	10.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.4	13.6	11.5	60.5	31.1	27.6	24.5	0.0	0.0	37.9	0.0	0.0
LnGrp LOS	D	B	B	E	C	C	C	A	A	D	A	A
Approach Vol, veh/h		869			772			29			439	
Approach Delay, s/veh		27.6			30.6			24.5			37.9	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	58.5		37.1	26.6	37.0		37.1				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	52.7		46.1	34.4	23.3		* 47				
Max Q Clear Time (g_c+I1), s	2.2	9.7		28.8	21.6	16.7		3.4				
Green Ext Time (p_c), s	0.0	3.3		2.4	0.4	2.4		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		30.8	
HCM 6th LOS		C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	158	2	21	18	12	4	14	46	2	16	2
Future Vol, veh/h	8	158	2	21	18	12	4	14	46	2	16	2
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	193	2	26	22	15	5	17	56	2	20	2
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	9.3	8	7.6	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	6%	5%	0%	54%	0%	10%
Vol Thru, %	22%	95%	0%	46%	0%	80%
Vol Right, %	72%	0%	100%	0%	100%	10%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	64	166	2	39	12	20
LT Vol	4	8	0	21	0	2
Through Vol	14	158	0	18	0	16
RT Vol	46	0	2	0	12	2
Lane Flow Rate	78	202	2	48	15	24
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.09	0.266	0.003	0.068	0.017	0.031
Departure Headway (Hd)	4.167	4.737	4.011	5.163	4.19	4.604
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	865	751	880	696	857	781
Service Time	2.17	2.515	1.789	2.874	1.901	2.61
HCM Lane V/C Ratio	0.09	0.269	0.002	0.069	0.018	0.031
HCM Control Delay	7.6	9.3	6.8	8.3	7	7.8
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.3	1.1	0	0.2	0.1	0.1

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	4	0	8	14	0	4	6	72	8	1	71	8
Future Vol, veh/h	4	0	8	14	0	4	6	72	8	1	71	8
Conflicting Peds, #/hr	0	0	1	0	0	1	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	0	10	18	0	5	8	91	10	1	90	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	213	214	96	215	214	97	100	0	0	101	0	0
Stage 1	97	97	-	112	112	-	-	-	-	-	-	-
Stage 2	116	117	-	103	102	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	748	687	966	746	687	965	1505	-	-	1504	-	-
Stage 1	914	819	-	898	807	-	-	-	-	-	-	-
Stage 2	894	803	-	908	815	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	739	682	965	733	682	964	1505	-	-	1504	-	-
Mov Cap-2 Maneuver	739	682	-	733	682	-	-	-	-	-	-	-
Stage 1	909	818	-	893	802	-	-	-	-	-	-	-
Stage 2	883	798	-	897	814	-	-	-	-	-	-	-

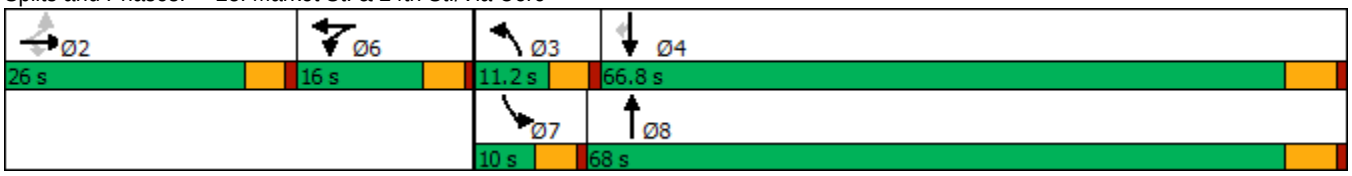
Approach	EB	WB	NB	SB
HCM Control Delay, s	9.2	9.8	0.5	0.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1505	-	-	876	774	1504	-	-
HCM Lane V/C Ratio	0.005	-	-	0.017	0.029	0.001	-	-
HCM Control Delay (s)	7.4	0	-	9.2	9.8	7.4	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	4	32	164	94	8	38	721	29	549	3
Future Volume (vph)	4	32	164	94	8	38	721	29	549	3
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	26.0	26.0	26.0	16.0	16.0	11.2	68.0	10.0	66.8	66.8
Total Split (%)	21.7%	21.7%	21.7%	13.3%	13.3%	9.3%	56.7%	8.3%	55.7%	55.7%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		11.9	11.9	10.8	10.8	6.1	62.5	5.3	61.9	61.9
Actuated g/C Ratio		0.11	0.11	0.10	0.10	0.06	0.59	0.05	0.58	0.58
v/c Ratio		0.44	0.52	0.54	0.08	0.39	0.85	0.34	0.52	0.00
Control Delay		61.3	12.7	58.7	36.2	61.9	28.6	62.3	16.9	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		61.3	12.7	58.7	36.2	61.9	28.6	62.3	16.9	0.0
LOS		E	B	E	D	E	C	E	B	A
Approach Delay		21.5			55.9		30.0		19.1	
Approach LOS		C			E		C		B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 106	
Natural Cycle: 105	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 27.1	Intersection LOS: C
Intersection Capacity Utilization 68.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	32	164	94	8	6	38	721	161	29	549	3
Future Volume (veh/h)	4	32	164	94	8	6	38	721	161	29	549	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	4	34	80	99	8	5	40	759	147	31	578	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	19	159	151	167	101	63	60	923	179	51	1126	954
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.03	0.60	0.60	0.03	0.59	0.59
Sat Flow, veh/h	199	1691	1605	1810	1094	683	1810	1546	299	1810	1900	1610
Grp Volume(v), veh/h	38	0	80	99	0	13	40	0	906	31	578	3
Grp Sat Flow(s),veh/h/ln	1890	0	1605	1810	0	1777	1810	0	1846	1810	1900	1610
Q Serve(g_s), s	1.9	0.0	5.0	5.5	0.0	0.7	2.3	0.0	40.5	1.8	18.6	0.1
Cycle Q Clear(g_c), s	1.9	0.0	5.0	5.5	0.0	0.7	2.3	0.0	40.5	1.8	18.6	0.1
Prop In Lane	0.11		1.00	1.00		0.38	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	178	0	151	167	0	164	60	0	1102	51	1126	954
V/C Ratio(X)	0.21	0.00	0.53	0.59	0.00	0.08	0.67	0.00	0.82	0.60	0.51	0.00
Avail Cap(c_a), veh/h	388	0	330	198	0	194	115	0	1102	94	1126	954
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.6	0.0	45.0	45.4	0.0	43.2	49.8	0.0	16.6	50.0	12.4	8.7
Incr Delay (d2), s/veh	0.6	0.0	2.9	3.3	0.0	0.2	4.8	0.0	6.9	4.2	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	2.0	2.6	0.0	0.3	1.1	0.0	16.5	0.8	7.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.2	0.0	47.8	48.7	0.0	43.4	54.6	0.0	23.6	54.2	14.1	8.7
LnGrp LOS	D	A	D	D	A	D	D	A	C	D	B	A
Approach Vol, veh/h		118			112			946			612	
Approach Delay, s/veh		46.7			48.1			24.9			16.1	
Approach LOS		D			D			C			B	

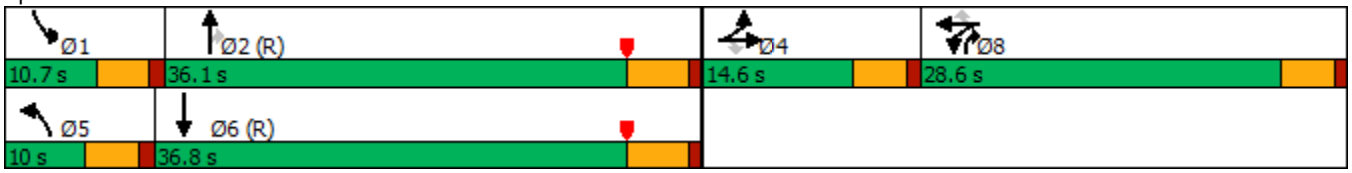
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.4	8.0	67.5		14.2	7.6	68.0				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		21.4	6.6	61.0		11.4	5.4	62.2				
Max Q Clear Time (g_c+I1), s		7.0	4.3	20.6		7.5	3.8	42.5				
Green Ext Time (p_c), s		0.3	0.0	3.8		0.1	0.0	6.4				

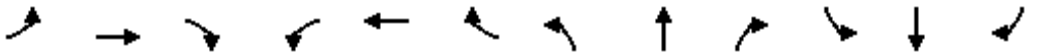
Intersection Summary												
HCM 6th Ctrl Delay			24.8									
HCM 6th LOS			C									

Lane Group	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	17	305	0	52	22	888	302	38	796
Future Volume (vph)	17	305	0	52	22	888	302	38	796
Turn Type	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases		8	8		5	2	8	1	6
Permitted Phases	4			8			2		
Detector Phase	4	8	8	8	5	2	8	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	14.6	28.6	28.6	28.6	9.6	35.1	28.6	9.6	29.1
Total Split (s)	14.6	28.6	28.6	28.6	10.0	36.1	28.6	10.7	36.8
Total Split (%)	16.2%	31.8%	31.8%	31.8%	11.1%	40.1%	31.8%	11.9%	40.9%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.1	3.6	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	5.1	4.6	4.6	5.1
Lead/Lag					Lead	Lag		Lead	Lag
Lead-Lag Optimize?					Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	10.0	16.0	16.0	16.0	5.5	51.7	68.2	6.0	54.3
Actuated g/C Ratio	0.11	0.18	0.18	0.18	0.06	0.57	0.76	0.07	0.60
v/c Ratio	0.05	0.52	0.52	0.14	0.21	0.44	0.24	0.32	0.38
Control Delay	0.2	38.4	38.4	0.7	41.1	17.9	0.8	47.2	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0
Total Delay	0.2	38.4	38.4	0.7	41.1	18.2	0.9	47.2	14.0
LOS	A	D	D	A	D	B	A	D	B
Approach Delay			32.9			14.3			15.5
Approach LOS			C			B			B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 2 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.52	
Intersection Signal Delay: 17.3	Intersection LOS: B
Intersection Capacity Utilization 50.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 29: Market St. & Rivera St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	17	305	0	52	22	888	302	38	796	1
Future Volume (veh/h)	0	0	17	305	0	52	22	888	302	38	796	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	0	4	314	0	30	23	915	205	39	821	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	0	20	17	425	0	185	44	2265	1198	63	2359	3
Arrive On Green	0.00	0.00	0.01	0.12	0.00	0.12	0.05	1.00	1.00	0.03	0.64	0.64
Sat Flow, veh/h	0	1900	1610	3619	0	1573	1810	3610	1609	1810	3700	5
Grp Volume(v), veh/h	0	0	4	314	0	30	23	915	205	39	401	421
Grp Sat Flow(s),veh/h/ln	0	1900	1610	1810	0	1573	1810	1805	1609	1810	1805	1899
Q Serve(g_s), s	0.0	0.0	0.2	7.5	0.0	1.5	1.1	0.0	0.0	1.9	9.3	9.3
Cycle Q Clear(g_c), s	0.0	0.0	0.2	7.5	0.0	1.5	1.1	0.0	0.0	1.9	9.3	9.3
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	20	17	425	0	185	44	2265	1198	63	1151	1211
V/C Ratio(X)	0.00	0.00	0.23	0.74	0.00	0.16	0.52	0.40	0.17	0.62	0.35	0.35
Avail Cap(c_a), veh/h	0	211	179	965	0	419	109	2265	1198	123	1151	1211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	0.90	0.90	0.90	0.84	0.84	0.84
Uniform Delay (d), s/veh	0.0	0.0	44.2	38.4	0.0	35.7	42.3	0.0	0.0	42.9	7.6	7.6
Incr Delay (d2), s/veh	0.0	0.0	6.9	2.5	0.0	0.4	3.2	0.5	0.3	3.1	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	3.4	0.0	0.6	0.5	0.2	0.1	0.9	3.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	51.0	40.9	0.0	36.1	45.5	0.5	0.3	46.0	8.3	8.3
LnGrp LOS	A	A	D	D	A	D	D	A	A	D	A	A
Approach Vol, veh/h		4			344			1143			861	
Approach Delay, s/veh		51.0			40.5			1.4			10.0	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	61.6		5.6	6.8	62.5		15.2				
Change Period (Y+Rc), s	4.6	5.1		4.6	4.6	5.1		4.6				
Max Green Setting (Gmax), s	6.1	31.0		10.0	5.4	31.7		24.0				
Max Q Clear Time (g_c+I1), s	3.9	2.0		2.2	3.1	11.3		9.5				
Green Ext Time (p_c), s	0.0	7.4		0.0	0.0	4.6		1.0				

Intersection Summary			
HCM 6th Ctrl Delay		10.3	
HCM 6th LOS		B	

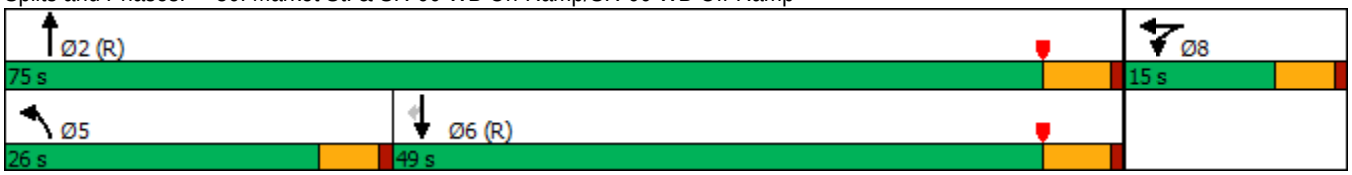
Notes

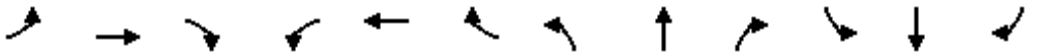
User approved volume balancing among the lanes for turning movement.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	871	185	341	934	184
Future Volume (vph)	0	871	185	341	934	184
Turn Type	NA	Free	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		Free				6
Detector Phase	8		5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	10.0		10.0	24.5	10.5	10.5
Total Split (s)	15.0		26.0	75.0	49.0	49.0
Total Split (%)	16.7%		28.9%	83.3%	54.4%	54.4%
Yellow Time (s)	4.0		4.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	C-Min	C-Min	C-Min
Act Effct Green (s)	8.5	90.0	14.9	74.2	53.2	53.2
Actuated g/C Ratio	0.09	1.00	0.17	0.82	0.59	0.59
v/c Ratio	0.37	0.57	0.65	0.12	0.46	0.19
Control Delay	43.6	1.5	27.1	5.1	10.8	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.2	0.0
Total Delay	43.6	1.5	27.1	5.1	11.0	2.3
LOS	D	A	C	A	B	A
Approach Delay	4.1			12.9	9.5	
Approach LOS	A			B	A	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 8.3	Intersection LOS: A
Intersection Capacity Utilization 64.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 30: Market St. & SR-60 WB On-Ramp/SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	59	0	871	185	341	0	0	934	184
Future Volume (veh/h)	0	0	0	59	0	871	185	341	0	0	934	184
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				62	0	0	195	359	0	0	983	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				81	0		231	3027	0	0	2366	
Arrive On Green				0.04	0.00	0.00	0.25	1.00	0.00	0.00	1.00	0.00
Sat Flow, veh/h				1810	0	1610	1810	3705	0	0	3705	1610
Grp Volume(v), veh/h				62	0	0	195	359	0	0	983	0
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1805	1610
Q Serve(g_s), s				3.1	0.0	0.0	9.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				3.1	0.0	0.0	9.2	0.0	0.0	0.0	0.0	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				81	0		231	3027	0	0	2366	
V/C Ratio(X)				0.76	0.00		0.85	0.12	0.00	0.00	0.42	
Avail Cap(c_a), veh/h				201	0		422	3027	0	0	2366	
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	0.00	0.00	0.91	0.91	0.00	0.00	0.93	0.00
Uniform Delay (d), s/veh				42.5	0.0	0.0	32.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				13.8	0.0	0.0	7.6	0.1	0.0	0.0	0.5	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.6	0.0	0.0	3.9	0.0	0.0	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				56.3	0.0	0.0	40.3	0.1	0.0	0.0	0.5	0.0
LnGrp LOS				E	A		D	A	A	A	A	
Approach Vol, veh/h					62			554			983	
Approach Delay, s/veh					56.3			14.2			0.5	
Approach LOS					E			B			A	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	81.0		16.5	64.5		9.0						
Change Period (Y+Rc), s	5.5		5.0	5.5		5.0						
Max Green Setting (Gmax), s	69.5		21.0	43.5		10.0						
Max Q Clear Time (g_c+I1), s	2.0		11.2	2.0		5.1						
Green Ext Time (p_c), s	2.4		0.3	7.7		0.1						

Intersection Summary		
HCM 6th Ctrl Delay	7.4	
HCM 6th LOS	A	

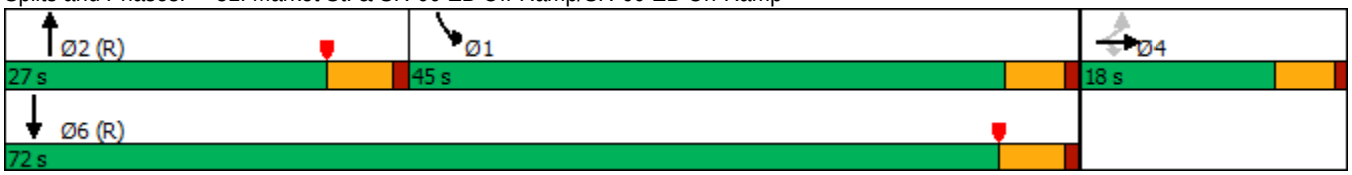
Notes

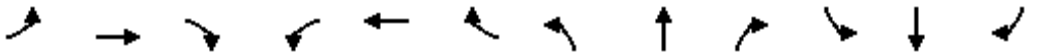
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	0	485	396	567	426
Future Volume (vph)	0	485	396	567	426
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	24.5	10.0	10.5
Total Split (s)	18.0	18.0	27.0	45.0	72.0
Total Split (%)	20.0%	20.0%	30.0%	50.0%	80.0%
Yellow Time (s)	4.0	4.0	4.5	4.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.0	5.5
Lead/Lag			Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Min	None	C-Min
Act Effct Green (s)	11.5	11.5	29.1	33.8	68.0
Actuated g/C Ratio	0.13	0.13	0.32	0.38	0.76
v/c Ratio	0.58	0.62	0.41	0.85	0.16
Control Delay	46.7	7.2	25.9	35.3	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	46.7	7.2	25.9	35.3	3.7
LOS	D	A	C	D	A
Approach Delay	15.6		25.9		21.7
Approach LOS	B		C		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 15 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 20.9	Intersection LOS: C
Intersection Capacity Utilization 64.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 31: Market St. & SR-60 EB Off-Ramp/SR-60 EB On-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	0	485	0	0	0	0	396	73	567	426	0
Future Volume (veh/h)	130	0	485	0	0	0	0	396	73	567	426	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	133	0	230				0	404	0	579	435	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	194	0	305				0	535		1025	2801	0
Arrive On Green	0.11	0.00	0.11				0.00	0.15	0.00	0.95	1.00	0.00
Sat Flow, veh/h	1810	0	2834				0	3800	0	1810	3705	0
Grp Volume(v), veh/h	133	0	230				0	404	0	579	435	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1805	0	1810	1805	0
Q Serve(g_s), s	6.4	0.0	7.1				0.0	9.7	0.0	3.3	0.0	0.0
Cycle Q Clear(g_c), s	6.4	0.0	7.1				0.0	9.7	0.0	3.3	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	194	0	305				0	535		1025	2801	0
V/C Ratio(X)	0.68	0.00	0.76				0.00	0.75		0.56	0.16	0.00
Avail Cap(c_a), veh/h	261	0	409				0	862		1025	2801	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.89	0.89	0.00
Uniform Delay (d), s/veh	38.7	0.0	39.0				0.0	36.8	0.0	1.1	0.0	0.0
Incr Delay (d2), s/veh	4.5	0.0	5.4				0.0	9.5	0.0	0.6	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	2.6				0.0	4.8	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.2	0.0	44.5				0.0	46.3	0.0	1.8	0.1	0.0
LnGrp LOS	D	A	D				A	D		A	A	A
Approach Vol, veh/h		363						404			1014	
Approach Delay, s/veh		44.0						46.3			1.1	
Approach LOS		D						D			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	56.5	18.8		14.7		75.3
Change Period (Y+Rc), s	5.5	* 5.5		5.0		5.5
Max Green Setting (Gmax), s	40.0	* 22		13.0		66.5
Max Q Clear Time (g_c+I1), s	5.3	11.7		9.1		2.0
Green Ext Time (p_c), s	1.9	1.7		0.6		3.0

Intersection Summary	
HCM 6th Ctrl Delay	20.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	1	14	0	0	5	10	442	5	104	778	30
Future Vol, veh/h	22	1	14	0	0	5	10	442	5	104	778	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	145	-	-	140	-	110
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	23	1	15	0	0	5	10	460	5	108	810	31

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1276	1513	405	1107	1542	235	841	0	0	467	0	0
Stage 1	1026	1026	-	485	485	-	-	-	-	-	-	-
Stage 2	250	487	-	622	1057	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	288	198	*774	*426	187	773	*1162	-	-	1105	-	-
Stage 1	544	514	-	*537	555	-	-	-	-	-	-	-
Stage 2	738	554	-	*730	492	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	263	176	*774	*382	167	772	*1162	-	-	1103	-	-
Mov Cap-2 Maneuver	382	286	-	*435	296	-	-	-	-	-	-	-
Stage 1	539	464	-	*532	549	-	-	-	-	-	-	-
Stage 2	727	548	-	*644	444	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.4	9.7	0.2	1
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 1162	-	-	467	772	1103	-	-
HCM Lane V/C Ratio	0.009	-	-	0.083	0.007	0.098	-	-
HCM Control Delay (s)	8.1	-	-	13.4	9.7	8.6	-	-
HCM Lane LOS	A	-	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	160	40	18	403	511	101
Future Vol, veh/h	160	40	18	403	511	101
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	170	43	19	429	544	107

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	851	598	651	0	-	0
Stage 1	598	-	-	-	-	-
Stage 2	253	-	-	-	-	-
Critical Hdwy	6.6	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	318	506	945	-	-	-
Stage 1	553	-	-	-	-	-
Stage 2	772	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	312	506	945	-	-	-
Mov Cap-2 Maneuver	425	-	-	-	-	-
Stage 1	542	-	-	-	-	-
Stage 2	772	-	-	-	-	-

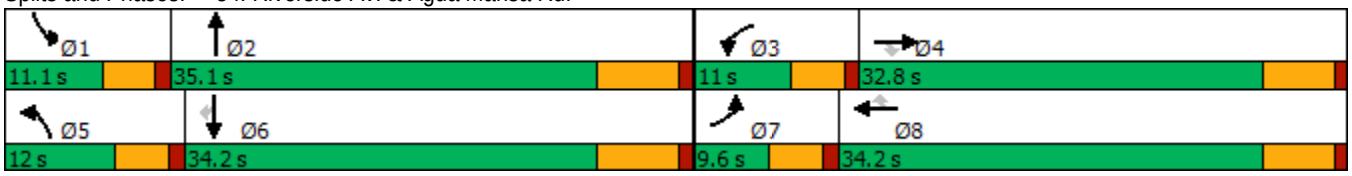
Approach	EB	NB	SB
HCM Control Delay, s	20.7	0.4	0
HCM LOS	C		

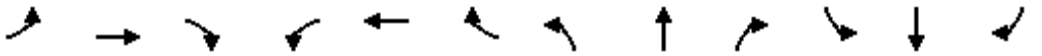
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	945	-	439	-	-
HCM Lane V/C Ratio	0.02	-	0.485	-	-
HCM Control Delay (s)	8.9	-	20.7	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	2.6	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	84	267	139	131	371	65	149	459	44	555	104
Future Volume (vph)	84	267	139	131	371	65	149	459	44	555	104
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	9.6	32.8	32.8	11.0	34.2	34.2	12.0	35.1	11.1	34.2	34.2
Total Split (%)	10.7%	36.4%	36.4%	12.2%	38.0%	38.0%	13.3%	39.0%	12.3%	38.0%	38.0%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	5.1	18.6	18.6	6.6	20.1	20.1	7.6	24.5	6.0	18.2	18.2
Actuated g/C Ratio	0.07	0.25	0.25	0.09	0.28	0.28	0.10	0.34	0.08	0.25	0.25
v/c Ratio	0.71	0.59	0.28	0.86	0.76	0.12	0.85	0.45	0.32	0.66	0.22
Control Delay	68.7	29.6	5.4	81.5	34.8	0.5	74.9	22.1	41.8	28.7	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.7	29.6	5.4	81.5	34.8	0.5	74.9	22.1	41.8	28.7	3.3
LOS	E	C	A	F	C	A	E	C	D	C	A
Approach Delay		29.4			41.7			34.1		25.7	
Approach LOS		C			D			C		C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 73	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 32.5	Intersection LOS: C
Intersection Capacity Utilization 65.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	267	139	131	371	65	149	459	49	44	555	104
Future Volume (veh/h)	84	267	139	131	371	65	149	459	49	44	555	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	89	284	84	139	395	45	159	488	48	47	590	92
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	115	423	358	176	487	413	199	992	97	80	841	375
Arrive On Green	0.06	0.22	0.22	0.10	0.26	0.26	0.11	0.30	0.30	0.04	0.23	0.23
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3320	325	1810	3610	1610
Grp Volume(v), veh/h	89	284	84	139	395	45	159	265	271	47	590	92
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1841	1810	1805	1610
Q Serve(g_s), s	3.1	8.7	2.7	4.8	12.4	1.4	5.5	7.7	7.7	1.6	9.6	3.0
Cycle Q Clear(g_c), s	3.1	8.7	2.7	4.8	12.4	1.4	5.5	7.7	7.7	1.6	9.6	3.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	115	423	358	176	487	413	199	539	550	80	841	375
V/C Ratio(X)	0.78	0.67	0.23	0.79	0.81	0.11	0.80	0.49	0.49	0.59	0.70	0.25
Avail Cap(c_a), veh/h	142	804	681	182	846	717	210	809	825	184	1567	699
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	22.7	20.3	28.1	22.3	18.1	27.7	18.4	18.4	29.9	22.4	19.9
Incr Delay (d2), s/veh	15.0	1.9	0.3	18.2	3.3	0.1	16.7	0.7	0.7	2.5	1.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	3.6	0.9	2.8	5.3	0.5	3.0	2.7	2.8	0.7	3.5	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.4	24.5	20.7	46.4	25.5	18.3	44.4	19.1	19.1	32.4	23.5	20.2
LnGrp LOS	D	C	C	D	C	B	D	B	B	C	C	C
Approach Vol, veh/h		457			579			695			729	
Approach Delay, s/veh		27.7			30.0			24.9			23.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	25.6	10.8	20.0	11.6	21.4	8.6	22.2
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	6.5	28.6	6.4	27.0	7.4	27.7	5.0	28.4
Max Q Clear Time (g_c+I1), s	3.6	9.7	6.8	10.7	7.5	11.6	5.1	14.4
Green Ext Time (p_c), s	0.0	2.5	0.0	1.5	0.0	3.3	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	26.2
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	0	0	160	694	1
Future Vol, veh/h	4	0	0	160	694	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	92	92	92	92	62
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	0	0	174	754	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	929	755	756	0	-	0
Stage 1	755	-	-	-	-	-
Stage 2	174	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	300	412	864	-	-	-
Stage 1	468	-	-	-	-	-
Stage 2	861	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	300	412	864	-	-	-
Mov Cap-2 Maneuver	300	-	-	-	-	-
Stage 1	468	-	-	-	-	-
Stage 2	861	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	864	-	300	-	-
HCM Lane V/C Ratio	-	-	0.022	-	-
HCM Control Delay (s)	0	-	17.3	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	20.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	67	0	225	42	2	663
Future Vol, veh/h	67	0	225	42	2	663
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	86	0	288	54	3	850

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	86	0	716	86
Stage 1	-	-	-	-	86	-
Stage 2	-	-	-	-	630	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1523	-	400	978
Stage 1	-	-	-	-	942	-
Stage 2	-	-	-	-	535	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1523	-	322	978
Mov Cap-2 Maneuver	-	-	-	-	322	-
Stage 1	-	-	-	-	942	-
Stage 2	-	-	-	-	431	-

Approach	EB	WB	NB
HCM Control Delay, s	0	6.7	28.2
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	972	-	-	1523	-
HCM Lane V/C Ratio	0.877	-	-	0.189	-
HCM Control Delay (s)	28.2	-	-	7.9	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	11.9	-	-	0.7	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	7	716	38	24	247	3	17	8	28	1	13	3
Future Vol, veh/h	7	716	38	24	247	3	17	8	28	1	13	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	873	46	29	301	4	21	10	34	1	16	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	305	0	0	919	0	0	1288	1277	896	1297	1298	306
Stage 1	-	-	-	-	-	-	914	914	-	361	361	-
Stage 2	-	-	-	-	-	-	374	363	-	936	937	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1267	-	-	751	-	-	142	168	342	140	163	739
Stage 1	-	-	-	-	-	-	330	355	-	662	629	-
Stage 2	-	-	-	-	-	-	651	628	-	321	346	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1267	-	-	751	-	-	124	158	342	115	153	737
Mov Cap-2 Maneuver	-	-	-	-	-	-	124	158	-	115	153	-
Stage 1	-	-	-	-	-	-	325	350	-	652	599	-
Stage 2	-	-	-	-	-	-	599	598	-	277	341	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.9	31.9	28.5
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	197	1267	-	-	751	-	-	174
HCM Lane V/C Ratio	0.328	0.007	-	-	0.039	-	-	0.119
HCM Control Delay (s)	31.9	7.9	0	-	10	0	-	28.5
HCM Lane LOS	D	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	1.4	0	-	-	0.1	-	-	0.4

Intersection	
Int Delay, s/veh	2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	19	35	8	20	55
Future Vol, veh/h	11	19	35	8	20	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	100	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	13	22	41	9	23	64

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	156	46	0	0	50	0
Stage 1	46	-	-	-	-	-
Stage 2	110	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	840	1029	-	-	1570	-
Stage 1	982	-	-	-	-	-
Stage 2	920	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	827	1029	-	-	1570	-
Mov Cap-2 Maneuver	827	-	-	-	-	-
Stage 1	982	-	-	-	-	-
Stage 2	906	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	827	1029	1570	-
HCM Lane V/C Ratio	-	-	0.015	0.021	0.015	-
HCM Control Delay (s)	-	-	9.4	8.6	7.3	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.1	0	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	8	0	9	0	34	25	10	57	0
Future Vol, veh/h	0	0	0	8	0	9	0	34	25	10	57	0
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	9	0	10	0	37	27	11	63	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	142	150	65	137	137	51	64	0	0	64	0	0
Stage 1	86	86	-	51	51	-	-	-	-	-	-	-
Stage 2	56	64	-	86	86	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	832	745	1005	838	758	1023	1551	-	-	1551	-	-
Stage 1	927	827	-	967	856	-	-	-	-	-	-	-
Stage 2	961	846	-	927	827	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	819	739	1003	833	752	1023	1550	-	-	1551	-	-
Mov Cap-2 Maneuver	819	739	-	833	752	-	-	-	-	-	-	-
Stage 1	926	820	-	967	856	-	-	-	-	-	-	-
Stage 2	952	846	-	920	820	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9	0	1.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1550	-	-	-	924	1551	-	-
HCM Lane V/C Ratio	-	-	-	-	0.02	0.007	-	-
HCM Control Delay (s)	0	-	-	0	9	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	0	0	39	59	6
Future Vol, veh/h	20	0	0	39	59	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	0	0	42	64	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	110	68	71	0	-	0
Stage 1	68	-	-	-	-	-
Stage 2	42	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	892	1001	1542	-	-	-
Stage 1	960	-	-	-	-	-
Stage 2	986	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	892	1001	1542	-	-	-
Mov Cap-2 Maneuver	892	-	-	-	-	-
Stage 1	960	-	-	-	-	-
Stage 2	986	-	-	-	-	-

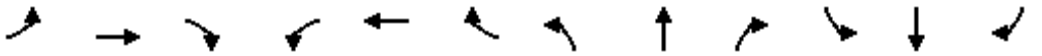
Approach	EB	NB	SB
HCM Control Delay, s	9.1	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1542	-	892	-	-
HCM Lane V/C Ratio	-	-	0.024	-	-
HCM Control Delay (s)	0	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	5	369	281	1312	1219	469
Future Volume (vph)	5	369	281	1312	1219	469
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	41.0	41.0	22.0	69.0	47.0	47.0
Total Split (%)	37.3%	37.3%	20.0%	62.7%	42.7%	42.7%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	29.9	29.9	22.8	71.6	44.8	44.8
Actuated g/C Ratio	0.27	0.27	0.21	0.65	0.41	0.41
v/c Ratio	0.82	0.75	0.81	0.60	0.62	0.54
Control Delay	50.8	40.9	67.5	7.0	28.0	4.4
Queue Delay	0.8	0.0	0.0	0.2	0.1	0.0
Total Delay	51.5	40.9	67.5	7.2	28.1	4.4
LOS	D	D	E	A	C	A
Approach Delay	46.5			17.8	21.5	
Approach LOS	D			B	C	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 24.3	Intersection LOS: C
Intersection Capacity Utilization 80.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	302	5	369	281	1312	0	0	1219	469
Future Volume (veh/h)	0	0	0	302	5	369	281	1312	0	0	1219	469
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				325	29	346	302	1411	0	0	1311	317
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				413	37	399	296	2436	0	0	2463	761
Arrive On Green				0.25	0.25	0.25	0.33	1.00	0.00	0.00	0.47	0.47
Sat Flow, veh/h				1668	149	1610	1810	3705	0	0	5358	1602
Grp Volume(v), veh/h				354	0	346	302	1411	0	0	1311	317
Grp Sat Flow(s),veh/h/ln				1817	0	1610	1810	1805	0	0	1729	1602
Q Serve(g_s), s				20.0	0.0	22.6	18.0	0.0	0.0	0.0	19.5	14.3
Cycle Q Clear(g_c), s				20.0	0.0	22.6	18.0	0.0	0.0	0.0	19.5	14.3
Prop In Lane				0.92		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				450	0	399	296	2436	0	0	2463	761
V/C Ratio(X)				0.79	0.00	0.87	1.02	0.58	0.00	0.00	0.53	0.42
Avail Cap(c_a), veh/h				611	0	542	296	2436	0	0	2463	761
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.74	0.74	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				38.7	0.0	39.6	37.0	0.0	0.0	0.0	20.3	18.9
Incr Delay (d2), s/veh				4.8	0.0	10.8	50.1	0.7	0.0	0.0	0.8	1.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.1	0.0	9.8	10.2	0.3	0.0	0.0	7.6	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				43.4	0.0	50.5	87.1	0.7	0.0	0.0	21.1	20.6
LnGrp LOS				D	A	D	F	A	A	A	C	C
Approach Vol, veh/h					700			1713			1628	
Approach Delay, s/veh					46.9			16.0			21.0	
Approach LOS					D			B			C	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		78.7			22.0	56.7		31.3				
Change Period (Y+Rc), s		4.5			4.0	4.5		4.0				
Max Green Setting (Gmax), s		64.5			18.0	42.5		37.0				
Max Q Clear Time (g_c+I1), s		2.0			20.0	21.5		24.6				
Green Ext Time (p_c), s		15.1			0.0	10.5		2.6				

Intersection Summary		
HCM 6th Ctrl Delay	23.4	
HCM 6th LOS	C	

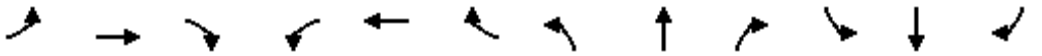
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	506	5	1088	468	393	1128
Future Volume (vph)	506	5	1088	468	393	1128
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	37.1	37.1	32.8	32.8	40.1	72.9
Total Split (%)	33.7%	33.7%	29.8%	29.8%	36.5%	66.3%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	28.2	28.2	42.0	42.0	28.8	74.3
Actuated g/C Ratio	0.26	0.26	0.38	0.38	0.26	0.68
v/c Ratio	0.82	0.75	0.56	0.53	0.85	0.47
Control Delay	53.8	41.7	36.7	16.6	45.9	3.5
Queue Delay	0.0	0.0	0.0	0.0	1.4	0.4
Total Delay	53.8	41.7	36.7	16.6	47.3	3.9
LOS	D	D	D	B	D	A
Approach Delay		47.9	30.7			15.1
Approach LOS		D	C			B

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 27.6	Intersection LOS: C
Intersection Capacity Utilization 80.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	506	5	177	0	0	0	0	1088	468	393	1128	0
Future Volume (veh/h)	506	5	177	0	0	0	0	1088	468	393	1128	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	346	243	171				0	1110	273	401	1151	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	474	272	191				0	1284	396	698	2417	0
Arrive On Green	0.26	0.26	0.26				0.00	0.08	0.08	0.39	0.67	0.00
Sat Flow, veh/h	1810	1038	730				0	5358	1600	1810	3705	0
Grp Volume(v), veh/h	346	0	414				0	1110	273	401	1151	0
Grp Sat Flow(s),veh/h/ln	1810	0	1769				0	1729	1600	1810	1805	0
Q Serve(g_s), s	19.2	0.0	24.8				0.0	23.3	18.3	19.2	17.0	0.0
Cycle Q Clear(g_c), s	19.2	0.0	24.8				0.0	23.3	18.3	19.2	17.0	0.0
Prop In Lane	1.00		0.41				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	474	0	464				0	1284	396	698	2417	0
V/C Ratio(X)	0.73	0.00	0.89				0.00	0.86	0.69	0.57	0.48	0.00
Avail Cap(c_a), veh/h	553	0	540				0	1358	419	698	2417	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.74	0.74	0.75	0.75	0.00
Uniform Delay (d), s/veh	37.0	0.0	39.1				0.0	48.7	46.4	26.7	8.8	0.0
Incr Delay (d2), s/veh	4.1	0.0	15.5				0.0	6.0	7.1	0.6	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	0.0	12.3				0.0	11.4	8.6	8.1	5.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.1	0.0	54.6				0.0	54.7	53.5	27.2	9.3	0.0
LnGrp LOS	D	A	D				A	D	D	C	A	A
Approach Vol, veh/h		760						1383			1552	
Approach Delay, s/veh		48.5						54.5			13.9	
Approach LOS		D						D			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	46.4	31.2		32.3		77.7
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	36.6	* 29		33.6		68.9
Max Q Clear Time (g_c+I1), s	21.2	25.3		26.8		19.0
Green Ext Time (p_c), s	0.5	2.0		2.0		6.1

Intersection Summary		
HCM 6th Ctrl Delay		36.2
HCM 6th LOS		D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	209	2	2	2	14	1193	42	1022	241
Future Volume (vph)	209	2	2	2	14	1193	42	1022	241
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases		4		8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	30.0	30.0	10.2	10.2	16.2	28.2	16.2	28.2	28.2
Total Split (s)	40.0	40.0	40.0	40.0	16.2	53.8	16.2	53.8	53.8
Total Split (%)	36.4%	36.4%	36.4%	36.4%	14.7%	48.9%	14.7%	48.9%	48.9%
Yellow Time (s)	5.0	5.0	5.0	5.0	3.0	4.7	3.0	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.0	5.7	4.0	5.7	5.7
Lead/Lag					Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min	C-Min
Act Effct Green (s)	25.2	25.2	25.2	25.2	71.0	64.5	73.6	69.0	69.0
Actuated g/C Ratio	0.23	0.23	0.23	0.23	0.65	0.59	0.67	0.63	0.63
v/c Ratio	0.85	0.05	0.01	0.33	0.04	0.59	0.16	0.47	0.24
Control Delay	67.4	13.4	28.0	6.6	4.7	10.7	5.8	12.7	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Total Delay	67.4	13.4	28.0	6.6	4.7	10.9	5.8	12.7	4.4
LOS	E	B	C	A	A	B	A	B	A
Approach Delay		63.1		6.9		10.8		10.9	
Approach LOS		E		A		B		B	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 68.3 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 14.7	Intersection LOS: B
Intersection Capacity Utilization 70.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 10: Cedar Av. & Orange St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	209	2	16	2	2	154	14	1193	2	42	1022	241
Future Volume (veh/h)	209	2	16	2	2	154	14	1193	2	42	1022	241
Initial Q (Qb), veh	0	0	0	0	0	0	0	44	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	218	2	12	2	2	114	15	1243	2	44	1065	190
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	307	57	345	404	7	389	241	2165	3	329	2162	942
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.03	1.00	1.00	0.01	0.20	0.20
Sat Flow, veh/h	1296	235	1408	1419	28	1587	1810	3698	6	1810	3610	1573
Grp Volume(v), veh/h	218	0	14	2	0	116	15	607	638	44	1065	190
Grp Sat Flow(s),veh/h/ln	1296	0	1643	1419	0	1614	1810	1805	1899	1810	1805	1573
Q Serve(g_s), s	18.1	0.0	0.7	0.1	0.0	6.4	0.4	0.0	0.0	1.1	28.8	11.1
Cycle Q Clear(g_c), s	24.5	0.0	0.7	0.8	0.0	6.4	0.4	0.0	0.0	1.1	28.8	11.1
Prop In Lane	1.00		0.86	1.00		0.98	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	307	0	402	404	0	395	241	1057	1112	329	2162	942
V/C Ratio(X)	0.71	0.00	0.03	0.00	0.00	0.29	0.06	0.57	0.57	0.13	0.49	0.20
Avail Cap(c_a), veh/h	390	0	508	495	0	499	417	1057	1112	532	2162	942
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.70	0.70	0.70	0.88	0.88	0.88
Uniform Delay (d), s/veh	43.8	0.0	31.6	31.9	0.0	33.8	12.3	0.0	0.0	12.3	29.3	22.2
Incr Delay (d2), s/veh	4.3	0.0	0.0	0.0	0.0	0.4	0.1	1.6	1.5	0.2	0.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.3	6.6	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	0.0	0.3	0.0	0.0	2.6	0.1	2.6	2.5	0.5	14.1	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.0	0.0	31.7	31.9	0.0	34.2	12.4	8.9	8.1	12.5	30.0	22.6
LnGrp LOS	D	A	C	C	A	C	B	A	A	B	C	C
Approach Vol, veh/h		232			118			1260			1299	
Approach Delay, s/veh		47.0			34.2			8.6			28.3	
Approach LOS		D			C			A			C	

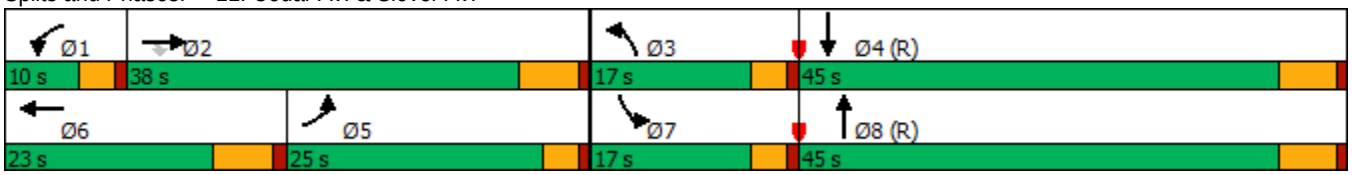
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	70.1		32.9	5.5	71.6		32.9				
Change Period (Y+Rc), s	4.0	5.7		6.0	4.0	5.7		6.0				
Max Green Setting (Gmax), s	12.2	48.1		34.0	12.2	48.1		34.0				
Max Q Clear Time (g_c+I1), s	3.1	2.0		26.5	2.4	30.8		8.4				
Green Ext Time (p_c), s	0.0	10.3		0.5	0.0	7.4		0.7				

Intersection Summary			
HCM 6th Ctrl Delay		21.5	
HCM 6th LOS		C	

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	206	356	175	32	234	127	864	102	866
Future Volume (vph)	206	356	175	32	234	127	864	102	866
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2		1	6	3	8	7	4
Permitted Phases			2						
Detector Phase	5	2	2	1	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	29.0	29.0	8.0	23.0	8.0	32.7	8.0	24.7
Total Split (s)	25.0	38.0	38.0	10.0	23.0	17.0	45.0	17.0	45.0
Total Split (%)	22.7%	34.5%	34.5%	9.1%	20.9%	15.5%	40.9%	15.5%	40.9%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	4.7	3.0	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	4.0	5.7	4.0	5.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	17.8	30.2	30.2	6.3	14.7	12.0	46.7	11.1	45.8
Actuated g/C Ratio	0.16	0.27	0.27	0.06	0.13	0.11	0.42	0.10	0.42
v/c Ratio	0.76	0.39	0.33	0.33	0.75	0.70	0.64	0.60	0.68
Control Delay	60.9	33.5	6.0	58.8	44.0	54.0	54.2	74.5	24.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.9	33.5	6.0	58.8	44.0	54.0	54.2	74.5	24.1
LOS	E	C	A	E	D	D	D	E	C
Approach Delay		34.6			45.1		54.1		29.0
Approach LOS		C			D		D		C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 40.4	Intersection LOS: D
Intersection Capacity Utilization 72.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 11: Cedar Av. & Slover Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	356	175	32	234	139	127	864	43	102	866	73
Future Volume (veh/h)	206	356	175	32	234	139	127	864	43	102	866	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	222	383	144	34	252	95	137	929	44	110	931	70
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	255	932	410	43	318	117	166	1628	77	136	1520	114
Arrive On Green	0.14	0.26	0.26	0.02	0.12	0.12	0.09	0.46	0.46	0.15	0.89	0.89
Sat Flow, veh/h	1810	3610	1589	1810	2585	949	1810	3509	166	1810	3399	256
Grp Volume(v), veh/h	222	383	144	34	174	173	137	478	495	110	494	507
Grp Sat Flow(s),veh/h/ln	1810	1805	1589	1810	1805	1729	1810	1805	1870	1810	1805	1850
Q Serve(g_s), s	13.2	9.7	8.1	2.1	10.3	10.7	8.2	21.2	21.2	6.5	7.0	7.0
Cycle Q Clear(g_c), s	13.2	9.7	8.1	2.1	10.3	10.7	8.2	21.2	21.2	6.5	7.0	7.0
Prop In Lane	1.00		1.00	1.00		0.55	1.00		0.09	1.00		0.14
Lane Grp Cap(c), veh/h	255	932	410	43	222	213	166	837	867	136	807	827
V/C Ratio(X)	0.87	0.41	0.35	0.79	0.78	0.81	0.82	0.57	0.57	0.81	0.61	0.61
Avail Cap(c_a), veh/h	345	1050	462	99	279	267	214	837	867	214	807	827
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.60	0.60	0.60	0.88	0.88	0.88
Uniform Delay (d), s/veh	46.3	33.9	33.3	53.4	46.8	47.0	49.1	21.5	21.5	46.0	3.6	3.6
Incr Delay (d2), s/veh	16.4	0.3	0.5	26.2	10.8	14.2	11.6	1.7	1.6	10.5	3.0	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	4.1	3.1	1.3	5.3	5.5	4.1	8.7	9.0	3.1	2.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.7	34.2	33.8	79.6	57.6	61.2	60.7	23.2	23.1	56.5	6.6	6.6
LnGrp LOS	E	C	C	E	E	E	E	C	C	E	A	A
Approach Vol, veh/h		749			381			1110			1111	
Approach Delay, s/veh		42.6			61.2			27.8			11.5	
Approach LOS		D			E			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	34.4	14.1	54.9	21.5	19.5	12.3	56.7
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	6.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	6.0	32.0	13.0	39.3	21.0	* 17	13.0	39.3
Max Q Clear Time (g_c+I1), s	4.1	11.7	10.2	9.0	15.2	12.7	8.5	23.2
Green Ext Time (p_c), s	0.0	2.5	0.1	6.9	0.3	0.8	0.1	5.2

Intersection Summary	
HCM 6th Ctrl Delay	29.5
HCM 6th LOS	C

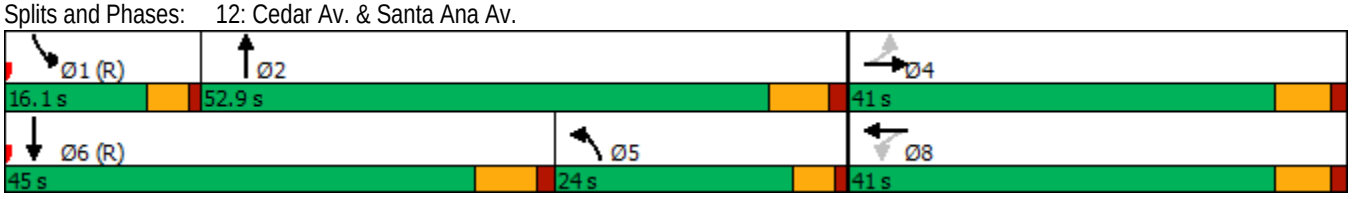
Notes

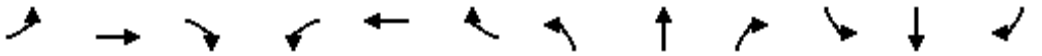
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	65	132	43	125	173	954	60	832
Future Volume (vph)	65	132	43	125	173	954	60	832
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	9.5	27.5	9.5	27.5
Total Split (s)	41.0	41.0	41.0	41.0	24.0	52.9	16.1	45.0
Total Split (%)	37.3%	37.3%	37.3%	37.3%	21.8%	48.1%	14.6%	40.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	4.5	6.5	4.5	6.5
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min
Act Effct Green (s)		26.9		26.9	19.2	45.4	20.8	46.9
Actuated g/C Ratio		0.24		0.24	0.17	0.41	0.19	0.43
v/c Ratio		0.85		0.60	0.58	0.73	0.19	0.61
Control Delay		55.9		41.0	37.5	18.3	33.8	41.9
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		55.9		41.0	37.5	18.3	33.8	41.9
LOS		E		D	D	B	C	D
Approach Delay		55.9		41.0		21.1		41.4
Approach LOS		E		D		C		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 90 (82%), Referenced to phase 1:SBL and 6:SBT, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 33.8	Intersection LOS: C
Intersection Capacity Utilization 71.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 12: Cedar Av. & Santa Ana Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	132	107	43	125	38	173	954	75	60	832	48
Future Volume (veh/h)	65	132	107	43	125	38	173	954	75	60	832	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	68	139	70	45	132	0	182	1004	77	63	876	44
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	106	177	82	95	253	0	558	1217	93	526	1127	57
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.00	0.62	0.72	0.72	0.10	0.11	0.11
Sat Flow, veh/h	332	900	416	272	1286	0	1810	3398	261	1810	3497	176
Grp Volume(v), veh/h	277	0	0	177	0	0	182	533	548	63	452	468
Grp Sat Flow(s),veh/h/ln	1648	0	0	1558	0	0	1810	1805	1853	1810	1805	1868
Q Serve(g_s), s	7.2	0.0	0.0	0.0	0.0	0.0	5.3	22.5	22.6	3.5	26.8	26.8
Cycle Q Clear(g_c), s	17.8	0.0	0.0	10.6	0.0	0.0	5.3	22.5	22.6	3.5	26.8	26.8
Prop In Lane	0.25		0.25	0.25		0.00	1.00		0.14	1.00		0.09
Lane Grp Cap(c), veh/h	365	0	0	347	0	0	558	646	664	526	582	602
V/C Ratio(X)	0.76	0.00	0.00	0.51	0.00	0.00	0.33	0.83	0.83	0.12	0.78	0.78
Avail Cap(c_a), veh/h	562	0	0	548	0	0	558	761	782	526	632	654
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.76	0.76	0.76	0.75	0.75	0.75
Uniform Delay (d), s/veh	42.5	0.0	0.0	39.4	0.0	0.0	15.6	13.2	13.2	36.9	45.3	45.3
Incr Delay (d2), s/veh	4.6	0.0	0.0	1.6	0.0	0.0	0.1	7.9	7.7	0.0	7.5	7.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	0.0	0.0	4.3	0.0	0.0	1.9	5.8	5.9	1.5	14.1	14.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.1	0.0	0.0	41.0	0.0	0.0	15.7	21.1	21.0	36.9	52.8	52.6
LnGrp LOS	D	A	A	D	A	A	B	C	C	D	D	D
Approach Vol, veh/h		277			177			1263			983	
Approach Delay, s/veh		47.1			41.0			20.3			51.7	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	36.5	45.9		27.6	40.4	42.0		27.6				
Change Period (Y+Rc), s	4.5	6.5		6.0	6.5	* 6.5		6.0				
Max Green Setting (Gmax), s	11.6	46.4		35.0	19.5	* 39		35.0				
Max Q Clear Time (g_c+I1), s	5.5	24.6		19.8	7.3	28.8		12.6				
Green Ext Time (p_c), s	0.0	14.4		1.9	0.2	6.6		1.3				

Intersection Summary	
HCM 6th Ctrl Delay	35.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	49	157	49	65	89	57	76	1054	128	860
Future Volume (vph)	49	157	49	65	89	57	76	1054	128	860
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	19.0	51.0	24.0	56.0
Total Split (%)	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	17.3%	46.4%	21.8%	50.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)		21.0	21.0		21.0	21.0	26.0	59.3	13.7	47.0
Actuated g/C Ratio		0.19	0.19		0.19	0.19	0.24	0.54	0.12	0.43
v/c Ratio		0.81	0.13		0.92	0.16	0.19	0.63	0.62	0.64
Control Delay		63.5	0.7		92.8	0.9	53.6	10.1	27.4	38.9
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		63.5	0.7		92.8	0.9	53.6	10.1	27.4	38.9
LOS		E	A		F	A	D	B	C	D
Approach Delay		51.5			68.1			12.8		37.5
Approach LOS		D			E			B		D

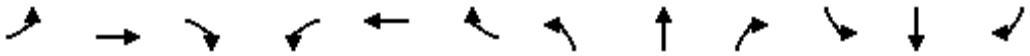
Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 30.3	Intersection LOS: C
Intersection Capacity Utilization 77.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	49	157	49	65	89	57	76	1054	128	860
Future Volume (vph)	49	157	49	65	89	57	76	1054	128	860
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	19.0	51.0	24.0	56.0
Total Split (%)	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	17.3%	46.4%	21.8%	50.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)		21.0	21.0		21.0	21.0	26.0	59.3	13.7	47.0
Actuated g/C Ratio		0.19	0.19		0.19	0.19	0.24	0.54	0.12	0.43
v/c Ratio		0.81	0.13		0.92	0.16	0.19	0.63	0.62	0.64
Control Delay		63.5	0.7		92.8	0.9	53.6	10.1	27.4	38.9
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		63.5	0.7		92.8	0.9	53.6	10.1	27.4	38.9
LOS		E	A		F	A	D	B	C	D
Approach Delay		51.5			68.1			12.8		37.5
Approach LOS		D			E			B		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 30.3	Intersection LOS: C
Intersection Capacity Utilization 77.0%	ICU Level of Service D
Analysis Period (min) 15	

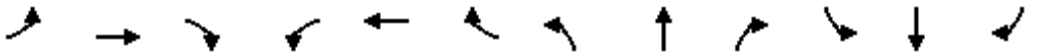
Splits and Phases: 13: Cedar Av. & Jurupa Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	157	49	65	89	57	76	1054	64	128	860	50
Future Volume (veh/h)	49	157	49	65	89	57	76	1054	64	128	860	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	53	171	48	71	97	16	83	1146	57	139	935	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	40	109	426	47	47	424	395	1720	85	172	1285	67
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.22	0.49	0.49	0.03	0.12	0.12
Sat Flow, veh/h	0	408	1588	0	176	1579	1810	3500	174	1810	3489	183
Grp Volume(v), veh/h	224	0	48	168	0	16	83	591	612	139	484	500
Grp Sat Flow(s),veh/h/ln	408	0	1588	176	0	1579	1810	1805	1869	1810	1805	1867
Q Serve(g_s), s	0.0	0.0	2.5	0.0	0.0	0.8	4.1	27.2	27.3	8.4	28.4	28.4
Cycle Q Clear(g_c), s	29.5	0.0	2.5	29.5	0.0	0.8	4.1	27.2	27.3	8.4	28.4	28.4
Prop In Lane	0.24		1.00	0.42		1.00	1.00		0.09	1.00		0.10
Lane Grp Cap(c), veh/h	150	0	426	94	0	424	395	887	918	172	665	688
V/C Ratio(X)	1.49	0.00	0.11	1.79	0.00	0.04	0.21	0.67	0.67	0.81	0.73	0.73
Avail Cap(c_a), veh/h	150	0	426	94	0	424	395	887	918	321	820	849
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.80	0.80	0.80	0.76	0.76	0.76
Uniform Delay (d), s/veh	35.8	0.0	30.4	40.8	0.0	29.8	35.2	21.2	21.2	52.3	43.0	43.0
Incr Delay (d2), s/veh	254.4	0.0	0.2	395.6	0.0	0.1	0.2	3.2	3.1	6.7	2.3	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.7	0.0	1.0	12.8	0.0	0.3	1.8	11.3	11.7	4.2	14.0	14.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	290.2	0.0	30.5	436.5	0.0	29.8	35.5	24.3	24.2	59.0	45.3	45.2
LnGrp LOS	F	A	C	F	A	C	D	C	C	E	D	D
Approach Vol, veh/h		272			184			1286			1123	
Approach Delay, s/veh		244.4			401.1			25.0			47.0	
Approach LOS		F			F			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.0	60.0		35.0	28.5	46.5		35.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	19.5	45.0		29.5	14.5	50.0		29.5				
Max Q Clear Time (g_c+I1), s	10.4	29.3		31.5	6.1	30.4		31.5				
Green Ext Time (p_c), s	0.2	8.8		0.0	0.1	8.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		78.6	
HCM 6th LOS		E	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	44	204	32	26	18	135	1045	18	67	816	30
Future Volume (veh/h)	68	44	204	32	26	18	135	1045	18	67	816	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	74	48	140	35	28	10	147	1136	20	73	887	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	116	70	166	143	107	32	178	2236	39	94	2025	73
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.10	0.62	0.62	0.05	0.57	0.57
Sat Flow, veh/h	391	368	871	495	562	168	1810	3628	64	1810	3554	128
Grp Volume(v), veh/h	262	0	0	73	0	0	147	565	591	73	451	468
Grp Sat Flow(s),veh/h/ln	1630	0	0	1225	0	0	1810	1805	1887	1810	1805	1877
Q Serve(g_s), s	12.1	0.0	0.0	0.0	0.0	0.0	8.8	19.2	19.2	4.4	15.7	15.7
Cycle Q Clear(g_c), s	16.9	0.0	0.0	4.8	0.0	0.0	8.8	19.2	19.2	4.4	15.7	15.7
Prop In Lane	0.28		0.53	0.48		0.14	1.00		0.03	1.00		0.07
Lane Grp Cap(c), veh/h	353	0	0	282	0	0	178	1112	1163	94	1029	1070
V/C Ratio(X)	0.74	0.00	0.00	0.26	0.00	0.00	0.82	0.51	0.51	0.77	0.44	0.44
Avail Cap(c_a), veh/h	569	0	0	482	0	0	304	1112	1163	189	1029	1070
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.57	0.57	0.57	0.75	0.75	0.75
Uniform Delay (d), s/veh	42.7	0.0	0.0	37.7	0.0	0.0	48.6	11.8	11.8	51.5	13.6	13.6
Incr Delay (d2), s/veh	4.4	0.0	0.0	0.7	0.0	0.0	5.5	0.9	0.9	9.6	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	0.0	0.0	1.7	0.0	0.0	4.1	6.8	7.1	2.2	6.1	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.1	0.0	0.0	38.4	0.0	0.0	54.1	12.7	12.7	61.1	14.6	14.5
LnGrp LOS	D	A	A	D	A	A	D	B	B	E	B	B
Approach Vol, veh/h		262			73			1303			992	
Approach Delay, s/veh		47.1			38.4			17.4			18.0	
Approach LOS		D			D			B			B	

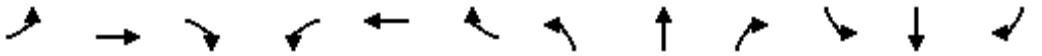
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.2	73.8		26.0	15.3	68.7		26.0				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	11.5	47.0		36.0	18.5	40.0		36.0				
Max Q Clear Time (g_c+I1), s	6.4	21.2		18.9	10.8	17.7		6.8				
Green Ext Time (p_c), s	0.0	10.8		2.1	0.2	7.8		0.5				

Intersection Summary			
HCM 6th Ctrl Delay		21.2	
HCM 6th LOS		C	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	9	7	183	5	194	12	1000	167	867
Future Volume (vph)	9	7	183	5	194	12	1000	167	867
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	35.0	35.0	35.0	9.5	24.0	9.5	24.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.6	35.0	20.0	45.4
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%	10.7%	38.9%	22.2%	50.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	5.0	4.5	6.0	4.5	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min
Act Effct Green (s)		13.3		17.6	17.6	5.2	29.5	11.7	44.2
Actuated g/C Ratio		0.18		0.24	0.24	0.07	0.40	0.16	0.59
v/c Ratio		0.09		0.59	0.37	0.10	0.82	0.60	0.42
Control Delay		17.4		33.3	5.7	39.3	28.3	40.0	10.9
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		17.4		33.3	5.7	39.3	28.3	40.0	10.9
LOS		B		C	A	D	C	D	B
Approach Delay		17.4		19.3			28.4		15.5
Approach LOS		B		B			C		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 74.6	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 21.8	Intersection LOS: C
Intersection Capacity Utilization 71.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 15: Rubidoux Bl. & Tarragona Dr./El Rivino Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	7	10	183	5	194	12	1000	142	167	867	23
Future Volume (veh/h)	9	7	10	183	5	194	12	1000	142	167	867	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	9	7	6	185	5	121	12	1010	136	169	876	22
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	114	86	46	364	7	401	27	1256	169	215	1793	45
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.01	0.39	0.39	0.12	0.50	0.50
Sat Flow, veh/h	147	345	184	1023	28	1610	1810	3188	429	1810	3598	90
Grp Volume(v), veh/h	22	0	0	190	0	121	12	571	575	169	439	459
Grp Sat Flow(s),veh/h/ln	676	0	0	1050	0	1610	1810	1805	1812	1810	1805	1884
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	4.0	0.4	18.3	18.3	5.9	10.5	10.5
Cycle Q Clear(g_c), s	12.6	0.0	0.0	12.4	0.0	4.0	0.4	18.3	18.3	5.9	10.5	10.5
Prop In Lane	0.41		0.27	0.97		1.00	1.00		0.24	1.00		0.05
Lane Grp Cap(c), veh/h	246	0	0	371	0	401	27	711	714	215	899	938
V/C Ratio(X)	0.09	0.00	0.00	0.51	0.00	0.30	0.44	0.80	0.80	0.78	0.49	0.49
Avail Cap(c_a), veh/h	568	0	0	673	0	741	142	803	806	430	1091	1139
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.3	0.0	0.0	23.0	0.0	19.9	31.8	17.5	17.5	27.9	10.8	10.8
Incr Delay (d2), s/veh	0.2	0.0	0.0	1.6	0.0	0.6	11.0	5.8	5.9	6.2	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	2.8	0.0	1.5	0.3	7.1	7.2	2.6	3.2	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.5	0.0	0.0	24.6	0.0	20.5	42.8	23.3	23.4	34.1	11.4	11.4
LnGrp LOS	B	A	A	C	A	C	D	C	C	C	B	B
Approach Vol, veh/h		22			311			1158			1067	
Approach Delay, s/veh		19.5			23.0			23.6			15.0	
Approach LOS		B			C			C			B	

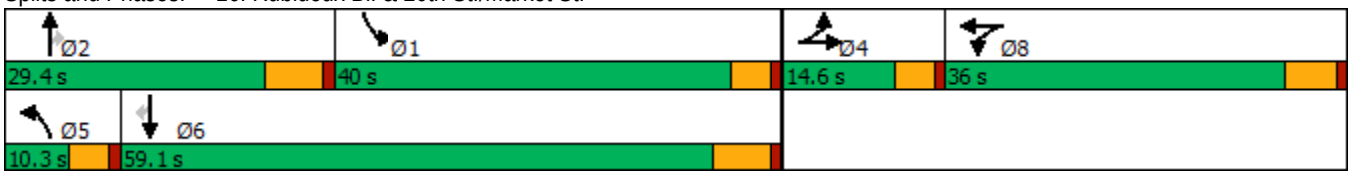
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.3	31.7		21.3	5.5	38.5		21.3				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	15.5	29.0		30.0	5.1	39.4		30.0				
Max Q Clear Time (g_c+I1), s	7.9	20.3		14.6	2.4	12.5		14.4				
Green Ext Time (p_c), s	0.2	5.4		0.1	0.0	7.9		1.9				

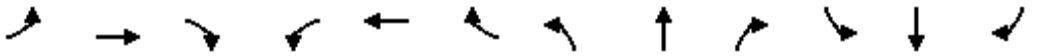
Intersection Summary			
HCM 6th Ctrl Delay		19.9	
HCM 6th LOS		B	

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	329	278	106	437	74	305	430	422	522	120
Future Volume (vph)	329	278	106	437	74	305	430	422	522	120
Turn Type	Split	NA	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4	8		5	2		1	6	
Permitted Phases				Free			2			6
Detector Phase	4	4	8		5	2	2	1	6	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	14.6	14.6	15.8		9.6	16.2	16.2	9.6	35.2	35.2
Total Split (s)	14.6	14.6	36.0		10.3	29.4	29.4	40.0	59.1	59.1
Total Split (%)	12.2%	12.2%	30.0%		8.6%	24.5%	24.5%	33.3%	49.3%	49.3%
Yellow Time (s)	3.6	3.6	4.8		3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	5.8		4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag					Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None		None	None	None	None	None	None
Act Effct Green (s)	10.2	10.2	27.7	104.0	5.8	15.8	15.8	28.7	38.6	38.6
Actuated g/C Ratio	0.10	0.10	0.27	1.00	0.06	0.15	0.15	0.28	0.37	0.37
v/c Ratio	1.90	2.38	0.86	0.28	0.75	0.57	0.71	0.87	0.40	0.18
Control Delay	453.6	657.8	56.6	0.4	94.2	46.4	11.1	55.3	24.6	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	453.6	657.8	56.6	0.4	94.2	46.4	11.1	55.3	24.6	4.3
LOS	F	F	E	A	F	D	B	E	C	A
Approach Delay		571.6	27.7			32.0			34.5	
Approach LOS		F	C			C			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 104	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 2.38	
Intersection Signal Delay: 151.9	Intersection LOS: F
Intersection Capacity Utilization 97.2%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	329	278	172	307	106	437	74	305	430	422	522	120
Future Volume (veh/h)	329	278	172	307	106	437	74	305	430	422	522	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	336	284	170	313	108	0	76	311	308	431	533	106
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	161	99	59	338	117		92	743	331	461	1530	682
Arrive On Green	0.09	0.09	0.09	0.25	0.25	0.00	0.05	0.21	0.21	0.25	0.42	0.42
Sat Flow, veh/h	1810	1113	667	1362	470	1610	1810	3610	1610	1810	3610	1608
Grp Volume(v), veh/h	336	0	454	421	0	0	76	311	308	431	533	106
Grp Sat Flow(s),veh/h/ln	1810	0	1780	1832	0	1610	1810	1805	1610	1810	1805	1608
Q Serve(g_s), s	10.0	0.0	10.0	25.2	0.0	0.0	4.7	8.4	21.1	26.2	11.2	4.6
Cycle Q Clear(g_c), s	10.0	0.0	10.0	25.2	0.0	0.0	4.7	8.4	21.1	26.2	11.2	4.6
Prop In Lane	1.00		0.37	0.74		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	161	0	158	455	0		92	743	331	461	1530	682
V/C Ratio(X)	2.09	0.00	2.87	0.93	0.00		0.83	0.42	0.93	0.94	0.35	0.16
Avail Cap(c_a), veh/h	161	0	158	492	0		92	744	332	569	1697	756
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.3	0.0	51.3	41.3	0.0	0.0	52.9	38.8	43.9	41.0	21.9	20.0
Incr Delay (d2), s/veh	510.7	0.0	858.5	22.8	0.0	0.0	42.2	0.4	31.7	19.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	27.4	0.0	42.2	13.8	0.0	0.0	3.1	3.6	10.9	13.5	4.5	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	562.0	0.0	909.7	64.1	0.0	0.0	95.1	39.2	75.6	60.1	22.0	20.1
LnGrp LOS	F	A	F	E	A		F	D	E	E	C	C
Approach Vol, veh/h		790			421			695			1070	
Approach Delay, s/veh		761.8			64.1			61.4			37.2	
Approach LOS		F			E			E			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	34.8	29.4		14.6	10.3	53.9		33.7				
Change Period (Y+Rc), s	6.2	* 6.2		4.6	4.6	6.2		5.8				
Max Green Setting (Gmax), s	35.4	* 23		10.0	5.7	52.9		30.2				
Max Q Clear Time (g_c+I1), s	28.2	23.1		12.0	6.7	13.2		27.2				
Green Ext Time (p_c), s	0.4	0.0		0.0	0.0	3.7		0.7				

Intersection Summary		
HCM 6th Ctrl Delay		239.0
HCM 6th LOS		F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	9.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	18	8	16	7	6	19	763	73	143	948	4
Future Vol, veh/h	2	18	8	16	7	6	19	763	73	143	948	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	18	8	16	7	6	19	779	74	146	967	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1692	2153	486	1640	2118	428	971	0	0	854	0	0
Stage 1	1261	1261	-	855	855	-	-	-	-	-	-	-
Stage 2	431	892	-	785	1263	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	62	49	533	68	51	581	718	-	-	794	-	-
Stage 1	183	244	-	323	378	-	-	-	-	-	-	-
Stage 2	578	363	-	356	243	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	34	28	533	22	29	580	718	-	-	793	-	-
Mov Cap-2 Maneuver	34	28	-	22	29	-	-	-	-	-	-	-
Stage 1	174	146	-	306	358	-	-	-	-	-	-	-
Stage 2	532	344	-	184	146	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	221.7	$ 352.8	0.4	2.8
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	718	-	-	39	30	793	-	-
HCM Lane V/C Ratio	0.027	-	-	0.733	0.986	0.184	-	-
HCM Control Delay (s)	10.2	0.2	-	221.7	$ 352.8	10.6	1.6	-
HCM Lane LOS	B	A	-	F	F	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	2.7	3.3	0.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	6	11	4	4	6	4	838	16	7	894	8
Future Vol, veh/h	12	6	11	4	4	6	4	838	16	7	894	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	110	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	13	7	12	4	4	7	4	921	18	8	982	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1475	1953	497	1451	1948	472	992	0	0	941	0	0
Stage 1	1004	1004	-	940	940	-	-	-	-	-	-	-
Stage 2	471	949	-	511	1008	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	90	65	524	93	65	544	705	-	-	737	-	-
Stage 1	263	322	-	287	345	-	-	-	-	-	-	-
Stage 2	548	342	-	519	321	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	86	64	524	87	64	543	704	-	-	736	-	-
Mov Cap-2 Maneuver	193	177	-	200	178	-	-	-	-	-	-	-
Stage 1	261	318	-	285	342	-	-	-	-	-	-	-
Stage 2	531	339	-	491	317	-	-	-	-	-	-	-

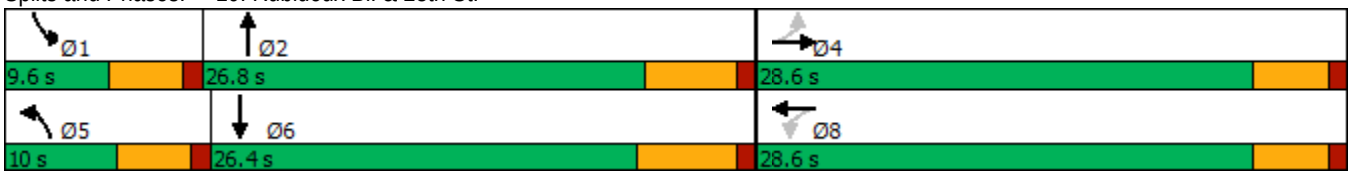
Approach	EB	WB	NB	SB
HCM Control Delay, s	21.6	19.6	0	0.1
HCM LOS	C	C		

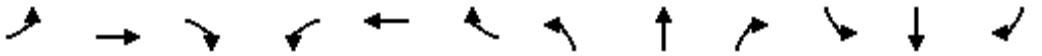
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	704	-	-	248	262	736	-	-
HCM Lane V/C Ratio	0.006	-	-	0.129	0.059	0.01	-	-
HCM Control Delay (s)	10.1	-	-	21.6	19.6	9.9	-	-
HCM Lane LOS	B	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.2	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	30	14	72	11	44	814	20	906
Future Volume (vph)	30	14	72	11	44	814	20	906
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	28.6	28.6	28.6	28.6	9.6	24.4	9.6	22.8
Total Split (s)	28.6	28.6	28.6	28.6	10.0	26.8	9.6	26.4
Total Split (%)	44.0%	44.0%	44.0%	44.0%	15.4%	41.2%	14.8%	40.6%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.4	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		14.8		14.8	6.7	26.8	6.6	25.1
Actuated g/C Ratio		0.38		0.38	0.17	0.69	0.17	0.65
v/c Ratio		0.14		0.20	0.15	0.38	0.07	0.43
Control Delay		9.8		13.7	24.0	9.2	24.6	12.2
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		9.8		13.7	24.0	9.2	24.6	12.2
LOS		A		B	C	A	C	B
Approach Delay		9.8		13.7		9.9		12.4
Approach LOS		A		B		A		B

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 38.9	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.43	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 52.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 19: Rubidoux Bl. & 28th St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	14	37	72	11	13	44	814	50	20	906	22
Future Volume (veh/h)	30	14	37	72	11	13	44	814	50	20	906	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	32	15	12	77	12	8	47	875	54	22	974	24
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	255	111	56	355	52	21	93	1412	87	49	1387	34
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.05	0.41	0.41	0.03	0.39	0.39
Sat Flow, veh/h	649	657	333	1095	309	126	1810	3449	213	1810	3600	89
Grp Volume(v), veh/h	59	0	0	97	0	0	47	458	471	22	488	510
Grp Sat Flow(s),veh/h/ln	1639	0	0	1531	0	0	1810	1805	1856	1810	1805	1884
Q Serve(g_s), s	0.0	0.0	0.0	0.9	0.0	0.0	1.0	7.6	7.6	0.5	8.7	8.7
Cycle Q Clear(g_c), s	1.1	0.0	0.0	1.9	0.0	0.0	1.0	7.6	7.6	0.5	8.7	8.7
Prop In Lane	0.54		0.20	0.79		0.08	1.00		0.11	1.00		0.05
Lane Grp Cap(c), veh/h	423	0	0	428	0	0	93	739	760	49	695	726
V/C Ratio(X)	0.14	0.00	0.00	0.23	0.00	0.00	0.50	0.62	0.62	0.45	0.70	0.70
Avail Cap(c_a), veh/h	1142	0	0	1107	0	0	257	1016	1045	238	978	1021
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	0.0	0.0	13.9	0.0	0.0	17.6	8.9	8.9	18.2	9.8	9.8
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.3	0.0	0.0	1.6	0.9	0.8	2.3	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.7	0.0	0.0	0.4	1.9	2.0	0.2	2.1	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	0.0	0.0	14.2	0.0	0.0	19.1	9.7	9.7	20.5	11.2	11.1
LnGrp LOS	B	A	A	B	A	A	B	A	A	C	B	B
Approach Vol, veh/h		59			97			976			1020	
Approach Delay, s/veh		13.7			14.2			10.2			11.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.6	21.4		11.0	6.6	20.4		11.0				
Change Period (Y+Rc), s	4.6	* 5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	5.0	* 21		24.0	5.4	20.6		24.0				
Max Q Clear Time (g_c+I1), s	2.5	9.6		3.1	3.0	10.7		3.9				
Green Ext Time (p_c), s	0.0	4.3		0.2	0.0	4.0		0.4				

Intersection Summary		
HCM 6th Ctrl Delay		11.0
HCM 6th LOS		B

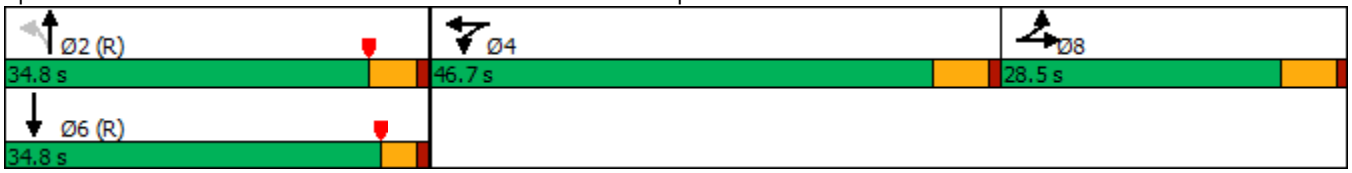
Notes

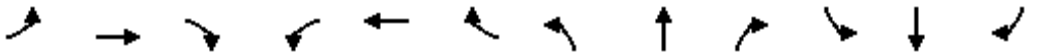
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	20	0	83	53	813	1006
Future Volume (vph)	20	0	83	53	813	1006
Turn Type	Split	NA	NA	Perm	NA	NA
Protected Phases	8	8	4		2	6
Permitted Phases				2		
Detector Phase	8	8	4	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.5	28.5	46.7	34.8	34.8	34.8
Total Split (%)	25.9%	25.9%	42.5%	31.6%	31.6%	31.6%
Yellow Time (s)	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	12.0	12.0	41.2	40.8	40.8	41.8
Actuated g/C Ratio	0.11	0.11	0.37	0.37	0.37	0.38
v/c Ratio	0.11	0.63	1.02	0.85	0.66	0.81
Control Delay	41.6	27.4	74.8	61.2	19.9	37.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.6	27.4	74.8	61.2	19.9	37.6
LOS	D	C	E	E	B	D
Approach Delay		29.0	74.8		22.4	37.6
Approach LOS		C	E		C	D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 40.9	Intersection LOS: D
Intersection Capacity Utilization 103.0%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	0	161	459	83	96	53	813	0	0	1006	18
Future Volume (veh/h)	20	0	161	459	83	96	53	813	0	0	1006	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	22	0	113	499	90	75	58	884	0	0	1093	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	165	0	147	506	91	76	131	1404	0	0	1415	22
Arrive On Green	0.09	0.00	0.09	0.37	0.37	0.37	0.78	0.78	0.00	0.00	0.39	0.39
Sat Flow, veh/h	1810	0	1610	1350	243	203	516	3705	0	0	3733	57
Grp Volume(v), veh/h	22	0	113	664	0	0	58	884	0	0	542	568
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1796	0	0	516	1805	0	0	1805	1890
Q Serve(g_s), s	1.2	0.0	7.5	40.4	0.0	0.0	11.9	11.7	0.0	0.0	28.9	28.9
Cycle Q Clear(g_c), s	1.2	0.0	7.5	40.4	0.0	0.0	40.8	11.7	0.0	0.0	28.9	28.9
Prop In Lane	1.00		1.00	0.75		0.11	1.00		0.00	0.00		0.03
Lane Grp Cap(c), veh/h	165	0	147	673	0	0	131	1404	0	0	702	735
V/C Ratio(X)	0.13	0.00	0.77	0.99	0.00	0.00	0.44	0.63	0.00	0.00	0.77	0.77
Avail Cap(c_a), veh/h	378	0	337	673	0	0	131	1404	0	0	702	735
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.91	0.91
Uniform Delay (d), s/veh	46.0	0.0	48.9	34.1	0.0	0.0	25.9	8.8	0.0	0.0	29.4	29.4
Incr Delay (d2), s/veh	0.4	0.0	9.8	31.4	0.0	0.0	10.5	2.2	0.0	0.0	7.4	7.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	3.5	22.2	0.0	0.0	1.6	3.1	0.0	0.0	13.3	13.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.4	0.0	58.7	65.5	0.0	0.0	36.4	10.9	0.0	0.0	36.7	36.4
LnGrp LOS	D	A	E	E	A	A	D	B	A	A	D	D
Approach Vol, veh/h		135			664			942			1110	
Approach Delay, s/veh		56.7			65.5			12.5			36.6	
Approach LOS		E			E			B			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		47.8		46.7		47.8		15.5				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		29.8		41.2		* 31		23.0				
Max Q Clear Time (g_c+I1), s		42.8		42.4		30.9		9.5				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.6				

Intersection Summary												
HCM 6th Ctrl Delay			36.3									
HCM 6th LOS			D									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	197	866	979	646
Future Vol, veh/h	0	0	197	866	979	646
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	212	931	1053	695

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	875	1749	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	0	*725	420	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	-	*724	420	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	4.1	0
HCM LOS	A		

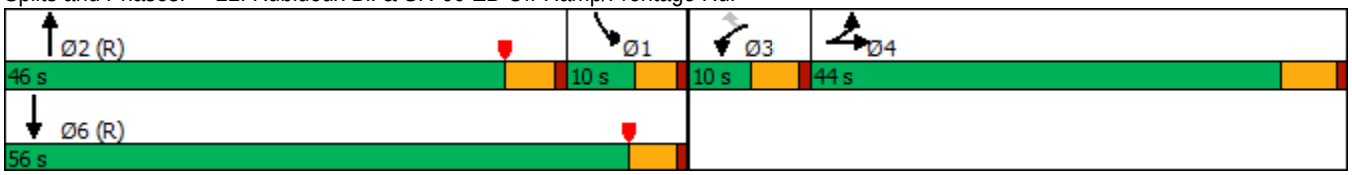
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	420	-	-	-	-
HCM Lane V/C Ratio	0.504	-	-	-	-
HCM Control Delay (s)	22	-	0	-	-
HCM Lane LOS	C	-	A	-	-
HCM 95th %tile Q(veh)	2.8	-	-	-	-

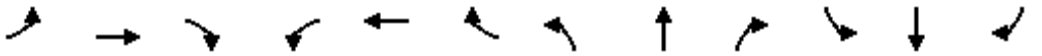
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	45	13	2	506	144	836
Future Volume (vph)	45	13	2	506	144	836
Turn Type	NA	Prot	Perm	NA	Prot	NA
Protected Phases	4	3		2	1	6
Permitted Phases			3			
Detector Phase	4	3	3	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	10.0	10.0	45.0	9.5	30.0
Total Split (s)	44.0	10.0	10.0	46.0	10.0	56.0
Total Split (%)	40.0%	9.1%	9.1%	41.8%	9.1%	50.9%
Yellow Time (s)	4.5	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	44.5	5.0	5.0	29.9	16.6	51.0
Actuated g/C Ratio	0.40	0.05	0.05	0.27	0.15	0.46
v/c Ratio	1.38	0.17	0.01	0.81	0.55	0.52
Control Delay	207.5	55.4	0.0	38.7	42.5	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	207.5	55.4	0.0	38.7	42.5	13.9
LOS	F	E	A	D	D	B
Approach Delay	207.5			38.7		18.1
Approach LOS	F			D		B

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.38	
Intersection Signal Delay: 90.5	Intersection LOS: F
Intersection Capacity Utilization 105.4%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	555	45	362	13	0	2	0	506	282	144	836	0
Future Volume (veh/h)	555	45	362	13	0	2	0	506	282	144	836	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	578	47	285	14	0	0	0	527	246	150	871	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	388	32	191	0	0	0	0	609	283	461	2002	0
Arrive On Green	0.35	0.35	0.35	0.00	0.00	0.00	0.00	0.25	0.25	0.51	1.00	0.00
Sat Flow, veh/h	1109	90	547		0		0	2487	1113	1810	3705	0
Grp Volume(v), veh/h	910	0	0		0.0		0	397	376	150	871	0
Grp Sat Flow(s),veh/h/ln	1746	0	0				0	1805	1700	1810	1805	0
Q Serve(g_s), s	38.5	0.0	0.0				0.0	23.1	23.3	5.4	0.0	0.0
Cycle Q Clear(g_c), s	38.5	0.0	0.0				0.0	23.1	23.3	5.4	0.0	0.0
Prop In Lane	0.64		0.31				0.00		0.65	1.00		0.00
Lane Grp Cap(c), veh/h	611	0	0				0	459	432	461	2002	0
V/C Ratio(X)	1.49	0.00	0.00				0.00	0.86	0.87	0.33	0.44	0.00
Avail Cap(c_a), veh/h	611	0	0				0	673	634	461	2002	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.82	0.82	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.8	0.0	0.0				0.0	39.2	39.2	21.4	0.0	0.0
Incr Delay (d2), s/veh	228.7	0.0	0.0				0.0	16.2	17.4	0.2	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	54.1	0.0	0.0				0.0	12.0	11.5	2.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	264.4	0.0	0.0				0.0	55.4	56.7	21.6	0.7	0.0
LnGrp LOS	F	A	A				A	E	E	C	A	A
Approach Vol, veh/h		910						773			1021	
Approach Delay, s/veh		264.4						56.0			3.8	
Approach LOS		F						E			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	33.0	33.0		44.0		66.0
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0
Max Green Setting (Gmax), s	5.5	* 41		38.5		51.0
Max Q Clear Time (g_c+I1), s	7.4	25.3		40.5		2.0
Green Ext Time (p_c), s	0.0	2.7		0.0		4.2

Intersection Summary		
HCM 6th Ctrl Delay		106.4
HCM 6th LOS		F

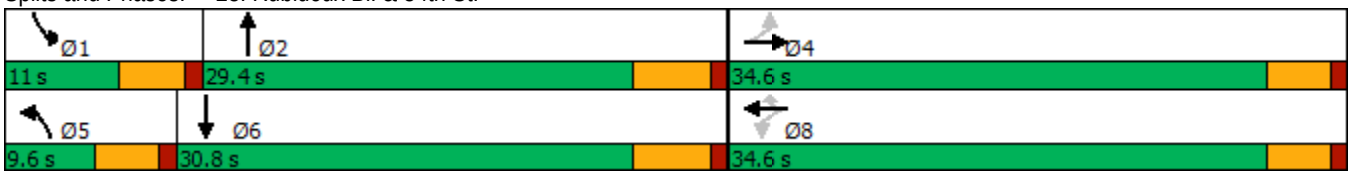
Notes

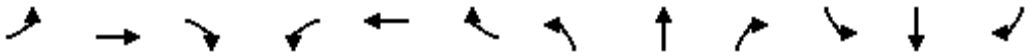
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	90	44	14	15	79	19	601	189	906
Future Volume (vph)	90	44	14	15	79	19	601	189	906
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	30.6	30.6	34.6	34.6	34.6	9.6	29.4	9.6	22.4
Total Split (s)	34.6	34.6	34.6	34.6	34.6	9.6	29.4	11.0	30.8
Total Split (%)	46.1%	46.1%	46.1%	46.1%	46.1%	12.8%	39.2%	14.7%	41.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	4.6	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		14.2		14.2	14.2	5.6	16.1	7.2	29.2
Actuated g/C Ratio		0.29		0.29	0.29	0.12	0.33	0.15	0.60
v/c Ratio		0.36		0.07	0.15	0.10	0.59	0.74	0.51
Control Delay		17.2		14.8	3.4	27.9	17.1	47.5	12.3
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		17.2		14.8	3.4	27.9	17.1	47.5	12.3
LOS		B		B	A	C	B	D	B
Approach Delay		17.2		6.5			17.4		17.7
Approach LOS		B		A			B		B

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 48.5	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 17.0	Intersection LOS: B
Intersection Capacity Utilization 62.3%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 23: Rubidoux Bl. & 34th St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	44	19	14	15	79	19	601	79	189	906	130
Future Volume (veh/h)	90	44	19	14	15	79	19	601	79	189	906	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	94	46	14	15	16	29	20	626	78	197	944	116
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	310	135	31	259	234	348	45	978	122	249	1341	165
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.02	0.30	0.30	0.14	0.42	0.42
Sat Flow, veh/h	802	625	143	618	1079	1606	1810	3231	402	1810	3226	396
Grp Volume(v), veh/h	154	0	0	31	0	29	20	349	355	197	528	532
Grp Sat Flow(s),veh/h/ln	1570	0	0	1697	0	1606	1810	1805	1828	1810	1805	1817
Q Serve(g_s), s	2.2	0.0	0.0	0.0	0.0	0.6	0.5	7.1	7.1	4.5	10.3	10.3
Cycle Q Clear(g_c), s	3.4	0.0	0.0	0.6	0.0	0.6	0.5	7.1	7.1	4.5	10.3	10.3
Prop In Lane	0.61		0.09	0.48		1.00	1.00		0.22	1.00		0.22
Lane Grp Cap(c), veh/h	476	0	0	493	0	348	45	547	553	249	750	755
V/C Ratio(X)	0.32	0.00	0.00	0.06	0.00	0.08	0.45	0.64	0.64	0.79	0.70	0.70
Avail Cap(c_a), veh/h	1220	0	0	1269	0	1133	213	1018	1031	272	1078	1085
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.3	0.0	0.0	13.3	0.0	13.3	20.5	12.8	12.8	17.8	10.3	10.3
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.1	0.0	0.1	2.6	1.3	1.2	12.0	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	0.2	0.0	0.2	0.2	2.3	2.3	2.3	2.9	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.7	0.0	0.0	13.3	0.0	13.4	23.0	14.1	14.1	29.7	11.5	11.5
LnGrp LOS	B	A	A	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		154			60			724			1257	
Approach Delay, s/veh		14.7			13.4			14.3			14.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.5	18.3		13.8	5.7	23.1		13.8				
Change Period (Y+Rc), s	4.6	5.4		4.6	4.6	5.4		4.6				
Max Green Setting (Gmax), s	6.4	24.0		30.0	5.0	25.4		30.0				
Max Q Clear Time (g_c+I1), s	6.5	9.1		5.4	2.5	12.3		2.6				
Green Ext Time (p_c), s	0.0	3.6		0.9	0.0	5.4		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			14.3									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	393	78	0	0	15	14
Future Vol, veh/h	393	78	0	0	15	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	447	89	0	0	17	16

Major/Minor	Major1			Minor1	
Conflicting Flow All	0	0		492	492
Stage 1	-	-		492	-
Stage 2	-	-		0	-
Critical Hdwy	-	-		6.4	6.2
Critical Hdwy Stg 1	-	-		5.4	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	-		3.5	3.3
Pot Cap-1 Maneuver	-	-		540	581
Stage 1	-	-		619	-
Stage 2	-	-		-	-
Platoon blocked, %	-	-			
Mov Cap-1 Maneuver	-	-		540	581
Mov Cap-2 Maneuver	-	-		540	-
Stage 1	-	-		619	-
Stage 2	-	-		-	-

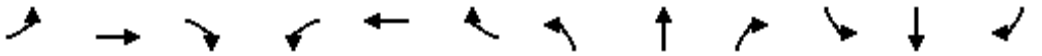
Approach	EB	NB
HCM Control Delay, s	0	11.8
HCM LOS		B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	559	-	-
HCM Lane V/C Ratio	0.059	-	-
HCM Control Delay (s)	11.8	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-

Lane Group	EBL	EBT	EBR	WBT	WBR	NBT	SBL	SBT	Ø1
Lane Configurations									
Traffic Volume (vph)	571	556	4	514	149	3	141	2	
Future Volume (vph)	571	556	4	514	149	3	141	2	
Turn Type	Prot	NA	Perm	NA	Perm	NA	Perm	NA	
Protected Phases	5	2		6		8		4	1
Permitted Phases			2		6		4		
Detector Phase	5	2	2	6	6	8	4	4	
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	31.8	31.8	26.8	26.8	14.6	43.8	43.8	9.6
Total Split (s)	42.0	66.6	66.6	34.2	34.2	43.8	43.8	43.8	9.6
Total Split (%)	35.0%	55.5%	55.5%	28.5%	28.5%	36.5%	36.5%	36.5%	8%
Yellow Time (s)	3.6	4.8	4.8	4.8	4.8	3.6	4.8	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.6	5.8	5.8	5.8	5.8	4.6		5.8	
Lead/Lag	Lead	Lag	Lag	Lag	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				Yes
Recall Mode	None	Max	Max	Max	Max	None	None	None	None
Act Effct Green (s)	37.4	70.5	70.5	28.4	28.4	36.5		35.3	
Actuated g/C Ratio	0.32	0.60	0.60	0.24	0.24	0.31		0.30	
v/c Ratio	1.06	0.27	0.00	0.63	0.31	0.01		0.95	
Control Delay	92.6	12.0	0.0	44.0	7.4	27.3		60.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	92.6	12.0	0.0	44.0	7.4	27.3		60.4	
LOS	F	B	A	D	A	C		E	
Approach Delay		52.7		35.7		27.3		60.4	
Approach LOS		D		D		C		E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 117.4	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.06	
Intersection Signal Delay: 49.3	Intersection LOS: D
Intersection Capacity Utilization 94.6%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	571	556	4	0	514	149	0	3	0	141	2	336
Future Volume (veh/h)	571	556	4	0	514	149	0	3	0	141	2	336
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	607	591	3	0	547	121	0	3	0	150	2	225
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	604	2270	1013	2	916	408	0	508	0	203	9	247
Arrive On Green	0.33	0.63	0.63	0.00	0.25	0.25	0.00	0.27	0.00	0.27	0.27	0.27
Sat Flow, veh/h	1810	3610	1610	1810	3610	1610	0	1900	0	589	33	921
Grp Volume(v), veh/h	607	591	3	0	547	121	0	3	0	377	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1610	0	1900	0	1544	0	0
Q Serve(g_s), s	37.4	8.1	0.1	0.0	14.9	6.8	0.0	0.1	0.0	25.4	0.0	0.0
Cycle Q Clear(g_c), s	37.4	8.1	0.1	0.0	14.9	6.8	0.0	0.1	0.0	26.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.00		0.00	0.40		0.60
Lane Grp Cap(c), veh/h	604	2270	1013	2	916	408	0	508	0	458	0	0
V/C Ratio(X)	1.00	0.26	0.00	0.00	0.60	0.30	0.00	0.01	0.00	0.82	0.00	0.00
Avail Cap(c_a), veh/h	604	2270	1013	81	916	408	0	665	0	568	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	37.3	9.2	7.7	0.0	36.7	33.7	0.0	30.1	0.0	39.7	0.0	0.0
Incr Delay (d2), s/veh	37.6	0.3	0.0	0.0	2.9	1.8	0.0	0.0	0.0	7.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.9	2.9	0.0	0.0	6.7	2.8	0.0	0.1	0.0	10.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.9	9.5	7.7	0.0	39.6	35.6	0.0	30.1	0.0	47.5	0.0	0.0
LnGrp LOS	F	A	A	A	D	D	A	C	A	D	A	A
Approach Vol, veh/h		1201			668			3			377	
Approach Delay, s/veh		42.6			38.9			30.1			47.5	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	76.2		35.8	42.0	34.2		35.8				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	60.8		38.0	37.4	28.4		* 39				
Max Q Clear Time (g_c+I1), s	0.0	10.1		28.5	39.4	16.9		2.1				
Green Ext Time (p_c), s	0.0	4.0		1.5	0.0	2.9		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		42.3	
HCM 6th LOS		D	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	215	10	51	14	2	9	13	71	4	32	3
Future Vol, veh/h	4	215	10	51	14	2	9	13	71	4	32	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	239	11	57	16	2	10	14	79	4	36	3
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	10	8.8	8	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	10%	2%	0%	78%	0%	10%
Vol Thru, %	14%	98%	0%	22%	0%	82%
Vol Right, %	76%	0%	100%	0%	100%	8%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	93	219	10	65	2	39
LT Vol	9	4	0	51	0	4
Through Vol	13	215	0	14	0	32
RT Vol	71	0	10	0	2	3
Lane Flow Rate	103	243	11	72	2	43
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.125	0.332	0.013	0.109	0.003	0.058
Departure Headway (Hd)	4.34	4.914	4.201	5.45	4.351	4.822
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	827	732	851	658	821	743
Service Time	2.363	2.642	1.929	3.183	2.084	2.85
HCM Lane V/C Ratio	0.125	0.332	0.013	0.109	0.002	0.058
HCM Control Delay	8	10.1	7	8.9	7.1	8.1
HCM Lane LOS	A	B	A	A	A	A
HCM 95th-tile Q	0.4	1.5	0	0.4	0	0.2

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	15	1	7	7	1	1	4	116	7	13	84	14
Future Vol, veh/h	15	1	7	7	1	1	4	116	7	13	84	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	17	1	8	8	1	1	5	135	8	15	98	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	286	290	106	291	294	140	114	0	0	144	0	0
Stage 1	136	136	-	150	150	-	-	-	-	-	-	-
Stage 2	150	154	-	141	144	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	670	624	954	665	620	913	1488	-	-	1451	-	-
Stage 1	872	788	-	857	777	-	-	-	-	-	-	-
Stage 2	857	774	-	867	782	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	661	614	954	650	610	912	1488	-	-	1450	-	-
Mov Cap-2 Maneuver	661	614	-	650	610	-	-	-	-	-	-	-
Stage 1	869	779	-	853	773	-	-	-	-	-	-	-
Stage 2	851	770	-	849	773	-	-	-	-	-	-	-

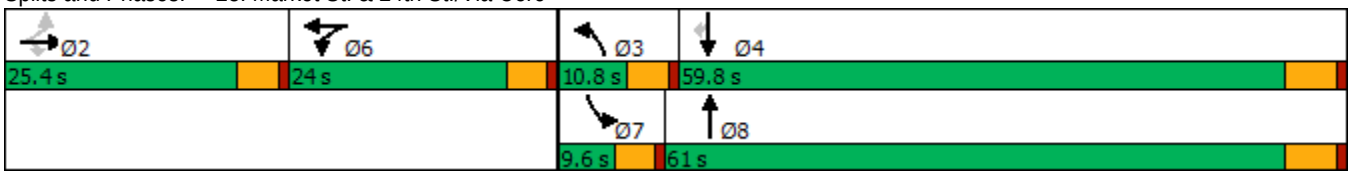
Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	10.5	0.2	0.9
HCM LOS	B	B		

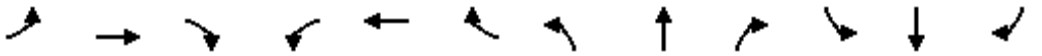
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1488	-	-	726	666	1450	-	-
HCM Lane V/C Ratio	0.003	-	-	0.037	0.016	0.01	-	-
HCM Control Delay (s)	7.4	0	-	10.1	10.5	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	3	30	193	221	37	45	671	6	743	3
Future Volume (vph)	3	30	193	221	37	45	671	6	743	3
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	25.4	25.4	25.4	24.0	24.0	10.8	61.0	9.6	59.8	59.8
Total Split (%)	21.2%	21.2%	21.2%	20.0%	20.0%	9.0%	50.8%	8.0%	49.8%	49.8%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		12.3	12.3	18.4	18.4	6.0	61.2	5.0	54.5	54.5
Actuated g/C Ratio		0.11	0.11	0.17	0.17	0.06	0.56	0.05	0.50	0.50
v/c Ratio		0.38	0.68	0.83	0.19	0.53	0.81	0.08	0.90	0.00
Control Delay		57.5	25.5	68.1	34.4	71.9	28.3	55.2	39.9	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		57.5	25.5	68.1	34.4	71.9	28.3	55.2	39.9	0.0
LOS		E	C	E	C	E	C	E	D	A
Approach Delay		30.1			61.6		30.8		39.8	
Approach LOS		C			E		C		D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 108.7	
Natural Cycle: 105	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 38.2	Intersection LOS: D
Intersection Capacity Utilization 76.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	30	193	221	37	15	45	671	75	6	743	3
Future Volume (veh/h)	3	30	193	221	37	15	45	671	75	6	743	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	3	34	137	254	43	8	52	771	85	7	854	3
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	17	189	174	288	248	46	67	903	100	16	969	821
Arrive On Green	0.11	0.11	0.11	0.16	0.16	0.16	0.04	0.54	0.54	0.01	0.51	0.51
Sat Flow, veh/h	153	1739	1597	1810	1558	290	1810	1677	185	1810	1900	1610
Grp Volume(v), veh/h	37	0	137	254	0	51	52	0	856	7	854	3
Grp Sat Flow(s),veh/h/ln	1892	0	1597	1810	0	1848	1810	0	1862	1810	1900	1610
Q Serve(g_s), s	1.9	0.0	8.9	14.5	0.0	2.5	3.0	0.0	41.6	0.4	42.4	0.1
Cycle Q Clear(g_c), s	1.9	0.0	8.9	14.5	0.0	2.5	3.0	0.0	41.6	0.4	42.4	0.1
Prop In Lane	0.08		1.00	1.00		0.16	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	206	0	174	288	0	294	67	0	1002	16	969	821
V/C Ratio(X)	0.18	0.00	0.79	0.88	0.00	0.17	0.77	0.00	0.85	0.44	0.88	0.00
Avail Cap(c_a), veh/h	372	0	314	331	0	338	106	0	1002	85	969	821
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.9	0.0	46.0	43.6	0.0	38.5	50.6	0.0	20.9	52.2	23.1	12.8
Incr Delay (d2), s/veh	0.4	0.0	7.7	21.2	0.0	0.3	6.9	0.0	9.2	7.0	11.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	3.8	8.2	0.0	1.2	1.5	0.0	18.5	0.2	19.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.3	0.0	53.7	64.8	0.0	38.8	57.4	0.0	30.1	59.2	34.5	12.8
LnGrp LOS	D	A	D	E	A	D	E	A	C	E	C	B
Approach Vol, veh/h		174			305			908			864	
Approach Delay, s/veh		51.5			60.4			31.7			34.7	
Approach LOS		D			E			C			C	

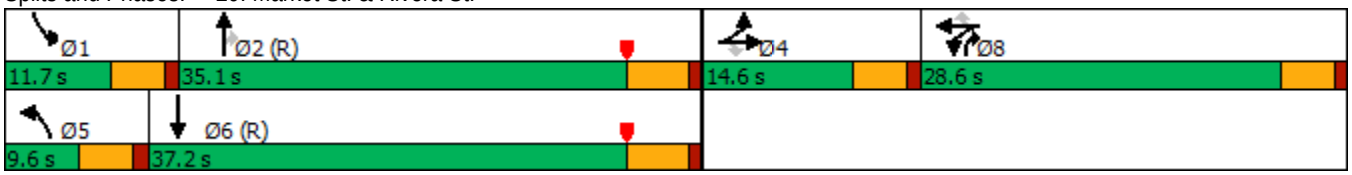
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.1	8.5	59.8		21.5	5.5	62.8				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		20.8	6.2	54.0		19.4	5.0	55.2				
Max Q Clear Time (g_c+I1), s		10.9	5.0	44.4		16.5	2.4	43.6				
Green Ext Time (p_c), s		0.4	0.0	3.9		0.3	0.0	4.5				

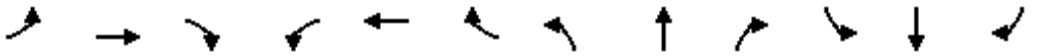
Intersection Summary												
HCM 6th Ctrl Delay			38.3									
HCM 6th LOS			D									

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	13	71	221	2	37	4	713	243	124	980
Future Volume (vph)	13	71	221	2	37	4	713	243	124	980
Turn Type	NA	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	4		8	8		5	2	8	1	6
Permitted Phases		4			8			2		
Detector Phase	4	4	8	8	8	5	2	8	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	14.6	14.6	28.6	28.6	28.6	9.6	35.1	28.6	9.6	29.1
Total Split (s)	14.6	14.6	28.6	28.6	28.6	9.6	35.1	28.6	11.7	37.2
Total Split (%)	16.2%	16.2%	31.8%	31.8%	31.8%	10.7%	39.0%	31.8%	13.0%	41.3%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.1	3.6	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	4.6	5.1	4.6	4.6	5.1
Lead/Lag						Lead	Lag		Lead	Lag
Lead-Lag Optimize?						Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	10.0	10.0	14.3	14.3	14.3	5.0	39.3	55.0	10.5	52.4
Actuated g/C Ratio	0.11	0.11	0.16	0.16	0.16	0.06	0.44	0.61	0.12	0.58
v/c Ratio	0.09	0.24	0.42	0.42	0.10	0.04	0.47	0.23	0.61	0.48
Control Delay	37.2	2.4	37.3	37.5	0.6	36.8	24.9	1.4	52.8	14.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Total Delay	37.2	2.4	37.3	37.5	0.6	36.8	25.1	1.4	52.8	14.8
LOS	D	A	D	D	A	D	C	A	D	B
Approach Delay	9.6			32.2			19.1			19.1
Approach LOS	A			C			B			B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 2 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 20.2	Intersection LOS: C
Intersection Capacity Utilization 56.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 29: Market St. & Rivera St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	13	71	221	2	37	4	713	243	124	980	0
Future Volume (veh/h)	6	13	71	221	2	37	4	713	243	124	980	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	6	13	30	229	0	19	4	735	150	128	1010	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	46	100	126	408	0	181	10	1876	1019	143	2142	0
Arrive On Green	0.08	0.08	0.08	0.11	0.00	0.11	0.01	1.00	1.00	0.08	0.59	0.00
Sat Flow, veh/h	591	1280	1610	3619	0	1603	1810	3610	1610	1810	3705	0
Grp Volume(v), veh/h	19	0	30	229	0	19	4	735	150	128	1010	0
Grp Sat Flow(s),veh/h/ln	1870	0	1610	1810	0	1603	1810	1805	1610	1810	1805	0
Q Serve(g_s), s	0.9	0.0	1.6	5.4	0.0	1.0	0.2	0.0	0.0	6.3	14.2	0.0
Cycle Q Clear(g_c), s	0.9	0.0	1.6	5.4	0.0	1.0	0.2	0.0	0.0	6.3	14.2	0.0
Prop In Lane	0.32		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	147	0	126	408	0	181	10	1876	1019	143	2142	0
V/C Ratio(X)	0.13	0.00	0.24	0.56	0.00	0.11	0.42	0.39	0.15	0.90	0.47	0.00
Avail Cap(c_a), veh/h	208	0	179	965	0	427	101	1876	1019	143	2142	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.96	0.96	0.96	0.41	0.41	0.00
Uniform Delay (d), s/veh	38.6	0.0	38.9	37.8	0.0	35.8	44.4	0.0	0.0	41.1	10.3	0.0
Incr Delay (d2), s/veh	0.4	0.0	1.0	1.2	0.0	0.3	10.0	0.6	0.3	24.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.6	2.4	0.0	0.4	0.1	0.2	0.1	3.6	4.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.0	0.0	39.9	39.0	0.0	36.1	54.4	0.6	0.3	65.1	10.6	0.0
LnGrp LOS	D	A	D	D	A	D	D	A	A	E	B	A
Approach Vol, veh/h		49			248			889			1138	
Approach Delay, s/veh		39.5			38.8			0.8			16.8	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.7	51.9		11.7	5.1	58.5		14.8				
Change Period (Y+Rc), s	4.6	5.1		4.6	4.6	5.1		4.6				
Max Green Setting (Gmax), s	7.1	30.0		10.0	5.0	32.1		24.0				
Max Q Clear Time (g_c+I1), s	8.3	2.0		3.6	2.2	16.2		7.4				
Green Ext Time (p_c), s	0.0	5.5		0.0	0.0	5.9		0.7				

Intersection Summary			
HCM 6th Ctrl Delay		13.5	
HCM 6th LOS		B	

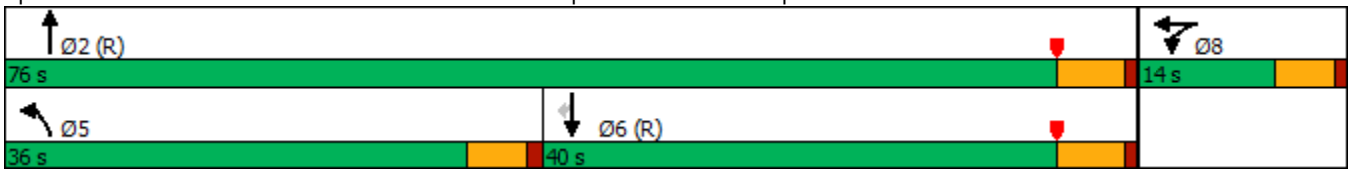
Notes

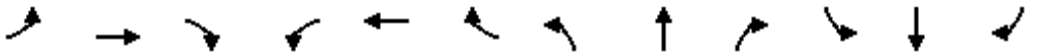
User approved volume balancing among the lanes for turning movement.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	5	641	399	319	1108	164
Future Volume (vph)	5	641	399	319	1108	164
Turn Type	NA	Free	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		Free				6
Detector Phase	8		5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	10.0		10.0	24.5	10.5	10.5
Total Split (s)	14.0		36.0	76.0	40.0	40.0
Total Split (%)	15.6%		40.0%	84.4%	44.4%	44.4%
Yellow Time (s)	4.0		4.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	C-Min	C-Min	C-Min
Act Effct Green (s)	8.4	90.0	25.0	74.4	43.3	43.3
Actuated g/C Ratio	0.09	1.00	0.28	0.83	0.48	0.48
v/c Ratio	0.53	0.40	0.81	0.11	0.65	0.19
Control Delay	50.4	0.8	40.2	7.4	16.8	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0
Total Delay	50.4	0.8	40.2	7.4	16.9	3.2
LOS	D	A	D	A	B	A
Approach Delay	6.8			25.6	15.1	
Approach LOS	A			C	B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 15.7	Intersection LOS: B
Intersection Capacity Utilization 70.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 30: Market St. & SR-60 WB On-Ramp/SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	83	5	641	399	319	0	0	1108	164
Future Volume (veh/h)	0	0	0	83	5	641	399	319	0	0	1108	164
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				85	5	0	407	326	0	0	1131	0
Peak Hour Factor				0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				110	6		444	2957	0	0	1871	
Arrive On Green				0.06	0.06	0.00	0.41	1.00	0.00	0.00	1.00	0.00
Sat Flow, veh/h				1714	101	1610	1810	3705	0	0	3705	1610
Grp Volume(v), veh/h				90	0	0	407	326	0	0	1131	0
Grp Sat Flow(s),veh/h/ln				1814	0	1610	1810	1805	0	0	1805	1610
Q Serve(g_s), s				4.4	0.0	0.0	19.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				4.4	0.0	0.0	19.1	0.0	0.0	0.0	0.0	0.0
Prop In Lane				0.94		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				117	0		444	2957	0	0	1871	
V/C Ratio(X)				0.77	0.00		0.92	0.11	0.00	0.00	0.60	
Avail Cap(c_a), veh/h				181	0		623	2957	0	0	1871	
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	0.00	0.00	0.84	0.84	0.00	0.00	0.89	0.00
Uniform Delay (d), s/veh				41.5	0.0	0.0	25.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				10.3	0.0	0.0	12.8	0.1	0.0	0.0	1.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.2	0.0	0.0	7.6	0.0	0.0	0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				51.7	0.0	0.0	38.6	0.1	0.0	0.0	1.3	0.0
LnGrp LOS				D	A		D	A	A	A	A	
Approach Vol, veh/h					90			733			1131	
Approach Delay, s/veh					51.7			21.4			1.3	
Approach LOS					D			C			A	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	79.2		27.1	52.2		10.8						
Change Period (Y+Rc), s	5.5		5.0	5.5		5.0						
Max Green Setting (Gmax), s	70.5		31.0	34.5		9.0						
Max Q Clear Time (g_c+I1), s	2.0		21.1	2.0		6.4						
Green Ext Time (p_c), s	2.2		0.9	9.0		0.1						

Intersection Summary		
HCM 6th Ctrl Delay	11.2	
HCM 6th LOS	B	

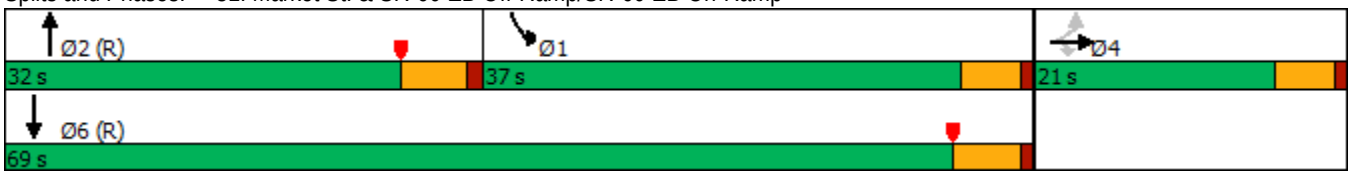
Notes

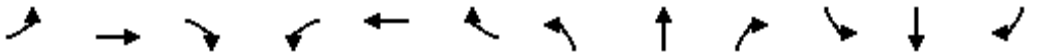
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	3	646	636	528	663
Future Volume (vph)	3	646	636	528	663
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	24.5	10.0	10.5
Total Split (s)	21.0	21.0	32.0	37.0	69.0
Total Split (%)	23.3%	23.3%	35.6%	41.1%	76.7%
Yellow Time (s)	4.0	4.0	4.5	4.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.0	5.5
Lead/Lag			Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Min	None	C-Min
Act Effct Green (s)	11.3	11.3	33.1	30.1	68.2
Actuated g/C Ratio	0.13	0.13	0.37	0.33	0.76
v/c Ratio	0.39	0.79	0.53	0.89	0.25
Control Delay	39.8	14.1	25.4	55.6	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	39.8	14.1	25.4	55.6	4.2
LOS	D	B	C	E	A
Approach Delay	17.1		25.4		27.0
Approach LOS	B		C		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 15 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 23.8	Intersection LOS: C
Intersection Capacity Utilization 70.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 31: Market St. & SR-60 EB Off-Ramp/SR-60 EB On-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	3	646	0	0	0	0	636	45	528	663	0
Future Volume (veh/h)	83	3	646	0	0	0	0	636	45	528	663	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	85	3	394				0	649	0	539	677	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	284	10	459				0	806		791	2604	0
Arrive On Green	0.16	0.16	0.16				0.00	0.22	0.00	0.87	1.00	0.00
Sat Flow, veh/h	1751	62	2834				0	3800	0	1810	3705	0
Grp Volume(v), veh/h	88	0	394				0	649	0	539	677	0
Grp Sat Flow(s),veh/h/ln	1812	0	1417				0	1805	0	1810	1805	0
Q Serve(g_s), s	3.8	0.0	12.2				0.0	15.3	0.0	8.4	0.0	0.0
Cycle Q Clear(g_c), s	3.8	0.0	12.2				0.0	15.3	0.0	8.4	0.0	0.0
Prop In Lane	0.97		1.00				0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	294	0	459				0	806		791	2604	0
V/C Ratio(X)	0.30	0.00	0.86				0.00	0.81		0.68	0.26	0.00
Avail Cap(c_a), veh/h	322	0	504				0	1063		791	2604	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.71	0.71	0.00
Uniform Delay (d), s/veh	33.2	0.0	36.7				0.0	33.1	0.0	3.7	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	12.9				0.0	8.4	0.0	1.7	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	4.8				0.0	7.3	0.0	1.8	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.8	0.0	49.6				0.0	41.5	0.0	5.4	0.2	0.0
LnGrp LOS	C	A	D				A	D		A	A	A
Approach Vol, veh/h		482						649			1216	
Approach Delay, s/veh		46.7						41.5			2.5	
Approach LOS		D						D			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	44.8	25.6		19.6		70.4
Change Period (Y+Rc), s	5.5	* 5.5		5.0		5.5
Max Green Setting (Gmax), s	32.0	* 27		16.0		63.5
Max Q Clear Time (g_c+I1), s	10.4	17.3		14.2		2.0
Green Ext Time (p_c), s	1.7	2.8		0.4		5.0

Intersection Summary	
HCM 6th Ctrl Delay	22.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	0	30	1	1	14	40	637	0	17	1202	91
Future Vol, veh/h	30	0	30	1	1	14	40	637	0	17	1202	91
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	145	-	-	140	-	110
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	31	0	31	1	1	15	42	664	0	18	1252	95

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1705	2037	626	1411	2132	333	1347	0	0	665	0	0
Stage 1	1288	1288	-	749	749	-	-	-	-	-	-	-
Stage 2	417	749	-	662	1383	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	*195	*95	*603	*462	75	669	895	-	-	934	-	-
Stage 1	*569	*498	-	*375	422	-	-	-	-	-	-	-
Stage 2	*589	*422	-	*569	461	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	*180	*89	*603	*416	70	668	895	-	-	933	-	-
Mov Cap-2 Maneuver	*327	*236	-	*61	217	-	-	-	-	-	-	-
Stage 1	*542	*488	-	*357	402	-	-	-	-	-	-	-
Stage 2	*548	*402	-	*529	452	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15	14.9	0.5	0.1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	895	-	-	424	381	933	-	-
HCM Lane V/C Ratio	0.047	-	-	0.147	0.044	0.019	-	-
HCM Control Delay (s)	9.2	-	-	15	14.9	8.9	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.1	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	11.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	227	51	41	729	345	146
Future Vol, veh/h	227	51	41	729	345	146
Conflicting Peds, #/hr	0	0	0	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	284	64	51	911	431	183

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1083	525	616	0	-	0
Stage 1	525	-	-	-	-	-
Stage 2	558	-	-	-	-	-
Critical Hdwy	6.6	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	~ 228	556	974	-	-	-
Stage 1	598	-	-	-	-	-
Stage 2	542	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 215	555	972	-	-	-
Mov Cap-2 Maneuver	351	-	-	-	-	-
Stage 1	566	-	-	-	-	-
Stage 2	541	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	62.9	0.5	0
HCM LOS	F		

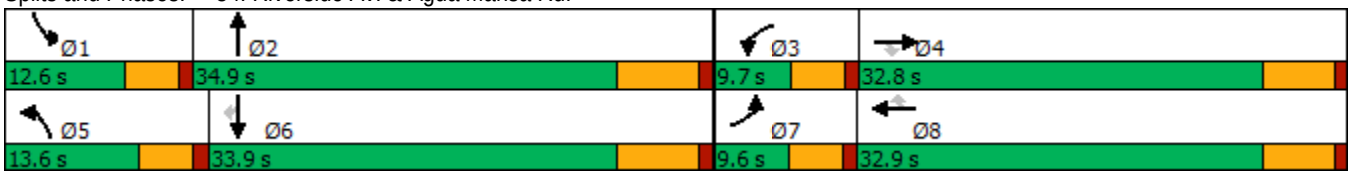
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	972	-	376	-	-
HCM Lane V/C Ratio	0.053	-	0.924	-	-
HCM Control Delay (s)	8.9	-	62.9	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q(veh)	0.2	-	9.8	-	-

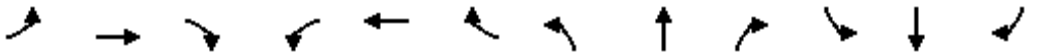
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	119	421	209	88	243	44	172	473	96	521	52
Future Volume (vph)	119	421	209	88	243	44	172	473	96	521	52
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	9.6	32.8	32.8	9.7	32.9	32.9	13.6	34.9	12.6	33.9	33.9
Total Split (%)	10.7%	36.4%	36.4%	10.8%	36.6%	36.6%	15.1%	38.8%	14.0%	37.7%	37.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	5.1	22.0	22.0	5.2	22.1	22.1	9.2	22.3	7.4	17.9	17.9
Actuated g/C Ratio	0.07	0.29	0.29	0.07	0.29	0.29	0.12	0.29	0.10	0.23	0.23
v/c Ratio	1.03	0.80	0.36	0.75	0.46	0.08	0.82	0.59	0.57	0.64	0.11
Control Delay	133.3	38.2	5.3	75.8	25.9	0.3	67.2	25.8	50.3	30.1	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	133.3	38.2	5.3	75.8	25.9	0.3	67.2	25.8	50.3	30.1	0.5
LOS	F	D	A	E	C	A	E	C	D	C	A
Approach Delay		44.1			34.6			35.1		30.7	
Approach LOS		D			C			D		C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 76.2	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 36.5	Intersection LOS: D
Intersection Capacity Utilization 69.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	421	209	88	243	44	172	473	119	96	521	52
Future Volume (veh/h)	119	421	209	88	243	44	172	473	119	96	521	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	124	439	120	92	253	31	179	493	118	100	543	46
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	134	532	450	119	516	437	220	767	183	129	775	344
Arrive On Green	0.07	0.28	0.28	0.07	0.27	0.27	0.12	0.27	0.27	0.07	0.21	0.21
Sat Flow, veh/h	1810	1900	1605	1810	1900	1608	1810	2893	688	1810	3610	1603
Grp Volume(v), veh/h	124	439	120	92	253	31	179	307	304	100	543	46
Grp Sat Flow(s),veh/h/ln	1810	1900	1605	1810	1900	1608	1810	1805	1776	1810	1805	1603
Q Serve(g_s), s	4.6	14.6	3.9	3.4	7.6	1.0	6.5	10.2	10.3	3.7	9.4	1.6
Cycle Q Clear(g_c), s	4.6	14.6	3.9	3.4	7.6	1.0	6.5	10.2	10.3	3.7	9.4	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.39	1.00		1.00
Lane Grp Cap(c), veh/h	134	532	450	119	516	437	220	479	471	129	775	344
V/C Ratio(X)	0.93	0.82	0.27	0.78	0.49	0.07	0.81	0.64	0.65	0.77	0.70	0.13
Avail Cap(c_a), veh/h	134	758	641	136	761	644	241	758	746	214	1462	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.1	22.8	18.9	31.1	20.7	18.3	29.0	22.0	22.0	30.9	24.6	21.5
Incr Delay (d2), s/veh	55.3	5.1	0.3	18.0	0.7	0.1	15.7	1.4	1.5	3.7	1.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	6.4	1.3	1.9	3.1	0.3	3.4	3.8	3.8	1.6	3.6	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	86.4	27.9	19.3	49.1	21.4	18.4	44.7	23.4	23.5	34.6	25.7	21.6
LnGrp LOS	F	C	B	D	C	B	D	C	C	C	C	C
Approach Vol, veh/h		683			376			790			689	
Approach Delay, s/veh		37.0			27.9			28.3			26.7	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	24.4	9.0	24.8	12.8	21.0	9.6	24.2
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	8.0	28.4	5.1	27.0	9.0	27.4	5.0	27.1
Max Q Clear Time (g_c+I1), s	5.7	12.3	5.4	16.6	8.5	11.4	6.6	9.6
Green Ext Time (p_c), s	0.0	2.8	0.0	2.1	0.0	2.9	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	30.2
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	0	0	637	200	8
Future Vol, veh/h	4	0	0	637	200	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	92	92	92	92	50
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	8	0	0	692	217	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	917	225	233	0	-	0
Stage 1	225	-	-	-	-	-
Stage 2	692	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	304	819	1346	-	-	-
Stage 1	817	-	-	-	-	-
Stage 2	500	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	304	819	1346	-	-	-
Mov Cap-2 Maneuver	304	-	-	-	-	-
Stage 1	817	-	-	-	-	-
Stage 2	500	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.2	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1346	-	304	-	-
HCM Lane V/C Ratio	-	-	0.026	-	-
HCM Control Delay (s)	0	-	17.2	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

APPENDIX 5.2: E+P CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

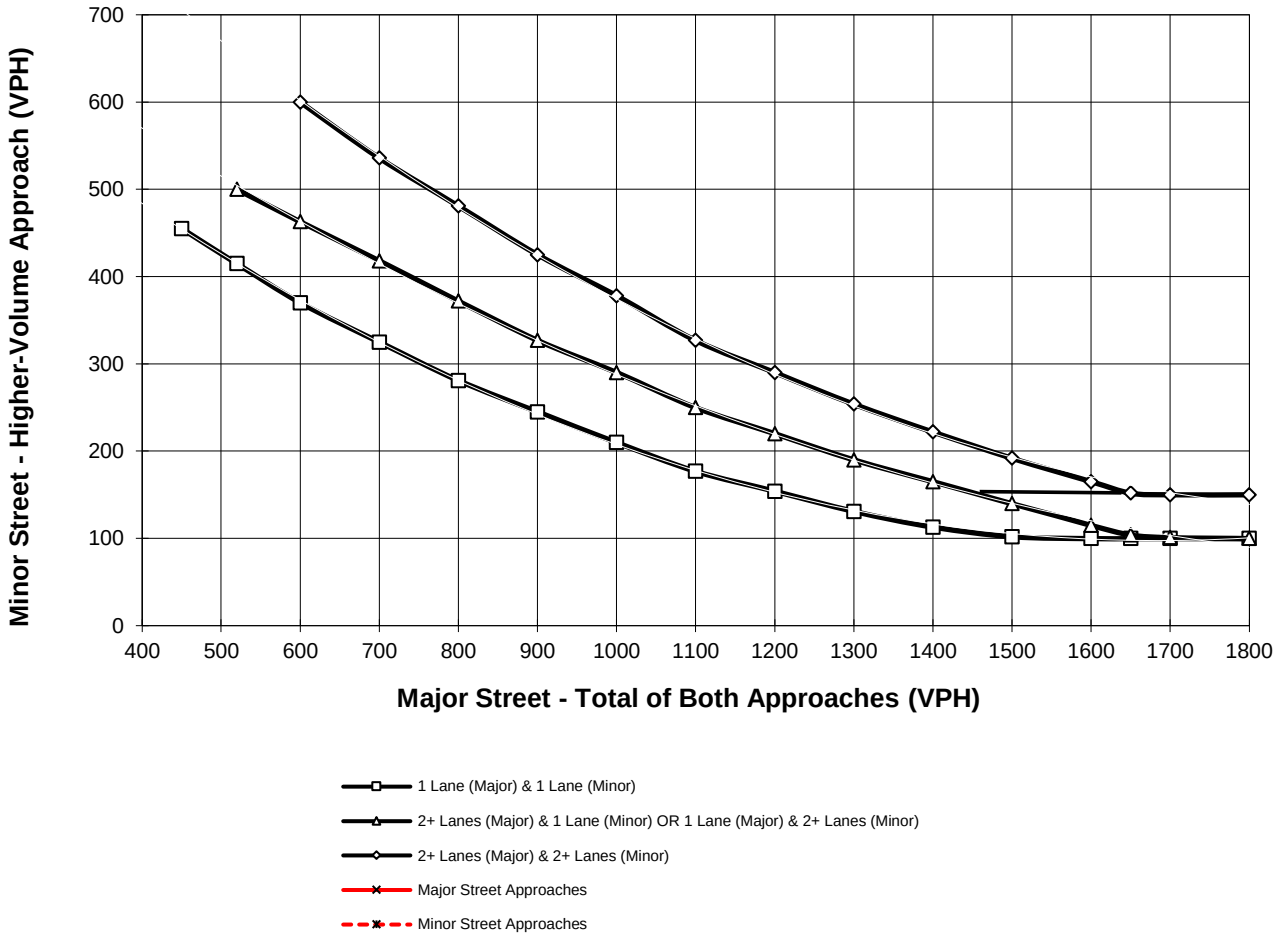
Major Street Name = **Van Dell Rd.**

Total of Both Approaches (VPH) = **334**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **20th St.**

High Volume Approach (VPH) = **665**
Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

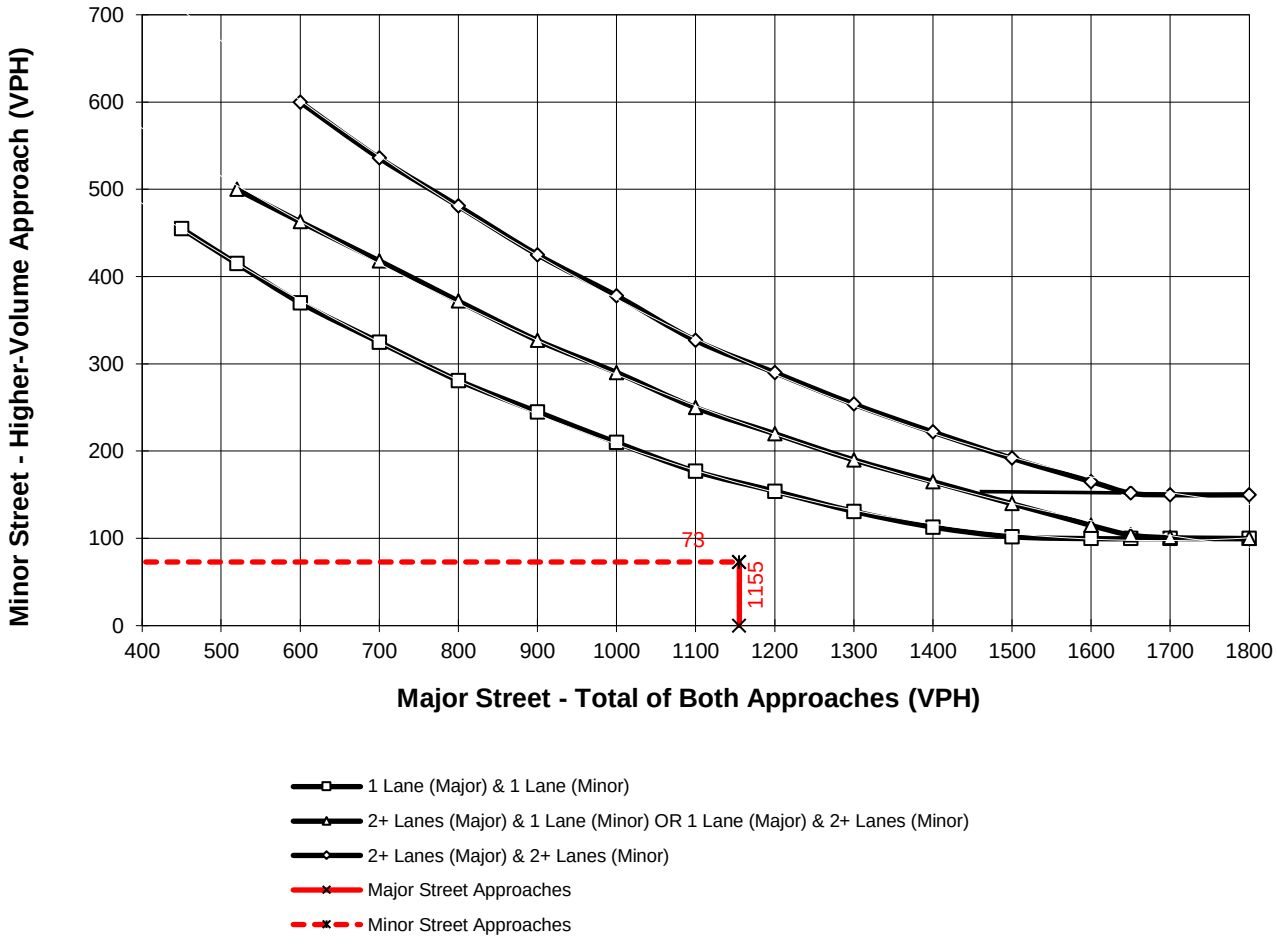
Major Street Name = **20th St.**

Total of Both Approaches (VPH) = **1155**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Avalon Rd.**

High Volume Approach (VPH) = **73**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

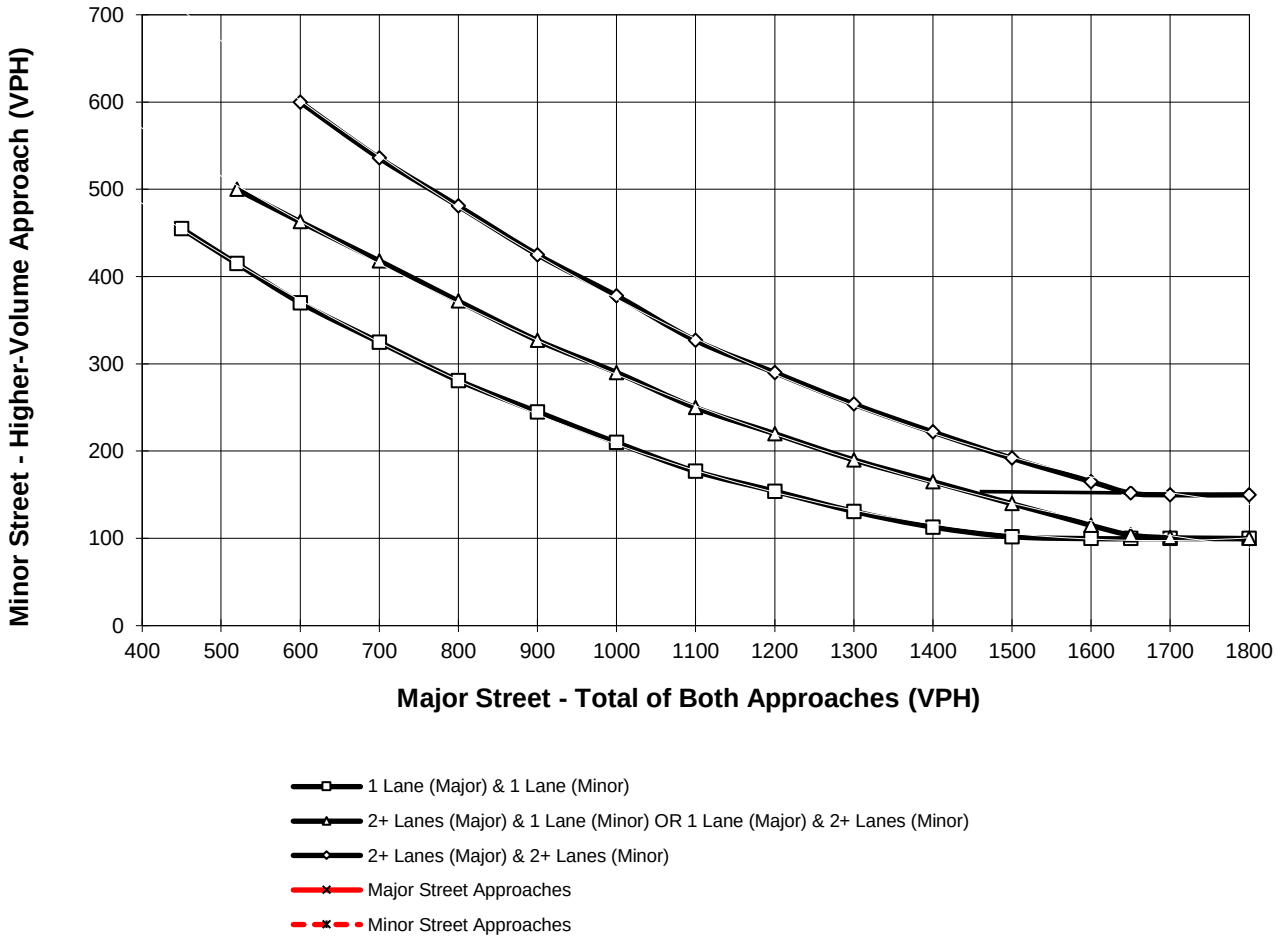
Major Street Name = **Avalon St.**

Total of Both Approaches (VPH) = **106**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **24th St.**

High Volume Approach (VPH) = **33**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

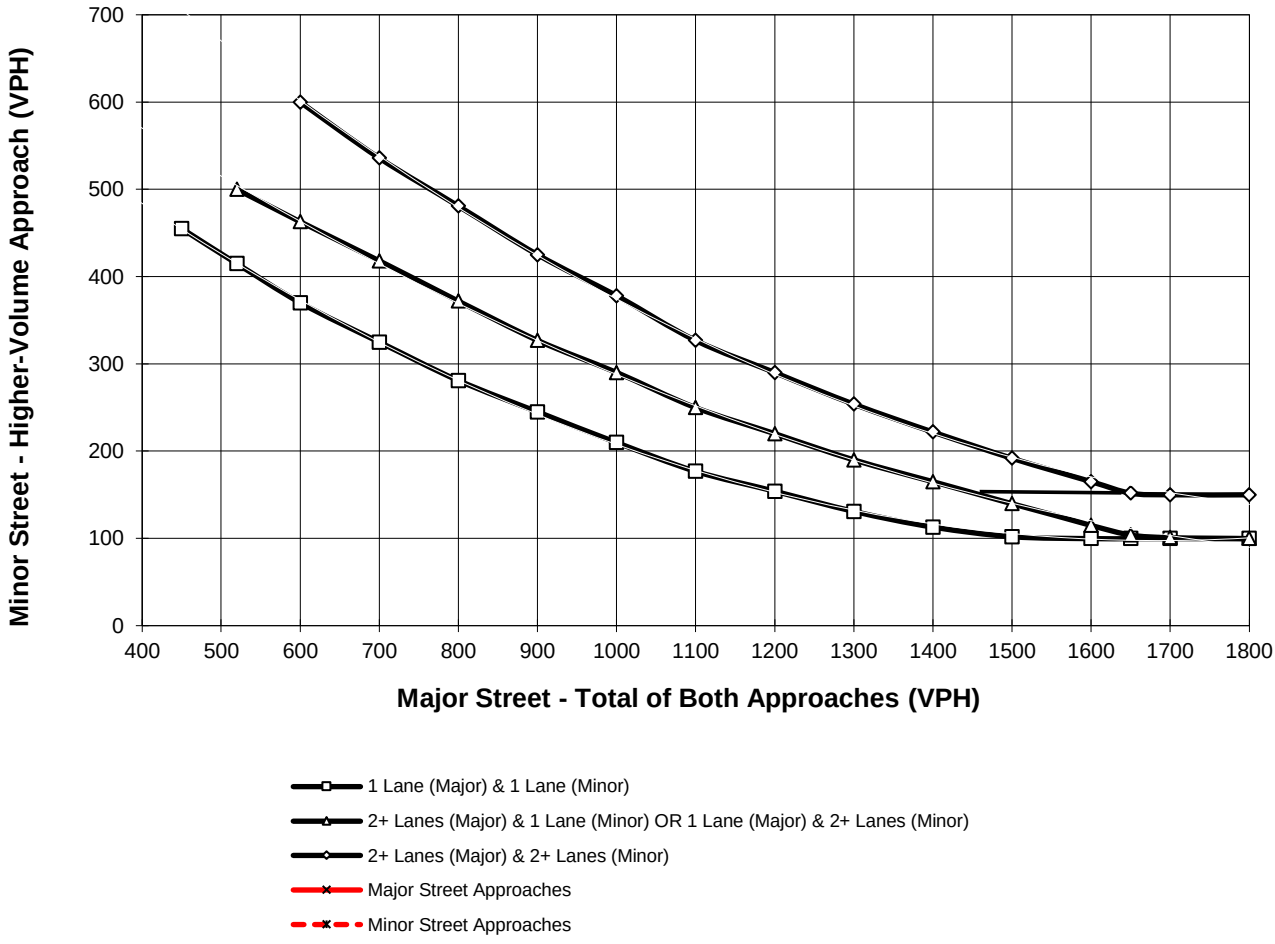
Major Street Name = **26th St.**

Total of Both Approaches (VPH) = **108**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Avalon St.**

High Volume Approach (VPH) = **38**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P
				CALC CS	DATE	11/29/22
Jurisdiction: City of Jurupa Valley				CHK CS	DATE	11/29/22
Major Street: **Avalon Rd.**				Critical Approach Speed (Major)		45 mph
Minor Street: **Driveway 7**				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **1,086** vpd Minor Street Future ADT = **90** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. √

or **RURAL (R)**

In built up area of isolated community of < 10,000 population ……

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **1,086** / *1* **90**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **1,086** / *1* **90**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied (XX)	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 5% **B** 11%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

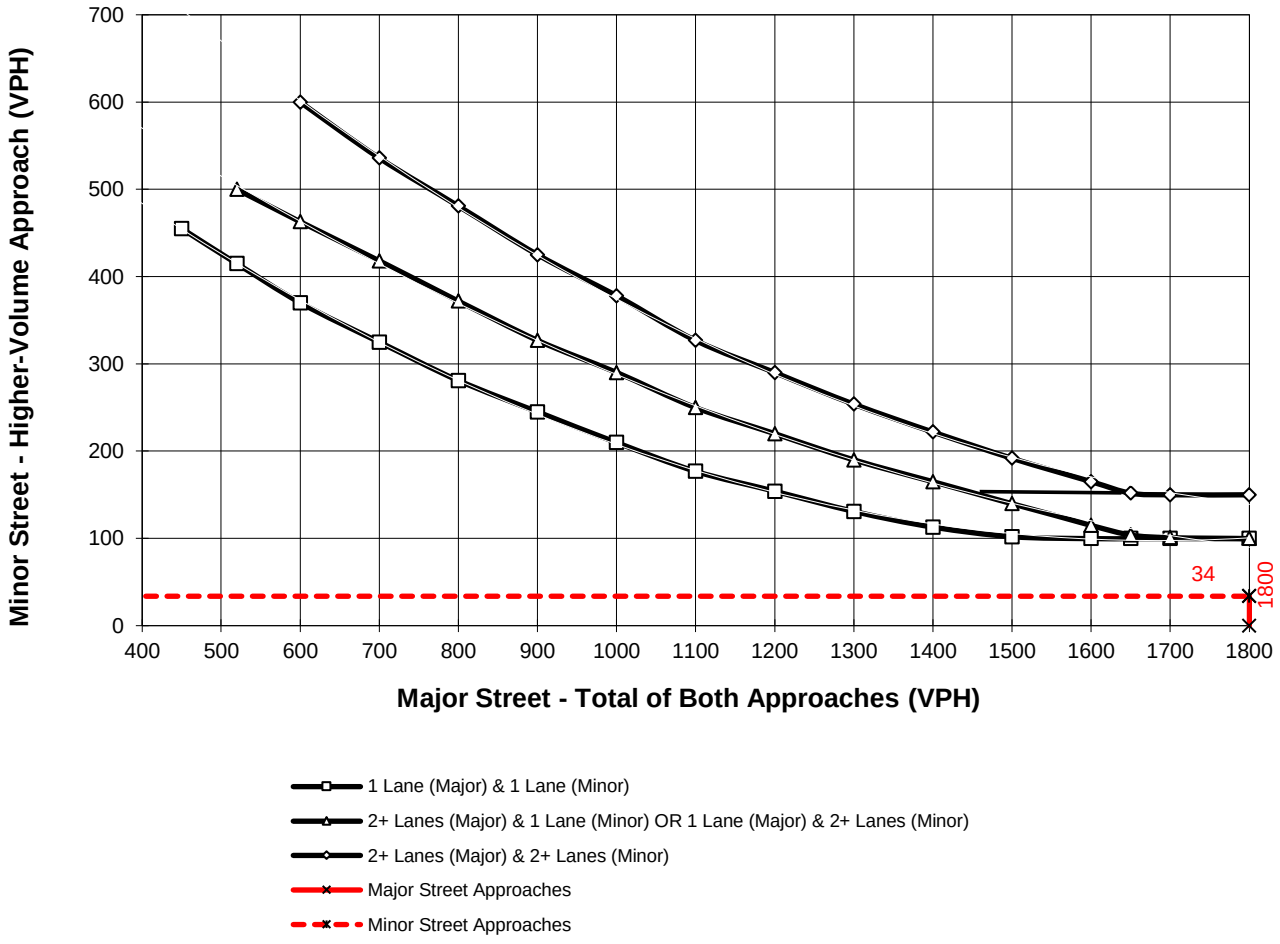
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

Major Street Name = **Rubidoux St.**
Total of Both Approaches (VPH) = **1832**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **24th St.**
High Volume Approach (VPH) = **34**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

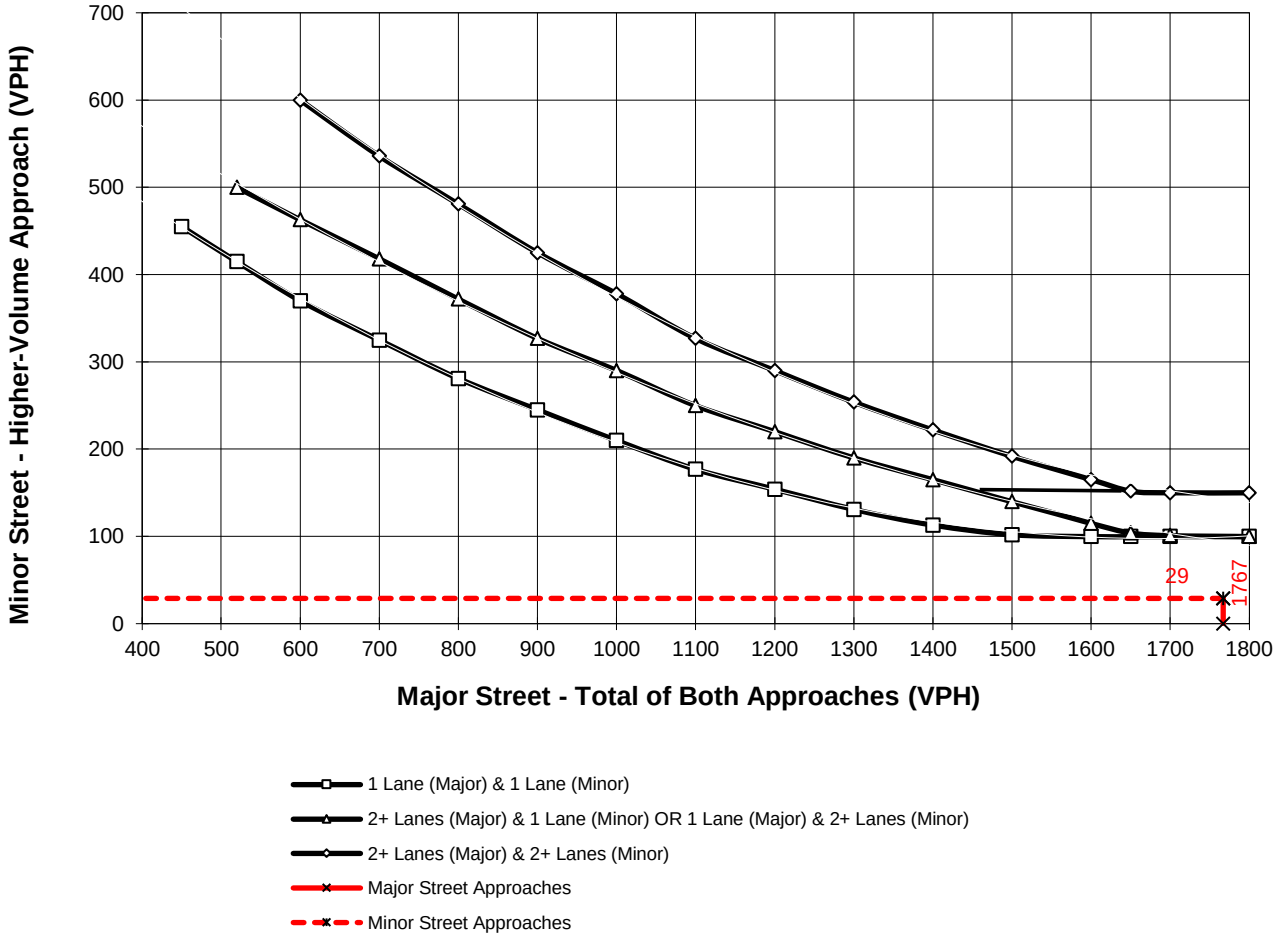
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

Major Street Name = **Rubidoux St.**
Total of Both Approaches (VPH) = **1767**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **26th St.**
High Volume Approach (VPH) = **29**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

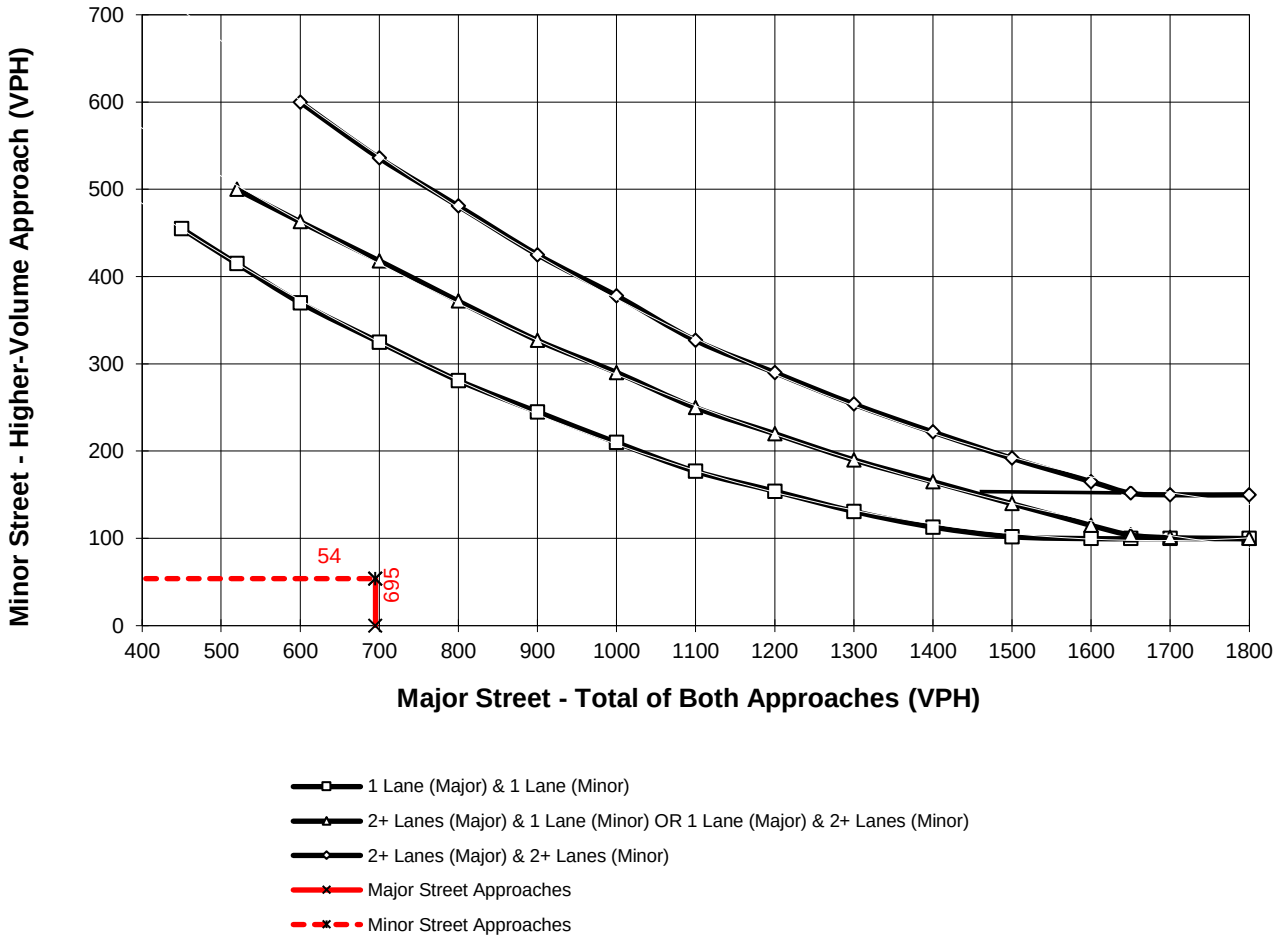
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

Major Street Name = **Frontage Rd.**
Total of Both Approaches (VPH) = **695**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Hall Av.**
High Volume Approach (VPH) = **54**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

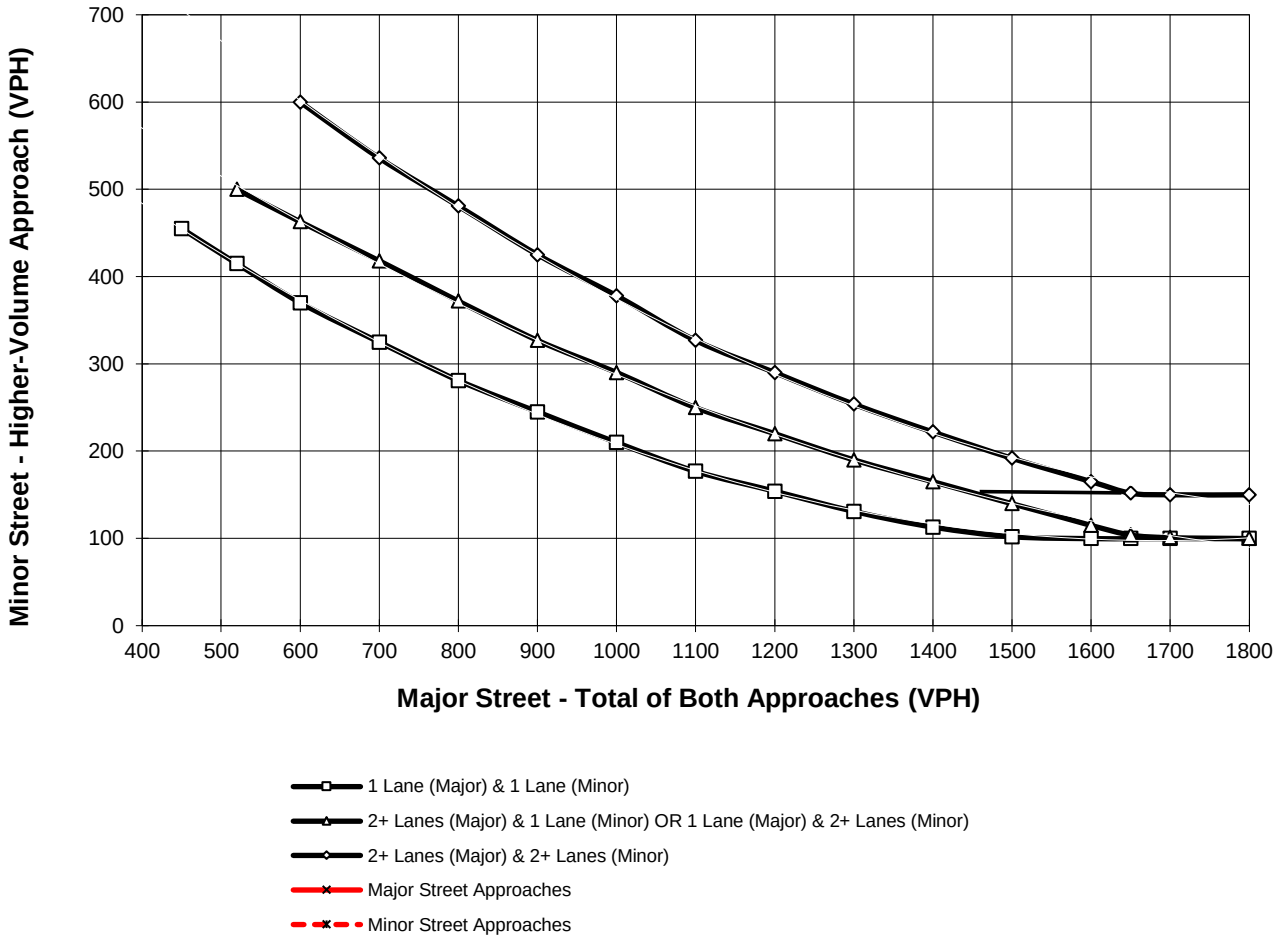
Major Street Name = **24th St.**

Total of Both Approaches (VPH) = **296**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Hall Av.**

High Volume Approach (VPH) = **93**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

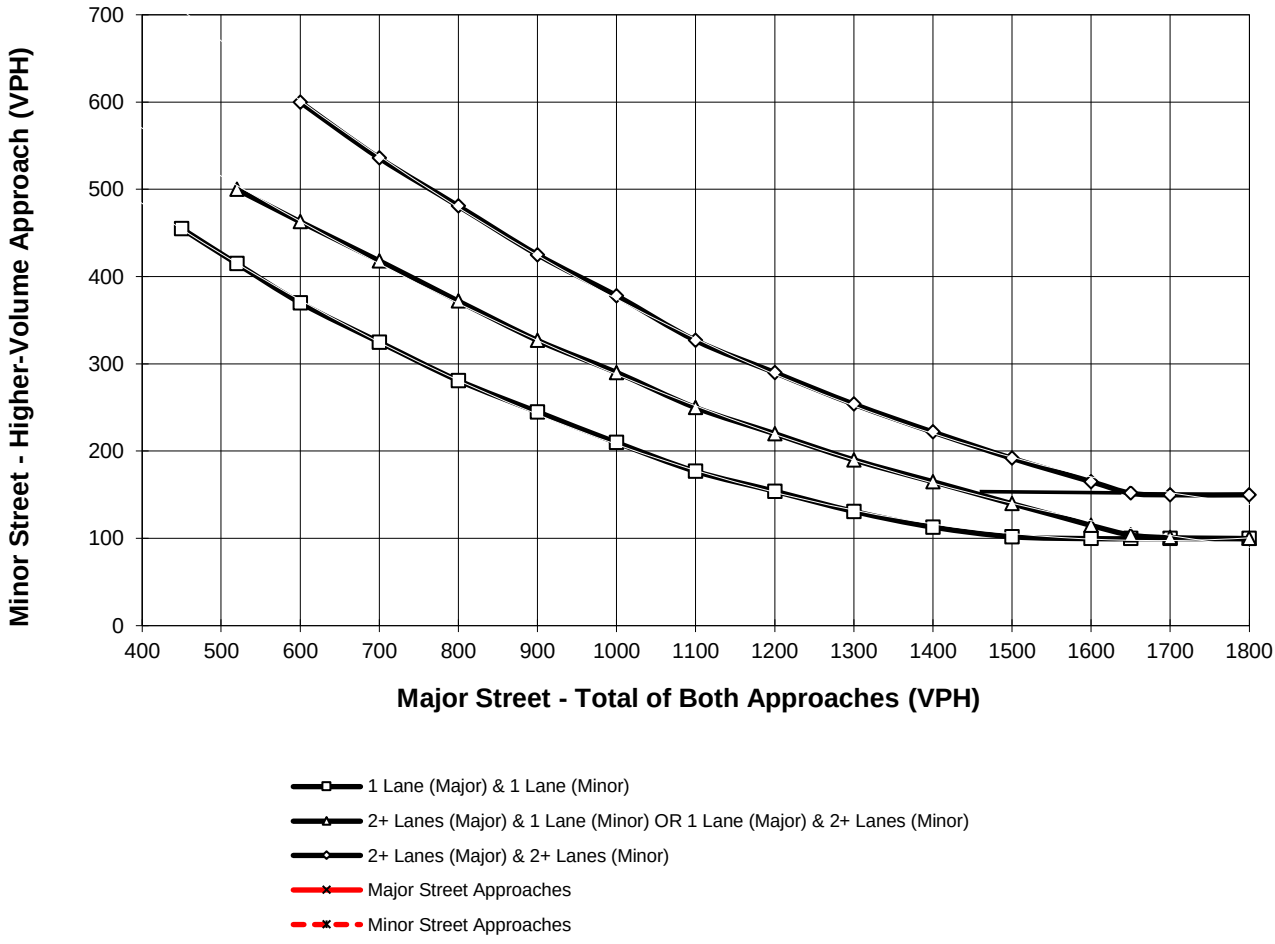
Major Street Name = **Hall Av.**

Total of Both Approaches (VPH) = **238**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **26th St.**

High Volume Approach (VPH) = **23**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

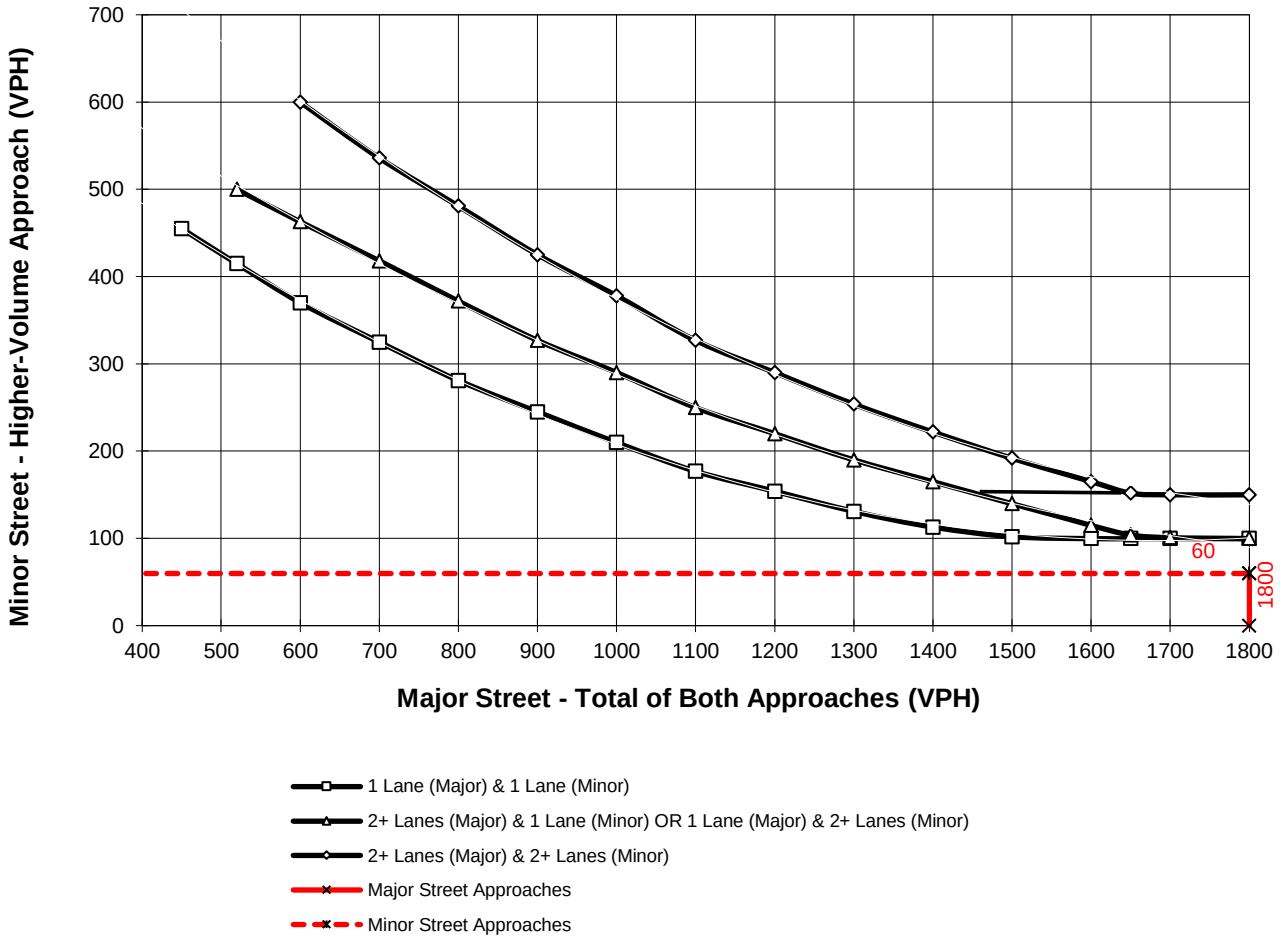
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

Major Street Name = **Market St.**
Total of Both Approaches (VPH) = **1987**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Redwood Dr.**
High Volume Approach (VPH) = **60**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

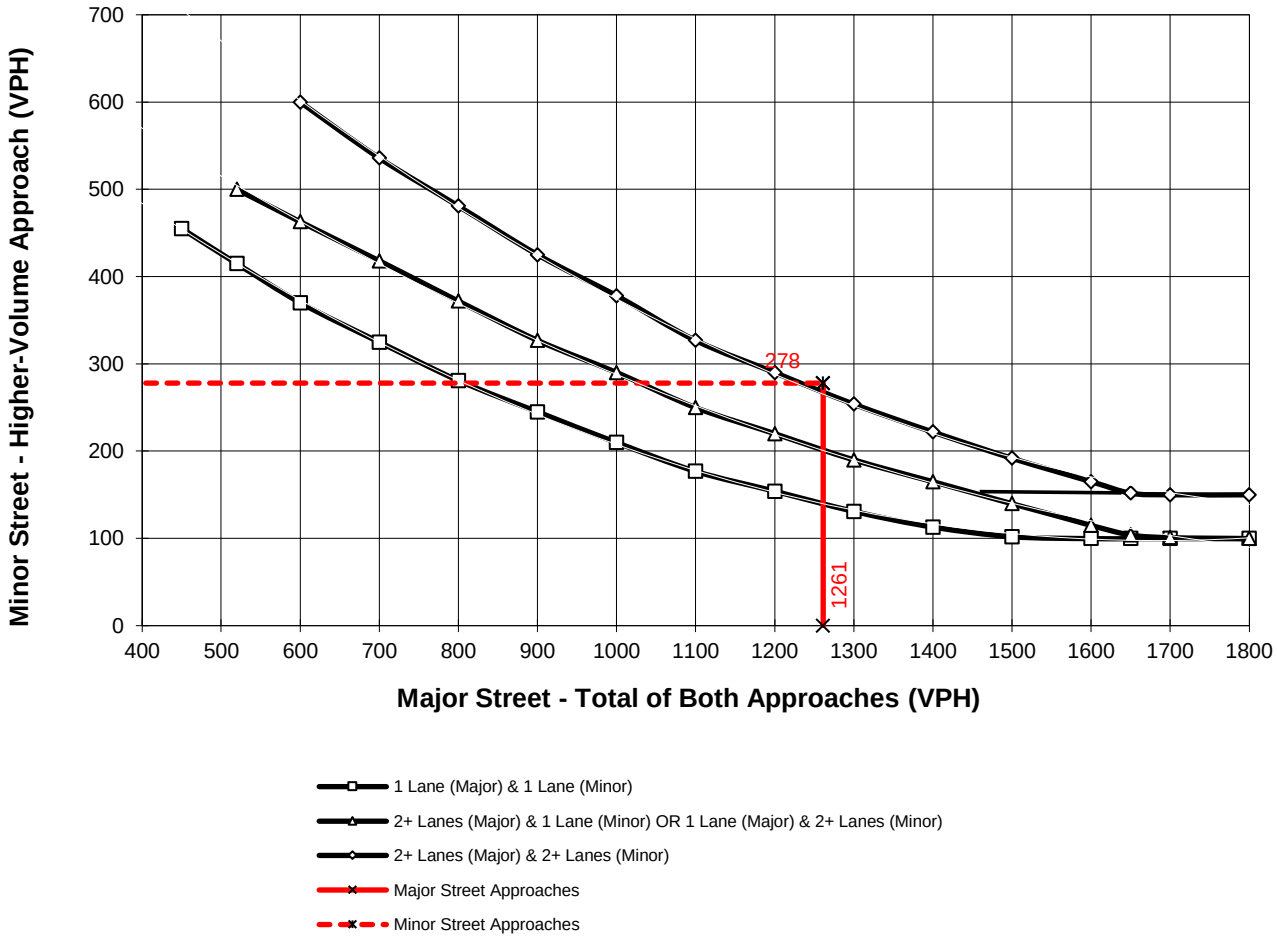
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

Major Street Name = **Agua Mansa Rd.**
Total of Both Approaches (VPH) = **1261**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **El Rivino Rd.**
High Volume Approach (VPH) = **278**
Number of Approach Lanes On Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

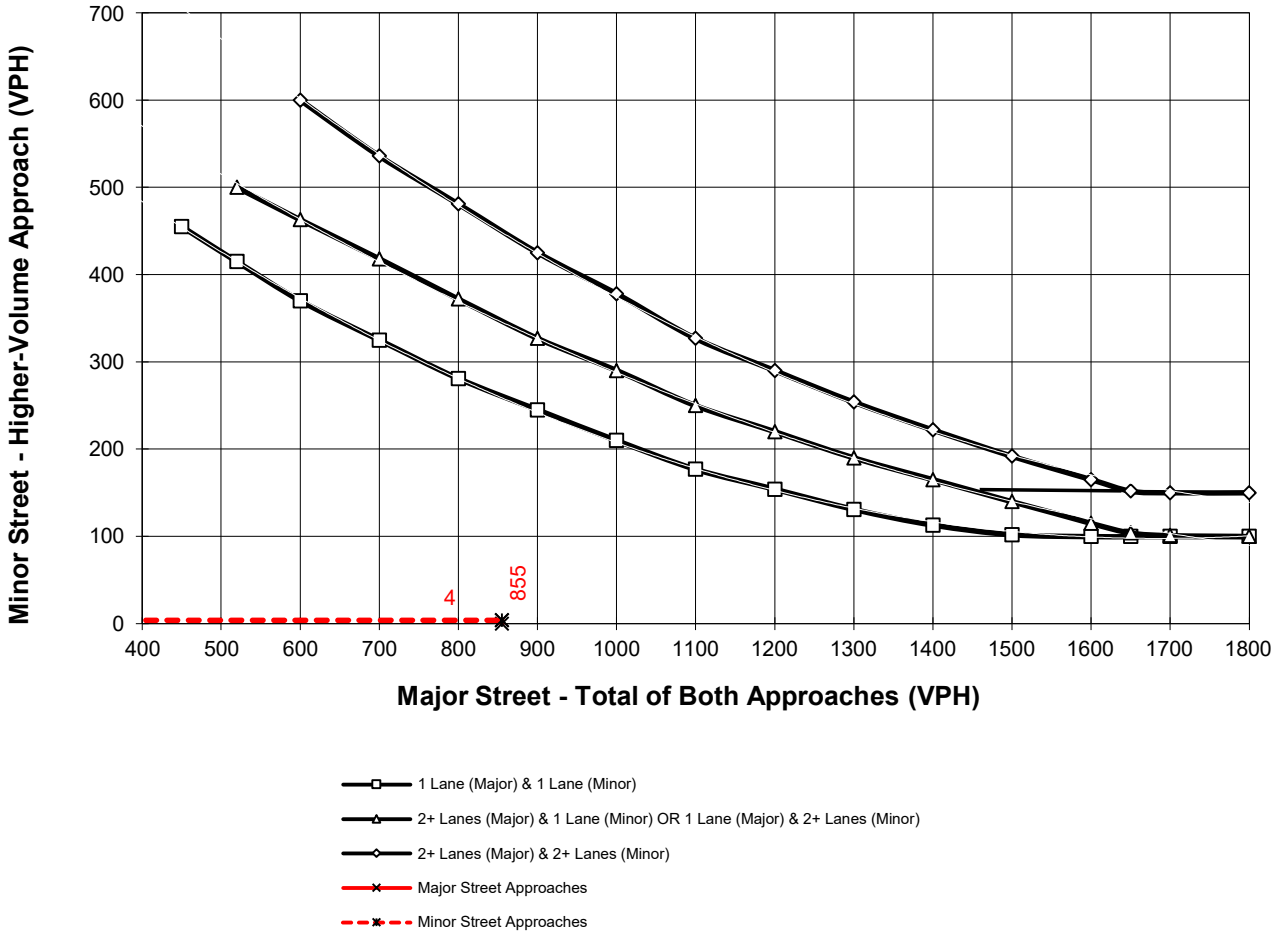
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P Conditions - Weekday AM Peak Hour**

Major Street Name = **25th St.**
Total of Both Approaches (VPH) = **855**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Van Dell Rd.**
High Volume Approach (VPH) = **4**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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APPENDIX 5.3: E+P CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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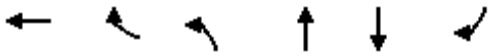


Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	599	356	272	1166	1505	604
v/c Ratio	0.97	0.62	0.87	0.56	0.78	0.62
Control Delay	62.3	29.4	69.2	12.2	34.5	5.1
Queue Delay	42.5	0.0	0.0	0.5	48.6	0.0
Total Delay	104.8	29.4	69.2	12.7	83.1	5.1
Queue Length 50th (ft)	401	174	181	96	348	0
Queue Length 95th (ft)	#646	284	m#239	m138	409	77
Internal Link Dist (ft)	1745			340	476	
Turn Bay Length (ft)		480				
Base Capacity (vph)	625	576	328	2097	1925	979
Starvation Cap Reductn	0	0	0	482	0	0
Spillback Cap Reductn	113	0	0	0	750	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.17	0.62	0.83	0.72	1.28	0.62

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

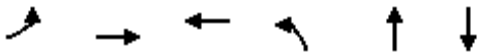
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	470	689	961	534	505	1627
v/c Ratio	0.70	1.09	0.89	0.71	0.93	0.83
Control Delay	35.8	92.4	53.3	20.8	48.6	18.0
Queue Delay	0.0	0.0	0.0	0.0	49.1	48.1
Total Delay	35.8	92.4	53.3	20.8	97.6	66.2
Queue Length 50th (ft)	301	~578	247	192	348	527
Queue Length 95th (ft)	435	#821	#319	m249	m#481	m610
Internal Link Dist (ft)		2158	960			340
Turn Bay Length (ft)	340			555	400	
Base Capacity (vph)	670	635	1084	752	582	2034
Starvation Cap Reductn	0	0	0	0	122	733
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.70	1.09	0.89	0.71	1.10	1.25

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	18	228	614	48	872	1126
v/c Ratio	0.08	0.73	1.01	0.71	0.61	0.77
Control Delay	39.4	33.0	75.6	52.6	19.5	34.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.4	33.0	75.6	52.6	19.5	34.1
Queue Length 50th (ft)	12	67	~453	22	207	350
Queue Length 95th (ft)	30	135	#663	m#40	m286	#545
Internal Link Dist (ft)		471	1307		110	1510
Turn Bay Length (ft)				75		
Base Capacity (vph)	379	441	608	68	1425	1454
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.52	1.01	0.71	0.61	0.77

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

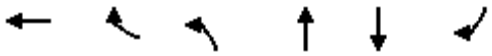
Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	769	18	5	1085	216	631
v/c Ratio	1.14	0.22	0.03	0.88	0.95	0.36
Control Delay	110.8	57.2	0.2	36.1	79.4	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	110.8	57.2	0.2	36.1	79.4	11.0
Queue Length 50th (ft)	~580	13	0	304	~165	80
Queue Length 95th (ft)	#937	37	0	371	m#301	m95
Internal Link Dist (ft)	1049			1396		322
Turn Bay Length (ft)			25		90	
Base Capacity (vph)	677	82	191	1383	227	1772
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.14	0.22	0.03	0.78	0.95	0.36

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

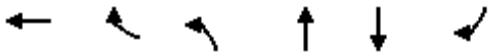


Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	62	917	195	359	983	194
v/c Ratio	0.37	0.57	0.65	0.12	0.46	0.19
Control Delay	43.6	1.5	27.1	5.1	10.8	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.2	0.0
Total Delay	43.6	1.5	27.1	5.1	11.0	2.3
Queue Length 50th (ft)	34	0	110	35	215	5
Queue Length 95th (ft)	71	0	190	117	179	18
Internal Link Dist (ft)	1457			561	315	
Turn Bay Length (ft)			125			
Base Capacity (vph)	206	1615	421	2989	2141	1037
Starvation Cap Reductn	0	0	0	0	379	0
Spillback Cap Reductn	0	27	0	62	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.58	0.46	0.12	0.56	0.19

Intersection Summary

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	133	495	478	579	435
v/c Ratio	0.58	0.62	0.41	0.85	0.16
Control Delay	46.7	7.2	25.9	35.3	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	46.7	7.2	25.9	35.3	3.7
Queue Length 50th (ft)	71	0	110	140	23
Queue Length 95th (ft)	129	46	170	386	83
Internal Link Dist (ft)	1642		355		561
Turn Bay Length (ft)		350		125	
Base Capacity (vph)	266	842	1156	802	2738
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.50	0.59	0.41	0.72	0.16

Intersection Summary



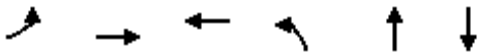
Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	382	345	302	1411	1311	504
v/c Ratio	0.82	0.75	0.81	0.60	0.62	0.54
Control Delay	50.8	40.9	67.5	7.0	28.0	4.4
Queue Delay	0.8	0.0	0.0	0.2	0.1	0.0
Total Delay	51.5	40.9	67.5	7.2	28.1	4.4
Queue Length 50th (ft)	258	197	183	54	274	0
Queue Length 95th (ft)	350	287	#401	154	326	66
Internal Link Dist (ft)	1745			340	476	
Turn Bay Length (ft)		480				
Base Capacity (vph)	575	552	374	2349	2110	932
Starvation Cap Reductn	0	0	0	248	0	0
Spillback Cap Reductn	46	0	0	0	132	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.63	0.81	0.67	0.66	0.54

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	361	341	1110	478	401	1151
v/c Ratio	0.82	0.75	0.56	0.53	0.85	0.47
Control Delay	53.8	41.7	36.7	16.6	45.9	3.5
Queue Delay	0.0	0.0	0.0	0.0	1.4	0.4
Total Delay	53.8	41.7	36.7	16.6	47.3	3.9
Queue Length 50th (ft)	250	196	265	148	274	17
Queue Length 95th (ft)	349	292	342	235	375	397
Internal Link Dist (ft)		2158	960			340
Turn Bay Length (ft)	340			555	400	
Base Capacity (vph)	523	532	1981	894	600	2438
Starvation Cap Reductn	0	0	0	0	75	692
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.64	0.56	0.53	0.76	0.66

Intersection Summary



Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	22	175	693	58	884	1113
v/c Ratio	0.11	0.63	1.02	0.85	0.66	0.81
Control Delay	41.6	27.4	74.8	61.2	19.9	37.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.6	27.4	74.8	61.2	19.9	37.6
Queue Length 50th (ft)	14	42	~517	31	202	356
Queue Length 95th (ft)	34	100	#748	m#66	m283	#607
Internal Link Dist (ft)		471	1307		110	1510
Turn Bay Length (ft)				75		
Base Capacity (vph)	377	427	678	68	1338	1367
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.41	1.02	0.85	0.66	0.81

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

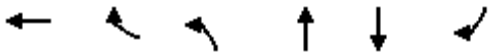
Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	1002	14	2	821	150	871
v/c Ratio	1.38	0.17	0.01	0.81	0.55	0.52
Control Delay	207.5	55.4	0.0	38.7	42.5	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	207.5	55.4	0.0	38.7	42.5	13.9
Queue Length 50th (ft)	~887	10	0	251	101	125
Queue Length 95th (ft)	#1257	31	0	282	m#182	m150
Internal Link Dist (ft)	1049			1396		322
Turn Bay Length (ft)			25		90	
Base Capacity (vph)	727	82	191	1342	272	1673
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.38	0.17	0.01	0.61	0.55	0.52

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	90	654	407	326	1131	167
v/c Ratio	0.53	0.40	0.81	0.11	0.65	0.19
Control Delay	50.4	0.8	40.2	7.4	16.8	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0
Total Delay	50.4	0.8	40.2	7.4	16.9	3.2
Queue Length 50th (ft)	49	0	254	34	294	21
Queue Length 95th (ft)	98	0	347	126	174	9
Internal Link Dist (ft)	1457			561	315	
Turn Bay Length (ft)			125			
Base Capacity (vph)	184	1615	621	2989	1735	863
Starvation Cap Reductn	0	0	0	0	89	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.40	0.66	0.11	0.69	0.19

Intersection Summary

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	88	659	695	539	677
v/c Ratio	0.39	0.79	0.53	0.89	0.25
Control Delay	39.8	14.1	25.4	55.6	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	39.8	14.1	25.4	55.6	4.2
Queue Length 50th (ft)	47	31	163	337	20
Queue Length 95th (ft)	87	88	240	#478	108
Internal Link Dist (ft)	1642		355		561
Turn Bay Length (ft)		350		125	
Base Capacity (vph)	322	959	1319	646	2736
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.27	0.69	0.53	0.83	0.25

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

APPENDIX 5.4: E+P CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	5	281	13	825	50	8	2	18
Future Volume (vph)	5	281	13	825	50	8	2	18
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	27.8	27.8	27.8	27.8	26.6	26.6	26.6	26.6
Total Split (s)	53.0	53.0	53.0	53.0	27.0	27.0	27.0	27.0
Total Split (%)	66.3%	66.3%	66.3%	66.3%	33.8%	33.8%	33.8%	33.8%
Yellow Time (s)	4.8	4.8	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		5.8		5.8		4.6		4.6
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		35.4		42.5		13.6		13.6
Actuated g/C Ratio		0.60		0.72		0.23		0.23
v/c Ratio		0.35		0.76		0.27		0.13
Control Delay		6.5		14.5		22.6		14.3
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		6.5		14.5		22.6		14.3
LOS		A		B		C		B
Approach Delay		6.5		14.5		22.6		14.3
Approach LOS		A		B		C		B

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 58.8	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 13.0	Intersection LOS: B
Intersection Capacity Utilization 70.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Avalon St. & 20th St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	281	31	13	825	0	50	8	15	2	18	24
Future Volume (veh/h)	5	281	31	13	825	0	50	8	15	2	18	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	6	347	38	16	1019	0	62	10	19	2	22	30
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	79	1072	116	81	1210	0	251	48	46	79	107	138
Arrive On Green	0.64	0.64	0.64	0.64	0.64	0.00	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	6	1666	180	10	1881	0	884	330	320	23	741	955
Grp Volume(v), veh/h	391	0	0	1035	0	0	91	0	0	54	0	0
Grp Sat Flow(s),veh/h/ln	1853	0	0	1891	0	0	1534	0	0	1720	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.3	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.6	0.0	0.0	21.0	0.0	0.0	2.4	0.0	0.0	1.4	0.0	0.0
Prop In Lane	0.02		0.10	0.02		0.00	0.68		0.21	0.04		0.56
Lane Grp Cap(c), veh/h	1266	0	0	1291	0	0	345	0	0	325	0	0
V/C Ratio(X)	0.31	0.00	0.00	0.80	0.00	0.00	0.26	0.00	0.00	0.17	0.00	0.00
Avail Cap(c_a), veh/h	1841	0	0	1888	0	0	802	0	0	857	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.0	0.0	0.0	6.9	0.0	0.0	18.9	0.0	0.0	18.5	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	1.6	0.0	0.0	0.4	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	3.6	0.0	0.0	0.9	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.1	0.0	0.0	8.5	0.0	0.0	19.3	0.0	0.0	18.8	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B	A	A	B	A	A
Approach Vol, veh/h		391			1035			91			54	
Approach Delay, s/veh		4.1			8.5			19.3			18.8	
Approach LOS		A			A			B			B	

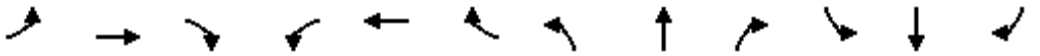
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		11.7		37.4		11.7		37.4				
Change Period (Y+Rc), s		4.6		5.8		4.6		5.8				
Max Green Setting (Gmax), s		22.4		47.2		22.4		47.2				
Max Q Clear Time (g_c+I1), s		4.4		6.6		3.4		23.0				
Green Ext Time (p_c), s		0.4		2.4		0.2		8.6				

Intersection Summary												
HCM 6th Ctrl Delay			8.4									
HCM 6th LOS			A									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	55	71	70	75	26	722	87	1326
Future Volume (vph)	55	71	70	75	26	722	87	1326
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	32.0	32.0	32.0	32.0	17.0	58.0	20.0	61.0
Total Split (%)	29.1%	29.1%	29.1%	29.1%	15.5%	52.7%	18.2%	55.5%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)	16.7	16.7	16.7	16.7	21.7	65.9	11.4	55.6
Actuated g/C Ratio	0.15	0.15	0.15	0.15	0.20	0.60	0.10	0.51
v/c Ratio	0.67	0.41	0.43	0.71	0.08	0.40	0.52	0.82
Control Delay	76.1	37.0	47.6	40.8	55.2	11.3	42.8	39.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.1	37.0	47.6	40.8	55.2	11.3	42.8	39.9
LOS	E	D	D	D	E	B	D	D
Approach Delay		50.3		42.5		12.8		40.0
Approach LOS		D		D		B		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 32.7	Intersection LOS: C
Intersection Capacity Utilization 80.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	71	35	70	75	131	26	722	56	87	1326	18
Future Volume (veh/h)	55	71	35	70	75	131	26	722	56	87	1326	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	61	79	20	78	83	80	29	802	51	97	1473	16
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	153	231	58	210	139	134	396	2164	138	125	1748	19
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.44	1.00	1.00	0.02	0.16	0.16
Sat Flow, veh/h	1242	1463	370	1317	883	851	1810	3446	219	1810	3658	40
Grp Volume(v), veh/h	61	0	99	78	0	163	29	420	433	97	726	763
Grp Sat Flow(s),veh/h/ln	1242	0	1833	1317	0	1733	1810	1805	1860	1810	1805	1893
Q Serve(g_s), s	5.3	0.0	5.3	6.2	0.0	9.6	1.0	0.0	0.0	5.9	43.0	43.1
Cycle Q Clear(g_c), s	14.9	0.0	5.3	11.5	0.0	9.6	1.0	0.0	0.0	5.9	43.0	43.1
Prop In Lane	1.00		0.20	1.00		0.49	1.00		0.12	1.00		0.02
Lane Grp Cap(c), veh/h	153	0	289	210	0	273	396	1133	1168	125	862	904
V/C Ratio(X)	0.40	0.00	0.34	0.37	0.00	0.60	0.07	0.37	0.37	0.78	0.84	0.84
Avail Cap(c_a), veh/h	256	0	442	319	0	418	396	1133	1168	255	903	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.97	0.97	0.97	0.64	0.64	0.64
Uniform Delay (d), s/veh	50.0	0.0	41.2	46.3	0.0	43.1	24.4	0.0	0.0	52.9	42.3	42.3
Incr Delay (d2), s/veh	2.4	0.0	1.0	1.6	0.0	2.9	0.1	0.9	0.9	6.5	4.9	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	2.4	2.1	0.0	4.2	0.4	0.3	0.3	2.9	21.8	22.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.4	0.0	42.2	47.9	0.0	46.0	24.5	0.9	0.9	59.4	47.2	47.0
LnGrp LOS	D	A	D	D	A	D	C	A	A	E	D	D
Approach Vol, veh/h		160			241			882			1586	
Approach Delay, s/veh		46.1			46.6			1.7			47.8	
Approach LOS		D			D			A			D	

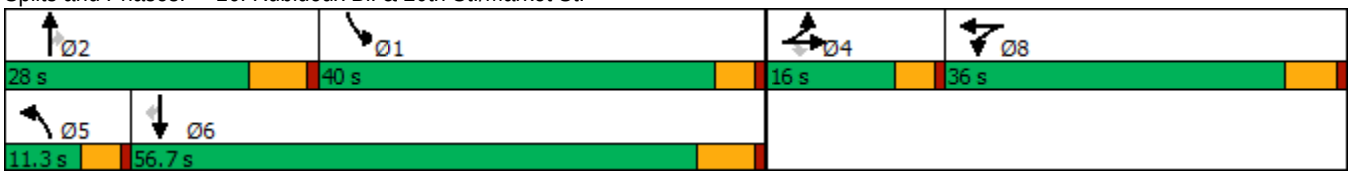
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.1	75.1		22.8	28.6	58.6		22.8				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	15.5	52.0		26.5	12.5	55.0		26.5				
Max Q Clear Time (g_c+I1), s	7.9	2.0		16.9	3.0	45.1		13.5				
Green Ext Time (p_c), s	0.1	8.8		0.6	0.0	7.5		1.2				

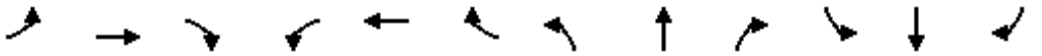
Intersection Summary			
HCM 6th Ctrl Delay		33.5	
HCM 6th LOS		C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	119	92	256	286	391	205	226	281	385	712	385
Future Volume (vph)	150	119	92	256	286	391	205	226	281	385	712	385
Turn Type	Split	NA	Perm	Split	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			Free			2			6
Detector Phase	4	4	4	8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	14.6	14.6	14.6	15.8	15.8		9.6	16.2	16.2	9.6	35.2	35.2
Total Split (s)	16.0	16.0	16.0	36.0	36.0		11.3	28.0	28.0	40.0	56.7	56.7
Total Split (%)	13.3%	13.3%	13.3%	30.0%	30.0%		9.4%	23.3%	23.3%	33.3%	47.3%	47.3%
Yellow Time (s)	3.6	3.6	3.6	4.8	4.8		3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.8	5.8		4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag							Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	None	None	None	None	None
Act Effct Green (s)	11.6	11.6	11.6	22.1	22.1	93.2	6.9	12.6	12.6	24.9	30.6	30.6
Actuated g/C Ratio	0.12	0.12	0.12	0.24	0.24	1.00	0.07	0.14	0.14	0.27	0.33	0.33
v/c Ratio	0.69	0.52	0.26	0.59	0.75	0.25	1.57	0.48	0.62	0.82	0.62	0.51
Control Delay	60.5	51.8	1.8	39.3	46.3	0.4	325.3	43.3	11.5	47.9	28.7	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.5	51.8	1.8	39.3	46.3	0.4	325.3	43.3	11.5	47.9	28.7	4.8
LOS	E	D	A	D	D	A	F	D	B	D	C	A
Approach Delay		42.7			25.3			111.8			27.5	
Approach LOS		D			C			F			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 93.2	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.57	
Intersection Signal Delay: 45.7	Intersection LOS: D
Intersection Capacity Utilization 72.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	119	92	256	286	391	205	226	281	385	712	385
Future Volume (veh/h)	150	119	92	256	286	391	205	226	281	385	712	385
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	155	123	80	264	295	0	211	233	202	397	734	366
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	220	231	196	357	375		147	582	260	440	1236	550
Arrive On Green	0.12	0.12	0.12	0.20	0.20	0.00	0.08	0.16	0.16	0.24	0.34	0.34
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3610	1610	1810	3610	1608
Grp Volume(v), veh/h	155	123	80	264	295	0	211	233	202	397	734	366
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1610	1810	1805	1608
Q Serve(g_s), s	6.8	5.0	3.8	11.3	12.1	0.0	6.7	4.8	9.9	17.5	13.8	16.0
Cycle Q Clear(g_c), s	6.8	5.0	3.8	11.3	12.1	0.0	6.7	4.8	9.9	17.5	13.8	16.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	220	231	196	357	375		147	582	260	440	1236	550
V/C Ratio(X)	0.71	0.53	0.41	0.74	0.79		1.43	0.40	0.78	0.90	0.59	0.67
Avail Cap(c_a), veh/h	251	263	223	664	697		147	956	427	778	2215	987
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.7	34.0	33.4	31.1	31.4	0.0	37.8	30.9	33.1	30.2	22.3	23.0
Incr Delay (d2), s/veh	7.4	1.9	1.4	3.0	3.7	0.0	228.9	0.4	5.0	3.5	0.5	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	2.4	1.5	4.9	5.5	0.0	12.1	2.0	3.9	7.3	5.3	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.2	35.9	34.8	34.1	35.1	0.0	266.7	31.4	38.1	33.7	22.8	24.4
LnGrp LOS	D	D	C	C	D		F	C	D	C	C	C
Approach Vol, veh/h		358			559			646			1497	
Approach Delay, s/veh		38.4			34.6			110.3			26.1	
Approach LOS		D			C			F			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	26.2	19.5		14.6	11.3	34.4		22.0				
Change Period (Y+Rc), s	6.2	* 6.2		4.6	4.6	6.2		5.8				
Max Green Setting (Gmax), s	35.4	* 22		11.4	6.7	50.5		30.2				
Max Q Clear Time (g_c+I1), s	19.5	11.9		8.8	8.7	18.0		14.1				
Green Ext Time (p_c), s	0.5	1.4		0.4	0.0	6.4		2.1				

Intersection Summary		
HCM 6th Ctrl Delay		46.9
HCM 6th LOS		D

Notes

User approved volume balancing among the lanes for turning movement.

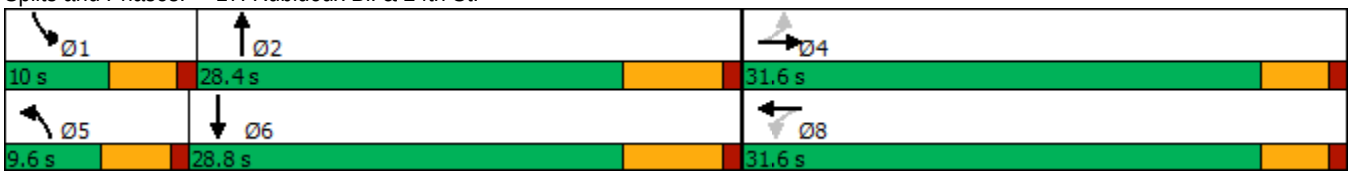
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	1	5	14	12	16	724	139	919
Future Volume (vph)	1	5	14	12	16	724	139	919
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.6	31.6	31.6	31.6	9.6	28.2	9.6	28.2
Total Split (s)	31.6	31.6	31.6	31.6	9.6	28.4	10.0	28.8
Total Split (%)	45.1%	45.1%	45.1%	45.1%	13.7%	40.6%	14.3%	41.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	6.2	4.6	6.2
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		13.6		13.6	5.8	15.6	6.3	31.6
Actuated g/C Ratio		0.34		0.34	0.14	0.39	0.16	0.78
v/c Ratio		0.03		0.07	0.07	0.59	0.54	0.36
Control Delay		9.5		11.5	24.8	14.0	34.5	9.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		9.5		11.5	24.8	14.0	34.5	9.0
LOS		A		B	C	B	C	A
Approach Delay		9.5		11.5		14.2		12.4
Approach LOS		A		B		B		B

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 40.5	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 13.1	Intersection LOS: B
Intersection Capacity Utilization 50.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 17: Rubidoux Bl. & 24th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	5	11	14	12	8	16	724	29	139	919	5
Future Volume (veh/h)	1	5	11	14	12	8	16	724	29	139	919	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1	5	12	15	13	9	17	787	32	151	999	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	116	43	97	198	56	34	39	1254	51	201	1635	8
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.02	0.35	0.35	0.11	0.44	0.44
Sat Flow, veh/h	66	492	1117	585	651	397	1810	3535	144	1810	3683	18
Grp Volume(v), veh/h	18	0	0	37	0	0	17	402	417	151	490	514
Grp Sat Flow(s),veh/h/ln	1676	0	0	1632	0	0	1810	1805	1874	1810	1805	1897
Q Serve(g_s), s	0.0	0.0	0.0	0.4	0.0	0.0	0.3	6.4	6.4	2.8	7.1	7.1
Cycle Q Clear(g_c), s	0.3	0.0	0.0	0.7	0.0	0.0	0.3	6.4	6.4	2.8	7.1	7.1
Prop In Lane	0.06		0.67	0.41		0.24	1.00		0.08	1.00		0.01
Lane Grp Cap(c), veh/h	256	0	0	288	0	0	39	640	665	201	801	842
V/C Ratio(X)	0.07	0.00	0.00	0.13	0.00	0.00	0.43	0.63	0.63	0.75	0.61	0.61
Avail Cap(c_a), veh/h	1420	0	0	1411	0	0	263	1165	1209	284	1186	1246
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.5	0.0	0.0	14.7	0.0	0.0	16.6	9.2	9.2	14.8	7.3	7.3
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.0	2.7	1.0	1.0	3.6	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.2	0.0	0.0	0.1	1.4	1.4	1.0	1.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.6	0.0	0.0	14.9	0.0	0.0	19.4	10.2	10.2	18.5	8.1	8.0
LnGrp LOS	B	A	A	B	A	A	B	B	B	B	A	A
Approach Vol, veh/h		18			37			836			1155	
Approach Delay, s/veh		14.6			14.9			10.4			9.4	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.4	18.4		7.6	5.3	21.5		7.6				
Change Period (Y+Rc), s	4.6	6.2		4.6	4.6	6.2		4.6				
Max Green Setting (Gmax), s	5.4	22.2		27.0	5.0	22.6		27.0				
Max Q Clear Time (g_c+I1), s	4.8	8.4		2.3	2.3	9.1		2.7				
Green Ext Time (p_c), s	0.0	3.8		0.0	0.0	4.7		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		10.0	
HCM 6th LOS		A	

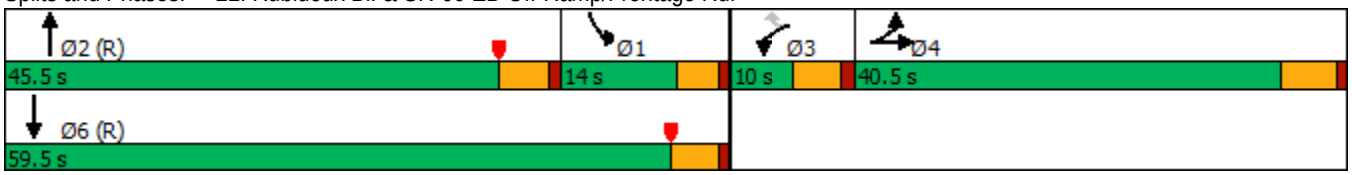
22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.

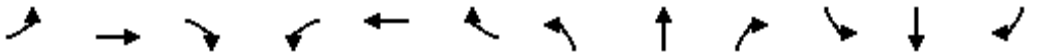
Lane Group	EBL	EBT	WBL	WBR	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	530	15	17	5	551	207	606
Future Volume (vph)	530	15	17	5	551	207	606
Turn Type	Split	NA	Prot	Perm	NA	Prot	NA
Protected Phases	4	4	3		2	1	6
Permitted Phases				3			
Detector Phase	4	4	3	3	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	10.0	10.0	45.0	9.5	30.0
Total Split (s)	40.5	40.5	10.0	10.0	45.5	14.0	59.5
Total Split (%)	36.8%	36.8%	9.1%	9.1%	41.4%	12.7%	54.1%
Yellow Time (s)	4.5	4.5	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	29.3	29.3	5.0	5.0	43.1	18.6	66.2
Actuated g/C Ratio	0.27	0.27	0.05	0.05	0.39	0.17	0.60
v/c Ratio	0.87	0.78	0.22	0.03	0.75	0.71	0.29
Control Delay	57.6	43.2	57.2	0.2	26.6	48.8	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.6	43.2	57.2	0.2	26.6	48.8	8.0
LOS	E	D	E	A	C	D	A
Approach Delay		50.7			26.6		18.4
Approach LOS		D			C		B

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 31.0 — Intersection LOS: C
Intersection Capacity Utilization 84.9% — ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	530	15	193	17	0	5	0	551	491	207	606	0
Future Volume (veh/h)	530	15	193	17	0	5	0	551	491	207	606	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	661	0	0	18	0	3	0	574	402	216	631	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	745	391	0	0	0	0	0	637	446	608	2522	0
Arrive On Green	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.32	0.67	1.00	0.00
Sat Flow, veh/h	3619	1900	0		0		0	2101	1405	1810	3705	0
Grp Volume(v), veh/h	661	0	0		0.0		0	516	460	216	631	0
Grp Sat Flow(s),veh/h/ln	1810	1900	0				0	1805	1607	1810	1805	0
Q Serve(g_s), s	19.5	0.0	0.0				0.0	30.1	30.1	5.7	0.0	0.0
Cycle Q Clear(g_c), s	19.5	0.0	0.0				0.0	30.1	30.1	5.7	0.0	0.0
Prop In Lane	1.00		0.00				0.00		0.87	1.00		0.00
Lane Grp Cap(c), veh/h	745	391	0				0	573	510	608	2522	0
V/C Ratio(X)	0.89	0.00	0.00				0.00	0.90	0.90	0.36	0.25	0.00
Avail Cap(c_a), veh/h	1152	605	0				0	665	591	608	2522	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.72	0.72	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.4	0.0	0.0				0.0	35.9	35.9	12.9	0.0	0.0
Incr Delay (d2), s/veh	3.8	0.0	0.0				0.0	15.3	16.8	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	0.0	0.0				0.0	15.1	13.6	1.9	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.3	0.0	0.0				0.0	51.2	52.7	13.1	0.2	0.0
LnGrp LOS	D	A	A				A	D	D	B	A	A
Approach Vol, veh/h		661						976			847	
Approach Delay, s/veh		46.3						51.9			3.5	
Approach LOS		D						D			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	41.9	39.9		28.1		81.9
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0
Max Green Setting (Gmax), s	9.5	* 41		35.0		54.5
Max Q Clear Time (g_c+I1), s	7.7	32.1		21.5		2.0
Green Ext Time (p_c), s	0.1	2.8		1.1		2.8

Intersection Summary		
HCM 6th Ctrl Delay		33.9
HCM 6th LOS		C

Notes

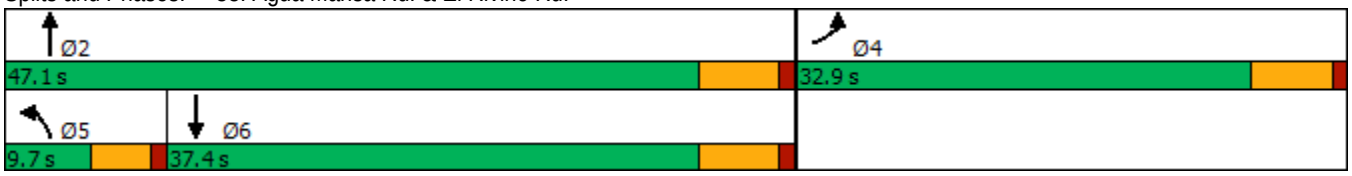
User approved volume balancing among the lanes for turning movement.

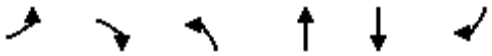
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	160	18	403	511
Future Volume (vph)	160	18	403	511
Turn Type	Prot	Prot	NA	NA
Protected Phases	4	5	2	6
Permitted Phases				
Detector Phase	4	5	2	6
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	32.8	9.6	15.8	27.8
Total Split (s)	32.9	9.7	47.1	37.4
Total Split (%)	41.1%	12.1%	58.9%	46.8%
Yellow Time (s)	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.8
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	None	None
Act Effct Green (s)	14.1	5.4	25.6	24.3
Actuated g/C Ratio	0.27	0.10	0.49	0.47
v/c Ratio	0.43	0.10	0.24	0.75
Control Delay	19.1	30.4	8.3	19.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	19.1	30.4	8.3	19.9
LOS	B	C	A	B
Approach Delay	19.1		9.2	19.9
Approach LOS	B		A	B

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 52.2	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 16.1	Intersection LOS: B
Intersection Capacity Utilization 54.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 33: Agua Mansa Rd. & El Rivino Rd.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	160	40	18	403	511	101
Future Volume (veh/h)	160	40	18	403	511	101
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	170	0	19	429	544	107
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	347		42	2003	665	131
Arrive On Green	0.19	0.00	0.02	0.55	0.43	0.43
Sat Flow, veh/h	1799	0	1810	3705	1542	303
Grp Volume(v), veh/h	171	0	19	429	0	651
Grp Sat Flow(s),veh/h/ln	1810	0	1810	1805	0	1845
Q Serve(g_s), s	3.9	0.0	0.5	2.8	0.0	14.3
Cycle Q Clear(g_c), s	3.9	0.0	0.5	2.8	0.0	14.3
Prop In Lane	0.99	0.00	1.00			0.16
Lane Grp Cap(c), veh/h	349		42	2003	0	796
V/C Ratio(X)	0.49		0.45	0.21	0.00	0.82
Avail Cap(c_a), veh/h	1066		201	3241	0	1268
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.5	0.0	22.2	5.2	0.0	11.5
Incr Delay (d2), s/veh	1.1	0.0	2.7	0.1	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.2	0.5	0.0	4.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.6	0.0	24.9	5.2	0.0	13.8
LnGrp LOS	B		C	A	A	B
Approach Vol, veh/h	171			448	651	
Approach Delay, s/veh	17.6			6.1	13.8	
Approach LOS	B			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		31.3		14.7	5.7	25.7
Change Period (Y+Rc), s		5.8		5.8	4.6	5.8
Max Green Setting (Gmax), s		41.3		27.1	5.1	31.6
Max Q Clear Time (g_c+I1), s		4.8		5.9	2.5	16.3
Green Ext Time (p_c), s		2.7		0.4	0.0	3.6

Intersection Summary	
HCM 6th Ctrl Delay	11.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	7	716	24	247	17	8	1	13
Future Volume (vph)	7	716	24	247	17	8	1	13
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	27.8	27.8	27.8	27.8	26.6	26.6	26.6	26.6
Total Split (s)	48.0	48.0	48.0	48.0	27.0	27.0	27.0	27.0
Total Split (%)	64.0%	64.0%	64.0%	64.0%	36.0%	36.0%	36.0%	36.0%
Yellow Time (s)	4.8	4.8	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		5.8		5.8		4.6		4.6
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)		32.8		32.8		12.2		12.2
Actuated g/C Ratio		0.59		0.59		0.22		0.22
v/c Ratio		0.84		0.33		0.17		0.05
Control Delay		18.8		7.3		13.2		18.1
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		18.8		7.3		13.2		18.1
LOS		B		A		B		B
Approach Delay		18.8		7.3		13.2		18.1
Approach LOS		B		A		B		B

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 55.8	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 15.7	Intersection LOS: B
Intersection Capacity Utilization 59.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4: Avalon St. & 20th St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	716	38	24	247	3	17	8	28	1	13	3
Future Volume (veh/h)	7	716	38	24	247	3	17	8	28	1	13	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.99		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	9	873	46	29	301	4	21	10	34	1	16	4
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	76	1036	54	119	996	13	165	93	177	81	302	72
Arrive On Green	0.58	0.58	0.58	0.58	0.58	0.58	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	5	1779	93	69	1711	22	328	449	853	22	1457	348
Grp Volume(v), veh/h	928	0	0	334	0	0	65	0	0	21	0	0
Grp Sat Flow(s),veh/h/ln	1877	0	0	1801	0	0	1631	0	0	1826	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	20.1	0.0	0.0	4.4	0.0	0.0	1.5	0.0	0.0	0.5	0.0	0.0
Prop In Lane	0.01		0.05	0.09		0.01	0.32		0.52	0.05		0.19
Lane Grp Cap(c), veh/h	1166	0	0	1128	0	0	435	0	0	455	0	0
V/C Ratio(X)	0.80	0.00	0.00	0.30	0.00	0.00	0.15	0.00	0.00	0.05	0.00	0.00
Avail Cap(c_a), veh/h	1674	0	0	1564	0	0	821	0	0	899	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.5	0.0	0.0	5.2	0.0	0.0	16.1	0.0	0.0	15.7	0.0	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.0	0.0	0.9	0.0	0.0	0.6	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.3	0.0	0.0	5.4	0.0	0.0	16.3	0.0	0.0	15.7	0.0	0.0
LnGrp LOS	B	A	A	A	A	A	B	A	A	B	A	A
Approach Vol, veh/h		928			334			65			21	
Approach Delay, s/veh		10.3			5.4			16.3			15.7	
Approach LOS		B			A			B			B	

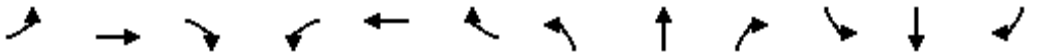
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		14.8		34.6		14.8		34.6				
Change Period (Y+Rc), s		4.6		5.8		4.6		5.8				
Max Green Setting (Gmax), s		22.4		42.2		22.4		42.2				
Max Q Clear Time (g_c+I1), s		3.5		22.1		2.5		6.4				
Green Ext Time (p_c), s		0.3		6.7		0.0		2.1				

Intersection Summary												
HCM 6th Ctrl Delay			9.4									
HCM 6th LOS			A									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	49	157	65	89	76	1054	128	860
Future Volume (vph)	49	157	65	89	76	1054	128	860
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	35.0	35.0	35.0	35.0	19.0	51.0	24.0	56.0
Total Split (%)	31.8%	31.8%	31.8%	31.8%	17.3%	46.4%	21.8%	50.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)	19.0	19.0	19.0	19.0	28.3	61.3	13.7	46.7
Actuated g/C Ratio	0.17	0.17	0.17	0.17	0.26	0.56	0.12	0.42
v/c Ratio	0.30	0.68	0.58	0.48	0.18	0.61	0.62	0.65
Control Delay	42.1	50.1	58.9	37.1	51.1	9.5	31.4	39.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.1	50.1	58.9	37.1	51.1	9.5	31.4	39.1
LOS	D	D	E	D	D	A	C	D
Approach Delay		48.6		43.8		12.2		38.2
Approach LOS		D		D		B		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 28.1	Intersection LOS: C
Intersection Capacity Utilization 74.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	157	49	65	89	57	76	1054	64	128	860	50
Future Volume (veh/h)	49	157	49	65	89	57	76	1054	64	128	860	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	53	171	28	71	97	16	83	1146	57	139	935	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	232	289	47	166	288	48	583	2022	100	172	1223	64
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.64	1.00	1.00	0.03	0.12	0.12
Sat Flow, veh/h	1292	1589	260	1202	1584	261	1810	3500	174	1810	3489	183
Grp Volume(v), veh/h	53	0	199	71	0	113	83	591	612	139	484	500
Grp Sat Flow(s),veh/h/ln	1292	0	1849	1202	0	1846	1810	1805	1869	1810	1805	1867
Q Serve(g_s), s	4.1	0.0	10.9	6.3	0.0	5.9	2.0	0.0	0.0	8.4	28.6	28.6
Cycle Q Clear(g_c), s	10.0	0.0	10.9	17.2	0.0	5.9	2.0	0.0	0.0	8.4	28.6	28.6
Prop In Lane	1.00		0.14	1.00		0.14	1.00		0.09	1.00		0.10
Lane Grp Cap(c), veh/h	232	0	336	166	0	336	583	1043	1079	172	633	654
V/C Ratio(X)	0.23	0.00	0.59	0.43	0.00	0.34	0.14	0.57	0.57	0.81	0.76	0.76
Avail Cap(c_a), veh/h	343	0	496	269	0	495	583	1043	1079	321	820	849
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.80	0.80	0.80	0.76	0.76	0.76
Uniform Delay (d), s/veh	43.6	0.0	41.2	49.1	0.0	39.2	13.6	0.0	0.0	52.3	44.2	44.2
Incr Delay (d2), s/veh	0.7	0.0	2.4	2.5	0.0	0.8	0.1	1.8	1.7	6.7	2.9	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	5.1	2.0	0.0	2.7	0.8	0.5	0.5	4.2	14.2	14.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.3	0.0	43.6	51.6	0.0	40.0	13.7	1.8	1.7	59.0	47.2	47.1
LnGrp LOS	D	A	D	D	A	D	B	A	A	E	D	D
Approach Vol, veh/h		252			184			1286			1123	
Approach Delay, s/veh		43.7			44.5			2.5			48.6	
Approach LOS		D			D			A			D	

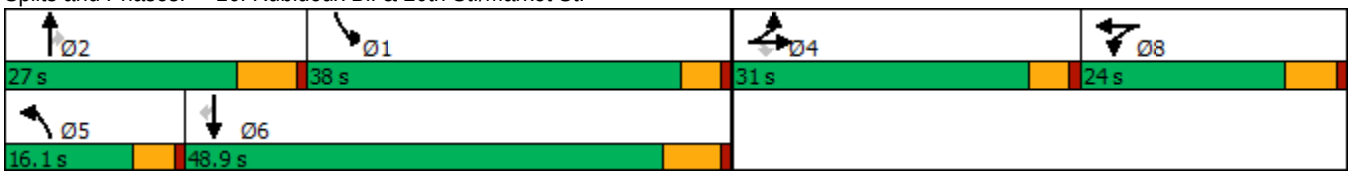
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.0	69.5		25.5	39.9	44.6		25.5				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	19.5	45.0		29.5	14.5	50.0		29.5				
Max Q Clear Time (g_c+I1), s	10.4	2.0		12.9	4.0	30.6		19.2				
Green Ext Time (p_c), s	0.2	14.4		1.5	0.1	8.0		0.7				

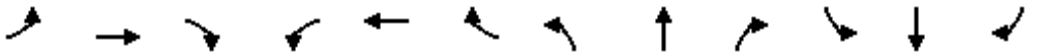
Intersection Summary			
HCM 6th Ctrl Delay		27.1	
HCM 6th LOS		C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	329	278	172	307	106	437	74	305	430	422	522	120
Future Volume (vph)	329	278	172	307	106	437	74	305	430	422	522	120
Turn Type	Split	NA	Perm	Split	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			Free			2			6
Detector Phase	4	4	4	8	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	14.6	14.6	14.6	15.8	15.8		9.6	16.2	16.2	9.6	35.2	35.2
Total Split (s)	31.0	31.0	31.0	24.0	24.0		16.1	27.0	27.0	38.0	48.9	48.9
Total Split (%)	25.8%	25.8%	25.8%	20.0%	20.0%		13.4%	22.5%	22.5%	31.7%	40.8%	40.8%
Yellow Time (s)	3.6	3.6	3.6	4.8	4.8		3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.8	5.8		4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag							Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	None	None	None	None	None
Act Effct Green (s)	24.2	24.2	24.2	16.5	16.5	107.1	8.7	15.7	15.7	29.0	38.6	38.6
Actuated g/C Ratio	0.23	0.23	0.23	0.15	0.15	1.00	0.08	0.15	0.15	0.27	0.36	0.36
v/c Ratio	0.83	0.66	0.35	0.78	0.79	0.28	0.52	0.59	0.77	0.88	0.41	0.19
Control Delay	59.0	48.1	7.4	67.0	67.0	0.4	63.7	48.9	17.8	59.4	28.4	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.0	48.1	7.4	67.0	67.0	0.4	63.7	48.9	17.8	59.4	28.4	5.5
LOS	E	D	A	E	E	A	E	D	B	E	C	A
Approach Delay		43.7			32.8			33.7			38.1	
Approach LOS		D			C			C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 107.1	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 37.0	Intersection LOS: D
Intersection Capacity Utilization 81.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	329	278	172	307	106	437	74	305	430	422	522	120
Future Volume (veh/h)	329	278	172	307	106	437	74	305	430	422	522	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	336	284	170	210	251	0	76	311	308	431	533	106
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	381	400	339	272	285		98	664	296	459	1437	640
Arrive On Green	0.21	0.21	0.21	0.15	0.15	0.00	0.05	0.18	0.18	0.25	0.40	0.40
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3610	1610	1810	3610	1608
Grp Volume(v), veh/h	336	284	170	210	251	0	76	311	308	431	533	106
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1610	1810	1805	1608
Q Serve(g_s), s	20.4	15.7	10.5	12.6	14.6	0.0	4.7	8.7	20.8	26.4	11.8	4.8
Cycle Q Clear(g_c), s	20.4	15.7	10.5	12.6	14.6	0.0	4.7	8.7	20.8	26.4	11.8	4.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	381	400	339	272	285		98	664	296	459	1437	640
V/C Ratio(X)	0.88	0.71	0.50	0.77	0.88		0.78	0.47	1.04	0.94	0.37	0.17
Avail Cap(c_a), veh/h	423	444	376	291	306		184	664	296	535	1437	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	41.4	39.4	46.2	47.0	0.0	52.8	41.2	46.1	41.3	24.0	21.9
Incr Delay (d2), s/veh	18.0	4.7	1.2	11.4	23.3	0.0	5.0	0.5	63.0	21.5	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.0	7.9	4.1	6.4	8.5	0.0	2.2	3.8	13.1	13.9	4.8	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.3	46.1	40.6	57.6	70.4	0.0	57.8	41.7	109.1	62.8	24.2	22.0
LnGrp LOS	E	D	D	E	E		E	D	F	E	C	C
Approach Vol, veh/h		790			461			695			1070	
Approach Delay, s/veh		51.4			64.6			73.3			39.5	
Approach LOS		D			E			E			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	34.9	27.0		28.4	10.7	51.2		22.8				
Change Period (Y+Rc), s	6.2	* 6.2		4.6	4.6	6.2		5.8				
Max Green Setting (Gmax), s	33.4	* 21		26.4	11.5	42.7		18.2				
Max Q Clear Time (g_c+I1), s	28.4	22.8		22.4	6.7	13.8		16.6				
Green Ext Time (p_c), s	0.3	0.0		1.4	0.0	3.6		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		54.2	
HCM 6th LOS		D	

Notes

User approved volume balancing among the lanes for turning movement.

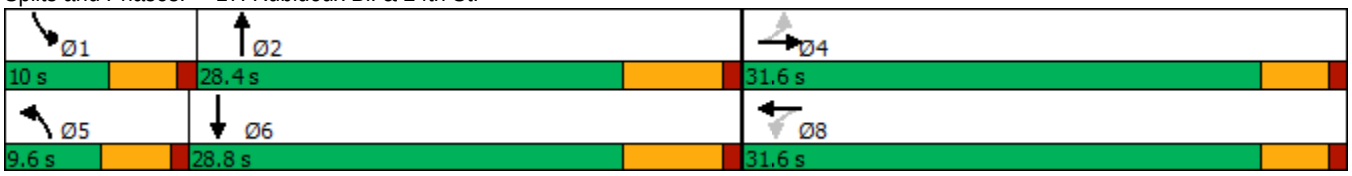
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	2	18	16	7	19	763	143	948
Future Volume (vph)	2	18	16	7	19	763	143	948
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.6	31.6	31.6	31.6	9.6	28.2	9.6	28.2
Total Split (s)	31.6	31.6	31.6	31.6	9.6	28.4	10.0	28.8
Total Split (%)	45.1%	45.1%	45.1%	45.1%	13.7%	40.6%	14.3%	41.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	6.2	4.6	6.2
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		13.6		13.6	5.8	16.0	6.3	32.1
Actuated g/C Ratio		0.33		0.33	0.14	0.39	0.15	0.78
v/c Ratio		0.05		0.06	0.07	0.61	0.53	0.34
Control Delay		11.6		12.3	25.1	14.1	34.4	8.7
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		11.6		12.3	25.1	14.1	34.4	8.7
LOS		B		B	C	B	C	A
Approach Delay		11.6		12.3		14.3		12.1
Approach LOS		B		B		B		B

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 40.9	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 13.0	Intersection LOS: B
Intersection Capacity Utilization 52.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 17: Rubidoux Bl. & 24th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	18	8	16	7	6	19	763	73	143	948	4
Future Volume (veh/h)	2	18	8	16	7	6	19	763	73	143	948	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2	18	8	16	7	6	19	779	74	146	967	4
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	121	82	36	226	27	23	44	1229	117	199	1676	7
Arrive On Green	0.07	0.07	0.07	0.07	0.07	0.07	0.02	0.37	0.37	0.11	0.45	0.45
Sat Flow, veh/h	115	1160	510	886	388	332	1810	3331	316	1810	3687	15
Grp Volume(v), veh/h	28	0	0	29	0	0	19	422	431	146	473	498
Grp Sat Flow(s),veh/h/ln	1785	0	0	1606	0	0	1810	1805	1843	1810	1805	1897
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.4	6.6	6.6	2.7	6.6	6.6
Cycle Q Clear(g_c), s	0.5	0.0	0.0	0.5	0.0	0.0	0.4	6.6	6.6	2.7	6.6	6.6
Prop In Lane	0.07		0.29	0.55		0.21	1.00		0.17	1.00		0.01
Lane Grp Cap(c), veh/h	239	0	0	277	0	0	44	666	680	199	821	863
V/C Ratio(X)	0.12	0.00	0.00	0.10	0.00	0.00	0.43	0.63	0.63	0.74	0.58	0.58
Avail Cap(c_a), veh/h	1511	0	0	1388	0	0	265	1173	1197	286	1194	1255
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.0	0.0	0.0	15.0	0.0	0.0	16.4	8.9	8.9	14.7	6.9	6.9
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	0.0	2.5	1.0	1.0	2.5	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.2	0.0	0.0	0.1	1.4	1.4	0.9	1.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.2	0.0	0.0	15.2	0.0	0.0	19.0	9.9	9.9	17.2	7.5	7.5
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		28			29			872			1117	
Approach Delay, s/veh		15.2			15.2			10.1			8.8	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.3	18.8		7.0	5.4	21.7		7.0				
Change Period (Y+Rc), s	4.6	6.2		4.6	4.6	6.2		4.6				
Max Green Setting (Gmax), s	5.4	22.2		27.0	5.0	22.6		27.0				
Max Q Clear Time (g_c+I1), s	4.7	8.6		2.5	2.4	8.6		2.5				
Green Ext Time (p_c), s	0.0	4.0		0.1	0.0	4.6		0.1				

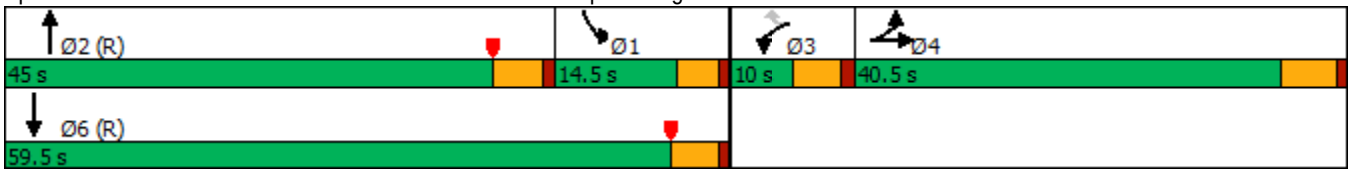
Intersection Summary	
HCM 6th Ctrl Delay	9.5
HCM 6th LOS	A

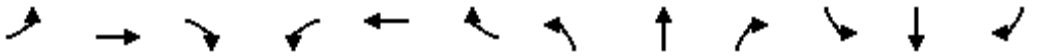
22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.

Lane Group	EBL	EBT	WBL	WBR	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	555	45	13	2	506	144	836
Future Volume (vph)	555	45	13	2	506	144	836
Turn Type	Split	NA	Prot	Perm	NA	Prot	NA
Protected Phases	4	4	3		2	1	6
Permitted Phases				3			
Detector Phase	4	4	3	3	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	10.0	10.0	45.0	9.5	30.0
Total Split (s)	40.5	40.5	10.0	10.0	45.0	14.5	59.5
Total Split (%)	36.8%	36.8%	9.1%	9.1%	40.9%	13.2%	54.1%
Yellow Time (s)	4.5	4.5	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	36.3	36.3	5.2	5.2	41.2	13.3	59.0
Actuated g/C Ratio	0.33	0.33	0.05	0.05	0.37	0.12	0.54
v/c Ratio	0.92	0.76	0.16	0.01	0.61	0.69	0.45
Control Delay	58.7	30.6	54.7	0.0	27.2	47.0	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.7	30.6	54.7	0.0	27.2	47.0	11.1
LOS	E	C	D	A	C	D	B
Approach Delay		45.2			27.2		16.4
Approach LOS		D			C		B

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 29.7	Intersection LOS: C
Intersection Capacity Utilization 77.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	555	45	362	13	0	2	0	506	282	144	836	0
Future Volume (veh/h)	555	45	362	13	0	2	0	506	282	144	836	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	455	219	285	14	0	0	0	527	246	150	871	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	559	231	301	0	0	0	0	608	283	536	2150	0
Arrive On Green	0.31	0.31	0.31	0.00	0.00	0.00	0.00	0.25	0.25	0.59	1.00	0.00
Sat Flow, veh/h	1810	749	975		0		0	2487	1113	1810	3705	0
Grp Volume(v), veh/h	455	0	504		0.0		0	397	376	150	871	0
Grp Sat Flow(s),veh/h/ln	1810	0	1724				0	1805	1700	1810	1805	0
Q Serve(g_s), s	25.5	0.0	31.4				0.0	23.2	23.3	4.5	0.0	0.0
Cycle Q Clear(g_c), s	25.5	0.0	31.4				0.0	23.2	23.3	4.5	0.0	0.0
Prop In Lane	1.00		0.57				0.00		0.65	1.00		0.00
Lane Grp Cap(c), veh/h	559	0	533				0	459	432	536	2150	0
V/C Ratio(X)	0.81	0.00	0.95				0.00	0.87	0.87	0.28	0.41	0.00
Avail Cap(c_a), veh/h	576	0	549				0	656	618	536	2150	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.82	0.82	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.1	0.0	37.1				0.0	39.2	39.3	16.7	0.0	0.0
Incr Delay (d2), s/veh	7.9	0.0	24.9				0.0	16.4	17.6	0.1	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.9	0.0	16.2				0.0	12.0	11.5	1.7	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.0	0.0	62.0				0.0	55.6	56.9	16.8	0.6	0.0
LnGrp LOS	D	A	E				A	E	E	B	A	A
Approach Vol, veh/h		959						773			1021	
Approach Delay, s/veh		53.0						56.2			3.0	
Approach LOS		D						E			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	37.6	32.9		39.5		70.5
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0
Max Green Setting (Gmax), s	10.0	* 40		35.0		54.5
Max Q Clear Time (g_c+I1), s	6.5	25.3		33.4		2.0
Green Ext Time (p_c), s	0.1	2.7		0.6		4.2

Intersection Summary		
HCM 6th Ctrl Delay		35.4
HCM 6th LOS		D

Notes

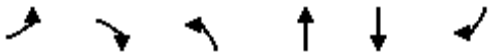
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	227	41	729	345
Future Volume (vph)	227	41	729	345
Turn Type	Prot	Prot	NA	NA
Protected Phases	4	5	2	6
Permitted Phases				
Detector Phase	4	5	2	6
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	32.8	9.6	15.8	27.8
Total Split (s)	32.8	9.7	42.2	32.5
Total Split (%)	43.7%	12.9%	56.3%	43.3%
Yellow Time (s)	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.8
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	None	None
Act Effct Green (s)	17.1	5.4	28.7	23.8
Actuated g/C Ratio	0.29	0.09	0.49	0.41
v/c Ratio	0.65	0.30	0.51	0.81
Control Delay	24.8	35.7	11.4	27.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	24.8	35.7	11.4	27.6
LOS	C	D	B	C
Approach Delay	24.8		12.7	27.6
Approach LOS	C		B	C

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 58.2	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 19.7	Intersection LOS: B
Intersection Capacity Utilization 59.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 33: Agua Mansa Rd. & El Rivino Rd.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	227	51	41	729	345	146
Future Volume (veh/h)	227	51	41	729	345	146
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	284	0	51	911	431	182
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	368		93	1997	514	217
Arrive On Green	0.20	0.00	0.05	0.55	0.41	0.41
Sat Flow, veh/h	1803	0	1810	3705	1267	535
Grp Volume(v), veh/h	285	0	51	911	0	613
Grp Sat Flow(s),veh/h/ln	1810	0	1810	1805	0	1802
Q Serve(g_s), s	7.1	0.0	1.3	7.2	0.0	14.7
Cycle Q Clear(g_c), s	7.1	0.0	1.3	7.2	0.0	14.7
Prop In Lane	1.00	0.00	1.00			0.30
Lane Grp Cap(c), veh/h	370		93	1997	0	731
V/C Ratio(X)	0.77		0.55	0.46	0.00	0.84
Avail Cap(c_a), veh/h	1021		193	2747	0	1006
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	22.1	6.4	0.0	12.8
Incr Delay (d2), s/veh	3.4	0.0	1.9	0.2	0.0	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.5	1.5	0.0	5.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.4	0.0	24.0	6.5	0.0	17.5
LnGrp LOS	C		C	A	A	B
Approach Vol, veh/h	285			962	613	
Approach Delay, s/veh	21.4			7.5	17.5	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		32.3		15.6	7.1	25.2
Change Period (Y+Rc), s		5.8		5.8	4.6	5.8
Max Green Setting (Gmax), s		36.4		27.0	5.1	26.7
Max Q Clear Time (g_c+I1), s		9.2		9.1	3.3	16.7
Green Ext Time (p_c), s		6.4		0.7	0.0	2.7

Intersection Summary		
HCM 6th Ctrl Delay	12.9	
HCM 6th LOS	B	

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

APPENDIX 5.5: E+P CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Lane Group	EBL	EBT	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	397	372	18	5	1085	216	631
v/c Ratio	0.87	0.78	0.22	0.03	0.75	0.71	0.29
Control Delay	57.6	43.2	57.2	0.2	26.6	48.8	8.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.6	43.2	57.2	0.2	26.6	48.8	8.0
Queue Length 50th (ft)	276	216	13	0	267	154	62
Queue Length 95th (ft)	384	318	37	0	374	m#292	m95
Internal Link Dist (ft)		1049			1396		322
Turn Bay Length (ft)				25		90	
Base Capacity (vph)	545	555	82	191	1441	304	2171
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.67	0.22	0.03	0.75	0.71	0.29

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	520	482	14	2	821	150	871
v/c Ratio	0.92	0.76	0.16	0.01	0.61	0.69	0.45
Control Delay	58.7	30.6	54.7	0.0	27.2	47.0	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.7	30.6	54.7	0.0	27.2	47.0	11.1
Queue Length 50th (ft)	343	201	10	0	220	101	117
Queue Length 95th (ft)	#603	#375	31	0	283	m#149	m141
Internal Link Dist (ft)		1049			1396		322
Turn Bay Length (ft)				25		90	
Base Capacity (vph)	575	639	86	194	1403	218	1943
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.90	0.75	0.16	0.01	0.59	0.69	0.45

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

APPENDIX 6.1: OPENING YEAR PLUS PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	10.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	84	4	738	159	4	222
Future Vol, veh/h	84	4	738	159	4	222
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	102	5	900	194	5	271

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	107	0	2096	102
Stage 1	-	-	-	-	102	-
Stage 2	-	-	-	-	1994	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1497	-	58	959
Stage 1	-	-	-	-	927	-
Stage 2	-	-	-	-	117	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1497	-	19	959
Mov Cap-2 Maneuver	-	-	-	-	19	-
Stage 1	-	-	-	-	927	-
Stage 2	-	-	-	-	38	-

Approach	EB	WB	NB
HCM Control Delay, s	0	9	20
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	511	-	-	1497	-
HCM Lane V/C Ratio	0.539	-	-	0.601	-
HCM Control Delay (s)	20	-	-	11	0
HCM Lane LOS	C	-	-	B	A
HCM 95th %tile Q(veh)	3.2	-	-	4.3	-

Intersection	
Int Delay, s/veh	10.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	288	33	13	833	0	53	8	16	2	19	25
Future Vol, veh/h	5	288	33	13	833	0	53	8	16	2	19	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	356	41	16	1028	0	65	10	20	2	23	31

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1028	0	0	397	0	0	1476	1449	377	1464	1469	1028
Stage 1	-	-	-	-	-	-	389	389	-	1060	1060	-
Stage 2	-	-	-	-	-	-	1087	1060	-	404	409	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	683	-	-	1173	-	-	105	132	674	107	129	287
Stage 1	-	-	-	-	-	-	639	612	-	273	303	-
Stage 2	-	-	-	-	-	-	264	303	-	627	600	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	683	-	-	1173	-	-	77	126	674	94	123	287
Mov Cap-2 Maneuver	-	-	-	-	-	-	77	126	-	94	123	-
Stage 1	-	-	-	-	-	-	632	605	-	270	293	-
Stage 2	-	-	-	-	-	-	210	293	-	592	593	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.1	158.1	35.2
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	99	683	-	-	1173	-	-	175
HCM Lane V/C Ratio	0.96	0.009	-	-	0.014	-	-	0.325
HCM Control Delay (s)	158.1	10.3	0	-	8.1	0	-	35.2
HCM Lane LOS	F	B	A	-	A	A	-	E
HCM 95th %tile Q(veh)	5.7	0	-	-	0	-	-	1.3

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	31	46	1	16	49
Future Vol, veh/h	3	31	46	1	16	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	100	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	36	53	1	19	57

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	149	54	0	0	54	0
Stage 1	54	-	-	-	-	-
Stage 2	95	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	848	1019	-	-	1564	-
Stage 1	974	-	-	-	-	-
Stage 2	934	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	837	1019	-	-	1564	-
Mov Cap-2 Maneuver	837	-	-	-	-	-
Stage 1	974	-	-	-	-	-
Stage 2	922	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	1.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	837	1019	1564	-
HCM Lane V/C Ratio	-	-	0.004	0.035	0.012	-
HCM Control Delay (s)	-	-	9.3	8.7	7.3	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.1	0	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	34	0	5	0	36	7	10	61	0
Future Vol, veh/h	0	0	0	34	0	5	0	36	7	10	61	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	40	0	6	0	43	8	12	73	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	147	148	73	144	144	47	73	0	0	51	0	0
Stage 1	97	97	-	47	47	-	-	-	-	-	-	-
Stage 2	50	51	-	97	97	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	826	747	995	830	751	1028	1540	-	-	1568	-	-
Stage 1	914	819	-	972	860	-	-	-	-	-	-	-
Stage 2	968	856	-	914	819	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	816	741	995	825	745	1028	1540	-	-	1568	-	-
Mov Cap-2 Maneuver	816	741	-	825	745	-	-	-	-	-	-	-
Stage 1	914	812	-	972	860	-	-	-	-	-	-	-
Stage 2	962	856	-	907	812	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.5	0	1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1540	-	-	-	846	1568	-	-
HCM Lane V/C Ratio	-	-	-	-	0.055	0.008	-	-
HCM Control Delay (s)	0	-	-	0	9.5	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	0	0	38	73	22
Future Vol, veh/h	5	0	0	38	73	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	0	0	41	79	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	132	91	103	0	-	0
Stage 1	91	-	-	-	-	-
Stage 2	41	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	867	972	1502	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	987	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	867	972	1502	-	-	-
Mov Cap-2 Maneuver	867	-	-	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	987	-	-	-	-	-

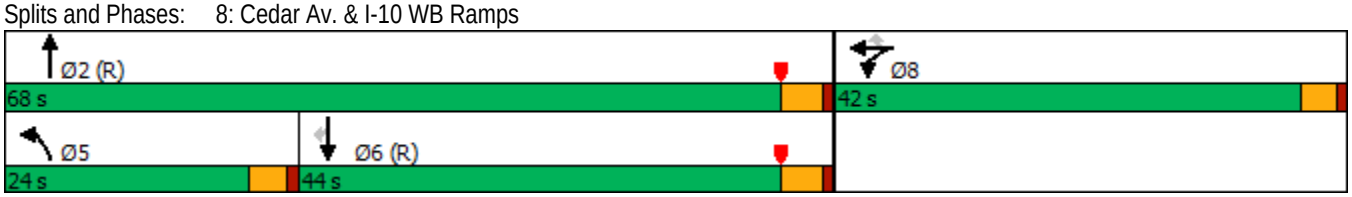
Approach	EB	NB	SB
HCM Control Delay, s	9.2	0	0
HCM LOS	A		

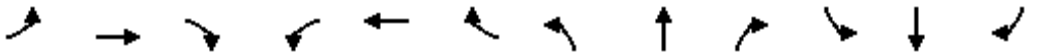
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1502	-	867	-	-
HCM Lane V/C Ratio	-	-	0.006	-	-
HCM Control Delay (s)	0	-	9.2	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	403	275	1187	1531	615
Future Volume (vph)	0	403	275	1187	1531	615
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	42.0	42.0	24.0	68.0	44.0	44.0
Total Split (%)	38.2%	38.2%	21.8%	61.8%	40.0%	40.0%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	38.0	38.0	19.4	63.5	40.1	40.1
Actuated g/C Ratio	0.35	0.35	0.18	0.58	0.36	0.36
v/c Ratio	1.01	0.66	0.90	0.59	0.84	0.65
Control Delay	71.7	32.1	70.6	12.9	37.3	6.2
Queue Delay	33.4	0.0	0.0	0.8	48.3	0.0
Total Delay	105.0	32.1	70.6	13.6	85.6	6.2
LOS	F	C	E	B	F	A
Approach Delay	77.7			24.3	62.9	
Approach LOS	E			C	E	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 53.7	Intersection LOS: D
Intersection Capacity Utilization 103.6%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	564	0	403	275	1187	0	0	1531	615
Future Volume (veh/h)	0	0	0	564	0	403	275	1187	0	0	1531	615
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				588	0	314	286	1236	0	0	1595	375
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				616	0	549	313	2101	0	0	1933	600
Arrive On Green				0.34	0.00	0.34	0.23	0.77	0.00	0.00	0.37	0.37
Sat Flow, veh/h				1810	0	1610	1810	3705	0	0	5358	1610
Grp Volume(v), veh/h				588	0	314	286	1236	0	0	1595	375
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1729	1610
Q Serve(g_s), s				34.9	0.0	17.6	16.9	15.6	0.0	0.0	30.6	21.0
Cycle Q Clear(g_c), s				34.9	0.0	17.6	16.9	15.6	0.0	0.0	30.6	21.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				616	0	549	313	2101	0	0	1933	600
V/C Ratio(X)				0.95	0.00	0.57	0.91	0.59	0.00	0.00	0.83	0.63
Avail Cap(c_a), veh/h				625	0	556	329	2101	0	0	1933	600
HCM Platoon Ratio				1.00	1.00	1.00	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.35	0.35	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				35.4	0.0	29.7	41.5	7.0	0.0	0.0	31.3	28.2
Incr Delay (d2), s/veh				24.9	0.0	1.4	12.7	0.4	0.0	0.0	4.2	4.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				18.7	0.0	6.7	8.0	4.0	0.0	0.0	12.9	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				60.3	0.0	31.1	54.2	7.4	0.0	0.0	35.4	33.1
LnGrp LOS				E	A	C	D	A	A	A	D	C
Approach Vol, veh/h					902			1522			1970	
Approach Delay, s/veh					50.1			16.2			35.0	
Approach LOS					D			B			C	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	68.5		23.0	45.5		41.5						
Change Period (Y+Rc), s	4.5		4.0	4.5		4.0						
Max Green Setting (Gmax), s	63.5		20.0	39.5		38.0						
Max Q Clear Time (g_c+I1), s	17.6		18.9	32.6		36.9						
Green Ext Time (p_c), s	11.5		0.1	5.4		0.6						

Intersection Summary	
HCM 6th Ctrl Delay	31.6
HCM 6th LOS	C

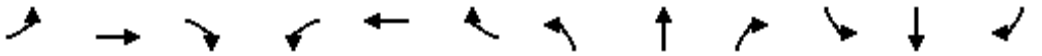
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	515	0	947	526	498	1598
Future Volume (vph)	515	0	947	526	498	1598
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	44.0	44.0	27.0	27.0	39.0	66.0
Total Split (%)	40.0%	40.0%	24.5%	24.5%	35.5%	60.0%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	41.7	41.7	23.0	23.0	34.3	60.8
Actuated g/C Ratio	0.38	0.38	0.21	0.21	0.31	0.55
v/c Ratio	0.77	1.17	0.94	0.73	0.95	0.86
Control Delay	39.8	123.6	55.9	20.5	49.3	18.0
Queue Delay	0.0	0.0	0.0	0.0	46.9	47.8
Total Delay	39.8	123.6	55.9	20.5	96.3	65.7
LOS	D	F	E	C	F	E
Approach Delay		89.3	43.2			73.0
Approach LOS		F	D			E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.17	
Intersection Signal Delay: 67.6	Intersection LOS: E
Intersection Capacity Utilization 103.6%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	515	0	620	0	0	0	0	947	526	498	1598	0
Future Volume (veh/h)	515	0	620	0	0	0	0	947	526	498	1598	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	554	0	615				0	1018	292	535	1718	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	666	0	593				0	1085	336	576	2035	0
Arrive On Green	0.37	0.00	0.37				0.00	0.07	0.07	0.32	0.56	0.00
Sat Flow, veh/h	1810	0	1610				0	5358	1606	1810	3705	0
Grp Volume(v), veh/h	554	0	615				0	1018	292	535	1718	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1729	1606	1810	1805	0
Q Serve(g_s), s	30.7	0.0	40.5				0.0	21.5	19.8	31.5	43.6	0.0
Cycle Q Clear(g_c), s	30.7	0.0	40.5				0.0	21.5	19.8	31.5	43.6	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	666	0	593				0	1085	336	576	2035	0
V/C Ratio(X)	0.83	0.00	1.04				0.00	0.94	0.87	0.93	0.84	0.00
Avail Cap(c_a), veh/h	666	0	593				0	1085	336	584	2035	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.65	0.65	0.42	0.42	0.00
Uniform Delay (d), s/veh	31.6	0.0	34.8				0.0	50.5	49.7	36.3	20.0	0.0
Incr Delay (d2), s/veh	8.8	0.0	47.0				0.0	11.6	17.8	10.9	2.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.2	0.0	22.5				0.0	11.1	10.2	15.0	16.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.4	0.0	81.7				0.0	62.1	67.5	47.2	21.9	0.0
LnGrp LOS	D	A	F				A	E	E	D	C	A
Approach Vol, veh/h		1169						1310			2253	
Approach Delay, s/veh		62.2						63.3			27.9	
Approach LOS		E						E			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	39.0	27.0		44.0		66.0
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	35.5	* 23		40.5		62.0
Max Q Clear Time (g_c+I1), s	33.5	23.5		42.5		45.6
Green Ext Time (p_c), s	0.2	0.0		0.0		8.2

Intersection Summary	
HCM 6th Ctrl Delay	46.2
HCM 6th LOS	D

Notes

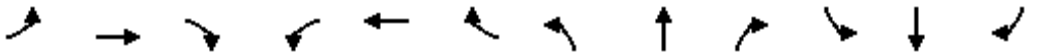
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	245	4	6	3	6	1082	176	1604	437
Future Volume (vph)	245	4	6	3	6	1082	176	1604	437
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases		4		8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	30.0	30.0	10.2	10.2	16.2	28.2	16.2	28.2	28.2
Total Split (s)	36.0	36.0	36.0	36.0	16.2	57.2	16.8	57.8	57.8
Total Split (%)	32.7%	32.7%	32.7%	32.7%	14.7%	52.0%	15.3%	52.5%	52.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	3.0	4.7	3.0	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.0	5.7	4.0	5.7	5.7
Lead/Lag					Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min	C-Min
Act Effct Green (s)	27.6	27.6	27.6	27.6	63.7	56.3	72.4	68.7	68.7
Actuated g/C Ratio	0.25	0.25	0.25	0.25	0.58	0.51	0.66	0.62	0.62
v/c Ratio	0.94	0.06	0.02	0.31	0.04	0.65	0.62	0.78	0.45
Control Delay	79.8	14.1	29.7	6.8	7.2	21.8	14.4	15.8	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0
Total Delay	79.8	14.1	29.7	6.8	7.2	22.1	14.4	16.1	3.6
LOS	E	B	C	A	A	C	B	B	A
Approach Delay		74.2		7.8		22.0		13.5	
Approach LOS		E		A		C		B	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 68.3 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 20.1	Intersection LOS: C
Intersection Capacity Utilization 88.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 10: Cedar Av. & Orange St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	245	4	19	6	3	145	6	1082	4	176	1604	437
Future Volume (veh/h)	245	4	19	6	3	145	6	1082	4	176	1604	437
Initial Q (Qb), veh	0	0	0	0	0	0	0	44	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	269	4	16	7	3	72	7	1189	4	193	1763	389
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	356	84	335	409	16	393	109	1973	6	293	2158	960
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.00	0.36	0.36	0.04	0.40	0.40
Sat Flow, veh/h	1346	332	1326	1411	65	1555	1810	3690	12	1810	3610	1606
Grp Volume(v), veh/h	269	0	20	7	0	75	7	582	611	193	1763	389
Grp Sat Flow(s),veh/h/ln	1346	0	1658	1411	0	1620	1810	1805	1898	1810	1805	1606
Q Serve(g_s), s	21.5	0.0	1.0	0.4	0.0	4.0	0.2	28.8	28.8	4.9	47.9	19.1
Cycle Q Clear(g_c), s	25.5	0.0	1.0	1.4	0.0	4.0	0.2	28.8	28.8	4.9	47.9	19.1
Prop In Lane	1.00		0.80	1.00		0.96	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	356	0	419	409	0	409	109	964	1015	293	2158	960
V/C Ratio(X)	0.75	0.00	0.05	0.02	0.00	0.18	0.06	0.60	0.60	0.66	0.82	0.41
Avail Cap(c_a), veh/h	384	0	452	437	0	442	297	975	1025	409	2158	960
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.77	0.77	0.77	0.39	0.39	0.39
Uniform Delay (d), s/veh	42.2	0.0	31.1	31.6	0.0	32.2	19.6	28.0	27.9	21.1	27.6	19.0
Incr Delay (d2), s/veh	7.7	0.0	0.0	0.0	0.0	0.2	0.2	2.2	2.0	1.0	1.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4	8.5	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	0.0	0.4	0.1	0.0	1.6	0.1	19.1	19.6	2.7	21.5	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.9	0.0	31.2	31.7	0.0	32.4	19.8	39.6	38.4	22.1	29.0	19.5
LnGrp LOS	D	A	C	C	A	C	B	D	D	C	C	B
Approach Vol, veh/h		289			82			1200			2345	
Approach Delay, s/veh		48.6			32.4			38.9			26.9	
Approach LOS		D			C			D			C	

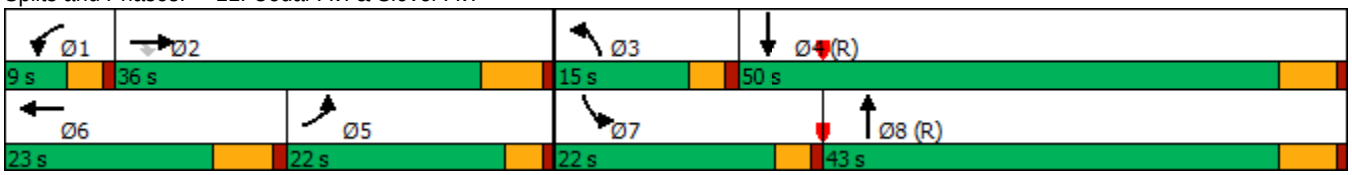
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	65.1		33.8	4.8	71.5		33.8				
Change Period (Y+Rc), s	4.0	5.7		6.0	4.0	5.7		6.0				
Max Green Setting (Gmax), s	12.8	51.5		30.0	12.2	52.1		30.0				
Max Q Clear Time (g_c+I1), s	6.9	30.8		27.5	2.2	49.9		6.0				
Green Ext Time (p_c), s	0.2	7.7		0.2	0.0	2.0		0.4				

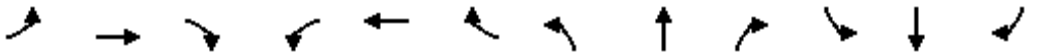
Intersection Summary												
HCM 6th Ctrl Delay			32.3									
HCM 6th LOS			C									

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	226	127	103	36	163	142	760	175	1352
Future Volume (vph)	226	127	103	36	163	142	760	175	1352
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2		1	6	3	8	7	4
Permitted Phases			2						
Detector Phase	5	2	2	1	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	29.0	29.0	8.0	23.0	8.0	32.7	8.0	24.7
Total Split (s)	22.0	36.0	36.0	9.0	23.0	15.0	43.0	22.0	50.0
Total Split (%)	20.0%	32.7%	32.7%	8.2%	20.9%	13.6%	39.1%	20.0%	45.5%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	4.7	3.0	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	4.0	5.7	4.0	5.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	18.2	28.2	28.2	5.0	11.4	12.0	45.5	15.3	48.7
Actuated g/C Ratio	0.17	0.26	0.26	0.05	0.10	0.11	0.41	0.14	0.44
v/c Ratio	0.78	0.14	0.21	0.45	0.62	0.74	0.55	0.72	0.95
Control Delay	62.4	31.6	2.9	68.7	33.9	64.1	48.8	59.8	41.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.4	31.6	2.9	68.7	33.9	64.1	48.8	59.8	41.2
LOS	E	C	A	E	C	E	D	E	D
Approach Delay		40.4			38.0		51.2		43.2
Approach LOS		D			D		D		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 44.6	Intersection LOS: D
Intersection Capacity Utilization 85.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 11: Cedar Av. & Slover Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	127	103	36	163	107	142	760	27	175	1352	102
Future Volume (veh/h)	226	127	103	36	163	107	142	760	27	175	1352	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	233	131	84	37	168	79	146	784	26	180	1394	104
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	263	843	375	47	232	105	175	1579	52	214	1583	118
Arrive On Green	0.15	0.23	0.23	0.03	0.10	0.10	0.10	0.44	0.44	0.04	0.15	0.15
Sat Flow, veh/h	1810	3610	1606	1810	2420	1089	1810	3565	118	1810	3406	253
Grp Volume(v), veh/h	233	131	84	37	123	124	146	397	413	180	736	762
Grp Sat Flow(s),veh/h/ln	1810	1805	1606	1810	1805	1704	1810	1805	1879	1810	1805	1854
Q Serve(g_s), s	13.9	3.2	4.7	2.2	7.3	7.8	8.7	17.3	17.3	10.9	43.9	44.3
Cycle Q Clear(g_c), s	13.9	3.2	4.7	2.2	7.3	7.8	8.7	17.3	17.3	10.9	43.9	44.3
Prop In Lane	1.00		1.00	1.00		0.64	1.00		0.06	1.00		0.14
Lane Grp Cap(c), veh/h	263	843	375	47	173	164	175	799	832	214	839	861
V/C Ratio(X)	0.88	0.16	0.22	0.78	0.71	0.76	0.84	0.50	0.50	0.84	0.88	0.88
Avail Cap(c_a), veh/h	296	985	438	82	279	263	181	799	832	296	839	861
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.84	0.84	0.84	0.53	0.53	0.53
Uniform Delay (d), s/veh	46.1	33.5	34.1	53.3	48.2	48.5	48.8	21.9	21.9	51.8	43.5	43.7
Incr Delay (d2), s/veh	23.9	0.1	0.3	23.9	5.3	6.9	23.4	1.8	1.8	8.1	7.2	7.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	1.3	1.8	1.3	3.6	3.6	5.0	7.3	7.5	5.7	22.8	23.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.0	33.6	34.4	77.2	53.6	55.4	72.3	23.7	23.7	60.0	50.7	51.1
LnGrp LOS	E	C	C	E	D	E	E	C	C	E	D	D
Approach Vol, veh/h		448			284			956			1678	
Approach Delay, s/veh		52.7			57.4			31.1			51.9	
Approach LOS		D			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	31.7	14.6	56.8	22.0	16.6	17.0	54.4
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	6.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	5.0	30.0	11.0	44.3	18.0	* 17	18.0	37.3
Max Q Clear Time (g_c+I1), s	4.2	6.7	10.7	46.3	15.9	9.8	12.9	19.3
Green Ext Time (p_c), s	0.0	0.9	0.0	0.0	0.1	0.8	0.2	4.3

Intersection Summary	
HCM 6th Ctrl Delay	46.6
HCM 6th LOS	D

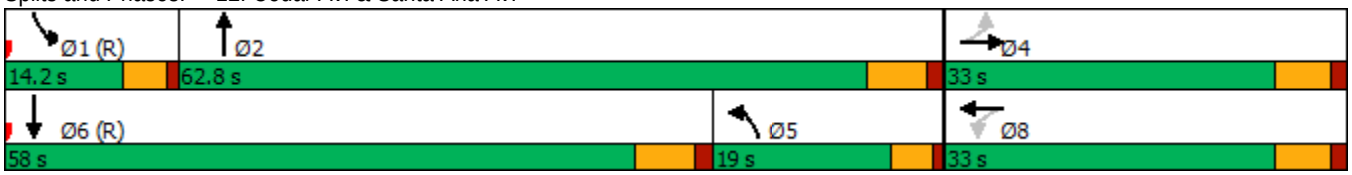
Notes

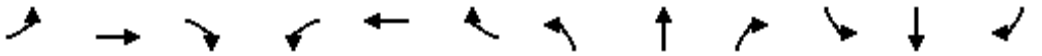
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	49	73	63	71	111	827	42	1355
Future Volume (vph)	49	73	63	71	111	827	42	1355
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	9.5	27.5	9.5	27.5
Total Split (s)	33.0	33.0	33.0	33.0	19.0	62.8	14.2	58.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	17.3%	57.1%	12.9%	52.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	4.5	6.5	4.5	6.5
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min
Act Effct Green (s)		20.1		20.1	11.3	55.1	17.8	61.6
Actuated g/C Ratio		0.18		0.18	0.10	0.50	0.16	0.56
v/c Ratio		0.76		0.81	0.66	0.52	0.16	0.76
Control Delay		52.8		65.7	58.9	14.8	33.6	43.3
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		52.8		65.7	58.9	14.8	33.6	43.3
LOS		D		E	E	B	C	D
Approach Delay		52.8		65.7		19.9		43.0
Approach LOS		D		E		B		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 90 (82%), Referenced to phase 1:SBL and 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 37.0	Intersection LOS: D
Intersection Capacity Utilization 75.7%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 12: Cedar Av. & Santa Ana Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	73	86	63	71	36	111	827	34	42	1355	47
Future Volume (veh/h)	49	73	86	63	71	36	111	827	34	42	1355	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	53	79	52	68	77	27	121	899	33	46	1473	43
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	96	117	67	117	112	34	383	1774	65	354	1666	49
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.42	1.00	1.00	0.06	0.15	0.15
Sat Flow, veh/h	358	782	449	474	746	227	1810	3551	130	1810	3582	104
Grp Volume(v), veh/h	184	0	0	172	0	0	121	457	475	46	741	775
Grp Sat Flow(s),veh/h/ln	1589	0	0	1448	0	0	1810	1805	1876	1810	1805	1881
Q Serve(g_s), s	0.0	0.0	0.0	0.6	0.0	0.0	4.9	0.0	0.0	2.6	44.2	44.4
Cycle Q Clear(g_c), s	12.3	0.0	0.0	12.9	0.0	0.0	4.9	0.0	0.0	2.6	44.2	44.4
Prop In Lane	0.29		0.28	0.40		0.16	1.00		0.07	1.00		0.06
Lane Grp Cap(c), veh/h	281	0	0	263	0	0	383	902	937	354	840	875
V/C Ratio(X)	0.65	0.00	0.00	0.65	0.00	0.00	0.32	0.51	0.51	0.13	0.88	0.89
Avail Cap(c_a), veh/h	434	0	0	411	0	0	383	924	960	354	845	881
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.90	0.90	0.90	0.34	0.34	0.34
Uniform Delay (d), s/veh	44.7	0.0	0.0	44.9	0.0	0.0	26.4	0.0	0.0	42.6	43.6	43.7
Incr Delay (d2), s/veh	3.7	0.0	0.0	3.9	0.0	0.0	0.2	1.4	1.4	0.0	5.0	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.0	0.0	4.7	0.0	0.0	1.9	0.4	0.4	1.2	22.4	23.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.4	0.0	0.0	48.8	0.0	0.0	26.5	1.5	1.4	42.6	48.6	48.6
LnGrp LOS	D	A	A	D	A	A	C	A	A	D	D	D
Approach Vol, veh/h		184			172			1053			1562	
Approach Delay, s/veh		48.4			48.8			4.3			48.5	
Approach LOS		D			D			A			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	26.0	61.5		22.5	29.8	57.7		22.5				
Change Period (Y+Rc), s	4.5	6.5		6.0	6.5	* 6.5		6.0				
Max Green Setting (Gmax), s	9.7	56.3		27.0	14.5	* 52		27.0				
Max Q Clear Time (g_c+I1), s	4.6	2.0		14.3	6.9	46.4		14.9				
Green Ext Time (p_c), s	0.0	19.8		1.0	0.1	4.8		0.9				

Intersection Summary			
HCM 6th Ctrl Delay		32.8	
HCM 6th LOS		C	

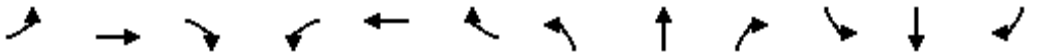
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	58	75	37	73	79	139	27	762	92	1388
Future Volume (vph)	58	75	37	73	79	139	27	762	92	1388
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	32.0	32.0	32.0	32.0	32.0	32.0	17.0	58.0	20.0	61.0
Total Split (%)	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%	15.5%	52.7%	18.2%	55.5%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)		19.4	19.4		19.4	19.4	17.7	63.0	11.6	56.8
Actuated g/C Ratio		0.18	0.18		0.18	0.18	0.16	0.57	0.11	0.52
v/c Ratio		0.70	0.12		0.75	0.38	0.10	0.45	0.54	0.84
Control Delay		59.7	2.8		62.5	8.4	61.4	12.9	41.6	40.1
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		59.7	2.8		62.5	8.4	61.4	12.9	41.6	40.1
LOS		E	A		E	A	E	B	D	D
Approach Delay		47.3			36.7			14.4		40.2
Approach LOS		D			D			B		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 32.4	Intersection LOS: C
Intersection Capacity Utilization 73.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	75	37	73	79	139	27	762	59	92	1388	19
Future Volume (veh/h)	58	75	37	73	79	139	27	762	59	92	1388	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	64	83	22	81	88	88	30	847	55	102	1542	17
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	47	45	388	48	38	383	230	1864	121	130	1779	20
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.25	1.00	1.00	0.02	0.16	0.16
Sat Flow, veh/h	0	186	1610	0	156	1589	1810	3441	223	1810	3657	40
Grp Volume(v), veh/h	147	0	22	169	0	88	30	444	458	102	760	799
Grp Sat Flow(s),veh/h/ln	186	0	1610	156	0	1589	1810	1805	1860	1810	1805	1893
Q Serve(g_s), s	0.0	0.0	1.2	0.0	0.0	4.9	1.4	0.0	0.0	6.2	45.2	45.3
Cycle Q Clear(g_c), s	26.5	0.0	1.2	26.5	0.0	4.9	1.4	0.0	0.0	6.2	45.2	45.3
Prop In Lane	0.44		1.00	0.48		1.00	1.00		0.12	1.00		0.02
Lane Grp Cap(c), veh/h	92	0	388	86	0	383	230	978	1007	130	878	921
V/C Ratio(X)	1.60	0.00	0.06	1.97	0.00	0.23	0.13	0.45	0.45	0.78	0.87	0.87
Avail Cap(c_a), veh/h	92	0	388	86	0	383	230	978	1007	255	903	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.97	0.97	0.97	0.57	0.57	0.57
Uniform Delay (d), s/veh	42.7	0.0	32.1	43.9	0.0	33.5	36.3	0.0	0.0	52.8	42.7	42.7
Incr Delay (d2), s/veh	315.7	0.0	0.1	474.0	0.0	0.4	0.2	1.5	1.4	5.8	5.4	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	0.0	0.5	13.7	0.0	1.9	0.6	0.4	0.4	3.0	23.0	24.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	358.4	0.0	32.2	517.9	0.0	34.0	36.5	1.5	1.4	58.7	48.1	48.0
LnGrp LOS	F	A	C	F	A	C	D	A	A	E	D	D
Approach Vol, veh/h		169			257			932			1661	
Approach Delay, s/veh		316.0			352.2			2.6			48.7	
Approach LOS		F			F			A			D	

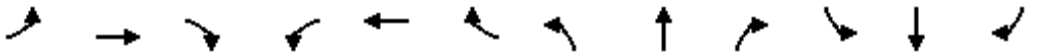
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.4	65.6		32.0	18.5	59.5		32.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	15.5	52.0		26.5	12.5	55.0		26.5				
Max Q Clear Time (g_c+I1), s	8.2	2.0		28.5	3.4	47.3		28.5				
Green Ext Time (p_c), s	0.1	9.5		0.0	0.0	6.2		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			75.3									
HCM 6th LOS			E									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	36	7	26	8	67	745	23	1408
Future Volume (vph)	36	7	26	8	67	745	23	1408
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	10.0	10.0	9.5	24.0	9.5	24.0
Total Split (s)	30.0	30.0	30.0	30.0	17.0	68.0	12.0	63.0
Total Split (%)	27.3%	27.3%	27.3%	27.3%	15.5%	61.8%	10.9%	57.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)		12.5		12.5	9.7	81.4	7.0	74.5
Actuated g/C Ratio		0.11		0.11	0.09	0.74	0.06	0.68
v/c Ratio		0.72		0.48	0.45	0.30	0.21	0.62
Control Delay		29.0		52.1	55.8	6.6	67.9	8.9
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		29.0		52.1	55.8	6.6	67.9	8.9
LOS		C		D	E	A	E	A
Approach Delay		29.0		52.1		10.7		9.8
Approach LOS		C		D		B		A

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 74 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 12.5	Intersection LOS: B
Intersection Capacity Utilization 69.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 14: Rubidoux Bl./Cedar Av. & 7th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	7	173	26	8	10	67	745	5	23	1408	20
Future Volume (veh/h)	36	7	173	26	8	10	67	745	5	23	1408	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	38	7	90	27	8	3	71	784	4	24	1482	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	79	20	113	142	38	11	92	2688	14	43	2560	36
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.05	0.73	0.73	0.02	0.70	0.70
Sat Flow, veh/h	347	186	1066	814	362	101	1810	3683	19	1810	3644	52
Grp Volume(v), veh/h	135	0	0	38	0	0	71	384	404	24	734	769
Grp Sat Flow(s),veh/h/ln	1598	0	0	1276	0	0	1810	1805	1897	1810	1805	1891
Q Serve(g_s), s	6.2	0.0	0.0	0.0	0.0	0.0	4.3	8.0	8.0	1.4	22.4	22.5
Cycle Q Clear(g_c), s	9.0	0.0	0.0	2.8	0.0	0.0	4.3	8.0	8.0	1.4	22.4	22.5
Prop In Lane	0.28		0.67	0.71		0.08	1.00		0.01	1.00		0.03
Lane Grp Cap(c), veh/h	211	0	0	191	0	0	92	1317	1384	43	1268	1328
V/C Ratio(X)	0.64	0.00	0.00	0.20	0.00	0.00	0.77	0.29	0.29	0.56	0.58	0.58
Avail Cap(c_a), veh/h	401	0	0	365	0	0	206	1317	1384	123	1268	1328
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.80	0.80	0.80	0.46	0.46	0.46
Uniform Delay (d), s/veh	47.9	0.0	0.0	45.1	0.0	0.0	51.6	5.1	5.1	53.1	8.2	8.2
Incr Delay (d2), s/veh	4.6	0.0	0.0	0.7	0.0	0.0	10.3	0.4	0.4	5.2	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	0.0	1.0	0.0	0.0	2.1	2.4	2.5	0.7	7.2	7.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.5	0.0	0.0	45.8	0.0	0.0	61.9	5.5	5.5	58.4	9.1	9.1
LnGrp LOS	D	A	A	D	A	A	E	A	A	E	A	A
Approach Vol, veh/h		135			38			859			1527	
Approach Delay, s/veh		52.5			45.8			10.2			9.8	
Approach LOS		D			D			B			A	

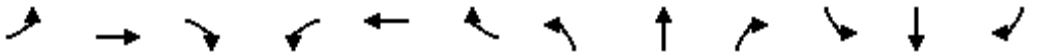
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	86.3		16.6	10.1	83.3		16.6				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	7.5	62.0		25.0	12.5	57.0		25.0				
Max Q Clear Time (g_c+I1), s	3.4	10.0		11.0	6.3	24.5		4.8				
Green Ext Time (p_c), s	0.0	7.5		0.8	0.1	17.9		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		12.7	
HCM 6th LOS		B	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	18	8	110	1	86	2	652	169	1385
Future Volume (vph)	18	8	110	1	86	2	652	169	1385
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	35.0	35.0	35.0	9.5	24.0	9.5	24.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.6	34.0	21.0	45.4
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%	10.7%	37.8%	23.3%	50.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	5.0	4.5	6.0	4.5	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min
Act Effct Green (s)		13.1		14.3	14.3	5.7	23.5	12.1	41.5
Actuated g/C Ratio		0.21		0.23	0.23	0.09	0.38	0.19	0.66
v/c Ratio		0.16		0.39	0.19	0.01	0.62	0.51	0.61
Control Delay		14.3		27.2	1.9	36.0	20.4	32.7	13.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		14.3		27.2	1.9	36.0	20.4	32.7	13.0
LOS		B		C	A	D	C	C	B
Approach Delay		14.3		16.2			20.4		15.1
Approach LOS		B		B			C		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 62.5	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 16.8	Intersection LOS: B
Intersection Capacity Utilization 68.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 15: Rubidoux Bl. & Tarragona Dr./El Rivino Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	8	27	110	1	86	2	652	132	169	1385	12
Future Volume (veh/h)	18	8	27	110	1	86	2	652	132	169	1385	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	19	8	19	116	1	59	2	686	132	178	1458	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	132	55	62	323	2	183	5	1380	265	233	2137	19
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.00	0.46	0.46	0.13	0.58	0.58
Sat Flow, veh/h	293	479	543	1613	14	1610	1810	3020	581	1810	3666	33
Grp Volume(v), veh/h	46	0	0	117	0	59	2	410	408	178	717	754
Grp Sat Flow(s),veh/h/ln	1316	0	0	1627	0	1610	1810	1805	1795	1810	1805	1894
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	1.7	0.1	8.2	8.2	4.9	14.2	14.2
Cycle Q Clear(g_c), s	3.2	0.0	0.0	3.2	0.0	1.7	0.1	8.2	8.2	4.9	14.2	14.2
Prop In Lane	0.41		0.41	0.99		1.00	1.00		0.32	1.00		0.02
Lane Grp Cap(c), veh/h	248	0	0	324	0	183	5	825	820	233	1052	1104
V/C Ratio(X)	0.19	0.00	0.00	0.36	0.00	0.32	0.40	0.50	0.50	0.76	0.68	0.68
Avail Cap(c_a), veh/h	968	0	0	984	0	937	179	981	976	579	1380	1448
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	0.0	0.0	21.6	0.0	21.0	25.7	9.8	9.8	21.7	7.4	7.4
Incr Delay (d2), s/veh	0.5	0.0	0.0	1.0	0.0	1.4	45.4	0.7	0.7	5.2	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	1.3	0.0	0.7	0.1	2.3	2.2	2.1	3.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.3	0.0	0.0	22.6	0.0	22.4	71.1	10.5	10.5	26.9	8.7	8.6
LnGrp LOS	C	A	A	C	A	C	E	B	B	C	A	A
Approach Vol, veh/h		46			176			820			1649	
Approach Delay, s/veh		21.3			22.5			10.6			10.6	
Approach LOS		C			C			B			B	

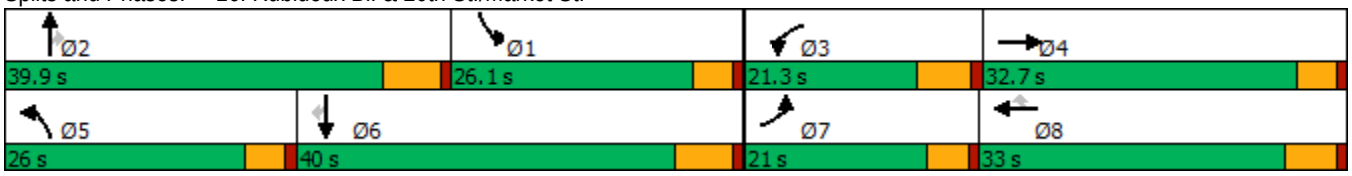
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	29.5		10.9	4.6	36.0		10.9				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	16.5	28.0		30.0	5.1	39.4		30.0				
Max Q Clear Time (g_c+I1), s	6.9	10.2		5.2	2.1	16.2		5.2				
Green Ext Time (p_c), s	0.3	6.1		0.3	0.0	13.8		1.2				

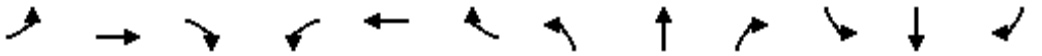
Intersection Summary			
HCM 6th Ctrl Delay		11.6	
HCM 6th LOS		B	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	155	123	271	291	415	207	239	298	408	754	389
Future Volume (vph)	155	123	271	291	415	207	239	298	408	754	389
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	14.6	10.8	27.8	27.8	9.6	28.2	28.2	9.6	35.2	35.2
Total Split (s)	21.0	32.7	21.3	33.0	33.0	26.0	39.9	39.9	26.1	40.0	40.0
Total Split (%)	17.5%	27.3%	17.8%	27.5%	27.5%	21.7%	33.3%	33.3%	21.8%	33.3%	33.3%
Yellow Time (s)	3.6	3.6	4.8	4.8	4.8	3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	5.8	5.8	5.8	4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	13.6	22.0	13.2	21.6	21.6	16.3	14.2	14.2	30.8	28.8	28.8
Actuated g/C Ratio	0.13	0.22	0.13	0.21	0.21	0.16	0.14	0.14	0.30	0.28	0.28
v/c Ratio	0.67	0.28	0.62	0.75	0.63	0.74	0.49	0.63	0.40	0.77	0.56
Control Delay	59.9	20.9	51.4	52.4	8.4	59.9	46.5	11.2	31.0	40.8	7.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.9	20.9	51.4	52.4	8.4	59.9	46.5	11.2	31.0	40.8	7.4
LOS	E	C	D	D	A	E	D	B	C	D	A
Approach Delay		37.2		33.4			36.1			29.8	
Approach LOS		D		C			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 102.3	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 32.8	Intersection LOS: C
Intersection Capacity Utilization 74.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	123	94	271	291	415	207	239	298	408	754	389
Future Volume (veh/h)	155	123	94	271	291	415	207	239	298	408	754	389
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	160	127	82	279	300	0	213	246	219	421	777	370
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	200	387	234	378	362		254	520	232	969	1081	481
Arrive On Green	0.11	0.18	0.18	0.11	0.19	0.00	0.14	0.14	0.14	0.28	0.30	0.30
Sat Flow, veh/h	1810	2162	1307	3510	1900	1610	1810	3610	1610	3510	3610	1607
Grp Volume(v), veh/h	160	105	104	279	300	0	213	246	219	421	777	370
Grp Sat Flow(s),veh/h/ln	1810	1805	1665	1755	1900	1610	1810	1805	1610	1755	1805	1607
Q Serve(g_s), s	7.1	4.1	4.5	6.3	12.4	0.0	9.4	5.1	7.8	8.1	15.7	17.1
Cycle Q Clear(g_c), s	7.1	4.1	4.5	6.3	12.4	0.0	9.4	5.1	7.8	8.1	15.7	17.1
Prop In Lane	1.00		0.79	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	200	323	298	378	362		254	520	232	969	1081	481
V/C Ratio(X)	0.80	0.32	0.35	0.74	0.83		0.84	0.47	0.94	0.43	0.72	0.77
Avail Cap(c_a), veh/h	363	620	571	665	631		473	1486	663	969	1491	664
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.5	29.3	29.4	35.4	31.8	0.0	34.3	32.2	17.1	24.4	25.6	26.1
Incr Delay (d2), s/veh	7.2	0.6	0.7	2.8	4.9	0.0	2.8	0.7	16.9	0.1	1.1	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	1.8	1.8	2.7	5.8	0.0	4.0	2.1	4.9	3.0	6.2	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.7	29.9	30.1	38.2	36.7	0.0	37.1	32.8	34.1	24.5	26.7	29.8
LnGrp LOS	D	C	C	D	D		D	C	C	C	C	C
Approach Vol, veh/h		369			579			678			1568	
Approach Delay, s/veh		35.5			37.4			34.6			26.8	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	28.8	18.0	14.6	20.4	16.1	30.7	13.7	21.4
Change Period (Y+Rc), s	6.2	* 6.2	5.8	* 5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	21.5	* 34	15.5	* 28	21.4	33.8	16.4	27.2
Max Q Clear Time (g_c+I1), s	10.1	9.8	8.3	6.5	11.4	19.1	9.1	14.4
Green Ext Time (p_c), s	0.6	2.0	0.5	1.2	0.2	5.3	0.2	1.2

Intersection Summary	
HCM 6th Ctrl Delay	31.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	11

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	5	12	14	13	8	17	757	30	147	971	5
Future Vol, veh/h	1	5	12	14	13	8	17	757	30	147	971	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	5	13	15	14	9	18	823	33	160	1055	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1833	2271	530	1727	2257	429	1060	0	0	857	0	0
Stage 1	1378	1378	-	877	877	-	-	-	-	-	-	-
Stage 2	455	893	-	850	1380	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	48	41	499	58	42	580	665	-	-	792	-	-
Stage 1	155	214	-	314	369	-	-	-	-	-	-	-
Stage 2	560	363	-	326	214	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	13	20	499	27	20	579	665	-	-	791	-	-
Mov Cap-2 Maneuver	13	20	-	27	20	-	-	-	-	-	-	-
Stage 1	147	108	-	297	349	-	-	-	-	-	-	-
Stage 2	502	344	-	153	108	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	114.2	$ 453.9	0.5	3.1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	665	-	-	51	30	791	-	-
HCM Lane V/C Ratio	0.028	-	-	0.384	1.268	0.202	-	-
HCM Control Delay (s)	10.6	0.3	-	114.2	$ 453.9	10.7	2	-
HCM Lane LOS	B	A	-	F	F	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1.4	4.3	0.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	2	6	3	5	6	19	843	15	8	921	12
Future Vol, veh/h	3	2	6	3	5	6	19	843	15	8	921	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	110	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	2	7	3	5	7	21	916	16	9	1001	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1529	2000	507	1486	1998	466	1014	0	0	932	0	0
Stage 1	1026	1026	-	966	966	-	-	-	-	-	-	-
Stage 2	503	974	-	520	1032	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	82	61	516	88	61	549	692	-	-	743	-	-
Stage 1	255	315	-	277	336	-	-	-	-	-	-	-
Stage 2	524	333	-	512	313	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	77	58	516	83	58	549	692	-	-	743	-	-
Mov Cap-2 Maneuver	180	169	-	191	166	-	-	-	-	-	-	-
Stage 1	247	311	-	269	326	-	-	-	-	-	-	-
Stage 2	494	323	-	496	309	-	-	-	-	-	-	-

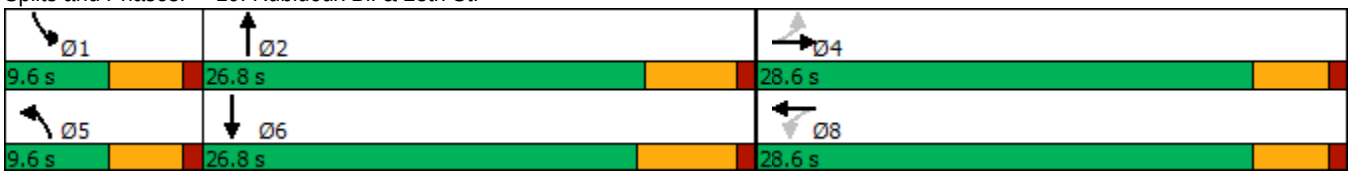
Approach	EB	WB	NB	SB
HCM Control Delay, s	18.7	20.5	0.2	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	692	-	-	274	247	743	-	-
HCM Lane V/C Ratio	0.03	-	-	0.044	0.062	0.012	-	-
HCM Control Delay (s)	10.4	-	-	18.7	20.5	9.9	-	-
HCM Lane LOS	B	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.2	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	15	18	61	32	31	860	11	921
Future Volume (vph)	15	18	61	32	31	860	11	921
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	28.6	28.6	28.6	28.6	9.6	24.4	9.6	22.8
Total Split (s)	28.6	28.6	28.6	28.6	9.6	26.8	9.6	26.8
Total Split (%)	44.0%	44.0%	44.0%	44.0%	14.8%	41.2%	14.8%	41.2%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.4	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		14.3		14.3	6.3	23.8	6.3	21.9
Actuated g/C Ratio		0.35		0.35	0.15	0.57	0.15	0.53
v/c Ratio		0.12		0.23	0.12	0.47	0.04	0.53
Control Delay		9.7		14.4	24.6	11.2	24.4	13.8
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		9.7		14.4	24.6	11.2	24.4	13.8
LOS		A		B	C	B	C	B
Approach Delay		9.7		14.4		11.6		14.0
Approach LOS		A		B		B		B

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 41.4	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 12.8	Intersection LOS: B
Intersection Capacity Utilization 47.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 19: Rubidoux Bl. & 28th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	18	30	61	32	15	31	860	34	11	921	10
Future Volume (veh/h)	15	18	30	61	32	15	31	860	34	11	921	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	16	20	24	66	35	11	34	935	34	12	1001	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	161	142	123	282	129	29	72	1464	53	28	1422	14
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.04	0.41	0.41	0.02	0.39	0.39
Sat Flow, veh/h	230	785	677	732	710	157	1810	3549	129	1810	3662	37
Grp Volume(v), veh/h	60	0	0	112	0	0	34	476	493	12	493	518
Grp Sat Flow(s),veh/h/ln	1692	0	0	1599	0	0	1810	1805	1873	1810	1805	1893
Q Serve(g_s), s	0.0	0.0	0.0	0.8	0.0	0.0	0.7	8.1	8.1	0.3	8.8	8.8
Cycle Q Clear(g_c), s	1.1	0.0	0.0	2.2	0.0	0.0	0.7	8.1	8.1	0.3	8.8	8.8
Prop In Lane	0.27		0.40	0.59		0.10	1.00		0.07	1.00		0.02
Lane Grp Cap(c), veh/h	426	0	0	439	0	0	72	744	772	28	701	735
V/C Ratio(X)	0.14	0.00	0.00	0.26	0.00	0.00	0.47	0.64	0.64	0.42	0.70	0.70
Avail Cap(c_a), veh/h	1144	0	0	1120	0	0	236	1005	1043	236	987	1035
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.3	0.0	0.0	13.7	0.0	0.0	18.1	9.0	9.0	18.7	9.9	9.9
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.3	0.0	0.0	1.8	0.9	0.9	3.7	1.3	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.8	0.0	0.0	0.3	2.1	2.1	0.1	2.1	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.5	0.0	0.0	14.0	0.0	0.0	19.9	9.9	9.9	22.4	11.2	11.1
LnGrp LOS	B	A	A	B	A	A	B	A	A	C	B	B
Approach Vol, veh/h		60			112			1003			1023	
Approach Delay, s/veh		13.5			14.0			10.2			11.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.2	21.6		11.6	6.1	20.7		11.6				
Change Period (Y+Rc), s	4.6	* 5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	5.0	* 21		24.0	5.0	21.0		24.0				
Max Q Clear Time (g_c+I1), s	2.3	10.1		3.1	2.7	10.8		4.2				
Green Ext Time (p_c), s	0.0	4.4		0.2	0.0	4.1		0.5				

Intersection Summary		
HCM 6th Ctrl Delay		11.0
HCM 6th LOS		B

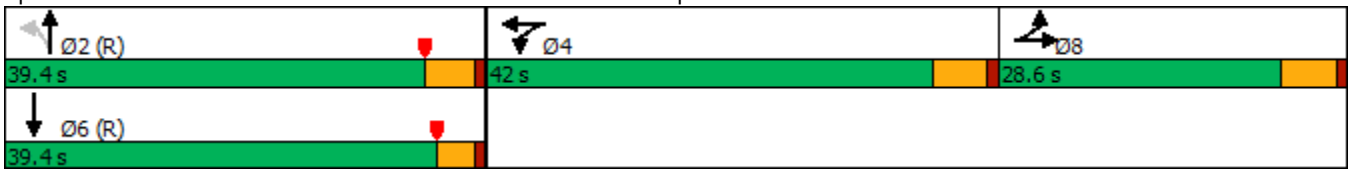
Notes

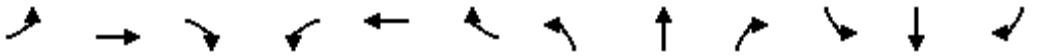
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	17	0	75	45	815	1043
Future Volume (vph)	17	0	75	45	815	1043
Turn Type	Split	NA	NA	Perm	NA	NA
Protected Phases	8	8	4		2	6
Permitted Phases				2		
Detector Phase	8	8	4	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.6	28.6	42.0	39.4	39.4	39.4
Total Split (%)	26.0%	26.0%	38.2%	35.8%	35.8%	35.8%
Yellow Time (s)	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	14.9	14.9	36.5	42.6	42.6	43.6
Actuated g/C Ratio	0.14	0.14	0.33	0.39	0.39	0.40
v/c Ratio	0.08	0.76	1.08	0.74	0.66	0.84
Control Delay	38.6	37.7	94.3	51.1	20.8	37.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.6	37.7	94.3	51.1	20.8	37.5
LOS	D	D	F	D	C	D
Approach Delay		37.8	94.3		22.4	37.5
Approach LOS		D	F		C	D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 44.8	Intersection LOS: D
Intersection Capacity Utilization 96.5%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	0	215	361	75	140	45	815	0	0	1043	18
Future Volume (veh/h)	17	0	215	361	75	140	45	815	0	0	1043	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	19	0	158	406	84	123	51	916	0	0	1172	19
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	218	0	194	391	81	118	122	1452	0	0	1461	24
Arrive On Green	0.12	0.00	0.12	0.33	0.33	0.33	0.80	0.80	0.00	0.00	0.40	0.40
Sat Flow, veh/h	1810	0	1610	1177	244	357	478	3705	0	0	3729	59
Grp Volume(v), veh/h	19	0	158	613	0	0	51	916	0	0	582	609
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1777	0	0	478	1805	0	0	1805	1888
Q Serve(g_s), s	1.0	0.0	10.5	36.5	0.0	0.0	11.4	11.1	0.0	0.0	31.3	31.3
Cycle Q Clear(g_c), s	1.0	0.0	10.5	36.5	0.0	0.0	42.7	11.1	0.0	0.0	31.3	31.3
Prop In Lane	1.00		1.00	0.66		0.20	1.00		0.00	0.00		0.03
Lane Grp Cap(c), veh/h	218	0	194	590	0	0	122	1452	0	0	726	759
V/C Ratio(X)	0.09	0.00	0.81	1.04	0.00	0.00	0.42	0.63	0.00	0.00	0.80	0.80
Avail Cap(c_a), veh/h	380	0	338	590	0	0	122	1452	0	0	726	759
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.83	0.83
Uniform Delay (d), s/veh	43.0	0.0	47.2	36.8	0.0	0.0	25.8	7.5	0.0	0.0	29.0	29.0
Incr Delay (d2), s/veh	0.2	0.0	9.5	47.7	0.0	0.0	10.3	2.1	0.0	0.0	7.7	7.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	4.8	22.7	0.0	0.0	1.4	2.9	0.0	0.0	14.4	15.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.2	0.0	56.7	84.5	0.0	0.0	36.1	9.6	0.0	0.0	36.7	36.4
LnGrp LOS	D	A	E	F	A	A	D	A	A	A	D	D
Approach Vol, veh/h		177			613			967			1191	
Approach Delay, s/veh		55.2			84.5			11.0			36.5	
Approach LOS		E			F			B			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		49.2		42.0		49.2		18.8				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		34.4		36.5		* 35		23.1				
Max Q Clear Time (g_c+I1), s		44.7		38.5		33.3		12.5				
Green Ext Time (p_c), s		0.0		0.0		1.5		0.8				

Intersection Summary												
HCM 6th Ctrl Delay			39.3									
HCM 6th LOS			D									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	283	860	861	757
Future Vol, veh/h	0	0	283	860	861	757
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	298	905	906	797

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	853	1704	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	0	*776	427	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	-	*775	426	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	7.6	0
HCM LOS	A		

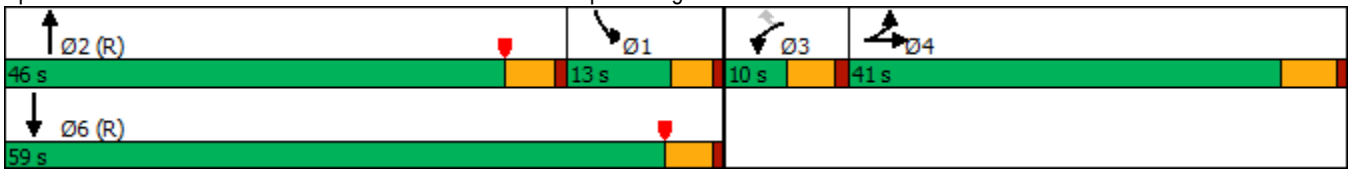
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	426	-	-	-	-
HCM Lane V/C Ratio	0.699	-	-	-	-
HCM Control Delay (s)	30.9	-	0	-	-
HCM Lane LOS	D	-	A	-	-
HCM 95th %tile Q(veh)	5.3	-	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	15	18	5	583	219	643
Future Volume (vph)	15	18	5	583	219	643
Turn Type	NA	Prot	Perm	NA	Prot	NA
Protected Phases	4	3		2	1	6
Permitted Phases			3			
Detector Phase	4	3	3	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	10.0	10.0	45.0	9.5	30.0
Total Split (s)	41.0	10.0	10.0	46.0	13.0	59.0
Total Split (%)	37.3%	9.1%	9.1%	41.8%	11.8%	53.6%
Yellow Time (s)	4.5	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	39.5	5.0	5.0	37.3	12.2	54.0
Actuated g/C Ratio	0.36	0.05	0.05	0.34	0.11	0.49
v/c Ratio	1.25	0.23	0.03	0.90	1.14	0.38
Control Delay	158.2	57.7	0.2	37.4	128.1	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	158.2	57.7	0.2	37.4	128.1	10.8
LOS	F	E	A	D	F	B
Approach Delay	158.2			37.4		40.6
Approach LOS	F			D		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.25	
Intersection Signal Delay: 72.4	Intersection LOS: E
Intersection Capacity Utilization 108.7%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	556	15	204	18	0	5	0	583	521	219	643	0
Future Volume (veh/h)	556	15	204	18	0	5	0	583	521	219	643	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	579	16	115	19	0	3	0	607	434	228	670	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	467	13	93	0	0	0	0	666	476	364	2100	0
Arrive On Green	0.32	0.32	0.32	0.00	0.00	0.00	0.00	0.33	0.33	0.40	1.00	0.00
Sat Flow, veh/h	1448	40	288		0		0	2083	1421	1810	3705	0
Grp Volume(v), veh/h	710	0	0		0.0		0	551	490	228	670	0
Grp Sat Flow(s),veh/h/ln	1776	0	0				0	1805	1604	1810	1805	0
Q Serve(g_s), s	35.5	0.0	0.0				0.0	32.1	32.2	11.1	0.0	0.0
Cycle Q Clear(g_c), s	35.5	0.0	0.0				0.0	32.1	32.2	11.1	0.0	0.0
Prop In Lane	0.82		0.16				0.00		0.89	1.00		0.00
Lane Grp Cap(c), veh/h	573	0	0				0	605	537	364	2100	0
V/C Ratio(X)	1.24	0.00	0.00				0.00	0.91	0.91	0.63	0.32	0.00
Avail Cap(c_a), veh/h	573	0	0				0	673	598	364	2100	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.71	0.71	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.3	0.0	0.0				0.0	35.0	35.0	29.5	0.0	0.0
Incr Delay (d2), s/veh	121.9	0.0	0.0				0.0	15.6	17.2	2.5	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	33.9	0.0	0.0				0.0	16.1	14.6	4.2	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	159.1	0.0	0.0				0.0	50.6	52.2	32.1	0.4	0.0
LnGrp LOS	F	A	A				A	D	D	C	A	A
Approach Vol, veh/h		710						1041			898	
Approach Delay, s/veh		159.1						51.4			8.4	
Approach LOS		F						D			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	27.2	41.8		41.0		69.0
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0
Max Green Setting (Gmax), s	8.5	* 41		35.5		54.0
Max Q Clear Time (g_c+I1), s	13.1	34.2		37.5		2.0
Green Ext Time (p_c), s	0.0	2.6		0.0		3.0

Intersection Summary		
HCM 6th Ctrl Delay		65.7
HCM 6th LOS		E

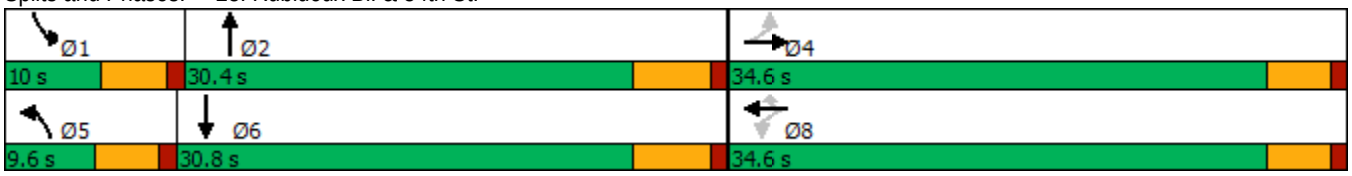
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	162	32	29	20	123	32	856	52	782
Future Volume (vph)	162	32	29	20	123	32	856	52	782
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	30.6	30.6	34.6	34.6	34.6	9.6	29.4	9.6	22.4
Total Split (s)	34.6	34.6	34.6	34.6	34.6	9.6	30.4	10.0	30.8
Total Split (%)	46.1%	46.1%	46.1%	46.1%	46.1%	12.8%	40.5%	13.3%	41.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	4.6	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		16.4		16.4	16.4	5.5	21.9	5.7	23.8
Actuated g/C Ratio		0.30		0.30	0.30	0.10	0.40	0.11	0.44
v/c Ratio		0.57		0.12	0.24	0.20	0.71	0.31	0.59
Control Delay		22.6		16.2	4.5	32.4	19.3	33.5	15.3
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		22.6		16.2	4.5	32.4	19.3	33.5	15.3
LOS		C		B	A	C	B	C	B
Approach Delay		22.6		7.8			19.7		16.4
Approach LOS		C		A			B		B

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 54.2	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 17.8	Intersection LOS: B
Intersection Capacity Utilization 64.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 23: Rubidoux Bl. & 34th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	162	32	21	29	20	123	32	856	60	52	782	50
Future Volume (veh/h)	162	32	21	29	20	123	32	856	60	52	782	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.98		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	182	36	15	33	22	68	36	962	60	58	879	48
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	402	74	24	351	207	433	71	1305	81	101	1374	75
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.04	0.38	0.38	0.06	0.39	0.39
Sat Flow, veh/h	1010	274	88	868	770	1610	1810	3445	215	1810	3481	190
Grp Volume(v), veh/h	233	0	0	55	0	68	36	504	518	58	456	471
Grp Sat Flow(s),veh/h/ln	1372	0	0	1638	0	1610	1810	1805	1855	1810	1805	1866
Q Serve(g_s), s	6.5	0.0	0.0	0.0	0.0	1.6	1.0	11.8	11.8	1.5	10.1	10.1
Cycle Q Clear(g_c), s	7.5	0.0	0.0	1.1	0.0	1.6	1.0	11.8	11.8	1.5	10.1	10.1
Prop In Lane	0.78		0.06	0.60		1.00	1.00		0.12	1.00		0.10
Lane Grp Cap(c), veh/h	499	0	0	558	0	433	71	684	702	101	713	737
V/C Ratio(X)	0.47	0.00	0.00	0.10	0.00	0.16	0.50	0.74	0.74	0.58	0.64	0.64
Avail Cap(c_a), veh/h	978	0	0	1077	0	982	184	917	942	199	932	963
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.0	0.0	0.0	13.5	0.0	13.7	23.2	13.2	13.2	22.7	12.1	12.1
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.1	0.0	0.2	2.0	2.1	2.1	1.9	1.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.0	0.4	0.0	0.5	0.4	4.0	4.1	0.6	3.2	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.7	0.0	0.0	13.6	0.0	13.9	25.2	15.3	15.3	24.6	13.0	13.0
LnGrp LOS	B	A	A	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		233			123			1058			985	
Approach Delay, s/veh		16.7			13.8			15.6			13.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.3	24.0		17.8	6.5	24.8		17.8				
Change Period (Y+Rc), s	4.6	5.4		4.6	4.6	5.4		4.6				
Max Green Setting (Gmax), s	5.4	25.0		30.0	5.0	25.4		30.0				
Max Q Clear Time (g_c+I1), s	3.5	13.8		9.5	3.0	12.1		3.6				
Green Ext Time (p_c), s	0.0	4.7		1.4	0.0	4.6		0.5				

Intersection Summary			
HCM 6th Ctrl Delay		14.8	
HCM 6th LOS		B	

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	674	63	0	0	23	33
Future Vol, veh/h	674	63	0	0	23	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	695	65	0	0	24	34

Major/Minor	Major1			Minor1	
Conflicting Flow All	0	0		728	728
Stage 1	-	-		728	-
Stage 2	-	-		0	-
Critical Hdwy	-	-		6.4	6.2
Critical Hdwy Stg 1	-	-		5.4	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	-		3.5	3.3
Pot Cap-1 Maneuver	-	-		393	427
Stage 1	-	-		482	-
Stage 2	-	-		-	-
Platoon blocked, %	-	-			
Mov Cap-1 Maneuver	-	-		393	427
Mov Cap-2 Maneuver	-	-		393	-
Stage 1	-	-		482	-
Stage 2	-	-		-	-

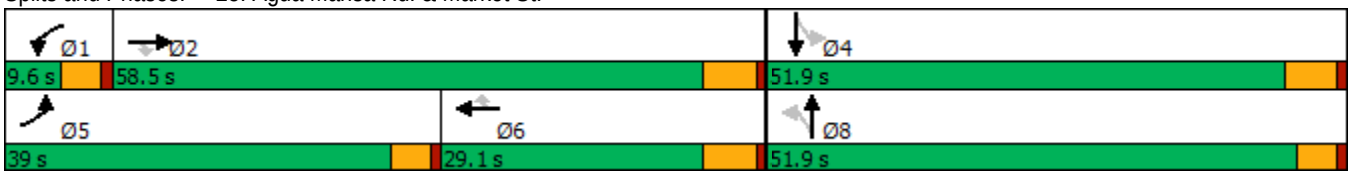
Approach	EB	NB
HCM Control Delay, s	0	15.2
HCM LOS		C

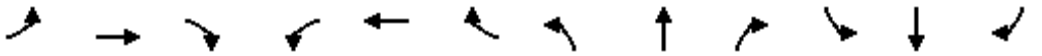
Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	412	-	-
HCM Lane V/C Ratio	0.14	-	-
HCM Control Delay (s)	15.2	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	0.5	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	343	475	10	4	593	168	19	2	122	16
Future Volume (vph)	343	475	10	4	593	168	19	2	122	16
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	5	2		1	6			8		4
Permitted Phases			2			6	8		4	
Detector Phase	5	2	2	1	6	6	8	8	4	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	31.8	31.8	9.6	26.8	26.8	14.6	14.6	43.8	43.8
Total Split (s)	39.0	58.5	58.5	9.6	29.1	29.1	51.9	51.9	51.9	51.9
Total Split (%)	32.5%	48.8%	48.8%	8.0%	24.3%	24.3%	43.3%	43.3%	43.3%	43.3%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None
Act Effct Green (s)	25.7	55.3	55.3	5.1	26.6	26.6		37.1		35.9
Actuated g/C Ratio	0.25	0.53	0.53	0.05	0.25	0.25		0.35		0.34
v/c Ratio	0.86	0.28	0.01	0.05	0.72	0.35		0.07		0.91
Control Delay	57.8	16.0	0.0	55.2	44.1	7.9		17.7		45.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	57.8	16.0	0.0	55.2	44.1	7.9		17.7		45.1
LOS	E	B	A	E	D	A		B		D
Approach Delay		33.1			36.1			17.7		45.1
Approach LOS		C			D			B		D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 104.7	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 36.8	Intersection LOS: D
Intersection Capacity Utilization 79.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	343	475	10	4	593	168	19	2	8	122	16	365
Future Volume (veh/h)	343	475	10	4	593	168	19	2	8	122	16	365
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	381	528	8	4	659	148	21	2	7	136	18	312
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	415	1844	823	9	1036	461	240	29	64	183	32	344
Arrive On Green	0.23	0.51	0.51	0.01	0.29	0.29	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1810	3610	1610	1810	3610	1607	552	88	195	422	97	1052
Grp Volume(v), veh/h	381	528	8	4	659	148	30	0	0	466	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1607	835	0	0	1571	0	0
Q Serve(g_s), s	21.2	8.6	0.3	0.2	16.4	7.5	0.0	0.0	0.0	26.8	0.0	0.0
Cycle Q Clear(g_c), s	21.2	8.6	0.3	0.2	16.4	7.5	1.6	0.0	0.0	29.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.70		0.23	0.29		0.67
Lane Grp Cap(c), veh/h	415	1844	823	9	1036	461	332	0	0	559	0	0
V/C Ratio(X)	0.92	0.29	0.01	0.42	0.64	0.32	0.09	0.00	0.00	0.83	0.00	0.00
Avail Cap(c_a), veh/h	603	1844	823	88	1036	461	490	0	0	746	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	38.8	14.5	12.4	51.1	32.1	28.9	23.8	0.0	0.0	33.1	0.0	0.0
Incr Delay (d2), s/veh	11.9	0.4	0.0	10.6	3.0	1.8	0.1	0.0	0.0	6.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	3.3	0.1	0.1	7.2	3.0	0.5	0.0	0.0	11.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.7	14.8	12.4	61.8	35.1	30.7	23.9	0.0	0.0	39.3	0.0	0.0
LnGrp LOS	D	B	B	E	D	C	C	A	A	D	A	A
Approach Vol, veh/h		917			811			30			466	
Approach Delay, s/veh		29.7			34.4			23.9			39.3	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	58.5		39.5	28.2	35.4		39.5				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	52.7		46.1	34.4	23.3		* 47				
Max Q Clear Time (g_c+I1), s	2.2	10.6		31.2	23.2	18.4		3.6				
Green Ext Time (p_c), s	0.0	3.5		2.5	0.4	2.0		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		33.4	
HCM 6th LOS		C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	168	2	22	19	13	4	14	49	2	17	2
Future Vol, veh/h	8	168	2	22	19	13	4	14	49	2	17	2
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	205	2	27	23	16	5	17	60	2	21	2
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	9.4	8	7.6	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	6%	5%	0%	54%	0%	10%
Vol Thru, %	21%	95%	0%	46%	0%	81%
Vol Right, %	73%	0%	100%	0%	100%	10%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	67	176	2	41	13	21
LT Vol	4	8	0	22	0	2
Through Vol	14	168	0	19	0	17
RT Vol	49	0	2	0	13	2
Lane Flow Rate	82	215	2	50	16	26
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.095	0.283	0.003	0.072	0.019	0.033
Departure Headway (Hd)	4.199	4.747	4.023	5.184	4.211	4.65
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	857	749	877	693	852	773
Service Time	2.206	2.532	1.807	2.899	1.926	2.66
HCM Lane V/C Ratio	0.096	0.287	0.002	0.072	0.019	0.034
HCM Control Delay	7.6	9.4	6.8	8.3	7	7.8
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.3	1.2	0	0.2	0.1	0.1

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	0	8	14	0	4	6	76	8	1	75	8
Future Vol, veh/h	4	0	8	14	0	4	6	76	8	1	75	8
Conflicting Peds, #/hr	0	0	1	0	0	1	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	0	10	18	0	5	8	96	10	1	95	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	223	224	101	225	224	102	105	0	0	106	0	0
Stage 1	102	102	-	117	117	-	-	-	-	-	-	-
Stage 2	121	122	-	108	107	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	737	678	960	735	678	959	1499	-	-	1498	-	-
Stage 1	909	815	-	892	803	-	-	-	-	-	-	-
Stage 2	888	799	-	902	811	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	728	673	959	723	673	958	1499	-	-	1498	-	-
Mov Cap-2 Maneuver	728	673	-	723	673	-	-	-	-	-	-	-
Stage 1	904	814	-	887	798	-	-	-	-	-	-	-
Stage 2	877	794	-	891	810	-	-	-	-	-	-	-

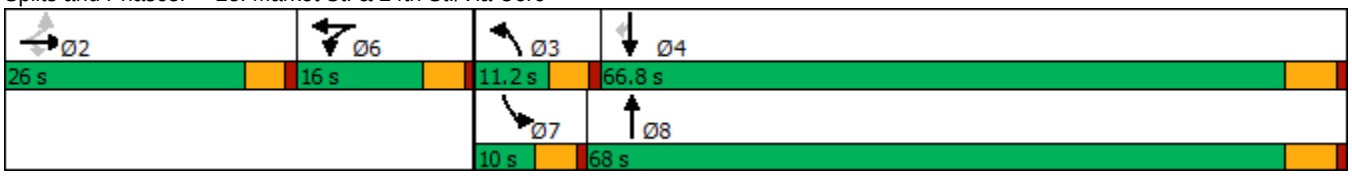
Approach	EB	WB	NB	SB
HCM Control Delay, s	9.2	9.9	0.5	0.1
HCM LOS	A	A		

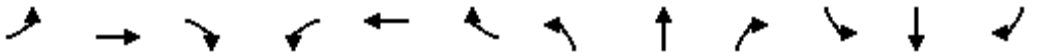
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1499	-	-	867	765	1498	-	-
HCM Lane V/C Ratio	0.005	-	-	0.018	0.03	0.001	-	-
HCM Control Delay (s)	7.4	0	-	9.2	9.9	7.4	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	4	33	173	100	8	40	756	30	580	3
Future Volume (vph)	4	33	173	100	8	40	756	30	580	3
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	26.0	26.0	26.0	16.0	16.0	11.2	68.0	10.0	66.8	66.8
Total Split (%)	21.7%	21.7%	21.7%	13.3%	13.3%	9.3%	56.7%	8.3%	55.7%	55.7%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		11.9	11.9	10.9	10.9	6.1	62.6	5.3	61.9	61.9
Actuated g/C Ratio		0.11	0.11	0.10	0.10	0.06	0.59	0.05	0.58	0.58
v/c Ratio		0.45	0.54	0.57	0.07	0.41	0.89	0.36	0.55	0.00
Control Delay		62.0	12.8	60.1	36.2	62.7	32.6	62.8	17.6	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		62.0	12.8	60.1	36.2	62.7	32.6	62.8	17.6	0.0
LOS		E	B	E	D	E	C	E	B	A
Approach Delay		21.5			57.3		33.8		19.7	
Approach LOS		C			E		C		B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 106.1	
Natural Cycle: 105	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 29.3	Intersection LOS: C
Intersection Capacity Utilization 71.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	33	173	100	8	6	40	756	170	30	580	3
Future Volume (veh/h)	4	33	173	100	8	6	40	756	170	30	580	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	4	35	89	105	8	5	42	796	157	32	611	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	18	161	152	168	101	63	61	918	181	52	1123	952
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.03	0.60	0.60	0.03	0.59	0.59
Sat Flow, veh/h	194	1696	1605	1810	1094	683	1810	1541	304	1810	1900	1610
Grp Volume(v), veh/h	39	0	89	105	0	13	42	0	953	32	611	3
Grp Sat Flow(s),veh/h/ln	1890	0	1605	1810	0	1777	1810	0	1845	1810	1900	1610
Q Serve(g_s), s	2.0	0.0	5.5	5.8	0.0	0.7	2.4	0.0	45.1	1.8	20.2	0.1
Cycle Q Clear(g_c), s	2.0	0.0	5.5	5.8	0.0	0.7	2.4	0.0	45.1	1.8	20.2	0.1
Prop In Lane	0.10		1.00	1.00		0.38	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	179	0	152	168	0	165	61	0	1099	52	1123	952
V/C Ratio(X)	0.22	0.00	0.59	0.63	0.00	0.08	0.69	0.00	0.87	0.61	0.54	0.00
Avail Cap(c_a), veh/h	388	0	329	198	0	194	114	0	1099	94	1123	952
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	0.0	45.3	45.6	0.0	43.3	49.9	0.0	17.6	50.1	12.9	8.7
Incr Delay (d2), s/veh	0.6	0.0	3.5	4.6	0.0	0.2	5.0	0.0	9.2	4.2	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	2.3	2.9	0.0	0.3	1.1	0.0	18.9	0.9	8.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.3	0.0	48.8	50.3	0.0	43.5	54.9	0.0	26.9	54.3	14.8	8.7
LnGrp LOS	D	A	D	D	A	D	D	A	C	D	B	A
Approach Vol, veh/h		128			118			995			646	
Approach Delay, s/veh		47.4			49.5			28.1			16.7	
Approach LOS		D			D			C			B	

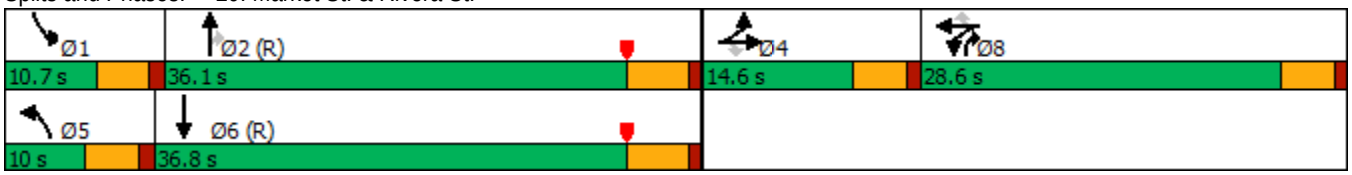
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.5	8.1	67.5		14.3	7.6	68.0				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		21.4	6.6	61.0		11.4	5.4	62.2				
Max Q Clear Time (g_c+I1), s		7.5	4.4	22.2		7.8	3.8	47.1				
Green Ext Time (p_c), s		0.3	0.0	4.1		0.1	0.0	6.1				

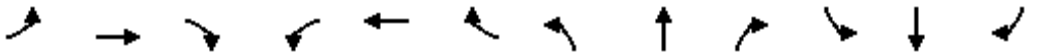
Intersection Summary												
HCM 6th Ctrl Delay			26.8									
HCM 6th LOS			C									

Lane Group	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	18	324	0	55	23	934	320	40	842
Future Volume (vph)	18	324	0	55	23	934	320	40	842
Turn Type	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases		8	8		5	2	8	1	6
Permitted Phases	4			8			2		
Detector Phase	4	8	8	8	5	2	8	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	14.6	28.6	28.6	28.6	9.6	35.1	28.6	9.6	29.1
Total Split (s)	14.6	28.6	28.6	28.6	10.0	36.1	28.6	10.7	36.8
Total Split (%)	16.2%	31.8%	31.8%	31.8%	11.1%	40.1%	31.8%	11.9%	40.9%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.1	3.6	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	5.1	4.6	4.6	5.1
Lead/Lag					Lead	Lag		Lead	Lag
Lead-Lag Optimize?					Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	10.0	16.3	16.3	16.3	5.5	51.4	68.2	6.1	54.0
Actuated g/C Ratio	0.11	0.18	0.18	0.18	0.06	0.57	0.76	0.07	0.60
v/c Ratio	0.05	0.54	0.54	0.14	0.22	0.47	0.26	0.34	0.40
Control Delay	0.3	38.9	38.9	0.8	41.0	18.4	0.8	47.6	14.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.0
Total Delay	0.3	38.9	38.9	0.8	41.0	18.7	0.9	47.6	14.4
LOS	A	D	D	A	D	B	A	D	B
Approach Delay			33.3			14.6			15.9
Approach LOS			C			B			B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 2 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay: 17.7	Intersection LOS: B
Intersection Capacity Utilization 52.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 29: Market St. & Rivera St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	18	324	0	55	23	934	320	40	842	1
Future Volume (veh/h)	0	0	18	324	0	55	23	934	320	40	842	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	0	5	334	0	33	24	963	224	41	868	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	0	25	21	447	0	194	45	2230	1193	64	2325	3
Arrive On Green	0.00	0.00	0.01	0.12	0.00	0.12	0.05	1.00	1.00	0.04	0.63	0.63
Sat Flow, veh/h	0	1900	1610	3619	0	1573	1810	3610	1609	1810	3700	4
Grp Volume(v), veh/h	0	0	5	334	0	33	24	963	224	41	423	446
Grp Sat Flow(s),veh/h/ln	0	1900	1610	1810	0	1573	1810	1805	1609	1810	1805	1899
Q Serve(g_s), s	0.0	0.0	0.3	8.0	0.0	1.7	1.2	0.0	0.0	2.0	10.3	10.3
Cycle Q Clear(g_c), s	0.0	0.0	0.3	8.0	0.0	1.7	1.2	0.0	0.0	2.0	10.3	10.3
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	25	21	447	0	194	45	2230	1193	64	1134	1193
V/C Ratio(X)	0.00	0.00	0.24	0.75	0.00	0.17	0.53	0.43	0.19	0.64	0.37	0.37
Avail Cap(c_a), veh/h	0	211	179	965	0	420	109	2230	1193	123	1134	1193
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	0.88	0.88	0.88	0.82	0.82	0.82
Uniform Delay (d), s/veh	0.0	0.0	44.0	38.1	0.0	35.3	42.2	0.0	0.0	42.8	8.1	8.1
Incr Delay (d2), s/veh	0.0	0.0	5.7	2.5	0.0	0.4	3.1	0.5	0.3	3.2	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	3.7	0.0	0.7	0.5	0.2	0.1	0.9	3.4	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	49.6	40.6	0.0	35.7	45.3	0.5	0.3	46.0	8.9	8.9
LnGrp LOS	A	A	D	D	A	D	D	A	A	D	A	A
Approach Vol, veh/h		5			367			1211			910	
Approach Delay, s/veh		49.6			40.2			1.4			10.5	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	60.7		5.8	6.9	61.7		15.7				
Change Period (Y+Rc), s	4.6	5.1		4.6	4.6	5.1		4.6				
Max Green Setting (Gmax), s	6.1	31.0		10.0	5.4	31.7		24.0				
Max Q Clear Time (g_c+I1), s	4.0	2.0		2.3	3.2	12.3		10.0				
Green Ext Time (p_c), s	0.0	8.0		0.0	0.0	4.8		1.1				

Intersection Summary			
HCM 6th Ctrl Delay		10.5	
HCM 6th LOS		B	

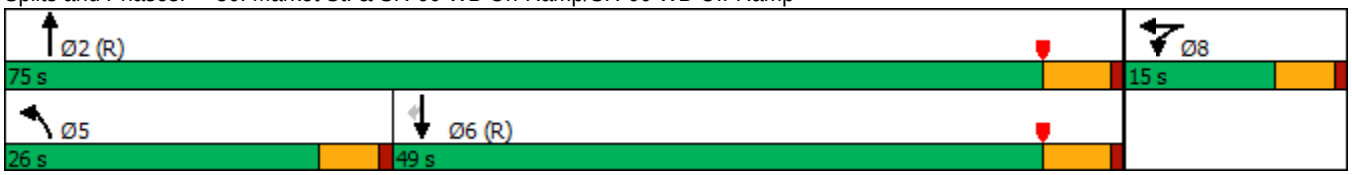
Notes

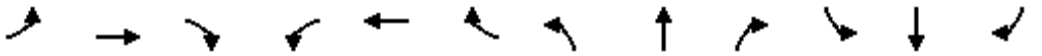
User approved volume balancing among the lanes for turning movement.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	917	196	360	989	195
Future Volume (vph)	0	917	196	360	989	195
Turn Type	NA	Free	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		Free				6
Detector Phase	8		5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	10.0		10.0	24.5	10.5	10.5
Total Split (s)	15.0		26.0	75.0	49.0	49.0
Total Split (%)	16.7%		28.9%	83.3%	54.4%	54.4%
Yellow Time (s)	4.0		4.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	C-Min	C-Min	C-Min
Act Effct Green (s)	8.4	90.0	15.4	74.3	52.8	52.8
Actuated g/C Ratio	0.09	1.00	0.17	0.83	0.59	0.59
v/c Ratio	0.39	0.60	0.67	0.13	0.49	0.20
Control Delay	44.5	1.6	27.2	5.3	10.5	2.1
Queue Delay	0.0	0.1	0.0	0.0	0.2	0.0
Total Delay	44.5	1.7	27.2	5.3	10.7	2.1
LOS	D	A	C	A	B	A
Approach Delay	4.4			13.0	9.3	
Approach LOS	A			B	A	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 8.3	Intersection LOS: A
Intersection Capacity Utilization 67.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 30: Market St. & SR-60 WB On-Ramp/SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	62	0	917	196	360	0	0	989	195
Future Volume (veh/h)	0	0	0	62	0	917	196	360	0	0	989	195
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				65	0	0	206	379	0	0	1041	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				85	0		242	3019	0	0	2337	
Arrive On Green				0.05	0.00	0.00	0.27	1.00	0.00	0.00	1.00	0.00
Sat Flow, veh/h				1810	0	1610	1810	3705	0	0	3705	1610
Grp Volume(v), veh/h				65	0	0	206	379	0	0	1041	0
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1805	1610
Q Serve(g_s), s				3.2	0.0	0.0	9.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				3.2	0.0	0.0	9.7	0.0	0.0	0.0	0.0	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				85	0		242	3019	0	0	2337	
V/C Ratio(X)				0.76	0.00		0.85	0.13	0.00	0.00	0.45	
Avail Cap(c_a), veh/h				201	0		422	3019	0	0	2337	
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	0.00	0.00	0.89	0.89	0.00	0.00	0.91	0.00
Uniform Delay (d), s/veh				42.4	0.0	0.0	32.1	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				13.2	0.0	0.0	7.5	0.1	0.0	0.0	0.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.7	0.0	0.0	4.0	0.0	0.0	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				55.6	0.0	0.0	39.6	0.1	0.0	0.0	0.6	0.0
LnGrp LOS				E	A		D	A	A	A	A	
Approach Vol, veh/h					65			585			1041	
Approach Delay, s/veh					55.6			14.0			0.6	
Approach LOS					E			B			A	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		80.8			17.0	63.8		9.2				
Change Period (Y+Rc), s		5.5			5.0	5.5		5.0				
Max Green Setting (Gmax), s		69.5			21.0	43.5		10.0				
Max Q Clear Time (g_c+I1), s		2.0			11.7	2.0		5.2				
Green Ext Time (p_c), s		2.6			0.4	8.3		0.1				

Intersection Summary		
HCM 6th Ctrl Delay	7.3	
HCM 6th LOS	A	

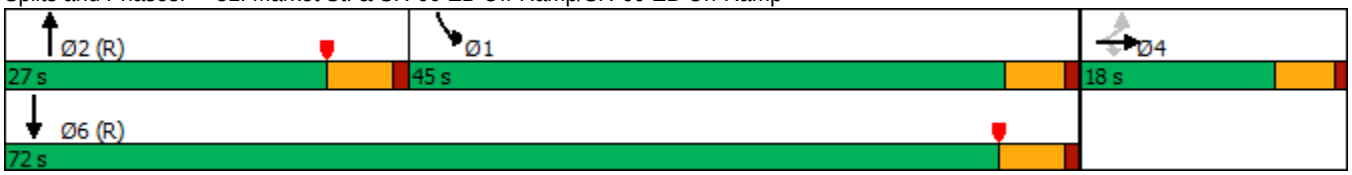
Notes

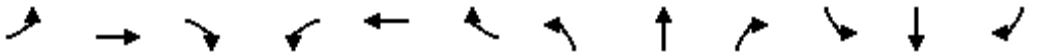
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	0	515	419	600	452
Future Volume (vph)	0	515	419	600	452
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	24.5	10.0	10.5
Total Split (s)	18.0	18.0	27.0	45.0	72.0
Total Split (%)	20.0%	20.0%	30.0%	50.0%	80.0%
Yellow Time (s)	4.0	4.0	4.5	4.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.0	5.5
Lead/Lag			Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Min	None	C-Min
Act Effct Green (s)	11.8	11.8	27.7	35.0	67.7
Actuated g/C Ratio	0.13	0.13	0.31	0.39	0.75
v/c Ratio	0.59	0.63	0.46	0.87	0.17
Control Delay	47.2	7.2	27.5	38.4	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	47.2	7.2	27.5	38.4	4.5
LOS	D	A	C	D	A
Approach Delay	15.6		27.5		23.8
Approach LOS	B		C		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 15 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 22.2	Intersection LOS: C
Intersection Capacity Utilization 67.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 31: Market St. & SR-60 EB Off-Ramp/SR-60 EB On-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	0	515	0	0	0	0	419	77	600	452	0
Future Volume (veh/h)	137	0	515	0	0	0	0	419	77	600	452	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	140	0	261				0	428	0	612	461	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	213	0	333				0	560		994	2765	0
Arrive On Green	0.12	0.00	0.12				0.00	0.16	0.00	0.92	1.00	0.00
Sat Flow, veh/h	1810	0	2834				0	3800	0	1810	3705	0
Grp Volume(v), veh/h	140	0	261				0	428	0	612	461	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1805	0	1810	1805	0
Q Serve(g_s), s	6.7	0.0	8.1				0.0	10.2	0.0	5.8	0.0	0.0
Cycle Q Clear(g_c), s	6.7	0.0	8.1				0.0	10.2	0.0	5.8	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	213	0	333				0	560		994	2765	0
V/C Ratio(X)	0.66	0.00	0.78				0.00	0.76		0.62	0.17	0.00
Avail Cap(c_a), veh/h	261	0	409				0	862		994	2765	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.86	0.86	0.00
Uniform Delay (d), s/veh	38.0	0.0	38.6				0.0	36.4	0.0	1.9	0.0	0.0
Incr Delay (d2), s/veh	4.3	0.0	7.8				0.0	9.5	0.0	1.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	3.0				0.0	5.1	0.0	1.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.3	0.0	46.4				0.0	46.0	0.0	2.9	0.1	0.0
LnGrp LOS	D	A	D				A	D		A	A	A
Approach Vol, veh/h		401						428			1073	
Approach Delay, s/veh		45.0						46.0			1.7	
Approach LOS		D						D			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	55.0	19.5		15.6		74.4
Change Period (Y+Rc), s	5.5	* 5.5		5.0		5.5
Max Green Setting (Gmax), s	40.0	* 22		13.0		66.5
Max Q Clear Time (g_c+I1), s	7.8	12.2		10.1		2.0
Green Ext Time (p_c), s	2.1	1.7		0.5		3.2

Intersection Summary		
HCM 6th Ctrl Delay		20.8
HCM 6th LOS		C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	1	15	0	0	5	10	467	5	110	825	32
Future Vol, veh/h	23	1	15	0	0	5	10	467	5	110	825	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	145	-	-	140	-	110
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	24	1	16	0	0	5	10	486	5	115	859	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1352	1602	430	1171	1633	248	892	0	0	493	0	0
Stage 1	1089	1089	-	511	511	-	-	-	-	-	-	-
Stage 2	263	513	-	660	1122	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	242	167	*774	*367	157	758	1131	-	-	1081	-	-
Stage 1	483	470	-	*519	540	-	-	-	-	-	-	-
Stage 2	725	539	-	*730	449	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	220	147	*774	*327	139	757	1131	-	-	1079	-	-
Mov Cap-2 Maneuver	341	258	-	*403	267	-	-	-	-	-	-	-
Stage 1	479	420	-	*513	534	-	-	-	-	-	-	-
Stage 2	714	533	-	*637	401	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.2	9.8	0.2	1
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1131	-	-	430	757	1079	-	-
HCM Lane V/C Ratio	0.009	-	-	0.094	0.007	0.106	-	-
HCM Control Delay (s)	8.2	-	-	14.2	9.8	8.7	-	-
HCM Lane LOS	A	-	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	170	42	19	426	537	107
Future Vol, veh/h	170	42	19	426	537	107
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	181	45	20	453	571	114

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	895	628	685	0	-	0
Stage 1	628	-	-	-	-	-
Stage 2	267	-	-	-	-	-
Critical Hdwy	6.6	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	299	487	918	-	-	-
Stage 1	536	-	-	-	-	-
Stage 2	760	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	292	487	918	-	-	-
Mov Cap-2 Maneuver	408	-	-	-	-	-
Stage 1	524	-	-	-	-	-
Stage 2	760	-	-	-	-	-

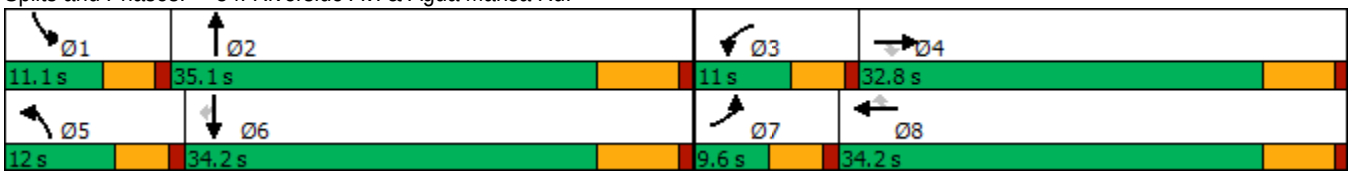
Approach	EB	NB	SB
HCM Control Delay, s	22.9	0.4	0
HCM LOS	C		

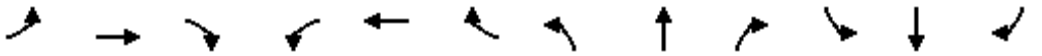
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	918	-	422	-	-
HCM Lane V/C Ratio	0.022	-	0.534	-	-
HCM Control Delay (s)	9	-	22.9	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	3.1	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	89	283	147	139	391	69	158	487	47	588	108
Future Volume (vph)	89	283	147	139	391	69	158	487	47	588	108
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	9.6	32.8	32.8	11.0	34.2	34.2	12.0	35.1	11.1	34.2	34.2
Total Split (%)	10.7%	36.4%	36.4%	12.2%	38.0%	38.0%	13.3%	39.0%	12.3%	38.0%	38.0%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	5.1	19.6	19.6	6.5	21.1	21.1	7.6	25.6	6.0	19.4	19.4
Actuated g/C Ratio	0.07	0.26	0.26	0.09	0.28	0.28	0.10	0.34	0.08	0.26	0.26
v/c Ratio	0.78	0.61	0.29	0.94	0.78	0.13	0.93	0.47	0.34	0.67	0.22
Control Delay	79.3	30.5	5.7	99.9	36.6	0.5	90.3	22.6	43.5	29.3	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.3	30.5	5.7	99.9	36.6	0.5	90.3	22.6	43.5	29.3	3.6
LOS	E	C	A	F	D	A	F	C	D	C	A
Approach Delay		31.9			47.2			37.9		26.5	
Approach LOS		C			D			D		C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 75.1	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 35.5	Intersection LOS: D
Intersection Capacity Utilization 68.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	283	147	139	391	69	158	487	52	47	588	108
Future Volume (veh/h)	89	283	147	139	391	69	158	487	52	47	588	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	95	301	92	148	416	49	168	518	51	50	626	96
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	122	451	382	171	503	426	198	1010	99	82	866	386
Arrive On Green	0.07	0.24	0.24	0.09	0.26	0.26	0.11	0.30	0.30	0.05	0.24	0.24
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3320	326	1810	3610	1610
Grp Volume(v), veh/h	95	301	92	148	416	49	168	281	288	50	626	96
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1841	1810	1805	1610
Q Serve(g_s), s	3.5	9.7	3.1	5.4	13.9	1.6	6.2	8.7	8.7	1.8	10.8	3.3
Cycle Q Clear(g_c), s	3.5	9.7	3.1	5.4	13.9	1.6	6.2	8.7	8.7	1.8	10.8	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	122	451	382	171	503	426	198	549	560	82	866	386
V/C Ratio(X)	0.78	0.67	0.24	0.86	0.83	0.12	0.85	0.51	0.51	0.61	0.72	0.25
Avail Cap(c_a), veh/h	134	760	644	171	799	677	198	764	780	174	1481	660
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.0	23.3	20.8	30.1	23.4	18.8	29.5	19.4	19.4	31.7	23.6	20.7
Incr Delay (d2), s/veh	19.9	1.7	0.3	32.4	4.1	0.1	26.2	0.7	0.7	2.8	1.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	4.0	1.1	3.7	6.0	0.5	3.8	3.1	3.2	0.8	4.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.8	25.0	21.1	62.6	27.4	19.0	55.7	20.1	20.1	34.4	24.8	21.1
LnGrp LOS	D	C	C	E	C	B	E	C	C	C	C	C
Approach Vol, veh/h		488			613			737			772	
Approach Delay, s/veh		29.3			35.2			28.2			24.9	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	27.1	11.0	21.8	12.0	22.7	9.2	23.7
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	6.5	28.6	6.4	27.0	7.4	27.7	5.0	28.4
Max Q Clear Time (g_c+I1), s	3.8	10.7	7.4	11.7	8.2	12.8	5.5	15.9
Green Ext Time (p_c), s	0.0	2.7	0.0	1.6	0.0	3.4	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	29.1
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	0	0	160	694	1
Future Vol, veh/h	4	0	0	160	694	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	92	92	92	92	62
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	0	0	174	754	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	929	755	756	0	-	0
Stage 1	755	-	-	-	-	-
Stage 2	174	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	300	412	864	-	-	-
Stage 1	468	-	-	-	-	-
Stage 2	861	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	300	412	864	-	-	-
Mov Cap-2 Maneuver	300	-	-	-	-	-
Stage 1	468	-	-	-	-	-
Stage 2	861	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	864	-	300	-	-
HCM Lane V/C Ratio	-	-	0.022	-	-
HCM Control Delay (s)	0	-	17.3	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	21

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	71	0	226	45	2	664
Future Vol, veh/h	71	0	226	45	2	664
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	91	0	290	58	3	851

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	91	0	729	91
Stage 1	-	-	-	-	91	-
Stage 2	-	-	-	-	638	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1517	-	393	972
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	530	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1517	-	316	972
Mov Cap-2 Maneuver	-	-	-	-	316	-
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	426	-

Approach	EB	WB	NB
HCM Control Delay, s	0	6.6	29.1
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	966	-	-	1517	-
HCM Lane V/C Ratio	0.884	-	-	0.191	-
HCM Control Delay (s)	29.1	-	-	7.9	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	12.2	-	-	0.7	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	7	721	40	25	249	3	18	8	30	1	13	3
Future Vol, veh/h	7	721	40	25	249	3	18	8	30	1	13	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	879	49	30	304	4	22	10	37	1	16	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	308	0	0	928	0	0	1301	1290	904	1311	1312	309
Stage 1	-	-	-	-	-	-	922	922	-	366	366	-
Stage 2	-	-	-	-	-	-	379	368	-	945	946	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1264	-	-	745	-	-	139	165	338	137	160	736
Stage 1	-	-	-	-	-	-	327	352	-	657	626	-
Stage 2	-	-	-	-	-	-	647	625	-	317	343	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1264	-	-	745	-	-	121	155	338	111	150	734
Mov Cap-2 Maneuver	-	-	-	-	-	-	121	155	-	111	150	-
Stage 1	-	-	-	-	-	-	322	347	-	647	595	-
Stage 2	-	-	-	-	-	-	594	594	-	271	338	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.9	33.3	29.1
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	194	1264	-	-	745	-	-	170
HCM Lane V/C Ratio	0.352	0.007	-	-	0.041	-	-	0.122
HCM Control Delay (s)	33.3	7.9	0	-	10	0	-	29.1
HCM Lane LOS	D	A	A	-	B	A	-	D
HCM 95th %tile Q(veh)	1.5	0	-	-	0.1	-	-	0.4

Intersection	
Int Delay, s/veh	2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	20	37	8	21	58
Future Vol, veh/h	12	20	37	8	21	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	100	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	14	23	43	9	24	67

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	163	48	0	0	52	0
Stage 1	48	-	-	-	-	-
Stage 2	115	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	832	1027	-	-	1567	-
Stage 1	980	-	-	-	-	-
Stage 2	915	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	819	1027	-	-	1567	-
Mov Cap-2 Maneuver	819	-	-	-	-	-
Stage 1	980	-	-	-	-	-
Stage 2	900	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	1.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	819	1027	1567	-
HCM Lane V/C Ratio	-	-	0.017	0.023	0.016	-
HCM Control Delay (s)	-	-	9.5	8.6	7.3	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	0	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	8	0	9	0	36	25	10	60	0
Future Vol, veh/h	0	0	0	8	0	9	0	36	25	10	60	0
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	9	0	10	0	40	27	11	66	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	148	156	68	143	143	54	67	0	0	67	0	0
Stage 1	89	89	-	54	54	-	-	-	-	-	-	-
Stage 2	59	67	-	89	89	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	825	740	1001	831	752	1019	1547	-	-	1547	-	-
Stage 1	923	825	-	963	854	-	-	-	-	-	-	-
Stage 2	958	843	-	923	825	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	812	734	999	826	746	1019	1546	-	-	1547	-	-
Mov Cap-2 Maneuver	812	734	-	826	746	-	-	-	-	-	-	-
Stage 1	922	818	-	963	854	-	-	-	-	-	-	-
Stage 2	949	843	-	916	818	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9	0	1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1546	-	-	-	918	1547	-	-
HCM Lane V/C Ratio	-	-	-	-	0.02	0.007	-	-
HCM Control Delay (s)	0	-	-	0	9	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	0	0	41	62	6
Future Vol, veh/h	20	0	0	41	62	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	0	0	45	67	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	116	71	74	0	-	0
Stage 1	71	-	-	-	-	-
Stage 2	45	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	885	997	1538	-	-	-
Stage 1	957	-	-	-	-	-
Stage 2	983	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	885	997	1538	-	-	-
Mov Cap-2 Maneuver	885	-	-	-	-	-
Stage 1	957	-	-	-	-	-
Stage 2	983	-	-	-	-	-

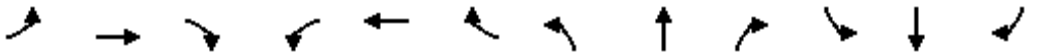
Approach	EB	NB	SB
HCM Control Delay, s	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1538	-	885	-	-
HCM Lane V/C Ratio	-	-	0.025	-	-
HCM Control Delay (s)	0	-	9.2	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	5	392	291	1391	1293	497
Future Volume (vph)	5	392	291	1391	1293	497
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	41.0	41.0	22.0	69.0	47.0	47.0
Total Split (%)	37.3%	37.3%	20.0%	62.7%	42.7%	42.7%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	31.0	31.0	23.2	70.5	43.3	43.3
Actuated g/C Ratio	0.28	0.28	0.21	0.64	0.39	0.39
v/c Ratio	0.83	0.78	0.82	0.65	0.68	0.57
Control Delay	51.2	42.0	68.5	8.8	29.9	4.7
Queue Delay	1.0	0.0	0.0	0.3	0.2	0.0
Total Delay	52.2	42.0	68.5	9.1	30.1	4.7
LOS	D	D	E	A	C	A
Approach Delay	47.4			19.4	23.1	
Approach LOS	D			B	C	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 25.7	Intersection LOS: C
Intersection Capacity Utilization 84.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	319	5	392	291	1391	0	0	1293	497
Future Volume (veh/h)	0	0	0	319	5	392	291	1391	0	0	1293	497
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				343	34	367	313	1496	0	0	1390	347
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				431	43	420	296	2390	0	0	2397	740
Arrive On Green				0.26	0.26	0.26	0.33	1.00	0.00	0.00	0.46	0.46
Sat Flow, veh/h				1653	164	1610	1810	3705	0	0	5358	1601
Grp Volume(v), veh/h				377	0	367	313	1496	0	0	1390	347
Grp Sat Flow(s),veh/h/ln				1817	0	1610	1810	1805	0	0	1729	1601
Q Serve(g_s), s				21.3	0.0	24.0	18.0	0.0	0.0	0.0	21.7	16.4
Cycle Q Clear(g_c), s				21.3	0.0	24.0	18.0	0.0	0.0	0.0	21.7	16.4
Prop In Lane				0.91		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				474	0	420	296	2390	0	0	2397	740
V/C Ratio(X)				0.80	0.00	0.87	1.06	0.63	0.00	0.00	0.58	0.47
Avail Cap(c_a), veh/h				611	0	542	296	2390	0	0	2397	740
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.68	0.68	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				37.9	0.0	38.9	37.0	0.0	0.0	0.0	21.7	20.3
Incr Delay (d2), s/veh				5.6	0.0	12.2	59.0	0.9	0.0	0.0	1.0	2.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.8	0.0	10.5	10.9	0.3	0.0	0.0	8.5	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				43.5	0.0	51.1	96.0	0.9	0.0	0.0	22.8	22.4
LnGrp LOS				D	A	D	F	A	A	A	C	C
Approach Vol, veh/h					744			1809			1737	
Approach Delay, s/veh					47.3			17.3			22.7	
Approach LOS					D			B			C	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		77.3			22.0	55.3		32.7				
Change Period (Y+Rc), s		4.5			4.0	4.5		4.0				
Max Green Setting (Gmax), s		64.5			18.0	42.5		37.0				
Max Q Clear Time (g_c+I1), s		2.0			20.0	23.7		26.0				
Green Ext Time (p_c), s		16.9			0.0	10.6		2.7				

Intersection Summary												
HCM 6th Ctrl Delay			24.7									
HCM 6th LOS			C									

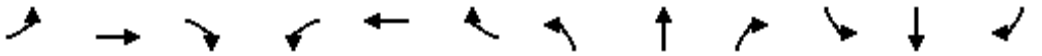
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	536	5	1145	492	417	1195
Future Volume (vph)	536	5	1145	492	417	1195
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	37.1	37.1	32.8	32.8	40.1	72.9
Total Split (%)	33.7%	33.7%	29.8%	29.8%	36.5%	66.3%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	29.3	29.3	39.8	39.8	29.9	73.2
Actuated g/C Ratio	0.27	0.27	0.36	0.36	0.27	0.67
v/c Ratio	0.84	0.76	0.62	0.57	0.87	0.51
Control Delay	54.7	42.1	37.3	16.1	45.5	4.3
Queue Delay	0.0	0.0	0.0	0.0	2.7	0.6
Total Delay	54.7	42.1	37.3	16.1	48.3	4.9
LOS	D	D	D	B	D	A
Approach Delay		48.6	31.0			16.1
Approach LOS		D	C			B

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 28.2	Intersection LOS: C
Intersection Capacity Utilization 84.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	536	5	186	0	0	0	0	1145	492	417	1195	0
Future Volume (veh/h)	536	5	186	0	0	0	0	1145	492	417	1195	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	366	259	180				0	1168	297	426	1219	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	496	286	199				0	1317	406	665	2374	0
Arrive On Green	0.27	0.27	0.27				0.00	0.08	0.08	0.37	0.66	0.00
Sat Flow, veh/h	1810	1044	725				0	5358	1601	1810	3705	0
Grp Volume(v), veh/h	366	0	439				0	1168	297	426	1219	0
Grp Sat Flow(s),veh/h/ln	1810	0	1769				0	1729	1601	1810	1805	0
Q Serve(g_s), s	20.2	0.0	26.3				0.0	24.5	19.9	21.4	19.2	0.0
Cycle Q Clear(g_c), s	20.2	0.0	26.3				0.0	24.5	19.9	21.4	19.2	0.0
Prop In Lane	1.00		0.41				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	496	0	485				0	1317	406	665	2374	0
V/C Ratio(X)	0.74	0.00	0.90				0.00	0.89	0.73	0.64	0.51	0.00
Avail Cap(c_a), veh/h	553	0	540				0	1358	419	665	2374	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.69	0.69	0.68	0.68	0.00
Uniform Delay (d), s/veh	36.3	0.0	38.5				0.0	48.8	46.7	28.8	9.7	0.0
Incr Delay (d2), s/veh	4.6	0.0	17.7				0.0	6.6	7.8	1.1	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	0.0	13.3				0.0	12.1	9.4	9.1	6.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.9	0.0	56.2				0.0	55.4	54.5	29.9	10.3	0.0
LnGrp LOS	D	A	E				A	E	D	C	B	A
Approach Vol, veh/h		805						1465			1645	
Approach Delay, s/veh		49.3						55.2			15.4	
Approach LOS		D						E			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	44.4	31.9		33.7		76.3
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	36.6	* 29		33.6		68.9
Max Q Clear Time (g_c+I1), s	23.4	26.5		28.3		21.2
Green Ext Time (p_c), s	0.5	1.4		1.8		6.7

Intersection Summary		
HCM 6th Ctrl Delay		37.2
HCM 6th LOS		D

Notes

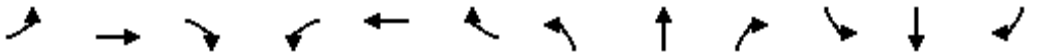
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	222	2	2	2	15	1252	45	1080	256
Future Volume (vph)	222	2	2	2	15	1252	45	1080	256
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases		4		8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	30.0	30.0	10.2	10.2	16.2	28.2	16.2	28.2	28.2
Total Split (s)	40.0	40.0	40.0	40.0	16.2	53.8	16.2	53.8	53.8
Total Split (%)	36.4%	36.4%	36.4%	36.4%	14.7%	48.9%	14.7%	48.9%	48.9%
Yellow Time (s)	5.0	5.0	5.0	5.0	3.0	4.7	3.0	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.0	5.7	4.0	5.7	5.7
Lead/Lag					Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min	C-Min
Act Effct Green (s)	26.1	26.1	26.1	26.1	70.1	63.6	72.8	68.1	68.1
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.64	0.58	0.66	0.62	0.62
v/c Ratio	0.89	0.05	0.01	0.34	0.05	0.63	0.19	0.50	0.26
Control Delay	73.4	12.9	27.5	6.4	4.9	11.6	6.3	13.7	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
Total Delay	73.4	12.9	27.5	6.4	4.9	11.9	6.3	13.7	4.7
LOS	E	B	C	A	A	B	A	B	A
Approach Delay		68.6		6.7		11.8		11.8	
Approach LOS		E		A		B		B	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 68.3 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 16.0	Intersection LOS: B
Intersection Capacity Utilization 74.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 10: Cedar Av. & Orange St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	2	17	2	2	163	15	1252	2	45	1080	256
Future Volume (veh/h)	222	2	17	2	2	163	15	1252	2	45	1080	256
Initial Q (Qb), veh	0	0	0	0	0	0	0	44	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	231	2	13	2	2	124	16	1304	2	47	1125	206
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	319	57	370	425	7	413	217	2106	3	306	2104	917
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.03	1.00	1.00	0.01	0.19	0.19
Sat Flow, veh/h	1285	219	1422	1417	26	1588	1810	3698	6	1810	3610	1573
Grp Volume(v), veh/h	231	0	15	2	0	126	16	636	670	47	1125	206
Grp Sat Flow(s),veh/h/ln	1285	0	1640	1417	0	1614	1810	1805	1899	1810	1805	1573
Q Serve(g_s), s	19.3	0.0	0.8	0.1	0.0	6.9	0.4	0.0	0.0	1.2	30.9	12.2
Cycle Q Clear(g_c), s	26.2	0.0	0.8	0.9	0.0	6.9	0.4	0.0	0.0	1.2	30.9	12.2
Prop In Lane	1.00		0.87	1.00		0.98	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	319	0	427	425	0	420	217	1028	1081	306	2104	917
V/C Ratio(X)	0.72	0.00	0.04	0.00	0.00	0.30	0.07	0.62	0.62	0.15	0.53	0.22
Avail Cap(c_a), veh/h	382	0	507	494	0	499	393	1028	1081	510	2104	917
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.65	0.65	0.65	0.85	0.85	0.85
Uniform Delay (d), s/veh	43.2	0.0	30.4	30.7	0.0	32.6	13.5	0.0	0.0	13.3	31.0	23.4
Incr Delay (d2), s/veh	5.4	0.0	0.0	0.0	0.0	0.4	0.1	1.8	1.7	0.2	0.8	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.7	7.8	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	0.0	0.3	0.0	0.0	2.8	0.2	3.0	2.9	0.5	15.0	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.5	0.0	30.4	30.7	0.0	33.0	13.6	10.5	9.6	13.5	31.8	23.9
LnGrp LOS	D	A	C	C	A	C	B	B	A	B	C	C
Approach Vol, veh/h		246			128			1322			1378	
Approach Delay, s/veh		47.4			33.0			10.1			30.0	
Approach LOS		D			C			B			C	

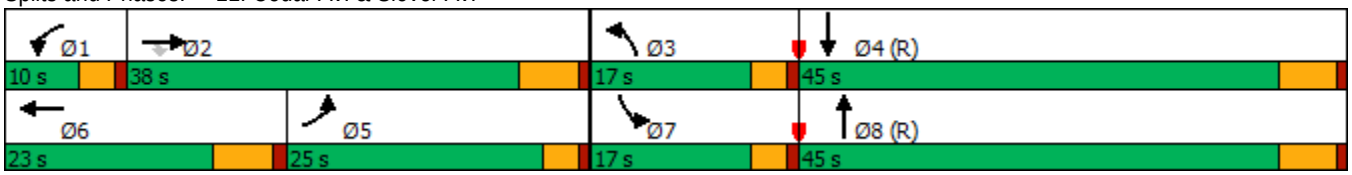
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	68.3		34.6	5.5	69.8		34.6				
Change Period (Y+Rc), s	4.0	5.7		6.0	4.0	5.7		6.0				
Max Green Setting (Gmax), s	12.2	48.1		34.0	12.2	48.1		34.0				
Max Q Clear Time (g_c+I1), s	3.2	2.0		28.2	2.4	32.9		8.9				
Green Ext Time (p_c), s	0.0	11.1		0.4	0.0	7.4		0.8				

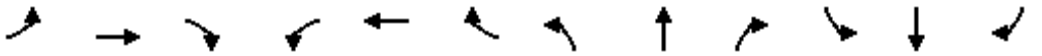
Intersection Summary			
HCM 6th Ctrl Delay		23.0	
HCM 6th LOS		C	

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	218	377	185	33	248	134	903	108	914
Future Volume (vph)	218	377	185	33	248	134	903	108	914
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2		1	6	3	8	7	4
Permitted Phases			2						
Detector Phase	5	2	2	1	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	29.0	29.0	8.0	23.0	8.0	32.7	8.0	24.7
Total Split (s)	25.0	38.0	38.0	10.0	23.0	17.0	45.0	17.0	45.0
Total Split (%)	22.7%	34.5%	34.5%	9.1%	20.9%	15.5%	40.9%	15.5%	40.9%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	4.7	3.0	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	4.0	5.7	4.0	5.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	18.2	31.3	31.3	6.0	15.1	12.3	45.7	11.3	44.7
Actuated g/C Ratio	0.17	0.28	0.28	0.05	0.14	0.11	0.42	0.10	0.41
v/c Ratio	0.79	0.39	0.33	0.36	0.77	0.72	0.68	0.63	0.73
Control Delay	62.4	32.9	5.8	60.5	45.4	55.1	54.5	73.8	28.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.4	32.9	5.8	60.5	45.4	55.1	54.5	73.8	28.2
LOS	E	C	A	E	D	E	D	E	C
Approach Delay		34.7			46.5		54.5		32.7
Approach LOS		C			D		D		C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 41.9	Intersection LOS: D
Intersection Capacity Utilization 75.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 11: Cedar Av. & Slover Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	218	377	185	33	248	148	134	903	44	108	914	77
Future Volume (veh/h)	218	377	185	33	248	148	134	903	44	108	914	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	234	405	155	35	267	105	144	971	45	116	983	75
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	266	976	430	45	331	127	173	1571	73	142	1460	111
Arrive On Green	0.15	0.27	0.27	0.02	0.13	0.13	0.10	0.45	0.45	0.16	0.86	0.86
Sat Flow, veh/h	1810	3610	1590	1810	2551	978	1810	3513	163	1810	3395	259
Grp Volume(v), veh/h	234	405	155	35	187	185	144	499	517	116	523	535
Grp Sat Flow(s),veh/h/ln	1810	1805	1590	1810	1805	1724	1810	1805	1871	1810	1805	1849
Q Serve(g_s), s	13.9	10.1	8.7	2.1	11.1	11.5	8.6	23.2	23.2	6.8	10.6	10.6
Cycle Q Clear(g_c), s	13.9	10.1	8.7	2.1	11.1	11.5	8.6	23.2	23.2	6.8	10.6	10.6
Prop In Lane	1.00		1.00	1.00		0.57	1.00		0.09	1.00		0.14
Lane Grp Cap(c), veh/h	266	976	430	45	234	223	173	807	837	142	776	795
V/C Ratio(X)	0.88	0.41	0.36	0.79	0.80	0.83	0.83	0.62	0.62	0.82	0.67	0.67
Avail Cap(c_a), veh/h	345	1050	462	99	279	266	214	807	837	214	776	795
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.58	0.58	0.58	0.86	0.86	0.86
Uniform Delay (d), s/veh	45.9	33.0	32.4	53.4	46.5	46.7	48.9	23.2	23.2	45.6	5.1	5.1
Incr Delay (d2), s/veh	18.1	0.3	0.5	25.4	12.9	16.7	12.4	2.1	2.0	11.9	4.0	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	4.3	3.3	1.3	5.8	6.0	4.4	9.7	10.0	3.3	2.8	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.0	33.3	33.0	78.7	59.4	63.4	61.2	25.3	25.2	57.5	9.1	9.0
LnGrp LOS	E	C	C	E	E	E	E	C	C	E	A	A
Approach Vol, veh/h		794			407			1160			1174	
Approach Delay, s/veh		42.3			62.9			29.7			13.9	
Approach LOS		D			E			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	35.7	14.5	53.0	22.2	20.3	12.6	54.9
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	6.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	6.0	32.0	13.0	39.3	21.0	* 17	13.0	39.3
Max Q Clear Time (g_c+I1), s	4.1	12.1	10.6	12.6	15.9	13.5	8.8	25.2
Green Ext Time (p_c), s	0.0	2.7	0.1	7.2	0.3	0.7	0.1	5.1

Intersection Summary	
HCM 6th Ctrl Delay	31.1
HCM 6th LOS	C

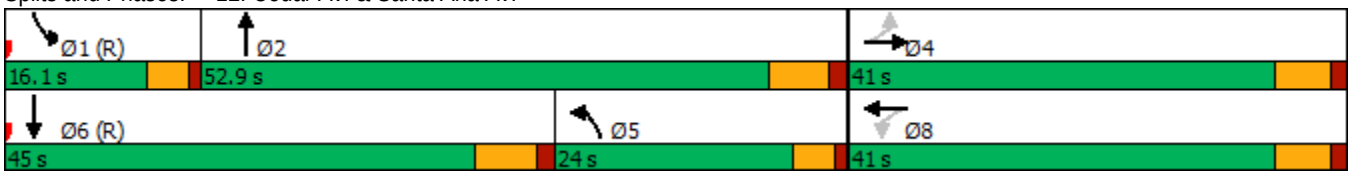
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	68	140	45	132	182	996	63	878
Future Volume (vph)	68	140	45	132	182	996	63	878
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	9.5	27.5	9.5	27.5
Total Split (s)	41.0	41.0	41.0	41.0	24.0	52.9	16.1	45.0
Total Split (%)	37.3%	37.3%	37.3%	37.3%	21.8%	48.1%	14.6%	40.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	4.5	6.5	4.5	6.5
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min
Act Effct Green (s)		27.9		27.9	19.4	46.4	18.7	45.7
Actuated g/C Ratio		0.25		0.25	0.18	0.42	0.17	0.42
v/c Ratio		0.87		0.61	0.61	0.75	0.22	0.66
Control Delay		58.1		40.9	36.1	16.6	34.1	42.6
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		58.1		40.9	36.1	16.6	34.1	42.6
LOS		E		D	D	B	C	D
Approach Delay		58.1		40.9		19.4		42.0
Approach LOS		E		D		B		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 90 (82%), Referenced to phase 1:SBL and 6:SBT, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 33.6	Intersection LOS: C
Intersection Capacity Utilization 74.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 12: Cedar Av. & Santa Ana Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	140	113	45	132	40	182	996	79	63	878	51
Future Volume (veh/h)	68	140	113	45	132	40	182	996	79	63	878	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	72	147	76	47	139	2	192	1048	81	66	924	47
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	110	185	88	96	263	3	520	1267	98	476	1154	59
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.58	0.75	0.75	0.09	0.11	0.11
Sat Flow, veh/h	329	882	420	265	1253	16	1810	3395	262	1810	3495	178
Grp Volume(v), veh/h	295	0	0	188	0	0	192	557	572	66	477	494
Grp Sat Flow(s),veh/h/ln	1631	0	0	1534	0	0	1810	1805	1853	1810	1805	1867
Q Serve(g_s), s	7.8	0.0	0.0	0.0	0.0	0.0	6.3	22.5	22.6	3.7	28.4	28.4
Cycle Q Clear(g_c), s	19.2	0.0	0.0	11.4	0.0	0.0	6.3	22.5	22.6	3.7	28.4	28.4
Prop In Lane	0.24		0.26	0.25		0.01	1.00		0.14	1.00		0.10
Lane Grp Cap(c), veh/h	383	0	0	362	0	0	520	673	691	476	596	616
V/C Ratio(X)	0.77	0.00	0.00	0.52	0.00	0.00	0.37	0.83	0.83	0.14	0.80	0.80
Avail Cap(c_a), veh/h	558	0	0	541	0	0	520	761	782	476	632	654
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.71	0.71	0.71	0.70	0.70	0.70
Uniform Delay (d), s/veh	41.8	0.0	0.0	38.4	0.0	0.0	18.0	11.6	11.6	38.7	45.5	45.5
Incr Delay (d2), s/veh	5.2	0.0	0.0	1.6	0.0	0.0	0.1	7.3	7.2	0.0	7.8	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	0.0	0.0	4.6	0.0	0.0	2.2	5.4	5.5	1.6	14.9	15.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.0	0.0	0.0	40.1	0.0	0.0	18.1	19.0	18.8	38.8	53.3	53.1
LnGrp LOS	D	A	A	D	A	A	B	B	B	D	D	D
Approach Vol, veh/h		295			188			1321			1037	
Approach Delay, s/veh		47.0			40.1			18.8			52.3	
Approach LOS		D			D			B			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	33.4	47.5		29.1	38.1	42.8		29.1				
Change Period (Y+Rc), s	4.5	6.5		6.0	6.5	* 6.5		6.0				
Max Green Setting (Gmax), s	11.6	46.4		35.0	19.5	* 39		35.0				
Max Q Clear Time (g_c+I1), s	5.7	24.6		21.2	8.3	30.4		13.4				
Green Ext Time (p_c), s	0.0	14.9		1.9	0.2	5.9		1.3				

Intersection Summary			
HCM 6th Ctrl Delay		35.3	
HCM 6th LOS		D	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	52	167	52	68	94	60	80	1102	135	908
Future Volume (vph)	52	167	52	68	94	60	80	1102	135	908
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	19.0	51.0	24.0	56.0
Total Split (%)	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	17.3%	46.4%	21.8%	50.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)		22.1	22.1		22.1	22.1	23.1	57.7	14.2	48.8
Actuated g/C Ratio		0.20	0.20		0.20	0.20	0.21	0.52	0.13	0.44
v/c Ratio		0.83	0.14		0.95	0.16	0.23	0.68	0.63	0.66
Control Delay		64.8	0.7		98.1	1.3	55.2	11.8	27.3	37.7
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		64.8	0.7		98.1	1.3	55.2	11.8	27.3	37.7
LOS		E	A		F	A	E	B	C	D
Approach Delay		52.5			72.0			14.6		36.4
Approach LOS		D			E			B		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 31.1	Intersection LOS: C
Intersection Capacity Utilization 79.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	167	52	68	94	60	80	1102	67	135	908	53
Future Volume (veh/h)	52	167	52	68	94	60	80	1102	67	135	908	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	57	182	32	74	102	19	87	1198	60	147	987	53
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	41	103	426	46	48	424	398	1702	85	180	1277	69
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.44	0.97	0.97	0.03	0.12	0.12
Sat Flow, veh/h	0	382	1588	0	177	1579	1810	3498	175	1810	3484	187
Grp Volume(v), veh/h	239	0	32	176	0	19	87	618	640	147	511	529
Grp Sat Flow(s),veh/h/ln	382	0	1588	177	0	1579	1810	1805	1868	1810	1805	1866
Q Serve(g_s), s	0.0	0.0	1.7	0.0	0.0	1.0	3.3	3.2	3.2	8.9	30.2	30.2
Cycle Q Clear(g_c), s	29.5	0.0	1.7	29.5	0.0	1.0	3.3	3.2	3.2	8.9	30.2	30.2
Prop In Lane	0.24		1.00	0.42		1.00	1.00		0.09	1.00		0.10
Lane Grp Cap(c), veh/h	143	0	426	94	0	424	398	878	909	180	662	684
V/C Ratio(X)	1.67	0.00	0.08	1.87	0.00	0.04	0.22	0.70	0.70	0.81	0.77	0.77
Avail Cap(c_a), veh/h	143	0	426	94	0	424	398	878	909	321	820	848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.76	0.76	0.76	0.71	0.71	0.71
Uniform Delay (d), s/veh	36.0	0.0	30.1	40.8	0.0	29.8	25.0	0.8	0.8	52.2	43.9	43.9
Incr Delay (d2), s/veh	330.4	0.0	0.1	429.3	0.0	0.1	0.2	3.6	3.5	6.3	3.1	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.1	0.0	0.6	13.8	0.0	0.4	1.3	1.3	1.3	4.5	15.0	15.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	366.3	0.0	30.2	470.0	0.0	29.9	25.2	4.4	4.3	58.4	47.0	46.9
LnGrp LOS	F	A	C	F	A	C	C	A	A	E	D	D
Approach Vol, veh/h		271			195			1345			1187	
Approach Delay, s/veh		326.6			427.2			5.7			48.3	
Approach LOS		F			F			A			D	

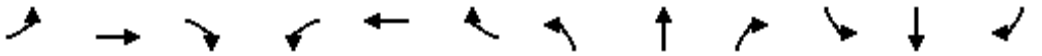
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.5	59.5		35.0	28.7	46.3		35.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	19.5	45.0		29.5	14.5	50.0		29.5				
Max Q Clear Time (g_c+I1), s	10.9	5.2		31.5	5.3	32.2		31.5				
Green Ext Time (p_c), s	0.2	15.1		0.0	0.1	8.1		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			79.0									
HCM 6th LOS			E									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	72	47	33	28	143	1091	71	861
Future Volume (vph)	72	47	33	28	143	1091	71	861
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	10.0	10.0	9.5	24.0	9.5	24.0
Total Split (s)	41.0	41.0	41.0	41.0	23.0	53.0	16.0	46.0
Total Split (%)	37.3%	37.3%	37.3%	37.3%	20.9%	48.2%	14.5%	41.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)		26.5		24.6	14.4	60.6	9.6	53.6
Actuated g/C Ratio		0.24		0.22	0.13	0.55	0.09	0.49
v/c Ratio		0.81		0.31	0.66	0.61	0.49	0.55
Control Delay		43.2		28.6	58.4	21.0	47.5	23.7
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		43.2		28.6	58.4	21.0	47.5	23.7
LOS		D		C	E	C	D	C
Approach Delay		43.2		28.6		25.3		25.4
Approach LOS		D		C		C		C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 74 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 27.7	Intersection LOS: C
Intersection Capacity Utilization 69.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 14: Rubidoux Bl./Cedar Av. & 7th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	47	216	33	28	19	143	1091	19	71	861	32
Future Volume (veh/h)	72	47	216	33	28	19	143	1091	19	71	861	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	78	51	153	36	30	11	155	1186	21	77	936	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	120	73	180	145	113	35	187	2180	39	99	1963	71
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.10	0.60	0.60	0.05	0.55	0.55
Sat Flow, veh/h	385	360	884	475	557	172	1810	3628	64	1810	3553	129
Grp Volume(v), veh/h	282	0	0	77	0	0	155	590	617	77	476	494
Grp Sat Flow(s),veh/h/ln	1629	0	0	1204	0	0	1810	1805	1887	1810	1805	1877
Q Serve(g_s), s	13.1	0.0	0.0	0.0	0.0	0.0	9.2	21.3	21.3	4.6	17.6	17.6
Cycle Q Clear(g_c), s	18.2	0.0	0.0	5.1	0.0	0.0	9.2	21.3	21.3	4.6	17.6	17.6
Prop In Lane	0.28		0.54	0.47		0.14	1.00		0.03	1.00		0.07
Lane Grp Cap(c), veh/h	373	0	0	293	0	0	187	1085	1134	99	997	1037
V/C Ratio(X)	0.76	0.00	0.00	0.26	0.00	0.00	0.83	0.54	0.54	0.78	0.48	0.48
Avail Cap(c_a), veh/h	569	0	0	474	0	0	304	1085	1134	189	997	1037
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.50	0.50	0.50	0.74	0.74	0.74
Uniform Delay (d), s/veh	42.0	0.0	0.0	36.6	0.0	0.0	48.4	13.0	13.0	51.3	14.9	14.9
Incr Delay (d2), s/veh	4.4	0.0	0.0	0.7	0.0	0.0	5.1	1.0	0.9	9.2	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	0.0	0.0	1.8	0.0	0.0	4.3	7.7	8.0	2.3	6.9	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.4	0.0	0.0	37.3	0.0	0.0	53.5	14.0	14.0	60.5	16.2	16.1
LnGrp LOS	D	A	A	D	A	A	D	B	B	E	B	B
Approach Vol, veh/h		282			77			1362			1047	
Approach Delay, s/veh		46.4			37.3			18.5			19.4	
Approach LOS		D			D			B			B	

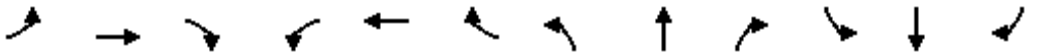
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.5	72.1		27.4	15.8	66.8		27.4				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	11.5	47.0		36.0	18.5	40.0		36.0				
Max Q Clear Time (g_c+I1), s	6.6	23.3		20.2	11.2	19.6		7.1				
Green Ext Time (p_c), s	0.1	11.0		2.2	0.2	8.0		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		22.2	
HCM 6th LOS		C	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	10	7	194	5	205	13	1043	177	915
Future Volume (vph)	10	7	194	5	205	13	1043	177	915
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	35.0	35.0	35.0	9.5	24.0	9.5	24.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.6	35.0	20.0	45.4
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%	10.7%	38.9%	22.2%	50.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	5.0	4.5	6.0	4.5	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min
Act Effct Green (s)		13.7		18.4	18.4	5.2	29.5	12.1	44.6
Actuated g/C Ratio		0.18		0.24	0.24	0.07	0.39	0.16	0.59
v/c Ratio		0.09		0.61	0.38	0.11	0.87	0.62	0.45
Control Delay		17.3		34.0	5.6	40.0	32.0	41.1	11.5
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		17.3		34.0	5.6	40.0	32.0	41.1	11.5
LOS		B		C	A	D	C	D	B
Approach Delay		17.3		19.6			32.1		16.2
Approach LOS		B		B			C		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 75.8	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 23.7	Intersection LOS: C
Intersection Capacity Utilization 74.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 15: Rubidoux Bl. & Tarragona Dr./El Rivino Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	7	11	194	5	205	13	1043	151	177	915	24
Future Volume (veh/h)	10	7	11	194	5	205	13	1043	151	177	915	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	10	7	7	196	5	132	13	1054	146	179	924	23
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	107	75	45	361	7	429	29	1234	171	224	1787	44
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.02	0.39	0.39	0.12	0.50	0.50
Sat Flow, veh/h	129	280	169	976	25	1610	1810	3176	439	1810	3599	90
Grp Volume(v), veh/h	24	0	0	201	0	132	13	598	602	179	463	484
Grp Sat Flow(s),veh/h/ln	578	0	0	1000	0	1610	1810	1805	1810	1810	1805	1884
Q Serve(g_s), s	0.2	0.0	0.0	0.0	0.0	4.6	0.5	21.3	21.4	6.7	12.2	12.2
Cycle Q Clear(g_c), s	15.1	0.0	0.0	14.9	0.0	4.6	0.5	21.3	21.4	6.7	12.2	12.2
Prop In Lane	0.42		0.29	0.98		1.00	1.00		0.24	1.00		0.05
Lane Grp Cap(c), veh/h	227	0	0	368	0	429	29	701	703	224	896	935
V/C Ratio(X)	0.11	0.00	0.00	0.55	0.00	0.31	0.45	0.85	0.86	0.80	0.52	0.52
Avail Cap(c_a), veh/h	470	0	0	598	0	688	131	746	748	400	1013	1058
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.2	0.0	0.0	24.3	0.0	20.6	34.2	19.6	19.7	29.9	12.0	12.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	1.8	0.0	0.6	10.6	9.5	9.6	6.4	0.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	3.2	0.0	1.7	0.3	9.1	9.2	3.0	3.9	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.5	0.0	0.0	26.1	0.0	21.1	44.8	29.1	29.3	36.3	12.6	12.6
LnGrp LOS	C	A	A	C	A	C	D	C	C	D	B	B
Approach Vol, veh/h		24			333			1213			1126	
Approach Delay, s/veh		20.5			24.1			29.4			16.4	
Approach LOS		C			C			C			B	

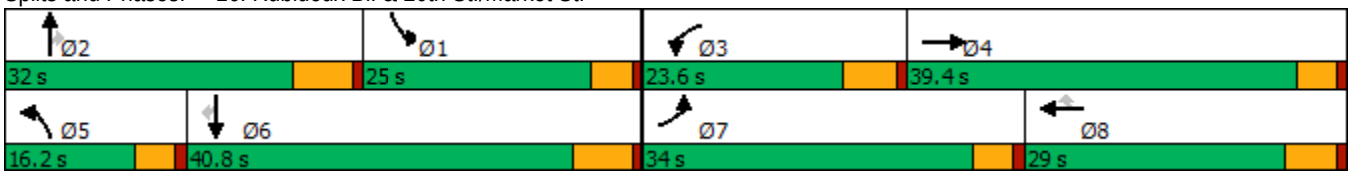
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.2	33.3		23.7	5.6	40.9		23.7				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	15.5	29.0		30.0	5.1	39.4		30.0				
Max Q Clear Time (g_c+I1), s	8.7	23.4		17.1	2.5	14.2		16.9				
Green Ext Time (p_c), s	0.2	3.9		0.1	0.0	8.3		1.9				

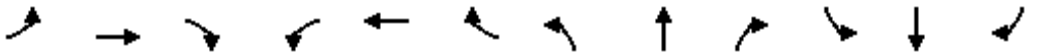
Intersection Summary			
HCM 6th Ctrl Delay		23.2	
HCM 6th LOS		C	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	331	283	325	109	464	75	323	456	448	554	122
Future Volume (vph)	331	283	325	109	464	75	323	456	448	554	122
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	14.6	10.8	27.8	27.8	9.6	28.2	28.2	9.6	35.2	35.2
Total Split (s)	34.0	39.4	23.6	29.0	29.0	16.2	32.0	32.0	25.0	40.8	40.8
Total Split (%)	28.3%	32.8%	19.7%	24.2%	24.2%	13.5%	26.7%	26.7%	20.8%	34.0%	34.0%
Yellow Time (s)	3.6	3.6	4.8	4.8	4.8	3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	5.8	5.8	5.8	4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	22.1	21.9	14.0	13.7	13.7	8.4	16.1	16.1	16.2	26.6	26.6
Actuated g/C Ratio	0.24	0.24	0.16	0.15	0.15	0.09	0.18	0.18	0.18	0.29	0.29
v/c Ratio	0.76	0.51	0.61	0.39	0.77	0.46	0.51	0.72	0.73	0.53	0.21
Control Delay	46.0	25.2	43.5	42.2	15.1	53.5	38.3	12.3	44.7	31.2	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.0	25.2	43.5	42.2	15.1	53.5	38.3	12.3	44.7	31.2	3.0
LOS	D	C	D	D	B	D	D	B	D	C	A
Approach Delay		34.0		28.7			25.7			33.5	
Approach LOS		C		C			C			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 90.3	
Natural Cycle: 95	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 30.6	Intersection LOS: C
Intersection Capacity Utilization 69.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	331	283	173	325	109	464	75	323	456	448	554	122
Future Volume (veh/h)	331	283	173	325	109	464	75	323	456	448	554	122
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	338	289	171	332	111	0	77	330	334	457	565	108
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	397	435	250	453	235		100	650	290	568	1114	496
Arrive On Green	0.22	0.20	0.20	0.13	0.12	0.00	0.06	0.18	0.18	0.16	0.31	0.31
Sat Flow, veh/h	1810	2207	1270	3510	1900	1610	1810	3610	1610	3510	3610	1608
Grp Volume(v), veh/h	338	235	225	332	111	0	77	330	334	457	565	108
Grp Sat Flow(s),veh/h/ln	1810	1805	1671	1755	1900	1610	1810	1805	1610	1755	1805	1608
Q Serve(g_s), s	13.0	8.7	9.0	6.6	3.9	0.0	3.0	6.0	8.3	9.1	9.3	3.6
Cycle Q Clear(g_c), s	13.0	8.7	9.0	6.6	3.9	0.0	3.0	6.0	8.3	9.1	9.3	3.6
Prop In Lane	1.00		0.76	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	397	356	329	453	235		100	650	290	568	1114	496
V/C Ratio(X)	0.85	0.66	0.68	0.73	0.47		0.77	0.51	1.15	0.80	0.51	0.22
Avail Cap(c_a), veh/h	736	869	805	864	610		290	1289	575	991	1728	770
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.1	26.8	26.9	30.3	29.5	0.0	33.7	26.7	12.1	29.2	20.5	18.5
Incr Delay (d2), s/veh	5.2	2.1	2.5	2.3	1.5	0.0	4.7	0.6	82.1	1.0	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	3.8	3.7	2.7	1.8	0.0	1.4	2.4	10.8	3.5	3.4	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.3	28.9	29.4	32.6	31.0	0.0	38.4	27.4	94.2	30.2	20.8	18.7
LnGrp LOS	C	C	C	C	C		D	C	F	C	C	B
Approach Vol, veh/h		798			443			741			1130	
Approach Delay, s/veh		30.5			32.2			58.6			24.4	
Approach LOS		C			C			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.9	19.2	15.1	20.0	8.6	28.5	20.5	14.7
Change Period (Y+Rc), s	6.2	* 6.2	5.8	* 5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	20.4	* 26	17.8	* 35	11.6	34.6	29.4	23.2
Max Q Clear Time (g_c+I1), s	11.1	10.3	8.6	11.0	5.0	11.3	15.0	5.9
Green Ext Time (p_c), s	0.6	2.7	0.8	3.0	0.0	3.7	0.9	0.4

Intersection Summary	
HCM 6th Ctrl Delay	35.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	28.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	19	8	17	7	6	20	805	77	151	996	4
Future Vol, veh/h	2	19	8	17	7	6	20	805	77	151	996	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	19	8	17	7	6	20	821	79	154	1016	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1780	2267	510	1728	2230	451	1020	0	0	901	0	0
Stage 1	1326	1326	-	902	902	-	-	-	-	-	-	-
Stage 2	454	941	-	826	1328	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	53	41	514	58	43	561	688	-	-	763	-	-
Stage 1	167	227	-	303	359	-	-	-	-	-	-	-
Stage 2	560	345	-	337	226	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	25	21	514	~ 7	22	560	688	-	-	762	-	-
Mov Cap-2 Maneuver	25	21	-	~ 7	22	-	-	-	-	-	-	-
Stage 1	157	121	-	285	337	-	-	-	-	-	-	-
Stage 2	510	324	-	148	120	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 372.5	$ 1488.9	0.5	3.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	688	-	-	29	11	762	-	-
HCM Lane V/C Ratio	0.03	-	-	1.02	2.783	0.202	-	-
HCM Control Delay (s)	10.4	0.3	-	$ 372.5	$ 1488.9	10.9	2	-
HCM Lane LOS	B	A	-	F	F	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	3.4	4.8	0.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	6	11	4	4	6	4	886	17	7	939	8
Future Vol, veh/h	12	6	11	4	4	6	4	886	17	7	939	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	110	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	13	7	12	4	4	7	4	974	19	8	1032	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1551	2057	522	1530	2052	499	1042	0	0	995	0	0
Stage 1	1054	1054	-	994	994	-	-	-	-	-	-	-
Stage 2	497	1003	-	536	1058	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	79	56	505	82	56	522	675	-	-	703	-	-
Stage 1	245	305	-	267	326	-	-	-	-	-	-	-
Stage 2	529	322	-	501	304	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	75	55	505	76	55	521	674	-	-	702	-	-
Mov Cap-2 Maneuver	179	165	-	186	166	-	-	-	-	-	-	-
Stage 1	243	301	-	265	323	-	-	-	-	-	-	-
Stage 2	512	319	-	473	300	-	-	-	-	-	-	-

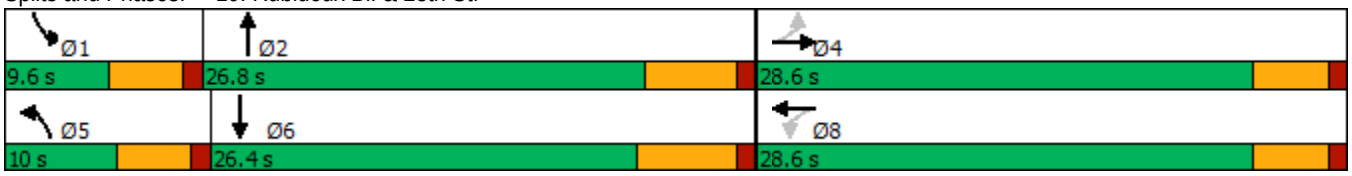
Approach	EB	WB	NB	SB
HCM Control Delay, s	23	20.7	0	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	674	-	-	232	245	702	-	-
HCM Lane V/C Ratio	0.007	-	-	0.137	0.063	0.011	-	-
HCM Control Delay (s)	10.4	-	-	23	20.7	10.2	-	-
HCM Lane LOS	B	-	-	C	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.2	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	31	15	76	12	47	861	21	952
Future Volume (vph)	31	15	76	12	47	861	21	952
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	28.6	28.6	28.6	28.6	9.6	24.4	9.6	22.8
Total Split (s)	28.6	28.6	28.6	28.6	10.0	26.8	9.6	26.4
Total Split (%)	44.0%	44.0%	44.0%	44.0%	15.4%	41.2%	14.8%	40.6%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.4	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		14.5		14.5	6.6	27.1	6.4	25.3
Actuated g/C Ratio		0.37		0.37	0.17	0.69	0.16	0.64
v/c Ratio		0.15		0.22	0.17	0.40	0.08	0.45
Control Delay		9.8		14.1	24.2	9.7	24.7	12.7
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		9.8		14.1	24.2	9.7	24.7	12.7
LOS		A		B	C	A	C	B
Approach Delay		9.8		14.1		10.4		12.9
Approach LOS		A		B		B		B

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 39.3	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.45	
Intersection Signal Delay: 11.7	Intersection LOS: B
Intersection Capacity Utilization 54.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 19: Rubidoux Bl. & 28th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	15	39	76	12	13	47	861	53	21	952	23
Future Volume (veh/h)	31	15	39	76	12	13	47	861	53	21	952	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	33	16	14	82	13	8	51	926	57	23	1024	25
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	247	112	63	354	52	20	98	1445	89	51	1415	35
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.05	0.42	0.42	0.03	0.39	0.39
Sat Flow, veh/h	625	654	365	1106	306	119	1810	3449	212	1810	3601	88
Grp Volume(v), veh/h	63	0	0	103	0	0	51	485	498	23	513	536
Grp Sat Flow(s),veh/h/ln	1644	0	0	1531	0	0	1810	1805	1856	1810	1805	1884
Q Serve(g_s), s	0.0	0.0	0.0	1.0	0.0	0.0	1.1	8.4	8.4	0.5	9.5	9.5
Cycle Q Clear(g_c), s	1.2	0.0	0.0	2.1	0.0	0.0	1.1	8.4	8.4	0.5	9.5	9.5
Prop In Lane	0.52		0.22	0.80		0.08	1.00		0.11	1.00		0.05
Lane Grp Cap(c), veh/h	422	0	0	427	0	0	98	756	778	51	709	740
V/C Ratio(X)	0.15	0.00	0.00	0.24	0.00	0.00	0.52	0.64	0.64	0.45	0.72	0.72
Avail Cap(c_a), veh/h	1104	0	0	1069	0	0	248	981	1009	230	945	986
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.0	0.0	0.0	14.3	0.0	0.0	18.1	9.1	9.1	18.8	10.1	10.1
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.3	0.0	0.0	1.6	0.9	0.9	2.3	1.9	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.7	0.0	0.0	0.4	2.2	2.2	0.2	2.4	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.1	0.0	0.0	14.6	0.0	0.0	19.7	10.0	10.0	21.1	12.0	11.9
LnGrp LOS	B	A	A	B	A	A	B	A	A	C	B	B
Approach Vol, veh/h		63			103			1034			1072	
Approach Delay, s/veh		14.1			14.6			10.5			12.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.7	22.3		11.4	6.7	21.3		11.4				
Change Period (Y+Rc), s	4.6	* 5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	5.0	* 21		24.0	5.4	20.6		24.0				
Max Q Clear Time (g_c+I1), s	2.5	10.4		3.2	3.1	11.5		4.1				
Green Ext Time (p_c), s	0.0	4.4		0.3	0.0	4.0		0.5				

Intersection Summary		
HCM 6th Ctrl Delay		11.5
HCM 6th LOS		B

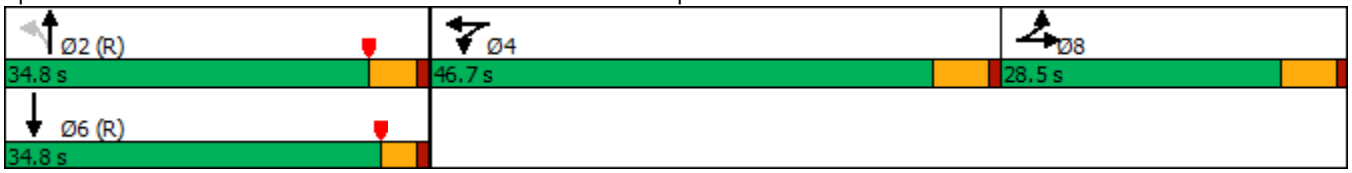
Notes

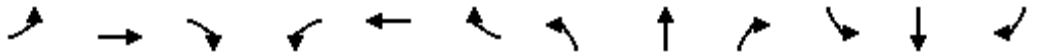
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	21	0	88	56	860	1057
Future Volume (vph)	21	0	88	56	860	1057
Turn Type	Split	NA	NA	Perm	NA	NA
Protected Phases	8	8	4		2	6
Permitted Phases				2		
Detector Phase	8	8	4	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.5	28.5	46.7	34.8	34.8	34.8
Total Split (%)	25.9%	25.9%	42.5%	31.6%	31.6%	31.6%
Yellow Time (s)	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	12.9	12.9	41.2	39.9	39.9	40.9
Actuated g/C Ratio	0.12	0.12	0.37	0.36	0.36	0.37
v/c Ratio	0.11	0.67	1.08	0.90	0.71	0.88
Control Delay	40.8	32.1	93.2	47.5	20.7	41.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.8	32.1	93.2	47.5	20.7	41.9
LOS	D	C	F	D	C	D
Approach Delay		33.1	93.2		22.3	41.9
Approach LOS		C	F		C	D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 47.2	Intersection LOS: D
Intersection Capacity Utilization 107.3%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	0	170	487	88	101	56	860	0	0	1057	19
Future Volume (veh/h)	21	0	170	487	88	101	56	860	0	0	1057	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	23	0	123	529	96	81	61	935	0	0	1149	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	177	0	158	504	91	77	113	1380	0	0	1390	22
Arrive On Green	0.10	0.00	0.10	0.37	0.37	0.37	0.76	0.76	0.00	0.00	0.38	0.38
Sat Flow, veh/h	1810	0	1610	1345	244	206	488	3705	0	0	3733	57
Grp Volume(v), veh/h	23	0	123	706	0	0	61	935	0	0	570	597
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1796	0	0	488	1805	0	0	1805	1890
Q Serve(g_s), s	1.3	0.0	8.2	41.2	0.0	0.0	10.7	13.9	0.0	0.0	31.4	31.4
Cycle Q Clear(g_c), s	1.3	0.0	8.2	41.2	0.0	0.0	42.0	13.9	0.0	0.0	31.4	31.4
Prop In Lane	1.00		1.00	0.75		0.11	1.00		0.00	0.00		0.03
Lane Grp Cap(c), veh/h	177	0	158	673	0	0	113	1380	0	0	690	722
V/C Ratio(X)	0.13	0.00	0.78	1.05	0.00	0.00	0.54	0.68	0.00	0.00	0.83	0.83
Avail Cap(c_a), veh/h	378	0	337	673	0	0	113	1380	0	0	690	722
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.89	0.89
Uniform Delay (d), s/veh	45.3	0.0	48.5	34.4	0.0	0.0	29.8	9.6	0.0	0.0	30.7	30.7
Incr Delay (d2), s/veh	0.4	0.0	9.7	48.5	0.0	0.0	17.3	2.7	0.0	0.0	9.8	9.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	3.7	25.8	0.0	0.0	2.0	3.6	0.0	0.0	14.8	15.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.7	0.0	58.1	82.9	0.0	0.0	47.2	12.3	0.0	0.0	40.5	40.1
LnGrp LOS	D	A	E	F	A	A	D	B	A	A	D	D
Approach Vol, veh/h		146			706			996			1167	
Approach Delay, s/veh		56.2			82.9			14.5			40.3	
Approach LOS		E			F			B			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		47.0		46.7		47.0		16.3				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		29.8		41.2		* 31		23.0				
Max Q Clear Time (g_c+I1), s		44.0		43.2		33.4		10.2				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.7				

Intersection Summary												
HCM 6th Ctrl Delay			42.5									
HCM 6th LOS			D									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	209	916	1035	679
Future Vol, veh/h	0	0	209	916	1035	679
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	225	985	1113	730

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	923	1844	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	0	*699	378	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	-	*698	378	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	5.1	0
HCM LOS	A		

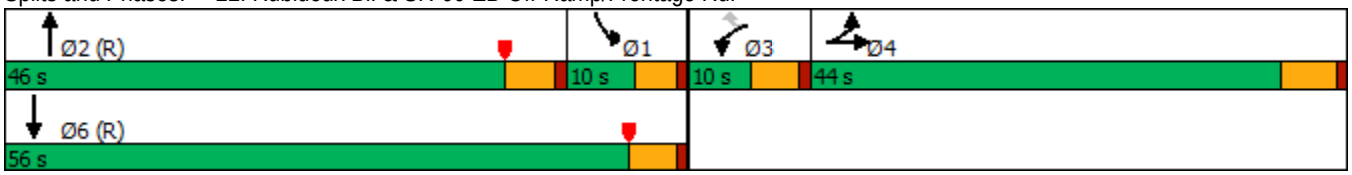
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	378	-	-	-	-
HCM Lane V/C Ratio	0.595	-	-	-	-
HCM Control Delay (s)	27.6	-	0	-	-
HCM Lane LOS	D	-	A	-	-
HCM 95th %tile Q(veh)	3.7	-	-	-	-

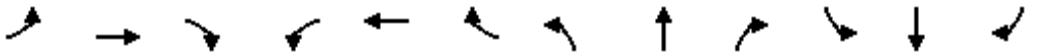
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	48	14	2	536	150	885
Future Volume (vph)	48	14	2	536	150	885
Turn Type	NA	Prot	Perm	NA	Prot	NA
Protected Phases	4	3		2	1	6
Permitted Phases			3			
Detector Phase	4	3	3	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	10.0	10.0	45.0	9.5	30.0
Total Split (s)	44.0	10.0	10.0	46.0	10.0	56.0
Total Split (%)	40.0%	9.1%	9.1%	41.8%	9.1%	50.9%
Yellow Time (s)	4.5	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	44.5	5.0	5.0	31.3	15.2	51.0
Actuated g/C Ratio	0.40	0.05	0.05	0.28	0.14	0.46
v/c Ratio	1.46	0.18	0.01	0.83	0.63	0.55
Control Delay	242.2	55.8	0.0	38.8	43.9	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	242.2	55.8	0.0	38.8	43.9	13.9
LOS	F	E	A	D	D	B
Approach Delay	242.2			38.8		18.3
Approach LOS	F			D		B

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.46	
Intersection Signal Delay: 102.9	Intersection LOS: F
Intersection Capacity Utilization 110.4%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	587	48	384	14	0	2	0	536	299	150	885	0
Future Volume (veh/h)	587	48	384	14	0	2	0	536	299	150	885	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	611	50	308	15	0	0	0	558	263	156	922	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	385	32	194	0	0	0	0	639	301	436	2002	0
Arrive On Green	0.35	0.35	0.35	0.00	0.00	0.00	0.00	0.27	0.27	0.48	1.00	0.00
Sat Flow, veh/h	1100	90	555		0		0	2478	1121	1810	3705	0
Grp Volume(v), veh/h	969	0	0		0.0		0	422	399	156	922	0
Grp Sat Flow(s),veh/h/ln	1745	0	0				0	1805	1698	1810	1805	0
Q Serve(g_s), s	38.5	0.0	0.0				0.0	24.6	24.7	5.9	0.0	0.0
Cycle Q Clear(g_c), s	38.5	0.0	0.0				0.0	24.6	24.7	5.9	0.0	0.0
Prop In Lane	0.63		0.32				0.00		0.66	1.00		0.00
Lane Grp Cap(c), veh/h	611	0	0				0	484	456	436	2002	0
V/C Ratio(X)	1.59	0.00	0.00				0.00	0.87	0.87	0.36	0.46	0.00
Avail Cap(c_a), veh/h	611	0	0				0	673	633	436	2002	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.81	0.81	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.8	0.0	0.0				0.0	38.4	38.5	23.2	0.0	0.0
Incr Delay (d2), s/veh	271.6	0.0	0.0				0.0	16.1	17.1	0.2	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	61.4	0.0	0.0				0.0	12.6	12.1	2.3	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	307.4	0.0	0.0				0.0	54.5	55.6	23.4	0.8	0.0
LnGrp LOS	F	A	A				A	D	E	C	A	A
Approach Vol, veh/h		969						821			1078	
Approach Delay, s/veh		307.4						55.1			4.0	
Approach LOS		F						E			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	31.5	34.5		44.0		66.0
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0
Max Green Setting (Gmax), s	5.5	* 41		38.5		51.0
Max Q Clear Time (g_c+I1), s	7.9	26.7		40.5		2.0
Green Ext Time (p_c), s	0.0	2.8		0.0		4.5

Intersection Summary		
HCM 6th Ctrl Delay		121.1
HCM 6th LOS		F

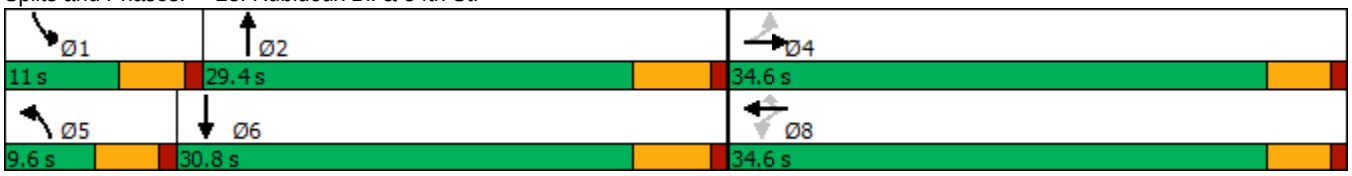
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	95	47	15	16	84	20	637	200	960
Future Volume (vph)	95	47	15	16	84	20	637	200	960
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	30.6	30.6	34.6	34.6	34.6	9.6	29.4	9.6	22.4
Total Split (s)	34.6	34.6	34.6	34.6	34.6	9.6	29.4	11.0	30.8
Total Split (%)	46.1%	46.1%	46.1%	46.1%	46.1%	12.8%	39.2%	14.7%	41.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	4.6	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		14.4		14.4	14.4	5.6	17.1	7.1	30.0
Actuated g/C Ratio		0.29		0.29	0.29	0.11	0.35	0.14	0.61
v/c Ratio		0.38		0.07	0.16	0.10	0.61	0.80	0.53
Control Delay		17.9		15.0	3.9	28.5	17.3	54.4	12.8
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		17.9		15.0	3.9	28.5	17.3	54.4	12.8
LOS		B		B	A	C	B	D	B
Approach Delay		17.9		6.9			17.6		19.2
Approach LOS		B		A			B		B

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 49.5	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 18.0	Intersection LOS: B
Intersection Capacity Utilization 64.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 23: Rubidoux Bl. & 34th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	47	20	15	16	84	20	637	84	200	960	137
Future Volume (veh/h)	95	47	20	15	16	84	20	637	84	200	960	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	99	49	15	16	17	35	21	664	84	208	1000	124
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	303	134	31	256	231	346	47	998	126	261	1379	171
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.03	0.31	0.31	0.14	0.43	0.43
Sat Flow, veh/h	797	623	144	628	1075	1606	1810	3224	407	1810	3222	399
Grp Volume(v), veh/h	163	0	0	33	0	35	21	371	377	208	560	564
Grp Sat Flow(s),veh/h/ln	1564	0	0	1703	0	1606	1810	1805	1827	1810	1805	1816
Q Serve(g_s), s	2.6	0.0	0.0	0.0	0.0	0.8	0.5	7.9	7.9	4.9	11.3	11.4
Cycle Q Clear(g_c), s	3.8	0.0	0.0	0.6	0.0	0.8	0.5	7.9	7.9	4.9	11.3	11.4
Prop In Lane	0.61		0.09	0.48		1.00	1.00		0.22	1.00		0.22
Lane Grp Cap(c), veh/h	468	0	0	488	0	346	47	559	565	261	773	777
V/C Ratio(X)	0.35	0.00	0.00	0.07	0.00	0.10	0.45	0.66	0.67	0.80	0.72	0.73
Avail Cap(c_a), veh/h	1174	0	0	1225	0	1093	205	982	994	263	1040	1046
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.0	0.0	0.0	13.8	0.0	13.9	21.2	13.2	13.2	18.2	10.5	10.5
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.1	0.0	0.1	2.5	1.4	1.4	14.4	1.7	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	0.2	0.0	0.3	0.2	2.6	2.7	2.7	3.3	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.4	0.0	0.0	13.9	0.0	14.0	23.7	14.6	14.6	32.7	12.1	12.1
LnGrp LOS	B	A	A	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		163			68			769			1332	
Approach Delay, s/veh		15.4			13.9			14.9			15.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.0	19.0		14.1	5.7	24.3		14.1				
Change Period (Y+Rc), s	4.6	5.4		4.6	4.6	5.4		4.6				
Max Green Setting (Gmax), s	6.4	24.0		30.0	5.0	25.4		30.0				
Max Q Clear Time (g_c+I1), s	6.9	9.9		5.8	2.5	13.4		2.8				
Green Ext Time (p_c), s	0.0	3.7		0.9	0.0	5.5		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		15.1	
HCM 6th LOS		B	

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	415	83	0	0	16	15
Future Vol, veh/h	415	83	0	0	16	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	472	94	0	0	18	17

Major/Minor	Major1			Minor1	
Conflicting Flow All	0	0		519	519
Stage 1	-	-		519	-
Stage 2	-	-		0	-
Critical Hdwy	-	-		6.4	6.2
Critical Hdwy Stg 1	-	-		5.4	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	-		3.5	3.3
Pot Cap-1 Maneuver	-	-		521	561
Stage 1	-	-		601	-
Stage 2	-	-		-	-
Platoon blocked, %	-	-			
Mov Cap-1 Maneuver	-	-		521	561
Mov Cap-2 Maneuver	-	-		521	-
Stage 1	-	-		601	-
Stage 2	-	-		-	-

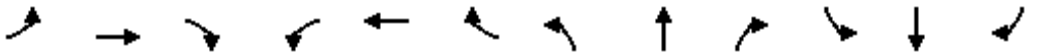
Approach	EB	NB
HCM Control Delay, s	0	12.1
HCM LOS		B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	540	-	-
HCM Lane V/C Ratio	0.065	-	-
HCM Control Delay (s)	12.1	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-

Lane Group	EBL	EBT	EBR	WBT	WBR	NBT	SBL	SBT	Ø1
Lane Configurations									
Traffic Volume (vph)	601	581	4	542	158	3	149	2	
Future Volume (vph)	601	581	4	542	158	3	149	2	
Turn Type	Prot	NA	Perm	NA	Perm	NA	Perm	NA	
Protected Phases	5	2		6		8		4	1
Permitted Phases			2		6		4		
Detector Phase	5	2	2	6	6	8	4	4	
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	31.8	31.8	26.8	26.8	14.6	43.8	43.8	9.6
Total Split (s)	42.0	66.6	66.6	34.2	34.2	43.8	43.8	43.8	9.6
Total Split (%)	35.0%	55.5%	55.5%	28.5%	28.5%	36.5%	36.5%	36.5%	8%
Yellow Time (s)	3.6	4.8	4.8	4.8	4.8	3.6	4.8	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.6	5.8	5.8	5.8	5.8	4.6		5.8	
Lead/Lag	Lead	Lag	Lag	Lag	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				Yes
Recall Mode	None	Max	Max	Max	Max	None	None	None	None
Act Effct Green (s)	37.4	70.4	70.4	28.4	28.4	38.4		37.2	
Actuated g/C Ratio	0.31	0.59	0.59	0.24	0.24	0.32		0.31	
v/c Ratio	1.13	0.29	0.00	0.67	0.33	0.00		0.98	
Control Delay	117.0	12.6	0.0	45.8	7.3	27.3		66.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	117.0	12.6	0.0	45.8	7.3	27.3		66.2	
LOS	F	B	A	D	A	C		E	
Approach Delay		65.4		37.1		27.3		66.2	
Approach LOS		E		D		C		E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 119.2	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.13	
Intersection Signal Delay: 57.3	Intersection LOS: E
Intersection Capacity Utilization 98.7%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	601	581	4	0	542	158	0	3	0	149	2	355
Future Volume (veh/h)	601	581	4	0	542	158	0	3	0	149	2	355
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	639	618	3	0	577	130	0	3	0	159	2	246
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	590	2217	989	2	894	399	0	541	0	210	8	266
Arrive On Green	0.33	0.61	0.61	0.00	0.25	0.25	0.00	0.28	0.00	0.28	0.28	0.28
Sat Flow, veh/h	1810	3610	1610	1810	3610	1610	0	1900	0	583	28	933
Grp Volume(v), veh/h	639	618	3	0	577	130	0	3	0	407	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1610	0	1900	0	1544	0	0
Q Serve(g_s), s	37.4	9.1	0.1	0.0	16.4	7.6	0.0	0.1	0.0	28.3	0.0	0.0
Cycle Q Clear(g_c), s	37.4	9.1	0.1	0.0	16.4	7.6	0.0	0.1	0.0	29.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.00		0.00	0.39		0.60
Lane Grp Cap(c), veh/h	590	2217	989	2	894	399	0	541	0	483	0	0
V/C Ratio(X)	1.08	0.28	0.00	0.00	0.65	0.33	0.00	0.01	0.00	0.84	0.00	0.00
Avail Cap(c_a), veh/h	590	2217	989	79	894	399	0	650	0	555	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	38.6	10.3	8.5	0.0	38.6	35.3	0.0	29.4	0.0	39.8	0.0	0.0
Incr Delay (d2), s/veh	61.3	0.3	0.0	0.0	3.6	2.2	0.0	0.0	0.0	10.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	25.7	3.3	0.0	0.0	7.4	3.1	0.0	0.1	0.0	12.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	99.9	10.6	8.6	0.0	42.2	37.4	0.0	29.4	0.0	49.9	0.0	0.0
LnGrp LOS	F	B	A	A	D	D	A	C	A	D	A	A
Approach Vol, veh/h		1260			707			3			407	
Approach Delay, s/veh		55.9			41.3			29.4			49.9	
Approach LOS		E			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	76.2		38.4	42.0	34.2		38.4				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	60.8		38.0	37.4	28.4		* 39				
Max Q Clear Time (g_c+I1), s	0.0	11.1		31.3	39.4	18.4		2.1				
Green Ext Time (p_c), s	0.0	4.3		1.3	0.0	2.8		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		50.5	
HCM 6th LOS		D	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	228	11	54	14	2	10	13	75	4	34	3
Future Vol, veh/h	4	228	11	54	14	2	10	13	75	4	34	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	253	12	60	16	2	11	14	83	4	38	3
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	10.2	8.8	8.1	8.2
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	10%	2%	0%	79%	0%	10%
Vol Thru, %	13%	98%	0%	21%	0%	83%
Vol Right, %	77%	0%	100%	0%	100%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	98	232	11	68	2	41
LT Vol	10	4	0	54	0	4
Through Vol	13	228	0	14	0	34
RT Vol	75	0	11	0	2	3
Lane Flow Rate	109	258	12	76	2	46
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.133	0.354	0.014	0.115	0.003	0.062
Departure Headway (Hd)	4.393	4.939	4.227	5.493	4.389	4.88
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	817	730	846	652	813	733
Service Time	2.419	2.669	1.957	3.23	2.126	2.914
HCM Lane V/C Ratio	0.133	0.353	0.014	0.117	0.002	0.063
HCM Control Delay	8.1	10.4	7	8.9	7.1	8.2
HCM Lane LOS	A	B	A	A	A	A
HCM 95th-tile Q	0.5	1.6	0	0.4	0	0.2

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	15	1	7	7	1	1	4	123	7	13	89	14
Future Vol, veh/h	15	1	7	7	1	1	4	123	7	13	89	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	17	1	8	8	1	1	5	143	8	15	103	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	299	303	111	304	307	148	119	0	0	152	0	0
Stage 1	141	141	-	158	158	-	-	-	-	-	-	-
Stage 2	158	162	-	146	149	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	657	613	948	652	610	904	1482	-	-	1441	-	-
Stage 1	867	784	-	849	771	-	-	-	-	-	-	-
Stage 2	849	768	-	861	778	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	648	603	948	638	600	903	1482	-	-	1440	-	-
Mov Cap-2 Maneuver	648	603	-	638	600	-	-	-	-	-	-	-
Stage 1	864	775	-	845	767	-	-	-	-	-	-	-
Stage 2	843	764	-	843	769	-	-	-	-	-	-	-

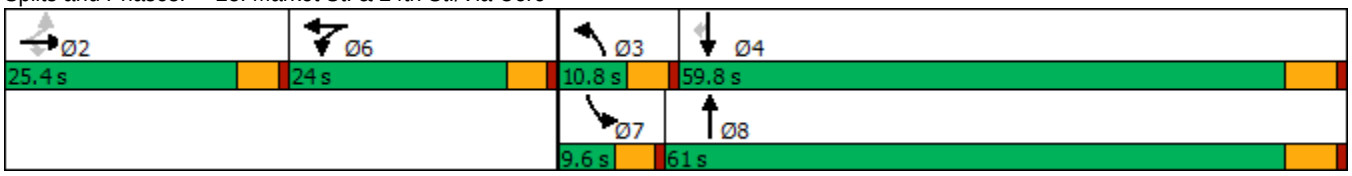
Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	10.6	0.2	0.8
HCM LOS	B	B		

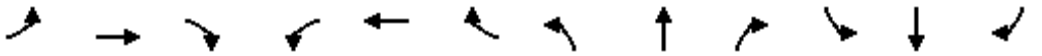
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1482	-	-	714	655	1440	-	-
HCM Lane V/C Ratio	0.003	-	-	0.037	0.016	0.01	-	-
HCM Control Delay (s)	7.4	0	-	10.2	10.6	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	3	31	205	235	39	48	709	6	780	3
Future Volume (vph)	3	31	205	235	39	48	709	6	780	3
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	25.4	25.4	25.4	24.0	24.0	10.8	61.0	9.6	59.8	59.8
Total Split (%)	21.2%	21.2%	21.2%	20.0%	20.0%	9.0%	50.8%	8.0%	49.8%	49.8%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		13.4	13.4	18.9	18.9	6.0	61.2	5.0	54.6	54.6
Actuated g/C Ratio		0.12	0.12	0.17	0.17	0.05	0.55	0.05	0.49	0.49
v/c Ratio		0.35	0.72	0.87	0.20	0.57	0.87	0.09	0.96	0.00
Control Delay		54.3	31.0	73.8	35.5	75.8	33.4	56.3	49.4	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		54.3	31.0	73.8	35.5	75.8	33.4	56.3	49.4	0.0
LOS		D	C	E	D	E	C	E	D	A
Approach Delay		34.3			66.5		35.8		49.3	
Approach LOS		C			E		D		D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 110.4	
Natural Cycle: 115	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 44.7	Intersection LOS: D
Intersection Capacity Utilization 79.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	31	205	235	39	16	48	709	79	6	780	3
Future Volume (veh/h)	3	31	205	235	39	16	48	709	79	6	780	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	3	36	151	270	45	9	55	815	90	7	897	3
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	17	204	187	301	256	51	71	885	98	16	944	800
Arrive On Green	0.12	0.12	0.12	0.17	0.17	0.17	0.04	0.53	0.53	0.01	0.50	0.50
Sat Flow, veh/h	146	1747	1598	1810	1537	307	1810	1677	185	1810	1900	1610
Grp Volume(v), veh/h	39	0	151	270	0	54	55	0	905	7	897	3
Grp Sat Flow(s),veh/h/ln	1893	0	1598	1810	0	1845	1810	0	1862	1810	1900	1610
Q Serve(g_s), s	2.0	0.0	10.0	15.9	0.0	2.7	3.3	0.0	48.5	0.4	48.9	0.1
Cycle Q Clear(g_c), s	2.0	0.0	10.0	15.9	0.0	2.7	3.3	0.0	48.5	0.4	48.9	0.1
Prop In Lane	0.08		1.00	1.00		0.17	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	221	0	187	301	0	307	71	0	982	16	944	800
V/C Ratio(X)	0.18	0.00	0.81	0.90	0.00	0.18	0.77	0.00	0.92	0.44	0.95	0.00
Avail Cap(c_a), veh/h	362	0	306	323	0	329	103	0	982	83	944	800
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	0.0	46.8	44.4	0.0	38.9	51.7	0.0	23.6	53.6	26.0	13.8
Incr Delay (d2), s/veh	0.4	0.0	8.1	25.1	0.0	0.3	10.9	0.0	15.0	7.0	19.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	4.3	9.2	0.0	1.3	1.7	0.0	23.0	0.2	24.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.6	0.0	54.8	69.4	0.0	39.2	62.6	0.0	38.6	60.6	45.4	13.8
LnGrp LOS	D	A	D	E	A	D	E	A	D	E	D	B
Approach Vol, veh/h		190			324			960			907	
Approach Delay, s/veh		52.5			64.4			40.0			45.4	
Approach LOS		D			E			D			D	

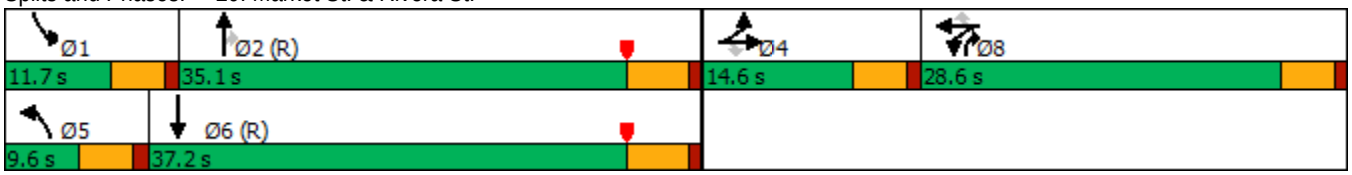
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		17.3	8.9	59.8		22.7	5.6	63.1				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		20.8	6.2	54.0		19.4	5.0	55.2				
Max Q Clear Time (g_c+I1), s		12.0	5.3	50.9		17.9	2.4	50.5				
Green Ext Time (p_c), s		0.4	0.0	1.7		0.2	0.0	2.5				

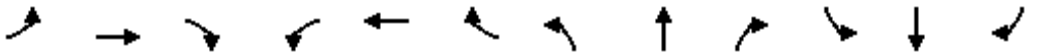
Intersection Summary												
HCM 6th Ctrl Delay			46.4									
HCM 6th LOS			D									

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	14	75	234	2	39	4	754	258	131	1032
Future Volume (vph)	14	75	234	2	39	4	754	258	131	1032
Turn Type	NA	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	4		8	8		5	2	8	1	6
Permitted Phases		4			8			2		
Detector Phase	4	4	8	8	8	5	2	8	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	14.6	14.6	28.6	28.6	28.6	9.6	35.1	28.6	9.6	29.1
Total Split (s)	14.6	14.6	28.6	28.6	28.6	9.6	35.1	28.6	11.7	37.2
Total Split (%)	16.2%	16.2%	31.8%	31.8%	31.8%	10.7%	39.0%	31.8%	13.0%	41.3%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.1	3.6	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	4.6	5.1	4.6	4.6	5.1
Lead/Lag						Lead	Lag		Lead	Lag
Lead-Lag Optimize?						Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	10.0	10.0	14.4	14.4	14.4	5.0	38.5	54.3	11.1	52.3
Actuated g/C Ratio	0.11	0.11	0.16	0.16	0.16	0.06	0.43	0.60	0.12	0.58
v/c Ratio	0.10	0.26	0.44	0.45	0.11	0.04	0.50	0.25	0.61	0.51
Control Delay	37.3	3.1	37.6	37.9	0.6	36.0	25.5	1.4	51.8	15.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1
Total Delay	37.3	3.1	37.6	37.9	0.6	36.0	25.7	1.4	51.8	15.4
LOS	D	A	D	D	A	D	C	A	D	B
Approach Delay	10.1			32.5			19.6			19.5
Approach LOS	B			C			B			B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 2 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 20.6	Intersection LOS: C
Intersection Capacity Utilization 58.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 29: Market St. & Rivera St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	14	75	234	2	39	4	754	258	131	1032	0
Future Volume (veh/h)	6	14	75	234	2	39	4	754	258	131	1032	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	6	14	34	242	0	21	4	777	165	135	1064	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	46	108	133	409	0	181	10	1862	1012	143	2128	0
Arrive On Green	0.08	0.08	0.08	0.11	0.00	0.11	0.01	1.00	1.00	0.08	0.59	0.00
Sat Flow, veh/h	562	1310	1610	3619	0	1603	1810	3610	1610	1810	3705	0
Grp Volume(v), veh/h	20	0	34	242	0	21	4	777	165	135	1064	0
Grp Sat Flow(s),veh/h/ln	1872	0	1610	1810	0	1603	1810	1805	1610	1810	1805	0
Q Serve(g_s), s	0.9	0.0	1.8	5.7	0.0	1.1	0.2	0.0	0.0	6.7	15.4	0.0
Cycle Q Clear(g_c), s	0.9	0.0	1.8	5.7	0.0	1.1	0.2	0.0	0.0	6.7	15.4	0.0
Prop In Lane	0.30		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	154	0	133	409	0	181	10	1862	1012	143	2128	0
V/C Ratio(X)	0.13	0.00	0.26	0.59	0.00	0.12	0.42	0.42	0.16	0.95	0.50	0.00
Avail Cap(c_a), veh/h	208	0	179	965	0	427	101	1862	1012	143	2128	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.96	0.96	0.96	0.31	0.31	0.00
Uniform Delay (d), s/veh	38.3	0.0	38.7	37.9	0.0	35.9	44.4	0.0	0.0	41.3	10.8	0.0
Incr Delay (d2), s/veh	0.4	0.0	1.0	1.4	0.0	0.3	10.0	0.7	0.3	28.4	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.7	2.6	0.0	0.4	0.1	0.2	0.1	4.0	5.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.7	0.0	39.7	39.3	0.0	36.2	54.4	0.7	0.3	69.6	11.0	0.0
LnGrp LOS	D	A	D	D	A	D	D	A	A	E	B	A
Approach Vol, veh/h		54			263			946			1199	
Approach Delay, s/veh		39.3			39.1			0.8			17.6	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.7	51.5		12.0	5.1	58.2		14.8				
Change Period (Y+Rc), s	4.6	5.1		4.6	4.6	5.1		4.6				
Max Green Setting (Gmax), s	7.1	30.0		10.0	5.0	32.1		24.0				
Max Q Clear Time (g_c+I1), s	8.7	2.0		3.8	2.2	17.4		7.7				
Green Ext Time (p_c), s	0.0	5.9		0.1	0.0	6.0		0.8				

Intersection Summary			
HCM 6th Ctrl Delay		13.9	
HCM 6th LOS		B	

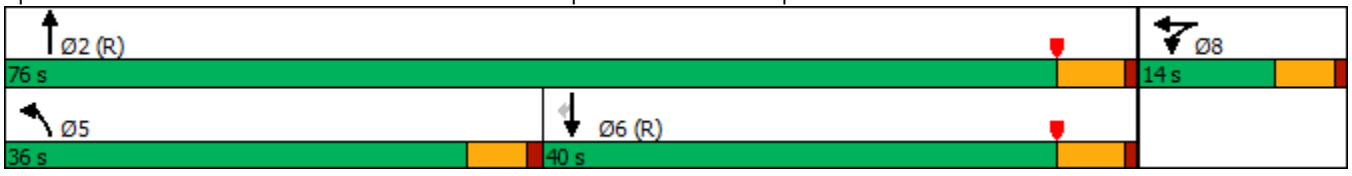
Notes

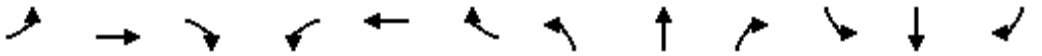
User approved volume balancing among the lanes for turning movement.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	5	678	423	338	1167	174
Future Volume (vph)	5	678	423	338	1167	174
Turn Type	NA	Free	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		Free				6
Detector Phase	8		5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	10.0		10.0	24.5	10.5	10.5
Total Split (s)	14.0		36.0	76.0	40.0	40.0
Total Split (%)	15.6%		40.0%	84.4%	44.4%	44.4%
Yellow Time (s)	4.0		4.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	C-Min	C-Min	C-Min
Act Effct Green (s)	8.3	90.0	25.9	74.5	42.5	42.5
Actuated g/C Ratio	0.09	1.00	0.29	0.83	0.47	0.47
v/c Ratio	0.57	0.43	0.83	0.12	0.70	0.21
Control Delay	52.5	0.8	38.8	8.6	18.6	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0
Total Delay	52.5	0.8	38.8	8.6	18.7	3.3
LOS	D	A	D	A	B	A
Approach Delay	7.1			25.4	16.7	
Approach LOS	A			C	B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 16.4	Intersection LOS: B
Intersection Capacity Utilization 73.7%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 30: Market St. & SR-60 WB On-Ramp/SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	88	5	678	423	338	0	0	1167	174
Future Volume (veh/h)	0	0	0	88	5	678	423	338	0	0	1167	174
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				90	5	0	432	345	0	0	1191	0
Peak Hour Factor				0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				116	6		467	2945	0	0	1812	
Arrive On Green				0.07	0.07	0.00	0.43	1.00	0.00	0.00	1.00	0.00
Sat Flow, veh/h				1719	95	1610	1810	3705	0	0	3705	1610
Grp Volume(v), veh/h				95	0	0	432	345	0	0	1191	0
Grp Sat Flow(s),veh/h/ln				1814	0	1610	1810	1805	0	0	1805	1610
Q Serve(g_s), s				4.6	0.0	0.0	20.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				4.6	0.0	0.0	20.3	0.0	0.0	0.0	0.0	0.0
Prop In Lane				0.95		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				123	0		467	2945	0	0	1812	
V/C Ratio(X)				0.78	0.00		0.92	0.12	0.00	0.00	0.66	
Avail Cap(c_a), veh/h				181	0		623	2945	0	0	1812	
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	0.00	0.00	0.77	0.77	0.00	0.00	0.87	0.00
Uniform Delay (d), s/veh				41.3	0.0	0.0	24.8	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				11.5	0.0	0.0	13.5	0.1	0.0	0.0	1.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.4	0.0	0.0	7.9	0.0	0.0	0.0	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				52.8	0.0	0.0	38.2	0.1	0.0	0.0	1.6	0.0
LnGrp LOS				D	A		D	A	A	A	A	
Approach Vol, veh/h					95			777			1191	
Approach Delay, s/veh					52.8			21.3			1.6	
Approach LOS					D			C			A	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	78.9		28.2	50.7		11.1						
Change Period (Y+Rc), s	5.5		5.0	5.5		5.0						
Max Green Setting (Gmax), s	70.5		31.0	34.5		9.0						
Max Q Clear Time (g_c+I1), s	2.0		22.3	2.0		6.6						
Green Ext Time (p_c), s	2.3		0.9	9.6		0.1						

Intersection Summary		
HCM 6th Ctrl Delay	11.4	
HCM 6th LOS	B	

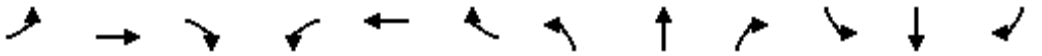
Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	3	686	674	553	702
Future Volume (vph)	3	686	674	553	702
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	24.5	10.0	10.5
Total Split (s)	21.0	21.0	32.0	37.0	69.0
Total Split (%)	23.3%	23.3%	35.6%	41.1%	76.7%
Yellow Time (s)	4.0	4.0	4.5	4.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.0	5.5
Lead/Lag			Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Min	None	C-Min
Act Effct Green (s)	12.5	12.5	31.1	30.9	67.0
Actuated g/C Ratio	0.14	0.14	0.35	0.34	0.74
v/c Ratio	0.37	0.84	0.60	0.91	0.27
Control Delay	38.0	19.5	27.8	56.6	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	38.0	19.5	27.8	56.6	5.4
LOS	D	B	C	E	A
Approach Delay	21.6		27.8		28.0
Approach LOS	C		C		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 15 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 26.2	Intersection LOS: C
Intersection Capacity Utilization 73.7%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 31: Market St. & SR-60 EB Off-Ramp/SR-60 EB On-Ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	3	686	0	0	0	0	674	48	553	702	0
Future Volume (veh/h)	88	3	686	0	0	0	0	674	48	553	702	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	90	3	435				0	688	0	564	716	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	305	10	492				0	842		752	2562	0
Arrive On Green	0.17	0.17	0.17				0.00	0.23	0.00	0.83	1.00	0.00
Sat Flow, veh/h	1754	58	2834				0	3800	0	1810	3705	0
Grp Volume(v), veh/h	93	0	435				0	688	0	564	716	0
Grp Sat Flow(s),veh/h/ln	1812	0	1417				0	1805	0	1810	1805	0
Q Serve(g_s), s	4.0	0.0	13.5				0.0	16.2	0.0	12.6	0.0	0.0
Cycle Q Clear(g_c), s	4.0	0.0	13.5				0.0	16.2	0.0	12.6	0.0	0.0
Prop In Lane	0.97		1.00				0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	315	0	492				0	842		752	2562	0
V/C Ratio(X)	0.30	0.00	0.88				0.00	0.82		0.75	0.28	0.00
Avail Cap(c_a), veh/h	322	0	504				0	1063		752	2562	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.65	0.65	0.00
Uniform Delay (d), s/veh	32.4	0.0	36.3				0.0	32.7	0.0	5.5	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	16.6				0.0	8.6	0.0	2.8	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	5.5				0.0	7.7	0.0	2.6	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.9	0.0	52.9				0.0	41.3	0.0	8.3	0.2	0.0
LnGrp LOS	C	A	D				A	D		A	A	A
Approach Vol, veh/h		528						688			1280	
Approach Delay, s/veh		49.4						41.3			3.8	
Approach LOS		D						D			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	42.9	26.5		20.6		69.4
Change Period (Y+Rc), s	5.5	* 5.5		5.0		5.5
Max Green Setting (Gmax), s	32.0	* 27		16.0		63.5
Max Q Clear Time (g_c+I1), s	14.6	18.2		15.5		2.0
Green Ext Time (p_c), s	1.7	2.7		0.1		5.4

Intersection Summary		
HCM 6th Ctrl Delay		23.8
HCM 6th LOS		C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	0	32	1	1	15	42	675	0	18	1274	97
Future Vol, veh/h	32	0	32	1	1	15	42	675	0	18	1274	97
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	145	-	-	140	-	110
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	33	0	33	1	1	16	44	703	0	19	1327	101

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1805	2157	664	1494	2258	353	1428	0	0	704	0	0
Stage 1	1365	1365	-	792	792	-	-	-	-	-	-	-
Stage 2	440	792	-	702	1466	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	*169	*76	*569	*446	57	649	*854	-	-	903	-	-
Stage 1	*536	*469	-	*353	404	-	-	-	-	-	-	-
Stage 2	*571	*404	-	*536	442	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	*155	*70	*569	*396	53	648	*854	-	-	902	-	-
Mov Cap-2 Maneuver	*303	*217	-	*791	200	-	-	-	-	-	-	-
Stage 1	*508	*460	-	*335	383	-	-	-	-	-	-	-
Stage 2	*527	*383	-	*494	433	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16	11.4	0.6	0.1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 854	-	-	395	578	902	-	-
HCM Lane V/C Ratio	0.051	-	-	0.169	0.031	0.021	-	-
HCM Control Delay (s)	9.4	-	-	16	11.4	9.1	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.6	0.1	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	16.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	240	54	43	769	365	154
Future Vol, veh/h	240	54	43	769	365	154
Conflicting Peds, #/hr	0	0	0	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	300	68	54	961	456	193

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1144	555	651	0	-	0
Stage 1	555	-	-	-	-	-
Stage 2	589	-	-	-	-	-
Critical Hdwy	6.6	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	~ 209	535	945	-	-	-
Stage 1	579	-	-	-	-	-
Stage 2	523	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 196	534	943	-	-	-
Mov Cap-2 Maneuver	333	-	-	-	-	-
Stage 1	545	-	-	-	-	-
Stage 2	522	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	89.4	0.5	0
HCM LOS	F		

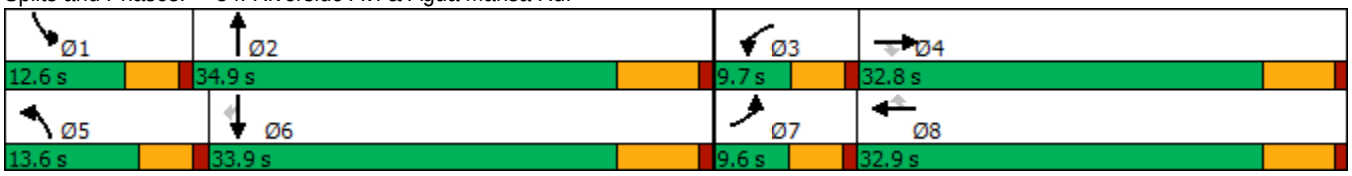
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	943	-	358	-	-
HCM Lane V/C Ratio	0.057	-	1.027	-	-
HCM Control Delay (s)	9	-	89.4	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q(veh)	0.2	-	12.3	-	-

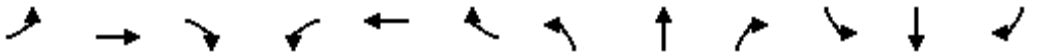
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	124	444	221	93	257	47	183	502	101	552	54
Future Volume (vph)	124	444	221	93	257	47	183	502	101	552	54
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	9.6	32.8	32.8	9.7	32.9	32.9	13.6	34.9	12.6	33.9	33.9
Total Split (%)	10.7%	36.4%	36.4%	10.8%	36.6%	36.6%	15.1%	38.8%	14.0%	37.7%	37.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	5.1	23.2	23.2	5.2	23.3	23.3	9.1	23.0	7.5	18.8	18.8
Actuated g/C Ratio	0.07	0.30	0.30	0.07	0.30	0.30	0.12	0.29	0.10	0.24	0.24
v/c Ratio	1.10	0.82	0.36	0.82	0.47	0.08	0.91	0.62	0.61	0.66	0.11
Control Delay	155.5	39.8	5.2	86.7	26.3	0.3	81.6	26.9	53.2	31.0	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	155.5	39.8	5.2	86.7	26.3	0.3	81.6	26.9	53.2	31.0	0.5
LOS	F	D	A	F	C	A	F	C	D	C	A
Approach Delay		48.3			37.3			39.2		31.8	
Approach LOS		D			D			D		C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 78.2	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 39.7	Intersection LOS: D
Intersection Capacity Utilization 72.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	444	221	93	257	47	183	502	126	101	552	54
Future Volume (veh/h)	124	444	221	93	257	47	183	502	126	101	552	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	129	462	132	97	268	34	191	523	125	105	575	48
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	126	546	461	125	545	461	226	783	186	135	795	353
Arrive On Green	0.07	0.29	0.29	0.07	0.29	0.29	0.13	0.27	0.27	0.07	0.22	0.22
Sat Flow, veh/h	1810	1900	1605	1810	1900	1608	1810	2893	688	1810	3610	1603
Grp Volume(v), veh/h	129	462	132	97	268	34	191	325	323	105	575	48
Grp Sat Flow(s),veh/h/ln	1810	1900	1605	1810	1900	1608	1810	1805	1776	1810	1805	1603
Q Serve(g_s), s	5.0	16.5	4.6	3.8	8.4	1.1	7.4	11.6	11.7	4.1	10.6	1.7
Cycle Q Clear(g_c), s	5.0	16.5	4.6	3.8	8.4	1.1	7.4	11.6	11.7	4.1	10.6	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.39	1.00		1.00
Lane Grp Cap(c), veh/h	126	546	461	125	545	461	226	488	480	135	795	353
V/C Ratio(X)	1.03	0.85	0.29	0.78	0.49	0.07	0.84	0.67	0.67	0.78	0.72	0.14
Avail Cap(c_a), veh/h	126	713	602	128	715	606	226	712	701	201	1374	610
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	24.2	19.9	33.0	21.3	18.7	30.8	23.4	23.4	32.7	26.0	22.6
Incr Delay (d2), s/veh	87.5	7.4	0.3	22.7	0.7	0.1	23.1	1.6	1.6	5.4	1.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	7.7	1.6	2.3	3.4	0.4	4.3	4.4	4.4	1.8	4.1	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	121.0	31.5	20.3	55.7	22.0	18.8	54.0	24.9	25.0	38.1	27.3	22.7
LnGrp LOS	F	C	C	E	C	B	D	C	C	D	C	C
Approach Vol, veh/h		723			399			839			728	
Approach Delay, s/veh		45.4			29.9			31.6			28.6	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	26.0	9.6	26.5	13.6	22.3	9.6	26.4
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	8.0	28.4	5.1	27.0	9.0	27.4	5.0	27.1
Max Q Clear Time (g_c+I1), s	6.1	13.7	5.8	18.5	9.4	12.6	7.0	10.4
Green Ext Time (p_c), s	0.0	2.9	0.0	2.0	0.0	3.0	0.0	1.3

Intersection Summary	
HCM 6th Ctrl Delay	34.2
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	0	0	637	200	8
Future Vol, veh/h	4	0	0	637	200	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	92	92	92	92	50
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	8	0	0	692	217	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	917	225	233	0	-	0
Stage 1	225	-	-	-	-	-
Stage 2	692	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	304	819	1346	-	-	-
Stage 1	817	-	-	-	-	-
Stage 2	500	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	304	819	1346	-	-	-
Mov Cap-2 Maneuver	304	-	-	-	-	-
Stage 1	817	-	-	-	-	-
Stage 2	500	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.2	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1346	-	304	-	-
HCM Lane V/C Ratio	-	-	0.026	-	-
HCM Control Delay (s)	0	-	17.2	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

APPENDIX 6.2: OPENING YEAR PLUS PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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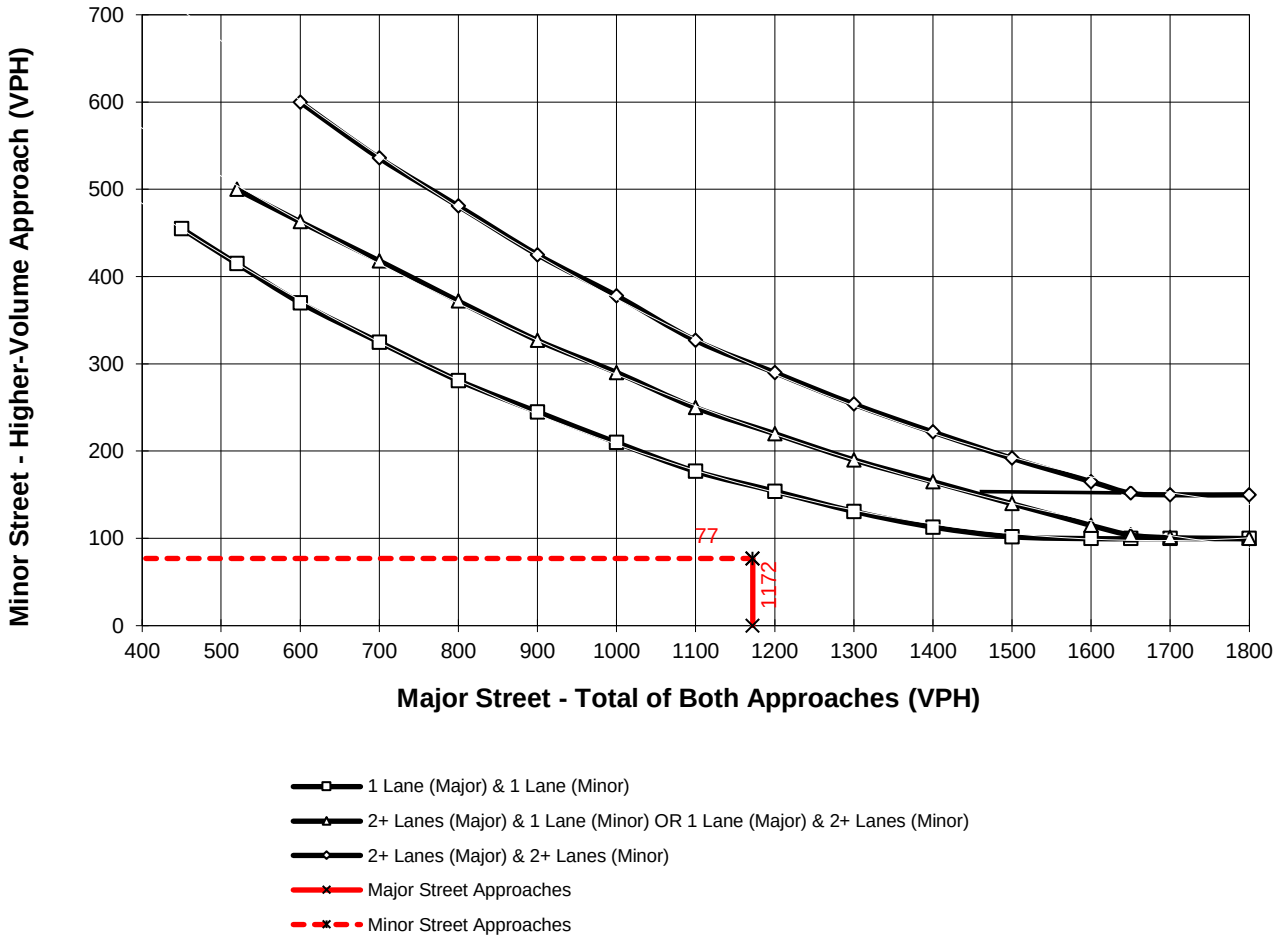
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAP (2025) Conditions - Weekday AM Peak Hour**

Major Street Name = **20th St.**
Total of Both Approaches (VPH) = **1172**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Avalon Rd.**
High Volume Approach (VPH) = **77**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

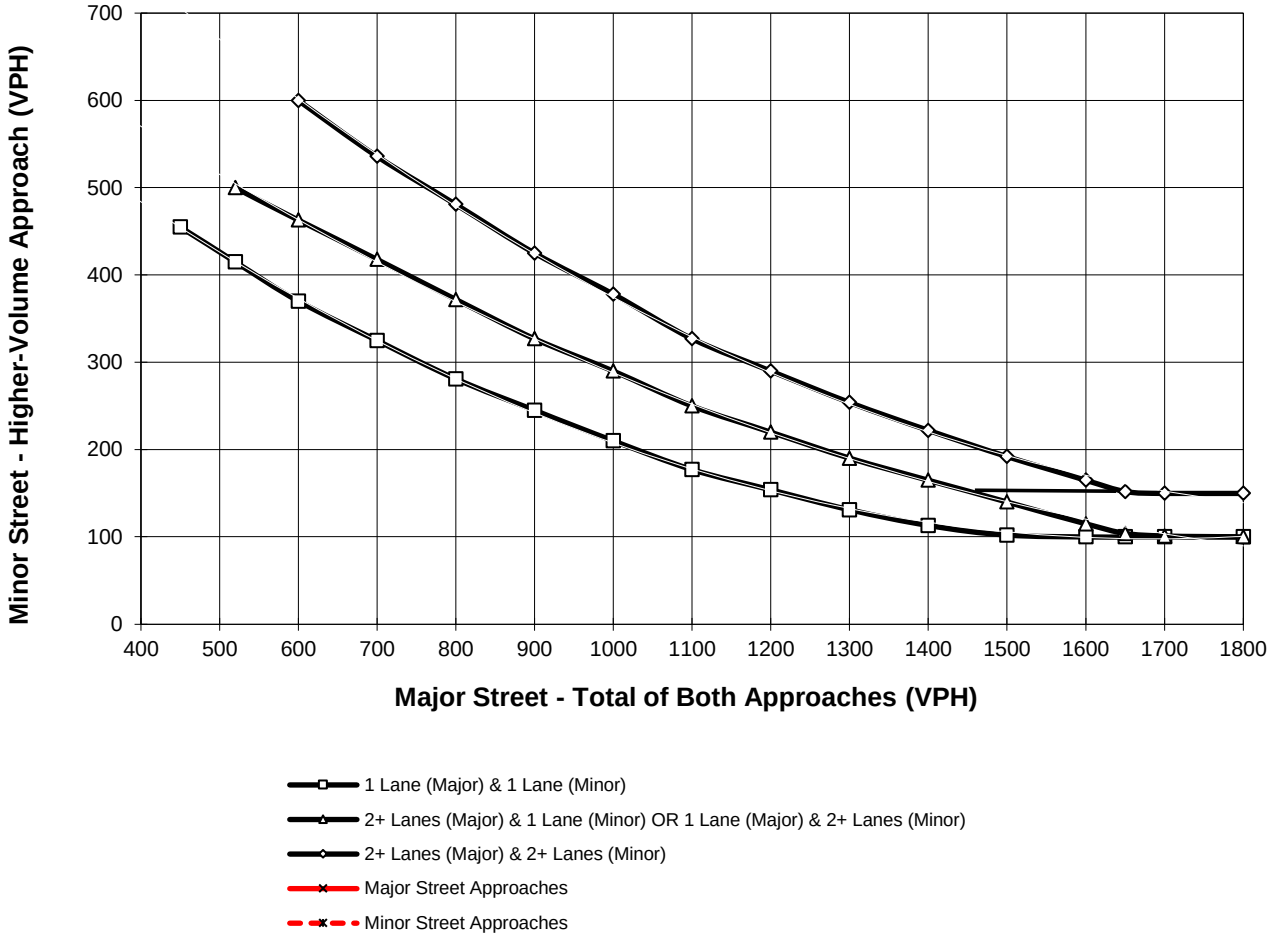
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAP (2025) Conditions - Weekday AM Peak Hour**

Major Street Name = **Avalon St.**
Total of Both Approaches (VPH) = **112**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **24th St.**
High Volume Approach (VPH) = **34**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

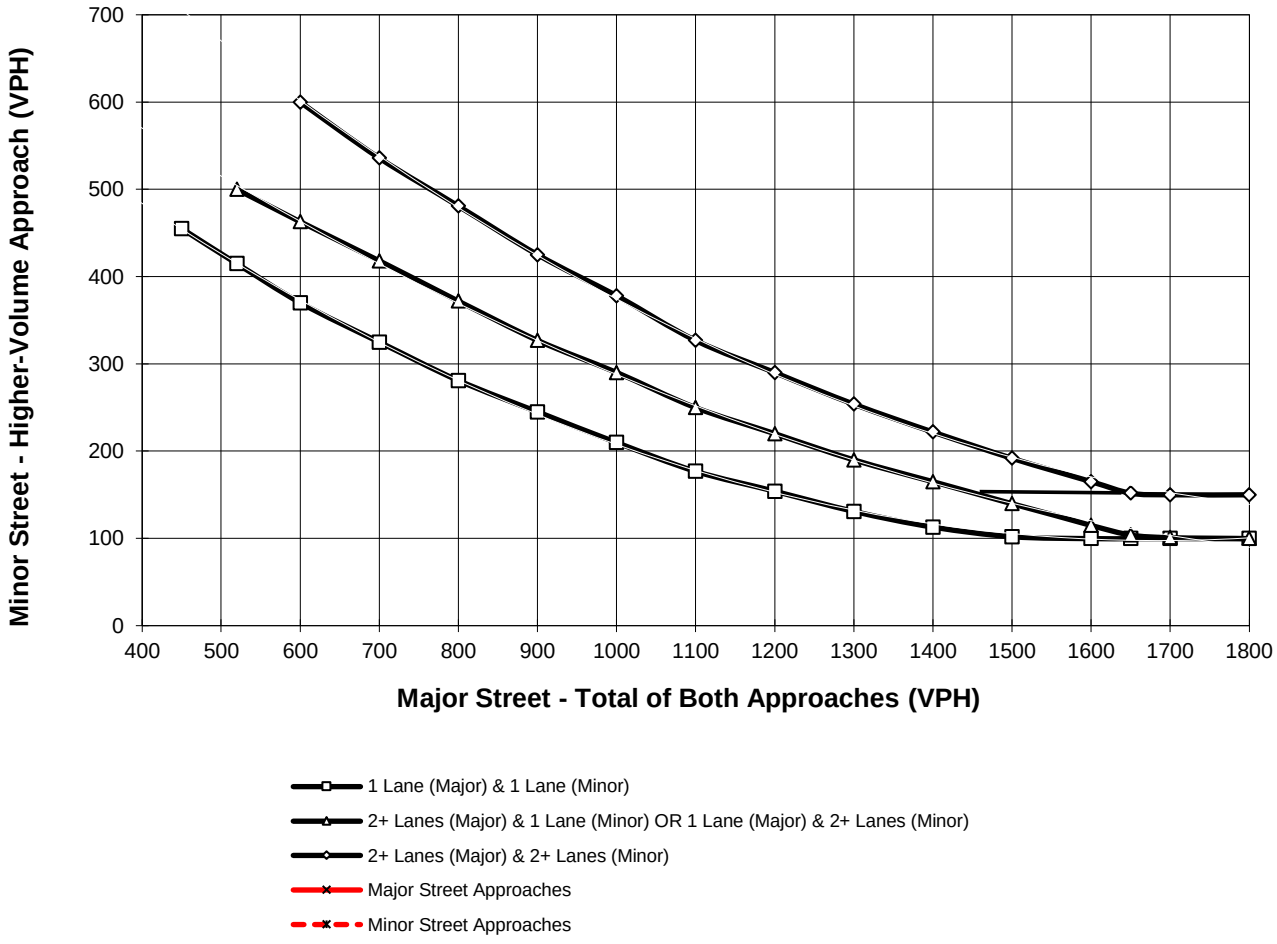
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAP (2025) Conditions - Weekday AM Peak Hour**

Major Street Name = **Avalon St.**
Total of Both Approaches (VPH) = **114**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **26th St.**
High Volume Approach (VPH) = **39**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		EAP 2025
				CALC CS	DATE	11/29/22
Jurisdiction: City of Jurupa Valley				CHK CS	DATE	11/29/22
Major Street: **Avalon Rd.**				Critical Approach Speed (Major)		45 mph
Minor Street: **Driveway 7**				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **1,147** vpd Minor Street Future ADT = **90** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. √

or

In built up area of isolated community of < 10,000 population ……

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **1,147** / *1* **90**	8,000	5,600	2,400	1,680
2 + / *1*	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **1,147** / *1* **90**	12,000	8,400	1,200	850
2 + / *1*	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied (XX)	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 5% **B** 11%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

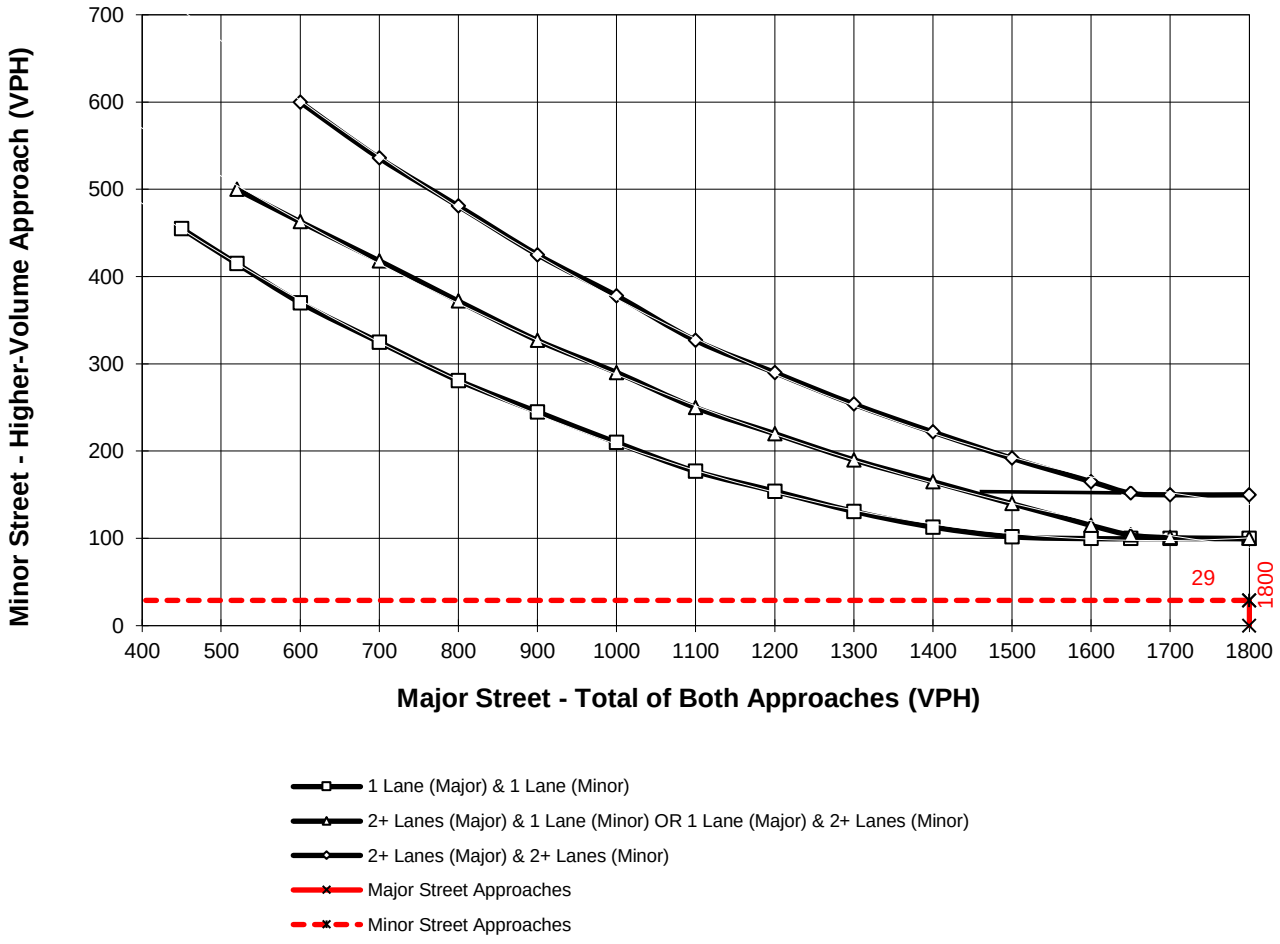
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAP (2025) Conditions - Weekday PM Peak Hour**

Major Street Name = **Rubidoux St.**
Total of Both Approaches (VPH) = **2053**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **24th St.**
High Volume Approach (VPH) = **29**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

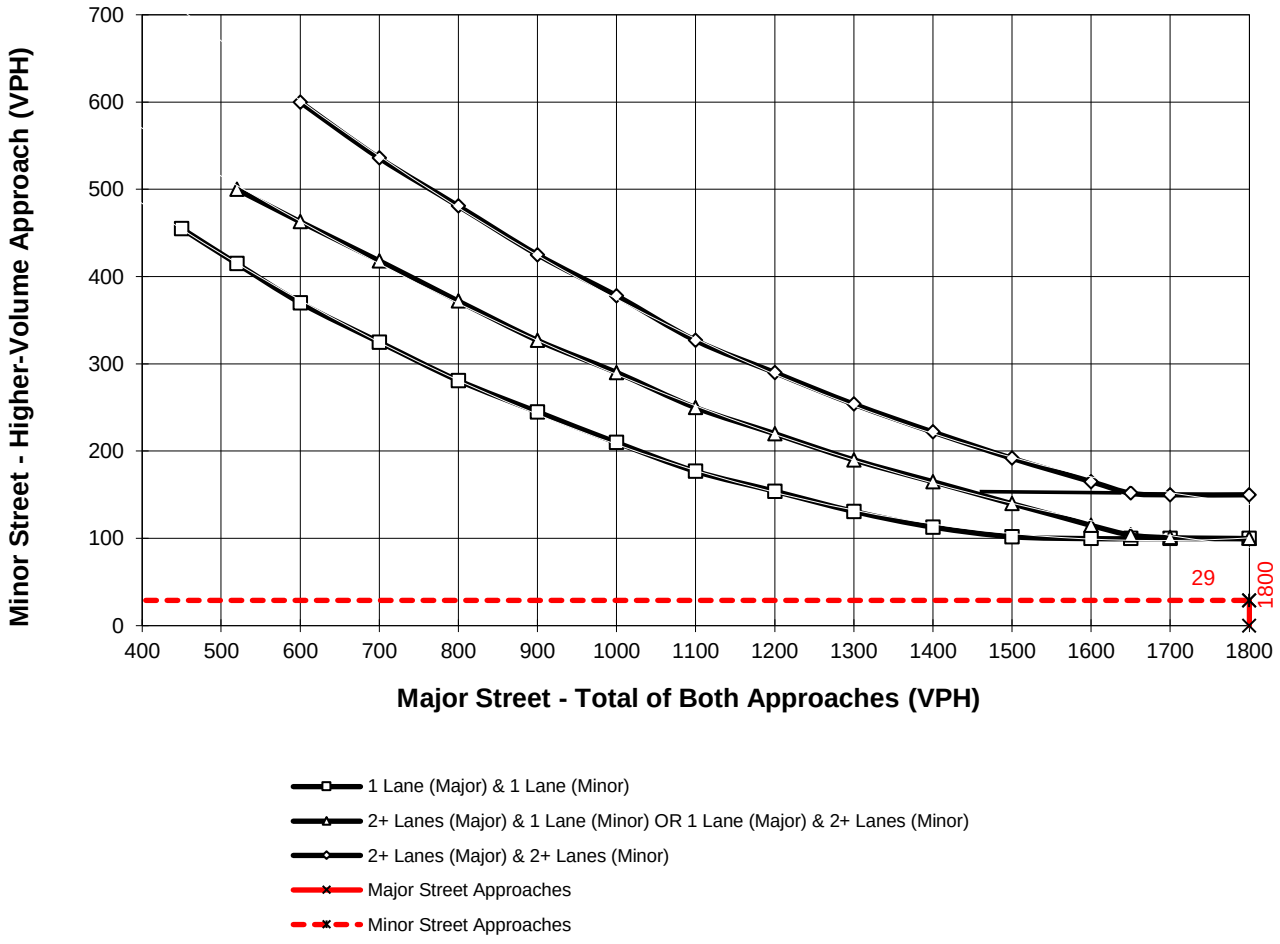
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAP (2025) Conditions - Weekday PM Peak Hour**

Major Street Name = **Rubidoux St.**
Total of Both Approaches (VPH) = **1861**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **26th St.**
High Volume Approach (VPH) = **29**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

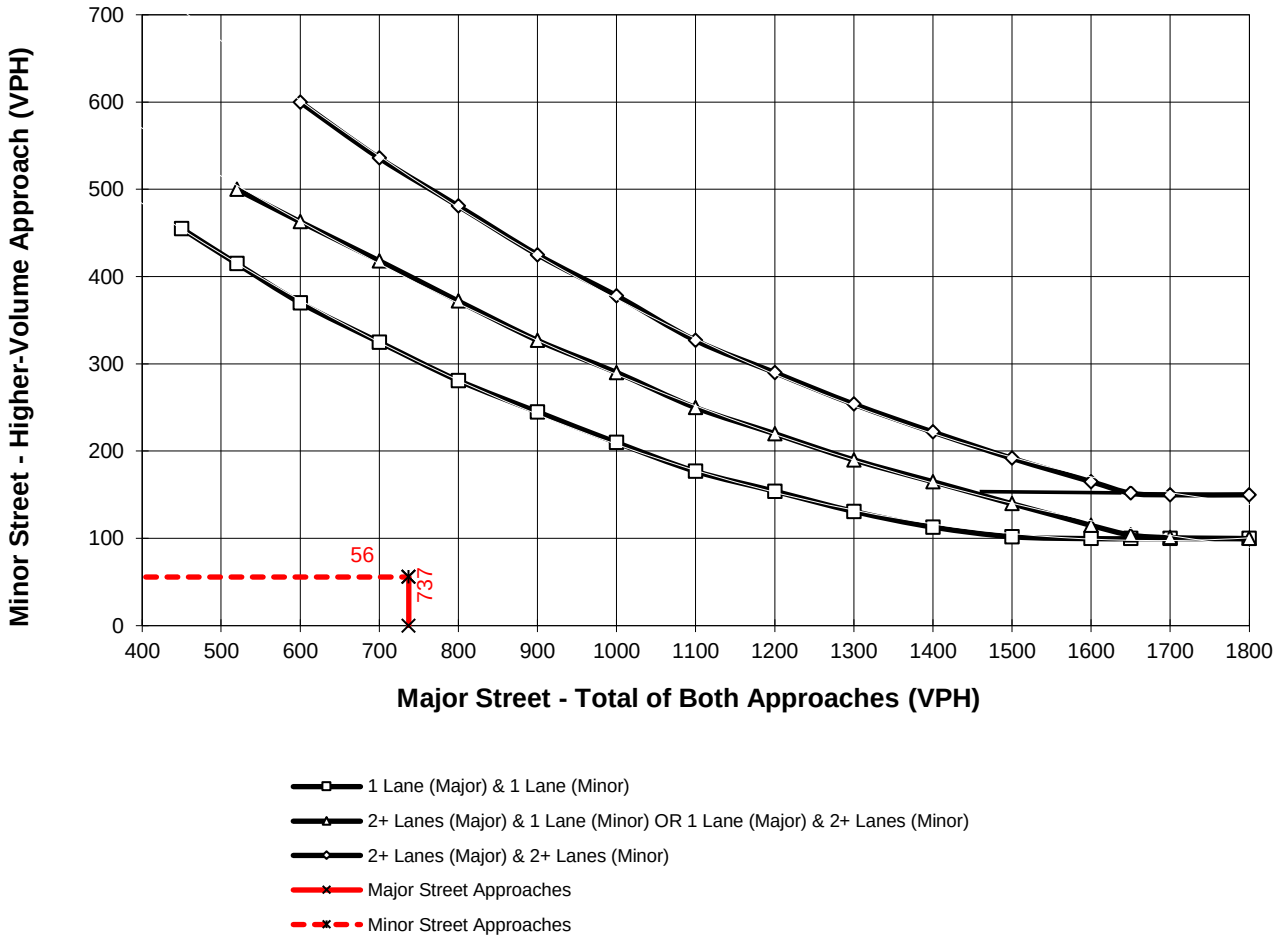
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAP (2025) Conditions - Weekday AM Peak Hour**

Major Street Name = **Frontage Rd.**
Total of Both Approaches (VPH) = **737**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Hall Av.**
High Volume Approach (VPH) = **56**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

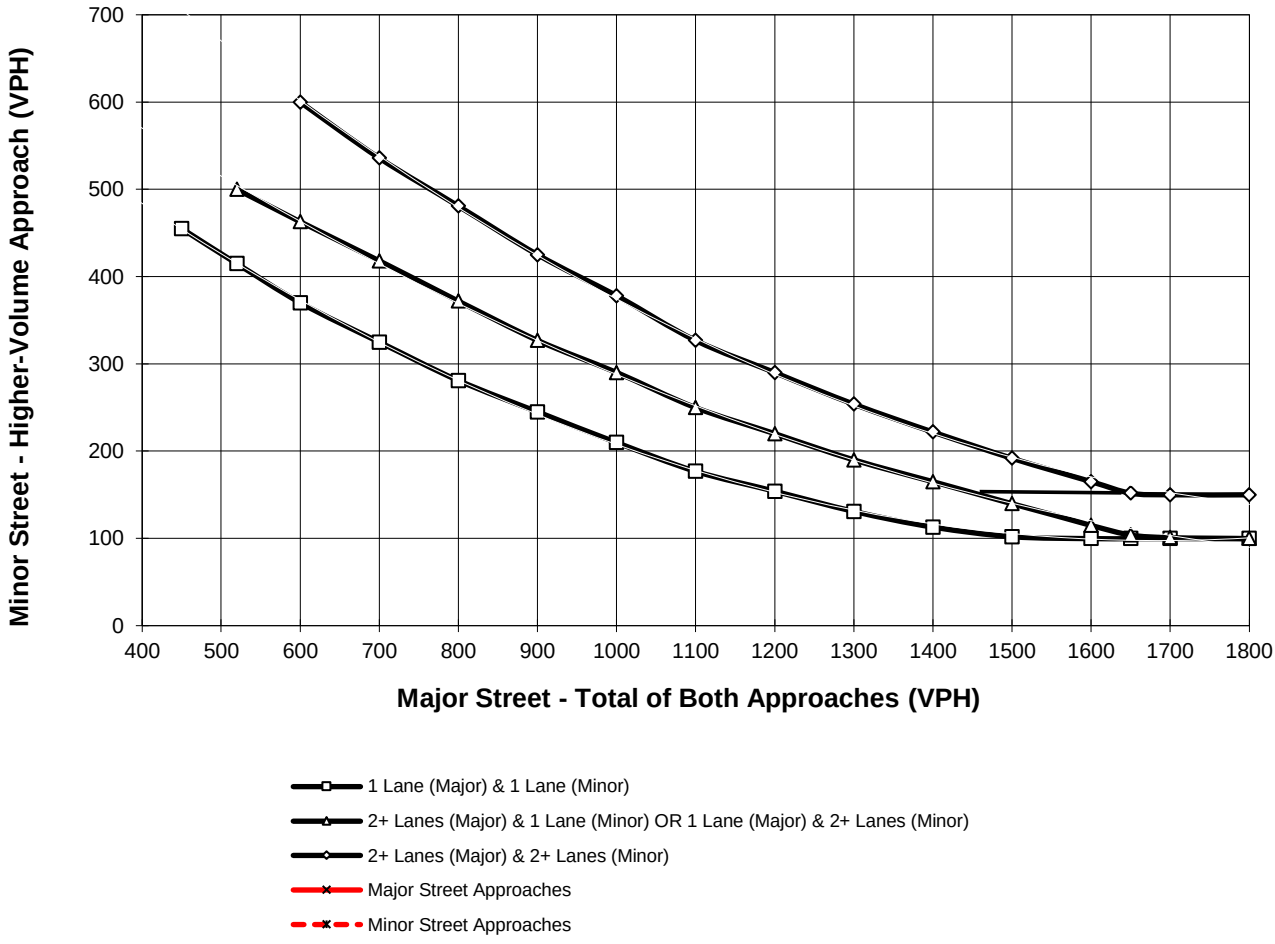
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAP (2025) Conditions - Weekday PM Peak Hour**

Major Street Name = **24th St.**
Total of Both Approaches (VPH) = **313**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Hall Av.**
High Volume Approach (VPH) = **98**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAP (2025) Conditions - Weekday PM Peak Hour**

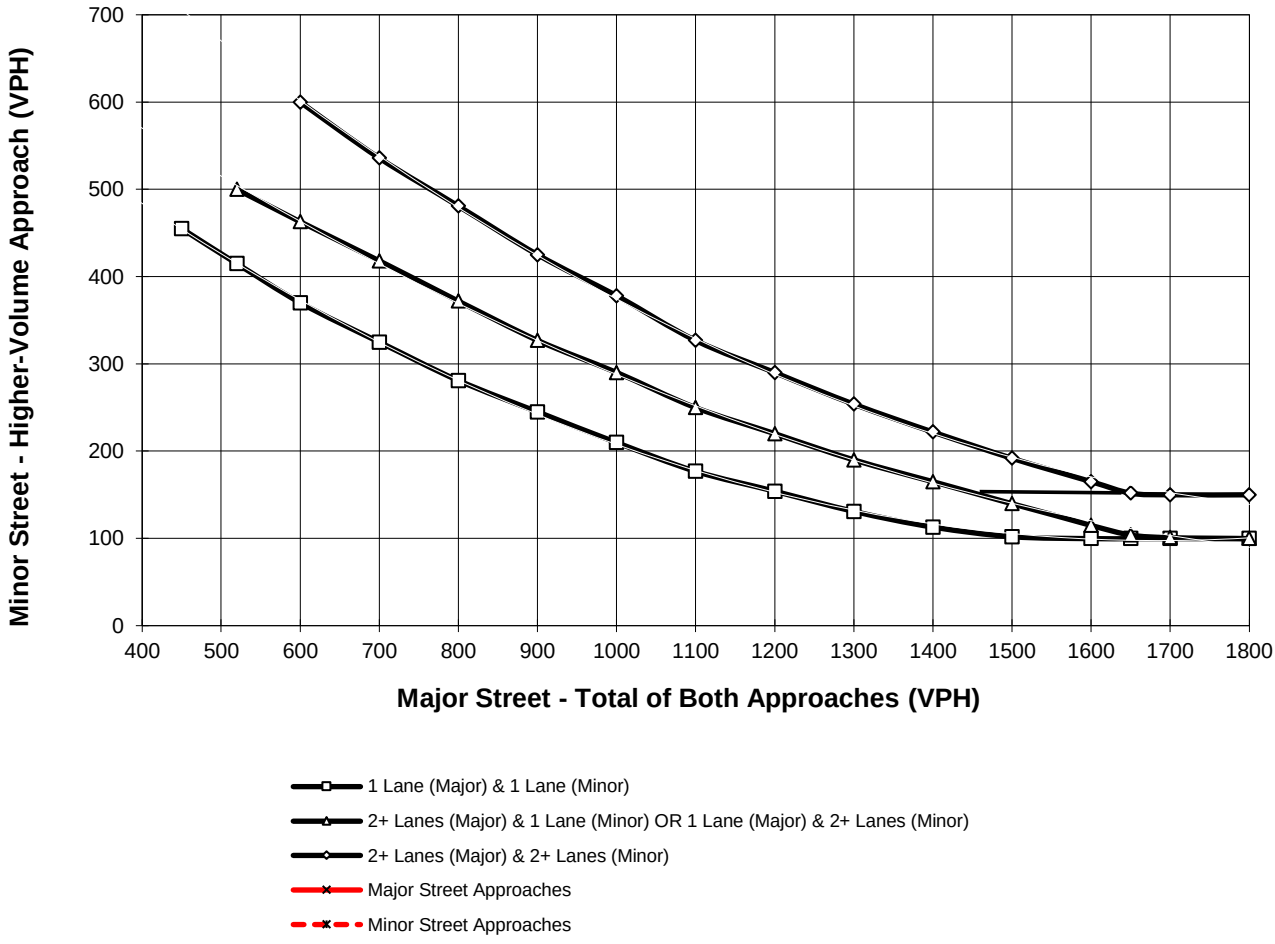
Major Street Name = **Hall Av.**

Total of Both Approaches (VPH) = **250**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **26th St.**

High Volume Approach (VPH) = **23**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

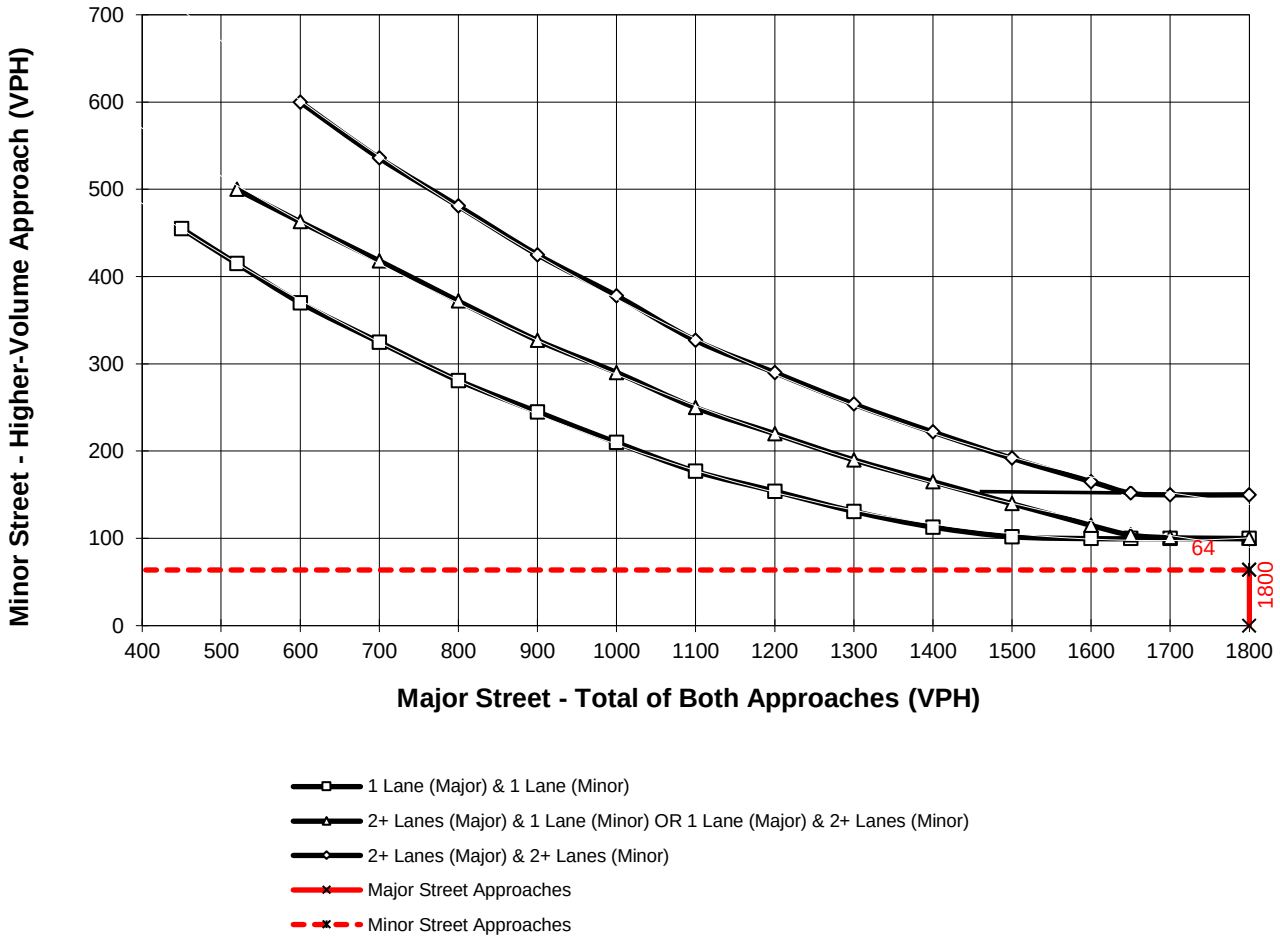
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAP (2025) Conditions - Weekday PM Peak Hour**

Major Street Name = **Market St.**
Total of Both Approaches (VPH) = **2106**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Redwood Dr.**
High Volume Approach (VPH) = **64**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

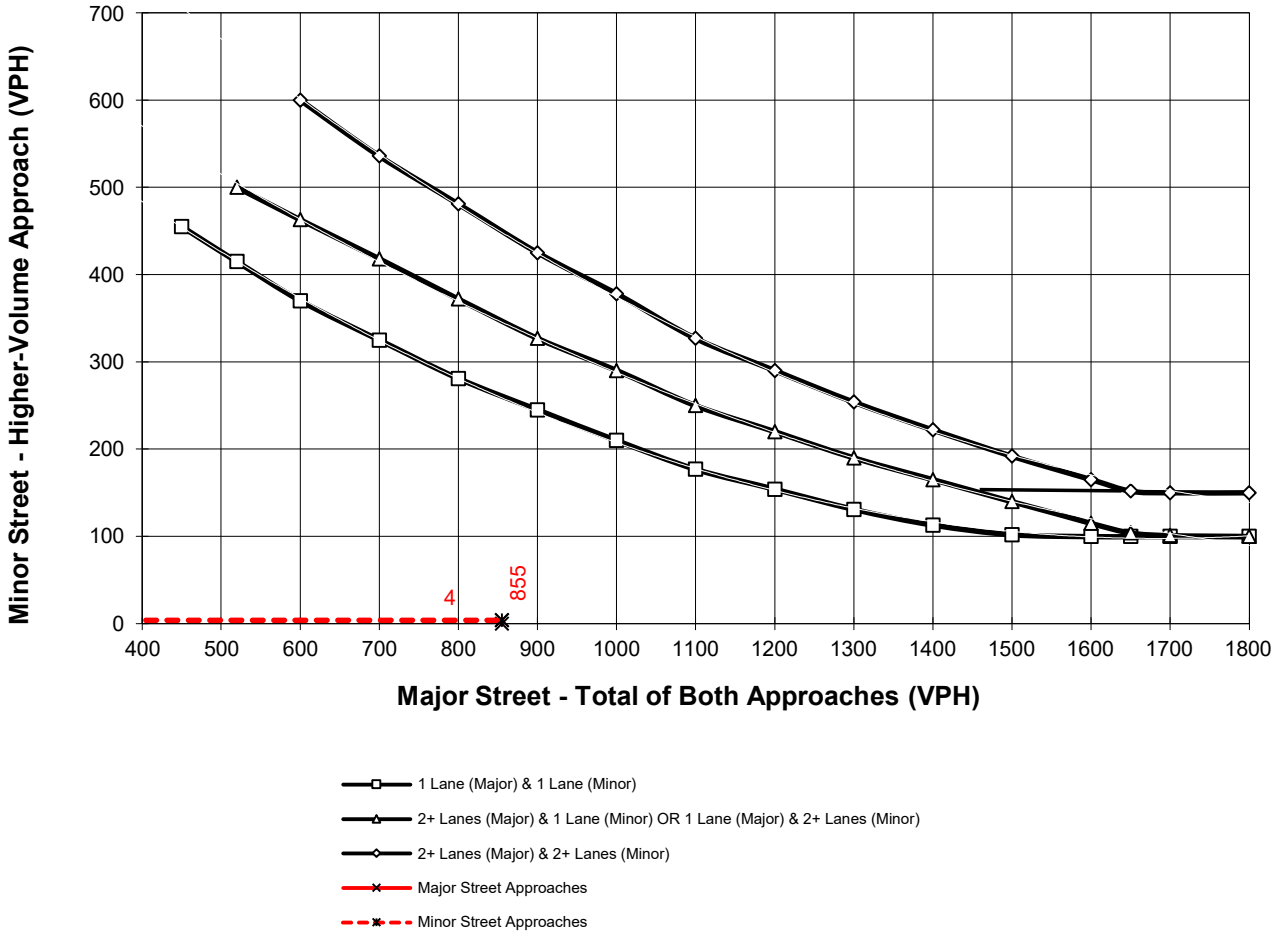
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAP (2025) Conditions - Weekday AM Peak Hour**

Major Street Name = **25th St.**
Total of Both Approaches (VPH) = **855**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Van Dell Rd.**
High Volume Approach (VPH) = **4**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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APPENDIX 6.3: OPENING YEAR PLUS PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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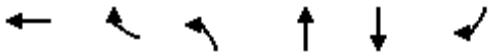


Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	630	378	286	1236	1595	641
v/c Ratio	1.01	0.66	0.90	0.59	0.84	0.65
Control Delay	71.7	32.1	70.6	12.9	37.3	6.2
Queue Delay	33.4	0.0	0.0	0.8	48.3	0.0
Total Delay	105.0	32.1	70.6	13.6	85.6	6.2
Queue Length 50th (ft)	~442	200	194	114	378	11
Queue Length 95th (ft)	#697	316	m232	m148	442	103
Internal Link Dist (ft)	1745			340	476	
Turn Bay Length (ft)		480				
Base Capacity (vph)	625	569	328	2083	1891	981
Starvation Cap Reductn	0	0	0	482	0	0
Spillback Cap Reductn	143	0	0	0	773	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.31	0.66	0.87	0.77	1.43	0.65

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

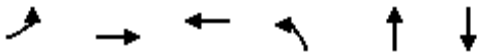
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	499	722	1018	566	535	1718
v/c Ratio	0.77	1.17	0.94	0.73	0.95	0.86
Control Delay	39.8	123.6	55.9	20.5	49.3	18.0
Queue Delay	0.0	0.0	0.0	0.0	46.9	47.8
Total Delay	39.8	123.6	55.9	20.5	96.3	65.7
Queue Length 50th (ft)	327	~631	266	198	378	577
Queue Length 95th (ft)	#480	#877	#352	m268	m#474	m647
Internal Link Dist (ft)		2158	960			340
Turn Bay Length (ft)	340			555	400	
Base Capacity (vph)	650	617	1084	777	582	2034
Starvation Cap Reductn	0	0	0	0	122	733
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.77	1.17	0.94	0.73	1.16	1.32

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	19	242	647	51	916	1192
v/c Ratio	0.08	0.76	1.08	0.74	0.66	0.84
Control Delay	38.6	37.7	94.3	51.1	20.8	37.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.6	37.7	94.3	51.1	20.8	37.5
Queue Length 50th (ft)	12	85	~503	25	220	393
Queue Length 95th (ft)	31	157	#716	m37	m294	#599
Internal Link Dist (ft)		471	1307		110	1510
Turn Bay Length (ft)				75		
Base Capacity (vph)	379	431	601	69	1398	1427
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.56	1.08	0.74	0.66	0.84

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

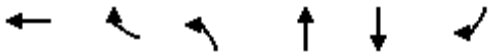
Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	808	19	5	1150	228	670
v/c Ratio	1.25	0.23	0.03	0.90	1.14	0.38
Control Delay	158.2	57.7	0.2	37.4	128.1	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	158.2	57.7	0.2	37.4	128.1	10.8
Queue Length 50th (ft)	~759	13	0	324	~217	86
Queue Length 95th (ft)	#999	38	0	408	m#297	m95
Internal Link Dist (ft)	1049			1396		322
Turn Bay Length (ft)			25		90	
Base Capacity (vph)	645	82	191	1383	200	1772
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.25	0.23	0.03	0.83	1.14	0.38

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

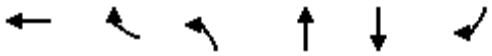


Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	65	965	206	379	1041	205
v/c Ratio	0.39	0.60	0.67	0.13	0.49	0.20
Control Delay	44.5	1.6	27.2	5.3	10.5	2.1
Queue Delay	0.0	0.1	0.0	0.0	0.2	0.0
Total Delay	44.5	1.7	27.2	5.3	10.7	2.1
Queue Length 50th (ft)	35	0	116	32	235	7
Queue Length 95th (ft)	74	0	198	121	164	20
Internal Link Dist (ft)	1457			561	315	
Turn Bay Length (ft)			125			
Base Capacity (vph)	202	1615	421	2985	2121	1033
Starvation Cap Reductn	0	0	0	0	344	0
Spillback Cap Reductn	0	47	0	106	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.62	0.49	0.13	0.59	0.20

Intersection Summary

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	140	526	507	612	461
v/c Ratio	0.59	0.63	0.46	0.87	0.17
Control Delay	47.2	7.2	27.5	38.4	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	47.2	7.2	27.5	38.4	4.5
Queue Length 50th (ft)	75	0	121	170	36
Queue Length 95th (ft)	135	48	181	450	101
Internal Link Dist (ft)	1642		355		561
Turn Bay Length (ft)		350		125	
Base Capacity (vph)	268	870	1110	802	2732
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.52	0.60	0.46	0.76	0.17

Intersection Summary



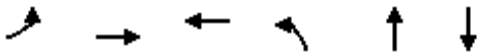
Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	403	367	313	1496	1390	534
v/c Ratio	0.83	0.78	0.82	0.65	0.68	0.57
Control Delay	51.2	42.0	68.5	8.8	29.9	4.7
Queue Delay	1.0	0.0	0.0	0.3	0.2	0.0
Total Delay	52.2	42.0	68.5	9.1	30.1	4.7
Queue Length 50th (ft)	270	211	201	61	297	0
Queue Length 95th (ft)	374	311	#419	197	351	68
Internal Link Dist (ft)	1745			340	476	
Turn Bay Length (ft)		480				
Base Capacity (vph)	575	552	380	2312	2050	938
Starvation Cap Reductn	0	0	0	264	0	0
Spillback Cap Reductn	46	0	0	0	138	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.66	0.82	0.73	0.73	0.57

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	383	359	1168	502	426	1219
v/c Ratio	0.84	0.76	0.62	0.57	0.87	0.51
Control Delay	54.7	42.1	37.3	16.1	45.5	4.3
Queue Delay	0.0	0.0	0.0	0.0	2.7	0.6
Total Delay	54.7	42.1	37.3	16.1	48.3	4.9
Queue Length 50th (ft)	265	208	285	140	293	12
Queue Length 95th (ft)	373	311	362	257	402	434
Internal Link Dist (ft)		2158	960			340
Turn Bay Length (ft)	340			555	400	
Base Capacity (vph)	526	536	1877	887	600	2409
Starvation Cap Reductn	0	0	0	0	88	732
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.67	0.62	0.57	0.83	0.73

Intersection Summary



Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	23	185	735	61	935	1170
v/c Ratio	0.11	0.67	1.08	0.90	0.71	0.88
Control Delay	40.8	32.1	93.2	47.5	20.7	41.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.8	32.1	93.2	47.5	20.7	41.9
Queue Length 50th (ft)	15	57	~580	36	216	393
Queue Length 95th (ft)	36	118	#814	m#64	m289	#654
Internal Link Dist (ft)		471	1307		110	1510
Turn Bay Length (ft)				75		
Base Capacity (vph)	377	417	678	68	1308	1337
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.44	1.08	0.90	0.71	0.88

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

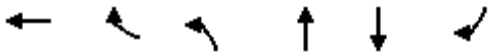
Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	1061	15	2	869	156	922
v/c Ratio	1.46	0.18	0.01	0.83	0.63	0.55
Control Delay	242.2	55.8	0.0	38.8	43.9	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	242.2	55.8	0.0	38.8	43.9	13.9
Queue Length 50th (ft)	~976	10	0	268	103	135
Queue Length 95th (ft)	#1348	32	0	304	m#176	m154
Internal Link Dist (ft)	1049			1396		322
Turn Bay Length (ft)			25		90	
Base Capacity (vph)	727	82	191	1342	249	1673
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.46	0.18	0.01	0.65	0.63	0.55

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	95	692	432	345	1191	178
v/c Ratio	0.57	0.43	0.83	0.12	0.70	0.21
Control Delay	52.5	0.8	38.8	8.6	18.6	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0
Total Delay	52.5	0.8	38.8	8.6	18.7	3.3
Queue Length 50th (ft)	52	0	270	82	317	19
Queue Length 95th (ft)	102	0	365	132	#191	9
Internal Link Dist (ft)	1457			561	315	
Turn Bay Length (ft)			125			
Base Capacity (vph)	181	1615	621	2988	1703	856
Starvation Cap Reductn	0	0	0	0	67	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.43	0.70	0.12	0.73	0.21

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	93	700	737	564	716
v/c Ratio	0.37	0.84	0.60	0.91	0.27
Control Delay	38.0	19.5	27.8	56.6	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	38.0	19.5	27.8	56.6	5.4
Queue Length 50th (ft)	47	54	194	353	144
Queue Length 95th (ft)	91	123	256	#512	122
Internal Link Dist (ft)	1642		355		561
Turn Bay Length (ft)		350		125	
Base Capacity (vph)	322	927	1239	649	2686
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.29	0.76	0.59	0.87	0.27

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

APPENDIX 6.4: OPENING YEAR PLUS PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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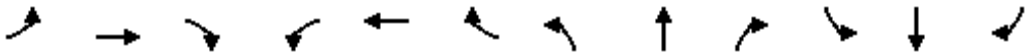
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	5	288	13	833	53	8	2	19
Future Volume (vph)	5	288	13	833	53	8	2	19
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	27.8	27.8	27.8	27.8	26.6	26.6	26.6	26.6
Total Split (s)	53.0	53.0	53.0	53.0	27.0	27.0	27.0	27.0
Total Split (%)	66.3%	66.3%	66.3%	66.3%	33.8%	33.8%	33.8%	33.8%
Yellow Time (s)	4.8	4.8	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		5.8		5.8		4.6		4.6
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		35.9		43.3		13.5		13.5
Actuated g/C Ratio		0.60		0.73		0.23		0.23
v/c Ratio		0.36		0.76		0.29		0.13
Control Delay		6.6		14.6		23.0		14.4
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		6.6		14.6		23.0		14.4
LOS		A		B		C		B
Approach Delay		6.6		14.6		23.0		14.4
Approach LOS		A		B		C		B

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 59.7	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 13.1	Intersection LOS: B
Intersection Capacity Utilization 70.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 4: Avalon St. & 20th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	288	33	13	833	0	53	8	16	2	19	25
Future Volume (veh/h)	5	288	33	13	833	0	53	8	16	2	19	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	6	356	41	16	1028	0	65	10	20	2	23	31
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	77	1070	122	80	1214	0	252	46	47	78	109	140
Arrive On Green	0.65	0.65	0.65	0.65	0.65	0.00	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	6	1657	188	10	1881	0	893	317	323	22	746	953
Grp Volume(v), veh/h	403	0	0	1044	0	0	95	0	0	56	0	0
Grp Sat Flow(s),veh/h/ln	1851	0	0	1891	0	0	1533	0	0	1721	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.5	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.9	0.0	0.0	21.6	0.0	0.0	2.6	0.0	0.0	1.4	0.0	0.0
Prop In Lane	0.01		0.10	0.02		0.00	0.68		0.21	0.04		0.55
Lane Grp Cap(c), veh/h	1268	0	0	1294	0	0	346	0	0	327	0	0
V/C Ratio(X)	0.32	0.00	0.00	0.81	0.00	0.00	0.27	0.00	0.00	0.17	0.00	0.00
Avail Cap(c_a), veh/h	1806	0	0	1853	0	0	786	0	0	842	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.0	0.0	0.0	7.0	0.0	0.0	19.2	0.0	0.0	18.8	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	1.8	0.0	0.0	0.4	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	3.8	0.0	0.0	1.0	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.2	0.0	0.0	8.8	0.0	0.0	19.7	0.0	0.0	19.1	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B	A	A	B	A	A
Approach Vol, veh/h		403			1044			95			56	
Approach Delay, s/veh		4.2			8.8			19.7			19.1	
Approach LOS		A			A			B			B	

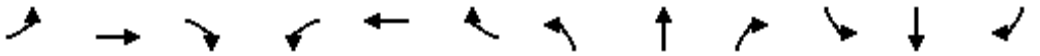
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		11.9		38.1		11.9		38.1				
Change Period (Y+Rc), s		4.6		5.8		4.6		5.8				
Max Green Setting (Gmax), s		22.4		47.2		22.4		47.2				
Max Q Clear Time (g_c+I1), s		4.6		6.9		3.4		23.6				
Green Ext Time (p_c), s		0.4		2.5		0.2		8.6				

Intersection Summary												
HCM 6th Ctrl Delay			8.6									
HCM 6th LOS			A									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	58	75	73	79	27	762	92	1388
Future Volume (vph)	58	75	73	79	27	762	92	1388
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	32.0	32.0	32.0	32.0	17.0	58.0	20.0	61.0
Total Split (%)	29.1%	29.1%	29.1%	29.1%	15.5%	52.7%	18.2%	55.5%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)	17.5	17.5	17.5	17.5	19.6	64.8	11.7	56.9
Actuated g/C Ratio	0.16	0.16	0.16	0.16	0.18	0.59	0.11	0.52
v/c Ratio	0.70	0.41	0.43	0.72	0.09	0.43	0.53	0.84
Control Delay	80.1	36.7	46.9	41.8	59.9	11.8	42.8	40.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.1	36.7	46.9	41.8	59.9	11.8	42.8	40.0
LOS	F	D	D	D	E	B	D	D
Approach Delay		51.5		43.1		13.3		40.2
Approach LOS		D		D		B		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 33.1	Intersection LOS: C
Intersection Capacity Utilization 82.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	75	37	73	79	139	27	762	59	92	1388	19
Future Volume (veh/h)	58	75	37	73	79	139	27	762	59	92	1388	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	64	83	22	81	88	88	30	847	55	102	1542	17
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	156	243	64	219	145	145	363	2116	137	130	1779	20
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.40	1.00	1.00	0.02	0.16	0.16
Sat Flow, veh/h	1228	1447	384	1309	865	865	1810	3441	223	1810	3657	40
Grp Volume(v), veh/h	64	0	105	81	0	176	30	444	458	102	760	799
Grp Sat Flow(s),veh/h/ln	1228	0	1831	1309	0	1730	1810	1805	1860	1810	1805	1893
Q Serve(g_s), s	5.6	0.0	5.6	6.4	0.0	10.4	1.1	0.0	0.0	6.2	45.2	45.3
Cycle Q Clear(g_c), s	16.0	0.0	5.6	12.0	0.0	10.4	1.1	0.0	0.0	6.2	45.2	45.3
Prop In Lane	1.00		0.21	1.00		0.50	1.00		0.12	1.00		0.02
Lane Grp Cap(c), veh/h	156	0	307	219	0	290	363	1110	1144	130	878	921
V/C Ratio(X)	0.41	0.00	0.34	0.37	0.00	0.61	0.08	0.40	0.40	0.78	0.87	0.87
Avail Cap(c_a), veh/h	246	0	441	315	0	417	363	1110	1144	255	903	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.97	0.97	0.97	0.57	0.57	0.57
Uniform Delay (d), s/veh	49.8	0.0	40.4	45.7	0.0	42.4	26.7	0.0	0.0	52.8	42.7	42.7
Incr Delay (d2), s/veh	2.5	0.0	0.9	1.5	0.0	2.9	0.1	1.0	1.0	5.8	5.4	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	2.5	2.1	0.0	4.6	0.5	0.3	0.3	3.0	23.0	24.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.3	0.0	41.4	47.2	0.0	45.3	26.8	1.0	1.0	58.7	48.1	48.0
LnGrp LOS	D	A	D	D	A	D	C	A	A	E	D	D
Approach Vol, veh/h		169			257			932			1661	
Approach Delay, s/veh		45.5			45.9			1.9			48.7	
Approach LOS		D			D			A			D	

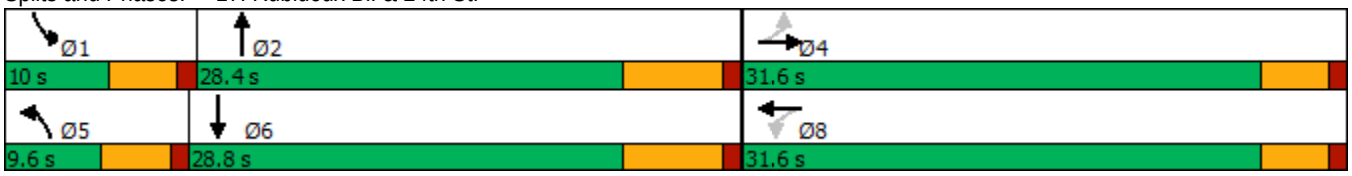
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.4	73.6		23.9	26.6	59.5		23.9				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	15.5	52.0		26.5	12.5	55.0		26.5				
Max Q Clear Time (g_c+I1), s	8.2	2.0		18.0	3.1	47.3		14.0				
Green Ext Time (p_c), s	0.1	9.5		0.6	0.0	6.2		1.3				

Intersection Summary			
HCM 6th Ctrl Delay		33.8	
HCM 6th LOS		C	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	1	5	14	13	17	757	147	971
Future Volume (vph)	1	5	14	13	17	757	147	971
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.6	31.6	31.6	31.6	9.6	28.2	9.6	28.2
Total Split (s)	31.6	31.6	31.6	31.6	9.6	28.4	10.0	28.8
Total Split (%)	45.1%	45.1%	45.1%	45.1%	13.7%	40.6%	14.3%	41.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	6.2	4.6	6.2
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		13.6		13.6	5.8	16.1	6.3	32.1
Actuated g/C Ratio		0.33		0.33	0.14	0.39	0.15	0.78
v/c Ratio		0.03		0.07	0.07	0.61	0.58	0.38
Control Delay		9.5		11.8	25.1	14.1	36.9	9.4
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		9.5		11.8	25.1	14.1	36.9	9.4
LOS		A		B	C	B	D	A
Approach Delay		9.5		11.8		14.4		13.0
Approach LOS		A		B		B		B

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 41	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 13.5	Intersection LOS: B
Intersection Capacity Utilization 52.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 17: Rubidoux Bl. & 24th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	5	12	14	13	8	17	757	30	147	971	5
Future Volume (veh/h)	1	5	12	14	13	8	17	757	30	147	971	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1	5	13	15	14	9	18	823	33	160	1055	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	113	41	101	191	62	34	41	1283	51	205	1669	8
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.02	0.36	0.36	0.11	0.45	0.45
Sat Flow, veh/h	60	468	1145	554	698	389	1810	3537	142	1810	3684	17
Grp Volume(v), veh/h	19	0	0	38	0	0	18	420	436	160	517	543
Grp Sat Flow(s),veh/h/ln	1673	0	0	1641	0	0	1810	1805	1874	1810	1805	1897
Q Serve(g_s), s	0.0	0.0	0.0	0.3	0.0	0.0	0.3	6.8	6.8	3.0	7.8	7.8
Cycle Q Clear(g_c), s	0.4	0.0	0.0	0.7	0.0	0.0	0.3	6.8	6.8	3.0	7.8	7.8
Prop In Lane	0.05		0.68	0.39		0.24	1.00		0.08	1.00		0.01
Lane Grp Cap(c), veh/h	255	0	0	287	0	0	41	655	680	205	817	859
V/C Ratio(X)	0.07	0.00	0.00	0.13	0.00	0.00	0.43	0.64	0.64	0.78	0.63	0.63
Avail Cap(c_a), veh/h	1381	0	0	1378	0	0	256	1135	1178	277	1155	1214
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.8	0.0	0.0	15.0	0.0	0.0	17.0	9.3	9.3	15.2	7.4	7.4
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.0	2.6	1.1	1.0	6.6	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.3	0.0	0.0	0.1	1.5	1.6	1.2	1.3	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.0	0.0	0.0	15.2	0.0	0.0	19.7	10.4	10.4	21.8	8.2	8.2
LnGrp LOS	B	A	A	B	A	A	B	B	B	C	A	A
Approach Vol, veh/h		19			38			874			1220	
Approach Delay, s/veh		15.0			15.2			10.6			10.0	
Approach LOS		B			B			B			A	

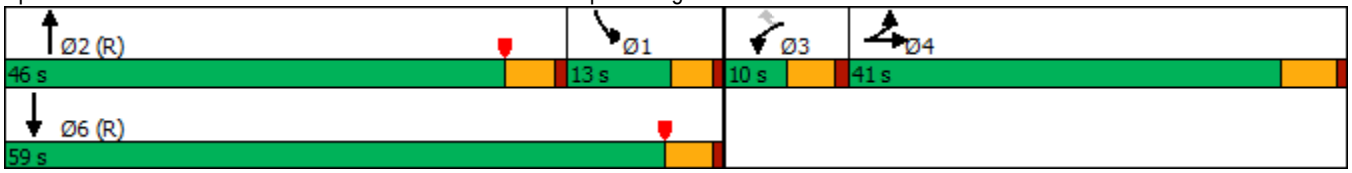
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	19.0		7.7	5.4	22.2		7.7				
Change Period (Y+Rc), s	4.6	6.2		4.6	4.6	6.2		4.6				
Max Green Setting (Gmax), s	5.4	22.2		27.0	5.0	22.6		27.0				
Max Q Clear Time (g_c+I1), s	5.0	8.8		2.4	2.3	9.8		2.7				
Green Ext Time (p_c), s	0.0	3.9		0.0	0.0	4.9		0.1				

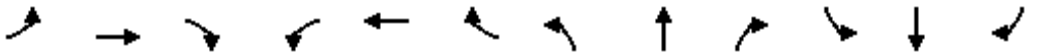
Intersection Summary												
HCM 6th Ctrl Delay			10.4									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBL	WBR	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	556	15	18	5	583	219	643
Future Volume (vph)	556	15	18	5	583	219	643
Turn Type	Split	NA	Prot	Perm	NA	Prot	NA
Protected Phases	4	4	3		2	1	6
Permitted Phases				3			
Detector Phase	4	4	3	3	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	10.0	10.0	45.0	9.5	30.0
Total Split (s)	41.0	41.0	10.0	10.0	46.0	13.0	59.0
Total Split (%)	37.3%	37.3%	9.1%	9.1%	41.8%	11.8%	53.6%
Yellow Time (s)	4.5	4.5	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	30.6	30.6	5.0	5.0	42.8	15.6	62.9
Actuated g/C Ratio	0.28	0.28	0.05	0.05	0.39	0.14	0.57
v/c Ratio	0.88	0.79	0.23	0.03	0.80	0.89	0.32
Control Delay	57.3	43.1	57.7	0.2	28.9	63.4	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.3	43.1	57.7	0.2	28.9	63.4	8.6
LOS	E	D	E	A	C	E	A
Approach Delay		50.4			28.9		22.5
Approach LOS		D			C		C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 33.1	Intersection LOS: C
Intersection Capacity Utilization 86.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	556	15	204	18	0	5	0	583	521	219	643	0
Future Volume (veh/h)	556	15	204	18	0	5	0	583	521	219	643	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	698	0	0	19	0	3	0	607	434	228	670	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	782	411	0	0	0	0	0	666	476	557	2485	0
Arrive On Green	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.33	0.62	1.00	0.00
Sat Flow, veh/h	3619	1900	0		0		0	2083	1421	1810	3705	0
Grp Volume(v), veh/h	698	0	0		0.0		0	551	490	228	670	0
Grp Sat Flow(s),veh/h/ln	1810	1900	0				0	1805	1604	1810	1805	0
Q Serve(g_s), s	20.6	0.0	0.0				0.0	32.1	32.2	7.1	0.0	0.0
Cycle Q Clear(g_c), s	20.6	0.0	0.0				0.0	32.1	32.2	7.1	0.0	0.0
Prop In Lane	1.00		0.00				0.00		0.89	1.00		0.00
Lane Grp Cap(c), veh/h	782	411	0				0	605	537	557	2485	0
V/C Ratio(X)	0.89	0.00	0.00				0.00	0.91	0.91	0.41	0.27	0.00
Avail Cap(c_a), veh/h	1168	613	0				0	673	598	557	2485	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.71	0.71	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.9	0.0	0.0				0.0	35.0	35.0	16.0	0.0	0.0
Incr Delay (d2), s/veh	4.5	0.0	0.0				0.0	15.6	17.2	0.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	0.0	0.0				0.0	16.1	14.6	2.4	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.4	0.0	0.0				0.0	50.6	52.2	16.2	0.3	0.0
LnGrp LOS	D	A	A				A	D	D	B	A	A
Approach Vol, veh/h		698						1041			898	
Approach Delay, s/veh		46.4						51.4			4.3	
Approach LOS		D						D			A	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	38.9	41.8		29.3		80.7						
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0						
Max Green Setting (Gmax), s	8.5	* 41		35.5		54.0						
Max Q Clear Time (g_c+I1), s	9.1	34.2		22.6		2.0						
Green Ext Time (p_c), s	0.0	2.6		1.2		3.0						

Intersection Summary												
HCM 6th Ctrl Delay			34.0									
HCM 6th LOS			C									

Notes

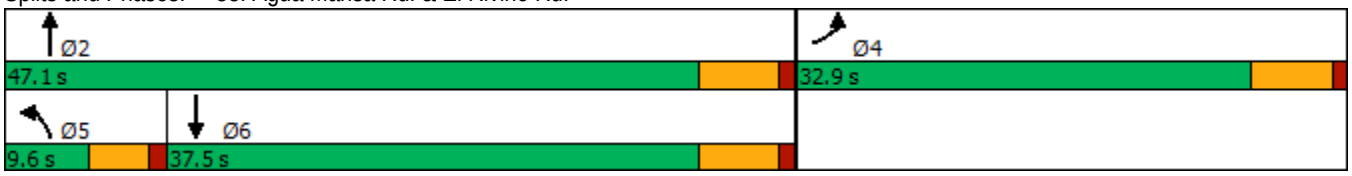
User approved volume balancing among the lanes for turning movement.

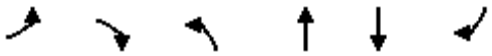
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	170	19	426	537
Future Volume (vph)	170	19	426	537
Turn Type	Prot	Prot	NA	NA
Protected Phases	4	5	2	6
Permitted Phases				
Detector Phase	4	5	2	6
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	32.8	9.6	15.8	27.8
Total Split (s)	32.9	9.6	47.1	37.5
Total Split (%)	41.1%	12.0%	58.9%	46.9%
Yellow Time (s)	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.8
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	None	None
Act Effct Green (s)	14.3	5.3	27.5	26.2
Actuated g/C Ratio	0.26	0.10	0.51	0.48
v/c Ratio	0.47	0.11	0.25	0.76
Control Delay	20.3	31.1	8.2	20.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	20.3	31.1	8.2	20.3
LOS	C	C	A	C
Approach Delay	20.3		9.2	20.3
Approach LOS	C		A	C

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 54.1	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 16.5	Intersection LOS: B
Intersection Capacity Utilization 56.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 33: Agua Mansa Rd. & El Rivino Rd.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	170	42	19	426	537	107
Future Volume (veh/h)	170	42	19	426	537	107
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	181	0	20	453	571	114
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	343		44	2047	686	137
Arrive On Green	0.19	0.00	0.02	0.57	0.45	0.45
Sat Flow, veh/h	1800	0	1810	3705	1538	307
Grp Volume(v), veh/h	182	0	20	453	0	685
Grp Sat Flow(s),veh/h/ln	1810	0	1810	1805	0	1845
Q Serve(g_s), s	4.3	0.0	0.5	3.0	0.0	15.6
Cycle Q Clear(g_c), s	4.3	0.0	0.5	3.0	0.0	15.6
Prop In Lane	0.99	0.00	1.00			0.17
Lane Grp Cap(c), veh/h	345		44	2047	0	823
V/C Ratio(X)	0.53		0.45	0.22	0.00	0.83
Avail Cap(c_a), veh/h	1026		189	3118	0	1223
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.4	0.0	23.0	5.1	0.0	11.7
Incr Delay (d2), s/veh	1.3	0.0	2.7	0.1	0.0	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.2	0.6	0.0	4.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.7	0.0	25.7	5.2	0.0	14.9
LnGrp LOS	B		C	A	A	B
Approach Vol, veh/h	182			473	685	
Approach Delay, s/veh	18.7			6.0	14.9	
Approach LOS	B			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		32.9		14.9	5.8	27.1
Change Period (Y+Rc), s		5.8		5.8	4.6	5.8
Max Green Setting (Gmax), s		41.3		27.1	5.0	31.7
Max Q Clear Time (g_c+I1), s		5.0		6.3	2.5	17.6
Green Ext Time (p_c), s		2.9		0.4	0.0	3.7

Intersection Summary	
HCM 6th Ctrl Delay	12.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	7	721	25	249	18	8	1	13
Future Volume (vph)	7	721	25	249	18	8	1	13
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	27.8	27.8	27.8	27.8	26.6	26.6	26.6	26.6
Total Split (s)	48.0	48.0	48.0	48.0	27.0	27.0	27.0	27.0
Total Split (%)	64.0%	64.0%	64.0%	64.0%	36.0%	36.0%	36.0%	36.0%
Yellow Time (s)	4.8	4.8	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		5.8		5.8		4.6		4.6
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		36.3		26.1		14.6		14.6
Actuated g/C Ratio		0.77		0.56		0.31		0.31
v/c Ratio		0.65		0.36		0.14		0.04
Control Delay		11.2		7.2		12.8		18.1
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		11.2		7.2		12.8		18.1
LOS		B		A		B		B
Approach Delay		11.2		7.2		12.8		18.1
Approach LOS		B		A		B		B

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 47	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 10.4	Intersection LOS: B
Intersection Capacity Utilization 60.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4: Avalon St. & 20th St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	721	40	25	249	3	18	8	30	1	13	3
Future Volume (veh/h)	7	721	40	25	249	3	18	8	30	1	13	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.99		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	9	879	49	30	304	4	22	10	37	1	16	4
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	92	1086	60	135	1042	13	161	55	116	97	191	46
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	5	1773	98	64	1700	21	335	418	870	36	1439	347
Grp Volume(v), veh/h	937	0	0	338	0	0	69	0	0	21	0	0
Grp Sat Flow(s),veh/h/ln	1876	0	0	1785	0	0	1623	0	0	1821	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	15.7	0.0	0.0	3.4	0.0	0.0	1.5	0.0	0.0	0.4	0.0	0.0
Prop In Lane	0.01		0.05	0.09		0.01	0.32		0.54	0.05		0.19
Lane Grp Cap(c), veh/h	1238	0	0	1189	0	0	332	0	0	334	0	0
V/C Ratio(X)	0.76	0.00	0.00	0.28	0.00	0.00	0.21	0.00	0.00	0.06	0.00	0.00
Avail Cap(c_a), veh/h	2022	0	0	1861	0	0	984	0	0	1083	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.1	0.0	0.0	3.7	0.0	0.0	16.0	0.0	0.0	15.5	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.0	0.4	0.0	0.0	0.5	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.1	0.0	0.0	3.9	0.0	0.0	16.3	0.0	0.0	15.6	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B	A	A	B	A	A
Approach Vol, veh/h		937			338			69			21	
Approach Delay, s/veh		7.1			3.9			16.3			15.6	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		10.0		30.8		10.0		30.8				
Change Period (Y+Rc), s		4.6		5.8		4.6		5.8				
Max Green Setting (Gmax), s		22.4		42.2		22.4		42.2				
Max Q Clear Time (g_c+I1), s		3.5		17.7		2.4		5.4				
Green Ext Time (p_c), s		0.3		7.3		0.0		2.2				

Intersection Summary												
HCM 6th Ctrl Delay			6.9									
HCM 6th LOS			A									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	52	167	68	94	80	1102	135	908
Future Volume (vph)	52	167	68	94	80	1102	135	908
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	35.0	35.0	35.0	35.0	19.0	51.0	24.0	56.0
Total Split (%)	31.8%	31.8%	31.8%	31.8%	17.3%	46.4%	21.8%	50.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)	19.9	19.9	19.9	19.9	25.7	59.9	14.2	48.4
Actuated g/C Ratio	0.18	0.18	0.18	0.18	0.23	0.54	0.13	0.44
v/c Ratio	0.31	0.70	0.61	0.49	0.21	0.65	0.63	0.66
Control Delay	41.8	50.1	60.9	37.1	52.2	10.6	32.3	37.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.8	50.1	60.9	37.1	52.2	10.6	32.3	37.8
LOS	D	D	E	D	D	B	C	D
Approach Delay		48.5		44.4		13.3		37.1
Approach LOS		D		D		B		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 28.3	Intersection LOS: C
Intersection Capacity Utilization 76.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	167	52	68	94	60	80	1102	67	135	908	53
Future Volume (veh/h)	52	167	52	68	94	60	80	1102	67	135	908	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	57	182	32	74	102	19	87	1198	60	147	987	53
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	239	301	53	167	298	55	536	1969	99	180	1277	69
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.59	1.00	1.00	0.03	0.12	0.12
Sat Flow, veh/h	1283	1570	276	1186	1551	289	1810	3498	175	1810	3484	187
Grp Volume(v), veh/h	57	0	214	74	0	121	87	618	640	147	511	529
Grp Sat Flow(s),veh/h/ln	1283	0	1846	1186	0	1840	1810	1805	1868	1810	1805	1866
Q Serve(g_s), s	4.4	0.0	11.7	6.7	0.0	6.3	2.4	0.0	0.0	8.9	30.2	30.2
Cycle Q Clear(g_c), s	10.7	0.0	11.7	18.4	0.0	6.3	2.4	0.0	0.0	8.9	30.2	30.2
Prop In Lane	1.00		0.15	1.00		0.16	1.00		0.09	1.00		0.10
Lane Grp Cap(c), veh/h	239	0	354	167	0	353	536	1016	1052	180	662	684
V/C Ratio(X)	0.24	0.00	0.60	0.44	0.00	0.34	0.16	0.61	0.61	0.81	0.77	0.77
Avail Cap(c_a), veh/h	337	0	495	258	0	494	536	1016	1052	321	820	848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.76	0.76	0.76	0.70	0.70	0.70
Uniform Delay (d), s/veh	43.1	0.0	40.6	49.0	0.0	38.4	16.3	0.0	0.0	52.2	43.9	43.9
Incr Delay (d2), s/veh	0.7	0.0	2.4	2.6	0.0	0.8	0.1	2.1	2.0	6.2	3.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	5.4	2.1	0.0	2.8	0.9	0.6	0.6	4.5	15.0	15.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.8	0.0	43.0	51.6	0.0	39.3	16.4	2.1	2.0	58.4	46.9	46.8
LnGrp LOS	D	A	D	D	A	D	B	A	A	E	D	D
Approach Vol, veh/h		271			195			1345			1187	
Approach Delay, s/veh		43.2			43.9			3.0			48.3	
Approach LOS		D			D			A			D	

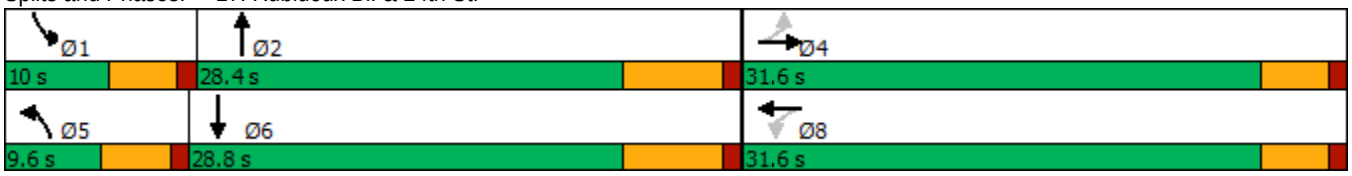
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.5	67.9		26.6	37.1	46.3		26.6				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	19.5	45.0		29.5	14.5	50.0		29.5				
Max Q Clear Time (g_c+I1), s	10.9	2.0		13.7	4.4	32.2		20.4				
Green Ext Time (p_c), s	0.2	15.5		1.6	0.1	8.1		0.7				

Intersection Summary			
HCM 6th Ctrl Delay		27.2	
HCM 6th LOS		C	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	2	19	17	7	20	805	151	996
Future Volume (vph)	2	19	17	7	20	805	151	996
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.6	31.6	31.6	31.6	9.6	28.2	9.6	28.2
Total Split (s)	31.6	31.6	31.6	31.6	9.6	28.4	10.0	28.8
Total Split (%)	45.1%	45.1%	45.1%	45.1%	13.7%	40.6%	14.3%	41.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	6.2	4.6	6.2
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		13.6		13.6	5.8	16.9	6.2	32.8
Actuated g/C Ratio		0.33		0.33	0.14	0.41	0.15	0.79
v/c Ratio		0.05		0.06	0.08	0.62	0.57	0.36
Control Delay		11.9		12.5	25.4	14.3	37.0	9.1
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		11.9		12.5	25.4	14.3	37.0	9.1
LOS		B		B	C	B	D	A
Approach Delay		11.9		12.5		14.6		12.8
Approach LOS		B		B		B		B

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 41.7	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 13.5	Intersection LOS: B
Intersection Capacity Utilization 54.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 17: Rubidoux Bl. & 24th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	19	8	17	7	6	20	805	77	151	996	4
Future Volume (veh/h)	2	19	8	17	7	6	20	805	77	151	996	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2	19	8	17	7	6	20	821	79	154	1016	4
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	117	86	36	226	27	23	46	1262	121	200	1714	7
Arrive On Green	0.07	0.07	0.07	0.07	0.07	0.07	0.03	0.38	0.38	0.11	0.46	0.46
Sat Flow, veh/h	105	1188	492	908	374	320	1810	3327	320	1810	3688	15
Grp Volume(v), veh/h	29	0	0	30	0	0	20	445	455	154	497	523
Grp Sat Flow(s),veh/h/ln	1785	0	0	1602	0	0	1810	1805	1842	1810	1805	1897
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.4	7.2	7.2	2.9	7.2	7.2
Cycle Q Clear(g_c), s	0.5	0.0	0.0	0.5	0.0	0.0	0.4	7.2	7.2	2.9	7.2	7.2
Prop In Lane	0.07		0.28	0.57		0.20	1.00		0.17	1.00		0.01
Lane Grp Cap(c), veh/h	238	0	0	276	0	0	46	685	699	200	839	882
V/C Ratio(X)	0.12	0.00	0.00	0.11	0.00	0.00	0.44	0.65	0.65	0.77	0.59	0.59
Avail Cap(c_a), veh/h	1470	0	0	1345	0	0	257	1139	1162	278	1160	1219
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.4	0.0	0.0	15.4	0.0	0.0	16.9	9.0	9.0	15.2	7.0	7.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	0.0	2.4	1.0	1.0	5.2	0.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.2	0.0	0.0	0.1	1.5	1.6	1.1	1.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.6	0.0	0.0	15.6	0.0	0.0	19.3	10.0	10.0	20.4	7.6	7.6
LnGrp LOS	B	A	A	B	A	A	B	B	B	C	A	A
Approach Vol, veh/h		29			30			920			1174	
Approach Delay, s/veh		15.6			15.6			10.2			9.3	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	19.5		7.1	5.5	22.5		7.1				
Change Period (Y+Rc), s	4.6	6.2		4.6	4.6	6.2		4.6				
Max Green Setting (Gmax), s	5.4	22.2		27.0	5.0	22.6		27.0				
Max Q Clear Time (g_c+I1), s	4.9	9.2		2.5	2.4	9.2		2.5				
Green Ext Time (p_c), s	0.0	4.2		0.1	0.0	4.8		0.1				

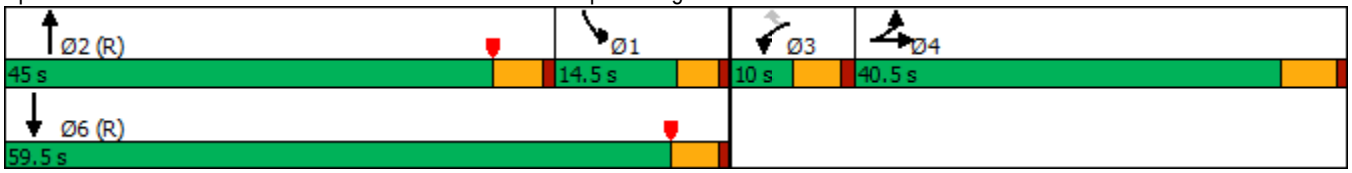
Intersection Summary												
HCM 6th Ctrl Delay			9.9									
HCM 6th LOS			A									

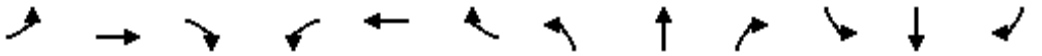
22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.

Lane Group	EBL	EBT	WBL	WBR	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	587	48	14	2	536	150	885
Future Volume (vph)	587	48	14	2	536	150	885
Turn Type	Split	NA	Prot	Perm	NA	Prot	NA
Protected Phases	4	4	3		2	1	6
Permitted Phases				3			
Detector Phase	4	4	3	3	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	10.0	10.0	45.0	9.5	30.0
Total Split (s)	40.5	40.5	10.0	10.0	45.0	14.5	59.5
Total Split (%)	36.8%	36.8%	9.1%	9.1%	40.9%	13.2%	54.1%
Yellow Time (s)	4.5	4.5	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	39.3	39.3	5.1	5.1	38.0	13.6	56.2
Actuated g/C Ratio	0.36	0.36	0.05	0.05	0.35	0.12	0.51
v/c Ratio	0.90	0.77	0.18	0.01	0.69	0.70	0.50
Control Delay	53.6	31.9	55.6	0.0	30.5	45.9	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.6	31.9	55.6	0.0	30.5	45.9	12.1
LOS	D	C	E	A	C	D	B
Approach Delay		43.2			30.5		17.0
Approach LOS		D			C		B

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 30.2	Intersection LOS: C
Intersection Capacity Utilization 81.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	587	48	384	14	0	2	0	536	299	150	885	0
Future Volume (veh/h)	587	48	384	14	0	2	0	536	299	150	885	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	485	227	308	15	0	0	0	558	263	156	922	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	576	232	315	0	0	0	0	638	300	494	2117	0
Arrive On Green	0.32	0.32	0.32	0.00	0.00	0.00	0.00	0.27	0.27	0.55	1.00	0.00
Sat Flow, veh/h	1810	730	991		0		0	2478	1121	1810	3705	0
Grp Volume(v), veh/h	485	0	535		0.0		0	422	399	156	922	0
Grp Sat Flow(s),veh/h/ln	1810	0	1722				0	1805	1698	1810	1805	0
Q Serve(g_s), s	27.5	0.0	33.8				0.0	24.6	24.7	5.2	0.0	0.0
Cycle Q Clear(g_c), s	27.5	0.0	33.8				0.0	24.6	24.7	5.2	0.0	0.0
Prop In Lane	1.00		0.58				0.00		0.66	1.00		0.00
Lane Grp Cap(c), veh/h	576	0	548				0	483	455	494	2117	0
V/C Ratio(X)	0.84	0.00	0.98				0.00	0.87	0.88	0.32	0.44	0.00
Avail Cap(c_a), veh/h	576	0	548				0	656	618	494	2117	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.81	0.81	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.9	0.0	37.1				0.0	38.5	38.5	19.3	0.0	0.0
Incr Delay (d2), s/veh	10.4	0.0	32.3				0.0	16.3	17.3	0.1	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.1	0.0	18.3				0.0	12.7	12.1	2.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.3	0.0	69.4				0.0	54.8	55.9	19.5	0.7	0.0
LnGrp LOS	D	A	E				A	D	E	B	A	A
Approach Vol, veh/h		1020						821			1078	
Approach Delay, s/veh		57.9						55.3			3.4	
Approach LOS		E						E			A	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	35.0	34.5		40.5		69.5						
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0						
Max Green Setting (Gmax), s	10.0	* 40		35.0		54.5						
Max Q Clear Time (g_c+I1), s	7.2	26.7		35.8		2.0						
Green Ext Time (p_c), s	0.1	2.8		0.0		4.5						

Intersection Summary		
HCM 6th Ctrl Delay		37.0
HCM 6th LOS		D

Notes

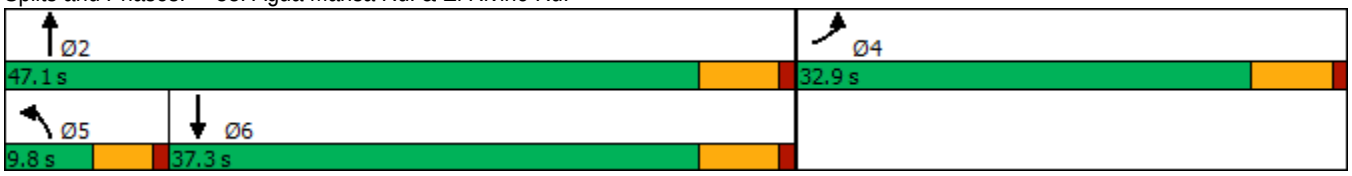
User approved volume balancing among the lanes for turning movement.

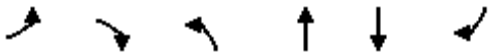
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	240	43	769	365
Future Volume (vph)	240	43	769	365
Turn Type	Prot	Prot	NA	NA
Protected Phases	4	5	2	6
Permitted Phases				
Detector Phase	4	5	2	6
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	32.8	9.6	15.8	27.8
Total Split (s)	32.9	9.8	47.1	37.3
Total Split (%)	41.1%	12.3%	58.9%	46.6%
Yellow Time (s)	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.8
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	None	None
Act Effct Green (s)	18.4	5.6	31.6	26.8
Actuated g/C Ratio	0.29	0.09	0.50	0.43
v/c Ratio	0.69	0.34	0.53	0.82
Control Delay	28.1	39.5	11.7	28.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	28.1	39.5	11.7	28.1
LOS	C	D	B	C
Approach Delay	28.1		13.2	28.1
Approach LOS	C		B	C

Intersection Summary			
Cycle Length: 80			
Actuated Cycle Length: 62.7			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 20.6		Intersection LOS: C	
Intersection Capacity Utilization 62.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 33: Agua Mansa Rd. & El Rivino Rd.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	240	54	43	769	365	154
Future Volume (veh/h)	240	54	43	769	365	154
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	300	0	54	961	456	192
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	376		94	2047	540	227
Arrive On Green	0.21	0.00	0.05	0.57	0.43	0.43
Sat Flow, veh/h	1804	0	1810	3705	1268	534
Grp Volume(v), veh/h	301	0	54	961	0	648
Grp Sat Flow(s),veh/h/ln	1810	0	1810	1805	0	1802
Q Serve(g_s), s	8.2	0.0	1.5	8.1	0.0	16.7
Cycle Q Clear(g_c), s	8.2	0.0	1.5	8.1	0.0	16.7
Prop In Lane	1.00	0.00	1.00			0.30
Lane Grp Cap(c), veh/h	377		94	2047	0	767
V/C Ratio(X)	0.80		0.57	0.47	0.00	0.84
Avail Cap(c_a), veh/h	949		182	2885	0	1099
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.4	0.0	23.9	6.6	0.0	13.3
Incr Delay (d2), s/veh	3.9	0.0	2.0	0.2	0.0	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	0.6	1.8	0.0	5.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.3	0.0	25.9	6.8	0.0	17.6
LnGrp LOS	C		C	A	A	B
Approach Vol, veh/h	301			1015	648	
Approach Delay, s/veh	23.3			7.8	17.6	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		35.1		16.6	7.3	27.8
Change Period (Y+Rc), s		5.8		5.8	4.6	5.8
Max Green Setting (Gmax), s		41.3		27.1	5.2	31.5
Max Q Clear Time (g_c+I1), s		10.1		10.2	3.5	18.7
Green Ext Time (p_c), s		7.1		0.8	0.0	3.3

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

APPENDIX 6.5: OPENING YEAR PLUS PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Lane Group	EBL	EBT	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	417	391	19	5	1150	228	670
v/c Ratio	0.88	0.79	0.23	0.03	0.80	0.89	0.32
Control Delay	57.3	43.1	57.7	0.2	28.9	63.4	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.3	43.1	57.7	0.2	28.9	63.4	8.6
Queue Length 50th (ft)	289	227	13	0	317	~191	85
Queue Length 95th (ft)	403	335	38	0	408	m#297	m95
Internal Link Dist (ft)		1049			1396		322
Turn Bay Length (ft)				25		90	
Base Capacity (vph)	553	563	82	191	1437	256	2065
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.69	0.23	0.03	0.80	0.89	0.32

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	550	511	15	2	869	156	922
v/c Ratio	0.90	0.77	0.18	0.01	0.69	0.70	0.50
Control Delay	53.6	31.9	55.6	0.0	30.5	45.9	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.6	31.9	55.6	0.0	30.5	45.9	12.1
Queue Length 50th (ft)	358	228	10	0	251	105	131
Queue Length 95th (ft)	#652	#462	32	0	305	m#143	m145
Internal Link Dist (ft)		1049			1396		322
Turn Bay Length (ft)				25		90	
Base Capacity (vph)	613	661	83	192	1325	223	1843
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.90	0.77	0.18	0.01	0.66	0.70	0.50

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

APPENDIX 7.1: OPENING YEAR BACKGROUND CONDITIONS WITHOUT PROJECT INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	84	4	44	159	4	62
Future Vol, veh/h	84	4	44	159	4	62
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	102	5	54	194	5	76

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	107	0	404	102
Stage 1	-	-	-	-	102	-
Stage 2	-	-	-	-	302	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1497	-	606	959
Stage 1	-	-	-	-	927	-
Stage 2	-	-	-	-	755	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1497	-	582	959
Mov Cap-2 Maneuver	-	-	-	-	582	-
Stage 1	-	-	-	-	927	-
Stage 2	-	-	-	-	725	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	923	-	-	1497	-
HCM Lane V/C Ratio	0.087	-	-	0.036	-
HCM Control Delay (s)	9.3	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	128	33	12	139	0	53	8	16	2	19	25
Future Vol, veh/h	5	128	33	12	139	0	53	8	16	2	19	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	158	41	15	172	0	65	10	20	2	23	31

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	172	0	0	199	0	0	420	393	179	408	413	172
Stage 1	-	-	-	-	-	-	191	191	-	202	202	-
Stage 2	-	-	-	-	-	-	229	202	-	206	211	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1417	-	-	1385	-	-	547	546	869	557	532	877
Stage 1	-	-	-	-	-	-	815	746	-	805	738	-
Stage 2	-	-	-	-	-	-	778	738	-	801	731	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1417	-	-	1385	-	-	503	537	869	530	523	877
Mov Cap-2 Maneuver	-	-	-	-	-	-	503	537	-	530	523	-
Stage 1	-	-	-	-	-	-	811	742	-	801	729	-
Stage 2	-	-	-	-	-	-	718	729	-	769	727	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.6	12.8	10.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	555	1417	-	-	1385	-	-	670
HCM Lane V/C Ratio	0.171	0.004	-	-	0.011	-	-	0.085
HCM Control Delay (s)	12.8	7.6	0	-	7.6	0	-	10.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	31	46	1	16	48
Future Vol, veh/h	3	31	46	1	16	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	100	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	36	53	1	19	56

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	148	54	0	0	54	0
Stage 1	54	-	-	-	-	-
Stage 2	94	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	849	1019	-	-	1564	-
Stage 1	974	-	-	-	-	-
Stage 2	935	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	838	1019	-	-	1564	-
Mov Cap-2 Maneuver	838	-	-	-	-	-
Stage 1	974	-	-	-	-	-
Stage 2	923	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	1.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	838	1019	1564	-
HCM Lane V/C Ratio	-	-	0.004	0.035	0.012	-
HCM Control Delay (s)	-	-	9.3	8.7	7.3	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.1	0	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	13	0	5	0	36	2	10	60	0
Future Vol, veh/h	0	0	0	13	0	5	0	36	2	10	60	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	15	0	6	0	43	2	12	71	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	142	140	71	139	139	44	71	0	0	45	0	0
Stage 1	95	95	-	44	44	-	-	-	-	-	-	-
Stage 2	47	45	-	95	95	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	832	755	997	836	756	1032	1542	-	-	1576	-	-
Stage 1	917	820	-	975	862	-	-	-	-	-	-	-
Stage 2	972	861	-	917	820	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	822	749	997	831	750	1032	1542	-	-	1576	-	-
Mov Cap-2 Maneuver	822	749	-	831	750	-	-	-	-	-	-	-
Stage 1	917	813	-	975	862	-	-	-	-	-	-	-
Stage 2	966	861	-	910	813	-	-	-	-	-	-	-

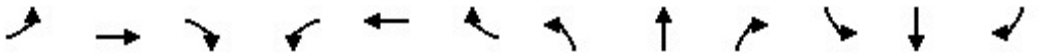
Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.2	0	1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1542	-	-	-	879	1576	-	-
HCM Lane V/C Ratio	-	-	-	-	0.024	0.008	-	-
HCM Control Delay (s)	0	-	-	0	9.2	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	407	432	1349	1706	640
Future Volume (vph)	0	407	432	1349	1706	640
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	42.0	42.0	24.0	68.0	44.0	44.0
Total Split (%)	38.2%	38.2%	21.8%	61.8%	40.0%	40.0%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	38.0	38.0	20.0	63.5	39.5	39.5
Actuated g/C Ratio	0.35	0.35	0.18	0.58	0.36	0.36
v/c Ratio	1.16	0.68	1.37	0.67	0.95	0.70
Control Delay	121.7	33.1	210.9	17.0	47.3	9.1
Queue Delay	2.0	0.0	0.0	2.0	45.4	0.0
Total Delay	123.7	33.1	210.9	19.0	92.8	9.1
LOS	F	C	F	B	F	A
Approach Delay	92.6			65.6	69.9	
Approach LOS	F			E	E	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.37	
Intersection Signal Delay: 73.1	Intersection LOS: E
Intersection Capacity Utilization 167.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	659	0	407	432	1349	0	0	1706	640
Future Volume (veh/h)	0	0	0	659	0	407	432	1349	0	0	1706	640
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				686	0	318	450	1405	0	0	1777	401
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				625	0	556	329	2084	0	0	1863	578
Arrive On Green				0.35	0.00	0.35	0.24	0.77	0.00	0.00	0.36	0.36
Sat Flow, veh/h				1810	0	1610	1810	3705	0	0	5358	1610
Grp Volume(v), veh/h				686	0	318	450	1405	0	0	1777	401
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1729	1610
Q Serve(g_s), s				38.0	0.0	17.7	20.0	20.6	0.0	0.0	36.7	23.4
Cycle Q Clear(g_c), s				38.0	0.0	17.7	20.0	20.6	0.0	0.0	36.7	23.4
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				625	0	556	329	2084	0	0	1863	578
V/C Ratio(X)				1.10	0.00	0.57	1.37	0.67	0.00	0.00	0.95	0.69
Avail Cap(c_a), veh/h				625	0	556	329	2084	0	0	1863	578
HCM Platoon Ratio				1.00	1.00	1.00	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				36.0	0.0	29.4	41.7	7.8	0.0	0.0	34.4	30.1
Incr Delay (d2), s/veh				65.5	0.0	1.4	167.3	0.2	0.0	0.0	12.5	6.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				27.1	0.0	6.7	23.4	4.7	0.0	0.0	16.8	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				101.5	0.0	30.8	209.0	8.0	0.0	0.0	46.9	36.8
LnGrp LOS				F	A	C	F	A	A	A	D	D
Approach Vol, veh/h					1004			1855			2178	
Approach Delay, s/veh					79.1			56.7			45.0	
Approach LOS					E			E			D	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	68.0		24.0	44.0		42.0						
Change Period (Y+Rc), s	4.5		4.0	4.5		4.0						
Max Green Setting (Gmax), s	63.5		20.0	39.5		38.0						
Max Q Clear Time (g_c+I1), s	22.6		22.0	38.7		40.0						
Green Ext Time (p_c), s	13.8		0.0	0.7		0.0						

Intersection Summary		
HCM 6th Ctrl Delay	56.1	
HCM 6th LOS	E	

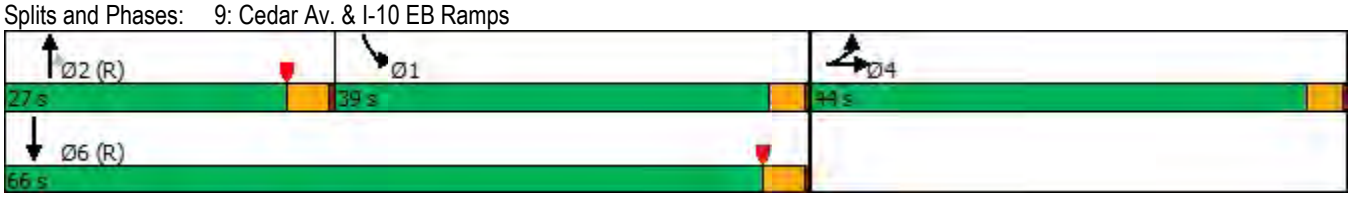
Notes

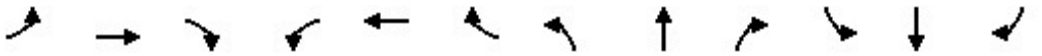
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	599	0	1203	668	500	1863
Future Volume (vph)	599	0	1203	668	500	1863
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	44.0	44.0	27.0	27.0	39.0	66.0
Total Split (%)	40.0%	40.0%	24.5%	24.5%	35.5%	60.0%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	40.5	40.5	23.0	23.0	35.5	62.0
Actuated g/C Ratio	0.37	0.37	0.21	0.21	0.32	0.56
v/c Ratio	0.92	1.48	1.19	0.86	0.92	0.98
Control Delay	54.9	251.5	129.3	24.5	39.4	25.7
Queue Delay	2.2	0.2	0.0	0.0	46.6	41.2
Total Delay	57.1	251.7	129.3	24.5	86.0	66.9
LOS	E	F	F	C	F	E
Approach Delay		174.8	91.9			70.9
Approach LOS		F	F			E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.48	
Intersection Signal Delay: 103.3	Intersection LOS: F
Intersection Capacity Utilization 167.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	599	0	766	0	0	0	0	1203	668	500	1863	0
Future Volume (veh/h)	599	0	766	0	0	0	0	1203	668	500	1863	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	644	0	772				0	1294	444	538	2003	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	666	0	593				0	1085	336	576	2035	0
Arrive On Green	0.37	0.00	0.37				0.00	0.07	0.07	0.32	0.56	0.00
Sat Flow, veh/h	1810	0	1610				0	5358	1606	1810	3705	0
Grp Volume(v), veh/h	644	0	772				0	1294	444	538	2003	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1729	1606	1810	1805	0
Q Serve(g_s), s	38.4	0.0	40.5				0.0	23.0	23.0	31.7	59.8	0.0
Cycle Q Clear(g_c), s	38.4	0.0	40.5				0.0	23.0	23.0	31.7	59.8	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	666	0	593				0	1085	336	576	2035	0
V/C Ratio(X)	0.97	0.00	1.30				0.00	1.19	1.32	0.93	0.98	0.00
Avail Cap(c_a), veh/h	666	0	593				0	1085	336	584	2035	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.32	0.32	0.20	0.20	0.00
Uniform Delay (d), s/veh	34.1	0.0	34.8				0.0	51.2	51.2	36.4	23.5	0.0
Incr Delay (d2), s/veh	26.7	0.0	148.0				0.0	90.1	151.6	6.3	6.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.7	0.0	39.1				0.0	19.7	24.0	14.4	24.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.8	0.0	182.8				0.0	141.3	202.8	42.7	29.5	0.0
LnGrp LOS	E	A	F				A	F	F	D	C	A
Approach Vol, veh/h		1416						1738			2541	
Approach Delay, s/veh		127.3						157.0			32.3	
Approach LOS		F						F			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	39.0	27.0		44.0		66.0
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	35.5	* 23		40.5		62.0
Max Q Clear Time (g_c+I1), s	33.7	25.0		42.5		61.8
Green Ext Time (p_c), s	0.2	0.0		0.0		0.2

Intersection Summary		
HCM 6th Ctrl Delay		94.0
HCM 6th LOS		F

Notes

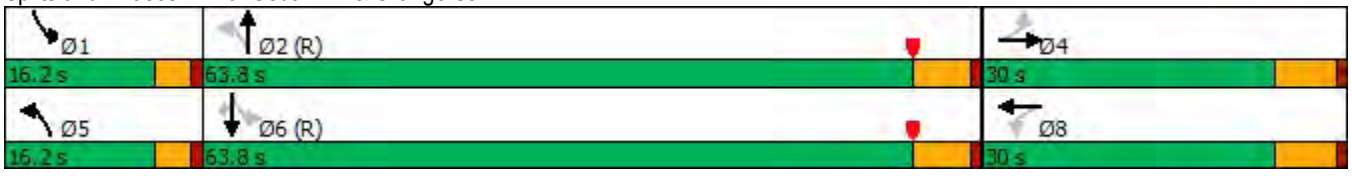
User approved volume balancing among the lanes for turning movement.

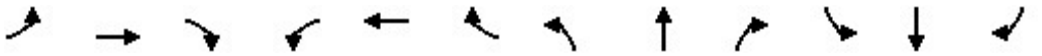
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	253	4	12	3	18	1454	199	1976	460
Future Volume (vph)	253	4	12	3	18	1454	199	1976	460
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases		4		8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	30.0	30.0	10.2	10.2	16.2	28.2	16.2	28.2	28.2
Total Split (s)	30.0	30.0	30.0	30.0	16.2	63.8	16.2	63.8	63.8
Total Split (%)	27.3%	27.3%	27.3%	27.3%	14.7%	58.0%	14.7%	58.0%	58.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	3.0	4.7	3.0	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.0	5.7	4.0	5.7	5.7
Lead/Lag					Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min	C-Min
Act Effct Green (s)	24.0	24.0	24.0	24.0	66.4	58.8	76.0	70.2	70.2
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.60	0.53	0.69	0.64	0.64
v/c Ratio	1.18	0.07	0.04	0.35	0.12	0.85	0.85	0.94	0.47
Control Delay	154.3	15.6	34.6	8.0	4.7	18.8	34.2	18.4	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	8.6	0.0	0.0	0.0
Total Delay	154.3	15.6	34.6	8.0	4.7	27.4	34.2	18.4	3.4
LOS	F	B	C	A	A	C	C	B	A
Approach Delay		141.6		9.9		27.1		17.0	
Approach LOS		F		A		C		B	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 68.3 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.18	
Intersection Signal Delay: 27.6	Intersection LOS: C
Intersection Capacity Utilization 99.6%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 10: Cedar Av. & Orange St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	253	4	22	12	3	151	18	1454	30	199	1976	460
Future Volume (veh/h)	253	4	22	12	3	151	18	1454	30	199	1976	460
Initial Q (Qb), veh	0	0	0	0	0	0	0	44	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	278	4	19	13	3	79	20	1598	33	219	2171	414
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	301	63	297	357	13	340	102	2019	31	268	2247	1000
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.02	0.76	0.76	0.07	0.62	0.62
Sat Flow, veh/h	1337	287	1363	1407	59	1560	1810	3617	75	1810	3610	1606
Grp Volume(v), veh/h	278	0	23	13	0	82	20	796	835	219	2171	414
Grp Sat Flow(s),veh/h/ln	1337	0	1650	1407	0	1619	1810	1805	1887	1810	1805	1606
Q Serve(g_s), s	19.4	0.0	1.2	0.8	0.0	4.6	0.5	28.2	28.4	5.2	62.7	14.4
Cycle Q Clear(g_c), s	24.0	0.0	1.2	2.0	0.0	4.6	0.5	28.2	28.4	5.2	62.7	14.4
Prop In Lane	1.00		0.83	1.00		0.96	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	301	0	360	357	0	353	102	1001	1050	268	2247	1000
V/C Ratio(X)	0.92	0.00	0.06	0.04	0.00	0.23	0.20	0.80	0.80	0.82	0.97	0.41
Avail Cap(c_a), veh/h	301	0	360	357	0	353	273	1031	1078	364	2247	1000
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.18	0.18	0.18	0.13	0.13	0.13
Uniform Delay (d), s/veh	46.8	0.0	34.1	34.9	0.0	35.4	26.1	12.4	12.2	27.2	19.7	10.6
Incr Delay (d2), s/veh	32.3	0.0	0.1	0.0	0.0	0.3	0.2	1.2	1.2	1.4	2.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0	15.5	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	0.0	0.5	0.3	0.0	1.9	0.3	15.3	15.3	4.6	23.2	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.1	0.0	34.2	34.9	0.0	35.7	26.3	30.6	28.9	28.6	22.2	10.7
LnGrp LOS	E	A	C	C	A	D	C	C	C	C	C	B
Approach Vol, veh/h		301			95			1651			2804	
Approach Delay, s/veh		75.7			35.6			29.7			21.0	
Approach LOS		E			D			C			C	

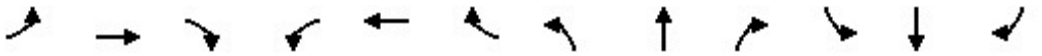
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.4	68.6		30.0	5.8	74.2		30.0				
Change Period (Y+Rc), s	4.0	5.7		6.0	4.0	5.7		6.0				
Max Green Setting (Gmax), s	12.2	58.1		24.0	12.2	58.1		24.0				
Max Q Clear Time (g_c+I1), s	7.2	30.4		26.0	2.5	64.7		6.6				
Green Ext Time (p_c), s	0.3	13.7		0.0	0.0	0.0		0.4				

Intersection Summary												
HCM 6th Ctrl Delay			27.6									
HCM 6th LOS			C									

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	313	204	114	62	319	213	1058	241	1490
Future Volume (vph)	313	204	114	62	319	213	1058	241	1490
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2		1	6	3	8	7	4
Permitted Phases			2						
Detector Phase	5	2	2	1	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	29.0	29.0	8.0	23.0	8.0	32.7	8.0	24.7
Total Split (s)	22.0	36.0	36.0	9.0	23.0	15.0	43.0	22.0	50.0
Total Split (%)	20.0%	32.7%	32.7%	8.2%	20.9%	13.6%	39.1%	20.0%	45.5%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	4.7	3.0	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	4.0	5.7	4.0	5.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	18.6	31.8	31.8	5.0	16.4	11.0	38.0	17.3	44.3
Actuated g/C Ratio	0.17	0.29	0.29	0.05	0.15	0.10	0.35	0.16	0.40
v/c Ratio	1.06	0.20	0.21	0.78	0.84	1.22	0.93	0.87	1.28
Control Delay	112.6	30.9	3.7	104.6	55.0	169.3	65.3	66.4	157.8
Queue Delay	0.0	0.0	0.0	0.0	1.2	0.0	9.7	0.0	0.0
Total Delay	112.6	30.9	3.7	104.6	56.2	169.3	75.0	66.4	157.8
LOS	F	C	A	F	E	F	E	E	F
Approach Delay		66.5			62.1		90.1		146.9
Approach LOS		E			E		F		F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.28	
Intersection Signal Delay: 109.0	Intersection LOS: F
Intersection Capacity Utilization 108.8%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 11: Cedar Av. & Slover Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	313	204	114	62	319	131	213	1058	63	241	1490	280
Future Volume (veh/h)	313	204	114	62	319	131	213	1058	63	241	1490	280
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	323	210	96	64	329	104	220	1091	63	248	1536	288
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	296	1009	449	82	388	121	181	1972	114	280	1899	347
Arrive On Green	0.16	0.28	0.28	0.05	0.14	0.14	0.10	0.57	0.57	0.05	0.21	0.21
Sat Flow, veh/h	1810	3610	1607	1810	2711	843	1810	3469	200	1810	3046	557
Grp Volume(v), veh/h	323	210	96	64	217	216	220	568	586	248	895	929
Grp Sat Flow(s),veh/h/ln	1810	1805	1607	1810	1805	1748	1810	1805	1864	1810	1805	1798
Q Serve(g_s), s	18.0	4.9	5.0	3.8	12.9	13.3	11.0	21.8	21.8	15.0	51.8	54.4
Cycle Q Clear(g_c), s	18.0	4.9	5.0	3.8	12.9	13.3	11.0	21.8	21.8	15.0	51.8	54.4
Prop In Lane	1.00		1.00	1.00		0.48	1.00		0.11	1.00		0.31
Lane Grp Cap(c), veh/h	296	1009	449	82	258	250	181	1026	1060	280	1125	1121
V/C Ratio(X)	1.09	0.21	0.21	0.78	0.84	0.86	1.22	0.55	0.55	0.88	0.79	0.83
Avail Cap(c_a), veh/h	296	1009	449	82	279	270	181	1026	1060	296	1125	1121
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.66	0.66	0.66	0.23	0.23	0.23
Uniform Delay (d), s/veh	46.0	30.3	30.4	52.0	45.9	46.1	49.5	14.9	14.9	51.2	37.0	38.1
Incr Delay (d2), s/veh	78.8	0.1	0.2	36.6	19.0	22.6	125.7	1.4	1.4	7.4	1.4	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.2	2.0	1.9	2.6	7.2	7.4	11.1	8.4	8.6	7.8	25.3	26.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	124.8	30.4	30.6	88.6	64.9	68.6	175.2	16.4	16.3	58.6	38.4	39.8
LnGrp LOS	F	C	C	F	E	E	F	B	B	E	D	D
Approach Vol, veh/h		629			497			1374			2072	
Approach Delay, s/veh		78.9			69.6			41.8			41.5	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	36.7	15.0	75.0	24.0	21.7	21.1	69.0
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	6.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	5.0	30.0	11.0	44.3	18.0	* 17	18.0	37.3
Max Q Clear Time (g_c+I1), s	5.8	7.0	13.0	56.4	20.0	15.3	17.0	23.8
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.0	0.5	0.1	5.8

Intersection Summary	
HCM 6th Ctrl Delay	49.8
HCM 6th LOS	D

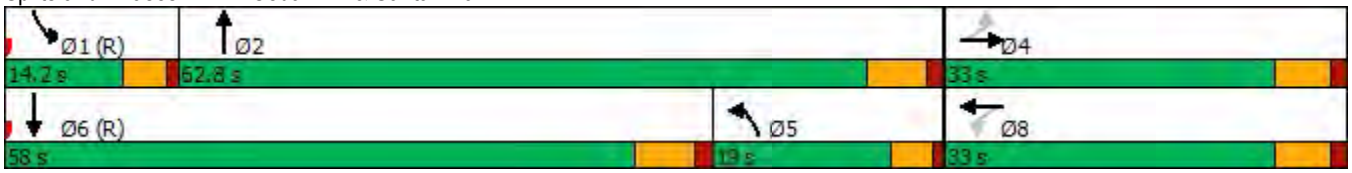
Notes

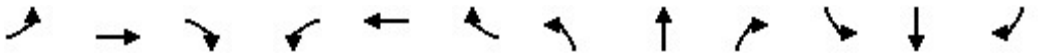
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	76	75	70	73	108	1133	42	1514
Future Volume (vph)	76	75	70	73	108	1133	42	1514
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	9.5	27.5	9.5	27.5
Total Split (s)	33.0	33.0	33.0	33.0	19.0	62.8	14.2	58.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	17.3%	57.1%	12.9%	52.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	4.5	6.5	4.5	6.5
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min
Act Effct Green (s)		23.9		23.9	11.9	56.2	12.9	57.2
Actuated g/C Ratio		0.22		0.22	0.11	0.51	0.12	0.52
v/c Ratio		0.86		0.83	0.60	0.69	0.22	0.91
Control Delay		64.4		59.2	48.4	13.1	35.8	51.2
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		64.4		59.2	48.4	13.1	35.8	51.2
LOS		E		E	D	B	D	D
Approach Delay		64.4		59.2		16.0		50.8
Approach LOS		E		E		B		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 90 (82%), Referenced to phase 1:SBL and 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 39.1	Intersection LOS: D
Intersection Capacity Utilization 81.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 12: Cedar Av. & Santa Ana Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	75	80	70	73	91	108	1133	33	42	1514	47
Future Volume (veh/h)	76	75	80	70	73	91	108	1133	33	42	1514	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	83	82	46	76	79	87	117	1232	32	46	1646	43
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	128	115	55	117	107	101	301	1824	47	263	1683	44
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.33	1.00	1.00	0.05	0.15	0.15
Sat Flow, veh/h	429	594	285	382	553	525	1810	3595	93	1810	3594	94
Grp Volume(v), veh/h	211	0	0	242	0	0	117	618	646	46	825	864
Grp Sat Flow(s),veh/h/ln	1309	0	0	1459	0	0	1810	1805	1883	1810	1805	1883
Q Serve(g_s), s	0.0	0.0	0.0	0.2	0.0	0.0	5.5	0.0	0.0	2.7	50.0	50.3
Cycle Q Clear(g_c), s	17.7	0.0	0.0	17.9	0.0	0.0	5.5	0.0	0.0	2.7	50.0	50.3
Prop In Lane	0.39		0.22	0.31		0.36	1.00		0.05	1.00		0.05
Lane Grp Cap(c), veh/h	298	0	0	325	0	0	301	916	955	263	845	882
V/C Ratio(X)	0.71	0.00	0.00	0.75	0.00	0.00	0.39	0.68	0.68	0.18	0.98	0.98
Avail Cap(c_a), veh/h	378	0	0	406	0	0	301	924	964	263	845	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.75	0.75	0.75	0.09	0.09	0.09
Uniform Delay (d), s/veh	42.4	0.0	0.0	42.7	0.0	0.0	32.4	0.0	0.0	46.0	45.9	46.0
Incr Delay (d2), s/veh	5.5	0.0	0.0	6.8	0.0	0.0	0.2	2.6	2.5	0.0	5.2	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.0	0.0	6.8	0.0	0.0	2.2	0.7	0.7	1.2	25.2	26.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.9	0.0	0.0	49.5	0.0	0.0	32.7	2.6	2.5	46.1	51.1	51.6
LnGrp LOS	D	A	A	D	A	A	C	A	A	D	D	D
Approach Vol, veh/h		211			242			1381			1735	
Approach Delay, s/veh		47.9			49.5			5.1			51.2	
Approach LOS		D			D			A			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.5	62.3		27.2	24.8	58.0		27.2				
Change Period (Y+Rc), s	4.5	6.5		6.0	6.5	* 6.5		6.0				
Max Green Setting (Gmax), s	9.7	56.3		27.0	14.5	* 52		27.0				
Max Q Clear Time (g_c+I1), s	4.7	2.0		19.7	7.5	52.3		19.9				
Green Ext Time (p_c), s	0.0	30.9		0.8	0.1	0.0		1.0				

Intersection Summary	
HCM 6th Ctrl Delay	33.1
HCM 6th LOS	C

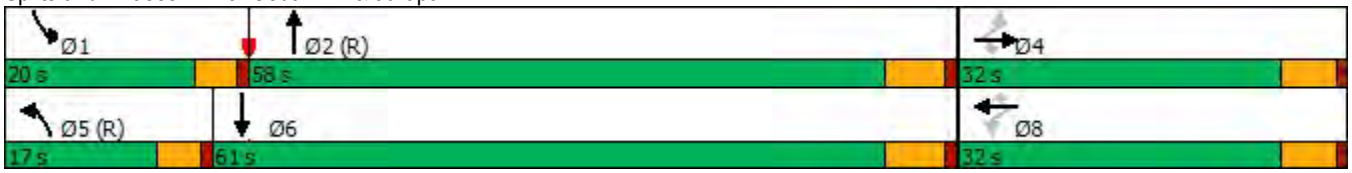
Notes

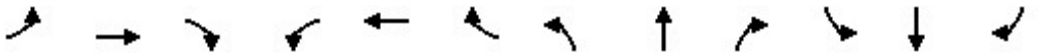
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	123	104	59	64	109	162	130	976	160	1347
Future Volume (vph)	123	104	59	64	109	162	130	976	160	1347
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	32.0	32.0	32.0	32.0	32.0	32.0	17.0	58.0	20.0	61.0
Total Split (%)	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%	15.5%	52.7%	18.2%	55.5%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)		25.9	25.9		25.9	25.9	13.1	53.9	14.2	55.1
Actuated g/C Ratio		0.24	0.24		0.24	0.24	0.12	0.49	0.13	0.50
v/c Ratio		0.94	0.15		0.77	0.35	0.67	0.66	0.76	0.93
Control Delay		84.2	7.5		60.4	7.0	72.2	17.8	43.7	44.4
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		84.2	7.5		60.4	7.0	72.2	17.8	43.7	44.4
LOS		F	A		E	A	E	B	D	D
Approach Delay		68.3			34.6			23.8		44.3
Approach LOS		E			C			C		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 38.4	Intersection LOS: D
Intersection Capacity Utilization 81.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	104	59	64	109	162	130	976	70	160	1347	154
Future Volume (veh/h)	123	104	59	64	109	162	130	976	70	160	1347	154
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	137	116	47	71	121	114	144	1084	67	178	1497	167
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	50	4	388	45	59	383	211	1717	106	211	1629	180
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.23	0.99	0.99	0.04	0.16	0.16
Sat Flow, veh/h	0	19	1610	0	244	1589	1810	3453	213	1810	3278	362
Grp Volume(v), veh/h	253	0	47	192	0	114	144	566	585	178	818	846
Grp Sat Flow(s),veh/h/ln	19	0	1610	244	0	1589	1810	1805	1861	1810	1805	1835
Q Serve(g_s), s	0.0	0.0	2.5	0.0	0.0	6.5	8.0	0.5	0.5	10.8	49.0	50.0
Cycle Q Clear(g_c), s	26.5	0.0	2.5	26.5	0.0	6.5	8.0	0.5	0.5	10.8	49.0	50.0
Prop In Lane	0.54		1.00	0.37		1.00	1.00		0.11	1.00		0.20
Lane Grp Cap(c), veh/h	55	0	388	104	0	383	211	897	925	211	897	912
V/C Ratio(X)	4.61	0.00	0.12	1.85	0.00	0.30	0.68	0.63	0.63	0.84	0.91	0.93
Avail Cap(c_a), veh/h	55	0	388	104	0	383	211	897	925	255	903	917
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.89	0.89	0.89	0.30	0.30	0.30
Uniform Delay (d), s/veh	52.9	0.0	32.6	40.9	0.0	34.1	40.3	0.2	0.2	51.9	43.6	44.0
Incr Delay (d2), s/veh	1663.6	0.0	0.2	418.8	0.0	0.6	7.8	3.0	2.9	6.7	4.8	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	26.9	0.0	1.0	14.9	0.0	2.5	3.6	0.8	0.8	5.5	24.7	25.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1716.4	0.0	32.8	459.7	0.0	34.8	48.1	3.2	3.1	58.6	48.4	49.8
LnGrp LOS	F	A	C	F	A	C	D	A	A	E	D	D
Approach Vol, veh/h		300			306			1295			1842	
Approach Delay, s/veh		1452.7			301.4			8.1			50.0	
Approach LOS		F			F			A			D	

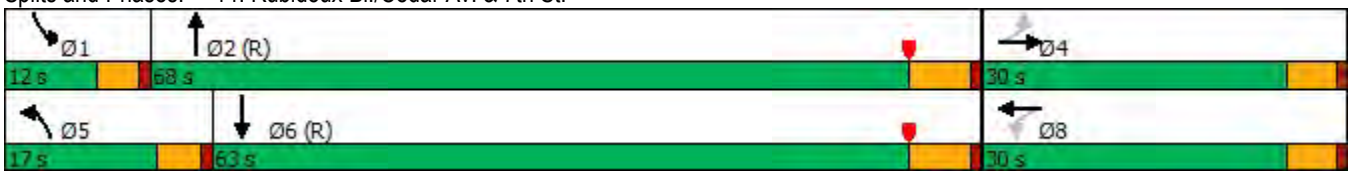
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.3	60.7		32.0	17.3	60.7		32.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	15.5	52.0		26.5	12.5	55.0		26.5				
Max Q Clear Time (g_c+I1), s	12.8	2.5		28.5	10.0	52.0		28.5				
Green Ext Time (p_c), s	0.1	13.9		0.0	0.1	2.7		0.0				

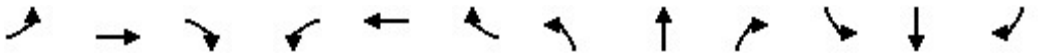
Intersection Summary		
HCM 6th Ctrl Delay		168.5
HCM 6th LOS		F

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	131	7	26	8	99	979	23	1353
Future Volume (vph)	131	7	26	8	99	979	23	1353
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	10.0	10.0	9.5	24.0	9.5	24.0
Total Split (s)	30.0	30.0	30.0	30.0	17.0	68.0	12.0	63.0
Total Split (%)	27.3%	27.3%	27.3%	27.3%	15.5%	61.8%	10.9%	57.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)		24.8		21.8	10.7	69.4	6.7	59.0
Actuated g/C Ratio		0.23		0.20	0.10	0.63	0.06	0.54
v/c Ratio		0.92		0.18	0.59	0.46	0.22	0.77
Control Delay		65.5		29.4	61.2	12.2	65.3	16.7
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		65.5		29.4	61.2	12.2	65.3	16.7
LOS		E		C	E	B	E	B
Approach Delay		65.5		29.4		16.7		17.5
Approach LOS		E		C		B		B

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 74 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 22.9	Intersection LOS: C
Intersection Capacity Utilization 78.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 14: Rubidoux Bl./Cedar Av. & 7th St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	7	193	26	8	10	99	979	5	23	1353	48
Future Volume (veh/h)	131	7	193	26	8	10	99	979	5	23	1353	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	138	7	111	27	8	3	104	1031	4	24	1424	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	202	12	125	214	59	19	131	2393	9	43	2134	76
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.07	0.65	0.65	0.02	0.60	0.60
Sat Flow, veh/h	814	63	671	844	319	100	1810	3688	14	1810	3555	127
Grp Volume(v), veh/h	256	0	0	38	0	0	104	505	530	24	722	753
Grp Sat Flow(s),veh/h/ln	1549	0	0	1263	0	0	1810	1805	1897	1810	1805	1877
Q Serve(g_s), s	15.2	0.0	0.0	0.0	0.0	0.0	6.2	15.0	15.0	1.4	29.3	29.5
Cycle Q Clear(g_c), s	17.6	0.0	0.0	2.4	0.0	0.0	6.2	15.0	15.0	1.4	29.3	29.5
Prop In Lane	0.54		0.43	0.71		0.08	1.00		0.01	1.00		0.07
Lane Grp Cap(c), veh/h	339	0	0	292	0	0	131	1171	1231	43	1083	1127
V/C Ratio(X)	0.75	0.00	0.00	0.13	0.00	0.00	0.80	0.43	0.43	0.56	0.67	0.67
Avail Cap(c_a), veh/h	401	0	0	349	0	0	206	1171	1231	123	1083	1127
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.54	0.54	0.54	0.31	0.31	0.31
Uniform Delay (d), s/veh	43.3	0.0	0.0	37.3	0.0	0.0	50.2	9.4	9.4	53.1	14.6	14.7
Incr Delay (d2), s/veh	7.6	0.0	0.0	0.3	0.0	0.0	6.1	0.6	0.6	3.5	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	0.0	0.0	0.9	0.0	0.0	2.9	5.1	5.3	0.7	10.7	11.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.0	0.0	0.0	37.6	0.0	0.0	56.3	10.0	10.0	56.7	15.7	15.7
LnGrp LOS	D	A	A	D	A	A	E	B	B	E	B	B
Approach Vol, veh/h		256			38			1139			1499	
Approach Delay, s/veh		51.0			37.6			14.3			16.3	
Approach LOS		D			D			B			B	

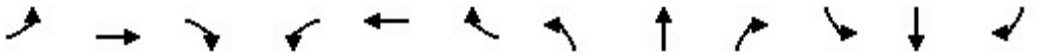
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	77.4		25.5	12.5	72.0		25.5				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	7.5	62.0		25.0	12.5	57.0		25.0				
Max Q Clear Time (g_c+I1), s	3.4	17.0		19.6	8.2	31.5		4.4				
Green Ext Time (p_c), s	0.0	11.0		0.9	0.1	15.1		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		18.8	
HCM 6th LOS		B	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	18	11	131	2	110	2	895	215	1351
Future Volume (vph)	18	11	131	2	110	2	895	215	1351
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	35.0	35.0	35.0	9.5	24.0	9.5	24.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.6	34.0	21.0	45.4
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%	10.7%	37.8%	23.3%	50.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	5.0	4.5	6.0	4.5	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min
Act Effct Green (s)		13.9		15.4	15.4	5.2	28.5	13.5	45.0
Actuated g/C Ratio		0.19		0.21	0.21	0.07	0.39	0.18	0.61
v/c Ratio		0.18		0.51	0.26	0.02	0.83	0.68	0.65
Control Delay		15.4		32.2	3.9	37.5	28.4	40.5	13.6
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		15.4		32.2	3.9	37.5	28.4	40.5	13.6
LOS		B		C	A	D	C	D	B
Approach Delay		15.4		19.4			28.4		17.2
Approach LOS		B		B			C		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 73.2	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 21.5	Intersection LOS: C
Intersection Capacity Utilization 69.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 15: Rubidoux Bl. & Tarragona Dr./El Rivino Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	11	27	131	2	110	2	895	194	215	1351	12
Future Volume (veh/h)	18	11	27	131	2	110	2	895	194	215	1351	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	19	12	19	138	2	84	2	942	197	226	1422	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	123	77	68	339	3	233	5	1248	261	285	2106	19
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.00	0.42	0.42	0.16	0.57	0.57
Sat Flow, veh/h	237	530	470	1453	21	1610	1810	2972	621	1810	3665	33
Grp Volume(v), veh/h	50	0	0	140	0	84	2	572	567	226	700	735
Grp Sat Flow(s),veh/h/ln	1237	0	0	1474	0	1610	1810	1805	1788	1810	1805	1894
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	2.6	0.1	15.0	15.0	6.7	15.0	15.1
Cycle Q Clear(g_c), s	4.9	0.0	0.0	4.8	0.0	2.6	0.1	15.0	15.0	6.7	15.0	15.1
Prop In Lane	0.38		0.38	0.99		1.00	1.00		0.35	1.00		0.02
Lane Grp Cap(c), veh/h	268	0	0	342	0	233	5	758	751	285	1037	1088
V/C Ratio(X)	0.19	0.00	0.00	0.41	0.00	0.36	0.40	0.75	0.76	0.79	0.67	0.68
Avail Cap(c_a), veh/h	874	0	0	893	0	865	165	905	897	535	1274	1337
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	0.0	0.0	22.5	0.0	21.5	27.8	13.7	13.8	22.6	8.3	8.3
Incr Delay (d2), s/veh	0.5	0.0	0.0	1.1	0.0	1.3	45.7	3.5	3.5	5.0	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	1.7	0.0	1.0	0.1	5.1	5.1	2.8	3.6	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.5	0.0	0.0	23.6	0.0	22.9	73.5	17.2	17.3	27.6	9.6	9.5
LnGrp LOS	C	A	A	C	A	C	E	B	B	C	A	A
Approach Vol, veh/h		50			224			1141			1661	
Approach Delay, s/veh		21.5			23.3			17.3			12.0	
Approach LOS		C			C			B			B	

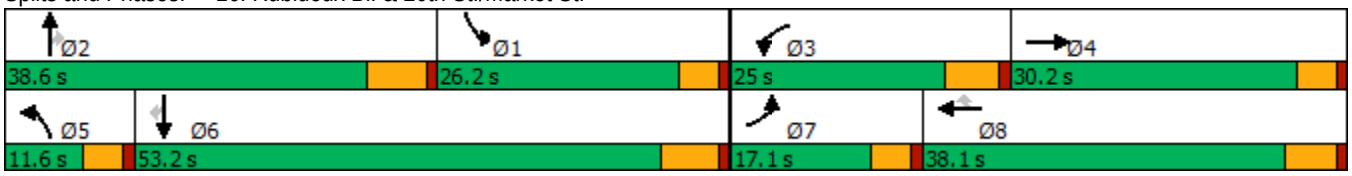
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.3	29.4		13.1	4.7	38.1		13.1				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	16.5	28.0		30.0	5.1	39.4		30.0				
Max Q Clear Time (g_c+I1), s	8.7	17.0		6.9	2.1	17.1		6.8				
Green Ext Time (p_c), s	0.4	6.4		0.3	0.0	13.1		1.5				

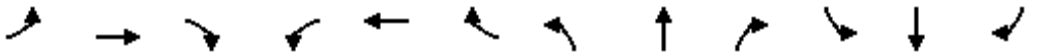
Intersection Summary			
HCM 6th Ctrl Delay		15.0	
HCM 6th LOS		B	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	88	72	338	79	485	39	541	391	411	1007	74
Future Volume (vph)	88	72	338	79	485	39	541	391	411	1007	74
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	14.6	10.8	27.8	27.8	9.6	28.2	28.2	9.6	35.2	35.2
Total Split (s)	17.1	30.2	25.0	38.1	38.1	11.6	38.6	38.6	26.2	53.2	53.2
Total Split (%)	14.3%	25.2%	20.8%	31.8%	31.8%	9.7%	32.2%	32.2%	21.8%	44.3%	44.3%
Yellow Time (s)	3.6	3.6	4.8	4.8	4.8	3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	5.8	5.8	5.8	4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	9.8	11.7	14.3	19.1	19.1	6.3	21.5	21.5	16.3	36.4	36.4
Actuated g/C Ratio	0.11	0.14	0.17	0.22	0.22	0.07	0.25	0.25	0.19	0.42	0.42
v/c Ratio	0.44	0.25	0.60	0.19	0.69	0.31	0.62	0.57	0.64	0.68	0.10
Control Delay	47.0	24.5	39.6	34.4	10.6	50.0	32.6	6.7	38.2	24.0	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.0	24.5	39.6	34.4	10.6	50.0	32.6	6.7	38.2	24.0	0.3
LOS	D	C	D	C	B	D	C	A	D	C	A
Approach Delay		33.9		23.6			22.9			26.8	
Approach LOS		C		C			C			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 85.8	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 25.3	Intersection LOS: C
Intersection Capacity Utilization 67.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	72	51	338	79	485	39	541	391	411	1007	74
Future Volume (veh/h)	88	72	51	338	79	485	39	541	391	411	1007	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	91	74	38	348	81	0	40	558	315	424	1038	45
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	119	297	143	476	403		70	830	370	595	1385	617
Arrive On Green	0.07	0.13	0.13	0.14	0.21	0.00	0.04	0.23	0.23	0.17	0.38	0.38
Sat Flow, veh/h	1810	2364	1136	3510	1900	1610	1810	3610	1610	3510	3610	1608
Grp Volume(v), veh/h	91	55	57	348	81	0	40	558	315	424	1038	45
Grp Sat Flow(s),veh/h/ln	1810	1805	1696	1755	1900	1610	1810	1805	1610	1755	1805	1608
Q Serve(g_s), s	3.5	2.0	2.1	6.7	2.5	0.0	1.5	10.0	8.0	8.1	17.6	1.3
Cycle Q Clear(g_c), s	3.5	2.0	2.1	6.7	2.5	0.0	1.5	10.0	8.0	8.1	17.6	1.3
Prop In Lane	1.00		0.67	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	119	227	213	476	403		70	830	370	595	1385	617
V/C Ratio(X)	0.76	0.24	0.27	0.73	0.20		0.57	0.67	0.85	0.71	0.75	0.07
Avail Cap(c_a), veh/h	320	653	614	953	868		179	1654	738	1072	2399	1069
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	27.9	28.0	29.3	22.9	0.0	33.4	24.8	9.5	27.7	18.9	13.8
Incr Delay (d2), s/veh	9.6	0.6	0.7	2.2	0.2	0.0	2.8	1.0	5.5	0.6	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.9	0.9	2.7	1.0	0.0	0.7	3.8	4.6	3.1	6.2	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.1	28.4	28.6	31.5	23.2	0.0	36.2	25.8	15.0	28.3	19.7	13.9
LnGrp LOS	D	C	C	C	C		D	C	B	C	B	B
Approach Vol, veh/h		203			429			913			1507	
Approach Delay, s/veh		34.6			29.9			22.5			22.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.2	22.5	15.4	14.7	7.3	33.3	9.3	20.8
Change Period (Y+Rc), s	6.2	* 6.2	5.8	* 5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	21.6	* 32	19.2	* 26	7.0	47.0	12.5	32.3
Max Q Clear Time (g_c+I1), s	10.1	12.0	8.7	4.1	3.5	19.6	5.5	4.5
Green Ext Time (p_c), s	0.6	4.3	0.9	0.6	0.0	7.5	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	24.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	9	12	31	16	15	17	977	52	155	1242	5
Future Vol, veh/h	1	9	12	31	16	15	17	977	52	155	1242	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	10	13	34	17	16	18	1062	57	168	1350	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2265	2845	678	2144	2819	561	1355	0	0	1120	0	0
Stage 1	1689	1689	-	1128	1128	-	-	-	-	-	-	-
Stage 2	576	1156	-	1016	1691	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	23	17	399	~ 28	18	476	514	-	-	631	-	-
Stage 1	99	151	-	221	282	-	-	-	-	-	-	-
Stage 2	475	273	-	259	151	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	399	-	0	476	514	-	-	630	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	90	0	-	200	255	-	-	-	-	-	-	-
Stage 2	387	247	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.8	5.9
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	514	-	-	-	-	630	-	-
HCM Lane V/C Ratio	0.036	-	-	-	-	0.267	-	-
HCM Control Delay (s)	12.3	0.6	-	-	-	12.8	5.1	-
HCM Lane LOS	B	A	-	-	-	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-	1.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	1	8	3	1	6	16	1083	15	9	1215	4
Future Vol, veh/h	4	1	8	3	1	6	16	1083	15	9	1215	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	110	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	1	9	3	1	7	17	1177	16	10	1321	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1966	2570	663	1900	2564	597	1325	0	0	1193	0	0
Stage 1	1343	1343	-	1219	1219	-	-	-	-	-	-	-
Stage 2	623	1227	-	681	1345	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	38	26	409	43	27	451	528	-	-	592	-	-
Stage 1	163	223	-	194	255	-	-	-	-	-	-	-
Stage 2	445	253	-	411	222	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	36	25	409	40	26	451	528	-	-	592	-	-
Mov Cap-2 Maneuver	117	115	-	130	113	-	-	-	-	-	-	-
Stage 1	158	219	-	188	247	-	-	-	-	-	-	-
Stage 2	423	245	-	394	218	-	-	-	-	-	-	-

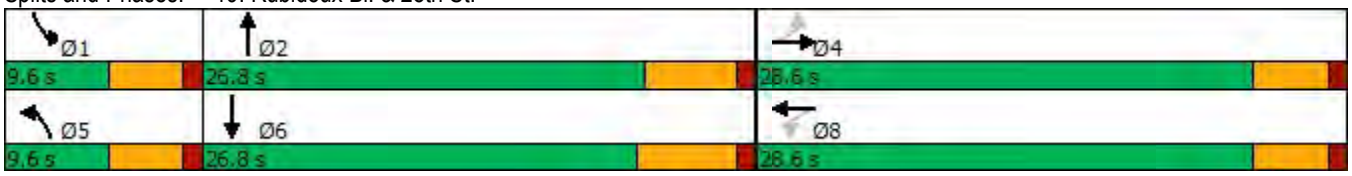
Approach	EB	WB	NB	SB
HCM Control Delay, s	23.6	22.1	0.2	0.1
HCM LOS	C	C		

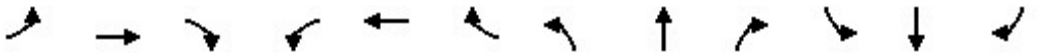
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	528	-	-	208	221	592	-	-
HCM Lane V/C Ratio	0.033	-	-	0.068	0.049	0.017	-	-
HCM Control Delay (s)	12.1	-	-	23.6	22.1	11.2	-	-
HCM Lane LOS	B	-	-	C	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.2	0.1	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	49	18	64	32	46	1065	11	1199
Future Volume (vph)	49	18	64	32	46	1065	11	1199
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	28.6	28.6	28.6	28.6	9.6	24.4	9.6	22.8
Total Split (s)	28.6	28.6	28.6	28.6	9.6	26.8	9.6	26.8
Total Split (%)	44.0%	44.0%	44.0%	44.0%	14.8%	41.2%	14.8%	41.2%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.4	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		12.9		12.9	5.4	26.8	5.4	24.8
Actuated g/C Ratio		0.29		0.29	0.12	0.59	0.12	0.55
v/c Ratio		0.30		0.28	0.23	0.56	0.06	0.67
Control Delay		10.2		15.6	26.4	13.1	24.8	17.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		10.2		15.6	26.4	13.1	24.8	17.0
LOS		B		B	C	B	C	B
Approach Delay		10.2		15.6		13.6		17.0
Approach LOS		B		B		B		B

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 45.2	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 15.1	Intersection LOS: B
Intersection Capacity Utilization 56.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 19: Rubidoux Bl. & 28th St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	18	70	64	32	15	46	1065	37	11	1199	24
Future Volume (veh/h)	49	18	70	64	32	15	46	1065	37	11	1199	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	53	20	67	70	35	11	50	1158	37	12	1303	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	189	75	142	278	123	28	93	1666	53	28	1561	30
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.05	0.47	0.47	0.02	0.43	0.43
Sat Flow, veh/h	428	411	770	811	669	155	1810	3567	114	1810	3623	69
Grp Volume(v), veh/h	140	0	0	116	0	0	50	586	609	12	649	679
Grp Sat Flow(s),veh/h/ln	1609	0	0	1635	0	0	1810	1805	1876	1810	1805	1887
Q Serve(g_s), s	0.8	0.0	0.0	0.0	0.0	0.0	1.2	11.5	11.5	0.3	14.4	14.4
Cycle Q Clear(g_c), s	3.3	0.0	0.0	2.4	0.0	0.0	1.2	11.5	11.5	0.3	14.4	14.4
Prop In Lane	0.38		0.48	0.60		0.09	1.00		0.06	1.00		0.04
Lane Grp Cap(c), veh/h	406	0	0	429	0	0	93	843	876	28	777	813
V/C Ratio(X)	0.34	0.00	0.00	0.27	0.00	0.00	0.53	0.70	0.70	0.43	0.83	0.84
Avail Cap(c_a), veh/h	948	0	0	951	0	0	201	860	894	201	844	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.3	0.0	0.0	16.0	0.0	0.0	20.8	9.5	9.5	21.9	11.4	11.4
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.3	0.0	0.0	1.8	2.4	2.3	3.8	6.8	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	1.0	0.0	0.0	0.5	3.4	3.5	0.1	4.8	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.8	0.0	0.0	16.3	0.0	0.0	22.5	11.8	11.8	25.7	18.2	18.0
LnGrp LOS	B	A	A	B	A	A	C	B	B	C	B	B
Approach Vol, veh/h		140			116			1245			1340	
Approach Delay, s/veh		16.8			16.3			12.2			18.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.3	26.8		12.9	6.9	25.2		12.9				
Change Period (Y+Rc), s	4.6	* 5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	5.0	* 21		24.0	5.0	21.0		24.0				
Max Q Clear Time (g_c+I1), s	2.3	13.5		5.3	3.2	16.4		4.4				
Green Ext Time (p_c), s	0.0	4.3		0.7	0.0	3.0		0.6				

Intersection Summary		
HCM 6th Ctrl Delay		15.4
HCM 6th LOS		B

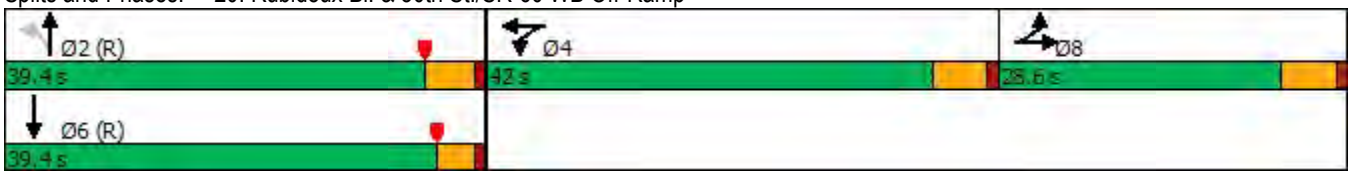
Notes

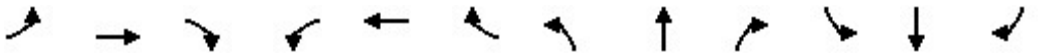
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	51	0	82	59	1029	1350
Future Volume (vph)	51	0	82	59	1029	1350
Turn Type	Split	NA	NA	Perm	NA	NA
Protected Phases	8	8	4		2	6
Permitted Phases				2		
Detector Phase	8	8	4	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.6	28.6	42.0	39.4	39.4	39.4
Total Split (%)	26.0%	26.0%	38.2%	35.8%	35.8%	35.8%
Yellow Time (s)	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	19.3	19.3	36.5	38.2	38.2	39.2
Actuated g/C Ratio	0.18	0.18	0.33	0.35	0.35	0.36
v/c Ratio	0.18	0.85	1.06	0.96	0.92	1.21
Control Delay	38.2	49.5	89.4	60.2	29.7	134.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.2	49.5	89.4	60.2	29.7	134.7
LOS	D	D	F	E	C	F
Approach Delay		47.8	89.4		31.4	134.7
Approach LOS		D	F		C	F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.21	
Intersection Signal Delay: 85.2	Intersection LOS: F
Intersection Capacity Utilization 111.4%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	0	278	381	82	105	59	1029	0	0	1350	31
Future Volume (veh/h)	51	0	278	381	82	105	59	1029	0	0	1350	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	57	0	228	428	92	84	66	1156	0	0	1517	34
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	297	0	265	421	91	83	65	1294	0	0	1293	29
Arrive On Green	0.16	0.00	0.16	0.33	0.33	0.33	0.72	0.72	0.00	0.00	0.36	0.36
Sat Flow, veh/h	1810	0	1610	1270	273	249	338	3705	0	0	3703	81
Grp Volume(v), veh/h	57	0	228	604	0	0	66	1156	0	0	758	793
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1792	0	0	338	1805	0	0	1805	1883
Q Serve(g_s), s	3.0	0.0	15.2	36.5	0.0	0.0	0.0	27.8	0.0	0.0	39.4	39.4
Cycle Q Clear(g_c), s	3.0	0.0	15.2	36.5	0.0	0.0	39.4	27.8	0.0	0.0	39.4	39.4
Prop In Lane	1.00		1.00	0.71		0.14	1.00		0.00	0.00		0.04
Lane Grp Cap(c), veh/h	297	0	265	595	0	0	65	1294	0	0	647	675
V/C Ratio(X)	0.19	0.00	0.86	1.02	0.00	0.00	1.01	0.89	0.00	0.00	1.17	1.18
Avail Cap(c_a), veh/h	380	0	338	595	0	0	65	1294	0	0	647	675
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.69	0.69
Uniform Delay (d), s/veh	39.7	0.0	44.7	36.8	0.0	0.0	35.3	13.9	0.0	0.0	35.3	35.3
Incr Delay (d2), s/veh	0.4	0.0	17.2	41.0	0.0	0.0	113.6	9.7	0.0	0.0	88.6	89.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	7.3	21.7	0.0	0.0	3.6	6.6	0.0	0.0	32.3	33.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.0	0.0	61.9	77.7	0.0	0.0	148.9	23.6	0.0	0.0	123.9	125.0
LnGrp LOS	D	A	E	F	A	A	F	C	A	A	F	F
Approach Vol, veh/h		285			604			1222			1551	
Approach Delay, s/veh		57.6			77.7			30.4			124.4	
Approach LOS		E			E			C			F	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		44.4		42.0		44.4		23.6				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		34.4		36.5		* 35		23.1				
Max Q Clear Time (g_c+I1), s		41.4		38.5		41.4		17.2				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.9				

Intersection Summary												
HCM 6th Ctrl Delay			80.2									
HCM 6th LOS			F									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	16.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	295	1096	1258	819
Future Vol, veh/h	0	0	295	1096	1258	819
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	311	1154	1324	862

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1094	2187	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	0	*622	~ 242	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	-	*622	~ 242	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	41.6	0
HCM LOS	A		

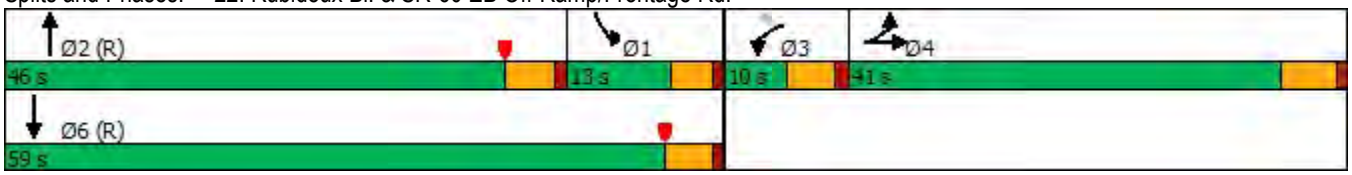
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	~ 242	-	-	-	-
HCM Lane V/C Ratio	1.283	-	-	-	-
HCM Control Delay (s)	196.1	-	0	-	-
HCM Lane LOS	F	-	A	-	-
HCM 95th %tile Q(veh)	15.9	-	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	15	18	5	767	259	931
Future Volume (vph)	15	18	5	767	259	931
Turn Type	NA	Prot	Perm	NA	Prot	NA
Protected Phases	4	3		2	1	6
Permitted Phases			3			
Detector Phase	4	3	3	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	10.0	10.0	45.0	9.5	30.0
Total Split (s)	41.0	10.0	10.0	46.0	13.0	59.0
Total Split (%)	37.3%	9.1%	9.1%	41.8%	11.8%	53.6%
Yellow Time (s)	4.5	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	39.5	5.0	5.0	41.0	8.5	54.0
Actuated g/C Ratio	0.36	0.05	0.05	0.37	0.08	0.49
v/c Ratio	1.48	0.23	0.03	1.00	1.94	0.55
Control Delay	253.6	57.7	0.2	55.5	451.0	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	253.6	57.7	0.2	55.5	451.0	9.4
LOS	F	E	A	E	F	A
Approach Delay	253.6			55.5		105.6
Approach LOS	F			E		F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.94	
Intersection Signal Delay: 125.5	Intersection LOS: F
Intersection Capacity Utilization 124.4%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	685	15	218	18	0	5	0	767	549	259	931	0
Future Volume (veh/h)	685	15	218	18	0	5	0	767	549	259	931	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	714	16	130	19	0	3	0	799	463	270	970	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	476	11	87	0	0	0	0	816	468	296	2100	0
Arrive On Green	0.32	0.32	0.32	0.00	0.00	0.00	0.00	0.37	0.37	0.33	1.00	0.00
Sat Flow, veh/h	1476	33	269		0		0	2283	1255	1810	3705	0
Grp Volume(v), veh/h	860	0	0		0.0		0	658	604	270	970	0
Grp Sat Flow(s),veh/h/ln	1778	0	0				0	1805	1639	1810	1805	0
Q Serve(g_s), s	35.5	0.0	0.0				0.0	39.5	40.3	15.7	0.0	0.0
Cycle Q Clear(g_c), s	35.5	0.0	0.0				0.0	39.5	40.3	15.7	0.0	0.0
Prop In Lane	0.83		0.15				0.00		0.77	1.00		0.00
Lane Grp Cap(c), veh/h	574	0	0				0	673	611	296	2100	0
V/C Ratio(X)	1.50	0.00	0.00				0.00	0.98	0.99	0.91	0.46	0.00
Avail Cap(c_a), veh/h	574	0	0				0	673	611	296	2100	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.61	0.61	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.3	0.0	0.0				0.0	34.0	34.3	36.2	0.0	0.0
Incr Delay (d2), s/veh	233.6	0.0	0.0				0.0	22.2	26.0	30.0	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	51.7	0.0	0.0				0.0	20.5	19.6	7.9	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	270.8	0.0	0.0				0.0	56.2	60.3	66.2	0.7	0.0
LnGrp LOS	F	A	A				A	E	E	E	A	A
Approach Vol, veh/h		860						1262			1240	
Approach Delay, s/veh		270.8						58.2			15.0	
Approach LOS		F						E			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	23.0	46.0		41.0		69.0
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0
Max Green Setting (Gmax), s	8.5	* 41		35.5		54.0
Max Q Clear Time (g_c+I1), s	17.7	42.3		37.5		2.0
Green Ext Time (p_c), s	0.0	0.0		0.0		4.8

Intersection Summary		
HCM 6th Ctrl Delay		96.7
HCM 6th LOS		F

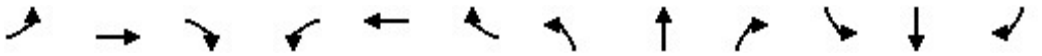
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	165	32	30	20	126	33	1062	56	1076
Future Volume (vph)	165	32	30	20	126	33	1062	56	1076
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	30.6	30.6	34.6	34.6	34.6	9.6	29.4	9.6	22.4
Total Split (s)	34.6	34.6	34.6	34.6	34.6	9.6	30.4	10.0	30.8
Total Split (%)	46.1%	46.1%	46.1%	46.1%	46.1%	12.8%	40.5%	13.3%	41.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	4.6	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		16.3		16.3	16.3	5.2	26.1	5.5	28.2
Actuated g/C Ratio		0.28		0.28	0.28	0.09	0.45	0.09	0.49
v/c Ratio		0.62		0.13	0.26	0.23	0.78	0.37	0.73
Control Delay		25.2		16.5	4.6	33.4	21.8	36.0	18.9
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		25.2		16.5	4.6	33.4	21.8	36.0	18.9
LOS		C		B	A	C	C	D	B
Approach Delay		25.2		7.9			22.1		19.8
Approach LOS		C		A			C		B

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 58.1	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 20.4	Intersection LOS: C
Intersection Capacity Utilization 69.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 23: Rubidoux Bl. & 34th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	32	22	30	20	126	33	1062	60	56	1076	54
Future Volume (veh/h)	165	32	22	30	20	126	33	1062	60	56	1076	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.98		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	185	36	16	34	22	72	37	1193	60	63	1209	53
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	384	70	24	340	196	429	71	1437	72	102	1510	66
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.04	0.41	0.41	0.06	0.43	0.43
Sat Flow, veh/h	1003	262	92	881	738	1610	1810	3493	176	1810	3523	154
Grp Volume(v), veh/h	237	0	0	56	0	72	37	616	637	63	619	643
Grp Sat Flow(s),veh/h/ln	1356	0	0	1619	0	1610	1810	1805	1863	1810	1805	1872
Q Serve(g_s), s	7.5	0.0	0.0	0.0	0.0	1.9	1.1	16.7	16.8	1.9	16.4	16.4
Cycle Q Clear(g_c), s	8.8	0.0	0.0	1.2	0.0	1.9	1.1	16.7	16.8	1.9	16.4	16.4
Prop In Lane	0.78		0.07	0.61		1.00	1.00		0.09	1.00		0.08
Lane Grp Cap(c), veh/h	478	0	0	536	0	429	71	743	767	102	773	802
V/C Ratio(X)	0.50	0.00	0.00	0.10	0.00	0.17	0.52	0.83	0.83	0.62	0.80	0.80
Avail Cap(c_a), veh/h	871	0	0	963	0	880	165	822	849	178	835	866
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	0.0	0.0	15.2	0.0	15.5	25.9	14.4	14.4	25.3	13.6	13.7
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.1	0.0	0.2	2.2	6.6	6.5	2.3	5.2	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	0.0	0.5	0.0	0.7	0.5	6.6	6.8	0.8	6.2	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.0	0.0	0.0	15.3	0.0	15.7	28.0	21.0	20.9	27.6	18.9	18.8
LnGrp LOS	B	A	A	B	A	B	C	C	C	C	B	B
Approach Vol, veh/h		237			128			1290			1325	
Approach Delay, s/veh		19.0			15.5			21.2			19.2	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	28.0		19.2	6.8	28.9		19.2				
Change Period (Y+Rc), s	4.6	5.4		4.6	4.6	5.4		4.6				
Max Green Setting (Gmax), s	5.4	25.0		30.0	5.0	25.4		30.0				
Max Q Clear Time (g_c+I1), s	3.9	18.8		10.8	3.1	18.4		3.9				
Green Ext Time (p_c), s	0.0	3.8		1.4	0.0	4.2		0.5				

Intersection Summary												
HCM 6th Ctrl Delay			19.9									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	742	63	0	0	23	33
Future Vol, veh/h	742	63	0	0	23	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	765	65	0	0	24	34

Major/Minor	Major1			Minor1	
Conflicting Flow All	0	0		798	798
Stage 1	-	-		798	-
Stage 2	-	-		0	-
Critical Hdwy	-	-		6.4	6.2
Critical Hdwy Stg 1	-	-		5.4	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	-		3.5	3.3
Pot Cap-1 Maneuver	-	-		358	389
Stage 1	-	-		447	-
Stage 2	-	-		-	-
Platoon blocked, %	-	-			
Mov Cap-1 Maneuver	-	-		358	389
Mov Cap-2 Maneuver	-	-		358	-
Stage 1	-	-		447	-
Stage 2	-	-		-	-

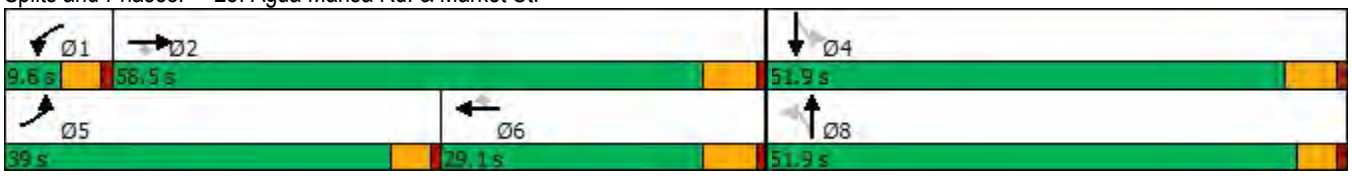
Approach	EB	NB
HCM Control Delay, s	0	16.3
HCM LOS		C

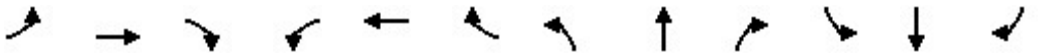
Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	376	-	-
HCM Lane V/C Ratio	0.154	-	-
HCM Control Delay (s)	16.3	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	0.5	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	377	486	10	4	547	267	19	2	176	16
Future Volume (vph)	377	486	10	4	547	267	19	2	176	16
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	5	2		1	6			8		4
Permitted Phases			2			6	8		4	
Detector Phase	5	2	2	1	6	6	8	8	4	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	31.8	31.8	9.6	26.8	26.8	14.6	14.6	43.8	43.8
Total Split (s)	39.0	58.5	58.5	9.6	29.1	29.1	51.9	51.9	51.9	51.9
Total Split (%)	32.5%	48.8%	48.8%	8.0%	24.3%	24.3%	43.3%	43.3%	43.3%	43.3%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None
Act Effct Green (s)	29.2	56.7	56.7	5.0	24.7	24.7		43.0		41.8
Actuated g/C Ratio	0.26	0.51	0.51	0.04	0.22	0.22		0.38		0.37
v/c Ratio	0.89	0.30	0.01	0.05	0.76	0.51		0.06		0.95
Control Delay	62.4	17.7	0.0	56.5	50.1	8.1		17.9		55.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	62.4	17.7	0.0	56.5	50.1	8.1		17.9		55.1
LOS	E	B	A	E	D	A		B		E
Approach Delay		36.8			36.4			17.9		55.1
Approach LOS		D			D			B		E

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 112	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 40.7	Intersection LOS: D
Intersection Capacity Utilization 83.6%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	377	486	10	4	547	267	19	2	8	176	16	336
Future Volume (veh/h)	377	486	10	4	547	267	19	2	8	176	16	336
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	419	540	8	4	608	258	21	2	7	196	18	279
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	451	1793	800	9	912	406	286	33	80	256	24	303
Arrive On Green	0.25	0.50	0.50	0.01	0.25	0.25	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	1810	3610	1610	1810	3610	1607	661	96	230	603	71	878
Grp Volume(v), veh/h	419	540	8	4	608	258	30	0	0	493	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1607	987	0	0	1551	0	0
Q Serve(g_s), s	24.0	9.4	0.3	0.2	16.1	15.2	0.0	0.0	0.0	30.9	0.0	0.0
Cycle Q Clear(g_c), s	24.0	9.4	0.3	0.2	16.1	15.2	1.5	0.0	0.0	32.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.70		0.23	0.40		0.57
Lane Grp Cap(c), veh/h	451	1793	800	9	912	406	399	0	0	583	0	0
V/C Ratio(X)	0.93	0.30	0.01	0.42	0.67	0.64	0.08	0.00	0.00	0.85	0.00	0.00
Avail Cap(c_a), veh/h	587	1793	800	85	912	406	521	0	0	720	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	38.9	15.8	13.5	52.6	35.6	35.3	23.1	0.0	0.0	33.2	0.0	0.0
Incr Delay (d2), s/veh	16.4	0.4	0.0	10.7	3.8	7.4	0.1	0.0	0.0	7.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.2	3.7	0.1	0.1	7.2	6.5	0.5	0.0	0.0	12.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.3	16.2	13.5	63.3	39.5	42.7	23.2	0.0	0.0	40.9	0.0	0.0
LnGrp LOS	E	B	B	E	D	D	C	A	A	D	A	A
Approach Vol, veh/h		967			870			30			493	
Approach Delay, s/veh		33.2			40.5			23.2			40.9	
Approach LOS		C			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.2	58.5		42.5	31.0	32.6		42.5				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	52.7		46.1	34.4	23.3		* 47				
Max Q Clear Time (g_c+I1), s	2.2	11.4		34.3	26.0	18.1		3.5				
Green Ext Time (p_c), s	0.0	3.6		2.3	0.4	2.1		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		37.4
HCM 6th LOS		D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	168	2	19	19	13	4	14	48	2	17	2
Future Vol, veh/h	8	168	2	19	19	13	4	14	48	2	17	2
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	205	2	23	23	16	5	17	59	2	21	2
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	9.4	7.9	7.6	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	6%	5%	0%	50%	0%	10%
Vol Thru, %	21%	95%	0%	50%	0%	81%
Vol Right, %	73%	0%	100%	0%	100%	10%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	66	176	2	38	13	21
LT Vol	4	8	0	19	0	2
Through Vol	14	168	0	19	0	17
RT Vol	48	0	2	0	13	2
Lane Flow Rate	80	215	2	46	16	26
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.094	0.283	0.003	0.066	0.019	0.033
Departure Headway (Hd)	4.193	4.743	4.019	5.163	4.209	4.64
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	859	749	878	696	852	775
Service Time	2.198	2.526	1.801	2.879	1.924	2.648
HCM Lane V/C Ratio	0.093	0.287	0.002	0.066	0.019	0.034
HCM Control Delay	7.6	9.4	6.8	8.2	7	7.8
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.3	1.2	0	0.2	0.1	0.1

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	3	0	8	14	0	4	6	76	8	1	75	5
Future Vol, veh/h	3	0	8	14	0	4	6	76	8	1	75	5
Conflicting Peds, #/hr	0	0	1	0	0	1	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	0	10	18	0	5	8	96	10	1	95	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	221	222	99	223	220	102	101	0	0	106	0	0
Stage 1	100	100	-	117	117	-	-	-	-	-	-	-
Stage 2	121	122	-	106	103	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	739	680	962	737	682	959	1504	-	-	1498	-	-
Stage 1	911	816	-	892	803	-	-	-	-	-	-	-
Stage 2	888	799	-	905	814	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	730	675	961	724	677	958	1504	-	-	1498	-	-
Mov Cap-2 Maneuver	730	675	-	724	677	-	-	-	-	-	-	-
Stage 1	906	815	-	887	798	-	-	-	-	-	-	-
Stage 2	877	794	-	894	813	-	-	-	-	-	-	-

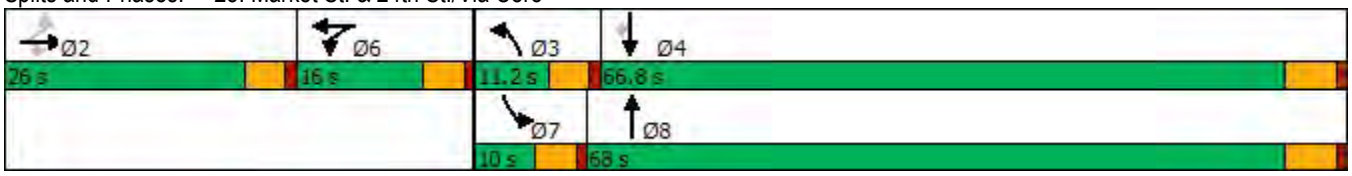
Approach	EB	WB	NB	SB
HCM Control Delay, s	9.1	9.8	0.5	0.1
HCM LOS	A	A		

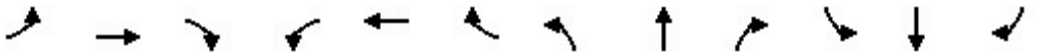
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1504	-	-	885	766	1498	-	-
HCM Lane V/C Ratio	0.005	-	-	0.016	0.03	0.001	-	-
HCM Control Delay (s)	7.4	0	-	9.1	9.8	7.4	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	4	33	172	100	8	37	756	30	772	3
Future Volume (vph)	4	33	172	100	8	37	756	30	772	3
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	26.0	26.0	26.0	16.0	16.0	11.2	68.0	10.0	66.8	66.8
Total Split (%)	21.7%	21.7%	21.7%	13.3%	13.3%	9.3%	56.7%	8.3%	55.7%	55.7%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		11.9	11.9	10.9	10.9	6.1	62.6	5.3	61.9	61.9
Actuated g/C Ratio		0.11	0.11	0.10	0.10	0.06	0.59	0.05	0.58	0.58
v/c Ratio		0.45	0.53	0.57	0.07	0.38	0.89	0.36	0.73	0.00
Control Delay		62.0	12.7	60.1	36.2	61.6	32.6	62.9	23.1	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		62.0	12.7	60.1	36.2	61.6	32.6	62.9	23.1	0.0
LOS		E	B	E	D	E	C	E	C	A
Approach Delay		21.4			57.3		33.7		24.5	
Approach LOS		C			E		C		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 106.1	
Natural Cycle: 105	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 30.2	Intersection LOS: C
Intersection Capacity Utilization 72.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	33	172	100	8	6	37	756	170	30	772	3
Future Volume (veh/h)	4	33	172	100	8	6	37	756	170	30	772	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	4	35	88	105	8	5	39	796	157	32	813	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	18	161	152	168	101	63	59	918	181	52	1126	954
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.03	0.60	0.60	0.03	0.59	0.59
Sat Flow, veh/h	194	1696	1605	1810	1094	683	1810	1541	304	1810	1900	1610
Grp Volume(v), veh/h	39	0	88	105	0	13	39	0	953	32	813	3
Grp Sat Flow(s),veh/h/ln	1890	0	1605	1810	0	1777	1810	0	1845	1810	1900	1610
Q Serve(g_s), s	2.0	0.0	5.5	5.8	0.0	0.7	2.2	0.0	45.1	1.8	31.8	0.1
Cycle Q Clear(g_c), s	2.0	0.0	5.5	5.8	0.0	0.7	2.2	0.0	45.1	1.8	31.8	0.1
Prop In Lane	0.10		1.00	1.00		0.38	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	179	0	152	168	0	165	59	0	1099	52	1126	954
V/C Ratio(X)	0.22	0.00	0.58	0.63	0.00	0.08	0.66	0.00	0.87	0.61	0.72	0.00
Avail Cap(c_a), veh/h	388	0	329	198	0	194	114	0	1099	94	1126	954
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	0.0	45.3	45.6	0.0	43.3	49.9	0.0	17.6	50.1	15.2	8.7
Incr Delay (d2), s/veh	0.6	0.0	3.5	4.6	0.0	0.2	4.7	0.0	9.2	4.2	4.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	2.3	2.9	0.0	0.3	1.1	0.0	18.9	0.9	13.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.3	0.0	48.7	50.3	0.0	43.5	54.7	0.0	26.9	54.3	19.2	8.7
LnGrp LOS	D	A	D	D	A	D	D	A	C	D	B	A
Approach Vol, veh/h		127			118			992			848	
Approach Delay, s/veh		47.3			49.5			28.0			20.5	
Approach LOS		D			D			C			C	

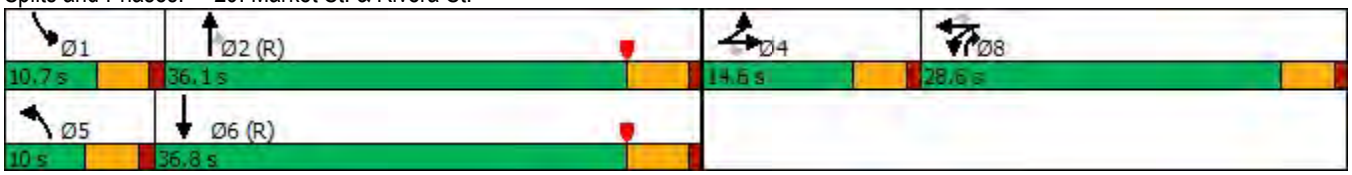
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.5	8.0	67.6		14.3	7.6	68.0				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		21.4	6.6	61.0		11.4	5.4	62.2				
Max Q Clear Time (g_c+I1), s		7.5	4.2	33.8		7.8	3.8	47.1				
Green Ext Time (p_c), s		0.3	0.0	5.9		0.1	0.0	6.1				

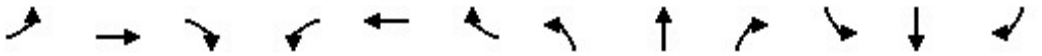
Intersection Summary	
HCM 6th Ctrl Delay	27.3
HCM 6th LOS	C

Lane Group	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	18	324	0	48	23	1026	320	39	946
Future Volume (vph)	18	324	0	48	23	1026	320	39	946
Turn Type	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases		8	8		5	2	8	1	6
Permitted Phases	4			8			2		
Detector Phase	4	8	8	8	5	2	8	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	14.6	28.6	28.6	28.6	9.6	35.1	28.6	9.6	29.1
Total Split (s)	14.6	28.6	28.6	28.6	10.0	36.1	28.6	10.7	36.8
Total Split (%)	16.2%	31.8%	31.8%	31.8%	11.1%	40.1%	31.8%	11.9%	40.9%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.1	3.6	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	5.1	4.6	4.6	5.1
Lead/Lag					Lead	Lag		Lead	Lag
Lead-Lag Optimize?					Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	10.0	16.3	16.3	16.3	5.5	51.5	68.2	6.1	54.0
Actuated g/C Ratio	0.11	0.18	0.18	0.18	0.06	0.57	0.76	0.07	0.60
v/c Ratio	0.05	0.54	0.54	0.12	0.22	0.51	0.26	0.33	0.45
Control Delay	0.3	38.9	38.9	0.6	39.9	19.4	0.9	47.4	15.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.0
Total Delay	0.3	38.9	38.9	0.6	39.9	19.8	0.9	47.4	15.1
LOS	A	D	D	A	D	B	A	D	B
Approach Delay			34.0			15.7			16.3
Approach LOS			C			B			B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 2 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay: 18.3	Intersection LOS: B
Intersection Capacity Utilization 55.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 29: Market St. & Rivera St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	18	324	0	48	23	1026	320	39	946	1
Future Volume (veh/h)	0	0	18	324	0	48	23	1026	320	39	946	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	0	5	334	0	25	24	1058	224	40	975	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	0	25	21	446	0	194	45	2233	1194	64	2326	2
Arrive On Green	0.00	0.00	0.01	0.12	0.00	0.12	0.05	1.00	1.00	0.04	0.63	0.63
Sat Flow, veh/h	0	1900	1610	3619	0	1573	1810	3610	1609	1810	3700	4
Grp Volume(v), veh/h	0	0	5	334	0	25	24	1058	224	40	476	500
Grp Sat Flow(s),veh/h/ln	0	1900	1610	1810	0	1573	1810	1805	1609	1810	1805	1899
Q Serve(g_s), s	0.0	0.0	0.3	8.0	0.0	1.3	1.2	0.0	0.0	2.0	12.0	12.0
Cycle Q Clear(g_c), s	0.0	0.0	0.3	8.0	0.0	1.3	1.2	0.0	0.0	2.0	12.0	12.0
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	25	21	446	0	194	45	2233	1194	64	1135	1194
V/C Ratio(X)	0.00	0.00	0.24	0.75	0.00	0.13	0.53	0.47	0.19	0.63	0.42	0.42
Avail Cap(c_a), veh/h	0	211	179	965	0	420	109	2233	1194	123	1135	1194
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	0.87	0.87	0.87	0.67	0.67	0.67
Uniform Delay (d), s/veh	0.0	0.0	44.0	38.1	0.0	35.1	42.2	0.0	0.0	42.8	8.4	8.4
Incr Delay (d2), s/veh	0.0	0.0	5.7	2.5	0.0	0.3	3.1	0.6	0.3	2.5	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	3.7	0.0	0.5	0.5	0.2	0.1	0.9	3.9	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	49.6	40.6	0.0	35.4	45.3	0.6	0.3	45.4	9.2	9.2
LnGrp LOS	A	A	D	D	A	D	D	A	A	D	A	A
Approach Vol, veh/h		5			359			1306			1016	
Approach Delay, s/veh		49.6			40.3			1.4			10.6	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	60.8		5.8	6.9	61.7		15.7				
Change Period (Y+Rc), s	4.6	5.1		4.6	4.6	5.1		4.6				
Max Green Setting (Gmax), s	6.1	31.0		10.0	5.4	31.7		24.0				
Max Q Clear Time (g_c+I1), s	4.0	2.0		2.3	3.2	14.0		10.0				
Green Ext Time (p_c), s	0.0	8.9		0.0	0.0	5.4		1.1				

Intersection Summary		
HCM 6th Ctrl Delay		10.2
HCM 6th LOS		B

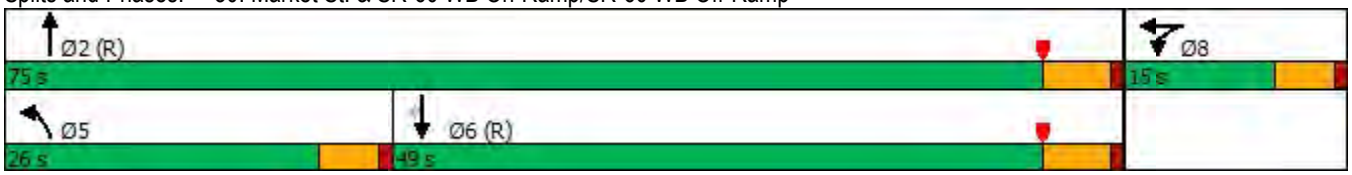
Notes

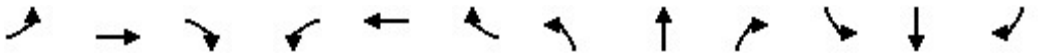
User approved volume balancing among the lanes for turning movement.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	960	209	409	1083	204
Future Volume (vph)	0	960	209	409	1083	204
Turn Type	NA	Free	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		Free				6
Detector Phase	8		5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	10.0		10.0	24.5	10.5	10.5
Total Split (s)	15.0		26.0	75.0	49.0	49.0
Total Split (%)	16.7%		28.9%	83.3%	54.4%	54.4%
Yellow Time (s)	4.0		4.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	C-Min	C-Min	C-Min
Act Effct Green (s)	8.3	90.0	16.0	74.4	52.3	52.3
Actuated g/C Ratio	0.09	1.00	0.18	0.83	0.58	0.58
v/c Ratio	0.41	0.63	0.69	0.14	0.54	0.21
Control Delay	45.4	1.8	26.3	5.3	11.3	2.2
Queue Delay	0.0	0.1	0.0	0.0	0.2	0.0
Total Delay	45.4	2.0	26.3	5.3	11.5	2.2
LOS	D	A	C	A	B	A
Approach Delay	4.7			12.4	10.1	
Approach LOS	A			B	B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 8.7	Intersection LOS: A
Intersection Capacity Utilization 73.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 30: Market St. & SR-60 WB On-Ramp/SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	65	0	960	209	409	0	0	1083	204
Future Volume (veh/h)	0	0	0	65	0	960	209	409	0	0	1083	204
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				68	0	0	220	431	0	0	1140	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				89	0		255	3011	0	0	2301	
Arrive On Green				0.05	0.00	0.00	0.28	1.00	0.00	0.00	1.00	0.00
Sat Flow, veh/h				1810	0	1610	1810	3705	0	0	3705	1610
Grp Volume(v), veh/h				68	0	0	220	431	0	0	1140	0
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1805	1610
Q Serve(g_s), s				3.3	0.0	0.0	10.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				3.3	0.0	0.0	10.4	0.0	0.0	0.0	0.0	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				89	0		255	3011	0	0	2301	
V/C Ratio(X)				0.76	0.00		0.86	0.14	0.00	0.00	0.50	
Avail Cap(c_a), veh/h				201	0		422	3011	0	0	2301	
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	0.00	0.00	0.81	0.81	0.00	0.00	0.89	0.00
Uniform Delay (d), s/veh				42.3	0.0	0.0	31.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				12.7	0.0	0.0	7.8	0.1	0.0	0.0	0.7	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.7	0.0	0.0	4.3	0.0	0.0	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				54.9	0.0	0.0	39.3	0.1	0.0	0.0	0.7	0.0
LnGrp LOS				D	A		D	A	A	A	A	
Approach Vol, veh/h					68	A		651			1140	A
Approach Delay, s/veh					54.9			13.3			0.7	
Approach LOS					D			B			A	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		80.6			17.7	62.9		9.4				
Change Period (Y+Rc), s		5.5			5.0	5.5		5.0				
Max Green Setting (Gmax), s		69.5			21.0	43.5		10.0				
Max Q Clear Time (g_c+I1), s		2.0			12.4	2.0		5.3				
Green Ext Time (p_c), s		2.9			0.4	9.5		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		7.1	
HCM 6th LOS		A	

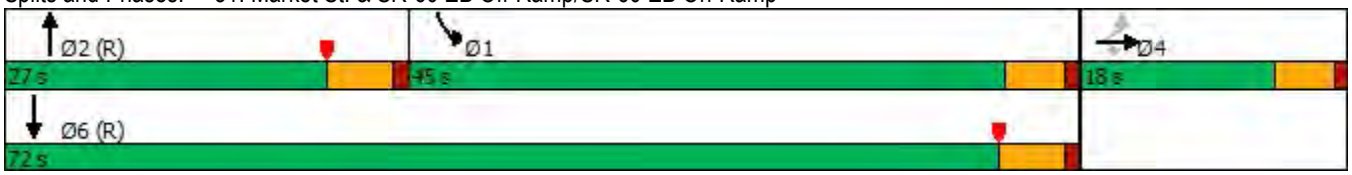
Notes

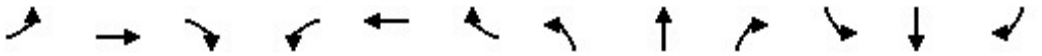
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	0	518	471	661	487
Future Volume (vph)	0	518	471	661	487
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	24.5	10.0	10.5
Total Split (s)	18.0	18.0	27.0	45.0	72.0
Total Split (%)	20.0%	20.0%	30.0%	50.0%	80.0%
Yellow Time (s)	4.0	4.0	4.5	4.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.0	5.5
Lead/Lag			Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Min	None	C-Min
Act Effct Green (s)	11.8	11.8	25.6	37.1	67.7
Actuated g/C Ratio	0.13	0.13	0.28	0.41	0.75
v/c Ratio	0.64	0.64	0.56	0.91	0.18
Control Delay	49.3	7.2	30.1	41.9	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	49.3	7.2	30.1	41.9	5.0
LOS	D	A	C	D	A
Approach Delay	16.5		30.1		26.2
Approach LOS	B		C		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 15 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 24.4	Intersection LOS: C
Intersection Capacity Utilization 73.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 31: Market St. & SR-60 EB Off-Ramp/SR-60 EB On-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	0	518	0	0	0	0	471	87	661	487	0
Future Volume (veh/h)	147	0	518	0	0	0	0	471	87	661	487	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	150	0	264				0	481	0	674	497	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	215	0	336				0	614		966	2761	0
Arrive On Green	0.12	0.00	0.12				0.00	0.17	0.00	0.89	1.00	0.00
Sat Flow, veh/h	1810	0	2834				0	3800	0	1810	3705	0
Grp Volume(v), veh/h	150	0	264				0	481	0	674	497	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1805	0	1810	1805	0
Q Serve(g_s), s	7.2	0.0	8.1				0.0	11.5	0.0	9.7	0.0	0.0
Cycle Q Clear(g_c), s	7.2	0.0	8.1				0.0	11.5	0.0	9.7	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	215	0	336				0	614		966	2761	0
V/C Ratio(X)	0.70	0.00	0.79				0.00	0.78		0.70	0.18	0.00
Avail Cap(c_a), veh/h	261	0	409				0	862		966	2761	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.82	0.82	0.00
Uniform Delay (d), s/veh	38.1	0.0	38.5				0.0	35.8	0.0	2.8	0.0	0.0
Incr Delay (d2), s/veh	6.2	0.0	8.0				0.0	9.7	0.0	1.8	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	3.1				0.0	5.7	0.0	1.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.3	0.0	46.6				0.0	45.4	0.0	4.6	0.1	0.0
LnGrp LOS	D	A	D				A	D		A	A	A
Approach Vol, veh/h		414						481	A		1171	
Approach Delay, s/veh		45.7						45.4			2.7	
Approach LOS		D						D			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	53.5	20.8		15.7		74.3
Change Period (Y+Rc), s	5.5	* 5.5		5.0		5.5
Max Green Setting (Gmax), s	40.0	* 22		13.0		66.5
Max Q Clear Time (g_c+I1), s	11.7	13.5		10.1		2.0
Green Ext Time (p_c), s	2.3	1.8		0.5		3.5

Intersection Summary	
HCM 6th Ctrl Delay	21.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	1	15	0	0	5	10	529	5	110	864	32
Future Vol, veh/h	23	1	15	0	0	5	10	529	5	110	864	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	145	-	-	140	-	110
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	24	1	16	0	0	5	10	551	5	115	900	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1426	1708	450	1257	1739	280	933	0	0	558	0	0
Stage 1	1130	1130	-	576	576	-	-	-	-	-	-	-
Stage 2	296	578	-	681	1163	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	231	146	*740	*347	137	723	*1110	-	-	1023	-	-
Stage 1	503	479	-	*475	505	-	-	-	-	-	-	-
Stage 2	694	504	-	*698	456	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	208	128	*740	*307	120	722	*1110	-	-	1021	-	-
Mov Cap-2 Maneuver	337	242	-	*375	255	-	-	-	-	-	-	-
Stage 1	499	425	-	*470	499	-	-	-	-	-	-	-
Stage 2	683	498	-	*604	405	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.5	10	0.2	1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 1110	-	-	421	722	1021	-	-
HCM Lane V/C Ratio	0.009	-	-	0.096	0.007	0.112	-	-
HCM Control Delay (s)	8.3	-	-	14.5	10	9	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	196	51	49	505	547	191
Future Vol, veh/h	196	51	49	505	547	191
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	209	54	52	537	582	203

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1057	684	785	0	-	0
Stage 1	684	-	-	-	-	-
Stage 2	373	-	-	-	-	-
Critical Hdwy	6.6	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	237	452	843	-	-	-
Stage 1	505	-	-	-	-	-
Stage 2	672	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	222	452	843	-	-	-
Mov Cap-2 Maneuver	350	-	-	-	-	-
Stage 1	474	-	-	-	-	-
Stage 2	672	-	-	-	-	-

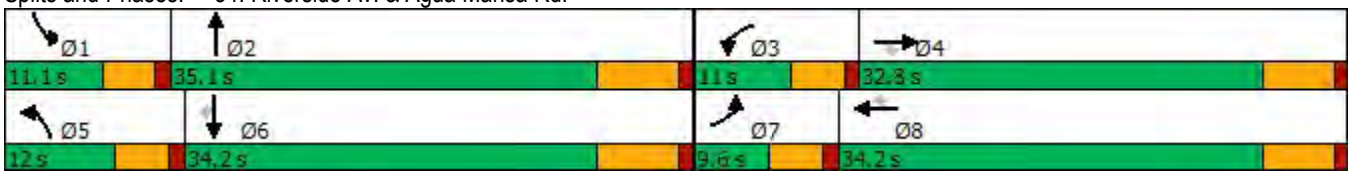
Approach	EB	NB	SB
HCM Control Delay, s	36	0.8	0
HCM LOS	E		

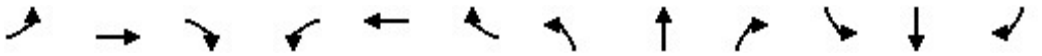
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	843	-	367	-	-
HCM Lane V/C Ratio	0.062	-	0.716	-	-
HCM Control Delay (s)	9.6	-	36	-	-
HCM Lane LOS	A	-	E	-	-
HCM 95th %tile Q(veh)	0.2	-	5.4	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	155	309	161	141	387	82	178	507	80	609	184
Future Volume (vph)	155	309	161	141	387	82	178	507	80	609	184
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	9.6	32.8	32.8	11.0	34.2	34.2	12.0	35.1	11.1	34.2	34.2
Total Split (%)	10.7%	36.4%	36.4%	12.2%	38.0%	38.0%	13.3%	39.0%	12.3%	38.0%	38.0%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	5.1	19.7	19.7	6.5	21.1	21.1	7.6	23.7	6.3	20.0	20.0
Actuated g/C Ratio	0.07	0.26	0.26	0.09	0.28	0.28	0.10	0.31	0.08	0.26	0.26
v/c Ratio	1.36	0.67	0.31	0.96	0.78	0.16	1.05	0.53	0.57	0.68	0.34
Control Delay	239.3	32.8	5.7	105.0	36.8	1.0	120.9	24.5	53.4	29.4	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	239.3	32.8	5.7	105.0	36.8	1.0	120.9	24.5	53.4	29.4	5.6
LOS	F	C	A	F	D	A	F	C	D	C	A
Approach Delay		77.1			47.8			47.8		26.6	
Approach LOS		E			D			D		C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 75.7	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.36	
Intersection Signal Delay: 47.7	Intersection LOS: D
Intersection Capacity Utilization 73.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	309	161	141	387	82	178	507	53	80	609	184
Future Volume (veh/h)	155	309	161	141	387	82	178	507	53	80	609	184
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	165	329	107	150	412	63	189	539	52	85	648	177
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	131	459	389	168	497	421	194	979	94	110	894	399
Arrive On Green	0.07	0.24	0.24	0.09	0.26	0.26	0.11	0.29	0.29	0.06	0.25	0.25
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3327	320	1810	3610	1610
Grp Volume(v), veh/h	165	329	107	150	412	63	189	292	299	85	648	177
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1842	1810	1805	1610
Q Serve(g_s), s	5.0	11.0	3.7	5.7	14.1	2.1	7.2	9.4	9.5	3.2	11.4	6.4
Cycle Q Clear(g_c), s	5.0	11.0	3.7	5.7	14.1	2.1	7.2	9.4	9.5	3.2	11.4	6.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	131	459	389	168	497	421	194	531	542	110	894	399
V/C Ratio(X)	1.26	0.72	0.28	0.89	0.83	0.15	0.98	0.55	0.55	0.77	0.72	0.44
Avail Cap(c_a), veh/h	131	742	629	168	781	662	194	747	762	170	1447	646
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.0	24.0	21.3	31.0	24.0	19.6	30.8	20.5	20.5	32.0	23.8	22.0
Incr Delay (d2), s/veh	164.4	2.1	0.4	40.0	4.3	0.2	57.0	0.9	0.9	4.3	1.1	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	4.7	1.3	4.1	6.2	0.7	5.8	3.5	3.5	1.4	4.3	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	196.5	26.2	21.7	71.0	28.3	19.8	87.8	21.4	21.4	36.3	25.0	22.7
LnGrp LOS	F	C	C	E	C	B	F	C	C	D	C	C
Approach Vol, veh/h		601			625			780			910	
Approach Delay, s/veh		72.1			37.7			37.5			25.6	
Approach LOS		E			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	26.8	11.0	22.5	12.0	23.6	9.6	23.9
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	6.5	28.6	6.4	27.0	7.4	27.7	5.0	28.4
Max Q Clear Time (g_c+I1), s	5.2	11.5	7.7	13.0	9.2	13.4	7.0	16.1
Green Ext Time (p_c), s	0.0	2.7	0.0	1.8	0.0	3.7	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	41.0
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	0	0	0	0	1
Future Vol, veh/h	4	0	0	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	92	92	92	92	62
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	0	0	0	0	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1	1	2	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	1027	1090	1634	-	-	-
Stage 1	1028	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1027	1090	1634	-	-	-
Mov Cap-2 Maneuver	1027	-	-	-	-	-
Stage 1	1028	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1634	-	1027	-	-
HCM Lane V/C Ratio	-	-	0.006	-	-
HCM Control Delay (s)	0	-	8.5	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	71	0	26	45	2	27
Future Vol, veh/h	71	0	26	45	2	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	91	0	33	58	3	35

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	91	0	215	91
Stage 1	-	-	-	-	91	-
Stage 2	-	-	-	-	124	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1517	-	778	972
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	907	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1517	-	761	972
Mov Cap-2 Maneuver	-	-	-	-	761	-
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	887	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.7	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	954	-	-	1517	-
HCM Lane V/C Ratio	0.039	-	-	0.022	-
HCM Control Delay (s)	8.9	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	7	84	40	25	49	3	18	8	29	1	13	3
Future Vol, veh/h	7	84	40	25	49	3	18	8	29	1	13	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	102	49	30	60	4	22	10	35	1	16	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	64	0	0	151	0	0	280	269	127	289	291	65
Stage 1	-	-	-	-	-	-	145	145	-	122	122	-
Stage 2	-	-	-	-	-	-	135	124	-	167	169	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1551	-	-	1442	-	-	676	641	929	667	623	1005
Stage 1	-	-	-	-	-	-	863	781	-	887	799	-
Stage 2	-	-	-	-	-	-	873	797	-	840	763	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1551	-	-	1442	-	-	644	623	929	620	606	1002
Mov Cap-2 Maneuver	-	-	-	-	-	-	644	623	-	620	606	-
Stage 1	-	-	-	-	-	-	858	776	-	882	781	-
Stage 2	-	-	-	-	-	-	831	779	-	793	758	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	2.5	10.2	10.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	764	1551	-	-	1442	-	-	652
HCM Lane V/C Ratio	0.088	0.006	-	-	0.021	-	-	0.032
HCM Control Delay (s)	10.2	7.3	0	-	7.5	0	-	10.7
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	20	36	8	21	58
Future Vol, veh/h	12	20	36	8	21	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	100	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	14	23	42	9	24	67

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	162	47	0	0	51	0
Stage 1	47	-	-	-	-	-
Stage 2	115	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	834	1028	-	-	1568	-
Stage 1	981	-	-	-	-	-
Stage 2	915	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	821	1028	-	-	1568	-
Mov Cap-2 Maneuver	821	-	-	-	-	-
Stage 1	981	-	-	-	-	-
Stage 2	900	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	1.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	821	1028	1568	-
HCM Lane V/C Ratio	-	-	0.017	0.023	0.016	-
HCM Control Delay (s)	-	-	9.5	8.6	7.3	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	0	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	2	0	9	0	35	6	10	60	0
Future Vol, veh/h	0	0	0	2	0	9	0	35	6	10	60	0
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	2	0	10	0	38	7	11	66	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	136	134	68	131	131	42	67	0	0	45	0	0
Stage 1	89	89	-	42	42	-	-	-	-	-	-	-
Stage 2	47	45	-	89	89	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	840	760	1001	846	763	1034	1547	-	-	1576	-	-
Stage 1	923	825	-	978	864	-	-	-	-	-	-	-
Stage 2	972	861	-	923	825	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	827	754	999	841	757	1034	1546	-	-	1576	-	-
Mov Cap-2 Maneuver	827	754	-	841	757	-	-	-	-	-	-	-
Stage 1	922	818	-	978	864	-	-	-	-	-	-	-
Stage 2	963	861	-	916	818	-	-	-	-	-	-	-

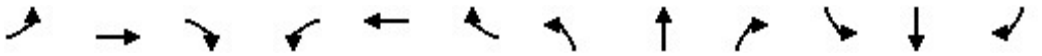
Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8.7	0	1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1546	-	-	-	993	1576	-	-
HCM Lane V/C Ratio	-	-	-	-	0.012	0.007	-	-
HCM Control Delay (s)	0	-	-	0	8.7	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0	0	-	-

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	5	394	501	1603	1401	582
Future Volume (vph)	5	394	501	1603	1401	582
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	41.0	41.0	22.0	69.0	47.0	47.0
Total Split (%)	37.3%	37.3%	20.0%	62.7%	42.7%	42.7%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	37.2	37.2	18.4	64.3	41.9	41.9
Actuated g/C Ratio	0.34	0.34	0.17	0.58	0.38	0.38
v/c Ratio	0.97	0.69	1.79	0.82	0.76	0.64
Control Delay	67.5	34.2	393.3	18.2	32.7	5.2
Queue Delay	23.4	0.0	0.0	6.7	19.3	0.0
Total Delay	90.9	34.2	393.3	24.9	52.0	5.2
LOS	F	C	F	C	D	A
Approach Delay	68.0			112.6	38.3	
Approach LOS	E			F	D	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.79	
Intersection Signal Delay: 75.0	Intersection LOS: E
Intersection Capacity Utilization 109.6%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	480	5	394	501	1603	0	0	1401	582
Future Volume (veh/h)	0	0	0	480	5	394	501	1603	0	0	1401	582
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				516	5	389	539	1724	0	0	1506	439
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				561	5	504	296	2201	0	0	2125	656
Arrive On Green				0.31	0.31	0.31	0.22	0.81	0.00	0.00	0.41	0.41
Sat Flow, veh/h				1793	17	1610	1810	3705	0	0	5358	1600
Grp Volume(v), veh/h				521	0	389	539	1724	0	0	1506	439
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1729	1600
Q Serve(g_s), s				30.5	0.0	24.1	18.0	27.2	0.0	0.0	26.6	24.5
Cycle Q Clear(g_c), s				30.5	0.0	24.1	18.0	27.2	0.0	0.0	26.6	24.5
Prop In Lane				0.99		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				567	0	504	296	2201	0	0	2125	656
V/C Ratio(X)				0.92	0.00	0.77	1.82	0.78	0.00	0.00	0.71	0.67
Avail Cap(c_a), veh/h				609	0	542	296	2201	0	0	2125	656
HCM Platoon Ratio				1.00	1.00	1.00	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.18	0.18	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				36.4	0.0	34.2	43.0	6.6	0.0	0.0	27.0	26.4
Incr Delay (d2), s/veh				18.5	0.0	6.3	371.6	0.5	0.0	0.0	2.0	5.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				15.7	0.0	9.8	37.9	4.8	0.0	0.0	10.8	9.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				55.0	0.0	40.6	414.6	7.2	0.0	0.0	29.0	31.8
LnGrp LOS				D	A	D	F	A	A	A	C	C
Approach Vol, veh/h					910			2263			1945	
Approach Delay, s/veh					48.8			104.2			29.7	
Approach LOS					D			F			C	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	71.6		22.0	49.6		38.4						
Change Period (Y+Rc), s	4.5		4.0	4.5		4.0						
Max Green Setting (Gmax), s	64.5		18.0	42.5		37.0						
Max Q Clear Time (g_c+I1), s	29.2		20.0	28.6		32.5						
Green Ext Time (p_c), s	17.9		0.0	9.5		1.9						

Intersection Summary		
HCM 6th Ctrl Delay	66.0	
HCM 6th LOS	E	

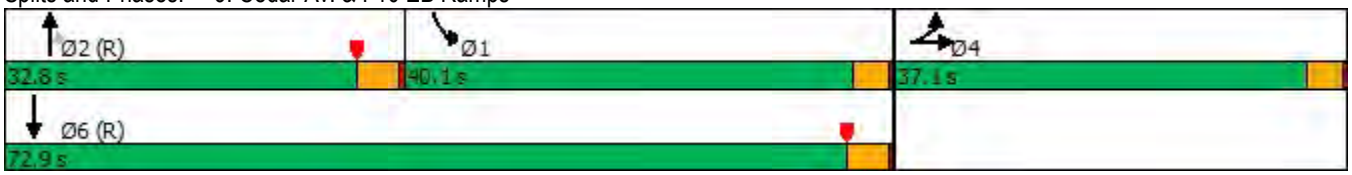
Notes

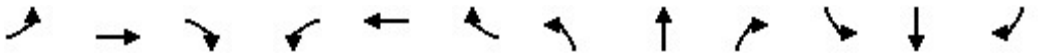
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	566	5	1559	685	420	1458
Future Volume (vph)	566	5	1559	685	420	1458
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	37.1	37.1	32.8	32.8	40.1	72.9
Total Split (%)	33.7%	33.7%	29.8%	29.8%	36.5%	66.3%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	34.8	34.8	34.2	34.2	30.0	67.7
Actuated g/C Ratio	0.32	0.32	0.31	0.31	0.27	0.62
v/c Ratio	0.89	0.83	0.99	0.76	0.87	0.67
Control Delay	55.3	46.1	52.5	18.2	44.4	9.9
Queue Delay	26.5	11.2	0.0	0.0	3.1	4.1
Total Delay	81.8	57.3	52.5	18.2	47.4	14.0
LOS	F	E	D	B	D	B
Approach Delay		70.1	42.0			21.5
Approach LOS		E	D			C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 39.4	Intersection LOS: D
Intersection Capacity Utilization 109.6%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	566	5	331	0	0	0	0	1559	685	420	1458	0
Future Volume (veh/h)	566	5	331	0	0	0	0	1559	685	420	1458	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	455	177	328				0	1591	494	429	1488	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	553	182	337				0	1358	419	594	2261	0
Arrive On Green	0.31	0.31	0.31				0.00	0.09	0.09	0.33	0.63	0.00
Sat Flow, veh/h	1810	596	1105				0	5358	1601	1810	3705	0
Grp Volume(v), veh/h	455	0	505				0	1591	494	429	1488	0
Grp Sat Flow(s),veh/h/ln	1810	0	1701				0	1729	1601	1810	1805	0
Q Serve(g_s), s	25.7	0.0	32.3				0.0	28.8	28.8	23.0	28.8	0.0
Cycle Q Clear(g_c), s	25.7	0.0	32.3				0.0	28.8	28.8	23.0	28.8	0.0
Prop In Lane	1.00		0.65				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	553	0	520				0	1358	419	594	2261	0
V/C Ratio(X)	0.82	0.00	0.97				0.00	1.17	1.18	0.72	0.66	0.00
Avail Cap(c_a), veh/h	553	0	520				0	1358	419	602	2261	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.28	0.28	0.56	0.56	0.00
Uniform Delay (d), s/veh	35.4	0.0	37.7				0.0	50.2	50.2	32.5	13.1	0.0
Incr Delay (d2), s/veh	9.8	0.0	32.2				0.0	79.6	87.6	2.0	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.2	0.0	17.3				0.0	23.3	22.5	10.0	10.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.2	0.0	70.0				0.0	129.9	137.9	34.6	13.9	0.0
LnGrp LOS	D	A	E				A	F	F	C	B	A
Approach Vol, veh/h		960						2085			1917	
Approach Delay, s/veh		58.2						131.8			18.5	
Approach LOS		E						F			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	40.1	32.8		37.1		72.9
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	36.6	* 29		33.6		68.9
Max Q Clear Time (g_c+I1), s	25.0	30.8		34.3		30.8
Green Ext Time (p_c), s	0.5	0.0		0.0		9.0

Intersection Summary		
HCM 6th Ctrl Delay		73.8
HCM 6th LOS		E

Notes

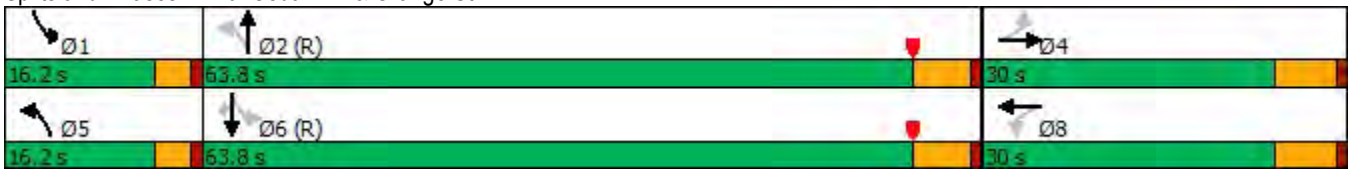
User approved volume balancing among the lanes for turning movement.

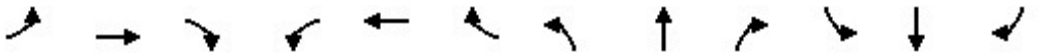
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	245	2	28	2	19	1797	52	1474	263
Future Volume (vph)	245	2	28	2	19	1797	52	1474	263
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases		4		8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	30.0	30.0	10.2	10.2	16.2	28.2	16.2	28.2	28.2
Total Split (s)	30.0	30.0	30.0	30.0	16.2	63.8	16.2	63.8	63.8
Total Split (%)	27.3%	27.3%	27.3%	27.3%	14.7%	58.0%	14.7%	58.0%	58.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	3.0	4.7	3.0	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.0	5.7	4.0	5.7	5.7
Lead/Lag					Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min	C-Min
Act Effct Green (s)	24.2	24.2	24.2	24.2	71.9	65.4	74.5	69.9	69.9
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.65	0.59	0.68	0.64	0.64
v/c Ratio	1.19	0.09	0.09	0.39	0.10	0.88	0.31	0.67	0.26
Control Delay	159.3	13.3	35.4	7.7	4.1	14.6	11.8	14.9	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	46.5	0.0	0.0	0.0
Total Delay	159.3	13.3	35.4	7.7	4.1	61.1	11.8	14.9	2.2
LOS	F	B	D	A	A	E	B	B	A
Approach Delay		142.6		11.3		60.5		12.9	
Approach LOS		F		B		E		B	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 68.3 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.19	
Intersection Signal Delay: 42.7	Intersection LOS: D
Intersection Capacity Utilization 90.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 10: Cedar Av. & Orange St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	245	2	30	28	2	187	19	1797	10	52	1474	263
Future Volume (veh/h)	245	2	30	28	2	187	19	1797	10	52	1474	263
Initial Q (Qb), veh	0	0	0	0	0	0	0	44	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	255	2	26	29	2	149	20	1872	10	54	1535	213
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	238	25	329	352	5	347	173	2248	9	172	2247	979
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.03	1.00	1.00	0.02	0.42	0.42
Sat Flow, veh/h	1256	116	1508	1400	21	1592	1810	3682	20	1810	3610	1573
Grp Volume(v), veh/h	255	0	28	29	0	151	20	917	965	54	1535	213
Grp Sat Flow(s),veh/h/ln	1256	0	1624	1400	0	1613	1810	1805	1896	1810	1805	1573
Q Serve(g_s), s	15.1	0.0	1.5	1.9	0.0	8.9	0.5	0.0	0.0	1.2	38.1	9.5
Cycle Q Clear(g_c), s	24.0	0.0	1.5	3.4	0.0	8.9	0.5	0.0	0.0	1.2	38.1	9.5
Prop In Lane	1.00		0.93	1.00		0.99	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	238	0	354	352	0	352	173	1101	1157	172	2247	979
V/C Ratio(X)	1.07	0.00	0.08	0.08	0.00	0.43	0.12	0.83	0.83	0.31	0.68	0.22
Avail Cap(c_a), veh/h	238	0	354	352	0	352	343	1101	1156	416	2247	979
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	0.69	0.69	0.69
Uniform Delay (d), s/veh	49.5	0.0	34.2	35.5	0.0	37.1	14.1	0.0	0.0	20.8	23.2	14.9
Incr Delay (d2), s/veh	78.4	0.0	0.1	0.1	0.0	0.8	0.0	0.7	0.7	0.7	1.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.3	15.7	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.8	0.0	0.6	0.7	0.0	3.6	0.2	5.5	5.3	0.7	17.1	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	127.9	0.0	34.3	35.6	0.0	37.9	14.1	18.0	16.4	21.5	24.4	15.2
LnGrp LOS	F	A	C	D	A	D	B	B	B	C	C	B
Approach Vol, veh/h		283			180			1902			1802	
Approach Delay, s/veh		118.7			37.6			17.1			23.2	
Approach LOS		F			D			B			C	

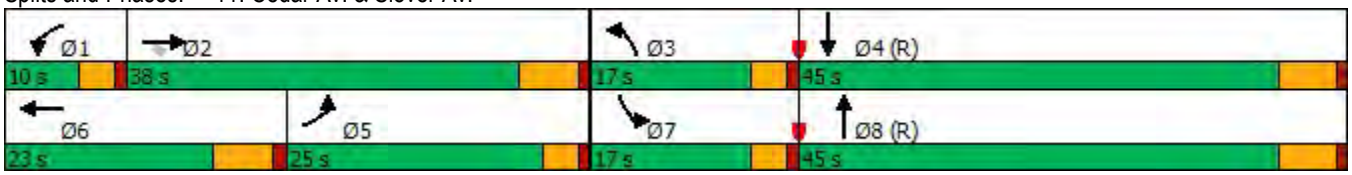
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	72.8		30.0	5.8	74.2		30.0				
Change Period (Y+Rc), s	4.0	5.7		6.0	4.0	5.7		6.0				
Max Green Setting (Gmax), s	12.2	58.1		24.0	12.2	58.1		24.0				
Max Q Clear Time (g_c+I1), s	3.2	2.0		26.0	2.5	40.1		10.9				
Green Ext Time (p_c), s	0.1	24.2		0.0	0.0	11.2		0.8				

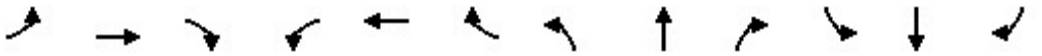
Intersection Summary			
HCM 6th Ctrl Delay		27.6	
HCM 6th LOS		C	

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	421	565	230	50	330	186	1219	159	1147
Future Volume (vph)	421	565	230	50	330	186	1219	159	1147
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2		1	6	3	8	7	4
Permitted Phases			2						
Detector Phase	5	2	2	1	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	29.0	29.0	8.0	23.0	8.0	32.7	8.0	24.7
Total Split (s)	25.0	38.0	38.0	10.0	23.0	17.0	45.0	17.0	45.0
Total Split (%)	22.7%	34.5%	34.5%	9.1%	20.9%	15.5%	40.9%	15.5%	40.9%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	4.7	3.0	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	4.0	5.7	4.0	5.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	21.0	34.0	34.0	5.9	17.0	13.0	39.7	12.6	39.3
Actuated g/C Ratio	0.19	0.31	0.31	0.05	0.15	0.12	0.36	0.11	0.36
v/c Ratio	1.32	0.54	0.37	0.56	0.93	0.94	1.10	0.83	1.16
Control Delay	197.8	34.4	5.5	72.9	62.3	72.9	99.7	85.0	107.0
Queue Delay	0.0	0.0	0.0	0.0	0.5	0.0	2.3	0.0	0.0
Total Delay	197.8	34.4	5.5	72.9	62.8	72.9	102.1	85.0	107.0
LOS	F	C	A	E	E	E	F	F	F
Approach Delay		85.6			63.7		98.5		104.7
Approach LOS		F			E		F		F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.32	
Intersection Signal Delay: 93.1	Intersection LOS: F
Intersection Capacity Utilization 104.1%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 11: Cedar Av. & Slover Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	421	565	230	50	330	187	186	1219	101	159	1147	225
Future Volume (veh/h)	421	565	230	50	330	187	186	1219	101	159	1147	225
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	453	608	203	54	355	147	200	1311	107	171	1233	234
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	345	1173	517	70	387	158	214	1786	145	199	1574	296
Arrive On Green	0.19	0.33	0.33	0.04	0.15	0.15	0.12	0.53	0.53	0.15	0.69	0.69
Sat Flow, veh/h	1810	3610	1590	1810	2502	1019	1810	3380	275	1810	3025	569
Grp Volume(v), veh/h	453	608	203	54	254	248	200	698	720	171	731	736
Grp Sat Flow(s),veh/h/ln	1810	1805	1590	1810	1805	1717	1810	1805	1850	1810	1805	1789
Q Serve(g_s), s	21.0	15.0	10.9	3.3	15.3	15.7	12.1	32.7	33.0	10.1	29.7	30.8
Cycle Q Clear(g_c), s	21.0	15.0	10.9	3.3	15.3	15.7	12.1	32.7	33.0	10.1	29.7	30.8
Prop In Lane	1.00		1.00	1.00		0.59	1.00		0.15	1.00		0.32
Lane Grp Cap(c), veh/h	345	1173	517	70	279	265	214	954	978	199	939	931
V/C Ratio(X)	1.31	0.52	0.39	0.77	0.91	0.93	0.94	0.73	0.74	0.86	0.78	0.79
Avail Cap(c_a), veh/h	345	1173	517	99	279	265	214	954	978	214	939	931
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.29	0.29	0.29	0.70	0.70	0.70
Uniform Delay (d), s/veh	44.5	30.1	28.7	52.4	45.8	45.9	48.1	19.9	20.0	46.1	12.7	12.9
Incr Delay (d2), s/veh	159.4	0.4	0.5	21.0	31.9	37.7	19.1	1.5	1.5	19.9	4.5	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.2	6.2	4.0	1.9	9.3	9.5	6.4	12.7	13.2	5.4	9.0	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	203.9	30.5	29.2	73.4	77.7	83.6	67.2	21.4	21.5	66.0	17.2	17.7
LnGrp LOS	F	C	C	E	E	F	E	C	C	E	B	B
Approach Vol, veh/h		1264			556			1618			1638	
Approach Delay, s/veh		92.4			79.9			27.1			22.5	
Approach LOS		F			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	41.8	17.0	62.9	27.0	23.0	16.1	63.8
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	6.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	6.0	32.0	13.0	39.3	21.0	* 17	13.0	39.3
Max Q Clear Time (g_c+I1), s	5.3	17.0	14.1	32.8	23.0	17.7	12.1	35.0
Green Ext Time (p_c), s	0.0	3.8	0.0	4.5	0.0	0.0	0.0	3.0

Intersection Summary	
HCM 6th Ctrl Delay	47.7
HCM 6th LOS	D

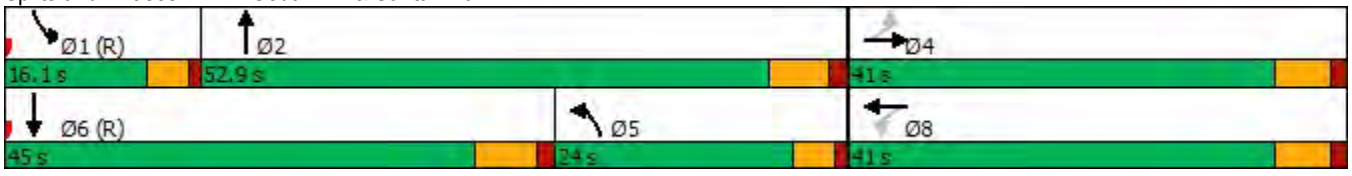
Notes

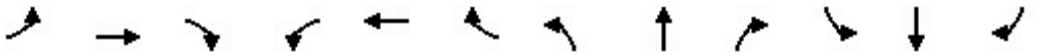
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	94	141	56	134	171	1327	63	1159
Future Volume (vph)	94	141	56	134	171	1327	63	1159
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	9.5	27.5	9.5	27.5
Total Split (s)	41.0	41.0	41.0	41.0	24.0	52.9	16.1	45.0
Total Split (%)	37.3%	37.3%	37.3%	37.3%	21.8%	48.1%	14.6%	40.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	4.5	6.5	4.5	6.5
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min
Act Effct Green (s)		32.3		32.3	19.5	49.7	11.0	41.2
Actuated g/C Ratio		0.29		0.29	0.18	0.45	0.10	0.37
v/c Ratio		0.93		0.68	0.56	0.91	0.37	0.95
Control Delay		65.5		39.6	34.1	22.9	34.2	45.6
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		65.5		39.6	34.1	22.9	34.2	45.6
LOS		E		D	C	C	C	D
Approach Delay		65.5		39.6		24.1		45.0
Approach LOS		E		D		C		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 90 (82%), Referenced to phase 1:SBL and 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 37.2	Intersection LOS: D
Intersection Capacity Utilization 87.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 12: Cedar Av. & Santa Ana Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	141	116	56	134	94	171	1327	73	63	1159	51
Future Volume (veh/h)	94	141	116	56	134	94	171	1327	73	63	1159	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	99	148	79	59	141	59	180	1397	75	66	1220	47
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	139	181	89	104	230	87	399	1452	78	311	1240	48
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.44	0.83	0.83	0.06	0.12	0.12
Sat Flow, veh/h	374	706	345	248	897	338	1810	3485	187	1810	3544	136
Grp Volume(v), veh/h	326	0	0	259	0	0	180	722	750	66	621	646
Grp Sat Flow(s),veh/h/ln	1426	0	0	1483	0	0	1810	1805	1866	1810	1805	1875
Q Serve(g_s), s	7.9	0.0	0.0	0.0	0.0	0.0	7.6	36.7	37.6	3.8	37.8	37.8
Cycle Q Clear(g_c), s	24.6	0.0	0.0	16.8	0.0	0.0	7.6	36.7	37.6	3.8	37.8	37.8
Prop In Lane	0.30		0.24	0.23		0.23	1.00		0.10	1.00		0.07
Lane Grp Cap(c), veh/h	409	0	0	421	0	0	399	752	778	311	632	656
V/C Ratio(X)	0.80	0.00	0.00	0.62	0.00	0.00	0.45	0.96	0.96	0.21	0.98	0.98
Avail Cap(c_a), veh/h	504	0	0	519	0	0	399	761	787	311	632	656
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.52	0.52	0.52	0.09	0.09	0.09
Uniform Delay (d), s/veh	39.6	0.0	0.0	36.1	0.0	0.0	26.1	8.4	8.5	44.8	48.3	48.3
Incr Delay (d2), s/veh	8.2	0.0	0.0	2.1	0.0	0.0	0.2	15.6	16.0	0.0	7.5	7.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	0.0	0.0	6.3	0.0	0.0	2.8	6.6	6.9	1.7	19.4	20.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.8	0.0	0.0	38.2	0.0	0.0	26.2	24.1	24.5	44.8	55.8	55.8
LnGrp LOS	D	A	A	D	A	A	C	C	C	D	E	E
Approach Vol, veh/h		326			259			1652			1333	
Approach Delay, s/veh		47.8			38.2			24.5			55.3	
Approach LOS		D			D			C			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.4	52.3		34.2	30.8	45.0		34.2				
Change Period (Y+Rc), s	4.5	6.5		6.0	6.5	* 6.5		6.0				
Max Green Setting (Gmax), s	11.6	46.4		35.0	19.5	* 39		35.0				
Max Q Clear Time (g_c+I1), s	5.8	39.6		26.6	9.6	39.8		18.8				
Green Ext Time (p_c), s	0.0	6.3		1.6	0.2	0.0		1.8				

Intersection Summary		
HCM 6th Ctrl Delay		39.1
HCM 6th LOS		D

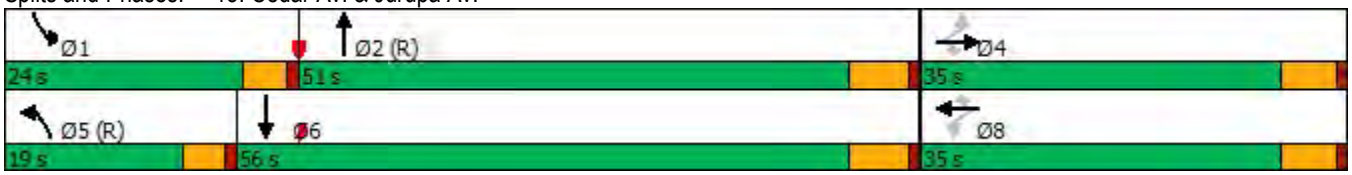
Notes

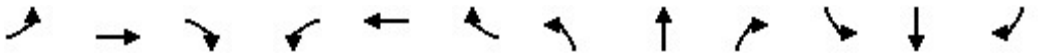
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	251	209	148	78	132	129	126	1147	163	1102
Future Volume (vph)	251	209	148	78	132	129	126	1147	163	1102
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	19.0	51.0	24.0	56.0
Total Split (%)	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	17.3%	46.4%	21.8%	50.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)		30.7	30.7		30.7	30.7	12.5	47.8	15.5	50.8
Actuated g/C Ratio		0.28	0.28		0.28	0.28	0.11	0.43	0.14	0.46
v/c Ratio		1.66	0.30		2.81	0.26	0.67	0.84	0.70	0.81
Control Delay		337.7	11.7		865.4	7.0	67.4	20.3	29.0	37.2
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		337.7	11.7		865.4	7.0	67.4	20.3	29.0	37.2
LOS		F	B		F	A	E	C	C	D
Approach Delay		258.3			538.8			24.8		36.2
Approach LOS		F			F			C		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.81	
Intersection Signal Delay: 115.2	Intersection LOS: F
Intersection Capacity Utilization 97.9%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	209	148	78	132	129	126	1147	62	163	1102	127
Future Volume (veh/h)	251	209	148	78	132	129	126	1147	62	163	1102	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	273	227	136	85	143	94	137	1247	54	177	1198	133
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	51	0	426	45	54	424	280	1655	72	212	1415	157
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.31	0.94	0.94	0.04	0.14	0.14
Sat Flow, veh/h	0	0	1588	0	202	1579	1810	3525	153	1810	3277	363
Grp Volume(v), veh/h	500	0	136	228	0	94	137	638	663	177	659	672
Grp Sat Flow(s),veh/h/ln	0	0	1588	202	0	1579	1810	1805	1873	1810	1805	1835
Q Serve(g_s), s	0.0	0.0	7.5	0.0	0.0	5.1	6.8	8.1	8.2	10.7	39.1	39.3
Cycle Q Clear(g_c), s	29.5	0.0	7.5	29.5	0.0	5.1	6.8	8.1	8.2	10.7	39.1	39.3
Prop In Lane	0.55		1.00	0.37		1.00	1.00		0.08	1.00		0.20
Lane Grp Cap(c), veh/h	51	0	426	99	0	424	280	847	879	212	779	792
V/C Ratio(X)	9.88	0.00	0.32	2.30	0.00	0.22	0.49	0.75	0.75	0.84	0.84	0.85
Avail Cap(c_a), veh/h	51	0	426	99	0	424	280	847	879	321	820	834
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.64	0.64	0.64	0.21	0.21	0.21
Uniform Delay (d), s/veh	55.0	0.0	32.2	39.7	0.0	31.3	34.5	2.0	2.0	51.8	43.6	43.7
Incr Delay (d2), s/veh	4036.1	0.0	0.6	616.3	0.0	0.4	0.9	4.0	3.9	2.6	1.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	58.1	0.0	2.9	19.7	0.0	1.9	2.7	1.9	2.0	5.2	19.1	19.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4091.1	0.0	32.8	656.0	0.0	31.7	35.3	6.0	5.9	54.4	45.4	45.6
LnGrp LOS	F	A	C	F	A	C	D	A	A	D	D	D
Approach Vol, veh/h		636			322			1438			1508	
Approach Delay, s/veh		3223.3			473.8			8.8			46.6	
Approach LOS		F			F			A			D	

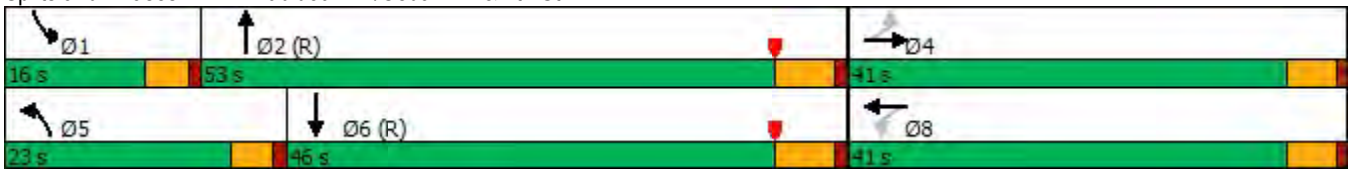
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.4	57.6		35.0	21.5	53.5		35.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	19.5	45.0		29.5	14.5	50.0		29.5				
Max Q Clear Time (g_c+I1), s	12.7	10.2		31.5	8.8	41.3		31.5				
Green Ext Time (p_c), s	0.2	15.0		0.0	0.1	6.2		0.0				

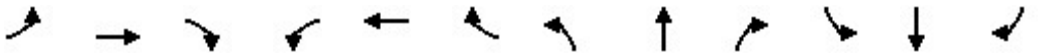
Intersection Summary		
HCM 6th Ctrl Delay		585.4
HCM 6th LOS		F

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	132	47	33	28	167	1118	71	1059
Future Volume (vph)	132	47	33	28	167	1118	71	1059
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	10.0	10.0	9.5	24.0	9.5	24.0
Total Split (s)	41.0	41.0	41.0	41.0	23.0	53.0	16.0	46.0
Total Split (%)	37.3%	37.3%	37.3%	37.3%	20.9%	48.2%	14.5%	41.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)		33.5		29.6	15.5	53.6	9.5	45.5
Actuated g/C Ratio		0.30		0.27	0.14	0.49	0.09	0.41
v/c Ratio		0.91		0.24	0.72	0.70	0.49	0.88
Control Delay		54.7		24.4	60.8	26.6	44.6	38.2
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		54.7		24.4	60.8	26.6	44.6	38.2
LOS		D		C	E	C	D	D
Approach Delay		54.7		24.4		31.0		38.6
Approach LOS		D		C		C		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 74 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 37.2	Intersection LOS: D
Intersection Capacity Utilization 85.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 14: Rubidoux Bl./Cedar Av. & 7th St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	47	251	33	28	19	167	1118	19	71	1059	134
Future Volume (veh/h)	132	47	251	33	28	19	167	1118	19	71	1059	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	143	51	191	36	30	11	182	1215	21	77	1151	145
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	196	65	213	182	144	46	214	1939	34	99	1520	191
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.12	0.53	0.53	0.05	0.47	0.47
Sat Flow, veh/h	560	240	788	496	535	172	1810	3629	63	1810	3226	405
Grp Volume(v), veh/h	385	0	0	77	0	0	182	604	632	77	643	653
Grp Sat Flow(s),veh/h/ln	1589	0	0	1203	0	0	1810	1805	1887	1810	1805	1827
Q Serve(g_s), s	21.2	0.0	0.0	0.0	0.0	0.0	10.8	25.8	25.8	4.6	32.2	32.4
Cycle Q Clear(g_c), s	25.5	0.0	0.0	4.4	0.0	0.0	10.8	25.8	25.8	4.6	32.2	32.4
Prop In Lane	0.37		0.50	0.47		0.14	1.00		0.03	1.00		0.22
Lane Grp Cap(c), veh/h	474	0	0	373	0	0	214	965	1008	99	850	860
V/C Ratio(X)	0.81	0.00	0.00	0.21	0.00	0.00	0.85	0.63	0.63	0.78	0.76	0.76
Avail Cap(c_a), veh/h	563	0	0	455	0	0	304	965	1008	189	850	860
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.43	0.43	0.43	0.57	0.57	0.57
Uniform Delay (d), s/veh	38.4	0.0	0.0	30.7	0.0	0.0	47.5	17.9	17.9	51.3	23.9	24.0
Incr Delay (d2), s/veh	8.4	0.0	0.0	0.4	0.0	0.0	6.9	1.3	1.3	7.2	3.6	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	0.0	0.0	1.6	0.0	0.0	5.1	9.9	10.3	2.2	13.4	13.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.8	0.0	0.0	31.1	0.0	0.0	54.5	19.3	19.2	58.5	27.5	27.6
LnGrp LOS	D	A	A	C	A	A	D	B	B	E	C	C
Approach Vol, veh/h		385			77			1418			1373	
Approach Delay, s/veh		46.8			31.1			23.8			29.3	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.5	64.8		34.7	17.5	57.8		34.7				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	11.5	47.0		36.0	18.5	40.0		36.0				
Max Q Clear Time (g_c+I1), s	6.6	27.8		27.5	12.8	34.4		6.4				
Green Ext Time (p_c), s	0.1	10.0		2.1	0.2	4.2		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		29.0	
HCM 6th LOS		C	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	10	8	268	8	264	13	1034	184	1164
Future Volume (vph)	10	8	268	8	264	13	1034	184	1164
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	35.0	35.0	35.0	9.5	24.0	9.5	24.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.6	35.0	20.0	45.4
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%	10.7%	38.9%	22.2%	50.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	5.0	4.5	6.0	4.5	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min
Act Effct Green (s)		15.2		22.9	22.9	5.2	29.4	12.6	44.9
Actuated g/C Ratio		0.19		0.28	0.28	0.06	0.36	0.16	0.56
v/c Ratio		0.09		0.73	0.41	0.11	0.94	0.66	0.60
Control Delay		17.4		38.0	5.0	42.1	41.3	45.2	15.3
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		17.4		38.0	5.0	42.1	41.3	45.2	15.3
LOS		B		D	A	D	D	D	B
Approach Delay		17.4		21.9			41.3		19.3
Approach LOS		B		C			D		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 80.6	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 28.2	Intersection LOS: C
Intersection Capacity Utilization 79.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 15: Rubidoux Bl. & Tarragona Dr./El Rivino Rd.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	8	11	268	8	264	13	1034	171	184	1164	24
Future Volume (veh/h)	10	8	11	268	8	264	13	1034	171	184	1164	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	10	8	7	271	8	192	13	1044	166	186	1176	23
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	59	46	18	352	8	568	28	1060	168	225	1629	32
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.02	0.34	0.34	0.12	0.45	0.45
Sat Flow, veh/h	0	130	51	762	22	1610	1810	3110	494	1810	3621	71
Grp Volume(v), veh/h	25	0	0	279	0	192	13	605	605	186	586	613
Grp Sat Flow(s),veh/h/ln	181	0	0	784	0	1610	1810	1805	1799	1810	1805	1887
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	7.5	0.6	28.3	28.4	8.5	22.5	22.5
Cycle Q Clear(g_c), s	30.0	0.0	0.0	30.0	0.0	7.5	0.6	28.3	28.4	8.5	22.5	22.5
Prop In Lane	0.40		0.28	0.97		1.00	1.00		0.27	1.00		0.04
Lane Grp Cap(c), veh/h	123	0	0	360	0	568	28	615	613	225	812	849
V/C Ratio(X)	0.20	0.00	0.00	0.78	0.00	0.34	0.46	0.98	0.99	0.83	0.72	0.72
Avail Cap(c_a), veh/h	123	0	0	360	0	568	108	615	613	330	836	874
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.4	0.0	0.0	27.7	0.0	20.3	41.5	27.8	27.9	36.3	19.1	19.1
Incr Delay (d2), s/veh	1.1	0.0	0.0	10.7	0.0	0.5	11.3	32.1	33.0	10.5	3.3	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	6.5	0.0	2.8	0.3	16.2	16.4	4.2	8.8	9.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.5	0.0	0.0	38.4	0.0	20.8	52.9	59.9	60.8	46.9	22.4	22.2
LnGrp LOS	C	A	A	D	A	C	D	E	E	D	C	C
Approach Vol, veh/h		25			471			1223			1385	
Approach Delay, s/veh		23.5			31.2			60.3			25.6	
Approach LOS		C			C			E			C	

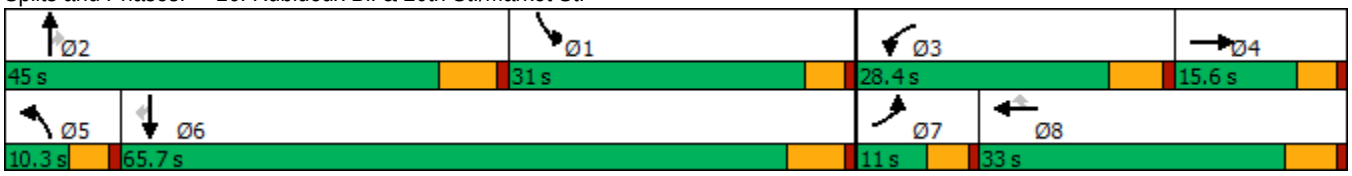
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.1	35.0		35.0	5.8	44.3		35.0				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	15.5	29.0		30.0	5.1	39.4		30.0				
Max Q Clear Time (g_c+I1), s	10.5	30.4		32.0	2.6	24.5		32.0				
Green Ext Time (p_c), s	0.2	0.0		0.0	0.0	8.3		0.0				

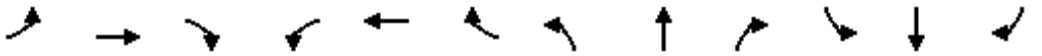
Intersection Summary												
HCM 6th Ctrl Delay			40.1									
HCM 6th LOS			D									

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	42	88	439	46	452	23	634	529	537	852	36
Future Volume (vph)	42	88	439	46	452	23	634	529	537	852	36
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	14.6	10.8	27.8	27.8	9.6	28.2	28.2	9.6	35.2	35.2
Total Split (s)	11.0	15.6	28.4	33.0	33.0	10.3	45.0	45.0	31.0	65.7	65.7
Total Split (%)	9.2%	13.0%	23.7%	27.5%	27.5%	8.6%	37.5%	37.5%	25.8%	54.8%	54.8%
Yellow Time (s)	3.6	3.6	4.8	4.8	4.8	3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	5.8	5.8	5.8	4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	6.4	10.4	17.5	26.7	26.7	5.5	26.3	26.3	19.4	47.0	47.0
Actuated g/C Ratio	0.07	0.11	0.18	0.28	0.28	0.06	0.28	0.28	0.20	0.49	0.49
v/c Ratio	0.36	0.27	0.70	0.09	0.59	0.22	0.65	0.70	0.77	0.49	0.04
Control Delay	57.4	39.3	44.5	32.7	7.0	54.9	34.4	11.7	45.1	18.1	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.4	39.3	44.5	32.7	7.0	54.9	34.4	11.7	45.1	18.1	0.1
LOS	E	D	D	C	A	D	C	B	D	B	A
Approach Delay		44.4		25.8			24.6			27.8	
Approach LOS		D		C			C			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 95.5	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 27.0	Intersection LOS: C
Intersection Capacity Utilization 69.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	88	19	439	46	452	23	634	529	537	852	36
Future Volume (veh/h)	42	88	19	439	46	452	23	634	529	537	852	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	43	90	13	448	47	0	23	647	409	548	869	21
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	69	348	49	566	470		45	917	409	650	1565	697
Arrive On Green	0.04	0.11	0.11	0.16	0.25	0.00	0.02	0.25	0.25	0.19	0.43	0.43
Sat Flow, veh/h	1810	3174	450	3510	1900	1610	1810	3610	1610	3510	3610	1608
Grp Volume(v), veh/h	43	50	53	448	47	0	23	647	409	548	869	21
Grp Sat Flow(s),veh/h/ln	1810	1805	1819	1755	1900	1610	1810	1805	1610	1755	1805	1608
Q Serve(g_s), s	1.9	2.1	2.2	10.1	1.6	0.0	1.0	13.5	12.4	12.5	14.8	0.6
Cycle Q Clear(g_c), s	1.9	2.1	2.2	10.1	1.6	0.0	1.0	13.5	12.4	12.5	14.8	0.6
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	69	198	199	566	470		45	917	409	650	1565	697
V/C Ratio(X)	0.63	0.25	0.26	0.79	0.10		0.51	0.71	1.00	0.84	0.56	0.03
Avail Cap(c_a), veh/h	140	240	242	959	625		125	1694	755	1121	2597	1157
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	33.7	33.8	33.4	24.0	0.0	39.8	28.0	10.7	32.5	17.5	13.4
Incr Delay (d2), s/veh	9.0	0.7	0.7	2.5	0.1	0.0	3.3	1.0	23.7	1.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.0	1.0	4.2	0.7	0.0	0.5	5.4	6.3	5.0	5.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.2	34.4	34.5	35.9	24.1	0.0	43.2	29.1	34.4	33.7	17.8	13.5
LnGrp LOS	D	C	C	D	C		D	C	F	C	B	B
Approach Vol, veh/h		146			495			1079			1438	
Approach Delay, s/veh		38.5			34.8			31.4			23.8	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.5	27.2	19.1	14.9	6.7	42.1	7.7	26.2
Change Period (Y+Rc), s	6.2	* 6.2	5.8	* 5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	26.4	* 39	22.6	* 11	5.7	59.5	6.4	27.2
Max Q Clear Time (g_c+I1), s	14.5	15.5	12.1	4.2	3.0	16.8	3.9	3.6
Green Ext Time (p_c), s	0.8	5.5	1.2	0.2	0.0	6.3	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	28.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	928.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	22	8	42	11	13	20	1130	100	159	1246	4
Future Vol, veh/h	2	22	8	42	11	13	20	1130	100	159	1246	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	22	8	43	11	13	20	1153	102	162	1271	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2219	2893	638	2216	2844	629	1275	0	0	1256	0	0
Stage 1	1597	1597	-	1245	1245	-	-	-	-	-	-	-
Stage 2	622	1296	-	971	1599	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	25	~ 16	424	~ 25	17	430	551	-	-	561	-	-
Stage 1	113	168	-	187	248	-	-	-	-	-	-	-
Stage 2	446	234	-	275	167	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 1	0	424	~ 1	0	430	551	-	-	560	-	-
Mov Cap-2 Maneuver	~ 1	0	-	~ 1	0	-	-	-	-	-	-	-
Stage 1	99	~ 1	-	163	217	-	-	-	-	-	-	-
Stage 2	359	205	-	-	~ 1	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, $	3883.7	36752.5	0.8	6.5
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	551	-	-	5	1	560	-	-
HCM Lane V/C Ratio	0.037	-	-	6.531	67.347	0.29	-	-
HCM Control Delay (s)	11.8	0.7	-	$ 3883.7	$ 36752.5	14	5.6	-
HCM Lane LOS	B	A	-	F	F	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	5.6	10.7	1.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	2	13	4	3	7	9	1239	17	7	1214	9
Future Vol, veh/h	5	2	13	4	3	7	9	1239	17	7	1214	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	110	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	2	14	4	3	8	10	1362	19	8	1334	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2059	2759	673	2078	2755	693	1345	0	0	1383	0	0
Stage 1	1356	1356	-	1394	1394	-	-	-	-	-	-	-
Stage 2	703	1403	-	684	1361	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	33	20	402	32	20	390	519	-	-	502	-	-
Stage 1	160	219	-	152	210	-	-	-	-	-	-	-
Stage 2	399	208	-	410	218	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	31	19	402	30	19	389	519	-	-	501	-	-
Mov Cap-2 Maneuver	112	102	-	108	102	-	-	-	-	-	-	-
Stage 1	157	215	-	149	206	-	-	-	-	-	-	-
Stage 2	377	204	-	385	214	-	-	-	-	-	-	-

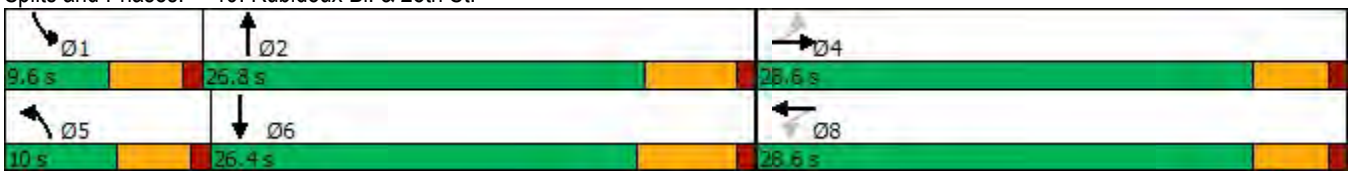
Approach	EB	WB	NB	SB
HCM Control Delay, s	24.4	28.9	0.1	0.1
HCM LOS	C	D		

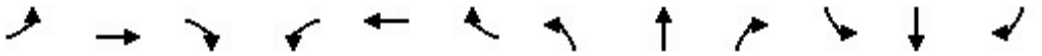
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	519	-	-	207	166	501	-	-
HCM Lane V/C Ratio	0.019	-	-	0.106	0.093	0.015	-	-
HCM Control Delay (s)	12.1	-	-	24.4	28.9	12.3	-	-
HCM Lane LOS	B	-	-	C	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.3	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	55	15	82	12	93	1192	21	1192
Future Volume (vph)	55	15	82	12	93	1192	21	1192
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	28.6	28.6	28.6	28.6	9.6	24.4	9.6	22.8
Total Split (s)	28.6	28.6	28.6	28.6	10.0	26.8	9.6	26.4
Total Split (%)	44.0%	44.0%	44.0%	44.0%	15.4%	41.2%	14.8%	40.6%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.4	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		13.2		13.2	5.8	30.9	5.5	24.8
Actuated g/C Ratio		0.27		0.27	0.12	0.63	0.11	0.51
v/c Ratio		0.32		0.31	0.47	0.60	0.12	0.74
Control Delay		11.4		17.6	35.3	13.6	26.2	20.9
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		11.4		17.6	35.3	13.6	26.2	20.9
LOS		B		B	D	B	C	C
Approach Delay		11.4		17.6		15.1		21.0
Approach LOS		B		B		B		C

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 49.1	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 17.6	Intersection LOS: B
Intersection Capacity Utilization 63.3%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 19: Rubidoux Bl. & 28th St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	15	69	82	12	13	93	1192	59	21	1192	59
Future Volume (veh/h)	55	15	69	82	12	13	93	1192	59	21	1192	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	59	16	46	88	13	8	100	1282	63	23	1282	63
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	217	71	105	343	48	20	142	1663	82	50	1488	73
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.08	0.48	0.48	0.03	0.42	0.42
Sat Flow, veh/h	586	415	614	1178	279	115	1810	3498	172	1810	3502	172
Grp Volume(v), veh/h	121	0	0	109	0	0	100	661	684	23	660	685
Grp Sat Flow(s),veh/h/ln	1616	0	0	1572	0	0	1810	1805	1865	1810	1805	1869
Q Serve(g_s), s	0.4	0.0	0.0	0.0	0.0	0.0	2.5	13.9	14.0	0.6	15.3	15.3
Cycle Q Clear(g_c), s	2.8	0.0	0.0	2.4	0.0	0.0	2.5	13.9	14.0	0.6	15.3	15.3
Prop In Lane	0.49		0.38	0.81		0.07	1.00		0.09	1.00		0.09
Lane Grp Cap(c), veh/h	393	0	0	410	0	0	142	858	887	50	767	794
V/C Ratio(X)	0.31	0.00	0.00	0.27	0.00	0.00	0.71	0.77	0.77	0.46	0.86	0.86
Avail Cap(c_a), veh/h	931	0	0	910	0	0	212	858	887	197	808	836
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.0	0.0	0.0	16.8	0.0	0.0	20.7	10.0	10.0	22.0	12.0	12.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.3	0.0	0.0	2.4	4.3	4.2	2.4	9.0	8.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	1.0	0.0	0.0	1.0	4.5	4.7	0.2	5.6	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.4	0.0	0.0	17.2	0.0	0.0	23.1	14.3	14.2	24.5	21.1	20.9
LnGrp LOS	B	A	A	B	A	A	C	B	B	C	C	C
Approach Vol, veh/h		121			109			1445			1368	
Approach Delay, s/veh		17.4			17.2			14.9			21.1	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	27.7		12.5	8.2	25.4		12.5				
Change Period (Y+Rc), s	4.6	* 5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	5.0	* 21		24.0	5.4	20.6		24.0				
Max Q Clear Time (g_c+I1), s	2.6	16.0		4.8	4.5	17.3		4.4				
Green Ext Time (p_c), s	0.0	3.6		0.6	0.0	2.2		0.5				

Intersection Summary		
HCM 6th Ctrl Delay		17.8
HCM 6th LOS		B

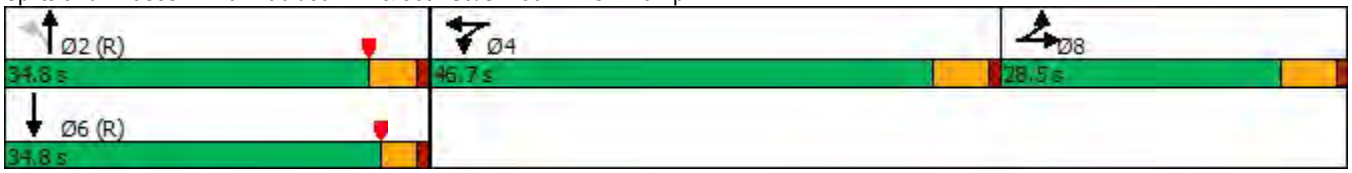
Notes

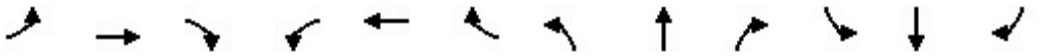
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	44	0	114	102	1208	1298
Future Volume (vph)	44	0	114	102	1208	1298
Turn Type	Split	NA	NA	Perm	NA	NA
Protected Phases	8	8	4		2	6
Permitted Phases				2		
Detector Phase	8	8	4	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.5	28.5	46.7	34.8	34.8	34.8
Total Split (%)	25.9%	25.9%	42.5%	31.6%	31.6%	31.6%
Yellow Time (s)	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	16.3	16.3	41.2	36.5	36.5	37.5
Actuated g/C Ratio	0.15	0.15	0.37	0.33	0.33	0.34
v/c Ratio	0.18	0.76	1.21	1.61	1.10	1.20
Control Delay	40.0	44.0	139.3	310.4	73.3	132.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.0	44.0	139.3	310.4	73.3	132.2
LOS	D	D	F	F	E	F
Approach Delay		43.3	139.3		91.8	132.2
Approach LOS		D	F		F	F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.61	
Intersection Signal Delay: 113.0	Intersection LOS: F
Intersection Capacity Utilization 122.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	0	215	535	114	107	102	1208	0	0	1298	55
Future Volume (veh/h)	44	0	215	535	114	107	102	1208	0	0	1298	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	48	0	172	582	124	87	111	1313	0	0	1411	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	236	0	210	494	105	74	65	1262	0	0	1236	50
Arrive On Green	0.13	0.00	0.13	0.37	0.37	0.37	0.70	0.70	0.00	0.00	0.35	0.35
Sat Flow, veh/h	1810	0	1610	1320	281	197	367	3705	0	0	3631	143
Grp Volume(v), veh/h	48	0	172	793	0	0	111	1313	0	0	719	749
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1798	0	0	367	1805	0	0	1805	1874
Q Serve(g_s), s	2.6	0.0	11.4	41.2	0.0	0.0	0.0	38.5	0.0	0.0	38.5	38.5
Cycle Q Clear(g_c), s	2.6	0.0	11.4	41.2	0.0	0.0	38.5	38.5	0.0	0.0	38.5	38.5
Prop In Lane	1.00		1.00	0.73		0.11	1.00		0.00	0.00		0.08
Lane Grp Cap(c), veh/h	236	0	210	674	0	0	65	1262	0	0	631	655
V/C Ratio(X)	0.20	0.00	0.82	1.18	0.00	0.00	1.70	1.04	0.00	0.00	1.14	1.14
Avail Cap(c_a), veh/h	378	0	337	674	0	0	65	1262	0	0	631	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.59	0.59
Uniform Delay (d), s/veh	42.7	0.0	46.6	34.4	0.0	0.0	35.8	16.5	0.0	0.0	35.8	35.8
Incr Delay (d2), s/veh	0.5	0.0	9.6	94.7	0.0	0.0	369.9	36.5	0.0	0.0	74.3	75.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	5.2	34.4	0.0	0.0	8.3	12.1	0.0	0.0	29.1	30.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.2	0.0	56.2	129.1	0.0	0.0	405.6	53.0	0.0	0.0	110.1	111.4
LnGrp LOS	D	A	E	F	A	A	F	F	A	A	F	F
Approach Vol, veh/h		220			793			1424			1468	
Approach Delay, s/veh		53.4			129.1			80.5			110.7	
Approach LOS		D			F			F			F	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		43.5		46.7		43.5		19.8				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		29.8		41.2		* 31		23.0				
Max Q Clear Time (g_c+I1), s		40.5		43.2		40.5		13.4				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.9				

Intersection Summary		
HCM 6th Ctrl Delay		100.2
HCM 6th LOS		F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	12.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	238	1317	1405	737
Future Vol, veh/h	0	0	238	1317	1405	737
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	256	1416	1511	792

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1153	2304	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	0	*571	~ 204	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	-	*571	~ 204	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	29.8	0
HCM LOS	A		

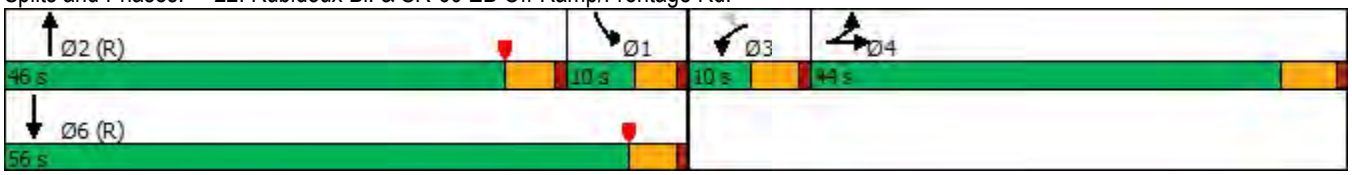
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	~ 204	-	-	-	-
HCM Lane V/C Ratio	1.254	-	-	-	-
HCM Control Delay (s)	195	-	0	-	-
HCM Lane LOS	F	-	A	-	-
HCM 95th %tile Q(veh)	13.6	-	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	48	14	2	906	140	1171
Future Volume (vph)	48	14	2	906	140	1171
Turn Type	NA	Prot	Perm	NA	Prot	NA
Protected Phases	4	3		2	1	6
Permitted Phases			3			
Detector Phase	4	3	3	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	10.0	10.0	45.0	9.5	30.0
Total Split (s)	44.0	10.0	10.0	46.0	10.0	56.0
Total Split (%)	40.0%	9.1%	9.1%	41.8%	9.1%	50.9%
Yellow Time (s)	4.5	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	44.5	5.0	5.0	41.0	5.5	51.0
Actuated g/C Ratio	0.40	0.05	0.05	0.37	0.05	0.46
v/c Ratio	1.68	0.18	0.01	0.98	1.62	0.73
Control Delay	338.7	55.8	0.0	53.6	313.9	13.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.7
Total Delay	338.7	55.8	0.0	53.6	313.9	14.3
LOS	F	E	A	D	F	B
Approach Delay	338.7			53.6		46.3
Approach LOS	F			D		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.68	
Intersection Signal Delay: 140.3	Intersection LOS: F
Intersection Capacity Utilization 130.1%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	713	48	413	14	0	2	0	906	341	140	1171	0
Future Volume (veh/h)	713	48	413	14	0	2	0	906	341	140	1171	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	743	50	338	15	0	0	0	944	307	146	1220	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	402	27	183	0	0	0	0	989	320	253	2002	0
Arrive On Green	0.35	0.35	0.35	0.00	0.00	0.00	0.00	0.37	0.37	0.28	1.00	0.00
Sat Flow, veh/h	1149	77	523		0		0	2776	868	1810	3705	0
Grp Volume(v), veh/h	1131	0	0		0.0		0	634	617	146	1220	0
Grp Sat Flow(s),veh/h/ln	1749	0	0				0	1805	1744	1810	1805	0
Q Serve(g_s), s	38.5	0.0	0.0				0.0	37.6	38.0	7.6	0.0	0.0
Cycle Q Clear(g_c), s	38.5	0.0	0.0				0.0	37.6	38.0	7.6	0.0	0.0
Prop In Lane	0.66		0.30				0.00		0.50	1.00		0.00
Lane Grp Cap(c), veh/h	612	0	0				0	666	644	253	2002	0
V/C Ratio(X)	1.85	0.00	0.00				0.00	0.95	0.96	0.58	0.61	0.00
Avail Cap(c_a), veh/h	612	0	0				0	673	650	253	2002	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.57	0.57	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.8	0.0	0.0				0.0	33.8	33.9	36.8	0.0	0.0
Incr Delay (d2), s/veh	388.0	0.0	0.0				0.0	17.1	18.5	2.1	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	81.3	0.0	0.0				0.0	18.8	18.5	3.1	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	423.7	0.0	0.0				0.0	50.8	52.4	38.9	1.4	0.0
LnGrp LOS	F	A	A				A	D	D	D	A	A
Approach Vol, veh/h		1131						1251			1366	
Approach Delay, s/veh		423.7						51.6			5.4	
Approach LOS		F						D			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	20.4	45.6		44.0		66.0
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0
Max Green Setting (Gmax), s	5.5	* 41		38.5		51.0
Max Q Clear Time (g_c+I1), s	9.6	40.0		40.5		2.0
Green Ext Time (p_c), s	0.0	0.6		0.0		6.7

Intersection Summary		
HCM 6th Ctrl Delay		147.0
HCM 6th LOS		F

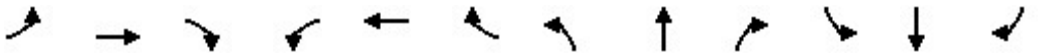
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	101	47	16	16	90	22	1036	206	1263
Future Volume (vph)	101	47	16	16	90	22	1036	206	1263
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	30.6	30.6	34.6	34.6	34.6	9.6	29.4	9.6	22.4
Total Split (s)	34.6	34.6	34.6	34.6	34.6	9.6	29.4	11.0	30.8
Total Split (%)	46.1%	46.1%	46.1%	46.1%	46.1%	12.8%	39.2%	14.7%	41.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	4.6	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		14.3		14.3	14.3	5.1	24.3	6.5	33.9
Actuated g/C Ratio		0.24		0.24	0.24	0.09	0.41	0.11	0.57
v/c Ratio		0.49		0.09	0.21	0.15	0.80	1.10	0.73
Control Delay		22.3		16.8	4.7	31.1	23.1	125.9	16.3
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		22.3		16.8	4.7	31.1	23.1	125.9	16.3
LOS		C		B	A	C	C	F	B
Approach Delay		22.3		7.9			23.2		30.3
Approach LOS		C		A			C		C

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 59.9	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 26.3	Intersection LOS: C
Intersection Capacity Utilization 73.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 23: Rubidoux Bl. & 34th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	47	22	16	16	90	22	1036	85	206	1263	144
Future Volume (veh/h)	101	47	22	16	16	90	22	1036	85	206	1263	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	105	49	17	17	17	41	23	1079	85	215	1316	131
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	271	114	30	237	204	314	49	1351	106	224	1638	162
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.03	0.40	0.40	0.12	0.50	0.50
Sat Flow, veh/h	811	586	154	677	1042	1605	1810	3390	267	1810	3309	328
Grp Volume(v), veh/h	171	0	0	34	0	41	23	574	590	215	715	732
Grp Sat Flow(s),veh/h/ln	1550	0	0	1719	0	1605	1810	1805	1852	1810	1805	1832
Q Serve(g_s), s	3.7	0.0	0.0	0.0	0.0	1.1	0.6	14.5	14.5	6.1	17.1	17.4
Cycle Q Clear(g_c), s	5.0	0.0	0.0	0.8	0.0	1.1	0.6	14.5	14.5	6.1	17.1	17.4
Prop In Lane	0.61		0.10	0.50		1.00	1.00		0.14	1.00		0.18
Lane Grp Cap(c), veh/h	415	0	0	440	0	314	49	719	738	224	894	907
V/C Ratio(X)	0.41	0.00	0.00	0.08	0.00	0.13	0.47	0.80	0.80	0.96	0.80	0.81
Avail Cap(c_a), veh/h	995	0	0	1047	0	931	175	838	860	224	894	907
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.7	0.0	0.0	17.0	0.0	17.2	24.8	13.7	13.7	22.5	10.9	11.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.1	0.0	0.2	2.5	4.8	4.7	48.4	5.2	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	0.3	0.0	0.4	0.3	5.4	5.5	5.3	5.9	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.3	0.0	0.0	17.1	0.0	17.4	27.3	18.5	18.4	70.9	16.2	16.4
LnGrp LOS	B	A	A	B	A	B	C	B	B	E	B	B
Approach Vol, veh/h		171			75			1187			1662	
Approach Delay, s/veh		19.3			17.3			18.6			23.4	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.0	26.0		14.7	6.0	31.0		14.7				
Change Period (Y+Rc), s	4.6	5.4		4.6	4.6	5.4		4.6				
Max Green Setting (Gmax), s	6.4	24.0		30.0	5.0	25.4		30.0				
Max Q Clear Time (g_c+I1), s	8.1	16.5		7.0	2.6	19.4		3.1				
Green Ext Time (p_c), s	0.0	4.1		1.0	0.0	4.2		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		21.2	
HCM 6th LOS		C	

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	446	83	0	0	16	15
Future Vol, veh/h	446	83	0	0	16	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	507	94	0	0	18	17

Major/Minor	Major1			Minor1	
Conflicting Flow All	0	0		554	554
Stage 1	-	-		554	-
Stage 2	-	-		0	-
Critical Hdwy	-	-		6.4	6.2
Critical Hdwy Stg 1	-	-		5.4	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	-		3.5	3.3
Pot Cap-1 Maneuver	-	-		497	536
Stage 1	-	-		580	-
Stage 2	-	-		-	-
Platoon blocked, %	-	-			
Mov Cap-1 Maneuver	-	-		497	536
Mov Cap-2 Maneuver	-	-		497	-
Stage 1	-	-		580	-
Stage 2	-	-		-	-

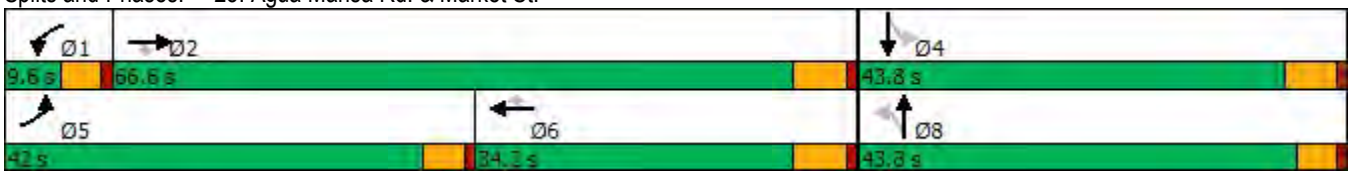
Approach	EB	NB
HCM Control Delay, s	0	12.5
HCM LOS		B

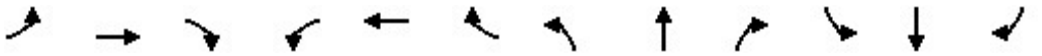
Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	515	-	-
HCM Lane V/C Ratio	0.068	-	-
HCM Control Delay (s)	12.5	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-

Lane Group	EBL	EBT	EBR	WBT	WBR	NBT	SBL	SBT	Ø1
Lane Configurations									
Traffic Volume (vph)	585	564	4	556	210	3	261	2	
Future Volume (vph)	585	564	4	556	210	3	261	2	
Turn Type	Prot	NA	Perm	NA	Perm	NA	Perm	NA	
Protected Phases	5	2		6		8		4	1
Permitted Phases			2		6		4		
Detector Phase	5	2	2	6	6	8	4	4	
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	31.8	31.8	26.8	26.8	14.6	43.8	43.8	9.6
Total Split (s)	42.0	66.6	66.6	34.2	34.2	43.8	43.8	43.8	9.6
Total Split (%)	35.0%	55.5%	55.5%	28.5%	28.5%	36.5%	36.5%	36.5%	8%
Yellow Time (s)	3.6	4.8	4.8	4.8	4.8	3.6	4.8	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.6	5.8	5.8	5.8	5.8	4.6		5.8	
Lead/Lag	Lead	Lag	Lag	Lag	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				Yes
Recall Mode	None	Max	Max	Max	Max	None	None	None	None
Act Effct Green (s)	37.4	70.4	70.4	28.4	28.4	39.2		38.0	
Actuated g/C Ratio	0.31	0.59	0.59	0.24	0.24	0.33		0.32	
v/c Ratio	1.11	0.28	0.00	0.69	0.40	0.00		1.31	
Control Delay	109.7	12.7	0.0	46.8	7.1	27.3		184.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	109.7	12.7	0.0	46.8	7.1	27.3		184.5	
LOS	F	B	A	D	A	C		F	
Approach Delay		61.9		35.9		27.3		184.5	
Approach LOS		E		D		C		F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.31	
Intersection Signal Delay: 84.9	Intersection LOS: F
Intersection Capacity Utilization 105.9%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	585	564	4	0	556	210	0	3	0	261	2	381
Future Volume (veh/h)	585	564	4	0	556	210	0	3	0	261	2	381
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	622	600	3	0	591	185	0	3	0	278	2	273
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	564	2118	945	2	854	381	0	602	0	286	2	237
Arrive On Green	0.31	0.59	0.59	0.00	0.24	0.24	0.00	0.32	0.00	0.32	0.32	0.32
Sat Flow, veh/h	1810	3610	1610	1810	3610	1610	0	1900	0	761	5	747
Grp Volume(v), veh/h	622	600	3	0	591	185	0	3	0	553	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1610	0	1900	0	1513	0	0
Q Serve(g_s), s	37.4	9.9	0.1	0.0	17.9	11.9	0.0	0.1	0.0	37.9	0.0	0.0
Cycle Q Clear(g_c), s	37.4	9.9	0.1	0.0	17.9	11.9	0.0	0.1	0.0	38.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.00		0.00	0.50		0.49
Lane Grp Cap(c), veh/h	564	2118	945	2	854	381	0	602	0	524	0	0
V/C Ratio(X)	1.10	0.28	0.00	0.00	0.69	0.49	0.00	0.00	0.00	1.05	0.00	0.00
Avail Cap(c_a), veh/h	564	2118	945	75	854	381	0	621	0	524	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	41.3	12.3	10.3	0.0	41.8	39.5	0.0	28.1	0.0	42.7	0.0	0.0
Incr Delay (d2), s/veh	69.2	0.3	0.0	0.0	4.6	4.4	0.0	0.0	0.0	54.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	26.7	3.8	0.0	0.0	8.3	5.0	0.0	0.1	0.0	23.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	110.5	12.6	10.3	0.0	46.4	43.9	0.0	28.1	0.0	97.2	0.0	0.0
LnGrp LOS	F	B	B	A	D	D	A	C	A	F	A	A
Approach Vol, veh/h		1225			776			3			553	
Approach Delay, s/veh		62.3			45.8			28.1			97.2	
Approach LOS		E			D			C			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	76.2		43.8	42.0	34.2		43.8				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	60.8		38.0	37.4	28.4		* 39				
Max Q Clear Time (g_c+I1), s	0.0	11.9		40.0	39.4	19.9		2.1				
Green Ext Time (p_c), s	0.0	4.1		0.0	0.0	2.7		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		64.8
HCM 6th LOS		E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	228	11	54	14	2	10	13	72	4	34	3
Future Vol, veh/h	4	228	11	54	14	2	10	13	72	4	34	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	253	12	60	16	2	11	14	80	4	38	3
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	10.2	8.8	8.1	8.2
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	11%	2%	0%	79%	0%	10%
Vol Thru, %	14%	98%	0%	21%	0%	83%
Vol Right, %	76%	0%	100%	0%	100%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	95	232	11	68	2	41
LT Vol	10	4	0	54	0	4
Through Vol	13	228	0	14	0	34
RT Vol	72	0	11	0	2	3
Lane Flow Rate	106	258	12	76	2	46
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.129	0.353	0.014	0.115	0.003	0.062
Departure Headway (Hd)	4.398	4.933	4.221	5.486	4.382	4.877
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	816	730	847	654	815	734
Service Time	2.422	2.661	1.949	3.22	2.116	2.907
HCM Lane V/C Ratio	0.13	0.353	0.014	0.116	0.002	0.063
HCM Control Delay	8.1	10.3	7	8.9	7.1	8.2
HCM Lane LOS	A	B	A	A	A	A
HCM 95th-tile Q	0.4	1.6	0	0.4	0	0.2

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	12	1	7	7	1	1	4	123	7	13	89	14
Future Vol, veh/h	12	1	7	7	1	1	4	123	7	13	89	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	14	1	8	8	1	1	5	143	8	15	103	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	299	303	111	304	307	148	119	0	0	152	0	0
Stage 1	141	141	-	158	158	-	-	-	-	-	-	-
Stage 2	158	162	-	146	149	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	657	613	948	652	610	904	1482	-	-	1441	-	-
Stage 1	867	784	-	849	771	-	-	-	-	-	-	-
Stage 2	849	768	-	861	778	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	648	603	948	638	600	903	1482	-	-	1440	-	-
Mov Cap-2 Maneuver	648	603	-	638	600	-	-	-	-	-	-	-
Stage 1	864	775	-	845	767	-	-	-	-	-	-	-
Stage 2	843	764	-	843	769	-	-	-	-	-	-	-

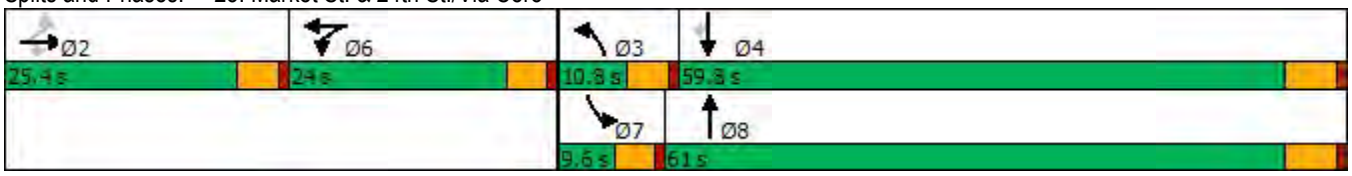
Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	10.6	0.2	0.8
HCM LOS	B	B		

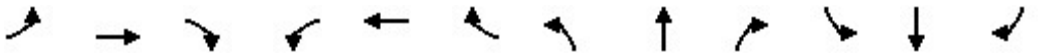
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1482	-	-	726	655	1440	-	-
HCM Lane V/C Ratio	0.003	-	-	0.032	0.016	0.01	-	-
HCM Control Delay (s)	7.4	0	-	10.1	10.6	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	3	31	202	235	39	48	921	6	806	3
Future Volume (vph)	3	31	202	235	39	48	921	6	806	3
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	25.4	25.4	25.4	24.0	24.0	10.8	61.0	9.6	59.8	59.8
Total Split (%)	21.2%	21.2%	21.2%	20.0%	20.0%	9.0%	50.8%	8.0%	49.8%	49.8%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		13.5	13.5	18.9	18.9	6.0	61.2	5.0	54.6	54.6
Actuated g/C Ratio		0.12	0.12	0.17	0.17	0.05	0.55	0.05	0.49	0.49
v/c Ratio		0.35	0.72	0.87	0.20	0.57	1.11	0.09	0.99	0.00
Control Delay		54.1	31.4	73.8	35.5	75.9	87.0	56.3	56.0	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		54.1	31.4	73.8	35.5	75.9	87.0	56.3	56.0	0.0
LOS		D	C	E	D	E	F	E	E	A
Approach Delay		34.6			66.6		86.5		55.8	
Approach LOS		C			E		F		E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 110.4	
Natural Cycle: 115	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.11	
Intersection Signal Delay: 68.5	Intersection LOS: E
Intersection Capacity Utilization 81.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	31	202	235	39	16	48	921	79	6	806	3
Future Volume (veh/h)	3	31	202	235	39	16	48	921	79	6	806	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	3	36	147	270	45	9	55	1059	90	7	926	3
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	17	200	183	301	256	51	71	912	78	16	947	803
Arrive On Green	0.11	0.11	0.11	0.17	0.17	0.17	0.04	0.53	0.53	0.01	0.50	0.50
Sat Flow, veh/h	146	1747	1598	1810	1537	307	1810	1724	146	1810	1900	1610
Grp Volume(v), veh/h	39	0	147	270	0	54	55	0	1149	7	926	3
Grp Sat Flow(s),veh/h/ln	1893	0	1598	1810	0	1845	1810	0	1870	1810	1900	1610
Q Serve(g_s), s	2.0	0.0	9.7	15.8	0.0	2.7	3.3	0.0	57.3	0.4	51.6	0.1
Cycle Q Clear(g_c), s	2.0	0.0	9.7	15.8	0.0	2.7	3.3	0.0	57.3	0.4	51.6	0.1
Prop In Lane	0.08		1.00	1.00		0.17	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	217	0	183	301	0	307	71	0	990	16	947	803
V/C Ratio(X)	0.18	0.00	0.80	0.90	0.00	0.18	0.77	0.00	1.16	0.44	0.98	0.00
Avail Cap(c_a), veh/h	364	0	307	324	0	330	104	0	990	84	947	803
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	0.0	46.8	44.2	0.0	38.8	51.5	0.0	25.5	53.4	26.5	13.6
Incr Delay (d2), s/veh	0.4	0.0	8.0	24.9	0.0	0.3	10.7	0.0	83.8	7.0	24.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	4.1	9.2	0.0	1.3	1.6	0.0	45.3	0.2	27.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.7	0.0	54.7	69.1	0.0	39.0	62.2	0.0	109.3	60.4	50.8	13.6
LnGrp LOS	D	A	D	E	A	D	E	A	F	E	D	B
Approach Vol, veh/h		186			324			1204			936	
Approach Delay, s/veh		52.4			64.1			107.1			50.8	
Approach LOS		D			E			F			D	

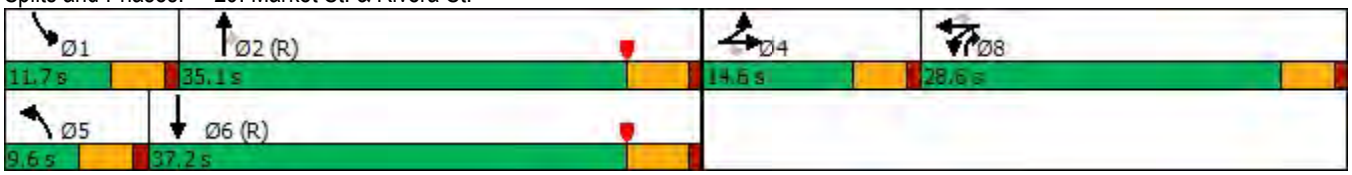
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		17.0	8.9	59.8		22.6	5.5	63.1				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		20.8	6.2	54.0		19.4	5.0	55.2				
Max Q Clear Time (g_c+I1), s		11.7	5.3	53.6		17.8	2.4	59.3				
Green Ext Time (p_c), s		0.4	0.0	0.2		0.2	0.0	0.0				

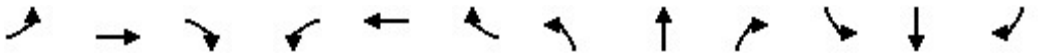
Intersection Summary												
HCM 6th Ctrl Delay			78.1									
HCM 6th LOS			E									

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	14	75	234	2	37	4	864	258	125	1163
Future Volume (vph)	14	75	234	2	37	4	864	258	125	1163
Turn Type	NA	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	4		8	8		5	2	8	1	6
Permitted Phases		4			8			2		
Detector Phase	4	4	8	8	8	5	2	8	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	14.6	14.6	28.6	28.6	28.6	9.6	35.1	28.6	9.6	29.1
Total Split (s)	14.6	14.6	28.6	28.6	28.6	9.6	35.1	28.6	11.7	37.2
Total Split (%)	16.2%	16.2%	31.8%	31.8%	31.8%	10.7%	39.0%	31.8%	13.0%	41.3%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.1	3.6	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	4.6	5.1	4.6	4.6	5.1
Lead/Lag						Lead	Lag		Lead	Lag
Lead-Lag Optimize?						Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	10.0	10.0	14.4	14.4	14.4	5.0	39.1	54.9	10.5	52.3
Actuated g/C Ratio	0.11	0.11	0.16	0.16	0.16	0.06	0.43	0.61	0.12	0.58
v/c Ratio	0.10	0.26	0.44	0.45	0.10	0.04	0.57	0.24	0.61	0.57
Control Delay	37.3	3.1	37.6	37.9	0.6	36.5	26.9	0.8	52.9	16.7
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.2
Total Delay	37.3	3.1	37.6	37.9	0.6	36.5	27.2	0.8	52.9	17.0
LOS	D	A	D	D	A	D	C	A	D	B
Approach Delay	10.2			32.7			21.2			20.4
Approach LOS	B			C			C			C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 2 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 21.6	Intersection LOS: C
Intersection Capacity Utilization 61.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 29: Market St. & Rivera St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	14	75	234	2	37	4	864	258	125	1163	0
Future Volume (veh/h)	6	14	75	234	2	37	4	864	258	125	1163	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	6	14	34	242	0	19	4	891	165	129	1199	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	46	108	133	409	0	181	10	1862	1012	143	2128	0
Arrive On Green	0.08	0.08	0.08	0.11	0.00	0.11	0.01	1.00	1.00	0.08	0.59	0.00
Sat Flow, veh/h	562	1310	1610	3619	0	1603	1810	3610	1610	1810	3705	0
Grp Volume(v), veh/h	20	0	34	242	0	19	4	891	165	129	1199	0
Grp Sat Flow(s),veh/h/ln	1872	0	1610	1810	0	1603	1810	1805	1610	1810	1805	0
Q Serve(g_s), s	0.9	0.0	1.8	5.7	0.0	1.0	0.2	0.0	0.0	6.4	18.4	0.0
Cycle Q Clear(g_c), s	0.9	0.0	1.8	5.7	0.0	1.0	0.2	0.0	0.0	6.4	18.4	0.0
Prop In Lane	0.30		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	154	0	133	409	0	181	10	1862	1012	143	2128	0
V/C Ratio(X)	0.13	0.00	0.26	0.59	0.00	0.10	0.42	0.48	0.16	0.90	0.56	0.00
Avail Cap(c_a), veh/h	208	0	179	965	0	427	101	1862	1012	143	2128	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.94	0.94	0.94	0.27	0.27	0.00
Uniform Delay (d), s/veh	38.3	0.0	38.7	37.9	0.0	35.8	44.4	0.0	0.0	41.1	11.4	0.0
Incr Delay (d2), s/veh	0.4	0.0	1.0	1.4	0.0	0.3	9.8	0.8	0.3	18.4	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.7	2.6	0.0	0.4	0.1	0.2	0.1	3.4	6.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.7	0.0	39.7	39.3	0.0	36.1	54.2	0.8	0.3	59.5	11.6	0.0
LnGrp LOS	D	A	D	D	A	D	D	A	A	E	B	A
Approach Vol, veh/h		54			261			1060			1328	
Approach Delay, s/veh		39.3			39.1			1.0			16.3	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.7	51.5		12.0	5.1	58.2		14.8				
Change Period (Y+Rc), s	4.6	5.1		4.6	4.6	5.1		4.6				
Max Green Setting (Gmax), s	7.1	30.0		10.0	5.0	32.1		24.0				
Max Q Clear Time (g_c+I1), s	8.4	2.0		3.8	2.2	20.4		7.7				
Green Ext Time (p_c), s	0.0	6.9		0.1	0.0	6.0		0.8				

Intersection Summary		
HCM 6th Ctrl Delay		12.9
HCM 6th LOS		B

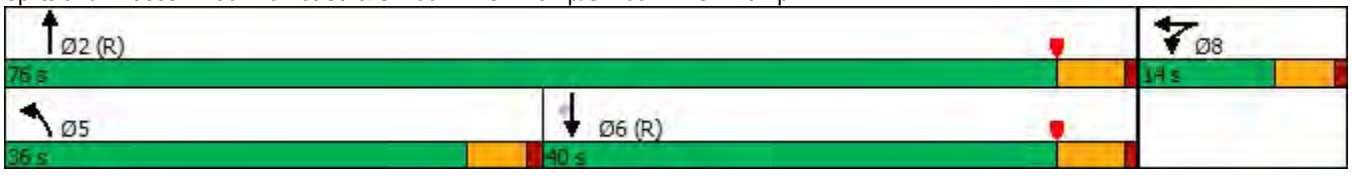
Notes

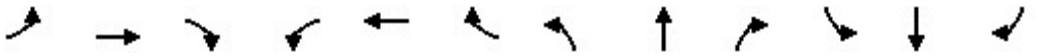
User approved volume balancing among the lanes for turning movement.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	5	738	431	388	1290	182
Future Volume (vph)	5	738	431	388	1290	182
Turn Type	NA	Free	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		Free				6
Detector Phase	8		5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	10.0		10.0	24.5	10.5	10.5
Total Split (s)	14.0		36.0	76.0	40.0	40.0
Total Split (%)	15.6%		40.0%	84.4%	44.4%	44.4%
Yellow Time (s)	4.0		4.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	C-Min	C-Min	C-Min
Act Effct Green (s)	8.5	90.0	26.2	74.4	42.1	42.1
Actuated g/C Ratio	0.09	1.00	0.29	0.83	0.47	0.47
v/c Ratio	0.62	0.47	0.84	0.13	0.78	0.22
Control Delay	55.2	1.0	35.1	9.9	20.5	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.3	0.0
Total Delay	55.2	1.0	35.1	9.9	20.7	2.5
LOS	E	A	D	A	C	A
Approach Delay	7.7			23.2	18.5	
Approach LOS	A			C	B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 16.8	Intersection LOS: B
Intersection Capacity Utilization 78.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 30: Market St. & SR-60 WB On-Ramp/SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	99	5	738	431	388	0	0	1290	182
Future Volume (veh/h)	0	0	0	99	5	738	431	388	0	0	1290	182
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				101	5	0	440	396	0	0	1316	0
Peak Hour Factor				0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				129	6		475	2919	0	0	1771	
Arrive On Green				0.07	0.07	0.00	0.44	1.00	0.00	0.00	0.98	0.00
Sat Flow, veh/h				1728	86	1610	1810	3705	0	0	3705	1610
Grp Volume(v), veh/h				106	0	0	440	396	0	0	1316	0
Grp Sat Flow(s),veh/h/ln				1814	0	1610	1810	1805	0	0	1805	1610
Q Serve(g_s), s				5.2	0.0	0.0	20.7	0.0	0.0	0.0	2.3	0.0
Cycle Q Clear(g_c), s				5.2	0.0	0.0	20.7	0.0	0.0	0.0	2.3	0.0
Prop In Lane				0.95		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				135	0		475	2919	0	0	1771	
V/C Ratio(X)				0.78	0.00		0.93	0.14	0.00	0.00	0.74	
Avail Cap(c_a), veh/h				181	0		623	2919	0	0	1771	
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	0.00	0.00	0.61	0.61	0.00	0.00	0.82	0.00
Uniform Delay (d), s/veh				40.9	0.0	0.0	24.5	0.0	0.0	0.0	0.5	0.0
Incr Delay (d2), s/veh				14.5	0.0	0.0	11.6	0.1	0.0	0.0	2.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.7	0.0	0.0	7.8	0.0	0.0	0.0	0.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				55.4	0.0	0.0	36.1	0.1	0.0	0.0	2.8	0.0
LnGrp LOS				E	A		D	A	A	A	A	
Approach Vol, veh/h					106	A		836			1316	A
Approach Delay, s/veh					55.4			19.0			2.8	
Approach LOS					E			B			A	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	78.3		28.6	49.7		11.7						
Change Period (Y+Rc), s	5.5		5.0	5.5		5.0						
Max Green Setting (Gmax), s	70.5		31.0	34.5		9.0						
Max Q Clear Time (g_c+I1), s	2.0		22.7	4.3		7.2						
Green Ext Time (p_c), s	2.7		0.9	10.9		0.1						

Intersection Summary		
HCM 6th Ctrl Delay	11.3	
HCM 6th LOS	B	

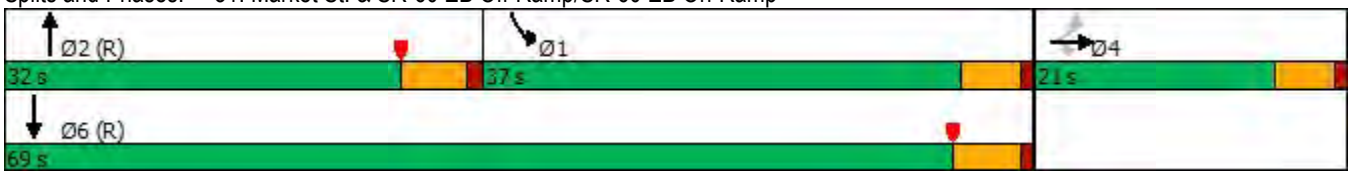
Notes

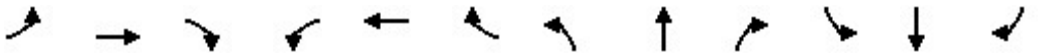
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	3	698	721	628	762
Future Volume (vph)	3	698	721	628	762
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	24.5	10.0	10.5
Total Split (s)	21.0	21.0	32.0	37.0	69.0
Total Split (%)	23.3%	23.3%	35.6%	41.1%	76.7%
Yellow Time (s)	4.0	4.0	4.5	4.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.0	5.5
Lead/Lag			Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Min	None	C-Min
Act Effct Green (s)	13.6	13.6	27.2	33.7	65.9
Actuated g/C Ratio	0.15	0.15	0.30	0.37	0.73
v/c Ratio	0.37	0.87	0.73	0.95	0.29
Control Delay	37.3	25.3	32.8	57.8	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	37.3	25.3	32.8	57.8	6.1
LOS	D	C	C	E	A
Approach Delay	26.8		32.8		29.4
Approach LOS	C		C		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 15 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 29.6	Intersection LOS: C
Intersection Capacity Utilization 78.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 31: Market St. & SR-60 EB Off-Ramp/SR-60 EB On-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	3	698	0	0	0	0	721	54	628	762	0
Future Volume (veh/h)	97	3	698	0	0	0	0	721	54	628	762	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	99	3	447				0	736	0	641	778	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	311	9	501				0	885		724	2551	0
Arrive On Green	0.18	0.18	0.18				0.00	0.25	0.00	0.53	0.94	0.00
Sat Flow, veh/h	1759	53	2834				0	3800	0	1810	3705	0
Grp Volume(v), veh/h	102	0	447				0	736	0	641	778	0
Grp Sat Flow(s),veh/h/ln	1812	0	1417				0	1805	0	1810	1805	0
Q Serve(g_s), s	4.4	0.0	13.9				0.0	17.4	0.0	28.2	1.6	0.0
Cycle Q Clear(g_c), s	4.4	0.0	13.9				0.0	17.4	0.0	28.2	1.6	0.0
Prop In Lane	0.97		1.00				0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	320	0	501				0	885		724	2551	0
V/C Ratio(X)	0.32	0.00	0.89				0.00	0.83		0.88	0.31	0.00
Avail Cap(c_a), veh/h	322	0	504				0	1063		724	2551	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.33	1.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.53	0.53	0.00
Uniform Delay (d), s/veh	32.3	0.0	36.2				0.0	32.2	0.0	19.2	0.8	0.0
Incr Delay (d2), s/veh	0.6	0.0	17.9				0.0	9.0	0.0	7.3	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	5.8				0.0	8.3	0.0	10.2	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.9	0.0	54.1				0.0	41.2	0.0	26.5	1.0	0.0
LnGrp LOS	C	A	D				A	D		C	A	A
Approach Vol, veh/h		549						736	A		1419	
Approach Delay, s/veh		50.1						41.2			12.5	
Approach LOS		D						D			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	41.5	27.6		20.9		69.1
Change Period (Y+Rc), s	5.5	* 5.5		5.0		5.5
Max Green Setting (Gmax), s	32.0	* 27		16.0		63.5
Max Q Clear Time (g_c+I1), s	30.2	19.4		15.9		3.6
Green Ext Time (p_c), s	0.5	2.7		0.0		6.0

Intersection Summary		
HCM 6th Ctrl Delay		28.0
HCM 6th LOS		C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	0	32	1	1	15	42	728	0	18	1346	97
Future Vol, veh/h	32	0	32	1	1	15	42	728	0	18	1346	97
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	145	-	-	140	-	110
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	33	0	33	1	1	16	44	758	0	19	1402	101

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1908	2287	701	1586	2388	380	1503	0	0	759	0	0
Stage 1	1440	1440	-	847	847	-	-	-	-	-	-	-
Stage 2	468	847	-	739	1541	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	*143	*56	*535	*417	42	624	*803	-	-	862	-	-
Stage 1	*504	*441	-	*327	381	-	-	-	-	-	-	-
Stage 2	*550	*381	-	*504	430	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	*131	*52	*535	*368	39	623	*803	-	-	861	-	-
Mov Cap-2 Maneuver	*279	*197	-	*635	186	-	-	-	-	-	-	-
Stage 1	*476	*432	-	*309	360	-	-	-	-	-	-	-
Stage 2	*505	*360	-	*462	421	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17	11.8	0.5	0.1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 803	-	-	367	548	861	-	-
HCM Lane V/C Ratio	0.054	-	-	0.182	0.032	0.022	-	-
HCM Control Delay (s)	9.7	-	-	17	11.8	9.3	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.7	0.1	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	75

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	326	87	53	812	455	187
Future Vol, veh/h	326	87	53	812	455	187
Conflicting Peds, #/hr	0	0	0	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	408	109	66	1015	569	234

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1328	688	805	0	-	0
Stage 1	688	-	-	-	-	-
Stage 2	640	-	-	-	-	-
Critical Hdwy	6.6	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	~ 161	450	828	-	-	-
Stage 1	503	-	-	-	-	-
Stage 2	493	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 147	449	826	-	-	-
Mov Cap-2 Maneuver	~ 284	-	-	-	-	-
Stage 1	462	-	-	-	-	-
Stage 2	492	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 347.6	0.6	0
HCM LOS	F		

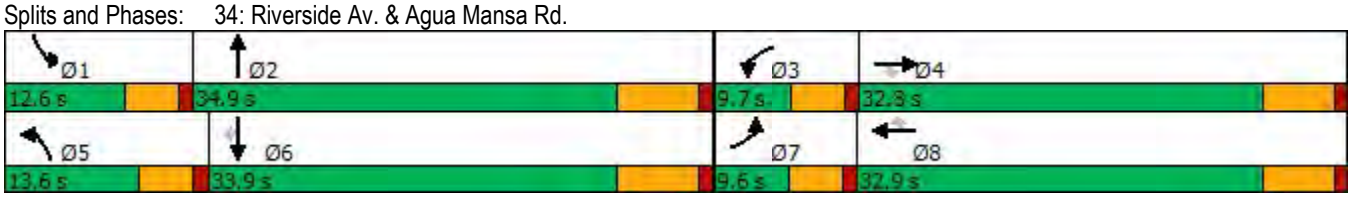
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	826	-	308	-	-
HCM Lane V/C Ratio	0.08	-	1.676	-	-
HCM Control Delay (s)	9.7	-	-$ 347.6	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q(veh)	0.3	-	32.1	-	-

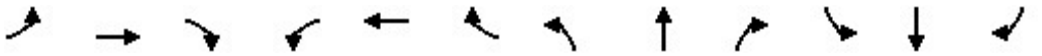
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	219	452	248	94	286	80	201	525	118	573	129
Future Volume (vph)	219	452	248	94	286	80	201	525	118	573	129
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	9.6	32.8	32.8	9.7	32.9	32.9	13.6	34.9	12.6	33.9	33.9
Total Split (%)	10.7%	36.4%	36.4%	10.8%	36.6%	36.6%	15.1%	38.8%	14.0%	37.7%	37.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	5.1	23.6	23.6	5.2	23.7	23.7	9.1	21.0	7.7	19.7	19.7
Actuated g/C Ratio	0.06	0.30	0.30	0.07	0.30	0.30	0.11	0.26	0.10	0.25	0.25
v/c Ratio	1.98	0.83	0.39	0.84	0.52	0.14	1.01	0.71	0.70	0.67	0.27
Control Delay	499.8	41.1	5.2	91.1	27.6	0.7	106.2	30.0	60.0	31.1	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	499.8	41.1	5.2	91.1	27.6	0.7	106.2	30.0	60.0	31.1	5.3
LOS	F	D	A	F	C	A	F	C	E	C	A
Approach Delay		140.7			36.0			47.9		31.2	
Approach LOS		F			D			D		C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 79.4	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.98	
Intersection Signal Delay: 69.6	Intersection LOS: E
Intersection Capacity Utilization 74.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	452	248	94	286	80	201	525	127	118	573	129
Future Volume (veh/h)	219	452	248	94	286	80	201	525	127	118	573	129
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	228	471	160	98	298	68	209	547	126	123	597	126
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	123	552	466	125	554	469	221	767	176	156	821	365
Arrive On Green	0.07	0.29	0.29	0.07	0.29	0.29	0.12	0.26	0.26	0.09	0.23	0.23
Sat Flow, veh/h	1810	1900	1605	1810	1900	1609	1810	2915	669	1810	3610	1603
Grp Volume(v), veh/h	228	471	160	98	298	68	209	338	335	123	597	126
Grp Sat Flow(s),veh/h/ln	1810	1900	1605	1810	1900	1609	1810	1805	1780	1810	1805	1603
Q Serve(g_s), s	5.0	17.3	5.8	3.9	9.7	2.3	8.5	12.5	12.6	4.9	11.3	4.9
Cycle Q Clear(g_c), s	5.0	17.3	5.8	3.9	9.7	2.3	8.5	12.5	12.6	4.9	11.3	4.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	123	552	466	125	554	469	221	475	468	156	821	365
V/C Ratio(X)	1.86	0.85	0.34	0.78	0.54	0.14	0.95	0.71	0.72	0.79	0.73	0.35
Avail Cap(c_a), veh/h	123	695	587	125	697	590	221	694	685	196	1340	595
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.4	24.7	20.6	33.8	22.0	19.3	32.2	24.7	24.7	33.1	26.4	23.9
Incr Delay (d2), s/veh	416.7	8.4	0.4	25.0	0.8	0.1	45.5	2.0	2.1	11.9	1.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.2	8.2	2.0	2.5	4.0	0.8	6.1	4.9	4.9	2.5	4.4	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	451.2	33.1	21.1	58.9	22.8	19.5	77.7	26.7	26.8	45.0	27.6	24.5
LnGrp LOS	F	C	C	E	C	B	E	C	C	D	C	C
Approach Vol, veh/h		859			464			882			846	
Approach Delay, s/veh		141.8			29.9			38.8			29.7	
Approach LOS		F			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	25.9	9.7	27.2	13.6	23.3	9.6	27.3
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	8.0	28.4	5.1	27.0	9.0	27.4	5.0	27.1
Max Q Clear Time (g_c+I1), s	6.9	14.6	5.9	19.3	10.5	13.3	7.0	11.7
Green Ext Time (p_c), s	0.0	3.0	0.0	2.0	0.0	3.3	0.0	1.5

Intersection Summary	
HCM 6th Ctrl Delay	63.9
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	0	0	0	0	8
Future Vol, veh/h	4	0	0	0	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	92	92	92	92	50
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	8	0	0	0	0	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	8	8	16	0	-	0
Stage 1	8	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	1018	1080	1615	-	-	-
Stage 1	1020	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1018	1080	1615	-	-	-
Mov Cap-2 Maneuver	1018	-	-	-	-	-
Stage 1	1020	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1615	-	1018	-	-
HCM Lane V/C Ratio	-	-	0.008	-	-
HCM Control Delay (s)	0	-	8.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

APPENDIX 7.2: OPENING YEAR BACKGROUND CONDITIONS WITHOUT PROJECT TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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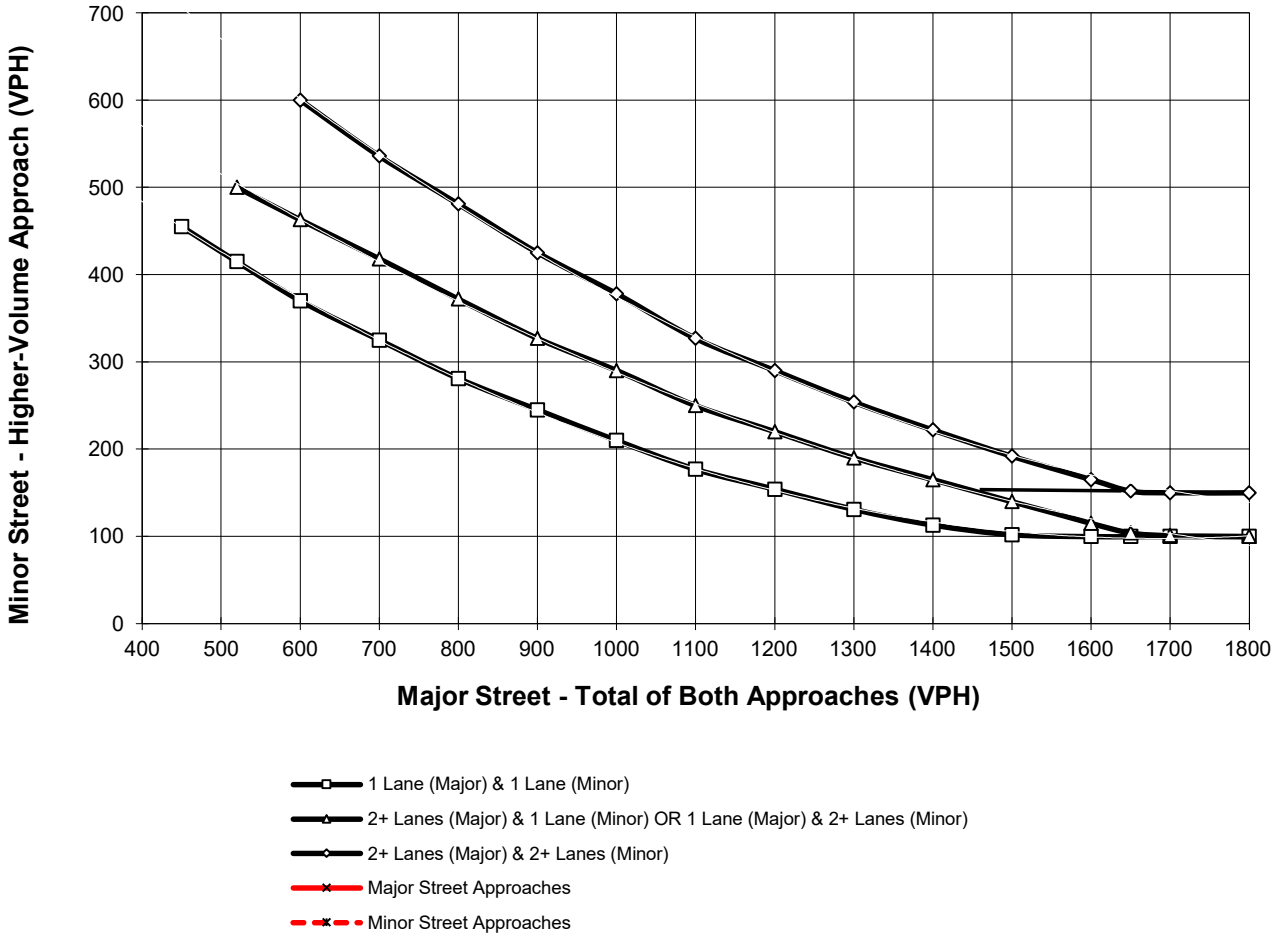
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (Approved) (2025) Conditions - Weekday AM Peak Hour**

Major Street Name = **20th St.**
Total of Both Approaches (VPH) = **318**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Avalon Rd.**
High Volume Approach (VPH) = **77**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

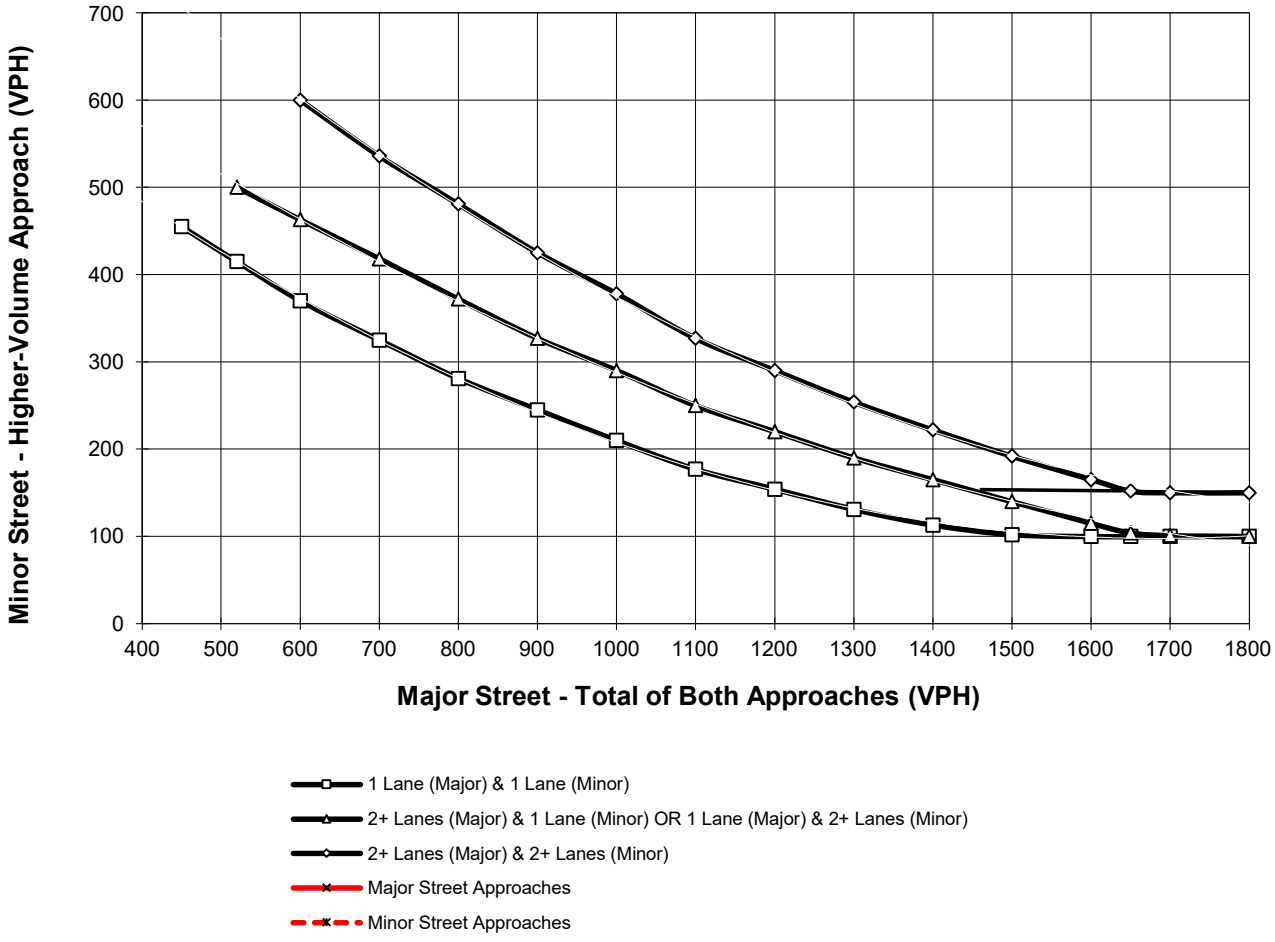
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (Approved) (2025) Conditions - Weekday AM Peak Hour**

Major Street Name = **Avalon St.**
Total of Both Approaches (VPH) = **111**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **24th St.**
High Volume Approach (VPH) = **34**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

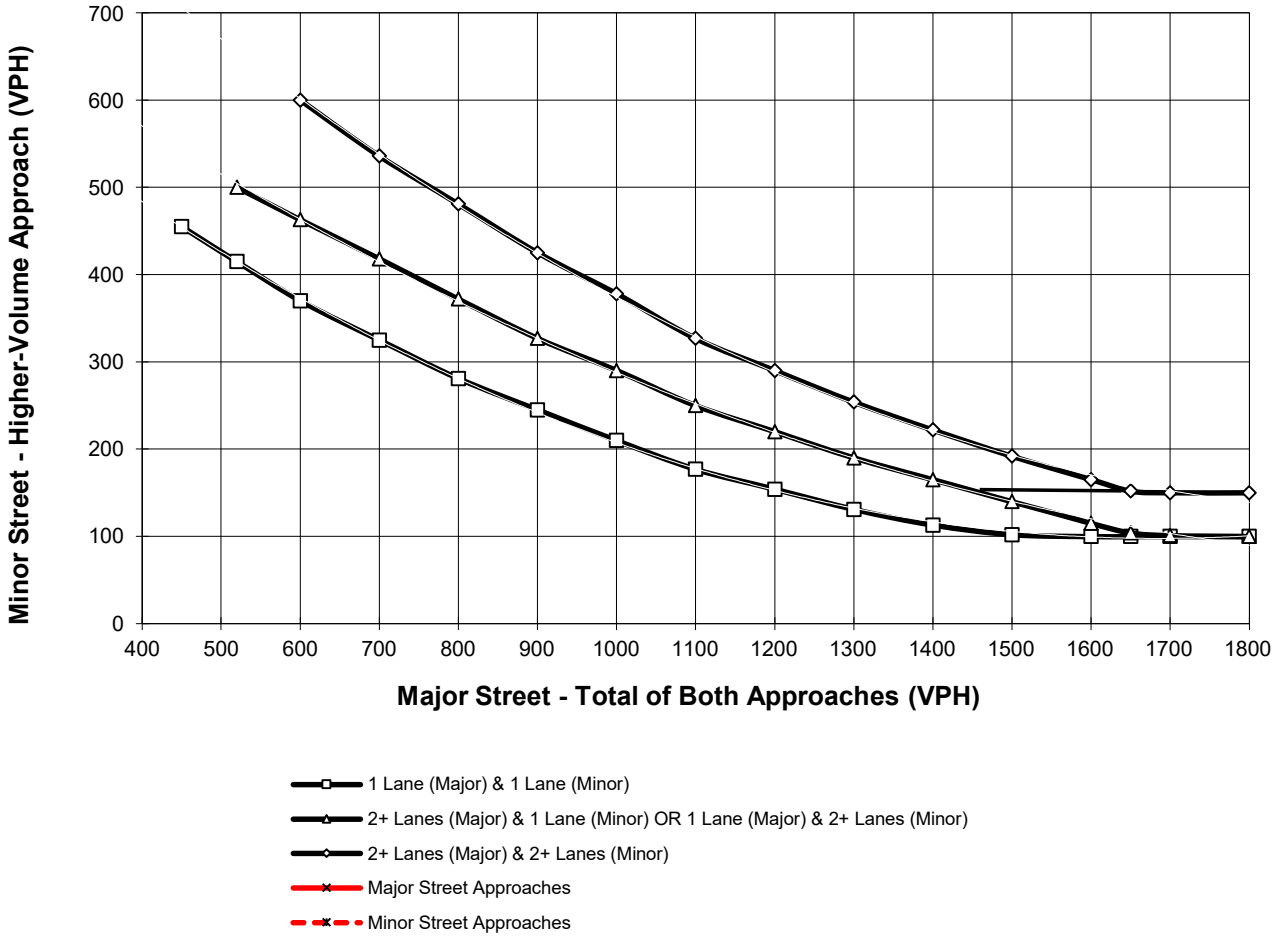
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (Approved) (2025) Conditions - Weekday AM Peak Hour**

Major Street Name = **Avalon St.**
Total of Both Approaches (VPH) = **107**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **26th St.**
High Volume Approach (VPH) = **18**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

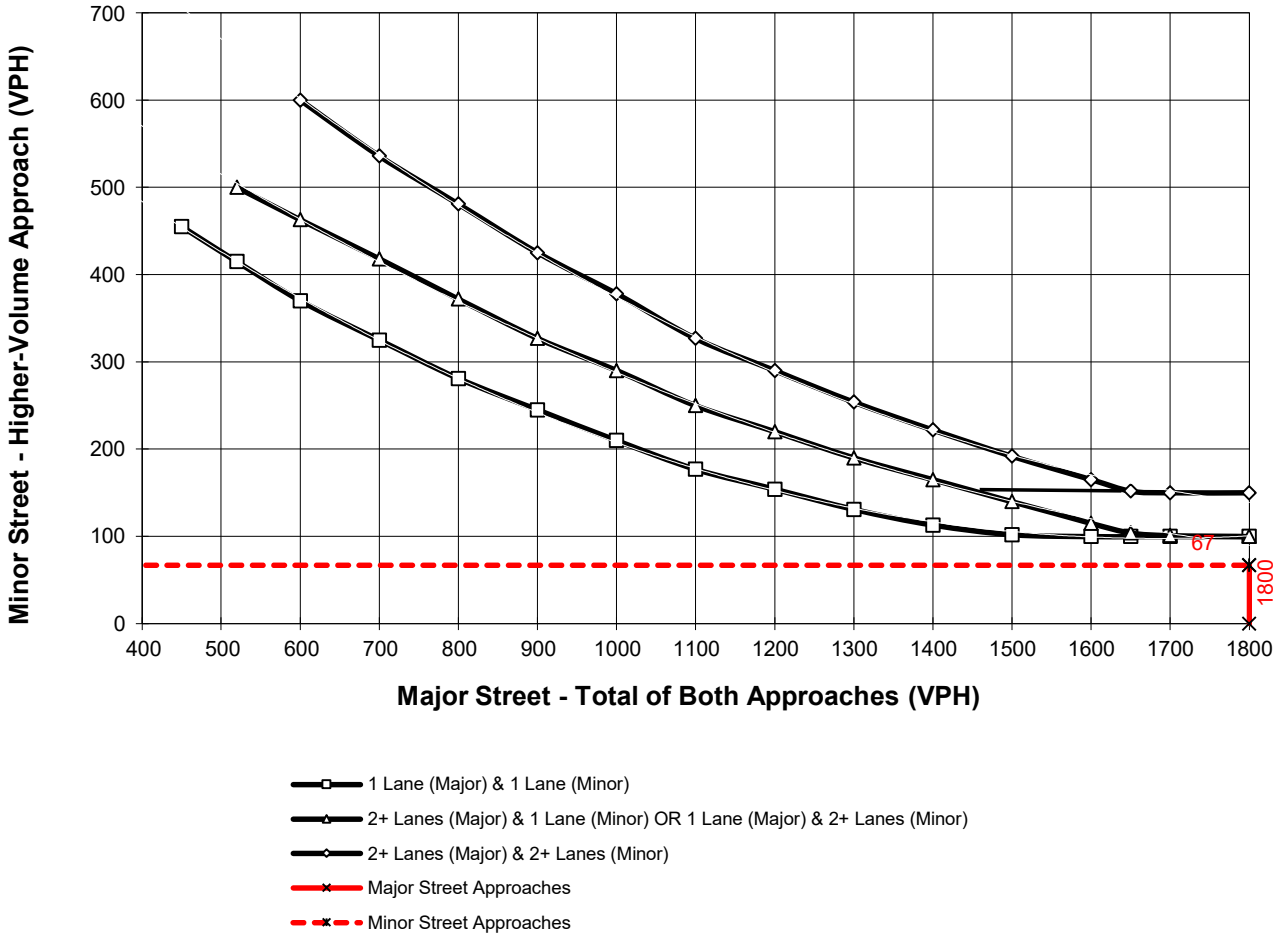
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (Approved) (2025) Conditions - Weekday PM Peak Hour**

Major Street Name = **Rubidoux St.**
Total of Both Approaches (VPH) = **2659**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **24th St.**
High Volume Approach (VPH) = **67**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

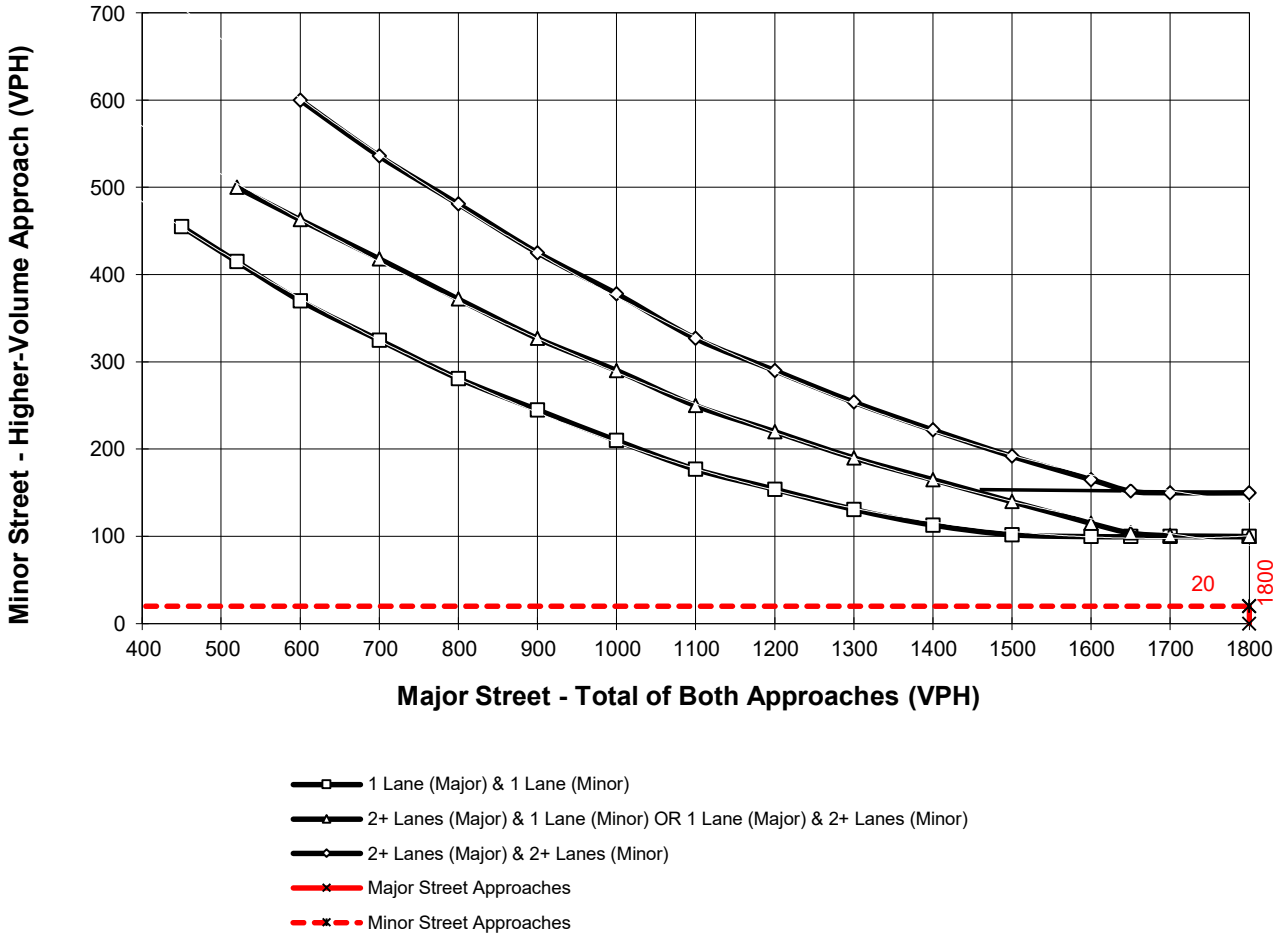
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (Approved) (2025) Conditions - Weekday PM Peak Hour**

Major Street Name = **Rubidoux St.**
Total of Both Approaches (VPH) = **2495**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **26th St.**
High Volume Approach (VPH) = **20**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

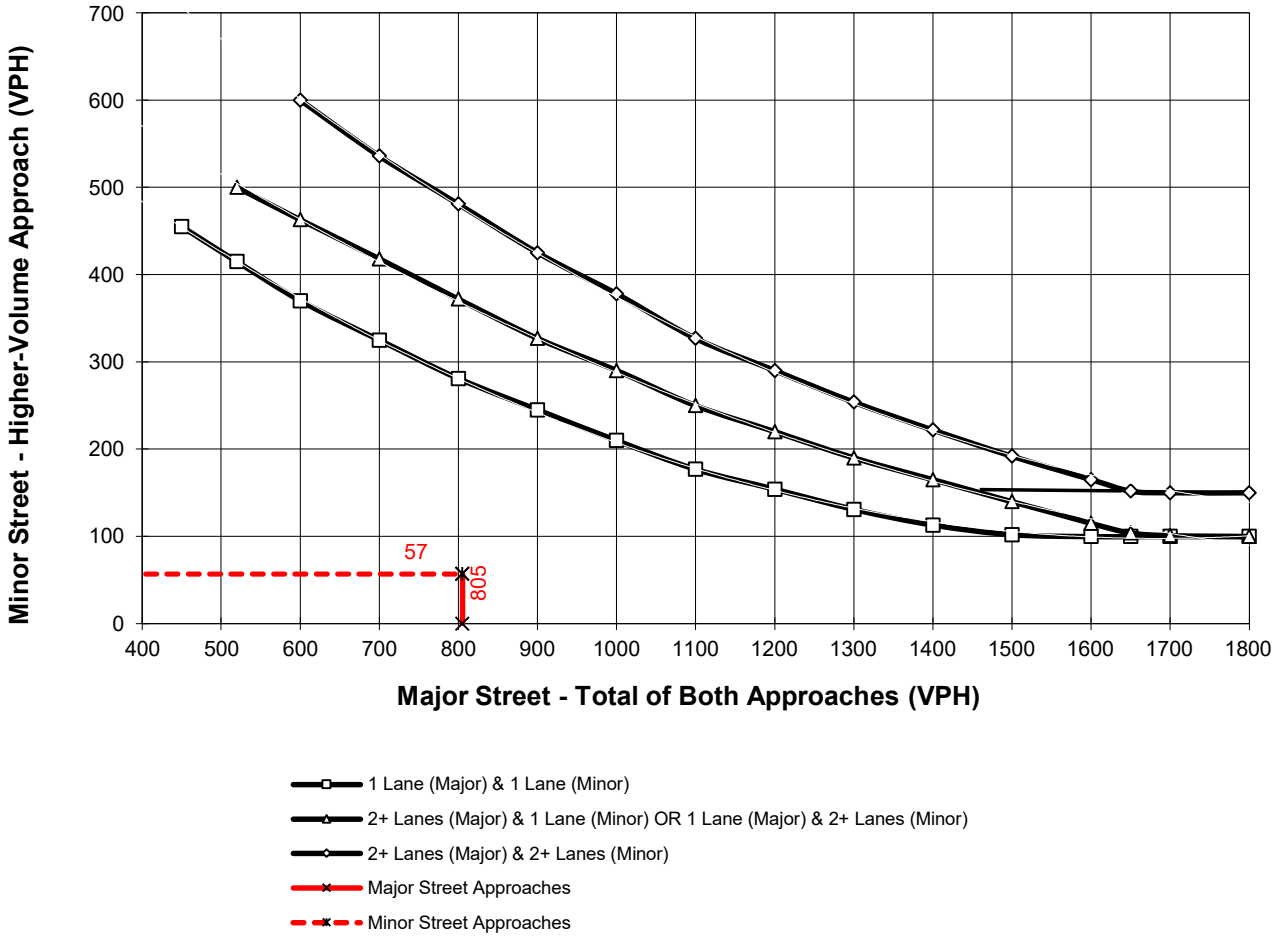
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (Approved) (2025) Conditions - Weekday AM Peak Hour**

Major Street Name = **Frontage Rd.**
Total of Both Approaches (VPH) = **805**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Hall Av.**
High Volume Approach (VPH) = **57**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

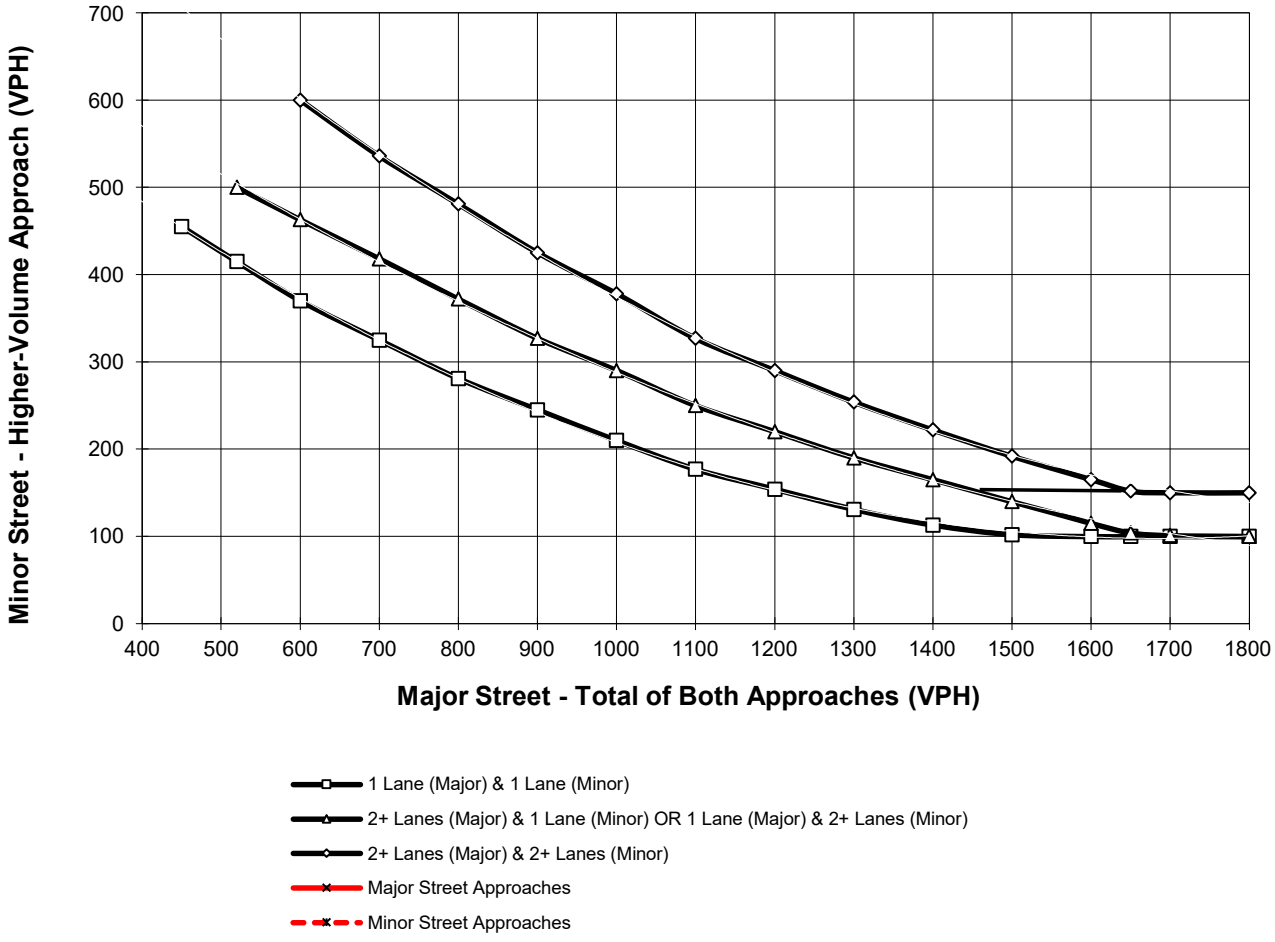
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (Approved) (2025) Conditions - Weekday PM Peak Hour**

Major Street Name = **24th St.**
Total of Both Approaches (VPH) = **311**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Hall Av.**
High Volume Approach (VPH) = **94**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (Approved) (2025) Conditions - Weekday PM Peak Hour**

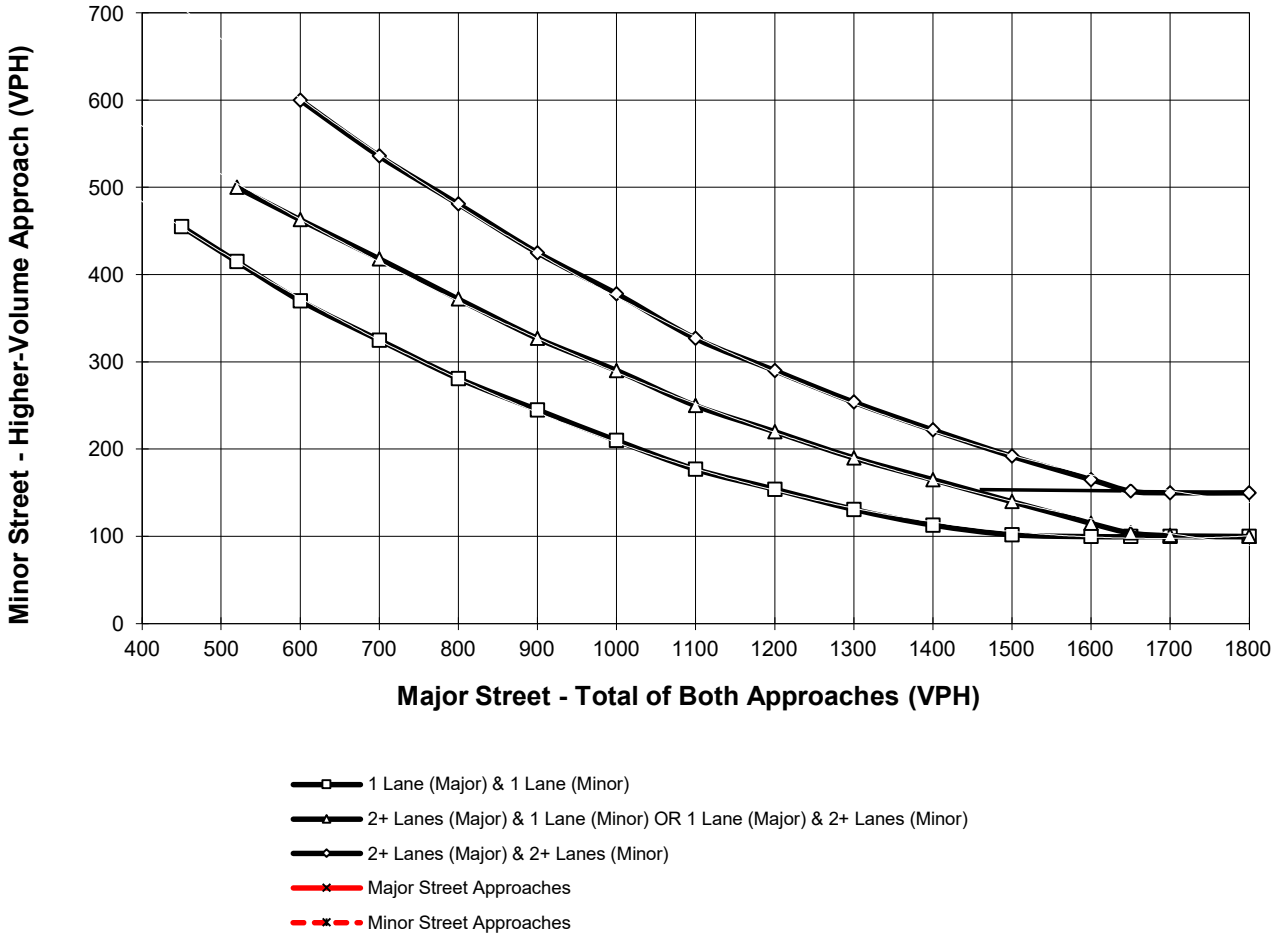
Major Street Name = **Hall Av.**

Total of Both Approaches (VPH) = **250**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **26th St.**

High Volume Approach (VPH) = **21**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

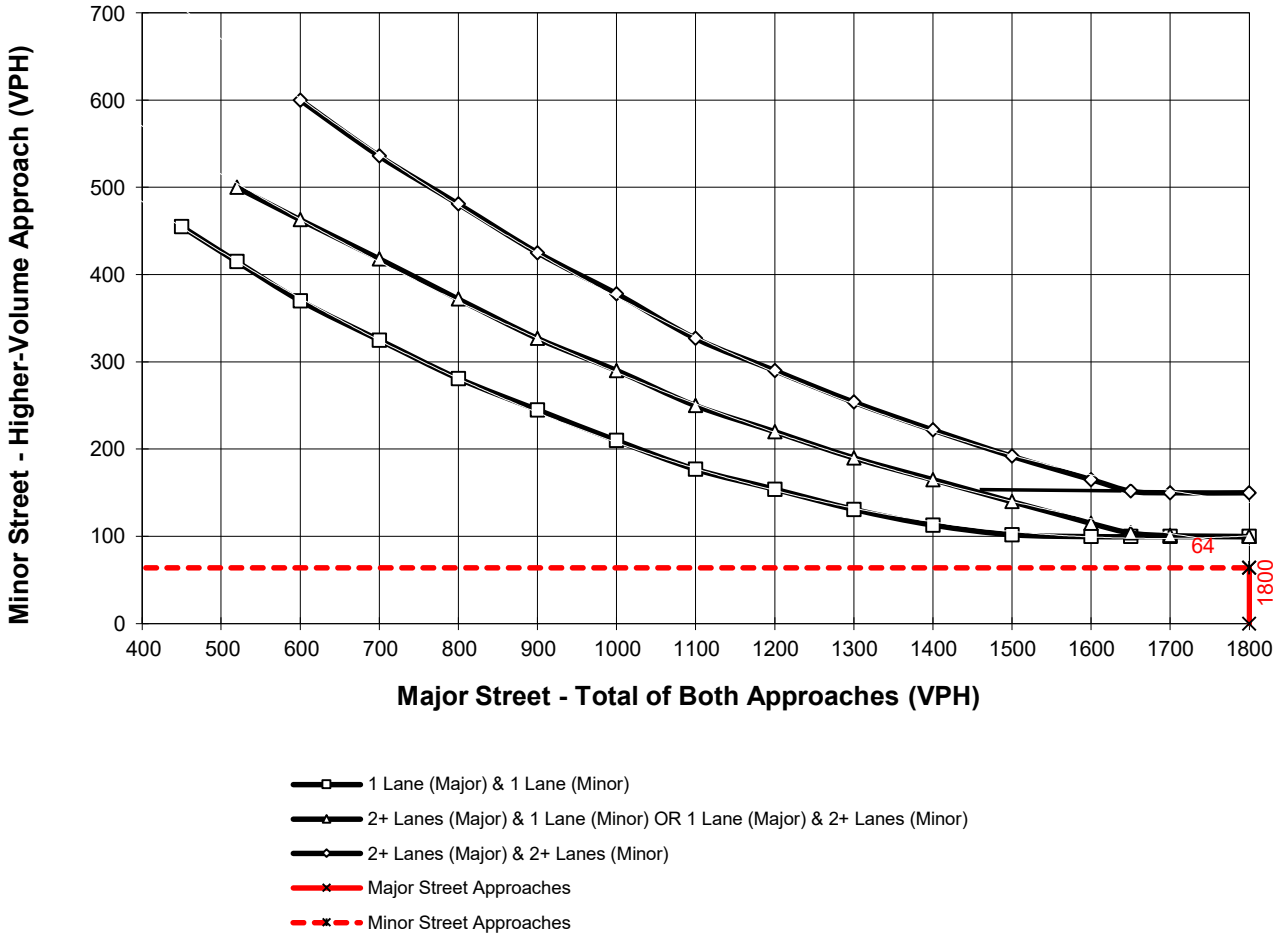
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (Approved) (2025) Conditions - Weekday PM Peak Hour**

Major Street Name = **Market St.**
Total of Both Approaches (VPH) = **2230**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Redwood Dr.**
High Volume Approach (VPH) = **64**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAC (Approved) (2025) Conditions - Weekday PM Peak Hour**

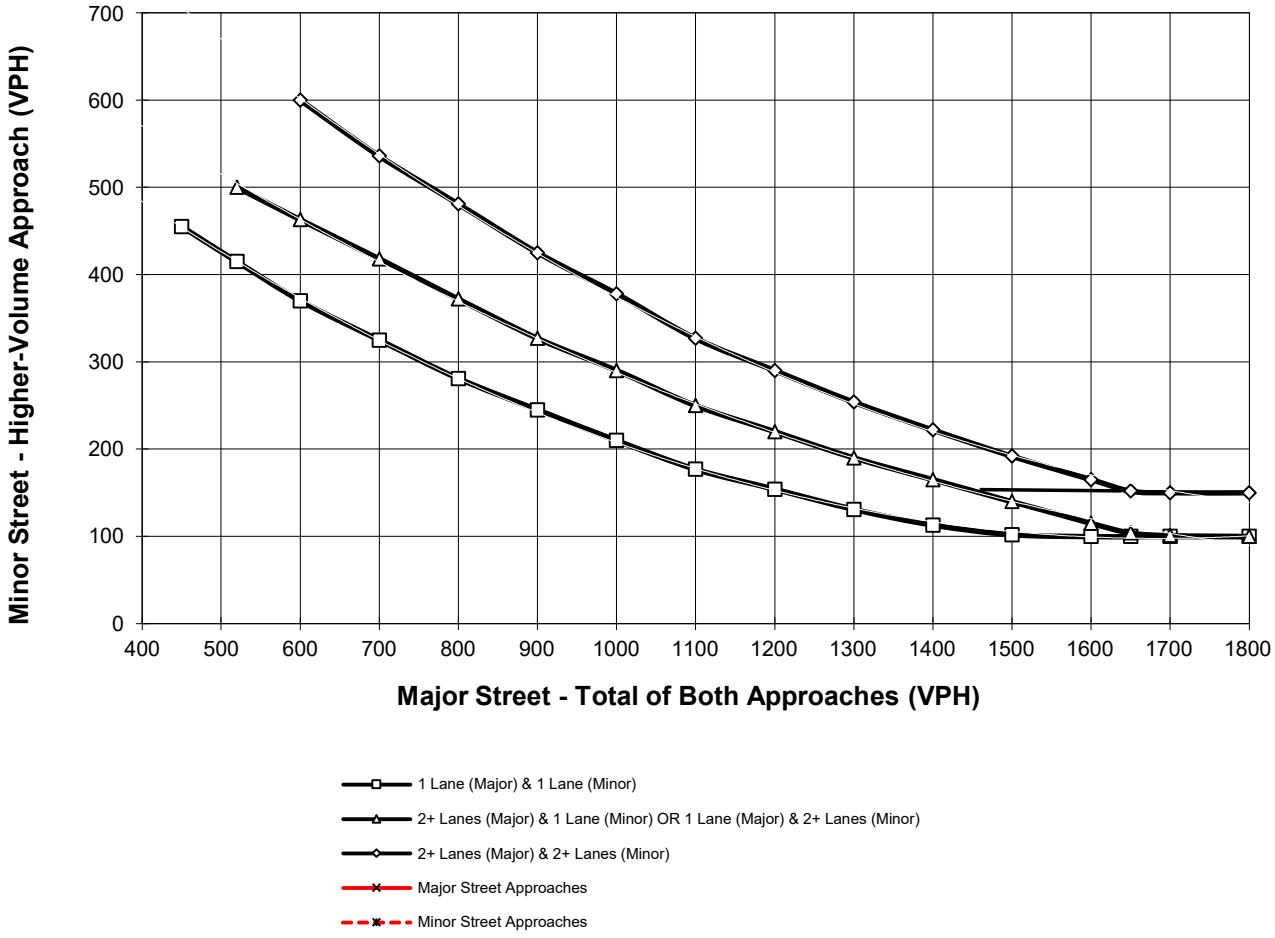
Major Street Name = **25th St.**

Total of Both Approaches (VPH) = **8**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Van Dell Rd.**

High Volume Approach (VPH) = **4**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

APPENDIX 7.3: OPENING YEAR BACKGROUND CONDITIONS WITHOUT PROJECT OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	728	382	450	1405	1777	667
v/c Ratio	1.16	0.68	1.37	0.67	0.95	0.70
Control Delay	121.7	33.1	210.9	17.0	47.3	9.1
Queue Delay	2.0	0.0	0.0	2.0	45.4	0.0
Total Delay	123.7	33.1	210.9	19.0	92.8	9.1
Queue Length 50th (ft)	~617	207	~425	195	443	43
Queue Length 95th (ft)	#864	324	m#364	m138	#553	173
Internal Link Dist (ft)	1745			340	476	
Turn Bay Length (ft)		480				
Base Capacity (vph)	626	565	328	2083	1862	949
Starvation Cap Reductn	0	0	0	500	0	0
Spillback Cap Reductn	143	0	0	0	864	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.51	0.68	1.37	0.89	1.78	0.70

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

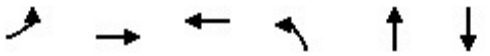
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	580	888	1294	718	538	2003
v/c Ratio	0.92	1.48	1.19	0.86	0.92	0.98
Control Delay	54.9	251.5	129.3	24.5	39.4	25.7
Queue Delay	2.2	0.2	0.0	0.0	46.6	41.2
Total Delay	57.1	251.7	129.3	24.5	86.0	66.9
Queue Length 50th (ft)	407	~893	~412	247	379	737
Queue Length 95th (ft)	#635	#1150	m#482	m341	m381	m735
Internal Link Dist (ft)		2158	960			340
Turn Bay Length (ft)	340			555	400	
Base Capacity (vph)	631	601	1084	836	582	2034
Starvation Cap Reductn	0	0	0	0	125	717
Spillback Cap Reductn	15	13	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.94	1.51	1.19	0.86	1.18	1.52

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	57	312	638	66	1156	1552
v/c Ratio	0.18	0.85	1.06	0.96	0.92	1.21
Control Delay	38.2	49.5	89.4	60.2	29.7	134.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.2	49.5	89.4	60.2	29.7	134.7
Queue Length 50th (ft)	34	143	~492	45	397	~731
Queue Length 95th (ft)	68	#243	#705	m40	m327	#884
Internal Link Dist (ft)		471	1307		110	1510
Turn Bay Length (ft)				75		
Base Capacity (vph)	379	421	602	69	1254	1283
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.74	1.06	0.96	0.92	1.21

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	957	19	5	1371	270	970
v/c Ratio	1.48	0.23	0.03	1.00	1.94	0.55
Control Delay	253.6	57.7	0.2	55.5	451.0	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	253.6	57.7	0.2	55.5	451.0	9.4
Queue Length 50th (ft)	~983	13	0	~457	~300	117
Queue Length 95th (ft)	#1232	38	0	#624	m#266	m92
Internal Link Dist (ft)	1049			1396		322
Turn Bay Length (ft)			25		90	
Base Capacity (vph)	646	82	191	1366	139	1772
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.48	0.23	0.03	1.00	1.94	0.55

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	68	1011	220	431	1140	215
v/c Ratio	0.41	0.63	0.69	0.14	0.54	0.21
Control Delay	45.4	1.8	26.3	5.3	11.3	2.2
Queue Delay	0.0	0.1	0.0	0.0	0.2	0.0
Total Delay	45.4	2.0	26.3	5.3	11.5	2.2
Queue Length 50th (ft)	37	0	65	17	263	6
Queue Length 95th (ft)	77	0	209	138	189	17
Internal Link Dist (ft)	1457			561	315	
Turn Bay Length (ft)			125			
Base Capacity (vph)	200	1615	421	2983	2098	1028
Starvation Cap Reductn	0	0	0	0	283	0
Spillback Cap Reductn	0	82	0	183	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.66	0.52	0.15	0.63	0.21

Intersection Summary

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	150	529	570	674	497
v/c Ratio	0.64	0.64	0.56	0.91	0.18
Control Delay	49.3	7.2	30.1	41.9	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	49.3	7.2	30.1	41.9	5.0
Queue Length 50th (ft)	80	0	148	183	41
Queue Length 95th (ft)	143	48	205	#518	118
Internal Link Dist (ft)	1642		355		561
Turn Bay Length (ft)		350		125	
Base Capacity (vph)	262	866	1017	802	2719
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.57	0.61	0.56	0.84	0.18

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	563	382	539	1724	1506	626
v/c Ratio	0.97	0.69	1.79	0.82	0.76	0.64
Control Delay	67.5	34.2	393.3	18.2	32.7	5.2
Queue Delay	23.4	0.0	0.0	6.7	19.3	0.0
Total Delay	90.9	34.2	393.3	24.9	52.0	5.2
Queue Length 50th (ft)	408	210	~584	333	332	0
Queue Length 95th (ft)	#650	329	m#637	m310	390	75
Internal Link Dist (ft)	1745			340	476	
Turn Bay Length (ft)		480				
Base Capacity (vph)	580	555	301	2116	2004	985
Starvation Cap Reductn	0	0	0	355	0	0
Spillback Cap Reductn	47	0	0	0	536	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.06	0.69	1.79	0.98	1.03	0.64

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

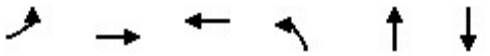
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	480	441	1591	699	429	1488
v/c Ratio	0.89	0.83	0.99	0.76	0.87	0.67
Control Delay	55.3	46.1	52.5	18.2	44.4	9.9
Queue Delay	26.5	11.2	0.0	0.0	3.1	4.1
Total Delay	81.8	57.3	52.5	18.2	47.4	14.0
Queue Length 50th (ft)	316	257	~496	225	298	478
Queue Length 95th (ft)	#550	#469	m#574	m300	m370	m515
Internal Link Dist (ft)		2158	960			340
Turn Bay Length (ft)	340			555	400	
Base Capacity (vph)	554	541	1611	914	600	2287
Starvation Cap Reductn	0	0	0	0	91	704
Spillback Cap Reductn	90	82	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.03	0.96	0.99	0.76	0.84	0.94

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	48	234	822	111	1313	1471
v/c Ratio	0.18	0.76	1.21	1.61	1.10	1.20
Control Delay	40.0	44.0	139.3	310.4	73.3	132.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.0	44.0	139.3	310.4	73.3	132.2
Queue Length 50th (ft)	30	104	~709	~114	~551	~672
Queue Length 95th (ft)	61	180	#951	m#96	m#464	#896
Internal Link Dist (ft)		471	1307		110	1510
Turn Bay Length (ft)				75		
Base Capacity (vph)	377	402	680	69	1198	1224
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.58	1.21	1.61	1.10	1.20

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	1223	15	2	1299	146	1220
v/c Ratio	1.68	0.18	0.01	0.98	1.62	0.73
Control Delay	338.7	55.8	0.0	53.6	313.9	13.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.7
Total Delay	338.7	55.8	0.0	53.6	313.9	14.3
Queue Length 50th (ft)	~1220	10	0	456	~146	184
Queue Length 95th (ft)	#1599	32	0	#616	m#132	m155
Internal Link Dist (ft)	1049			1396		322
Turn Bay Length (ft)			25		90	
Base Capacity (vph)	727	82	191	1325	90	1673
Starvation Cap Reductn	0	0	0	0	0	171
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.68	0.18	0.01	0.98	1.62	0.81

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	106	753	440	396	1316	186
v/c Ratio	0.62	0.47	0.84	0.13	0.78	0.22
Control Delay	55.2	1.0	35.1	9.9	20.5	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.3	0.0
Total Delay	55.2	1.0	35.1	9.9	20.7	2.5
Queue Length 50th (ft)	59	0	275	105	365	1
Queue Length 95th (ft)	#121	0	370	151	#498	10
Internal Link Dist (ft)	1457			561	315	
Turn Bay Length (ft)			125			
Base Capacity (vph)	181	1615	621	2984	1688	854
Starvation Cap Reductn	0	0	0	0	63	0
Spillback Cap Reductn	0	39	0	89	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.48	0.71	0.14	0.81	0.22

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	102	712	791	641	778
v/c Ratio	0.37	0.87	0.73	0.95	0.29
Control Delay	37.3	25.3	32.8	57.8	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	37.3	25.3	32.8	57.8	6.1
Queue Length 50th (ft)	51	76	212	401	161
Queue Length 95th (ft)	98	#159	279	#617	147
Internal Link Dist (ft)	1642		355		561
Turn Bay Length (ft)		350		125	
Base Capacity (vph)	322	881	1092	675	2642
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.32	0.81	0.72	0.95	0.29

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

APPENDIX 7.4: OPENING YEAR BACKGROUND CONDITIONS WITHOUT PROJECT INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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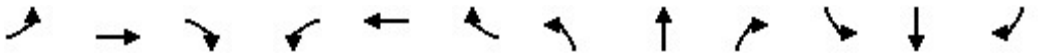
Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	407	432	1349	1706	640
Future Volume (vph)	0	407	432	1349	1706	640
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	42.0	42.0	24.0	68.0	44.0	44.0
Total Split (%)	38.2%	38.2%	21.8%	61.8%	40.0%	40.0%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	38.0	38.0	18.2	63.5	41.3	41.3
Actuated g/C Ratio	0.35	0.35	0.17	0.58	0.38	0.38
v/c Ratio	1.16	0.68	0.78	0.67	0.91	0.69
Control Delay	121.7	33.1	52.6	31.6	41.4	8.7
Queue Delay	0.9	0.0	0.0	35.1	48.1	0.0
Total Delay	122.6	33.1	52.6	66.7	89.6	8.7
LOS	F	C	D	E	F	A
Approach Delay	91.8			63.3	67.5	
Approach LOS	F			E	E	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.16	
Intersection Signal Delay: 71.0	Intersection LOS: E
Intersection Capacity Utilization 167.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	659	0	407	432	1349	0	0	1706	640
Future Volume (veh/h)	0	0	0	659	0	407	432	1349	0	0	1706	640
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				686	0	318	450	1405	0	0	1777	401
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				625	0	556	528	2084	0	0	2026	629
Arrive On Green				0.35	0.00	0.35	0.10	0.39	0.00	0.00	0.39	0.39
Sat Flow, veh/h				1810	0	1610	3510	3705	0	0	5358	1610
Grp Volume(v), veh/h				686	0	318	450	1405	0	0	1777	401
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1755	1805	0	0	1729	1610
Q Serve(g_s), s				38.0	0.0	17.7	13.9	35.5	0.0	0.0	34.9	22.2
Cycle Q Clear(g_c), s				38.0	0.0	17.7	13.9	35.5	0.0	0.0	34.9	22.2
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				625	0	556	528	2084	0	0	2026	629
V/C Ratio(X)				1.10	0.00	0.57	0.85	0.67	0.00	0.00	0.88	0.64
Avail Cap(c_a), veh/h				625	0	556	638	2084	0	0	2026	629
HCM Platoon Ratio				1.00	1.00	1.00	0.67	0.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.43	0.43	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				36.0	0.0	29.4	48.3	25.1	0.0	0.0	31.1	27.2
Incr Delay (d2), s/veh				65.5	0.0	1.4	4.3	0.8	0.0	0.0	5.7	4.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				27.1	0.0	6.7	6.5	15.9	0.0	0.0	14.9	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				101.5	0.0	30.8	52.5	25.9	0.0	0.0	36.8	32.1
LnGrp LOS				F	A	C	D	C	A	A	D	C
Approach Vol, veh/h					1004			1855			2178	
Approach Delay, s/veh					79.1			32.4			36.0	
Approach LOS					E			C			D	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	68.0		20.5	47.5		42.0						
Change Period (Y+Rc), s	4.5		4.0	4.5		4.0						
Max Green Setting (Gmax), s	63.5		20.0	39.5		38.0						
Max Q Clear Time (g_c+I1), s	37.5		15.9	36.9		40.0						
Green Ext Time (p_c), s	11.6		0.7	2.3		0.0						

Intersection Summary	
HCM 6th Ctrl Delay	43.2
HCM 6th LOS	D

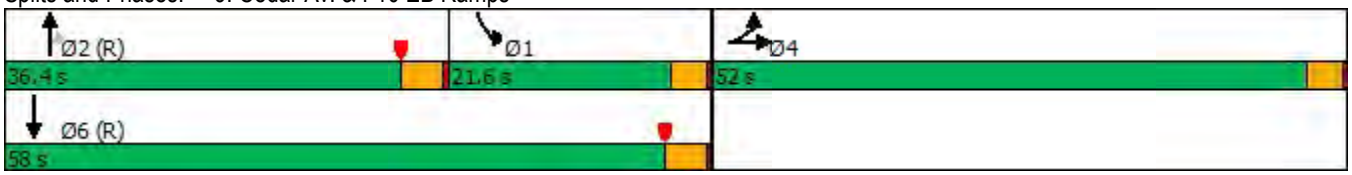
Notes

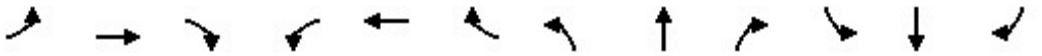
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	599	0	1203	668	500	1863
Future Volume (vph)	599	0	1203	668	500	1863
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	52.0	52.0	36.4	36.4	21.6	58.0
Total Split (%)	47.3%	47.3%	33.1%	33.1%	19.6%	52.7%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	48.5	48.5	32.0	32.0	18.5	54.0
Actuated g/C Ratio	0.44	0.44	0.29	0.29	0.17	0.49
v/c Ratio	0.77	1.25	0.86	0.74	0.91	1.13
Control Delay	34.2	152.2	51.7	18.3	50.2	86.4
Queue Delay	5.3	1.2	0.3	0.0	0.0	1.4
Total Delay	39.5	153.4	52.0	18.3	50.2	87.8
LOS	D	F	D	B	D	F
Approach Delay		108.4	40.0			79.8
Approach LOS		F	D			E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 20.8 (19%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.25	
Intersection Signal Delay: 73.5	Intersection LOS: E
Intersection Capacity Utilization 167.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	599	0	766	0	0	0	0	1203	668	500	1863	0
Future Volume (veh/h)	599	0	766	0	0	0	0	1203	668	500	1863	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	546	137	448				0	1294	444	538	2003	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	699	151	494				0	1525	473	755	1969	0
Arrive On Green	0.39	0.39	0.39				0.00	0.10	0.10	0.14	0.37	0.00
Sat Flow, veh/h	1810	391	1279				0	5358	1609	3510	3705	0
Grp Volume(v), veh/h	546	0	585				0	1294	444	538	2003	0
Grp Sat Flow(s),veh/h/ln	1810	0	1670				0	1729	1609	1755	1805	0
Q Serve(g_s), s	29.2	0.0	36.4				0.0	27.0	30.2	16.1	60.0	0.0
Cycle Q Clear(g_c), s	29.2	0.0	36.4				0.0	27.0	30.2	16.1	60.0	0.0
Prop In Lane	1.00		0.77				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	699	0	645				0	1525	473	755	1969	0
V/C Ratio(X)	0.78	0.00	0.91				0.00	0.85	0.94	0.71	1.02	0.00
Avail Cap(c_a), veh/h	798	0	736				0	1528	474	755	1969	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.27	0.27	0.29	0.29	0.00
Uniform Delay (d), s/veh	29.7	0.0	31.9				0.0	47.3	48.7	43.8	34.9	0.0
Incr Delay (d2), s/veh	4.4	0.0	13.9				0.0	1.7	11.2	0.8	15.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.7	0.0	16.2				0.0	12.7	14.4	7.3	30.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.1	0.0	45.7				0.0	49.0	59.9	44.6	50.4	0.0
LnGrp LOS	C	A	D				A	D	E	D	F	A
Approach Vol, veh/h		1131						1738			2541	
Approach Delay, s/veh		40.1						51.8			49.2	
Approach LOS		D						D			D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	27.7	36.3		46.0		64.0
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	18.1	* 32		48.5		54.0
Max Q Clear Time (g_c+I1), s	18.1	32.2		38.4		62.0
Green Ext Time (p_c), s	0.0	0.2		4.1		0.0

Intersection Summary		
HCM 6th Ctrl Delay		48.1
HCM 6th LOS		D

Notes

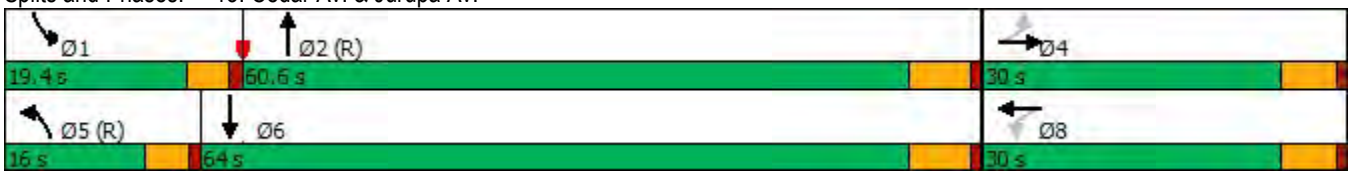
User approved volume balancing among the lanes for turning movement.

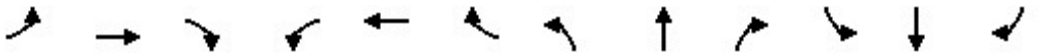
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	123	104	64	109	130	976	160	1347
Future Volume (vph)	123	104	64	109	130	976	160	1347
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	30.0	30.0	30.0	30.0	16.0	60.6	19.4	64.0
Total Split (%)	27.3%	27.3%	27.3%	27.3%	14.5%	55.1%	17.6%	58.2%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)	25.4	25.4	25.4	25.4	11.1	54.7	13.9	57.5
Actuated g/C Ratio	0.23	0.23	0.23	0.23	0.10	0.50	0.13	0.52
v/c Ratio	0.99	0.42	0.30	0.68	0.80	0.65	0.78	0.89
Control Delay	119.6	35.0	39.8	39.2	85.7	17.2	51.5	36.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	119.6	35.0	39.8	39.2	85.7	17.2	51.5	36.7
LOS	F	D	D	D	F	B	D	D
Approach Delay		71.4		39.4		24.8		38.1
Approach LOS		E		D		C		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 36.4	Intersection LOS: D
Intersection Capacity Utilization 89.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	104	59	64	109	162	130	976	70	160	1347	154
Future Volume (veh/h)	123	104	59	64	109	162	130	976	70	160	1347	154
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	137	116	47	71	121	114	144	1084	67	178	1497	167
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	183	286	116	246	199	188	205	1780	110	210	1700	188
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.23	1.00	1.00	0.04	0.17	0.17
Sat Flow, veh/h	1163	1285	521	1242	894	842	1810	3453	213	1810	3278	362
Grp Volume(v), veh/h	137	0	163	71	0	235	144	566	585	178	818	846
Grp Sat Flow(s),veh/h/ln	1163	0	1806	1242	0	1735	1810	1805	1861	1810	1805	1835
Q Serve(g_s), s	11.1	0.0	8.5	5.7	0.0	13.4	8.1	0.0	0.0	10.8	48.6	49.6
Cycle Q Clear(g_c), s	24.5	0.0	8.5	14.2	0.0	13.4	8.1	0.0	0.0	10.8	48.6	49.6
Prop In Lane	1.00		0.29	1.00		0.49	1.00		0.11	1.00		0.20
Lane Grp Cap(c), veh/h	183	0	402	246	0	387	205	931	960	210	936	952
V/C Ratio(X)	0.75	0.00	0.41	0.29	0.00	0.61	0.70	0.61	0.61	0.85	0.87	0.89
Avail Cap(c_a), veh/h	183	0	402	246	0	387	205	931	960	245	952	967
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.89	0.89	0.89	0.42	0.42	0.42
Uniform Delay (d), s/veh	50.2	0.0	36.5	42.6	0.0	38.4	40.9	0.0	0.0	51.9	42.1	42.5
Incr Delay (d2), s/veh	16.7	0.0	0.9	0.9	0.0	3.2	9.3	2.6	2.6	9.9	4.2	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	0.0	3.8	1.8	0.0	5.9	3.7	0.7	0.7	5.7	24.3	25.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.9	0.0	37.5	43.5	0.0	41.7	50.2	2.6	2.6	61.8	46.2	47.3
LnGrp LOS	E	A	D	D	A	D	D	A	A	E	D	D
Approach Vol, veh/h		300			306			1295			1842	
Approach Delay, s/veh		50.9			42.1			7.9			48.2	
Approach LOS		D			D			A			D	

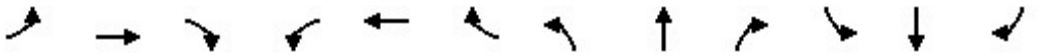
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.3	62.7		30.0	16.9	63.1		30.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	14.9	54.6		24.5	11.5	58.0		24.5				
Max Q Clear Time (g_c+I1), s	12.8	2.0		26.5	10.1	51.6		16.2				
Green Ext Time (p_c), s	0.1	14.1		0.0	0.0	5.5		1.3				

Intersection Summary			
HCM 6th Ctrl Delay		34.0	
HCM 6th LOS		C	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	1	9	31	16	17	977	155	1242
Future Volume (vph)	1	9	31	16	17	977	155	1242
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.6	31.6	31.6	31.6	9.6	28.2	9.6	28.2
Total Split (s)	31.6	31.6	31.6	31.6	9.6	34.2	14.2	38.8
Total Split (%)	39.5%	39.5%	39.5%	39.5%	12.0%	42.8%	17.8%	48.5%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	6.2	4.6	6.2
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		13.5		13.5	5.6	24.2	9.4	41.4
Actuated g/C Ratio		0.24		0.24	0.10	0.44	0.17	0.75
v/c Ratio		0.06		0.17	0.10	0.71	0.55	0.50
Control Delay		14.4		17.8	32.8	18.6	35.8	10.2
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		14.4		17.8	32.8	18.6	35.8	10.2
LOS		B		B	C	B	D	B
Approach Delay		14.4		17.8		18.8		13.1
Approach LOS		B		B		B		B

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 55.2	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 15.6	Intersection LOS: B
Intersection Capacity Utilization 61.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 17: Rubidoux Bl. & 24th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	9	12	31	16	15	17	977	52	155	1242	5
Future Volume (veh/h)	1	9	12	31	16	15	17	977	52	155	1242	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1	10	13	34	17	16	18	1062	57	168	1350	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	85	95	117	192	81	49	40	1464	79	216	1907	7
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.02	0.42	0.42	0.12	0.52	0.52
Sat Flow, veh/h	29	761	933	591	647	388	1810	3484	187	1810	3689	14
Grp Volume(v), veh/h	24	0	0	67	0	0	18	550	569	168	660	695
Grp Sat Flow(s),veh/h/ln	1722	0	0	1625	0	0	1810	1805	1866	1810	1805	1898
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	0.0	0.5	11.7	11.7	4.1	12.8	12.8
Cycle Q Clear(g_c), s	0.6	0.0	0.0	1.5	0.0	0.0	0.5	11.7	11.7	4.1	12.8	12.8
Prop In Lane	0.04		0.54	0.51		0.24	1.00		0.10	1.00		0.01
Lane Grp Cap(c), veh/h	297	0	0	322	0	0	40	758	784	216	933	981
V/C Ratio(X)	0.08	0.00	0.00	0.21	0.00	0.00	0.45	0.73	0.73	0.78	0.71	0.71
Avail Cap(c_a), veh/h	1088	0	0	1043	0	0	197	1101	1138	378	1282	1347
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	0.0	0.0	18.2	0.0	0.0	22.2	11.1	11.1	19.6	8.4	8.4
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.3	0.0	0.0	2.8	1.3	1.3	2.3	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.6	0.0	0.0	0.2	3.1	3.2	1.5	2.7	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.9	0.0	0.0	18.6	0.0	0.0	25.0	12.4	12.4	21.9	9.6	9.5
LnGrp LOS	B	A	A	B	A	A	C	B	B	C	A	A
Approach Vol, veh/h		24			67			1137			1523	
Approach Delay, s/veh		17.9			18.6			12.6			10.9	
Approach LOS		B			B			B			B	

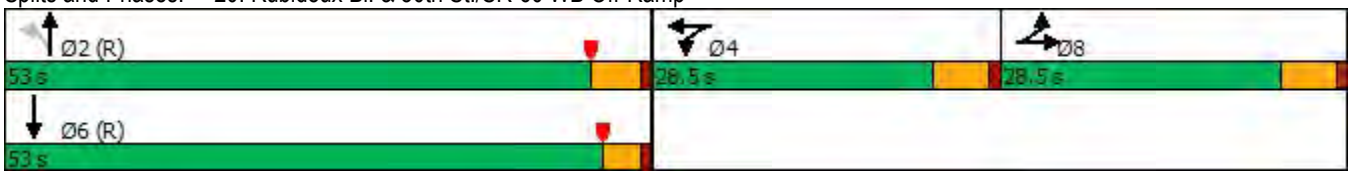
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.1	25.5		10.3	5.6	29.9		10.3				
Change Period (Y+Rc), s	4.6	6.2		4.6	4.6	6.2		4.6				
Max Green Setting (Gmax), s	9.6	28.0		27.0	5.0	32.6		27.0				
Max Q Clear Time (g_c+I1), s	6.1	13.7		2.6	2.5	14.8		3.5				
Green Ext Time (p_c), s	0.1	5.6		0.1	0.0	7.9		0.3				

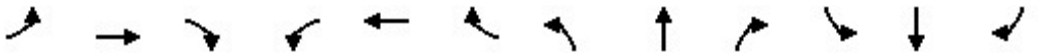
Intersection Summary		
HCM 6th Ctrl Delay		11.9
HCM 6th LOS		B

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Configurations							
Traffic Volume (vph)	51	0	381	82	59	1029	1350
Future Volume (vph)	51	0	381	82	59	1029	1350
Turn Type	Split	NA	Split	NA	Perm	NA	NA
Protected Phases	8	8	4	4		2	6
Permitted Phases					2		
Detector Phase	8	8	4	4	2	2	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.5	28.5	28.5	28.5	53.0	53.0	53.0
Total Split (%)	25.9%	25.9%	25.9%	25.9%	48.2%	48.2%	48.2%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	20.6	20.6	22.6	22.6	50.9	50.9	51.9
Actuated g/C Ratio	0.19	0.19	0.21	0.21	0.46	0.46	0.47
v/c Ratio	0.17	0.86	0.93	0.86	0.96	0.69	0.91
Control Delay	37.5	55.7	76.1	62.1	123.3	16.4	37.5
Queue Delay	0.0	8.0	54.5	57.6	0.0	10.2	0.1
Total Delay	37.5	63.6	130.6	119.8	123.3	26.6	37.6
LOS	D	E	F	F	F	C	D
Approach Delay		59.6		125.3		31.8	37.6
Approach LOS		E		F		C	D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 52.7	Intersection LOS: D
Intersection Capacity Utilization 95.5%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	0	278	381	82	105	59	1029	0	0	1350	31
Future Volume (veh/h)	51	0	278	381	82	105	59	1029	0	0	1350	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	57	0	228	302	268	84	66	1156	0	0	1517	34
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	297	0	264	377	289	91	101	1740	0	0	1739	39
Arrive On Green	0.16	0.00	0.16	0.21	0.21	0.21	0.32	0.32	0.00	0.00	0.48	0.48
Sat Flow, veh/h	1810	0	1610	1810	1387	435	338	3705	0	0	3703	81
Grp Volume(v), veh/h	57	0	228	302	0	352	66	1156	0	0	758	793
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1810	0	1822	338	1805	0	0	1805	1883
Q Serve(g_s), s	3.0	0.0	15.2	17.4	0.0	20.9	11.6	30.4	0.0	0.0	41.2	41.5
Cycle Q Clear(g_c), s	3.0	0.0	15.2	17.4	0.0	20.9	53.0	30.4	0.0	0.0	41.2	41.5
Prop In Lane	1.00		1.00	1.00		0.24	1.00		0.00	0.00		0.04
Lane Grp Cap(c), veh/h	297	0	264	377	0	380	101	1740	0	0	870	908
V/C Ratio(X)	0.19	0.00	0.86	0.80	0.00	0.93	0.65	0.66	0.00	0.00	0.87	0.87
Avail Cap(c_a), veh/h	378	0	337	378	0	381	101	1740	0	0	870	908
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.96	0.96	0.00	0.00	0.69	0.69
Uniform Delay (d), s/veh	39.7	0.0	44.8	41.4	0.0	42.7	60.6	29.6	0.0	0.0	25.4	25.5
Incr Delay (d2), s/veh	0.4	0.0	17.4	11.9	0.0	28.7	27.4	1.9	0.0	0.0	8.4	8.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	7.3	8.7	0.0	12.0	2.6	14.0	0.0	0.0	18.3	19.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.0	0.0	62.1	53.3	0.0	71.4	88.1	31.5	0.0	0.0	33.9	33.8
LnGrp LOS	D	A	E	D	A	E	F	C	A	A	C	C
Approach Vol, veh/h		285			654			1222			1551	
Approach Delay, s/veh		57.7			63.0			34.6			33.8	
Approach LOS		E			E			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		58.0		28.4		58.0		23.6				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		48.0		23.0		* 49		23.0				
Max Q Clear Time (g_c+I1), s		55.0		22.9		43.5		17.2				
Green Ext Time (p_c), s		0.0		0.1		4.4		0.9				

Intersection Summary		
HCM 6th Ctrl Delay	41.0	
HCM 6th LOS	D	

Notes

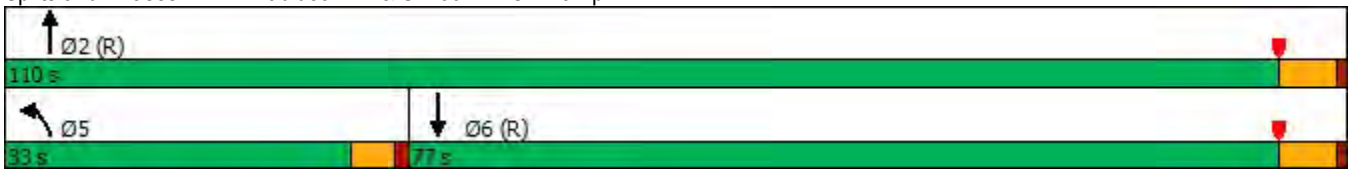
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	NBL	NBT	SBT
Lane Configurations			
Traffic Volume (vph)	295	1096	1258
Future Volume (vph)	295	1096	1258
Turn Type	Prot	NA	NA
Protected Phases	5	2	6
Permitted Phases			
Detector Phase	5	2	6
Switch Phase			
Minimum Initial (s)	5.0	10.0	10.0
Minimum Split (s)	9.6	27.8	27.8
Total Split (s)	33.0	110.0	77.0
Total Split (%)	30.0%	100.0%	70.0%
Yellow Time (s)	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8
Lead/Lag	Lead		Lag
Lead-Lag Optimize?	Yes		Yes
Recall Mode	None	C-Min	C-Min
Act Effct Green (s)	22.7	110.0	76.9
Actuated g/C Ratio	0.21	1.00	0.70
v/c Ratio	0.83	0.32	0.90
Control Delay	75.8	0.2	12.0
Queue Delay	0.5	0.1	45.8
Total Delay	76.4	0.2	57.8
LOS	E	A	E
Approach Delay		16.4	57.8
Approach LOS		B	E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 41.2	Intersection LOS: D
Intersection Capacity Utilization 86.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 21: Rubidoux Bl. & SR-60 WB On-Ramp



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	295	1096	1258	819
Future Volume (veh/h)	0	0	295	1096	1258	819
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			0.98
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach				No	No	
Adj Sat Flow, veh/h/ln			1900	1900	1900	1900
Adj Flow Rate, veh/h			311	1154	1324	862
Peak Hour Factor			0.95	0.95	0.95	0.95
Percent Heavy Veh, %			0	0	0	0
Cap, veh/h			336	3420	1572	908
Arrive On Green			0.37	1.00	1.00	1.00
Sat Flow, veh/h			1810	3705	2279	1262
Grp Volume(v), veh/h			311	1154	1065	1121
Grp Sat Flow(s),veh/h/ln			1810	1805	1805	1641
Q Serve(g_s), s			18.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s			18.1	0.0	0.0	0.0
Prop In Lane			1.00			0.77
Lane Grp Cap(c), veh/h			336	3420	1299	1181
V/C Ratio(X)			0.93	0.34	0.82	0.95
Avail Cap(c_a), veh/h			467	3420	1299	1181
HCM Platoon Ratio			2.00	2.00	2.00	2.00
Upstream Filter(I)			0.68	0.68	0.28	0.28
Uniform Delay (d), s/veh			33.9	0.0	0.0	0.0
Incr Delay (d2), s/veh			12.7	0.2	1.7	6.3
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			7.1	0.1	0.6	2.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			46.6	0.2	1.7	6.3
LnGrp LOS			D	A	A	A
Approach Vol, veh/h				1465	2186	
Approach Delay, s/veh				10.0	4.0	
Approach LOS				B	A	

Timer - Assigned Phs	2			5	6
Phs Duration (G+Y+Rc), s	110.0			25.0	85.0
Change Period (Y+Rc), s	5.8			4.6	5.8
Max Green Setting (Gmax), s	104.2			28.4	71.2
Max Q Clear Time (g_c+I1), s	2.0			20.1	2.0
Green Ext Time (p_c), s	10.8			0.3	40.2

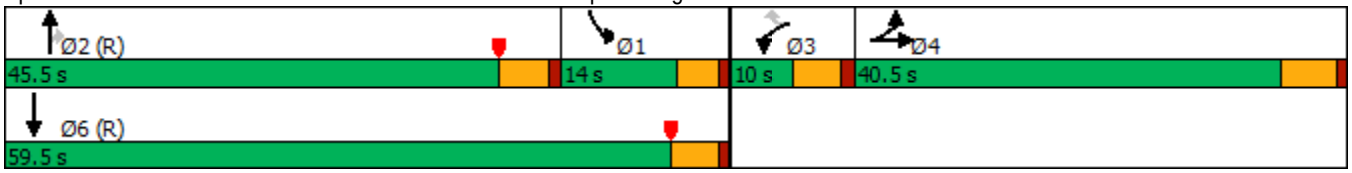
Intersection Summary	
HCM 6th Ctrl Delay	6.4
HCM 6th LOS	A

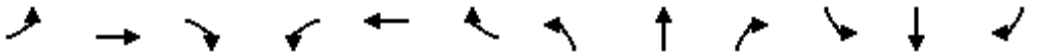
22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.

Lane Group	EBL	EBT	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	685	15	18	5	767	549	259	931
Future Volume (vph)	685	15	18	5	767	549	259	931
Turn Type	Split	NA	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4	4	3		2		1	6
Permitted Phases				3		2		
Detector Phase	4	4	3	3	2	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	10.0	10.0	45.0	45.0	9.5	30.0
Total Split (s)	40.5	40.5	10.0	10.0	45.5	45.5	14.0	59.5
Total Split (%)	36.8%	36.8%	9.1%	9.1%	41.4%	41.4%	12.7%	54.1%
Yellow Time (s)	4.5	4.5	4.0	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.0	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	33.6	33.6	5.0	5.0	36.3	36.3	19.1	59.9
Actuated g/C Ratio	0.31	0.31	0.05	0.05	0.33	0.33	0.17	0.54
v/c Ratio	0.94	0.87	0.23	0.03	0.67	0.63	0.86	0.49
Control Delay	65.0	50.8	57.7	0.2	35.0	5.7	54.1	9.1
Queue Delay	0.0	0.1	0.0	0.0	0.2	0.0	0.0	1.0
Total Delay	65.0	50.9	57.7	0.2	35.1	5.7	54.1	10.1
LOS	E	D	E	A	D	A	D	B
Approach Delay		58.2			22.9			19.7
Approach LOS		E			C			B

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 31.3	Intersection LOS: C
Intersection Capacity Utilization 92.9%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	685	15	218	18	0	5	0	767	549	259	931	0
Future Volume (veh/h)	685	15	218	18	0	5	0	767	549	259	931	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	847	0	0	19	0	3	0	799	463	270	970	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	929	488	0	0	0	0	0	1138	495	520	2339	0
Arrive On Green	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.32	0.09	0.21	0.00
Sat Flow, veh/h	3619	1900	0		0		0	3705	1572	1810	3705	0
Grp Volume(v), veh/h	847	0	0		0.0		0	799	463	270	970	0
Grp Sat Flow(s),veh/h/ln	1810	1900	0				0	1805	1572	1810	1805	0
Q Serve(g_s), s	25.0	0.0	0.0				0.0	21.4	29.4	15.6	25.5	0.0
Cycle Q Clear(g_c), s	25.0	0.0	0.0				0.0	21.4	29.4	15.6	25.5	0.0
Prop In Lane	1.00		0.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	929	488	0				0	1138	495	520	2339	0
V/C Ratio(X)	0.91	0.00	0.00				0.00	0.70	0.93	0.52	0.41	0.00
Avail Cap(c_a), veh/h	1152	605	0				0	1329	579	520	2339	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.61	0.61	0.31	0.31	0.00
Uniform Delay (d), s/veh	39.7	0.0	0.0				0.0	33.1	31.9	42.6	25.3	0.0
Incr Delay (d2), s/veh	8.5	0.0	0.0				0.0	2.2	19.2	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.7	0.0	0.0				0.0	9.4	13.1	7.6	12.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.1	0.0	0.0				0.0	35.4	51.1	42.7	25.4	0.0
LnGrp LOS	D	A	A				A	D	D	D	C	A
Approach Vol, veh/h		847						1262			1240	
Approach Delay, s/veh		48.1						41.1			29.2	
Approach LOS		D						D			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	36.6	39.7		33.7		76.3						
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0						
Max Green Setting (Gmax), s	9.5	* 41		35.0		54.5						
Max Q Clear Time (g_c+I1), s	17.6	31.4		27.0		27.5						
Green Ext Time (p_c), s	0.0	3.2		1.3		4.6						

Intersection Summary		
HCM 6th Ctrl Delay		38.5
HCM 6th LOS		D

Notes

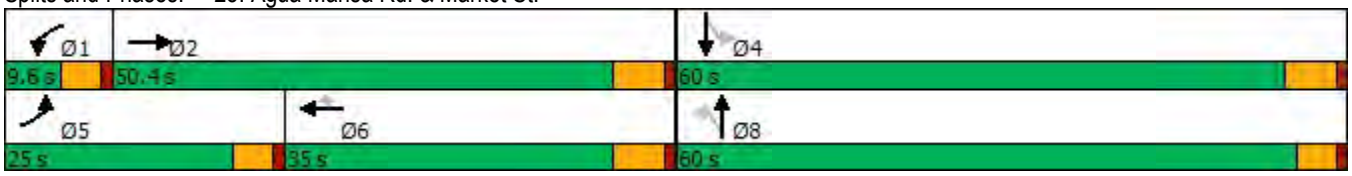
User approved volume balancing among the lanes for turning movement.

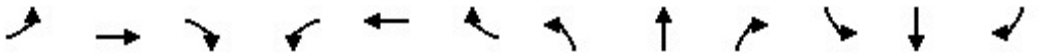
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	377	486	4	547	267	19	2	176	16
Future Volume (vph)	377	486	4	547	267	19	2	176	16
Turn Type	Prot	NA	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	5	2	1	6			8		4
Permitted Phases					6	8		4	
Detector Phase	5	2	1	6	6	8	8	4	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	31.8	9.6	26.8	26.8	14.6	14.6	43.8	43.8
Total Split (s)	25.0	50.4	9.6	35.0	35.0	60.0	60.0	60.0	60.0
Total Split (%)	20.8%	42.0%	8.0%	29.2%	29.2%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8		4.6		5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	None	Max	Max	None	None	None	None
Act Effct Green (s)	16.2	49.2	5.1	29.9	29.9		41.2		40.0
Actuated g/C Ratio	0.16	0.48	0.05	0.29	0.29		0.40		0.39
v/c Ratio	0.76	0.32	0.04	0.58	0.44		0.06		0.90
Control Delay	52.4	19.5	55.0	36.4	6.4		14.4		42.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	52.4	19.5	55.0	36.4	6.4		14.4		42.9
LOS	D	B	D	D	A		B		D
Approach Delay		33.7		26.7			14.4		42.9
Approach LOS		C		C			B		D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 102.7	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 33.1	Intersection LOS: C
Intersection Capacity Utilization 73.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	377	486	10	4	547	267	19	2	8	176	16	336
Future Volume (veh/h)	377	486	10	4	547	267	19	2	8	176	16	336
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	419	540	8	4	608	258	21	2	7	196	18	167
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	511	1894	28	10	1371	611	302	36	81	283	26	192
Arrive On Green	0.15	0.52	0.52	0.01	0.38	0.38	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	3510	3641	54	1810	3610	1609	806	126	284	770	92	673
Grp Volume(v), veh/h	419	268	280	4	608	258	30	0	0	381	0	0
Grp Sat Flow(s),veh/h/ln	1755	1805	1890	1810	1805	1609	1215	0	0	1535	0	0
Q Serve(g_s), s	9.9	7.2	7.2	0.2	10.8	10.2	0.0	0.0	0.0	19.1	0.0	0.0
Cycle Q Clear(g_c), s	9.9	7.2	7.2	0.2	10.8	10.2	1.1	0.0	0.0	20.2	0.0	0.0
Prop In Lane	1.00		0.03	1.00		1.00	0.70		0.23	0.51		0.44
Lane Grp Cap(c), veh/h	511	939	983	10	1371	611	419	0	0	502	0	0
V/C Ratio(X)	0.82	0.29	0.29	0.42	0.44	0.42	0.07	0.00	0.00	0.76	0.00	0.00
Avail Cap(c_a), veh/h	835	939	983	105	1371	611	896	0	0	1029	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	35.6	11.6	11.6	42.5	19.8	19.6	22.2	0.0	0.0	29.0	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.8	0.7	10.4	1.0	2.1	0.1	0.0	0.0	2.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	2.7	2.8	0.1	4.3	3.8	0.4	0.0	0.0	7.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.9	12.4	12.3	52.9	20.9	21.8	22.3	0.0	0.0	31.4	0.0	0.0
LnGrp LOS	D	B	B	D	C	C	C	A	A	C	A	A
Approach Vol, veh/h		967			870			30			381	
Approach Delay, s/veh		23.0			21.3			22.3			31.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	50.4		30.3	17.1	38.4		30.3				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	44.6		54.2	20.4	29.2		* 55				
Max Q Clear Time (g_c+I1), s	2.2	9.2		22.2	11.9	12.8		3.1				
Green Ext Time (p_c), s	0.0	3.1		2.3	0.5	4.2		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		23.7	
HCM 6th LOS		C	

Notes

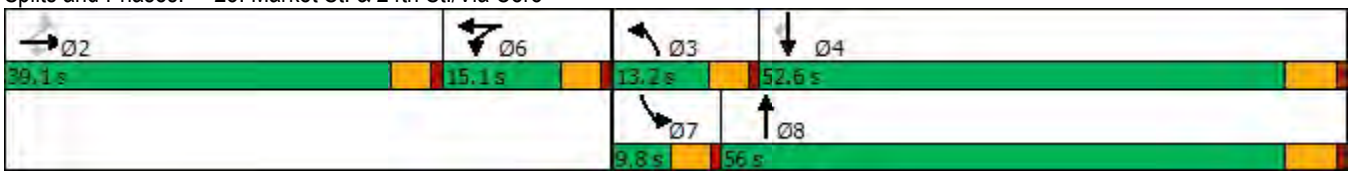
User approved pedestrian interval to be less than phase max green.

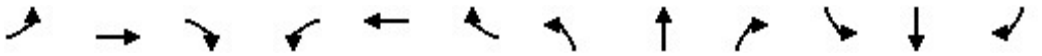
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	4	33	172	100	8	37	756	30	772	3
Future Volume (vph)	4	33	172	100	8	37	756	30	772	3
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	39.1	39.1	39.1	15.1	15.1	13.2	56.0	9.8	52.6	52.6
Total Split (%)	32.6%	32.6%	32.6%	12.6%	12.6%	11.0%	46.7%	8.2%	43.8%	43.8%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		11.7	11.7	10.3	10.3	6.5	50.5	5.2	49.2	49.2
Actuated g/C Ratio		0.13	0.13	0.11	0.11	0.07	0.54	0.06	0.53	0.53
v/c Ratio		0.39	0.51	0.53	0.07	0.31	0.51	0.32	0.43	0.00
Control Delay		50.8	11.6	51.3	32.2	49.8	15.3	53.9	15.7	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		50.8	11.6	51.3	32.2	49.8	15.3	53.9	15.7	0.0
LOS		D	B	D	C	D	B	D	B	A
Approach Delay		18.5			49.1		16.7		17.0	
Approach LOS		B			D		B		B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 93.2	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 18.7	Intersection LOS: B
Intersection Capacity Utilization 53.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	33	172	100	8	6	37	756	170	30	772	3
Future Volume (veh/h)	4	33	172	100	8	6	37	756	170	30	772	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	4	35	88	105	8	5	39	796	157	32	813	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	21	180	170	187	113	71	62	1643	324	55	1959	874
Arrive On Green	0.11	0.11	0.11	0.10	0.10	0.10	0.03	0.55	0.55	0.03	0.54	0.54
Sat Flow, veh/h	194	1696	1606	1810	1094	683	1810	3005	593	1810	3610	1610
Grp Volume(v), veh/h	39	0	88	105	0	13	39	478	475	32	813	3
Grp Sat Flow(s),veh/h/ln	1890	0	1606	1810	0	1777	1810	1805	1793	1810	1805	1610
Q Serve(g_s), s	1.7	0.0	4.8	5.1	0.0	0.6	2.0	15.0	15.0	1.6	12.2	0.1
Cycle Q Clear(g_c), s	1.7	0.0	4.8	5.1	0.0	0.6	2.0	15.0	15.0	1.6	12.2	0.1
Prop In Lane	0.10		1.00	1.00		0.38	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	200	0	170	187	0	184	62	987	980	55	1959	874
V/C Ratio(X)	0.19	0.00	0.52	0.56	0.00	0.07	0.63	0.48	0.48	0.58	0.41	0.00
Avail Cap(c_a), veh/h	710	0	603	207	0	203	169	987	980	102	1959	874
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.5	0.0	38.8	39.2	0.0	37.2	43.8	12.8	12.8	43.9	12.4	9.6
Incr Delay (d2), s/veh	0.5	0.0	2.4	2.8	0.0	0.2	3.8	1.7	1.7	3.6	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	1.9	2.4	0.0	0.3	0.9	5.7	5.6	0.7	4.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.9	0.0	41.2	41.9	0.0	37.3	47.6	14.5	14.5	47.5	13.0	9.6
LnGrp LOS	D	A	D	D	A	D	D	B	B	D	B	A
Approach Vol, veh/h		127			118			992			848	
Approach Delay, s/veh		40.2			41.4			15.8			14.3	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.3	7.8	55.6		14.1	7.4	56.0				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		34.5	8.6	46.8		10.5	5.2	50.2				
Max Q Clear Time (g_c+I1), s		6.8	4.0	14.2		7.1	3.6	17.0				
Green Ext Time (p_c), s		0.5	0.0	5.8		0.1	0.0	6.4				

Intersection Summary												
HCM 6th Ctrl Delay			18.2									
HCM 6th LOS			B									

Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	196	49	505	547
Future Volume (vph)	196	49	505	547
Turn Type	Prot	Prot	NA	NA
Protected Phases	4	5	2	6
Permitted Phases				
Detector Phase	4	5	2	6
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	32.8	9.6	15.8	27.8
Total Split (s)	32.8	14.7	67.2	52.5
Total Split (%)	32.8%	14.7%	67.2%	52.5%
Yellow Time (s)	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.8
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	None	None
Act Effct Green (s)	17.8	7.3	45.0	38.6
Actuated g/C Ratio	0.24	0.10	0.60	0.51
v/c Ratio	0.62	0.30	0.25	0.83
Control Delay	34.7	43.3	7.4	26.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	34.7	43.3	7.4	26.6
LOS	C	D	A	C
Approach Delay	34.7		10.6	26.6
Approach LOS	C		B	C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 75.6	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 22.2	Intersection LOS: C
Intersection Capacity Utilization 64.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 33: Agua Mansa Rd. & El Rivino Rd.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	196	51	49	505	547	191
Future Volume (veh/h)	196	51	49	505	547	191
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	209	0	52	537	582	203
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	300		88	2289	681	238
Arrive On Green	0.17	0.00	0.05	0.63	0.51	0.51
Sat Flow, veh/h	1801	0	1810	3705	1346	469
Grp Volume(v), veh/h	210	0	52	537	0	785
Grp Sat Flow(s),veh/h/ln	1810	0	1810	1805	0	1815
Q Serve(g_s), s	6.4	0.0	1.6	3.7	0.0	21.9
Cycle Q Clear(g_c), s	6.4	0.0	1.6	3.7	0.0	21.9
Prop In Lane	1.00	0.00	1.00			0.26
Lane Grp Cap(c), veh/h	301		88	2289	0	918
V/C Ratio(X)	0.70		0.59	0.23	0.00	0.85
Avail Cap(c_a), veh/h	841		315	3816	0	1460
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.8	0.0	27.1	4.6	0.0	12.5
Incr Delay (d2), s/veh	2.9	0.0	2.3	0.1	0.0	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	0.7	0.8	0.0	6.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.8	0.0	29.4	4.6	0.0	15.5
LnGrp LOS	C		C	A	A	B
Approach Vol, veh/h	210	A		589	785	
Approach Delay, s/veh	25.8			6.8	15.5	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		42.6		15.5	7.4	35.2
Change Period (Y+Rc), s		5.8		5.8	4.6	5.8
Max Green Setting (Gmax), s		61.4		27.0	10.1	46.7
Max Q Clear Time (g_c+I1), s		5.7		8.4	3.6	23.9
Green Ext Time (p_c), s		3.6		0.5	0.0	5.5

Intersection Summary	
HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

Notes

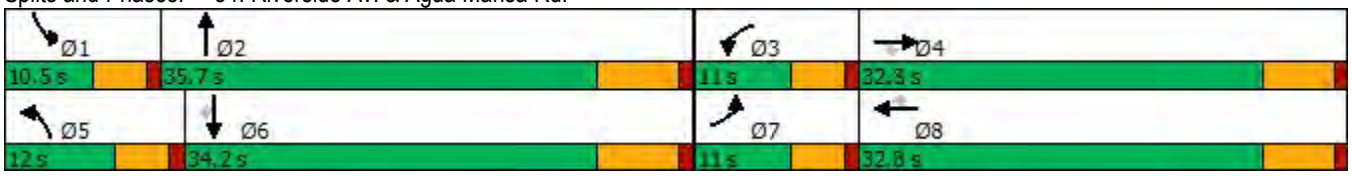
User approved volume balancing among the lanes for turning movement.

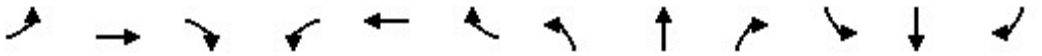
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	155	309	161	141	387	82	178	507	80	609	184
Future Volume (vph)	155	309	161	141	387	82	178	507	80	609	184
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	11.0	32.8	32.8	11.0	32.8	32.8	12.0	35.7	10.5	34.2	34.2
Total Split (%)	12.2%	36.4%	36.4%	12.2%	36.4%	36.4%	13.3%	39.7%	11.7%	38.0%	38.0%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	6.5	15.0	15.0	6.5	15.0	15.0	7.6	22.9	5.9	18.8	18.8
Actuated g/C Ratio	0.09	0.21	0.21	0.09	0.21	0.21	0.11	0.33	0.08	0.27	0.27
v/c Ratio	0.98	0.43	0.36	0.89	0.53	0.19	0.97	0.51	0.56	0.67	0.34
Control Delay	103.1	25.7	6.4	83.7	27.2	1.4	94.8	21.7	50.7	26.8	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	103.1	25.7	6.4	83.7	27.2	1.4	94.8	21.7	50.7	26.8	5.4
LOS	F	C	A	F	C	A	F	C	D	C	A
Approach Delay		40.0			36.8			39.3		24.5	
Approach LOS		D			D			D		C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 69.9	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay: 34.4	Intersection LOS: C
Intersection Capacity Utilization 63.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	309	161	141	387	82	178	507	53	80	609	184
Future Volume (veh/h)	155	309	161	141	387	82	178	507	53	80	609	184
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	165	329	107	150	412	63	189	539	52	85	648	177
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	186	640	285	186	640	285	215	1043	100	112	927	413
Arrive On Green	0.10	0.18	0.18	0.10	0.18	0.18	0.12	0.31	0.31	0.06	0.26	0.26
Sat Flow, veh/h	1810	3610	1610	1810	3610	1610	1810	3327	320	1810	3610	1610
Grp Volume(v), veh/h	165	329	107	150	412	63	189	292	299	85	648	177
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1610	1810	1805	1842	1810	1805	1610
Q Serve(g_s), s	5.6	5.1	3.7	5.1	6.6	2.1	6.4	8.3	8.3	2.9	10.1	5.7
Cycle Q Clear(g_c), s	5.6	5.1	3.7	5.1	6.6	2.1	6.4	8.3	8.3	2.9	10.1	5.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	186	640	285	186	640	285	215	566	578	112	927	413
V/C Ratio(X)	0.89	0.51	0.37	0.81	0.64	0.22	0.88	0.52	0.52	0.76	0.70	0.43
Avail Cap(c_a), veh/h	186	1563	697	186	1563	697	215	845	862	171	1603	715
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.6	23.2	22.6	27.4	23.8	22.0	27.0	17.5	17.5	28.8	21.0	19.4
Incr Delay (d2), s/veh	35.8	0.6	0.8	21.2	1.1	0.4	30.6	0.7	0.7	4.0	1.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	2.0	1.3	3.1	2.6	0.7	4.2	2.9	2.9	1.2	3.6	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.5	23.9	23.4	48.5	24.9	22.4	57.7	18.3	18.3	32.8	22.0	20.1
LnGrp LOS	E	C	C	D	C	C	E	B	B	C	C	C
Approach Vol, veh/h		601			625			780			910	
Approach Delay, s/veh		34.7			30.3			27.8			22.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	26.1	11.0	16.9	12.0	22.5	11.0	16.9
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	5.9	29.2	6.4	27.0	7.4	27.7	6.4	27.0
Max Q Clear Time (g_c+I1), s	4.9	10.3	7.1	7.1	8.4	12.1	7.6	8.6
Green Ext Time (p_c), s	0.0	2.8	0.0	2.1	0.0	3.9	0.0	2.4

Intersection Summary	
HCM 6th Ctrl Delay	28.1
HCM 6th LOS	C

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	5	394	501	1603	1401	582
Future Volume (vph)	5	394	501	1603	1401	582
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	41.0	41.0	22.0	69.0	47.0	47.0
Total Split (%)	37.3%	37.3%	20.0%	62.7%	42.7%	42.7%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	37.2	37.2	18.2	64.3	42.1	42.1
Actuated g/C Ratio	0.34	0.34	0.17	0.58	0.38	0.38
v/c Ratio	0.97	0.69	0.93	0.82	0.76	0.63
Control Delay	67.5	34.2	72.9	11.3	32.5	5.1
Queue Delay	0.0	0.0	0.0	0.2	0.1	0.0
Total Delay	67.5	34.2	72.9	11.5	32.6	5.1
LOS	E	C	E	B	C	A
Approach Delay	54.1			26.2	24.6	
Approach LOS	D			C	C	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 30.5	Intersection LOS: C
Intersection Capacity Utilization 96.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	480	5	394	501	1603	0	0	1401	582
Future Volume (veh/h)	0	0	0	480	5	394	501	1603	0	0	1401	582
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				516	5	389	539	1724	0	0	1506	439
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				561	5	504	574	2201	0	0	2125	657
Arrive On Green				0.31	0.31	0.31	0.33	1.00	0.00	0.00	0.41	0.41
Sat Flow, veh/h				1793	17	1610	3510	3705	0	0	5358	1604
Grp Volume(v), veh/h				521	0	389	539	1724	0	0	1506	439
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1755	1805	0	0	1729	1604
Q Serve(g_s), s				30.5	0.0	24.1	16.4	0.0	0.0	0.0	26.6	24.5
Cycle Q Clear(g_c), s				30.5	0.0	24.1	16.4	0.0	0.0	0.0	26.6	24.5
Prop In Lane				0.99		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				567	0	504	574	2201	0	0	2125	657
V/C Ratio(X)				0.92	0.00	0.77	0.94	0.78	0.00	0.00	0.71	0.67
Avail Cap(c_a), veh/h				609	0	542	574	2201	0	0	2125	657
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.58	0.58	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				36.4	0.0	34.2	36.5	0.0	0.0	0.0	27.0	26.4
Incr Delay (d2), s/veh				18.5	0.0	6.3	15.9	1.7	0.0	0.0	2.0	5.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				15.7	0.0	9.8	6.8	0.5	0.0	0.0	10.8	9.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				55.0	0.0	40.6	52.3	1.7	0.0	0.0	29.0	31.7
LnGrp LOS				D	A	D	D	A	A	A	C	C
Approach Vol, veh/h					910			2263			1945	
Approach Delay, s/veh					48.8			13.8			29.6	
Approach LOS					D			B			C	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	71.6		22.0	49.6		38.4						
Change Period (Y+Rc), s	4.5		4.0	4.5		4.0						
Max Green Setting (Gmax), s	64.5		18.0	42.5		37.0						
Max Q Clear Time (g_c+I1), s	2.0		18.4	28.6		32.5						
Green Ext Time (p_c), s	22.3		0.0	9.5		1.9						

Intersection Summary		
HCM 6th Ctrl Delay	26.0	
HCM 6th LOS	C	

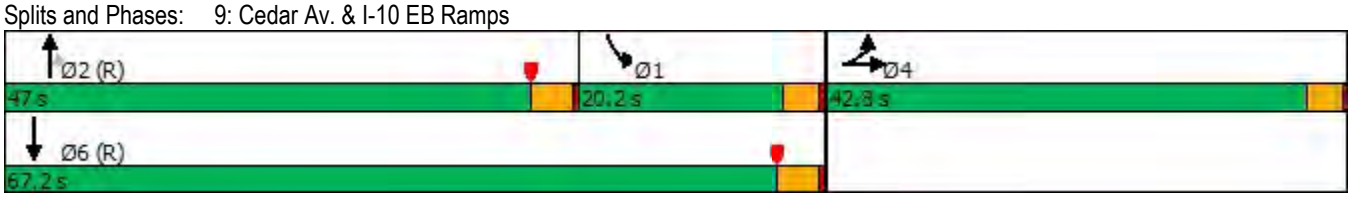
Notes

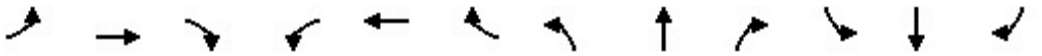
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	566	5	1559	685	420	1458
Future Volume (vph)	566	5	1559	685	420	1458
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	42.8	42.8	47.0	47.0	20.2	67.2
Total Split (%)	38.9%	38.9%	42.7%	42.7%	18.4%	61.1%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	35.5	35.5	47.6	47.6	15.9	67.0
Actuated g/C Ratio	0.32	0.32	0.43	0.43	0.14	0.61
v/c Ratio	0.87	0.83	0.71	0.65	0.85	0.68
Control Delay	51.8	45.7	26.2	9.7	47.6	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.6
Total Delay	51.8	45.7	26.2	9.7	47.6	9.9
LOS	D	D	C	A	D	A
Approach Delay		48.8	21.2			18.4
Approach LOS		D	C			B

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 25.1	Intersection LOS: C
Intersection Capacity Utilization 96.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	566	5	331	0	0	0	0	1559	685	420	1458	0
Future Volume (veh/h)	566	5	331	0	0	0	0	1559	685	420	1458	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	455	177	328				0	1591	494	429	1488	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	588	194	359				0	1852	574	749	2190	0
Arrive On Green	0.33	0.33	0.33				0.00	0.36	0.36	0.43	1.00	0.00
Sat Flow, veh/h	1810	596	1105				0	5358	1606	3510	3705	0
Grp Volume(v), veh/h	455	0	505				0	1591	494	429	1488	0
Grp Sat Flow(s),veh/h/ln	1810	0	1701				0	1729	1606	1755	1805	0
Q Serve(g_s), s	24.9	0.0	31.3				0.0	31.3	31.4	10.2	0.0	0.0
Cycle Q Clear(g_c), s	24.9	0.0	31.3				0.0	31.3	31.4	10.2	0.0	0.0
Prop In Lane	1.00		0.65				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	588	0	553				0	1852	574	749	2190	0
V/C Ratio(X)	0.77	0.00	0.91				0.00	0.86	0.86	0.57	0.68	0.00
Avail Cap(c_a), veh/h	646	0	608				0	2028	628	749	2190	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.29	0.29	0.57	0.57	0.00
Uniform Delay (d), s/veh	33.5	0.0	35.6				0.0	32.8	32.8	27.7	0.0	0.0
Incr Delay (d2), s/veh	5.3	0.0	17.4				0.0	1.7	5.2	0.4	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.2	0.0	14.9				0.0	12.8	12.5	3.6	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.8	0.0	53.1				0.0	34.5	38.0	28.1	1.0	0.0
LnGrp LOS	D	A	D				A	C	D	C	A	A
Approach Vol, veh/h		960						2085			1917	
Approach Delay, s/veh		46.3						35.3			7.1	
Approach LOS		D						D			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	27.5	43.3		39.3		70.7
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	16.7	* 43		39.3		63.2
Max Q Clear Time (g_c+I1), s	12.2	33.4		33.3		2.0
Green Ext Time (p_c), s	0.4	5.9		2.4		9.4

Intersection Summary		
HCM 6th Ctrl Delay		26.5
HCM 6th LOS		C

Notes

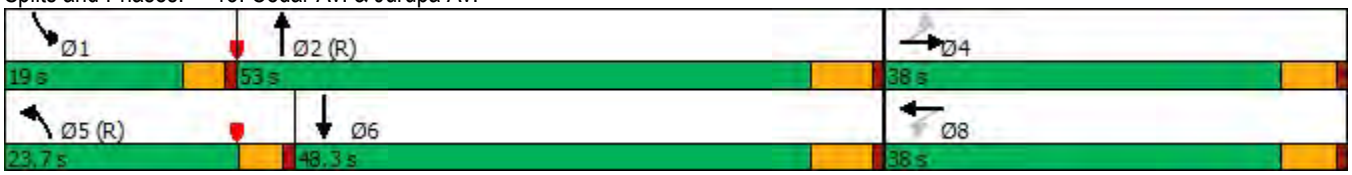
User approved volume balancing among the lanes for turning movement.

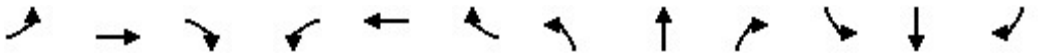
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	251	209	78	132	126	1147	163	1102
Future Volume (vph)	251	209	78	132	126	1147	163	1102
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	38.0	38.0	38.0	38.0	23.7	53.0	19.0	48.3
Total Split (%)	34.5%	34.5%	34.5%	34.5%	21.5%	48.2%	17.3%	43.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)	33.8	33.8	33.8	33.8	13.6	46.5	13.7	46.6
Actuated g/C Ratio	0.31	0.31	0.31	0.31	0.12	0.42	0.12	0.42
v/c Ratio	1.07	0.68	0.50	0.50	0.61	0.87	0.79	0.88
Control Delay	116.5	38.2	44.6	30.1	68.0	20.1	44.4	43.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	116.5	38.2	44.6	30.1	68.0	20.1	44.4	43.6
LOS	F	D	D	C	E	C	D	D
Approach Delay		70.5		33.4		24.6		43.7
Approach LOS		E		C		C		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 40.3	Intersection LOS: D
Intersection Capacity Utilization 90.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	209	148	78	132	129	126	1147	62	163	1102	127
Future Volume (veh/h)	251	209	148	78	132	129	126	1147	62	163	1102	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	273	227	136	85	143	94	137	1247	54	177	1198	133
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	281	327	196	183	314	206	316	1563	68	209	1259	139
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.35	0.89	0.89	0.04	0.13	0.13
Sat Flow, veh/h	1159	1107	663	1035	1061	698	1810	3525	153	1810	3277	363
Grp Volume(v), veh/h	273	0	363	85	0	237	137	638	663	177	659	672
Grp Sat Flow(s),veh/h/ln	1159	0	1770	1035	0	1759	1810	1805	1873	1810	1805	1835
Q Serve(g_s), s	20.4	0.0	20.0	8.7	0.0	12.1	6.4	15.0	15.1	10.7	39.8	40.1
Cycle Q Clear(g_c), s	32.5	0.0	20.0	28.7	0.0	12.1	6.4	15.0	15.1	10.7	39.8	40.1
Prop In Lane	1.00		0.37	1.00		0.40	1.00		0.08	1.00		0.20
Lane Grp Cap(c), veh/h	281	0	523	183	0	520	316	801	830	209	693	705
V/C Ratio(X)	0.97	0.00	0.69	0.46	0.00	0.46	0.43	0.80	0.80	0.85	0.95	0.95
Avail Cap(c_a), veh/h	281	0	523	183	0	520	316	801	830	239	694	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.64	0.64	0.64	0.50	0.50	0.50
Uniform Delay (d), s/veh	46.9	0.0	34.3	47.1	0.0	31.6	31.6	4.3	4.3	51.9	47.0	47.1
Incr Delay (d2), s/veh	46.1	0.0	4.4	2.6	0.0	0.9	0.6	5.3	5.2	12.0	14.0	14.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.0	0.0	8.9	2.3	0.0	5.1	2.5	3.1	3.1	5.8	21.8	22.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	93.0	0.0	38.7	49.7	0.0	32.4	32.2	9.6	9.5	63.9	61.0	61.6
LnGrp LOS	F	A	D	D	A	C	C	A	A	E	E	E
Approach Vol, veh/h		636			322			1438			1508	
Approach Delay, s/veh		62.0			37.0			11.7			61.6	
Approach LOS		E			D			B			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.2	54.8		38.0	23.7	48.3		38.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	14.5	47.0		32.5	19.2	42.3		32.5				
Max Q Clear Time (g_c+I1), s	12.7	17.1		34.5	8.4	42.1		30.7				
Green Ext Time (p_c), s	0.1	14.0		0.0	0.2	0.2		0.4				

Intersection Summary			
HCM 6th Ctrl Delay		41.3	
HCM 6th LOS		D	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	2	22	42	11	20	1130	159	1246
Future Volume (vph)	2	22	42	11	20	1130	159	1246
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.6	31.6	31.6	31.6	9.6	28.2	9.6	28.2
Total Split (s)	31.6	31.6	31.6	31.6	9.6	37.4	11.0	38.8
Total Split (%)	39.5%	39.5%	39.5%	39.5%	12.0%	46.8%	13.8%	48.5%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	6.2	4.6	6.2
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		13.5		13.5	5.6	26.7	7.1	41.5
Actuated g/C Ratio		0.24		0.24	0.10	0.48	0.13	0.75
v/c Ratio		0.07		0.18	0.11	0.73	0.70	0.47
Control Delay		17.4		18.7	32.9	17.1	50.4	9.7
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		17.4		18.7	32.9	17.1	50.4	9.7
LOS		B		B	C	B	D	A
Approach Delay		17.4		18.7		17.3		14.3
Approach LOS		B		B		B		B

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 55.4	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 15.8	Intersection LOS: B
Intersection Capacity Utilization 66.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 17: Rubidoux Bl. & 24th St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	22	8	42	11	13	20	1130	100	159	1246	4
Future Volume (veh/h)	2	22	8	42	11	13	20	1130	100	159	1246	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2	22	8	43	11	13	20	1153	102	162	1271	4
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	82	158	55	215	56	37	44	1533	135	206	2017	6
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.02	0.46	0.46	0.11	0.55	0.55
Sat Flow, veh/h	46	1306	451	795	464	303	1810	3355	296	1810	3691	12
Grp Volume(v), veh/h	32	0	0	67	0	0	20	620	635	162	621	654
Grp Sat Flow(s),veh/h/ln	1803	0	0	1563	0	0	1810	1805	1846	1810	1805	1898
Q Serve(g_s), s	0.0	0.0	0.0	0.7	0.0	0.0	0.5	14.2	14.2	4.4	11.9	11.9
Cycle Q Clear(g_c), s	0.8	0.0	0.0	1.8	0.0	0.0	0.5	14.2	14.2	4.4	11.9	11.9
Prop In Lane	0.06		0.25	0.64		0.19	1.00		0.16	1.00		0.01
Lane Grp Cap(c), veh/h	295	0	0	308	0	0	44	825	844	206	986	1037
V/C Ratio(X)	0.11	0.00	0.00	0.22	0.00	0.00	0.46	0.75	0.75	0.79	0.63	0.63
Avail Cap(c_a), veh/h	1041	0	0	938	0	0	181	1127	1153	232	1178	1238
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	0.0	0.0	20.1	0.0	0.0	24.1	11.2	11.2	21.6	7.8	7.8
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.4	0.0	0.0	2.7	1.9	1.9	12.7	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.7	0.0	0.0	0.2	4.0	4.1	2.2	2.6	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.8	0.0	0.0	20.4	0.0	0.0	26.8	13.1	13.1	34.3	8.6	8.6
LnGrp LOS	B	A	A	C	A	A	C	B	B	C	A	A
Approach Vol, veh/h		32			67			1275			1437	
Approach Delay, s/veh		19.8			20.4			13.3			11.5	
Approach LOS		B			C			B			B	

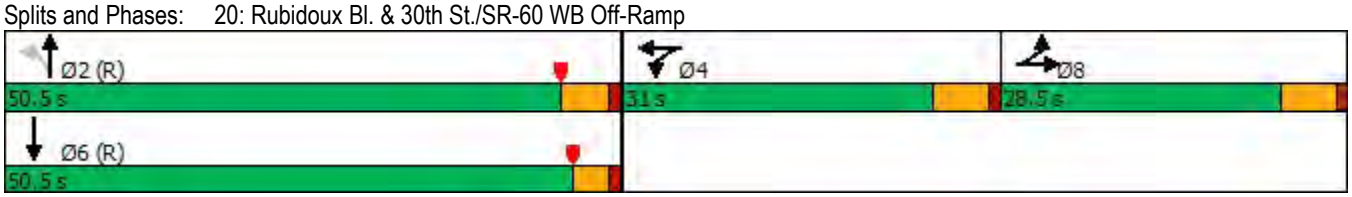
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.3	29.0		10.7	5.8	33.5		10.7				
Change Period (Y+Rc), s	4.6	6.2		4.6	4.6	6.2		4.6				
Max Green Setting (Gmax), s	6.4	31.2		27.0	5.0	32.6		27.0				
Max Q Clear Time (g_c+I1), s	6.4	16.2		2.8	2.5	13.9		3.8				
Green Ext Time (p_c), s	0.0	6.6		0.1	0.0	7.5		0.3				

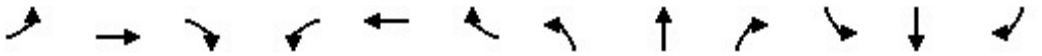
Intersection Summary												
HCM 6th Ctrl Delay			12.7									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Configurations							
Traffic Volume (vph)	44	0	535	114	102	1208	1298
Future Volume (vph)	44	0	535	114	102	1208	1298
Turn Type	Split	NA	Split	NA	Perm	NA	NA
Protected Phases	8	8	4	4		2	6
Permitted Phases					2		
Detector Phase	8	8	4	4	2	2	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.5	28.5	31.0	31.0	50.5	50.5	50.5
Total Split (%)	25.9%	25.9%	28.2%	28.2%	45.9%	45.9%	45.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	16.7	16.7	25.5	25.5	51.8	51.8	52.8
Actuated g/C Ratio	0.15	0.15	0.23	0.23	0.47	0.47	0.48
v/c Ratio	0.18	0.76	1.04	1.01	1.63	0.77	0.85
Control Delay	39.7	45.6	98.0	88.4	360.6	22.2	32.3
Queue Delay	0.0	0.5	32.4	40.4	0.0	10.2	0.0
Total Delay	39.7	46.2	130.4	128.8	360.6	32.5	32.3
LOS	D	D	F	F	F	C	C
Approach Delay		45.1		129.6		58.0	32.3
Approach LOS		D		F		E	C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.63	
Intersection Signal Delay: 62.4	Intersection LOS: E
Intersection Capacity Utilization 101.2%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	0	215	535	114	107	102	1208	0	0	1298	55
Future Volume (veh/h)	44	0	215	535	114	107	102	1208	0	0	1298	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	48	0	63	396	384	87	111	1313	0	0	1411	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	106	0	94	419	348	79	166	2036	0	0	1995	80
Arrive On Green	0.06	0.00	0.06	0.23	0.23	0.23	0.19	0.19	0.00	0.00	0.56	0.56
Sat Flow, veh/h	1810	0	1610	1810	1499	340	367	3705	0	0	3631	143
Grp Volume(v), veh/h	48	0	63	396	0	471	111	1313	0	0	719	749
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1810	0	1839	367	1805	0	0	1805	1874
Q Serve(g_s), s	2.8	0.0	4.2	23.7	0.0	25.5	30.1	37.0	0.0	0.0	31.7	31.9
Cycle Q Clear(g_c), s	2.8	0.0	4.2	23.7	0.0	25.5	62.0	37.0	0.0	0.0	31.7	31.9
Prop In Lane	1.00		1.00	1.00		0.18	1.00		0.00	0.00		0.08
Lane Grp Cap(c), veh/h	106	0	94	419	0	426	166	2036	0	0	1018	1057
V/C Ratio(X)	0.45	0.00	0.67	0.94	0.00	1.10	0.67	0.64	0.00	0.00	0.71	0.71
Avail Cap(c_a), veh/h	378	0	337	419	0	426	166	2036	0	0	1018	1057
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.93	0.93	0.00	0.00	0.59	0.59
Uniform Delay (d), s/veh	50.1	0.0	50.7	41.5	0.0	42.3	62.2	34.6	0.0	0.0	17.4	17.4
Incr Delay (d2), s/veh	3.6	0.0	9.4	30.2	0.0	75.1	18.2	1.5	0.0	0.0	2.5	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	2.0	13.6	0.0	19.9	4.1	18.2	0.0	0.0	12.6	13.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.7	0.0	60.1	71.7	0.0	117.4	80.4	36.1	0.0	0.0	19.8	19.8
LnGrp LOS	D	A	E	E	A	F	F	D	A	A	B	B
Approach Vol, veh/h		111			867			1424			1468	
Approach Delay, s/veh		57.3			96.5			39.5			19.8	
Approach LOS		E			F			D			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		67.0		31.0		67.0		12.0				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		45.5		25.5		* 47		23.0				
Max Q Clear Time (g_c+I1), s		64.0		27.5		33.9		6.2				
Green Ext Time (p_c), s		0.0		0.0		8.4		0.5				

Intersection Summary		
HCM 6th Ctrl Delay		45.3
HCM 6th LOS		D

Notes

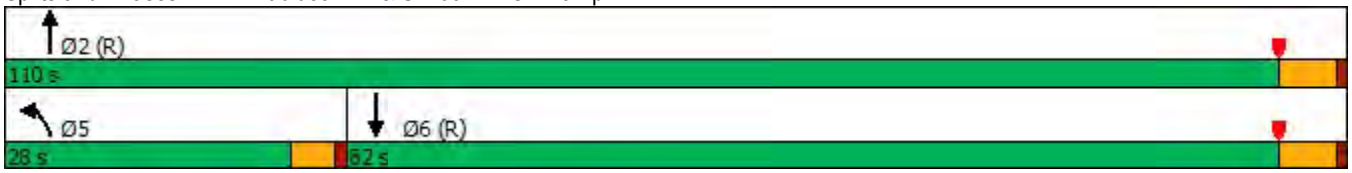
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	NBL	NBT	SBT
Lane Configurations			
Traffic Volume (vph)	238	1317	1405
Future Volume (vph)	238	1317	1405
Turn Type	Prot	NA	NA
Protected Phases	5	2	6
Permitted Phases			
Detector Phase	5	2	6
Switch Phase			
Minimum Initial (s)	5.0	10.0	10.0
Minimum Split (s)	9.6	27.8	27.8
Total Split (s)	28.0	110.0	82.0
Total Split (%)	25.5%	100.0%	74.5%
Yellow Time (s)	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8
Lead/Lag	Lead		Lag
Lead-Lag Optimize?	Yes		Yes
Recall Mode	None	C-Min	C-Min
Act Effct Green (s)	19.2	110.0	80.4
Actuated g/C Ratio	0.17	1.00	0.73
v/c Ratio	0.82	0.39	0.91
Control Delay	71.7	0.2	12.8
Queue Delay	0.0	0.1	45.7
Total Delay	71.7	0.4	58.5
LOS	E	A	E
Approach Delay		11.3	58.5
Approach LOS		B	E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 38.7	Intersection LOS: D
Intersection Capacity Utilization 84.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 21: Rubidoux Bl. & SR-60 WB On-Ramp



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	238	1317	1405	737
Future Volume (veh/h)	0	0	238	1317	1405	737
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach				No	No	
Adj Sat Flow, veh/h/ln			1900	1900	1900	1900
Adj Flow Rate, veh/h			256	1416	1511	792
Peak Hour Factor			0.93	0.93	0.93	0.93
Percent Heavy Veh, %			0	0	0	0
Cap, veh/h			282	3420	1772	852
Arrive On Green			0.31	1.00	1.00	1.00
Sat Flow, veh/h			1810	3705	2458	1136
Grp Volume(v), veh/h			256	1416	1122	1181
Grp Sat Flow(s),veh/h/ln			1810	1805	1805	1695
Q Serve(g_s), s			14.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s			14.9	0.0	0.0	0.0
Prop In Lane			1.00			0.67
Lane Grp Cap(c), veh/h			282	3420	1353	1270
V/C Ratio(X)			0.91	0.41	0.83	0.93
Avail Cap(c_a), veh/h			385	3420	1353	1270
HCM Platoon Ratio			2.00	2.00	2.00	2.00
Upstream Filter(I)			0.69	0.69	0.32	0.32
Uniform Delay (d), s/veh			37.1	0.0	0.0	0.0
Incr Delay (d2), s/veh			12.8	0.3	2.0	5.2
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			6.3	0.1	0.8	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			49.9	0.3	2.0	5.2
LnGrp LOS			D	A	A	A
Approach Vol, veh/h				1672	2303	
Approach Delay, s/veh				7.9	3.6	
Approach LOS				A	A	

Timer - Assigned Phs	2			5	6
Phs Duration (G+Y+Rc), s	110.0			21.7	88.3
Change Period (Y+Rc), s	5.8			4.6	5.8
Max Green Setting (Gmax), s	104.2			23.4	76.2
Max Q Clear Time (g_c+I1), s	2.0			16.9	2.0
Green Ext Time (p_c), s	15.8			0.2	46.3

Intersection Summary	
HCM 6th Ctrl Delay	5.4
HCM 6th LOS	A

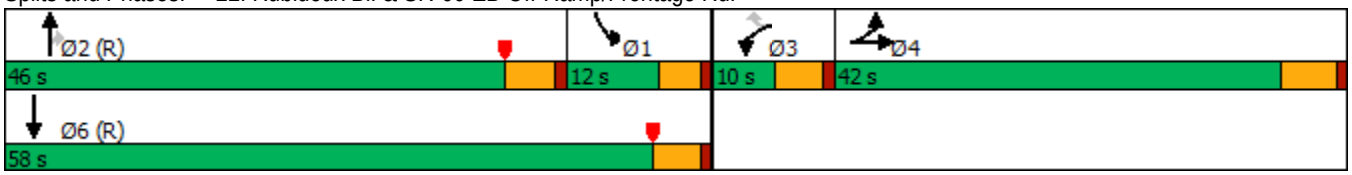
22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.

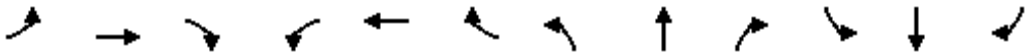
Lane Group	EBL	EBT	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	713	48	14	2	906	341	140	1171
Future Volume (vph)	713	48	14	2	906	341	140	1171
Turn Type	Split	NA	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4	4	3		2		1	6
Permitted Phases				3		2		
Detector Phase	4	4	3	3	2	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	10.0	10.0	45.0	45.0	9.5	30.0
Total Split (s)	42.0	42.0	10.0	10.0	46.0	46.0	12.0	58.0
Total Split (%)	38.2%	38.2%	9.1%	9.1%	41.8%	41.8%	10.9%	52.7%
Yellow Time (s)	4.5	4.5	4.0	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.0	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	42.7	42.7	5.0	5.0	35.4	35.4	12.9	52.8
Actuated g/C Ratio	0.39	0.39	0.05	0.05	0.32	0.32	0.12	0.48
v/c Ratio	0.96	0.86	0.18	0.01	0.81	0.48	0.69	0.70
Control Delay	61.0	41.0	55.8	0.0	40.2	5.7	51.3	16.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0
Total Delay	61.0	41.0	55.8	0.0	40.2	5.7	51.3	37.7
LOS	E	D	E	A	D	A	D	D
Approach Delay		51.5			30.8			39.2
Approach LOS		D			C			D

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.96
Intersection Signal Delay: 40.3 — Intersection LOS: D
Intersection Capacity Utilization 85.6% — ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	713	48	413	14	0	2	0	906	341	140	1171	0
Future Volume (veh/h)	713	48	413	14	0	2	0	906	341	140	1171	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	546	325	300	15	0	0	0	944	307	146	1220	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	600	302	279	0	0	0	0	1087	485	409	2068	0
Arrive On Green	0.33	0.33	0.33	0.00	0.00	0.00	0.00	0.30	0.30	0.07	0.19	0.00
Sat Flow, veh/h	1810	909	839		0		0	3705	1610	1810	3705	0
Grp Volume(v), veh/h	546	0	625		0.0		0	944	307	146	1220	0
Grp Sat Flow(s),veh/h/ln	1810	0	1749				0	1805	1610	1810	1805	0
Q Serve(g_s), s	31.8	0.0	36.5				0.0	27.2	16.9	8.4	33.9	0.0
Cycle Q Clear(g_c), s	31.8	0.0	36.5				0.0	27.2	16.9	8.4	33.9	0.0
Prop In Lane	1.00		0.48				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	600	0	580				0	1087	485	409	2068	0
V/C Ratio(X)	0.91	0.00	1.08				0.00	0.87	0.63	0.36	0.59	0.00
Avail Cap(c_a), veh/h	600	0	580				0	1346	600	409	2068	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.57	0.57	0.30	0.30	0.00
Uniform Delay (d), s/veh	35.2	0.0	36.8				0.0	36.4	29.0	43.3	32.8	0.0
Incr Delay (d2), s/veh	17.5	0.0	59.8				0.0	5.7	3.6	0.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.1	0.0	24.3				0.0	12.4	6.7	3.9	16.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.7	0.0	96.5				0.0	42.1	32.6	43.3	33.2	0.0
LnGrp LOS	D	A	F				A	D	C	D	C	A
Approach Vol, veh/h		1171						1251			1366	
Approach Delay, s/veh		76.1						39.7			34.3	
Approach LOS		E						D			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	29.9	38.1		42.0		68.0
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0
Max Green Setting (Gmax), s	7.5	* 41		36.5		53.0
Max Q Clear Time (g_c+I1), s	10.4	29.2		38.5		35.9
Green Ext Time (p_c), s	0.0	3.9		0.0		5.4

Intersection Summary		
HCM 6th Ctrl Delay		49.0
HCM 6th LOS		D

Notes

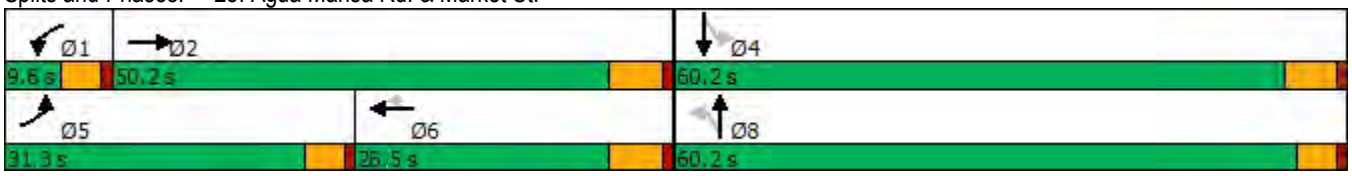
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	WBR	NBT	SBL	SBT	Ø1
Lane Configurations								
Traffic Volume (vph)	585	564	556	210	3	261	2	
Future Volume (vph)	585	564	556	210	3	261	2	
Turn Type	Prot	NA	NA	Perm	NA	Perm	NA	
Protected Phases	5	2	6		8		4	1
Permitted Phases				6		4		
Detector Phase	5	2	6	6	8	4	4	
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	31.8	26.8	26.8	14.6	43.8	43.8	9.6
Total Split (s)	31.3	50.2	28.5	28.5	60.2	60.2	60.2	9.6
Total Split (%)	26.1%	41.8%	23.8%	23.8%	50.2%	50.2%	50.2%	8%
Yellow Time (s)	3.6	4.8	4.8	4.8	3.6	4.8	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.6	5.8	5.8	5.8	4.6		5.8	
Lead/Lag	Lead	Lag	Lag	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				Yes
Recall Mode	None	Max	Max	Max	None	None	None	None
Act Effct Green (s)	23.4	51.1	23.0	23.0	51.6		50.4	
Actuated g/C Ratio	0.21	0.45	0.20	0.20	0.46		0.45	
v/c Ratio	0.86	0.37	0.81	0.44	0.00		0.95	
Control Delay	56.5	21.8	54.0	8.4	17.3		51.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	56.5	21.8	54.0	8.4	17.3		51.6	
LOS	E	C	D	A	B		D	
Approach Delay		39.4	41.5		17.3		51.6	
Approach LOS		D	D		B		D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 113.2	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 43.1	Intersection LOS: D
Intersection Capacity Utilization 90.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	585	564	4	0	556	210	0	3	0	261	2	381
Future Volume (veh/h)	585	564	4	0	556	210	0	3	0	261	2	381
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	622	600	3	0	591	78	0	3	0	278	2	167
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	722	1936	10	2	960	428	0	643	0	383	2	189
Arrive On Green	0.21	0.53	0.53	0.00	0.27	0.27	0.00	0.34	0.00	0.34	0.34	0.34
Sat Flow, veh/h	3510	3683	18	1810	3610	1610	0	1900	0	929	7	558
Grp Volume(v), veh/h	622	294	309	0	591	78	0	3	0	447	0	0
Grp Sat Flow(s),veh/h/ln	1755	1805	1897	1810	1805	1610	0	1900	0	1494	0	0
Q Serve(g_s), s	14.6	7.9	7.9	0.0	12.3	3.2	0.0	0.1	0.0	24.0	0.0	0.0
Cycle Q Clear(g_c), s	14.6	7.9	7.9	0.0	12.3	3.2	0.0	0.1	0.0	24.1	0.0	0.0
Prop In Lane	1.00		0.01	1.00		1.00	0.00		0.00	0.62		0.37
Lane Grp Cap(c), veh/h	722	949	997	2	960	428	0	643	0	574	0	0
V/C Ratio(X)	0.86	0.31	0.31	0.00	0.62	0.18	0.00	0.00	0.00	0.78	0.00	0.00
Avail Cap(c_a), veh/h	1099	949	997	106	960	428	0	1238	0	1022	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	32.7	11.5	11.5	0.0	27.5	24.1	0.0	18.7	0.0	26.7	0.0	0.0
Incr Delay (d2), s/veh	3.0	0.8	0.8	0.0	2.9	0.9	0.0	0.0	0.0	2.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	2.9	3.0	0.0	5.3	1.2	0.0	0.0	0.0	8.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.7	12.3	12.3	0.0	30.4	25.1	0.0	18.7	0.0	29.0	0.0	0.0
LnGrp LOS	D	B	B	A	C	C	A	B	A	C	A	A
Approach Vol, veh/h		1225			669			3			447	
Approach Delay, s/veh		24.2			29.8			18.7			29.0	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	50.6		34.7	22.1	28.5		34.7				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	44.4		54.4	26.7	22.7		* 56				
Max Q Clear Time (g_c+I1), s	0.0	9.9		26.1	16.6	14.3		2.1				
Green Ext Time (p_c), s	0.0	3.5		2.7	1.0	2.5		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		26.7
HCM 6th LOS		C

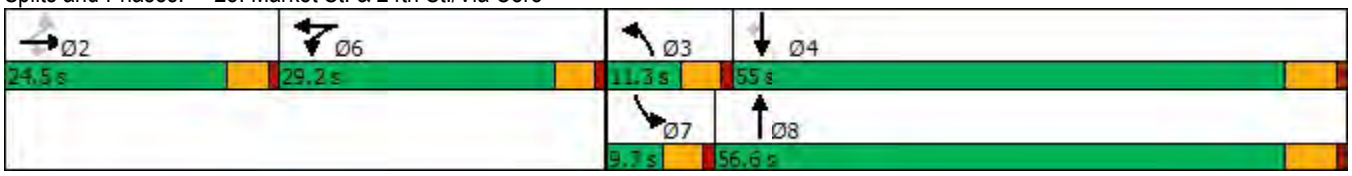
Notes

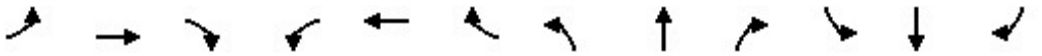
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	3	31	202	235	39	48	921	6	806	3
Future Volume (vph)	3	31	202	235	39	48	921	6	806	3
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	24.5	24.5	24.5	29.2	29.2	11.3	56.6	9.7	55.0	55.0
Total Split (%)	20.4%	20.4%	20.4%	24.3%	24.3%	9.4%	47.2%	8.1%	45.8%	45.8%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		12.7	12.7	20.1	20.1	6.3	57.1	5.1	50.1	50.1
Actuated g/C Ratio		0.12	0.12	0.19	0.19	0.06	0.53	0.05	0.47	0.47
v/c Ratio		0.37	0.70	0.80	0.18	0.52	0.60	0.08	0.55	0.00
Control Delay		55.8	27.0	60.0	31.5	69.6	20.5	55.7	23.6	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		55.8	27.0	60.0	31.5	69.6	20.5	55.7	23.6	0.0
LOS		E	C	E	C	E	C	E	C	A
Approach Delay		31.1			54.6		22.7		23.8	
Approach LOS		C			D		C		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 106.8	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 27.8	Intersection LOS: C
Intersection Capacity Utilization 64.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	31	202	235	39	16	48	921	79	6	806	3
Future Volume (veh/h)	3	31	202	235	39	16	48	921	79	6	806	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	3	36	147	270	45	9	55	1059	90	7	926	3
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	17	202	185	311	264	53	71	1721	146	16	1738	775
Arrive On Green	0.12	0.12	0.12	0.17	0.17	0.17	0.04	0.51	0.51	0.01	0.48	0.48
Sat Flow, veh/h	146	1747	1598	1810	1537	307	1810	3361	285	1810	3610	1610
Grp Volume(v), veh/h	39	0	147	270	0	54	55	568	581	7	926	3
Grp Sat Flow(s),veh/h/ln	1893	0	1598	1810	0	1845	1810	1805	1841	1810	1805	1610
Q Serve(g_s), s	1.9	0.0	9.2	14.8	0.0	2.6	3.1	22.9	23.0	0.4	18.3	0.1
Cycle Q Clear(g_c), s	1.9	0.0	9.2	14.8	0.0	2.6	3.1	22.9	23.0	0.4	18.3	0.1
Prop In Lane	0.08		1.00	1.00		0.17	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	219	0	185	311	0	317	71	924	943	16	1738	775
V/C Ratio(X)	0.18	0.00	0.79	0.87	0.00	0.17	0.77	0.62	0.62	0.44	0.53	0.00
Avail Cap(c_a), veh/h	369	0	311	436	0	444	119	924	943	90	1738	775
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.8	0.0	44.0	41.2	0.0	36.1	48.6	17.8	17.8	50.4	18.5	13.8
Incr Delay (d2), s/veh	0.4	0.0	7.5	12.8	0.0	0.3	6.5	3.1	3.0	6.9	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	3.9	7.7	0.0	1.2	1.5	9.3	9.5	0.2	7.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.2	0.0	51.5	54.0	0.0	36.4	55.1	20.8	20.8	57.3	19.7	13.8
LnGrp LOS	D	A	D	D	A	D	E	C	C	E	B	B
Approach Vol, veh/h		186			324			1204			936	
Approach Delay, s/veh		49.4			51.0			22.4			19.9	
Approach LOS		D			D			C			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.4	8.6	55.0		22.1	5.5	58.1				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		19.9	6.7	49.2		24.6	5.1	50.8				
Max Q Clear Time (g_c+I1), s		11.2	5.1	20.3		16.8	2.4	25.0				
Green Ext Time (p_c), s		0.4	0.0	6.7		0.7	0.0	7.7				

Intersection Summary	
HCM 6th Ctrl Delay	26.9
HCM 6th LOS	C

Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	326	53	812	455
Future Volume (vph)	326	53	812	455
Turn Type	Prot	Prot	NA	NA
Protected Phases	4	5	2	6
Permitted Phases				
Detector Phase	4	5	2	6
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	32.8	9.6	15.8	22.8
Total Split (s)	35.0	10.0	55.0	45.0
Total Split (%)	38.9%	11.1%	61.1%	50.0%
Yellow Time (s)	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.8
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	Min	Min
Act Effct Green (s)	27.0	5.4	47.0	39.4
Actuated g/C Ratio	0.32	0.06	0.55	0.46
v/c Ratio	0.91	0.59	0.51	0.95
Control Delay	49.7	63.5	13.5	45.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	49.7	63.5	13.5	45.2
LOS	D	E	B	D
Approach Delay	49.7		16.6	45.2
Approach LOS	D		B	D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 85.7	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 33.3	Intersection LOS: C
Intersection Capacity Utilization 76.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 33: Agua Mansa Rd. & El Rivino Rd.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	326	87	53	812	455	187
Future Volume (veh/h)	326	87	53	812	455	187
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	408	0	66	1015	569	234
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	463		90	2129	612	252
Arrive On Green	0.26	0.00	0.05	0.59	0.48	0.48
Sat Flow, veh/h	1805	0	1810	3705	1278	526
Grp Volume(v), veh/h	409	0	66	1015	0	803
Grp Sat Flow(s),veh/h/ln	1810	0	1810	1805	0	1804
Q Serve(g_s), s	16.3	0.0	2.7	12.1	0.0	31.5
Cycle Q Clear(g_c), s	16.3	0.0	2.7	12.1	0.0	31.5
Prop In Lane	1.00	0.00	1.00			0.29
Lane Grp Cap(c), veh/h	464		90	2129	0	864
V/C Ratio(X)	0.88		0.73	0.48	0.00	0.93
Avail Cap(c_a), veh/h	702		130	2360	0	939
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.9	0.0	35.3	8.8	0.0	18.4
Incr Delay (d2), s/veh	8.6	0.0	5.1	0.2	0.0	14.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	1.2	3.6	0.0	14.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.5	0.0	40.3	9.0	0.0	33.0
LnGrp LOS	D		D	A	A	C
Approach Vol, veh/h	409	A		1081	803	
Approach Delay, s/veh	35.5			10.9	33.0	
Approach LOS	D			B	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		50.2		25.1	8.3	41.8
Change Period (Y+Rc), s		5.8		5.8	4.6	5.8
Max Green Setting (Gmax), s		49.2		29.2	5.4	39.2
Max Q Clear Time (g_c+I1), s		14.1		18.3	4.7	33.5
Green Ext Time (p_c), s		7.8		0.9	0.0	2.6

Intersection Summary		
HCM 6th Ctrl Delay		23.0
HCM 6th LOS		C

Notes

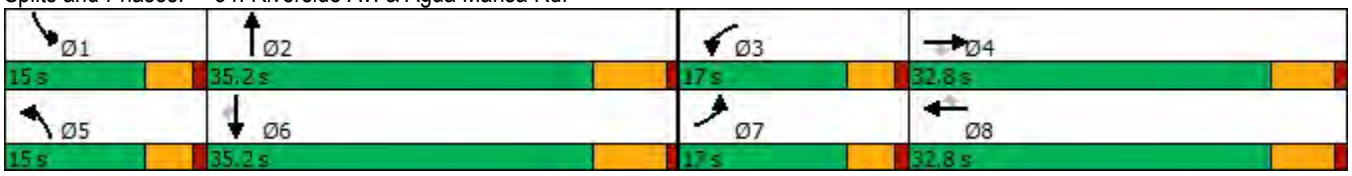
User approved volume balancing among the lanes for turning movement.

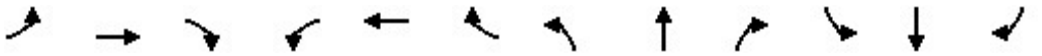
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	219	452	248	94	286	80	201	525	118	573	129
Future Volume (vph)	219	452	248	94	286	80	201	525	118	573	129
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	17.0	32.8	32.8	17.0	32.8	32.8	15.0	35.2	15.0	35.2	35.2
Total Split (%)	17.0%	32.8%	32.8%	17.0%	32.8%	32.8%	15.0%	35.2%	15.0%	35.2%	35.2%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	12.7	21.5	21.5	8.7	15.2	15.2	10.6	21.6	9.1	20.1	20.1
Actuated g/C Ratio	0.16	0.27	0.27	0.11	0.19	0.19	0.13	0.27	0.11	0.25	0.25
v/c Ratio	0.80	0.49	0.42	0.50	0.44	0.20	0.88	0.71	0.61	0.66	0.27
Control Delay	58.6	29.0	6.2	45.7	31.1	2.0	73.5	30.6	50.4	31.4	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.6	29.0	6.2	45.7	31.1	2.0	73.5	30.6	50.4	31.4	6.5
LOS	E	C	A	D	C	A	E	C	D	C	A
Approach Delay		29.9			29.1			40.7		30.2	
Approach LOS		C			C			D		C	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 80.5	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 32.9	Intersection LOS: C
Intersection Capacity Utilization 66.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	452	248	94	286	80	201	525	127	118	573	129
Future Volume (veh/h)	219	452	248	94	286	80	201	525	127	118	573	129
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	228	471	160	98	298	68	209	547	126	123	597	126
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	273	839	373	127	547	244	253	842	193	158	854	379
Arrive On Green	0.15	0.23	0.23	0.07	0.15	0.15	0.14	0.29	0.29	0.09	0.24	0.24
Sat Flow, veh/h	1810	3610	1604	1810	3610	1607	1810	2915	669	1810	3610	1603
Grp Volume(v), veh/h	228	471	160	98	298	68	209	338	335	123	597	126
Grp Sat Flow(s),veh/h/ln	1810	1805	1604	1810	1805	1607	1810	1805	1780	1810	1805	1603
Q Serve(g_s), s	8.2	7.7	5.7	3.6	5.1	2.5	7.5	11.0	11.0	4.5	10.1	4.4
Cycle Q Clear(g_c), s	8.2	7.7	5.7	3.6	5.1	2.5	7.5	11.0	11.0	4.5	10.1	4.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	273	839	373	127	547	244	253	522	514	158	854	379
V/C Ratio(X)	0.83	0.56	0.43	0.77	0.54	0.28	0.83	0.65	0.65	0.78	0.70	0.33
Avail Cap(c_a), veh/h	335	1456	647	335	1456	648	281	774	763	281	1547	687
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.6	22.7	21.9	30.6	26.3	25.2	28.0	20.8	20.9	29.9	23.4	21.2
Incr Delay (d2), s/veh	11.8	0.6	0.8	3.7	0.8	0.6	15.1	1.4	1.4	3.1	1.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	3.0	2.0	1.6	2.0	0.9	3.9	4.0	4.0	1.8	3.8	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.4	23.3	22.7	34.3	27.1	25.8	43.1	22.2	22.3	33.1	24.4	21.7
LnGrp LOS	D	C	C	C	C	C	D	C	C	C	C	C
Approach Vol, veh/h		859			464			882			846	
Approach Delay, s/veh		27.4			28.4			27.2			25.3	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	25.8	9.3	21.4	14.0	22.3	14.7	15.9
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	10.4	28.7	12.4	27.0	10.4	28.7	12.4	27.0
Max Q Clear Time (g_c+I1), s	6.5	13.0	5.6	9.7	9.5	12.1	10.2	7.1
Green Ext Time (p_c), s	0.0	3.1	0.1	3.1	0.0	3.5	0.1	1.8

Intersection Summary	
HCM 6th Ctrl Delay	26.9
HCM 6th LOS	C

APPENDIX 7.5: OPENING YEAR BACKGROUND CONDITIONS WITHOUT PROJECT OFF-RAMP QUEUING ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Lane Group	EBL	EBT	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	493	464	19	5	799	572	270	970
v/c Ratio	0.94	0.87	0.23	0.03	0.67	0.63	0.86	0.49
Control Delay	65.0	50.8	57.7	0.2	35.0	5.7	54.1	9.1
Queue Delay	0.0	0.1	0.0	0.0	0.2	0.0	0.0	1.0
Total Delay	65.0	50.9	57.7	0.2	35.1	5.7	54.1	10.1
Queue Length 50th (ft)	349	291	13	0	269	0	205	164
Queue Length 95th (ft)	#556	#478	38	0	305	75	m#331	m209
Internal Link Dist (ft)		1049			1396			322
Turn Bay Length (ft)	300			25		200	90	
Base Capacity (vph)	545	551	82	191	1329	942	313	1965
Starvation Cap Reductn	0	0	0	0	0	0	0	671
Spillback Cap Reductn	0	2	0	0	86	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.90	0.85	0.23	0.03	0.64	0.61	0.86	0.75

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	639	584	15	2	944	355	146	1220
v/c Ratio	0.96	0.86	0.18	0.01	0.81	0.48	0.69	0.70
Control Delay	61.0	41.0	55.8	0.0	40.2	5.7	51.3	16.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0
Total Delay	61.0	41.0	55.8	0.0	40.2	5.7	51.3	37.7
Queue Length 50th (ft)	428	314	10	0	319	10	107	295
Queue Length 95th (ft)	#782	#622	32	0	368	70	m#152	m348
Internal Link Dist (ft)		1049			1396			322
Turn Bay Length (ft)	300			25		200	90	
Base Capacity (vph)	666	679	82	191	1345	812	211	1739
Starvation Cap Reductn	0	0	0	0	0	0	0	551
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.96	0.86	0.18	0.01	0.70	0.44	0.69	1.03

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

APPENDIX 8.1: OPENING YEAR BACKGROUND CONDITIONS PLUS PROJECT INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	10.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	84	4	738	159	4	222
Future Vol, veh/h	84	4	738	159	4	222
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	102	5	900	194	5	271

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	107	0	2096	102
Stage 1	-	-	-	-	102	-
Stage 2	-	-	-	-	1994	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1497	-	58	959
Stage 1	-	-	-	-	927	-
Stage 2	-	-	-	-	117	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1497	-	19	959
Mov Cap-2 Maneuver	-	-	-	-	19	-
Stage 1	-	-	-	-	927	-
Stage 2	-	-	-	-	38	-

Approach	EB	WB	NB
HCM Control Delay, s	0	9	20
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	511	-	-	1497	-
HCM Lane V/C Ratio	0.539	-	-	0.601	-
HCM Control Delay (s)	20	-	-	11	0
HCM Lane LOS	C	-	-	B	A
HCM 95th %tile Q(veh)	3.2	-	-	4.3	-

Intersection	
Int Delay, s/veh	10.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	288	33	13	833	0	53	8	16	2	19	25
Future Vol, veh/h	5	288	33	13	833	0	53	8	16	2	19	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	356	41	16	1028	0	65	10	20	2	23	31

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1028	0	0	397	0	0	1476	1449	377	1464	1469	1028
Stage 1	-	-	-	-	-	-	389	389	-	1060	1060	-
Stage 2	-	-	-	-	-	-	1087	1060	-	404	409	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	683	-	-	1173	-	-	105	132	674	107	129	287
Stage 1	-	-	-	-	-	-	639	612	-	273	303	-
Stage 2	-	-	-	-	-	-	264	303	-	627	600	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	683	-	-	1173	-	-	77	126	674	94	123	287
Mov Cap-2 Maneuver	-	-	-	-	-	-	77	126	-	94	123	-
Stage 1	-	-	-	-	-	-	632	605	-	270	293	-
Stage 2	-	-	-	-	-	-	210	293	-	592	593	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.1	158.1	35.2
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	99	683	-	-	1173	-	-	175
HCM Lane V/C Ratio	0.96	0.009	-	-	0.014	-	-	0.325
HCM Control Delay (s)	158.1	10.3	0	-	8.1	0	-	35.2
HCM Lane LOS	F	B	A	-	A	A	-	E
HCM 95th %tile Q(veh)	5.7	0	-	-	0	-	-	1.3

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	31	46	1	16	49
Future Vol, veh/h	3	31	46	1	16	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	100	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	36	53	1	19	57

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	149	54	0	0	54	0
Stage 1	54	-	-	-	-	-
Stage 2	95	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	848	1019	-	-	1564	-
Stage 1	974	-	-	-	-	-
Stage 2	934	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	837	1019	-	-	1564	-
Mov Cap-2 Maneuver	837	-	-	-	-	-
Stage 1	974	-	-	-	-	-
Stage 2	922	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	1.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	837	1019	1564	-
HCM Lane V/C Ratio	-	-	0.004	0.035	0.012	-
HCM Control Delay (s)	-	-	9.3	8.7	7.3	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.1	0	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	34	0	5	0	36	7	10	61	0
Future Vol, veh/h	0	0	0	34	0	5	0	36	7	10	61	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	40	0	6	0	43	8	12	73	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	147	148	73	144	144	47	73	0	0	51	0	0
Stage 1	97	97	-	47	47	-	-	-	-	-	-	-
Stage 2	50	51	-	97	97	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	826	747	995	830	751	1028	1540	-	-	1568	-	-
Stage 1	914	819	-	972	860	-	-	-	-	-	-	-
Stage 2	968	856	-	914	819	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	816	741	995	825	745	1028	1540	-	-	1568	-	-
Mov Cap-2 Maneuver	816	741	-	825	745	-	-	-	-	-	-	-
Stage 1	914	812	-	972	860	-	-	-	-	-	-	-
Stage 2	962	856	-	907	812	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.5	0	1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1540	-	-	-	846	1568	-	-
HCM Lane V/C Ratio	-	-	-	-	0.055	0.008	-	-
HCM Control Delay (s)	0	-	-	0	9.5	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	0	0	38	73	22
Future Vol, veh/h	5	0	0	38	73	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	0	0	41	79	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	132	91	103	0	-	0
Stage 1	91	-	-	-	-	-
Stage 2	41	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	867	972	1502	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	987	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	867	972	1502	-	-	-
Mov Cap-2 Maneuver	867	-	-	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	987	-	-	-	-	-

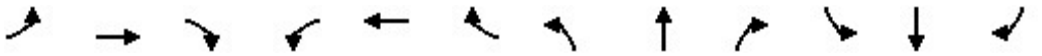
Approach	EB	NB	SB
HCM Control Delay, s	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1502	-	867	-	-
HCM Lane V/C Ratio	-	-	0.006	-	-
HCM Control Delay (s)	0	-	9.2	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	407	461	1355	1733	640
Future Volume (vph)	0	407	461	1355	1733	640
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	42.0	42.0	24.0	68.0	44.0	44.0
Total Split (%)	38.2%	38.2%	21.8%	61.8%	40.0%	40.0%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	38.0	38.0	20.0	63.5	39.5	39.5
Actuated g/C Ratio	0.35	0.35	0.18	0.58	0.36	0.36
v/c Ratio	1.30	0.68	1.46	0.68	0.97	0.71
Control Delay	177.4	33.1	249.3	17.5	49.8	9.5
Queue Delay	2.0	0.0	0.0	2.2	44.2	0.0
Total Delay	179.4	33.1	249.3	19.7	94.1	9.5
LOS	F	C	F	B	F	A
Approach Delay	132.7			78.0	71.3	
Approach LOS	F			E	E	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.46	
Intersection Signal Delay: 86.8	Intersection LOS: F
Intersection Capacity Utilization 177.5%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	742	0	407	461	1355	0	0	1733	640
Future Volume (veh/h)	0	0	0	742	0	407	461	1355	0	0	1733	640
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				773	0	318	480	1411	0	0	1805	401
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				625	0	556	329	2084	0	0	1863	578
Arrive On Green				0.35	0.00	0.35	0.24	0.77	0.00	0.00	0.36	0.36
Sat Flow, veh/h				1810	0	1610	1810	3705	0	0	5358	1610
Grp Volume(v), veh/h				773	0	318	480	1411	0	0	1805	401
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1729	1610
Q Serve(g_s), s				38.0	0.0	17.7	20.0	20.8	0.0	0.0	37.6	23.4
Cycle Q Clear(g_c), s				38.0	0.0	17.7	20.0	20.8	0.0	0.0	37.6	23.4
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				625	0	556	329	2084	0	0	1863	578
V/C Ratio(X)				1.24	0.00	0.57	1.46	0.68	0.00	0.00	0.97	0.69
Avail Cap(c_a), veh/h				625	0	556	329	2084	0	0	1863	578
HCM Platoon Ratio				1.00	1.00	1.00	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				36.0	0.0	29.4	41.7	7.8	0.0	0.0	34.6	30.1
Incr Delay (d2), s/veh				119.8	0.0	1.4	208.1	0.2	0.0	0.0	14.7	6.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				36.5	0.0	6.7	27.1	4.8	0.0	0.0	17.5	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				155.8	0.0	30.8	249.8	8.0	0.0	0.0	49.4	36.8
LnGrp LOS				F	A	C	F	A	A	A	D	D
Approach Vol, veh/h					1091			1891			2206	
Approach Delay, s/veh					119.4			69.4			47.1	
Approach LOS					F			E			D	

Timer - Assigned Phs	2			5	6		8					
Phs Duration (G+Y+Rc), s	68.0			24.0	44.0		42.0					
Change Period (Y+Rc), s	4.5			4.0	4.5		4.0					
Max Green Setting (Gmax), s	63.5			20.0	39.5		38.0					
Max Q Clear Time (g_c+I1), s	22.8			22.0	39.6		40.0					
Green Ext Time (p_c), s	13.8			0.0	0.0		0.0					

Intersection Summary		
HCM 6th Ctrl Delay		70.4
HCM 6th LOS		E

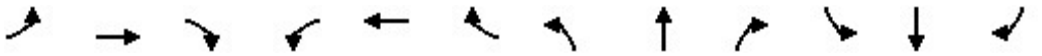
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	599	0	1238	686	500	1974
Future Volume (vph)	599	0	1238	686	500	1974
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	44.0	44.0	27.0	27.0	39.0	66.0
Total Split (%)	40.0%	40.0%	24.5%	24.5%	35.5%	60.0%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	40.5	40.5	23.0	23.0	35.5	62.0
Actuated g/C Ratio	0.37	0.37	0.21	0.21	0.32	0.56
v/c Ratio	0.92	1.72	1.23	0.88	0.92	1.04
Control Delay	54.9	355.6	142.9	25.9	34.6	41.0
Queue Delay	2.7	0.2	0.0	0.0	46.6	24.4
Total Delay	57.7	355.8	142.9	25.9	81.1	65.3
LOS	E	F	F	C	F	E
Approach Delay		248.5	101.2			68.5
Approach LOS		F	F			E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.72	
Intersection Signal Delay: 124.9	Intersection LOS: F
Intersection Capacity Utilization 177.5%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	599	0	899	0	0	0	0	1238	686	500	1974	0
Future Volume (veh/h)	599	0	899	0	0	0	0	1238	686	500	1974	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	644	0	915				0	1331	464	538	2123	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	666	0	593				0	1085	336	576	2035	0
Arrive On Green	0.37	0.00	0.37				0.00	0.07	0.07	0.42	0.75	0.00
Sat Flow, veh/h	1810	0	1610				0	5358	1606	1810	3705	0
Grp Volume(v), veh/h	644	0	915				0	1331	464	538	2123	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1729	1606	1810	1805	0
Q Serve(g_s), s	38.4	0.0	40.5				0.0	23.0	23.0	31.2	62.0	0.0
Cycle Q Clear(g_c), s	38.4	0.0	40.5				0.0	23.0	23.0	31.2	62.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	666	0	593				0	1085	336	576	2035	0
V/C Ratio(X)	0.97	0.00	1.54				0.00	1.23	1.38	0.93	1.04	0.00
Avail Cap(c_a), veh/h	666	0	593				0	1085	336	584	2035	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	1.33	1.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.27	0.27	0.16	0.16	0.00
Uniform Delay (d), s/veh	34.1	0.0	34.8				0.0	51.2	51.2	30.6	13.8	0.0
Incr Delay (d2), s/veh	26.7	0.0	252.9				0.0	104.6	176.8	5.2	22.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.7	0.0	56.4				0.0	21.1	26.3	12.6	19.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.8	0.0	287.6				0.0	155.8	228.0	35.8	36.2	0.0
LnGrp LOS	E	A	F				A	F	F	D	F	A
Approach Vol, veh/h		1559						1795			2661	
Approach Delay, s/veh		193.9						174.5			36.2	
Approach LOS		F						F			D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	39.0	27.0		44.0		66.0
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	35.5	* 23		40.5		62.0
Max Q Clear Time (g_c+I1), s	33.2	25.0		42.5		64.0
Green Ext Time (p_c), s	0.3	0.0		0.0		0.0

Intersection Summary		
HCM 6th Ctrl Delay		118.3
HCM 6th LOS		F

Notes

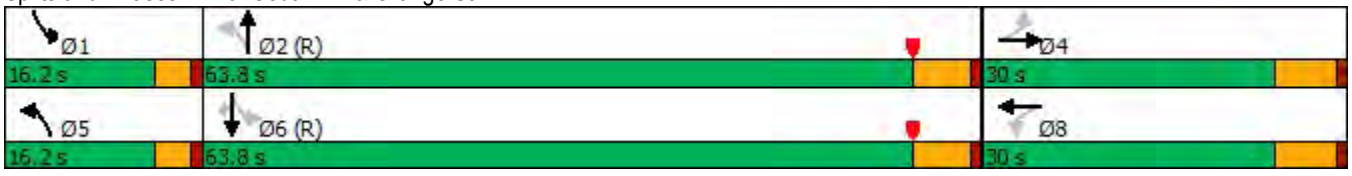
User approved volume balancing among the lanes for turning movement.

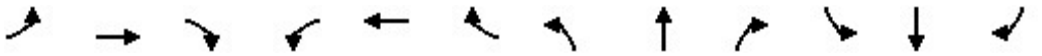
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	253	4	12	3	18	1507	199	2219	460
Future Volume (vph)	253	4	12	3	18	1507	199	2219	460
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases		4		8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	30.0	30.0	10.2	10.2	16.2	28.2	16.2	28.2	28.2
Total Split (s)	30.0	30.0	30.0	30.0	16.2	63.8	16.2	63.8	63.8
Total Split (%)	27.3%	27.3%	27.3%	27.3%	14.7%	58.0%	14.7%	58.0%	58.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	3.0	4.7	3.0	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.0	5.7	4.0	5.7	5.7
Lead/Lag					Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min	C-Min
Act Effct Green (s)	24.0	24.0	24.0	24.0	66.4	58.8	76.0	70.2	70.2
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.60	0.53	0.69	0.64	0.64
v/c Ratio	1.18	0.07	0.04	0.35	0.12	0.88	0.85	1.06	0.47
Control Delay	154.3	15.6	34.6	8.0	4.5	19.4	33.5	47.5	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	17.4	0.0	0.0	0.0
Total Delay	154.3	15.6	34.6	8.0	4.5	36.8	33.5	47.5	4.5
LOS	F	B	C	A	A	D	C	D	A
Approach Delay		141.6		9.9		36.4		39.6	
Approach LOS		F		A		D		D	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 68.3 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.18	
Intersection Signal Delay: 43.4	Intersection LOS: D
Intersection Capacity Utilization 106.3%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 10: Cedar Av. & Orange St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	253	4	22	12	3	151	18	1507	30	199	2219	460
Future Volume (veh/h)	253	4	22	12	3	151	18	1507	30	199	2219	460
Initial Q (Qb), veh	0	0	0	0	0	0	0	44	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	278	4	19	13	3	79	20	1656	33	219	2438	414
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	301	63	297	357	13	340	96	2010	28	256	2247	1000
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.02	0.76	0.76	0.07	0.62	0.62
Sat Flow, veh/h	1337	287	1363	1407	59	1560	1810	3620	72	1810	3610	1606
Grp Volume(v), veh/h	278	0	23	13	0	82	20	824	865	219	2438	414
Grp Sat Flow(s),veh/h/ln	1337	0	1650	1407	0	1619	1810	1805	1887	1810	1805	1606
Q Serve(g_s), s	19.4	0.0	1.2	0.8	0.0	4.6	0.5	30.7	31.0	5.2	68.5	14.4
Cycle Q Clear(g_c), s	24.0	0.0	1.2	2.0	0.0	4.6	0.5	30.7	31.0	5.2	68.5	14.4
Prop In Lane	1.00		0.83	1.00		0.96	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	301	0	360	357	0	353	96	995	1044	256	2247	1000
V/C Ratio(X)	0.92	0.00	0.06	0.04	0.00	0.23	0.21	0.83	0.83	0.86	1.08	0.41
Avail Cap(c_a), veh/h	301	0	360	357	0	353	266	1031	1078	352	2247	1000
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.10	0.10	0.10	0.09	0.09	0.09
Uniform Delay (d), s/veh	46.8	0.0	34.1	34.9	0.0	35.4	26.9	13.1	13.0	31.6	20.8	10.6
Incr Delay (d2), s/veh	32.3	0.0	0.1	0.0	0.0	0.3	0.1	0.9	0.8	1.5	39.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.5	18.6	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	0.0	0.5	0.3	0.0	1.9	0.3	17.1	17.1	5.1	36.7	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.1	0.0	34.2	34.9	0.0	35.7	27.0	34.5	32.4	33.1	59.9	10.7
LnGrp LOS	E	A	C	C	A	D	C	C	C	C	F	B
Approach Vol, veh/h		301			95			1709			3071	
Approach Delay, s/veh		75.7			35.6			33.4			51.3	
Approach LOS		E			D			C			D	

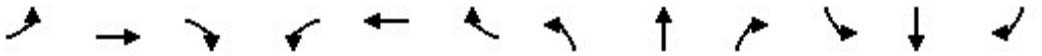
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.4	68.6		30.0	5.8	74.2		30.0				
Change Period (Y+Rc), s	4.0	5.7		6.0	4.0	5.7		6.0				
Max Green Setting (Gmax), s	12.2	58.1		24.0	12.2	58.1		24.0				
Max Q Clear Time (g_c+I1), s	7.2	33.0		26.0	2.5	70.5		6.6				
Green Ext Time (p_c), s	0.3	13.7		0.0	0.0	0.0		0.4				

Intersection Summary			
HCM 6th Ctrl Delay		46.5	
HCM 6th LOS		D	

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	313	204	134	76	319	217	1111	241	1733
Future Volume (vph)	313	204	134	76	319	217	1111	241	1733
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2		1	6	3	8	7	4
Permitted Phases			2						
Detector Phase	5	2	2	1	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	29.0	29.0	8.0	23.0	8.0	32.7	8.0	24.7
Total Split (s)	22.0	36.0	36.0	9.0	23.0	15.0	43.0	22.0	50.0
Total Split (%)	20.0%	32.7%	32.7%	8.2%	20.9%	13.6%	39.1%	20.0%	45.5%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	4.7	3.0	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	4.0	5.7	4.0	5.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	18.6	30.0	30.0	5.0	16.4	11.0	38.0	17.3	44.3
Actuated g/C Ratio	0.17	0.27	0.27	0.05	0.15	0.10	0.35	0.16	0.40
v/c Ratio	1.06	0.21	0.26	0.95	0.84	1.24	0.98	0.87	1.45
Control Delay	112.6	31.6	5.8	140.4	55.0	175.6	71.5	55.7	233.1
Queue Delay	0.0	0.0	0.0	0.0	1.6	0.0	39.0	0.0	0.0
Total Delay	112.6	31.6	5.8	140.4	56.7	175.6	110.5	55.7	233.1
LOS	F	C	A	F	E	F	F	E	F
Approach Delay		65.3			68.7		120.6		214.2
Approach LOS		E			E		F		F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.45	
Intersection Signal Delay: 151.2	Intersection LOS: F
Intersection Capacity Utilization 115.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 11: Cedar Av. & Slover Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	313	204	134	76	319	131	217	1111	66	241	1733	280
Future Volume (veh/h)	313	204	134	76	319	131	217	1111	66	241	1733	280
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	323	210	116	78	329	104	224	1145	66	248	1787	288
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	296	1009	449	82	388	121	181	1972	114	280	1949	306
Arrive On Green	0.16	0.28	0.28	0.05	0.14	0.14	0.10	0.57	0.57	0.05	0.21	0.21
Sat Flow, veh/h	1810	3610	1607	1810	2711	843	1810	3469	200	1810	3126	490
Grp Volume(v), veh/h	323	210	116	78	217	216	224	595	616	248	1011	1064
Grp Sat Flow(s),veh/h/ln	1810	1805	1607	1810	1805	1748	1810	1805	1864	1810	1805	1811
Q Serve(g_s), s	18.0	4.9	6.2	4.7	12.9	13.3	11.0	23.4	23.4	15.0	60.0	63.7
Cycle Q Clear(g_c), s	18.0	4.9	6.2	4.7	12.9	13.3	11.0	23.4	23.4	15.0	60.0	63.7
Prop In Lane	1.00		1.00	1.00		0.48	1.00		0.11	1.00		0.27
Lane Grp Cap(c), veh/h	296	1009	449	82	258	250	181	1026	1060	280	1125	1129
V/C Ratio(X)	1.09	0.21	0.26	0.95	0.84	0.86	1.24	0.58	0.58	0.88	0.90	0.94
Avail Cap(c_a), veh/h	296	1009	449	82	279	270	181	1026	1060	296	1125	1129
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.62	0.62	0.62	0.09	0.09	0.09
Uniform Delay (d), s/veh	46.0	30.3	30.8	52.4	45.9	46.1	49.5	15.3	15.3	51.2	40.3	41.7
Incr Delay (d2), s/veh	78.8	0.1	0.3	81.7	19.0	22.6	132.9	1.5	1.4	3.1	1.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.2	2.0	2.3	4.0	7.2	7.4	11.5	9.0	9.3	7.5	29.2	31.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	124.8	30.4	31.1	134.1	64.9	68.6	182.4	16.8	16.7	54.3	41.5	43.9
LnGrp LOS	F	C	C	F	E	E	F	B	B	D	D	D
Approach Vol, veh/h		649			511			1435			2323	
Approach Delay, s/veh		77.5			77.1			42.6			44.0	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	36.7	15.0	75.0	24.0	21.7	21.1	69.0
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	6.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	5.0	30.0	11.0	44.3	18.0	* 17	18.0	37.3
Max Q Clear Time (g_c+I1), s	6.7	8.2	13.0	65.7	20.0	15.3	17.0	25.4
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.0	0.5	0.1	5.7

Intersection Summary	
HCM 6th Ctrl Delay	51.4
HCM 6th LOS	D

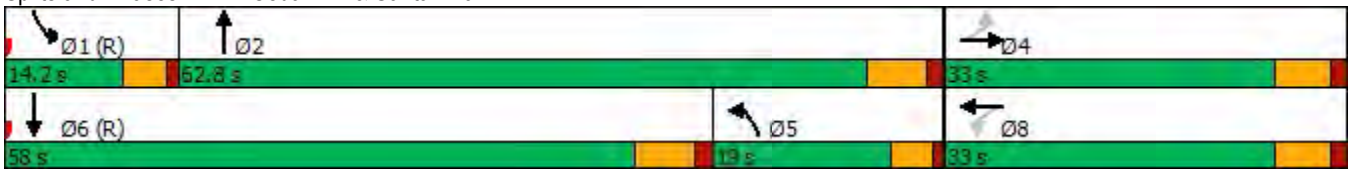
Notes

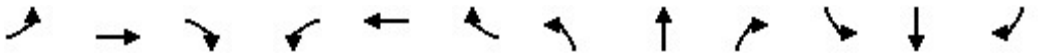
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	76	75	77	73	111	1193	42	1791
Future Volume (vph)	76	75	77	73	111	1193	42	1791
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	9.5	27.5	9.5	27.5
Total Split (s)	33.0	33.0	33.0	33.0	19.0	62.8	14.2	58.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	17.3%	57.1%	12.9%	52.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	4.5	6.5	4.5	6.5
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min
Act Effct Green (s)		24.4		24.4	12.2	56.5	12.2	56.4
Actuated g/C Ratio		0.22		0.22	0.11	0.51	0.11	0.51
v/c Ratio		0.87		0.88	0.61	0.72	0.23	1.08
Control Delay		64.2		66.3	46.5	12.3	36.0	87.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		64.2		66.3	46.5	12.3	36.0	87.0
LOS		E		E	D	B	D	F
Approach Delay		64.2		66.3		15.1		85.8
Approach LOS		E		E		B		F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 90 (82%), Referenced to phase 1:SBL and 6:SBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 57.6	Intersection LOS: E
Intersection Capacity Utilization 90.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 12: Cedar Av. & Santa Ana Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	75	94	77	73	91	111	1193	34	42	1791	47
Future Volume (veh/h)	76	75	94	77	73	91	111	1193	34	42	1791	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	83	82	61	84	79	87	121	1297	33	46	1947	43
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	128	115	73	125	105	100	281	1838	47	237	1691	37
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.31	1.00	1.00	0.09	0.31	0.31
Sat Flow, veh/h	407	566	360	400	516	489	1810	3597	91	1810	3611	79
Grp Volume(v), veh/h	226	0	0	250	0	0	121	650	680	46	969	1021
Grp Sat Flow(s),veh/h/ln	1333	0	0	1405	0	0	1810	1805	1883	1810	1805	1886
Q Serve(g_s), s	0.0	0.0	0.0	1.0	0.0	0.0	5.9	0.0	0.0	2.6	51.5	51.5
Cycle Q Clear(g_c), s	18.3	0.0	0.0	19.3	0.0	0.0	5.9	0.0	0.0	2.6	51.5	51.5
Prop In Lane	0.37		0.27	0.34		0.35	1.00		0.05	1.00		0.04
Lane Grp Cap(c), veh/h	316	0	0	330	0	0	281	923	963	237	845	883
V/C Ratio(X)	0.71	0.00	0.00	0.76	0.00	0.00	0.43	0.71	0.71	0.19	1.15	1.16
Avail Cap(c_a), veh/h	380	0	0	394	0	0	281	924	964	237	845	883
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.69	0.69	0.69	0.09	0.09	0.09
Uniform Delay (d), s/veh	41.7	0.0	0.0	42.3	0.0	0.0	34.0	0.0	0.0	44.8	37.7	37.7
Incr Delay (d2), s/veh	6.0	0.0	0.0	7.9	0.0	0.0	0.3	2.8	2.7	0.0	67.7	71.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	0.0	7.1	0.0	0.0	2.3	0.7	0.7	1.1	38.8	41.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.7	0.0	0.0	50.1	0.0	0.0	34.3	2.8	2.7	44.8	105.5	109.3
LnGrp LOS	D	A	A	D	A	A	C	A	A	D	F	F
Approach Vol, veh/h		226			250			1451			2036	
Approach Delay, s/veh		47.7			50.1			5.3			106.0	
Approach LOS		D			D			A			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.9	62.7		28.4	23.6	58.0		28.4				
Change Period (Y+Rc), s	4.5	6.5		6.0	6.5	* 6.5		6.0				
Max Green Setting (Gmax), s	9.7	56.3		27.0	14.5	* 52		27.0				
Max Q Clear Time (g_c+I1), s	4.6	2.0		20.3	7.9	53.5		21.3				
Green Ext Time (p_c), s	0.0	33.1		0.8	0.1	0.0		0.9				

Intersection Summary		
HCM 6th Ctrl Delay	62.3	
HCM 6th LOS	E	

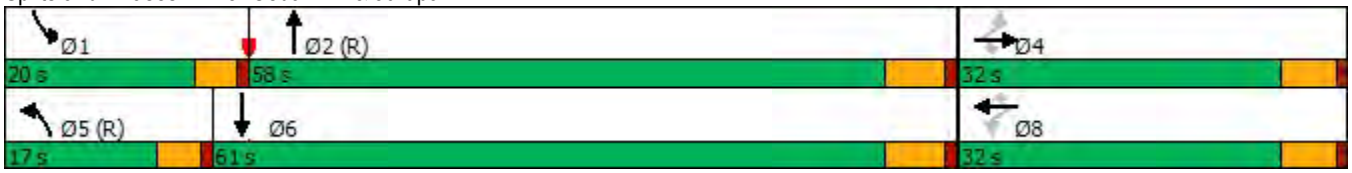
Notes

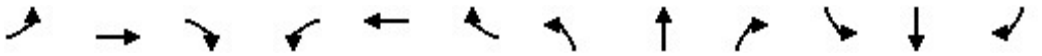
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	123	104	66	78	109	162	131	1040	160	1645
Future Volume (vph)	123	104	66	78	109	162	131	1040	160	1645
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	32.0	32.0	32.0	32.0	32.0	32.0	17.0	58.0	20.0	61.0
Total Split (%)	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%	15.5%	52.7%	18.2%	55.5%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)		26.5	26.5		26.5	26.5	11.8	53.3	14.2	55.7
Actuated g/C Ratio		0.24	0.24		0.24	0.24	0.11	0.48	0.13	0.51
v/c Ratio		0.97	0.16		0.87	0.35	0.75	0.71	0.76	1.11
Control Delay		90.2	8.6		74.9	7.0	81.8	18.1	37.7	85.6
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		90.2	8.6		74.9	7.0	81.8	18.1	37.7	85.6
LOS		F	A		E	A	F	B	D	F
Approach Delay		71.9			43.4			24.8		81.7
Approach LOS		E			D			C		F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.11	
Intersection Signal Delay: 59.1	Intersection LOS: E
Intersection Capacity Utilization 89.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	104	66	78	109	162	131	1040	73	160	1645	154
Future Volume (veh/h)	123	104	66	78	109	162	131	1040	73	160	1645	154
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	137	116	54	87	121	114	146	1156	70	178	1828	167
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	50	4	388	46	43	383	206	1721	104	210	1675	151
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.23	1.00	1.00	0.08	0.34	0.34
Sat Flow, veh/h	0	19	1610	0	178	1589	1810	3458	209	1810	3349	301
Grp Volume(v), veh/h	253	0	54	208	0	114	146	603	623	178	972	1023
Grp Sat Flow(s),veh/h/ln	19	0	1610	178	0	1589	1810	1805	1862	1810	1805	1846
Q Serve(g_s), s	0.0	0.0	2.9	0.0	0.0	6.5	8.2	0.5	0.5	10.7	55.0	55.0
Cycle Q Clear(g_c), s	26.5	0.0	2.9	26.5	0.0	6.5	8.2	0.5	0.5	10.7	55.0	55.0
Prop In Lane	0.54		1.00	0.42		1.00	1.00		0.11	1.00		0.16
Lane Grp Cap(c), veh/h	55	0	388	89	0	383	206	898	927	210	903	923
V/C Ratio(X)	4.61	0.00	0.14	2.33	0.00	0.30	0.71	0.67	0.67	0.85	1.08	1.11
Avail Cap(c_a), veh/h	55	0	388	89	0	383	206	898	927	255	903	923
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.87	0.87	0.87	0.09	0.09	0.09
Uniform Delay (d), s/veh	52.9	0.0	32.8	42.9	0.0	34.1	40.8	0.1	0.1	49.8	36.6	36.6
Incr Delay (d2), s/veh	1663.6	0.0	0.2	632.5	0.0	0.6	9.5	3.5	3.4	2.2	37.0	50.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	26.9	0.0	1.1	18.1	0.0	2.5	3.8	0.9	0.9	5.0	33.6	37.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1716.4	0.0	33.0	675.4	0.0	34.8	50.3	3.6	3.5	52.0	73.5	87.2
LnGrp LOS	F	A	C	F	A	C	D	A	A	D	F	F
Approach Vol, veh/h		307			322			1372			2173	
Approach Delay, s/veh		1420.3			448.6			8.5			78.2	
Approach LOS		F			F			A			E	

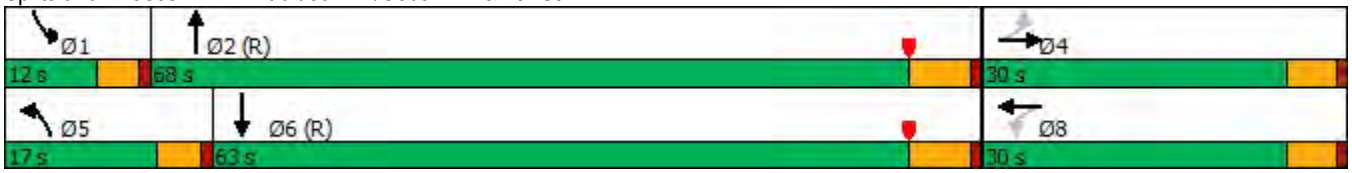
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.2	60.8		32.0	17.0	61.0		32.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	15.5	52.0		26.5	12.5	55.0		26.5				
Max Q Clear Time (g_c+I1), s	12.7	2.5		28.5	10.2	57.0		28.5				
Green Ext Time (p_c), s	0.1	15.4		0.0	0.1	0.0		0.0				

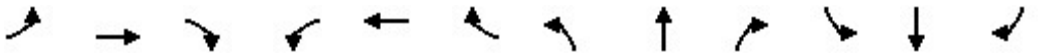
Intersection Summary		
HCM 6th Ctrl Delay		182.6
HCM 6th LOS		F

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	131	7	26	8	100	1047	23	1671
Future Volume (vph)	131	7	26	8	100	1047	23	1671
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	10.0	10.0	9.5	24.0	9.5	24.0
Total Split (s)	30.0	30.0	30.0	30.0	17.0	68.0	12.0	63.0
Total Split (%)	27.3%	27.3%	27.3%	27.3%	15.5%	61.8%	10.9%	57.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)		24.5		21.3	10.7	69.7	6.7	59.3
Actuated g/C Ratio		0.22		0.19	0.10	0.63	0.06	0.54
v/c Ratio		0.94		0.18	0.60	0.48	0.22	0.93
Control Delay		69.6		29.6	61.5	12.5	63.2	22.8
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		69.6		29.6	61.5	12.5	63.2	22.8
LOS		E		C	E	B	E	C
Approach Delay		69.6		29.6		16.7		23.4
Approach LOS		E		C		B		C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 74 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 25.9	Intersection LOS: C
Intersection Capacity Utilization 87.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 14: Rubidoux Bl./Cedar Av. & 7th St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	7	200	26	8	10	100	1047	5	23	1671	48
Future Volume (veh/h)	131	7	200	26	8	10	100	1047	5	23	1671	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	138	7	119	27	8	3	105	1102	4	24	1759	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	201	12	134	214	60	19	132	2377	9	43	2132	62
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.07	0.64	0.64	0.02	0.60	0.60
Sat Flow, veh/h	788	63	699	827	312	98	1810	3689	13	1810	3583	103
Grp Volume(v), veh/h	264	0	0	38	0	0	105	539	567	24	883	927
Grp Sat Flow(s),veh/h/ln	1550	0	0	1236	0	0	1810	1805	1898	1810	1805	1881
Q Serve(g_s), s	15.7	0.0	0.0	0.0	0.0	0.0	6.3	16.7	16.7	1.4	42.7	43.3
Cycle Q Clear(g_c), s	18.2	0.0	0.0	2.5	0.0	0.0	6.3	16.7	16.7	1.4	42.7	43.3
Prop In Lane	0.52		0.45	0.71		0.08	1.00		0.01	1.00		0.06
Lane Grp Cap(c), veh/h	346	0	0	292	0	0	132	1163	1223	43	1074	1119
V/C Ratio(X)	0.76	0.00	0.00	0.13	0.00	0.00	0.80	0.46	0.46	0.56	0.82	0.83
Avail Cap(c_a), veh/h	401	0	0	343	0	0	206	1163	1223	123	1074	1119
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.46	0.46	0.46	0.09	0.09	0.09
Uniform Delay (d), s/veh	43.1	0.0	0.0	36.9	0.0	0.0	50.2	9.9	9.9	53.1	17.7	17.8
Incr Delay (d2), s/veh	8.2	0.0	0.0	0.3	0.0	0.0	5.4	0.6	0.6	1.0	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	0.0	0.0	0.9	0.0	0.0	2.9	5.6	5.9	0.7	15.4	16.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.3	0.0	0.0	37.1	0.0	0.0	55.6	10.5	10.5	54.2	18.3	18.5
LnGrp LOS	D	A	A	D	A	A	E	B	B	D	B	B
Approach Vol, veh/h		264			38			1211			1834	
Approach Delay, s/veh		51.3			37.1			14.4			18.9	
Approach LOS		D			D			B			B	

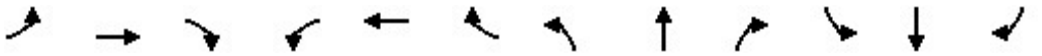
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	76.9		26.0	12.5	71.5		26.0				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	7.5	62.0		25.0	12.5	57.0		25.0				
Max Q Clear Time (g_c+I1), s	3.4	18.7		20.2	8.3	45.3		4.5				
Green Ext Time (p_c), s	0.0	12.1		0.9	0.1	9.9		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		20.0	
HCM 6th LOS		C	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	18	11	131	2	110	2	964	215	1676
Future Volume (vph)	18	11	131	2	110	2	964	215	1676
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	35.0	35.0	35.0	9.5	24.0	9.5	24.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.6	34.0	21.0	45.4
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%	10.7%	37.8%	23.3%	50.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	5.0	4.5	6.0	4.5	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min
Act Effct Green (s)		13.9		15.4	15.4	5.2	28.5	13.5	45.0
Actuated g/C Ratio		0.19		0.21	0.21	0.07	0.39	0.18	0.61
v/c Ratio		0.18		0.51	0.26	0.02	0.88	0.68	0.80
Control Delay		15.4		32.2	3.9	37.5	31.7	40.5	17.4
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		15.4		32.2	3.9	37.5	31.7	40.5	17.4
LOS		B		C	A	D	C	D	B
Approach Delay		15.4		19.4			31.7		20.0
Approach LOS		B		B			C		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 73.2	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 23.9	Intersection LOS: C
Intersection Capacity Utilization 77.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 15: Rubidoux Bl. & Tarragona Dr./El Rivino Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	11	27	131	2	110	2	964	194	215	1676	12
Future Volume (veh/h)	18	11	27	131	2	110	2	964	194	215	1676	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	19	12	19	138	2	84	2	1015	197	226	1764	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	109	72	62	316	3	263	5	1313	254	280	2157	16
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.00	0.44	0.44	0.15	0.59	0.59
Sat Flow, veh/h	186	438	382	1236	18	1610	1810	3016	584	1810	3673	27
Grp Volume(v), veh/h	50	0	0	140	0	84	2	607	605	226	866	911
Grp Sat Flow(s),veh/h/ln	1006	0	0	1254	0	1610	1810	1805	1795	1810	1805	1895
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	2.9	0.1	18.0	18.0	7.6	23.9	24.0
Cycle Q Clear(g_c), s	7.1	0.0	0.0	7.0	0.0	2.9	0.1	18.0	18.0	7.6	23.9	24.0
Prop In Lane	0.38		0.38	0.99		1.00	1.00		0.33	1.00		0.01
Lane Grp Cap(c), veh/h	243	0	0	319	0	263	5	786	781	280	1060	1113
V/C Ratio(X)	0.21	0.00	0.00	0.44	0.00	0.32	0.41	0.77	0.77	0.81	0.82	0.82
Avail Cap(c_a), veh/h	729	0	0	761	0	769	147	805	800	475	1132	1189
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	0.0	0.0	24.9	0.0	23.2	31.3	15.1	15.1	25.6	10.3	10.3
Incr Delay (d2), s/veh	0.6	0.0	0.0	1.4	0.0	1.0	45.9	4.9	5.0	5.5	4.8	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	2.0	0.0	1.1	0.1	6.6	6.6	3.3	7.1	7.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.3	0.0	0.0	26.3	0.0	24.2	77.2	20.0	20.1	31.2	15.1	15.0
LnGrp LOS	C	A	A	C	A	C	E	B	C	C	B	B
Approach Vol, veh/h		50			224			1214			2003	
Approach Delay, s/veh		23.3			25.5			20.1			16.9	
Approach LOS		C			C			C			B	

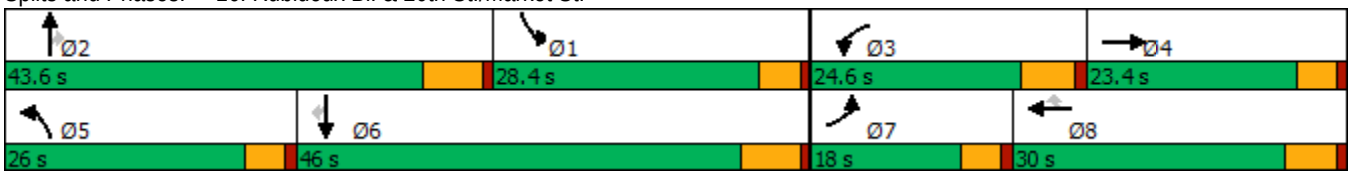
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.2	33.3		15.3	4.7	42.9		15.3				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	16.5	28.0		30.0	5.1	39.4		30.0				
Max Q Clear Time (g_c+I1), s	9.6	20.0		9.1	2.1	26.0		9.0				
Green Ext Time (p_c), s	0.3	5.3		0.3	0.0	10.9		1.5				

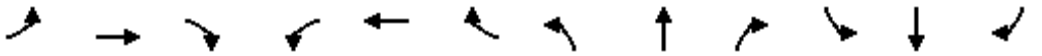
Intersection Summary			
HCM 6th Ctrl Delay		18.6	
HCM 6th LOS		B	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	181	179	340	357	507	339	550	392	458	1027	408
Future Volume (vph)	181	179	340	357	507	339	550	392	458	1027	408
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	14.6	10.8	27.8	27.8	9.6	28.2	28.2	9.6	35.2	35.2
Total Split (s)	18.0	23.4	24.6	30.0	30.0	26.0	43.6	43.6	28.4	46.0	46.0
Total Split (%)	15.0%	19.5%	20.5%	25.0%	25.0%	21.7%	36.3%	36.3%	23.7%	38.3%	38.3%
Yellow Time (s)	3.6	3.6	4.8	4.8	4.8	3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	5.8	5.8	5.8	4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	13.4	21.1	16.5	24.2	24.2	21.4	26.5	26.5	33.8	38.9	38.9
Actuated g/C Ratio	0.11	0.18	0.14	0.20	0.20	0.18	0.22	0.22	0.28	0.33	0.33
v/c Ratio	0.92	0.56	0.72	0.95	0.79	1.08	0.71	0.62	0.48	0.90	0.58
Control Delay	99.0	23.1	58.1	83.1	18.8	118.7	47.4	9.1	38.3	49.6	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	99.0	23.1	58.1	83.1	18.8	118.7	47.4	9.1	38.3	49.6	11.5
LOS	F	C	E	F	B	F	D	A	D	D	B
Approach Delay		45.8		48.9			54.6			38.7	
Approach LOS		D		D			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 119.1	
Natural Cycle: 105	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 46.1	Intersection LOS: D
Intersection Capacity Utilization 93.7%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	181	179	244	340	357	507	339	550	392	458	1027	408
Future Volume (veh/h)	181	179	244	340	357	507	339	550	392	458	1027	408
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	187	185	237	351	368	281	349	567	275	472	1059	292
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	205	339	303	420	388	329	327	722	322	1017	1164	518
Arrive On Green	0.11	0.19	0.19	0.12	0.20	0.20	0.18	0.20	0.20	0.29	0.32	0.32
Sat Flow, veh/h	1810	1805	1610	3510	1900	1610	1810	3610	1610	3510	3610	1608
Grp Volume(v), veh/h	187	185	237	351	368	281	349	567	275	472	1059	292
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1755	1900	1610	1810	1805	1610	1755	1805	1608
Q Serve(g_s), s	12.1	11.0	16.6	11.6	22.6	10.1	21.4	17.6	14.1	13.1	33.3	17.8
Cycle Q Clear(g_c), s	12.1	11.0	16.6	11.6	22.6	10.1	21.4	17.6	14.1	13.1	33.3	17.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	205	339	303	420	388	329	327	722	322	1017	1164	518
V/C Ratio(X)	0.91	0.55	0.78	0.84	0.95	0.85	1.07	0.79	0.85	0.46	0.91	0.56
Avail Cap(c_a), veh/h	205	339	303	558	388	329	327	1141	509	1017	1214	541
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.9	43.5	45.8	51.0	46.4	11.7	48.5	44.9	23.9	34.5	38.5	33.2
Incr Delay (d2), s/veh	39.5	1.8	12.5	8.3	32.3	19.0	68.5	1.9	8.1	0.1	10.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	5.1	7.7	5.4	13.8	5.1	15.5	7.8	5.9	5.3	15.5	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.4	45.3	58.3	59.2	78.8	30.8	117.0	46.9	32.1	34.6	48.5	34.4
LnGrp LOS	F	D	E	E	E	C	F	D	C	C	D	C
Approach Vol, veh/h		609			1000			1191			1823	
Approach Delay, s/veh		64.5			58.4			64.0			42.6	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	40.5	29.9	19.9	28.1	26.0	44.4	18.0	30.0
Change Period (Y+Rc), s	6.2	* 6.2	5.8	* 5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	23.8	* 37	18.8	* 19	21.4	39.8	13.4	24.2
Max Q Clear Time (g_c+I1), s	15.1	19.6	13.6	18.6	23.4	35.3	14.1	24.6
Green Ext Time (p_c), s	0.6	4.0	0.6	0.1	0.0	2.9	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	54.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	9	12	31	16	15	17	1148	52	155	1296	5
Future Vol, veh/h	1	9	12	31	16	15	17	1148	52	155	1296	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	10	13	34	17	16	18	1248	57	168	1409	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2417	3090	707	2360	3064	654	1414	0	0	1306	0	0
Stage 1	1748	1748	-	1314	1314	-	-	-	-	-	-	-
Stage 2	669	1342	-	1046	1750	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	17	12	382	~ 19	~ 13	414	488	-	-	537	-	-
Stage 1	91	141	-	170	230	-	-	-	-	-	-	-
Stage 2	418	223	-	248	141	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	382	-	0	414	488	-	-	536	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	79	0	-	147	198	-	-	-	-	-	-	-
Stage 2	316	192	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.9	6.9
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	488	-	-	-	-	536	-	-
HCM Lane V/C Ratio	0.038	-	-	-	-	0.314	-	-
HCM Control Delay (s)	12.7	0.8	-	-	-	14.8	6	-
HCM Lane LOS	B	A	-	-	-	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-	1.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	2	9	3	5	6	21	1251	15	9	1258	16
Future Vol, veh/h	7	2	9	3	5	6	21	1251	15	9	1258	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	110	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	8	2	10	3	5	7	23	1360	16	10	1367	17

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2125	2818	692	2119	2818	688	1384	0	0	1376	0	0
Stage 1	1396	1396	-	1414	1414	-	-	-	-	-	-	-
Stage 2	729	1422	-	705	1404	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	29	18	391	29	18	393	501	-	-	505	-	-
Stage 1	151	210	-	147	206	-	-	-	-	-	-	-
Stage 2	385	204	-	398	208	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	26	17	391	26	17	393	501	-	-	505	-	-
Mov Cap-2 Maneuver	102	97	-	101	94	-	-	-	-	-	-	-
Stage 1	144	206	-	140	197	-	-	-	-	-	-	-
Stage 2	351	195	-	376	204	-	-	-	-	-	-	-

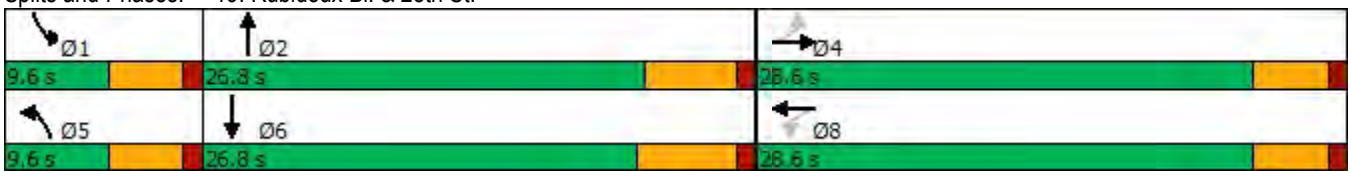
Approach	EB	WB	NB	SB
HCM Control Delay, s	30.6	33.2	0.2	0.1
HCM LOS	D	D		

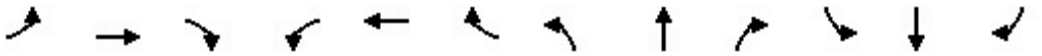
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	501	-	-	160	143	505	-	-
HCM Lane V/C Ratio	0.046	-	-	0.122	0.106	0.019	-	-
HCM Control Delay (s)	12.5	-	-	30.6	33.2	12.3	-	-
HCM Lane LOS	B	-	-	D	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.3	0.1	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	49	18	64	32	46	1238	11	1243
Future Volume (vph)	49	18	64	32	46	1238	11	1243
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	28.6	28.6	28.6	28.6	9.6	24.4	9.6	22.8
Total Split (s)	28.6	28.6	28.6	28.6	9.6	26.8	9.6	26.8
Total Split (%)	44.0%	44.0%	44.0%	44.0%	14.8%	41.2%	14.8%	41.2%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.4	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		12.9		12.9	5.4	26.8	5.4	24.8
Actuated g/C Ratio		0.29		0.29	0.12	0.59	0.12	0.55
v/c Ratio		0.30		0.28	0.23	0.65	0.06	0.70
Control Delay		10.2		15.6	26.4	14.7	24.8	17.8
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		10.2		15.6	26.4	14.7	24.8	17.8
LOS		B		B	C	B	C	B
Approach Delay		10.2		15.6		15.1		17.8
Approach LOS		B		B		B		B

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 45.2	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 16.1	Intersection LOS: B
Intersection Capacity Utilization 56.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 19: Rubidoux Bl. & 28th St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	18	70	64	32	15	46	1238	37	11	1243	24
Future Volume (veh/h)	49	18	70	64	32	15	46	1238	37	11	1243	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	53	20	67	70	35	11	50	1346	37	12	1351	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	188	75	141	275	122	28	93	1692	46	28	1580	29
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.05	0.47	0.47	0.02	0.44	0.44
Sat Flow, veh/h	430	410	771	812	668	155	1810	3586	98	1810	3626	67
Grp Volume(v), veh/h	140	0	0	116	0	0	50	677	706	12	672	704
Grp Sat Flow(s),veh/h/ln	1610	0	0	1636	0	0	1810	1805	1880	1810	1805	1888
Q Serve(g_s), s	0.8	0.0	0.0	0.0	0.0	0.0	1.2	14.4	14.4	0.3	15.2	15.2
Cycle Q Clear(g_c), s	3.3	0.0	0.0	2.5	0.0	0.0	1.2	14.4	14.4	0.3	15.2	15.2
Prop In Lane	0.38		0.48	0.60		0.09	1.00		0.05	1.00		0.04
Lane Grp Cap(c), veh/h	403	0	0	426	0	0	93	852	887	28	787	823
V/C Ratio(X)	0.35	0.00	0.00	0.27	0.00	0.00	0.54	0.79	0.80	0.43	0.85	0.86
Avail Cap(c_a), veh/h	938	0	0	941	0	0	199	852	887	199	834	873
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.5	0.0	0.0	16.2	0.0	0.0	21.0	10.1	10.1	22.2	11.5	11.5
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.3	0.0	0.0	1.8	5.2	5.1	3.8	8.3	8.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	1.0	0.0	0.0	0.5	4.8	5.0	0.1	5.4	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.0	0.0	0.0	16.5	0.0	0.0	22.8	15.4	15.3	26.0	19.8	19.6
LnGrp LOS	B	A	A	B	A	A	C	B	B	C	B	B
Approach Vol, veh/h		140			116			1433			1388	
Approach Delay, s/veh		17.0			16.5			15.6			19.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.3	27.2		12.9	6.9	25.6		12.9				
Change Period (Y+Rc), s	4.6	* 5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	5.0	* 21		24.0	5.0	21.0		24.0				
Max Q Clear Time (g_c+I1), s	2.3	16.4		5.3	3.2	17.2		4.5				
Green Ext Time (p_c), s	0.0	3.4		0.7	0.0	2.6		0.6				

Intersection Summary	
HCM 6th Ctrl Delay	17.6
HCM 6th LOS	B

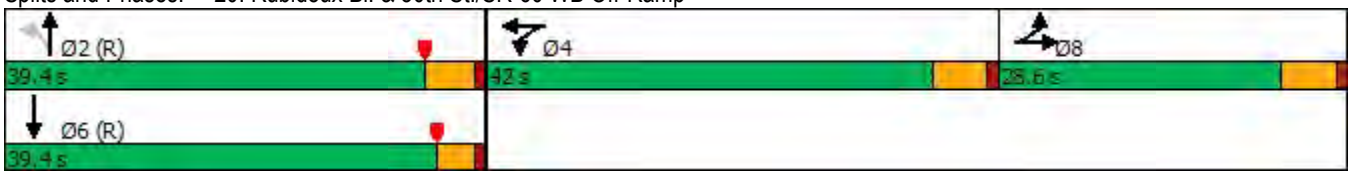
Notes

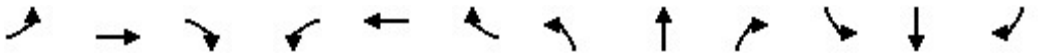
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	51	0	82	59	1166	1394
Future Volume (vph)	51	0	82	59	1166	1394
Turn Type	Split	NA	NA	Perm	NA	NA
Protected Phases	8	8	4		2	6
Permitted Phases				2		
Detector Phase	8	8	4	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.6	28.6	42.0	39.4	39.4	39.4
Total Split (%)	26.0%	26.0%	38.2%	35.8%	35.8%	35.8%
Yellow Time (s)	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	19.3	19.3	36.5	38.2	38.2	39.2
Actuated g/C Ratio	0.18	0.18	0.33	0.35	0.35	0.36
v/c Ratio	0.18	0.85	1.13	0.96	1.04	1.25
Control Delay	38.2	49.5	111.8	60.4	52.6	150.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.2	49.5	111.8	60.4	52.6	150.3
LOS	D	D	F	E	D	F
Approach Delay		47.8	111.8		53.0	150.3
Approach LOS		D	F		D	F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.25	
Intersection Signal Delay: 101.1	Intersection LOS: F
Intersection Capacity Utilization 113.6%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	0	278	381	82	141	59	1166	0	0	1394	31
Future Volume (veh/h)	51	0	278	381	82	141	59	1166	0	0	1394	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	57	0	228	428	92	124	66	1310	0	0	1566	34
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	297	0	265	392	84	114	65	1294	0	0	1294	28
Arrive On Green	0.16	0.00	0.16	0.33	0.33	0.33	0.72	0.72	0.00	0.00	0.36	0.36
Sat Flow, veh/h	1810	0	1610	1182	254	343	323	3705	0	0	3706	78
Grp Volume(v), veh/h	57	0	228	644	0	0	66	1310	0	0	781	819
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1779	0	0	323	1805	0	0	1805	1884
Q Serve(g_s), s	3.0	0.0	15.2	36.5	0.0	0.0	0.0	39.4	0.0	0.0	39.4	39.4
Cycle Q Clear(g_c), s	3.0	0.0	15.2	36.5	0.0	0.0	39.4	39.4	0.0	0.0	39.4	39.4
Prop In Lane	1.00		1.00	0.66		0.19	1.00		0.00	0.00		0.04
Lane Grp Cap(c), veh/h	297	0	265	590	0	0	65	1294	0	0	647	675
V/C Ratio(X)	0.19	0.00	0.86	1.09	0.00	0.00	1.01	1.01	0.00	0.00	1.21	1.21
Avail Cap(c_a), veh/h	380	0	338	590	0	0	65	1294	0	0	647	675
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.65	0.65
Uniform Delay (d), s/veh	39.7	0.0	44.7	36.8	0.0	0.0	35.3	15.6	0.0	0.0	35.3	35.3
Incr Delay (d2), s/veh	0.4	0.0	17.2	64.2	0.0	0.0	113.6	28.2	0.0	0.0	103.2	104.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	7.3	25.4	0.0	0.0	3.6	10.6	0.0	0.0	34.9	36.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.0	0.0	61.9	100.9	0.0	0.0	148.9	43.8	0.0	0.0	138.5	139.9
LnGrp LOS	D	A	E	F	A	A	F	F	A	A	F	F
Approach Vol, veh/h		285			644			1376			1600	
Approach Delay, s/veh		57.6			100.9			48.8			139.2	
Approach LOS		E			F			D			F	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		44.4		42.0		44.4		23.6				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		34.4		36.5		* 35		23.1				
Max Q Clear Time (g_c+I1), s		41.4		38.5		41.4		17.2				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.9				

Intersection Summary												
HCM 6th Ctrl Delay			95.1									
HCM 6th LOS			F									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	19.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	295	1233	1272	849
Future Vol, veh/h	0	0	295	1233	1272	849
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	311	1298	1339	894

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1118	2234	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	0	*622	~ 225	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	-	*622	~ 224	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	46.4	0
HCM LOS	A		

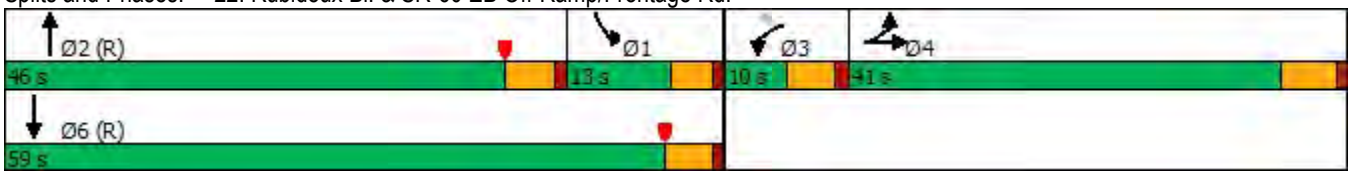
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	~ 224	-	-	-	-
HCM Lane V/C Ratio	1.386	-	-	-	-
HCM Control Delay (s)	240.6	-	0	-	-
HCM Lane LOS	F	-	A	-	-
HCM 95th %tile Q(veh)	17.5	-	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	15	18	5	794	267	937
Future Volume (vph)	15	18	5	794	267	937
Turn Type	NA	Prot	Perm	NA	Prot	NA
Protected Phases	4	3		2	1	6
Permitted Phases			3			
Detector Phase	4	3	3	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	10.0	10.0	45.0	9.5	30.0
Total Split (s)	41.0	10.0	10.0	46.0	13.0	59.0
Total Split (%)	37.3%	9.1%	9.1%	41.8%	11.8%	53.6%
Yellow Time (s)	4.5	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	39.5	5.0	5.0	41.0	8.5	54.0
Actuated g/C Ratio	0.36	0.05	0.05	0.37	0.08	0.49
v/c Ratio	1.66	0.23	0.03	1.03	2.00	0.55
Control Delay	329.7	57.7	0.2	61.4	476.2	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	329.7	57.7	0.2	61.4	476.2	9.1
LOS	F	E	A	E	F	A
Approach Delay	329.7			61.4		112.6
Approach LOS	F			E		F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.00	
Intersection Signal Delay: 155.1	Intersection LOS: F
Intersection Capacity Utilization 131.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	795	15	218	18	0	5	0	794	549	267	937	0
Future Volume (veh/h)	795	15	218	18	0	5	0	794	549	267	937	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	828	16	130	19	0	3	0	827	463	278	976	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	489	9	77	0	0	0	0	828	458	296	2100	0
Arrive On Green	0.32	0.32	0.32	0.00	0.00	0.00	0.00	0.37	0.37	0.33	1.00	0.00
Sat Flow, veh/h	1514	29	238		0		0	2316	1229	1810	3705	0
Grp Volume(v), veh/h	974	0	0		0.0		0	670	620	278	976	0
Grp Sat Flow(s),veh/h/ln	1781	0	0				0	1805	1644	1810	1805	0
Q Serve(g_s), s	35.5	0.0	0.0				0.0	40.8	41.0	16.4	0.0	0.0
Cycle Q Clear(g_c), s	35.5	0.0	0.0				0.0	40.8	41.0	16.4	0.0	0.0
Prop In Lane	0.85		0.13				0.00		0.75	1.00		0.00
Lane Grp Cap(c), veh/h	575	0	0				0	673	613	296	2100	0
V/C Ratio(X)	1.69	0.00	0.00				0.00	1.00	1.01	0.94	0.46	0.00
Avail Cap(c_a), veh/h	575	0	0				0	673	613	296	2100	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.58	0.58	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.3	0.0	0.0				0.0	34.4	34.5	36.5	0.0	0.0
Incr Delay (d2), s/veh	319.8	0.0	0.0				0.0	25.6	30.4	35.9	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	65.6	0.0	0.0				0.0	21.7	20.6	8.6	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	357.1	0.0	0.0				0.0	60.0	64.9	72.4	0.7	0.0
LnGrp LOS	F	A	A				A	E	F	E	A	A
Approach Vol, veh/h		974						1290			1254	
Approach Delay, s/veh		357.1						62.4			16.6	
Approach LOS		F						E			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	23.0	46.0		41.0		69.0
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0
Max Green Setting (Gmax), s	8.5	* 41		35.5		54.0
Max Q Clear Time (g_c+I1), s	18.4	43.0		37.5		2.0
Green Ext Time (p_c), s	0.0	0.0		0.0		4.8

Intersection Summary		
HCM 6th Ctrl Delay		127.7
HCM 6th LOS		F

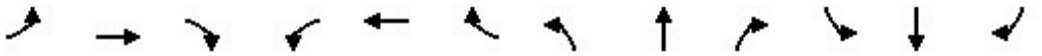
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	165	32	30	20	126	33	1089	56	1082
Future Volume (vph)	165	32	30	20	126	33	1089	56	1082
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	30.6	30.6	34.6	34.6	34.6	9.6	29.4	9.6	22.4
Total Split (s)	34.6	34.6	34.6	34.6	34.6	9.6	30.4	10.0	30.8
Total Split (%)	46.1%	46.1%	46.1%	46.1%	46.1%	12.8%	40.5%	13.3%	41.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	4.6	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		16.3		16.3	16.3	5.2	26.1	5.5	28.2
Actuated g/C Ratio		0.28		0.28	0.28	0.09	0.45	0.09	0.49
v/c Ratio		0.62		0.13	0.26	0.23	0.80	0.37	0.73
Control Delay		25.2		16.5	4.6	33.4	22.6	36.0	19.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		25.2		16.5	4.6	33.4	22.6	36.0	19.0
LOS		C		B	A	C	C	D	B
Approach Delay		25.2		7.9			22.9		19.8
Approach LOS		C		A			C		B

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 58.1	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 20.8	Intersection LOS: C
Intersection Capacity Utilization 70.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 23: Rubidoux Bl. & 34th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	32	22	30	20	126	33	1089	60	56	1082	54
Future Volume (veh/h)	165	32	22	30	20	126	33	1089	60	56	1082	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.98		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	185	36	16	34	22	72	37	1224	60	63	1216	53
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	382	70	24	338	196	428	71	1452	71	101	1522	66
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.04	0.42	0.42	0.06	0.43	0.43
Sat Flow, veh/h	1002	262	92	881	737	1610	1810	3498	171	1810	3524	153
Grp Volume(v), veh/h	237	0	0	56	0	72	37	631	653	63	622	647
Grp Sat Flow(s),veh/h/ln	1355	0	0	1618	0	1610	1810	1805	1864	1810	1805	1872
Q Serve(g_s), s	7.6	0.0	0.0	0.0	0.0	1.9	1.1	17.4	17.5	1.9	16.6	16.6
Cycle Q Clear(g_c), s	8.9	0.0	0.0	1.2	0.0	1.9	1.1	17.4	17.5	1.9	16.6	16.6
Prop In Lane	0.78		0.07	0.61		1.00	1.00		0.09	1.00		0.08
Lane Grp Cap(c), veh/h	476	0	0	534	0	428	71	749	774	101	779	809
V/C Ratio(X)	0.50	0.00	0.00	0.10	0.00	0.17	0.52	0.84	0.84	0.62	0.80	0.80
Avail Cap(c_a), veh/h	862	0	0	953	0	871	163	814	841	176	827	858
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.4	0.0	0.0	15.4	0.0	15.6	26.1	14.6	14.6	25.6	13.7	13.7
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.1	0.0	0.2	2.2	7.5	7.4	2.3	5.3	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	0.0	0.5	0.0	0.7	0.5	7.1	7.3	0.8	6.3	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.2	0.0	0.0	15.5	0.0	15.8	28.3	22.1	22.0	27.9	19.0	18.8
LnGrp LOS	B	A	A	B	A	B	C	C	C	C	B	B
Approach Vol, veh/h		237			128			1321			1332	
Approach Delay, s/veh		19.2			15.7			22.2			19.3	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	28.4		19.3	6.8	29.3		19.3				
Change Period (Y+Rc), s	4.6	5.4		4.6	4.6	5.4		4.6				
Max Green Setting (Gmax), s	5.4	25.0		30.0	5.0	25.4		30.0				
Max Q Clear Time (g_c+I1), s	3.9	19.5		10.9	3.1	18.6		3.9				
Green Ext Time (p_c), s	0.0	3.5		1.4	0.0	4.1		0.5				

Intersection Summary												
HCM 6th Ctrl Delay			20.4									
HCM 6th LOS			C									

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	750	63	0	0	23	33
Future Vol, veh/h	750	63	0	0	23	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	773	65	0	0	24	34

Major/Minor	Major1			Minor1	
Conflicting Flow All	0	0		806	806
Stage 1	-	-		806	-
Stage 2	-	-		0	-
Critical Hdwy	-	-		6.4	6.2
Critical Hdwy Stg 1	-	-		5.4	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	-		3.5	3.3
Pot Cap-1 Maneuver	-	-		354	385
Stage 1	-	-		443	-
Stage 2	-	-		-	-
Platoon blocked, %	-	-			
Mov Cap-1 Maneuver	-	-		354	385
Mov Cap-2 Maneuver	-	-		354	-
Stage 1	-	-		443	-
Stage 2	-	-		-	-

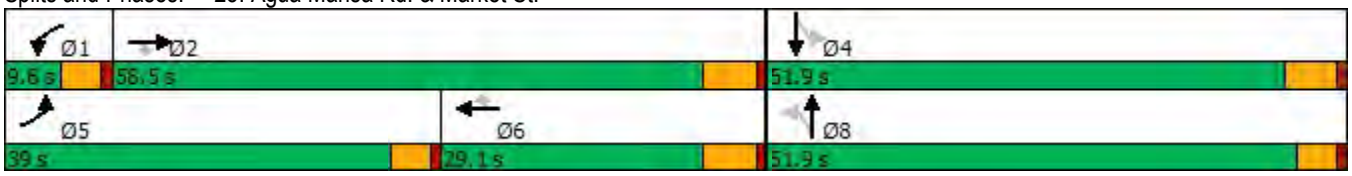
Approach	EB	NB
HCM Control Delay, s	0	16.4
HCM LOS		C

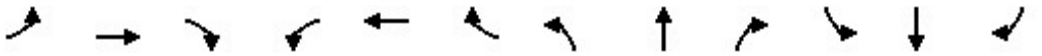
Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	372	-	-
HCM Lane V/C Ratio	0.155	-	-
HCM Control Delay (s)	16.4	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	0.5	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	394	521	10	4	690	267	19	2	176	16
Future Volume (vph)	394	521	10	4	690	267	19	2	176	16
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	5	2		1	6			8		4
Permitted Phases			2			6	8		4	
Detector Phase	5	2	2	1	6	6	8	8	4	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	31.8	31.8	9.6	26.8	26.8	14.6	14.6	43.8	43.8
Total Split (s)	39.0	58.5	58.5	9.6	29.1	29.1	51.9	51.9	51.9	51.9
Total Split (%)	32.5%	48.8%	48.8%	8.0%	24.3%	24.3%	43.3%	43.3%	43.3%	43.3%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None
Act Effct Green (s)	30.9	57.4	57.4	5.0	23.7	23.7		47.4		46.2
Actuated g/C Ratio	0.26	0.49	0.49	0.04	0.20	0.20		0.41		0.39
v/c Ratio	0.92	0.33	0.01	0.05	1.05	0.53		0.06		1.00
Control Delay	67.2	19.1	0.0	56.8	92.8	8.5		18.1		66.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	67.2	19.1	0.0	56.8	92.8	8.5		18.1		66.0
LOS	E	B	A	E	F	A		B		E
Approach Delay		39.4			69.2			18.1		66.0
Approach LOS		D			E			B		E

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 117	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay: 56.9	Intersection LOS: E
Intersection Capacity Utilization 90.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	394	521	10	4	690	267	19	2	8	176	16	408
Future Volume (veh/h)	394	521	10	4	690	267	19	2	8	176	16	408
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	438	579	8	4	767	258	21	2	7	196	18	359
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	467	1681	750	9	769	342	277	32	78	243	24	377
Arrive On Green	0.26	0.47	0.47	0.01	0.21	0.21	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1810	3610	1610	1810	3610	1606	578	83	201	520	61	976
Grp Volume(v), veh/h	438	579	8	4	767	258	30	0	0	573	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1606	862	0	0	1558	0	0
Q Serve(g_s), s	26.8	11.5	0.3	0.2	24.0	17.0	0.0	0.0	0.0	38.8	0.0	0.0
Cycle Q Clear(g_c), s	26.8	11.5	0.3	0.2	24.0	17.0	1.6	0.0	0.0	40.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.70		0.23	0.34		0.63
Lane Grp Cap(c), veh/h	467	1681	750	9	769	342	387	0	0	644	0	0
V/C Ratio(X)	0.94	0.34	0.01	0.42	1.00	0.75	0.08	0.00	0.00	0.89	0.00	0.00
Avail Cap(c_a), veh/h	550	1681	750	80	769	342	424	0	0	677	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	41.1	19.2	16.2	56.1	44.5	41.7	21.7	0.0	0.0	33.6	0.0	0.0
Incr Delay (d2), s/veh	20.9	0.6	0.0	10.8	31.8	14.3	0.1	0.0	0.0	13.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.1	4.7	0.1	0.1	13.7	7.9	0.5	0.0	0.0	16.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.0	19.8	16.3	66.9	76.3	56.0	21.8	0.0	0.0	47.1	0.0	0.0
LnGrp LOS	E	B	B	E	E	E	C	A	A	D	A	A
Approach Vol, veh/h		1025			1029			30			573	
Approach Delay, s/veh		37.8			71.2			21.8			47.1	
Approach LOS		D			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.2	58.5		49.5	33.8	29.9		49.5				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	52.7		46.1	34.4	23.3		* 47				
Max Q Clear Time (g_c+I1), s	2.2	13.5		42.4	28.8	26.0		3.6				
Green Ext Time (p_c), s	0.0	3.9		1.3	0.4	0.0		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		52.6
HCM 6th LOS		D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	168	2	23	19	13	4	14	49	2	17	2
Future Vol, veh/h	8	168	2	23	19	13	4	14	49	2	17	2
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	205	2	28	23	16	5	17	60	2	21	2
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	9.4	8	7.7	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	6%	5%	0%	55%	0%	10%
Vol Thru, %	21%	95%	0%	45%	0%	81%
Vol Right, %	73%	0%	100%	0%	100%	10%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	67	176	2	42	13	21
LT Vol	4	8	0	23	0	2
Through Vol	14	168	0	19	0	17
RT Vol	49	0	2	0	13	2
Lane Flow Rate	82	215	2	51	16	26
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.095	0.283	0.003	0.074	0.019	0.033
Departure Headway (Hd)	4.202	4.748	4.024	5.189	4.211	4.653
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	856	749	876	692	852	772
Service Time	2.209	2.533	1.808	2.905	1.926	2.664
HCM Lane V/C Ratio	0.096	0.287	0.002	0.074	0.019	0.034
HCM Control Delay	7.7	9.4	6.8	8.3	7	7.8
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.3	1.2	0	0.2	0.1	0.1

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	4	0	8	14	0	4	6	76	8	1	75	9
Future Vol, veh/h	4	0	8	14	0	4	6	76	8	1	75	9
Conflicting Peds, #/hr	0	0	1	0	0	1	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	0	10	18	0	5	8	96	10	1	95	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	224	225	102	226	225	102	106	0	0	106	0	0
Stage 1	103	103	-	117	117	-	-	-	-	-	-	-
Stage 2	121	122	-	109	108	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	736	678	959	734	678	959	1498	-	-	1498	-	-
Stage 1	908	814	-	892	803	-	-	-	-	-	-	-
Stage 2	888	799	-	901	810	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	727	673	958	722	673	958	1498	-	-	1498	-	-
Mov Cap-2 Maneuver	727	673	-	722	673	-	-	-	-	-	-	-
Stage 1	903	813	-	887	798	-	-	-	-	-	-	-
Stage 2	877	794	-	890	809	-	-	-	-	-	-	-

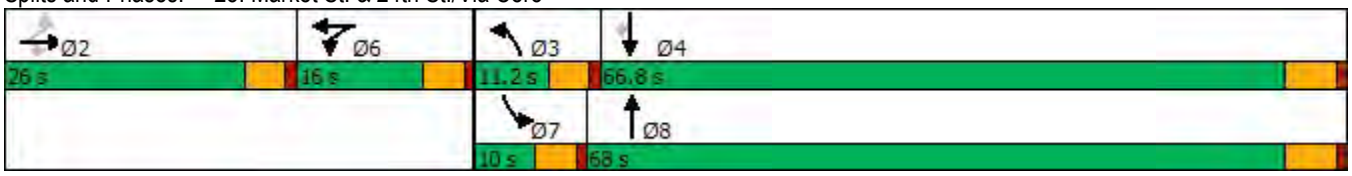
Approach	EB	WB	NB	SB
HCM Control Delay, s	9.2	9.9	0.5	0.1
HCM LOS	A	A		

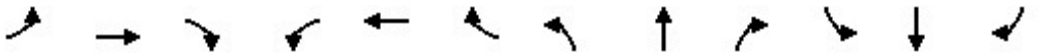
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1498	-	-	866	764	1498	-	-
HCM Lane V/C Ratio	0.005	-	-	0.018	0.03	0.001	-	-
HCM Control Delay (s)	7.4	0	-	9.2	9.9	7.4	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	4	33	173	100	8	41	899	30	807	3
Future Volume (vph)	4	33	173	100	8	41	899	30	807	3
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	26.0	26.0	26.0	16.0	16.0	11.2	68.0	10.0	66.8	66.8
Total Split (%)	21.7%	21.7%	21.7%	13.3%	13.3%	9.3%	56.7%	8.3%	55.7%	55.7%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		11.9	11.9	10.9	10.9	6.1	62.6	5.3	61.9	61.9
Actuated g/C Ratio		0.11	0.11	0.10	0.10	0.06	0.59	0.05	0.58	0.58
v/c Ratio		0.45	0.54	0.57	0.07	0.42	1.03	0.36	0.77	0.00
Control Delay		62.0	12.8	60.1	36.2	63.2	58.4	62.8	24.5	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		62.0	12.8	60.1	36.2	63.2	58.4	62.8	24.5	0.0
LOS		E	B	E	D	E	E	E	C	A
Approach Delay		21.5			57.3		58.6		25.8	
Approach LOS		C			E		E		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 106.1	
Natural Cycle: 115	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 43.0	Intersection LOS: D
Intersection Capacity Utilization 78.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	33	173	100	8	6	41	899	170	30	807	3
Future Volume (veh/h)	4	33	173	100	8	6	41	899	170	30	807	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	4	35	89	105	8	5	43	946	157	32	849	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	18	161	152	168	101	63	62	947	157	52	1122	951
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.03	0.60	0.60	0.03	0.59	0.59
Sat Flow, veh/h	194	1696	1605	1810	1094	683	1810	1589	264	1810	1900	1610
Grp Volume(v), veh/h	39	0	89	105	0	13	43	0	1103	32	849	3
Grp Sat Flow(s),veh/h/ln	1890	0	1605	1810	0	1777	1810	0	1852	1810	1900	1610
Q Serve(g_s), s	2.0	0.0	5.5	5.8	0.0	0.7	2.5	0.0	62.1	1.8	34.5	0.1
Cycle Q Clear(g_c), s	2.0	0.0	5.5	5.8	0.0	0.7	2.5	0.0	62.1	1.8	34.5	0.1
Prop In Lane	0.10		1.00	1.00		0.38	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	179	0	152	168	0	165	62	0	1104	52	1122	951
V/C Ratio(X)	0.22	0.00	0.59	0.63	0.00	0.08	0.70	0.00	1.00	0.61	0.76	0.00
Avail Cap(c_a), veh/h	388	0	329	198	0	194	114	0	1104	94	1122	951
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	0.0	45.3	45.6	0.0	43.3	49.9	0.0	21.1	50.1	15.8	8.8
Incr Delay (d2), s/veh	0.6	0.0	3.5	4.6	0.0	0.2	5.2	0.0	26.9	4.2	4.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	2.3	2.9	0.0	0.3	1.2	0.0	30.5	0.9	14.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.3	0.0	48.8	50.3	0.0	43.5	55.0	0.0	48.0	54.3	20.6	8.8
LnGrp LOS	D	A	D	D	A	D	E	A	D	D	C	A
Approach Vol, veh/h		128			118			1146			884	
Approach Delay, s/veh		47.4			49.5			48.3			21.8	
Approach LOS		D			D			D			C	

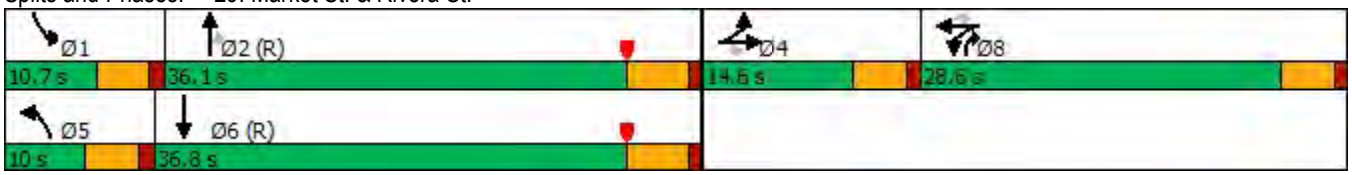
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.5	8.2	67.5		14.3	7.6	68.0				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		21.4	6.6	61.0		11.4	5.4	62.2				
Max Q Clear Time (g_c+I1), s		7.5	4.5	36.5		7.8	3.8	64.1				
Green Ext Time (p_c), s		0.3	0.0	6.1		0.1	0.0	0.0				

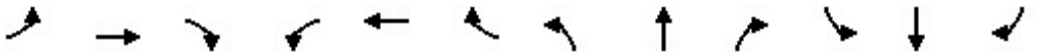
Intersection Summary												
HCM 6th Ctrl Delay			38.0									
HCM 6th LOS			D									

Lane Group	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	18	324	0	55	23	1166	320	40	980
Future Volume (vph)	18	324	0	55	23	1166	320	40	980
Turn Type	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases		8	8		5	2	8	1	6
Permitted Phases	4			8			2		
Detector Phase	4	8	8	8	5	2	8	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	14.6	28.6	28.6	28.6	9.6	35.1	28.6	9.6	29.1
Total Split (s)	14.6	28.6	28.6	28.6	10.0	36.1	28.6	10.7	36.8
Total Split (%)	16.2%	31.8%	31.8%	31.8%	11.1%	40.1%	31.8%	11.9%	40.9%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.1	3.6	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	5.1	4.6	4.6	5.1
Lead/Lag					Lead	Lag		Lead	Lag
Lead-Lag Optimize?					Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	10.0	16.3	16.3	16.3	5.5	51.4	68.2	6.1	54.0
Actuated g/C Ratio	0.11	0.18	0.18	0.18	0.06	0.57	0.76	0.07	0.60
v/c Ratio	0.05	0.54	0.54	0.14	0.22	0.58	0.26	0.34	0.47
Control Delay	0.3	38.9	38.9	0.8	40.2	21.2	0.5	47.6	15.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.5	0.1	0.0	0.0
Total Delay	0.3	38.9	38.9	0.8	40.2	21.7	0.6	47.6	15.3
LOS	A	D	D	A	D	C	A	D	B
Approach Delay			33.3			17.5			16.6
Approach LOS			C			B			B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 2 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 19.1	Intersection LOS: B
Intersection Capacity Utilization 56.3%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 29: Market St. & Rivera St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	18	324	0	55	23	1166	320	40	980	1
Future Volume (veh/h)	0	0	18	324	0	55	23	1166	320	40	980	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	0	5	334	0	33	24	1202	224	41	1010	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	0	25	21	447	0	194	45	2230	1193	64	2325	2
Arrive On Green	0.00	0.00	0.01	0.12	0.00	0.12	0.05	1.00	1.00	0.04	0.63	0.63
Sat Flow, veh/h	0	1900	1610	3619	0	1573	1810	3610	1609	1810	3701	4
Grp Volume(v), veh/h	0	0	5	334	0	33	24	1202	224	41	493	518
Grp Sat Flow(s),veh/h/ln	0	1900	1610	1810	0	1573	1810	1805	1609	1810	1805	1899
Q Serve(g_s), s	0.0	0.0	0.3	8.0	0.0	1.7	1.2	0.0	0.0	2.0	12.6	12.6
Cycle Q Clear(g_c), s	0.0	0.0	0.3	8.0	0.0	1.7	1.2	0.0	0.0	2.0	12.6	12.6
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	25	21	447	0	194	45	2230	1193	64	1134	1193
V/C Ratio(X)	0.00	0.00	0.24	0.75	0.00	0.17	0.53	0.54	0.19	0.64	0.43	0.43
Avail Cap(c_a), veh/h	0	211	179	965	0	420	109	2230	1193	123	1134	1193
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	0.82	0.82	0.82	0.63	0.63	0.63
Uniform Delay (d), s/veh	0.0	0.0	44.0	38.1	0.0	35.3	42.2	0.0	0.0	42.8	8.5	8.5
Incr Delay (d2), s/veh	0.0	0.0	5.7	2.5	0.0	0.4	2.9	0.8	0.3	2.4	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	3.7	0.0	0.7	0.5	0.2	0.1	0.9	4.1	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	49.6	40.6	0.0	35.7	45.1	0.8	0.3	45.3	9.3	9.3
LnGrp LOS	A	A	D	D	A	D	D	A	A	D	A	A
Approach Vol, veh/h		5			367			1450			1052	
Approach Delay, s/veh		49.6			40.2			1.4			10.7	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	60.7		5.8	6.9	61.7		15.7				
Change Period (Y+Rc), s	4.6	5.1		4.6	4.6	5.1		4.6				
Max Green Setting (Gmax), s	6.1	31.0		10.0	5.4	31.7		24.0				
Max Q Clear Time (g_c+I1), s	4.0	2.0		2.3	3.2	14.6		10.0				
Green Ext Time (p_c), s	0.0	10.5		0.0	0.0	5.5		1.1				

Intersection Summary	
HCM 6th Ctrl Delay	9.9
HCM 6th LOS	A

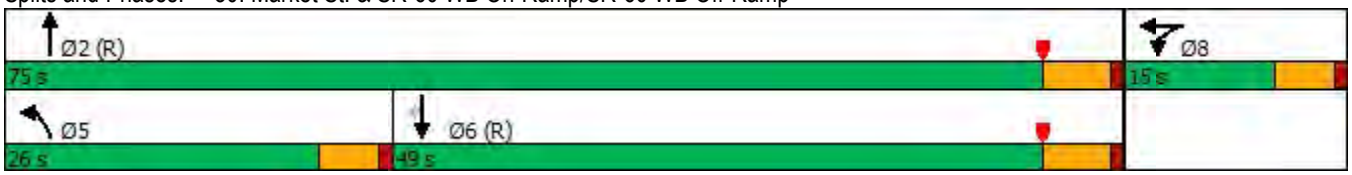
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	1073	209	436	1117	204
Future Volume (vph)	0	1073	209	436	1117	204
Turn Type	NA	Free	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		Free				6
Detector Phase	8		5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	10.0		10.0	24.5	10.5	10.5
Total Split (s)	15.0		26.0	75.0	49.0	49.0
Total Split (%)	16.7%		28.9%	83.3%	54.4%	54.4%
Yellow Time (s)	4.0		4.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	C-Min	C-Min	C-Min
Act Effct Green (s)	8.3	90.0	16.0	74.4	52.3	52.3
Actuated g/C Ratio	0.09	1.00	0.18	0.83	0.58	0.58
v/c Ratio	0.41	0.70	0.69	0.15	0.56	0.21
Control Delay	45.4	2.5	25.5	5.4	11.2	2.2
Queue Delay	0.0	0.3	0.0	0.0	0.2	0.0
Total Delay	45.4	2.9	25.5	5.4	11.4	2.2
LOS	D	A	C	A	B	A
Approach Delay	5.3			11.9	9.9	
Approach LOS	A			B	A	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 8.7	Intersection LOS: A
Intersection Capacity Utilization 75.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 30: Market St. & SR-60 WB On-Ramp/SR-60 WB Off-Ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	65	0	1073	209	436	0	0	1117	204
Future Volume (veh/h)	0	0	0	65	0	1073	209	436	0	0	1117	204
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				68	0	0	220	459	0	0	1176	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				89	0		255	3011	0	0	2301	
Arrive On Green				0.05	0.00	0.00	0.28	1.00	0.00	0.00	1.00	0.00
Sat Flow, veh/h				1810	0	1610	1810	3705	0	0	3705	1610
Grp Volume(v), veh/h				68	0	0	220	459	0	0	1176	0
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1805	1610
Q Serve(g_s), s				3.3	0.0	0.0	10.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				3.3	0.0	0.0	10.4	0.0	0.0	0.0	0.0	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				89	0		255	3011	0	0	2301	
V/C Ratio(X)				0.76	0.00		0.86	0.15	0.00	0.00	0.51	
Avail Cap(c_a), veh/h				201	0		422	3011	0	0	2301	
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	0.00	0.00	0.76	0.76	0.00	0.00	0.88	0.00
Uniform Delay (d), s/veh				42.3	0.0	0.0	31.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				12.7	0.0	0.0	7.4	0.1	0.0	0.0	0.7	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.7	0.0	0.0	4.2	0.0	0.0	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				54.9	0.0	0.0	38.9	0.1	0.0	0.0	0.7	0.0
LnGrp LOS				D	A		D	A	A	A	A	
Approach Vol, veh/h					68	A		679			1176	A
Approach Delay, s/veh					54.9			12.6			0.7	
Approach LOS					D			B			A	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	80.6		17.7	62.9		9.4						
Change Period (Y+Rc), s	5.5		5.0	5.5		5.0						
Max Green Setting (Gmax), s	69.5		21.0	43.5		10.0						
Max Q Clear Time (g_c+I1), s	2.0		12.4	2.0		5.3						
Green Ext Time (p_c), s	3.2		0.4	10.0		0.1						

Intersection Summary		
HCM 6th Ctrl Delay	6.8	
HCM 6th LOS	A	

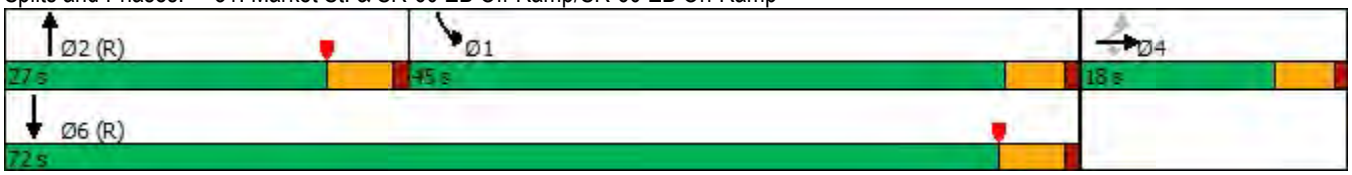
Notes

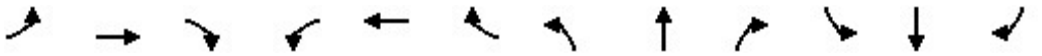
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	0	518	498	690	493
Future Volume (vph)	0	518	498	690	493
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	24.5	10.0	10.5
Total Split (s)	18.0	18.0	27.0	45.0	72.0
Total Split (%)	20.0%	20.0%	30.0%	50.0%	80.0%
Yellow Time (s)	4.0	4.0	4.5	4.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.0	5.5
Lead/Lag			Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Min	None	C-Min
Act Effct Green (s)	11.7	11.7	24.6	38.2	67.8
Actuated g/C Ratio	0.13	0.13	0.27	0.42	0.75
v/c Ratio	0.64	0.64	0.61	0.92	0.18
Control Delay	49.9	7.2	31.6	43.1	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	49.9	7.2	31.6	43.1	5.1
LOS	D	A	C	D	A
Approach Delay	16.6		31.6		27.3
Approach LOS	B		C		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 15 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 25.4	Intersection LOS: C
Intersection Capacity Utilization 75.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 31: Market St. & SR-60 EB Off-Ramp/SR-60 EB On-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	0	518	0	0	0	0	498	87	690	493	0
Future Volume (veh/h)	147	0	518	0	0	0	0	498	87	690	493	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	150	0	264				0	508	0	704	503	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	215	0	336				0	640		952	2761	0
Arrive On Green	0.12	0.00	0.12				0.00	0.18	0.00	0.88	1.00	0.00
Sat Flow, veh/h	1810	0	2834				0	3800	0	1810	3705	0
Grp Volume(v), veh/h	150	0	264				0	508	0	704	503	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1805	0	1810	1805	0
Q Serve(g_s), s	7.2	0.0	8.1				0.0	12.1	0.0	12.1	0.0	0.0
Cycle Q Clear(g_c), s	7.2	0.0	8.1				0.0	12.1	0.0	12.1	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	215	0	336				0	640		952	2761	0
V/C Ratio(X)	0.70	0.00	0.79				0.00	0.79		0.74	0.18	0.00
Avail Cap(c_a), veh/h	261	0	409				0	862		952	2761	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.81	0.81	0.00
Uniform Delay (d), s/veh	38.1	0.0	38.5				0.0	35.5	0.0	3.3	0.0	0.0
Incr Delay (d2), s/veh	6.2	0.0	8.0				0.0	9.8	0.0	2.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	3.1				0.0	6.0	0.0	2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.3	0.0	46.6				0.0	45.3	0.0	5.8	0.1	0.0
LnGrp LOS	D	A	D				A	D		A	A	A
Approach Vol, veh/h		414						508	A		1207	
Approach Delay, s/veh		45.7						45.3			3.4	
Approach LOS		D						D			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	52.9	21.5		15.7		74.3
Change Period (Y+Rc), s	5.5	* 5.5		5.0		5.5
Max Green Setting (Gmax), s	40.0	* 22		13.0		66.5
Max Q Clear Time (g_c+I1), s	14.1	14.1		10.1		2.0
Green Ext Time (p_c), s	2.5	1.8		0.5		3.5

Intersection Summary	
HCM 6th Ctrl Delay	21.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	1	15	0	0	5	10	556	5	110	870	32
Future Vol, veh/h	23	1	15	0	0	5	10	556	5	110	870	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	145	-	-	140	-	110
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	24	1	16	0	0	5	10	579	5	115	906	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1446	1742	453	1288	1773	294	939	0	0	586	0	0
Stage 1	1136	1136	-	604	604	-	-	-	-	-	-	-
Stage 2	310	606	-	684	1169	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	219	137	*740	*322	128	708	*1110	-	-	999	-	-
Stage 1	497	475	-	*457	491	-	-	-	-	-	-	-
Stage 2	681	490	-	*698	453	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	197	119	*740	*284	112	707	*1110	-	-	997	-	-
Mov Cap-2 Maneuver	328	234	-	*359	248	-	-	-	-	-	-	-
Stage 1	493	421	-	*452	486	-	-	-	-	-	-	-
Stage 2	670	485	-	*603	401	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.7	10.1	0.1	1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 1110	-	-	412	707	997	-	-
HCM Lane V/C Ratio	0.009	-	-	0.099	0.007	0.115	-	-
HCM Control Delay (s)	8.3	-	-	14.7	10.1	9.1	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	196	51	49	522	619	191
Future Vol, veh/h	196	51	49	522	619	191
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	209	54	52	555	659	203

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1143	761	862	0	-	0
Stage 1	761	-	-	-	-	-
Stage 2	382	-	-	-	-	-
Critical Hdwy	6.6	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	210	409	789	-	-	-
Stage 1	465	-	-	-	-	-
Stage 2	665	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 196	409	789	-	-	-
Mov Cap-2 Maneuver	323	-	-	-	-	-
Stage 1	434	-	-	-	-	-
Stage 2	665	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	44.5	0.8	0
HCM LOS	E		

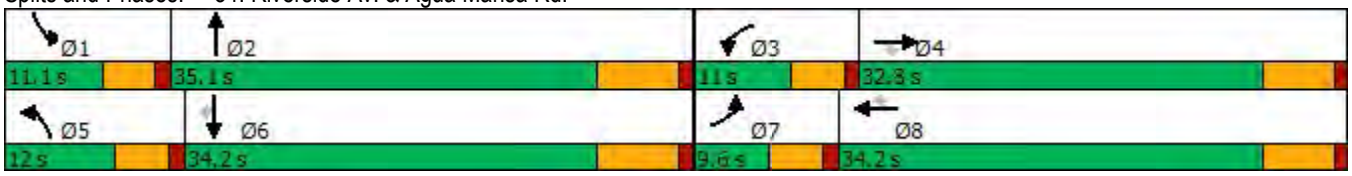
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	789	-	338	-	-
HCM Lane V/C Ratio	0.066	-	0.777	-	-
HCM Control Delay (s)	9.9	-	44.5	-	-
HCM Lane LOS	A	-	E	-	-
HCM 95th %tile Q(veh)	0.2	-	6.3	-	-

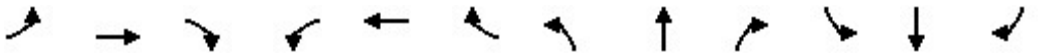
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	163	317	161	141	423	82	178	507	80	609	220
Future Volume (vph)	163	317	161	141	423	82	178	507	80	609	220
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	9.6	32.8	32.8	11.0	34.2	34.2	12.0	35.1	11.1	34.2	34.2
Total Split (%)	10.7%	36.4%	36.4%	12.2%	38.0%	38.0%	13.3%	39.0%	12.3%	38.0%	38.0%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	5.1	21.2	21.2	6.5	22.6	22.6	7.6	24.1	6.3	20.4	20.4
Actuated g/C Ratio	0.07	0.27	0.27	0.08	0.29	0.29	0.10	0.31	0.08	0.26	0.26
v/c Ratio	1.47	0.65	0.30	0.99	0.81	0.15	1.08	0.53	0.58	0.68	0.39
Control Delay	280.8	32.0	5.6	113.5	39.1	1.0	130.0	25.1	55.4	30.0	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	280.8	32.0	5.6	113.5	39.1	1.0	130.0	25.1	55.4	30.0	5.6
LOS	F	C	A	F	D	A	F	C	E	C	A
Approach Delay		88.6			50.5			50.4		26.3	
Approach LOS		F			D			D		C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 77.6	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.47	
Intersection Signal Delay: 51.3	Intersection LOS: D
Intersection Capacity Utilization 75.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	163	317	161	141	423	82	178	507	53	80	609	220
Future Volume (veh/h)	163	317	161	141	423	82	178	507	53	80	609	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	173	337	107	150	450	63	189	539	52	85	648	215
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	127	494	418	162	531	450	187	962	93	110	889	397
Arrive On Green	0.07	0.26	0.26	0.09	0.28	0.28	0.10	0.29	0.29	0.06	0.25	0.25
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3327	320	1810	3610	1610
Grp Volume(v), veh/h	173	337	107	150	450	63	189	292	299	85	648	215
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1842	1810	1805	1610
Q Serve(g_s), s	5.0	11.4	3.8	5.9	16.0	2.1	7.4	9.8	9.9	3.3	11.8	8.3
Cycle Q Clear(g_c), s	5.0	11.4	3.8	5.9	16.0	2.1	7.4	9.8	9.9	3.3	11.8	8.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	127	494	418	162	531	450	187	522	533	110	889	397
V/C Ratio(X)	1.37	0.68	0.26	0.93	0.85	0.14	1.01	0.56	0.56	0.77	0.73	0.54
Avail Cap(c_a), veh/h	127	718	608	162	755	640	187	722	737	165	1399	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.2	23.8	21.0	32.3	24.3	19.3	32.0	21.5	21.6	33.1	24.7	23.4
Incr Delay (d2), s/veh	207.2	1.7	0.3	48.7	6.3	0.1	68.0	0.9	0.9	5.9	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	4.8	1.3	4.6	7.3	0.7	6.4	3.7	3.7	1.5	4.5	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	240.4	25.5	21.3	81.0	30.6	19.5	100.1	22.5	22.5	39.0	25.9	24.6
LnGrp LOS	F	C	C	F	C	B	F	C	C	D	C	C
Approach Vol, veh/h		617			663			780			948	
Approach Delay, s/veh		85.0			41.0			41.3			26.8	
Approach LOS		F			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	27.2	11.0	24.4	12.0	24.1	9.6	25.8
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	6.5	28.6	6.4	27.0	7.4	27.7	5.0	28.4
Max Q Clear Time (g_c+I1), s	5.3	11.9	7.9	13.4	9.4	13.8	7.0	18.0
Green Ext Time (p_c), s	0.0	2.7	0.0	1.8	0.0	3.8	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	45.6
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	0	0	160	694	1
Future Vol, veh/h	4	0	0	160	694	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	92	92	92	92	62
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	0	0	174	754	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	929	755	756	0	-	0
Stage 1	755	-	-	-	-	-
Stage 2	174	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	300	412	864	-	-	-
Stage 1	468	-	-	-	-	-
Stage 2	861	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	300	412	864	-	-	-
Mov Cap-2 Maneuver	300	-	-	-	-	-
Stage 1	468	-	-	-	-	-
Stage 2	861	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	864	-	300	-	-
HCM Lane V/C Ratio	-	-	0.022	-	-
HCM Control Delay (s)	0	-	17.3	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	21

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	71	0	226	45	2	664
Future Vol, veh/h	71	0	226	45	2	664
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	91	0	290	58	3	851

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	91	0	729	91
Stage 1	-	-	-	-	91	-
Stage 2	-	-	-	-	638	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1517	-	393	972
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	530	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1517	-	316	972
Mov Cap-2 Maneuver	-	-	-	-	316	-
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	426	-

Approach	EB	WB	NB
HCM Control Delay, s	0	6.6	29.1
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	966	-	-	1517	-
HCM Lane V/C Ratio	0.884	-	-	0.191	-
HCM Control Delay (s)	29.1	-	-	7.9	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	12.2	-	-	0.7	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	7	721	40	25	249	3	18	8	30	1	13	3
Future Vol, veh/h	7	721	40	25	249	3	18	8	30	1	13	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	879	49	30	304	4	22	10	37	1	16	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	308	0	0	928	0	0	1301	1290	904	1311	1312	309
Stage 1	-	-	-	-	-	-	922	922	-	366	366	-
Stage 2	-	-	-	-	-	-	379	368	-	945	946	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1264	-	-	745	-	-	139	165	338	137	160	736
Stage 1	-	-	-	-	-	-	327	352	-	657	626	-
Stage 2	-	-	-	-	-	-	647	625	-	317	343	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1264	-	-	745	-	-	121	155	338	111	150	734
Mov Cap-2 Maneuver	-	-	-	-	-	-	121	155	-	111	150	-
Stage 1	-	-	-	-	-	-	322	347	-	647	595	-
Stage 2	-	-	-	-	-	-	594	594	-	271	338	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.9	33.3	29.1
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	194	1264	-	-	745	-	-	170
HCM Lane V/C Ratio	0.352	0.007	-	-	0.041	-	-	0.122
HCM Control Delay (s)	33.3	7.9	0	-	10	0	-	29.1
HCM Lane LOS	D	A	A	-	B	A	-	D
HCM 95th %tile Q(veh)	1.5	0	-	-	0.1	-	-	0.4

Intersection	
Int Delay, s/veh	2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	20	37	8	21	58
Future Vol, veh/h	12	20	37	8	21	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	100	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	14	23	43	9	24	67

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	163	48	0	0	52	0
Stage 1	48	-	-	-	-	-
Stage 2	115	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	832	1027	-	-	1567	-
Stage 1	980	-	-	-	-	-
Stage 2	915	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	819	1027	-	-	1567	-
Mov Cap-2 Maneuver	819	-	-	-	-	-
Stage 1	980	-	-	-	-	-
Stage 2	900	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	1.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	819	1027	1567	-
HCM Lane V/C Ratio	-	-	0.017	0.023	0.016	-
HCM Control Delay (s)	-	-	9.5	8.6	7.3	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	0	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	8	0	9	0	36	25	10	60	0
Future Vol, veh/h	0	0	0	8	0	9	0	36	25	10	60	0
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	9	0	10	0	40	27	11	66	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	148	156	68	143	143	54	67	0	0	67	0	0
Stage 1	89	89	-	54	54	-	-	-	-	-	-	-
Stage 2	59	67	-	89	89	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	825	740	1001	831	752	1019	1547	-	-	1547	-	-
Stage 1	923	825	-	963	854	-	-	-	-	-	-	-
Stage 2	958	843	-	923	825	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	812	734	999	826	746	1019	1546	-	-	1547	-	-
Mov Cap-2 Maneuver	812	734	-	826	746	-	-	-	-	-	-	-
Stage 1	922	818	-	963	854	-	-	-	-	-	-	-
Stage 2	949	843	-	916	818	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9	0	1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1546	-	-	-	918	1547	-	-
HCM Lane V/C Ratio	-	-	-	-	0.02	0.007	-	-
HCM Control Delay (s)	0	-	-	0	9	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	0	0	41	62	6
Future Vol, veh/h	20	0	0	41	62	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	0	0	45	67	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	116	71	74	0	-	0
Stage 1	71	-	-	-	-	-
Stage 2	45	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	885	997	1538	-	-	-
Stage 1	957	-	-	-	-	-
Stage 2	983	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	885	997	1538	-	-	-
Mov Cap-2 Maneuver	885	-	-	-	-	-
Stage 1	957	-	-	-	-	-
Stage 2	983	-	-	-	-	-

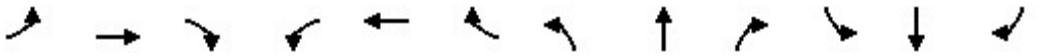
Approach	EB	NB	SB
HCM Control Delay, s	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1538	-	885	-	-
HCM Lane V/C Ratio	-	-	0.025	-	-
HCM Control Delay (s)	0	-	9.2	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	5	394	623	1628	1408	582
Future Volume (vph)	5	394	623	1628	1408	582
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	41.0	41.0	22.0	69.0	47.0	47.0
Total Split (%)	37.3%	37.3%	20.0%	62.7%	42.7%	42.7%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	37.6	37.6	18.0	63.9	41.9	41.9
Actuated g/C Ratio	0.34	0.34	0.16	0.58	0.38	0.38
v/c Ratio	1.01	0.68	2.27	0.84	0.77	0.64
Control Delay	75.3	33.9	599.0	19.2	32.8	5.2
Queue Delay	29.8	0.0	0.0	12.3	29.5	0.0
Total Delay	105.1	33.9	599.0	31.5	62.3	5.2
LOS	F	C	F	C	E	A
Approach Delay	77.1			188.6	45.6	
Approach LOS	E			F	D	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.27	
Intersection Signal Delay: 113.7	Intersection LOS: F
Intersection Capacity Utilization 117.6%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	503	5	394	623	1628	0	0	1408	582
Future Volume (veh/h)	0	0	0	503	5	394	623	1628	0	0	1408	582
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				541	5	389	670	1751	0	0	1514	439
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				579	5	520	296	2166	0	0	2074	640
Arrive On Green				0.32	0.32	0.32	0.22	0.80	0.00	0.00	0.40	0.40
Sat Flow, veh/h				1794	17	1610	1810	3705	0	0	5358	1600
Grp Volume(v), veh/h				546	0	389	670	1751	0	0	1514	439
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1729	1600
Q Serve(g_s), s				32.2	0.0	23.7	18.0	30.4	0.0	0.0	27.2	25.0
Cycle Q Clear(g_c), s				32.2	0.0	23.7	18.0	30.4	0.0	0.0	27.2	25.0
Prop In Lane				0.99		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				584	0	520	296	2166	0	0	2074	640
V/C Ratio(X)				0.93	0.00	0.75	2.26	0.81	0.00	0.00	0.73	0.69
Avail Cap(c_a), veh/h				609	0	542	296	2166	0	0	2074	640
HCM Platoon Ratio				1.00	1.00	1.00	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				36.1	0.0	33.3	43.0	7.5	0.0	0.0	28.0	27.3
Incr Delay (d2), s/veh				21.3	0.0	5.5	569.2	0.3	0.0	0.0	2.3	5.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				16.8	0.0	9.6	54.2	5.3	0.0	0.0	11.1	10.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				57.4	0.0	38.7	612.2	7.8	0.0	0.0	30.3	33.2
LnGrp LOS				E	A	D	F	A	A	A	C	C
Approach Vol, veh/h					935			2421			1953	
Approach Delay, s/veh					49.6			175.1			30.9	
Approach LOS					D			F			C	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	70.5		22.0	48.5		39.5						
Change Period (Y+Rc), s	4.5		4.0	4.5		4.0						
Max Green Setting (Gmax), s	64.5		18.0	42.5		37.0						
Max Q Clear Time (g_c+I1), s	32.4		20.0	29.2		34.2						
Green Ext Time (p_c), s	17.4		0.0	9.2		1.3						

Intersection Summary		
HCM 6th Ctrl Delay	100.0	
HCM 6th LOS	F	

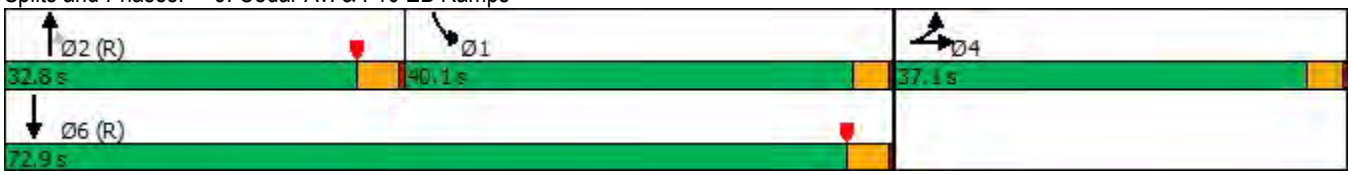
Notes

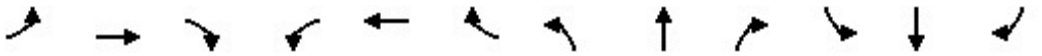
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	566	5	1706	761	420	1488
Future Volume (vph)	566	5	1706	761	420	1488
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	37.1	37.1	32.8	32.8	40.1	72.9
Total Split (%)	33.7%	33.7%	29.8%	29.8%	36.5%	66.3%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	36.2	36.2	32.8	32.8	30.0	66.3
Actuated g/C Ratio	0.33	0.33	0.30	0.30	0.27	0.60
v/c Ratio	0.89	0.84	1.13	0.86	0.87	0.70
Control Delay	55.2	46.4	96.4	21.7	44.1	11.0
Queue Delay	48.9	30.2	0.0	0.0	3.1	6.9
Total Delay	104.1	76.7	96.4	21.7	47.2	17.9
LOS	F	E	F	C	D	B
Approach Delay		91.1	73.4			24.4
Approach LOS		F	E			C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.13	
Intersection Signal Delay: 58.9	Intersection LOS: E
Intersection Capacity Utilization 117.6%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	566	5	368	0	0	0	0	1706	761	420	1488	0
Future Volume (veh/h)	566	5	368	0	0	0	0	1706	761	420	1488	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	474	150	366				0	1741	572	429	1518	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	553	150	365				0	1358	419	594	2261	0
Arrive On Green	0.31	0.31	0.31				0.00	0.09	0.09	0.44	0.83	0.00
Sat Flow, veh/h	1810	490	1195				0	5358	1601	1810	3705	0
Grp Volume(v), veh/h	474	0	516				0	1741	572	429	1518	0
Grp Sat Flow(s),veh/h/ln	1810	0	1685				0	1729	1601	1810	1805	0
Q Serve(g_s), s	27.1	0.0	33.6				0.0	28.8	28.8	21.5	17.5	0.0
Cycle Q Clear(g_c), s	27.1	0.0	33.6				0.0	28.8	28.8	21.5	17.5	0.0
Prop In Lane	1.00		0.71				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	553	0	515				0	1358	419	594	2261	0
V/C Ratio(X)	0.86	0.00	1.00				0.00	1.28	1.36	0.72	0.67	0.00
Avail Cap(c_a), veh/h	553	0	515				0	1358	419	602	2261	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	1.33	1.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.09	0.09	0.55	0.55	0.00
Uniform Delay (d), s/veh	35.9	0.0	38.2				0.0	50.2	50.2	26.9	4.9	0.0
Incr Delay (d2), s/veh	12.7	0.0	40.3				0.0	127.4	165.5	2.0	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.3	0.0	18.8				0.0	29.3	31.6	8.3	3.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.7	0.0	78.5				0.0	177.7	215.8	28.9	5.8	0.0
LnGrp LOS	D	A	F				A	F	F	C	A	A
Approach Vol, veh/h		990						2313			1947	
Approach Delay, s/veh		64.2						187.1			10.9	
Approach LOS		E						F			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	40.1	32.8		37.1		72.9
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	36.6	* 29		33.6		68.9
Max Q Clear Time (g_c+I1), s	23.5	30.8		35.6		19.5
Green Ext Time (p_c), s	0.5	0.0		0.0		9.6

Intersection Summary		
HCM 6th Ctrl Delay		98.6
HCM 6th LOS		F

Notes

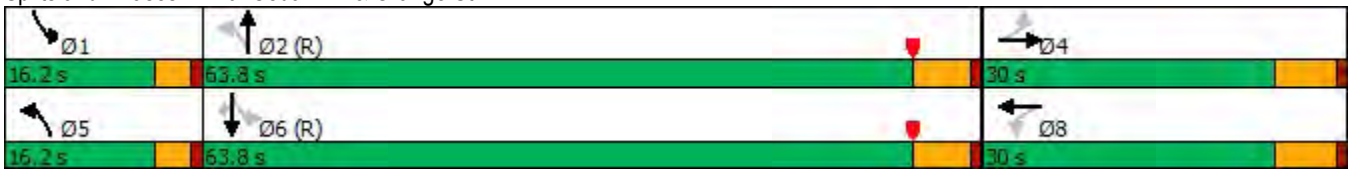
User approved volume balancing among the lanes for turning movement.

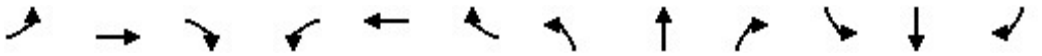
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	245	2	28	2	19	2020	52	1541	263
Future Volume (vph)	245	2	28	2	19	2020	52	1541	263
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases		4		8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	30.0	30.0	10.2	10.2	16.2	28.2	16.2	28.2	28.2
Total Split (s)	30.0	30.0	30.0	30.0	16.2	63.8	16.2	63.8	63.8
Total Split (%)	27.3%	27.3%	27.3%	27.3%	14.7%	58.0%	14.7%	58.0%	58.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	3.0	4.7	3.0	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.0	5.7	4.0	5.7	5.7
Lead/Lag					Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min	C-Min
Act Effct Green (s)	24.0	24.0	24.0	24.0	72.2	65.7	74.8	70.2	70.2
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.66	0.60	0.68	0.64	0.64
v/c Ratio	1.20	0.09	0.10	0.39	0.10	0.98	0.31	0.70	0.26
Control Delay	165.9	13.3	35.4	8.0	3.6	19.1	11.4	15.4	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	41.0	0.0	0.0	0.0
Total Delay	165.9	13.3	35.4	8.0	3.6	60.1	11.4	15.4	2.3
LOS	F	B	D	A	A	E	B	B	A
Approach Delay		148.4		11.5		59.6		13.4	
Approach LOS		F		B		E		B	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 68.3 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.20	
Intersection Signal Delay: 43.3	Intersection LOS: D
Intersection Capacity Utilization 96.2%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 10: Cedar Av. & Orange St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	245	2	30	28	2	187	19	2020	10	52	1541	263
Future Volume (veh/h)	245	2	30	28	2	187	19	2020	10	52	1541	263
Initial Q (Qb), veh	0	0	0	0	0	0	0	44	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	255	2	26	29	2	149	20	2104	10	54	1605	213
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	238	25	329	352	5	347	162	2252	6	119	2247	979
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.03	1.00	1.00	0.02	0.42	0.42
Sat Flow, veh/h	1256	116	1508	1400	21	1592	1810	3684	17	1810	3610	1573
Grp Volume(v), veh/h	255	0	28	29	0	151	20	1030	1084	54	1605	213
Grp Sat Flow(s),veh/h/ln	1256	0	1624	1400	0	1613	1810	1805	1897	1810	1805	1573
Q Serve(g_s), s	15.1	0.0	1.5	1.9	0.0	8.9	0.5	0.0	0.0	1.2	40.6	9.5
Cycle Q Clear(g_c), s	24.0	0.0	1.5	3.4	0.0	8.9	0.5	0.0	0.0	1.2	40.6	9.5
Prop In Lane	1.00		0.93	1.00		0.99	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	238	0	354	352	0	352	162	1101	1157	119	2247	979
V/C Ratio(X)	1.07	0.00	0.08	0.08	0.00	0.43	0.12	0.94	0.94	0.46	0.71	0.22
Avail Cap(c_a), veh/h	238	0	354	352	0	352	332	1101	1156	385	2247	979
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	0.65	0.65	0.65
Uniform Delay (d), s/veh	49.5	0.0	34.2	35.5	0.0	37.1	15.1	0.0	0.0	28.1	23.9	14.9
Incr Delay (d2), s/veh	78.4	0.0	0.1	0.1	0.0	0.8	0.0	2.0	1.9	1.8	1.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	43.1	40.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.8	0.0	0.6	0.7	0.0	3.6	0.2	13.8	13.5	0.9	18.2	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	127.9	0.0	34.3	35.6	0.0	37.9	15.1	45.1	41.9	29.9	25.2	15.2
LnGrp LOS	F	A	C	D	A	D	B	D	D	C	C	B
Approach Vol, veh/h		283			180			2134			1872	
Approach Delay, s/veh		118.7			37.6			43.2			24.2	
Approach LOS		F			D			D			C	

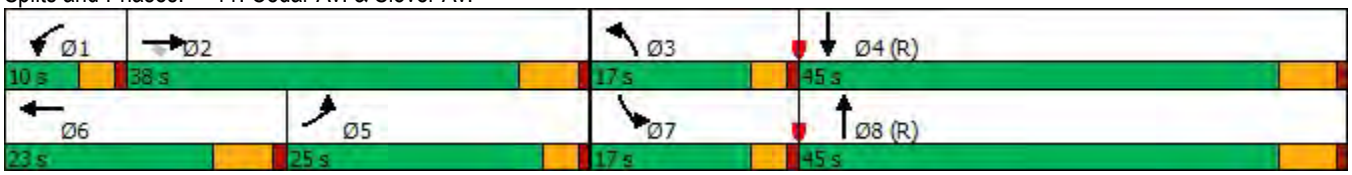
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	72.8		30.0	5.8	74.2		30.0				
Change Period (Y+Rc), s	4.0	5.7		6.0	4.0	5.7		6.0				
Max Green Setting (Gmax), s	12.2	58.1		24.0	12.2	58.1		24.0				
Max Q Clear Time (g_c+I1), s	3.2	2.0		26.0	2.5	42.6		10.9				
Green Ext Time (p_c), s	0.1	31.2		0.0	0.0	10.5		0.8				

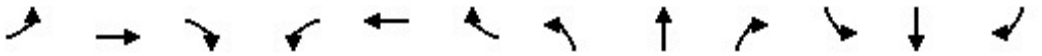
Intersection Summary			
HCM 6th Ctrl Delay		39.8	
HCM 6th LOS		D	

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	421	565	235	54	330	205	1442	159	1214
Future Volume (vph)	421	565	235	54	330	205	1442	159	1214
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2		1	6	3	8	7	4
Permitted Phases			2						
Detector Phase	5	2	2	1	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	29.0	29.0	8.0	23.0	8.0	32.7	8.0	24.7
Total Split (s)	25.0	38.0	38.0	10.0	23.0	17.0	45.0	17.0	45.0
Total Split (%)	22.7%	34.5%	34.5%	9.1%	20.9%	15.5%	40.9%	15.5%	40.9%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	4.7	3.0	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	4.0	5.7	4.0	5.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	21.0	34.0	34.0	6.0	17.0	13.0	39.7	12.6	39.3
Actuated g/C Ratio	0.19	0.31	0.31	0.05	0.15	0.12	0.36	0.11	0.36
v/c Ratio	1.32	0.54	0.38	0.60	0.93	1.03	1.29	0.83	1.22
Control Delay	197.8	34.4	5.5	75.8	62.3	70.2	175.6	83.5	130.4
Queue Delay	0.0	0.0	0.0	0.0	0.8	0.0	2.1	0.0	0.0
Total Delay	197.8	34.4	5.5	75.8	63.1	70.2	177.6	83.5	130.4
LOS	F	C	A	E	E	E	F	F	F
Approach Delay		85.2			64.3		165.2		125.7
Approach LOS		F			E		F		F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.32	
Intersection Signal Delay: 122.8	Intersection LOS: F
Intersection Capacity Utilization 107.1%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 11: Cedar Av. & Slover Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	421	565	235	54	330	187	205	1442	113	159	1214	225
Future Volume (veh/h)	421	565	235	54	330	187	205	1442	113	159	1214	225
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	453	608	209	58	355	147	220	1551	120	171	1305	234
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	345	1163	512	75	387	158	214	2223	171	199	1976	350
Arrive On Green	0.19	0.32	0.32	0.04	0.15	0.15	0.12	0.65	0.65	0.15	0.86	0.86
Sat Flow, veh/h	1810	3610	1590	1810	2502	1019	1810	3397	261	1810	3057	542
Grp Volume(v), veh/h	453	608	209	58	254	248	220	819	852	171	764	775
Grp Sat Flow(s),veh/h/ln	1810	1805	1590	1810	1805	1717	1810	1805	1853	1810	1805	1794
Q Serve(g_s), s	21.0	15.1	11.3	3.5	15.3	15.7	13.0	31.6	32.3	10.1	15.0	15.6
Cycle Q Clear(g_c), s	21.0	15.1	11.3	3.5	15.3	15.7	13.0	31.6	32.3	10.1	15.0	15.6
Prop In Lane	1.00		1.00	1.00		0.59	1.00		0.14	1.00		0.30
Lane Grp Cap(c), veh/h	345	1163	512	75	279	265	214	1181	1213	199	1167	1160
V/C Ratio(X)	1.31	0.52	0.41	0.77	0.91	0.93	1.03	0.69	0.70	0.86	0.66	0.67
Avail Cap(c_a), veh/h	345	1163	512	99	279	265	214	1181	1213	214	1167	1160
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09	0.67	0.67	0.67
Uniform Delay (d), s/veh	44.5	30.4	29.1	52.2	45.8	45.9	48.5	12.0	12.2	46.1	3.8	3.8
Incr Delay (d2), s/veh	159.4	0.4	0.5	23.5	31.9	37.7	26.3	0.3	0.3	19.2	1.9	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.2	6.3	4.2	2.1	9.3	9.5	7.2	10.6	11.2	5.4	3.3	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	203.9	30.8	29.6	75.7	77.7	83.6	74.8	12.3	12.5	65.3	5.7	5.9
LnGrp LOS	F	C	C	E	E	F	F	B	B	E	A	A
Approach Vol, veh/h		1270			560			1891			1710	
Approach Delay, s/veh		92.3			80.1			19.7			11.8	
Approach LOS		F			F			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	41.4	17.0	76.8	27.0	23.0	16.1	77.7
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	6.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	6.0	32.0	13.0	39.3	21.0	* 17	13.0	39.3
Max Q Clear Time (g_c+I1), s	5.5	17.1	15.0	17.6	23.0	17.7	12.1	34.3
Green Ext Time (p_c), s	0.0	3.8	0.0	11.3	0.0	0.0	0.0	3.9

Intersection Summary	
HCM 6th Ctrl Delay	40.4
HCM 6th LOS	D

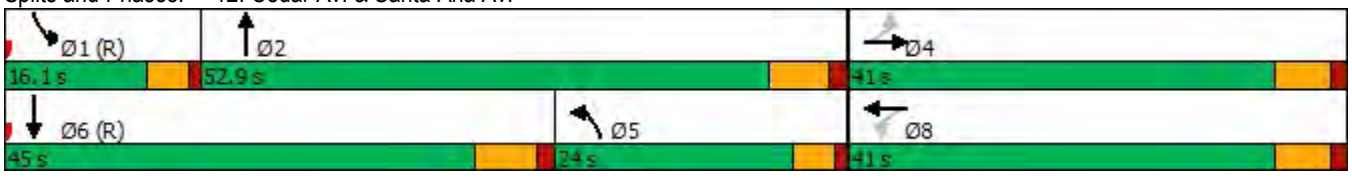
Notes

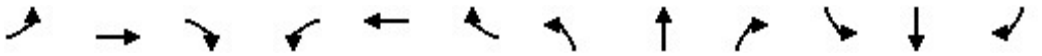
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	94	141	58	134	183	1581	63	1235
Future Volume (vph)	94	141	58	134	183	1581	63	1235
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	9.5	27.5	9.5	27.5
Total Split (s)	41.0	41.0	41.0	41.0	24.0	52.9	16.1	45.0
Total Split (%)	37.3%	37.3%	37.3%	37.3%	21.8%	48.1%	14.6%	40.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	4.5	6.5	4.5	6.5
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min
Act Effct Green (s)		32.5		32.5	19.5	49.7	10.8	41.0
Actuated g/C Ratio		0.30		0.30	0.18	0.45	0.10	0.37
v/c Ratio		0.93		0.69	0.61	1.08	0.37	1.01
Control Delay		65.7		39.9	30.3	56.2	34.2	54.6
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		65.7		39.9	30.3	56.2	34.2	54.6
LOS		E		D	C	E	C	D
Approach Delay		65.7		39.9		53.7		53.6
Approach LOS		E		D		D		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 90 (82%), Referenced to phase 1:SBL and 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 53.7	Intersection LOS: D
Intersection Capacity Utilization 94.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 12: Cedar Av. & Santa Ana Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	141	120	58	134	94	183	1581	79	63	1235	51
Future Volume (veh/h)	94	141	120	58	134	94	183	1581	79	63	1235	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	99	148	83	61	141	59	193	1664	81	66	1300	47
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	138	181	93	106	229	86	394	1478	72	297	1244	45
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.44	0.84	0.84	0.05	0.12	0.12
Sat Flow, veh/h	369	698	358	254	881	331	1810	3505	170	1810	3553	128
Grp Volume(v), veh/h	330	0	0	261	0	0	193	853	892	66	660	687
Grp Sat Flow(s),veh/h/ln	1425	0	0	1466	0	0	1810	1805	1869	1810	1805	1876
Q Serve(g_s), s	7.8	0.0	0.0	0.0	0.0	0.0	8.4	46.4	46.4	3.8	38.5	38.5
Cycle Q Clear(g_c), s	25.0	0.0	0.0	17.1	0.0	0.0	8.4	46.4	46.4	3.8	38.5	38.5
Prop In Lane	0.30		0.25	0.23		0.23	1.00		0.09	1.00		0.07
Lane Grp Cap(c), veh/h	412	0	0	421	0	0	394	761	789	297	632	657
V/C Ratio(X)	0.80	0.00	0.00	0.62	0.00	0.00	0.49	1.12	1.13	0.22	1.04	1.05
Avail Cap(c_a), veh/h	503	0	0	514	0	0	394	761	789	297	632	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.19	0.19	0.19	0.09	0.09	0.09
Uniform Delay (d), s/veh	39.5	0.0	0.0	36.0	0.0	0.0	26.6	8.6	8.6	45.3	48.6	48.6
Incr Delay (d2), s/veh	8.4	0.0	0.0	2.2	0.0	0.0	0.1	57.9	62.7	0.0	24.8	25.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	0.0	0.0	6.3	0.0	0.0	3.1	15.5	17.1	1.7	22.8	23.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.8	0.0	0.0	38.2	0.0	0.0	26.7	66.5	71.3	45.3	73.5	74.1
LnGrp LOS	D	A	A	D	A	A	C	F	F	D	F	F
Approach Vol, veh/h		330			261			1938			1413	
Approach Delay, s/veh		47.8			38.2			64.7			72.5	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	22.6	52.9		34.5	30.5	45.0		34.5				
Change Period (Y+Rc), s	4.5	6.5		6.0	6.5	* 6.5		6.0				
Max Green Setting (Gmax), s	11.6	46.4		35.0	19.5	* 39		35.0				
Max Q Clear Time (g_c+I1), s	5.8	48.4		27.0	10.4	40.5		19.1				
Green Ext Time (p_c), s	0.0	0.0		1.6	0.2	0.0		1.8				

Intersection Summary		
HCM 6th Ctrl Delay		64.3
HCM 6th LOS		E

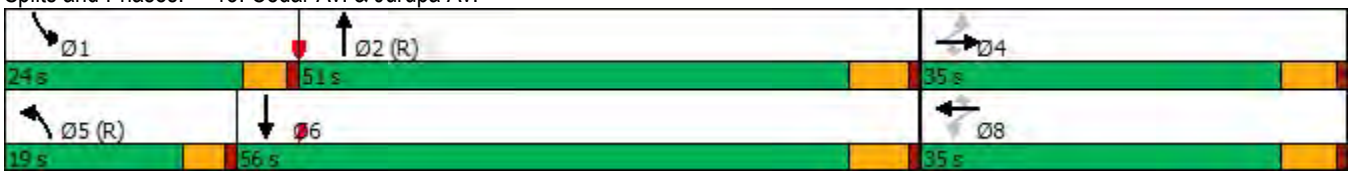
Notes

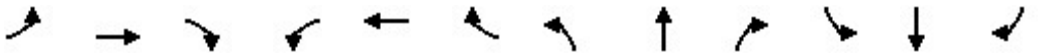
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	251	209	150	82	132	129	132	1420	163	1183
Future Volume (vph)	251	209	150	82	132	129	132	1420	163	1183
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	19.0	51.0	24.0	56.0
Total Split (%)	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	17.3%	46.4%	21.8%	50.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)		29.5	29.5		29.5	29.5	12.7	49.0	15.5	51.8
Actuated g/C Ratio		0.27	0.27		0.27	0.27	0.12	0.45	0.14	0.47
v/c Ratio		1.77	0.32		4.38	0.27	0.69	1.02	0.70	0.85
Control Delay		389.5	12.1		1575.3	7.4	63.9	41.2	27.9	37.8
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		389.5	12.1		1575.3	7.4	63.9	41.2	27.9	37.8
LOS		F	B		F	A	E	D	C	D
Approach Delay		296.7			985.2			43.0		36.7
Approach LOS		F			F			D		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 4.38	
Intersection Signal Delay: 158.6	Intersection LOS: F
Intersection Capacity Utilization 106.0%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	209	150	82	132	129	132	1420	74	163	1183	127
Future Volume (veh/h)	251	209	150	82	132	129	132	1420	74	163	1183	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	273	227	138	89	143	94	143	1543	67	177	1286	133
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	51	0	426	45	49	424	259	1655	72	212	1463	151
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.29	0.94	0.94	0.04	0.15	0.15
Sat Flow, veh/h	0	0	1588	0	183	1579	1810	3525	153	1810	3303	340
Grp Volume(v), veh/h	500	0	138	232	0	94	143	788	822	177	701	718
Grp Sat Flow(s),veh/h/ln	0	0	1588	183	0	1579	1810	1805	1873	1810	1805	1839
Q Serve(g_s), s	0.0	0.0	7.7	0.0	0.0	5.1	7.4	23.1	24.3	10.7	41.8	42.1
Cycle Q Clear(g_c), s	29.5	0.0	7.7	29.5	0.0	5.1	7.4	23.1	24.3	10.7	41.8	42.1
Prop In Lane	0.55		1.00	0.38		1.00	1.00		0.08	1.00		0.19
Lane Grp Cap(c), veh/h	51	0	426	94	0	424	259	847	879	212	800	815
V/C Ratio(X)	9.88	0.00	0.32	2.46	0.00	0.22	0.55	0.93	0.94	0.84	0.88	0.88
Avail Cap(c_a), veh/h	51	0	426	94	0	424	259	847	879	321	820	836
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.34	0.34	0.34	0.09	0.09	0.09
Uniform Delay (d), s/veh	55.0	0.0	32.3	40.4	0.0	31.3	36.2	2.5	2.5	51.8	44.0	44.1
Incr Delay (d2), s/veh	4036.1	0.0	0.6	687.1	0.0	0.4	0.9	7.7	7.9	1.1	1.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	58.1	0.0	2.9	20.6	0.0	1.9	2.9	3.0	3.2	5.1	20.3	20.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4091.1	0.0	32.9	727.5	0.0	31.7	37.1	10.2	10.5	53.0	45.1	45.3
LnGrp LOS	F	A	C	F	A	C	D	B	B	D	D	D
Approach Vol, veh/h		638			326			1753			1596	
Approach Delay, s/veh		3213.3			526.8			12.5			46.1	
Approach LOS		F			F			B			D	

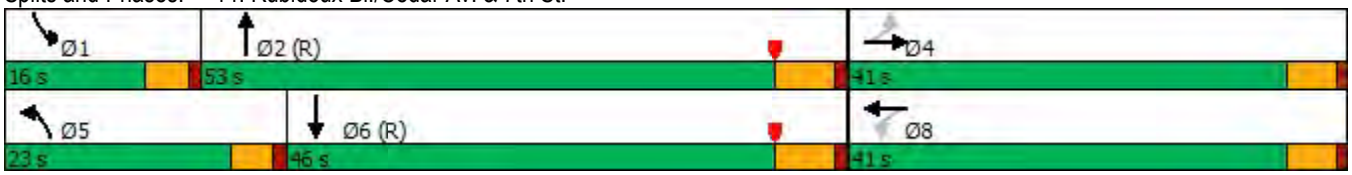
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.4	57.6		35.0	20.3	54.7		35.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	19.5	45.0		29.5	14.5	50.0		29.5				
Max Q Clear Time (g_c+I1), s	12.7	26.3		31.5	9.4	44.1		31.5				
Green Ext Time (p_c), s	0.2	13.4		0.0	0.1	4.6		0.0				

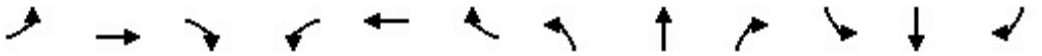
Intersection Summary		
HCM 6th Ctrl Delay		537.3
HCM 6th LOS		F

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	132	47	33	28	173	1409	71	1146
Future Volume (vph)	132	47	33	28	173	1409	71	1146
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	10.0	10.0	9.5	24.0	9.5	24.0
Total Split (s)	41.0	41.0	41.0	41.0	23.0	53.0	16.0	46.0
Total Split (%)	37.3%	37.3%	37.3%	37.3%	20.9%	48.2%	14.5%	41.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)		33.5		29.7	15.7	53.6	9.5	45.3
Actuated g/C Ratio		0.30		0.27	0.14	0.49	0.09	0.41
v/c Ratio		0.91		0.24	0.73	0.89	0.49	0.95
Control Delay		54.8		24.4	61.7	35.0	44.1	39.5
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		54.8		24.4	61.7	35.0	44.1	39.5
LOS		D		C	E	C	D	D
Approach Delay		54.8		24.4		37.9		39.7
Approach LOS		D		C		D		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 74 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 40.4	Intersection LOS: D
Intersection Capacity Utilization 88.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 14: Rubidoux Bl./Cedar Av. & 7th St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	47	253	33	28	19	173	1409	19	71	1146	134
Future Volume (veh/h)	132	47	253	33	28	19	173	1409	19	71	1146	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	143	51	193	36	30	11	188	1532	21	77	1246	145
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	196	65	215	182	145	46	220	1944	27	99	1520	176
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.12	0.53	0.53	0.05	0.47	0.47
Sat Flow, veh/h	557	239	792	495	533	171	1810	3645	50	1810	3259	378
Grp Volume(v), veh/h	387	0	0	77	0	0	188	758	795	77	688	703
Grp Sat Flow(s),veh/h/ln	1589	0	0	1199	0	0	1810	1805	1890	1810	1805	1832
Q Serve(g_s), s	21.3	0.0	0.0	0.0	0.0	0.0	11.2	37.2	37.3	4.6	36.2	36.5
Cycle Q Clear(g_c), s	25.7	0.0	0.0	4.4	0.0	0.0	11.2	37.2	37.3	4.6	36.2	36.5
Prop In Lane	0.37		0.50	0.47		0.14	1.00		0.03	1.00		0.21
Lane Grp Cap(c), veh/h	475	0	0	373	0	0	220	962	1008	99	842	855
V/C Ratio(X)	0.81	0.00	0.00	0.21	0.00	0.00	0.85	0.79	0.79	0.78	0.82	0.82
Avail Cap(c_a), veh/h	563	0	0	454	0	0	304	962	1008	189	842	855
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.09	0.09	0.09	0.51	0.51	0.51
Uniform Delay (d), s/veh	38.3	0.0	0.0	30.6	0.0	0.0	47.4	20.7	20.7	51.3	25.3	25.4
Incr Delay (d2), s/veh	8.5	0.0	0.0	0.4	0.0	0.0	1.7	0.6	0.6	6.5	4.6	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	0.0	0.0	1.6	0.0	0.0	4.9	13.9	14.6	2.2	15.2	15.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.8	0.0	0.0	31.0	0.0	0.0	49.1	21.3	21.3	57.8	29.9	30.1
LnGrp LOS	D	A	A	C	A	A	D	C	C	E	C	C
Approach Vol, veh/h		387			77			1741			1468	
Approach Delay, s/veh		46.8			31.0			24.3			31.5	
Approach LOS		D			C			C			C	

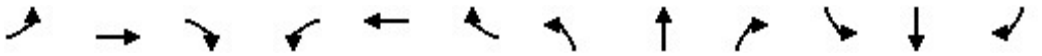
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.5	64.7		34.8	17.9	57.3		34.8				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	11.5	47.0		36.0	18.5	40.0		36.0				
Max Q Clear Time (g_c+I1), s	6.6	39.3		27.7	13.2	38.5		6.4				
Green Ext Time (p_c), s	0.1	6.1		2.1	0.2	1.2		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		29.7	
HCM 6th LOS		C	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	10	8	268	8	264	13	1332	184	1253
Future Volume (vph)	10	8	268	8	264	13	1332	184	1253
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	35.0	35.0	35.0	9.5	24.0	9.5	24.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.6	35.0	20.0	45.4
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%	10.7%	38.9%	22.2%	50.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	5.0	4.5	6.0	4.5	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min
Act Effct Green (s)		15.2		22.9	22.9	5.2	29.4	12.6	44.9
Actuated g/C Ratio		0.19		0.28	0.28	0.06	0.36	0.16	0.56
v/c Ratio		0.09		0.73	0.41	0.11	1.17	0.66	0.64
Control Delay		17.4		38.0	5.0	42.1	110.5	45.2	16.1
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		17.4		38.0	5.0	42.1	110.5	45.2	16.1
LOS		B		D	A	D	F	D	B
Approach Delay		17.4		21.9			109.9		19.8
Approach LOS		B		C			F		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 80.6	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.17	
Intersection Signal Delay: 58.6	Intersection LOS: E
Intersection Capacity Utilization 87.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 15: Rubidoux Bl. & Tarragona Dr./El Rivino Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	8	11	268	8	264	13	1332	171	184	1253	24
Future Volume (veh/h)	10	8	11	268	8	264	13	1332	171	184	1253	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	10	8	7	271	8	192	13	1345	166	186	1266	23
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	59	46	18	352	8	568	28	1100	135	225	1632	30
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.02	0.34	0.34	0.12	0.45	0.45
Sat Flow, veh/h	0	130	51	762	22	1610	1810	3228	396	1810	3627	66
Grp Volume(v), veh/h	25	0	0	279	0	192	13	748	763	186	630	659
Grp Sat Flow(s),veh/h/ln	181	0	0	784	0	1610	1810	1805	1819	1810	1805	1888
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	7.5	0.6	29.0	29.0	8.5	25.1	25.1
Cycle Q Clear(g_c), s	30.0	0.0	0.0	30.0	0.0	7.5	0.6	29.0	29.0	8.5	25.1	25.1
Prop In Lane	0.40		0.28	0.97		1.00	1.00		0.22	1.00		0.03
Lane Grp Cap(c), veh/h	123	0	0	360	0	568	28	615	620	225	812	849
V/C Ratio(X)	0.20	0.00	0.00	0.78	0.00	0.34	0.46	1.22	1.23	0.83	0.78	0.78
Avail Cap(c_a), veh/h	123	0	0	360	0	568	108	615	620	330	836	874
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.4	0.0	0.0	27.7	0.0	20.3	41.5	28.0	28.0	36.3	19.8	19.8
Incr Delay (d2), s/veh	1.1	0.0	0.0	10.7	0.0	0.5	11.3	111.4	117.9	10.5	4.8	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	6.5	0.0	2.8	0.3	30.0	31.4	4.2	10.0	10.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.5	0.0	0.0	38.4	0.0	20.8	52.9	139.4	145.9	46.9	24.6	24.4
LnGrp LOS	C	A	A	D	A	C	D	F	F	D	C	C
Approach Vol, veh/h		25			471			1524			1475	
Approach Delay, s/veh		23.5			31.2			141.9			27.3	
Approach LOS		C			C			F			C	

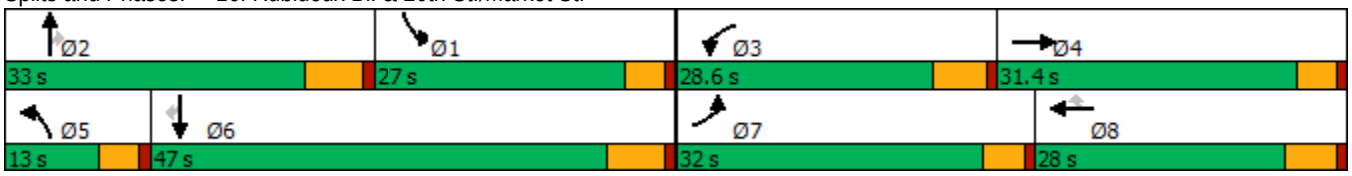
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.1	35.0		35.0	5.8	44.3		35.0				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	15.5	29.0		30.0	5.1	39.4		30.0				
Max Q Clear Time (g_c+I1), s	10.5	31.0		32.0	2.6	27.1		32.0				
Green Ext Time (p_c), s	0.2	0.0		0.0	0.0	7.7		0.0				

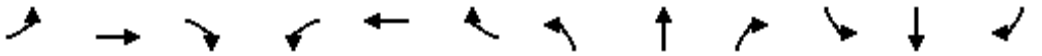
Intersection Summary			
HCM 6th Ctrl Delay		77.8	
HCM 6th LOS		E	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	331	283	440	109	452	75	643	531	537	855	122
Future Volume (vph)	331	283	440	109	452	75	643	531	537	855	122
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	14.6	10.8	27.8	27.8	9.6	28.2	28.2	9.6	35.2	35.2
Total Split (s)	32.0	31.4	28.6	28.0	28.0	13.0	33.0	33.0	27.0	47.0	47.0
Total Split (%)	26.7%	26.2%	23.8%	23.3%	23.3%	10.8%	27.5%	27.5%	22.5%	39.2%	39.2%
Yellow Time (s)	3.6	3.6	4.8	4.8	4.8	3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	5.8	5.8	5.8	4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	23.6	19.4	18.4	14.2	14.2	7.6	24.6	24.6	19.8	39.4	39.4
Actuated g/C Ratio	0.23	0.19	0.18	0.14	0.14	0.07	0.24	0.24	0.19	0.38	0.38
v/c Ratio	0.82	0.65	0.73	0.43	0.81	0.58	0.77	0.76	0.82	0.64	0.18
Control Delay	57.1	35.7	49.1	48.6	19.6	69.0	45.3	16.3	52.8	31.0	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.1	35.7	49.1	48.6	19.6	69.0	45.3	16.3	52.8	31.0	6.1
LOS	E	D	D	D	B	E	D	B	D	C	A
Approach Delay		44.7		35.7			34.4			36.8	
Approach LOS		D		D			C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 103.9	
Natural Cycle: 95	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 37.2	Intersection LOS: D
Intersection Capacity Utilization 77.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	331	283	173	440	109	452	75	643	531	537	855	122
Future Volume (veh/h)	331	283	173	440	109	452	75	643	531	537	855	122
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	338	289	171	449	111	0	77	656	411	548	872	108
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	381	387	223	551	256		99	833	372	632	1346	600
Arrive On Green	0.21	0.18	0.18	0.16	0.13	0.00	0.05	0.23	0.23	0.18	0.37	0.37
Sat Flow, veh/h	1810	2207	1270	3510	1900	1610	1810	3610	1610	3510	3610	1608
Grp Volume(v), veh/h	338	235	225	449	111	0	77	656	411	548	872	108
Grp Sat Flow(s),veh/h/ln	1810	1805	1671	1755	1900	1610	1810	1805	1610	1755	1805	1608
Q Serve(g_s), s	16.9	11.5	12.0	11.6	5.0	0.0	3.9	16.0	13.6	14.2	18.7	4.2
Cycle Q Clear(g_c), s	16.9	11.5	12.0	11.6	5.0	0.0	3.9	16.0	13.6	14.2	18.7	4.2
Prop In Lane	1.00		0.76	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	381	317	293	551	256		99	833	372	632	1346	600
V/C Ratio(X)	0.89	0.74	0.77	0.81	0.43		0.77	0.79	1.11	0.87	0.65	0.18
Avail Cap(c_a), veh/h	531	518	479	857	452		163	1036	462	842	1577	702
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.8	36.5	36.7	38.1	37.1	0.0	43.6	33.8	14.2	37.2	24.2	19.7
Incr Delay (d2), s/veh	12.9	3.4	4.2	3.5	1.2	0.0	4.8	3.3	74.4	6.1	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	5.4	5.2	5.0	2.3	0.0	1.8	6.9	12.0	6.2	7.3	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.7	40.0	40.9	41.6	38.3	0.0	48.3	37.1	88.6	43.3	24.9	19.8
LnGrp LOS	D	D	D	D	D		D	D	F	D	C	B
Approach Vol, veh/h		798			560			1144			1528	
Approach Delay, s/veh		43.9			40.9			56.3			31.2	
Approach LOS		D			D			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.0	27.8	20.5	22.2	9.7	41.0	24.2	18.4
Change Period (Y+Rc), s	6.2	* 6.2	5.8	* 5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	22.4	* 27	22.8	* 27	8.4	40.8	27.4	22.2
Max Q Clear Time (g_c+I1), s	16.2	18.0	13.6	14.0	5.9	20.7	18.9	7.0
Green Ext Time (p_c), s	0.6	3.6	1.1	2.4	0.0	5.7	0.7	0.4

Intersection Summary	
HCM 6th Ctrl Delay	42.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	22	8	42	11	13	20	1193	100	159	1404	4
Future Vol, veh/h	2	22	8	42	11	13	20	1193	100	159	1404	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	22	8	43	11	13	20	1217	102	162	1433	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2413	3119	719	2361	3070	661	1437	0	0	1320	0	0
Stage 1	1759	1759	-	1309	1309	-	-	-	-	-	-	-
Stage 2	654	1360	-	1052	1761	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	17	~ 12	375	~ 19	12	410	479	-	-	530	-	-
Stage 1	90	139	-	171	231	-	-	-	-	-	-	-
Stage 2	427	218	-	246	139	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	375	-	0	410	479	-	-	529	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	75	0	-	143	193	-	-	-	-	-	-	-
Stage 2	326	182	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			1.1	6.9
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	479	-	-	-	-	529	-	-
HCM Lane V/C Ratio	0.043	-	-	-	-	0.307	-	-
HCM Control Delay (s)	12.8	1	-	-	-	14.8	6	-
HCM Lane LOS	B	A	-	-	-	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-	1.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	6	17	4	4	7	10	1291	17	7	1368	12
Future Vol, veh/h	16	6	17	4	4	7	10	1291	17	7	1368	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	110	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	18	7	19	4	4	8	11	1419	19	8	1503	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2261	2989	759	2224	2986	721	1517	0	0	1440	0	0
Stage 1	1527	1527	-	1453	1453	-	-	-	-	-	-	-
Stage 2	734	1462	-	771	1533	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	23	14	353	24	14	374	446	-	-	477	-	-
Stage 1	125	181	-	139	197	-	-	-	-	-	-	-
Stage 2	382	195	-	363	180	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	21	13	353	21	13	373	446	-	-	476	-	-
Mov Cap-2 Maneuver	90	88	-	94	87	-	-	-	-	-	-	-
Stage 1	122	178	-	135	192	-	-	-	-	-	-	-
Stage 2	357	190	-	325	177	-	-	-	-	-	-	-

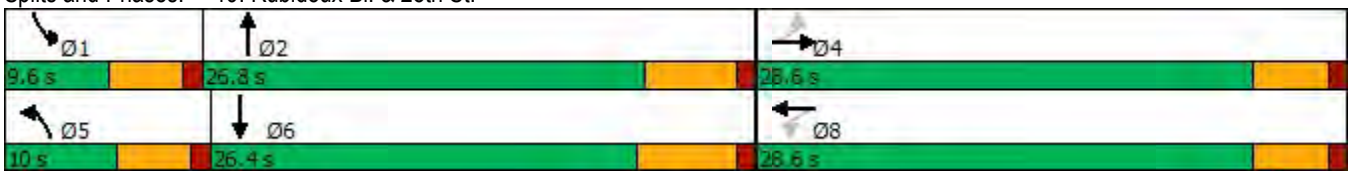
Approach	EB	WB	NB	SB
HCM Control Delay, s	44.4	34.1	0.1	0.1
HCM LOS	E	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	446	-	-	133	140	476	-	-
HCM Lane V/C Ratio	0.025	-	-	0.322	0.118	0.016	-	-
HCM Control Delay (s)	13.3	-	-	44.4	34.1	12.7	-	-
HCM Lane LOS	B	-	-	E	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.3	0.4	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	55	15	82	12	93	1245	21	1351
Future Volume (vph)	55	15	82	12	93	1245	21	1351
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	28.6	28.6	28.6	28.6	9.6	24.4	9.6	22.8
Total Split (s)	28.6	28.6	28.6	28.6	10.0	26.8	9.6	26.4
Total Split (%)	44.0%	44.0%	44.0%	44.0%	15.4%	41.2%	14.8%	40.6%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.4	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		13.2		13.2	5.8	30.9	5.5	24.8
Actuated g/C Ratio		0.27		0.27	0.12	0.63	0.11	0.51
v/c Ratio		0.32		0.31	0.47	0.62	0.12	0.84
Control Delay		11.4		17.6	35.3	14.0	26.2	25.1
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		11.4		17.6	35.3	14.0	26.2	25.1
LOS		B		B	D	B	C	C
Approach Delay		11.4		17.6		15.4		25.1
Approach LOS		B		B		B		C

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 49.1	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 19.8	Intersection LOS: B
Intersection Capacity Utilization 67.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 19: Rubidoux Bl. & 28th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	15	69	82	12	13	93	1245	59	21	1351	59
Future Volume (veh/h)	55	15	69	82	12	13	93	1245	59	21	1351	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	59	16	46	88	13	8	100	1339	63	23	1453	63
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	213	70	104	337	47	19	140	1705	80	50	1538	67
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.08	0.49	0.49	0.03	0.44	0.44
Sat Flow, veh/h	590	413	615	1181	279	116	1810	3507	165	1810	3525	152
Grp Volume(v), veh/h	121	0	0	109	0	0	100	688	714	23	742	774
Grp Sat Flow(s),veh/h/ln	1618	0	0	1575	0	0	1810	1805	1866	1810	1805	1873
Q Serve(g_s), s	0.4	0.0	0.0	0.0	0.0	0.0	2.5	14.9	15.0	0.6	18.6	18.7
Cycle Q Clear(g_c), s	2.9	0.0	0.0	2.5	0.0	0.0	2.5	14.9	15.0	0.6	18.6	18.7
Prop In Lane	0.49		0.38	0.81		0.07	1.00		0.09	1.00		0.08
Lane Grp Cap(c), veh/h	386	0	0	403	0	0	140	878	907	50	788	817
V/C Ratio(X)	0.31	0.00	0.00	0.27	0.00	0.00	0.71	0.78	0.79	0.46	0.94	0.95
Avail Cap(c_a), veh/h	908	0	0	888	0	0	207	878	907	192	788	817
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.5	0.0	0.0	17.3	0.0	0.0	21.3	10.1	10.1	22.6	12.7	12.8
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.4	0.0	0.0	2.5	4.7	4.6	2.4	19.5	19.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	1.0	0.0	0.0	1.0	4.9	5.1	0.2	8.8	9.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.0	0.0	0.0	17.7	0.0	0.0	23.8	14.8	14.7	25.1	32.2	32.5
LnGrp LOS	B	A	A	B	A	A	C	B	B	C	C	C
Approach Vol, veh/h		121			109			1502			1539	
Approach Delay, s/veh		18.0			17.7			15.4			32.2	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	28.8		12.6	8.3	26.4		12.6				
Change Period (Y+Rc), s	4.6	* 5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	5.0	* 21		24.0	5.4	20.6		24.0				
Max Q Clear Time (g_c+I1), s	2.6	17.0		4.9	4.5	20.7		4.5				
Green Ext Time (p_c), s	0.0	3.1		0.6	0.0	0.0		0.5				

Intersection Summary		
HCM 6th Ctrl Delay		23.5
HCM 6th LOS		C

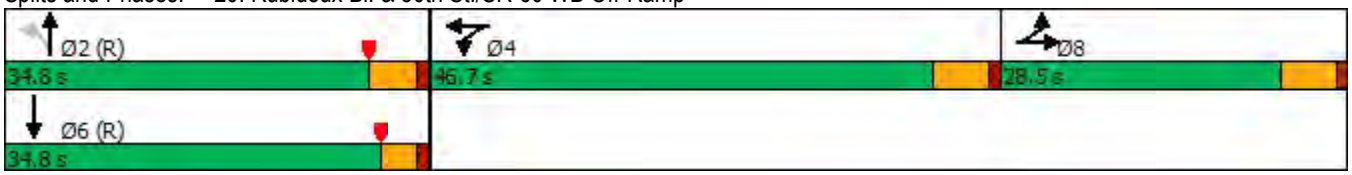
Notes

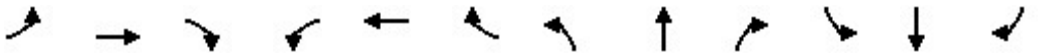
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	44	0	114	102	1251	1457
Future Volume (vph)	44	0	114	102	1251	1457
Turn Type	Split	NA	NA	Perm	NA	NA
Protected Phases	8	8	4		2	6
Permitted Phases				2		
Detector Phase	8	8	4	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.5	28.5	46.7	34.8	34.8	34.8
Total Split (%)	25.9%	25.9%	42.5%	31.6%	31.6%	31.6%
Yellow Time (s)	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	16.3	16.3	41.2	36.5	36.5	37.5
Actuated g/C Ratio	0.15	0.15	0.37	0.33	0.33	0.34
v/c Ratio	0.18	0.76	1.23	1.61	1.14	1.34
Control Delay	40.0	44.0	147.2	310.4	90.4	190.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.0	44.0	147.2	310.4	90.4	190.8
LOS	D	D	F	F	F	F
Approach Delay		43.3	147.2		107.0	190.8
Approach LOS		D	F		F	F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.61	
Intersection Signal Delay: 143.2	Intersection LOS: F
Intersection Capacity Utilization 127.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	0	215	535	114	117	102	1251	0	0	1457	55
Future Volume (veh/h)	44	0	215	535	114	117	102	1251	0	0	1457	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	48	0	172	582	124	98	111	1360	0	0	1584	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	236	0	210	487	104	82	65	1262	0	0	1242	45
Arrive On Green	0.13	0.00	0.13	0.37	0.37	0.37	0.70	0.70	0.00	0.00	0.35	0.35
Sat Flow, veh/h	1810	0	1610	1300	277	219	310	3705	0	0	3649	128
Grp Volume(v), veh/h	48	0	172	804	0	0	111	1360	0	0	802	839
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1796	0	0	310	1805	0	0	1805	1877
Q Serve(g_s), s	2.6	0.0	11.4	41.2	0.0	0.0	0.0	38.5	0.0	0.0	38.5	38.5
Cycle Q Clear(g_c), s	2.6	0.0	11.4	41.2	0.0	0.0	38.5	38.5	0.0	0.0	38.5	38.5
Prop In Lane	1.00		1.00	0.72		0.12	1.00		0.00	0.00		0.07
Lane Grp Cap(c), veh/h	236	0	210	673	0	0	65	1262	0	0	631	656
V/C Ratio(X)	0.20	0.00	0.82	1.20	0.00	0.00	1.70	1.08	0.00	0.00	1.27	1.28
Avail Cap(c_a), veh/h	378	0	337	673	0	0	65	1262	0	0	631	656
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.44	0.44
Uniform Delay (d), s/veh	42.7	0.0	46.6	34.4	0.0	0.0	35.8	16.5	0.0	0.0	35.8	35.8
Incr Delay (d2), s/veh	0.5	0.0	9.6	102.1	0.0	0.0	369.9	49.0	0.0	0.0	127.7	130.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	5.2	35.8	0.0	0.0	8.3	14.3	0.0	0.0	38.4	40.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.2	0.0	56.2	136.5	0.0	0.0	405.6	65.6	0.0	0.0	163.4	166.5
LnGrp LOS	D	A	E	F	A	A	F	F	A	A	F	F
Approach Vol, veh/h		220			804			1471			1641	
Approach Delay, s/veh		53.4			136.5			91.2			165.0	
Approach LOS		D			F			F			F	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		43.5		46.7		43.5		19.8				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		29.8		41.2		* 31		23.0				
Max Q Clear Time (g_c+I1), s		40.5		43.2		40.5		13.4				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.9				

Intersection Summary		
HCM 6th Ctrl Delay		127.3
HCM 6th LOS		F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	23.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	238	1360	1463	838
Future Vol, veh/h	0	0	238	1360	1463	838
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	256	1462	1573	901

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1238	2475	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	0	*546	~ 152	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	-	*545	~ 152	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	57.6	0
HCM LOS	A		

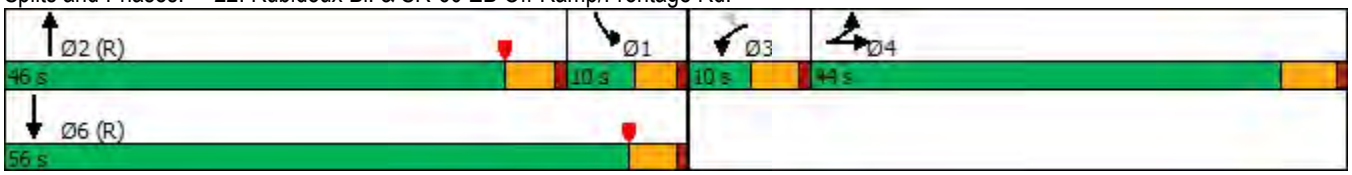
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	~ 152	-	-	-	-
HCM Lane V/C Ratio	1.684	-	-	-	-
HCM Control Delay (s)	$ 386.5	-	0	-	-
HCM Lane LOS	F	-	A	-	-
HCM 95th %tile Q(veh)	18.2	-	-	-	-

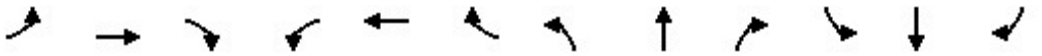
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	48	14	2	913	173	1196
Future Volume (vph)	48	14	2	913	173	1196
Turn Type	NA	Prot	Perm	NA	Prot	NA
Protected Phases	4	3		2	1	6
Permitted Phases			3			
Detector Phase	4	3	3	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	10.0	10.0	45.0	9.5	30.0
Total Split (s)	44.0	10.0	10.0	46.0	10.0	56.0
Total Split (%)	40.0%	9.1%	9.1%	41.8%	9.1%	50.9%
Yellow Time (s)	4.5	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	44.5	5.0	5.0	41.0	5.5	51.0
Actuated g/C Ratio	0.40	0.05	0.05	0.37	0.05	0.46
v/c Ratio	1.74	0.18	0.01	0.99	2.00	0.74
Control Delay	361.6	55.8	0.0	54.8	477.8	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.8
Total Delay	361.6	55.8	0.0	54.8	477.8	13.5
LOS	F	E	A	D	F	B
Approach Delay	361.6			54.8		72.1
Approach LOS	F			D		E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.00	
Intersection Signal Delay: 157.4	Intersection LOS: F
Intersection Capacity Utilization 134.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	749	48	413	14	0	2	0	913	341	173	1196	0
Future Volume (veh/h)	749	48	413	14	0	2	0	913	341	173	1196	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	780	50	338	15	0	0	0	951	307	180	1246	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	409	26	177	0	0	0	0	994	319	252	2002	0
Arrive On Green	0.35	0.35	0.35	0.00	0.00	0.00	0.00	0.37	0.37	0.28	1.00	0.00
Sat Flow, veh/h	1169	75	507		0		0	2781	863	1810	3705	0
Grp Volume(v), veh/h	1168	0	0		0.0		0	637	621	180	1246	0
Grp Sat Flow(s),veh/h/ln	1750	0	0				0	1805	1745	1810	1805	0
Q Serve(g_s), s	38.5	0.0	0.0				0.0	37.8	38.2	9.9	0.0	0.0
Cycle Q Clear(g_c), s	38.5	0.0	0.0				0.0	37.8	38.2	9.9	0.0	0.0
Prop In Lane	0.67		0.29				0.00		0.49	1.00		0.00
Lane Grp Cap(c), veh/h	613	0	0				0	668	646	252	2002	0
V/C Ratio(X)	1.91	0.00	0.00				0.00	0.95	0.96	0.72	0.62	0.00
Avail Cap(c_a), veh/h	613	0	0				0	673	650	252	2002	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.56	0.56	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.8	0.0	0.0				0.0	33.7	33.9	37.8	0.0	0.0
Incr Delay (d2), s/veh	414.0	0.0	0.0				0.0	17.2	18.7	8.1	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	85.8	0.0	0.0				0.0	18.8	18.7	4.3	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	449.8	0.0	0.0				0.0	50.9	52.5	45.8	1.5	0.0
LnGrp LOS	F	A	A				A	D	D	D	A	A
Approach Vol, veh/h		1168						1258			1426	
Approach Delay, s/veh		449.8						51.7			7.1	
Approach LOS		F						D			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	20.3	45.7		44.0		66.0
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0
Max Green Setting (Gmax), s	5.5	* 41		38.5		51.0
Max Q Clear Time (g_c+I1), s	11.9	40.2		40.5		2.0
Green Ext Time (p_c), s	0.0	0.5		0.0		6.9

Intersection Summary		
HCM 6th Ctrl Delay		155.9
HCM 6th LOS		F

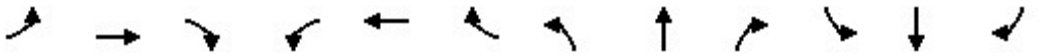
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	101	47	16	16	90	22	1043	206	1288
Future Volume (vph)	101	47	16	16	90	22	1043	206	1288
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	30.6	30.6	34.6	34.6	34.6	9.6	29.4	9.6	22.4
Total Split (s)	34.6	34.6	34.6	34.6	34.6	9.6	29.4	11.0	30.8
Total Split (%)	46.1%	46.1%	46.1%	46.1%	46.1%	12.8%	39.2%	14.7%	41.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	4.6	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		14.3		14.3	14.3	5.1	24.3	6.5	33.9
Actuated g/C Ratio		0.24		0.24	0.24	0.09	0.41	0.11	0.57
v/c Ratio		0.49		0.09	0.21	0.15	0.81	1.10	0.74
Control Delay		22.3		16.8	4.7	31.1	23.3	125.9	16.6
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		22.3		16.8	4.7	31.1	23.3	125.9	16.6
LOS		C		B	A	C	C	F	B
Approach Delay		22.3		7.9			23.4		30.4
Approach LOS		C		A			C		C

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 59.9	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 26.4	Intersection LOS: C
Intersection Capacity Utilization 74.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 23: Rubidoux Bl. & 34th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	47	22	16	16	90	22	1043	85	206	1288	144
Future Volume (veh/h)	101	47	22	16	16	90	22	1043	85	206	1288	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	105	49	17	17	17	41	23	1086	85	215	1342	131
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	270	114	30	236	203	313	49	1355	106	224	1644	160
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.03	0.40	0.40	0.12	0.50	0.50
Sat Flow, veh/h	811	585	154	677	1042	1605	1810	3392	265	1810	3316	322
Grp Volume(v), veh/h	171	0	0	34	0	41	23	578	593	215	727	746
Grp Sat Flow(s),veh/h/ln	1550	0	0	1720	0	1605	1810	1805	1852	1810	1805	1833
Q Serve(g_s), s	3.8	0.0	0.0	0.0	0.0	1.1	0.6	14.6	14.7	6.1	17.6	17.9
Cycle Q Clear(g_c), s	5.0	0.0	0.0	0.8	0.0	1.1	0.6	14.6	14.7	6.1	17.6	17.9
Prop In Lane	0.61		0.10	0.50		1.00	1.00		0.14	1.00		0.18
Lane Grp Cap(c), veh/h	415	0	0	440	0	313	49	721	740	224	895	909
V/C Ratio(X)	0.41	0.00	0.00	0.08	0.00	0.13	0.47	0.80	0.80	0.96	0.81	0.82
Avail Cap(c_a), veh/h	993	0	0	1044	0	929	175	836	858	224	895	909
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.7	0.0	0.0	17.1	0.0	17.2	24.8	13.7	13.7	22.6	11.0	11.1
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.1	0.0	0.2	2.5	4.9	4.8	49.0	5.8	6.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	0.3	0.0	0.4	0.3	5.5	5.6	5.3	6.2	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.4	0.0	0.0	17.2	0.0	17.4	27.4	18.6	18.6	71.6	16.8	17.1
LnGrp LOS	B	A	A	B	A	B	C	B	B	E	B	B
Approach Vol, veh/h		171			75			1194			1688	
Approach Delay, s/veh		19.4			17.3			18.8			23.9	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.0	26.1		14.7	6.0	31.1		14.7				
Change Period (Y+Rc), s	4.6	5.4		4.6	4.6	5.4		4.6				
Max Green Setting (Gmax), s	6.4	24.0		30.0	5.0	25.4		30.0				
Max Q Clear Time (g_c+I1), s	8.1	16.7		7.0	2.6	19.9		3.1				
Green Ext Time (p_c), s	0.0	4.0		1.0	0.0	3.9		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		21.5	
HCM 6th LOS		C	

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	479	83	0	0	16	15
Future Vol, veh/h	479	83	0	0	16	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	544	94	0	0	18	17

Major/Minor	Major1			Minor1	
Conflicting Flow All	0	0		591	591
Stage 1	-	-		591	-
Stage 2	-	-		0	-
Critical Hdwy	-	-		6.4	6.2
Critical Hdwy Stg 1	-	-		5.4	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	-		3.5	3.3
Pot Cap-1 Maneuver	-	-		473	511
Stage 1	-	-		557	-
Stage 2	-	-		-	-
Platoon blocked, %	-	-			
Mov Cap-1 Maneuver	-	-		473	511
Mov Cap-2 Maneuver	-	-		473	-
Stage 1	-	-		557	-
Stage 2	-	-		-	-

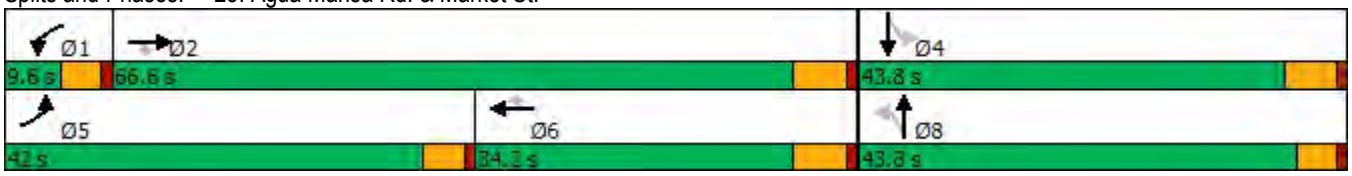
Approach	EB	NB
HCM Control Delay, s	0	12.9
HCM LOS		B

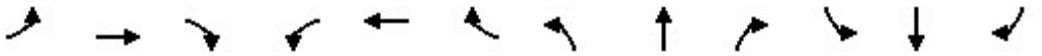
Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	491	-	-
HCM Lane V/C Ratio	0.072	-	-
HCM Control Delay (s)	12.9	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-

Lane Group	EBL	EBT	EBR	WBT	WBR	NBT	SBL	SBT	Ø1
Lane Configurations									
Traffic Volume (vph)	651	695	4	599	210	3	261	2	
Future Volume (vph)	651	695	4	599	210	3	261	2	
Turn Type	Prot	NA	Perm	NA	Perm	NA	Perm	NA	
Protected Phases	5	2		6		8		4	1
Permitted Phases			2		6		4		
Detector Phase	5	2	2	6	6	8	4	4	
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	31.8	31.8	26.8	26.8	14.6	43.8	43.8	9.6
Total Split (s)	42.0	66.6	66.6	34.2	34.2	43.8	43.8	43.8	9.6
Total Split (%)	35.0%	55.5%	55.5%	28.5%	28.5%	36.5%	36.5%	36.5%	8%
Yellow Time (s)	3.6	4.8	4.8	4.8	4.8	3.6	4.8	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.6	5.8	5.8	5.8	5.8	4.6		5.8	
Lead/Lag	Lead	Lag	Lag	Lag	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				Yes
Recall Mode	None	Max	Max	Max	Max	None	None	None	None
Act Effct Green (s)	37.4	70.4	70.4	28.4	28.4	39.2		38.0	
Actuated g/C Ratio	0.31	0.59	0.59	0.24	0.24	0.33		0.32	
v/c Ratio	1.23	0.35	0.00	0.75	0.40	0.00		1.35	
Control Delay	156.1	13.5	0.0	48.7	7.1	27.3		199.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	156.1	13.5	0.0	48.7	7.1	27.3		199.2	
LOS	F	B	A	D	A	C		F	
Approach Delay		82.3		37.9		27.3		199.2	
Approach LOS		F		D		C		F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.35	
Intersection Signal Delay: 97.1	Intersection LOS: F
Intersection Capacity Utilization 112.1%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	651	695	4	0	599	210	0	3	0	261	2	402
Future Volume (veh/h)	651	695	4	0	599	210	0	3	0	261	2	402
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	693	739	3	0	637	185	0	3	0	278	2	296
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	564	2118	945	2	854	381	0	602	0	276	2	247
Arrive On Green	0.31	0.59	0.59	0.00	0.24	0.24	0.00	0.32	0.00	0.32	0.32	0.32
Sat Flow, veh/h	1810	3610	1610	1810	3610	1610	0	1900	0	732	5	779
Grp Volume(v), veh/h	693	739	3	0	637	185	0	3	0	576	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1610	0	1900	0	1517	0	0
Q Serve(g_s), s	37.4	12.8	0.1	0.0	19.6	11.9	0.0	0.1	0.0	37.9	0.0	0.0
Cycle Q Clear(g_c), s	37.4	12.8	0.1	0.0	19.6	11.9	0.0	0.1	0.0	38.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.00		0.00	0.48		0.51
Lane Grp Cap(c), veh/h	564	2118	945	2	854	381	0	602	0	525	0	0
V/C Ratio(X)	1.23	0.35	0.00	0.00	0.75	0.49	0.00	0.00	0.00	1.10	0.00	0.00
Avail Cap(c_a), veh/h	564	2118	945	75	854	381	0	621	0	525	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	41.3	12.9	10.3	0.0	42.5	39.5	0.0	28.1	0.0	42.7	0.0	0.0
Incr Delay (d2), s/veh	117.9	0.5	0.0	0.0	5.9	4.4	0.0	0.0	0.0	68.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	34.4	4.9	0.0	0.0	9.2	5.0	0.0	0.1	0.0	25.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	159.2	13.3	10.3	0.0	48.3	43.9	0.0	28.1	0.0	111.3	0.0	0.0
LnGrp LOS	F	B	B	A	D	D	A	C	A	F	A	A
Approach Vol, veh/h		1435			822			3			576	
Approach Delay, s/veh		83.8			47.3			28.1			111.3	
Approach LOS		F			D			C			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	76.2		43.8	42.0	34.2		43.8				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	60.8		38.0	37.4	28.4		* 39				
Max Q Clear Time (g_c+I1), s	0.0	14.8		40.0	39.4	21.6		2.1				
Green Ext Time (p_c), s	0.0	5.3		0.0	0.0	2.5		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		78.7
HCM 6th LOS		E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	228	11	55	14	2	10	13	76	4	34	3
Future Vol, veh/h	4	228	11	55	14	2	10	13	76	4	34	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	253	12	61	16	2	11	14	84	4	38	3
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	10.2	8.9	8.1	8.2
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	10%	2%	0%	80%	0%	10%
Vol Thru, %	13%	98%	0%	20%	0%	83%
Vol Right, %	77%	0%	100%	0%	100%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	99	232	11	69	2	41
LT Vol	10	4	0	55	0	4
Through Vol	13	228	0	14	0	34
RT Vol	76	0	11	0	2	3
Lane Flow Rate	110	258	12	77	2	46
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.134	0.354	0.014	0.117	0.003	0.062
Departure Headway (Hd)	4.393	4.944	4.232	5.499	4.393	4.884
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	816	727	845	652	813	733
Service Time	2.421	2.673	1.961	3.234	2.128	2.918
HCM Lane V/C Ratio	0.135	0.355	0.014	0.118	0.002	0.063
HCM Control Delay	8.1	10.4	7	9	7.1	8.2
HCM Lane LOS	A	B	A	A	A	A
HCM 95th-tile Q	0.5	1.6	0	0.4	0	0.2

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	16	1	7	7	1	1	4	123	7	13	89	15
Future Vol, veh/h	16	1	7	7	1	1	4	123	7	13	89	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	19	1	8	8	1	1	5	143	8	15	103	17

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	300	304	112	304	308	148	120	0	0	152	0	0
Stage 1	142	142	-	158	158	-	-	-	-	-	-	-
Stage 2	158	162	-	146	150	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	656	613	947	652	609	904	1480	-	-	1441	-	-
Stage 1	866	783	-	849	771	-	-	-	-	-	-	-
Stage 2	849	768	-	861	777	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	647	603	947	638	599	903	1480	-	-	1440	-	-
Mov Cap-2 Maneuver	647	603	-	638	599	-	-	-	-	-	-	-
Stage 1	863	774	-	845	767	-	-	-	-	-	-	-
Stage 2	843	764	-	843	768	-	-	-	-	-	-	-

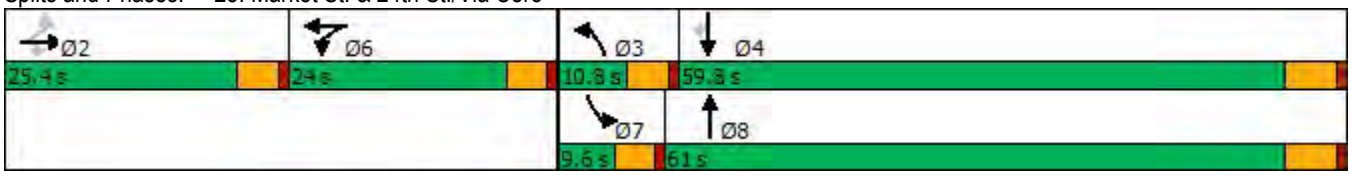
Approach	EB	WB	NB	SB
HCM Control Delay, s	10.3	10.6	0.2	0.8
HCM LOS	B	B		

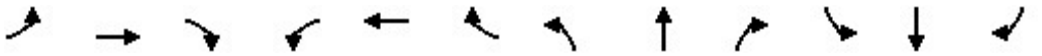
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1480	-	-	710	655	1440	-	-
HCM Lane V/C Ratio	0.003	-	-	0.039	0.016	0.01	-	-
HCM Control Delay (s)	7.4	0	-	10.3	10.6	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	3	31	206	235	39	49	964	6	937	3
Future Volume (vph)	3	31	206	235	39	49	964	6	937	3
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	25.4	25.4	25.4	24.0	24.0	10.8	61.0	9.6	59.8	59.8
Total Split (%)	21.2%	21.2%	21.2%	20.0%	20.0%	9.0%	50.8%	8.0%	49.8%	49.8%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		14.2	14.2	18.9	18.9	6.0	61.2	5.0	54.6	54.6
Actuated g/C Ratio		0.13	0.13	0.17	0.17	0.05	0.55	0.05	0.49	0.49
v/c Ratio		0.33	0.75	0.88	0.20	0.58	1.16	0.09	1.15	0.00
Control Delay		52.1	37.2	75.2	35.8	77.4	108.3	56.7	110.8	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		52.1	37.2	75.2	35.8	77.4	108.3	56.7	110.8	0.0
LOS		D	D	E	D	E	F	E	F	A
Approach Delay		39.3			67.7		106.9		110.1	
Approach LOS		D			E		F		F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 111.1	
Natural Cycle: 115	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.16	
Intersection Signal Delay: 97.4	Intersection LOS: F
Intersection Capacity Utilization 88.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	31	206	235	39	16	49	964	79	6	937	3
Future Volume (veh/h)	3	31	206	235	39	16	49	964	79	6	937	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	3	36	152	270	45	9	56	1108	90	7	1077	3
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	17	205	188	301	256	51	72	913	74	16	943	799
Arrive On Green	0.12	0.12	0.12	0.17	0.17	0.17	0.04	0.53	0.53	0.01	0.50	0.50
Sat Flow, veh/h	146	1747	1598	1810	1537	307	1810	1731	141	1810	1900	1610
Grp Volume(v), veh/h	39	0	152	270	0	54	56	0	1198	7	1077	3
Grp Sat Flow(s),veh/h/ln	1893	0	1598	1810	0	1845	1810	0	1871	1810	1900	1610
Q Serve(g_s), s	2.0	0.0	10.1	15.9	0.0	2.7	3.3	0.0	57.4	0.4	54.0	0.1
Cycle Q Clear(g_c), s	2.0	0.0	10.1	15.9	0.0	2.7	3.3	0.0	57.4	0.4	54.0	0.1
Prop In Lane	0.08		1.00	1.00		0.17	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	222	0	188	301	0	307	72	0	987	16	943	799
V/C Ratio(X)	0.18	0.00	0.81	0.90	0.00	0.18	0.77	0.00	1.21	0.44	1.14	0.00
Avail Cap(c_a), veh/h	362	0	305	323	0	329	103	0	987	83	943	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	0.0	46.8	44.5	0.0	39.0	51.7	0.0	25.7	53.7	27.4	13.8
Incr Delay (d2), s/veh	0.4	0.0	8.1	25.2	0.0	0.3	12.1	0.0	105.7	7.0	76.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	4.3	9.3	0.0	1.3	1.7	0.0	51.4	0.2	42.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.7	0.0	54.9	69.6	0.0	39.2	63.8	0.0	131.4	60.7	104.3	13.8
LnGrp LOS	D	A	D	E	A	D	E	A	F	E	F	B
Approach Vol, veh/h		191			324			1254			1087	
Approach Delay, s/veh		52.6			64.6			128.4			103.8	
Approach LOS		D			E			F			F	

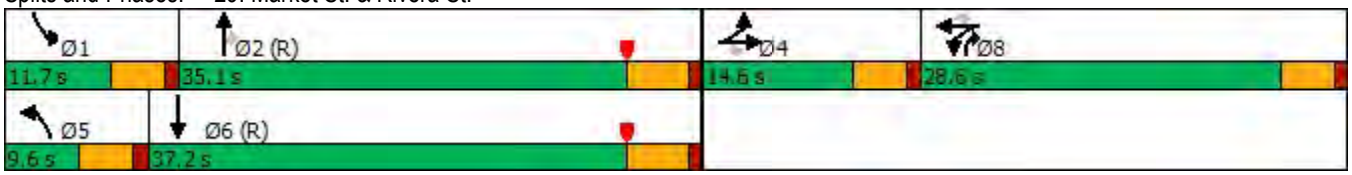
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		17.4	9.0	59.8		22.7	5.6	63.2				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		20.8	6.2	54.0		19.4	5.0	55.2				
Max Q Clear Time (g_c+I1), s		12.1	5.3	56.0		17.9	2.4	59.4				
Green Ext Time (p_c), s		0.4	0.0	0.0		0.2	0.0	0.0				

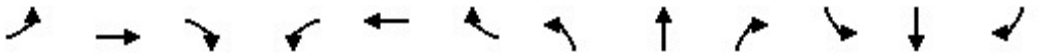
Intersection Summary												
HCM 6th Ctrl Delay			106.7									
HCM 6th LOS			F									

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	14	75	234	2	39	4	906	258	131	1292
Future Volume (vph)	14	75	234	2	39	4	906	258	131	1292
Turn Type	NA	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	4		8	8		5	2	8	1	6
Permitted Phases		4			8			2		
Detector Phase	4	4	8	8	8	5	2	8	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	14.6	14.6	28.6	28.6	28.6	9.6	35.1	28.6	9.6	29.1
Total Split (s)	14.6	14.6	28.6	28.6	28.6	9.6	35.1	28.6	11.7	37.2
Total Split (%)	16.2%	16.2%	31.8%	31.8%	31.8%	10.7%	39.0%	31.8%	13.0%	41.3%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.1	3.6	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	4.6	5.1	4.6	4.6	5.1
Lead/Lag						Lead	Lag		Lead	Lag
Lead-Lag Optimize?						Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	10.0	10.0	14.4	14.4	14.4	5.0	38.5	54.3	11.1	52.3
Actuated g/C Ratio	0.11	0.11	0.16	0.16	0.16	0.06	0.43	0.60	0.12	0.58
v/c Ratio	0.10	0.26	0.44	0.45	0.11	0.04	0.61	0.25	0.61	0.64
Control Delay	37.3	3.1	37.6	37.9	0.6	36.5	27.8	0.6	51.8	18.0
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.4
Total Delay	37.3	3.1	37.6	37.9	0.6	36.5	28.1	0.6	51.8	18.4
LOS	D	A	D	D	A	D	C	A	D	B
Approach Delay	10.2			32.5			22.1			21.5
Approach LOS	B			C			C			C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 2 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay: 22.4	Intersection LOS: C
Intersection Capacity Utilization 65.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 29: Market St. & Rivera St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	14	75	234	2	39	4	906	258	131	1292	0
Future Volume (veh/h)	6	14	75	234	2	39	4	906	258	131	1292	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	6	14	34	242	0	21	4	934	165	135	1332	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	46	108	133	409	0	181	10	1862	1012	143	2128	0
Arrive On Green	0.08	0.08	0.08	0.11	0.00	0.11	0.01	1.00	1.00	0.08	0.59	0.00
Sat Flow, veh/h	562	1310	1610	3619	0	1603	1810	3610	1610	1810	3705	0
Grp Volume(v), veh/h	20	0	34	242	0	21	4	934	165	135	1332	0
Grp Sat Flow(s),veh/h/ln	1872	0	1610	1810	0	1603	1810	1805	1610	1810	1805	0
Q Serve(g_s), s	0.9	0.0	1.8	5.7	0.0	1.1	0.2	0.0	0.0	6.7	21.6	0.0
Cycle Q Clear(g_c), s	0.9	0.0	1.8	5.7	0.0	1.1	0.2	0.0	0.0	6.7	21.6	0.0
Prop In Lane	0.30		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	154	0	133	409	0	181	10	1862	1012	143	2128	0
V/C Ratio(X)	0.13	0.00	0.26	0.59	0.00	0.12	0.42	0.50	0.16	0.95	0.63	0.00
Avail Cap(c_a), veh/h	208	0	179	965	0	427	101	1862	1012	143	2128	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.94	0.94	0.94	0.09	0.09	0.00
Uniform Delay (d), s/veh	38.3	0.0	38.7	37.9	0.0	35.9	44.4	0.0	0.0	41.3	12.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	1.0	1.4	0.0	0.3	9.8	0.9	0.3	11.9	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.7	2.6	0.0	0.4	0.1	0.2	0.1	3.3	7.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.7	0.0	39.7	39.3	0.0	36.2	54.2	0.9	0.3	53.2	12.1	0.0
LnGrp LOS	D	A	D	D	A	D	D	A	A	D	B	A
Approach Vol, veh/h		54			263			1103			1467	
Approach Delay, s/veh		39.3			39.1			1.0			15.9	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.7	51.5		12.0	5.1	58.2		14.8				
Change Period (Y+Rc), s	4.6	5.1		4.6	4.6	5.1		4.6				
Max Green Setting (Gmax), s	7.1	30.0		10.0	5.0	32.1		24.0				
Max Q Clear Time (g_c+I1), s	8.7	2.0		3.8	2.2	23.6		7.7				
Green Ext Time (p_c), s	0.0	7.3		0.1	0.0	5.2		0.8				

Intersection Summary			
HCM 6th Ctrl Delay		12.8	
HCM 6th LOS		B	

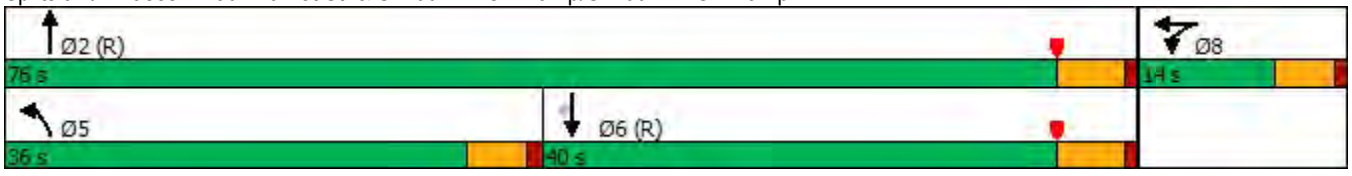
Notes

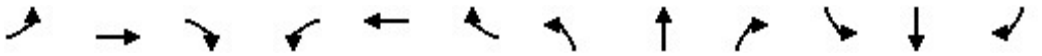
User approved volume balancing among the lanes for turning movement.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	5	773	431	395	1419	182
Future Volume (vph)	5	773	431	395	1419	182
Turn Type	NA	Free	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		Free				6
Detector Phase	8		5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	10.0		10.0	24.5	10.5	10.5
Total Split (s)	14.0		36.0	76.0	40.0	40.0
Total Split (%)	15.6%		40.0%	84.4%	44.4%	44.4%
Yellow Time (s)	4.0		4.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	C-Min	C-Min	C-Min
Act Effct Green (s)	8.5	90.0	26.2	74.4	42.1	42.1
Actuated g/C Ratio	0.09	1.00	0.29	0.83	0.47	0.47
v/c Ratio	0.62	0.49	0.84	0.14	0.86	0.22
Control Delay	55.2	1.1	34.8	10.0	23.4	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.6	0.0
Total Delay	55.2	1.1	34.8	10.0	24.0	2.5
LOS	E	A	C	B	C	A
Approach Delay	7.5			23.0	21.6	
Approach LOS	A			C	C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 18.2	Intersection LOS: B
Intersection Capacity Utilization 81.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 30: Market St. & SR-60 WB On-Ramp/SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	99	5	773	431	395	0	0	1419	182
Future Volume (veh/h)	0	0	0	99	5	773	431	395	0	0	1419	182
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				101	5	0	440	403	0	0	1448	0
Peak Hour Factor				0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				129	6		475	2919	0	0	1771	
Arrive On Green				0.07	0.07	0.00	0.44	1.00	0.00	0.00	0.98	0.00
Sat Flow, veh/h				1728	86	1610	1810	3705	0	0	3705	1610
Grp Volume(v), veh/h				106	0	0	440	403	0	0	1448	0
Grp Sat Flow(s),veh/h/ln				1814	0	1610	1810	1805	0	0	1805	1610
Q Serve(g_s), s				5.2	0.0	0.0	20.7	0.0	0.0	0.0	3.4	0.0
Cycle Q Clear(g_c), s				5.2	0.0	0.0	20.7	0.0	0.0	0.0	3.4	0.0
Prop In Lane				0.95		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				135	0		475	2919	0	0	1771	
V/C Ratio(X)				0.78	0.00		0.93	0.14	0.00	0.00	0.82	
Avail Cap(c_a), veh/h				181	0		623	2919	0	0	1771	
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	0.00	0.00	0.56	0.56	0.00	0.00	0.77	0.00
Uniform Delay (d), s/veh				40.9	0.0	0.0	24.5	0.0	0.0	0.0	0.5	0.0
Incr Delay (d2), s/veh				14.5	0.0	0.0	10.8	0.1	0.0	0.0	3.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.7	0.0	0.0	7.7	0.0	0.0	0.0	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				55.4	0.0	0.0	35.3	0.1	0.0	0.0	3.8	0.0
LnGrp LOS				E	A		D	A	A	A	A	
Approach Vol, veh/h					106	A		843			1448	A
Approach Delay, s/veh					55.4			18.5			3.8	
Approach LOS					E			B			A	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	78.3		28.6	49.7		11.7						
Change Period (Y+Rc), s	5.5		5.0	5.5		5.0						
Max Green Setting (Gmax), s	70.5		31.0	34.5		9.0						
Max Q Clear Time (g_c+I1), s	2.0		22.7	5.4		7.2						
Green Ext Time (p_c), s	2.7		0.9	12.3		0.1						

Intersection Summary		
HCM 6th Ctrl Delay	11.3	
HCM 6th LOS	B	

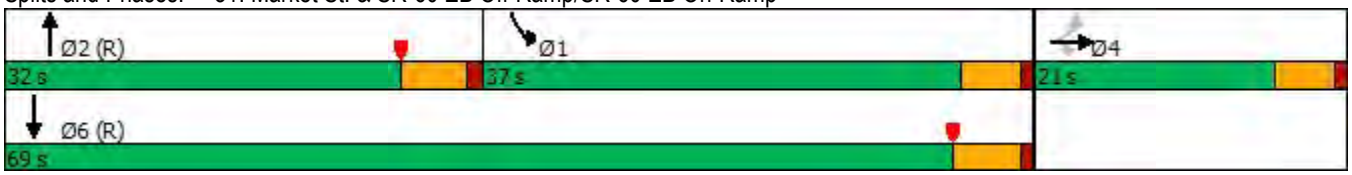
Notes

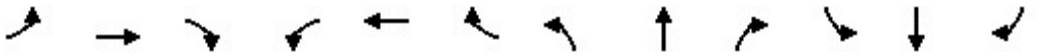
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	3	698	728	732	787
Future Volume (vph)	3	698	728	732	787
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	24.5	10.0	10.5
Total Split (s)	21.0	21.0	32.0	37.0	69.0
Total Split (%)	23.3%	23.3%	35.6%	41.1%	76.7%
Yellow Time (s)	4.0	4.0	4.5	4.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.0	5.5
Lead/Lag			Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Min	None	C-Min
Act Effct Green (s)	14.0	14.0	26.2	34.3	65.5
Actuated g/C Ratio	0.16	0.16	0.29	0.38	0.73
v/c Ratio	0.36	0.88	0.76	1.09	0.31
Control Delay	37.0	27.4	34.4	90.9	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	37.0	27.4	34.4	90.9	6.4
LOS	D	C	C	F	A
Approach Delay	28.6		34.4		47.1
Approach LOS	C		C		D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 15 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.09	
Intersection Signal Delay: 39.2	Intersection LOS: D
Intersection Capacity Utilization 81.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 31: Market St. & SR-60 EB Off-Ramp/SR-60 EB On-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	3	698	0	0	0	0	728	54	732	787	0
Future Volume (veh/h)	97	3	698	0	0	0	0	728	54	732	787	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	99	3	447				0	743	0	747	803	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	311	9	501				0	891		721	2551	0
Arrive On Green	0.18	0.18	0.18				0.00	0.25	0.00	0.53	0.94	0.00
Sat Flow, veh/h	1759	53	2834				0	3800	0	1810	3705	0
Grp Volume(v), veh/h	102	0	447				0	743	0	747	803	0
Grp Sat Flow(s),veh/h/ln	1812	0	1417				0	1805	0	1810	1805	0
Q Serve(g_s), s	4.4	0.0	13.9				0.0	17.6	0.0	35.9	1.7	0.0
Cycle Q Clear(g_c), s	4.4	0.0	13.9				0.0	17.6	0.0	35.9	1.7	0.0
Prop In Lane	0.97		1.00				0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	320	0	501				0	891		721	2551	0
V/C Ratio(X)	0.32	0.00	0.89				0.00	0.83		1.04	0.31	0.00
Avail Cap(c_a), veh/h	322	0	504				0	1063		721	2551	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.33	1.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.40	0.40	0.00
Uniform Delay (d), s/veh	32.3	0.0	36.2				0.0	32.1	0.0	21.1	0.8	0.0
Incr Delay (d2), s/veh	0.6	0.0	17.9				0.0	9.1	0.0	31.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	5.8				0.0	8.4	0.0	17.4	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.9	0.0	54.1				0.0	41.2	0.0	52.1	1.0	0.0
LnGrp LOS	C	A	D				A	D		F	A	A
Approach Vol, veh/h		549						743	A		1550	
Approach Delay, s/veh		50.1						41.2			25.6	
Approach LOS		D						D			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	41.4	27.7		20.9		69.1
Change Period (Y+Rc), s	5.5	* 5.5		5.0		5.5
Max Green Setting (Gmax), s	32.0	* 27		16.0		63.5
Max Q Clear Time (g_c+I1), s	37.9	19.6		15.9		3.7
Green Ext Time (p_c), s	0.0	2.6		0.0		6.2

Intersection Summary	
HCM 6th Ctrl Delay	34.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	0	32	1	1	15	42	735	0	18	1371	97
Future Vol, veh/h	32	0	32	1	1	15	42	735	0	18	1371	97
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	145	-	-	140	-	110
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	33	0	33	1	1	16	44	766	0	19	1428	101

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1938	2321	714	1607	2422	384	1529	0	0	767	0	0
Stage 1	1466	1466	-	855	855	-	-	-	-	-	-	-
Stage 2	472	855	-	752	1567	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	*129	*52	*535	*389	38	620	801	-	-	856	-	-
Stage 1	*504	*441	-	*323	378	-	-	-	-	-	-	-
Stage 2	*547	*378	-	*504	408	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	*118	*48	*535	*343	35	619	801	-	-	855	-	-
Mov Cap-2 Maneuver	*273	*195	-	*243	178	-	-	-	-	-	-	-
Stage 1	*476	*432	-	*305	357	-	-	-	-	-	-	-
Stage 2	*502	*357	-	*462	399	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.2	12.4	0.5	0.1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	801	-	-	362	501	855	-	-
HCM Lane V/C Ratio	0.055	-	-	0.184	0.035	0.022	-	-
HCM Control Delay (s)	9.8	-	-	17.2	12.4	9.3	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.7	0.1	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	79.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	326	87	53	878	476	187
Future Vol, veh/h	326	87	53	878	476	187
Conflicting Peds, #/hr	0	0	0	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	408	109	66	1098	595	234

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1395	714	831	0	-	0
Stage 1	714	-	-	-	-	-
Stage 2	681	-	-	-	-	-
Critical Hdwy	6.6	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	~ 146	435	810	-	-	-
Stage 1	489	-	-	-	-	-
Stage 2	469	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 133	434	808	-	-	-
Mov Cap-2 Maneuver	~ 270	-	-	-	-	-
Stage 1	448	-	-	-	-	-
Stage 2	468	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 386.5	0.6	0
HCM LOS	F		

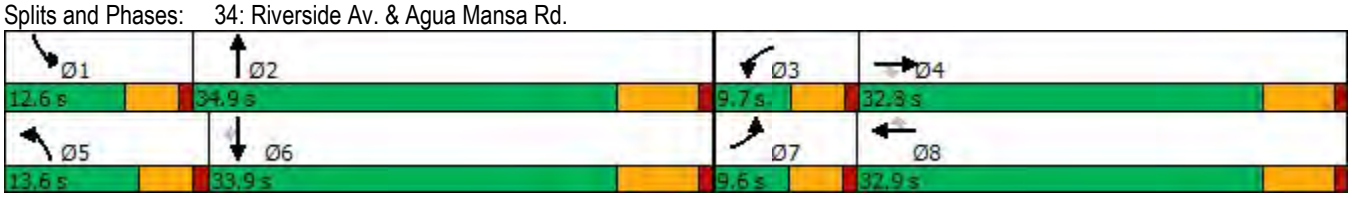
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	808	-	293	-	-
HCM Lane V/C Ratio	0.082	-	1.762	-	-
HCM Control Delay (s)	9.9	-	$ 386.5	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q(veh)	0.3	-	33.7	-	-

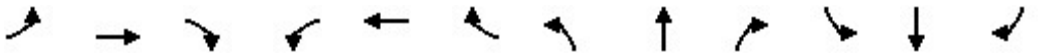
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	252	485	248	94	296	80	201	525	118	573	139
Future Volume (vph)	252	485	248	94	296	80	201	525	118	573	139
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	9.6	32.8	32.8	9.7	32.9	32.9	13.6	34.9	12.6	33.9	33.9
Total Split (%)	10.7%	36.4%	36.4%	10.8%	36.6%	36.6%	15.1%	38.8%	14.0%	37.7%	37.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	5.1	24.9	24.9	5.2	25.0	25.0	9.1	21.2	7.7	19.8	19.8
Actuated g/C Ratio	0.06	0.31	0.31	0.06	0.31	0.31	0.11	0.26	0.10	0.25	0.25
v/c Ratio	2.33	0.86	0.39	0.85	0.52	0.14	1.03	0.72	0.71	0.67	0.29
Control Delay	649.5	43.7	5.1	95.1	27.5	0.7	111.5	30.6	61.5	31.6	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	649.5	43.7	5.1	95.1	27.5	0.7	111.5	30.6	61.5	31.6	6.1
LOS	F	D	A	F	C	A	F	C	E	C	A
Approach Delay		189.3			36.5			49.6		31.6	
Approach LOS		F			D			D		C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 80.7	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 2.33	
Intersection Signal Delay: 86.7	Intersection LOS: F
Intersection Capacity Utilization 76.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	252	485	248	94	296	80	201	525	127	118	573	139
Future Volume (veh/h)	252	485	248	94	296	80	201	525	127	118	573	139
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	262	505	160	98	308	68	209	547	126	123	597	137
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	120	577	488	122	580	491	215	754	173	156	816	362
Arrive On Green	0.07	0.30	0.30	0.07	0.31	0.31	0.12	0.26	0.26	0.09	0.23	0.23
Sat Flow, veh/h	1810	1900	1605	1810	1900	1609	1810	2915	669	1810	3610	1603
Grp Volume(v), veh/h	262	505	160	98	308	68	209	338	335	123	597	137
Grp Sat Flow(s),veh/h/ln	1810	1900	1605	1810	1900	1609	1810	1805	1780	1810	1805	1603
Q Serve(g_s), s	5.0	19.1	5.8	4.0	10.2	2.3	8.7	12.9	13.0	5.0	11.6	5.5
Cycle Q Clear(g_c), s	5.0	19.1	5.8	4.0	10.2	2.3	8.7	12.9	13.0	5.0	11.6	5.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	120	577	488	122	580	491	215	467	460	156	816	362
V/C Ratio(X)	2.19	0.88	0.33	0.80	0.53	0.14	0.97	0.72	0.73	0.79	0.73	0.38
Avail Cap(c_a), veh/h	120	678	573	122	680	576	215	677	668	191	1307	580
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	25.0	20.4	34.8	21.8	19.1	33.2	25.6	25.6	33.9	27.2	24.8
Incr Delay (d2), s/veh	562.7	11.0	0.4	29.1	0.8	0.1	52.8	2.1	2.3	13.0	1.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.7	9.4	2.0	2.6	4.2	0.8	6.6	5.1	5.1	2.6	4.5	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	598.1	36.0	20.8	63.9	22.6	19.2	86.0	27.7	27.9	46.9	28.5	25.4
LnGrp LOS	F	D	C	E	C	B	F	C	C	D	C	C
Approach Vol, veh/h		927			474			882			857	
Approach Delay, s/veh		192.2			30.6			41.6			30.6	
Approach LOS		F			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	26.1	9.7	28.8	13.6	23.6	9.6	28.9
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	8.0	28.4	5.1	27.0	9.0	27.4	5.0	27.1
Max Q Clear Time (g_c+I1), s	7.0	15.0	6.0	21.1	10.7	13.6	7.0	12.2
Green Ext Time (p_c), s	0.0	2.9	0.0	1.8	0.0	3.3	0.0	1.6

Intersection Summary	
HCM 6th Ctrl Delay	81.4
HCM 6th LOS	F

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	0	0	637	200	8
Future Vol, veh/h	4	0	0	637	200	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	92	92	92	92	50
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	8	0	0	692	217	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	917	225	233	0	-	0
Stage 1	225	-	-	-	-	-
Stage 2	692	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	304	819	1346	-	-	-
Stage 1	817	-	-	-	-	-
Stage 2	500	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	304	819	1346	-	-	-
Mov Cap-2 Maneuver	304	-	-	-	-	-
Stage 1	817	-	-	-	-	-
Stage 2	500	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.2	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1346	-	304	-	-
HCM Lane V/C Ratio	-	-	0.026	-	-
HCM Control Delay (s)	0	-	17.2	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

APPENDIX 8.2: OPENING YEAR BACKGROUND CONDITIONS PLUS PROJECT TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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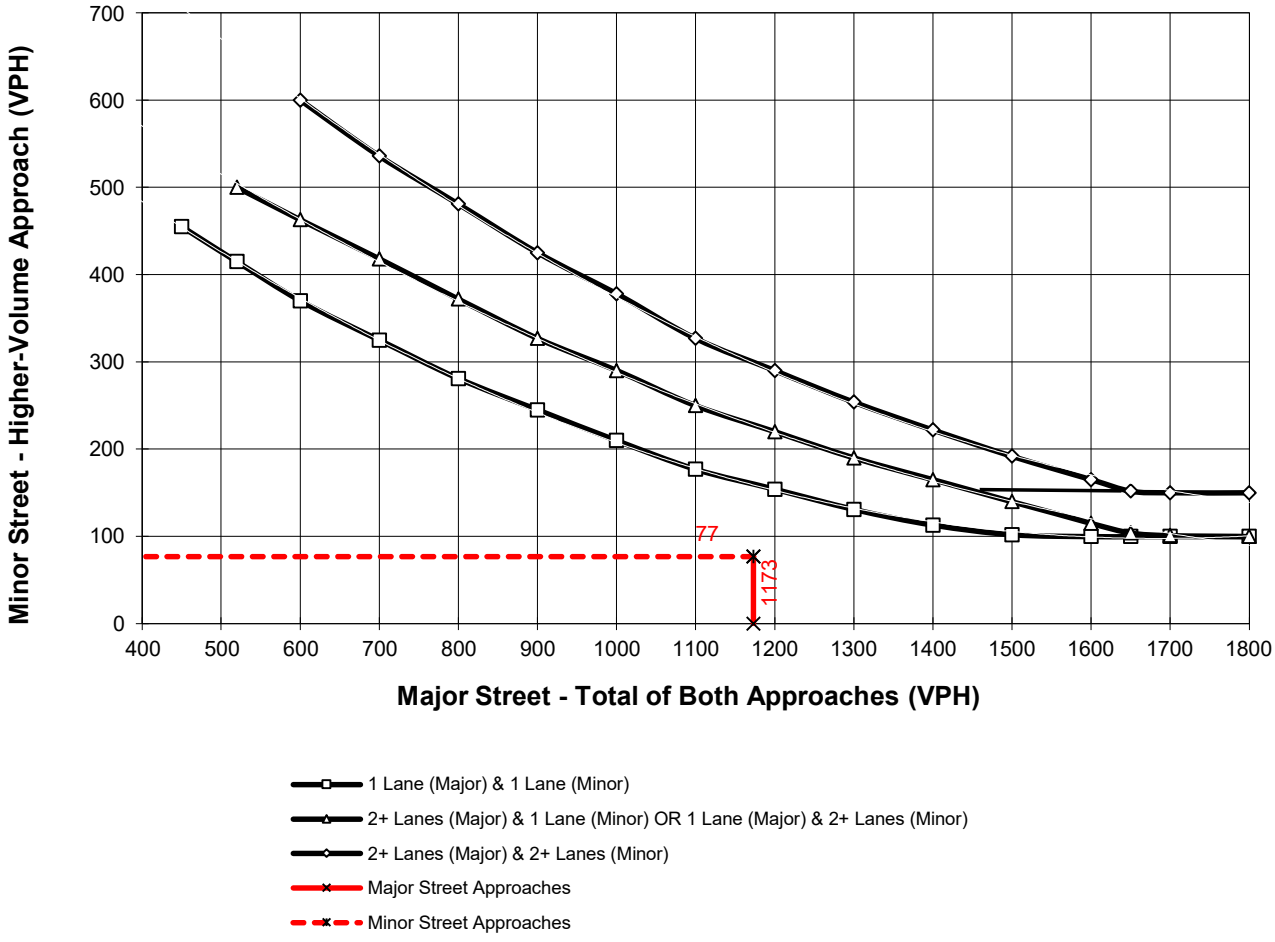
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (Approved) (2025) Conditions - Weekday AM Peak Hour**

Major Street Name = **20th St.**
Total of Both Approaches (VPH) = **1173**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Avalon Rd.**
High Volume Approach (VPH) = **77**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

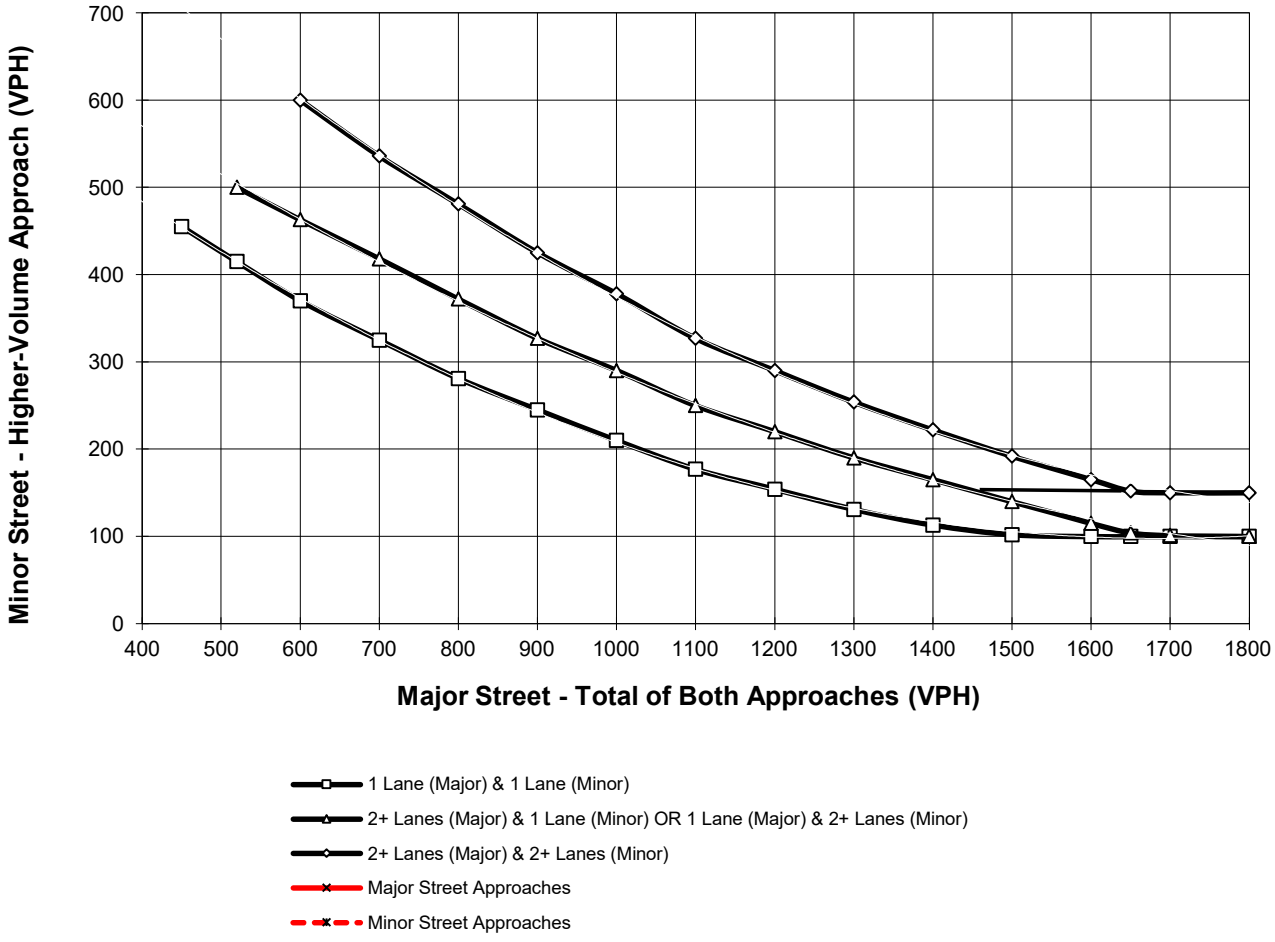
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (Approved) (2025) Conditions - Weekday AM Peak Hour**

Major Street Name = **Avalon St.**
Total of Both Approaches (VPH) = **112**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **24th St.**
High Volume Approach (VPH) = **34**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

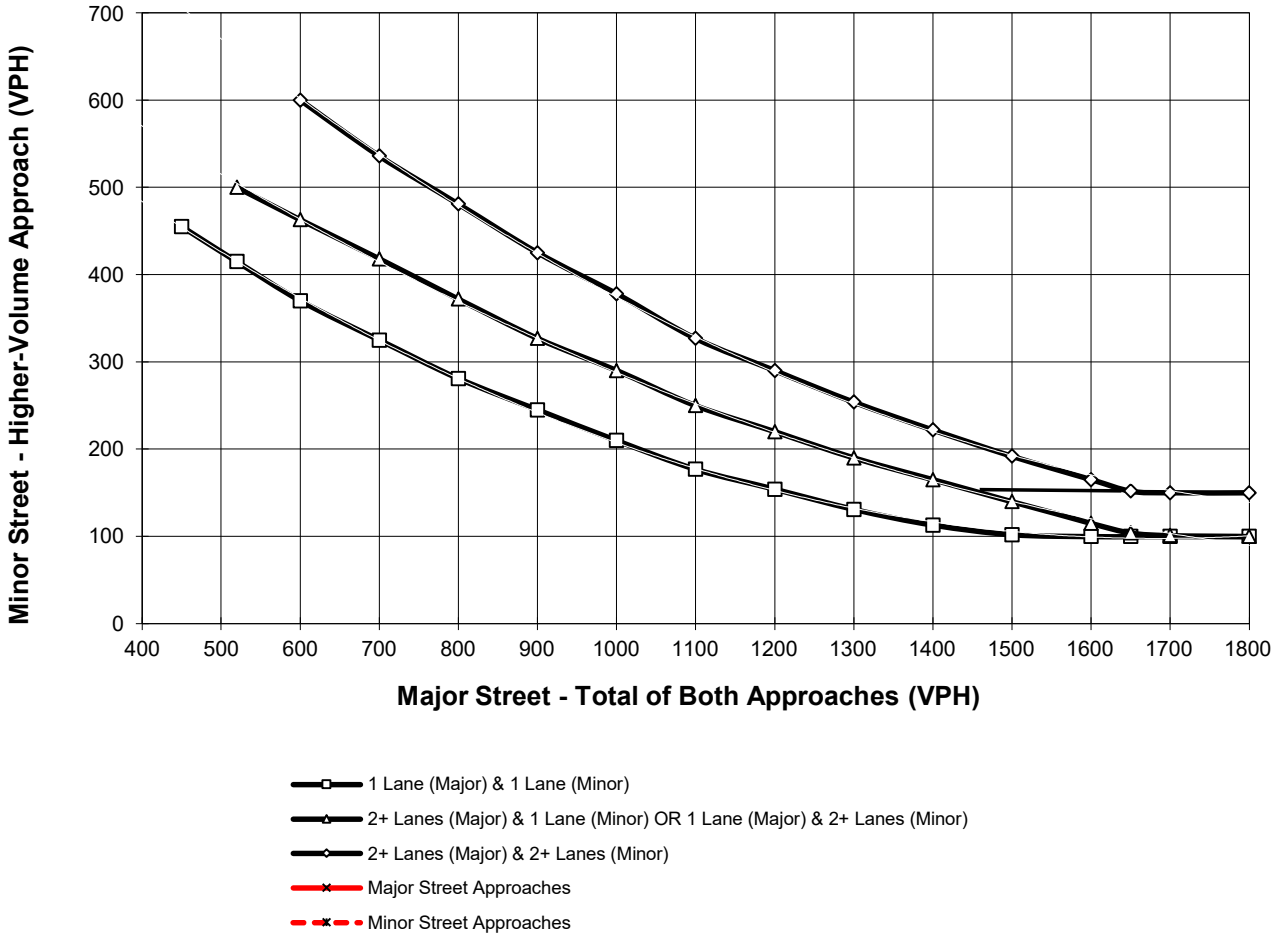
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (Approved) (2025) Conditions - Weekday AM Peak Hour**

Major Street Name = **Avalon St.**
Total of Both Approaches (VPH) = **113**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **26th St.**
High Volume Approach (VPH) = **39**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	EAPC (Approved)
				CALC JB	DATE 05/31/23
Jurisdiction: City of Jurupa Valley				CHK JB	DATE 05/31/23
Major Street: Avalon Rd.				Critical Approach Speed (Major)	45 mph
Minor Street: Driveway 7				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **1,147** vpd Minor Street Future ADT = **90** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... √

or

In built up area of isolated community of < 10,000 population .....

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
	XX				
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **1,147**	*1* **90**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **1,147**	*1* **90**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more	A 5% B 11%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

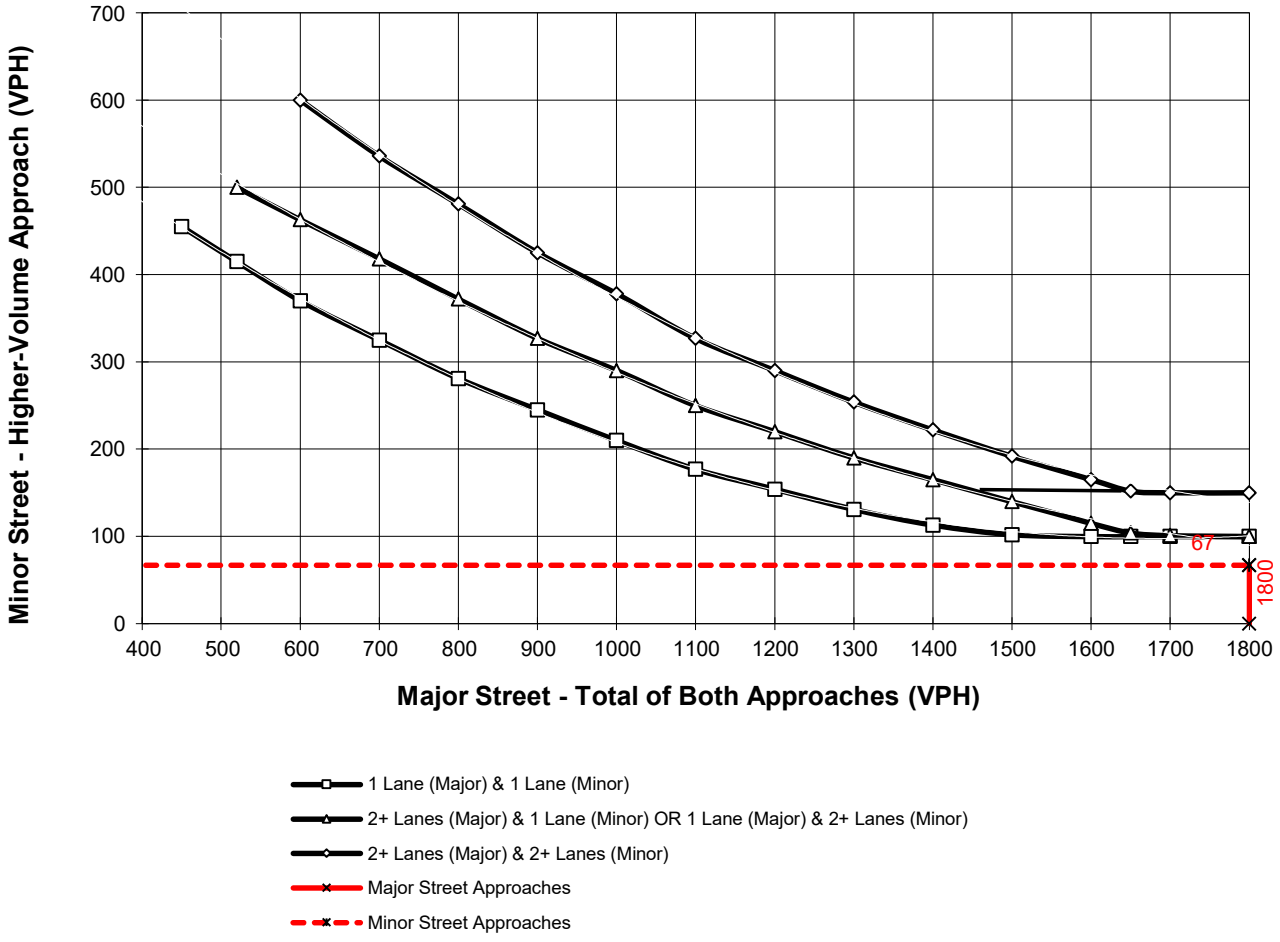
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (Approved) (2025) Conditions - Weekday PM Peak Hour**

Major Street Name = **Rubidoux St.**
Total of Both Approaches (VPH) = **2880**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **24th St.**
High Volume Approach (VPH) = **67**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

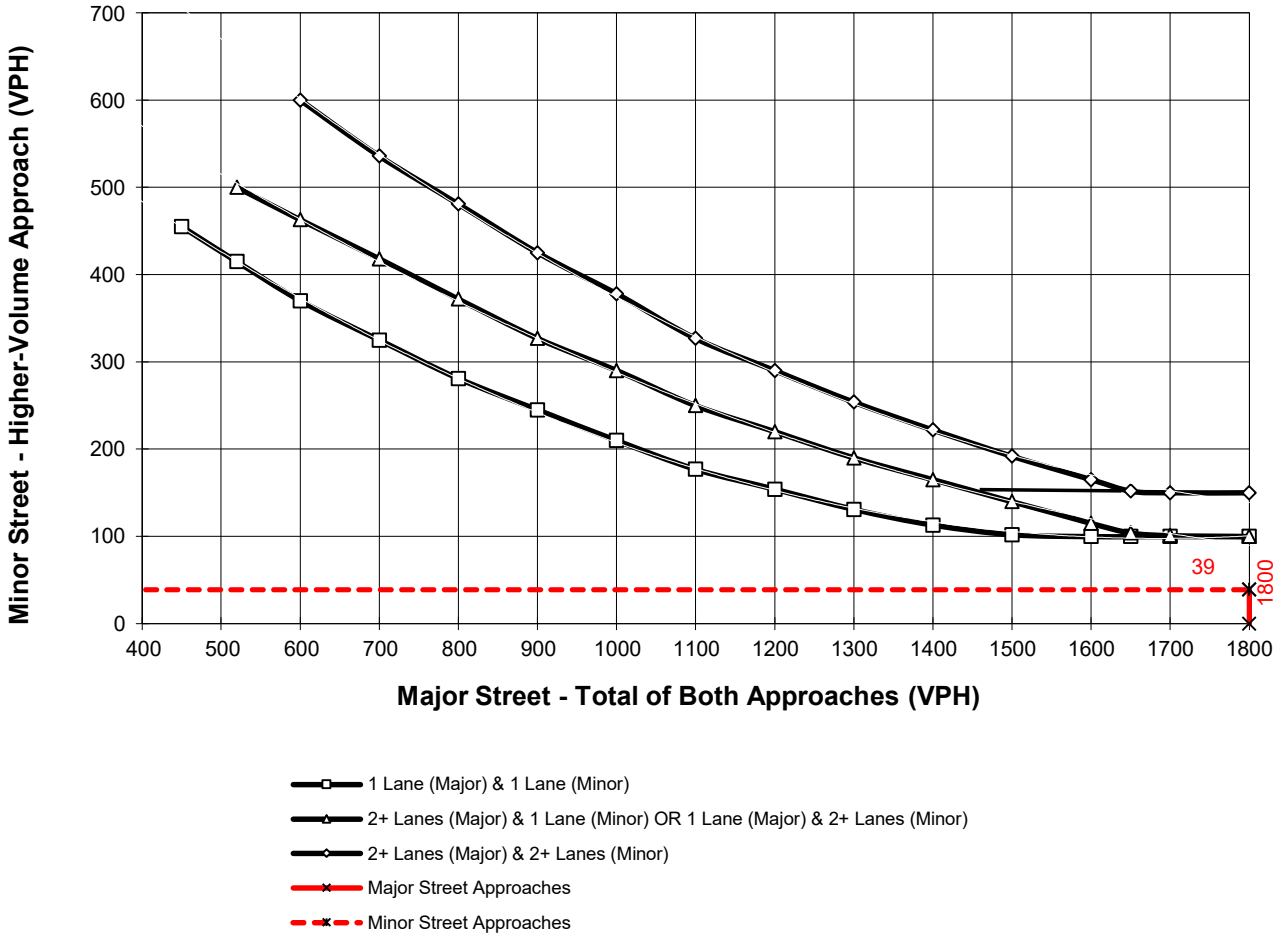
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (Approved) (2025) Conditions - Weekday PM Peak Hour**

Major Street Name = **Rubidoux St.**
Total of Both Approaches (VPH) = **2705**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **26th St.**
High Volume Approach (VPH) = **39**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

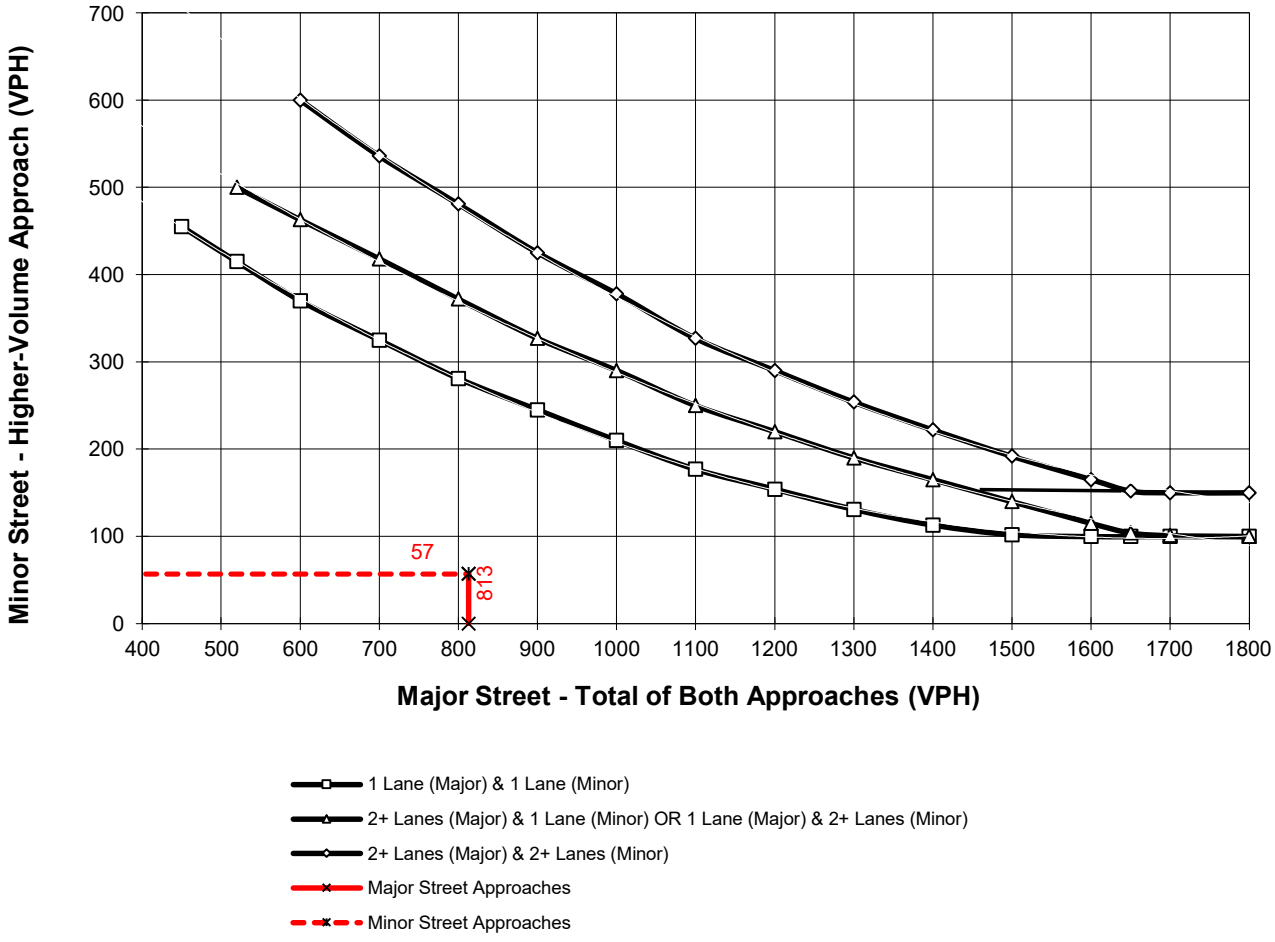
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (Approved) (2025) Conditions - Weekday AM Peak Hour**

Major Street Name = **Frontage Rd.**
Total of Both Approaches (VPH) = **813**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Hall Av.**
High Volume Approach (VPH) = **57**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

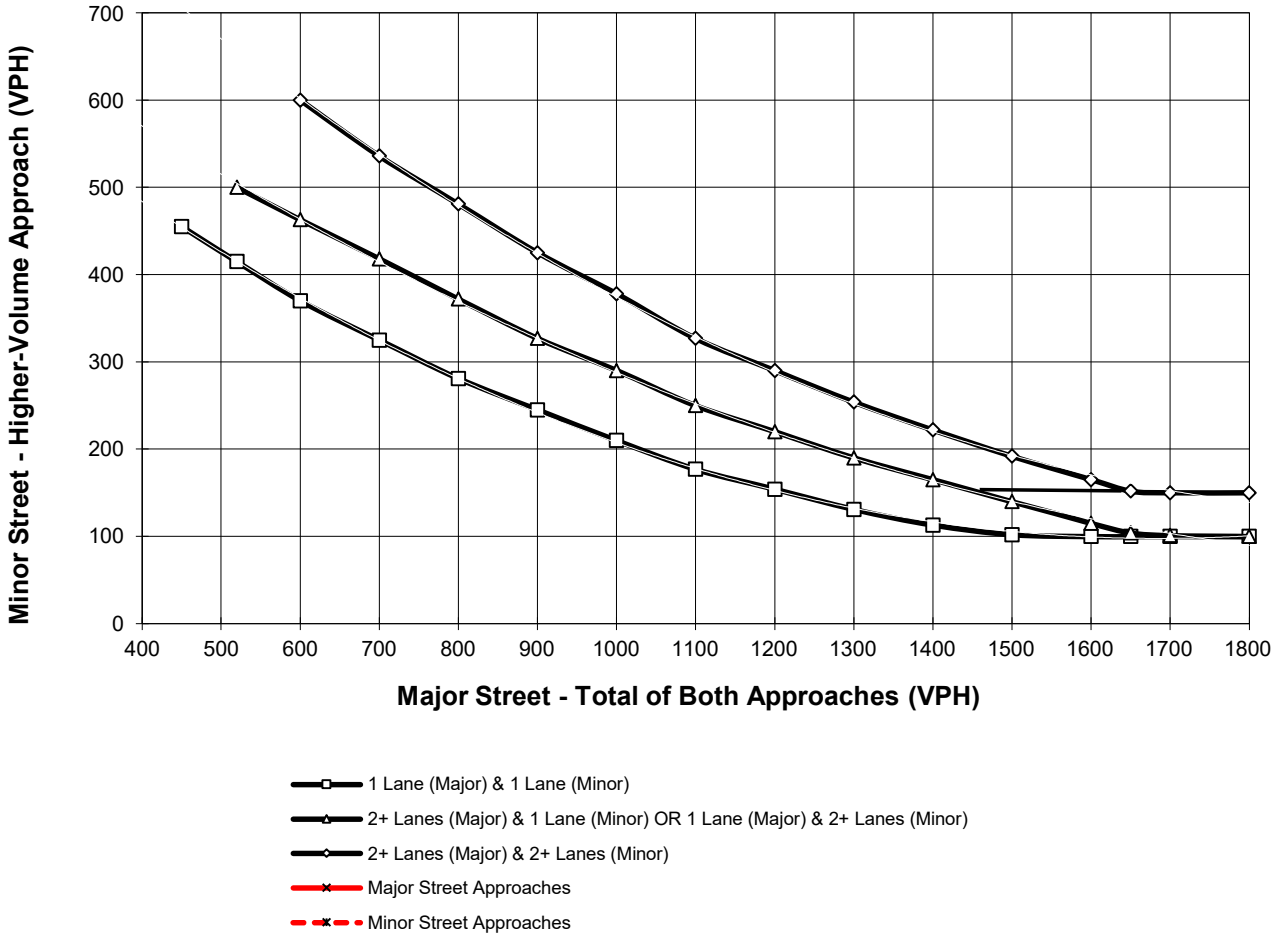
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (Approved) (2025) Conditions - Weekday PM Peak Hour**

Major Street Name = **24th St.**
Total of Both Approaches (VPH) = **312**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Hall Av.**
High Volume Approach (VPH) = **98**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (Approved) (2025) Conditions - Weekday PM Peak Hour**

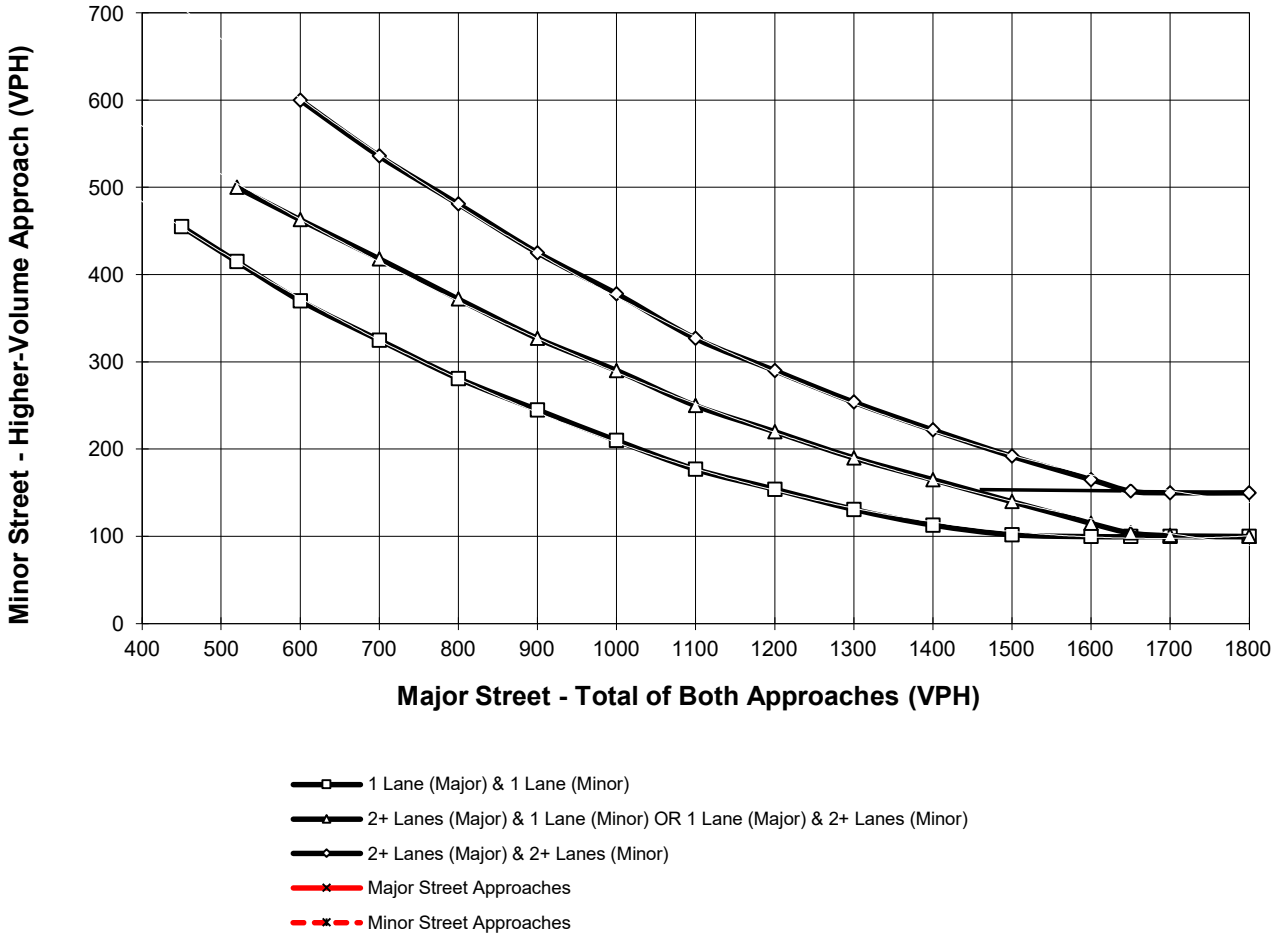
Major Street Name = **Hall Av.**

Total of Both Approaches (VPH) = **251**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **26th St.**

High Volume Approach (VPH) = **25**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

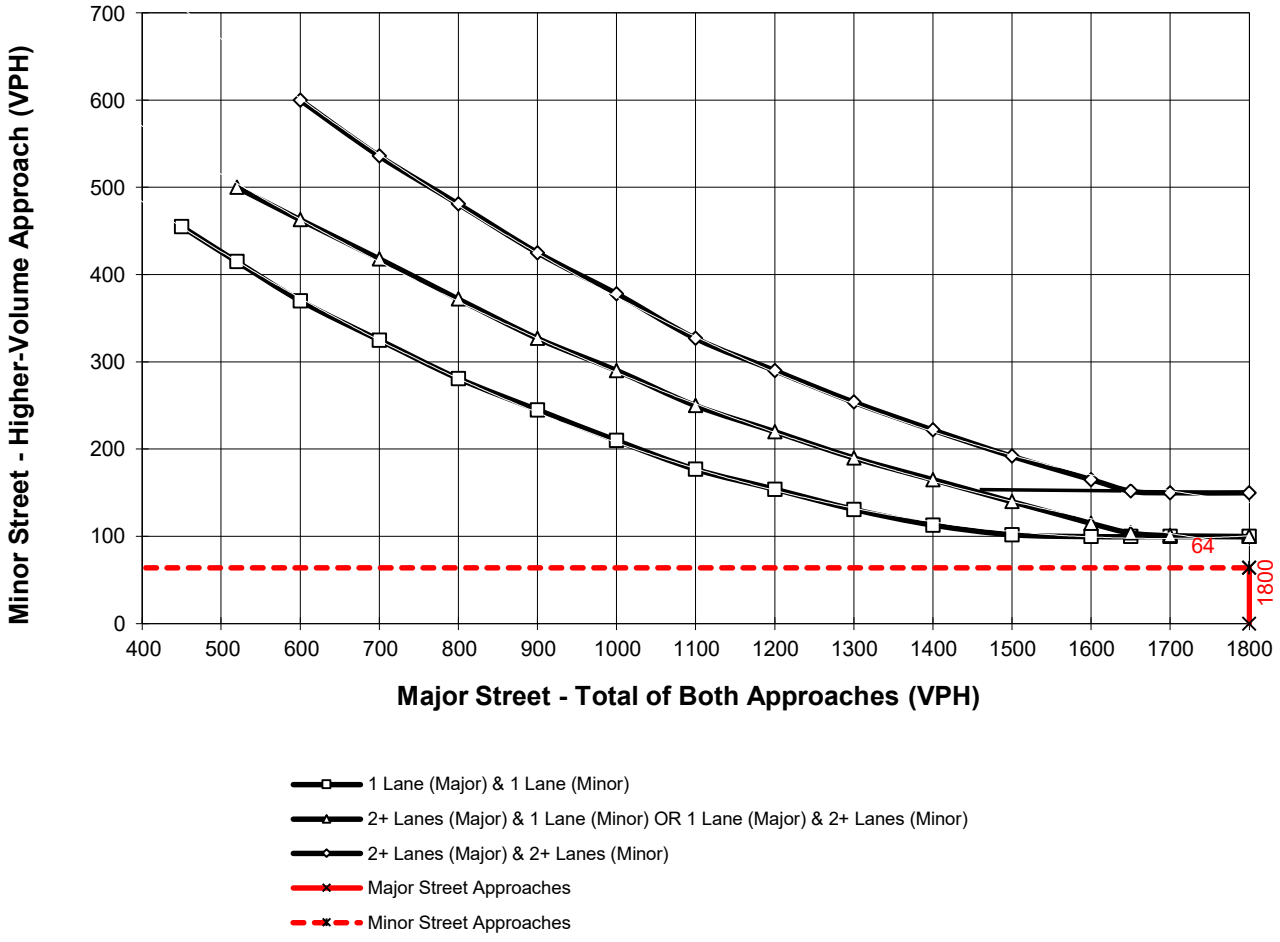
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (Approved) (2025) Conditions - Weekday PM Peak Hour**

Major Street Name = **Market St.**
Total of Both Approaches (VPH) = **2262**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Redwood Dr.**
High Volume Approach (VPH) = **64**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

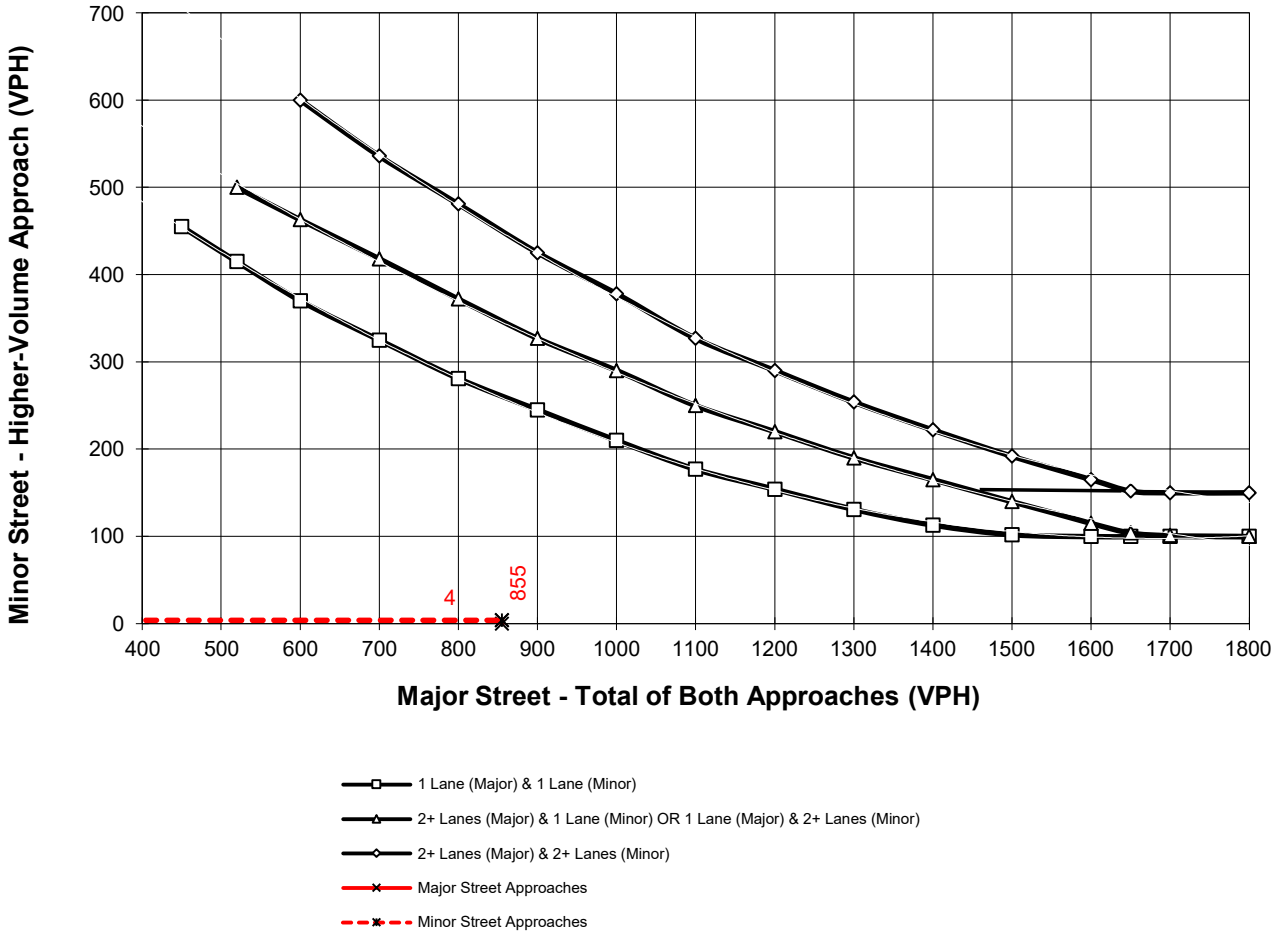
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (Approved) (2025) Conditions - Weekday AM Peak Hour**

Major Street Name = **25th St.**
Total of Both Approaches (VPH) = **855**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Van Dell Rd.**
High Volume Approach (VPH) = **4**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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APPENDIX 8.3: OPENING YEAR BACKGROUND CONDITIONS PLUS PROJECT OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	815	382	480	1411	1805	667
v/c Ratio	1.30	0.68	1.46	0.68	0.97	0.71
Control Delay	177.4	33.1	249.3	17.5	49.8	9.5
Queue Delay	2.0	0.0	0.0	2.2	44.2	0.0
Total Delay	179.4	33.1	249.3	19.7	94.1	9.5
Queue Length 50th (ft)	~754	207	~471	203	454	48
Queue Length 95th (ft)	#1008	324	m#391	m133	#568	182
Internal Link Dist (ft)	1745			340	476	
Turn Bay Length (ft)		480				
Base Capacity (vph)	626	565	328	2083	1862	943
Starvation Cap Reductn	0	0	0	505	0	0
Spillback Cap Reductn	143	0	0	0	908	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.69	0.68	1.46	0.89	1.89	0.71

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

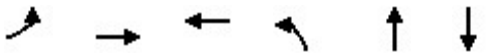
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	580	1031	1331	738	538	2123
v/c Ratio	0.92	1.72	1.23	0.88	0.92	1.04
Control Delay	54.9	355.6	142.9	25.9	34.6	41.0
Queue Delay	2.7	0.2	0.0	0.0	46.6	24.4
Total Delay	57.7	355.8	142.9	25.9	81.1	65.3
Queue Length 50th (ft)	407	~1120	~433	264	376	~864
Queue Length 95th (ft)	#635	#1386	m#502	m342	m357	m749
Internal Link Dist (ft)		2158	960			340
Turn Bay Length (ft)	340			555	400	
Base Capacity (vph)	631	600	1084	836	582	2034
Starvation Cap Reductn	0	0	0	0	126	708
Spillback Cap Reductn	18	16	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.95	1.77	1.23	0.88	1.18	1.60

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	57	312	678	66	1310	1601
v/c Ratio	0.18	0.85	1.13	0.96	1.04	1.25
Control Delay	38.2	49.5	111.8	60.4	52.6	150.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.2	49.5	111.8	60.4	52.6	150.3
Queue Length 50th (ft)	34	143	~550	45	~549	~770
Queue Length 95th (ft)	68	#243	#764	m36	m366	#923
Internal Link Dist (ft)		471	1307		110	1510
Turn Bay Length (ft)				75		
Base Capacity (vph)	379	421	601	69	1254	1284
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.74	1.13	0.96	1.04	1.25

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	1071	19	5	1399	278	976
v/c Ratio	1.66	0.23	0.03	1.03	2.00	0.55
Control Delay	329.7	57.7	0.2	61.4	476.2	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	329.7	57.7	0.2	61.4	476.2	9.1
Queue Length 50th (ft)	~1155	13	0	~510	~312	115
Queue Length 95th (ft)	#1410	38	0	#650	m#266	m87
Internal Link Dist (ft)	1049			1396		322
Turn Bay Length (ft)			25		90	
Base Capacity (vph)	646	82	191	1364	139	1772
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.66	0.23	0.03	1.03	2.00	0.55

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	68	1129	220	459	1176	215
v/c Ratio	0.41	0.70	0.69	0.15	0.56	0.21
Control Delay	45.4	2.5	25.5	5.4	11.2	2.2
Queue Delay	0.0	0.3	0.0	0.0	0.2	0.0
Total Delay	45.4	2.9	25.5	5.4	11.4	2.2
Queue Length 50th (ft)	37	0	41	26	273	6
Queue Length 95th (ft)	77	0	209	150	201	17
Internal Link Dist (ft)	1457			561	315	
Turn Bay Length (ft)			125			
Base Capacity (vph)	200	1615	421	2983	2098	1028
Starvation Cap Reductn	0	0	0	0	264	0
Spillback Cap Reductn	0	121	0	271	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.76	0.52	0.17	0.64	0.21

Intersection Summary

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	150	529	597	704	503
v/c Ratio	0.64	0.64	0.61	0.92	0.18
Control Delay	49.9	7.2	31.6	43.1	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	49.9	7.2	31.6	43.1	5.1
Queue Length 50th (ft)	81	0	160	178	35
Queue Length 95th (ft)	143	48	216	#557	124
Internal Link Dist (ft)	1642		355		561
Turn Bay Length (ft)		350		125	
Base Capacity (vph)	260	863	988	806	2719
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.58	0.61	0.60	0.87	0.18

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	588	382	670	1751	1514	626
v/c Ratio	1.01	0.68	2.27	0.84	0.77	0.64
Control Delay	75.3	33.9	599.0	19.2	32.8	5.2
Queue Delay	29.8	0.0	0.0	12.3	29.5	0.0
Total Delay	105.1	33.9	599.0	31.5	62.3	5.2
Queue Length 50th (ft)	~463	210	~783	357	334	0
Queue Length 95th (ft)	#693	329	m#747	m251	392	75
Internal Link Dist (ft)	1745			340	476	
Turn Bay Length (ft)		480				
Base Capacity (vph)	585	560	295	2116	2004	985
Starvation Cap Reductn	0	0	0	377	0	0
Spillback Cap Reductn	47	0	0	0	568	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.09	0.68	2.27	1.01	1.05	0.64

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

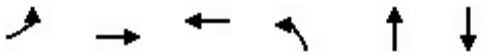
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	503	456	1741	777	429	1518
v/c Ratio	0.89	0.84	1.13	0.86	0.87	0.70
Control Delay	55.2	46.4	96.4	21.7	44.1	11.0
Queue Delay	48.9	30.2	0.0	0.0	3.1	6.9
Total Delay	104.1	76.7	96.4	21.7	47.2	17.9
Queue Length 50th (ft)	336	273	~585	295	298	494
Queue Length 95th (ft)	#590	#501	m#592	m314	m365	m517
Internal Link Dist (ft)		2158	960			340
Turn Bay Length (ft)	340			555	400	
Base Capacity (vph)	565	545	1547	902	600	2266
Starvation Cap Reductn	0	0	0	0	91	703
Spillback Cap Reductn	116	107	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.12	1.04	1.13	0.86	0.84	0.97

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	48	234	833	111	1360	1644
v/c Ratio	0.18	0.76	1.23	1.61	1.14	1.34
Control Delay	40.0	44.0	147.2	310.4	90.4	190.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.0	44.0	147.2	310.4	90.4	190.8
Queue Length 50th (ft)	30	104	~727	~114	~587	~808
Queue Length 95th (ft)	61	180	#970	m#93	m#480	#1033
Internal Link Dist (ft)		471	1307		110	1510
Turn Bay Length (ft)				75		
Base Capacity (vph)	377	402	678	69	1198	1225
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.58	1.23	1.61	1.14	1.34

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	1260	15	2	1306	180	1246
v/c Ratio	1.74	0.18	0.01	0.99	2.00	0.74
Control Delay	361.6	55.8	0.0	54.8	477.8	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.8
Total Delay	361.6	55.8	0.0	54.8	477.8	13.5
Queue Length 50th (ft)	~1276	10	0	460	~196	176
Queue Length 95th (ft)	#1657	32	0	#622	m#156	m134
Internal Link Dist (ft)	1049			1396		322
Turn Bay Length (ft)			25		90	
Base Capacity (vph)	726	82	191	1325	90	1673
Starvation Cap Reductn	0	0	0	0	0	179
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.74	0.18	0.01	0.99	2.00	0.83

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	106	789	440	403	1448	186
v/c Ratio	0.62	0.49	0.84	0.14	0.86	0.22
Control Delay	55.2	1.1	34.8	10.0	23.4	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.6	0.0
Total Delay	55.2	1.1	34.8	10.0	24.0	2.5
Queue Length 50th (ft)	59	0	275	107	420	1
Queue Length 95th (ft)	#121	0	m366	m148	#583	m10
Internal Link Dist (ft)	1457			561	315	
Turn Bay Length (ft)			125			
Base Capacity (vph)	181	1615	621	2984	1688	848
Starvation Cap Reductn	0	0	0	0	57	0
Spillback Cap Reductn	0	55	0	124	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.51	0.71	0.14	0.89	0.22

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	102	712	798	747	803
v/c Ratio	0.36	0.88	0.76	1.09	0.31
Control Delay	37.0	27.4	34.4	90.9	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	37.0	27.4	34.4	90.9	6.4
Queue Length 50th (ft)	51	85	214	~530	141
Queue Length 95th (ft)	98	#184	282	m#695	m141
Internal Link Dist (ft)	1642		355		561
Turn Bay Length (ft)		350		125	
Base Capacity (vph)	322	863	1056	688	2627
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.32	0.83	0.76	1.09	0.31

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

APPENDIX 8.4: OPENING YEAR BACKGROUND CONDITIONS PLUS PROJECT INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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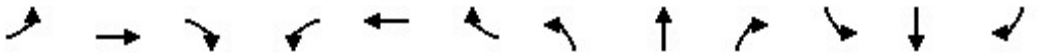
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	5	288	13	833	53	8	2	19
Future Volume (vph)	5	288	13	833	53	8	2	19
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	27.8	27.8	27.8	27.8	31.6	31.6	31.6	31.6
Total Split (s)	88.4	88.4	88.4	88.4	31.6	31.6	31.6	31.6
Total Split (%)	73.7%	73.7%	73.7%	73.7%	26.3%	26.3%	26.3%	26.3%
Yellow Time (s)	4.8	4.8	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8		4.6		4.6
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	47.5	47.5	47.5	47.5		14.5		14.5
Actuated g/C Ratio	0.72	0.72	0.72	0.72		0.22		0.22
v/c Ratio	0.03	0.29	0.02	0.75		0.30		0.14
Control Delay	5.4	5.7	4.9	13.3		29.3		18.2
Queue Delay	0.0	0.0	0.0	0.1		0.0		0.0
Total Delay	5.4	5.7	4.9	13.3		29.3		18.2
LOS	A	A	A	B		C		B
Approach Delay		5.7		13.2		29.3		18.2
Approach LOS		A		B		C		B

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 65.8	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 12.4	Intersection LOS: B
Intersection Capacity Utilization 63.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4: Avalon St. & 20th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	288	33	13	833	0	53	8	16	2	19	25
Future Volume (veh/h)	5	288	33	13	833	0	53	8	16	2	19	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	6	356	41	16	1028	0	65	10	20	2	23	31
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	276	1092	126	701	1240	0	248	46	47	76	108	138
Arrive On Green	0.65	0.65	0.65	0.65	0.65	0.00	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	557	1673	193	1003	1900	0	896	315	323	22	746	953
Grp Volume(v), veh/h	6	0	397	16	1028	0	95	0	0	56	0	0
Grp Sat Flow(s),veh/h/ln	557	0	1865	1003	1900	0	1534	0	0	1721	0	0
Q Serve(g_s), s	0.4	0.0	4.8	0.4	21.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	21.4	0.0	4.8	5.2	21.0	0.0	2.7	0.0	0.0	1.5	0.0	0.0
Prop In Lane	1.00		0.10	1.00		0.00	0.68		0.21	0.04		0.55
Lane Grp Cap(c), veh/h	276	0	1217	701	1240	0	340	0	0	322	0	0
V/C Ratio(X)	0.02	0.00	0.33	0.02	0.83	0.00	0.28	0.00	0.00	0.17	0.00	0.00
Avail Cap(c_a), veh/h	810	0	3004	1662	3060	0	897	0	0	974	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.9	0.0	3.9	5.1	6.7	0.0	19.8	0.0	0.0	19.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.0	1.5	0.0	0.4	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.8	0.0	3.7	0.0	1.0	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.9	0.0	4.1	5.1	8.2	0.0	20.3	0.0	0.0	19.6	0.0	0.0
LnGrp LOS	B	A	A	A	A	A	C	A	A	B	A	A
Approach Vol, veh/h		403			1044			95			56	
Approach Delay, s/veh		4.2			8.2			20.3			19.6	
Approach LOS		A			A			C			B	

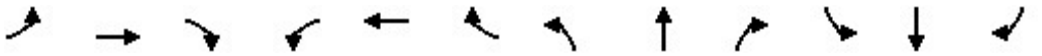
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		39.3		12.0		39.3		12.0				
Change Period (Y+Rc), s		5.8		4.6		5.8		4.6				
Max Green Setting (Gmax), s		82.6		27.0		82.6		27.0				
Max Q Clear Time (g_c+I1), s		23.4		3.5		23.0		4.7				
Green Ext Time (p_c), s		2.5		0.2		10.5		0.5				

Intersection Summary												
HCM 6th Ctrl Delay			8.3									
HCM 6th LOS			A									

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	407	461	1355	1733	640
Future Volume (vph)	0	407	461	1355	1733	640
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	42.0	42.0	24.0	68.0	44.0	44.0
Total Split (%)	38.2%	38.2%	21.8%	61.8%	40.0%	40.0%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	38.0	38.0	18.7	63.5	40.8	40.8
Actuated g/C Ratio	0.35	0.35	0.17	0.58	0.37	0.37
v/c Ratio	1.30	0.68	0.81	0.68	0.94	0.70
Control Delay	177.4	33.1	52.7	31.9	44.5	9.3
Queue Delay	0.9	0.0	0.0	39.5	47.3	0.0
Total Delay	178.3	33.1	52.7	71.4	91.7	9.3
LOS	F	C	D	E	F	A
Approach Delay	131.9			66.6	69.5	
Approach LOS	F			E	E	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.30	
Intersection Signal Delay: 82.0	Intersection LOS: F
Intersection Capacity Utilization 177.5%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	742	0	407	461	1355	0	0	1733	640
Future Volume (veh/h)	0	0	0	742	0	407	461	1355	0	0	1733	640
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				773	0	318	480	1411	0	0	1805	401
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				625	0	556	555	2084	0	0	1985	616
Arrive On Green				0.35	0.00	0.35	0.11	0.39	0.00	0.00	0.38	0.38
Sat Flow, veh/h				1810	0	1610	3510	3705	0	0	5358	1610
Grp Volume(v), veh/h				773	0	318	480	1411	0	0	1805	401
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1755	1805	0	0	1729	1610
Q Serve(g_s), s				38.0	0.0	17.7	14.8	35.7	0.0	0.0	36.2	22.5
Cycle Q Clear(g_c), s				38.0	0.0	17.7	14.8	35.7	0.0	0.0	36.2	22.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				625	0	556	555	2084	0	0	1985	616
V/C Ratio(X)				1.24	0.00	0.57	0.86	0.68	0.00	0.00	0.91	0.65
Avail Cap(c_a), veh/h				625	0	556	638	2084	0	0	1985	616
HCM Platoon Ratio				1.00	1.00	1.00	0.67	0.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.40	0.40	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				36.0	0.0	29.4	48.0	25.2	0.0	0.0	32.1	27.9
Incr Delay (d2), s/veh				119.8	0.0	1.4	4.7	0.7	0.0	0.0	7.6	5.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				36.5	0.0	6.7	7.0	16.0	0.0	0.0	15.7	9.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				155.8	0.0	30.8	52.7	25.9	0.0	0.0	39.8	33.2
LnGrp LOS				F	A	C	D	C	A	A	D	C
Approach Vol, veh/h					1091			1891			2206	
Approach Delay, s/veh					119.4			32.7			38.6	
Approach LOS					F			C			D	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		68.0			21.4	46.6		42.0				
Change Period (Y+Rc), s		4.5			4.0	4.5		4.0				
Max Green Setting (Gmax), s		63.5			20.0	39.5		38.0				
Max Q Clear Time (g_c+I1), s		37.7			16.8	38.2		40.0				
Green Ext Time (p_c), s		11.6			0.6	1.2		0.0				

Intersection Summary		
HCM 6th Ctrl Delay	53.4	
HCM 6th LOS	D	

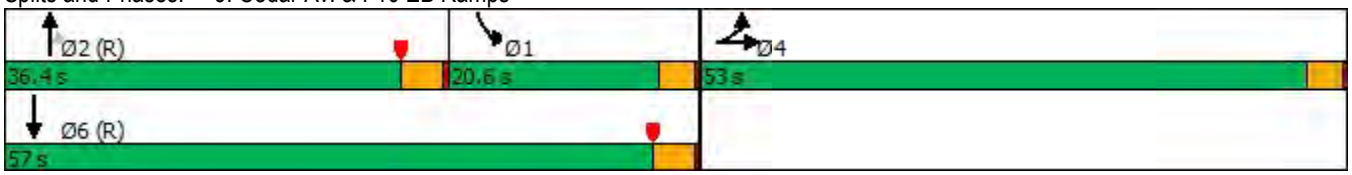
Notes

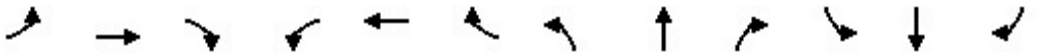
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	599	0	1238	686	500	1974
Future Volume (vph)	599	0	1238	686	500	1974
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	53.0	53.0	36.4	36.4	20.6	57.0
Total Split (%)	48.2%	48.2%	33.1%	33.1%	18.7%	51.8%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	49.5	49.5	32.1	32.1	17.4	53.0
Actuated g/C Ratio	0.45	0.45	0.29	0.29	0.16	0.48
v/c Ratio	0.75	1.43	0.88	0.75	0.97	1.22
Control Delay	32.7	226.1	52.1	18.0	49.3	124.8
Queue Delay	5.4	1.3	0.5	0.0	0.0	1.4
Total Delay	38.1	227.4	52.6	18.0	49.3	126.2
LOS	D	F	D	B	D	F
Approach Delay		159.2	40.2			110.6
Approach LOS		F	D			F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 20.8 (19%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.43	
Intersection Signal Delay: 100.0	Intersection LOS: F
Intersection Capacity Utilization 177.5%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	599	0	899	0	0	0	0	1238	686	500	1974	0
Future Volume (veh/h)	599	0	899	0	0	0	0	1238	686	500	1974	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	644	0	700				0	1331	464	538	2123	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	810	0	721				0	1528	474	823	2041	0
Arrive On Green	0.45	0.00	0.45				0.00	0.10	0.10	0.23	0.57	0.00
Sat Flow, veh/h	1810	0	1610				0	5358	1609	3510	3705	0
Grp Volume(v), veh/h	644	0	700				0	1331	464	538	2123	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1729	1609	1755	1805	0
Q Serve(g_s), s	33.6	0.0	46.7				0.0	27.8	31.7	15.2	62.2	0.0
Cycle Q Clear(g_c), s	33.6	0.0	46.7				0.0	27.8	31.7	15.2	62.2	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	810	0	721				0	1528	474	823	2041	0
V/C Ratio(X)	0.79	0.00	0.97				0.00	0.87	0.98	0.65	1.04	0.00
Avail Cap(c_a), veh/h	814	0	725				0	1528	474	823	2041	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.23	0.23	0.23	0.23	0.00
Uniform Delay (d), s/veh	26.0	0.0	29.7				0.0	47.6	49.3	38.1	23.9	0.0
Incr Delay (d2), s/veh	5.5	0.0	26.2				0.0	1.8	15.5	0.3	22.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.6	0.0	21.7				0.0	13.1	15.6	6.4	29.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.5	0.0	55.9				0.0	49.4	64.8	38.4	46.3	0.0
LnGrp LOS	C	A	E				A	D	E	D	F	A
Approach Vol, veh/h		1344						1795			2661	
Approach Delay, s/veh		44.2						53.4			44.7	
Approach LOS		D						D			D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	30.0	36.4		52.8		66.4
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	17.1	* 32		49.5		53.0
Max Q Clear Time (g_c+I1), s	17.2	33.7		48.7		64.2
Green Ext Time (p_c), s	0.0	0.0		0.6		0.0

Intersection Summary		
HCM 6th Ctrl Delay		47.3
HCM 6th LOS		D

Notes

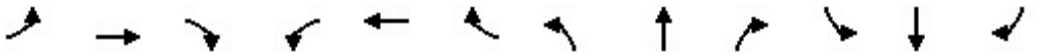
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	76	75	77	73	111	1193	42	1791
Future Volume (vph)	76	75	77	73	111	1193	42	1791
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	9.5	27.5	9.5	27.5
Total Split (s)	31.0	31.0	31.0	31.0	12.6	66.4	12.6	66.4
Total Split (%)	28.2%	28.2%	28.2%	28.2%	11.5%	60.4%	11.5%	60.4%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	4.5	6.5	4.5	6.5
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min
Act Effct Green (s)		23.8		23.8	8.1	61.1	8.1	61.1
Actuated g/C Ratio		0.22		0.22	0.07	0.56	0.07	0.56
v/c Ratio		0.90		0.91	0.92	0.67	0.35	1.00
Control Delay		70.3		71.8	94.4	14.0	40.9	42.8
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		70.3		71.8	94.4	14.0	40.9	42.8
LOS		E		E	F	B	D	D
Approach Delay		70.3		71.8		20.7		42.7
Approach LOS		E		E		C		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 90 (82%), Referenced to phase 1:SBL and 6:SBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.00	
Intersection Signal Delay: 38.5	Intersection LOS: D
Intersection Capacity Utilization 90.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 12: Cedar Av. & Santa Ana Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	75	94	77	73	91	111	1193	34	42	1791	47
Future Volume (veh/h)	76	75	94	77	73	91	111	1193	34	42	1791	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	83	82	61	84	79	87	121	1297	33	46	1947	43
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	127	114	72	124	104	99	146	2125	54	95	1966	43
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.16	1.00	1.00	0.04	0.36	0.36
Sat Flow, veh/h	405	564	358	399	515	488	1810	3597	91	1810	3611	79
Grp Volume(v), veh/h	226	0	0	250	0	0	121	650	680	46	969	1021
Grp Sat Flow(s),veh/h/ln	1328	0	0	1401	0	0	1810	1805	1883	1810	1805	1886
Q Serve(g_s), s	0.0	0.0	0.0	1.0	0.0	0.0	7.1	0.0	0.0	2.7	58.6	59.3
Cycle Q Clear(g_c), s	18.4	0.0	0.0	19.4	0.0	0.0	7.1	0.0	0.0	2.7	58.6	59.3
Prop In Lane	0.37		0.27	0.34		0.35	1.00		0.05	1.00		0.04
Lane Grp Cap(c), veh/h	313	0	0	327	0	0	146	1067	1113	95	983	1027
V/C Ratio(X)	0.72	0.00	0.00	0.76	0.00	0.00	0.83	0.61	0.61	0.48	0.99	0.99
Avail Cap(c_a), veh/h	351	0	0	365	0	0	146	1067	1113	133	983	1027
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.62	0.62	0.62	0.09	0.09	0.09
Uniform Delay (d), s/veh	41.8	0.0	0.0	42.4	0.0	0.0	45.4	0.0	0.0	51.6	34.5	34.7
Incr Delay (d2), s/veh	7.1	0.0	0.0	9.3	0.0	0.0	20.2	1.4	1.3	0.1	6.0	7.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	0.0	0.0	7.3	0.0	0.0	3.7	0.4	0.4	1.2	27.4	29.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.0	0.0	0.0	51.7	0.0	0.0	65.6	1.4	1.3	51.7	40.5	41.9
LnGrp LOS	D	A	A	D	A	A	E	A	A	D	D	D
Approach Vol, veh/h		226			250			1451			2036	
Approach Delay, s/veh		49.0			51.7			6.7			41.5	
Approach LOS		D			D			A			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.3	71.5		28.2	15.4	66.4		28.2				
Change Period (Y+Rc), s	4.5	6.5		6.0	6.5	* 6.5		6.0				
Max Green Setting (Gmax), s	8.1	59.9		25.0	8.1	* 60		25.0				
Max Q Clear Time (g_c+I1), s	4.7	2.0		20.4	9.1	61.3		21.4				
Green Ext Time (p_c), s	0.0	34.4		0.6	0.0	0.0		0.6				

Intersection Summary	
HCM 6th Ctrl Delay	29.8
HCM 6th LOS	C

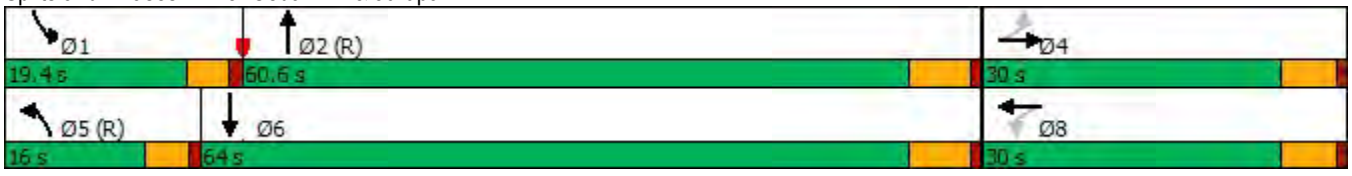
Notes

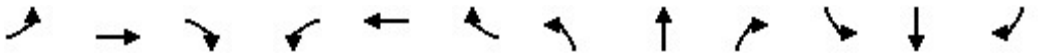
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	123	104	78	109	131	1040	160	1645
Future Volume (vph)	123	104	78	109	131	1040	160	1645
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	30.0	30.0	30.0	30.0	16.0	60.6	19.4	64.0
Total Split (%)	27.3%	27.3%	27.3%	27.3%	14.5%	55.1%	17.6%	58.2%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)	24.5	24.5	24.5	24.5	11.1	55.6	13.9	58.4
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.10	0.51	0.13	0.53
v/c Ratio	1.08	0.45	0.40	0.70	0.80	0.68	0.78	1.05
Control Delay	144.9	35.7	42.8	40.5	88.2	16.0	49.3	62.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	144.9	35.7	42.8	40.5	88.2	16.0	49.3	62.7
LOS	F	D	D	D	F	B	D	E
Approach Delay		81.6		41.0		23.6		61.6
Approach LOS		F		D		C		E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 49.0	Intersection LOS: D
Intersection Capacity Utilization 98.0%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	104	66	78	109	162	131	1040	73	160	1645	154
Future Volume (veh/h)	123	104	66	78	109	162	131	1040	73	160	1645	154
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	137	116	54	87	121	114	146	1156	70	178	1828	167
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	183	273	127	240	199	188	189	1785	108	209	1766	159
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.21	1.00	1.00	0.08	0.35	0.35
Sat Flow, veh/h	1163	1226	571	1234	894	842	1810	3458	209	1810	3349	301
Grp Volume(v), veh/h	137	0	170	87	0	235	146	603	623	178	972	1023
Grp Sat Flow(s),veh/h/ln	1163	0	1797	1234	0	1735	1810	1805	1862	1810	1805	1846
Q Serve(g_s), s	11.1	0.0	8.9	7.2	0.0	13.4	8.4	0.0	0.0	10.7	58.0	58.0
Cycle Q Clear(g_c), s	24.5	0.0	8.9	16.1	0.0	13.4	8.4	0.0	0.0	10.7	58.0	58.0
Prop In Lane	1.00		0.32	1.00		0.49	1.00		0.11	1.00		0.16
Lane Grp Cap(c), veh/h	183	0	400	240	0	387	189	932	961	209	952	973
V/C Ratio(X)	0.75	0.00	0.42	0.36	0.00	0.61	0.77	0.65	0.65	0.85	1.02	1.05
Avail Cap(c_a), veh/h	183	0	400	240	0	387	189	932	961	245	952	973
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.87	0.87	0.87	0.09	0.09	0.09
Uniform Delay (d), s/veh	50.2	0.0	36.7	43.6	0.0	38.4	42.3	0.0	0.0	49.8	35.6	35.6
Incr Delay (d2), s/veh	16.7	0.0	1.0	1.3	0.0	3.2	15.6	3.0	2.9	2.4	14.8	26.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	0.0	3.9	2.2	0.0	5.9	4.1	0.8	0.8	5.0	29.5	33.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.9	0.0	37.7	44.9	0.0	41.7	57.9	3.0	2.9	52.2	50.4	61.6
LnGrp LOS	E	A	D	D	A	D	E	A	A	D	F	F
Approach Vol, veh/h		307			322			1372			2173	
Approach Delay, s/veh		50.7			42.6			8.8			55.8	
Approach LOS		D			D			A			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.2	62.8		30.0	16.0	64.0		30.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	14.9	54.6		24.5	11.5	58.0		24.5				
Max Q Clear Time (g_c+I1), s	12.7	2.0		26.5	10.4	60.0		18.1				
Green Ext Time (p_c), s	0.1	15.7		0.0	0.0	0.0		1.1				

Intersection Summary			
HCM 6th Ctrl Delay		39.0	
HCM 6th LOS		D	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	18	11	131	2	110	2	964	215	1676
Future Volume (vph)	18	11	131	2	110	2	964	215	1676
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	35.0	35.0	35.0	9.5	24.0	9.5	24.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.6	34.0	21.0	45.4
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%	10.7%	37.8%	23.3%	50.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	5.0	4.5	6.0	4.5	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min
Act Effct Green (s)		13.9		15.4	15.4	5.2	28.5	13.5	45.0
Actuated g/C Ratio		0.19		0.21	0.21	0.07	0.39	0.18	0.61
v/c Ratio		0.18		0.51	0.26	0.02	0.88	0.68	0.80
Control Delay		15.4		32.2	3.9	37.5	31.7	40.5	17.4
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		15.4		32.2	3.9	37.5	31.7	40.5	17.4
LOS		B		C	A	D	C	D	B
Approach Delay		15.4		19.4			31.7		20.0
Approach LOS		B		B			C		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 73.2	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 23.9	Intersection LOS: C
Intersection Capacity Utilization 77.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 15: Rubidoux Bl. & Tarragona Dr./El Rivino Rd.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	11	27	131	2	110	2	964	194	215	1676	12
Future Volume (veh/h)	18	11	27	131	2	110	2	964	194	215	1676	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	19	12	19	138	2	84	2	1015	197	226	1764	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	109	72	62	316	3	263	5	1313	254	280	2157	16
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.00	0.44	0.44	0.15	0.59	0.59
Sat Flow, veh/h	186	438	382	1236	18	1610	1810	3016	584	1810	3673	27
Grp Volume(v), veh/h	50	0	0	140	0	84	2	607	605	226	866	911
Grp Sat Flow(s),veh/h/ln	1006	0	0	1254	0	1610	1810	1805	1795	1810	1805	1895
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	2.9	0.1	18.0	18.0	7.6	23.9	24.0
Cycle Q Clear(g_c), s	7.1	0.0	0.0	7.0	0.0	2.9	0.1	18.0	18.0	7.6	23.9	24.0
Prop In Lane	0.38		0.38	0.99		1.00	1.00		0.33	1.00		0.01
Lane Grp Cap(c), veh/h	243	0	0	319	0	263	5	786	781	280	1060	1113
V/C Ratio(X)	0.21	0.00	0.00	0.44	0.00	0.32	0.41	0.77	0.77	0.81	0.82	0.82
Avail Cap(c_a), veh/h	729	0	0	761	0	769	147	805	800	475	1132	1189
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	0.0	0.0	24.9	0.0	23.2	31.3	15.1	15.1	25.6	10.3	10.3
Incr Delay (d2), s/veh	0.6	0.0	0.0	1.4	0.0	1.0	45.9	4.9	5.0	5.5	4.8	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	2.0	0.0	1.1	0.1	6.6	6.6	3.3	7.1	7.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.3	0.0	0.0	26.3	0.0	24.2	77.2	20.0	20.1	31.2	15.1	15.0
LnGrp LOS	C	A	A	C	A	C	E	B	C	C	B	B
Approach Vol, veh/h		50			224			1214			2003	
Approach Delay, s/veh		23.3			25.5			20.1			16.9	
Approach LOS		C			C			C			B	

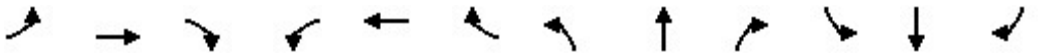
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.2	33.3		15.3	4.7	42.9		15.3				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	16.5	28.0		30.0	5.1	39.4		30.0				
Max Q Clear Time (g_c+I1), s	9.6	20.0		9.1	2.1	26.0		9.0				
Green Ext Time (p_c), s	0.3	5.3		0.3	0.0	10.9		1.5				

Intersection Summary			
HCM 6th Ctrl Delay		18.6	
HCM 6th LOS		B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	155	123	94	340	291	485	207	543	392	411	1017	389
Future Volume (vph)	155	123	94	340	291	485	207	543	392	411	1017	389
Turn Type	Prot	NA	pm+ov	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4			Free			2			6
Detector Phase	7	4	5	3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	14.6	14.6	9.6	15.8	15.8		9.6	16.2	16.2	9.6	35.2	35.2
Total Split (s)	18.0	27.0	28.0	21.0	30.0		28.0	43.6	43.6	28.4	44.0	44.0
Total Split (%)	15.0%	22.5%	23.3%	17.5%	25.0%		23.3%	36.3%	36.3%	23.7%	36.7%	36.7%
Yellow Time (s)	3.6	3.6	3.6	4.8	4.8		3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.8	5.8		4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	None	None	None	None	None
Act Effct Green (s)	12.7	19.4	36.4	14.4	21.1	108.4	17.0	35.4	35.4	17.6	36.1	36.1
Actuated g/C Ratio	0.12	0.18	0.34	0.13	0.19	1.00	0.16	0.33	0.33	0.16	0.33	0.33
v/c Ratio	0.75	0.37	0.16	0.76	0.81	0.31	0.76	0.47	0.51	0.75	0.87	0.55
Control Delay	71.5	44.3	2.4	58.4	61.1	0.5	62.0	31.7	5.4	52.8	44.4	11.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.5	44.3	2.4	58.4	61.1	0.5	62.0	31.7	5.4	52.8	44.4	11.7
LOS	E	D	A	E	E	A	E	C	A	D	D	B
Approach Delay		45.0			33.9			28.1			39.3	
Approach LOS		D			C			C			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 108.4	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 35.6	Intersection LOS: D
Intersection Capacity Utilization 81.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	123	94	340	291	485	207	543	392	411	1017	389
Future Volume (veh/h)	155	123	94	340	291	485	207	543	392	411	1017	389
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	160	127	82	351	300	0	213	560	316	424	1048	370
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	193	294	469	429	346		248	1269	566	505	1235	550
Arrive On Green	0.11	0.15	0.15	0.12	0.18	0.00	0.14	0.35	0.35	0.14	0.34	0.34
Sat Flow, veh/h	1810	1900	1610	3510	1900	1610	1810	3610	1610	3510	3610	1608
Grp Volume(v), veh/h	160	127	82	351	300	0	213	560	316	424	1048	370
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1755	1900	1610	1810	1805	1610	1755	1805	1608
Q Serve(g_s), s	8.5	6.0	1.0	9.6	15.1	0.0	11.3	11.7	15.6	11.6	26.5	13.0
Cycle Q Clear(g_c), s	8.5	6.0	1.0	9.6	15.1	0.0	11.3	11.7	15.6	11.6	26.5	13.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	193	294	469	429	346		248	1269	566	505	1235	550
V/C Ratio(X)	0.83	0.43	0.17	0.82	0.87		0.86	0.44	0.56	0.84	0.85	0.67
Avail Cap(c_a), veh/h	247	433	587	543	468		431	1373	612	850	1388	618
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.0	37.7	10.2	42.1	39.0	0.0	41.5	24.5	25.7	41.0	30.0	12.4
Incr Delay (d2), s/veh	16.6	1.0	0.2	7.7	12.3	0.0	3.4	0.2	1.0	1.5	4.7	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	2.9	0.7	4.4	7.9	0.0	5.0	4.7	5.7	4.8	11.3	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.7	38.7	10.4	49.8	51.3	0.0	44.9	24.7	26.7	42.4	34.7	14.9
LnGrp LOS	E	D	B	D	D		D	C	C	D	C	B
Approach Vol, veh/h		369			651	A		1089			1842	
Approach Delay, s/veh		41.5			50.5			29.2			32.5	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	40.8	17.8	21.0	19.7	39.8	15.1	23.7
Change Period (Y+Rc), s	4.6	6.2	5.8	* 5.8	6.2	* 6.2	4.6	5.8
Max Green Setting (Gmax), s	23.8	37.4	15.2	* 22	23.4	* 38	13.4	24.2
Max Q Clear Time (g_c+I1), s	13.6	17.6	11.6	8.0	13.3	28.5	10.5	17.1
Green Ext Time (p_c), s	0.6	4.3	0.4	0.8	0.2	5.2	0.1	0.9

Intersection Summary	
HCM 6th Ctrl Delay	35.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	1	9	31	16	17	1148	155	1296
Future Volume (vph)	1	9	31	16	17	1148	155	1296
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.6	31.6	31.6	31.6	9.6	28.2	9.6	28.2
Total Split (s)	31.6	31.6	31.6	31.6	9.6	34.2	14.2	38.8
Total Split (%)	39.5%	39.5%	39.5%	39.5%	12.0%	42.8%	17.8%	48.5%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	6.2	4.6	6.2
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		13.0		13.0	5.2	29.2	9.0	44.7
Actuated g/C Ratio		0.22		0.22	0.09	0.49	0.15	0.75
v/c Ratio		0.06		0.20	0.11	0.74	0.62	0.52
Control Delay		14.3		18.2	33.2	19.7	39.7	10.6
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		14.3		18.2	33.2	19.7	39.7	10.6
LOS		B		B	C	B	D	B
Approach Delay		14.3		18.2		19.9		13.7
Approach LOS		B		B		B		B

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 59.7	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 16.5	Intersection LOS: B
Intersection Capacity Utilization 65.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 17: Rubidoux Bl. & 24th St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	9	12	31	16	15	17	1148	52	155	1296	5
Future Volume (veh/h)	1	9	12	31	16	15	17	1148	52	155	1296	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1	10	13	34	17	16	18	1248	57	168	1409	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	78	92	113	179	78	47	40	1595	73	215	2030	7
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.02	0.45	0.45	0.12	0.55	0.55
Sat Flow, veh/h	27	762	933	590	648	388	1810	3515	160	1810	3690	13
Grp Volume(v), veh/h	24	0	0	67	0	0	18	640	665	168	689	725
Grp Sat Flow(s),veh/h/ln	1722	0	0	1625	0	0	1810	1805	1871	1810	1805	1898
Q Serve(g_s), s	0.0	0.0	0.0	0.2	0.0	0.0	0.5	15.1	15.1	4.5	13.9	14.0
Cycle Q Clear(g_c), s	0.6	0.0	0.0	1.7	0.0	0.0	0.5	15.1	15.1	4.5	13.9	14.0
Prop In Lane	0.04		0.54	0.51		0.24	1.00		0.09	1.00		0.01
Lane Grp Cap(c), veh/h	283	0	0	305	0	0	40	819	849	215	993	1044
V/C Ratio(X)	0.08	0.00	0.00	0.22	0.00	0.00	0.45	0.78	0.78	0.78	0.69	0.69
Avail Cap(c_a), veh/h	995	0	0	954	0	0	180	1007	1044	346	1172	1232
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	0.0	0.0	20.1	0.0	0.0	24.2	11.6	11.6	21.5	8.2	8.2
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.4	0.0	0.0	2.9	3.3	3.2	2.4	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.7	0.0	0.0	0.2	4.5	4.7	1.7	3.2	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.8	0.0	0.0	20.5	0.0	0.0	27.2	14.9	14.8	23.9	9.7	9.6
LnGrp LOS	B	A	A	C	A	A	C	B	B	C	A	A
Approach Vol, veh/h		24			67			1323			1582	
Approach Delay, s/veh		19.8			20.5			15.0			11.1	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.6	29.0		10.7	5.7	33.8		10.7				
Change Period (Y+Rc), s	4.6	6.2		4.6	4.6	6.2		4.6				
Max Green Setting (Gmax), s	9.6	28.0		27.0	5.0	32.6		27.0				
Max Q Clear Time (g_c+I1), s	6.5	17.1		2.6	2.5	16.0		3.7				
Green Ext Time (p_c), s	0.1	5.7		0.1	0.0	8.0		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		13.1	
HCM 6th LOS		B	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	7	2	3	5	21	1251	9	1258
Future Volume (vph)	7	2	3	5	21	1251	9	1258
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.6	31.6	31.6	31.6	9.6	28.2	9.6	28.2
Total Split (s)	31.6	31.6	31.6	31.6	9.8	48.6	9.8	48.6
Total Split (%)	35.1%	35.1%	35.1%	35.1%	10.9%	54.0%	10.9%	54.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	6.2	4.6	6.2
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		16.4		16.4	7.4	36.8	7.4	35.5
Actuated g/C Ratio		0.37		0.37	0.17	0.83	0.17	0.80
v/c Ratio		0.03		0.02	0.08	0.46	0.03	0.48
Control Delay		15.6		16.3	31.7	7.7	32.1	9.2
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		15.6		16.3	31.7	7.7	32.1	9.2
LOS		B		B	C	A	C	A
Approach Delay		15.6		16.3		8.1		9.4
Approach LOS		B		B		A		A

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 44.2	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.48	
Intersection Signal Delay: 8.8	Intersection LOS: A
Intersection Capacity Utilization 52.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 18: Rubidoux Bl. & 26th St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	2	9	3	5	6	21	1251	15	9	1258	16
Future Volume (veh/h)	7	2	9	3	5	6	21	1251	15	9	1258	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	8	2	10	3	5	7	23	1360	16	10	1367	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	152	8	40	120	28	39	51	2080	24	24	2024	25
Arrive On Green	0.05	0.05	0.05	0.05	0.05	0.05	0.03	0.57	0.57	0.01	0.55	0.55
Sat Flow, veh/h	640	160	800	340	567	794	1810	3653	43	1810	3651	45
Grp Volume(v), veh/h	20	0	0	15	0	0	23	672	704	10	675	709
Grp Sat Flow(s),veh/h/ln	1601	0	0	1701	0	0	1810	1805	1891	1810	1805	1892
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	0.0	0.5	10.7	10.7	0.2	11.2	11.2
Cycle Q Clear(g_c), s	0.5	0.0	0.0	0.3	0.0	0.0	0.5	10.7	10.7	0.2	11.2	11.2
Prop In Lane	0.40		0.50	0.20		0.47	1.00		0.02	1.00		0.02
Lane Grp Cap(c), veh/h	200	0	0	188	0	0	51	1028	1077	24	1001	1049
V/C Ratio(X)	0.10	0.00	0.00	0.08	0.00	0.00	0.45	0.65	0.65	0.42	0.68	0.68
Avail Cap(c_a), veh/h	1125	0	0	1171	0	0	225	1829	1916	225	1829	1917
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.1	0.0	0.0	19.1	0.0	0.0	20.0	6.2	6.2	20.5	6.6	6.6
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	0.0	2.3	0.7	0.7	4.4	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.1	0.0	0.0	0.2	1.5	1.6	0.1	1.7	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.3	0.0	0.0	19.2	0.0	0.0	22.4	6.9	6.9	24.9	7.4	7.4
LnGrp LOS	B	A	A	B	A	A	C	A	A	C	A	A
Approach Vol, veh/h		20			15			1399			1394	
Approach Delay, s/veh		19.3			19.2			7.1			7.6	
Approach LOS		B			B			A			A	

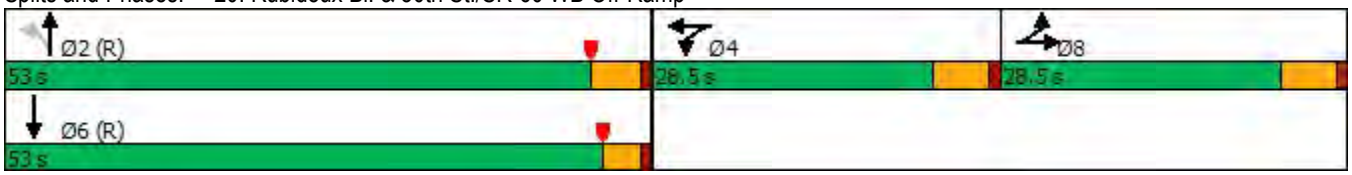
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	30.0		6.7	5.8	29.4		6.7				
Change Period (Y+Rc), s	4.6	6.2		4.6	4.6	6.2		4.6				
Max Green Setting (Gmax), s	5.2	42.4		27.0	5.2	42.4		27.0				
Max Q Clear Time (g_c+I1), s	2.2	12.7		2.5	2.5	13.2		2.3				
Green Ext Time (p_c), s	0.0	10.0		0.1	0.0	10.0		0.0				

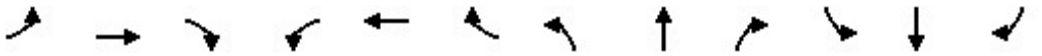
Intersection Summary		
HCM 6th Ctrl Delay		7.5
HCM 6th LOS		A

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Configurations							
Traffic Volume (vph)	51	0	381	82	59	1166	1394
Future Volume (vph)	51	0	381	82	59	1166	1394
Turn Type	Split	NA	Split	NA	Perm	NA	NA
Protected Phases	8	8	4	4		2	6
Permitted Phases					2		
Detector Phase	8	8	4	4	2	2	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.5	28.5	28.5	28.5	53.0	53.0	53.0
Total Split (%)	25.9%	25.9%	25.9%	25.9%	48.2%	48.2%	48.2%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	20.6	20.6	23.0	23.0	50.4	50.4	51.4
Actuated g/C Ratio	0.19	0.19	0.21	0.21	0.46	0.46	0.47
v/c Ratio	0.17	0.86	0.97	0.88	0.97	0.79	0.95
Control Delay	37.5	55.7	84.6	62.5	124.8	19.6	42.3
Queue Delay	0.0	8.3	47.3	56.2	0.0	21.9	1.0
Total Delay	37.5	63.9	131.9	118.7	124.8	41.4	43.3
LOS	D	E	F	F	F	D	D
Approach Delay		59.9		125.4		45.4	43.3
Approach LOS		E		F		D	D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 59.4	Intersection LOS: E
Intersection Capacity Utilization 96.6%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	0	278	381	82	141	59	1166	0	0	1394	31
Future Volume (veh/h)	51	0	278	381	82	141	59	1166	0	0	1394	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	57	0	228	322	240	124	66	1310	0	0	1566	34
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	297	0	264	378	247	128	92	1737	0	0	1737	38
Arrive On Green	0.16	0.00	0.16	0.21	0.21	0.21	0.48	0.48	0.00	0.00	0.48	0.48
Sat Flow, veh/h	1810	0	1610	1810	1180	610	323	3705	0	0	3706	78
Grp Volume(v), veh/h	57	0	228	322	0	364	66	1310	0	0	781	819
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1810	0	1790	323	1805	0	0	1805	1884
Q Serve(g_s), s	3.0	0.0	15.2	18.8	0.0	22.2	9.1	32.5	0.0	0.0	43.6	43.8
Cycle Q Clear(g_c), s	3.0	0.0	15.2	18.8	0.0	22.2	52.9	32.5	0.0	0.0	43.6	43.8
Prop In Lane	1.00		1.00	1.00		0.34	1.00		0.00	0.00		0.04
Lane Grp Cap(c), veh/h	297	0	264	378	0	374	92	1737	0	0	869	907
V/C Ratio(X)	0.19	0.00	0.86	0.85	0.00	0.97	0.72	0.75	0.00	0.00	0.90	0.90
Avail Cap(c_a), veh/h	378	0	337	378	0	374	92	1737	0	0	869	907
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.94	0.94	0.00	0.00	0.65	0.65
Uniform Delay (d), s/veh	39.7	0.0	44.8	41.9	0.0	43.2	53.2	23.2	0.0	0.0	26.1	26.2
Incr Delay (d2), s/veh	0.4	0.0	17.4	16.9	0.0	39.2	36.2	2.9	0.0	0.0	9.9	9.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	7.3	9.8	0.0	13.5	2.7	13.5	0.0	0.0	19.6	20.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.0	0.0	62.1	58.8	0.0	82.3	89.3	26.1	0.0	0.0	36.0	36.0
LnGrp LOS	D	A	E	E	A	F	F	C	A	A	D	D
Approach Vol, veh/h		285			686			1376			1600	
Approach Delay, s/veh		57.7			71.3			29.2			36.0	
Approach LOS		E			E			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		57.9		28.5		57.9		23.6				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		48.0		23.0		* 49		23.0				
Max Q Clear Time (g_c+I1), s		54.9		24.2		45.8		17.2				
Green Ext Time (p_c), s		0.0		0.0		2.7		0.9				

Intersection Summary		
HCM 6th Ctrl Delay	41.3	
HCM 6th LOS	D	

Notes

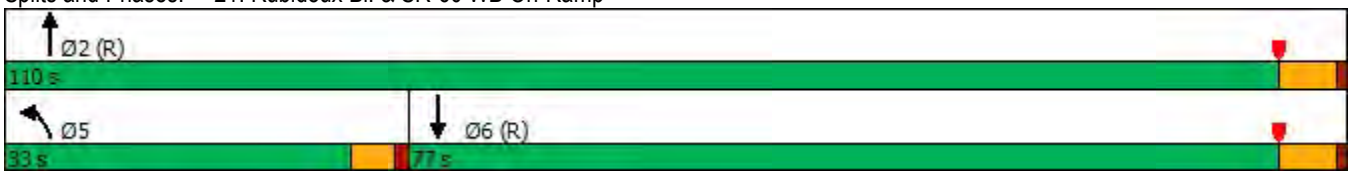
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	NBL	NBT	SBT
Lane Configurations			
Traffic Volume (vph)	295	1233	1272
Future Volume (vph)	295	1233	1272
Turn Type	Prot	NA	NA
Protected Phases	5	2	6
Permitted Phases			
Detector Phase	5	2	6
Switch Phase			
Minimum Initial (s)	5.0	10.0	10.0
Minimum Split (s)	9.6	27.8	27.8
Total Split (s)	33.0	110.0	77.0
Total Split (%)	30.0%	100.0%	70.0%
Yellow Time (s)	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8
Lead/Lag	Lead		Lag
Lead-Lag Optimize?	Yes		Yes
Recall Mode	None	C-Min	C-Min
Act Effct Green (s)	22.7	110.0	76.9
Actuated g/C Ratio	0.21	1.00	0.70
v/c Ratio	0.83	0.36	0.92
Control Delay	75.0	0.2	12.9
Queue Delay	0.5	0.1	45.3
Total Delay	75.6	0.3	58.2
LOS	E	A	E
Approach Delay		14.8	58.2
Approach LOS		B	E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 40.1	Intersection LOS: D
Intersection Capacity Utilization 87.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 21: Rubidoux Bl. & SR-60 WB On-Ramp



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	295	1233	1272	849
Future Volume (veh/h)	0	0	295	1233	1272	849
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			0.98
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach				No	No	
Adj Sat Flow, veh/h/ln			1900	1900	1900	1900
Adj Flow Rate, veh/h			311	1298	1339	894
Peak Hour Factor			0.95	0.95	0.95	0.95
Percent Heavy Veh, %			0	0	0	0
Cap, veh/h			336	3420	1558	920
Arrive On Green			0.37	1.00	1.00	1.00
Sat Flow, veh/h			1810	3705	2259	1278
Grp Volume(v), veh/h			311	1298	1088	1145
Grp Sat Flow(s),veh/h/ln			1810	1805	1805	1637
Q Serve(g_s), s			18.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s			18.1	0.0	0.0	0.0
Prop In Lane			1.00			0.78
Lane Grp Cap(c), veh/h			336	3420	1299	1179
V/C Ratio(X)			0.93	0.38	0.84	0.97
Avail Cap(c_a), veh/h			467	3420	1299	1179
HCM Platoon Ratio			2.00	2.00	2.00	2.00
Upstream Filter(I)			0.62	0.62	0.20	0.20
Uniform Delay (d), s/veh			33.9	0.0	0.0	0.0
Incr Delay (d2), s/veh			11.8	0.2	1.4	6.8
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			7.1	0.1	0.5	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			45.7	0.2	1.4	6.8
LnGrp LOS			D	A	A	A
Approach Vol, veh/h				1609	2233	
Approach Delay, s/veh				9.0	4.2	
Approach LOS				A	A	

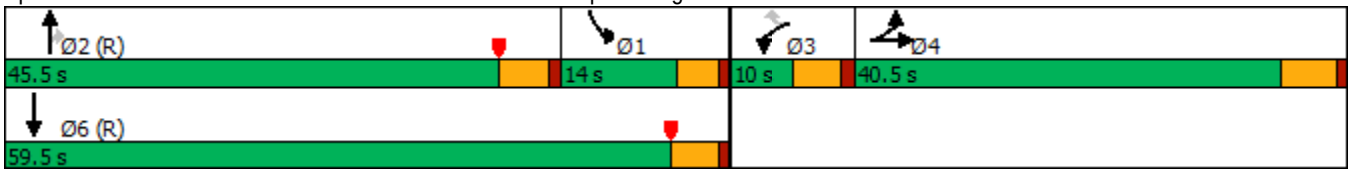
Timer - Assigned Phs	2			5	6
Phs Duration (G+Y+Rc), s	110.0			25.0	85.0
Change Period (Y+Rc), s	5.8			4.6	5.8
Max Green Setting (Gmax), s	104.2			28.4	71.2
Max Q Clear Time (g_c+I1), s	2.0			20.1	2.0
Green Ext Time (p_c), s	13.3			0.3	42.2

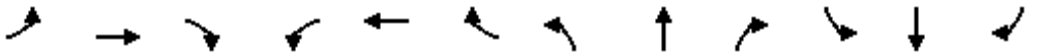
Intersection Summary	
HCM 6th Ctrl Delay	6.2
HCM 6th LOS	A

Lane Group	EBL	EBT	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	795	15	18	5	794	549	267	937
Future Volume (vph)	795	15	18	5	794	549	267	937
Turn Type	Split	NA	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4	4	3		2		1	6
Permitted Phases				3		2		
Detector Phase	4	4	3	3	2	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	10.0	10.0	45.0	45.0	9.5	30.0
Total Split (s)	40.5	40.5	10.0	10.0	45.5	45.5	14.0	59.5
Total Split (%)	36.8%	36.8%	9.1%	9.1%	41.4%	41.4%	12.7%	54.1%
Yellow Time (s)	4.5	4.5	4.0	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.0	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	37.4	37.4	5.0	5.0	34.4	34.4	17.2	56.1
Actuated g/C Ratio	0.34	0.34	0.05	0.05	0.31	0.31	0.16	0.51
v/c Ratio	0.94	0.90	0.23	0.03	0.73	0.65	0.99	0.53
Control Delay	61.6	53.3	57.7	0.2	37.7	5.9	71.7	9.7
Queue Delay	0.0	0.2	0.0	0.0	0.2	0.0	0.0	2.0
Total Delay	61.6	53.5	57.7	0.2	37.9	5.9	71.7	11.7
LOS	E	D	E	A	D	A	E	B
Approach Delay		57.6			24.8			25.0
Approach LOS		E			C			C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 34.4	Intersection LOS: C
Intersection Capacity Utilization 96.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	795	15	218	18	0	5	0	794	549	267	937	0
Future Volume (veh/h)	795	15	218	18	0	5	0	794	549	267	937	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	961	0	0	19	0	3	0	827	463	278	976	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1036	544	0	0	0	0	0	1140	496	465	2232	0
Arrive On Green	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.32	0.08	0.20	0.00
Sat Flow, veh/h	3619	1900	0		0		0	3705	1572	1810	3705	0
Grp Volume(v), veh/h	961	0	0		0.0		0	827	463	278	976	0
Grp Sat Flow(s),veh/h/ln	1810	1900	0				0	1805	1572	1810	1805	0
Q Serve(g_s), s	28.4	0.0	0.0				0.0	22.4	29.3	16.3	26.0	0.0
Cycle Q Clear(g_c), s	28.4	0.0	0.0				0.0	22.4	29.3	16.3	26.0	0.0
Prop In Lane	1.00		0.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1036	544	0				0	1140	496	465	2232	0
V/C Ratio(X)	0.93	0.00	0.00				0.00	0.73	0.93	0.60	0.44	0.00
Avail Cap(c_a), veh/h	1152	605	0				0	1329	579	465	2232	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.58	0.58	0.26	0.26	0.00
Uniform Delay (d), s/veh	38.2	0.0	0.0				0.0	33.4	31.8	44.8	27.0	0.0
Incr Delay (d2), s/veh	11.5	0.0	0.0				0.0	2.4	18.2	0.4	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.6	0.0	0.0				0.0	9.8	13.0	7.9	12.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.7	0.0	0.0				0.0	35.8	50.1	45.2	27.2	0.0
LnGrp LOS	D	A	A				A	D	D	D	C	A
Approach Vol, veh/h		961						1290			1254	
Approach Delay, s/veh		49.7						40.9			31.2	
Approach LOS		D						D			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	33.3	39.7		37.0		73.0						
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0						
Max Green Setting (Gmax), s	9.5	* 41		35.0		54.5						
Max Q Clear Time (g_c+I1), s	18.3	31.3		30.4		28.0						
Green Ext Time (p_c), s	0.0	3.3		1.1		4.6						

Intersection Summary			
HCM 6th Ctrl Delay		39.8	
HCM 6th LOS		D	

Notes

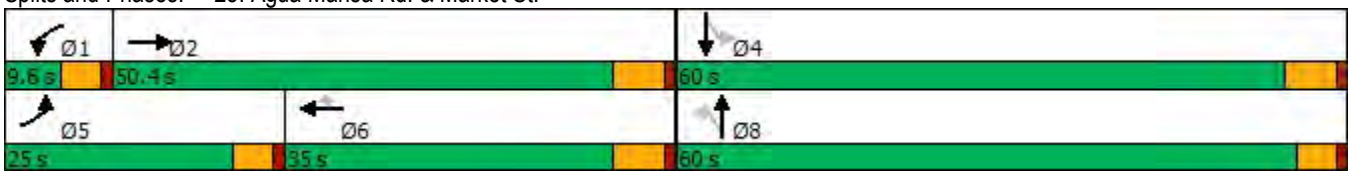
User approved volume balancing among the lanes for turning movement.

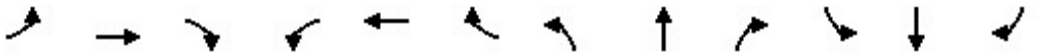
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	394	521	4	690	267	19	2	176	16
Future Volume (vph)	394	521	4	690	267	19	2	176	16
Turn Type	Prot	NA	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	5	2	1	6			8		4
Permitted Phases					6	8		4	
Detector Phase	5	2	1	6	6	8	8	4	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	31.8	9.6	26.8	26.8	14.6	14.6	43.8	43.8
Total Split (s)	25.0	50.4	9.6	35.0	35.0	60.0	60.0	60.0	60.0
Total Split (%)	20.8%	42.0%	8.0%	29.2%	29.2%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8		4.6		5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	None	Max	Max	None	None	None	None
Act Effct Green (s)	17.2	49.8	5.1	29.6	29.6		47.4		46.2
Actuated g/C Ratio	0.16	0.45	0.05	0.27	0.27		0.43		0.42
v/c Ratio	0.80	0.36	0.05	0.79	0.46		0.06		0.93
Control Delay	56.9	22.0	56.2	45.7	6.7		14.3		46.4
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	56.9	22.0	56.2	45.7	6.7		14.3		46.4
LOS	E	C	E	D	A		B		D
Approach Delay		36.9		34.9			14.3		46.4
Approach LOS		D		C			B		D

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 109.5	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 38.1	Intersection LOS: D
Intersection Capacity Utilization 79.7%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	394	521	10	4	690	267	19	2	8	176	16	408
Future Volume (veh/h)	394	521	10	4	690	267	19	2	8	176	16	408
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	438	579	8	4	767	258	21	2	7	196	18	247
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	522	1763	24	10	1228	547	303	36	83	269	27	278
Arrive On Green	0.15	0.48	0.48	0.01	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	3510	3646	50	1810	3610	1609	705	106	247	636	81	828
Grp Volume(v), veh/h	438	287	300	4	767	258	30	0	0	461	0	0
Grp Sat Flow(s),veh/h/ln	1755	1805	1891	1810	1805	1609	1058	0	0	1545	0	0
Q Serve(g_s), s	11.2	9.0	9.0	0.2	16.4	11.6	0.0	0.0	0.0	24.9	0.0	0.0
Cycle Q Clear(g_c), s	11.2	9.0	9.0	0.2	16.4	11.6	1.2	0.0	0.0	26.0	0.0	0.0
Prop In Lane	1.00		0.03	1.00		1.00	0.70		0.23	0.43		0.54
Lane Grp Cap(c), veh/h	522	873	915	10	1228	547	421	0	0	574	0	0
V/C Ratio(X)	0.84	0.33	0.33	0.42	0.62	0.47	0.07	0.00	0.00	0.80	0.00	0.00
Avail Cap(c_a), veh/h	777	873	915	98	1228	547	754	0	0	962	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	38.2	14.6	14.6	45.7	25.5	23.9	20.7	0.0	0.0	28.9	0.0	0.0
Incr Delay (d2), s/veh	3.4	1.0	1.0	10.5	2.4	2.9	0.1	0.0	0.0	2.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	3.5	3.7	0.1	6.9	4.5	0.4	0.0	0.0	9.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.5	15.6	15.6	56.2	27.9	26.8	20.8	0.0	0.0	31.6	0.0	0.0
LnGrp LOS	D	B	B	E	C	C	C	A	A	C	A	A
Approach Vol, veh/h		1025			1029			30			461	
Approach Delay, s/veh		26.7			27.7			20.8			31.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	50.4		36.7	18.3	37.2		36.7				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	44.6		54.2	20.4	29.2		* 55				
Max Q Clear Time (g_c+I1), s	2.2	11.0		28.0	13.2	18.4		3.2				
Green Ext Time (p_c), s	0.0	3.4		2.9	0.5	4.2		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		27.9
HCM 6th LOS		C

Notes

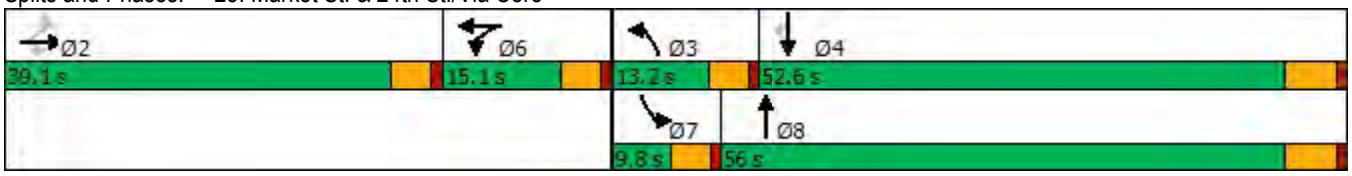
User approved pedestrian interval to be less than phase max green.

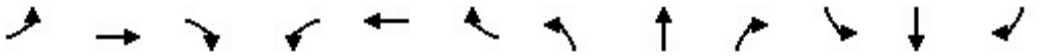
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	4	33	173	100	8	41	899	30	807	3
Future Volume (vph)	4	33	173	100	8	41	899	30	807	3
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	39.1	39.1	39.1	15.1	15.1	13.2	56.0	9.8	52.6	52.6
Total Split (%)	32.6%	32.6%	32.6%	12.6%	12.6%	11.0%	46.7%	8.2%	43.8%	43.8%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		11.7	11.7	10.3	10.3	6.7	50.5	5.2	49.1	49.1
Actuated g/C Ratio		0.13	0.13	0.11	0.11	0.07	0.54	0.06	0.53	0.53
v/c Ratio		0.39	0.52	0.53	0.07	0.34	0.59	0.32	0.45	0.00
Control Delay		50.8	12.8	51.3	32.2	50.3	16.7	53.9	16.0	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		50.8	12.8	51.3	32.2	50.3	16.7	53.9	16.0	0.0
LOS		D	B	D	C	D	B	D	B	A
Approach Delay		19.5			49.1		18.0		17.3	
Approach LOS		B			D		B		B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 93.2	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 19.4	Intersection LOS: B
Intersection Capacity Utilization 54.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	33	173	100	8	6	41	899	170	30	807	3
Future Volume (veh/h)	4	33	173	100	8	6	41	899	170	30	807	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	4	35	89	105	8	5	43	946	157	32	849	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	21	180	170	187	113	71	66	1693	281	55	1952	871
Arrive On Green	0.11	0.11	0.11	0.10	0.10	0.10	0.04	0.55	0.55	0.03	0.54	0.54
Sat Flow, veh/h	194	1696	1606	1810	1094	683	1810	3098	514	1810	3610	1610
Grp Volume(v), veh/h	39	0	89	105	0	13	43	551	552	32	849	3
Grp Sat Flow(s),veh/h/ln	1890	0	1606	1810	0	1777	1810	1805	1807	1810	1805	1610
Q Serve(g_s), s	1.7	0.0	4.8	5.1	0.0	0.6	2.2	18.3	18.3	1.6	13.0	0.1
Cycle Q Clear(g_c), s	1.7	0.0	4.8	5.1	0.0	0.6	2.2	18.3	18.3	1.6	13.0	0.1
Prop In Lane	0.10		1.00	1.00		0.38	1.00		0.28	1.00		1.00
Lane Grp Cap(c), veh/h	200	0	170	187	0	184	66	987	988	55	1952	871
V/C Ratio(X)	0.19	0.00	0.52	0.56	0.00	0.07	0.66	0.56	0.56	0.58	0.43	0.00
Avail Cap(c_a), veh/h	710	0	603	207	0	203	169	987	988	102	1952	871
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.5	0.0	38.8	39.2	0.0	37.2	43.7	13.6	13.6	43.9	12.7	9.7
Incr Delay (d2), s/veh	0.5	0.0	2.5	2.8	0.0	0.2	4.1	2.3	2.3	3.6	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	1.9	2.4	0.0	0.3	1.0	7.0	7.0	0.7	4.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.9	0.0	41.3	41.9	0.0	37.3	47.8	15.9	15.9	47.5	13.4	9.7
LnGrp LOS	D	A	D	D	A	D	D	B	B	D	B	A
Approach Vol, veh/h		128			118			1146			884	
Approach Delay, s/veh		40.3			41.4			17.1			14.6	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.3	7.9	55.5		14.1	7.4	56.0				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		34.5	8.6	46.8		10.5	5.2	50.2				
Max Q Clear Time (g_c+I1), s		6.8	4.2	15.0		7.1	3.6	20.3				
Green Ext Time (p_c), s		0.5	0.0	6.1		0.1	0.0	7.6				

Intersection Summary												
HCM 6th Ctrl Delay			18.7									
HCM 6th LOS			B									

Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	196	49	522	619
Future Volume (vph)	196	49	522	619
Turn Type	Prot	Prot	NA	NA
Protected Phases	4	5	2	6
Permitted Phases				
Detector Phase	4	5	2	6
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	32.8	9.6	15.8	27.8
Total Split (s)	32.8	14.7	67.2	52.5
Total Split (%)	32.8%	14.7%	67.2%	52.5%
Yellow Time (s)	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.8
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	None	None
Act Effct Green (s)	17.5	7.1	52.2	45.4
Actuated g/C Ratio	0.21	0.09	0.64	0.56
v/c Ratio	0.67	0.33	0.24	0.84
Control Delay	38.6	45.5	7.0	27.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	38.6	45.5	7.0	27.3
LOS	D	D	A	C
Approach Delay	38.6		10.3	27.3
Approach LOS	D		B	C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 81.8	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 23.1	Intersection LOS: C
Intersection Capacity Utilization 67.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 33: Agua Mansa Rd. & El Rivino Rd.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	196	51	49	522	619	191
Future Volume (veh/h)	196	51	49	522	619	191
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	209	0	52	555	659	203
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	280		86	2382	751	231
Arrive On Green	0.16	0.00	0.05	0.66	0.54	0.54
Sat Flow, veh/h	1801	0	1810	3705	1393	429
Grp Volume(v), veh/h	210	0	52	555	0	862
Grp Sat Flow(s),veh/h/ln	1810	0	1810	1805	0	1823
Q Serve(g_s), s	7.0	0.0	1.8	3.9	0.0	26.0
Cycle Q Clear(g_c), s	7.0	0.0	1.8	3.9	0.0	26.0
Prop In Lane	1.00	0.00	1.00			0.24
Lane Grp Cap(c), veh/h	281		86	2382	0	983
V/C Ratio(X)	0.75		0.61	0.23	0.00	0.88
Avail Cap(c_a), veh/h	779		291	3532	0	1356
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.3	0.0	29.3	4.3	0.0	12.6
Incr Delay (d2), s/veh	4.0	0.0	2.5	0.0	0.0	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	0.8	0.8	0.0	8.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.3	0.0	31.9	4.3	0.0	17.8
LnGrp LOS	C		C	A	A	B
Approach Vol, veh/h	210	A		607	862	
Approach Delay, s/veh	29.3			6.7	17.8	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		47.2		15.5	7.6	39.6
Change Period (Y+Rc), s		5.8		5.8	4.6	5.8
Max Green Setting (Gmax), s		61.4		27.0	10.1	46.7
Max Q Clear Time (g_c+I1), s		5.9		9.0	3.8	28.0
Green Ext Time (p_c), s		3.8		0.5	0.0	5.9

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Notes

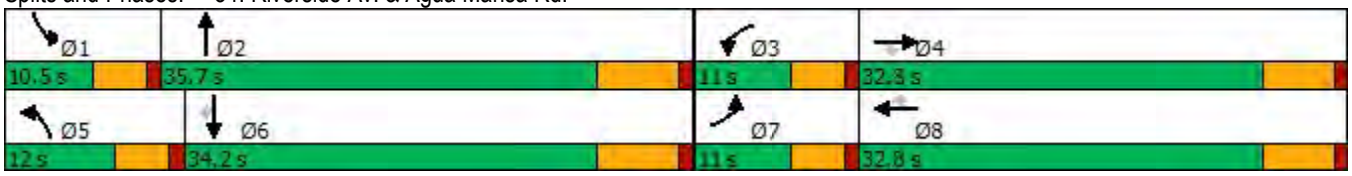
User approved volume balancing among the lanes for turning movement.

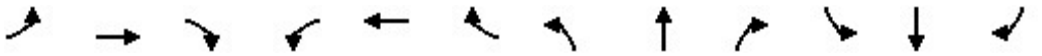
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	163	317	161	141	423	82	178	507	80	609	220
Future Volume (vph)	163	317	161	141	423	82	178	507	80	609	220
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	11.0	32.8	32.8	11.0	32.8	32.8	12.0	35.7	10.5	34.2	34.2
Total Split (%)	12.2%	36.4%	36.4%	12.2%	36.4%	36.4%	13.3%	39.7%	11.7%	38.0%	38.0%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	6.6	15.5	15.5	6.6	15.5	15.5	7.6	23.2	5.9	19.1	19.1
Actuated g/C Ratio	0.09	0.22	0.22	0.09	0.22	0.22	0.11	0.33	0.08	0.27	0.27
v/c Ratio	1.04	0.43	0.35	0.90	0.57	0.18	0.98	0.51	0.56	0.67	0.39
Control Delay	118.8	25.8	6.4	86.6	27.9	1.3	98.6	21.9	51.6	27.0	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	118.8	25.8	6.4	86.6	27.9	1.3	98.6	21.9	51.6	27.0	5.4
LOS	F	C	A	F	C	A	F	C	D	C	A
Approach Delay		44.5			37.3			40.4		23.9	
Approach LOS		D			D			D		C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 70.8	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.04	
Intersection Signal Delay: 35.5	Intersection LOS: D
Intersection Capacity Utilization 65.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	163	317	161	141	423	82	178	507	53	80	609	220
Future Volume (veh/h)	163	317	161	141	423	82	178	507	53	80	609	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	173	337	107	150	450	63	189	539	52	85	648	215
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	182	681	304	182	681	304	210	1037	100	111	926	413
Arrive On Green	0.10	0.19	0.19	0.10	0.19	0.19	0.12	0.31	0.31	0.06	0.26	0.26
Sat Flow, veh/h	1810	3610	1610	1810	3610	1610	1810	3327	320	1810	3610	1610
Grp Volume(v), veh/h	173	337	107	150	450	63	189	292	299	85	648	215
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1610	1810	1805	1842	1810	1805	1610
Q Serve(g_s), s	6.0	5.3	3.7	5.2	7.4	2.1	6.6	8.4	8.5	2.9	10.3	7.3
Cycle Q Clear(g_c), s	6.0	5.3	3.7	5.2	7.4	2.1	6.6	8.4	8.5	2.9	10.3	7.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	182	681	304	182	681	304	210	563	574	111	926	413
V/C Ratio(X)	0.95	0.49	0.35	0.82	0.66	0.21	0.90	0.52	0.52	0.77	0.70	0.52
Avail Cap(c_a), veh/h	182	1532	683	182	1532	683	210	828	845	168	1572	701
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.5	23.1	22.4	28.1	23.9	21.8	27.7	18.0	18.0	29.4	21.4	20.3
Incr Delay (d2), s/veh	51.8	0.6	0.7	24.0	1.1	0.3	34.8	0.7	0.7	4.8	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	2.1	1.3	3.2	2.9	0.7	4.5	2.9	3.0	1.3	3.7	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.3	23.7	23.1	52.1	25.0	22.1	62.5	18.7	18.7	34.2	22.4	21.3
LnGrp LOS	F	C	C	D	C	C	E	B	B	C	C	C
Approach Vol, veh/h		617			663			780			948	
Approach Delay, s/veh		39.4			30.9			29.3			23.2	
Approach LOS		D			C			C			C	

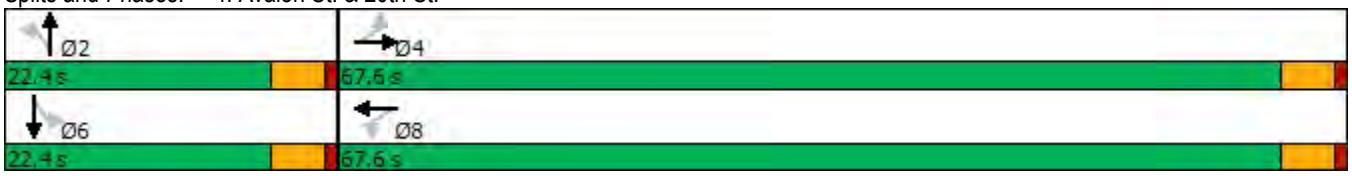
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	26.3	11.0	17.8	12.0	22.8	11.0	17.8
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	5.9	29.2	6.4	27.0	7.4	27.7	6.4	27.0
Max Q Clear Time (g_c+I1), s	4.9	10.5	7.2	7.3	8.6	12.3	8.0	9.4
Green Ext Time (p_c), s	0.0	2.8	0.0	2.2	0.0	4.0	0.0	2.6

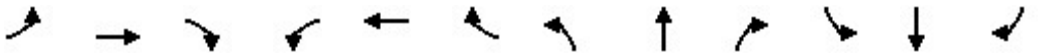
Intersection Summary	
HCM 6th Ctrl Delay	29.8
HCM 6th LOS	C

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	7	721	25	249	18	8	1	13
Future Volume (vph)	7	721	25	249	18	8	1	13
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6
Total Split (s)	67.6	67.6	67.6	67.6	22.4	22.4	22.4	22.4
Total Split (%)	75.1%	75.1%	75.1%	75.1%	24.9%	24.9%	24.9%	24.9%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6		4.6		4.6
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)	24.3	24.3	24.3	24.3		6.3		6.3
Actuated g/C Ratio	0.60	0.60	0.60	0.60		0.16		0.16
v/c Ratio	0.01	0.82	0.16	0.27		0.25		0.07
Control Delay	2.9	12.8	5.3	4.1		14.4		18.0
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	2.9	12.8	5.3	4.1		14.4		18.0
LOS	A	B	A	A		B		B
Approach Delay		12.7		4.2		14.4		18.0
Approach LOS		B		A		B		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 40.4	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 10.8	Intersection LOS: B
Intersection Capacity Utilization 57.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 4: Avalon St. & 20th St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	721	40	25	249	3	18	8	30	1	13	3
Future Volume (veh/h)	7	721	40	25	249	3	18	8	30	1	13	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.99		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	9	879	49	30	304	4	22	10	37	1	16	4
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	760	1048	58	321	1102	14	185	62	129	113	213	51
Arrive On Green	0.59	0.59	0.59	0.59	0.59	0.59	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1088	1780	99	612	1871	25	333	421	871	37	1436	347
Grp Volume(v), veh/h	9	0	928	30	0	308	69	0	0	21	0	0
Grp Sat Flow(s),veh/h/ln	1088	0	1880	612	0	1896	1625	0	0	1819	0	0
Q Serve(g_s), s	0.1	0.0	14.0	1.5	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.9	0.0	14.0	15.5	0.0	2.8	1.2	0.0	0.0	0.3	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.01	0.32		0.54	0.05		0.19
Lane Grp Cap(c), veh/h	760	0	1107	321	0	1116	376	0	0	377	0	0
V/C Ratio(X)	0.01	0.00	0.84	0.09	0.00	0.28	0.18	0.00	0.00	0.06	0.00	0.00
Avail Cap(c_a), veh/h	2080	0	3387	1064	0	3416	943	0	0	1028	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.2	0.0	5.8	12.1	0.0	3.5	13.2	0.0	0.0	12.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.0	0.1	0.0	0.2	0.4	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.3	0.0	6.5	12.2	0.0	3.6	13.3	0.0	0.0	12.9	0.0	0.0
LnGrp LOS	A	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		937			338			69			21	
Approach Delay, s/veh		6.5			4.3			13.3			12.9	
Approach LOS		A			A			B			B	

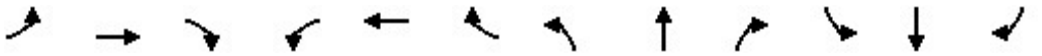
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		9.8		25.2		9.8		25.2				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		17.8		63.0		17.8		63.0				
Max Q Clear Time (g_c+I1), s		3.2		16.0		2.3		17.5				
Green Ext Time (p_c), s		0.2		4.6		0.0		1.2				

Intersection Summary												
HCM 6th Ctrl Delay			6.4									
HCM 6th LOS			A									

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	5	394	623	1628	1408	582
Future Volume (vph)	5	394	623	1628	1408	582
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	41.0	41.0	22.0	69.0	47.0	47.0
Total Split (%)	37.3%	37.3%	20.0%	62.7%	42.7%	42.7%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	37.6	37.6	18.0	63.9	41.9	41.9
Actuated g/C Ratio	0.34	0.34	0.16	0.58	0.38	0.38
v/c Ratio	1.01	0.68	1.17	0.84	0.77	0.63
Control Delay	75.3	33.9	135.9	11.1	32.8	5.1
Queue Delay	0.0	0.0	0.0	0.4	0.4	0.0
Total Delay	75.3	33.9	135.9	11.5	33.3	5.1
LOS	E	C	F	B	C	A
Approach Delay	59.0			46.0	25.0	
Approach LOS	E			D	C	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.17	
Intersection Signal Delay: 40.1	Intersection LOS: D
Intersection Capacity Utilization 100.9%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	503	5	394	623	1628	0	0	1408	582
Future Volume (veh/h)	0	0	0	503	5	394	623	1628	0	0	1408	582
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				541	5	389	670	1751	0	0	1514	439
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				579	5	520	574	2166	0	0	2074	641
Arrive On Green				0.32	0.32	0.32	0.33	1.00	0.00	0.00	0.40	0.40
Sat Flow, veh/h				1794	17	1610	3510	3705	0	0	5358	1604
Grp Volume(v), veh/h				546	0	389	670	1751	0	0	1514	439
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1755	1805	0	0	1729	1604
Q Serve(g_s), s				32.2	0.0	23.7	18.0	0.0	0.0	0.0	27.2	24.9
Cycle Q Clear(g_c), s				32.2	0.0	23.7	18.0	0.0	0.0	0.0	27.2	24.9
Prop In Lane				0.99		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				584	0	520	574	2166	0	0	2074	641
V/C Ratio(X)				0.93	0.00	0.75	1.17	0.81	0.00	0.00	0.73	0.68
Avail Cap(c_a), veh/h				609	0	542	574	2166	0	0	2074	641
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.48	0.48	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				36.1	0.0	33.3	37.0	0.0	0.0	0.0	28.0	27.3
Incr Delay (d2), s/veh				21.3	0.0	5.5	84.2	1.7	0.0	0.0	2.3	5.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				16.8	0.0	9.6	12.6	0.5	0.0	0.0	11.1	10.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				57.4	0.0	38.7	121.2	1.7	0.0	0.0	30.3	33.1
LnGrp LOS				E	A	D	F	A	A	A	C	C
Approach Vol, veh/h					935			2421			1953	
Approach Delay, s/veh					49.6			34.7			30.9	
Approach LOS					D			C			C	

Timer - Assigned Phs	2			5	6		8					
Phs Duration (G+Y+Rc), s	70.5			22.0	48.5		39.5					
Change Period (Y+Rc), s	4.5			4.0	4.5		4.0					
Max Green Setting (Gmax), s	64.5			18.0	42.5		37.0					
Max Q Clear Time (g_c+I1), s	2.0			20.0	29.2		34.2					
Green Ext Time (p_c), s	23.0			0.0	9.2		1.3					

Intersection Summary		
HCM 6th Ctrl Delay	36.0	
HCM 6th LOS	D	

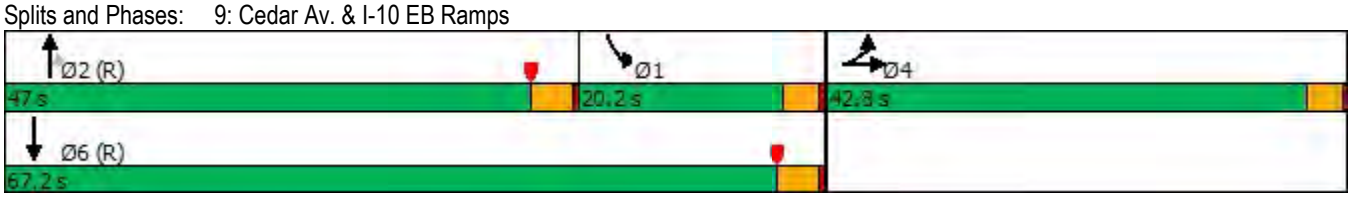
Notes

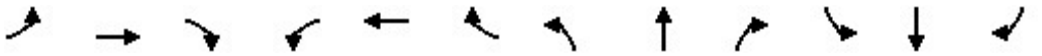
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	566	5	1706	761	420	1488
Future Volume (vph)	566	5	1706	761	420	1488
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	42.8	42.8	47.0	47.0	20.2	67.2
Total Split (%)	38.9%	38.9%	42.7%	42.7%	18.4%	61.1%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	36.5	36.5	46.6	46.6	15.9	66.0
Actuated g/C Ratio	0.33	0.33	0.42	0.42	0.14	0.60
v/c Ratio	0.89	0.84	0.79	0.70	0.85	0.70
Control Delay	53.0	46.9	27.9	10.1	48.1	10.2
Queue Delay	0.2	0.2	0.0	0.0	0.0	0.8
Total Delay	53.2	47.1	27.9	10.1	48.1	11.0
LOS	D	D	C	B	D	B
Approach Delay		50.3	22.4			19.2
Approach LOS		D	C			B

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 26.2	Intersection LOS: C
Intersection Capacity Utilization 100.9%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	566	5	368	0	0	0	0	1706	761	420	1488	0
Future Volume (veh/h)	566	5	368	0	0	0	0	1706	761	420	1488	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	474	150	366				0	1741	572	429	1518	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	602	163	397				0	1980	613	636	2164	0
Arrive On Green	0.33	0.33	0.33				0.00	0.51	0.51	0.36	1.00	0.00
Sat Flow, veh/h	1810	490	1195				0	5358	1606	3510	3705	0
Grp Volume(v), veh/h	474	0	516				0	1741	572	429	1518	0
Grp Sat Flow(s),veh/h/ln	1810	0	1685				0	1729	1606	1755	1805	0
Q Serve(g_s), s	26.1	0.0	32.4				0.0	32.8	36.6	11.3	0.0	0.0
Cycle Q Clear(g_c), s	26.1	0.0	32.4				0.0	32.8	36.6	11.3	0.0	0.0
Prop In Lane	1.00		0.71				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	602	0	560				0	1980	613	636	2164	0
V/C Ratio(X)	0.79	0.00	0.92				0.00	0.88	0.93	0.67	0.70	0.00
Avail Cap(c_a), veh/h	646	0	602				0	2028	628	636	2164	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.33	1.33	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.09	0.09	0.55	0.55	0.00
Uniform Delay (d), s/veh	33.2	0.0	35.3				0.0	24.8	25.8	32.3	0.0	0.0
Incr Delay (d2), s/veh	6.1	0.0	19.0				0.0	0.6	3.3	1.3	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.8	0.0	15.5				0.0	11.2	12.1	4.1	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.3	0.0	54.3				0.0	25.4	29.1	33.6	1.1	0.0
LnGrp LOS	D	A	D				A	C	C	C	A	A
Approach Vol, veh/h		990						2313			1947	
Approach Delay, s/veh		47.1						26.3			8.2	
Approach LOS		D						C			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	23.9	46.0		40.1		69.9
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	16.7	* 43		39.3		63.2
Max Q Clear Time (g_c+I1), s	13.3	38.6		34.4		2.0
Green Ext Time (p_c), s	0.3	3.4		2.1		9.7

Intersection Summary	
HCM 6th Ctrl Delay	23.5
HCM 6th LOS	C

Notes

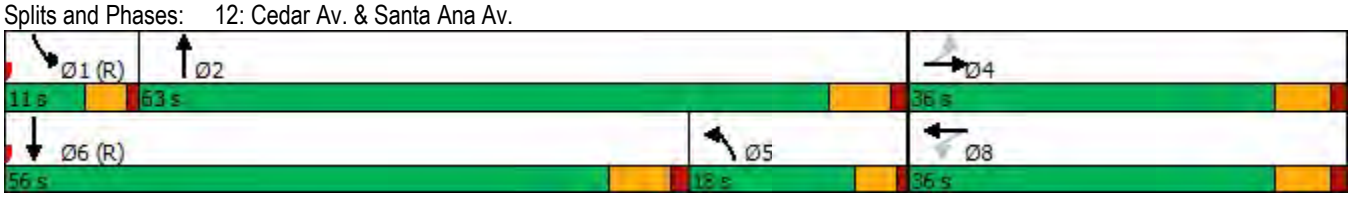
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	94	141	58	134	183	1581	63	1235
Future Volume (vph)	94	141	58	134	183	1581	63	1235
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	9.5	27.5	9.5	27.5
Total Split (s)	36.0	36.0	36.0	36.0	18.0	63.0	11.0	56.0
Total Split (%)	32.7%	32.7%	32.7%	32.7%	16.4%	57.3%	10.0%	50.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	4.5	6.5	4.5	6.5
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min
Act Effct Green (s)		30.0		30.0	13.6	56.8	6.2	49.4
Actuated g/C Ratio		0.27		0.27	0.12	0.52	0.06	0.45
v/c Ratio		1.03		0.76	0.87	0.94	0.65	0.84
Control Delay		92.5		48.0	43.0	16.4	49.8	39.3
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		92.5		48.0	43.0	16.4	49.8	39.3
LOS		F		D	D	B	D	D
Approach Delay		92.5		48.0		19.1		39.8
Approach LOS		F		D		B		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 90 (82%), Referenced to phase 1:SBL and 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 35.3	Intersection LOS: D
Intersection Capacity Utilization 94.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 12: Cedar Av. & Santa Ana Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	141	120	58	134	94	183	1581	79	63	1235	51
Future Volume (veh/h)	94	141	120	58	134	94	183	1581	79	63	1235	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	99	148	83	61	141	59	193	1664	81	66	1300	47
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	136	176	90	104	222	84	240	1830	89	125	1565	57
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.26	1.00	1.00	0.02	0.15	0.15
Sat Flow, veh/h	366	691	355	251	874	329	1810	3505	170	1810	3553	128
Grp Volume(v), veh/h	330	0	0	261	0	0	193	853	892	66	660	687
Grp Sat Flow(s),veh/h/ln	1413	0	0	1453	0	0	1810	1805	1869	1810	1805	1877
Q Serve(g_s), s	7.9	0.0	0.0	0.0	0.0	0.0	11.0	0.0	0.0	4.0	39.1	39.2
Cycle Q Clear(g_c), s	25.3	0.0	0.0	17.4	0.0	0.0	11.0	0.0	0.0	4.0	39.1	39.2
Prop In Lane	0.30		0.25	0.23		0.23	1.00		0.09	1.00		0.07
Lane Grp Cap(c), veh/h	402	0	0	410	0	0	240	942	976	125	795	827
V/C Ratio(X)	0.82	0.00	0.00	0.64	0.00	0.00	0.81	0.90	0.91	0.53	0.83	0.83
Avail Cap(c_a), veh/h	430	0	0	439	0	0	240	942	976	125	812	844
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.09	0.09	0.09	0.20	0.20	0.20
Uniform Delay (d), s/veh	40.1	0.0	0.0	36.5	0.0	0.0	39.1	0.0	0.0	52.0	43.0	43.0
Incr Delay (d2), s/veh	12.1	0.0	0.0	3.3	0.0	0.0	1.8	1.5	1.6	0.4	2.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	0.0	0.0	6.5	0.0	0.0	4.2	0.4	0.4	1.8	19.2	20.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.2	0.0	0.0	39.8	0.0	0.0	40.9	1.5	1.6	52.4	45.1	45.1
LnGrp LOS	D	A	A	D	A	A	D	A	A	D	D	D
Approach Vol, veh/h		330			261			1938			1413	
Approach Delay, s/veh		52.2			39.8			5.5			45.5	
Approach LOS		D			D			A			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.1	63.9		34.0	21.1	55.0		34.0				
Change Period (Y+Rc), s	4.5	6.5		6.0	6.5	* 6.5		6.0				
Max Green Setting (Gmax), s	6.5	56.5		30.0	13.5	* 50		30.0				
Max Q Clear Time (g_c+I1), s	6.0	2.0		27.3	13.0	41.2		19.4				
Green Ext Time (p_c), s	0.0	45.4		0.6	0.0	7.3		1.4				

Intersection Summary	
HCM 6th Ctrl Delay	26.0
HCM 6th LOS	C

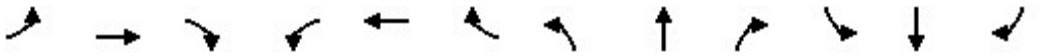
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	251	209	82	132	132	1420	163	1183
Future Volume (vph)	251	209	82	132	132	1420	163	1183
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	38.0	38.0	38.0	38.0	23.7	53.0	19.0	48.3
Total Split (%)	34.5%	34.5%	34.5%	34.5%	21.5%	48.2%	17.3%	43.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)	32.5	32.5	32.5	32.5	14.0	47.8	13.7	47.5
Actuated g/C Ratio	0.30	0.30	0.30	0.30	0.13	0.43	0.12	0.43
v/c Ratio	1.15	0.71	0.59	0.52	0.62	1.04	0.79	0.92
Control Delay	140.6	40.0	50.9	30.8	65.0	47.8	45.7	45.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	140.6	40.0	50.9	30.8	65.0	47.8	45.7	45.5
LOS	F	D	D	C	E	D	D	D
Approach Delay		81.4		35.6		49.2		45.5
Approach LOS		F		D		D		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.15	
Intersection Signal Delay: 51.5	Intersection LOS: D
Intersection Capacity Utilization 98.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	209	150	82	132	129	132	1420	74	163	1183	127
Future Volume (veh/h)	251	209	150	82	132	129	132	1420	74	163	1183	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	273	227	138	89	143	94	143	1543	67	177	1286	133
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	281	325	198	181	314	206	199	1563	68	209	1484	153
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.22	0.89	0.89	0.04	0.15	0.15
Sat Flow, veh/h	1159	1100	669	1033	1061	698	1810	3525	153	1810	3303	340
Grp Volume(v), veh/h	273	0	365	89	0	237	143	788	822	177	701	718
Grp Sat Flow(s),veh/h/ln	1159	0	1769	1033	0	1759	1810	1805	1873	1810	1805	1839
Q Serve(g_s), s	20.4	0.0	20.2	9.2	0.0	12.1	8.1	42.7	44.8	10.7	41.7	42.0
Cycle Q Clear(g_c), s	32.5	0.0	20.2	29.4	0.0	12.1	8.1	42.7	44.8	10.7	41.7	42.0
Prop In Lane	1.00		0.38	1.00		0.40	1.00		0.08	1.00		0.19
Lane Grp Cap(c), veh/h	281	0	523	181	0	520	199	801	830	209	811	826
V/C Ratio(X)	0.97	0.00	0.70	0.49	0.00	0.46	0.72	0.98	0.99	0.85	0.86	0.87
Avail Cap(c_a), veh/h	281	0	523	181	0	520	316	801	830	239	811	826
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.34	0.34	0.34	0.43	0.43	0.43
Uniform Delay (d), s/veh	46.9	0.0	34.4	47.4	0.0	31.6	41.4	5.9	6.0	51.9	43.6	43.7
Incr Delay (d2), s/veh	46.1	0.0	4.5	2.9	0.0	0.9	1.7	15.2	16.0	10.5	4.6	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.0	0.0	9.0	2.5	0.0	5.1	3.3	5.7	6.2	5.7	21.0	21.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	93.0	0.0	38.9	50.3	0.0	32.4	43.1	21.0	22.0	62.5	48.1	48.4
LnGrp LOS	F	A	D	D	A	C	D	C	C	E	D	D
Approach Vol, veh/h		638			326			1753			1596	
Approach Delay, s/veh		62.1			37.3			23.3			49.8	
Approach LOS		E			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.2	54.8		38.0	16.6	55.4		38.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	14.5	47.0		32.5	19.2	42.3		32.5				
Max Q Clear Time (g_c+I1), s	12.7	46.8		34.5	10.1	44.0		31.4				
Green Ext Time (p_c), s	0.1	0.1		0.0	0.2	0.0		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		39.9	
HCM 6th LOS		D	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	10	8	268	8	264	13	1332	184	1253
Future Volume (vph)	10	8	268	8	264	13	1332	184	1253
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	35.0	35.0	35.0	9.5	24.0	9.5	24.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.5	40.7	14.3	45.5
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%	10.6%	45.2%	15.9%	50.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	5.0	4.5	6.0	4.5	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min
Act Effct Green (s)		15.5		23.4	23.4	5.0	34.9	9.9	47.5
Actuated g/C Ratio		0.19		0.28	0.28	0.06	0.42	0.12	0.57
v/c Ratio		0.10		0.74	0.48	0.12	1.02	0.88	0.63
Control Delay		17.4		39.7	13.3	42.7	55.5	77.1	15.9
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		17.4		39.7	13.3	42.7	55.5	77.1	15.9
LOS		B		D	B	D	E	E	B
Approach Delay		17.4		26.8			55.4		23.6
Approach LOS		B		C			E		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 83.7	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 37.6	Intersection LOS: D
Intersection Capacity Utilization 87.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 15: Rubidoux Bl. & Tarragona Dr./El Rivino Rd.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	8	11	268	8	264	13	1332	171	184	1253	24
Future Volume (veh/h)	10	8	11	268	8	264	13	1332	171	184	1253	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	10	8	7	271	8	192	13	1345	57	186	1266	23
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	56	43	17	333	7	537	28	1359	58	197	1738	32
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.02	0.39	0.39	0.11	0.48	0.48
Sat Flow, veh/h	0	130	51	762	22	1610	1810	3525	149	1810	3627	66
Grp Volume(v), veh/h	25	0	0	279	0	192	13	688	714	186	630	659
Grp Sat Flow(s),veh/h/ln	181	0	0	784	0	1610	1810	1805	1869	1810	1805	1888
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	8.1	0.6	34.0	34.2	9.2	25.1	25.2
Cycle Q Clear(g_c), s	30.0	0.0	0.0	30.0	0.0	8.1	0.6	34.0	34.2	9.2	25.1	25.2
Prop In Lane	0.40		0.28	0.97		1.00	1.00		0.08	1.00		0.03
Lane Grp Cap(c), veh/h	116	0	0	340	0	537	28	696	721	197	865	904
V/C Ratio(X)	0.22	0.00	0.00	0.82	0.00	0.36	0.47	0.99	0.99	0.94	0.73	0.73
Avail Cap(c_a), veh/h	116	0	0	340	0	537	101	696	721	197	865	904
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.3	0.0	0.0	30.9	0.0	22.7	43.9	27.4	27.5	39.8	18.8	18.8
Incr Delay (d2), s/veh	1.3	0.0	0.0	15.2	0.0	0.6	11.6	31.1	31.2	48.2	3.4	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	7.5	0.0	3.1	0.4	18.9	19.7	6.5	9.8	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.6	0.0	0.0	46.2	0.0	23.3	55.5	58.5	58.7	88.0	22.1	22.0
LnGrp LOS	C	A	A	D	A	C	E	E	E	F	C	C
Approach Vol, veh/h		25			471			1415			1475	
Approach Delay, s/veh		25.6			36.8			58.6			30.4	
Approach LOS		C			D			E			C	

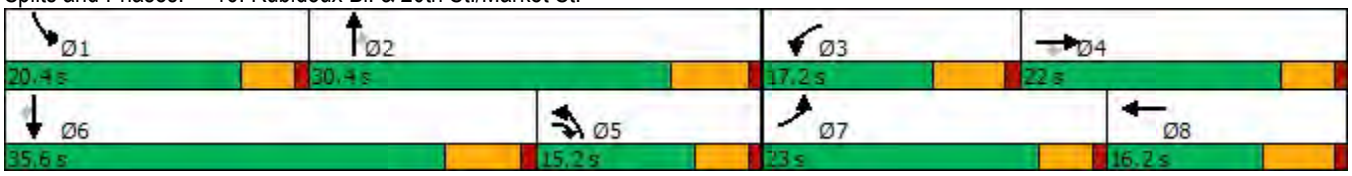
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.3	40.7		35.0	5.9	49.1		35.0				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	9.8	34.7		30.0	5.0	39.5		30.0				
Max Q Clear Time (g_c+I1), s	11.2	36.2		32.0	2.6	27.2		32.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	7.8		0.0				

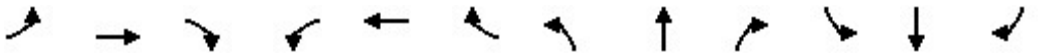
Intersection Summary			
HCM 6th Ctrl Delay		43.0	
HCM 6th LOS		D	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	331	283	173	440	109	452	75	643	531	537	855	122
Future Volume (vph)	331	283	173	440	109	452	75	643	531	537	855	122
Turn Type	Prot	NA	pm+ov	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4			Free			2			6
Detector Phase	7	4	5	3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	14.6	14.6	9.6	15.8	15.8		9.6	16.2	16.2	9.6	35.2	35.2
Total Split (s)	23.0	22.0	15.2	17.2	16.2		15.2	30.4	30.4	20.4	35.6	35.6
Total Split (%)	25.6%	24.4%	16.9%	19.1%	18.0%		16.9%	33.8%	33.8%	22.7%	39.6%	39.6%
Yellow Time (s)	3.6	3.6	3.6	4.8	4.8		3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.8	5.8		4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	None	None	None	None	None
Act Effct Green (s)	21.0	16.2	27.1	11.5	10.3	86.1	11.0	21.9	21.9	15.3	26.2	26.2
Actuated g/C Ratio	0.24	0.19	0.31	0.13	0.12	1.00	0.13	0.25	0.25	0.18	0.30	0.30
v/c Ratio	0.77	0.81	0.29	0.96	0.49	0.29	0.34	0.71	0.79	0.88	0.79	0.19
Control Delay	47.0	53.2	3.8	73.6	45.1	0.4	40.7	34.4	19.0	53.0	33.6	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.0	53.2	3.8	73.6	45.1	0.4	40.7	34.4	19.0	53.0	33.6	0.7
LOS	D	D	A	E	D	A	D	C	B	D	C	A
Approach Delay		39.7			37.5			28.2			37.9	
Approach LOS		D			D			C			D	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 86.1	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 35.5	Intersection LOS: D
Intersection Capacity Utilization 78.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	331	283	173	440	109	452	75	643	531	537	855	122
Future Volume (veh/h)	331	283	173	440	109	452	75	643	531	537	855	122
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	338	289	177	449	111	0	77	656	309	548	872	108
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	376	342	458	478	233		189	863	385	624	1058	471
Arrive On Green	0.21	0.18	0.18	0.14	0.12	0.00	0.10	0.24	0.24	0.18	0.29	0.29
Sat Flow, veh/h	1810	1900	1610	3510	1900	1610	1810	3610	1610	3510	3610	1607
Grp Volume(v), veh/h	338	289	177	449	111	0	77	656	309	548	872	108
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1755	1900	1610	1810	1805	1610	1755	1805	1607
Q Serve(g_s), s	15.3	12.3	2.1	10.6	4.6	0.0	3.3	14.2	15.1	12.7	18.9	2.2
Cycle Q Clear(g_c), s	15.3	12.3	2.1	10.6	4.6	0.0	3.3	14.2	15.1	12.7	18.9	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	376	342	458	478	233		189	863	385	624	1058	471
V/C Ratio(X)	0.90	0.85	0.39	0.94	0.48		0.41	0.76	0.80	0.88	0.82	0.23
Avail Cap(c_a), veh/h	397	395	503	478	236		229	1043	465	662	1267	564
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.4	33.2	8.3	35.9	34.3	0.0	35.1	29.7	30.0	33.6	27.6	6.2
Incr Delay (d2), s/veh	22.2	14.0	0.5	26.9	1.5	0.0	0.5	2.7	8.3	11.7	3.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	6.9	1.1	6.0	2.1	0.0	1.4	5.9	6.3	6.0	7.9	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.5	47.2	8.9	62.7	35.8	0.0	35.6	32.4	38.3	45.2	31.5	6.4
LnGrp LOS	D	D	A	E	D		D	C	D	D	C	A
Approach Vol, veh/h		804			560	A		1042			1528	
Approach Delay, s/veh		41.8			57.4			34.4			34.6	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	26.2	17.2	20.9	15.0	30.8	22.0	16.1
Change Period (Y+Rc), s	4.6	6.2	5.8	* 5.8	6.2	* 6.2	4.6	5.8
Max Green Setting (Gmax), s	15.8	24.2	11.4	* 17	10.6	* 29	18.4	10.4
Max Q Clear Time (g_c+I1), s	14.7	17.1	12.6	14.3	5.3	20.9	17.3	6.6
Green Ext Time (p_c), s	0.2	2.9	0.0	0.7	0.0	3.7	0.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	39.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	2	22	42	11	20	1193	159	1404
Future Volume (vph)	2	22	42	11	20	1193	159	1404
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.6	31.6	31.6	31.6	9.6	28.2	9.6	28.2
Total Split (s)	31.6	31.6	31.6	31.6	9.6	37.4	11.0	38.8
Total Split (%)	39.5%	39.5%	39.5%	39.5%	12.0%	46.8%	13.8%	48.5%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	6.2	4.6	6.2
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		13.3		13.3	5.5	28.0	7.0	42.3
Actuated g/C Ratio		0.24		0.24	0.10	0.50	0.12	0.75
v/c Ratio		0.07		0.19	0.11	0.74	0.73	0.53
Control Delay		17.5		18.9	33.0	17.6	53.3	10.8
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		17.5		18.9	33.0	17.6	53.3	10.8
LOS		B		B	C	B	D	B
Approach Delay		17.5		18.9		17.8		15.1
Approach LOS		B		B		B		B

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 56.5	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 16.4	Intersection LOS: B
Intersection Capacity Utilization 68.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 17: Rubidoux Bl. & 24th St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	22	8	42	11	13	20	1193	100	159	1404	4
Future Volume (veh/h)	2	22	8	42	11	13	20	1193	100	159	1404	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2	22	8	43	11	13	20	1217	102	162	1433	4
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	80	156	54	210	55	36	44	1579	132	206	2060	6
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.02	0.47	0.47	0.11	0.56	0.56
Sat Flow, veh/h	46	1306	451	798	460	303	1810	3372	282	1810	3693	10
Grp Volume(v), veh/h	32	0	0	67	0	0	20	650	669	162	700	737
Grp Sat Flow(s),veh/h/ln	1803	0	0	1562	0	0	1810	1805	1849	1810	1805	1898
Q Serve(g_s), s	0.0	0.0	0.0	0.8	0.0	0.0	0.6	15.5	15.5	4.5	14.5	14.5
Cycle Q Clear(g_c), s	0.8	0.0	0.0	1.9	0.0	0.0	0.6	15.5	15.5	4.5	14.5	14.5
Prop In Lane	0.06		0.25	0.64		0.19	1.00		0.15	1.00		0.01
Lane Grp Cap(c), veh/h	290	0	0	301	0	0	44	845	866	206	1007	1059
V/C Ratio(X)	0.11	0.00	0.00	0.22	0.00	0.00	0.46	0.77	0.77	0.79	0.70	0.70
Avail Cap(c_a), veh/h	1009	0	0	908	0	0	175	1091	1118	224	1140	1199
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.4	0.0	0.0	20.8	0.0	0.0	24.8	11.4	11.4	22.3	8.2	8.2
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.4	0.0	0.0	2.8	2.5	2.5	13.9	1.6	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.7	0.0	0.0	0.2	4.5	4.6	2.4	3.4	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.5	0.0	0.0	21.2	0.0	0.0	27.6	13.9	14.0	36.2	9.8	9.8
LnGrp LOS	C	A	A	C	A	A	C	B	B	D	A	A
Approach Vol, veh/h		32			67			1339			1599	
Approach Delay, s/veh		20.5			21.2			14.2			12.5	
Approach LOS		C			C			B			B	

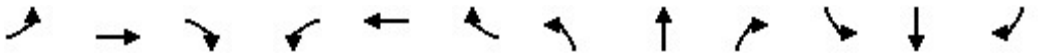
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.5	30.4		10.8	5.8	35.0		10.8				
Change Period (Y+Rc), s	4.6	6.2		4.6	4.6	6.2		4.6				
Max Green Setting (Gmax), s	6.4	31.2		27.0	5.0	32.6		27.0				
Max Q Clear Time (g_c+I1), s	6.5	17.5		2.8	2.6	16.5		3.9				
Green Ext Time (p_c), s	0.0	6.6		0.1	0.0	8.0		0.3				

Intersection Summary		
HCM 6th Ctrl Delay		13.5
HCM 6th LOS		B

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	16	6	4	4	10	1291	7	1368
Future Volume (vph)	16	6	4	4	10	1291	7	1368
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.6	31.6	31.6	31.6	9.6	28.2	9.6	28.2
Total Split (s)	31.6	31.6	31.6	31.6	9.7	48.7	9.7	48.7
Total Split (%)	35.1%	35.1%	35.1%	35.1%	10.8%	54.1%	10.8%	54.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	6.2	4.6	6.2
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		15.0		15.0	6.6	36.2	6.6	36.2
Actuated g/C Ratio		0.31		0.31	0.13	0.74	0.13	0.74
v/c Ratio		0.09		0.03	0.05	0.54	0.03	0.57
Control Delay		15.1		15.8	32.5	9.9	32.6	10.5
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		15.1		15.8	32.5	9.9	32.6	10.5
LOS		B		B	C	A	C	B
Approach Delay		15.1		15.8		10.1		10.6
Approach LOS		B		B		B		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 48.9	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.57	
Intersection Signal Delay: 10.5	Intersection LOS: B
Intersection Capacity Utilization 55.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 18: Rubidoux Bl. & 26th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	6	17	4	4	7	10	1291	17	7	1368	12
Future Volume (veh/h)	16	6	17	4	4	7	10	1291	17	7	1368	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	18	7	19	4	4	8	11	1419	19	8	1503	13
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	150	41	65	116	56	77	26	2097	28	19	2095	18
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.01	0.57	0.57	0.01	0.57	0.57
Sat Flow, veh/h	478	439	697	233	601	834	1810	3647	49	1810	3668	32
Grp Volume(v), veh/h	44	0	0	16	0	0	11	702	736	8	739	777
Grp Sat Flow(s),veh/h/ln	1615	0	0	1668	0	0	1810	1805	1891	1810	1805	1894
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.3	12.9	13.0	0.2	14.2	14.3
Cycle Q Clear(g_c), s	1.1	0.0	0.0	0.4	0.0	0.0	0.3	12.9	13.0	0.2	14.2	14.3
Prop In Lane	0.41		0.43	0.25		0.50	1.00		0.03	1.00		0.02
Lane Grp Cap(c), veh/h	255	0	0	248	0	0	26	1038	1087	19	1031	1082
V/C Ratio(X)	0.17	0.00	0.00	0.06	0.00	0.00	0.43	0.68	0.68	0.42	0.72	0.72
Avail Cap(c_a), veh/h	994	0	0	1010	0	0	193	1604	1680	193	1604	1683
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.2	0.0	0.0	19.9	0.0	0.0	23.4	7.1	7.1	23.5	7.4	7.4
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.1	0.0	0.0	4.1	0.8	0.7	5.4	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.2	0.0	0.0	0.1	2.4	2.5	0.1	2.7	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.5	0.0	0.0	20.0	0.0	0.0	27.5	7.8	7.8	28.9	8.4	8.4
LnGrp LOS	C	A	A	B	A	A	C	A	A	C	A	A
Approach Vol, veh/h		44			16			1449			1524	
Approach Delay, s/veh		20.5			20.0			8.0			8.5	
Approach LOS		C			B			A			A	

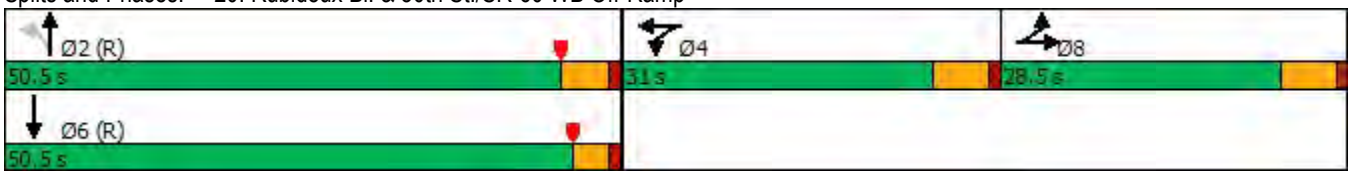
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	33.7		9.0	5.3	33.5		9.0				
Change Period (Y+Rc), s	4.6	6.2		4.6	4.6	6.2		4.6				
Max Green Setting (Gmax), s	5.1	42.5		27.0	5.1	42.5		27.0				
Max Q Clear Time (g_c+I1), s	2.2	15.0		3.1	2.3	16.3		2.4				
Green Ext Time (p_c), s	0.0	10.4		0.2	0.0	11.1		0.0				

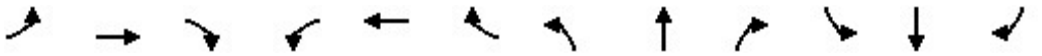
Intersection Summary		
HCM 6th Ctrl Delay		8.5
HCM 6th LOS		A

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Configurations							
Traffic Volume (vph)	44	0	535	114	102	1251	1457
Future Volume (vph)	44	0	535	114	102	1251	1457
Turn Type	Split	NA	Split	NA	Perm	NA	NA
Protected Phases	8	8	4	4		2	6
Permitted Phases					2		
Detector Phase	8	8	4	4	2	2	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.5	28.5	31.0	31.0	50.5	50.5	50.5
Total Split (%)	25.9%	25.9%	28.2%	28.2%	45.9%	45.9%	45.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	16.7	16.7	25.5	25.5	51.8	51.8	52.8
Actuated g/C Ratio	0.15	0.15	0.23	0.23	0.47	0.47	0.48
v/c Ratio	0.18	0.76	1.06	1.02	1.63	0.80	0.95
Control Delay	39.7	45.6	102.1	90.5	359.1	19.8	42.0
Queue Delay	0.0	0.6	30.6	40.4	0.0	11.6	0.0
Total Delay	39.7	46.2	132.7	130.9	359.1	31.4	42.0
LOS	D	D	F	F	F	C	D
Approach Delay		45.1		131.8		56.2	42.0
Approach LOS		D		F		E	D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.63	
Intersection Signal Delay: 64.8	Intersection LOS: E
Intersection Capacity Utilization 105.9%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	0	215	535	114	117	102	1251	0	0	1457	55
Future Volume (veh/h)	44	0	215	535	114	117	102	1251	0	0	1457	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	48	0	63	402	376	98	111	1360	0	0	1584	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	106	0	94	419	337	88	131	2036	0	0	2005	72
Arrive On Green	0.06	0.00	0.06	0.23	0.23	0.23	0.19	0.19	0.00	0.00	0.56	0.56
Sat Flow, veh/h	1810	0	1610	1810	1453	379	310	3705	0	0	3649	128
Grp Volume(v), veh/h	48	0	63	402	0	474	111	1360	0	0	802	839
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1810	0	1832	310	1805	0	0	1805	1877
Q Serve(g_s), s	2.8	0.0	4.2	24.1	0.0	25.5	23.3	38.5	0.0	0.0	38.4	38.8
Cycle Q Clear(g_c), s	2.8	0.0	4.2	24.1	0.0	25.5	62.0	38.5	0.0	0.0	38.4	38.8
Prop In Lane	1.00		1.00	1.00		0.21	1.00		0.00	0.00		0.07
Lane Grp Cap(c), veh/h	106	0	94	419	0	425	131	2036	0	0	1018	1059
V/C Ratio(X)	0.45	0.00	0.67	0.96	0.00	1.12	0.85	0.67	0.00	0.00	0.79	0.79
Avail Cap(c_a), veh/h	378	0	337	419	0	425	131	2036	0	0	1018	1059
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.92	0.92	0.00	0.00	0.44	0.44
Uniform Delay (d), s/veh	50.1	0.0	50.7	41.7	0.0	42.3	68.9	35.2	0.0	0.0	18.8	18.9
Incr Delay (d2), s/veh	3.6	0.0	9.4	33.3	0.0	79.2	43.0	1.6	0.0	0.0	2.8	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	2.0	14.2	0.0	20.3	4.8	18.9	0.0	0.0	15.2	16.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.7	0.0	60.1	75.1	0.0	121.4	111.8	36.8	0.0	0.0	21.6	21.7
LnGrp LOS	D	A	E	E	A	F	F	D	A	A	C	C
Approach Vol, veh/h		111			876			1471			1641	
Approach Delay, s/veh		57.3			100.2			42.5			21.6	
Approach LOS		E			F			D			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		67.0		31.0		67.0		12.0				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		45.5		25.5		* 47		23.0				
Max Q Clear Time (g_c+I1), s		64.0		27.5		40.8		6.2				
Green Ext Time (p_c), s		0.0		0.0		4.7		0.5				

Intersection Summary												
HCM 6th Ctrl Delay			46.9									
HCM 6th LOS			D									

Notes

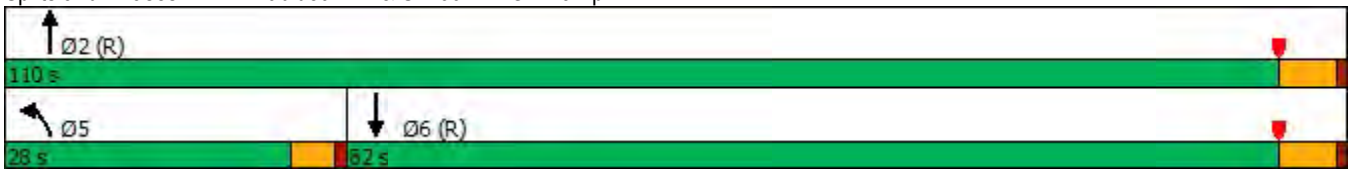
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	NBL	NBT	SBT
Lane Configurations			
Traffic Volume (vph)	238	1360	1463
Future Volume (vph)	238	1360	1463
Turn Type	Prot	NA	NA
Protected Phases	5	2	6
Permitted Phases			
Detector Phase	5	2	6
Switch Phase			
Minimum Initial (s)	5.0	10.0	10.0
Minimum Split (s)	9.6	27.8	27.8
Total Split (s)	28.0	110.0	82.0
Total Split (%)	25.5%	100.0%	74.5%
Yellow Time (s)	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8
Lead/Lag	Lead		Lag
Lead-Lag Optimize?	Yes		Yes
Recall Mode	None	C-Min	C-Min
Act Effct Green (s)	19.2	110.0	80.4
Actuated g/C Ratio	0.17	1.00	0.73
v/c Ratio	0.82	0.40	0.98
Control Delay	73.3	0.2	18.9
Queue Delay	0.0	0.1	42.0
Total Delay	73.3	0.4	61.0
LOS	E	A	E
Approach Delay		11.2	61.0
Approach LOS		B	E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay: 40.6	Intersection LOS: D
Intersection Capacity Utilization 89.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 21: Rubidoux Bl. & SR-60 WB On-Ramp



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	238	1360	1463	838
Future Volume (veh/h)	0	0	238	1360	1463	838
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach				No	No	
Adj Sat Flow, veh/h/ln			1900	1900	1900	1900
Adj Flow Rate, veh/h			256	1462	1573	901
Peak Hour Factor			0.93	0.93	0.93	0.93
Percent Heavy Veh, %			0	0	0	0
Cap, veh/h			282	3420	1719	896
Arrive On Green			0.31	1.00	1.00	1.00
Sat Flow, veh/h			1810	3705	2388	1196
Grp Volume(v), veh/h			256	1462	1205	1269
Grp Sat Flow(s),veh/h/ln			1810	1805	1805	1684
Q Serve(g_s), s			14.9	0.0	0.0	82.5
Cycle Q Clear(g_c), s			14.9	0.0	0.0	82.5
Prop In Lane			1.00			0.71
Lane Grp Cap(c), veh/h			282	3420	1353	1262
V/C Ratio(X)			0.91	0.43	0.89	1.01
Avail Cap(c_a), veh/h			385	3420	1353	1262
HCM Platoon Ratio			2.00	2.00	2.00	2.00
Upstream Filter(I)			0.61	0.61	0.15	0.15
Uniform Delay (d), s/veh			37.1	0.0	0.0	0.0
Incr Delay (d2), s/veh			11.6	0.2	1.6	11.0
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			6.2	0.1	0.6	3.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			48.7	0.2	1.6	11.0
LnGrp LOS			D	A	A	F
Approach Vol, veh/h				1718	2474	
Approach Delay, s/veh				7.5	6.4	
Approach LOS				A	A	

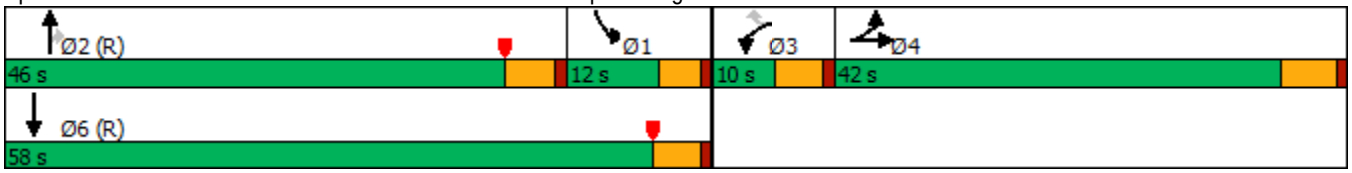
Timer - Assigned Phs	2			5	6
Phs Duration (G+Y+Rc), s	110.0			21.7	88.3
Change Period (Y+Rc), s	5.8			4.6	5.8
Max Green Setting (Gmax), s	104.2			23.4	76.2
Max Q Clear Time (g_c+I1), s	2.0			16.9	84.5
Green Ext Time (p_c), s	16.8			0.2	0.0

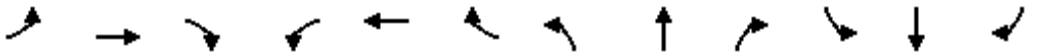
Intersection Summary	
HCM 6th Ctrl Delay	6.9
HCM 6th LOS	A

Lane Group	EBL	EBT	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	749	48	14	2	913	341	173	1196
Future Volume (vph)	749	48	14	2	913	341	173	1196
Turn Type	Split	NA	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4	4	3		2		1	6
Permitted Phases				3		2		
Detector Phase	4	4	3	3	2	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	10.0	10.0	45.0	45.0	9.5	30.0
Total Split (s)	42.0	42.0	10.0	10.0	46.0	46.0	12.0	58.0
Total Split (%)	38.2%	38.2%	9.1%	9.1%	41.8%	41.8%	10.9%	52.7%
Yellow Time (s)	4.5	4.5	4.0	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.0	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	42.5	42.5	5.0	5.0	35.6	35.6	12.9	53.0
Actuated g/C Ratio	0.39	0.39	0.05	0.05	0.32	0.32	0.12	0.48
v/c Ratio	0.99	0.89	0.18	0.01	0.82	0.48	0.85	0.72
Control Delay	67.7	45.2	55.8	0.0	40.2	5.8	55.3	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.4
Total Delay	67.7	45.2	55.8	0.0	40.2	5.8	55.3	49.9
LOS	E	D	E	A	D	A	E	D
Approach Delay		56.9			30.8			50.6
Approach LOS		E			C			D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 46.1	Intersection LOS: D
Intersection Capacity Utilization 88.6%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	749	48	413	14	0	2	0	913	341	173	1196	0
Future Volume (veh/h)	749	48	413	14	0	2	0	913	341	173	1196	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	565	351	300	15	0	0	0	951	307	180	1246	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	600	314	268	0	0	0	0	1093	488	406	2068	0
Arrive On Green	0.33	0.33	0.33	0.00	0.00	0.00	0.00	0.30	0.30	0.07	0.19	0.00
Sat Flow, veh/h	1810	946	809		0		0	3705	1610	1810	3705	0
Grp Volume(v), veh/h	565	0	651		0.0		0	951	307	180	1246	0
Grp Sat Flow(s),veh/h/ln	1810	0	1754				0	1805	1610	1810	1805	0
Q Serve(g_s), s	33.4	0.0	36.5				0.0	27.4	16.9	10.5	34.7	0.0
Cycle Q Clear(g_c), s	33.4	0.0	36.5				0.0	27.4	16.9	10.5	34.7	0.0
Prop In Lane	1.00		0.46				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	600	0	582				0	1093	488	406	2068	0
V/C Ratio(X)	0.94	0.00	1.12				0.00	0.87	0.63	0.44	0.60	0.00
Avail Cap(c_a), veh/h	600	0	582				0	1346	600	406	2068	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.56	0.56	0.15	0.15	0.00
Uniform Delay (d), s/veh	35.7	0.0	36.8				0.0	36.3	28.9	44.4	33.1	0.0
Incr Delay (d2), s/veh	22.9	0.0	74.2				0.0	5.6	3.4	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.7	0.0	26.7				0.0	12.4	6.7	5.0	16.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.6	0.0	110.9				0.0	41.9	32.3	44.4	33.3	0.0
LnGrp LOS	E	A	F				A	D	C	D	C	A
Approach Vol, veh/h		1216						1258			1426	
Approach Delay, s/veh		86.6						39.6			34.7	
Approach LOS		F						D			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	29.7	38.3		42.0		68.0						
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0						
Max Green Setting (Gmax), s	7.5	* 41		36.5		53.0						
Max Q Clear Time (g_c+I1), s	12.5	29.4		38.5		36.7						
Green Ext Time (p_c), s	0.0	3.9		0.0		5.5						

Intersection Summary	
HCM 6th Ctrl Delay	52.5
HCM 6th LOS	D

Notes

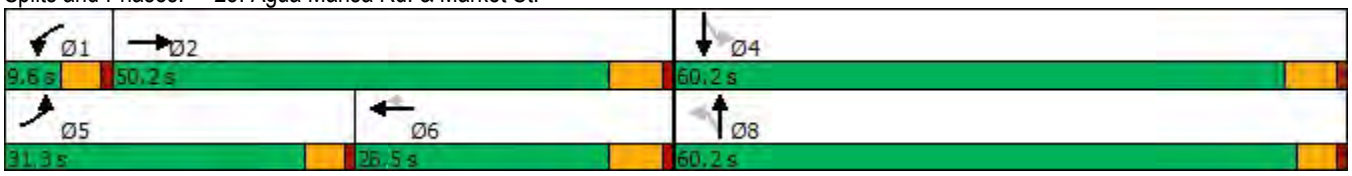
User approved volume balancing among the lanes for turning movement.

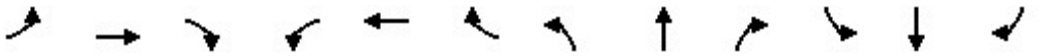
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	WBR	NBT	SBL	SBT	Ø1
Lane Configurations								
Traffic Volume (vph)	651	695	599	210	3	261	2	
Future Volume (vph)	651	695	599	210	3	261	2	
Turn Type	Prot	NA	NA	Perm	NA	Perm	NA	
Protected Phases	5	2	6		8		4	1
Permitted Phases				6		4		
Detector Phase	5	2	6	6	8	4	4	
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	31.8	26.8	26.8	14.6	43.8	43.8	9.6
Total Split (s)	31.3	50.2	28.5	28.5	60.2	60.2	60.2	9.6
Total Split (%)	26.1%	41.8%	23.8%	23.8%	50.2%	50.2%	50.2%	8%
Yellow Time (s)	3.6	4.8	4.8	4.8	3.6	4.8	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.6	5.8	5.8	5.8	4.6		5.8	
Lead/Lag	Lead	Lag	Lag	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				Yes
Recall Mode	None	Max	Max	Max	None	None	None	None
Act Effct Green (s)	25.3	52.7	22.8	22.8	53.6		52.4	
Actuated g/C Ratio	0.22	0.45	0.20	0.20	0.46		0.45	
v/c Ratio	0.91	0.46	0.90	0.45	0.00		0.98	
Control Delay	62.4	23.5	64.3	8.6	17.3		56.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	62.4	23.5	64.3	8.6	17.3		56.4	
LOS	E	C	E	A	B		E	
Approach Delay		42.3	49.9		17.3		56.4	
Approach LOS		D	D		B		E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 116.7	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay: 47.7	Intersection LOS: D
Intersection Capacity Utilization 94.6%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	651	695	4	0	599	210	0	3	0	261	2	402
Future Volume (veh/h)	651	695	4	0	599	210	0	3	0	261	2	402
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	693	739	3	0	637	78	0	3	0	278	2	190
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	784	1927	8	2	898	401	0	666	0	373	2	212
Arrive On Green	0.22	0.52	0.52	0.00	0.25	0.25	0.00	0.35	0.00	0.35	0.35	0.35
Sat Flow, veh/h	3510	3687	15	1810	3610	1610	0	1900	0	887	6	606
Grp Volume(v), veh/h	693	362	380	0	637	78	0	3	0	470	0	0
Grp Sat Flow(s),veh/h/ln	1755	1805	1897	1810	1805	1610	0	1900	0	1499	0	0
Q Serve(g_s), s	17.4	10.9	10.9	0.0	14.7	3.5	0.0	0.1	0.0	27.0	0.0	0.0
Cycle Q Clear(g_c), s	17.4	10.9	10.9	0.0	14.7	3.5	0.0	0.1	0.0	27.1	0.0	0.0
Prop In Lane	1.00		0.01	1.00		1.00	0.00		0.00	0.59		0.40
Lane Grp Cap(c), veh/h	784	943	991	2	898	401	0	666	0	588	0	0
V/C Ratio(X)	0.88	0.38	0.38	0.00	0.71	0.19	0.00	0.00	0.00	0.80	0.00	0.00
Avail Cap(c_a), veh/h	1027	943	991	99	898	401	0	1158	0	958	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	34.3	13.0	13.0	0.0	31.3	27.1	0.0	19.3	0.0	28.1	0.0	0.0
Incr Delay (d2), s/veh	6.3	1.2	1.1	0.0	4.7	1.1	0.0	0.0	0.0	2.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	4.2	4.4	0.0	6.6	1.4	0.0	0.0	0.0	9.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.6	14.2	14.1	0.0	36.0	28.1	0.0	19.3	0.0	30.7	0.0	0.0
LnGrp LOS	D	B	B	A	D	C	A	B	A	C	A	A
Approach Vol, veh/h		1435			715			3			470	
Approach Delay, s/veh		26.9			35.1			19.3			30.7	
Approach LOS		C			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	53.5		37.8	25.0	28.5		37.8				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	44.4		54.4	26.7	22.7		* 56				
Max Q Clear Time (g_c+I1), s	0.0	12.9		29.1	19.4	16.7		2.1				
Green Ext Time (p_c), s	0.0	4.4		2.9	0.9	2.1		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		29.8
HCM 6th LOS		C

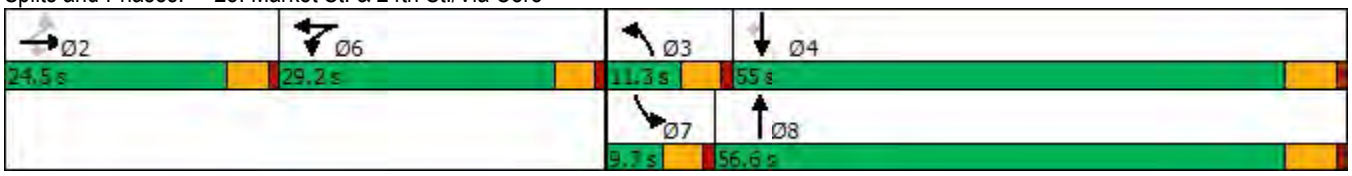
Notes

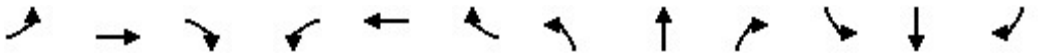
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	3	31	206	235	39	49	964	6	937	3
Future Volume (vph)	3	31	206	235	39	49	964	6	937	3
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	24.5	24.5	24.5	29.2	29.2	11.3	56.6	9.7	55.0	55.0
Total Split (%)	20.4%	20.4%	20.4%	24.3%	24.3%	9.4%	47.2%	8.1%	45.8%	45.8%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		13.3	13.3	20.1	20.1	6.3	57.0	5.1	50.1	50.1
Actuated g/C Ratio		0.12	0.12	0.19	0.19	0.06	0.53	0.05	0.47	0.47
v/c Ratio		0.35	0.72	0.80	0.18	0.53	0.63	0.08	0.64	0.00
Control Delay		53.8	31.1	60.6	31.8	71.0	21.4	56.0	26.0	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		53.8	31.1	60.6	31.8	71.0	21.4	56.0	26.0	0.0
LOS		D	C	E	C	E	C	E	C	A
Approach Delay		34.3			55.2		23.6		26.1	
Approach LOS		C			E		C		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 107.4	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 29.1	Intersection LOS: C
Intersection Capacity Utilization 65.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	31	206	235	39	16	49	964	79	6	937	3
Future Volume (veh/h)	3	31	206	235	39	16	49	964	79	6	937	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	3	36	152	270	45	9	56	1108	90	7	1077	3
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	17	207	190	310	264	53	72	1722	140	16	1729	771
Arrive On Green	0.12	0.12	0.12	0.17	0.17	0.17	0.04	0.51	0.51	0.01	0.48	0.48
Sat Flow, veh/h	146	1747	1598	1810	1537	307	1810	3375	274	1810	3610	1610
Grp Volume(v), veh/h	39	0	152	270	0	54	56	592	606	7	1077	3
Grp Sat Flow(s),veh/h/ln	1893	0	1598	1810	0	1845	1810	1805	1844	1810	1805	1610
Q Serve(g_s), s	1.9	0.0	9.5	14.9	0.0	2.6	3.1	24.6	24.6	0.4	22.8	0.1
Cycle Q Clear(g_c), s	1.9	0.0	9.5	14.9	0.0	2.6	3.1	24.6	24.6	0.4	22.8	0.1
Prop In Lane	0.08		1.00	1.00		0.17	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	224	0	190	310	0	316	72	921	941	16	1729	771
V/C Ratio(X)	0.17	0.00	0.80	0.87	0.00	0.17	0.77	0.64	0.64	0.44	0.62	0.00
Avail Cap(c_a), veh/h	367	0	310	433	0	442	118	921	941	90	1729	771
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.7	0.0	44.1	41.4	0.0	36.3	48.8	18.3	18.3	50.7	19.9	14.0
Incr Delay (d2), s/veh	0.4	0.0	7.7	13.0	0.0	0.3	6.4	3.4	3.4	6.9	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	4.0	7.8	0.0	1.2	1.5	10.1	10.3	0.2	9.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.1	0.0	51.7	54.4	0.0	36.6	55.2	21.8	21.7	57.5	21.6	14.0
LnGrp LOS	D	A	D	D	A	D	E	C	C	E	C	B
Approach Vol, veh/h		191			324			1254			1087	
Approach Delay, s/veh		49.6			51.4			23.3			21.8	
Approach LOS		D			D			C			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.8	8.7	55.0		22.2	5.5	58.2				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		19.9	6.7	49.2		24.6	5.1	50.8				
Max Q Clear Time (g_c+I1), s		11.5	5.1	24.8		16.9	2.4	26.6				
Green Ext Time (p_c), s		0.4	0.0	7.7		0.7	0.0	8.0				

Intersection Summary	
HCM 6th Ctrl Delay	27.6
HCM 6th LOS	C

Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	326	53	878	476
Future Volume (vph)	326	53	878	476
Turn Type	Prot	Prot	NA	NA
Protected Phases	4	5	2	6
Permitted Phases				
Detector Phase	4	5	2	6
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	32.8	9.6	15.8	22.8
Total Split (s)	35.0	10.0	55.0	45.0
Total Split (%)	38.9%	11.1%	61.1%	50.0%
Yellow Time (s)	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.8
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	Min	Min
Act Effct Green (s)	27.0	5.4	47.2	39.6
Actuated g/C Ratio	0.31	0.06	0.55	0.46
v/c Ratio	0.91	0.59	0.55	0.97
Control Delay	50.0	63.6	14.1	50.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	50.0	63.6	14.1	50.6
LOS	D	E	B	D
Approach Delay	50.0		16.9	50.6
Approach LOS	D		B	D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 85.9	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 34.9	Intersection LOS: C
Intersection Capacity Utilization 77.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 33: Agua Mansa Rd. & El Rivino Rd.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	326	87	53	878	476	187
Future Volume (veh/h)	326	87	53	878	476	187
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	408	0	66	1098	595	234
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	461		89	2145	630	248
Arrive On Green	0.26	0.00	0.05	0.59	0.49	0.49
Sat Flow, veh/h	1805	0	1810	3705	1297	510
Grp Volume(v), veh/h	409	0	66	1098	0	829
Grp Sat Flow(s),veh/h/ln	1810	0	1810	1805	0	1807
Q Serve(g_s), s	16.8	0.0	2.8	13.7	0.0	33.6
Cycle Q Clear(g_c), s	16.8	0.0	2.8	13.7	0.0	33.6
Prop In Lane	1.00	0.00	1.00			0.28
Lane Grp Cap(c), veh/h	462		89	2145	0	877
V/C Ratio(X)	0.88		0.74	0.51	0.00	0.95
Avail Cap(c_a), veh/h	685		127	2303	0	919
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.6	0.0	36.2	9.1	0.0	18.9
Incr Delay (d2), s/veh	9.3	0.0	6.6	0.2	0.0	17.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	0.0	1.3	4.1	0.0	15.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	37.0	0.0	42.8	9.3	0.0	36.4
LnGrp LOS	D		D	A	A	D
Approach Vol, veh/h	409	A		1164	829	
Approach Delay, s/veh	37.0			11.2	36.4	
Approach LOS	D			B	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		51.6		25.5	8.4	43.2
Change Period (Y+Rc), s		5.8		5.8	4.6	5.8
Max Green Setting (Gmax), s		49.2		29.2	5.4	39.2
Max Q Clear Time (g_c+I1), s		15.7		18.8	4.8	35.6
Green Ext Time (p_c), s		8.7		0.9	0.0	1.8

Intersection Summary		
HCM 6th Ctrl Delay	24.3	
HCM 6th LOS	C	

Notes

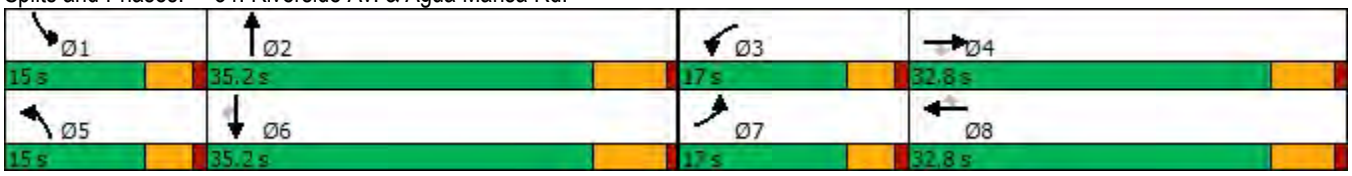
User approved volume balancing among the lanes for turning movement.

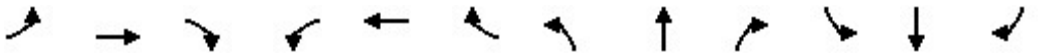
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	252	485	248	94	296	80	201	525	118	573	139
Future Volume (vph)	252	485	248	94	296	80	201	525	118	573	139
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	17.0	32.8	32.8	17.0	32.8	32.8	15.0	35.2	15.0	35.2	35.2
Total Split (%)	17.0%	32.8%	32.8%	17.0%	32.8%	32.8%	15.0%	35.2%	15.0%	35.2%	35.2%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	12.7	22.2	22.2	8.7	15.8	15.8	10.6	21.8	9.1	20.3	20.3
Actuated g/C Ratio	0.16	0.27	0.27	0.11	0.19	0.19	0.13	0.27	0.11	0.25	0.25
v/c Ratio	0.94	0.51	0.42	0.51	0.44	0.20	0.89	0.71	0.61	0.66	0.29
Control Delay	79.0	29.4	6.1	46.3	31.0	2.0	76.0	30.9	51.2	31.7	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.0	29.4	6.1	46.3	31.0	2.0	76.0	30.9	51.2	31.7	6.4
LOS	E	C	A	D	C	A	E	C	D	C	A
Approach Delay		36.2			29.2			41.5		30.2	
Approach LOS		D			C			D		C	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 81.4	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 35.0	Intersection LOS: D
Intersection Capacity Utilization 68.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	252	485	248	94	296	80	201	525	127	118	573	139
Future Volume (veh/h)	252	485	248	94	296	80	201	525	127	118	573	139
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	262	505	160	98	308	68	209	547	126	123	597	137
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	306	886	394	127	530	236	252	835	192	158	846	376
Arrive On Green	0.17	0.25	0.25	0.07	0.15	0.15	0.14	0.29	0.29	0.09	0.23	0.23
Sat Flow, veh/h	1810	3610	1604	1810	3610	1607	1810	2915	669	1810	3610	1603
Grp Volume(v), veh/h	262	505	160	98	308	68	209	338	335	123	597	137
Grp Sat Flow(s),veh/h/ln	1810	1805	1604	1810	1805	1607	1810	1805	1780	1810	1805	1603
Q Serve(g_s), s	9.7	8.5	5.8	3.7	5.5	2.6	7.8	11.4	11.5	4.6	10.5	4.9
Cycle Q Clear(g_c), s	9.7	8.5	5.8	3.7	5.5	2.6	7.8	11.4	11.5	4.6	10.5	4.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	306	886	394	127	530	236	252	517	510	158	846	376
V/C Ratio(X)	0.86	0.57	0.41	0.77	0.58	0.29	0.83	0.65	0.66	0.78	0.71	0.36
Avail Cap(c_a), veh/h	324	1409	626	324	1409	627	272	749	738	272	1498	665
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	22.9	21.9	31.6	27.5	26.3	29.0	21.7	21.7	30.9	24.3	22.2
Incr Delay (d2), s/veh	17.9	0.6	0.7	3.7	1.0	0.7	16.5	1.4	1.5	3.2	1.1	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	3.3	2.0	1.6	2.2	1.0	4.1	4.2	4.2	1.9	4.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.8	23.5	22.5	35.3	28.5	27.0	45.5	23.1	23.2	34.1	25.4	22.8
LnGrp LOS	D	C	C	D	C	C	D	C	C	C	C	C
Approach Vol, veh/h		927			474			882			857	
Approach Delay, s/veh		29.6			29.7			28.4			26.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	26.3	9.5	22.8	14.2	22.7	16.3	16.0
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	10.4	28.7	12.4	27.0	10.4	28.7	12.4	27.0
Max Q Clear Time (g_c+I1), s	6.6	13.5	5.7	10.5	9.8	12.5	11.7	7.5
Green Ext Time (p_c), s	0.0	3.1	0.0	3.2	0.0	3.5	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	28.4
HCM 6th LOS	C

APPENDIX 8.5: OPENING YEAR BACKGROUND CONDITIONS PLUS PROJECT OFF-RAMP QUEUING ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Lane Group	EBL	EBT	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	546	525	19	5	827	572	278	976
v/c Ratio	0.94	0.90	0.23	0.03	0.73	0.65	0.99	0.53
Control Delay	61.6	53.3	57.7	0.2	37.7	5.9	71.7	9.7
Queue Delay	0.0	0.2	0.0	0.0	0.2	0.0	0.0	2.0
Total Delay	61.6	53.5	57.7	0.2	37.9	5.9	71.7	11.7
Queue Length 50th (ft)	~405	360	13	0	278	0	211	174
Queue Length 95th (ft)	#645	#592	38	0	315	74	m#340	m203
Internal Link Dist (ft)		1049			1396			322
Turn Bay Length (ft)	300			25		200	90	
Base Capacity (vph)	582	583	82	191	1329	942	282	1841
Starvation Cap Reductn	0	0	0	0	0	0	0	676
Spillback Cap Reductn	0	2	0	0	84	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.90	0.23	0.03	0.66	0.61	0.99	0.84

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	655	605	15	2	951	355	180	1246
v/c Ratio	0.99	0.89	0.18	0.01	0.82	0.48	0.85	0.72
Control Delay	67.7	45.2	55.8	0.0	40.2	5.8	55.3	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.4
Total Delay	67.7	45.2	55.8	0.0	40.2	5.8	55.3	49.9
Queue Length 50th (ft)	445	336	10	0	321	11	132	308
Queue Length 95th (ft)	#808	#657	32	0	372	71	m#187	m314
Internal Link Dist (ft)		1049			1396			322
Turn Bay Length (ft)	300			25		200	90	
Base Capacity (vph)	662	676	82	191	1345	810	212	1739
Starvation Cap Reductn	0	0	0	0	0	0	0	571
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.99	0.89	0.18	0.01	0.71	0.44	0.85	1.07

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

APPENDIX 9.1: OPENING YEAR BACKGROUND PLUS PROJECT PLUS CUMULATIVE CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	9.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	302	4	738	376	4	222
Future Vol, veh/h	302	4	738	376	4	222
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	368	5	900	459	5	271

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	373	0	2627	368
Stage 1	-	-	-	-	368	-
Stage 2	-	-	-	-	2259	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1197	-	27	682
Stage 1	-	-	-	-	704	-
Stage 2	-	-	-	-	86	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1197	-	0	682
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	704	-
Stage 2	-	-	-	-	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	10.9	13.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	682	-	-	1197	-
HCM Lane V/C Ratio	0.404	-	-	0.752	-
HCM Control Delay (s)	13.8	-	-	16.5	0
HCM Lane LOS	B	-	-	C	A
HCM 95th %tile Q(veh)	2	-	-	7.6	-

Intersection	
Int Delay, s/veh	56.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	507	33	13	1051	0	53	8	16	2	19	25
Future Vol, veh/h	5	507	33	13	1051	0	53	8	16	2	19	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	626	41	16	1298	0	65	10	20	2	23	31

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1298	0	0	667	0	0	2016	1989	647	2004	2009	1298
Stage 1	-	-	-	-	-	-	659	659	-	1330	1330	-
Stage 2	-	-	-	-	-	-	1357	1330	-	674	679	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	540	-	-	932	-	-	~ 44	62	475	45	60	200
Stage 1	-	-	-	-	-	-	456	464	-	193	226	-
Stage 2	-	-	-	-	-	-	186	226	-	448	454	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	540	-	-	932	-	-	~ 23	57	475	35	55	200
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 23	57	-	35	55	-
Stage 1	-	-	-	-	-	-	448	456	-	190	212	-
Stage 2	-	-	-	-	-	-	131	212	-	413	446	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	$ 1199.6	103.4
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	31	540	-	-	932	-	-	87
HCM Lane V/C Ratio	3.067	0.011	-	-	0.017	-	-	0.653
HCM Control Delay (s)	$ 1199.6	11.7	0	-	8.9	0	-	103.4
HCM Lane LOS	F	B	A	-	A	A	-	F
HCM 95th %tile Q(veh)	11.2	0	-	-	0.1	-	-	3.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	31	46	1	16	49
Future Vol, veh/h	3	31	46	1	16	49
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	100	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	36	53	1	19	57

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	149	54	0	0	54	0
Stage 1	54	-	-	-	-	-
Stage 2	95	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	848	1019	-	-	1564	-
Stage 1	974	-	-	-	-	-
Stage 2	934	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	837	1019	-	-	1564	-
Mov Cap-2 Maneuver	837	-	-	-	-	-
Stage 1	974	-	-	-	-	-
Stage 2	922	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	1.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	837	1019	1564	-
HCM Lane V/C Ratio	-	-	0.004	0.035	0.012	-
HCM Control Delay (s)	-	-	9.3	8.7	7.3	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.1	0	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	34	0	5	0	36	7	10	61	0
Future Vol, veh/h	0	0	0	34	0	5	0	36	7	10	61	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	40	0	6	0	43	8	12	73	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	147	148	73	144	144	47	73	0	0	51	0	0
Stage 1	97	97	-	47	47	-	-	-	-	-	-	-
Stage 2	50	51	-	97	97	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	826	747	995	830	751	1028	1540	-	-	1568	-	-
Stage 1	914	819	-	972	860	-	-	-	-	-	-	-
Stage 2	968	856	-	914	819	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	816	741	995	825	745	1028	1540	-	-	1568	-	-
Mov Cap-2 Maneuver	816	741	-	825	745	-	-	-	-	-	-	-
Stage 1	914	812	-	972	860	-	-	-	-	-	-	-
Stage 2	962	856	-	907	812	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.5	0	1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1540	-	-	-	846	1568	-	-
HCM Lane V/C Ratio	-	-	-	-	0.055	0.008	-	-
HCM Control Delay (s)	0	-	-	0	9.5	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	0	0	38	73	22
Future Vol, veh/h	5	0	0	38	73	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	0	0	41	79	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	132	91	103	0	-	0
Stage 1	91	-	-	-	-	-
Stage 2	41	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	867	972	1502	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	987	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	867	972	1502	-	-	-
Mov Cap-2 Maneuver	867	-	-	-	-	-
Stage 1	938	-	-	-	-	-
Stage 2	987	-	-	-	-	-

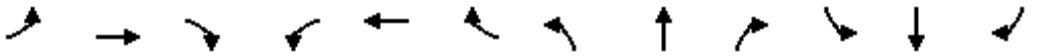
Approach	EB	NB	SB
HCM Control Delay, s	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1502	-	867	-	-
HCM Lane V/C Ratio	-	-	0.006	-	-
HCM Control Delay (s)	0	-	9.2	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	407	497	1355	1733	640
Future Volume (vph)	0	407	497	1355	1733	640
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	42.0	42.0	24.0	68.0	44.0	44.0
Total Split (%)	38.2%	38.2%	21.8%	61.8%	40.0%	40.0%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	38.0	38.0	20.0	63.5	39.5	39.5
Actuated g/C Ratio	0.35	0.35	0.18	0.58	0.36	0.36
v/c Ratio	1.39	0.68	1.58	0.68	0.97	0.71
Control Delay	215.3	33.1	298.5	17.7	49.8	9.5
Queue Delay	1.9	0.0	0.0	2.2	44.4	0.0
Total Delay	217.1	33.1	298.5	19.9	94.2	9.5
LOS	F	C	F	B	F	A
Approach Delay	161.1			94.7	71.4	
Approach LOS	F			F	E	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.58	
Intersection Signal Delay: 99.2	Intersection LOS: F
Intersection Capacity Utilization 184.5%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	798	0	407	497	1355	0	0	1733	640
Future Volume (veh/h)	0	0	0	798	0	407	497	1355	0	0	1733	640
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				831	0	318	518	1411	0	0	1805	401
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				625	0	556	329	2084	0	0	1863	578
Arrive On Green				0.35	0.00	0.35	0.24	0.77	0.00	0.00	0.36	0.36
Sat Flow, veh/h				1810	0	1610	1810	3705	0	0	5358	1610
Grp Volume(v), veh/h				831	0	318	518	1411	0	0	1805	401
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1729	1610
Q Serve(g_s), s				38.0	0.0	17.7	20.0	20.8	0.0	0.0	37.6	23.4
Cycle Q Clear(g_c), s				38.0	0.0	17.7	20.0	20.8	0.0	0.0	37.6	23.4
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				625	0	556	329	2084	0	0	1863	578
V/C Ratio(X)				1.33	0.00	0.57	1.57	0.68	0.00	0.00	0.97	0.69
Avail Cap(c_a), veh/h				625	0	556	329	2084	0	0	1863	578
HCM Platoon Ratio				1.00	1.00	1.00	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				36.0	0.0	29.4	41.7	7.8	0.0	0.0	34.6	30.1
Incr Delay (d2), s/veh				159.0	0.0	1.4	259.8	0.2	0.0	0.0	14.7	6.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				43.3	0.0	6.7	31.9	4.8	0.0	0.0	17.5	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				195.0	0.0	30.8	301.5	8.0	0.0	0.0	49.4	36.8
LnGrp LOS				F	A	C	F	A	A	A	D	D
Approach Vol, veh/h					1149			1929			2206	
Approach Delay, s/veh					149.6			86.8			47.1	
Approach LOS					F			F			D	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		68.0			24.0	44.0		42.0				
Change Period (Y+Rc), s		4.5			4.0	4.5		4.0				
Max Green Setting (Gmax), s		63.5			20.0	39.5		38.0				
Max Q Clear Time (g_c+I1), s		22.8			22.0	39.6		40.0				
Green Ext Time (p_c), s		13.8			0.0	0.0		0.0				

Intersection Summary		
HCM 6th Ctrl Delay	83.9	
HCM 6th LOS	F	

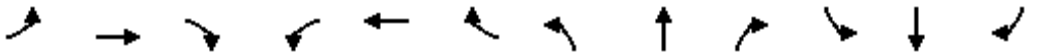
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	599	0	1254	718	500	2030
Future Volume (vph)	599	0	1254	718	500	2030
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	44.0	44.0	27.0	27.0	39.0	66.0
Total Split (%)	40.0%	40.0%	24.5%	24.5%	35.5%	60.0%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	40.5	40.5	23.0	23.0	35.5	62.0
Actuated g/C Ratio	0.37	0.37	0.21	0.21	0.32	0.56
v/c Ratio	0.92	1.83	1.24	0.92	0.92	1.07
Control Delay	54.9	402.9	147.3	29.0	34.4	53.9
Queue Delay	2.7	0.2	0.0	0.0	46.6	12.6
Total Delay	57.7	403.1	147.3	29.0	81.0	66.5
LOS	E	F	F	C	F	E
Approach Delay		283.6	104.2			69.4
Approach LOS		F	F			E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.83	
Intersection Signal Delay: 135.8	Intersection LOS: F
Intersection Capacity Utilization 184.5%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	599	0	960	0	0	0	0	1254	718	500	2030	0
Future Volume (veh/h)	599	0	960	0	0	0	0	1254	718	500	2030	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	644	0	980				0	1348	498	538	2183	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	666	0	593				0	1085	336	576	2035	0
Arrive On Green	0.37	0.00	0.37				0.00	0.07	0.07	0.42	0.75	0.00
Sat Flow, veh/h	1810	0	1610				0	5358	1606	1810	3705	0
Grp Volume(v), veh/h	644	0	980				0	1348	498	538	2183	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1729	1606	1810	1805	0
Q Serve(g_s), s	38.4	0.0	40.5				0.0	23.0	23.0	31.2	62.0	0.0
Cycle Q Clear(g_c), s	38.4	0.0	40.5				0.0	23.0	23.0	31.2	62.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	666	0	593				0	1085	336	576	2035	0
V/C Ratio(X)	0.97	0.00	1.65				0.00	1.24	1.48	0.93	1.07	0.00
Avail Cap(c_a), veh/h	666	0	593				0	1085	336	584	2035	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	1.33	1.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.12	0.12	0.16	0.16	0.00
Uniform Delay (d), s/veh	34.1	0.0	34.8				0.0	51.2	51.2	30.6	13.8	0.0
Incr Delay (d2), s/veh	26.7	0.0	301.4				0.0	110.3	219.2	5.2	34.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.7	0.0	64.4				0.0	21.7	30.3	12.6	22.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.8	0.0	336.1				0.0	161.5	270.4	35.8	48.5	0.0
LnGrp LOS	E	A	F				A	F	F	D	F	A
Approach Vol, veh/h		1624						1846			2721	
Approach Delay, s/veh		226.9						190.9			46.0	
Approach LOS		F						F			D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	39.0	27.0		44.0		66.0
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	35.5	* 23		40.5		62.0
Max Q Clear Time (g_c+I1), s	33.2	25.0		42.5		64.0
Green Ext Time (p_c), s	0.3	0.0		0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	136.7
HCM 6th LOS	F

Notes

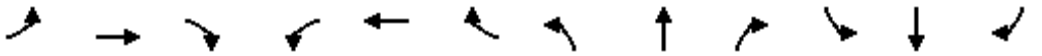
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	253	4	12	3	18	1566	199	2330	460
Future Volume (vph)	253	4	12	3	18	1566	199	2330	460
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases		4		8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	30.0	30.0	10.2	10.2	16.2	28.2	16.2	28.2	28.2
Total Split (s)	30.0	30.0	30.0	30.0	16.2	63.8	16.2	63.8	63.8
Total Split (%)	27.3%	27.3%	27.3%	27.3%	14.7%	58.0%	14.7%	58.0%	58.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	3.0	4.7	3.0	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.0	5.7	4.0	5.7	5.7
Lead/Lag					Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min	C-Min
Act Effct Green (s)	24.0	24.0	24.0	24.0	66.4	58.8	76.0	70.2	70.2
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.60	0.53	0.69	0.64	0.64
v/c Ratio	1.18	0.07	0.04	0.35	0.12	0.91	0.85	1.11	0.47
Control Delay	154.3	15.6	34.6	8.0	4.3	20.3	33.2	71.3	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	31.2	0.0	0.0	0.0
Total Delay	154.3	15.6	34.6	8.0	4.3	51.5	33.2	71.3	4.9
LOS	F	B	C	A	A	D	C	E	A
Approach Delay		141.6		9.9		50.9		58.6	
Approach LOS		F		A		D		E	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 68.3 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.18	
Intersection Signal Delay: 59.1	Intersection LOS: E
Intersection Capacity Utilization 109.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 10: Cedar Av. & Orange St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	253	4	22	12	3	151	18	1566	30	199	2330	460
Future Volume (veh/h)	253	4	22	12	3	151	18	1566	30	199	2330	460
Initial Q (Qb), veh	0	0	0	0	0	0	0	44	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	278	4	19	13	3	79	20	1721	33	219	2560	414
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	301	63	297	357	13	340	96	1995	24	251	2247	1000
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.02	0.76	0.76	0.07	0.62	0.62
Sat Flow, veh/h	1337	287	1363	1407	59	1560	1810	3623	69	1810	3610	1606
Grp Volume(v), veh/h	278	0	23	13	0	82	20	856	898	219	2560	414
Grp Sat Flow(s),veh/h/ln	1337	0	1650	1407	0	1619	1810	1805	1888	1810	1805	1606
Q Serve(g_s), s	19.4	0.0	1.2	0.8	0.0	4.6	0.5	33.9	34.2	5.2	68.5	14.4
Cycle Q Clear(g_c), s	24.0	0.0	1.2	2.0	0.0	4.6	0.5	33.9	34.2	5.2	68.5	14.4
Prop In Lane	1.00		0.83	1.00		0.96	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	301	0	360	357	0	353	96	985	1035	251	2247	1000
V/C Ratio(X)	0.92	0.00	0.06	0.04	0.00	0.23	0.21	0.87	0.87	0.87	1.14	0.41
Avail Cap(c_a), veh/h	301	0	360	357	0	353	266	1031	1079	338	2247	1000
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	0.09	0.09	0.09
Uniform Delay (d), s/veh	46.8	0.0	34.1	34.9	0.0	35.4	26.9	14.3	14.1	33.5	20.8	10.6
Incr Delay (d2), s/veh	32.3	0.0	0.1	0.0	0.0	0.3	0.1	1.1	1.0	1.9	63.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.3	24.7	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	0.0	0.5	0.3	0.0	1.9	0.3	20.5	20.5	5.4	44.2	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.1	0.0	34.2	34.9	0.0	35.7	27.0	42.6	39.8	35.4	84.0	10.7
LnGrp LOS	E	A	C	C	A	D	C	D	D	D	F	B
Approach Vol, veh/h		301			95			1774			3193	
Approach Delay, s/veh		75.7			35.6			41.0			71.2	
Approach LOS		E			D			D			E	

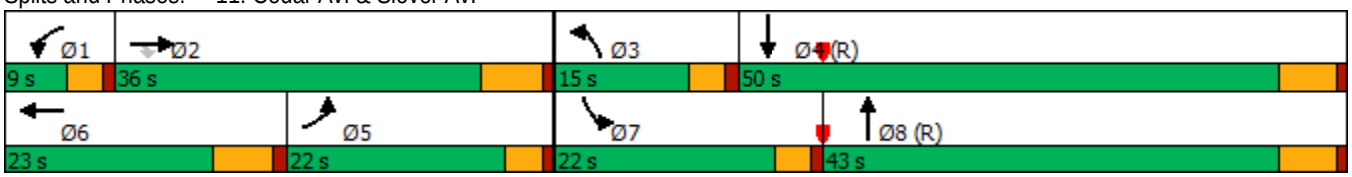
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.4	68.6		30.0	5.8	74.2		30.0				
Change Period (Y+Rc), s	4.0	5.7		6.0	4.0	5.7		6.0				
Max Green Setting (Gmax), s	12.2	58.1		24.0	12.2	58.1		24.0				
Max Q Clear Time (g_c+I1), s	7.2	36.2		26.0	2.5	70.5		6.6				
Green Ext Time (p_c), s	0.3	13.3		0.0	0.0	0.0		0.4				

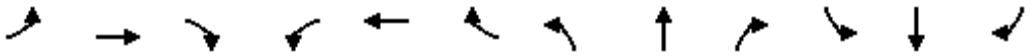
Intersection Summary			
HCM 6th Ctrl Delay		60.8	
HCM 6th LOS		E	

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	313	204	134	76	319	217	1171	241	1843
Future Volume (vph)	313	204	134	76	319	217	1171	241	1843
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2		1	6	3	8	7	4
Permitted Phases			2						
Detector Phase	5	2	2	1	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	29.0	29.0	8.0	23.0	8.0	32.7	8.0	24.7
Total Split (s)	22.0	36.0	36.0	9.0	23.0	15.0	43.0	22.0	50.0
Total Split (%)	20.0%	32.7%	32.7%	8.2%	20.9%	13.6%	39.1%	20.0%	45.5%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	4.7	3.0	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	4.0	5.7	4.0	5.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	18.6	30.0	30.0	5.0	16.4	11.0	38.0	17.3	44.3
Actuated g/C Ratio	0.17	0.27	0.27	0.05	0.15	0.10	0.35	0.16	0.40
v/c Ratio	1.06	0.21	0.26	0.95	0.84	1.24	1.03	0.87	1.53
Control Delay	112.6	31.6	5.8	140.4	55.0	174.3	82.0	52.8	269.0
Queue Delay	0.0	0.0	0.0	0.0	37.2	0.0	27.9	0.0	0.0
Total Delay	112.6	31.6	5.8	140.4	92.2	174.3	109.9	52.8	269.0
LOS	F	C	A	F	F	F	F	D	F
Approach Delay		65.3			99.2		119.5		247.0
Approach LOS		E			F		F		F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.53	
Intersection Signal Delay: 170.6	Intersection LOS: F
Intersection Capacity Utilization 118.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 11: Cedar Av. & Slover Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	313	204	134	76	319	131	217	1171	66	241	1843	280
Future Volume (veh/h)	313	204	134	76	319	131	217	1171	66	241	1843	280
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	323	210	116	78	329	104	224	1207	66	248	1900	288
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	296	1009	449	82	388	121	181	1979	108	280	1967	290
Arrive On Green	0.16	0.28	0.28	0.05	0.14	0.14	0.10	0.57	0.57	0.05	0.21	0.21
Sat Flow, veh/h	1810	3610	1607	1810	2711	843	1810	3481	190	1810	3154	466
Grp Volume(v), veh/h	323	210	116	78	217	216	224	625	648	248	1066	1122
Grp Sat Flow(s),veh/h/ln	1810	1805	1607	1810	1805	1748	1810	1805	1866	1810	1805	1815
Q Serve(g_s), s	18.0	4.9	6.2	4.7	12.9	13.3	11.0	25.2	25.2	15.0	64.1	67.9
Cycle Q Clear(g_c), s	18.0	4.9	6.2	4.7	12.9	13.3	11.0	25.2	25.2	15.0	64.1	67.9
Prop In Lane	1.00		1.00	1.00		0.48	1.00		0.10	1.00		0.26
Lane Grp Cap(c), veh/h	296	1009	449	82	258	250	181	1026	1061	280	1125	1132
V/C Ratio(X)	1.09	0.21	0.26	0.95	0.84	0.86	1.24	0.61	0.61	0.88	0.95	0.99
Avail Cap(c_a), veh/h	296	1009	449	82	279	270	181	1026	1061	296	1125	1132
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.58	0.58	0.58	0.09	0.09	0.09
Uniform Delay (d), s/veh	46.0	30.3	30.8	52.4	45.9	46.1	49.5	15.7	15.7	51.2	41.9	43.4
Incr Delay (d2), s/veh	78.8	0.1	0.3	81.7	19.0	22.6	131.5	1.6	1.5	3.1	2.4	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.2	2.0	2.3	4.0	7.2	7.4	11.4	9.7	10.0	7.5	31.5	34.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	124.8	30.4	31.1	134.1	64.9	68.6	181.0	17.2	17.2	54.3	44.3	49.7
LnGrp LOS	F	C	C	F	E	E	F	B	B	D	D	D
Approach Vol, veh/h		649			511			1497			2436	
Approach Delay, s/veh		77.5			77.1			41.7			47.8	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	36.7	15.0	75.0	24.0	21.7	21.1	69.0
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	6.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	5.0	30.0	11.0	44.3	18.0	* 17	18.0	37.3
Max Q Clear Time (g_c+I1), s	6.7	8.2	13.0	69.9	20.0	15.3	17.0	27.2
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.0	0.5	0.1	5.4

Intersection Summary	
HCM 6th Ctrl Delay	52.7
HCM 6th LOS	D

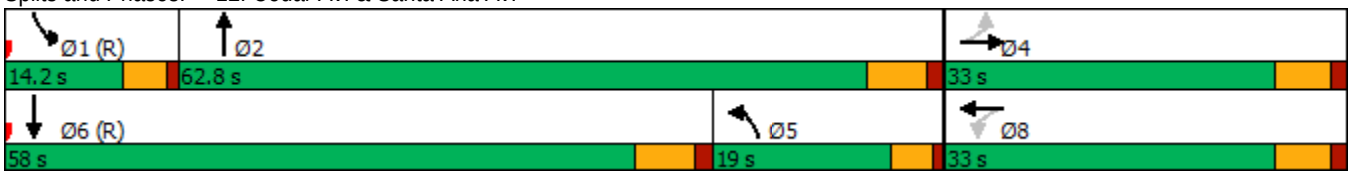
Notes

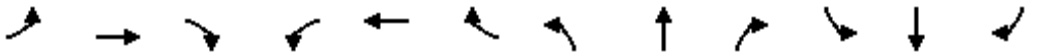
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	76	75	77	73	111	1252	42	1902
Future Volume (vph)	76	75	77	73	111	1252	42	1902
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	9.5	27.5	9.5	27.5
Total Split (s)	33.0	33.0	33.0	33.0	19.0	62.8	14.2	58.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	17.3%	57.1%	12.9%	52.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	4.5	6.5	4.5	6.5
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min
Act Effct Green (s)		24.4		24.4	12.9	57.1	11.5	55.8
Actuated g/C Ratio		0.22		0.22	0.12	0.52	0.10	0.51
v/c Ratio		0.87		0.88	0.58	0.75	0.24	1.16
Control Delay		64.2		66.3	43.8	12.7	36.5	119.5
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		64.2		66.3	43.8	12.7	36.5	119.5
LOS		E		E	D	B	D	F
Approach Delay		64.2		66.3		15.2		117.7
Approach LOS		E		E		B		F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 90 (82%), Referenced to phase 1:SBL and 6:SBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.16	
Intersection Signal Delay: 74.1	Intersection LOS: E
Intersection Capacity Utilization 93.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 12: Cedar Av. & Santa Ana Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	75	94	77	73	91	111	1252	34	42	1902	47
Future Volume (veh/h)	76	75	94	77	73	91	111	1252	34	42	1902	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	83	82	61	84	79	87	121	1361	33	46	2067	43
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	128	115	73	125	105	100	281	1841	45	237	1693	35
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.31	1.00	1.00	0.09	0.31	0.31
Sat Flow, veh/h	407	566	360	400	516	489	1810	3602	87	1810	3617	75
Grp Volume(v), veh/h	226	0	0	250	0	0	121	681	713	46	1028	1082
Grp Sat Flow(s),veh/h/ln	1333	0	0	1405	0	0	1810	1805	1884	1810	1805	1887
Q Serve(g_s), s	0.0	0.0	0.0	1.0	0.0	0.0	5.9	0.0	0.0	2.6	51.5	51.5
Cycle Q Clear(g_c), s	18.3	0.0	0.0	19.3	0.0	0.0	5.9	0.0	0.0	2.6	51.5	51.5
Prop In Lane	0.37		0.27	0.34		0.35	1.00		0.05	1.00		0.04
Lane Grp Cap(c), veh/h	316	0	0	330	0	0	281	923	963	237	845	883
V/C Ratio(X)	0.71	0.00	0.00	0.76	0.00	0.00	0.43	0.74	0.74	0.19	1.22	1.23
Avail Cap(c_a), veh/h	380	0	0	394	0	0	281	924	964	237	845	883
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.66	0.66	0.66	0.09	0.09	0.09
Uniform Delay (d), s/veh	41.7	0.0	0.0	42.3	0.0	0.0	34.0	0.0	0.0	44.8	37.7	37.7
Incr Delay (d2), s/veh	6.0	0.0	0.0	7.9	0.0	0.0	0.3	3.1	3.0	0.0	98.4	102.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	0.0	7.1	0.0	0.0	2.3	0.8	0.8	1.1	46.0	49.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.7	0.0	0.0	50.1	0.0	0.0	34.3	3.1	3.0	44.8	136.2	140.0
LnGrp LOS	D	A	A	D	A	A	C	A	A	D	F	F
Approach Vol, veh/h		226			250			1515			2156	
Approach Delay, s/veh		47.7			50.1			5.6			136.2	
Approach LOS		D			D			A			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.9	62.7		28.4	23.6	58.0		28.4				
Change Period (Y+Rc), s	4.5	6.5		6.0	6.5	* 6.5		6.0				
Max Green Setting (Gmax), s	9.7	56.3		27.0	14.5	* 52		27.0				
Max Q Clear Time (g_c+I1), s	4.6	2.0		20.3	7.9	53.5		21.3				
Green Ext Time (p_c), s	0.0	35.3		0.8	0.1	0.0		0.9				

Intersection Summary		
HCM 6th Ctrl Delay		78.5
HCM 6th LOS		E

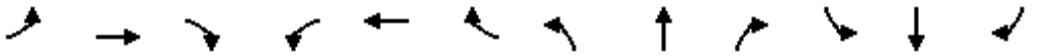
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	123	104	66	78	109	162	131	1100	160	1755
Future Volume (vph)	123	104	66	78	109	162	131	1100	160	1755
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	32.0	32.0	32.0	32.0	32.0	32.0	17.0	58.0	20.0	61.0
Total Split (%)	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%	15.5%	52.7%	18.2%	55.5%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)		25.4	25.4		25.4	25.4	12.9	54.4	14.2	55.7
Actuated g/C Ratio		0.23	0.23		0.23	0.23	0.12	0.49	0.13	0.51
v/c Ratio		1.02	0.17		0.95	0.36	0.69	0.74	0.76	1.17
Control Delay		106.3	8.7		90.4	7.1	75.7	18.0	38.7	113.4
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		106.3	8.7		90.4	7.1	75.7	18.0	38.7	113.4
LOS		F	A		F	A	E	B	D	F
Approach Delay		84.5			51.8			23.8		107.6
Approach LOS		F			D			C		F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.17	
Intersection Signal Delay: 73.8	Intersection LOS: E
Intersection Capacity Utilization 93.0%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	104	66	78	109	162	131	1100	73	160	1755	154
Future Volume (veh/h)	123	104	66	78	109	162	131	1100	73	160	1755	154
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	137	116	54	87	121	114	146	1222	70	178	1950	167
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	50	4	388	46	43	383	206	1727	99	210	1685	142
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.23	1.00	1.00	0.08	0.34	0.34
Sat Flow, veh/h	0	19	1610	0	178	1589	1810	3470	199	1810	3369	284
Grp Volume(v), veh/h	253	0	54	208	0	114	146	635	657	178	1031	1086
Grp Sat Flow(s),veh/h/ln	19	0	1610	178	0	1589	1810	1805	1864	1810	1805	1849
Q Serve(g_s), s	0.0	0.0	2.9	0.0	0.0	6.5	8.2	0.6	0.6	10.7	55.0	55.0
Cycle Q Clear(g_c), s	26.5	0.0	2.9	26.5	0.0	6.5	8.2	0.6	0.6	10.7	55.0	55.0
Prop In Lane	0.54		1.00	0.42		1.00	1.00		0.11	1.00		0.15
Lane Grp Cap(c), veh/h	55	0	388	89	0	383	206	898	928	210	903	924
V/C Ratio(X)	4.61	0.00	0.14	2.33	0.00	0.30	0.71	0.71	0.71	0.85	1.14	1.17
Avail Cap(c_a), veh/h	55	0	388	89	0	383	206	898	928	255	903	924
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.85	0.85	0.85	0.09	0.09	0.09
Uniform Delay (d), s/veh	52.9	0.0	32.8	42.9	0.0	34.1	40.8	0.1	0.1	49.8	36.6	36.6
Incr Delay (d2), s/veh	1663.6	0.0	0.2	632.5	0.0	0.6	9.3	4.0	3.9	2.2	65.7	79.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	26.9	0.0	1.1	18.1	0.0	2.5	3.7	1.1	1.1	5.0	40.8	45.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1716.4	0.0	33.0	675.4	0.0	34.8	50.1	4.1	4.0	52.0	102.2	116.2
LnGrp LOS	F	A	C	F	A	C	D	A	A	D	F	F
Approach Vol, veh/h		307			322			1438			2295	
Approach Delay, s/veh		1420.3			448.6			8.7			105.0	
Approach LOS		F			F			A			F	

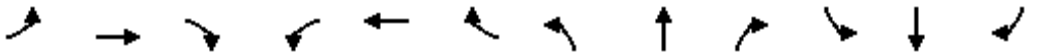
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.2	60.8		32.0	17.0	61.0		32.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	15.5	52.0		26.5	12.5	55.0		26.5				
Max Q Clear Time (g_c+I1), s	12.7	2.6		28.5	10.2	57.0		28.5				
Green Ext Time (p_c), s	0.1	16.9		0.0	0.1	0.0		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		191.2
HCM 6th LOS		F

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	131	7	26	8	100	1107	23	1782
Future Volume (vph)	131	7	26	8	100	1107	23	1782
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	10.0	10.0	9.5	24.0	9.5	24.0
Total Split (s)	30.0	30.0	30.0	30.0	17.0	68.0	12.0	63.0
Total Split (%)	27.3%	27.3%	27.3%	27.3%	15.5%	61.8%	10.9%	57.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)		24.5		21.3	10.7	69.7	6.7	59.3
Actuated g/C Ratio		0.22		0.19	0.10	0.63	0.06	0.54
v/c Ratio		0.94		0.18	0.60	0.51	0.22	0.99
Control Delay		69.6		29.6	61.5	12.9	63.6	28.4
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		69.6		29.6	61.5	12.9	63.6	28.4
LOS		E		C	E	B	E	C
Approach Delay		69.6		29.6		16.9		28.9
Approach LOS		E		C		B		C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 74 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 28.7	Intersection LOS: C
Intersection Capacity Utilization 90.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 14: Rubidoux Bl./Cedar Av. & 7th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	7	200	26	8	10	100	1107	5	23	1782	48
Future Volume (veh/h)	131	7	200	26	8	10	100	1107	5	23	1782	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	138	7	119	27	8	3	105	1165	4	24	1876	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	201	12	134	214	60	19	132	2377	8	43	2136	58
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.07	0.64	0.64	0.02	0.60	0.60
Sat Flow, veh/h	788	63	699	827	312	98	1810	3690	13	1810	3590	97
Grp Volume(v), veh/h	264	0	0	38	0	0	105	570	599	24	939	988
Grp Sat Flow(s),veh/h/ln	1550	0	0	1236	0	0	1810	1805	1898	1810	1805	1882
Q Serve(g_s), s	15.7	0.0	0.0	0.0	0.0	0.0	6.3	18.1	18.1	1.4	48.3	49.2
Cycle Q Clear(g_c), s	18.2	0.0	0.0	2.5	0.0	0.0	6.3	18.1	18.1	1.4	48.3	49.2
Prop In Lane	0.52		0.45	0.71		0.08	1.00		0.01	1.00		0.05
Lane Grp Cap(c), veh/h	346	0	0	292	0	0	132	1163	1223	43	1074	1120
V/C Ratio(X)	0.76	0.00	0.00	0.13	0.00	0.00	0.80	0.49	0.49	0.56	0.87	0.88
Avail Cap(c_a), veh/h	401	0	0	343	0	0	206	1163	1223	123	1074	1120
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.34	0.34	0.34	0.09	0.09	0.09
Uniform Delay (d), s/veh	43.1	0.0	0.0	36.9	0.0	0.0	50.2	10.2	10.2	53.1	18.8	19.0
Incr Delay (d2), s/veh	8.2	0.0	0.0	0.3	0.0	0.0	4.0	0.5	0.5	1.0	1.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	0.0	0.0	0.9	0.0	0.0	2.9	6.1	6.4	0.7	17.6	18.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.3	0.0	0.0	37.1	0.0	0.0	54.2	10.7	10.7	54.2	19.8	20.0
LnGrp LOS	D	A	A	D	A	A	D	B	B	D	B	C
Approach Vol, veh/h		264			38			1274			1951	
Approach Delay, s/veh		51.3			37.1			14.3			20.4	
Approach LOS		D			D			B			C	

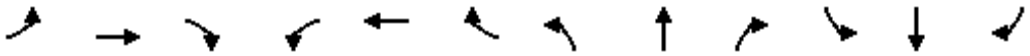
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	76.9		26.0	12.5	71.5		26.0				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	7.5	62.0		25.0	12.5	57.0		25.0				
Max Q Clear Time (g_c+I1), s	3.4	20.1		20.2	8.3	51.2		4.5				
Green Ext Time (p_c), s	0.0	13.1		0.9	0.1	5.3		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		20.7	
HCM 6th LOS		C	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	18	11	133	2	121	2	1013	260	1695
Future Volume (vph)	18	11	133	2	121	2	1013	260	1695
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	35.0	35.0	35.0	9.5	24.0	9.5	24.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.6	34.0	21.0	45.4
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%	10.7%	37.8%	23.3%	50.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	5.0	4.5	6.0	4.5	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min
Act Effct Green (s)		14.1		15.6	15.6	5.2	28.4	15.2	46.5
Actuated g/C Ratio		0.19		0.21	0.21	0.07	0.38	0.20	0.62
v/c Ratio		0.19		0.52	0.28	0.02	0.95	0.75	0.80
Control Delay		15.6		33.1	4.9	37.5	39.8	44.2	17.5
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		15.6		33.1	4.9	37.5	39.8	44.2	17.5
LOS		B		C	A	D	D	D	B
Approach Delay		15.6		19.8			39.8		21.0
Approach LOS		B		B			D		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 74.9	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 27.4	Intersection LOS: C
Intersection Capacity Utilization 78.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 15: Rubidoux Bl. & Tarragona Dr./El Rivino Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	11	27	133	2	121	2	1013	201	260	1695	12
Future Volume (veh/h)	18	11	27	133	2	121	2	1013	201	260	1695	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	19	12	19	140	2	95	2	1066	205	274	1784	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	106	70	62	312	3	278	5	1236	237	327	2156	16
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.00	0.41	0.41	0.18	0.59	0.59
Sat Flow, veh/h	174	407	356	1173	20	1610	1810	3021	579	1810	3673	27
Grp Volume(v), veh/h	50	0	0	142	0	95	2	635	636	274	876	921
Grp Sat Flow(s),veh/h/ln	937	0	0	1193	0	1610	1810	1805	1796	1810	1805	1895
Q Serve(g_s), s	0.2	0.0	0.0	0.0	0.0	3.4	0.1	21.0	21.1	9.5	25.4	25.5
Cycle Q Clear(g_c), s	8.1	0.0	0.0	7.9	0.0	3.4	0.1	21.0	21.1	9.5	25.4	25.5
Prop In Lane	0.38		0.38	0.99		1.00	1.00		0.32	1.00		0.01
Lane Grp Cap(c), veh/h	238	0	0	316	0	278	5	738	735	327	1059	1112
V/C Ratio(X)	0.21	0.00	0.00	0.45	0.00	0.34	0.41	0.86	0.87	0.84	0.83	0.83
Avail Cap(c_a), veh/h	679	0	0	719	0	740	141	774	770	457	1090	1144
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.2	0.0	0.0	25.6	0.0	23.7	32.5	17.6	17.6	25.8	10.8	10.8
Incr Delay (d2), s/veh	0.6	0.0	0.0	1.4	0.0	1.0	46.0	9.8	10.2	9.4	5.5	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	2.1	0.0	1.3	0.1	8.8	8.9	4.4	7.9	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.8	0.0	0.0	27.0	0.0	24.8	78.5	27.4	27.8	35.2	16.3	16.2
LnGrp LOS	C	A	A	C	A	C	E	C	C	D	B	B
Approach Vol, veh/h		50			237			1273			2071	
Approach Delay, s/veh		23.8			26.1			27.7			18.8	
Approach LOS		C			C			C			B	

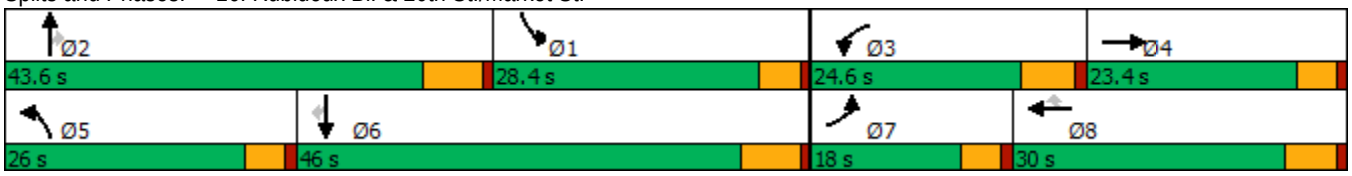
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.3	32.7		16.3	4.7	44.3		16.3				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	16.5	28.0		30.0	5.1	39.4		30.0				
Max Q Clear Time (g_c+I1), s	11.5	23.1		10.1	2.1	27.5		9.9				
Green Ext Time (p_c), s	0.3	3.6		0.3	0.0	9.9		1.5				

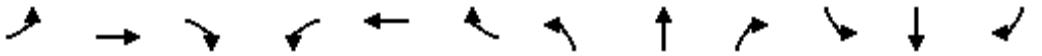
Intersection Summary			
HCM 6th Ctrl Delay		22.4	
HCM 6th LOS		C	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	181	179	340	357	507	339	550	392	458	1027	408
Future Volume (vph)	181	179	340	357	507	339	550	392	458	1027	408
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	14.6	10.8	27.8	27.8	9.6	28.2	28.2	9.6	35.2	35.2
Total Split (s)	18.0	23.4	24.6	30.0	30.0	26.0	43.6	43.6	28.4	46.0	46.0
Total Split (%)	15.0%	19.5%	20.5%	25.0%	25.0%	21.7%	36.3%	36.3%	23.7%	38.3%	38.3%
Yellow Time (s)	3.6	3.6	4.8	4.8	4.8	3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	5.8	5.8	5.8	4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	13.4	21.1	16.5	24.2	24.2	21.4	26.5	26.5	33.8	38.9	38.9
Actuated g/C Ratio	0.11	0.18	0.14	0.20	0.20	0.18	0.22	0.22	0.28	0.33	0.33
v/c Ratio	0.92	0.56	0.72	0.95	0.79	1.08	0.71	0.62	0.48	0.90	0.58
Control Delay	99.0	23.1	58.1	83.1	18.8	118.7	47.4	9.1	38.3	49.6	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	99.0	23.1	58.1	83.1	18.8	118.7	47.4	9.1	38.3	49.6	11.5
LOS	F	C	E	F	B	F	D	A	D	D	B
Approach Delay		45.8		48.9			54.6			38.7	
Approach LOS		D		D			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 119.1	
Natural Cycle: 105	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 46.1	Intersection LOS: D
Intersection Capacity Utilization 93.7%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	181	179	244	340	357	507	339	550	392	458	1027	408
Future Volume (veh/h)	181	179	244	340	357	507	339	550	392	458	1027	408
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	187	185	237	351	368	281	349	567	275	472	1059	292
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	205	339	303	420	388	329	327	722	322	1017	1164	518
Arrive On Green	0.11	0.19	0.19	0.12	0.20	0.20	0.18	0.20	0.20	0.29	0.32	0.32
Sat Flow, veh/h	1810	1805	1610	3510	1900	1610	1810	3610	1610	3510	3610	1608
Grp Volume(v), veh/h	187	185	237	351	368	281	349	567	275	472	1059	292
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1755	1900	1610	1810	1805	1610	1755	1805	1608
Q Serve(g_s), s	12.1	11.0	16.6	11.6	22.6	10.1	21.4	17.6	14.1	13.1	33.3	17.8
Cycle Q Clear(g_c), s	12.1	11.0	16.6	11.6	22.6	10.1	21.4	17.6	14.1	13.1	33.3	17.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	205	339	303	420	388	329	327	722	322	1017	1164	518
V/C Ratio(X)	0.91	0.55	0.78	0.84	0.95	0.85	1.07	0.79	0.85	0.46	0.91	0.56
Avail Cap(c_a), veh/h	205	339	303	558	388	329	327	1141	509	1017	1214	541
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.9	43.5	45.8	51.0	46.4	11.7	48.5	44.9	23.9	34.5	38.5	33.2
Incr Delay (d2), s/veh	39.5	1.8	12.5	8.3	32.3	19.0	68.5	1.9	8.1	0.1	10.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	5.1	7.7	5.4	13.8	5.1	15.5	7.8	5.9	5.3	15.5	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.4	45.3	58.3	59.2	78.8	30.8	117.0	46.9	32.1	34.6	48.5	34.4
LnGrp LOS	F	D	E	E	E	C	F	D	C	C	D	C
Approach Vol, veh/h		609			1000			1191			1823	
Approach Delay, s/veh		64.5			58.4			64.0			42.6	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	40.5	29.9	19.9	28.1	26.0	44.4	18.0	30.0
Change Period (Y+Rc), s	6.2	* 6.2	5.8	* 5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	23.8	* 37	18.8	* 19	21.4	39.8	13.4	24.2
Max Q Clear Time (g_c+I1), s	15.1	19.6	13.6	18.6	23.4	35.3	14.1	24.6
Green Ext Time (p_c), s	0.6	4.0	0.6	0.1	0.0	2.9	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	54.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	9	12	31	16	16	17	1294	52	155	1434	5
Future Vol, veh/h	1	9	12	31	16	16	17	1294	52	155	1434	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	10	13	34	17	17	18	1407	57	168	1559	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2646	3399	782	2594	3373	733	1564	0	0	1465	0	0
Stage 1	1898	1898	-	1473	1473	-	-	-	-	-	-	-
Stage 2	748	1501	-	1121	1900	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	12	~ 8	341	~ 13	~ 8	368	428	-	-	467	-	-
Stage 1	73	119	-	135	193	-	-	-	-	-	-	-
Stage 2	375	187	-	223	119	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	341	-	0	368	428	-	-	467	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	56	0	-	104	148	-	-	-	-	-	-	-
Stage 2	242	143	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			1.7	8
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	428	-	-	-	-	467	-	-
HCM Lane V/C Ratio	0.043	-	-	-	-	0.361	-	-
HCM Control Delay (s)	13.8	1.6	-	-	-	17	7	-
HCM Lane LOS	B	A	-	-	-	C	A	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-	1.6	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	2	9	3	5	6	21	1391	15	9	1395	16
Future Vol, veh/h	7	2	9	3	5	6	21	1391	15	9	1395	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	110	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	8	2	10	3	5	7	23	1512	16	10	1516	17

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2350	3119	767	2345	3119	764	1533	0	0	1528	0	0
Stage 1	1545	1545	-	1566	1566	-	-	-	-	-	-	-
Stage 2	805	1574	-	779	1553	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	20	12	349	20	12	351	440	-	-	442	-	-
Stage 1	122	178	-	118	174	-	-	-	-	-	-	-
Stage 2	347	172	-	359	176	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	18	11	349	18	11	351	440	-	-	442	-	-
Mov Cap-2 Maneuver	83	79	-	82	76	-	-	-	-	-	-	-
Stage 1	116	174	-	112	165	-	-	-	-	-	-	-
Stage 2	312	163	-	337	172	-	-	-	-	-	-	-

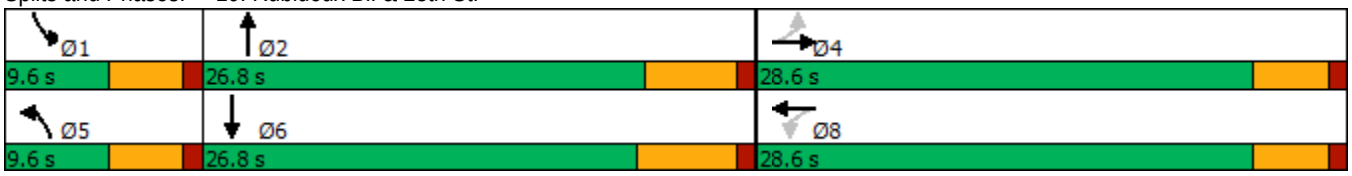
Approach	EB	WB	NB	SB
HCM Control Delay, s	36.7	40.3	0.2	0.1
HCM LOS	E	E		

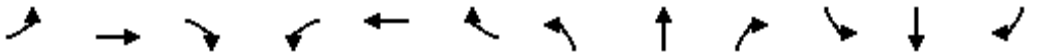
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	440	-	-	133	117	442	-	-
HCM Lane V/C Ratio	0.052	-	-	0.147	0.13	0.022	-	-
HCM Control Delay (s)	13.6	-	-	36.7	40.3	13.3	-	-
HCM Lane LOS	B	-	-	E	E	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.5	0.4	0.1	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	49	18	64	32	46	1378	11	1381
Future Volume (vph)	49	18	64	32	46	1378	11	1381
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	28.6	28.6	28.6	28.6	9.6	24.4	9.6	22.8
Total Split (s)	28.6	28.6	28.6	28.6	9.6	26.8	9.6	26.8
Total Split (%)	44.0%	44.0%	44.0%	44.0%	14.8%	41.2%	14.8%	41.2%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.4	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		12.9		12.9	5.4	26.8	5.4	24.8
Actuated g/C Ratio		0.29		0.29	0.12	0.59	0.12	0.55
v/c Ratio		0.30		0.28	0.23	0.72	0.06	0.77
Control Delay		10.2		15.6	26.4	16.1	24.8	20.3
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		10.2		15.6	26.4	16.1	24.8	20.3
LOS		B		B	C	B	C	C
Approach Delay		10.2		15.6		16.5		20.3
Approach LOS		B		B		B		C

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 45.2	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 17.9	Intersection LOS: B
Intersection Capacity Utilization 57.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 19: Rubidoux Bl. & 28th St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	18	70	64	32	15	46	1378	37	11	1381	24
Future Volume (veh/h)	49	18	70	64	32	15	46	1378	37	11	1381	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	53	20	67	70	35	11	50	1498	37	12	1501	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	184	73	139	270	120	28	93	1737	43	28	1625	27
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.05	0.48	0.48	0.02	0.45	0.45
Sat Flow, veh/h	433	408	772	815	668	155	1810	3598	89	1810	3634	60
Grp Volume(v), veh/h	140	0	0	116	0	0	50	750	785	12	745	781
Grp Sat Flow(s),veh/h/ln	1613	0	0	1638	0	0	1810	1805	1882	1810	1805	1889
Q Serve(g_s), s	0.9	0.0	0.0	0.0	0.0	0.0	1.3	17.1	17.2	0.3	18.1	18.1
Cycle Q Clear(g_c), s	3.4	0.0	0.0	2.5	0.0	0.0	1.3	17.1	17.2	0.3	18.1	18.1
Prop In Lane	0.38		0.48	0.60		0.09	1.00		0.05	1.00		0.03
Lane Grp Cap(c), veh/h	396	0	0	418	0	0	93	872	909	28	807	845
V/C Ratio(X)	0.35	0.00	0.00	0.28	0.00	0.00	0.54	0.86	0.86	0.43	0.92	0.92
Avail Cap(c_a), veh/h	915	0	0	918	0	0	194	872	909	194	814	852
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.0	0.0	0.0	16.7	0.0	0.0	21.6	10.7	10.7	22.7	12.1	12.1
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.4	0.0	0.0	1.8	8.8	8.6	3.8	15.9	15.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	1.0	0.0	0.0	0.5	6.4	6.7	0.1	7.8	8.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.6	0.0	0.0	17.1	0.0	0.0	23.4	19.4	19.3	26.6	28.0	27.7
LnGrp LOS	B	A	A	B	A	A	C	B	B	C	C	C
Approach Vol, veh/h		140			116			1585			1538	
Approach Delay, s/veh		17.6			17.1			19.5			27.8	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.3	28.3		13.0	7.0	26.6		13.0				
Change Period (Y+Rc), s	4.6	* 5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	5.0	* 21		24.0	5.0	21.0		24.0				
Max Q Clear Time (g_c+I1), s	2.3	19.2		5.4	3.3	20.1		4.5				
Green Ext Time (p_c), s	0.0	1.7		0.7	0.0	0.7		0.6				

Intersection Summary		
HCM 6th Ctrl Delay		23.1
HCM 6th LOS		C

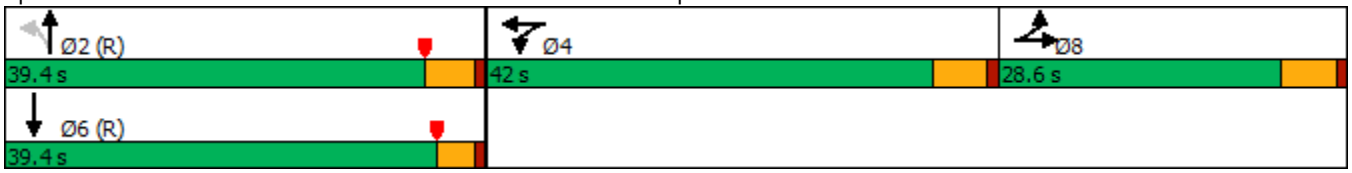
Notes

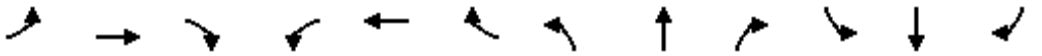
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	51	0	82	59	1240	1532
Future Volume (vph)	51	0	82	59	1240	1532
Turn Type	Split	NA	NA	Perm	NA	NA
Protected Phases	8	8	4		2	6
Permitted Phases				2		
Detector Phase	8	8	4	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.6	28.6	42.0	39.4	39.4	39.4
Total Split (%)	26.0%	26.0%	38.2%	35.8%	35.8%	35.8%
Yellow Time (s)	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	19.3	19.3	36.5	38.2	38.2	39.2
Actuated g/C Ratio	0.18	0.18	0.33	0.35	0.35	0.36
v/c Ratio	0.18	0.85	1.27	0.96	1.11	1.37
Control Delay	38.2	49.5	164.5	60.6	80.4	201.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.2	49.5	164.5	60.6	80.4	201.3
LOS	D	D	F	E	F	F
Approach Delay		47.8	164.5		79.5	201.3
Approach LOS		D	F		E	F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.37	
Intersection Signal Delay: 140.9	Intersection LOS: F
Intersection Capacity Utilization 118.1%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	0	278	381	82	215	59	1240	0	0	1532	31
Future Volume (veh/h)	51	0	278	381	82	215	59	1240	0	0	1532	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	57	0	228	428	92	208	66	1393	0	0	1721	34
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	297	0	265	343	74	167	65	1294	0	0	1297	26
Arrive On Green	0.16	0.00	0.16	0.33	0.33	0.33	0.72	0.72	0.00	0.00	0.36	0.36
Sat Flow, veh/h	1810	0	1610	1034	222	502	278	3705	0	0	3714	71
Grp Volume(v), veh/h	57	0	228	728	0	0	66	1393	0	0	856	899
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1758	0	0	278	1805	0	0	1805	1885
Q Serve(g_s), s	3.0	0.0	15.2	36.5	0.0	0.0	0.0	39.4	0.0	0.0	39.4	39.4
Cycle Q Clear(g_c), s	3.0	0.0	15.2	36.5	0.0	0.0	39.4	39.4	0.0	0.0	39.4	39.4
Prop In Lane	1.00		1.00	0.59		0.29	1.00		0.00	0.00		0.04
Lane Grp Cap(c), veh/h	297	0	265	583	0	0	65	1294	0	0	647	676
V/C Ratio(X)	0.19	0.00	0.86	1.25	0.00	0.00	1.01	1.08	0.00	0.00	1.32	1.33
Avail Cap(c_a), veh/h	380	0	338	583	0	0	65	1294	0	0	647	676
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.54	0.54
Uniform Delay (d), s/veh	39.7	0.0	44.7	36.8	0.0	0.0	35.3	15.6	0.0	0.0	35.3	35.3
Incr Delay (d2), s/veh	0.4	0.0	17.2	125.4	0.0	0.0	113.6	48.5	0.0	0.0	151.5	154.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	7.3	35.0	0.0	0.0	3.6	14.2	0.0	0.0	43.6	46.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.0	0.0	61.9	162.2	0.0	0.0	148.9	64.0	0.0	0.0	186.8	189.5
LnGrp LOS	D	A	E	F	A	A	F	F	A	A	F	F
Approach Vol, veh/h		285			728			1459			1755	
Approach Delay, s/veh		57.6			162.2			67.9			188.2	
Approach LOS		E			F			E			F	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		44.4		42.0		44.4		23.6				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		34.4		36.5		* 35		23.1				
Max Q Clear Time (g_c+I1), s		41.4		38.5		41.4		17.2				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.9				

Intersection Summary												
HCM 6th Ctrl Delay			133.4									
HCM 6th LOS			F									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	24.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	295	1299	1272	918
Future Vol, veh/h	0	0	295	1299	1272	918
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	311	1367	1339	966

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1154	2306	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	0	*622	~ 201	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	-	*622	~ 201	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	57.6	0
HCM LOS	A		

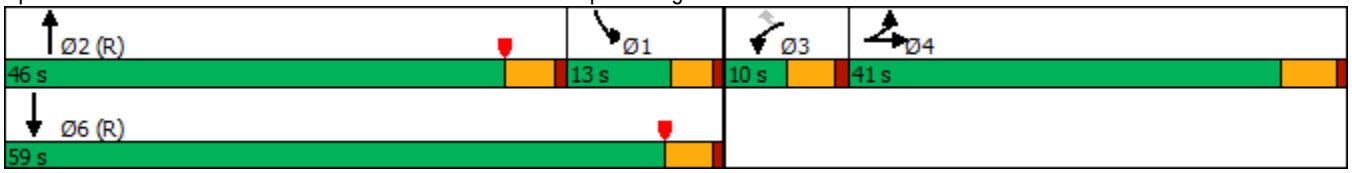
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	~ 201	-	-	-	-
HCM Lane V/C Ratio	1.545	-	-	-	-
HCM Control Delay (s)	$ 311.3	-	0	-	-
HCM Lane LOS	F	-	A	-	-
HCM 95th %tile Q(veh)	19.6	-	-	-	-

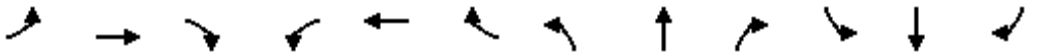
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	15	18	5	794	335	937
Future Volume (vph)	15	18	5	794	335	937
Turn Type	NA	Prot	Perm	NA	Prot	NA
Protected Phases	4	3		2	1	6
Permitted Phases			3			
Detector Phase	4	3	3	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	10.0	10.0	45.0	9.5	30.0
Total Split (s)	41.0	10.0	10.0	46.0	13.0	59.0
Total Split (%)	37.3%	9.1%	9.1%	41.8%	11.8%	53.6%
Yellow Time (s)	4.5	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	39.5	5.0	5.0	41.0	8.5	54.0
Actuated g/C Ratio	0.36	0.05	0.05	0.37	0.08	0.49
v/c Ratio	1.66	0.23	0.03	1.03	2.51	0.55
Control Delay	329.7	57.7	0.2	61.4	701.6	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	329.7	57.7	0.2	61.4	701.6	8.3
LOS	F	E	A	E	F	A
Approach Delay	329.7			61.4		190.9
Approach LOS	F			E		F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.51	
Intersection Signal Delay: 181.5	Intersection LOS: F
Intersection Capacity Utilization 135.5%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	795	15	218	18	0	5	0	794	549	335	937	0
Future Volume (veh/h)	795	15	218	18	0	5	0	794	549	335	937	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	828	16	130	19	0	3	0	827	463	349	976	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	489	9	77	0	0	0	0	828	458	296	2100	0
Arrive On Green	0.32	0.32	0.32	0.00	0.00	0.00	0.00	0.37	0.37	0.33	1.00	0.00
Sat Flow, veh/h	1514	29	238		0		0	2316	1229	1810	3705	0
Grp Volume(v), veh/h	974	0	0		0.0		0	670	620	349	976	0
Grp Sat Flow(s),veh/h/ln	1781	0	0				0	1805	1644	1810	1805	0
Q Serve(g_s), s	35.5	0.0	0.0				0.0	40.8	41.0	18.0	0.0	0.0
Cycle Q Clear(g_c), s	35.5	0.0	0.0				0.0	40.8	41.0	18.0	0.0	0.0
Prop In Lane	0.85		0.13				0.00		0.75	1.00		0.00
Lane Grp Cap(c), veh/h	575	0	0				0	673	613	296	2100	0
V/C Ratio(X)	1.69	0.00	0.00				0.00	1.00	1.01	1.18	0.46	0.00
Avail Cap(c_a), veh/h	575	0	0				0	673	613	296	2100	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.58	0.58	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.3	0.0	0.0				0.0	34.4	34.5	37.0	0.0	0.0
Incr Delay (d2), s/veh	319.8	0.0	0.0				0.0	25.6	30.4	109.8	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	65.6	0.0	0.0				0.0	21.7	20.6	15.1	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	357.1	0.0	0.0				0.0	60.0	64.9	146.8	0.7	0.0
LnGrp LOS	F	A	A				A	E	F	F	A	A
Approach Vol, veh/h		974						1290			1325	
Approach Delay, s/veh		357.1						62.4			39.2	
Approach LOS		F						E			D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	23.0	46.0		41.0		69.0
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0
Max Green Setting (Gmax), s	8.5	* 41		35.5		54.0
Max Q Clear Time (g_c+I1), s	20.0	43.0		37.5		2.0
Green Ext Time (p_c), s	0.0	0.0		0.0		4.8

Intersection Summary		
HCM 6th Ctrl Delay		133.8
HCM 6th LOS		F

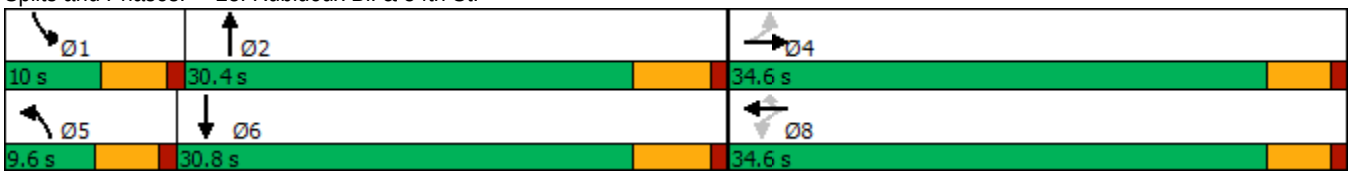
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	165	32	30	20	126	33	1089	56	1082
Future Volume (vph)	165	32	30	20	126	33	1089	56	1082
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	30.6	30.6	34.6	34.6	34.6	9.6	29.4	9.6	22.4
Total Split (s)	34.6	34.6	34.6	34.6	34.6	9.6	30.4	10.0	30.8
Total Split (%)	46.1%	46.1%	46.1%	46.1%	46.1%	12.8%	40.5%	13.3%	41.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	4.6	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		16.3		16.3	16.3	5.2	26.1	5.5	28.2
Actuated g/C Ratio		0.28		0.28	0.28	0.09	0.45	0.09	0.49
v/c Ratio		0.62		0.13	0.26	0.23	0.80	0.37	0.73
Control Delay		25.2		16.5	4.6	33.4	22.6	36.0	19.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		25.2		16.5	4.6	33.4	22.6	36.0	19.0
LOS		C		B	A	C	C	D	B
Approach Delay		25.2		7.9			22.9		19.8
Approach LOS		C		A			C		B

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 58.1	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 20.8	Intersection LOS: C
Intersection Capacity Utilization 70.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 23: Rubidoux Bl. & 34th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	32	22	30	20	126	33	1089	60	56	1082	54
Future Volume (veh/h)	165	32	22	30	20	126	33	1089	60	56	1082	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.98		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	185	36	16	34	22	72	37	1224	60	63	1216	53
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	382	70	24	338	196	428	71	1452	71	101	1522	66
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.04	0.42	0.42	0.06	0.43	0.43
Sat Flow, veh/h	1002	262	92	881	737	1610	1810	3498	171	1810	3524	153
Grp Volume(v), veh/h	237	0	0	56	0	72	37	631	653	63	622	647
Grp Sat Flow(s),veh/h/ln	1355	0	0	1618	0	1610	1810	1805	1864	1810	1805	1872
Q Serve(g_s), s	7.6	0.0	0.0	0.0	0.0	1.9	1.1	17.4	17.5	1.9	16.6	16.6
Cycle Q Clear(g_c), s	8.9	0.0	0.0	1.2	0.0	1.9	1.1	17.4	17.5	1.9	16.6	16.6
Prop In Lane	0.78		0.07	0.61		1.00	1.00		0.09	1.00		0.08
Lane Grp Cap(c), veh/h	476	0	0	534	0	428	71	749	774	101	779	809
V/C Ratio(X)	0.50	0.00	0.00	0.10	0.00	0.17	0.52	0.84	0.84	0.62	0.80	0.80
Avail Cap(c_a), veh/h	862	0	0	953	0	871	163	814	841	176	827	858
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.4	0.0	0.0	15.4	0.0	15.6	26.1	14.6	14.6	25.6	13.7	13.7
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.1	0.0	0.2	2.2	7.5	7.4	2.3	5.3	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	0.0	0.5	0.0	0.7	0.5	7.1	7.3	0.8	6.3	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.2	0.0	0.0	15.5	0.0	15.8	28.3	22.1	22.0	27.9	19.0	18.8
LnGrp LOS	B	A	A	B	A	B	C	C	C	C	B	B
Approach Vol, veh/h		237			128			1321			1332	
Approach Delay, s/veh		19.2			15.7			22.2			19.3	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	28.4		19.3	6.8	29.3		19.3				
Change Period (Y+Rc), s	4.6	5.4		4.6	4.6	5.4		4.6				
Max Green Setting (Gmax), s	5.4	25.0		30.0	5.0	25.4		30.0				
Max Q Clear Time (g_c+I1), s	3.9	19.5		10.9	3.1	18.6		3.9				
Green Ext Time (p_c), s	0.0	3.5		1.4	0.0	4.1		0.5				

Intersection Summary			
HCM 6th Ctrl Delay		20.4	
HCM 6th LOS		C	

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	818	63	0	0	23	33
Future Vol, veh/h	818	63	0	0	23	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	843	65	0	0	24	34

Major/Minor	Major1			Minor1	
Conflicting Flow All	0	0		876	876
Stage 1	-	-		876	-
Stage 2	-	-		0	-
Critical Hdwy	-	-		6.4	6.2
Critical Hdwy Stg 1	-	-		5.4	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	-		3.5	3.3
Pot Cap-1 Maneuver	-	-		322	351
Stage 1	-	-		411	-
Stage 2	-	-		-	-
Platoon blocked, %	-	-			
Mov Cap-1 Maneuver	-	-		322	351
Mov Cap-2 Maneuver	-	-		322	-
Stage 1	-	-		411	-
Stage 2	-	-		-	-

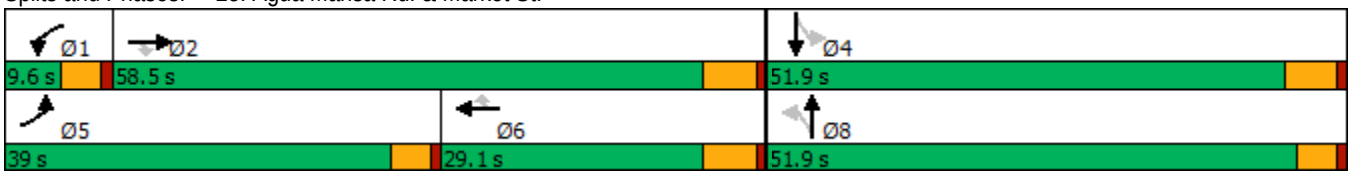
Approach	EB	NB
HCM Control Delay, s	0	17.8
HCM LOS		C

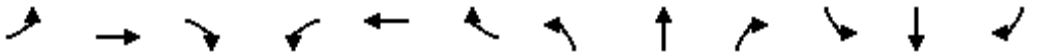
Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	338	-	-
HCM Lane V/C Ratio	0.171	-	-
HCM Control Delay (s)	17.8	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	0.6	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	497	521	10	4	690	267	19	2	176	16
Future Volume (vph)	497	521	10	4	690	267	19	2	176	16
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	5	2		1	6			8		4
Permitted Phases			2			6	8		4	
Detector Phase	5	2	2	1	6	6	8	8	4	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	31.8	31.8	9.6	26.8	26.8	14.6	14.6	43.8	43.8
Total Split (s)	39.0	58.5	58.5	9.6	29.1	29.1	51.9	51.9	51.9	51.9
Total Split (%)	32.5%	48.8%	48.8%	8.0%	24.3%	24.3%	43.3%	43.3%	43.3%	43.3%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None
Act Effct Green (s)	34.4	60.4	60.4	5.0	23.3	23.3		47.3		46.1
Actuated g/C Ratio	0.29	0.50	0.50	0.04	0.19	0.19		0.39		0.38
v/c Ratio	1.07	0.32	0.01	0.05	1.10	0.54		0.07		1.14
Control Delay	100.2	18.7	0.0	56.8	108.3	8.7		18.3		109.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	100.2	18.7	0.0	56.8	108.3	8.7		18.3		109.9
LOS	F	B	A	E	F	A		B		F
Approach Delay		57.9			80.4			18.3		109.9
Approach LOS		E			F			B		F

Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 120		
Natural Cycle: 120		
Control Type: Actuated-Uncoordinated		
Maximum v/c Ratio: 1.14		
Intersection Signal Delay: 78.7	Intersection LOS: E	
Intersection Capacity Utilization 101.1%	ICU Level of Service G	
Analysis Period (min) 15		

Splits and Phases: 25: Agua Mansa Rd. & Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	497	521	10	4	690	267	19	2	8	176	16	496
Future Volume (veh/h)	497	521	10	4	690	267	19	2	8	176	16	496
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	552	579	8	4	767	258	21	2	7	196	18	457
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	519	1717	766	9	701	312	239	28	66	211	19	410
Arrive On Green	0.29	0.48	0.48	0.01	0.19	0.19	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1810	3610	1610	1810	3610	1606	490	73	171	449	51	1068
Grp Volume(v), veh/h	552	579	8	4	767	258	30	0	0	671	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1606	734	0	0	1568	0	0
Q Serve(g_s), s	34.4	12.0	0.3	0.3	23.3	18.5	0.0	0.0	0.0	44.2	0.0	0.0
Cycle Q Clear(g_c), s	34.4	12.0	0.3	0.3	23.3	18.5	1.9	0.0	0.0	46.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.70		0.23	0.29		0.68
Lane Grp Cap(c), veh/h	519	1717	766	9	701	312	333	0	0	641	0	0
V/C Ratio(X)	1.06	0.34	0.01	0.43	1.09	0.83	0.09	0.00	0.00	1.05	0.00	0.00
Avail Cap(c_a), veh/h	519	1717	766	75	701	312	344	0	0	641	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	42.8	19.6	16.6	59.5	48.3	46.4	23.2	0.0	0.0	38.2	0.0	0.0
Incr Delay (d2), s/veh	57.7	0.5	0.0	10.9	62.6	21.6	0.1	0.0	0.0	48.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	23.0	4.9	0.1	0.1	16.2	9.0	0.6	0.0	0.0	27.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	100.5	20.2	16.6	70.4	111.0	68.1	23.3	0.0	0.0	86.5	0.0	0.0
LnGrp LOS	F	C	B	E	F	E	C	A	A	F	A	A
Approach Vol, veh/h		1139			1029			30			671	
Approach Delay, s/veh		59.1			100.0			23.3			86.5	
Approach LOS		E			F			C			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.2	62.9		51.9	39.0	29.1		51.9				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	52.7		46.1	34.4	23.3		* 47				
Max Q Clear Time (g_c+I1), s	2.3	14.0		48.1	36.4	25.3		3.9				
Green Ext Time (p_c), s	0.0	3.9		0.0	0.0	0.0		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		79.8
HCM 6th LOS		E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	168	2	23	19	13	4	14	49	2	17	2
Future Vol, veh/h	8	168	2	23	19	13	4	14	49	2	17	2
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	205	2	28	23	16	5	17	60	2	21	2
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	9.4	8	7.7	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	6%	5%	0%	55%	0%	10%
Vol Thru, %	21%	95%	0%	45%	0%	81%
Vol Right, %	73%	0%	100%	0%	100%	10%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	67	176	2	42	13	21
LT Vol	4	8	0	23	0	2
Through Vol	14	168	0	19	0	17
RT Vol	49	0	2	0	13	2
Lane Flow Rate	82	215	2	51	16	26
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.095	0.283	0.003	0.074	0.019	0.033
Departure Headway (Hd)	4.202	4.748	4.024	5.189	4.211	4.653
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	856	749	876	692	852	772
Service Time	2.209	2.533	1.808	2.905	1.926	2.664
HCM Lane V/C Ratio	0.096	0.287	0.002	0.074	0.019	0.034
HCM Control Delay	7.7	9.4	6.8	8.3	7	7.8
HCM Lane LOS	A	A	A	A	A	A
HCM 95th-tile Q	0.3	1.2	0	0.2	0.1	0.1

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	4	0	8	14	0	4	6	76	8	1	75	9
Future Vol, veh/h	4	0	8	14	0	4	6	76	8	1	75	9
Conflicting Peds, #/hr	0	0	1	0	0	1	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	0	10	18	0	5	8	96	10	1	95	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	224	225	102	226	225	102	106	0	0	106	0	0
Stage 1	103	103	-	117	117	-	-	-	-	-	-	-
Stage 2	121	122	-	109	108	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	736	678	959	734	678	959	1498	-	-	1498	-	-
Stage 1	908	814	-	892	803	-	-	-	-	-	-	-
Stage 2	888	799	-	901	810	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	727	673	958	722	673	958	1498	-	-	1498	-	-
Mov Cap-2 Maneuver	727	673	-	722	673	-	-	-	-	-	-	-
Stage 1	903	813	-	887	798	-	-	-	-	-	-	-
Stage 2	877	794	-	890	809	-	-	-	-	-	-	-

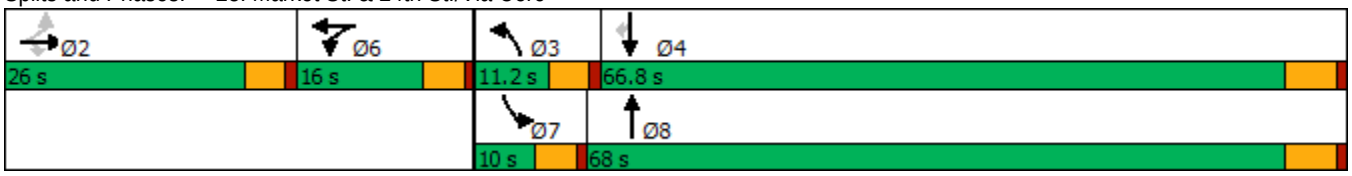
Approach	EB	WB	NB	SB
HCM Control Delay, s	9.2	9.9	0.5	0.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1498	-	-	866	764	1498	-	-
HCM Lane V/C Ratio	0.005	-	-	0.018	0.03	0.001	-	-
HCM Control Delay (s)	7.4	0	-	9.2	9.9	7.4	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	4	33	173	100	8	41	899	30	807	3
Future Volume (vph)	4	33	173	100	8	41	899	30	807	3
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	26.0	26.0	26.0	16.0	16.0	11.2	68.0	10.0	66.8	66.8
Total Split (%)	21.7%	21.7%	21.7%	13.3%	13.3%	9.3%	56.7%	8.3%	55.7%	55.7%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		11.9	11.9	10.9	10.9	6.1	62.6	5.3	61.9	61.9
Actuated g/C Ratio		0.11	0.11	0.10	0.10	0.06	0.59	0.05	0.58	0.58
v/c Ratio		0.45	0.54	0.57	0.07	0.42	1.03	0.36	0.77	0.00
Control Delay		62.0	12.8	60.1	36.2	63.2	58.4	62.8	24.5	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		62.0	12.8	60.1	36.2	63.2	58.4	62.8	24.5	0.0
LOS		E	B	E	D	E	E	E	C	A
Approach Delay		21.5			57.3		58.6		25.8	
Approach LOS		C			E		E		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 106.1	
Natural Cycle: 115	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 43.0	Intersection LOS: D
Intersection Capacity Utilization 78.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	33	173	100	8	6	41	899	170	30	807	3
Future Volume (veh/h)	4	33	173	100	8	6	41	899	170	30	807	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	4	35	89	105	8	5	43	946	157	32	849	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	18	161	152	168	101	63	62	947	157	52	1122	951
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.03	0.60	0.60	0.03	0.59	0.59
Sat Flow, veh/h	194	1696	1605	1810	1094	683	1810	1589	264	1810	1900	1610
Grp Volume(v), veh/h	39	0	89	105	0	13	43	0	1103	32	849	3
Grp Sat Flow(s),veh/h/ln	1890	0	1605	1810	0	1777	1810	0	1852	1810	1900	1610
Q Serve(g_s), s	2.0	0.0	5.5	5.8	0.0	0.7	2.5	0.0	62.1	1.8	34.5	0.1
Cycle Q Clear(g_c), s	2.0	0.0	5.5	5.8	0.0	0.7	2.5	0.0	62.1	1.8	34.5	0.1
Prop In Lane	0.10		1.00	1.00		0.38	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	179	0	152	168	0	165	62	0	1104	52	1122	951
V/C Ratio(X)	0.22	0.00	0.59	0.63	0.00	0.08	0.70	0.00	1.00	0.61	0.76	0.00
Avail Cap(c_a), veh/h	388	0	329	198	0	194	114	0	1104	94	1122	951
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	0.0	45.3	45.6	0.0	43.3	49.9	0.0	21.1	50.1	15.8	8.8
Incr Delay (d2), s/veh	0.6	0.0	3.5	4.6	0.0	0.2	5.2	0.0	26.9	4.2	4.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	2.3	2.9	0.0	0.3	1.2	0.0	30.5	0.9	14.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.3	0.0	48.8	50.3	0.0	43.5	55.0	0.0	48.0	54.3	20.6	8.8
LnGrp LOS	D	A	D	D	A	D	E	A	D	D	C	A
Approach Vol, veh/h		128			118			1146			884	
Approach Delay, s/veh		47.4			49.5			48.3			21.8	
Approach LOS		D			D			D			C	

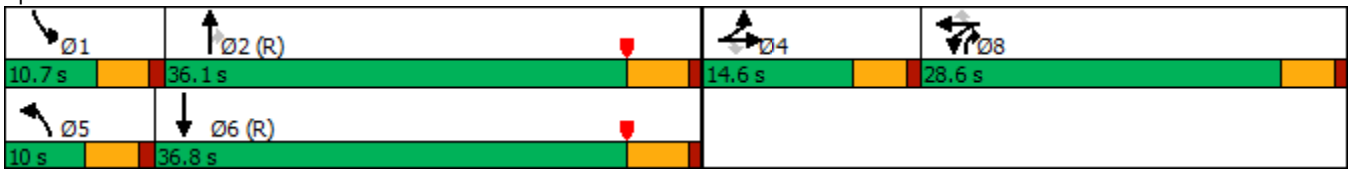
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.5	8.2	67.5		14.3	7.6	68.0				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		21.4	6.6	61.0		11.4	5.4	62.2				
Max Q Clear Time (g_c+I1), s		7.5	4.5	36.5		7.8	3.8	64.1				
Green Ext Time (p_c), s		0.3	0.0	6.1		0.1	0.0	0.0				

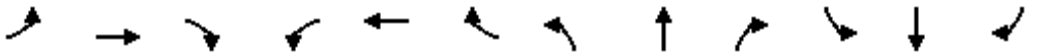
Intersection Summary												
HCM 6th Ctrl Delay			38.0									
HCM 6th LOS			D									

Lane Group	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	18	324	0	55	23	1166	320	40	980
Future Volume (vph)	18	324	0	55	23	1166	320	40	980
Turn Type	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases		8	8		5	2	8	1	6
Permitted Phases	4			8			2		
Detector Phase	4	8	8	8	5	2	8	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	14.6	28.6	28.6	28.6	9.6	35.1	28.6	9.6	29.1
Total Split (s)	14.6	28.6	28.6	28.6	10.0	36.1	28.6	10.7	36.8
Total Split (%)	16.2%	31.8%	31.8%	31.8%	11.1%	40.1%	31.8%	11.9%	40.9%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.1	3.6	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	5.1	4.6	4.6	5.1
Lead/Lag					Lead	Lag		Lead	Lag
Lead-Lag Optimize?					Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	10.0	16.3	16.3	16.3	5.5	51.4	68.2	6.1	54.0
Actuated g/C Ratio	0.11	0.18	0.18	0.18	0.06	0.57	0.76	0.07	0.60
v/c Ratio	0.05	0.54	0.54	0.14	0.22	0.58	0.26	0.34	0.47
Control Delay	0.3	38.9	38.9	0.8	40.2	21.2	0.5	47.6	15.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.5	0.1	0.0	0.0
Total Delay	0.3	38.9	38.9	0.8	40.2	21.7	0.6	47.6	15.3
LOS	A	D	D	A	D	C	A	D	B
Approach Delay			33.3			17.5			16.6
Approach LOS			C			B			B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 2 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 19.1	Intersection LOS: B
Intersection Capacity Utilization 56.3%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 29: Market St. & Rivera St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	18	324	0	55	23	1166	320	40	980	1
Future Volume (veh/h)	0	0	18	324	0	55	23	1166	320	40	980	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	0	5	334	0	33	24	1202	224	41	1010	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	0	25	21	447	0	194	45	2230	1193	64	2325	2
Arrive On Green	0.00	0.00	0.01	0.12	0.00	0.12	0.05	1.00	1.00	0.04	0.63	0.63
Sat Flow, veh/h	0	1900	1610	3619	0	1573	1810	3610	1609	1810	3701	4
Grp Volume(v), veh/h	0	0	5	334	0	33	24	1202	224	41	493	518
Grp Sat Flow(s),veh/h/ln	0	1900	1610	1810	0	1573	1810	1805	1609	1810	1805	1899
Q Serve(g_s), s	0.0	0.0	0.3	8.0	0.0	1.7	1.2	0.0	0.0	2.0	12.6	12.6
Cycle Q Clear(g_c), s	0.0	0.0	0.3	8.0	0.0	1.7	1.2	0.0	0.0	2.0	12.6	12.6
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	25	21	447	0	194	45	2230	1193	64	1134	1193
V/C Ratio(X)	0.00	0.00	0.24	0.75	0.00	0.17	0.53	0.54	0.19	0.64	0.43	0.43
Avail Cap(c_a), veh/h	0	211	179	965	0	420	109	2230	1193	123	1134	1193
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	0.82	0.82	0.82	0.63	0.63	0.63
Uniform Delay (d), s/veh	0.0	0.0	44.0	38.1	0.0	35.3	42.2	0.0	0.0	42.8	8.5	8.5
Incr Delay (d2), s/veh	0.0	0.0	5.7	2.5	0.0	0.4	2.9	0.8	0.3	2.4	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	3.7	0.0	0.7	0.5	0.2	0.1	0.9	4.1	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	49.6	40.6	0.0	35.7	45.1	0.8	0.3	45.3	9.3	9.3
LnGrp LOS	A	A	D	D	A	D	D	A	A	D	A	A
Approach Vol, veh/h		5			367			1450			1052	
Approach Delay, s/veh		49.6			40.2			1.4			10.7	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	60.7		5.8	6.9	61.7		15.7				
Change Period (Y+Rc), s	4.6	5.1		4.6	4.6	5.1		4.6				
Max Green Setting (Gmax), s	6.1	31.0		10.0	5.4	31.7		24.0				
Max Q Clear Time (g_c+I1), s	4.0	2.0		2.3	3.2	14.6		10.0				
Green Ext Time (p_c), s	0.0	10.5		0.0	0.0	5.5		1.1				

Intersection Summary	
HCM 6th Ctrl Delay	9.9
HCM 6th LOS	A

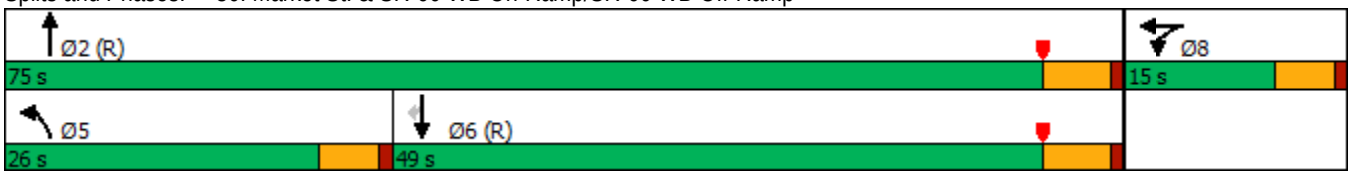
Notes

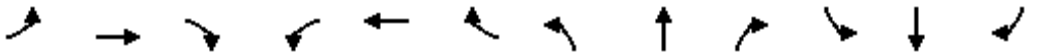
User approved volume balancing among the lanes for turning movement.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	1073	209	436	1117	204
Future Volume (vph)	0	1073	209	436	1117	204
Turn Type	NA	Free	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		Free				6
Detector Phase	8		5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	10.0		10.0	24.5	10.5	10.5
Total Split (s)	15.0		26.0	75.0	49.0	49.0
Total Split (%)	16.7%		28.9%	83.3%	54.4%	54.4%
Yellow Time (s)	4.0		4.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	C-Min	C-Min	C-Min
Act Effct Green (s)	8.3	90.0	16.0	74.4	52.3	52.3
Actuated g/C Ratio	0.09	1.00	0.18	0.83	0.58	0.58
v/c Ratio	0.41	0.70	0.69	0.15	0.56	0.21
Control Delay	45.4	2.5	25.5	5.4	11.2	2.2
Queue Delay	0.0	0.3	0.0	0.0	0.2	0.0
Total Delay	45.4	2.9	25.5	5.4	11.4	2.2
LOS	D	A	C	A	B	A
Approach Delay	5.3			11.9	9.9	
Approach LOS	A			B	A	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 8.7	Intersection LOS: A
Intersection Capacity Utilization 75.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 30: Market St. & SR-60 WB On-Ramp/SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	65	0	1073	209	436	0	0	1117	204
Future Volume (veh/h)	0	0	0	65	0	1073	209	436	0	0	1117	204
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				68	0	0	220	459	0	0	1176	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				89	0		255	3011	0	0	2301	
Arrive On Green				0.05	0.00	0.00	0.28	1.00	0.00	0.00	1.00	0.00
Sat Flow, veh/h				1810	0	1610	1810	3705	0	0	3705	1610
Grp Volume(v), veh/h				68	0	0	220	459	0	0	1176	0
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1805	1610
Q Serve(g_s), s				3.3	0.0	0.0	10.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				3.3	0.0	0.0	10.4	0.0	0.0	0.0	0.0	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				89	0		255	3011	0	0	2301	
V/C Ratio(X)				0.76	0.00		0.86	0.15	0.00	0.00	0.51	
Avail Cap(c_a), veh/h				201	0		422	3011	0	0	2301	
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	0.00	0.00	0.76	0.76	0.00	0.00	0.88	0.00
Uniform Delay (d), s/veh				42.3	0.0	0.0	31.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				12.7	0.0	0.0	7.4	0.1	0.0	0.0	0.7	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.7	0.0	0.0	4.2	0.0	0.0	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				54.9	0.0	0.0	38.9	0.1	0.0	0.0	0.7	0.0
LnGrp LOS				D	A		D	A	A	A	A	
Approach Vol, veh/h					68			679			1176	
Approach Delay, s/veh					54.9			12.6			0.7	
Approach LOS					D			B			A	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	80.6		17.7	62.9		9.4						
Change Period (Y+Rc), s	5.5		5.0	5.5		5.0						
Max Green Setting (Gmax), s	69.5		21.0	43.5		10.0						
Max Q Clear Time (g_c+I1), s	2.0		12.4	2.0		5.3						
Green Ext Time (p_c), s	3.2		0.4	10.0		0.1						

Intersection Summary		
HCM 6th Ctrl Delay	6.8	
HCM 6th LOS	A	

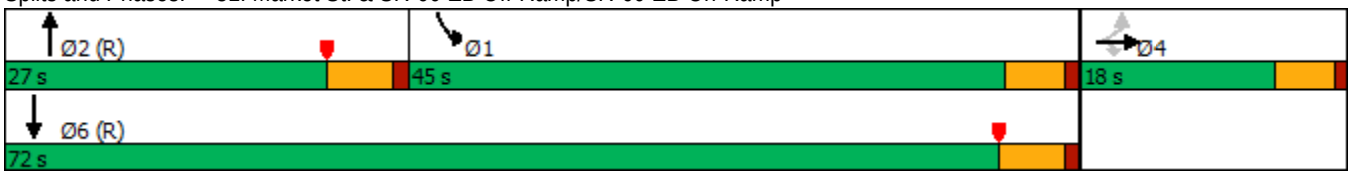
Notes

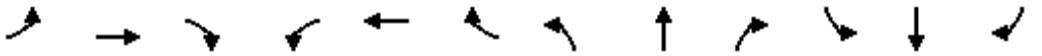
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	0	518	498	690	493
Future Volume (vph)	0	518	498	690	493
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	24.5	10.0	10.5
Total Split (s)	18.0	18.0	27.0	45.0	72.0
Total Split (%)	20.0%	20.0%	30.0%	50.0%	80.0%
Yellow Time (s)	4.0	4.0	4.5	4.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.0	5.5
Lead/Lag			Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Min	None	C-Min
Act Effct Green (s)	11.7	11.7	24.6	38.2	67.8
Actuated g/C Ratio	0.13	0.13	0.27	0.42	0.75
v/c Ratio	0.64	0.64	0.61	0.92	0.18
Control Delay	49.9	7.2	31.6	43.1	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	49.9	7.2	31.6	43.1	5.1
LOS	D	A	C	D	A
Approach Delay	16.6		31.6		27.3
Approach LOS	B		C		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 15 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 25.4	Intersection LOS: C
Intersection Capacity Utilization 75.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 31: Market St. & SR-60 EB Off-Ramp/SR-60 EB On-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	0	518	0	0	0	0	498	87	690	493	0
Future Volume (veh/h)	147	0	518	0	0	0	0	498	87	690	493	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	150	0	264				0	508	0	704	503	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	215	0	336				0	640		952	2761	0
Arrive On Green	0.12	0.00	0.12				0.00	0.18	0.00	0.88	1.00	0.00
Sat Flow, veh/h	1810	0	2834				0	3800	0	1810	3705	0
Grp Volume(v), veh/h	150	0	264				0	508	0	704	503	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1805	0	1810	1805	0
Q Serve(g_s), s	7.2	0.0	8.1				0.0	12.1	0.0	12.1	0.0	0.0
Cycle Q Clear(g_c), s	7.2	0.0	8.1				0.0	12.1	0.0	12.1	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	215	0	336				0	640		952	2761	0
V/C Ratio(X)	0.70	0.00	0.79				0.00	0.79		0.74	0.18	0.00
Avail Cap(c_a), veh/h	261	0	409				0	862		952	2761	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.81	0.81	0.00
Uniform Delay (d), s/veh	38.1	0.0	38.5				0.0	35.5	0.0	3.3	0.0	0.0
Incr Delay (d2), s/veh	6.2	0.0	8.0				0.0	9.8	0.0	2.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	3.1				0.0	6.0	0.0	2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.3	0.0	46.6				0.0	45.3	0.0	5.8	0.1	0.0
LnGrp LOS	D	A	D				A	D		A	A	A
Approach Vol, veh/h		414						508			1207	
Approach Delay, s/veh		45.7						45.3			3.4	
Approach LOS		D						D			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	52.9	21.5		15.7		74.3
Change Period (Y+Rc), s	5.5	* 5.5		5.0		5.5
Max Green Setting (Gmax), s	40.0	* 22		13.0		66.5
Max Q Clear Time (g_c+I1), s	14.1	14.1		10.1		2.0
Green Ext Time (p_c), s	2.5	1.8		0.5		3.5

Intersection Summary	
HCM 6th Ctrl Delay	21.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	1	15	0	0	5	10	556	5	110	870	32
Future Vol, veh/h	23	1	15	0	0	5	10	556	5	110	870	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	145	-	-	140	-	110
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	24	1	16	0	0	5	10	579	5	115	906	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1446	1742	453	1288	1773	294	939	0	0	586	0	0
Stage 1	1136	1136	-	604	604	-	-	-	-	-	-	-
Stage 2	310	606	-	684	1169	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	219	137	*740	*322	128	708	*1110	-	-	999	-	-
Stage 1	497	475	-	*457	491	-	-	-	-	-	-	-
Stage 2	681	490	-	*698	453	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	197	119	*740	*284	112	707	*1110	-	-	997	-	-
Mov Cap-2 Maneuver	328	234	-	*359	248	-	-	-	-	-	-	-
Stage 1	493	421	-	*452	486	-	-	-	-	-	-	-
Stage 2	670	485	-	*603	401	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.7	10.1	0.1	1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 1110	-	-	412	707	997	-	-
HCM Lane V/C Ratio	0.009	-	-	0.099	0.007	0.115	-	-
HCM Control Delay (s)	8.3	-	-	14.7	10.1	9.1	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	196	51	49	522	619	191
Future Vol, veh/h	196	51	49	522	619	191
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	209	54	52	555	659	203

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1143	761	862	0	-	0
Stage 1	761	-	-	-	-	-
Stage 2	382	-	-	-	-	-
Critical Hdwy	6.6	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	210	409	789	-	-	-
Stage 1	465	-	-	-	-	-
Stage 2	665	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 196	409	789	-	-	-
Mov Cap-2 Maneuver	323	-	-	-	-	-
Stage 1	434	-	-	-	-	-
Stage 2	665	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	44.5	0.8	0
HCM LOS	E		

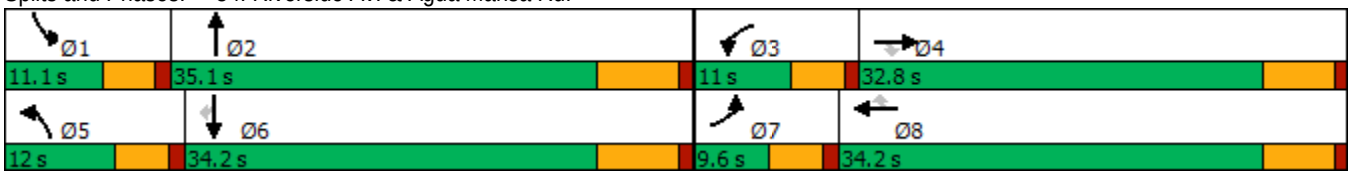
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	789	-	338	-	-
HCM Lane V/C Ratio	0.066	-	0.777	-	-
HCM Control Delay (s)	9.9	-	44.5	-	-
HCM Lane LOS	A	-	E	-	-
HCM 95th %tile Q(veh)	0.2	-	6.3	-	-

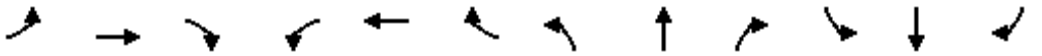
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	163	317	161	141	423	82	178	507	80	609	220
Future Volume (vph)	163	317	161	141	423	82	178	507	80	609	220
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	9.6	32.8	32.8	11.0	34.2	34.2	12.0	35.1	11.1	34.2	34.2
Total Split (%)	10.7%	36.4%	36.4%	12.2%	38.0%	38.0%	13.3%	39.0%	12.3%	38.0%	38.0%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	5.1	21.2	21.2	6.5	22.6	22.6	7.6	24.1	6.3	20.4	20.4
Actuated g/C Ratio	0.07	0.27	0.27	0.08	0.29	0.29	0.10	0.31	0.08	0.26	0.26
v/c Ratio	1.47	0.65	0.30	0.99	0.81	0.15	1.08	0.53	0.58	0.68	0.39
Control Delay	280.8	32.0	5.6	113.5	39.1	1.0	130.0	25.1	55.4	30.0	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	280.8	32.0	5.6	113.5	39.1	1.0	130.0	25.1	55.4	30.0	5.6
LOS	F	C	A	F	D	A	F	C	E	C	A
Approach Delay		88.6			50.5			50.4		26.3	
Approach LOS		F			D			D		C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 77.6	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.47	
Intersection Signal Delay: 51.3	Intersection LOS: D
Intersection Capacity Utilization 75.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	163	317	161	141	423	82	178	507	53	80	609	220
Future Volume (veh/h)	163	317	161	141	423	82	178	507	53	80	609	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	173	337	107	150	450	63	189	539	52	85	648	215
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	127	494	418	162	531	450	187	962	93	110	889	397
Arrive On Green	0.07	0.26	0.26	0.09	0.28	0.28	0.10	0.29	0.29	0.06	0.25	0.25
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3327	320	1810	3610	1610
Grp Volume(v), veh/h	173	337	107	150	450	63	189	292	299	85	648	215
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1842	1810	1805	1610
Q Serve(g_s), s	5.0	11.4	3.8	5.9	16.0	2.1	7.4	9.8	9.9	3.3	11.8	8.3
Cycle Q Clear(g_c), s	5.0	11.4	3.8	5.9	16.0	2.1	7.4	9.8	9.9	3.3	11.8	8.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	127	494	418	162	531	450	187	522	533	110	889	397
V/C Ratio(X)	1.37	0.68	0.26	0.93	0.85	0.14	1.01	0.56	0.56	0.77	0.73	0.54
Avail Cap(c_a), veh/h	127	718	608	162	755	640	187	722	737	165	1399	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.2	23.8	21.0	32.3	24.3	19.3	32.0	21.5	21.6	33.1	24.7	23.4
Incr Delay (d2), s/veh	207.2	1.7	0.3	48.7	6.3	0.1	68.0	0.9	0.9	5.9	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	4.8	1.3	4.6	7.3	0.7	6.4	3.7	3.7	1.5	4.5	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	240.4	25.5	21.3	81.0	30.6	19.5	100.1	22.5	22.5	39.0	25.9	24.6
LnGrp LOS	F	C	C	F	C	B	F	C	C	D	C	C
Approach Vol, veh/h		617			663			780			948	
Approach Delay, s/veh		85.0			41.0			41.3			26.8	
Approach LOS		F			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	27.2	11.0	24.4	12.0	24.1	9.6	25.8
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	6.5	28.6	6.4	27.0	7.4	27.7	5.0	28.4
Max Q Clear Time (g_c+I1), s	5.3	11.9	7.9	13.4	9.4	13.8	7.0	18.0
Green Ext Time (p_c), s	0.0	2.7	0.0	1.8	0.0	3.8	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	45.6
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	0	0	160	694	1
Future Vol, veh/h	4	0	0	160	694	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	92	92	92	92	62
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	0	0	174	754	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	929	755	756	0	-	0
Stage 1	755	-	-	-	-	-
Stage 2	174	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	300	412	864	-	-	-
Stage 1	468	-	-	-	-	-
Stage 2	861	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	300	412	864	-	-	-
Mov Cap-2 Maneuver	300	-	-	-	-	-
Stage 1	468	-	-	-	-	-
Stage 2	861	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	864	-	300	-	-
HCM Lane V/C Ratio	-	-	0.022	-	-
HCM Control Delay (s)	0	-	17.3	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	108.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	381	0	226	256	2	664
Future Vol, veh/h	381	0	226	256	2	664
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	488	0	290	328	3	851

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	488	0	1396	488
Stage 1	-	-	-	-	488	-
Stage 2	-	-	-	-	908	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1086	-	157	~ 584
Stage 1	-	-	-	-	621	-
Stage 2	-	-	-	-	397	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1086	-	106	~ 584
Mov Cap-2 Maneuver	-	-	-	-	106	-
Stage 1	-	-	-	-	621	-
Stage 2	-	-	-	-	267	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.5	246.1
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	576	-	-	1086	-
HCM Lane V/C Ratio	1.482	-	-	0.267	-
HCM Control Delay (s)	246.1	-	-	9.5	0
HCM Lane LOS	F	-	-	A	A
HCM 95th %tile Q(veh)	42.3	-	-	1.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	7	1031	40	25	461	3	18	8	30	1	13	3
Future Vol, veh/h	7	1031	40	25	461	3	18	8	30	1	13	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	1257	49	30	562	4	22	10	37	1	16	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	566	0	0	1306	0	0	1937	1926	1282	1947	1948	567
Stage 1	-	-	-	-	-	-	1300	1300	-	624	624	-
Stage 2	-	-	-	-	-	-	637	626	-	1323	1324	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1016	-	-	537	-	-	50	67	204	49	65	527
Stage 1	-	-	-	-	-	-	200	233	-	477	481	-
Stage 2	-	-	-	-	-	-	469	480	-	194	227	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1016	-	-	537	-	-	36	59	204	32	58	525
Mov Cap-2 Maneuver	-	-	-	-	-	-	36	59	-	32	58	-
Stage 1	-	-	-	-	-	-	193	225	-	461	442	-
Stage 2	-	-	-	-	-	-	411	441	-	147	220	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.6	190	84.4
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	72	1016	-	-	537	-	-	65
HCM Lane V/C Ratio	0.949	0.008	-	-	0.057	-	-	0.319
HCM Control Delay (s)	190	8.6	0	-	12.1	0	-	84.4
HCM Lane LOS	F	A	A	-	B	A	-	F
HCM 95th %tile Q(veh)	4.8	0	-	-	0.2	-	-	1.2

Intersection	
Int Delay, s/veh	2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	20	37	8	21	58
Future Vol, veh/h	12	20	37	8	21	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	100	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	14	23	43	9	24	67

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	163	48	0	0	52	0
Stage 1	48	-	-	-	-	-
Stage 2	115	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	832	1027	-	-	1567	-
Stage 1	980	-	-	-	-	-
Stage 2	915	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	819	1027	-	-	1567	-
Mov Cap-2 Maneuver	819	-	-	-	-	-
Stage 1	980	-	-	-	-	-
Stage 2	900	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	1.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	819	1027	1567	-
HCM Lane V/C Ratio	-	-	0.017	0.023	0.016	-
HCM Control Delay (s)	-	-	9.5	8.6	7.3	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	0	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	8	0	9	0	36	25	10	60	0
Future Vol, veh/h	0	0	0	8	0	9	0	36	25	10	60	0
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	9	0	10	0	40	27	11	66	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	148	156	68	143	143	54	67	0	0	67	0	0
Stage 1	89	89	-	54	54	-	-	-	-	-	-	-
Stage 2	59	67	-	89	89	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	825	740	1001	831	752	1019	1547	-	-	1547	-	-
Stage 1	923	825	-	963	854	-	-	-	-	-	-	-
Stage 2	958	843	-	923	825	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	812	734	999	826	746	1019	1546	-	-	1547	-	-
Mov Cap-2 Maneuver	812	734	-	826	746	-	-	-	-	-	-	-
Stage 1	922	818	-	963	854	-	-	-	-	-	-	-
Stage 2	949	843	-	916	818	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9	0	1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1546	-	-	-	918	1547	-	-
HCM Lane V/C Ratio	-	-	-	-	0.02	0.007	-	-
HCM Control Delay (s)	0	-	-	0	9	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	0	0	41	62	6
Future Vol, veh/h	20	0	0	41	62	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	0	0	45	67	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	116	71	74	0	-	0
Stage 1	71	-	-	-	-	-
Stage 2	45	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	885	997	1538	-	-	-
Stage 1	957	-	-	-	-	-
Stage 2	983	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	885	997	1538	-	-	-
Mov Cap-2 Maneuver	885	-	-	-	-	-
Stage 1	957	-	-	-	-	-
Stage 2	983	-	-	-	-	-

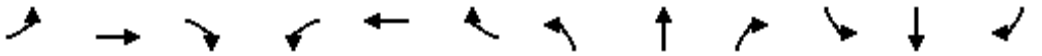
Approach	EB	NB	SB
HCM Control Delay, s	9.2	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1538	-	885	-	-
HCM Lane V/C Ratio	-	-	0.025	-	-
HCM Control Delay (s)	0	-	9.2	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	5	394	699	1684	1408	582
Future Volume (vph)	5	394	699	1684	1408	582
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	41.0	41.0	22.0	69.0	47.0	47.0
Total Split (%)	37.3%	37.3%	20.0%	62.7%	42.7%	42.7%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	37.6	37.6	18.0	63.9	41.9	41.9
Actuated g/C Ratio	0.34	0.34	0.16	0.58	0.38	0.38
v/c Ratio	1.07	0.68	2.55	0.86	0.77	0.64
Control Delay	94.0	33.9	721.1	22.1	32.8	5.2
Queue Delay	10.9	0.0	0.0	24.4	34.8	0.0
Total Delay	104.9	33.9	721.1	46.6	67.6	5.2
LOS	F	C	F	D	E	A
Approach Delay	78.0			244.5	49.4	
Approach LOS	E			F	D	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.55	
Intersection Signal Delay: 142.0	Intersection LOS: F
Intersection Capacity Utilization 124.0%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	541	5	394	699	1684	0	0	1408	582
Future Volume (veh/h)	0	0	0	541	5	394	699	1684	0	0	1408	582
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				582	5	389	752	1811	0	0	1514	439
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				604	5	542	296	2117	0	0	2004	618
Arrive On Green				0.34	0.34	0.34	0.22	0.78	0.00	0.00	0.39	0.39
Sat Flow, veh/h				1795	15	1610	1810	3705	0	0	5358	1600
Grp Volume(v), veh/h				587	0	389	752	1811	0	0	1514	439
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1729	1600
Q Serve(g_s), s				35.0	0.0	23.3	18.0	36.5	0.0	0.0	27.8	25.5
Cycle Q Clear(g_c), s				35.0	0.0	23.3	18.0	36.5	0.0	0.0	27.8	25.5
Prop In Lane				0.99		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				609	0	542	296	2117	0	0	2004	618
V/C Ratio(X)				0.96	0.00	0.72	2.54	0.86	0.00	0.00	0.76	0.71
Avail Cap(c_a), veh/h				609	0	542	296	2117	0	0	2004	618
HCM Platoon Ratio				1.00	1.00	1.00	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				35.8	0.0	31.9	43.0	9.0	0.0	0.0	29.2	28.5
Incr Delay (d2), s/veh				27.6	0.0	4.6	693.7	0.5	0.0	0.0	2.7	6.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				19.2	0.0	9.2	64.4	6.3	0.0	0.0	11.5	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				63.5	0.0	36.5	736.8	9.5	0.0	0.0	32.0	35.3
LnGrp LOS				E	A	D	F	A	A	A	C	D
Approach Vol, veh/h					976			2563			1953	
Approach Delay, s/veh					52.7			222.9			32.7	
Approach LOS					D			F			C	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	69.0		22.0	47.0		41.0						
Change Period (Y+Rc), s	4.5		4.0	4.5		4.0						
Max Green Setting (Gmax), s	64.5		18.0	42.5		37.0						
Max Q Clear Time (g_c+I1), s	38.5		20.0	29.8		37.0						
Green Ext Time (p_c), s	16.1		0.0	8.9		0.0						

Intersection Summary		
HCM 6th Ctrl Delay	125.0	
HCM 6th LOS	F	

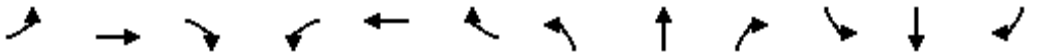
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	566	5	1819	857	420	1526
Future Volume (vph)	566	5	1819	857	420	1526
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	37.1	37.1	32.8	32.8	40.1	72.9
Total Split (%)	33.7%	33.7%	29.8%	29.8%	36.5%	66.3%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	37.6	37.6	31.3	31.3	30.0	64.9
Actuated g/C Ratio	0.34	0.34	0.28	0.28	0.27	0.59
v/c Ratio	0.89	0.86	1.26	0.98	0.87	0.73
Control Delay	53.5	48.6	149.9	29.2	43.6	12.1
Queue Delay	49.5	50.7	0.0	0.0	3.1	11.2
Total Delay	103.0	99.4	149.9	29.2	46.7	23.4
LOS	F	F	F	C	D	C
Approach Delay		101.2	111.2			28.4
Approach LOS		F	F			C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.26	
Intersection Signal Delay: 80.7	Intersection LOS: F
Intersection Capacity Utilization 124.0%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	566	5	411	0	0	0	0	1819	857	420	1526	0
Future Volume (veh/h)	566	5	411	0	0	0	0	1819	857	420	1526	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	496	120	409				0	1856	669	429	1557	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	553	116	394				0	1358	419	594	2261	0
Arrive On Green	0.31	0.31	0.31				0.00	0.09	0.09	0.44	0.83	0.00
Sat Flow, veh/h	1810	378	1290				0	5358	1601	1810	3705	0
Grp Volume(v), veh/h	496	0	529				0	1856	669	429	1557	0
Grp Sat Flow(s),veh/h/ln	1810	0	1668				0	1729	1601	1810	1805	0
Q Serve(g_s), s	28.8	0.0	33.6				0.0	28.8	28.8	21.5	18.6	0.0
Cycle Q Clear(g_c), s	28.8	0.0	33.6				0.0	28.8	28.8	21.5	18.6	0.0
Prop In Lane	1.00		0.77				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	553	0	509				0	1358	419	594	2261	0
V/C Ratio(X)	0.90	0.00	1.04				0.00	1.37	1.60	0.72	0.69	0.00
Avail Cap(c_a), veh/h	553	0	509				0	1358	419	602	2261	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	1.33	1.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.09	0.09	0.55	0.55	0.00
Uniform Delay (d), s/veh	36.6	0.0	38.2				0.0	50.2	50.2	26.9	5.0	0.0
Incr Delay (d2), s/veh	17.4	0.0	50.2				0.0	165.4	269.3	2.0	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.7	0.0	20.0				0.0	34.1	43.6	8.3	3.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.9	0.0	88.4				0.0	215.7	319.5	28.9	5.9	0.0
LnGrp LOS	D	A	F				A	F	F	C	A	A
Approach Vol, veh/h		1025						2525			1986	
Approach Delay, s/veh		71.7						243.2			10.9	
Approach LOS		E						F			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	40.1	32.8		37.1		72.9
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	36.6	* 29		33.6		68.9
Max Q Clear Time (g_c+I1), s	23.5	30.8		35.6		20.6
Green Ext Time (p_c), s	0.5	0.0		0.0		10.0

Intersection Summary	
HCM 6th Ctrl Delay	128.1
HCM 6th LOS	F

Notes

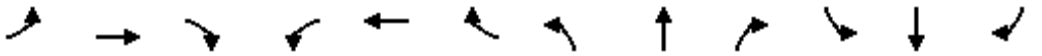
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	245	2	28	2	19	2245	52	1623	263
Future Volume (vph)	245	2	28	2	19	2245	52	1623	263
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases		4		8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	30.0	30.0	10.2	10.2	16.2	28.2	16.2	28.2	28.2
Total Split (s)	30.0	30.0	30.0	30.0	16.2	63.8	16.2	63.8	63.8
Total Split (%)	27.3%	27.3%	27.3%	27.3%	14.7%	58.0%	14.7%	58.0%	58.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	3.0	4.7	3.0	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.0	5.7	4.0	5.7	5.7
Lead/Lag					Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min	C-Min
Act Effct Green (s)	24.0	24.0	24.0	24.0	72.2	65.7	74.8	70.2	70.2
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.66	0.60	0.68	0.64	0.64
v/c Ratio	1.20	0.09	0.10	0.39	0.11	1.09	0.31	0.73	0.26
Control Delay	165.9	13.1	35.5	8.2	3.4	59.2	11.1	16.3	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0
Total Delay	165.9	13.1	35.5	8.2	3.4	63.7	11.1	16.3	2.6
LOS	F	B	D	A	A	E	B	B	A
Approach Delay		147.5		11.7		63.2		14.3	
Approach LOS		F		B		E		B	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 68.3 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.20	
Intersection Signal Delay: 45.7	Intersection LOS: D
Intersection Capacity Utilization 102.4%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 10: Cedar Av. & Orange St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	245	2	32	28	2	187	19	2245	10	52	1623	263
Future Volume (veh/h)	245	2	32	28	2	187	19	2245	10	52	1623	263
Initial Q (Qb), veh	0	0	0	0	0	0	0	44	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	255	2	28	29	2	149	20	2339	10	54	1691	213
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	238	24	330	350	5	347	149	2252	6	119	2247	979
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.03	1.00	1.00	0.02	0.42	0.42
Sat Flow, veh/h	1256	108	1514	1398	21	1592	1810	3686	16	1810	3610	1573
Grp Volume(v), veh/h	255	0	30	29	0	151	20	1144	1205	54	1691	213
Grp Sat Flow(s),veh/h/ln	1256	0	1622	1398	0	1613	1810	1805	1897	1810	1805	1573
Q Serve(g_s), s	15.1	0.0	1.6	1.9	0.0	8.9	0.5	67.1	61.6	1.2	43.8	9.5
Cycle Q Clear(g_c), s	24.0	0.0	1.6	3.5	0.0	8.9	0.5	67.1	61.6	1.2	43.8	9.5
Prop In Lane	1.00		0.93	1.00		0.99	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	238	0	354	350	0	352	149	1101	1157	119	2247	979
V/C Ratio(X)	1.07	0.00	0.08	0.08	0.00	0.43	0.13	1.04	1.04	0.46	0.75	0.22
Avail Cap(c_a), veh/h	238	0	354	350	0	352	320	1101	1157	266	2247	979
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	0.61	0.61	0.61
Uniform Delay (d), s/veh	49.5	0.0	34.3	35.6	0.0	37.1	16.4	0.0	0.0	28.1	24.9	14.9
Incr Delay (d2), s/veh	78.4	0.0	0.1	0.1	0.0	0.8	0.0	21.2	21.5	1.7	1.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.0	68.4	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.8	0.0	0.7	0.7	0.0	3.6	0.2	28.5	28.9	0.9	19.7	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	127.9	0.0	34.4	35.7	0.0	37.9	16.4	93.1	89.9	29.8	26.3	15.2
LnGrp LOS	F	A	C	D	A	D	B	F	F	C	C	B
Approach Vol, veh/h		285			180			2369			1958	
Approach Delay, s/veh		118.1			37.6			90.8			25.2	
Approach LOS		F			D			F			C	

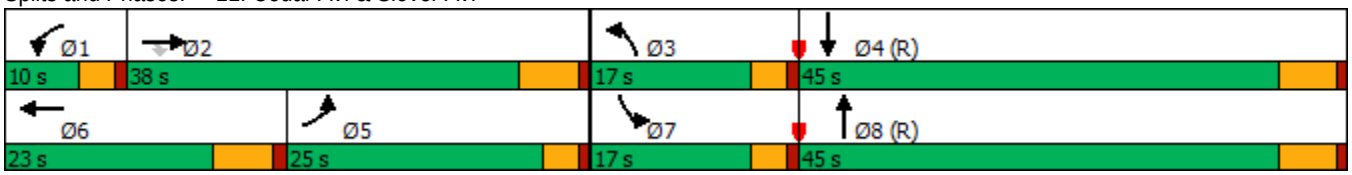
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	72.8		30.0	5.8	74.2		30.0				
Change Period (Y+Rc), s	4.0	5.7		6.0	4.0	5.7		6.0				
Max Green Setting (Gmax), s	12.2	58.1		24.0	12.2	58.1		24.0				
Max Q Clear Time (g_c+I1), s	3.2	69.1		26.0	2.5	45.8		10.9				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	9.2		0.8				

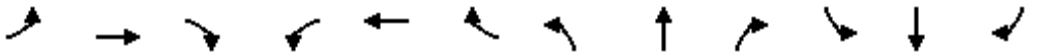
Intersection Summary			
HCM 6th Ctrl Delay		63.6	
HCM 6th LOS		E	

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	421	565	235	54	330	205	1584	159	1295
Future Volume (vph)	421	565	235	54	330	205	1584	159	1295
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2		1	6	3	8	7	4
Permitted Phases			2						
Detector Phase	5	2	2	1	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	29.0	29.0	8.0	23.0	8.0	32.7	8.0	24.7
Total Split (s)	25.0	38.0	38.0	10.0	23.0	17.0	45.0	17.0	45.0
Total Split (%)	22.7%	34.5%	34.5%	9.1%	20.9%	15.5%	40.9%	15.5%	40.9%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	4.7	3.0	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	4.0	5.7	4.0	5.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	21.0	34.0	34.0	6.0	17.0	13.0	39.7	12.6	39.3
Actuated g/C Ratio	0.19	0.31	0.31	0.05	0.15	0.12	0.36	0.11	0.36
v/c Ratio	1.32	0.54	0.38	0.60	0.93	1.03	1.41	0.83	1.29
Control Delay	197.8	34.4	5.5	75.8	62.3	69.9	224.6	75.8	163.8
Queue Delay	0.0	0.0	0.0	0.0	10.1	0.0	3.0	0.0	0.0
Total Delay	197.8	34.4	5.5	75.8	72.5	69.9	227.6	75.8	163.8
LOS	F	C	A	E	E	E	F	E	F
Approach Delay		85.2			72.8		210.6		155.4
Approach LOS		F			E		F		F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.41	
Intersection Signal Delay: 150.2	Intersection LOS: F
Intersection Capacity Utilization 111.0%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 11: Cedar Av. & Slover Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	421	565	235	54	330	187	205	1584	113	159	1295	225
Future Volume (veh/h)	421	565	235	54	330	187	205	1584	113	159	1295	225
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	453	608	209	58	355	147	220	1703	120	171	1392	234
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	345	1163	512	75	387	158	214	2458	172	200	2198	364
Arrive On Green	0.19	0.32	0.32	0.04	0.15	0.15	0.12	0.72	0.72	0.11	0.71	0.71
Sat Flow, veh/h	1810	3610	1590	1810	2502	1019	1810	3423	239	1810	3092	513
Grp Volume(v), veh/h	453	608	209	58	254	248	220	891	932	171	804	822
Grp Sat Flow(s),veh/h/ln	1810	1805	1590	1810	1805	1717	1810	1805	1857	1810	1805	1800
Q Serve(g_s), s	21.0	15.1	11.3	3.5	15.3	15.7	13.0	30.2	31.3	10.2	25.6	26.7
Cycle Q Clear(g_c), s	21.0	15.1	11.3	3.5	15.3	15.7	13.0	30.2	31.3	10.2	25.6	26.7
Prop In Lane	1.00		1.00	1.00		0.59	1.00		0.13	1.00		0.28
Lane Grp Cap(c), veh/h	345	1163	512	75	279	265	214	1296	1334	200	1283	1279
V/C Ratio(X)	1.31	0.52	0.41	0.77	0.91	0.93	1.03	0.69	0.70	0.85	0.63	0.64
Avail Cap(c_a), veh/h	345	1163	512	99	279	265	214	1296	1334	214	1283	1279
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09	0.55	0.55	0.55
Uniform Delay (d), s/veh	44.5	30.4	29.1	52.2	45.8	45.9	48.5	8.6	8.8	48.0	8.3	8.5
Incr Delay (d2), s/veh	159.4	0.4	0.5	23.5	31.9	37.7	26.3	0.3	0.3	15.9	1.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.2	6.3	4.2	2.1	9.3	9.5	7.2	9.0	9.6	5.4	8.5	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	203.9	30.8	29.6	75.7	77.7	83.6	74.8	8.9	9.1	64.0	9.6	9.8
LnGrp LOS	F	C	C	E	E	F	F	A	A	E	A	A
Approach Vol, veh/h		1270			560			2043			1797	
Approach Delay, s/veh		92.3			80.1			16.1			14.9	
Approach LOS		F			F			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	41.4	17.0	83.9	27.0	23.0	16.2	84.7
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	6.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	6.0	32.0	13.0	39.3	21.0	* 17	13.0	39.3
Max Q Clear Time (g_c+I1), s	5.5	17.1	15.0	28.7	23.0	17.7	12.2	33.3
Green Ext Time (p_c), s	0.0	3.8	0.0	7.3	0.0	0.0	0.0	4.9

Intersection Summary	
HCM 6th Ctrl Delay	39.1
HCM 6th LOS	D

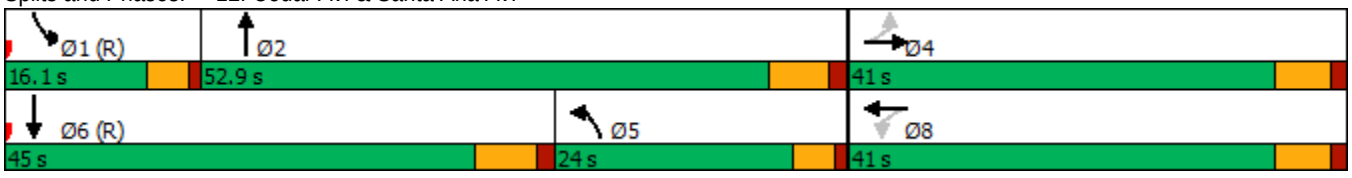
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	94	141	58	134	183	1723	63	1316
Future Volume (vph)	94	141	58	134	183	1723	63	1316
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	9.5	27.5	9.5	27.5
Total Split (s)	41.0	41.0	41.0	41.0	24.0	52.9	16.1	45.0
Total Split (%)	37.3%	37.3%	37.3%	37.3%	21.8%	48.1%	14.6%	40.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	4.5	6.5	4.5	6.5
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min
Act Effct Green (s)		31.3		31.3	19.5	49.7	12.0	42.2
Actuated g/C Ratio		0.28		0.28	0.18	0.45	0.11	0.38
v/c Ratio		0.97		0.72	0.61	1.17	0.34	1.05
Control Delay		76.2		42.5	29.5	96.9	33.4	65.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		76.2		42.5	29.5	96.9	33.4	65.0
LOS		E		D	C	F	C	E
Approach Delay		76.2		42.5		90.7		63.6
Approach LOS		E		D		F		E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 90 (82%), Referenced to phase 1:SBL and 6:SBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.17	
Intersection Signal Delay: 76.5	Intersection LOS: E
Intersection Capacity Utilization 98.0%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 12: Cedar Av. & Santa Ana Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	141	120	58	134	94	183	1723	79	63	1316	51
Future Volume (veh/h)	94	141	120	58	134	94	183	1723	79	63	1316	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	99	148	83	61	141	59	193	1814	81	66	1385	47
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	138	181	93	106	229	86	394	1485	66	297	1247	42
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.44	0.84	0.84	0.05	0.12	0.12
Sat Flow, veh/h	369	698	358	254	881	331	1810	3521	156	1810	3562	121
Grp Volume(v), veh/h	330	0	0	261	0	0	193	924	971	66	701	731
Grp Sat Flow(s),veh/h/ln	1425	0	0	1466	0	0	1810	1805	1872	1810	1805	1878
Q Serve(g_s), s	7.8	0.0	0.0	0.0	0.0	0.0	8.4	46.4	46.4	3.8	38.5	38.5
Cycle Q Clear(g_c), s	25.0	0.0	0.0	17.1	0.0	0.0	8.4	46.4	46.4	3.8	38.5	38.5
Prop In Lane	0.30		0.25	0.23		0.23	1.00		0.08	1.00		0.06
Lane Grp Cap(c), veh/h	412	0	0	421	0	0	394	761	790	297	632	657
V/C Ratio(X)	0.80	0.00	0.00	0.62	0.00	0.00	0.49	1.21	1.23	0.22	1.11	1.11
Avail Cap(c_a), veh/h	503	0	0	514	0	0	394	761	790	297	632	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.09	0.09	0.09	0.09	0.09	0.09
Uniform Delay (d), s/veh	39.5	0.0	0.0	36.0	0.0	0.0	26.6	8.6	8.6	45.3	48.6	48.6
Incr Delay (d2), s/veh	8.4	0.0	0.0	2.2	0.0	0.0	0.0	97.3	104.5	0.0	51.7	52.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	0.0	0.0	6.3	0.0	0.0	3.1	23.8	26.3	1.7	27.5	28.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.8	0.0	0.0	38.2	0.0	0.0	26.7	105.9	113.1	45.3	100.4	101.5
LnGrp LOS	D	A	A	D	A	A	C	F	F	D	F	F
Approach Vol, veh/h		330			261			2088			1498	
Approach Delay, s/veh		47.8			38.2			101.9			98.5	
Approach LOS		D			D			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	22.6	52.9		34.5	30.5	45.0		34.5				
Change Period (Y+Rc), s	4.5	6.5		6.0	6.5	* 6.5		6.0				
Max Green Setting (Gmax), s	11.6	46.4		35.0	19.5	* 39		35.0				
Max Q Clear Time (g_c+I1), s	5.8	48.4		27.0	10.4	40.5		19.1				
Green Ext Time (p_c), s	0.0	0.0		1.6	0.2	0.0		1.8				

Intersection Summary		
HCM 6th Ctrl Delay		92.4
HCM 6th LOS		F

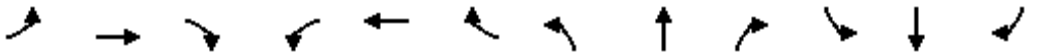
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	251	209	150	82	132	129	132	1562	163	1265
Future Volume (vph)	251	209	150	82	132	129	132	1562	163	1265
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	19.0	51.0	24.0	56.0
Total Split (%)	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	17.3%	46.4%	21.8%	50.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)		29.5	29.5		29.5	29.5	12.7	49.0	15.5	51.8
Actuated g/C Ratio		0.27	0.27		0.27	0.27	0.12	0.45	0.14	0.47
v/c Ratio		1.77	0.32		4.38	0.27	0.69	1.11	0.70	0.90
Control Delay		389.5	12.1		1575.3	7.4	61.5	76.5	27.0	40.4
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		389.5	12.1		1575.3	7.4	61.5	76.5	27.0	40.4
LOS		F	B		F	A	E	E	C	D
Approach Delay		296.7			985.2			75.4		39.0
Approach LOS		F			F			E		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 4.38	
Intersection Signal Delay: 166.6	Intersection LOS: F
Intersection Capacity Utilization 109.9%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	209	150	82	132	129	132	1562	74	163	1265	127
Future Volume (veh/h)	251	209	150	82	132	129	132	1562	74	163	1265	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	273	227	138	89	143	94	143	1698	67	177	1375	133
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	51	0	426	45	49	424	246	1662	65	212	1499	144
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.94	0.94	0.04	0.15	0.15
Sat Flow, veh/h	0	0	1588	0	183	1579	1810	3541	139	1810	3327	320
Grp Volume(v), veh/h	500	0	138	232	0	94	143	862	903	177	743	765
Grp Sat Flow(s),veh/h/ln	0	0	1588	183	0	1579	1810	1805	1875	1810	1805	1842
Q Serve(g_s), s	0.0	0.0	7.7	0.0	0.0	5.1	7.5	51.6	51.6	10.7	44.6	45.1
Cycle Q Clear(g_c), s	29.5	0.0	7.7	29.5	0.0	5.1	7.5	51.6	51.6	10.7	44.6	45.1
Prop In Lane	0.55		1.00	0.38		1.00	1.00		0.07	1.00		0.17
Lane Grp Cap(c), veh/h	51	0	426	94	0	424	246	847	880	212	813	830
V/C Ratio(X)	9.88	0.00	0.32	2.46	0.00	0.22	0.58	1.02	1.03	0.84	0.91	0.92
Avail Cap(c_a), veh/h	51	0	426	94	0	424	246	847	880	321	820	837
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.15	0.15	0.15	0.09	0.09	0.09
Uniform Delay (d), s/veh	55.0	0.0	32.3	40.4	0.0	31.3	37.4	3.4	3.4	51.8	44.7	44.9
Incr Delay (d2), s/veh	4036.1	0.0	0.6	687.1	0.0	0.4	0.5	16.6	19.2	1.1	1.7	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	58.1	0.0	2.9	20.6	0.0	1.9	3.0	5.2	6.0	5.1	21.8	22.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4091.1	0.0	32.9	727.5	0.0	31.7	37.9	19.9	22.5	53.0	46.4	46.8
LnGrp LOS	F	A	C	F	A	C	D	F	F	D	D	D
Approach Vol, veh/h		638			326			1908			1685	
Approach Delay, s/veh		3213.3			526.8			22.5			47.3	
Approach LOS		F			F			C			D	

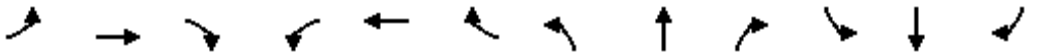
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.4	57.6		35.0	19.4	55.6		35.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	19.5	45.0		29.5	14.5	50.0		29.5				
Max Q Clear Time (g_c+I1), s	12.7	53.6		31.5	9.5	47.1		31.5				
Green Ext Time (p_c), s	0.2	0.0		0.0	0.1	2.5		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		514.5
HCM 6th LOS		F

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	132	47	33	28	173	1551	71	1228
Future Volume (vph)	132	47	33	28	173	1551	71	1228
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	10.0	10.0	9.5	24.0	9.5	24.0
Total Split (s)	41.0	41.0	41.0	41.0	23.0	53.0	16.0	46.0
Total Split (%)	37.3%	37.3%	37.3%	37.3%	20.9%	48.2%	14.5%	41.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)		33.5		29.7	15.7	53.6	9.5	45.3
Actuated g/C Ratio		0.30		0.27	0.14	0.49	0.09	0.41
v/c Ratio		0.91		0.24	0.73	0.97	0.49	1.01
Control Delay		54.8		24.4	61.7	46.0	44.0	44.9
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		54.8		24.4	61.7	46.0	44.0	44.9
LOS		D		C	E	D	D	D
Approach Delay		54.8		24.4		47.5		44.9
Approach LOS		D		C		D		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 74 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 46.8	Intersection LOS: D
Intersection Capacity Utilization 90.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 14: Rubidoux Bl./Cedar Av. & 7th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	47	253	33	28	19	173	1551	19	71	1228	134
Future Volume (veh/h)	132	47	253	33	28	19	173	1551	19	71	1228	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	143	51	193	36	30	11	188	1686	21	77	1335	145
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	196	65	215	182	145	46	220	1946	24	99	1533	166
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.12	0.53	0.53	0.05	0.47	0.47
Sat Flow, veh/h	557	239	792	495	533	171	1810	3650	45	1810	3286	355
Grp Volume(v), veh/h	387	0	0	77	0	0	188	833	874	77	730	750
Grp Sat Flow(s),veh/h/ln	1589	0	0	1199	0	0	1810	1805	1891	1810	1805	1836
Q Serve(g_s), s	21.3	0.0	0.0	0.0	0.0	0.0	11.2	44.0	44.2	4.6	39.9	40.5
Cycle Q Clear(g_c), s	25.7	0.0	0.0	4.4	0.0	0.0	11.2	44.0	44.2	4.6	39.9	40.5
Prop In Lane	0.37		0.50	0.47		0.14	1.00		0.02	1.00		0.19
Lane Grp Cap(c), veh/h	475	0	0	373	0	0	220	962	1008	99	842	856
V/C Ratio(X)	0.81	0.00	0.00	0.21	0.00	0.00	0.85	0.86	0.87	0.78	0.87	0.88
Avail Cap(c_a), veh/h	563	0	0	454	0	0	304	962	1008	189	842	856
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.09	0.09	0.09	0.43	0.43	0.43
Uniform Delay (d), s/veh	38.3	0.0	0.0	30.6	0.0	0.0	47.4	22.2	22.3	51.3	26.3	26.5
Incr Delay (d2), s/veh	8.5	0.0	0.0	0.4	0.0	0.0	1.7	1.1	1.0	5.5	5.5	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	0.0	0.0	1.6	0.0	0.0	4.9	16.5	17.3	2.2	16.9	17.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.8	0.0	0.0	31.0	0.0	0.0	49.1	23.3	23.3	56.8	31.8	32.2
LnGrp LOS	D	A	A	C	A	A	D	C	C	E	C	C
Approach Vol, veh/h		387			77			1895			1557	
Approach Delay, s/veh		46.8			31.0			25.9			33.2	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.5	64.7		34.8	17.9	57.3		34.8				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	11.5	47.0		36.0	18.5	40.0		36.0				
Max Q Clear Time (g_c+I1), s	6.6	46.2		27.7	13.2	42.5		6.4				
Green Ext Time (p_c), s	0.1	0.7		2.1	0.2	0.0		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		31.0	
HCM 6th LOS		C	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	10	9	270	8	304	13	1434	219	1278
Future Volume (vph)	10	9	270	8	304	13	1434	219	1278
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	35.0	35.0	35.0	9.5	24.0	9.5	24.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.6	35.0	20.0	45.4
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%	10.7%	38.9%	22.2%	50.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	5.0	4.5	6.0	4.5	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min
Act Effct Green (s)		15.3		23.2	23.2	5.2	29.4	13.7	45.9
Actuated g/C Ratio		0.19		0.28	0.28	0.06	0.36	0.17	0.56
v/c Ratio		0.10		0.74	0.46	0.12	1.27	0.73	0.65
Control Delay		17.6		39.0	5.4	42.4	155.7	49.3	16.4
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		17.6		39.0	5.4	42.4	155.7	49.3	16.4
LOS		B		D	A	D	F	D	B
Approach Delay		17.6		21.5			154.8		21.1
Approach LOS		B		C			F		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 81.9	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.27	
Intersection Signal Delay: 79.0	Intersection LOS: E
Intersection Capacity Utilization 92.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 15: Rubidoux Bl. & Tarragona Dr./El Rivino Rd.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	9	11	270	8	304	13	1434	178	219	1278	24
Future Volume (veh/h)	10	9	11	270	8	304	13	1434	178	219	1278	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	10	9	7	273	8	232	13	1448	173	221	1291	23
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	57	49	18	335	7	555	28	1081	128	260	1674	30
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.02	0.33	0.33	0.14	0.46	0.46
Sat Flow, veh/h	0	141	52	735	22	1610	1810	3243	383	1810	3629	65
Grp Volume(v), veh/h	26	0	0	281	0	232	13	799	822	221	642	672
Grp Sat Flow(s),veh/h/ln	193	0	0	757	0	1610	1810	1805	1821	1810	1805	1888
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	9.6	0.6	29.0	29.0	10.4	25.9	25.9
Cycle Q Clear(g_c), s	30.0	0.0	0.0	30.0	0.0	9.6	0.6	29.0	29.0	10.4	25.9	25.9
Prop In Lane	0.38		0.27	0.97		1.00	1.00		0.21	1.00		0.03
Lane Grp Cap(c), veh/h	124	0	0	343	0	555	28	602	607	260	833	871
V/C Ratio(X)	0.21	0.00	0.00	0.82	0.00	0.42	0.46	1.33	1.35	0.85	0.77	0.77
Avail Cap(c_a), veh/h	124	0	0	343	0	555	106	602	607	322	833	871
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	0.0	0.0	29.6	0.0	21.8	42.5	29.0	29.0	36.3	19.6	19.6
Incr Delay (d2), s/veh	1.2	0.0	0.0	15.1	0.0	0.7	11.4	159.0	169.6	16.2	4.7	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	7.3	0.0	3.7	0.4	37.7	39.8	5.4	10.3	10.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.2	0.0	0.0	44.7	0.0	22.5	53.9	187.9	198.5	52.5	24.3	24.1
LnGrp LOS	C	A	A	D	A	C	D	F	F	D	C	C
Approach Vol, veh/h		26			513			1634			1535	
Approach Delay, s/veh		24.2			34.7			192.2			28.3	
Approach LOS		C			C			F			C	

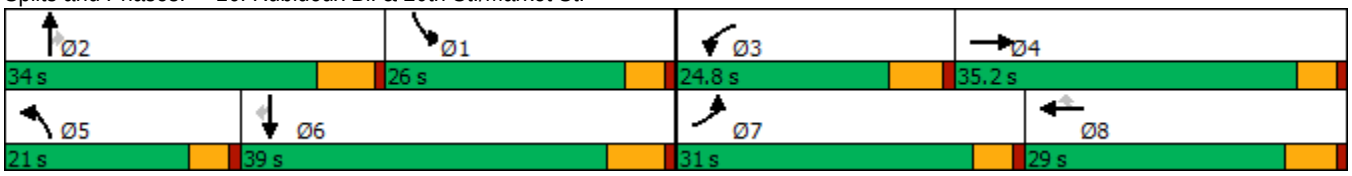
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.0	35.0		35.0	5.8	46.1		35.0				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	15.5	29.0		30.0	5.1	39.4		30.0				
Max Q Clear Time (g_c+I1), s	12.4	31.0		32.0	2.6	27.9		32.0				
Green Ext Time (p_c), s	0.2	0.0		0.0	0.0	7.5		0.0				

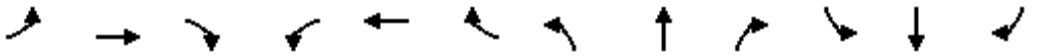
Intersection Summary												
HCM 6th Ctrl Delay			101.4									
HCM 6th LOS			F									

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	361	373	440	163	524	209	651	532	558	857	147
Future Volume (vph)	361	373	440	163	524	209	651	532	558	857	147
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	14.6	10.8	27.8	27.8	9.6	28.2	28.2	9.6	35.2	35.2
Total Split (s)	31.0	35.2	24.8	29.0	29.0	21.0	34.0	34.0	26.0	39.0	39.0
Total Split (%)	25.8%	29.3%	20.7%	24.2%	24.2%	17.5%	28.3%	28.3%	21.7%	32.5%	32.5%
Yellow Time (s)	3.6	3.6	4.8	4.8	4.8	3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	5.8	5.8	5.8	4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	25.3	26.1	17.7	18.5	18.5	15.5	25.7	25.7	20.6	30.8	30.8
Actuated g/C Ratio	0.23	0.23	0.16	0.17	0.17	0.14	0.23	0.23	0.18	0.28	0.28
v/c Ratio	0.90	0.81	0.81	0.53	0.91	0.85	0.80	0.81	0.88	0.88	0.27
Control Delay	69.3	37.3	58.8	49.7	34.0	78.2	49.6	22.7	61.7	50.7	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.3	37.3	58.8	49.7	34.0	78.2	49.6	22.7	61.7	50.7	5.6
LOS	E	D	E	D	C	E	D	C	E	D	A
Approach Delay		47.9		46.0			43.6			50.4	
Approach LOS		D		D			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 111.6	
Natural Cycle: 105	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 47.1	Intersection LOS: D
Intersection Capacity Utilization 87.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	361	373	363	440	163	524	209	651	532	558	857	147
Future Volume (veh/h)	361	373	363	440	163	524	209	651	532	558	857	147
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	368	381	242	449	166	295	213	664	364	569	874	134
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	401	469	294	525	303	256	244	805	359	635	1027	457
Arrive On Green	0.22	0.22	0.22	0.15	0.16	0.16	0.13	0.22	0.22	0.18	0.28	0.28
Sat Flow, veh/h	1810	2130	1334	3510	1900	1610	1810	3610	1610	3510	3610	1607
Grp Volume(v), veh/h	368	322	301	449	166	295	213	664	364	569	874	134
Grp Sat Flow(s),veh/h/ln	1810	1805	1660	1755	1900	1610	1810	1805	1610	1755	1805	1607
Q Serve(g_s), s	21.0	17.9	18.3	13.2	8.5	11.0	12.2	18.5	15.6	16.8	24.2	6.9
Cycle Q Clear(g_c), s	21.0	17.9	18.3	13.2	8.5	11.0	12.2	18.5	15.6	16.8	24.2	6.9
Prop In Lane	1.00		0.80	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	401	397	365	525	303	256	244	805	359	635	1027	457
V/C Ratio(X)	0.92	0.81	0.82	0.86	0.55	1.15	0.87	0.82	1.01	0.90	0.85	0.29
Avail Cap(c_a), veh/h	451	522	480	630	416	353	280	948	423	709	1118	498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.3	39.2	39.4	43.9	41.0	18.8	44.9	39.2	18.0	42.4	35.8	29.6
Incr Delay (d2), s/veh	22.3	7.2	8.7	9.7	1.6	96.0	20.9	5.2	45.4	12.3	6.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.8	8.7	8.3	6.2	4.0	10.7	6.6	8.3	9.9	8.0	10.8	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.6	46.4	48.0	53.7	42.6	114.8	65.9	44.4	63.4	54.7	41.8	29.9
LnGrp LOS	E	D	D	D	D	F	E	D	F	D	D	C
Approach Vol, veh/h		991			910			1241			1577	
Approach Delay, s/veh		52.9			71.5			53.6			45.5	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.4	29.8	21.6	29.1	18.9	36.3	28.1	22.7
Change Period (Y+Rc), s	6.2	* 6.2	5.8	* 5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	21.4	* 28	19.0	* 31	16.4	32.8	26.4	23.2
Max Q Clear Time (g_c+I1), s	18.8	20.5	15.2	20.3	14.2	26.2	23.0	13.0
Green Ext Time (p_c), s	0.4	3.1	0.6	3.0	0.1	3.1	0.4	1.4

Intersection Summary	
HCM 6th Ctrl Delay	54.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	22	8	42	11	13	20	1331	100	160	1609	4
Future Vol, veh/h	2	22	8	42	11	13	20	1331	100	160	1609	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	22	8	43	11	13	20	1358	102	163	1642	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2695	3471	823	2608	3422	731	1646	0	0	1461	0	0
Stage 1	1970	1970	-	1450	1450	-	-	-	-	-	-	-
Stage 2	725	1501	-	1158	1972	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	11	~ 7	321	~ 12	~ 7	369	398	-	-	469	-	-
Stage 1	66	109	-	140	198	-	-	-	-	-	-	-
Stage 2	387	187	-	212	109	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	321	-	0	369	398	-	-	469	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	47	0	-	100	142	-	-	-	-	-	-	-
Stage 2	246	134	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			2	7.9
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	398	-	-	-	-	469	-	-
HCM Lane V/C Ratio	0.051	-	-	-	-	0.348	-	-
HCM Control Delay (s)	14.5	2	-	-	-	16.7	7	-
HCM Lane LOS	B	A	-	-	-	C	A	-
HCM 95th %tile Q(veh)	0.2	-	-	-	-	1.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	6	17	4	4	7	10	1429	17	7	1560	12
Future Vol, veh/h	16	6	17	4	4	7	10	1429	17	7	1560	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	110	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	18	7	19	4	4	8	11	1570	19	8	1714	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2547	3351	865	2481	3348	797	1728	0	0	1591	0	0
Stage 1	1738	1738	-	1604	1604	-	-	-	-	-	-	-
Stage 2	809	1613	-	877	1744	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	~ 14	8	301	16	8	334	370	-	-	418	-	-
Stage 1	92	143	-	112	166	-	-	-	-	-	-	-
Stage 2	345	165	-	314	142	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 13	8	301	13	8	333	370	-	-	417	-	-
Mov Cap-2 Maneuver	67	70	-	75	69	-	-	-	-	-	-	-
Stage 1	89	140	-	108	161	-	-	-	-	-	-	-
Stage 2	318	160	-	275	139	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	63.8	42.2	0.1	0.1
HCM LOS	F	E		

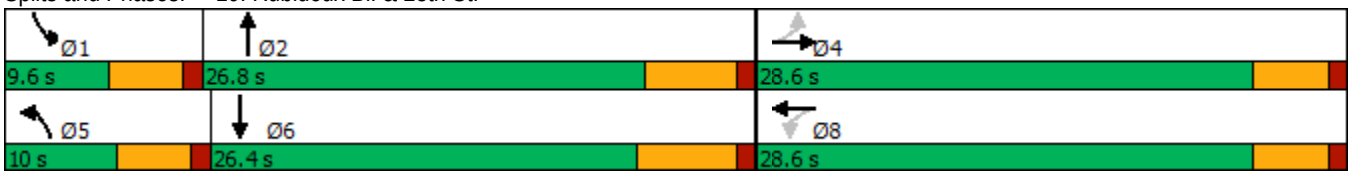
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	370	-	-	102	113	417	-	-
HCM Lane V/C Ratio	0.03	-	-	0.42	0.146	0.018	-	-
HCM Control Delay (s)	15	-	-	63.8	42.2	13.8	-	-
HCM Lane LOS	C	-	-	F	E	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.8	0.5	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	55	15	82	12	93	1384	21	1543
Future Volume (vph)	55	15	82	12	93	1384	21	1543
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	28.6	28.6	28.6	28.6	9.6	24.4	9.6	22.8
Total Split (s)	28.6	28.6	28.6	28.6	10.0	26.8	9.6	26.4
Total Split (%)	44.0%	44.0%	44.0%	44.0%	15.4%	41.2%	14.8%	40.6%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.4	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		13.2		13.2	5.8	30.9	5.5	24.8
Actuated g/C Ratio		0.27		0.27	0.12	0.63	0.11	0.51
v/c Ratio		0.32		0.31	0.47	0.69	0.12	0.95
Control Delay		11.4		17.6	35.3	15.2	26.2	35.5
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		11.4		17.6	35.3	15.2	26.2	35.5
LOS		B		B	D	B	C	D
Approach Delay		11.4		17.6		16.4		35.4
Approach LOS		B		B		B		D

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 49.1	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 25.3	Intersection LOS: C
Intersection Capacity Utilization 73.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 19: Rubidoux Bl. & 28th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	15	69	82	12	13	93	1384	59	21	1543	59
Future Volume (veh/h)	55	15	69	82	12	13	93	1384	59	21	1543	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	59	16	46	88	13	8	100	1488	63	23	1659	63
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	213	70	104	337	47	19	140	1714	72	50	1548	59
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.08	0.49	0.49	0.03	0.44	0.44
Sat Flow, veh/h	590	413	615	1181	279	116	1810	3526	149	1810	3547	134
Grp Volume(v), veh/h	121	0	0	109	0	0	100	760	791	23	841	881
Grp Sat Flow(s),veh/h/ln	1618	0	0	1575	0	0	1810	1805	1869	1810	1805	1876
Q Serve(g_s), s	0.4	0.0	0.0	0.0	0.0	0.0	2.5	17.6	17.8	0.6	20.6	20.6
Cycle Q Clear(g_c), s	2.9	0.0	0.0	2.5	0.0	0.0	2.5	17.6	17.8	0.6	20.6	20.6
Prop In Lane	0.49		0.38	0.81		0.07	1.00		0.08	1.00		0.07
Lane Grp Cap(c), veh/h	386	0	0	403	0	0	140	878	909	50	788	819
V/C Ratio(X)	0.31	0.00	0.00	0.27	0.00	0.00	0.71	0.87	0.87	0.46	1.07	1.08
Avail Cap(c_a), veh/h	908	0	0	888	0	0	207	878	909	192	788	819
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.5	0.0	0.0	17.3	0.0	0.0	21.3	10.8	10.8	22.6	13.3	13.3
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.4	0.0	0.0	2.5	9.1	9.2	2.4	51.8	54.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	1.0	0.0	0.0	1.0	6.7	7.0	0.2	16.4	17.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.0	0.0	0.0	17.7	0.0	0.0	23.8	19.8	20.0	25.1	65.1	67.3
LnGrp LOS	B	A	A	B	A	A	C	B	B	C	F	F
Approach Vol, veh/h		121			109			1651			1745	
Approach Delay, s/veh		18.0			17.7			20.1			65.7	
Approach LOS		B			B			C			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	28.8		12.6	8.3	26.4		12.6				
Change Period (Y+Rc), s	4.6	* 5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	5.0	* 21		24.0	5.4	20.6		24.0				
Max Q Clear Time (g_c+I1), s	2.6	19.8		4.9	4.5	22.6		4.5				
Green Ext Time (p_c), s	0.0	1.3		0.6	0.0	0.0		0.5				

Intersection Summary		
HCM 6th Ctrl Delay		41.9
HCM 6th LOS		D

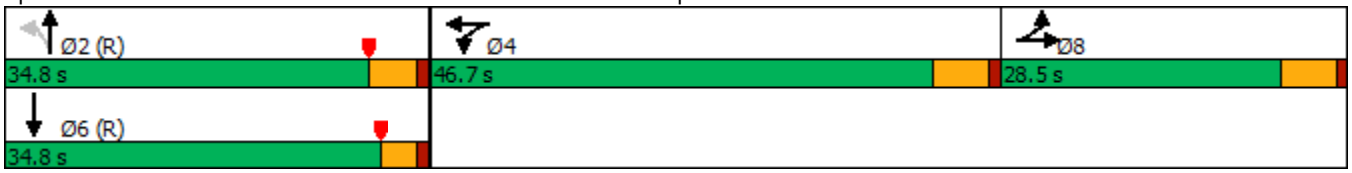
Notes

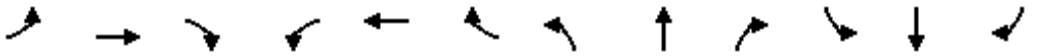
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	44	0	114	102	1324	1649
Future Volume (vph)	44	0	114	102	1324	1649
Turn Type	Split	NA	NA	Perm	NA	NA
Protected Phases	8	8	4		2	6
Permitted Phases				2		
Detector Phase	8	8	4	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.5	28.5	46.7	34.8	34.8	34.8
Total Split (%)	25.9%	25.9%	42.5%	31.6%	31.6%	31.6%
Yellow Time (s)	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	16.3	16.3	41.2	36.5	36.5	37.5
Actuated g/C Ratio	0.15	0.15	0.37	0.33	0.33	0.34
v/c Ratio	0.18	0.76	1.34	1.61	1.20	1.51
Control Delay	40.0	44.0	194.4	310.5	119.3	263.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.0	44.0	194.4	310.5	119.3	263.6
LOS	D	D	F	F	F	F
Approach Delay		43.3	194.4		133.0	263.6
Approach LOS		D	F		F	F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.61	
Intersection Signal Delay: 192.3	Intersection LOS: F
Intersection Capacity Utilization 137.0%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	0	215	535	114	189	102	1324	0	0	1649	55
Future Volume (veh/h)	44	0	215	535	114	189	102	1324	0	0	1649	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	48	0	172	582	124	176	111	1439	0	0	1792	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	236	0	210	439	94	133	65	1262	0	0	1248	40
Arrive On Green	0.13	0.00	0.13	0.37	0.37	0.37	0.70	0.70	0.00	0.00	0.35	0.35
Sat Flow, veh/h	1810	0	1610	1173	250	355	254	3705	0	0	3666	113
Grp Volume(v), veh/h	48	0	172	882	0	0	111	1439	0	0	902	947
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1778	0	0	254	1805	0	0	1805	1879
Q Serve(g_s), s	2.6	0.0	11.4	41.2	0.0	0.0	0.0	38.5	0.0	0.0	38.5	38.5
Cycle Q Clear(g_c), s	2.6	0.0	11.4	41.2	0.0	0.0	38.5	38.5	0.0	0.0	38.5	38.5
Prop In Lane	1.00		1.00	0.66		0.20	1.00		0.00	0.00		0.06
Lane Grp Cap(c), veh/h	236	0	210	666	0	0	65	1262	0	0	631	657
V/C Ratio(X)	0.20	0.00	0.82	1.32	0.00	0.00	1.70	1.14	0.00	0.00	1.43	1.44
Avail Cap(c_a), veh/h	378	0	337	666	0	0	65	1262	0	0	631	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.21	0.21
Uniform Delay (d), s/veh	42.7	0.0	46.6	34.4	0.0	0.0	35.8	16.5	0.0	0.0	35.8	35.8
Incr Delay (d2), s/veh	0.5	0.0	9.6	156.5	0.0	0.0	369.9	73.1	0.0	0.0	195.1	200.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	5.2	45.5	0.0	0.0	8.3	18.6	0.0	0.0	50.2	53.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.2	0.0	56.2	190.9	0.0	0.0	405.6	89.7	0.0	0.0	230.8	236.5
LnGrp LOS	D	A	E	F	A	A	F	F	A	A	F	F
Approach Vol, veh/h		220			882			1550			1849	
Approach Delay, s/veh		53.4			190.9			112.3			233.7	
Approach LOS		D			F			F			F	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		43.5		46.7		43.5		19.8				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		29.8		41.2		* 31		23.0				
Max Q Clear Time (g_c+I1), s		40.5		43.2		40.5		13.4				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.9				

Intersection Summary												
HCM 6th Ctrl Delay			174.7									
HCM 6th LOS			F									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	32.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	238	1426	1463	935
Future Vol, veh/h	0	0	238	1426	1463	935
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	256	1533	1573	1005

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1290	2579	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	0	*546	~ 126	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	-	*545	~ 126	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	78.4	0
HCM LOS	A		

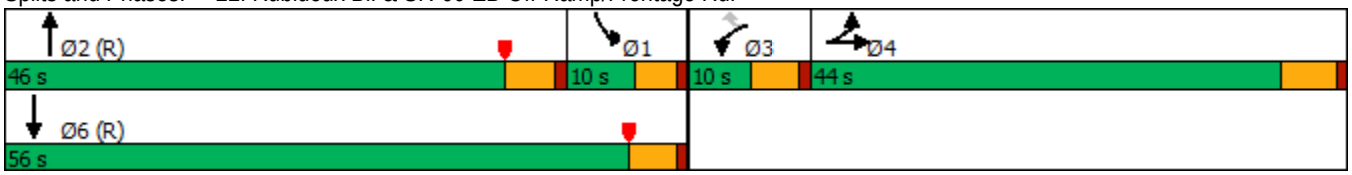
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	~ 126	-	-	-	-
HCM Lane V/C Ratio	2.031	-	-	-	-
HCM Control Delay (s)	$ 548.3	-	0	-	-
HCM Lane LOS	F	-	A	-	-
HCM 95th %tile Q(veh)	20.8	-	-	-	-

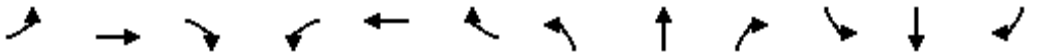
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	48	14	2	913	268	1196
Future Volume (vph)	48	14	2	913	268	1196
Turn Type	NA	Prot	Perm	NA	Prot	NA
Protected Phases	4	3		2	1	6
Permitted Phases			3			
Detector Phase	4	3	3	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	10.0	10.0	45.0	9.5	30.0
Total Split (s)	44.0	10.0	10.0	46.0	10.0	56.0
Total Split (%)	40.0%	9.1%	9.1%	41.8%	9.1%	50.9%
Yellow Time (s)	4.5	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	44.5	5.0	5.0	41.0	5.5	51.0
Actuated g/C Ratio	0.40	0.05	0.05	0.37	0.05	0.46
v/c Ratio	1.74	0.18	0.01	0.99	3.10	0.74
Control Delay	361.6	55.8	0.0	54.8	964.4	11.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.9
Total Delay	361.6	55.8	0.0	54.8	964.4	12.8
LOS	F	E	A	D	F	B
Approach Delay	361.6			54.8		186.9
Approach LOS	F			D		F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 3.10	
Intersection Signal Delay: 197.9	Intersection LOS: F
Intersection Capacity Utilization 139.4%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	749	48	413	14	0	2	0	913	341	268	1196	0
Future Volume (veh/h)	749	48	413	14	0	2	0	913	341	268	1196	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	780	50	338	15	0	0	0	951	307	279	1246	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	409	26	177	0	0	0	0	994	319	252	2002	0
Arrive On Green	0.35	0.35	0.35	0.00	0.00	0.00	0.00	0.37	0.37	0.28	1.00	0.00
Sat Flow, veh/h	1169	75	507		0		0	2781	863	1810	3705	0
Grp Volume(v), veh/h	1168	0	0		0.0		0	637	621	279	1246	0
Grp Sat Flow(s),veh/h/ln	1750	0	0				0	1805	1745	1810	1805	0
Q Serve(g_s), s	38.5	0.0	0.0				0.0	37.8	38.2	15.3	0.0	0.0
Cycle Q Clear(g_c), s	38.5	0.0	0.0				0.0	37.8	38.2	15.3	0.0	0.0
Prop In Lane	0.67		0.29				0.00		0.49	1.00		0.00
Lane Grp Cap(c), veh/h	613	0	0				0	668	646	252	2002	0
V/C Ratio(X)	1.91	0.00	0.00				0.00	0.95	0.96	1.11	0.62	0.00
Avail Cap(c_a), veh/h	613	0	0				0	673	650	252	2002	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.56	0.56	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.8	0.0	0.0				0.0	33.7	33.9	39.7	0.0	0.0
Incr Delay (d2), s/veh	414.0	0.0	0.0				0.0	17.2	18.7	89.2	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	85.8	0.0	0.0				0.0	18.8	18.7	11.7	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	449.8	0.0	0.0				0.0	50.9	52.5	128.9	1.5	0.0
LnGrp LOS	F	A	A				A	D	D	F	A	A
Approach Vol, veh/h		1168						1258			1525	
Approach Delay, s/veh		449.8						51.7			24.8	
Approach LOS		F						D			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	20.3	45.7		44.0		66.0
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0
Max Green Setting (Gmax), s	5.5	* 41		38.5		51.0
Max Q Clear Time (g_c+I1), s	17.3	40.2		40.5		2.0
Green Ext Time (p_c), s	0.0	0.5		0.0		6.9

Intersection Summary		
HCM 6th Ctrl Delay		159.0
HCM 6th LOS		F

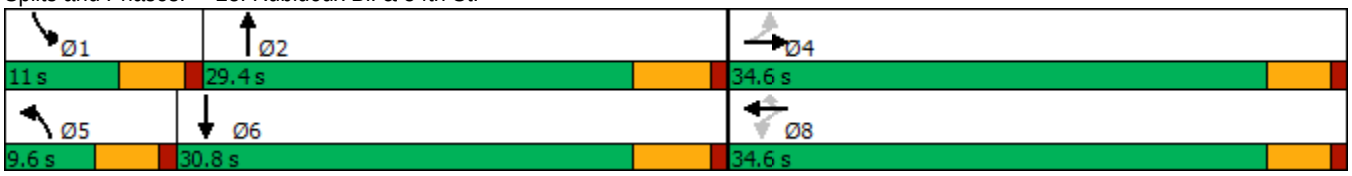
Notes

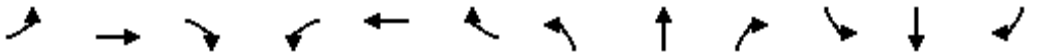
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	101	47	16	16	90	22	1043	206	1288
Future Volume (vph)	101	47	16	16	90	22	1043	206	1288
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	30.6	30.6	34.6	34.6	34.6	9.6	29.4	9.6	22.4
Total Split (s)	34.6	34.6	34.6	34.6	34.6	9.6	29.4	11.0	30.8
Total Split (%)	46.1%	46.1%	46.1%	46.1%	46.1%	12.8%	39.2%	14.7%	41.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	4.6	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		14.3		14.3	14.3	5.1	24.3	6.5	33.9
Actuated g/C Ratio		0.24		0.24	0.24	0.09	0.41	0.11	0.57
v/c Ratio		0.49		0.09	0.21	0.15	0.81	1.10	0.74
Control Delay		22.3		16.8	4.7	31.1	23.3	125.9	16.6
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		22.3		16.8	4.7	31.1	23.3	125.9	16.6
LOS		C		B	A	C	C	F	B
Approach Delay		22.3		7.9			23.4		30.4
Approach LOS		C		A			C		C

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 59.9	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 26.4	Intersection LOS: C
Intersection Capacity Utilization 74.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 23: Rubidoux Bl. & 34th St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	47	22	16	16	90	22	1043	85	206	1288	144
Future Volume (veh/h)	101	47	22	16	16	90	22	1043	85	206	1288	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	105	49	17	17	17	41	23	1086	85	215	1342	131
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	270	114	30	236	203	313	49	1355	106	224	1644	160
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.03	0.40	0.40	0.12	0.50	0.50
Sat Flow, veh/h	811	585	154	677	1042	1605	1810	3392	265	1810	3316	322
Grp Volume(v), veh/h	171	0	0	34	0	41	23	578	593	215	727	746
Grp Sat Flow(s),veh/h/ln	1550	0	0	1720	0	1605	1810	1805	1852	1810	1805	1833
Q Serve(g_s), s	3.8	0.0	0.0	0.0	0.0	1.1	0.6	14.6	14.7	6.1	17.6	17.9
Cycle Q Clear(g_c), s	5.0	0.0	0.0	0.8	0.0	1.1	0.6	14.6	14.7	6.1	17.6	17.9
Prop In Lane	0.61		0.10	0.50		1.00	1.00		0.14	1.00		0.18
Lane Grp Cap(c), veh/h	415	0	0	440	0	313	49	721	740	224	895	909
V/C Ratio(X)	0.41	0.00	0.00	0.08	0.00	0.13	0.47	0.80	0.80	0.96	0.81	0.82
Avail Cap(c_a), veh/h	993	0	0	1044	0	929	175	836	858	224	895	909
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.7	0.0	0.0	17.1	0.0	17.2	24.8	13.7	13.7	22.6	11.0	11.1
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.1	0.0	0.2	2.5	4.9	4.8	49.0	5.8	6.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	0.3	0.0	0.4	0.3	5.5	5.6	5.3	6.2	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.4	0.0	0.0	17.2	0.0	17.4	27.4	18.6	18.6	71.6	16.8	17.1
LnGrp LOS	B	A	A	B	A	B	C	B	B	E	B	B
Approach Vol, veh/h		171			75			1194			1688	
Approach Delay, s/veh		19.4			17.3			18.8			23.9	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.0	26.1		14.7	6.0	31.1		14.7				
Change Period (Y+Rc), s	4.6	5.4		4.6	4.6	5.4		4.6				
Max Green Setting (Gmax), s	6.4	24.0		30.0	5.0	25.4		30.0				
Max Q Clear Time (g_c+I1), s	8.1	16.7		7.0	2.6	19.9		3.1				
Green Ext Time (p_c), s	0.0	4.0		1.0	0.0	3.9		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		21.5	
HCM 6th LOS		C	

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	574	83	0	0	16	15
Future Vol, veh/h	574	83	0	0	16	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	652	94	0	0	18	17

Major/Minor	Major1			Minor1	
Conflicting Flow All	0	0		699	699
Stage 1	-	-		699	-
Stage 2	-	-		0	-
Critical Hdwy	-	-		6.4	6.2
Critical Hdwy Stg 1	-	-		5.4	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	-		3.5	3.3
Pot Cap-1 Maneuver	-	-		409	443
Stage 1	-	-		497	-
Stage 2	-	-		-	-
Platoon blocked, %	-	-			
Mov Cap-1 Maneuver	-	-		409	443
Mov Cap-2 Maneuver	-	-		409	-
Stage 1	-	-		497	-
Stage 2	-	-		-	-

Approach	EB	NB
HCM Control Delay, s	0	14.2
HCM LOS		B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	425	-	-
HCM Lane V/C Ratio	0.083	-	-
HCM Control Delay (s)	14.2	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-

Lane Group	EBL	EBT	EBR	WBT	WBR	NBT	SBL	SBT	Ø1
Lane Configurations									
Traffic Volume (vph)	762	695	4	599	210	3	261	2	
Future Volume (vph)	762	695	4	599	210	3	261	2	
Turn Type	Prot	NA	Perm	NA	Perm	NA	Perm	NA	
Protected Phases	5	2		6		8		4	1
Permitted Phases			2		6		4		
Detector Phase	5	2	2	6	6	8	4	4	
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	31.8	31.8	26.8	26.8	14.6	43.8	43.8	9.6
Total Split (s)	42.0	66.6	66.6	34.2	34.2	43.8	43.8	43.8	9.6
Total Split (%)	35.0%	55.5%	55.5%	28.5%	28.5%	36.5%	36.5%	36.5%	8%
Yellow Time (s)	3.6	4.8	4.8	4.8	4.8	3.6	4.8	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.6	5.8	5.8	5.8	5.8	4.6		5.8	
Lead/Lag	Lead	Lag	Lag	Lag	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				Yes
Recall Mode	None	Max	Max	Max	Max	None	None	None	None
Act Effct Green (s)	37.4	70.4	70.4	28.4	28.4	39.2		38.0	
Actuated g/C Ratio	0.31	0.59	0.59	0.24	0.24	0.33		0.32	
v/c Ratio	1.44	0.35	0.00	0.75	0.40	0.00		1.54	
Control Delay	241.9	13.5	0.0	48.7	7.1	27.3		281.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	241.9	13.5	0.0	48.7	7.1	27.3		281.9	
LOS	F	B	A	D	A	C		F	
Approach Delay		132.6		37.9		27.3		281.9	
Approach LOS		F		D		C		F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.54	
Intersection Signal Delay: 146.2	Intersection LOS: F
Intersection Capacity Utilization 126.0%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	762	695	4	0	599	210	0	3	0	261	2	529
Future Volume (veh/h)	762	695	4	0	599	210	0	3	0	261	2	529
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	811	739	3	0	637	185	0	3	0	278	2	431
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	564	2118	945	2	854	381	0	602	0	232	1	294
Arrive On Green	0.31	0.59	0.59	0.00	0.24	0.24	0.00	0.32	0.00	0.32	0.32	0.32
Sat Flow, veh/h	1810	3610	1610	1810	3610	1610	0	1900	0	599	4	929
Grp Volume(v), veh/h	811	739	3	0	637	185	0	3	0	711	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1610	0	1900	0	1533	0	0
Q Serve(g_s), s	37.4	12.8	0.1	0.0	19.6	11.9	0.0	0.1	0.0	37.9	0.0	0.0
Cycle Q Clear(g_c), s	37.4	12.8	0.1	0.0	19.6	11.9	0.0	0.1	0.0	38.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.00		0.00	0.39		0.61
Lane Grp Cap(c), veh/h	564	2118	945	2	854	381	0	602	0	527	0	0
V/C Ratio(X)	1.44	0.35	0.00	0.00	0.75	0.49	0.00	0.00	0.00	1.35	0.00	0.00
Avail Cap(c_a), veh/h	564	2118	945	75	854	381	0	621	0	527	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	41.3	12.9	10.3	0.0	42.5	39.5	0.0	28.1	0.0	42.6	0.0	0.0
Incr Delay (d2), s/veh	207.1	0.5	0.0	0.0	5.9	4.4	0.0	0.0	0.0	169.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	48.3	4.9	0.0	0.0	9.2	5.0	0.0	0.1	0.0	40.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	248.4	13.3	10.3	0.0	48.3	43.9	0.0	28.1	0.0	211.8	0.0	0.0
LnGrp LOS	F	B	B	A	D	D	A	C	A	F	A	A
Approach Vol, veh/h		1553			822			3			711	
Approach Delay, s/veh		136.1			47.3			28.1			211.8	
Approach LOS		F			D			C			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	76.2		43.8	42.0	34.2		43.8				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	60.8		38.0	37.4	28.4		* 39				
Max Q Clear Time (g_c+I1), s	0.0	14.8		40.0	39.4	21.6		2.1				
Green Ext Time (p_c), s	0.0	5.3		0.0	0.0	2.5		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		129.8
HCM 6th LOS		F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	228	11	55	14	2	10	13	76	4	34	3
Future Vol, veh/h	4	228	11	55	14	2	10	13	76	4	34	3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	253	12	61	16	2	11	14	84	4	38	3
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	10.2	8.9	8.1	8.2
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	10%	2%	0%	80%	0%	10%
Vol Thru, %	13%	98%	0%	20%	0%	83%
Vol Right, %	77%	0%	100%	0%	100%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	99	232	11	69	2	41
LT Vol	10	4	0	55	0	4
Through Vol	13	228	0	14	0	34
RT Vol	76	0	11	0	2	3
Lane Flow Rate	110	258	12	77	2	46
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.134	0.354	0.014	0.117	0.003	0.062
Departure Headway (Hd)	4.393	4.944	4.232	5.499	4.393	4.884
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	816	727	845	652	813	733
Service Time	2.421	2.673	1.961	3.234	2.128	2.918
HCM Lane V/C Ratio	0.135	0.355	0.014	0.118	0.002	0.063
HCM Control Delay	8.1	10.4	7	9	7.1	8.2
HCM Lane LOS	A	B	A	A	A	A
HCM 95th-tile Q	0.5	1.6	0	0.4	0	0.2

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	16	1	7	7	1	1	4	123	7	13	89	15
Future Vol, veh/h	16	1	7	7	1	1	4	123	7	13	89	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	19	1	8	8	1	1	5	143	8	15	103	17

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	300	304	112	304	308	148	120	0	0	152	0	0
Stage 1	142	142	-	158	158	-	-	-	-	-	-	-
Stage 2	158	162	-	146	150	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	656	613	947	652	609	904	1480	-	-	1441	-	-
Stage 1	866	783	-	849	771	-	-	-	-	-	-	-
Stage 2	849	768	-	861	777	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	647	603	947	638	599	903	1480	-	-	1440	-	-
Mov Cap-2 Maneuver	647	603	-	638	599	-	-	-	-	-	-	-
Stage 1	863	774	-	845	767	-	-	-	-	-	-	-
Stage 2	843	764	-	843	768	-	-	-	-	-	-	-

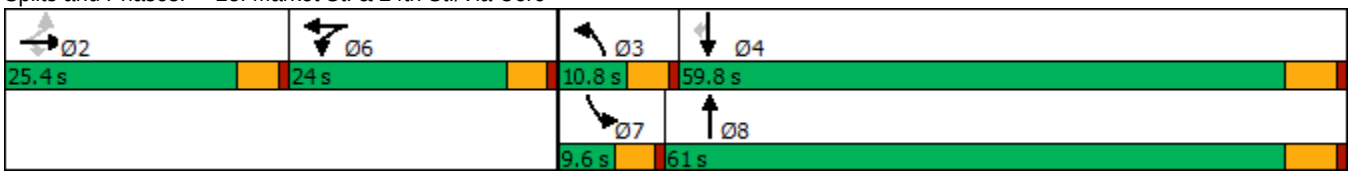
Approach	EB	WB	NB	SB
HCM Control Delay, s	10.3	10.6	0.2	0.8
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1480	-	-	710	655	1440	-	-
HCM Lane V/C Ratio	0.003	-	-	0.039	0.016	0.01	-	-
HCM Control Delay (s)	7.4	0	-	10.3	10.6	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	3	31	206	235	39	49	964	6	937	3
Future Volume (vph)	3	31	206	235	39	49	964	6	937	3
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	25.4	25.4	25.4	24.0	24.0	10.8	61.0	9.6	59.8	59.8
Total Split (%)	21.2%	21.2%	21.2%	20.0%	20.0%	9.0%	50.8%	8.0%	49.8%	49.8%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		14.2	14.2	18.9	18.9	6.0	61.2	5.0	54.6	54.6
Actuated g/C Ratio		0.13	0.13	0.17	0.17	0.05	0.55	0.05	0.49	0.49
v/c Ratio		0.33	0.75	0.88	0.20	0.58	1.16	0.09	1.15	0.00
Control Delay		52.1	37.2	75.2	35.8	77.4	108.3	56.7	110.8	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		52.1	37.2	75.2	35.8	77.4	108.3	56.7	110.8	0.0
LOS		D	D	E	D	E	F	E	F	A
Approach Delay		39.3			67.7		106.9		110.1	
Approach LOS		D			E		F		F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 111.1	
Natural Cycle: 115	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.16	
Intersection Signal Delay: 97.4	Intersection LOS: F
Intersection Capacity Utilization 88.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	31	206	235	39	16	49	964	79	6	937	3
Future Volume (veh/h)	3	31	206	235	39	16	49	964	79	6	937	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	3	36	152	270	45	9	56	1108	90	7	1077	3
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	17	205	188	301	256	51	72	913	74	16	943	799
Arrive On Green	0.12	0.12	0.12	0.17	0.17	0.17	0.04	0.53	0.53	0.01	0.50	0.50
Sat Flow, veh/h	146	1747	1598	1810	1537	307	1810	1731	141	1810	1900	1610
Grp Volume(v), veh/h	39	0	152	270	0	54	56	0	1198	7	1077	3
Grp Sat Flow(s),veh/h/ln	1893	0	1598	1810	0	1845	1810	0	1871	1810	1900	1610
Q Serve(g_s), s	2.0	0.0	10.1	15.9	0.0	2.7	3.3	0.0	57.4	0.4	54.0	0.1
Cycle Q Clear(g_c), s	2.0	0.0	10.1	15.9	0.0	2.7	3.3	0.0	57.4	0.4	54.0	0.1
Prop In Lane	0.08		1.00	1.00		0.17	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	222	0	188	301	0	307	72	0	987	16	943	799
V/C Ratio(X)	0.18	0.00	0.81	0.90	0.00	0.18	0.77	0.00	1.21	0.44	1.14	0.00
Avail Cap(c_a), veh/h	362	0	305	323	0	329	103	0	987	83	943	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	0.0	46.8	44.5	0.0	39.0	51.7	0.0	25.7	53.7	27.4	13.8
Incr Delay (d2), s/veh	0.4	0.0	8.1	25.2	0.0	0.3	12.1	0.0	105.7	7.0	76.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	4.3	9.3	0.0	1.3	1.7	0.0	51.4	0.2	42.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.7	0.0	54.9	69.6	0.0	39.2	63.8	0.0	131.4	60.7	104.3	13.8
LnGrp LOS	D	A	D	E	A	D	E	A	F	E	F	B
Approach Vol, veh/h		191			324			1254			1087	
Approach Delay, s/veh		52.6			64.6			128.4			103.8	
Approach LOS		D			E			F			F	

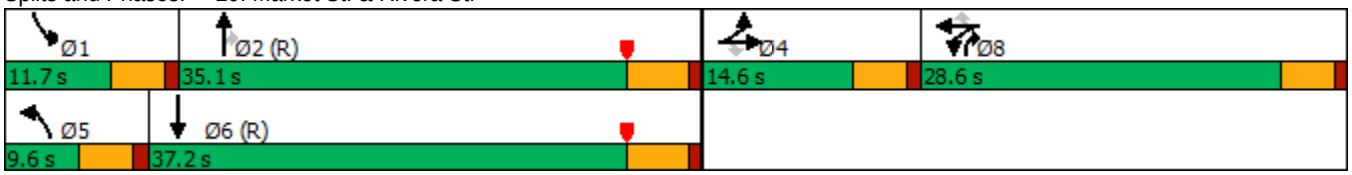
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		17.4	9.0	59.8		22.7	5.6	63.2				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		20.8	6.2	54.0		19.4	5.0	55.2				
Max Q Clear Time (g_c+I1), s		12.1	5.3	56.0		17.9	2.4	59.4				
Green Ext Time (p_c), s		0.4	0.0	0.0		0.2	0.0	0.0				

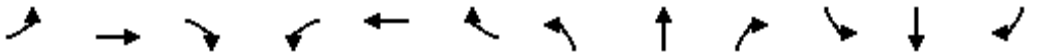
Intersection Summary												
HCM 6th Ctrl Delay			106.7									
HCM 6th LOS			F									

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	14	75	234	2	39	4	906	258	131	1292
Future Volume (vph)	14	75	234	2	39	4	906	258	131	1292
Turn Type	NA	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	4		8	8		5	2	8	1	6
Permitted Phases		4			8			2		
Detector Phase	4	4	8	8	8	5	2	8	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	14.6	14.6	28.6	28.6	28.6	9.6	35.1	28.6	9.6	29.1
Total Split (s)	14.6	14.6	28.6	28.6	28.6	9.6	35.1	28.6	11.7	37.2
Total Split (%)	16.2%	16.2%	31.8%	31.8%	31.8%	10.7%	39.0%	31.8%	13.0%	41.3%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.1	3.6	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	4.6	5.1	4.6	4.6	5.1
Lead/Lag						Lead	Lag		Lead	Lag
Lead-Lag Optimize?						Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	10.0	10.0	14.4	14.4	14.4	5.0	38.5	54.3	11.1	52.3
Actuated g/C Ratio	0.11	0.11	0.16	0.16	0.16	0.06	0.43	0.60	0.12	0.58
v/c Ratio	0.10	0.26	0.44	0.45	0.11	0.04	0.61	0.25	0.61	0.64
Control Delay	37.3	3.1	37.6	37.9	0.6	36.5	27.8	0.6	51.8	18.0
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.4
Total Delay	37.3	3.1	37.6	37.9	0.6	36.5	28.1	0.6	51.8	18.4
LOS	D	A	D	D	A	D	C	A	D	B
Approach Delay	10.2			32.5			22.1			21.5
Approach LOS	B			C			C			C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 2 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay: 22.4	Intersection LOS: C
Intersection Capacity Utilization 65.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 29: Market St. & Rivera St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	14	75	234	2	39	4	906	258	131	1292	0
Future Volume (veh/h)	6	14	75	234	2	39	4	906	258	131	1292	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	6	14	34	242	0	21	4	934	165	135	1332	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	46	108	133	409	0	181	10	1862	1012	143	2128	0
Arrive On Green	0.08	0.08	0.08	0.11	0.00	0.11	0.01	1.00	1.00	0.08	0.59	0.00
Sat Flow, veh/h	562	1310	1610	3619	0	1603	1810	3610	1610	1810	3705	0
Grp Volume(v), veh/h	20	0	34	242	0	21	4	934	165	135	1332	0
Grp Sat Flow(s),veh/h/ln	1872	0	1610	1810	0	1603	1810	1805	1610	1810	1805	0
Q Serve(g_s), s	0.9	0.0	1.8	5.7	0.0	1.1	0.2	0.0	0.0	6.7	21.6	0.0
Cycle Q Clear(g_c), s	0.9	0.0	1.8	5.7	0.0	1.1	0.2	0.0	0.0	6.7	21.6	0.0
Prop In Lane	0.30		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	154	0	133	409	0	181	10	1862	1012	143	2128	0
V/C Ratio(X)	0.13	0.00	0.26	0.59	0.00	0.12	0.42	0.50	0.16	0.95	0.63	0.00
Avail Cap(c_a), veh/h	208	0	179	965	0	427	101	1862	1012	143	2128	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.94	0.94	0.94	0.09	0.09	0.00
Uniform Delay (d), s/veh	38.3	0.0	38.7	37.9	0.0	35.9	44.4	0.0	0.0	41.3	12.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	1.0	1.4	0.0	0.3	9.8	0.9	0.3	11.9	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.7	2.6	0.0	0.4	0.1	0.2	0.1	3.3	7.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.7	0.0	39.7	39.3	0.0	36.2	54.2	0.9	0.3	53.2	12.1	0.0
LnGrp LOS	D	A	D	D	A	D	D	A	A	D	B	A
Approach Vol, veh/h		54			263			1103			1467	
Approach Delay, s/veh		39.3			39.1			1.0			15.9	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.7	51.5		12.0	5.1	58.2		14.8				
Change Period (Y+Rc), s	4.6	5.1		4.6	4.6	5.1		4.6				
Max Green Setting (Gmax), s	7.1	30.0		10.0	5.0	32.1		24.0				
Max Q Clear Time (g_c+I1), s	8.7	2.0		3.8	2.2	23.6		7.7				
Green Ext Time (p_c), s	0.0	7.3		0.1	0.0	5.2		0.8				

Intersection Summary		
HCM 6th Ctrl Delay		12.8
HCM 6th LOS		B

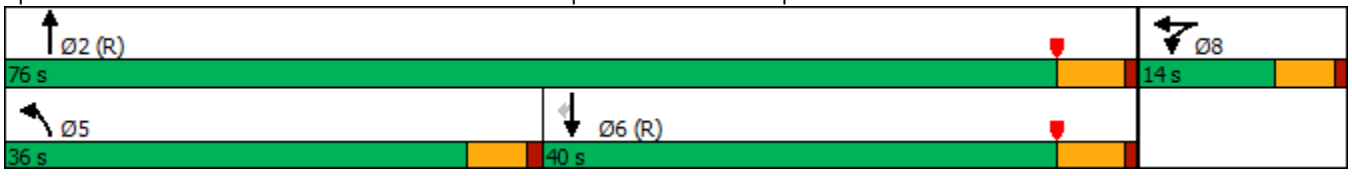
Notes

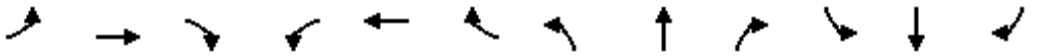
User approved volume balancing among the lanes for turning movement.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	5	773	431	395	1419	182
Future Volume (vph)	5	773	431	395	1419	182
Turn Type	NA	Free	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		Free				6
Detector Phase	8		5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	10.0		10.0	24.5	10.5	10.5
Total Split (s)	14.0		36.0	76.0	40.0	40.0
Total Split (%)	15.6%		40.0%	84.4%	44.4%	44.4%
Yellow Time (s)	4.0		4.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	C-Min	C-Min	C-Min
Act Effct Green (s)	8.5	90.0	26.2	74.4	42.1	42.1
Actuated g/C Ratio	0.09	1.00	0.29	0.83	0.47	0.47
v/c Ratio	0.62	0.49	0.84	0.14	0.86	0.22
Control Delay	55.2	1.1	34.8	10.0	23.4	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.6	0.0
Total Delay	55.2	1.1	34.8	10.0	24.0	2.5
LOS	E	A	C	B	C	A
Approach Delay	7.5			23.0	21.6	
Approach LOS	A			C	C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 18.2	Intersection LOS: B
Intersection Capacity Utilization 81.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 30: Market St. & SR-60 WB On-Ramp/SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	99	5	773	431	395	0	0	1419	182
Future Volume (veh/h)	0	0	0	99	5	773	431	395	0	0	1419	182
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				101	5	0	440	403	0	0	1448	0
Peak Hour Factor				0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				129	6		475	2919	0	0	1771	
Arrive On Green				0.07	0.07	0.00	0.44	1.00	0.00	0.00	0.98	0.00
Sat Flow, veh/h				1728	86	1610	1810	3705	0	0	3705	1610
Grp Volume(v), veh/h				106	0	0	440	403	0	0	1448	0
Grp Sat Flow(s),veh/h/ln				1814	0	1610	1810	1805	0	0	1805	1610
Q Serve(g_s), s				5.2	0.0	0.0	20.7	0.0	0.0	0.0	3.4	0.0
Cycle Q Clear(g_c), s				5.2	0.0	0.0	20.7	0.0	0.0	0.0	3.4	0.0
Prop In Lane				0.95		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				135	0		475	2919	0	0	1771	
V/C Ratio(X)				0.78	0.00		0.93	0.14	0.00	0.00	0.82	
Avail Cap(c_a), veh/h				181	0		623	2919	0	0	1771	
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	0.00	0.00	0.56	0.56	0.00	0.00	0.77	0.00
Uniform Delay (d), s/veh				40.9	0.0	0.0	24.5	0.0	0.0	0.0	0.5	0.0
Incr Delay (d2), s/veh				14.5	0.0	0.0	10.8	0.1	0.0	0.0	3.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.7	0.0	0.0	7.7	0.0	0.0	0.0	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				55.4	0.0	0.0	35.3	0.1	0.0	0.0	3.8	0.0
LnGrp LOS				E	A		D	A	A	A	A	
Approach Vol, veh/h					106			843			1448	
Approach Delay, s/veh					55.4			18.5			3.8	
Approach LOS					E			B			A	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		78.3			28.6	49.7		11.7				
Change Period (Y+Rc), s		5.5			5.0	5.5		5.0				
Max Green Setting (Gmax), s		70.5			31.0	34.5		9.0				
Max Q Clear Time (g_c+I1), s		2.0			22.7	5.4		7.2				
Green Ext Time (p_c), s		2.7			0.9	12.3		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			11.3									
HCM 6th LOS			B									

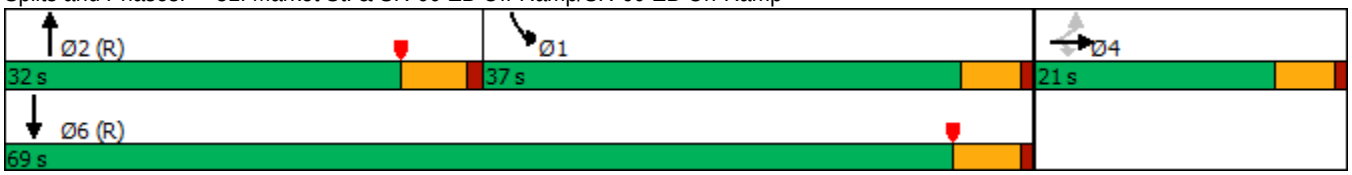
Notes

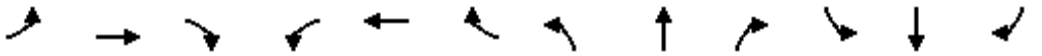
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	3	698	728	732	787
Future Volume (vph)	3	698	728	732	787
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	24.5	10.0	10.5
Total Split (s)	21.0	21.0	32.0	37.0	69.0
Total Split (%)	23.3%	23.3%	35.6%	41.1%	76.7%
Yellow Time (s)	4.0	4.0	4.5	4.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.0	5.5
Lead/Lag			Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Min	None	C-Min
Act Effct Green (s)	14.0	14.0	26.2	34.3	65.5
Actuated g/C Ratio	0.16	0.16	0.29	0.38	0.73
v/c Ratio	0.36	0.88	0.76	1.09	0.31
Control Delay	37.0	27.4	34.4	90.9	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	37.0	27.4	34.4	90.9	6.4
LOS	D	C	C	F	A
Approach Delay	28.6		34.4		47.1
Approach LOS	C		C		D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 15 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.09	
Intersection Signal Delay: 39.2	Intersection LOS: D
Intersection Capacity Utilization 81.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 31: Market St. & SR-60 EB Off-Ramp/SR-60 EB On-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	3	698	0	0	0	0	728	54	732	787	0
Future Volume (veh/h)	97	3	698	0	0	0	0	728	54	732	787	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	99	3	447				0	743	0	747	803	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	311	9	501				0	891		721	2551	0
Arrive On Green	0.18	0.18	0.18				0.00	0.25	0.00	0.53	0.94	0.00
Sat Flow, veh/h	1759	53	2834				0	3800	0	1810	3705	0
Grp Volume(v), veh/h	102	0	447				0	743	0	747	803	0
Grp Sat Flow(s),veh/h/ln	1812	0	1417				0	1805	0	1810	1805	0
Q Serve(g_s), s	4.4	0.0	13.9				0.0	17.6	0.0	35.9	1.7	0.0
Cycle Q Clear(g_c), s	4.4	0.0	13.9				0.0	17.6	0.0	35.9	1.7	0.0
Prop In Lane	0.97		1.00				0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	320	0	501				0	891		721	2551	0
V/C Ratio(X)	0.32	0.00	0.89				0.00	0.83		1.04	0.31	0.00
Avail Cap(c_a), veh/h	322	0	504				0	1063		721	2551	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.33	1.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.40	0.40	0.00
Uniform Delay (d), s/veh	32.3	0.0	36.2				0.0	32.1	0.0	21.1	0.8	0.0
Incr Delay (d2), s/veh	0.6	0.0	17.9				0.0	9.1	0.0	31.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	5.8				0.0	8.4	0.0	17.4	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.9	0.0	54.1				0.0	41.2	0.0	52.1	1.0	0.0
LnGrp LOS	C	A	D				A	D		F	A	A
Approach Vol, veh/h		549						743			1550	
Approach Delay, s/veh		50.1						41.2			25.6	
Approach LOS		D						D			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	41.4	27.7		20.9		69.1
Change Period (Y+Rc), s	5.5	* 5.5		5.0		5.5
Max Green Setting (Gmax), s	32.0	* 27		16.0		63.5
Max Q Clear Time (g_c+I1), s	37.9	19.6		15.9		3.7
Green Ext Time (p_c), s	0.0	2.6		0.0		6.2

Intersection Summary	
HCM 6th Ctrl Delay	34.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	0	32	1	1	15	42	735	0	18	1371	97
Future Vol, veh/h	32	0	32	1	1	15	42	735	0	18	1371	97
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	145	-	-	140	-	110
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	33	0	33	1	1	16	44	766	0	19	1428	101

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1938	2321	714	1607	2422	384	1529	0	0	767	0	0
Stage 1	1466	1466	-	855	855	-	-	-	-	-	-	-
Stage 2	472	855	-	752	1567	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	*129	*52	*535	*389	38	620	801	-	-	856	-	-
Stage 1	*504	*441	-	*323	378	-	-	-	-	-	-	-
Stage 2	*547	*378	-	*504	408	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	*118	*48	*535	*343	35	619	801	-	-	855	-	-
Mov Cap-2 Maneuver	*273	*195	-	*243	178	-	-	-	-	-	-	-
Stage 1	*476	*432	-	*305	357	-	-	-	-	-	-	-
Stage 2	*502	*357	-	*462	399	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.2	12.4	0.5	0.1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	801	-	-	362	501	855	-	-
HCM Lane V/C Ratio	0.055	-	-	0.184	0.035	0.022	-	-
HCM Control Delay (s)	9.8	-	-	17.2	12.4	9.3	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.7	0.1	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	79.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	326	87	53	878	476	187
Future Vol, veh/h	326	87	53	878	476	187
Conflicting Peds, #/hr	0	0	0	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	408	109	66	1098	595	234

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1395	714	831	0	-	0
Stage 1	714	-	-	-	-	-
Stage 2	681	-	-	-	-	-
Critical Hdwy	6.6	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	~ 146	435	810	-	-	-
Stage 1	489	-	-	-	-	-
Stage 2	469	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 133	434	808	-	-	-
Mov Cap-2 Maneuver	~ 270	-	-	-	-	-
Stage 1	448	-	-	-	-	-
Stage 2	468	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 386.5	0.6	0
HCM LOS	F		

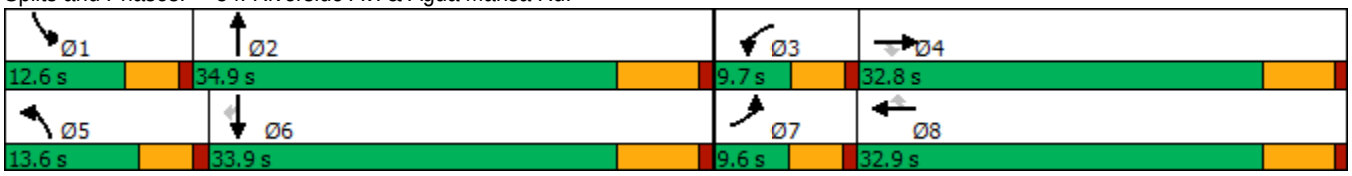
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	808	-	293	-	-
HCM Lane V/C Ratio	0.082	-	1.762	-	-
HCM Control Delay (s)	9.9	-	$ 386.5	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q(veh)	0.3	-	33.7	-	-

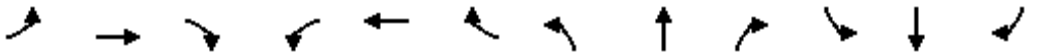
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	252	485	248	94	296	80	201	525	118	573	139
Future Volume (vph)	252	485	248	94	296	80	201	525	118	573	139
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	9.6	32.8	32.8	9.7	32.9	32.9	13.6	34.9	12.6	33.9	33.9
Total Split (%)	10.7%	36.4%	36.4%	10.8%	36.6%	36.6%	15.1%	38.8%	14.0%	37.7%	37.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	5.1	24.9	24.9	5.2	25.0	25.0	9.1	21.2	7.7	19.8	19.8
Actuated g/C Ratio	0.06	0.31	0.31	0.06	0.31	0.31	0.11	0.26	0.10	0.25	0.25
v/c Ratio	2.33	0.86	0.39	0.85	0.52	0.14	1.03	0.72	0.71	0.67	0.29
Control Delay	649.5	43.7	5.1	95.1	27.5	0.7	111.5	30.6	61.5	31.6	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	649.5	43.7	5.1	95.1	27.5	0.7	111.5	30.6	61.5	31.6	6.1
LOS	F	D	A	F	C	A	F	C	E	C	A
Approach Delay		189.3			36.5			49.6		31.6	
Approach LOS		F			D			D		C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 80.7	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 2.33	
Intersection Signal Delay: 86.7	Intersection LOS: F
Intersection Capacity Utilization 76.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	252	485	248	94	296	80	201	525	127	118	573	139
Future Volume (veh/h)	252	485	248	94	296	80	201	525	127	118	573	139
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	262	505	160	98	308	68	209	547	126	123	597	137
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	120	577	488	122	580	491	215	754	173	156	816	362
Arrive On Green	0.07	0.30	0.30	0.07	0.31	0.31	0.12	0.26	0.26	0.09	0.23	0.23
Sat Flow, veh/h	1810	1900	1605	1810	1900	1609	1810	2915	669	1810	3610	1603
Grp Volume(v), veh/h	262	505	160	98	308	68	209	338	335	123	597	137
Grp Sat Flow(s),veh/h/ln	1810	1900	1605	1810	1900	1609	1810	1805	1780	1810	1805	1603
Q Serve(g_s), s	5.0	19.1	5.8	4.0	10.2	2.3	8.7	12.9	13.0	5.0	11.6	5.5
Cycle Q Clear(g_c), s	5.0	19.1	5.8	4.0	10.2	2.3	8.7	12.9	13.0	5.0	11.6	5.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	120	577	488	122	580	491	215	467	460	156	816	362
V/C Ratio(X)	2.19	0.88	0.33	0.80	0.53	0.14	0.97	0.72	0.73	0.79	0.73	0.38
Avail Cap(c_a), veh/h	120	678	573	122	680	576	215	677	668	191	1307	580
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	25.0	20.4	34.8	21.8	19.1	33.2	25.6	25.6	33.9	27.2	24.8
Incr Delay (d2), s/veh	562.7	11.0	0.4	29.1	0.8	0.1	52.8	2.1	2.3	13.0	1.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.7	9.4	2.0	2.6	4.2	0.8	6.6	5.1	5.1	2.6	4.5	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	598.1	36.0	20.8	63.9	22.6	19.2	86.0	27.7	27.9	46.9	28.5	25.4
LnGrp LOS	F	D	C	E	C	B	F	C	C	D	C	C
Approach Vol, veh/h		927			474			882			857	
Approach Delay, s/veh		192.2			30.6			41.6			30.6	
Approach LOS		F			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	26.1	9.7	28.8	13.6	23.6	9.6	28.9
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	8.0	28.4	5.1	27.0	9.0	27.4	5.0	27.1
Max Q Clear Time (g_c+I1), s	7.0	15.0	6.0	21.1	10.7	13.6	7.0	12.2
Green Ext Time (p_c), s	0.0	2.9	0.0	1.8	0.0	3.3	0.0	1.6

Intersection Summary	
HCM 6th Ctrl Delay	81.4
HCM 6th LOS	F

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	0	0	637	200	8
Future Vol, veh/h	4	0	0	637	200	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	92	92	92	92	50
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	8	0	0	692	217	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	917	225	233	0	-	0
Stage 1	225	-	-	-	-	-
Stage 2	692	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	304	819	1346	-	-	-
Stage 1	817	-	-	-	-	-
Stage 2	500	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	304	819	1346	-	-	-
Mov Cap-2 Maneuver	304	-	-	-	-	-
Stage 1	817	-	-	-	-	-
Stage 2	500	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.2	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1346	-	304	-	-
HCM Lane V/C Ratio	-	-	0.026	-	-
HCM Control Delay (s)	0	-	17.2	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

APPENDIX 9.2: OPENING YEAR BACKGROUND PLUS PROJECT PLUS CUMULATIVE CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (2025) Conditions - Weekday AM Peak Hour**

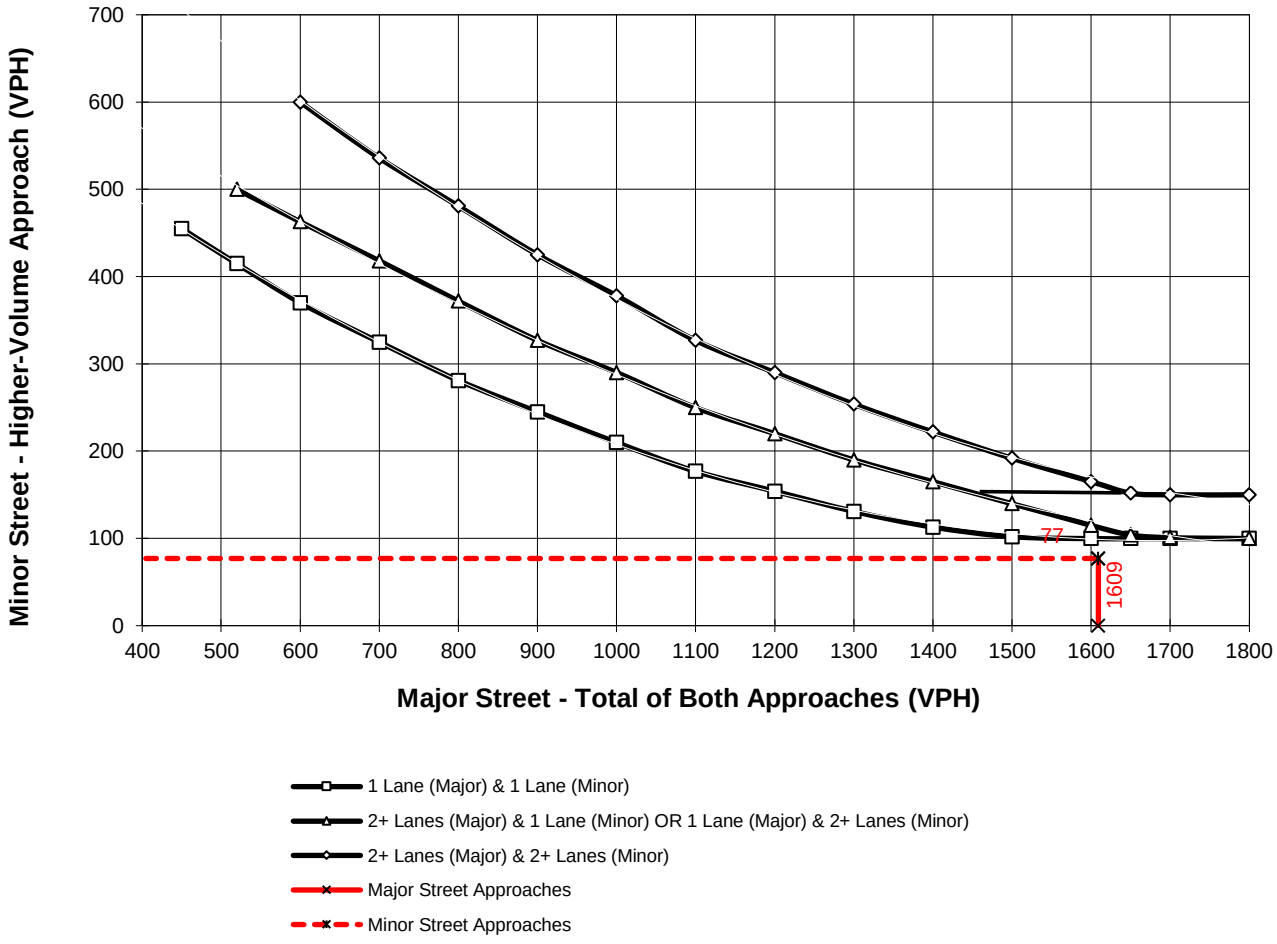
Major Street Name = **20th St.**

Total of Both Approaches (VPH) = **1609**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Avalon Rd.**

High Volume Approach (VPH) = **77**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (2025) Conditions - Weekday AM Peak Hour**

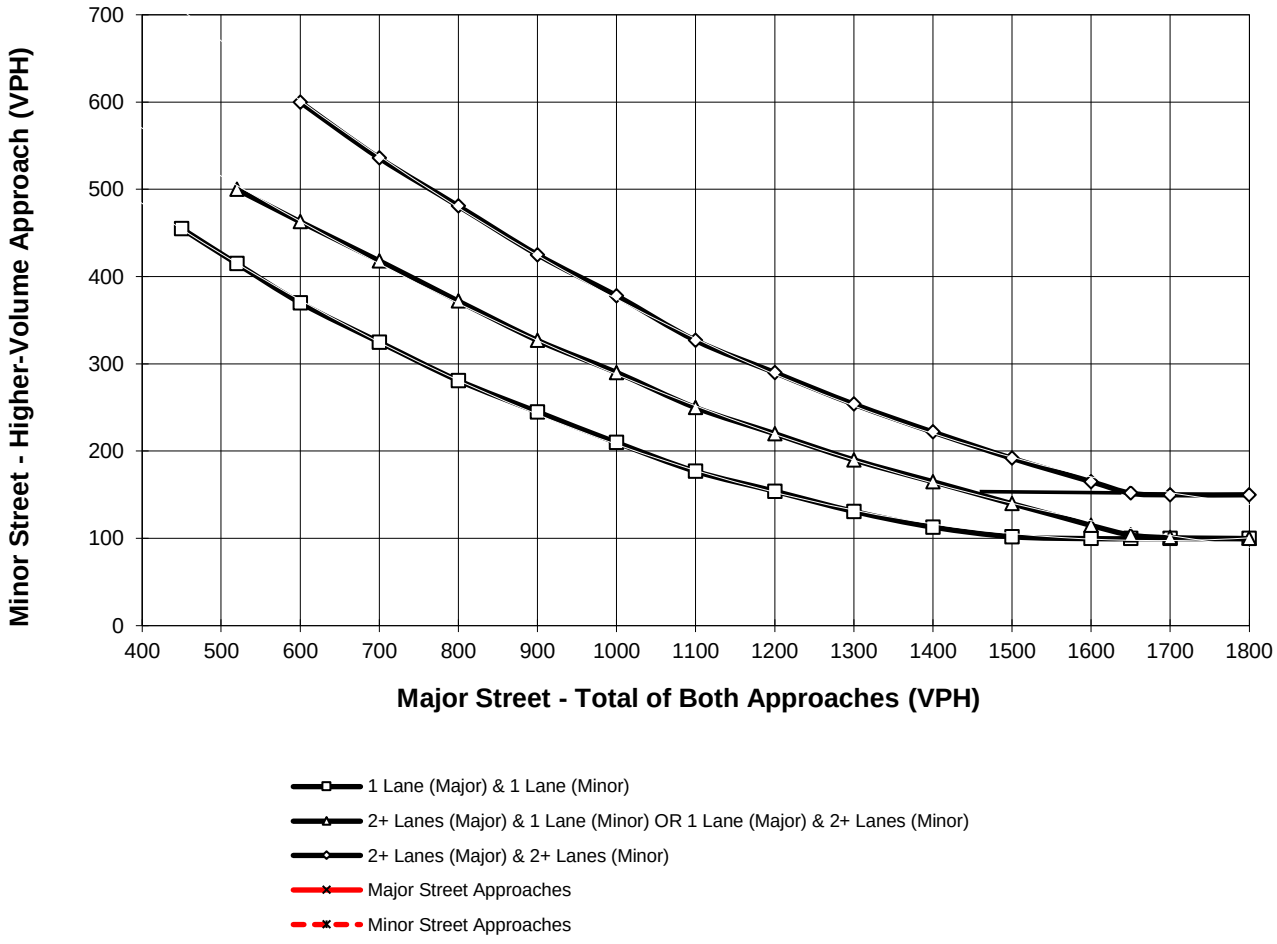
Major Street Name = **Avalon St.**

Total of Both Approaches (VPH) = **112**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **24th St.**

High Volume Approach (VPH) = **34**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (2025) Conditions - Weekday AM Peak Hour**

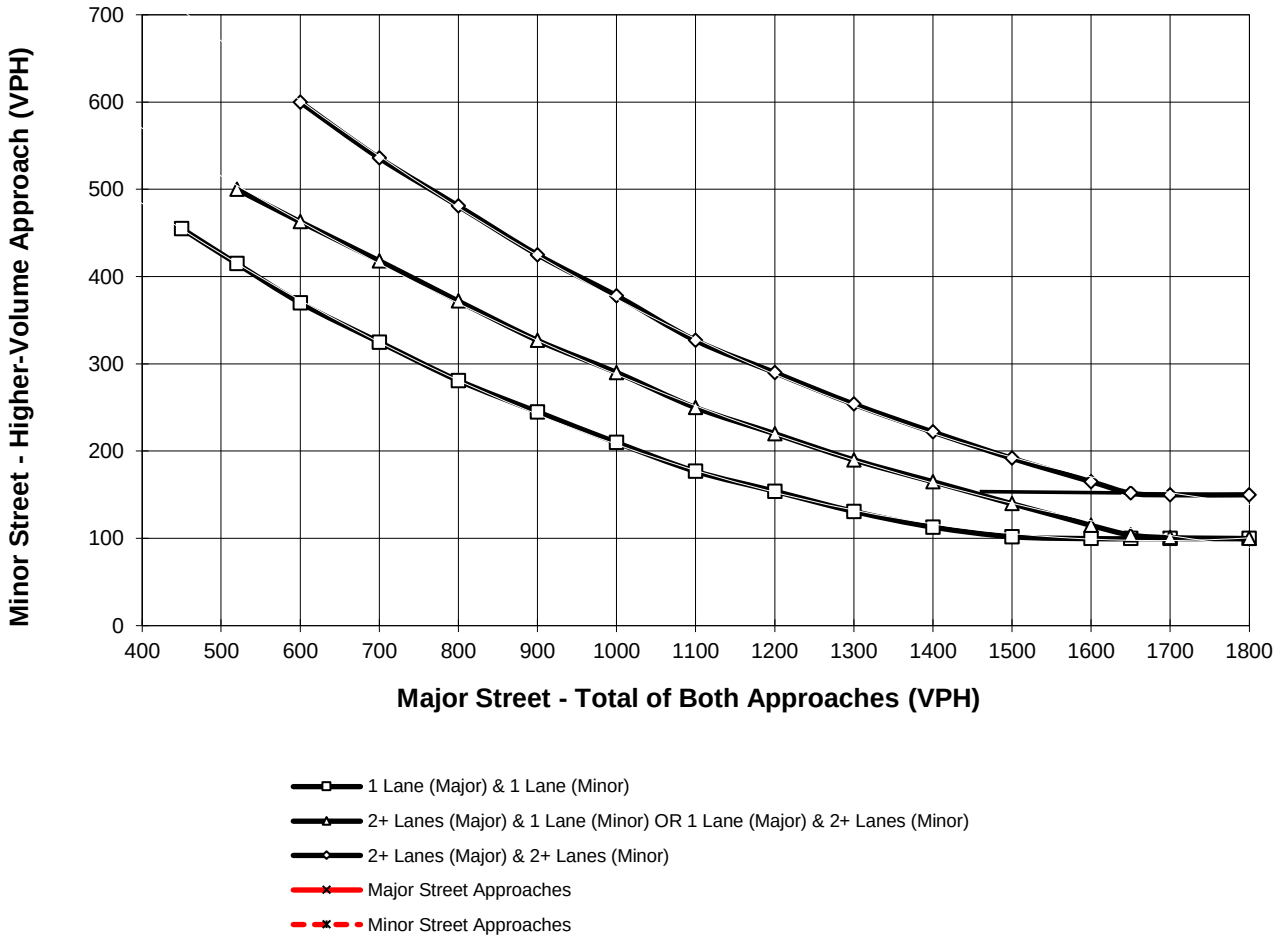
Major Street Name = **Avalon St.**

Total of Both Approaches (VPH) = **114**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **26th St.**

High Volume Approach (VPH) = **39**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		EAPC 2025	
				CALC	CS	DATE	11/29/22
Jurisdiction:	City of Jurupa Valley			CHK	CS	DATE	11/29/22
Major Street:	Avalon Rd.			Critical Approach Speed (Major)		45	mph
Minor Street:	Driveway 7			Critical Approach Speed (Minor)		25	mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **1,147** vpd Minor Street Future ADT = **90** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. √

or

In built up area of isolated community of < 10,000 population ……

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
	XX				
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **1,147**	*1* **90**	8,000	5,600	2,400	1,680
2 +	*1*	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **1,147**	*1* **90**	12,000	8,400	1,200	850
2 +	*1*	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 5% **B** 11%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

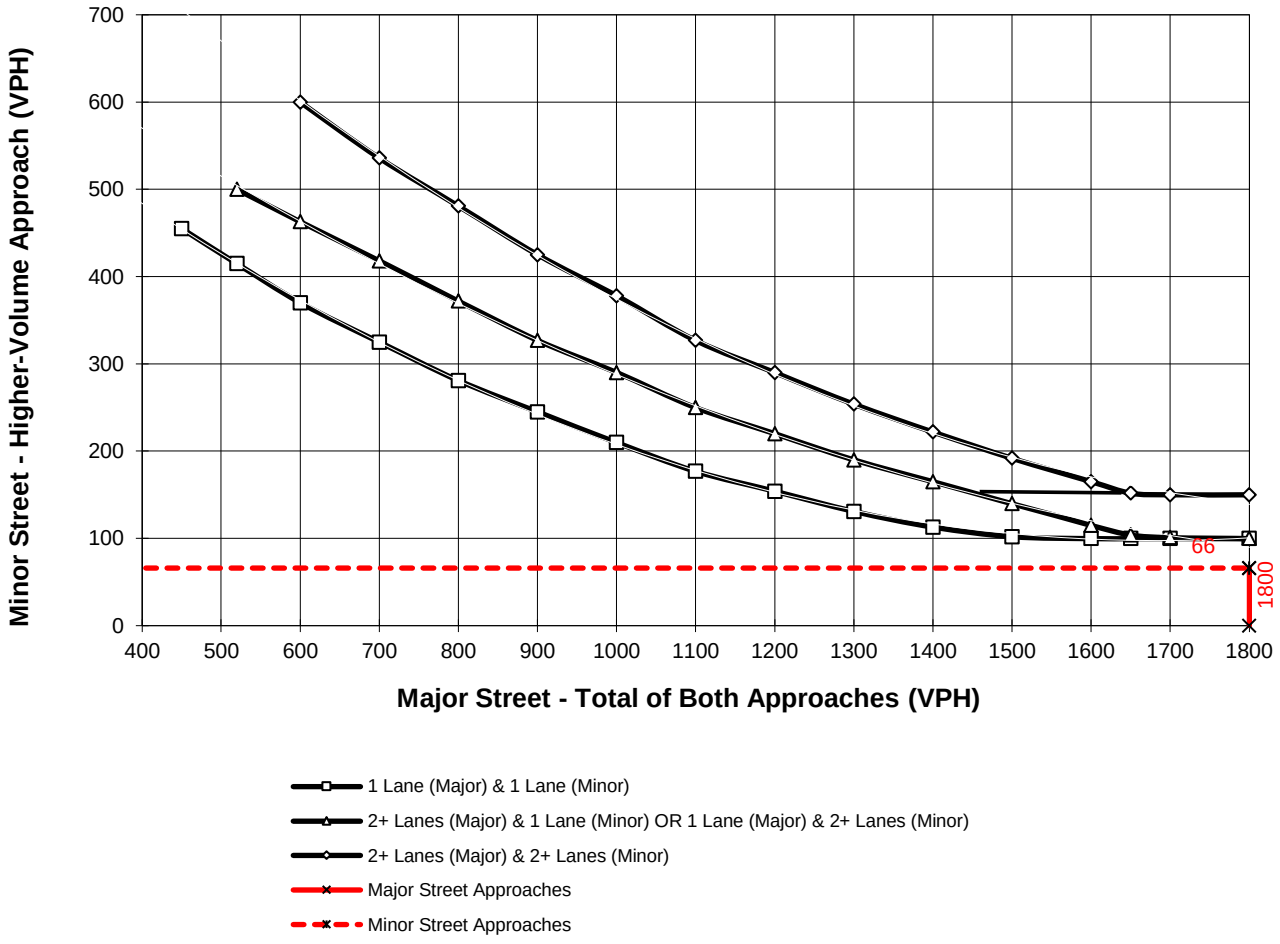
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (2025) Conditions - Weekday PM Peak Hour**

Major Street Name = **Rubidoux St.**
Total of Both Approaches (VPH) = **3224**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **24th St.**
High Volume Approach (VPH) = **66**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

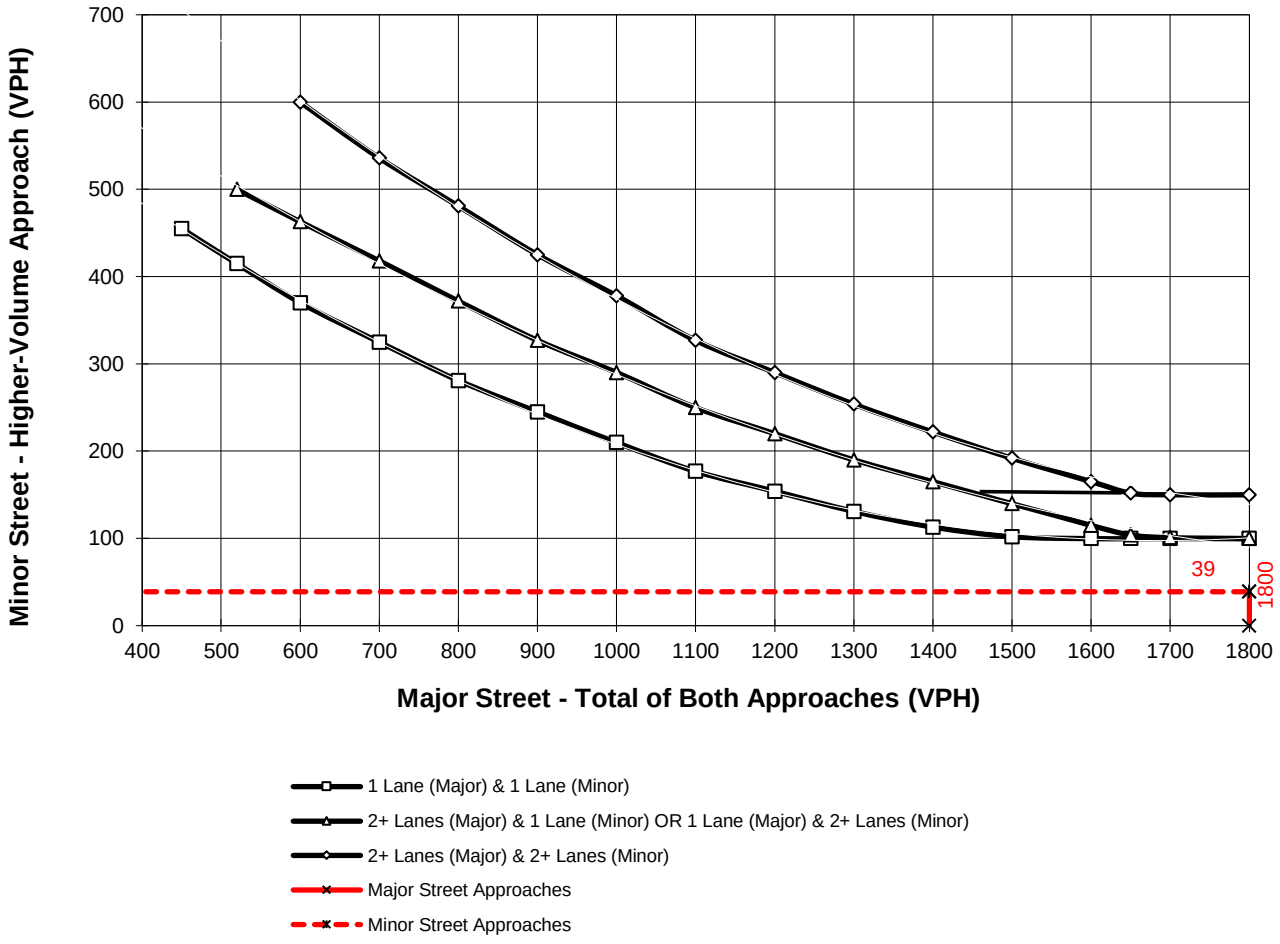
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (2025) Conditions - Weekday PM Peak Hour**

Major Street Name = **Rubidoux St.**
Total of Both Approaches (VPH) = **3035**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **26th St.**
High Volume Approach (VPH) = **39**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (2025) Conditions - Weekday AM Peak Hour**

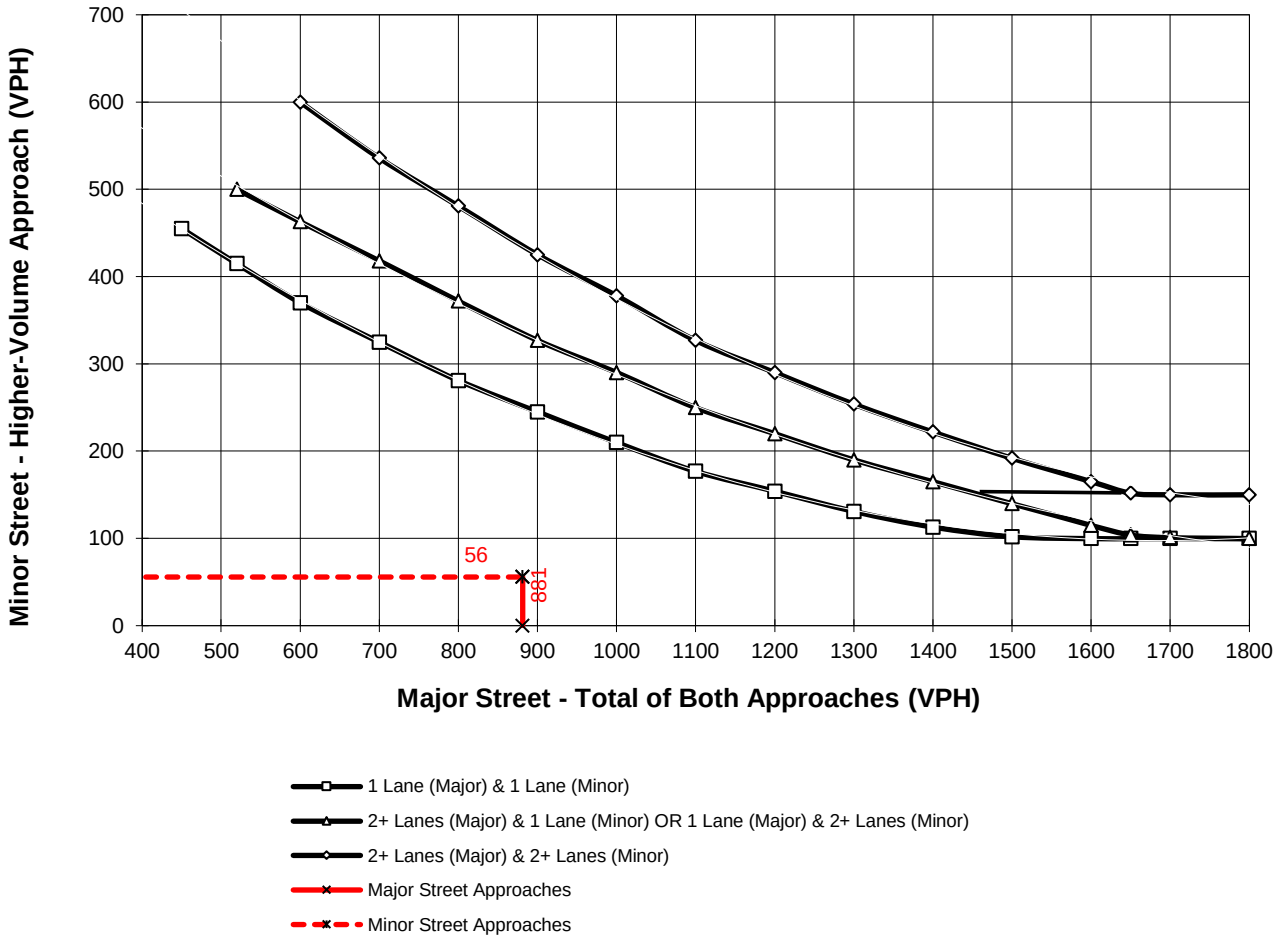
Major Street Name = **Frontage Rd.**

Total of Both Approaches (VPH) = **881**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Hall Av.**

High Volume Approach (VPH) = **56**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

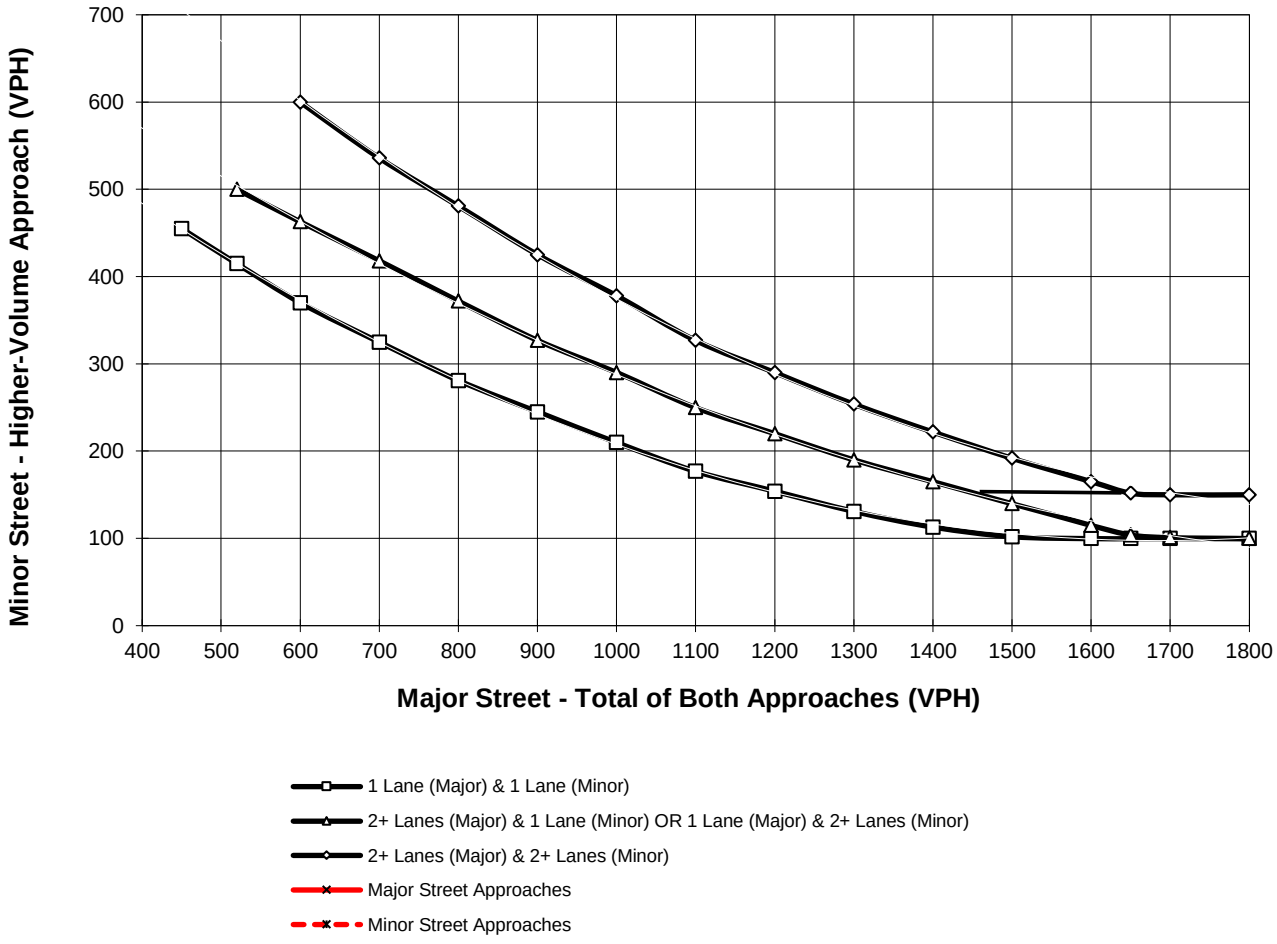
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (2025) Conditions - Weekday PM Peak Hour**

Major Street Name = **24th St.**
Total of Both Approaches (VPH) = **314**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Hall Av.**
High Volume Approach (VPH) = **99**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (2025) Conditions - Weekday PM Peak Hour**

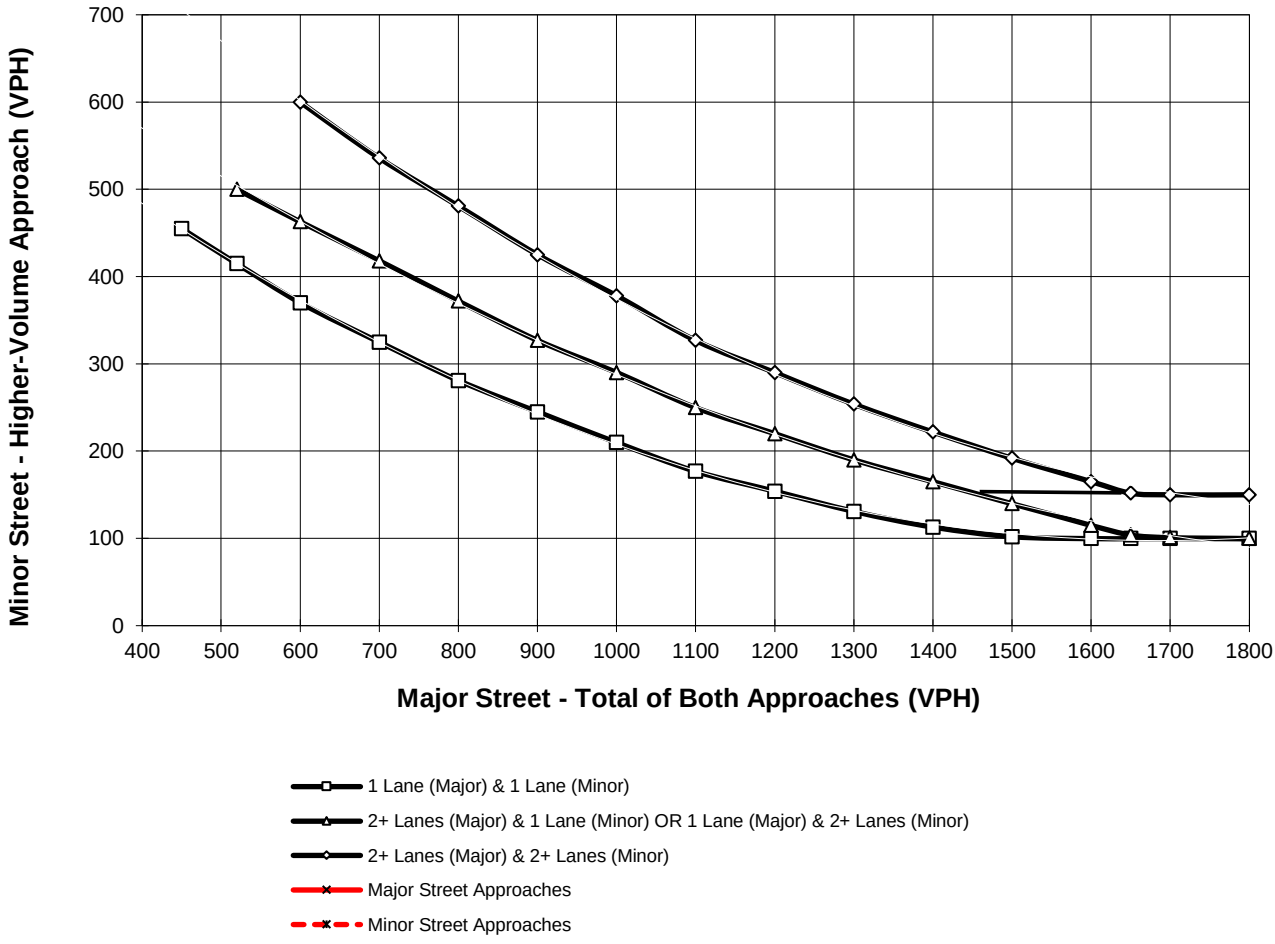
Major Street Name = **Hall Av.**

Total of Both Approaches (VPH) = **251**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **26th St.**

High Volume Approach (VPH) = **24**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

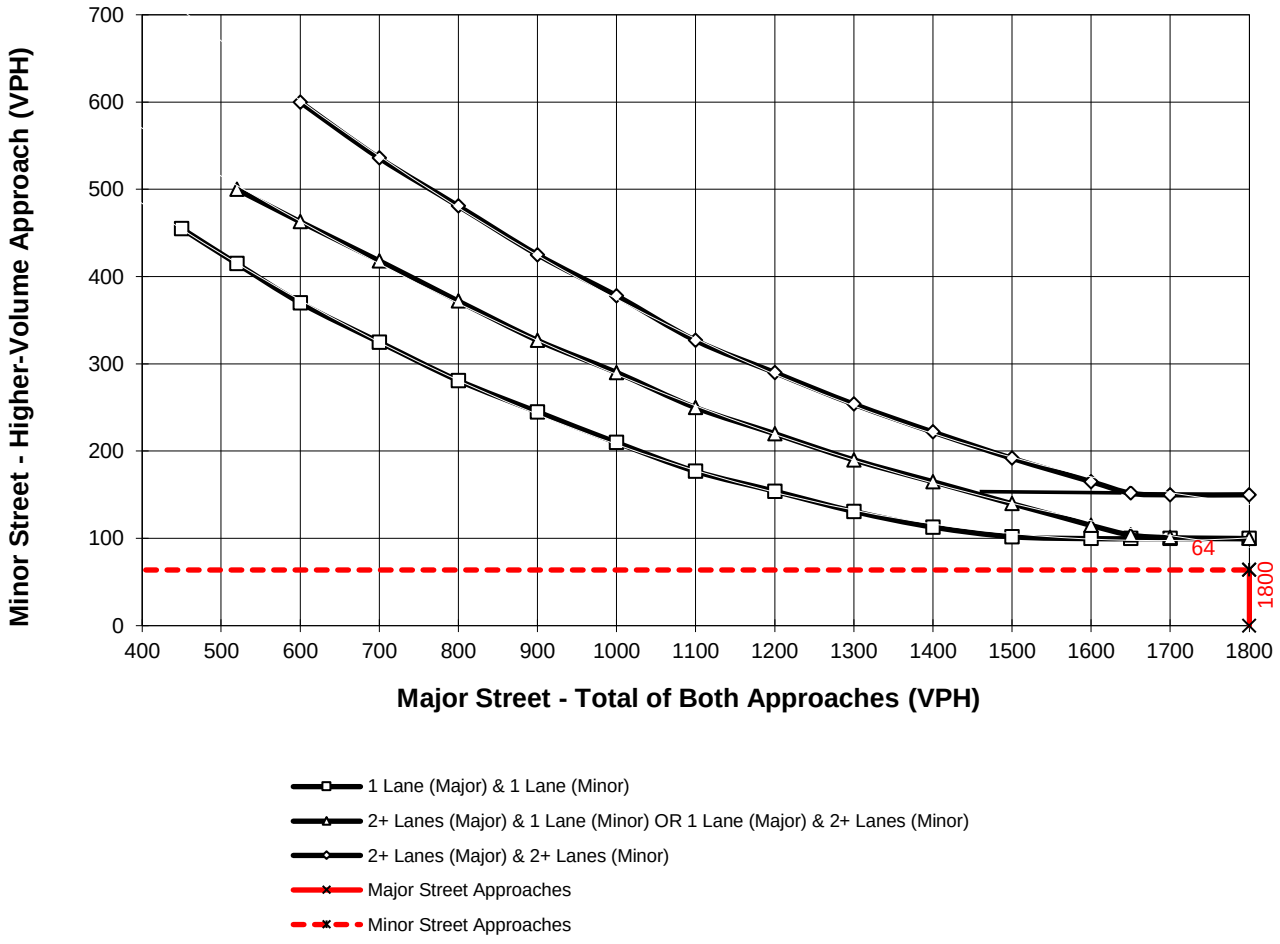
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (2025) Conditions - Weekday PM Peak Hour**

Major Street Name = **Market St.**
Total of Both Approaches (VPH) = **2263**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Redwood Dr.**
High Volume Approach (VPH) = **64**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (2025) Conditions - Weekday AM Peak Hour**

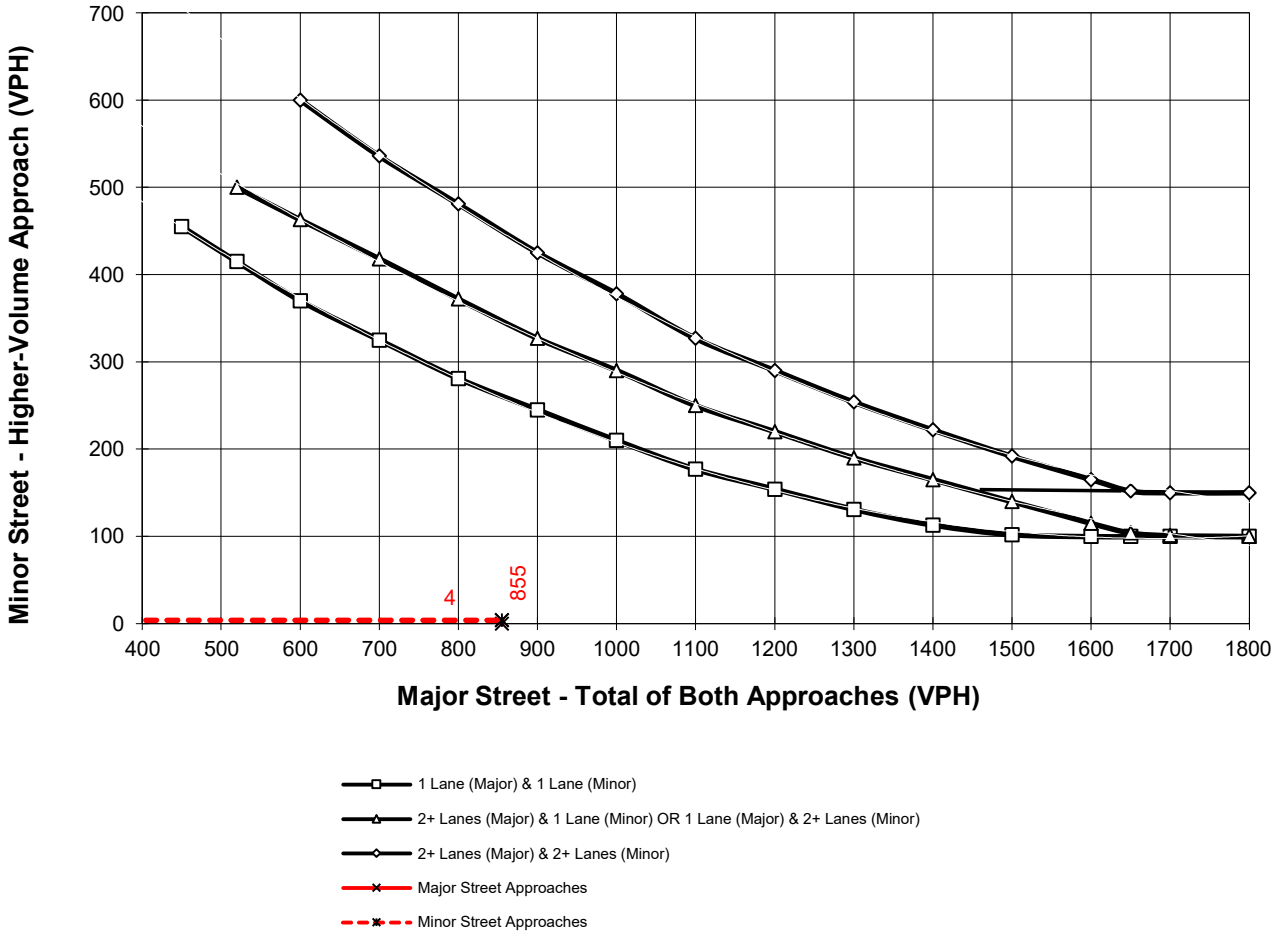
Major Street Name = **25th St.**

Total of Both Approaches (VPH) = **855**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Van Dell Rd.**

High Volume Approach (VPH) = **4**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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APPENDIX 9.3: OPENING YEAR BACKGROUND PLUS PROJECT PLUS CUMULATIVE CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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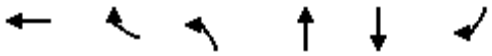


Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	873	382	518	1411	1805	667
v/c Ratio	1.39	0.68	1.58	0.68	0.97	0.71
Control Delay	215.3	33.1	298.5	17.7	49.8	9.5
Queue Delay	1.9	0.0	0.0	2.2	44.4	0.0
Total Delay	217.1	33.1	298.5	19.9	94.2	9.5
Queue Length 50th (ft)	~845	207	~528	205	454	48
Queue Length 95th (ft)	#1103	324	m#434	m131	#568	182
Internal Link Dist (ft)	1745			340	476	
Turn Bay Length (ft)		480				
Base Capacity (vph)	627	565	328	2083	1862	943
Starvation Cap Reductn	0	0	0	508	0	0
Spillback Cap Reductn	135	0	0	0	931	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.77	0.68	1.58	0.90	1.94	0.71

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

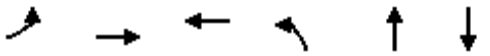
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	580	1096	1348	772	538	2183
v/c Ratio	0.92	1.83	1.24	0.92	0.92	1.07
Control Delay	54.9	402.9	147.3	29.0	34.4	53.9
Queue Delay	2.7	0.2	0.0	0.0	46.6	12.6
Total Delay	57.7	403.1	147.3	29.0	81.0	66.5
Queue Length 50th (ft)	407	~1222	~443	320	373	~910
Queue Length 95th (ft)	#635	#1492	m#466	m345	m345	m#765
Internal Link Dist (ft)		2158	960			340
Turn Bay Length (ft)	340			555	400	
Base Capacity (vph)	631	600	1084	836	582	2034
Starvation Cap Reductn	0	0	0	0	127	704
Spillback Cap Reductn	18	16	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.95	1.88	1.24	0.92	1.18	1.64

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	57	312	762	66	1393	1756
v/c Ratio	0.18	0.85	1.27	0.96	1.11	1.37
Control Delay	38.2	49.5	164.5	60.6	80.4	201.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.2	49.5	164.5	60.6	80.4	201.3
Queue Length 50th (ft)	34	143	~671	45	~614	~892
Queue Length 95th (ft)	68	#243	#893	m38	m#411	#1044
Internal Link Dist (ft)		471	1307		110	1510
Turn Bay Length (ft)				75		
Base Capacity (vph)	379	421	602	69	1254	1284
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.74	1.27	0.96	1.11	1.37

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

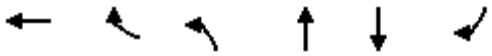
Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	1071	19	5	1399	349	976
v/c Ratio	1.66	0.23	0.03	1.03	2.51	0.55
Control Delay	329.7	57.7	0.2	61.4	701.6	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	329.7	57.7	0.2	61.4	701.6	8.3
Queue Length 50th (ft)	~1155	13	0	~510	~419	106
Queue Length 95th (ft)	#1410	38	0	#650	m#323	m73
Internal Link Dist (ft)	1049			1396		322
Turn Bay Length (ft)			25		90	
Base Capacity (vph)	646	82	191	1364	139	1772
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.66	0.23	0.03	1.03	2.51	0.55

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



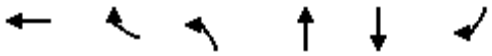
Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	68	1129	220	459	1176	215
v/c Ratio	0.41	0.70	0.69	0.15	0.56	0.21
Control Delay	45.4	2.5	25.5	5.4	11.2	2.2
Queue Delay	0.0	0.3	0.0	0.0	0.2	0.0
Total Delay	45.4	2.9	25.5	5.4	11.4	2.2
Queue Length 50th (ft)	37	0	41	26	273	6
Queue Length 95th (ft)	77	0	209	150	201	17
Internal Link Dist (ft)	1457			561	315	
Turn Bay Length (ft)			125			
Base Capacity (vph)	200	1615	421	2983	2098	1028
Starvation Cap Reductn	0	0	0	0	264	0
Spillback Cap Reductn	0	121	0	271	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.76	0.52	0.17	0.64	0.21

Intersection Summary

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	150	529	597	704	503
v/c Ratio	0.64	0.64	0.61	0.92	0.18
Control Delay	49.9	7.2	31.6	43.1	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	49.9	7.2	31.6	43.1	5.1
Queue Length 50th (ft)	81	0	160	178	35
Queue Length 95th (ft)	143	48	216	#557	124
Internal Link Dist (ft)	1642		355		561
Turn Bay Length (ft)		350		125	
Base Capacity (vph)	260	863	988	806	2719
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.58	0.61	0.60	0.87	0.18

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	629	382	752	1811	1514	626
v/c Ratio	1.07	0.68	2.55	0.86	0.77	0.64
Control Delay	94.0	33.9	721.1	22.1	32.8	5.2
Queue Delay	10.9	0.0	0.0	24.4	34.8	0.0
Total Delay	104.9	33.9	721.1	46.6	67.6	5.2
Queue Length 50th (ft)	~527	210	~908	388	334	0
Queue Length 95th (ft)	#764	329	m#785	m224	392	75
Internal Link Dist (ft)	1745			340	476	
Turn Bay Length (ft)		480				
Base Capacity (vph)	586	560	295	2116	2004	985
Starvation Cap Reductn	0	0	0	383	0	0
Spillback Cap Reductn	47	0	0	0	586	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.17	0.68	2.55	1.05	1.07	0.64

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

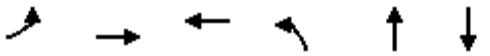
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	520	482	1856	874	429	1557
v/c Ratio	0.89	0.86	1.26	0.98	0.87	0.73
Control Delay	53.5	48.6	149.9	29.2	43.6	12.1
Queue Delay	49.5	50.7	0.0	0.0	3.1	11.2
Total Delay	103.0	99.4	149.9	29.2	46.7	23.4
Queue Length 50th (ft)	352	301	~650	~424	295	504
Queue Length 95th (ft)	#620	#553	m#540	m363	m352	m509
Internal Link Dist (ft)		2158	960			340
Turn Bay Length (ft)	340			555	400	
Base Capacity (vph)	586	559	1477	889	600	2261
Starvation Cap Reductn	0	0	0	0	91	699
Spillback Cap Reductn	148	138	1	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.19	1.14	1.26	0.98	0.84	1.00

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



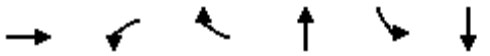
Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	48	234	911	111	1439	1852
v/c Ratio	0.18	0.76	1.34	1.61	1.20	1.51
Control Delay	40.0	44.0	194.4	310.5	119.3	263.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.0	44.0	194.4	310.5	119.3	263.6
Queue Length 50th (ft)	30	104	~842	~114	~650	~972
Queue Length 95th (ft)	61	180	#1089	m#98	m#544	#1197
Internal Link Dist (ft)		471	1307		110	1510
Turn Bay Length (ft)				75		
Base Capacity (vph)	377	402	678	69	1198	1225
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.58	1.34	1.61	1.20	1.51

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



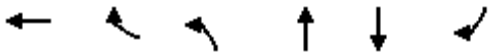
Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	1260	15	2	1306	279	1246
v/c Ratio	1.74	0.18	0.01	0.99	3.10	0.74
Control Delay	361.6	55.8	0.0	54.8	964.4	11.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.9
Total Delay	361.6	55.8	0.0	54.8	964.4	12.8
Queue Length 50th (ft)	~1276	10	0	460	~341	159
Queue Length 95th (ft)	#1657	32	0	#622	m#234	m105
Internal Link Dist (ft)	1049			1396		322
Turn Bay Length (ft)			25		90	
Base Capacity (vph)	726	82	191	1325	90	1673
Starvation Cap Reductn	0	0	0	0	0	191
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.74	0.18	0.01	0.99	3.10	0.84

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	106	789	440	403	1448	186
v/c Ratio	0.62	0.49	0.84	0.14	0.86	0.22
Control Delay	55.2	1.1	34.8	10.0	23.4	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.6	0.0
Total Delay	55.2	1.1	34.8	10.0	24.0	2.5
Queue Length 50th (ft)	59	0	275	107	420	1
Queue Length 95th (ft)	#121	0	m366	m148	#583	m10
Internal Link Dist (ft)	1457			561	315	
Turn Bay Length (ft)			125			
Base Capacity (vph)	181	1615	621	2984	1688	848
Starvation Cap Reductn	0	0	0	0	57	0
Spillback Cap Reductn	0	55	0	124	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.51	0.71	0.14	0.89	0.22

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	102	712	798	747	803
v/c Ratio	0.36	0.88	0.76	1.09	0.31
Control Delay	37.0	27.4	34.4	90.9	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	37.0	27.4	34.4	90.9	6.4
Queue Length 50th (ft)	51	85	214	~530	141
Queue Length 95th (ft)	98	#184	282	m#695	m141
Internal Link Dist (ft)	1642		355		561
Turn Bay Length (ft)		350		125	
Base Capacity (vph)	322	863	1056	688	2627
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.32	0.83	0.76	1.09	0.31

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

APPENDIX 9.4: OPENING YEAR BACKGROUND PLUS PROJECT PLUS CUMULATIVE CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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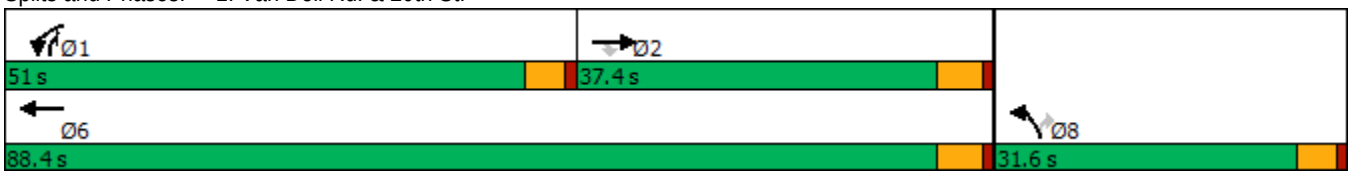
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	302	4	738	376	4	222
Future Volume (vph)	302	4	738	376	4	222
Turn Type	NA	Perm	Prot	NA	Prot	pm+ov
Protected Phases	2		1	6	8	1
Permitted Phases		2				8
Detector Phase	2	2	1	6	8	1
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	27.2	27.2	9.6	15.2	31.6	9.6
Total Split (s)	37.4	37.4	51.0	88.4	31.6	51.0
Total Split (%)	31.2%	31.2%	42.5%	73.7%	26.3%	42.5%
Yellow Time (s)	4.2	4.2	3.6	4.2	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.2	4.6	5.2	4.6	4.6
Lead/Lag	Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes	Yes			Yes
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)	21.4	21.4	48.4	63.4	12.9	55.6
Actuated g/C Ratio	0.25	0.25	0.56	0.73	0.15	0.64
v/c Ratio	0.79	0.01	0.90	0.33	0.02	0.25
Control Delay	45.3	18.5	35.5	7.0	36.5	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.3	18.5	35.5	7.0	36.5	3.3
LOS	D	B	D	A	D	A
Approach Delay	45.0			25.9	3.9	
Approach LOS	D			C	A	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 87.2	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 26.4	Intersection LOS: C
Intersection Capacity Utilization 77.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Van Dell Rd. & 20th St.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	302	4	738	376	4	222
Future Volume (veh/h)	302	4	738	376	4	222
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	368	5	900	459	5	210
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	428	363	919	1489	197	993
Arrive On Green	0.23	0.23	0.51	0.78	0.11	0.11
Sat Flow, veh/h	1900	1610	1810	1900	1810	1610
Grp Volume(v), veh/h	368	5	900	459	5	210
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1900	1810	1610
Q Serve(g_s), s	17.0	0.2	44.5	6.3	0.2	5.2
Cycle Q Clear(g_c), s	17.0	0.2	44.5	6.3	0.2	5.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	428	363	919	1489	197	993
V/C Ratio(X)	0.86	0.01	0.98	0.31	0.03	0.21
Avail Cap(c_a), veh/h	670	568	919	1730	535	1294
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	27.5	22.0	2.8	36.4	7.7
Incr Delay (d2), s/veh	6.8	0.0	24.5	0.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	0.1	22.2	1.2	0.1	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	40.8	27.5	46.5	2.9	36.4	7.8
LnGrp LOS	D	C	D	A	D	A
Approach Vol, veh/h	373			1359	215	
Approach Delay, s/veh	40.6			31.8	8.5	
Approach LOS	D			C	A	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	51.0	25.8				76.8	14.6
Change Period (Y+Rc), s	4.6	5.2				5.2	4.6
Max Green Setting (Gmax), s	46.4	32.2				83.2	27.0
Max Q Clear Time (g_c+I1), s	46.5	19.0				8.3	7.2
Green Ext Time (p_c), s	0.0	1.6				2.8	0.7

Intersection Summary	
HCM 6th Ctrl Delay	30.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	5	507	13	1051	53	8	2	19
Future Volume (vph)	5	507	13	1051	53	8	2	19
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	27.8	27.8	27.8	27.8	31.6	31.6	31.6	31.6
Total Split (s)	88.4	88.4	88.4	88.4	31.6	31.6	31.6	31.6
Total Split (%)	73.7%	73.7%	73.7%	73.7%	26.3%	26.3%	26.3%	26.3%
Yellow Time (s)	4.8	4.8	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8		4.6		4.6
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	78.6	78.6	78.6	78.6		14.0		14.0
Actuated g/C Ratio	0.76	0.76	0.76	0.76		0.14		0.14
v/c Ratio	0.07	0.46	0.03	0.90		0.45		0.21
Control Delay	6.6	6.5	4.5	20.7		44.2		23.7
Queue Delay	0.0	0.0	0.0	3.5		0.0		0.0
Total Delay	6.6	6.5	4.5	24.2		44.2		23.7
LOS	A	A	A	C		D		C
Approach Delay		6.5		24.0		44.2		23.7
Approach LOS		A		C		D		C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 103.2	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 19.4	Intersection LOS: B
Intersection Capacity Utilization 75.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4: Avalon St. & 20th St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	507	33	13	1051	0	53	8	16	2	19	25
Future Volume (veh/h)	5	507	33	13	1051	0	53	8	16	2	19	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	6	626	41	16	1298	0	65	10	20	2	23	31
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	193	1338	88	580	1441	0	180	33	36	49	83	105
Arrive On Green	0.76	0.76	0.76	0.76	0.76	0.00	0.11	0.11	0.11	0.11	0.11	0.11
Sat Flow, veh/h	431	1764	116	782	1900	0	937	295	329	21	747	953
Grp Volume(v), veh/h	6	0	667	16	1298	0	95	0	0	56	0	0
Grp Sat Flow(s),veh/h/ln	431	0	1879	782	1900	0	1561	0	0	1721	0	0
Q Serve(g_s), s	0.9	0.0	10.5	0.6	41.3	0.0	1.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	42.2	0.0	10.5	11.2	41.3	0.0	4.3	0.0	0.0	2.4	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.00	0.68		0.21	0.04		0.55
Lane Grp Cap(c), veh/h	193	0	1426	580	1441	0	249	0	0	237	0	0
V/C Ratio(X)	0.03	0.00	0.47	0.03	0.90	0.00	0.38	0.00	0.00	0.24	0.00	0.00
Avail Cap(c_a), veh/h	315	0	1954	800	1976	0	584	0	0	629	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	23.4	0.0	3.6	5.7	7.3	0.0	33.2	0.0	0.0	32.5	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.0	4.7	0.0	1.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.9	0.1	9.1	0.0	1.8	0.0	0.0	1.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.4	0.0	3.8	5.7	12.0	0.0	34.2	0.0	0.0	33.0	0.0	0.0
LnGrp LOS	C	A	A	A	B	A	C	A	A	C	A	A
Approach Vol, veh/h		673			1314			95			56	
Approach Delay, s/veh		4.0			11.9			34.2			33.0	
Approach LOS		A			B			C			C	

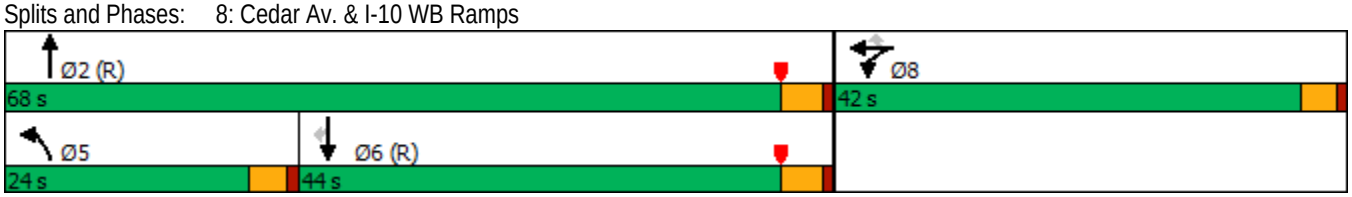
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		66.1		13.4		66.1		13.4				
Change Period (Y+Rc), s		5.8		4.6		5.8		4.6				
Max Green Setting (Gmax), s		82.6		27.0		82.6		27.0				
Max Q Clear Time (g_c+I1), s		44.2		4.4		43.3		6.3				
Green Ext Time (p_c), s		4.8		0.2		16.9		0.4				

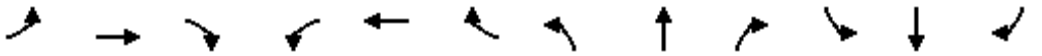
Intersection Summary												
HCM 6th Ctrl Delay			11.0									
HCM 6th LOS			B									

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	407	497	1355	1733	640
Future Volume (vph)	0	407	497	1355	1733	640
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	42.0	42.0	24.0	68.0	44.0	44.0
Total Split (%)	38.2%	38.2%	21.8%	61.8%	40.0%	40.0%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	38.0	38.0	19.2	63.5	40.3	40.3
Actuated g/C Ratio	0.35	0.35	0.17	0.58	0.37	0.37
v/c Ratio	1.39	0.68	0.85	0.68	0.95	0.70
Control Delay	215.3	33.1	61.8	4.3	46.5	9.4
Queue Delay	0.1	0.0	0.0	0.3	44.7	0.0
Total Delay	215.3	33.1	61.8	4.6	91.1	9.4
LOS	F	C	E	A	F	A
Approach Delay	159.9			20.0	69.1	
Approach LOS	F			B	E	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.39	
Intersection Signal Delay: 72.5	Intersection LOS: E
Intersection Capacity Utilization 184.5%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	798	0	407	497	1355	0	0	1733	640
Future Volume (veh/h)	0	0	0	798	0	407	497	1355	0	0	1733	640
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				831	0	318	518	1411	0	0	1805	401
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				625	0	556	575	2084	0	0	1956	607
Arrive On Green				0.35	0.00	0.35	0.33	1.00	0.00	0.00	0.38	0.38
Sat Flow, veh/h				1810	0	1610	3510	3705	0	0	5358	1610
Grp Volume(v), veh/h				831	0	318	518	1411	0	0	1805	401
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1755	1805	0	0	1729	1610
Q Serve(g_s), s				38.0	0.0	17.7	15.5	0.0	0.0	0.0	36.6	22.7
Cycle Q Clear(g_c), s				38.0	0.0	17.7	15.5	0.0	0.0	0.0	36.6	22.7
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				625	0	556	575	2084	0	0	1956	607
V/C Ratio(X)				1.33	0.00	0.57	0.90	0.68	0.00	0.00	0.92	0.66
Avail Cap(c_a), veh/h				625	0	556	638	2084	0	0	1956	607
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.46	0.46	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				36.0	0.0	29.4	36.1	0.0	0.0	0.0	32.7	28.4
Incr Delay (d2), s/veh				159.0	0.0	1.4	7.8	0.8	0.0	0.0	8.8	5.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				43.3	0.0	6.7	5.9	0.2	0.0	0.0	16.1	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				195.0	0.0	30.8	44.0	0.8	0.0	0.0	41.5	34.0
LnGrp LOS				F	A	C	D	A	A	A	D	C
Approach Vol, veh/h					1149			1929			2206	
Approach Delay, s/veh					149.6			12.4			40.1	
Approach LOS					F			B			D	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	68.0		22.0	46.0		42.0						
Change Period (Y+Rc), s	4.5		4.0	4.5		4.0						
Max Green Setting (Gmax), s	63.5		20.0	39.5		38.0						
Max Q Clear Time (g_c+I1), s	2.0		17.5	38.6		40.0						
Green Ext Time (p_c), s	15.1		0.5	0.9		0.0						

Intersection Summary		
HCM 6th Ctrl Delay	53.8	
HCM 6th LOS	D	

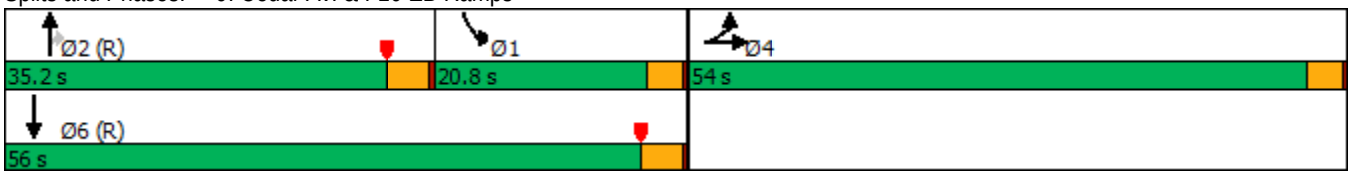
Notes

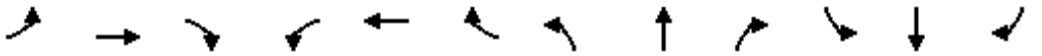
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	599	0	1254	718	500	2030
Future Volume (vph)	599	0	1254	718	500	2030
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	54.0	54.0	35.2	35.2	20.8	56.0
Total Split (%)	49.1%	49.1%	32.0%	32.0%	18.9%	50.9%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	50.5	50.5	31.2	31.2	17.3	52.0
Actuated g/C Ratio	0.46	0.46	0.28	0.28	0.16	0.47
v/c Ratio	0.74	1.49	0.92	0.77	0.98	1.28
Control Delay	31.2	253.0	54.3	18.0	49.5	151.1
Queue Delay	5.6	1.4	1.5	0.0	0.0	1.4
Total Delay	36.9	254.5	55.7	18.0	49.5	152.4
LOS	D	F	E	B	D	F
Approach Delay		179.2	42.0			132.1
Approach LOS		F	D			F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 20.8 (19%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.49	
Intersection Signal Delay: 114.9	Intersection LOS: F
Intersection Capacity Utilization 184.5%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	599	0	960	0	0	0	0	1254	718	500	2030	0
Future Volume (veh/h)	599	0	960	0	0	0	0	1254	718	500	2030	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	644	0	765				0	1348	498	538	2183	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	831	0	739				0	1471	456	1054	2239	0
Arrive On Green	0.46	0.00	0.46				0.00	0.09	0.09	0.20	0.42	0.00
Sat Flow, veh/h	1810	0	1610				0	5358	1608	3510	3705	0
Grp Volume(v), veh/h	644	0	765				0	1348	498	538	2183	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1729	1608	1755	1805	0
Q Serve(g_s), s	32.9	0.0	50.5				0.0	28.3	31.2	15.0	65.4	0.0
Cycle Q Clear(g_c), s	32.9	0.0	50.5				0.0	28.3	31.2	15.0	65.4	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	831	0	739				0	1471	456	1054	2239	0
V/C Ratio(X)	0.78	0.00	1.03				0.00	0.92	1.09	0.51	0.98	0.00
Avail Cap(c_a), veh/h	831	0	739				0	1471	456	1054	2239	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.18	0.18	0.20	0.20	0.00
Uniform Delay (d), s/veh	25.0	0.0	29.8				0.0	48.6	49.9	36.7	31.3	0.0
Incr Delay (d2), s/veh	4.6	0.0	42.4				0.0	2.3	48.4	0.0	4.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.0	0.0	26.4				0.0	13.4	19.5	6.7	30.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.6	0.0	72.2				0.0	50.8	98.3	36.8	35.8	0.0
LnGrp LOS	C	A	F				A	D	F	D	D	A
Approach Vol, veh/h		1409						1846			2721	
Approach Delay, s/veh		52.7						63.6			36.0	
Approach LOS		D						E			D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	37.3	35.2		54.0		72.5
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	17.3	* 31		50.5		52.0
Max Q Clear Time (g_c+I1), s	17.0	33.2		52.5		67.4
Green Ext Time (p_c), s	0.0	0.0		0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	48.5
HCM 6th LOS	D

Notes

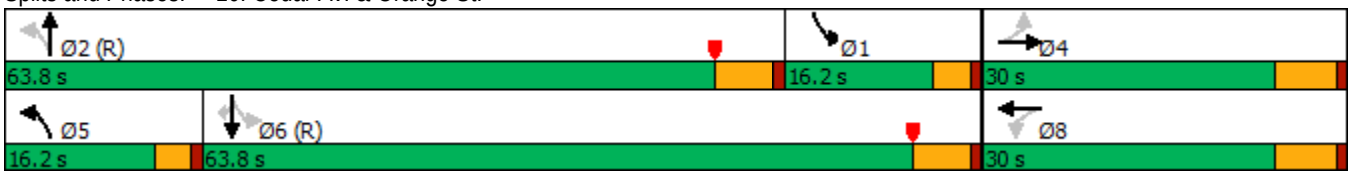
User approved volume balancing among the lanes for turning movement.

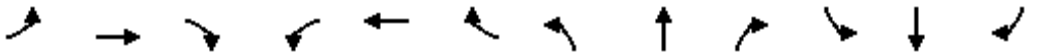
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	253	4	12	3	18	1566	199	2330	460
Future Volume (vph)	253	4	12	3	18	1566	199	2330	460
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases		4		8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	30.0	30.0	10.2	10.2	16.2	28.2	16.2	28.2	28.2
Total Split (s)	30.0	30.0	30.0	30.0	16.2	63.8	16.2	63.8	63.8
Total Split (%)	27.3%	27.3%	27.3%	27.3%	14.7%	58.0%	14.7%	58.0%	58.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	3.0	4.7	3.0	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.0	5.7	4.0	5.7	5.7
Lead/Lag					Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min	C-Min
Act Effct Green (s)	24.0	24.0	24.0	24.0	59.4	57.7	71.7	70.0	70.0
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.54	0.52	0.65	0.64	0.64
v/c Ratio	1.18	0.07	0.04	0.35	0.12	0.93	0.78	1.11	0.47
Control Delay	154.3	15.6	34.6	8.0	8.6	24.5	42.6	77.0	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	39.5	0.0	0.7	0.0
Total Delay	154.3	15.6	34.6	8.0	8.6	64.0	42.6	77.7	8.5
LOS	F	B	C	A	A	E	D	E	A
Approach Delay		141.6		9.9		63.3		64.7	
Approach LOS		F		A		E		E	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 68.3 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.18	
Intersection Signal Delay: 66.7	Intersection LOS: E
Intersection Capacity Utilization 109.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 10: Cedar Av. & Orange St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	253	4	22	12	3	151	18	1566	30	199	2330	460
Future Volume (veh/h)	253	4	22	12	3	151	18	1566	30	199	2330	460
Initial Q (Qb), veh	0	0	0	0	0	0	0	44	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	278	4	19	13	3	79	20	1721	33	219	2560	414
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	301	63	297	357	13	340	96	1928	20	325	2429	1074
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.02	0.51	0.51	0.11	0.62	0.62
Sat Flow, veh/h	1337	287	1363	1407	59	1560	1810	3623	69	1810	3610	1606
Grp Volume(v), veh/h	278	0	23	13	0	82	20	856	898	219	2560	414
Grp Sat Flow(s),veh/h/ln	1337	0	1650	1407	0	1619	1810	1805	1888	1810	1805	1606
Q Serve(g_s), s	19.4	0.0	1.2	0.8	0.0	4.6	0.6	48.3	48.7	7.9	68.5	14.4
Cycle Q Clear(g_c), s	24.0	0.0	1.2	2.0	0.0	4.6	0.6	48.3	48.7	7.9	68.5	14.4
Prop In Lane	1.00		0.83	1.00		0.96	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	301	0	360	357	0	353	96	951	996	325	2429	1074
V/C Ratio(X)	0.92	0.00	0.06	0.04	0.00	0.23	0.21	0.90	0.90	0.67	1.05	0.39
Avail Cap(c_a), veh/h	301	0	360	357	0	353	266	953	997	281	2247	1000
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.33	0.33	0.33	0.09	0.09	0.09
Uniform Delay (d), s/veh	46.8	0.0	34.1	34.9	0.0	35.4	26.7	25.8	25.8	42.7	18.0	8.1
Incr Delay (d2), s/veh	32.3	0.0	0.1	0.0	0.0	0.3	0.4	5.1	4.9	0.7	25.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.6	35.9	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	0.0	0.5	0.3	0.0	1.9	0.2	33.5	34.3	5.5	33.3	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.1	0.0	34.2	34.9	0.0	35.7	27.1	69.4	66.6	43.4	43.5	8.2
LnGrp LOS	E	A	C	C	A	D	C	E	E	D	F	A
Approach Vol, veh/h		301			95			1774			3193	
Approach Delay, s/veh		75.7			35.6			67.5			39.0	
Approach LOS		E			D			E			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.9	62.1		30.0	5.8	74.2		30.0				
Change Period (Y+Rc), s	5.7	* 5.7		6.0	4.0	5.7		6.0				
Max Green Setting (Gmax), s	12.2	* 58		24.0	12.2	58.1		24.0				
Max Q Clear Time (g_c+I1), s	9.9	50.7		26.0	2.6	70.5		6.6				
Green Ext Time (p_c), s	0.1	5.8		0.0	0.0	0.0		0.4				

Intersection Summary			
HCM 6th Ctrl Delay		50.4	
HCM 6th LOS		D	

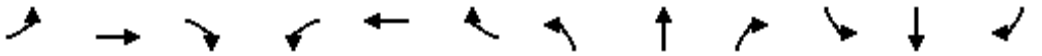
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	76	75	77	73	111	1252	42	1902
Future Volume (vph)	76	75	77	73	111	1252	42	1902
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	9.5	27.5	9.5	27.5
Total Split (s)	31.0	31.0	31.0	31.0	12.6	66.4	12.6	66.4
Total Split (%)	28.2%	28.2%	28.2%	28.2%	11.5%	60.4%	11.5%	60.4%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	4.5	6.5	4.5	6.5
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min
Act Effct Green (s)		23.8		23.8	8.1	61.1	8.1	61.1
Actuated g/C Ratio		0.22		0.22	0.07	0.56	0.07	0.56
v/c Ratio		0.90		0.91	0.92	0.70	0.35	1.06
Control Delay		70.3		71.8	92.1	13.9	40.8	64.1
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		70.3		71.8	92.1	13.9	40.8	64.1
LOS		E		E	F	B	D	E
Approach Delay		70.3		71.8		20.1		63.6
Approach LOS		E		E		C		E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 90 (82%), Referenced to phase 1:SBL and 6:SBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.06	
Intersection Signal Delay: 48.9	Intersection LOS: D
Intersection Capacity Utilization 93.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 12: Cedar Av. & Santa Ana Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	75	94	77	73	91	111	1252	34	42	1902	47
Future Volume (veh/h)	76	75	94	77	73	91	111	1252	34	42	1902	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	83	82	61	84	79	87	121	1361	33	46	2067	43
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	127	114	72	124	104	99	146	2128	52	95	1969	41
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.16	1.00	1.00	0.04	0.36	0.36
Sat Flow, veh/h	405	564	358	399	515	488	1810	3602	87	1810	3617	75
Grp Volume(v), veh/h	226	0	0	250	0	0	121	681	713	46	1028	1082
Grp Sat Flow(s),veh/h/ln	1328	0	0	1401	0	0	1810	1805	1884	1810	1805	1887
Q Serve(g_s), s	0.0	0.0	0.0	1.0	0.0	0.0	7.1	0.0	0.0	2.7	59.9	59.9
Cycle Q Clear(g_c), s	18.4	0.0	0.0	19.4	0.0	0.0	7.1	0.0	0.0	2.7	59.9	59.9
Prop In Lane	0.37		0.27	0.34		0.35	1.00		0.05	1.00		0.04
Lane Grp Cap(c), veh/h	313	0	0	327	0	0	146	1067	1113	95	983	1027
V/C Ratio(X)	0.72	0.00	0.00	0.76	0.00	0.00	0.83	0.64	0.64	0.48	1.05	1.05
Avail Cap(c_a), veh/h	351	0	0	365	0	0	146	1067	1113	133	983	1027
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.57	0.57	0.57	0.09	0.09	0.09
Uniform Delay (d), s/veh	41.8	0.0	0.0	42.4	0.0	0.0	45.4	0.0	0.0	51.6	34.9	34.9
Incr Delay (d2), s/veh	7.1	0.0	0.0	9.3	0.0	0.0	18.8	1.4	1.4	0.1	23.9	26.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	0.0	0.0	7.3	0.0	0.0	3.6	0.4	0.4	1.2	32.9	35.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.0	0.0	0.0	51.7	0.0	0.0	64.2	1.4	1.4	51.7	58.8	61.7
LnGrp LOS	D	A	A	D	A	A	E	A	A	D	F	F
Approach Vol, veh/h		226			250			1515			2156	
Approach Delay, s/veh		49.0			51.7			6.4			60.1	
Approach LOS		D			D			A			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.3	71.5		28.2	15.4	66.4		28.2				
Change Period (Y+Rc), s	4.5	6.5		6.0	6.5	* 6.5		6.0				
Max Green Setting (Gmax), s	8.1	59.9		25.0	8.1	* 60		25.0				
Max Q Clear Time (g_c+I1), s	4.7	2.0		20.4	9.1	61.9		21.4				
Green Ext Time (p_c), s	0.0	36.7		0.6	0.0	0.0		0.6				

Intersection Summary		
HCM 6th Ctrl Delay		39.4
HCM 6th LOS		D

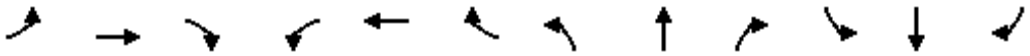
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	123	104	78	109	131	1100	160	1755
Future Volume (vph)	123	104	78	109	131	1100	160	1755
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	30.0	30.0	30.0	30.0	16.0	60.6	19.4	64.0
Total Split (%)	27.3%	27.3%	27.3%	27.3%	14.5%	55.1%	17.6%	58.2%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)	24.5	24.5	24.5	24.5	11.1	55.6	13.9	58.4
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.10	0.51	0.13	0.53
v/c Ratio	1.08	0.45	0.40	0.70	0.80	0.72	0.78	1.12
Control Delay	144.9	35.7	42.8	40.5	88.3	16.5	44.8	86.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	144.9	35.7	42.8	40.5	88.3	16.5	44.8	86.6
LOS	F	D	D	D	F	B	D	F
Approach Delay		81.6		41.0		23.8		83.4
Approach LOS		F		D		C		F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.12	
Intersection Signal Delay: 60.2	Intersection LOS: E
Intersection Capacity Utilization 101.1%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	104	66	78	109	162	131	1100	73	160	1755	154
Future Volume (veh/h)	123	104	66	78	109	162	131	1100	73	160	1755	154
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	137	116	54	87	121	114	146	1222	70	178	1950	167
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	183	273	127	240	199	188	189	1791	102	209	1777	150
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.21	1.00	1.00	0.08	0.35	0.35
Sat Flow, veh/h	1163	1226	571	1234	894	842	1810	3470	199	1810	3369	284
Grp Volume(v), veh/h	137	0	170	87	0	235	146	635	657	178	1031	1086
Grp Sat Flow(s),veh/h/ln	1163	0	1797	1234	0	1735	1810	1805	1864	1810	1805	1849
Q Serve(g_s), s	11.1	0.0	8.9	7.2	0.0	13.4	8.4	0.0	0.0	10.7	58.0	58.0
Cycle Q Clear(g_c), s	24.5	0.0	8.9	16.1	0.0	13.4	8.4	0.0	0.0	10.7	58.0	58.0
Prop In Lane	1.00		0.32	1.00		0.49	1.00		0.11	1.00		0.15
Lane Grp Cap(c), veh/h	183	0	400	240	0	387	189	932	962	209	952	975
V/C Ratio(X)	0.75	0.00	0.42	0.36	0.00	0.61	0.77	0.68	0.68	0.85	1.08	1.11
Avail Cap(c_a), veh/h	183	0	400	240	0	387	189	932	962	245	952	975
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.85	0.85	0.85	0.09	0.09	0.09
Uniform Delay (d), s/veh	50.2	0.0	36.7	43.6	0.0	38.4	42.3	0.0	0.0	49.8	35.6	35.6
Incr Delay (d2), s/veh	16.7	0.0	1.0	1.3	0.0	3.2	15.3	3.4	3.3	2.4	39.7	52.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	0.0	3.9	2.2	0.0	5.9	4.1	0.9	0.9	5.0	36.1	40.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.9	0.0	37.7	44.9	0.0	41.7	57.5	3.4	3.3	52.2	75.3	88.3
LnGrp LOS	E	A	D	D	A	D	E	A	A	D	F	F
Approach Vol, veh/h		307			322			1438			2295	
Approach Delay, s/veh		50.7			42.6			8.9			79.7	
Approach LOS		D			D			A			E	

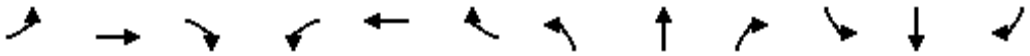
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.2	62.8		30.0	16.0	64.0		30.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	14.9	54.6		24.5	11.5	58.0		24.5				
Max Q Clear Time (g_c+I1), s	12.7	2.0		26.5	10.4	60.0		18.1				
Green Ext Time (p_c), s	0.1	17.2		0.0	0.0	0.0		1.1				

Intersection Summary												
HCM 6th Ctrl Delay			51.6									
HCM 6th LOS			D									

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	18	11	133	2	121	2	1013	260	1695
Future Volume (vph)	18	11	133	2	121	2	1013	260	1695
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	35.0	35.0	35.0	9.5	24.0	9.5	24.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.6	34.0	21.0	45.4
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%	10.7%	37.8%	23.3%	50.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	5.0	4.5	6.0	4.5	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min
Act Effct Green (s)		14.1		15.6	15.6	5.2	28.4	15.2	46.5
Actuated g/C Ratio		0.19		0.21	0.21	0.07	0.38	0.20	0.62
v/c Ratio		0.19		0.52	0.28	0.02	0.95	0.75	0.80
Control Delay		15.6		33.1	4.9	37.5	39.8	44.2	17.5
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		15.6		33.1	4.9	37.5	39.8	44.2	17.5
LOS		B		C	A	D	D	D	B
Approach Delay		15.6		19.8			39.8		21.0
Approach LOS		B		B			D		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 74.9	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 27.4	Intersection LOS: C
Intersection Capacity Utilization 78.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 15: Rubidoux Bl. & Tarragona Dr./El Rivino Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	11	27	133	2	121	2	1013	201	260	1695	12
Future Volume (veh/h)	18	11	27	133	2	121	2	1013	201	260	1695	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	19	12	19	140	2	95	2	1066	205	274	1784	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	106	70	62	312	3	278	5	1236	237	327	2156	16
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.00	0.41	0.41	0.18	0.59	0.59
Sat Flow, veh/h	174	407	356	1173	20	1610	1810	3021	579	1810	3673	27
Grp Volume(v), veh/h	50	0	0	142	0	95	2	635	636	274	876	921
Grp Sat Flow(s),veh/h/ln	937	0	0	1193	0	1610	1810	1805	1796	1810	1805	1895
Q Serve(g_s), s	0.2	0.0	0.0	0.0	0.0	3.4	0.1	21.0	21.1	9.5	25.4	25.5
Cycle Q Clear(g_c), s	8.1	0.0	0.0	7.9	0.0	3.4	0.1	21.0	21.1	9.5	25.4	25.5
Prop In Lane	0.38		0.38	0.99		1.00	1.00		0.32	1.00		0.01
Lane Grp Cap(c), veh/h	238	0	0	316	0	278	5	738	735	327	1059	1112
V/C Ratio(X)	0.21	0.00	0.00	0.45	0.00	0.34	0.41	0.86	0.87	0.84	0.83	0.83
Avail Cap(c_a), veh/h	679	0	0	719	0	740	141	774	770	457	1090	1144
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.2	0.0	0.0	25.6	0.0	23.7	32.5	17.6	17.6	25.8	10.8	10.8
Incr Delay (d2), s/veh	0.6	0.0	0.0	1.4	0.0	1.0	46.0	9.8	10.2	9.4	5.5	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	2.1	0.0	1.3	0.1	8.8	8.9	4.4	7.9	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.8	0.0	0.0	27.0	0.0	24.8	78.5	27.4	27.8	35.2	16.3	16.2
LnGrp LOS	C	A	A	C	A	C	E	C	C	D	B	B
Approach Vol, veh/h		50			237			1273			2071	
Approach Delay, s/veh		23.8			26.1			27.7			18.8	
Approach LOS		C			C			C			B	

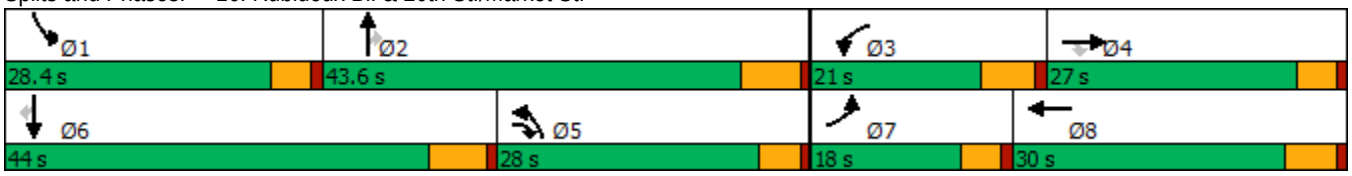
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.3	32.7		16.3	4.7	44.3		16.3				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	16.5	28.0		30.0	5.1	39.4		30.0				
Max Q Clear Time (g_c+I1), s	11.5	23.1		10.1	2.1	27.5		9.9				
Green Ext Time (p_c), s	0.3	3.6		0.3	0.0	9.9		1.5				

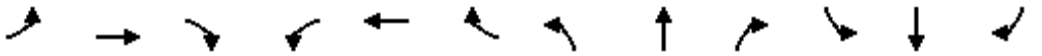
Intersection Summary			
HCM 6th Ctrl Delay		22.4	
HCM 6th LOS		C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	181	179	244	340	357	507	339	550	392	458	1027	408
Future Volume (vph)	181	179	244	340	357	507	339	550	392	458	1027	408
Turn Type	Prot	NA	pm+ov	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4			Free			2			6
Detector Phase	7	4	5	3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	14.6	14.6	9.6	15.8	15.8		9.6	16.2	16.2	9.6	35.2	35.2
Total Split (s)	18.0	27.0	28.0	21.0	30.0		28.0	43.6	43.6	28.4	44.0	44.0
Total Split (%)	15.0%	22.5%	23.3%	17.5%	25.0%		23.3%	36.3%	36.3%	23.7%	36.7%	36.7%
Yellow Time (s)	3.6	3.6	3.6	4.8	4.8		3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.8	5.8		4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	None	None	None	None	None
Act Effct Green (s)	13.4	22.8	46.2	14.8	24.2	119.9	23.4	41.0	41.0	20.1	37.7	37.7
Actuated g/C Ratio	0.11	0.19	0.39	0.12	0.20	1.00	0.20	0.34	0.34	0.17	0.31	0.31
v/c Ratio	0.93	0.51	0.36	0.81	0.96	0.32	0.99	0.46	0.51	0.81	0.93	0.59
Control Delay	100.6	49.5	9.4	66.9	84.8	0.5	94.8	32.8	6.6	59.1	55.2	12.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	100.6	49.5	9.4	66.9	84.8	0.5	94.8	32.8	6.6	59.1	55.2	12.8
LOS	F	D	A	E	F	A	F	C	A	E	E	B
Approach Delay		48.6			44.2			41.2			47.0	
Approach LOS		D			D			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 119.9	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 45.0	Intersection LOS: D
Intersection Capacity Utilization 93.7%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	181	179	244	340	357	507	339	550	392	458	1027	408
Future Volume (veh/h)	181	179	244	340	357	507	339	550	392	458	1027	408
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	187	185	237	351	368	0	349	567	316	472	1059	390
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	200	349	607	408	379		349	1311	585	535	1117	497
Arrive On Green	0.11	0.18	0.18	0.12	0.20	0.00	0.19	0.36	0.36	0.15	0.31	0.31
Sat Flow, veh/h	1810	1900	1610	3510	1900	1610	1810	3610	1610	3510	3610	1608
Grp Volume(v), veh/h	187	185	237	351	368	0	349	567	316	472	1059	390
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1755	1900	1610	1810	1805	1610	1755	1805	1608
Q Serve(g_s), s	12.4	10.7	3.4	11.9	23.3	0.0	23.4	14.4	18.9	16.0	34.8	19.1
Cycle Q Clear(g_c), s	12.4	10.7	3.4	11.9	23.3	0.0	23.4	14.4	18.9	16.0	34.8	19.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	200	349	607	408	379		349	1311	585	535	1117	497
V/C Ratio(X)	0.94	0.53	0.39	0.86	0.97		1.00	0.43	0.54	0.88	0.95	0.78
Avail Cap(c_a), veh/h	200	351	608	440	379		349	1311	585	689	1125	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.5	44.8	11.2	52.7	48.2	0.0	49.0	29.2	30.6	50.4	40.9	19.3
Incr Delay (d2), s/veh	45.7	1.5	0.4	15.1	38.5	0.0	48.2	0.2	1.0	9.1	15.9	7.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	5.2	2.5	6.0	14.7	0.0	14.8	6.0	7.2	7.4	17.1	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	99.3	46.3	11.6	67.7	86.7	0.0	97.2	29.4	31.6	59.4	56.9	27.3
LnGrp LOS	F	D	B	E	F		F	C	C	E	E	C
Approach Vol, veh/h		609			719			1232			1921	
Approach Delay, s/veh		49.0			77.5			49.2			51.5	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.1	50.3	19.9	28.1	29.6	43.7	18.0	30.0
Change Period (Y+Rc), s	4.6	6.2	5.8	* 5.8	6.2	* 6.2	4.6	5.8
Max Green Setting (Gmax), s	23.8	37.4	15.2	* 22	23.4	* 38	13.4	24.2
Max Q Clear Time (g_c+I1), s	18.0	20.9	13.9	12.7	25.4	36.8	14.4	25.3
Green Ext Time (p_c), s	0.5	4.1	0.2	1.4	0.0	0.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	54.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	1	9	31	16	17	1294	155	1434
Future Volume (vph)	1	9	31	16	17	1294	155	1434
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.6	31.6	31.6	31.6	9.6	28.2	9.6	28.2
Total Split (s)	31.6	31.6	31.6	31.6	9.6	34.2	14.2	38.8
Total Split (%)	39.5%	39.5%	39.5%	39.5%	12.0%	42.8%	17.8%	48.5%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	6.2	4.6	6.2
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		13.0		13.0	5.2	29.2	9.0	44.7
Actuated g/C Ratio		0.22		0.22	0.09	0.49	0.15	0.75
v/c Ratio		0.06		0.20	0.11	0.83	0.62	0.58
Control Delay		14.3		18.1	33.2	22.9	39.7	11.5
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		14.3		18.1	33.2	22.9	39.7	11.5
LOS		B		B	C	C	D	B
Approach Delay		14.3		18.1		23.0		14.3
Approach LOS		B		B		C		B

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 59.7	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 18.3	Intersection LOS: B
Intersection Capacity Utilization 69.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 17: Rubidoux Bl. & 24th St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	9	12	31	16	16	17	1294	52	155	1434	5
Future Volume (veh/h)	1	9	12	31	16	16	17	1294	52	155	1434	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1	10	13	34	17	17	18	1407	57	168	1559	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	73	91	111	170	76	48	40	1679	68	214	2108	7
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.02	0.47	0.47	0.12	0.57	0.57
Sat Flow, veh/h	27	763	933	579	640	406	1810	3536	143	1810	3691	12
Grp Volume(v), veh/h	24	0	0	68	0	0	18	717	747	168	762	802
Grp Sat Flow(s),veh/h/ln	1722	0	0	1626	0	0	1810	1805	1874	1810	1805	1898
Q Serve(g_s), s	0.0	0.0	0.0	0.2	0.0	0.0	0.5	18.5	18.6	4.8	16.8	16.8
Cycle Q Clear(g_c), s	0.7	0.0	0.0	1.9	0.0	0.0	0.5	18.5	18.6	4.8	16.8	16.8
Prop In Lane	0.04		0.54	0.50		0.25	1.00		0.08	1.00		0.01
Lane Grp Cap(c), veh/h	275	0	0	294	0	0	40	857	890	214	1031	1084
V/C Ratio(X)	0.09	0.00	0.00	0.23	0.00	0.00	0.45	0.84	0.84	0.79	0.74	0.74
Avail Cap(c_a), veh/h	935	0	0	897	0	0	169	946	982	325	1101	1158
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	0.0	0.0	21.6	0.0	0.0	25.8	12.2	12.3	22.9	8.5	8.5
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.4	0.0	0.0	3.0	6.2	6.1	3.3	2.5	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.8	0.0	0.0	0.2	6.2	6.5	1.9	4.1	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.2	0.0	0.0	21.9	0.0	0.0	28.8	18.4	18.3	26.2	11.0	10.9
LnGrp LOS	C	A	A	C	A	A	C	B	B	C	B	B
Approach Vol, veh/h		24			68			1482			1732	
Approach Delay, s/veh		21.2			21.9			18.5			12.5	
Approach LOS		C			C			B			B	

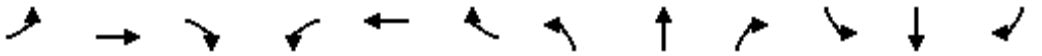
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.9	31.6		11.0	5.8	36.7		11.0				
Change Period (Y+Rc), s	4.6	6.2		4.6	4.6	6.2		4.6				
Max Green Setting (Gmax), s	9.6	28.0		27.0	5.0	32.6		27.0				
Max Q Clear Time (g_c+I1), s	6.8	20.6		2.7	2.5	18.8		3.9				
Green Ext Time (p_c), s	0.1	4.8		0.1	0.0	8.1		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		15.4	
HCM 6th LOS		B	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	7	2	3	5	21	1391	9	1395
Future Volume (vph)	7	2	3	5	21	1391	9	1395
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.6	31.6	31.6	31.6	9.6	28.2	9.6	28.2
Total Split (s)	31.6	31.6	31.6	31.6	9.8	48.6	9.8	48.6
Total Split (%)	35.1%	35.1%	35.1%	35.1%	10.9%	54.0%	10.9%	54.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	6.2	4.6	6.2
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		15.6		15.6	7.0	40.0	7.0	38.7
Actuated g/C Ratio		0.33		0.33	0.15	0.84	0.15	0.81
v/c Ratio		0.04		0.03	0.09	0.51	0.04	0.53
Control Delay		16.4		17.1	33.3	8.5	33.6	10.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		16.4		17.1	33.3	8.5	33.6	10.0
LOS		B		B	C	A	C	B
Approach Delay		16.4		17.1		8.8		10.2
Approach LOS		B		B		A		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 47.8	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 9.6	Intersection LOS: A
Intersection Capacity Utilization 56.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 18: Rubidoux Bl. & 26th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	2	9	3	5	6	21	1391	15	9	1395	16
Future Volume (veh/h)	7	2	9	3	5	6	21	1391	15	9	1395	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	8	2	10	3	5	7	23	1512	16	10	1516	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	142	8	39	111	28	39	50	2199	23	24	2144	24
Arrive On Green	0.05	0.05	0.05	0.05	0.05	0.05	0.03	0.60	0.60	0.01	0.59	0.59
Sat Flow, veh/h	640	160	801	339	569	794	1810	3658	39	1810	3657	41
Grp Volume(v), veh/h	20	0	0	15	0	0	23	745	783	10	748	785
Grp Sat Flow(s),veh/h/ln	1601	0	0	1701	0	0	1810	1805	1892	1810	1805	1893
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	0.0	0.6	12.8	12.9	0.3	13.4	13.4
Cycle Q Clear(g_c), s	0.5	0.0	0.0	0.4	0.0	0.0	0.6	12.8	12.9	0.3	13.4	13.4
Prop In Lane	0.40		0.50	0.20		0.47	1.00		0.02	1.00		0.02
Lane Grp Cap(c), veh/h	189	0	0	178	0	0	50	1085	1137	24	1059	1110
V/C Ratio(X)	0.11	0.00	0.00	0.08	0.00	0.00	0.46	0.69	0.69	0.42	0.71	0.71
Avail Cap(c_a), veh/h	1029	0	0	1072	0	0	206	1674	1754	206	1674	1755
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.9	0.0	0.0	20.8	0.0	0.0	21.9	6.2	6.2	22.4	6.7	6.7
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	0.0	2.4	0.8	0.8	4.4	0.9	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.2	0.0	0.0	0.2	1.9	2.0	0.1	2.1	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.1	0.0	0.0	21.0	0.0	0.0	24.3	7.0	7.0	26.8	7.6	7.5
LnGrp LOS	C	A	A	C	A	A	C	A	A	C	A	A
Approach Vol, veh/h		20			15			1551			1543	
Approach Delay, s/veh		21.1			21.0			7.2			7.7	
Approach LOS		C			C			A			A	

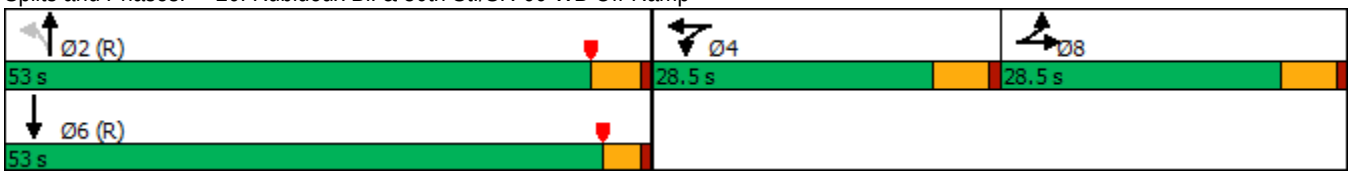
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.2	33.7		6.8	5.9	33.0		6.8				
Change Period (Y+Rc), s	4.6	6.2		4.6	4.6	6.2		4.6				
Max Green Setting (Gmax), s	5.2	42.4		27.0	5.2	42.4		27.0				
Max Q Clear Time (g_c+I1), s	2.3	14.9		2.5	2.6	15.4		2.4				
Green Ext Time (p_c), s	0.0	11.5		0.1	0.0	11.4		0.0				

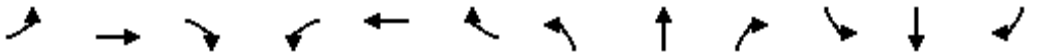
Intersection Summary			
HCM 6th Ctrl Delay		7.6	
HCM 6th LOS		A	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Configurations							
Traffic Volume (vph)	51	0	381	82	59	1240	1532
Future Volume (vph)	51	0	381	82	59	1240	1532
Turn Type	Split	NA	Split	NA	Perm	NA	NA
Protected Phases	8	8	4	4		2	6
Permitted Phases					2		
Detector Phase	8	8	4	4	2	2	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.5	28.5	28.5	28.5	53.0	53.0	53.0
Total Split (%)	25.9%	25.9%	25.9%	25.9%	48.2%	48.2%	48.2%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	20.6	20.6	23.0	23.0	50.4	50.4	51.4
Actuated g/C Ratio	0.19	0.19	0.21	0.21	0.46	0.46	0.47
v/c Ratio	0.17	0.86	1.08	0.95	0.97	0.84	1.04
Control Delay	37.5	55.7	111.3	69.6	124.7	22.5	64.3
Queue Delay	0.0	10.0	24.9	52.9	0.0	27.9	12.4
Total Delay	37.5	65.6	136.1	122.4	124.7	50.4	76.7
LOS	D	E	F	F	F	D	E
Approach Delay		61.3		129.4		53.8	76.7
Approach LOS		E		F		D	E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 77.0	Intersection LOS: E
Intersection Capacity Utilization 98.9%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	0	278	381	82	215	59	1240	0	0	1532	31
Future Volume (veh/h)	51	0	278	381	82	215	59	1240	0	0	1532	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	57	0	228	364	181	208	66	1393	0	0	1721	34
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	297	0	264	378	169	194	68	1737	0	0	1741	34
Arrive On Green	0.16	0.00	0.16	0.21	0.21	0.21	0.48	0.48	0.00	0.00	0.48	0.48
Sat Flow, veh/h	1810	0	1610	1810	806	927	278	3705	0	0	3714	71
Grp Volume(v), veh/h	57	0	228	364	0	389	66	1393	0	0	856	899
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1810	0	1733	278	1805	0	0	1805	1885
Q Serve(g_s), s	3.0	0.0	15.2	21.9	0.0	23.0	0.9	35.9	0.0	0.0	51.5	52.0
Cycle Q Clear(g_c), s	3.0	0.0	15.2	21.9	0.0	23.0	52.9	35.9	0.0	0.0	51.5	52.0
Prop In Lane	1.00		1.00	1.00		0.53	1.00		0.00	0.00		0.04
Lane Grp Cap(c), veh/h	297	0	264	378	0	362	68	1737	0	0	869	907
V/C Ratio(X)	0.19	0.00	0.86	0.96	0.00	1.07	0.97	0.80	0.00	0.00	0.99	0.99
Avail Cap(c_a), veh/h	378	0	337	378	0	362	68	1737	0	0	869	907
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.93	0.93	0.00	0.00	0.54	0.54
Uniform Delay (d), s/veh	39.7	0.0	44.8	43.1	0.0	43.5	55.0	24.1	0.0	0.0	28.2	28.3
Incr Delay (d2), s/veh	0.4	0.0	17.4	36.4	0.0	68.2	98.1	3.7	0.0	0.0	19.3	19.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	7.3	13.2	0.0	16.3	3.6	15.1	0.0	0.0	25.0	26.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.0	0.0	62.1	79.4	0.0	111.7	153.1	27.8	0.0	0.0	47.5	48.2
LnGrp LOS	D	A	E	E	A	F	F	C	A	A	D	D
Approach Vol, veh/h		285			753			1459			1755	
Approach Delay, s/veh		57.7			96.1			33.5			47.8	
Approach LOS		E			F			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		57.9		28.5		57.9		23.6				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		48.0		23.0		* 49		23.0				
Max Q Clear Time (g_c+I1), s		54.9		25.0		54.0		17.2				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.9				

Intersection Summary												
HCM 6th Ctrl Delay			52.1									
HCM 6th LOS			D									

Notes

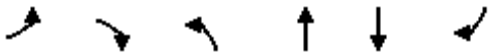
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	NBL	NBT	SBT
Lane Configurations			
Traffic Volume (vph)	295	1299	1272
Future Volume (vph)	295	1299	1272
Turn Type	Prot	NA	NA
Protected Phases	5	2	6
Permitted Phases			
Detector Phase	5	2	6
Switch Phase			
Minimum Initial (s)	5.0	10.0	10.0
Minimum Split (s)	9.6	27.8	27.8
Total Split (s)	33.0	110.0	77.0
Total Split (%)	30.0%	100.0%	70.0%
Yellow Time (s)	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8
Lead/Lag	Lead		Lag
Lead-Lag Optimize?	Yes		Yes
Recall Mode	None	C-Min	C-Min
Act Effct Green (s)	22.7	110.0	76.9
Actuated g/C Ratio	0.21	1.00	0.70
v/c Ratio	0.83	0.38	0.96
Control Delay	75.0	0.2	19.7
Queue Delay	0.5	0.2	44.0
Total Delay	75.6	0.4	63.7
LOS	E	A	E
Approach Delay		14.3	63.7
Approach LOS		B	E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 42.9	Intersection LOS: D
Intersection Capacity Utilization 89.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 21: Rubidoux Bl. & SR-60 WB On-Ramp



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	295	1299	1272	918
Future Volume (veh/h)	0	0	295	1299	1272	918
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			0.98
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach				No	No	
Adj Sat Flow, veh/h/ln			1900	1900	1900	1900
Adj Flow Rate, veh/h			311	1367	1339	966
Peak Hour Factor			0.95	0.95	0.95	0.95
Percent Heavy Veh, %			0	0	0	0
Cap, veh/h			336	3420	1513	957
Arrive On Green			0.37	1.00	1.00	1.00
Sat Flow, veh/h			1810	3705	2197	1329
Grp Volume(v), veh/h			311	1367	1123	1182
Grp Sat Flow(s),veh/h/ln			1810	1805	1805	1627
Q Serve(g_s), s			18.1	0.0	0.0	79.2
Cycle Q Clear(g_c), s			18.1	0.0	0.0	79.2
Prop In Lane			1.00			0.82
Lane Grp Cap(c), veh/h			336	3420	1299	1171
V/C Ratio(X)			0.93	0.40	0.86	1.01
Avail Cap(c_a), veh/h			467	3420	1299	1171
HCM Platoon Ratio			2.00	2.00	2.00	2.00
Upstream Filter(I)			0.62	0.62	0.09	0.09
Uniform Delay (d), s/veh			33.9	0.0	0.0	0.0
Incr Delay (d2), s/veh			11.8	0.2	0.8	10.3
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			7.1	0.1	0.3	3.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			45.7	0.2	0.8	10.3
LnGrp LOS			D	A	A	F
Approach Vol, veh/h				1678	2305	
Approach Delay, s/veh				8.6	5.7	
Approach LOS				A	A	

Timer - Assigned Phs	2			5	6
Phs Duration (G+Y+Rc), s	110.0			25.0	85.0
Change Period (Y+Rc), s	5.8			4.6	5.8
Max Green Setting (Gmax), s	104.2			28.4	71.2
Max Q Clear Time (g_c+I1), s	2.0			20.1	81.2
Green Ext Time (p_c), s	14.7			0.3	0.0

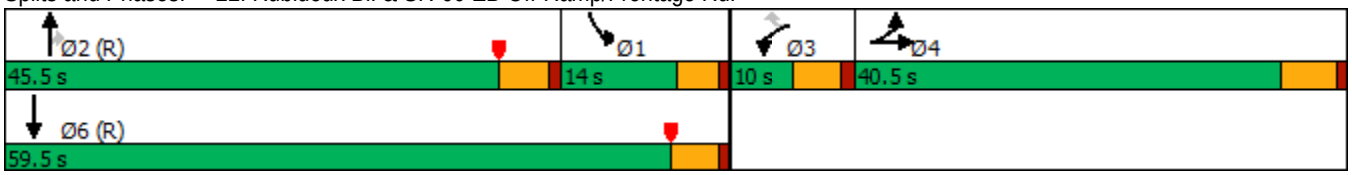
Intersection Summary	
HCM 6th Ctrl Delay	6.9
HCM 6th LOS	A

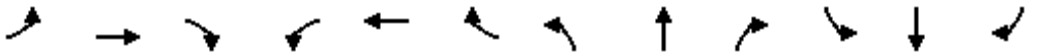
22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.

Lane Group	EBL	EBT	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	795	15	18	5	794	549	335	937
Future Volume (vph)	795	15	18	5	794	549	335	937
Turn Type	Split	NA	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4	4	3		2		1	6
Permitted Phases				3		2		
Detector Phase	4	4	3	3	2	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	10.0	10.0	45.0	45.0	9.5	30.0
Total Split (s)	40.5	40.5	10.0	10.0	45.5	45.5	14.0	59.5
Total Split (%)	36.8%	36.8%	9.1%	9.1%	41.4%	41.4%	12.7%	54.1%
Yellow Time (s)	4.5	4.5	4.0	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.0	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	37.4	37.4	5.0	5.0	34.4	34.4	17.2	56.1
Actuated g/C Ratio	0.34	0.34	0.05	0.05	0.31	0.31	0.16	0.51
v/c Ratio	0.94	0.90	0.23	0.03	0.73	0.65	1.24	0.53
Control Delay	61.6	53.3	57.7	0.2	37.7	5.9	152.1	9.5
Queue Delay	0.0	0.2	0.0	0.0	0.2	0.0	0.0	2.1
Total Delay	61.6	53.5	57.7	0.2	37.9	5.9	152.1	11.6
LOS	E	D	E	A	D	A	F	B
Approach Delay		57.6			24.8			48.6
Approach LOS		E			C			D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.24	
Intersection Signal Delay: 42.4	Intersection LOS: D
Intersection Capacity Utilization 100.1%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	795	15	218	18	0	5	0	794	549	335	937	0
Future Volume (veh/h)	795	15	218	18	0	5	0	794	549	335	937	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	961	0	0	19	0	3	0	827	463	349	976	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	1036	544	0	0	0	0	0	1140	496	465	2232	0
Arrive On Green	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.32	0.08	0.20	0.00
Sat Flow, veh/h	3619	1900	0		0		0	3705	1572	1810	3705	0
Grp Volume(v), veh/h	961	0	0		0.0		0	827	463	349	976	0
Grp Sat Flow(s),veh/h/ln	1810	1900	0				0	1805	1572	1810	1805	0
Q Serve(g_s), s	28.4	0.0	0.0				0.0	22.4	29.3	20.7	26.0	0.0
Cycle Q Clear(g_c), s	28.4	0.0	0.0				0.0	22.4	29.3	20.7	26.0	0.0
Prop In Lane	1.00		0.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1036	544	0				0	1140	496	465	2232	0
V/C Ratio(X)	0.93	0.00	0.00				0.00	0.73	0.93	0.75	0.44	0.00
Avail Cap(c_a), veh/h	1152	605	0				0	1329	579	465	2232	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.58	0.58	0.19	0.19	0.00
Uniform Delay (d), s/veh	38.2	0.0	0.0				0.0	33.4	31.8	46.9	27.0	0.0
Incr Delay (d2), s/veh	11.5	0.0	0.0				0.0	2.4	18.2	1.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.6	0.0	0.0				0.0	9.8	13.0	10.2	12.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.7	0.0	0.0				0.0	35.8	50.1	48.1	27.2	0.0
LnGrp LOS	D	A	A				A	D	D	D	C	A
Approach Vol, veh/h		961						1290			1325	
Approach Delay, s/veh		49.7						40.9			32.7	
Approach LOS		D						D			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	33.3	39.7		37.0		73.0						
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0						
Max Green Setting (Gmax), s	9.5	* 41		35.0		54.5						
Max Q Clear Time (g_c+I1), s	22.7	31.3		30.4		28.0						
Green Ext Time (p_c), s	0.0	3.3		1.1		4.6						

Intersection Summary		
HCM 6th Ctrl Delay		40.2
HCM 6th LOS		D

Notes

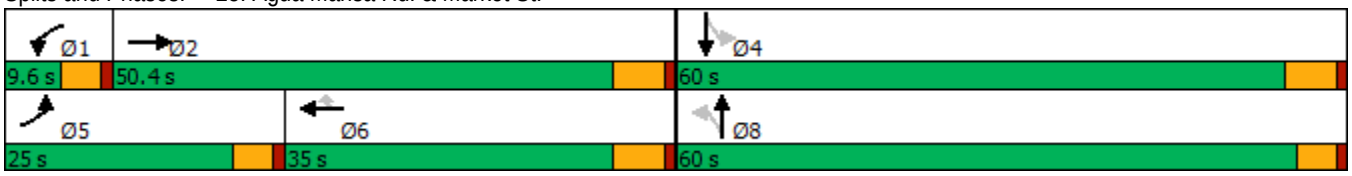
User approved volume balancing among the lanes for turning movement.

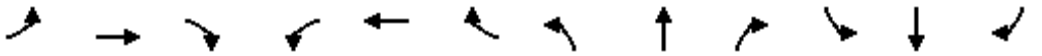
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	497	521	4	690	267	19	2	176	16
Future Volume (vph)	497	521	4	690	267	19	2	176	16
Turn Type	Prot	NA	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	5	2	1	6			8		4
Permitted Phases					6	8		4	
Detector Phase	5	2	1	6	6	8	8	4	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	31.8	9.6	26.8	26.8	14.6	14.6	43.8	43.8
Total Split (s)	25.0	50.4	9.6	35.0	35.0	60.0	60.0	60.0	60.0
Total Split (%)	20.8%	42.0%	8.0%	29.2%	29.2%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8		4.6		5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	None	Max	Max	None	None	None	None
Act Effct Green (s)	20.1	52.0	5.0	29.2	29.2		55.4		54.2
Actuated g/C Ratio	0.17	0.43	0.04	0.24	0.24		0.46		0.45
v/c Ratio	0.94	0.38	0.05	0.87	0.48		0.05		0.98
Control Delay	74.0	24.2	56.8	55.5	7.0		14.3		55.8
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	74.0	24.2	56.8	55.5	7.0		14.3		55.8
LOS	E	C	E	E	A		B		E
Approach Delay		48.3		42.0			14.3		55.8
Approach LOS		D		D			B		E

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 119.7	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay: 47.6	Intersection LOS: D
Intersection Capacity Utilization 87.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	497	521	10	4	690	267	19	2	8	176	16	496
Future Volume (veh/h)	497	521	10	4	690	267	19	2	8	176	16	496
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	552	579	8	4	767	258	21	2	7	196	18	345
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	618	1637	23	9	1005	448	295	34	82	253	26	375
Arrive On Green	0.18	0.45	0.45	0.01	0.28	0.28	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	3510	3646	50	1810	3610	1608	604	87	210	529	67	959
Grp Volume(v), veh/h	552	287	300	4	767	258	30	0	0	559	0	0
Grp Sat Flow(s),veh/h/ln	1755	1805	1891	1810	1805	1608	901	0	0	1555	0	0
Q Serve(g_s), s	16.1	10.9	10.9	0.2	20.4	14.5	0.0	0.0	0.0	34.5	0.0	0.0
Cycle Q Clear(g_c), s	16.1	10.9	10.9	0.2	20.4	14.5	1.3	0.0	0.0	35.8	0.0	0.0
Prop In Lane	1.00		0.03	1.00		1.00	0.70		0.23	0.35		0.62
Lane Grp Cap(c), veh/h	618	811	849	9	1005	448	411	0	0	655	0	0
V/C Ratio(X)	0.89	0.35	0.35	0.42	0.76	0.58	0.07	0.00	0.00	0.85	0.00	0.00
Avail Cap(c_a), veh/h	683	811	849	86	1005	448	571	0	0	849	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	42.3	18.9	18.9	52.0	34.7	32.5	19.8	0.0	0.0	30.3	0.0	0.0
Incr Delay (d2), s/veh	12.6	1.2	1.2	10.7	5.5	5.3	0.1	0.0	0.0	6.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	4.5	4.7	0.1	9.3	6.0	0.5	0.0	0.0	13.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.8	20.1	20.1	62.7	40.2	37.9	19.9	0.0	0.0	37.0	0.0	0.0
LnGrp LOS	D	C	C	E	D	D	B	A	A	D	A	A
Approach Vol, veh/h		1139			1029			30			559	
Approach Delay, s/veh		36.9			39.7			19.9			37.0	
Approach LOS		D			D			B			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.2	52.9		46.8	23.1	35.0		46.8				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	44.6		54.2	20.4	29.2		* 55				
Max Q Clear Time (g_c+I1), s	2.2	12.9		37.8	18.1	22.4		3.3				
Green Ext Time (p_c), s	0.0	3.3		3.2	0.3	3.1		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		37.8	
HCM 6th LOS		D	

Notes

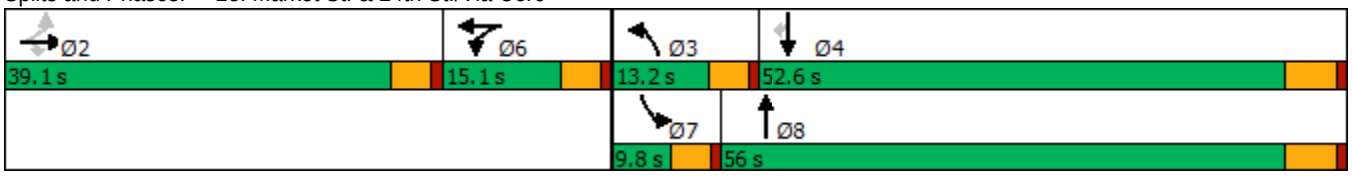
User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	4	33	173	100	8	41	899	30	807	3
Future Volume (vph)	4	33	173	100	8	41	899	30	807	3
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	39.1	39.1	39.1	15.1	15.1	13.2	56.0	9.8	52.6	52.6
Total Split (%)	32.6%	32.6%	32.6%	12.6%	12.6%	11.0%	46.7%	8.2%	43.8%	43.8%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		11.7	11.7	10.3	10.3	6.7	50.5	5.2	49.1	49.1
Actuated g/C Ratio		0.13	0.13	0.11	0.11	0.07	0.54	0.06	0.53	0.53
v/c Ratio		0.39	0.52	0.53	0.07	0.34	0.59	0.32	0.45	0.00
Control Delay		50.8	12.8	51.3	32.2	50.3	16.7	53.9	16.0	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		50.8	12.8	51.3	32.2	50.3	16.7	53.9	16.0	0.0
LOS		D	B	D	C	D	B	D	B	A
Approach Delay		19.5			49.1		18.0		17.3	
Approach LOS		B			D		B		B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 93.2	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 19.4	Intersection LOS: B
Intersection Capacity Utilization 54.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	33	173	100	8	6	41	899	170	30	807	3
Future Volume (veh/h)	4	33	173	100	8	6	41	899	170	30	807	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	4	35	89	105	8	5	43	946	157	32	849	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	21	180	170	187	113	71	66	1693	281	55	1952	871
Arrive On Green	0.11	0.11	0.11	0.10	0.10	0.10	0.04	0.55	0.55	0.03	0.54	0.54
Sat Flow, veh/h	194	1696	1606	1810	1094	683	1810	3098	514	1810	3610	1610
Grp Volume(v), veh/h	39	0	89	105	0	13	43	551	552	32	849	3
Grp Sat Flow(s),veh/h/ln	1890	0	1606	1810	0	1777	1810	1805	1807	1810	1805	1610
Q Serve(g_s), s	1.7	0.0	4.8	5.1	0.0	0.6	2.2	18.3	18.3	1.6	13.0	0.1
Cycle Q Clear(g_c), s	1.7	0.0	4.8	5.1	0.0	0.6	2.2	18.3	18.3	1.6	13.0	0.1
Prop In Lane	0.10		1.00	1.00		0.38	1.00		0.28	1.00		1.00
Lane Grp Cap(c), veh/h	200	0	170	187	0	184	66	987	988	55	1952	871
V/C Ratio(X)	0.19	0.00	0.52	0.56	0.00	0.07	0.66	0.56	0.56	0.58	0.43	0.00
Avail Cap(c_a), veh/h	710	0	603	207	0	203	169	987	988	102	1952	871
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.5	0.0	38.8	39.2	0.0	37.2	43.7	13.6	13.6	43.9	12.7	9.7
Incr Delay (d2), s/veh	0.5	0.0	2.5	2.8	0.0	0.2	4.1	2.3	2.3	3.6	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	1.9	2.4	0.0	0.3	1.0	7.0	7.0	0.7	4.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.9	0.0	41.3	41.9	0.0	37.3	47.8	15.9	15.9	47.5	13.4	9.7
LnGrp LOS	D	A	D	D	A	D	D	B	B	D	B	A
Approach Vol, veh/h		128			118			1146			884	
Approach Delay, s/veh		40.3			41.4			17.1			14.6	
Approach LOS		D			D			B			B	

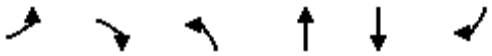
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.3	7.9	55.5		14.1	7.4	56.0				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		34.5	8.6	46.8		10.5	5.2	50.2				
Max Q Clear Time (g_c+I1), s		6.8	4.2	15.0		7.1	3.6	20.3				
Green Ext Time (p_c), s		0.5	0.0	6.1		0.1	0.0	7.6				

Intersection Summary												
HCM 6th Ctrl Delay			18.7									
HCM 6th LOS			B									

Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	196	49	522	619
Future Volume (vph)	196	49	522	619
Turn Type	Prot	Prot	NA	NA
Protected Phases	4	5	2	6
Permitted Phases				
Detector Phase	4	5	2	6
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	32.8	9.6	15.8	27.8
Total Split (s)	32.8	14.7	67.2	52.5
Total Split (%)	32.8%	14.7%	67.2%	52.5%
Yellow Time (s)	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.8
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	None	None
Act Effct Green (s)	17.5	7.1	52.2	45.4
Actuated g/C Ratio	0.21	0.09	0.64	0.56
v/c Ratio	0.67	0.33	0.24	0.84
Control Delay	38.6	45.5	7.0	27.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	38.6	45.5	7.0	27.3
LOS	D	D	A	C
Approach Delay	38.6		10.3	27.3
Approach LOS	D		B	C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 81.8	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 23.1	Intersection LOS: C
Intersection Capacity Utilization 67.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 33: Agua Mansa Rd. & El Rivino Rd.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	196	51	49	522	619	191
Future Volume (veh/h)	196	51	49	522	619	191
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	209	0	52	555	659	203
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	280		86	2382	751	231
Arrive On Green	0.16	0.00	0.05	0.66	0.54	0.54
Sat Flow, veh/h	1801	0	1810	3705	1393	429
Grp Volume(v), veh/h	210	0	52	555	0	862
Grp Sat Flow(s),veh/h/ln	1810	0	1810	1805	0	1823
Q Serve(g_s), s	7.0	0.0	1.8	3.9	0.0	26.0
Cycle Q Clear(g_c), s	7.0	0.0	1.8	3.9	0.0	26.0
Prop In Lane	1.00	0.00	1.00			0.24
Lane Grp Cap(c), veh/h	281		86	2382	0	983
V/C Ratio(X)	0.75		0.61	0.23	0.00	0.88
Avail Cap(c_a), veh/h	779		291	3532	0	1356
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.3	0.0	29.3	4.3	0.0	12.6
Incr Delay (d2), s/veh	4.0	0.0	2.5	0.0	0.0	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	0.8	0.8	0.0	8.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.3	0.0	31.9	4.3	0.0	17.8
LnGrp LOS	C		C	A	A	B
Approach Vol, veh/h	210			607	862	
Approach Delay, s/veh	29.3			6.7	17.8	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		47.2		15.5	7.6	39.6
Change Period (Y+Rc), s		5.8		5.8	4.6	5.8
Max Green Setting (Gmax), s		61.4		27.0	10.1	46.7
Max Q Clear Time (g_c+I1), s		5.9		9.0	3.8	28.0
Green Ext Time (p_c), s		3.8		0.5	0.0	5.9

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Notes

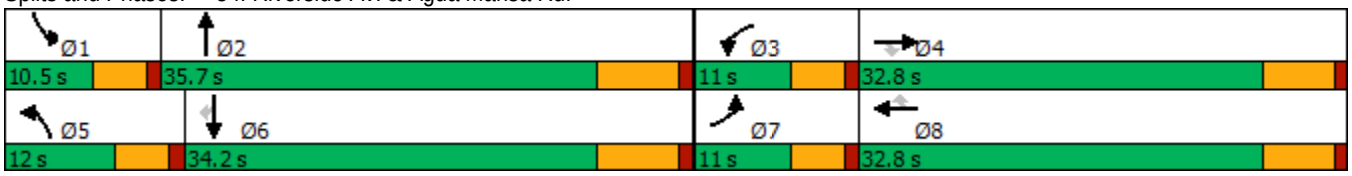
User approved volume balancing among the lanes for turning movement.

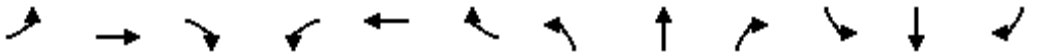
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	163	317	161	141	423	82	178	507	80	609	220
Future Volume (vph)	163	317	161	141	423	82	178	507	80	609	220
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	11.0	32.8	32.8	11.0	32.8	32.8	12.0	35.7	10.5	34.2	34.2
Total Split (%)	12.2%	36.4%	36.4%	12.2%	36.4%	36.4%	13.3%	39.7%	11.7%	38.0%	38.0%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	6.6	15.5	15.5	6.6	15.5	15.5	7.6	23.2	5.9	19.1	19.1
Actuated g/C Ratio	0.09	0.22	0.22	0.09	0.22	0.22	0.11	0.33	0.08	0.27	0.27
v/c Ratio	1.04	0.43	0.35	0.90	0.57	0.18	0.98	0.51	0.56	0.67	0.39
Control Delay	118.8	25.8	6.4	86.6	27.9	1.3	98.6	21.9	51.6	27.0	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	118.8	25.8	6.4	86.6	27.9	1.3	98.6	21.9	51.6	27.0	5.4
LOS	F	C	A	F	C	A	F	C	D	C	A
Approach Delay		44.5			37.3			40.4		23.9	
Approach LOS		D			D			D		C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 70.8	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.04	
Intersection Signal Delay: 35.5	Intersection LOS: D
Intersection Capacity Utilization 65.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	163	317	161	141	423	82	178	507	53	80	609	220
Future Volume (veh/h)	163	317	161	141	423	82	178	507	53	80	609	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	173	337	107	150	450	63	189	539	52	85	648	215
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	182	681	304	182	681	304	210	1037	100	111	926	413
Arrive On Green	0.10	0.19	0.19	0.10	0.19	0.19	0.12	0.31	0.31	0.06	0.26	0.26
Sat Flow, veh/h	1810	3610	1610	1810	3610	1610	1810	3327	320	1810	3610	1610
Grp Volume(v), veh/h	173	337	107	150	450	63	189	292	299	85	648	215
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1610	1810	1805	1842	1810	1805	1610
Q Serve(g_s), s	6.0	5.3	3.7	5.2	7.4	2.1	6.6	8.4	8.5	2.9	10.3	7.3
Cycle Q Clear(g_c), s	6.0	5.3	3.7	5.2	7.4	2.1	6.6	8.4	8.5	2.9	10.3	7.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	182	681	304	182	681	304	210	563	574	111	926	413
V/C Ratio(X)	0.95	0.49	0.35	0.82	0.66	0.21	0.90	0.52	0.52	0.77	0.70	0.52
Avail Cap(c_a), veh/h	182	1532	683	182	1532	683	210	828	845	168	1572	701
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.5	23.1	22.4	28.1	23.9	21.8	27.7	18.0	18.0	29.4	21.4	20.3
Incr Delay (d2), s/veh	51.8	0.6	0.7	24.0	1.1	0.3	34.8	0.7	0.7	4.8	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	2.1	1.3	3.2	2.9	0.7	4.5	2.9	3.0	1.3	3.7	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.3	23.7	23.1	52.1	25.0	22.1	62.5	18.7	18.7	34.2	22.4	21.3
LnGrp LOS	F	C	C	D	C	C	E	B	B	C	C	C
Approach Vol, veh/h		617			663			780			948	
Approach Delay, s/veh		39.4			30.9			29.3			23.2	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	26.3	11.0	17.8	12.0	22.8	11.0	17.8
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	5.9	29.2	6.4	27.0	7.4	27.7	6.4	27.0
Max Q Clear Time (g_c+I1), s	4.9	10.5	7.2	7.3	8.6	12.3	8.0	9.4
Green Ext Time (p_c), s	0.0	2.8	0.0	2.2	0.0	4.0	0.0	2.6

Intersection Summary	
HCM 6th Ctrl Delay	29.8
HCM 6th LOS	C

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	381	226	256	2	664
Future Volume (vph)	381	226	256	2	664
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	2	1	6	8	1
Permitted Phases					8
Detector Phase	2	1	6	8	1
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	27.5	9.6	15.5	31.6	9.6
Total Split (s)	36.4	22.0	58.4	31.6	22.0
Total Split (%)	40.4%	24.4%	64.9%	35.1%	24.4%
Yellow Time (s)	4.5	3.6	4.5	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	4.6	5.5	4.6	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	None	None	None	None	None
Act Effct Green (s)	18.1	19.1	32.1	13.0	22.8
Actuated g/C Ratio	0.35	0.37	0.62	0.25	0.44
v/c Ratio	0.74	0.44	0.28	0.01	1.06
Control Delay	24.1	21.4	6.5	18.5	65.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	24.1	21.4	6.5	18.5	65.3
LOS	C	C	A	B	E
Approach Delay	24.1		13.5	65.1	
Approach LOS	C		B	E	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 52	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.06	
Intersection Signal Delay: 38.6	Intersection LOS: D
Intersection Capacity Utilization 69.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Van Dell Rd. & 20th St.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	381	0	226	256	2	664
Future Volume (veh/h)	381	0	226	256	2	664
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	488	0	290	328	3	595
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	563	477	333	1028	589	820
Arrive On Green	0.30	0.00	0.18	0.54	0.33	0.33
Sat Flow, veh/h	1900	1610	1810	1900	1810	1610
Grp Volume(v), veh/h	488	0	290	328	3	595
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1900	1810	1610
Q Serve(g_s), s	18.4	0.0	11.8	7.2	0.1	21.7
Cycle Q Clear(g_c), s	18.4	0.0	11.8	7.2	0.1	21.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	563	477	333	1028	589	820
V/C Ratio(X)	0.87	0.00	0.87	0.32	0.01	0.73
Avail Cap(c_a), veh/h	776	658	416	1329	646	871
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	0.0	30.0	9.6	17.2	14.4
Incr Delay (d2), s/veh	7.7	0.0	13.2	0.2	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	0.0	5.9	2.5	0.0	7.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.9	0.0	43.2	9.8	17.2	17.3
LnGrp LOS	C	A	D	A	B	B
Approach Vol, veh/h	488			618	598	
Approach Delay, s/veh	32.9			25.5	17.3	
Approach LOS	C			C	B	

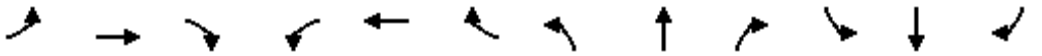
Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	18.5	27.9				46.4	29.2
Change Period (Y+Rc), s	4.6	5.5				5.5	4.6
Max Green Setting (Gmax), s	17.4	30.9				52.9	27.0
Max Q Clear Time (g_c+I1), s	13.8	20.4				9.2	23.7
Green Ext Time (p_c), s	0.2	2.0				1.9	0.9

Intersection Summary		
HCM 6th Ctrl Delay		24.7
HCM 6th LOS		C

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	7	1031	25	461	18	8	1	13
Future Volume (vph)	7	1031	25	461	18	8	1	13
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6
Total Split (s)	67.6	67.6	67.6	67.6	22.4	22.4	22.4	22.4
Total Split (%)	75.1%	75.1%	75.1%	75.1%	24.9%	24.9%	24.9%	24.9%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6		4.6		4.6
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)	59.2	59.2	59.2	59.2		6.5		6.5
Actuated g/C Ratio	0.79	0.79	0.79	0.79		0.09		0.09
v/c Ratio	0.01	0.88	0.23	0.38		0.41		0.13
Control Delay	2.0	14.7	7.3	3.3		26.7		30.5
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	2.0	14.7	7.3	3.3		26.7		30.5
LOS	A	B	A	A		C		C
Approach Delay		14.6		3.5		26.7		30.5
Approach LOS		B		A		C		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 75	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 11.9	Intersection LOS: B
Intersection Capacity Utilization 74.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4: Avalon St. & 20th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	1031	40	25	461	3	18	8	30	1	13	3
Future Volume (veh/h)	7	1031	40	25	461	3	18	8	30	1	13	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.98		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	9	1257	49	30	562	4	22	10	37	1	16	4
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	677	1362	53	205	1414	10	115	34	79	68	130	32
Arrive On Green	0.75	0.75	0.75	0.75	0.75	0.75	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	858	1815	71	428	1884	13	369	377	863	38	1433	346
Grp Volume(v), veh/h	9	0	1306	30	0	566	69	0	0	21	0	0
Grp Sat Flow(s),veh/h/ln	858	0	1886	428	0	1898	1610	0	0	1817	0	0
Q Serve(g_s), s	0.2	0.0	32.7	3.6	0.0	6.2	0.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.4	0.0	32.7	36.2	0.0	6.2	2.3	0.0	0.0	0.6	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.01	0.32		0.54	0.05		0.19
Lane Grp Cap(c), veh/h	677	0	1415	205	0	1424	228	0	0	230	0	0
V/C Ratio(X)	0.01	0.00	0.92	0.15	0.00	0.40	0.30	0.00	0.00	0.09	0.00	0.00
Avail Cap(c_a), veh/h	963	0	2044	347	0	2057	566	0	0	618	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.7	0.0	5.9	20.6	0.0	2.6	25.0	0.0	0.0	24.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	4.5	0.1	0.0	0.1	0.3	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.7	0.3	0.0	0.4	0.9	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.7	0.0	10.4	20.7	0.0	2.6	25.3	0.0	0.0	24.3	0.0	0.0
LnGrp LOS	A	A	B	C	A	A	C	A	A	C	A	A
Approach Vol, veh/h		1315			596			69			21	
Approach Delay, s/veh		10.3			3.6			25.3			24.3	
Approach LOS		B			A			C			C	

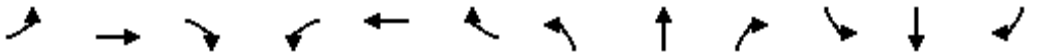
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		9.9		48.2		9.9		48.2				
Change Period (Y+Rc), s		4.6		4.6		4.6		4.6				
Max Green Setting (Gmax), s		17.8		63.0		17.8		63.0				
Max Q Clear Time (g_c+I1), s		4.3		34.7		2.6		38.2				
Green Ext Time (p_c), s		0.2		9.0		0.0		2.4				

Intersection Summary												
HCM 6th Ctrl Delay			9.0									
HCM 6th LOS			A									

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	5	394	699	1684	1408	582
Future Volume (vph)	5	394	699	1684	1408	582
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	41.0	41.0	22.0	69.0	47.0	47.0
Total Split (%)	37.3%	37.3%	20.0%	62.7%	42.7%	42.7%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	37.6	37.6	18.0	63.9	41.9	41.9
Actuated g/C Ratio	0.34	0.34	0.16	0.58	0.38	0.38
v/c Ratio	1.07	0.68	1.31	0.86	0.77	0.63
Control Delay	94.0	33.9	192.1	11.8	32.8	5.1
Queue Delay	0.0	0.0	0.0	0.7	0.6	0.0
Total Delay	94.0	33.9	192.1	12.5	33.5	5.1
LOS	F	C	F	B	C	A
Approach Delay	71.3			65.2	25.2	
Approach LOS	E			E	C	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.31	
Intersection Signal Delay: 51.3	Intersection LOS: D
Intersection Capacity Utilization 105.2%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	541	5	394	699	1684	0	0	1408	582
Future Volume (veh/h)	0	0	0	541	5	394	699	1684	0	0	1408	582
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				582	5	389	752	1811	0	0	1514	439
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				604	5	542	574	2117	0	0	2004	620
Arrive On Green				0.34	0.34	0.34	0.33	1.00	0.00	0.00	0.39	0.39
Sat Flow, veh/h				1795	15	1610	3510	3705	0	0	5358	1604
Grp Volume(v), veh/h				587	0	389	752	1811	0	0	1514	439
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1755	1805	0	0	1729	1604
Q Serve(g_s), s				35.0	0.0	23.3	18.0	0.0	0.0	0.0	27.8	25.4
Cycle Q Clear(g_c), s				35.0	0.0	23.3	18.0	0.0	0.0	0.0	27.8	25.4
Prop In Lane				0.99		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				609	0	542	574	2117	0	0	2004	620
V/C Ratio(X)				0.96	0.00	0.72	1.31	0.86	0.00	0.00	0.76	0.71
Avail Cap(c_a), veh/h				609	0	542	574	2117	0	0	2004	620
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.38	0.38	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				35.8	0.0	31.9	37.0	0.0	0.0	0.0	29.2	28.5
Incr Delay (d2), s/veh				27.6	0.0	4.6	144.0	1.9	0.0	0.0	2.7	6.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				19.2	0.0	9.2	17.4	0.5	0.0	0.0	11.5	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				63.5	0.0	36.5	181.0	1.9	0.0	0.0	32.0	35.2
LnGrp LOS				E	A	D	F	A	A	A	C	D
Approach Vol, veh/h					976			2563			1953	
Approach Delay, s/veh					52.7			54.4			32.7	
Approach LOS					D			D			C	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		69.0			22.0	47.0		41.0				
Change Period (Y+Rc), s		4.5			4.0	4.5		4.0				
Max Green Setting (Gmax), s		64.5			18.0	42.5		37.0				
Max Q Clear Time (g_c+I1), s		2.0			20.0	29.8		37.0				
Green Ext Time (p_c), s		24.6			0.0	8.9		0.0				

Intersection Summary		
HCM 6th Ctrl Delay	46.4	
HCM 6th LOS	D	

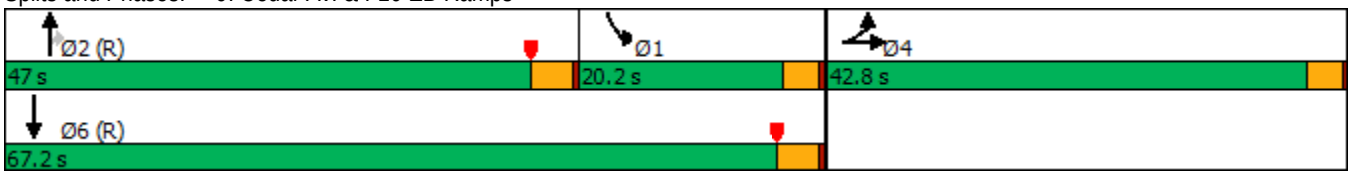
Notes

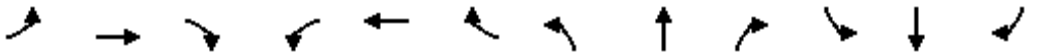
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	566	5	1819	857	420	1526
Future Volume (vph)	566	5	1819	857	420	1526
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	42.8	42.8	47.0	47.0	20.2	67.2
Total Split (%)	38.9%	38.9%	42.7%	42.7%	18.4%	61.1%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	36.9	36.9	46.1	46.1	15.9	65.6
Actuated g/C Ratio	0.34	0.34	0.42	0.42	0.14	0.60
v/c Ratio	0.90	0.89	0.85	0.79	0.85	0.72
Control Delay	55.2	52.0	29.1	13.1	48.2	11.0
Queue Delay	1.1	1.0	0.0	0.0	0.0	1.1
Total Delay	56.3	53.1	29.1	13.1	48.2	12.2
LOS	E	D	C	B	D	B
Approach Delay		54.7	24.0			19.9
Approach LOS		D	C			B

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 28.0	Intersection LOS: C
Intersection Capacity Utilization 105.2%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	566	5	411	0	0	0	0	1819	857	420	1526	0
Future Volume (veh/h)	566	5	411	0	0	0	0	1819	857	420	1526	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	496	120	409				0	1856	669	429	1557	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	616	129	439				0	2028	628	576	2135	0
Arrive On Green	0.34	0.34	0.34				0.00	0.52	0.52	0.33	1.00	0.00
Sat Flow, veh/h	1810	378	1290				0	5358	1606	3510	3705	0
Grp Volume(v), veh/h	496	0	529				0	1856	669	429	1557	0
Grp Sat Flow(s),veh/h/ln	1810	0	1668				0	1729	1606	1755	1805	0
Q Serve(g_s), s	27.4	0.0	33.7				0.0	36.1	43.0	12.0	0.0	0.0
Cycle Q Clear(g_c), s	27.4	0.0	33.7				0.0	36.1	43.0	12.0	0.0	0.0
Prop In Lane	1.00		0.77				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	616	0	568				0	2028	628	576	2135	0
V/C Ratio(X)	0.81	0.00	0.93				0.00	0.92	1.07	0.74	0.73	0.00
Avail Cap(c_a), veh/h	646	0	596				0	2028	628	576	2135	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.33	1.33	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.09	0.09	0.55	0.55	0.00
Uniform Delay (d), s/veh	33.0	0.0	35.0				0.0	24.7	26.4	34.9	0.0	0.0
Incr Delay (d2), s/veh	7.1	0.0	21.1				0.0	0.8	33.1	2.6	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.5	0.0	16.2				0.0	12.2	19.2	4.5	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.1	0.0	56.2				0.0	25.6	59.5	37.5	1.2	0.0
LnGrp LOS	D	A	E				A	C	F	D	A	A
Approach Vol, veh/h		1025						2525			1986	
Approach Delay, s/veh		48.4						34.6			9.1	
Approach LOS		D						C			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	22.1	47.0		40.9		69.1
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	16.7	* 43		39.3		63.2
Max Q Clear Time (g_c+I1), s	14.0	45.0		35.7		2.0
Green Ext Time (p_c), s	0.3	0.0		1.7		10.2

Intersection Summary		
HCM 6th Ctrl Delay		28.0
HCM 6th LOS		C

Notes

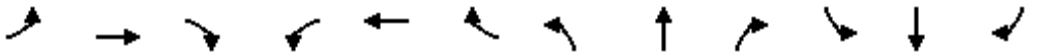
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	245	2	28	2	19	2245	52	1623	263
Future Volume (vph)	245	2	28	2	19	2245	52	1623	263
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases		4		8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	30.0	30.0	10.2	10.2	16.2	28.2	16.2	28.2	28.2
Total Split (s)	30.0	30.0	30.0	30.0	34.0	63.8	16.2	46.0	46.0
Total Split (%)	27.3%	27.3%	27.3%	27.3%	30.9%	58.0%	14.7%	41.8%	41.8%
Yellow Time (s)	5.0	5.0	5.0	5.0	3.0	4.7	3.0	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.0	5.7	4.0	5.7	5.7
Lead/Lag					Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min	C-Min
Act Effct Green (s)	24.0	24.0	24.0	24.0	72.2	65.7	74.8	70.2	70.2
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.66	0.60	0.68	0.64	0.64
v/c Ratio	1.20	0.09	0.10	0.39	0.11	1.09	0.31	0.73	0.26
Control Delay	165.9	13.1	35.5	7.7	3.5	59.1	10.8	22.8	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.4	0.0
Total Delay	165.9	13.1	35.5	7.7	3.5	63.2	10.8	23.2	7.7
LOS	F	B	D	A	A	E	B	C	A
Approach Delay		147.5		11.3		62.7		20.7	
Approach LOS		F		B		E		C	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 68.3 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.20	
Intersection Signal Delay: 48.1	Intersection LOS: D
Intersection Capacity Utilization 102.4%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 10: Cedar Av. & Orange St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	245	2	32	28	2	187	19	2245	10	52	1623	263
Future Volume (veh/h)	245	2	32	28	2	187	19	2245	10	52	1623	263
Initial Q (Qb), veh	0	0	0	0	0	0	0	44	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	255	2	28	29	2	149	20	2339	10	54	1691	213
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	238	24	330	350	5	347	242	2252	6	119	2247	979
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.03	1.00	1.00	0.06	1.00	1.00
Sat Flow, veh/h	1256	108	1514	1398	21	1592	1810	3686	16	1810	3610	1573
Grp Volume(v), veh/h	255	0	30	29	0	151	20	1144	1205	54	1691	213
Grp Sat Flow(s),veh/h/ln	1256	0	1622	1398	0	1613	1810	1805	1897	1810	1805	1573
Q Serve(g_s), s	15.1	0.0	1.6	1.9	0.0	8.9	0.5	67.1	61.6	1.2	0.0	0.0
Cycle Q Clear(g_c), s	24.0	0.0	1.6	3.5	0.0	8.9	0.5	67.1	61.6	1.2	0.0	0.0
Prop In Lane	1.00		0.93	1.00		0.99	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	238	0	354	350	0	352	242	1101	1157	119	2247	979
V/C Ratio(X)	1.07	0.00	0.08	0.08	0.00	0.43	0.08	1.04	1.04	0.46	0.75	0.22
Avail Cap(c_a), veh/h	238	0	354	350	0	352	705	1101	1157	266	2247	979
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	0.74	0.74	0.74
Uniform Delay (d), s/veh	49.5	0.0	34.3	35.6	0.0	37.1	7.6	0.0	0.0	27.0	0.0	0.0
Incr Delay (d2), s/veh	78.4	0.0	0.1	0.1	0.0	0.8	0.0	21.2	21.5	2.0	1.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.0	68.4	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.8	0.0	0.7	0.7	0.0	3.6	0.2	28.5	28.9	0.9	0.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	127.9	0.0	34.4	35.7	0.0	37.9	7.6	93.1	89.9	29.0	1.8	0.4
LnGrp LOS	F	A	C	D	A	D	A	F	F	C	A	A
Approach Vol, veh/h		285			180			2369			1958	
Approach Delay, s/veh		118.1			37.6			90.8			2.4	
Approach LOS		F			D			F			A	

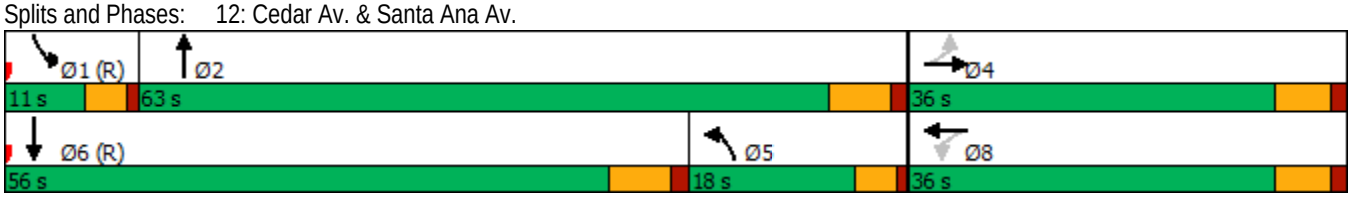
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	72.8		30.0	5.8	74.2		30.0				
Change Period (Y+Rc), s	4.0	5.7		6.0	4.0	5.7		6.0				
Max Green Setting (Gmax), s	12.2	58.1		24.0	30.0	40.3		24.0				
Max Q Clear Time (g_c+I1), s	3.2	69.1		26.0	2.5	2.0		10.9				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	19.5		0.8				

Intersection Summary			
HCM 6th Ctrl Delay		54.3	
HCM 6th LOS		D	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	94	141	58	134	183	1723	63	1316
Future Volume (vph)	94	141	58	134	183	1723	63	1316
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	9.5	27.5	9.5	27.5
Total Split (s)	36.0	36.0	36.0	36.0	18.0	63.0	11.0	56.0
Total Split (%)	32.7%	32.7%	32.7%	32.7%	16.4%	57.3%	10.0%	50.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	4.5	6.5	4.5	6.5
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min
Act Effct Green (s)		30.0		30.0	13.5	56.8	6.2	49.5
Actuated g/C Ratio		0.27		0.27	0.12	0.52	0.06	0.45
v/c Ratio		1.03		0.76	0.87	1.02	0.65	0.89
Control Delay		92.5		48.0	42.5	29.9	43.0	39.5
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		92.5		48.0	42.5	29.9	43.0	39.5
LOS		F		D	D	C	D	D
Approach Delay		92.5		48.0		31.0		39.7
Approach LOS		F		D		C		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 90 (82%), Referenced to phase 1:SBL and 6:SBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 40.6	Intersection LOS: D
Intersection Capacity Utilization 98.0%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 12: Cedar Av. & Santa Ana Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	141	120	58	134	94	183	1723	79	63	1316	51
Future Volume (veh/h)	94	141	120	58	134	94	183	1723	79	63	1316	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	99	148	83	61	141	59	193	1814	81	66	1385	47
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	136	176	90	104	222	84	230	1861	83	113	1588	54
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1.00	1.00	0.02	0.15	0.15
Sat Flow, veh/h	366	691	355	251	874	329	1810	3521	156	1810	3562	121
Grp Volume(v), veh/h	330	0	0	261	0	0	193	924	971	66	701	731
Grp Sat Flow(s),veh/h/ln	1413	0	0	1453	0	0	1810	1805	1872	1810	1805	1878
Q Serve(g_s), s	7.9	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	4.0	41.8	41.9
Cycle Q Clear(g_c), s	25.3	0.0	0.0	17.4	0.0	0.0	11.1	0.0	0.0	4.0	41.8	41.9
Prop In Lane	0.30		0.25	0.23		0.23	1.00		0.08	1.00		0.06
Lane Grp Cap(c), veh/h	402	0	0	410	0	0	230	954	989	113	804	837
V/C Ratio(X)	0.82	0.00	0.00	0.64	0.00	0.00	0.84	0.97	0.98	0.58	0.87	0.87
Avail Cap(c_a), veh/h	430	0	0	439	0	0	230	954	989	113	812	845
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.09	0.09	0.09	0.09	0.09	0.09
Uniform Delay (d), s/veh	40.1	0.0	0.0	36.5	0.0	0.0	39.9	0.0	0.0	52.4	43.8	43.9
Incr Delay (d2), s/veh	12.1	0.0	0.0	3.3	0.0	0.0	2.5	4.0	5.3	0.5	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	0.0	0.0	6.5	0.0	0.0	4.3	1.1	1.5	1.8	20.3	21.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.2	0.0	0.0	39.8	0.0	0.0	42.4	4.0	5.3	52.9	45.2	45.2
LnGrp LOS	D	A	A	D	A	A	D	A	A	D	D	D
Approach Vol, veh/h		330			261			2088			1498	
Approach Delay, s/veh		52.2			39.8			8.2			45.5	
Approach LOS		D			D			A			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.4	64.6		34.0	20.5	55.5		34.0				
Change Period (Y+Rc), s	4.5	6.5		6.0	6.5	* 6.5		6.0				
Max Green Setting (Gmax), s	6.5	56.5		30.0	13.5	* 50		30.0				
Max Q Clear Time (g_c+I1), s	6.0	2.0		27.3	13.1	43.9		19.4				
Green Ext Time (p_c), s	0.0	48.4		0.6	0.0	5.1		1.4				

Intersection Summary		
HCM 6th Ctrl Delay		27.0
HCM 6th LOS		C

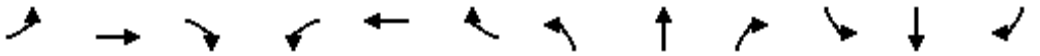
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	251	209	82	132	132	1562	163	1265
Future Volume (vph)	251	209	82	132	132	1562	163	1265
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	38.0	38.0	38.0	38.0	23.7	53.0	19.0	48.3
Total Split (%)	34.5%	34.5%	34.5%	34.5%	21.5%	48.2%	17.3%	43.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)	32.5	32.5	32.5	32.5	14.0	47.8	13.7	47.5
Actuated g/C Ratio	0.30	0.30	0.30	0.30	0.13	0.43	0.12	0.43
v/c Ratio	1.15	0.71	0.59	0.52	0.62	1.14	0.79	0.98
Control Delay	140.6	40.0	50.9	30.8	63.4	87.3	46.6	51.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	140.6	40.0	50.9	30.8	63.4	87.3	46.6	51.5
LOS	F	D	D	C	E	F	D	D
Approach Delay		81.4		35.6		85.5		51.0
Approach LOS		F		D		F		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.15	
Intersection Signal Delay: 68.4	Intersection LOS: E
Intersection Capacity Utilization 102.0%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	209	150	82	132	129	132	1562	74	163	1265	127
Future Volume (veh/h)	251	209	150	82	132	129	132	1562	74	163	1265	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	273	227	138	89	143	94	143	1698	67	177	1375	133
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	281	325	198	181	314	206	198	1570	62	209	1495	144
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.22	0.89	0.89	0.04	0.15	0.15
Sat Flow, veh/h	1159	1100	669	1033	1061	698	1810	3541	139	1810	3327	320
Grp Volume(v), veh/h	273	0	365	89	0	237	143	862	903	177	743	765
Grp Sat Flow(s),veh/h/ln	1159	0	1769	1033	0	1759	1810	1805	1875	1810	1805	1842
Q Serve(g_s), s	20.4	0.0	20.2	9.2	0.0	12.1	8.1	48.8	48.8	10.7	44.6	45.1
Cycle Q Clear(g_c), s	32.5	0.0	20.2	29.4	0.0	12.1	8.1	48.8	48.8	10.7	44.6	45.1
Prop In Lane	1.00		0.38	1.00		0.40	1.00		0.07	1.00		0.17
Lane Grp Cap(c), veh/h	281	0	523	181	0	520	198	801	832	209	811	828
V/C Ratio(X)	0.97	0.00	0.70	0.49	0.00	0.46	0.72	1.08	1.09	0.85	0.92	0.92
Avail Cap(c_a), veh/h	281	0	523	181	0	520	316	801	832	239	811	828
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.15	0.15	0.15	0.33	0.33	0.33
Uniform Delay (d), s/veh	46.9	0.0	34.4	47.4	0.0	31.6	41.4	6.2	6.2	51.9	44.8	45.0
Incr Delay (d2), s/veh	46.1	0.0	4.5	2.9	0.0	0.9	0.8	38.7	42.5	8.3	6.1	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.0	0.0	9.0	2.5	0.0	5.1	3.2	11.0	12.3	5.5	22.7	23.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	93.0	0.0	38.9	50.3	0.0	32.4	42.1	44.9	48.7	60.2	50.8	51.5
LnGrp LOS	F	A	D	D	A	C	D	F	F	E	D	D
Approach Vol, veh/h		638			326			1908			1685	
Approach Delay, s/veh		62.1			37.3			46.5			52.1	
Approach LOS		E			D			D			D	

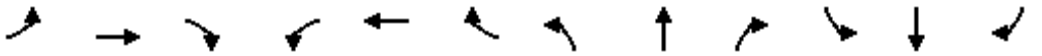
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.2	54.8		38.0	16.6	55.4		38.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	14.5	47.0		32.5	19.2	42.3		32.5				
Max Q Clear Time (g_c+I1), s	12.7	50.8		34.5	10.1	47.1		31.4				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.2	0.0		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		50.1	
HCM 6th LOS		D	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	10	9	270	8	304	13	1434	219	1278
Future Volume (vph)	10	9	270	8	304	13	1434	219	1278
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	35.0	35.0	35.0	9.5	24.0	9.5	24.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.5	42.0	13.0	45.5
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%	10.6%	46.7%	14.4%	50.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	5.0	4.5	6.0	4.5	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min
Act Effct Green (s)		15.5		23.4	23.4	5.0	36.2	8.5	47.5
Actuated g/C Ratio		0.18		0.28	0.28	0.06	0.43	0.10	0.57
v/c Ratio		0.10		0.75	0.56	0.12	1.06	1.20	0.64
Control Delay		17.5		40.0	17.1	42.7	65.7	168.6	16.2
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		17.5		40.0	17.1	42.7	65.7	168.6	16.2
LOS		B		D	B	D	E	F	B
Approach Delay		17.5		28.1			65.5		38.1
Approach LOS		B		C			E		D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 83.8	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.20	
Intersection Signal Delay: 48.2	Intersection LOS: D
Intersection Capacity Utilization 92.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 15: Rubidoux Bl. & Tarragona Dr./El Rivino Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	9	11	270	8	304	13	1434	178	219	1278	24
Future Volume (veh/h)	10	9	11	270	8	304	13	1434	178	219	1278	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	10	9	5	273	8	262	13	1448	61	221	1291	23
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	57	45	12	342	8	537	28	1411	59	171	1738	31
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.02	0.40	0.40	0.09	0.48	0.48
Sat Flow, veh/h	0	135	36	791	23	1610	1810	3526	148	1810	3629	65
Grp Volume(v), veh/h	24	0	0	281	0	262	13	739	770	221	642	672
Grp Sat Flow(s),veh/h/ln	171	0	0	814	0	1610	1810	1805	1870	1810	1805	1888
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	11.7	0.6	36.0	36.0	8.5	25.9	25.9
Cycle Q Clear(g_c), s	30.0	0.0	0.0	30.0	0.0	11.7	0.6	36.0	36.0	8.5	25.9	25.9
Prop In Lane	0.42		0.21	0.97		1.00	1.00		0.08	1.00		0.03
Lane Grp Cap(c), veh/h	114	0	0	350	0	537	28	722	748	171	865	905
V/C Ratio(X)	0.21	0.00	0.00	0.80	0.00	0.49	0.47	1.02	1.03	1.29	0.74	0.74
Avail Cap(c_a), veh/h	114	0	0	350	0	537	101	722	748	171	865	905
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.4	0.0	0.0	30.5	0.0	23.9	43.9	27.0	27.0	40.8	19.0	19.0
Incr Delay (d2), s/veh	1.3	0.0	0.0	13.2	0.0	1.0	11.6	39.8	40.6	168.3	3.7	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	7.3	0.0	4.5	0.4	21.5	22.4	11.5	10.1	10.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.7	0.0	0.0	43.7	0.0	24.9	55.5	66.8	67.6	209.1	22.7	22.6
LnGrp LOS	C	A	A	D	A	C	E	F	F	F	C	C
Approach Vol, veh/h		24			543			1522			1535	
Approach Delay, s/veh		25.7			34.6			67.1			49.5	
Approach LOS		C			C			E			D	

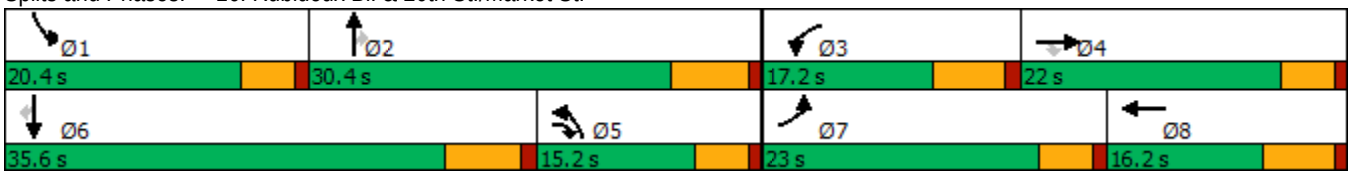
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.0	42.0		35.0	5.9	49.1		35.0				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	8.5	36.0		30.0	5.0	39.5		30.0				
Max Q Clear Time (g_c+I1), s	10.5	38.0		32.0	2.6	27.9		32.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	7.5		0.0				

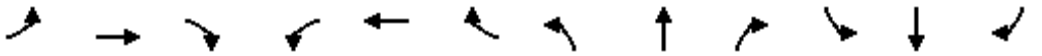
Intersection Summary			
HCM 6th Ctrl Delay		54.5	
HCM 6th LOS		D	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	361	373	363	440	163	524	209	651	532	558	857	147
Future Volume (vph)	361	373	363	440	163	524	209	651	532	558	857	147
Turn Type	Prot	NA	pm+ov	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4			Free			2			6
Detector Phase	7	4	5	3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0		5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	14.6	14.6	9.6	15.8	15.8		9.6	16.2	16.2	9.6	35.2	35.2
Total Split (s)	23.0	22.0	15.2	17.2	16.2		15.2	30.4	30.4	20.4	35.6	35.6
Total Split (%)	25.6%	24.4%	16.9%	19.1%	18.0%		16.9%	33.8%	33.8%	22.7%	39.6%	39.6%
Yellow Time (s)	3.6	3.6	3.6	4.8	4.8		3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.8	5.8		4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	None	None	None	None	None
Act Effct Green (s)	18.4	17.4	28.7	11.4	10.4	87.9	11.2	22.2	22.2	15.6	26.6	26.6
Actuated g/C Ratio	0.21	0.20	0.33	0.13	0.12	1.00	0.13	0.25	0.25	0.18	0.30	0.30
v/c Ratio	0.97	1.01	0.58	0.99	0.74	0.33	0.93	0.73	0.81	0.92	0.80	0.23
Control Delay	77.2	87.4	12.0	79.9	59.1	0.6	84.2	35.3	21.7	57.6	34.4	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	77.2	87.4	12.0	79.9	59.1	0.6	84.2	35.3	21.7	57.6	34.4	1.2
LOS	E	F	B	E	E	A	F	D	C	E	C	A
Approach Delay		59.1			40.0			37.4			39.6	
Approach LOS		E			D			D			D	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 87.9	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 43.2	Intersection LOS: D
Intersection Capacity Utilization 85.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	361	373	363	440	163	524	209	651	532	558	857	147
Future Volume (veh/h)	361	373	363	440	163	524	209	651	532	558	857	147
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	368	381	370	449	166	0	213	664	310	569	874	134
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	374	372	507	450	248		216	892	398	623	1038	462
Arrive On Green	0.21	0.20	0.20	0.13	0.13	0.00	0.12	0.25	0.25	0.18	0.29	0.29
Sat Flow, veh/h	1810	1900	1610	3510	1900	1610	1810	3610	1610	3510	3610	1607
Grp Volume(v), veh/h	368	381	370	449	166	0	213	664	310	569	874	134
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1755	1900	1610	1810	1805	1610	1755	1805	1607
Q Serve(g_s), s	18.0	17.4	5.1	11.4	7.4	0.0	10.5	15.1	16.0	14.2	20.3	3.1
Cycle Q Clear(g_c), s	18.0	17.4	5.1	11.4	7.4	0.0	10.5	15.1	16.0	14.2	20.3	3.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	374	372	507	450	248		216	892	398	623	1038	462
V/C Ratio(X)	0.98	1.03	0.73	1.00	0.67		0.99	0.74	0.78	0.91	0.84	0.29
Avail Cap(c_a), veh/h	374	372	507	450	248		216	982	438	623	1193	531
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.1	35.8	9.5	38.8	36.9	0.0	39.1	30.9	31.2	35.9	29.8	7.2
Incr Delay (d2), s/veh	42.0	53.4	5.3	42.0	6.8	0.0	57.6	2.8	8.0	17.5	5.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.2	13.5	3.3	7.3	3.7	0.0	7.8	6.4	6.7	7.1	8.7	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.1	89.1	14.8	80.7	43.7	0.0	96.8	33.7	39.3	53.5	34.8	7.5
LnGrp LOS	E	F	B	F	D		F	C	D	D	C	A
Approach Vol, veh/h		1119			615			1187			1577	
Approach Delay, s/veh		60.6			70.7			46.5			39.2	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.4	28.2	17.2	23.2	16.8	31.8	23.0	17.4
Change Period (Y+Rc), s	4.6	6.2	5.8	* 5.8	6.2	* 6.2	4.6	5.8
Max Green Setting (Gmax), s	15.8	24.2	11.4	* 17	10.6	* 29	18.4	10.4
Max Q Clear Time (g_c+I1), s	16.2	18.0	13.4	19.4	12.5	22.3	20.0	9.4
Green Ext Time (p_c), s	0.0	2.7	0.0	0.0	0.0	3.3	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	50.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	2	22	42	11	20	1331	160	1609
Future Volume (vph)	2	22	42	11	20	1331	160	1609
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.6	31.6	31.6	31.6	9.6	28.2	9.6	28.2
Total Split (s)	31.6	31.6	31.6	31.6	9.6	37.4	11.0	38.8
Total Split (%)	39.5%	39.5%	39.5%	39.5%	12.0%	46.8%	13.8%	48.5%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	6.2	4.6	6.2
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		12.9		12.9	5.2	32.4	6.6	45.4
Actuated g/C Ratio		0.21		0.21	0.09	0.53	0.11	0.75
v/c Ratio		0.08		0.21	0.13	0.76	0.83	0.61
Control Delay		17.3		19.3	33.5	18.4	65.9	12.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		17.3		19.3	33.5	18.4	65.9	12.0
LOS		B		B	C	B	E	B
Approach Delay		17.3		19.3		18.6		16.9
Approach LOS		B		B		B		B

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 60.6	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 17.7	Intersection LOS: B
Intersection Capacity Utilization 72.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 17: Rubidoux Bl. & 24th St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	22	8	42	11	13	20	1331	100	160	1609	4
Future Volume (veh/h)	2	22	8	42	11	13	20	1331	100	160	1609	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2	22	8	43	11	13	20	1358	102	163	1642	4
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	75	152	53	201	53	35	43	1667	125	206	2141	5
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.02	0.49	0.49	0.11	0.58	0.58
Sat Flow, veh/h	45	1307	451	803	454	303	1810	3404	255	1810	3694	9
Grp Volume(v), veh/h	32	0	0	67	0	0	20	718	742	163	802	844
Grp Sat Flow(s),veh/h/ln	1803	0	0	1560	0	0	1810	1805	1854	1810	1805	1898
Q Serve(g_s), s	0.0	0.0	0.0	0.9	0.0	0.0	0.6	18.5	18.7	4.8	18.5	18.5
Cycle Q Clear(g_c), s	0.9	0.0	0.0	2.0	0.0	0.0	0.6	18.5	18.7	4.8	18.5	18.5
Prop In Lane	0.06		0.25	0.64		0.19	1.00		0.14	1.00		0.00
Lane Grp Cap(c), veh/h	280	0	0	289	0	0	43	884	908	206	1046	1100
V/C Ratio(X)	0.11	0.00	0.00	0.23	0.00	0.00	0.46	0.81	0.82	0.79	0.77	0.77
Avail Cap(c_a), veh/h	946	0	0	852	0	0	164	1024	1051	211	1070	1125
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.9	0.0	0.0	22.3	0.0	0.0	26.5	11.9	11.9	23.7	8.7	8.7
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.4	0.0	0.0	2.8	4.4	4.5	16.5	3.3	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.8	0.0	0.0	0.3	5.9	6.1	2.7	4.8	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.0	0.0	0.0	22.7	0.0	0.0	29.3	16.3	16.5	40.2	12.1	11.9
LnGrp LOS	C	A	A	C	A	A	C	B	B	D	B	B
Approach Vol, veh/h		32			67			1480			1809	
Approach Delay, s/veh		22.0			22.7			16.6			14.5	
Approach LOS		C			C			B			B	

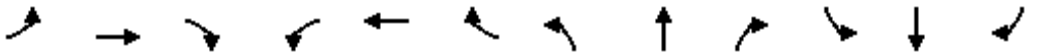
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.9	33.1		11.0	5.9	38.1		11.0				
Change Period (Y+Rc), s	4.6	6.2		4.6	4.6	6.2		4.6				
Max Green Setting (Gmax), s	6.4	31.2		27.0	5.0	32.6		27.0				
Max Q Clear Time (g_c+I1), s	6.8	20.7		2.9	2.6	20.5		4.0				
Green Ext Time (p_c), s	0.0	6.2		0.1	0.0	7.8		0.3				

Intersection Summary												
HCM 6th Ctrl Delay			15.7									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	16	6	4	4	10	1429	7	1560
Future Volume (vph)	16	6	4	4	10	1429	7	1560
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.6	31.6	31.6	31.6	9.6	28.2	9.6	28.2
Total Split (s)	31.6	31.6	31.6	31.6	9.7	48.7	9.7	48.7
Total Split (%)	35.1%	35.1%	35.1%	35.1%	10.8%	54.1%	10.8%	54.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	6.2	4.6	6.2
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		13.2		13.2	5.5	45.4	5.5	45.4
Actuated g/C Ratio		0.22		0.22	0.09	0.76	0.09	0.76
v/c Ratio		0.12		0.04	0.07	0.58	0.05	0.63
Control Delay		16.8		17.2	35.0	10.5	34.9	11.4
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		16.8		17.2	35.0	10.5	34.9	11.4
LOS		B		B	C	B	C	B
Approach Delay		16.8		17.2		10.6		11.5
Approach LOS		B		B		B		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 59.5	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 60.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 18: Rubidoux Bl. & 26th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	6	17	4	4	7	10	1429	17	7	1560	12
Future Volume (veh/h)	16	6	17	4	4	7	10	1429	17	7	1560	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	18	7	19	4	4	8	11	1570	19	8	1714	13
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	136	41	63	104	55	75	25	2238	27	19	2237	17
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.01	0.61	0.61	0.01	0.61	0.61
Sat Flow, veh/h	467	453	699	223	613	836	1810	3653	44	1810	3672	28
Grp Volume(v), veh/h	44	0	0	16	0	0	11	775	814	8	842	885
Grp Sat Flow(s),veh/h/ln	1618	0	0	1672	0	0	1810	1805	1892	1810	1805	1895
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.3	15.6	15.7	0.2	18.3	18.4
Cycle Q Clear(g_c), s	1.2	0.0	0.0	0.5	0.0	0.0	0.3	15.6	15.7	0.2	18.3	18.4
Prop In Lane	0.41		0.43	0.25		0.50	1.00		0.02	1.00		0.01
Lane Grp Cap(c), veh/h	240	0	0	234	0	0	25	1106	1159	19	1099	1154
V/C Ratio(X)	0.18	0.00	0.00	0.07	0.00	0.00	0.43	0.70	0.70	0.42	0.77	0.77
Avail Cap(c_a), veh/h	887	0	0	901	0	0	172	1431	1499	172	1431	1502
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	0.0	0.0	22.4	0.0	0.0	26.2	7.0	7.1	26.4	7.7	7.7
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.1	0.0	0.0	4.2	1.1	1.0	5.5	1.9	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	0.2	0.0	0.0	0.2	3.0	3.2	0.1	3.8	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.2	0.0	0.0	22.5	0.0	0.0	30.4	8.1	8.1	31.8	9.5	9.5
LnGrp LOS	C	A	A	C	A	A	C	A	A	C	A	A
Approach Vol, veh/h		44			16			1600			1735	
Approach Delay, s/veh		23.2			22.5			8.3			9.6	
Approach LOS		C			C			A			A	

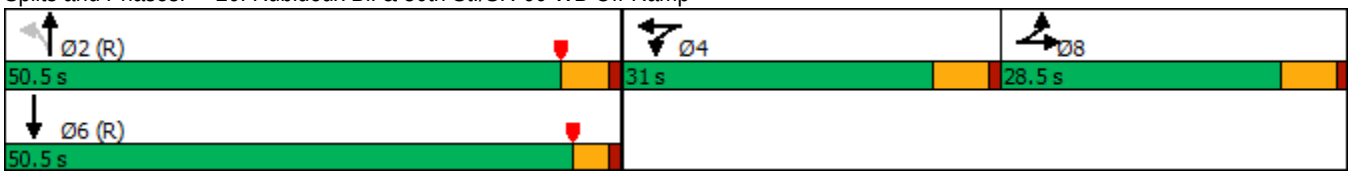
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.2	39.1		9.4	5.4	38.9		9.4				
Change Period (Y+Rc), s	4.6	6.2		4.6	4.6	6.2		4.6				
Max Green Setting (Gmax), s	5.1	42.5		27.0	5.1	42.5		27.0				
Max Q Clear Time (g_c+I1), s	2.2	17.7		3.2	2.3	20.4		2.5				
Green Ext Time (p_c), s	0.0	11.6		0.2	0.0	12.3		0.0				

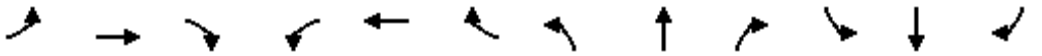
Intersection Summary			
HCM 6th Ctrl Delay		9.2	
HCM 6th LOS		A	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Configurations							
Traffic Volume (vph)	44	0	535	114	102	1324	1649
Future Volume (vph)	44	0	535	114	102	1324	1649
Turn Type	Split	NA	Split	NA	Perm	NA	NA
Protected Phases	8	8	4	4		2	6
Permitted Phases					2		
Detector Phase	8	8	4	4	2	2	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.5	28.5	31.0	31.0	50.5	50.5	50.5
Total Split (%)	25.9%	25.9%	28.2%	28.2%	45.9%	45.9%	45.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	16.7	16.7	25.5	25.5	51.8	51.8	52.8
Actuated g/C Ratio	0.15	0.15	0.23	0.23	0.47	0.47	0.48
v/c Ratio	0.18	0.76	1.17	1.08	1.63	0.85	1.07
Control Delay	39.7	45.6	140.2	105.2	358.7	22.2	74.0
Queue Delay	0.0	0.1	2.0	9.4	0.0	14.8	11.1
Total Delay	39.7	45.8	142.3	114.6	358.7	37.0	85.0
LOS	D	D	F	F	F	D	F
Approach Delay		44.7		128.7		60.0	85.0
Approach LOS		D		F		E	F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.63	
Intersection Signal Delay: 82.8	Intersection LOS: F
Intersection Capacity Utilization 113.4%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	0	215	535	114	189	102	1324	0	0	1649	55
Future Volume (veh/h)	44	0	215	535	114	189	102	1324	0	0	1649	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	48	0	63	441	322	176	111	1439	0	0	1792	57
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	106	0	94	419	268	146	96	2036	0	0	2014	64
Arrive On Green	0.06	0.00	0.06	0.23	0.23	0.23	0.38	0.38	0.00	0.00	0.56	0.56
Sat Flow, veh/h	1810	0	1610	1810	1155	631	253	3705	0	0	3666	113
Grp Volume(v), veh/h	48	0	63	441	0	498	111	1439	0	0	902	947
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1810	0	1786	253	1805	0	0	1805	1879
Q Serve(g_s), s	2.8	0.0	4.2	25.5	0.0	25.5	13.3	37.2	0.0	0.0	47.9	48.7
Cycle Q Clear(g_c), s	2.8	0.0	4.2	25.5	0.0	25.5	62.0	37.2	0.0	0.0	47.9	48.7
Prop In Lane	1.00		1.00	1.00		0.35	1.00		0.00	0.00		0.06
Lane Grp Cap(c), veh/h	106	0	94	419	0	414	96	2036	0	0	1018	1060
V/C Ratio(X)	0.45	0.00	0.67	1.05	0.00	1.20	1.15	0.71	0.00	0.00	0.89	0.89
Avail Cap(c_a), veh/h	378	0	337	419	0	414	96	2036	0	0	1018	1060
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.91	0.91	0.00	0.00	0.21	0.21
Uniform Delay (d), s/veh	50.1	0.0	50.7	42.2	0.0	42.3	63.1	26.5	0.0	0.0	20.9	21.1
Incr Delay (d2), s/veh	3.6	0.0	9.4	58.1	0.0	112.1	135.1	1.9	0.0	0.0	2.7	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	2.0	17.6	0.0	23.6	6.3	17.0	0.0	0.0	18.8	19.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.7	0.0	60.1	100.3	0.0	154.4	198.2	28.4	0.0	0.0	23.6	23.9
LnGrp LOS	D	A	E	F	A	F	F	C	A	A	C	C
Approach Vol, veh/h		111			939			1550			1849	
Approach Delay, s/veh		57.3			129.0			40.6			23.8	
Approach LOS		E			F			D			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		67.0		31.0		67.0		12.0				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		45.5		25.5		* 47		23.0				
Max Q Clear Time (g_c+I1), s		64.0		27.5		50.7		6.2				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.5				

Intersection Summary	
HCM 6th Ctrl Delay	52.7
HCM 6th LOS	D

Notes

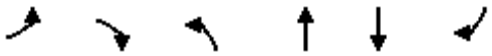
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	NBL	NBT	SBT
Lane Configurations			
Traffic Volume (vph)	238	1426	1463
Future Volume (vph)	238	1426	1463
Turn Type	Prot	NA	NA
Protected Phases	5	2	6
Permitted Phases			
Detector Phase	5	2	6
Switch Phase			
Minimum Initial (s)	5.0	10.0	10.0
Minimum Split (s)	9.6	27.8	27.8
Total Split (s)	28.0	110.0	82.0
Total Split (%)	25.5%	100.0%	74.5%
Yellow Time (s)	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8
Lead/Lag	Lead		Lag
Lead-Lag Optimize?	Yes		Yes
Recall Mode	None	C-Min	C-Min
Act Effct Green (s)	19.2	110.0	80.4
Actuated g/C Ratio	0.17	1.00	0.73
v/c Ratio	0.82	0.42	1.02
Control Delay	72.7	0.3	33.7
Queue Delay	0.0	0.4	32.4
Total Delay	72.7	0.7	66.1
LOS	E	A	E
Approach Delay		11.0	66.1
Approach LOS		B	E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 43.5	Intersection LOS: D
Intersection Capacity Utilization 92.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 21: Rubidoux Bl. & SR-60 WB On-Ramp



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	238	1426	1463	935
Future Volume (veh/h)	0	0	238	1426	1463	935
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach				No	No	
Adj Sat Flow, veh/h/ln			1900	1900	1900	1900
Adj Flow Rate, veh/h			256	1533	1573	1005
Peak Hour Factor			0.93	0.93	0.93	0.93
Percent Heavy Veh, %			0	0	0	0
Cap, veh/h			282	3420	1653	952
Arrive On Green			0.31	1.00	1.00	1.00
Sat Flow, veh/h			1810	3705	2301	1270
Grp Volume(v), veh/h			256	1533	1256	1322
Grp Sat Flow(s),veh/h/ln			1810	1805	1805	1670
Q Serve(g_s), s			14.9	0.0	0.0	82.5
Cycle Q Clear(g_c), s			14.9	0.0	0.0	82.5
Prop In Lane			1.00			0.76
Lane Grp Cap(c), veh/h			282	3420	1353	1252
V/C Ratio(X)			0.91	0.45	0.93	1.06
Avail Cap(c_a), veh/h			385	3420	1353	1252
HCM Platoon Ratio			2.00	2.00	2.00	2.00
Upstream Filter(I)			0.60	0.60	0.09	0.09
Uniform Delay (d), s/veh			37.1	0.0	0.0	0.0
Incr Delay (d2), s/veh			11.4	0.3	1.5	27.3
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			6.2	0.1	0.6	9.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			48.5	0.3	1.5	27.3
LnGrp LOS			D	A	A	F
Approach Vol, veh/h				1789	2578	
Approach Delay, s/veh				7.2	14.7	
Approach LOS				A	B	

Timer - Assigned Phs	2			5	6
Phs Duration (G+Y+Rc), s	110.0			21.7	88.3
Change Period (Y+Rc), s	5.8			4.6	5.8
Max Green Setting (Gmax), s	104.2			23.4	76.2
Max Q Clear Time (g_c+I1), s	2.0			16.9	84.5
Green Ext Time (p_c), s	18.6			0.2	0.0

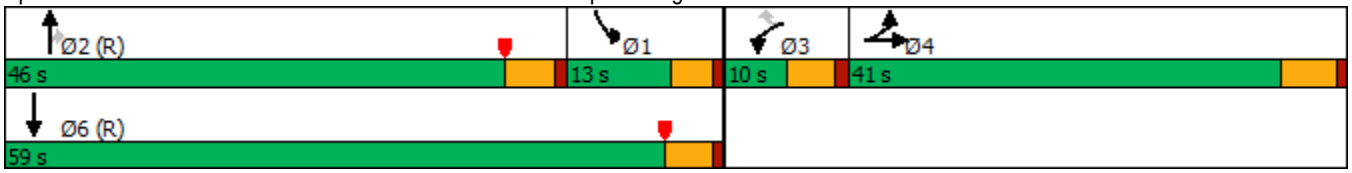
Intersection Summary	
HCM 6th Ctrl Delay	11.6
HCM 6th LOS	B

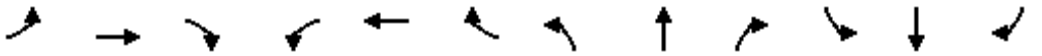
22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.

Lane Group	EBL	EBT	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	749	48	14	2	913	341	268	1196
Future Volume (vph)	749	48	14	2	913	341	268	1196
Turn Type	Split	NA	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4	4	3		2		1	6
Permitted Phases				3		2		
Detector Phase	4	4	3	3	2	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	10.0	10.0	45.0	45.0	9.5	30.0
Total Split (s)	41.0	41.0	10.0	10.0	46.0	46.0	13.0	59.0
Total Split (%)	37.3%	37.3%	9.1%	9.1%	41.8%	41.8%	11.8%	53.6%
Yellow Time (s)	4.5	4.5	4.0	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.0	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	41.5	41.5	5.0	5.0	35.6	35.6	13.9	54.0
Actuated g/C Ratio	0.38	0.38	0.05	0.05	0.32	0.32	0.13	0.49
v/c Ratio	1.01	0.91	0.18	0.01	0.82	0.48	1.22	0.70
Control Delay	74.2	48.2	55.8	0.0	40.2	5.8	141.9	13.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.0
Total Delay	74.2	48.2	55.8	0.0	40.2	5.8	141.9	54.6
LOS	E	D	E	A	D	A	F	D
Approach Delay		61.7			30.8			70.6
Approach LOS		E			C			E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.22	
Intersection Signal Delay: 55.1	Intersection LOS: E
Intersection Capacity Utilization 93.9%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	749	48	413	14	0	2	0	913	341	268	1196	0
Future Volume (veh/h)	749	48	413	14	0	2	0	913	341	268	1196	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	554	366	279	15	0	0	0	951	307	279	1246	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	584	323	246	0	0	0	0	1093	488	422	2100	0
Arrive On Green	0.32	0.32	0.32	0.00	0.00	0.00	0.00	0.30	0.30	0.08	0.19	0.00
Sat Flow, veh/h	1810	1000	762		0		0	3705	1610	1810	3705	0
Grp Volume(v), veh/h	554	0	645		0.0		0	951	307	279	1246	0
Grp Sat Flow(s),veh/h/ln	1810	0	1763				0	1805	1610	1810	1805	0
Q Serve(g_s), s	32.9	0.0	35.5				0.0	27.4	16.9	16.5	34.6	0.0
Cycle Q Clear(g_c), s	32.9	0.0	35.5				0.0	27.4	16.9	16.5	34.6	0.0
Prop In Lane	1.00		0.43				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	584	0	569				0	1093	488	422	2100	0
V/C Ratio(X)	0.95	0.00	1.13				0.00	0.87	0.63	0.66	0.59	0.00
Avail Cap(c_a), veh/h	584	0	569				0	1346	600	422	2100	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.56	0.56	0.09	0.09	0.00
Uniform Delay (d), s/veh	36.4	0.0	37.3				0.0	36.3	28.9	46.5	32.6	0.0
Incr Delay (d2), s/veh	24.8	0.0	80.3				0.0	5.6	3.4	0.3	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.7	0.0	27.1				0.0	12.4	6.7	8.0	16.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.2	0.0	117.6				0.0	41.9	32.3	46.8	32.7	0.0
LnGrp LOS	E	A	F				A	D	C	D	C	A
Approach Vol, veh/h		1199						1258			1525	
Approach Delay, s/veh		91.5						39.6			35.3	
Approach LOS		F						D			D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	30.7	38.3		41.0		69.0
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0
Max Green Setting (Gmax), s	8.5	* 41		35.5		54.0
Max Q Clear Time (g_c+I1), s	18.5	29.4		37.5		36.6
Green Ext Time (p_c), s	0.0	3.9		0.0		5.6

Intersection Summary		
HCM 6th Ctrl Delay		53.6
HCM 6th LOS		D

Notes

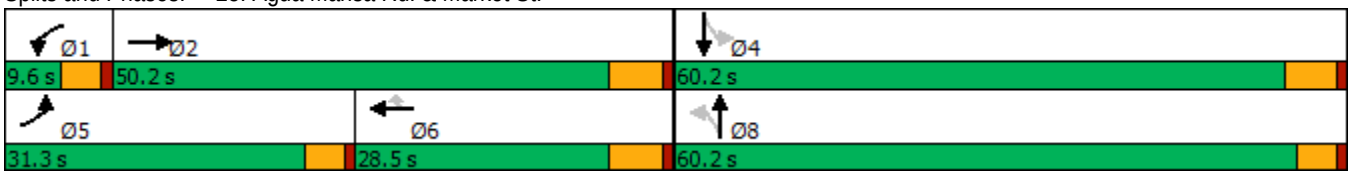
User approved volume balancing among the lanes for turning movement.

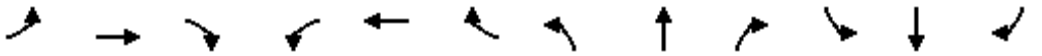
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	WBR	NBT	SBL	SBT	Ø1
Lane Configurations								
Traffic Volume (vph)	762	695	599	210	3	261	2	
Future Volume (vph)	762	695	599	210	3	261	2	
Turn Type	Prot	NA	NA	Perm	NA	Perm	NA	
Protected Phases	5	2	6		8		4	1
Permitted Phases				6		4		
Detector Phase	5	2	6	6	8	4	4	
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	31.8	26.8	26.8	14.6	43.8	43.8	9.6
Total Split (s)	31.3	50.2	28.5	28.5	60.2	60.2	60.2	9.6
Total Split (%)	26.1%	41.8%	23.8%	23.8%	50.2%	50.2%	50.2%	8%
Yellow Time (s)	3.6	4.8	4.8	4.8	3.6	4.8	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.6	5.8	5.8	5.8	4.6		5.8	
Lead/Lag	Lead	Lag	Lag	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				Yes
Recall Mode	None	Max	Max	Max	None	None	None	None
Act Effct Green (s)	26.7	54.0	22.7	22.7	55.6		54.4	
Actuated g/C Ratio	0.22	0.45	0.19	0.19	0.46		0.45	
v/c Ratio	1.04	0.46	0.93	0.46	0.00		1.12	
Control Delay	88.9	24.0	69.8	8.7	17.3		97.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	88.9	24.0	69.8	8.7	17.3		97.3	
LOS	F	C	E	A	B		F	
Approach Delay		57.9	54.0		17.3		97.3	
Approach LOS		E	D		B		F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.12	
Intersection Signal Delay: 67.0	Intersection LOS: E
Intersection Capacity Utilization 105.6%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	762	695	4	0	599	210	0	3	0	261	2	529
Future Volume (veh/h)	762	695	4	0	599	210	0	3	0	261	2	529
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	811	739	3	0	637	78	0	3	0	278	2	325
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	826	1755	7	2	722	322	0	801	0	341	2	345
Arrive On Green	0.24	0.48	0.48	0.00	0.20	0.20	0.00	0.42	0.00	0.42	0.42	0.42
Sat Flow, veh/h	3510	3687	15	1810	3610	1610	0	1900	0	700	5	818
Grp Volume(v), veh/h	811	362	380	0	637	78	0	3	0	605	0	0
Grp Sat Flow(s),veh/h/ln	1755	1805	1897	1810	1805	1610	0	1900	0	1523	0	0
Q Serve(g_s), s	26.1	14.9	14.9	0.0	19.4	4.6	0.0	0.1	0.0	43.2	0.0	0.0
Cycle Q Clear(g_c), s	26.1	14.9	14.9	0.0	19.4	4.6	0.0	0.1	0.0	43.3	0.0	0.0
Prop In Lane	1.00		0.01	1.00		1.00	0.00		0.00	0.46		0.54
Lane Grp Cap(c), veh/h	826	859	903	2	722	322	0	801	0	689	0	0
V/C Ratio(X)	0.98	0.42	0.42	0.00	0.88	0.24	0.00	0.00	0.00	0.88	0.00	0.00
Avail Cap(c_a), veh/h	826	859	903	80	722	322	0	931	0	777	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	43.1	19.5	19.5	0.0	44.1	38.1	0.0	19.0	0.0	31.5	0.0	0.0
Incr Delay (d2), s/veh	26.7	1.5	1.4	0.0	14.6	1.8	0.0	0.0	0.0	10.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.9	6.2	6.5	0.0	9.8	1.9	0.0	0.0	0.0	16.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.8	21.0	20.9	0.0	58.7	39.9	0.0	19.0	0.0	41.9	0.0	0.0
LnGrp LOS	E	C	C	A	E	D	A	B	A	D	A	A
Approach Vol, veh/h		1553			715			3			605	
Approach Delay, s/veh		46.5			56.6			19.0			41.9	
Approach LOS		D			E			B			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	59.8		53.7	31.3	28.5		53.7				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	44.4		54.4	26.7	22.7		* 56				
Max Q Clear Time (g_c+I1), s	0.0	16.9		45.3	28.1	21.4		2.1				
Green Ext Time (p_c), s	0.0	4.3		2.6	0.0	0.6		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		48.0	
HCM 6th LOS		D	

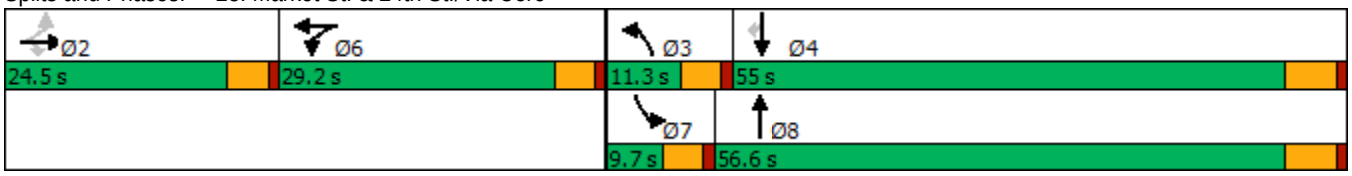
Notes

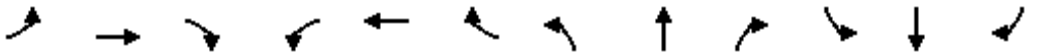
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	3	31	206	235	39	49	964	6	937	3
Future Volume (vph)	3	31	206	235	39	49	964	6	937	3
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	24.5	24.5	24.5	29.2	29.2	11.3	56.6	9.7	55.0	55.0
Total Split (%)	20.4%	20.4%	20.4%	24.3%	24.3%	9.4%	47.2%	8.1%	45.8%	45.8%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		13.3	13.3	20.1	20.1	6.3	57.0	5.1	50.1	50.1
Actuated g/C Ratio		0.12	0.12	0.19	0.19	0.06	0.53	0.05	0.47	0.47
v/c Ratio		0.35	0.72	0.80	0.18	0.53	0.63	0.08	0.64	0.00
Control Delay		53.8	31.1	60.6	31.8	71.0	21.4	56.0	26.0	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		53.8	31.1	60.6	31.8	71.0	21.4	56.0	26.0	0.0
LOS		D	C	E	C	E	C	E	C	A
Approach Delay		34.3			55.2		23.6		26.1	
Approach LOS		C			E		C		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 107.4	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 29.1	Intersection LOS: C
Intersection Capacity Utilization 65.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	31	206	235	39	16	49	964	79	6	937	3
Future Volume (veh/h)	3	31	206	235	39	16	49	964	79	6	937	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	3	36	152	270	45	9	56	1108	90	7	1077	3
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	17	207	190	310	264	53	72	1722	140	16	1729	771
Arrive On Green	0.12	0.12	0.12	0.17	0.17	0.17	0.04	0.51	0.51	0.01	0.48	0.48
Sat Flow, veh/h	146	1747	1598	1810	1537	307	1810	3375	274	1810	3610	1610
Grp Volume(v), veh/h	39	0	152	270	0	54	56	592	606	7	1077	3
Grp Sat Flow(s),veh/h/ln	1893	0	1598	1810	0	1845	1810	1805	1844	1810	1805	1610
Q Serve(g_s), s	1.9	0.0	9.5	14.9	0.0	2.6	3.1	24.6	24.6	0.4	22.8	0.1
Cycle Q Clear(g_c), s	1.9	0.0	9.5	14.9	0.0	2.6	3.1	24.6	24.6	0.4	22.8	0.1
Prop In Lane	0.08		1.00	1.00		0.17	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	224	0	190	310	0	316	72	921	941	16	1729	771
V/C Ratio(X)	0.17	0.00	0.80	0.87	0.00	0.17	0.77	0.64	0.64	0.44	0.62	0.00
Avail Cap(c_a), veh/h	367	0	310	433	0	442	118	921	941	90	1729	771
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.7	0.0	44.1	41.4	0.0	36.3	48.8	18.3	18.3	50.7	19.9	14.0
Incr Delay (d2), s/veh	0.4	0.0	7.7	13.0	0.0	0.3	6.4	3.4	3.4	6.9	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	4.0	7.8	0.0	1.2	1.5	10.1	10.3	0.2	9.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.1	0.0	51.7	54.4	0.0	36.6	55.2	21.8	21.7	57.5	21.6	14.0
LnGrp LOS	D	A	D	D	A	D	E	C	C	E	C	B
Approach Vol, veh/h		191			324			1254			1087	
Approach Delay, s/veh		49.6			51.4			23.3			21.8	
Approach LOS		D			D			C			C	

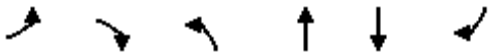
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.8	8.7	55.0		22.2	5.5	58.2				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		19.9	6.7	49.2		24.6	5.1	50.8				
Max Q Clear Time (g_c+I1), s		11.5	5.1	24.8		16.9	2.4	26.6				
Green Ext Time (p_c), s		0.4	0.0	7.7		0.7	0.0	8.0				

Intersection Summary		
HCM 6th Ctrl Delay		27.6
HCM 6th LOS		C

Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	326	53	878	476
Future Volume (vph)	326	53	878	476
Turn Type	Prot	Prot	NA	NA
Protected Phases	4	5	2	6
Permitted Phases				
Detector Phase	4	5	2	6
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	32.8	9.6	15.8	22.8
Total Split (s)	35.0	10.0	55.0	45.0
Total Split (%)	38.9%	11.1%	61.1%	50.0%
Yellow Time (s)	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.8
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	Min	Min
Act Effct Green (s)	27.0	5.4	47.2	39.6
Actuated g/C Ratio	0.31	0.06	0.55	0.46
v/c Ratio	0.91	0.59	0.55	0.97
Control Delay	50.0	63.6	14.1	50.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	50.0	63.6	14.1	50.6
LOS	D	E	B	D
Approach Delay	50.0		16.9	50.6
Approach LOS	D		B	D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 85.9	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 34.9	Intersection LOS: C
Intersection Capacity Utilization 77.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 33: Agua Mansa Rd. & El Rivino Rd.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	326	87	53	878	476	187
Future Volume (veh/h)	326	87	53	878	476	187
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	408	0	66	1098	595	234
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	461		89	2145	630	248
Arrive On Green	0.26	0.00	0.05	0.59	0.49	0.49
Sat Flow, veh/h	1805	0	1810	3705	1297	510
Grp Volume(v), veh/h	409	0	66	1098	0	829
Grp Sat Flow(s),veh/h/ln	1810	0	1810	1805	0	1807
Q Serve(g_s), s	16.8	0.0	2.8	13.7	0.0	33.6
Cycle Q Clear(g_c), s	16.8	0.0	2.8	13.7	0.0	33.6
Prop In Lane	1.00	0.00	1.00			0.28
Lane Grp Cap(c), veh/h	462		89	2145	0	877
V/C Ratio(X)	0.88		0.74	0.51	0.00	0.95
Avail Cap(c_a), veh/h	685		127	2303	0	919
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.6	0.0	36.2	9.1	0.0	18.9
Incr Delay (d2), s/veh	9.3	0.0	6.6	0.2	0.0	17.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	0.0	1.3	4.1	0.0	15.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	37.0	0.0	42.8	9.3	0.0	36.4
LnGrp LOS	D		D	A	A	D
Approach Vol, veh/h	409			1164	829	
Approach Delay, s/veh	37.0			11.2	36.4	
Approach LOS	D			B	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		51.6		25.5	8.4	43.2
Change Period (Y+Rc), s		5.8		5.8	4.6	5.8
Max Green Setting (Gmax), s		49.2		29.2	5.4	39.2
Max Q Clear Time (g_c+I1), s		15.7		18.8	4.8	35.6
Green Ext Time (p_c), s		8.7		0.9	0.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay	24.3
HCM 6th LOS	C

Notes

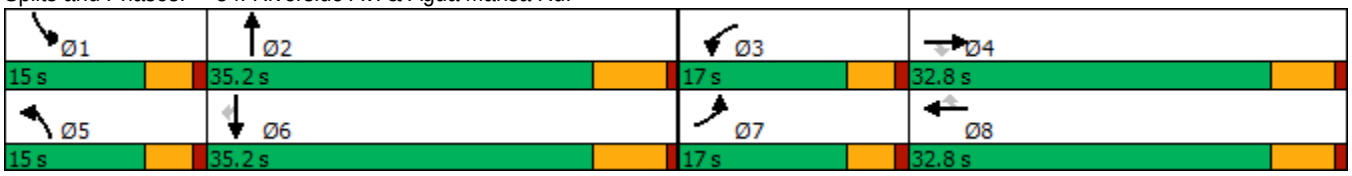
User approved volume balancing among the lanes for turning movement.

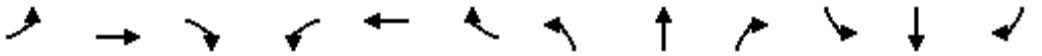
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	252	485	248	94	296	80	201	525	118	573	139
Future Volume (vph)	252	485	248	94	296	80	201	525	118	573	139
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	17.0	32.8	32.8	17.0	32.8	32.8	15.0	35.2	15.0	35.2	35.2
Total Split (%)	17.0%	32.8%	32.8%	17.0%	32.8%	32.8%	15.0%	35.2%	15.0%	35.2%	35.2%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	12.7	22.2	22.2	8.7	15.8	15.8	10.6	21.8	9.1	20.3	20.3
Actuated g/C Ratio	0.16	0.27	0.27	0.11	0.19	0.19	0.13	0.27	0.11	0.25	0.25
v/c Ratio	0.94	0.51	0.42	0.51	0.44	0.20	0.89	0.71	0.61	0.66	0.29
Control Delay	79.0	29.4	6.1	46.3	31.0	2.0	76.0	30.9	51.2	31.7	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.0	29.4	6.1	46.3	31.0	2.0	76.0	30.9	51.2	31.7	6.4
LOS	E	C	A	D	C	A	E	C	D	C	A
Approach Delay		36.2			29.2			41.5		30.2	
Approach LOS		D			C			D		C	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 81.4	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 35.0	Intersection LOS: D
Intersection Capacity Utilization 68.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	252	485	248	94	296	80	201	525	127	118	573	139
Future Volume (veh/h)	252	485	248	94	296	80	201	525	127	118	573	139
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	262	505	160	98	308	68	209	547	126	123	597	137
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	306	886	394	127	530	236	252	835	192	158	846	376
Arrive On Green	0.17	0.25	0.25	0.07	0.15	0.15	0.14	0.29	0.29	0.09	0.23	0.23
Sat Flow, veh/h	1810	3610	1604	1810	3610	1607	1810	2915	669	1810	3610	1603
Grp Volume(v), veh/h	262	505	160	98	308	68	209	338	335	123	597	137
Grp Sat Flow(s),veh/h/ln	1810	1805	1604	1810	1805	1607	1810	1805	1780	1810	1805	1603
Q Serve(g_s), s	9.7	8.5	5.8	3.7	5.5	2.6	7.8	11.4	11.5	4.6	10.5	4.9
Cycle Q Clear(g_c), s	9.7	8.5	5.8	3.7	5.5	2.6	7.8	11.4	11.5	4.6	10.5	4.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	306	886	394	127	530	236	252	517	510	158	846	376
V/C Ratio(X)	0.86	0.57	0.41	0.77	0.58	0.29	0.83	0.65	0.66	0.78	0.71	0.36
Avail Cap(c_a), veh/h	324	1409	626	324	1409	627	272	749	738	272	1498	665
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	22.9	21.9	31.6	27.5	26.3	29.0	21.7	21.7	30.9	24.3	22.2
Incr Delay (d2), s/veh	17.9	0.6	0.7	3.7	1.0	0.7	16.5	1.4	1.5	3.2	1.1	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	3.3	2.0	1.6	2.2	1.0	4.1	4.2	4.2	1.9	4.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.8	23.5	22.5	35.3	28.5	27.0	45.5	23.1	23.2	34.1	25.4	22.8
LnGrp LOS	D	C	C	D	C	C	D	C	C	C	C	C
Approach Vol, veh/h		927			474			882			857	
Approach Delay, s/veh		29.6			29.7			28.4			26.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	26.3	9.5	22.8	14.2	22.7	16.3	16.0
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	10.4	28.7	12.4	27.0	10.4	28.7	12.4	27.0
Max Q Clear Time (g_c+I1), s	6.6	13.5	5.7	10.5	9.8	12.5	11.7	7.5
Green Ext Time (p_c), s	0.0	3.1	0.0	3.2	0.0	3.5	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	28.4
HCM 6th LOS	C

APPENDIX 9.5: OPENING YEAR BACKGROUND PLUS PROJECT PLUS CUMULATIVE CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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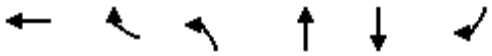


Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	873	382	518	1411	1805	667
v/c Ratio	1.39	0.68	0.85	0.68	0.95	0.70
Control Delay	215.3	33.1	61.8	4.3	46.5	9.4
Queue Delay	0.1	0.0	0.0	0.3	44.7	0.0
Total Delay	215.3	33.1	61.8	4.6	91.1	9.4
Queue Length 50th (ft)	~845	207	184	56	454	48
Queue Length 95th (ft)	#1103	324	m234	m140	#568	182
Internal Link Dist (ft)	1745			340	476	
Turn Bay Length (ft)		480				
Base Capacity (vph)	627	565	636	2083	1898	950
Starvation Cap Reductn	0	0	0	215	0	0
Spillback Cap Reductn	6	0	0	0	617	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.41	0.68	0.81	0.76	1.41	0.70

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

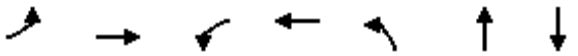
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	580	1096	1348	772	538	2183
v/c Ratio	0.74	1.49	0.92	0.77	0.98	1.28
Control Delay	31.2	253.0	54.3	18.0	49.5	151.1
Queue Delay	5.6	1.4	1.5	0.0	0.0	1.4
Total Delay	36.9	254.5	55.7	18.0	49.5	152.4
Queue Length 50th (ft)	343	~1116	353	219	199	~1042
Queue Length 95th (ft)	492	#1386	m379	m206	m189	m#958
Internal Link Dist (ft)		2158	960			340
Turn Bay Length (ft)	340			555	400	
Base Capacity (vph)	787	736	1471	1004	550	1706
Starvation Cap Reductn	0	0	0	0	0	536
Spillback Cap Reductn	152	143	40	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.91	1.85	0.94	0.77	0.98	1.87

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	57	312	385	377	66	1393	1756
v/c Ratio	0.18	0.84	0.81	0.73	0.96	0.97	1.19
Control Delay	38.0	48.9	50.1	35.5	128.9	42.4	124.8
Queue Delay	0.0	1.0	16.1	7.0	0.0	42.4	0.7
Total Delay	38.0	49.9	66.2	42.5	128.9	84.8	125.5
Queue Length 50th (ft)	34	143	262	193	~50	~566	~830
Queue Length 95th (ft)	68	#243	354	286	#149	#778	#1044
Internal Link Dist (ft)		471		1307		110	1510
Turn Bay Length (ft)					75		
Base Capacity (vph)	381	423	569	597	69	1443	1473
Starvation Cap Reductn	0	0	0	0	0	255	0
Spillback Cap Reductn	0	21	171	172	0	0	261
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.78	0.97	0.89	0.96	1.17	1.45

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.

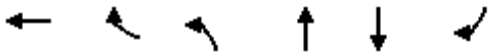
Lane Group	EBL	EBT	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	546	525	19	5	827	572	349	976
v/c Ratio	0.94	0.90	0.23	0.03	0.73	0.65	1.24	0.53
Control Delay	61.6	53.3	57.7	0.2	37.7	5.9	152.1	9.5
Queue Delay	0.0	0.2	0.0	0.0	0.2	0.0	0.0	2.1
Total Delay	61.6	53.5	57.7	0.2	37.9	5.9	152.1	11.6
Queue Length 50th (ft)	~405	360	13	0	278	0	~319	187
Queue Length 95th (ft)	#645	#592	38	0	315	74	m#438	m191
Internal Link Dist (ft)		1049			1396			322
Turn Bay Length (ft)	300			25		200	90	
Base Capacity (vph)	582	583	82	191	1329	942	282	1841
Starvation Cap Reductn	0	0	0	0	0	0	0	687
Spillback Cap Reductn	0	2	0	0	83	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.90	0.23	0.03	0.66	0.61	1.24	0.85

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	629	382	752	1811	1514	626
v/c Ratio	1.07	0.68	1.31	0.86	0.77	0.63
Control Delay	94.0	33.9	192.7	9.5	32.8	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	94.0	33.9	192.7	9.5	32.8	5.1
Queue Length 50th (ft)	~527	210	~345	185	334	0
Queue Length 95th (ft)	#764	329	m#417	m205	392	74
Internal Link Dist (ft)	1745			340	476	
Turn Bay Length (ft)		480				
Base Capacity (vph)	586	560	573	2116	2004	994
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.07	0.68	1.31	0.86	0.76	0.63

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

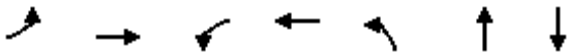
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	520	482	1856	874	429	1557
v/c Ratio	0.90	0.89	0.85	0.79	0.85	0.72
Control Delay	55.2	52.0	29.1	13.1	48.2	11.0
Queue Delay	1.1	1.0	0.0	0.0	0.0	1.1
Total Delay	56.3	53.1	29.1	13.1	48.2	12.2
Queue Length 50th (ft)	352	308	492	356	157	133
Queue Length 95th (ft)	#551	#502	m439	m304	m192	m142
Internal Link Dist (ft)		2158	960			340
Turn Bay Length (ft)	340			555	400	
Base Capacity (vph)	612	575	2174	1109	531	2151
Starvation Cap Reductn	0	0	0	0	0	338
Spillback Cap Reductn	18	17	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.88	0.86	0.85	0.79	0.81	0.86

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	48	234	466	445	111	1439	1852
v/c Ratio	0.18	0.76	0.83	0.78	1.61	1.05	1.33
Control Delay	40.0	44.0	47.3	39.4	357.1	65.8	182.1
Queue Delay	0.0	0.2	1.8	1.3	0.0	20.2	1.2
Total Delay	40.0	44.2	49.1	40.7	357.1	86.1	183.3
Queue Length 50th (ft)	30	104	310	263	~92	~620	~925
Queue Length 95th (ft)	61	180	426	374	#210	#868	#1197
Internal Link Dist (ft)		471		1307		110	1510
Turn Bay Length (ft)					75		
Base Capacity (vph)	377	402	642	649	69	1369	1396
Starvation Cap Reductn	0	0	0	0	0	192	0
Spillback Cap Reductn	0	14	70	73	0	0	360
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.60	0.81	0.77	1.61	1.22	1.79

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.

Lane Group	EBL	EBT	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	655	605	15	2	951	355	279	1246
v/c Ratio	1.01	0.91	0.18	0.01	0.82	0.48	1.22	0.70
Control Delay	74.2	48.2	55.8	0.0	40.2	5.8	141.9	13.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.0
Total Delay	74.2	48.2	55.8	0.0	40.2	5.8	141.9	54.6
Queue Length 50th (ft)	453	342	10	0	321	11	~255	314
Queue Length 95th (ft)	#821	#666	32	0	372	71	m#310	m287
Internal Link Dist (ft)		1049			1396			322
Turn Bay Length (ft)	300			25		200	90	
Base Capacity (vph)	647	663	82	191	1345	810	228	1772
Starvation Cap Reductn	0	0	0	0	0	0	0	619
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.01	0.91	0.18	0.01	0.71	0.44	1.22	1.08

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

APPENDIX 10.1: CUMULATIVE HORIZON YEAR (2045) NO PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	460	5	48	474	5	68
Future Vol, veh/h	460	5	48	474	5	68
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	561	6	59	578	6	83

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	567	0	1257	561
Stage 1	-	-	-	-	561	-
Stage 2	-	-	-	-	696	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1015	-	191	531
Stage 1	-	-	-	-	575	-
Stage 2	-	-	-	-	498	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1015	-	175	531
Mov Cap-2 Maneuver	-	-	-	-	175	-
Stage 1	-	-	-	-	575	-
Stage 2	-	-	-	-	455	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	14.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	466	-	-	1015	-
HCM Lane V/C Ratio	0.191	-	-	0.058	-
HCM Control Delay (s)	14.5	-	-	8.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.7	-	-	0.2	-

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	6	487	36	13	437	0	58	9	18	2	21	28
Future Vol, veh/h	6	487	36	13	437	0	58	9	18	2	21	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	601	44	16	540	0	72	11	22	2	26	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	540	0	0	645	0	0	1240	1209	623	1226	1231	540
Stage 1	-	-	-	-	-	-	637	637	-	572	572	-
Stage 2	-	-	-	-	-	-	603	572	-	654	659	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1039	-	-	950	-	-	153	184	490	157	179	546
Stage 1	-	-	-	-	-	-	469	475	-	509	508	-
Stage 2	-	-	-	-	-	-	489	508	-	459	464	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1039	-	-	950	-	-	124	178	490	139	173	546
Mov Cap-2 Maneuver	-	-	-	-	-	-	124	178	-	139	173	-
Stage 1	-	-	-	-	-	-	464	470	-	503	496	-
Stage 2	-	-	-	-	-	-	424	496	-	423	459	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.3	68.6	22.1
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	153	1039	-	-	950	-	-	273
HCM Lane V/C Ratio	0.686	0.007	-	-	0.017	-	-	0.231
HCM Control Delay (s)	68.6	8.5	0	-	8.9	0	-	22.1
HCM Lane LOS	F	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	4	0	-	-	0.1	-	-	0.9

Intersection	
Int Delay, s/veh	3.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	34	50	9	18	53
Future Vol, veh/h	11	34	50	9	18	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	100	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	13	40	58	10	21	62

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	167	63	0	0	68	0
Stage 1	63	-	-	-	-	-
Stage 2	104	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	828	1007	-	-	1546	-
Stage 1	965	-	-	-	-	-
Stage 2	925	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	816	1007	-	-	1546	-
Mov Cap-2 Maneuver	816	-	-	-	-	-
Stage 1	965	-	-	-	-	-
Stage 2	912	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	1.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	816	1007	1546	-
HCM Lane V/C Ratio	-	-	0.016	0.039	0.014	-
HCM Control Delay (s)	-	-	9.5	8.7	7.4	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.1	0	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	22	0	6	0	39	9	11	66	0
Future Vol, veh/h	0	0	0	22	0	6	0	39	9	11	66	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	26	0	7	0	46	11	13	79	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	160	162	79	157	157	52	79	0	0	57	0	0
Stage 1	105	105	-	52	52	-	-	-	-	-	-	-
Stage 2	55	57	-	105	105	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	810	734	987	814	739	1021	1532	-	-	1560	-	-
Stage 1	906	812	-	966	856	-	-	-	-	-	-	-
Stage 2	962	851	-	906	812	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	799	727	987	808	732	1021	1532	-	-	1560	-	-
Mov Cap-2 Maneuver	799	727	-	808	732	-	-	-	-	-	-	-
Stage 1	906	805	-	966	856	-	-	-	-	-	-	-
Stage 2	955	851	-	898	805	-	-	-	-	-	-	-

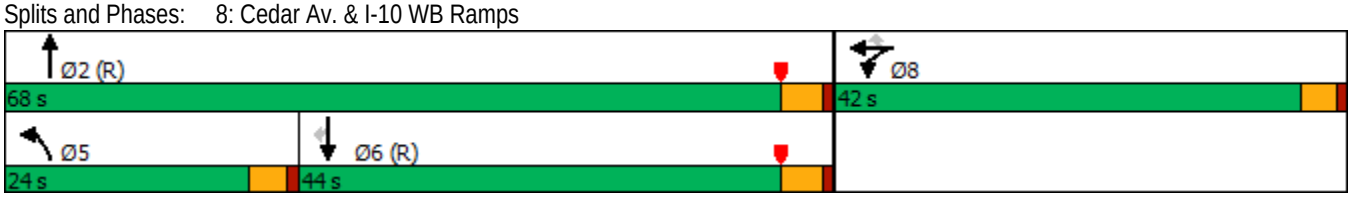
Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.4	0	1
HCM LOS	A	A		

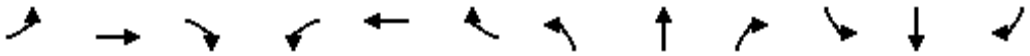
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1532	-	-	-	846	1560	-	-
HCM Lane V/C Ratio	-	-	-	-	0.039	0.008	-	-
HCM Control Delay (s)	0	-	-	0	9.4	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	448	240	1159	1865	570
Future Volume (vph)	0	448	240	1159	1865	570
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	42.0	42.0	24.0	68.0	44.0	44.0
Total Split (%)	38.2%	38.2%	21.8%	61.8%	40.0%	40.0%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	34.8	34.8	18.4	66.7	44.3	44.3
Actuated g/C Ratio	0.32	0.32	0.17	0.61	0.40	0.40
v/c Ratio	0.89	0.79	0.83	0.55	0.93	0.64
Control Delay	49.9	40.2	68.5	14.3	42.0	9.7
Queue Delay	38.2	0.0	0.0	0.5	46.0	0.0
Total Delay	88.0	40.2	68.5	14.7	88.0	9.7
LOS	F	D	E	B	F	A
Approach Delay	66.5			24.0	69.7	
Approach LOS	E			C	E	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 55.5	Intersection LOS: E
Intersection Capacity Utilization 112.9%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	445	0	448	240	1159	0	0	1865	570
Future Volume (veh/h)	0	0	0	445	0	448	240	1159	0	0	1865	570
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				464	0	361	250	1207	0	0	1943	328
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				522	0	465	276	2289	0	0	2308	716
Arrive On Green				0.29	0.00	0.29	0.31	1.00	0.00	0.00	0.44	0.44
Sat Flow, veh/h				1810	0	1610	1810	3705	0	0	5358	1610
Grp Volume(v), veh/h				464	0	361	250	1207	0	0	1943	328
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1729	1610
Q Serve(g_s), s				27.0	0.0	22.6	14.6	0.0	0.0	0.0	36.6	15.6
Cycle Q Clear(g_c), s				27.0	0.0	22.6	14.6	0.0	0.0	0.0	36.6	15.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				522	0	465	276	2289	0	0	2308	716
V/C Ratio(X)				0.89	0.00	0.78	0.90	0.53	0.00	0.00	0.84	0.46
Avail Cap(c_a), veh/h				625	0	556	329	2289	0	0	2308	716
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.45	0.45	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				37.4	0.0	35.9	37.4	0.0	0.0	0.0	27.1	21.3
Incr Delay (d2), s/veh				13.0	0.0	5.7	13.2	0.4	0.0	0.0	3.9	2.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				13.2	0.0	9.2	6.2	0.1	0.0	0.0	14.9	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				50.4	0.0	41.6	50.6	0.4	0.0	0.0	31.0	23.4
LnGrp LOS				D	A	D	D	A	A	A	C	C
Approach Vol, veh/h					825			1457			2271	
Approach Delay, s/veh					46.6			9.0			29.9	
Approach LOS					D			A			C	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	74.3		20.8	53.4		35.7						
Change Period (Y+Rc), s	4.5		4.0	4.5		4.0						
Max Green Setting (Gmax), s	63.5		20.0	39.5		38.0						
Max Q Clear Time (g_c+I1), s	2.0		16.6	38.6		29.0						
Green Ext Time (p_c), s	11.5		0.2	0.9		2.8						

Intersection Summary		
HCM 6th Ctrl Delay	26.2	
HCM 6th LOS	C	

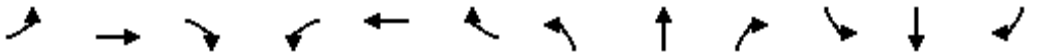
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	395	0	1004	770	551	1759
Future Volume (vph)	395	0	1004	770	551	1759
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	44.0	44.0	27.0	27.0	39.0	66.0
Total Split (%)	40.0%	40.0%	24.5%	24.5%	35.5%	60.0%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	37.9	37.9	25.6	25.6	35.5	64.6
Actuated g/C Ratio	0.34	0.34	0.23	0.23	0.32	0.59
v/c Ratio	0.65	0.92	0.90	0.98	1.02	0.89
Control Delay	35.7	53.5	43.9	39.5	63.5	19.4
Queue Delay	0.0	0.0	0.0	0.0	30.7	46.9
Total Delay	35.7	53.5	43.9	39.5	94.2	66.4
LOS	D	D	D	D	F	E
Approach Delay		46.0	42.0			73.0
Approach LOS		D	D			E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 57.2	Intersection LOS: E
Intersection Capacity Utilization 112.9%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	395	0	444	0	0	0	0	1004	770	551	1759	0
Future Volume (veh/h)	395	0	444	0	0	0	0	1004	770	551	1759	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	425	0	425				0	1080	554	592	1891	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	539	0	480				0	1085	336	703	2289	0
Arrive On Green	0.30	0.00	0.30				0.00	0.07	0.07	0.39	0.63	0.00
Sat Flow, veh/h	1810	0	1610				0	5358	1606	1810	3705	0
Grp Volume(v), veh/h	425	0	425				0	1080	554	592	1891	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1729	1606	1810	1805	0
Q Serve(g_s), s	23.7	0.0	27.7				0.0	22.9	23.0	32.7	44.3	0.0
Cycle Q Clear(g_c), s	23.7	0.0	27.7				0.0	22.9	23.0	32.7	44.3	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	539	0	480				0	1085	336	703	2289	0
V/C Ratio(X)	0.79	0.00	0.89				0.00	1.00	1.65	0.84	0.83	0.00
Avail Cap(c_a), veh/h	666	0	593				0	1085	336	703	2289	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.29	0.29	0.25	0.25	0.00
Uniform Delay (d), s/veh	35.4	0.0	36.8				0.0	51.2	51.2	30.6	15.5	0.0
Incr Delay (d2), s/veh	5.1	0.0	13.0				0.0	13.8	296.2	2.3	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	0.0	12.1				0.0	11.9	37.5	14.0	15.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.5	0.0	49.8				0.0	64.9	347.4	32.9	16.4	0.0
LnGrp LOS	D	A	D				A	E	F	C	B	A
Approach Vol, veh/h		850						1634			2483	
Approach Delay, s/veh		45.2						160.7			20.3	
Approach LOS		D						F			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	46.7	27.0		36.3		73.7
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	35.5	* 23		40.5		62.0
Max Q Clear Time (g_c+I1), s	34.7	25.0		29.7		46.3
Green Ext Time (p_c), s	0.1	0.0		3.1		9.0

Intersection Summary	
HCM 6th Ctrl Delay	70.8
HCM 6th LOS	E

Notes

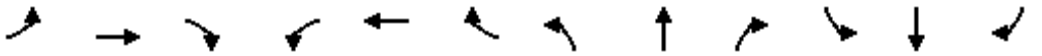
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	278	5	14	5	20	1329	219	1478	506
Future Volume (vph)	278	5	14	5	20	1329	219	1478	506
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases		4		8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	30.0	30.0	10.2	10.2	16.2	28.2	16.2	28.2	28.2
Total Split (s)	36.0	36.0	36.0	36.0	16.2	57.2	16.8	57.8	57.8
Total Split (%)	32.7%	32.7%	32.7%	32.7%	14.7%	52.0%	15.3%	52.5%	52.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	3.0	4.7	3.0	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.0	5.7	4.0	5.7	5.7
Lead/Lag					Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min	C-Min
Act Effct Green (s)	30.5	30.5	30.5	30.5	59.1	51.4	69.5	63.6	63.6
Actuated g/C Ratio	0.28	0.28	0.28	0.28	0.54	0.47	0.63	0.58	0.58
v/c Ratio	1.02	0.07	0.04	0.32	0.13	0.89	0.88	0.78	0.54
Control Delay	98.2	13.4	29.9	6.6	8.1	27.7	48.5	16.2	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0
Total Delay	98.2	13.4	29.9	6.6	8.1	31.1	48.5	16.2	3.0
LOS	F	B	C	A	A	C	D	B	A
Approach Delay		90.4		8.3		30.8		16.4	
Approach LOS		F		A		C		B	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 68.3 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 26.5	Intersection LOS: C
Intersection Capacity Utilization 94.0%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 10: Cedar Av. & Orange St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	278	5	24	14	5	167	20	1329	33	219	1478	506
Future Volume (veh/h)	278	5	24	14	5	167	20	1329	33	219	1478	506
Initial Q (Qb), veh	0	0	0	0	0	0	0	44	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	305	5	21	15	5	97	22	1460	36	241	1624	465
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	359	87	365	432	22	421	131	1744	25	272	2046	910
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.02	0.50	0.50	0.06	0.38	0.38
Sat Flow, veh/h	1313	318	1337	1404	80	1543	1810	3600	89	1810	3610	1606
Grp Volume(v), veh/h	305	0	26	15	0	102	22	731	765	241	1624	465
Grp Sat Flow(s),veh/h/ln	1313	0	1656	1404	0	1622	1810	1805	1884	1810	1805	1606
Q Serve(g_s), s	24.6	0.0	1.3	0.9	0.0	5.4	0.7	37.4	37.6	7.0	43.9	24.5
Cycle Q Clear(g_c), s	30.0	0.0	1.3	2.2	0.0	5.4	0.7	37.4	37.6	7.0	43.9	24.5
Prop In Lane	1.00		0.81	1.00		0.95	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	359	0	452	432	0	442	131	864	907	272	2046	910
V/C Ratio(X)	0.85	0.00	0.06	0.03	0.00	0.23	0.17	0.85	0.84	0.89	0.79	0.51
Avail Cap(c_a), veh/h	359	0	452	432	0	442	300	903	943	333	2046	910
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.30	0.30	0.30	0.33	0.33	0.33
Uniform Delay (d), s/veh	43.1	0.0	29.6	30.4	0.0	31.0	20.1	27.5	27.3	33.3	28.4	22.4
Incr Delay (d2), s/veh	17.1	0.0	0.1	0.0	0.0	0.3	0.2	3.3	3.1	8.3	1.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.4	27.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	0.0	0.5	0.3	0.0	2.2	0.3	27.2	27.3	6.2	19.7	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.2	0.0	29.6	30.4	0.0	31.3	20.3	61.2	57.4	41.6	29.5	23.1
LnGrp LOS	E	A	C	C	A	C	C	E	E	D	C	C
Approach Vol, veh/h		331			117			1518			2330	
Approach Delay, s/veh		57.8			31.2			58.7			29.5	
Approach LOS		E			C			E			C	

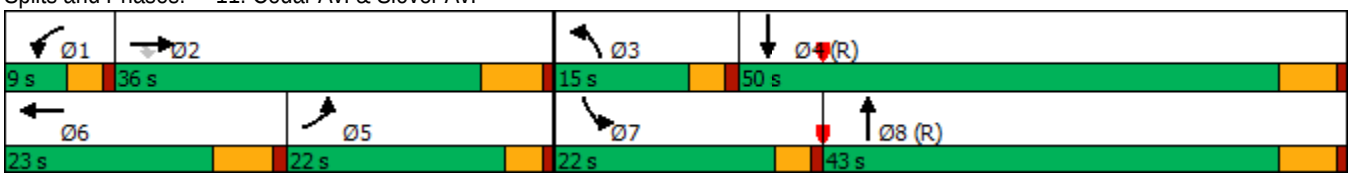
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.3	60.7		36.0	6.0	68.0		36.0				
Change Period (Y+Rc), s	4.0	5.7		6.0	4.0	5.7		6.0				
Max Green Setting (Gmax), s	12.8	51.5		30.0	12.2	52.1		30.0				
Max Q Clear Time (g_c+I1), s	9.0	39.6		32.0	2.7	45.9		7.4				
Green Ext Time (p_c), s	0.2	7.3		0.0	0.0	5.1		0.6				

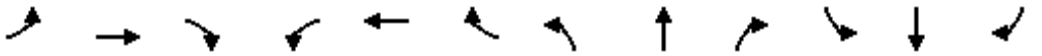
Intersection Summary												
HCM 6th Ctrl Delay			42.0									
HCM 6th LOS			D									

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	344	224	126	69	351	96	876	280	1111
Future Volume (vph)	344	224	126	69	351	96	876	280	1111
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2		1	6	3	8	7	4
Permitted Phases			2						
Detector Phase	5	2	2	1	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	29.0	29.0	8.0	23.0	8.0	32.7	8.0	24.7
Total Split (s)	22.0	36.0	36.0	9.0	23.0	15.0	43.0	22.0	50.0
Total Split (%)	20.0%	32.7%	32.7%	8.2%	20.9%	13.6%	39.1%	20.0%	45.5%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	4.7	3.0	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	4.0	5.7	4.0	5.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	19.4	30.8	30.8	5.6	17.0	9.9	35.9	18.0	44.0
Actuated g/C Ratio	0.18	0.28	0.28	0.05	0.15	0.09	0.33	0.16	0.40
v/c Ratio	1.12	0.23	0.24	0.77	0.91	0.61	0.83	0.98	0.89
Control Delay	129.0	31.5	5.0	99.9	62.4	63.0	58.7	91.5	41.0
Queue Delay	0.0	0.0	0.0	0.0	10.2	0.0	0.4	0.0	0.0
Total Delay	129.0	31.5	5.0	99.9	72.7	63.0	59.2	91.5	41.0
LOS	F	C	A	F	E	E	E	F	D
Approach Delay		75.0			75.9		59.5		50.3
Approach LOS		E			E		E		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.12	
Intersection Signal Delay: 61.2	Intersection LOS: E
Intersection Capacity Utilization 92.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 11: Cedar Av. & Slover Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	344	224	126	69	351	162	96	876	70	280	1111	124
Future Volume (veh/h)	344	224	126	69	351	162	96	876	70	280	1111	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	355	231	108	71	362	136	99	903	70	289	1145	127
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	296	1050	467	82	399	147	125	1089	84	296	1361	151
Arrive On Green	0.16	0.29	0.29	0.05	0.15	0.15	0.07	0.32	0.32	0.05	0.14	0.14
Sat Flow, veh/h	1810	3610	1607	1810	2579	954	1810	3394	263	1810	3276	363
Grp Volume(v), veh/h	355	231	108	71	252	246	99	480	493	289	630	642
Grp Sat Flow(s),veh/h/ln	1810	1805	1607	1810	1805	1728	1810	1805	1853	1810	1805	1833
Q Serve(g_s), s	18.0	5.3	5.6	4.3	15.1	15.5	5.9	27.1	27.1	17.5	37.4	37.6
Cycle Q Clear(g_c), s	18.0	5.3	5.6	4.3	15.1	15.5	5.9	27.1	27.1	17.5	37.4	37.6
Prop In Lane	1.00		1.00	1.00		0.55	1.00		0.14	1.00		0.20
Lane Grp Cap(c), veh/h	296	1050	467	82	279	267	125	579	595	296	750	762
V/C Ratio(X)	1.20	0.22	0.23	0.86	0.90	0.92	0.79	0.83	0.83	0.98	0.84	0.84
Avail Cap(c_a), veh/h	296	1050	467	82	279	267	181	612	628	296	750	762
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.86	0.86	0.55	0.55	0.55
Uniform Delay (d), s/veh	46.0	29.5	29.6	52.2	45.7	45.8	50.4	34.6	34.6	51.8	43.9	44.0
Incr Delay (d2), s/veh	117.4	0.1	0.2	56.5	30.0	35.0	12.2	11.3	11.0	32.6	6.4	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.4	2.2	2.1	3.2	9.1	9.2	3.0	13.1	13.4	11.2	19.3	19.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	163.4	29.6	29.9	108.7	75.7	80.9	62.6	45.9	45.6	84.4	50.3	50.3
LnGrp LOS	F	C	C	F	E	F	E	D	D	F	D	D
Approach Vol, veh/h		694			569			1072			1561	
Approach Delay, s/veh		98.1			82.1			47.3			56.6	
Approach LOS		F			F			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	38.0	11.6	51.4	24.0	23.0	22.0	41.0
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	6.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	5.0	30.0	11.0	44.3	18.0	* 17	18.0	37.3
Max Q Clear Time (g_c+I1), s	6.3	7.6	7.9	39.6	20.0	17.5	19.5	29.1
Green Ext Time (p_c), s	0.0	1.5	0.1	3.1	0.0	0.0	0.0	3.5

Intersection Summary	
HCM 6th Ctrl Delay	65.2
HCM 6th LOS	E

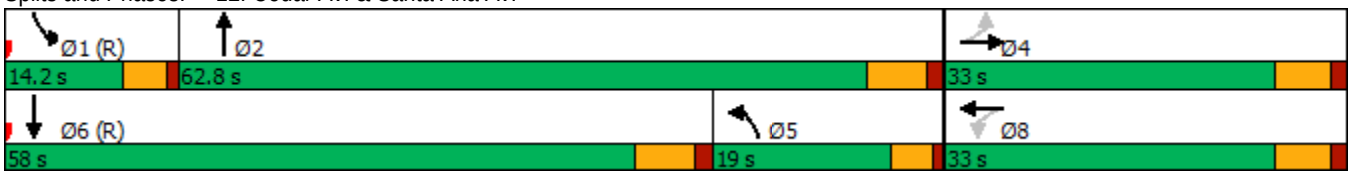
Notes

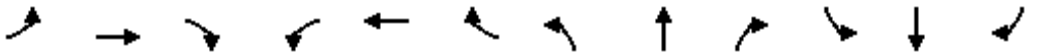
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	89	99	77	80	104	732	46	1026
Future Volume (vph)	89	99	77	80	104	732	46	1026
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	9.5	27.5	9.5	27.5
Total Split (s)	33.0	33.0	33.0	33.0	19.0	62.8	14.2	58.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	17.3%	57.1%	12.9%	52.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	4.5	6.5	4.5	6.5
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min
Act Effct Green (s)		30.2		30.2	10.9	51.6	11.3	51.9
Actuated g/C Ratio		0.27		0.27	0.10	0.47	0.10	0.47
v/c Ratio		0.89		0.78	0.63	0.50	0.27	0.69
Control Delay		62.0		50.6	55.2	11.9	38.7	47.8
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		62.0		50.6	55.2	11.9	38.7	47.8
LOS		E		D	E	B	D	D
Approach Delay		62.0		50.6		17.0		47.4
Approach LOS		E		D		B		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 90 (82%), Referenced to phase 1:SBL and 6:SBT, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 39.2	Intersection LOS: D
Intersection Capacity Utilization 73.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 12: Cedar Av. & Santa Ana Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	99	131	77	80	100	104	732	36	46	1026	44
Future Volume (veh/h)	89	99	131	77	80	100	104	732	36	46	1026	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	97	108	101	84	87	97	113	796	35	50	1115	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	132	131	109	125	122	116	279	1648	72	242	1525	55
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.31	0.94	0.94	0.04	0.14	0.14
Sat Flow, veh/h	366	537	445	335	501	474	1810	3522	155	1810	3555	127
Grp Volume(v), veh/h	306	0	0	268	0	0	113	408	423	50	566	589
Grp Sat Flow(s),veh/h/ln	1348	0	0	1309	0	0	1810	1805	1872	1810	1805	1877
Q Serve(g_s), s	3.3	0.0	0.0	0.0	0.0	0.0	5.4	2.9	2.9	2.9	33.0	33.0
Cycle Q Clear(g_c), s	24.8	0.0	0.0	21.5	0.0	0.0	5.4	2.9	2.9	2.9	33.0	33.0
Prop In Lane	0.32		0.33	0.31		0.36	1.00		0.08	1.00		0.07
Lane Grp Cap(c), veh/h	372	0	0	362	0	0	279	844	876	242	775	805
V/C Ratio(X)	0.82	0.00	0.00	0.74	0.00	0.00	0.41	0.48	0.48	0.21	0.73	0.73
Avail Cap(c_a), veh/h	374	0	0	365	0	0	279	924	958	242	845	879
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.86	0.86	0.86	0.45	0.45	0.45
Uniform Delay (d), s/veh	40.6	0.0	0.0	38.9	0.0	0.0	34.1	2.0	2.0	46.9	41.1	41.1
Incr Delay (d2), s/veh	14.2	0.0	0.0	8.3	0.0	0.0	0.3	1.3	1.3	0.1	2.8	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	0.0	0.0	7.5	0.0	0.0	2.2	1.0	1.0	1.3	16.4	17.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.8	0.0	0.0	47.3	0.0	0.0	34.4	3.3	3.3	47.0	43.9	43.8
LnGrp LOS	D	A	A	D	A	A	C	A	A	D	D	D
Approach Vol, veh/h		306			268			944			1205	
Approach Delay, s/veh		54.8			47.3			7.0			44.0	
Approach LOS		D			D			A			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.2	58.0		32.8	23.5	53.7		32.8				
Change Period (Y+Rc), s	4.5	6.5		6.0	6.5	* 6.5		6.0				
Max Green Setting (Gmax), s	9.7	56.3		27.0	14.5	* 52		27.0				
Max Q Clear Time (g_c+I1), s	4.9	4.9		26.8	7.4	35.0		23.5				
Green Ext Time (p_c), s	0.0	16.5		0.0	0.1	12.2		0.6				

Intersection Summary		
HCM 6th Ctrl Delay		32.7
HCM 6th LOS		C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	77	135	105	108	120	178	45	666	176	1207
Future Volume (vph)	77	135	105	108	120	178	45	666	176	1207
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	32.0	32.0	32.0	32.0	32.0	32.0	17.0	58.0	20.0	61.0
Total Split (%)	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%	15.5%	52.7%	18.2%	55.5%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)		31.5	31.5		31.5	31.5	10.2	47.8	14.7	52.3
Actuated g/C Ratio		0.29	0.29		0.29	0.29	0.09	0.43	0.13	0.48
v/c Ratio		0.69	0.23		0.79	0.34	0.30	0.53	0.81	0.79
Control Delay		48.6	14.9		57.2	9.4	68.2	17.4	48.4	37.4
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		48.6	14.9		57.2	9.4	68.2	17.4	48.4	37.4
LOS		D	B		E	A	E	B	D	D
Approach Delay		37.4			36.2			20.3		38.8
Approach LOS		D			D			C		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 33.3	Intersection LOS: C
Intersection Capacity Utilization 82.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	135	105	108	120	178	45	666	77	176	1207	15
Future Volume (veh/h)	77	135	105	108	120	178	45	666	77	176	1207	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	86	150	98	120	133	132	50	740	75	196	1341	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	45	44	388	48	14	383	287	1613	163	229	1667	16
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.32	0.97	0.97	0.04	0.15	0.15
Sat Flow, veh/h	0	182	1610	0	59	1589	1810	3309	335	1810	3663	36
Grp Volume(v), veh/h	236	0	98	253	0	132	50	403	412	196	661	693
Grp Sat Flow(s),veh/h/ln	182	0	1610	59	0	1589	1810	1805	1839	1810	1805	1894
Q Serve(g_s), s	0.0	0.0	5.4	0.0	0.0	7.6	2.2	1.1	1.1	11.8	38.9	38.9
Cycle Q Clear(g_c), s	26.5	0.0	5.4	26.5	0.0	7.6	2.2	1.1	1.1	11.8	38.9	38.9
Prop In Lane	0.36		1.00	0.47		1.00	1.00		0.18	1.00		0.02
Lane Grp Cap(c), veh/h	89	0	388	62	0	383	287	880	896	229	822	862
V/C Ratio(X)	2.66	0.00	0.25	4.05	0.00	0.34	0.17	0.46	0.46	0.86	0.80	0.80
Avail Cap(c_a), veh/h	89	0	388	62	0	383	287	880	896	255	903	947
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.95	0.95	0.95	0.67	0.67	0.67
Uniform Delay (d), s/veh	42.5	0.0	33.7	49.1	0.0	34.6	32.4	0.7	0.7	51.7	42.0	42.0
Incr Delay (d2), s/veh	779.8	0.0	0.5	1409.3	0.0	0.8	0.3	1.6	1.6	16.2	3.6	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.6	0.0	2.1	26.2	0.0	2.9	0.9	0.6	0.6	6.7	19.5	20.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	822.3	0.0	34.2	1458.4	0.0	35.3	32.6	2.4	2.3	67.9	45.6	45.5
LnGrp LOS	F	A	C	F	A	D	C	A	A	E	D	D
Approach Vol, veh/h		334			385			865			1550	
Approach Delay, s/veh		591.1			970.5			4.1			48.4	
Approach LOS		F			F			A			D	

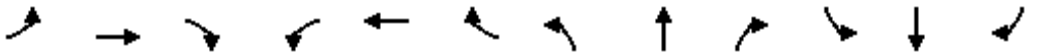
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.4	59.6		32.0	21.9	56.1		32.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	15.5	52.0		26.5	12.5	55.0		26.5				
Max Q Clear Time (g_c+I1), s	13.8	3.1		28.5	4.2	40.9		28.5				
Green Ext Time (p_c), s	0.1	8.2		0.0	0.0	9.1		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		207.3	
HCM 6th LOS		F	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	144	9	29	9	109	652	26	1352
Future Volume (vph)	144	9	29	9	109	652	26	1352
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	10.0	10.0	9.5	24.0	9.5	24.0
Total Split (s)	30.0	30.0	30.0	30.0	17.0	68.0	12.0	63.0
Total Split (%)	27.3%	27.3%	27.3%	27.3%	15.5%	61.8%	10.9%	57.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)		27.8		17.9	11.1	64.1	6.7	55.7
Actuated g/C Ratio		0.25		0.16	0.10	0.58	0.06	0.51
v/c Ratio		1.14		0.28	0.64	0.33	0.25	0.81
Control Delay		118.5		33.3	63.3	12.6	60.8	26.2
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		118.5		33.3	63.3	12.6	60.8	26.2
LOS		F		C	E	B	E	C
Approach Delay		118.5		33.3		19.8		26.9
Approach LOS		F		C		B		C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 74 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.14	
Intersection Signal Delay: 41.3	Intersection LOS: D
Intersection Capacity Utilization 88.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 14: Rubidoux Bl./Cedar Av. & 7th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	9	333	29	9	11	109	652	5	26	1352	53
Future Volume (veh/h)	144	9	333	29	9	11	109	652	5	26	1352	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	152	9	259	31	9	4	115	686	4	27	1423	56
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	171	11	222	193	53	19	143	2231	13	46	1958	77
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.08	0.61	0.61	0.03	0.55	0.55
Sat Flow, veh/h	557	49	976	603	232	83	1810	3680	21	1810	3541	139
Grp Volume(v), veh/h	420	0	0	44	0	0	115	336	354	27	724	755
Grp Sat Flow(s),veh/h/ln	1582	0	0	918	0	0	1810	1805	1896	1810	1805	1875
Q Serve(g_s), s	21.5	0.0	0.0	0.0	0.0	0.0	6.9	9.9	9.9	1.6	33.0	33.1
Cycle Q Clear(g_c), s	25.0	0.0	0.0	3.5	0.0	0.0	6.9	9.9	9.9	1.6	33.0	33.1
Prop In Lane	0.36		0.62	0.70		0.09	1.00		0.01	1.00		0.07
Lane Grp Cap(c), veh/h	404	0	0	264	0	0	143	1094	1150	46	998	1037
V/C Ratio(X)	1.04	0.00	0.00	0.17	0.00	0.00	0.81	0.31	0.31	0.58	0.73	0.73
Avail Cap(c_a), veh/h	404	0	0	264	0	0	206	1094	1150	123	998	1037
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.67	0.67	0.67	0.58	0.58	0.58
Uniform Delay (d), s/veh	43.6	0.0	0.0	34.0	0.0	0.0	49.8	10.5	10.5	53.0	18.4	18.4
Incr Delay (d2), s/veh	55.3	0.0	0.0	0.4	0.0	0.0	9.7	0.5	0.5	6.6	2.7	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.5	0.0	0.0	1.0	0.0	0.0	3.4	3.6	3.7	0.8	12.9	13.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	99.0	0.0	0.0	34.4	0.0	0.0	59.5	11.0	10.9	59.6	21.1	21.0
LnGrp LOS	F	A	A	C	A	A	E	B	B	E	C	C
Approach Vol, veh/h		420			44			805			1506	
Approach Delay, s/veh		99.0			34.4			17.9			21.8	
Approach LOS		F			C			B			C	

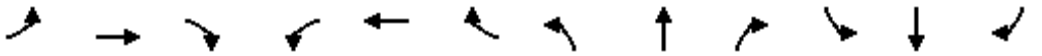
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.3	72.7		30.0	13.2	66.8		30.0				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	7.5	62.0		25.0	12.5	57.0		25.0				
Max Q Clear Time (g_c+I1), s	3.6	11.9		27.0	8.9	35.1		5.5				
Green Ext Time (p_c), s	0.0	6.3		0.0	0.1	13.7		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		32.5	
HCM 6th LOS		C	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	19	12	146	5	133	5	631	286	985
Future Volume (vph)	19	12	146	5	133	5	631	286	985
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	35.0	35.0	35.0	9.5	24.0	9.5	24.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.6	34.0	21.0	45.4
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%	10.7%	37.8%	23.3%	50.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	5.0	4.5	6.0	4.5	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min
Act Effct Green (s)		15.8		16.5	16.5	5.2	24.7	16.1	43.8
Actuated g/C Ratio		0.22		0.23	0.23	0.07	0.34	0.22	0.60
v/c Ratio		0.18		0.54	0.29	0.04	0.74	0.76	0.49
Control Delay		14.7		32.6	5.7	38.2	25.5	43.8	11.3
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		14.7		32.6	5.7	38.2	25.5	43.8	11.3
LOS		B		C	A	D	C	D	B
Approach Delay		14.7		20.0			25.6		18.5
Approach LOS		B		C			C		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 73.1	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 21.0	Intersection LOS: C
Intersection Capacity Utilization 68.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 15: Rubidoux Bl. & Tarragona Dr./El Rivino Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	12	30	146	5	133	5	631	221	286	985	13
Future Volume (veh/h)	19	12	30	146	5	133	5	631	221	286	985	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	20	13	23	154	5	108	5	664	226	301	1037	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	114	79	78	341	9	319	12	914	311	358	1958	26
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.01	0.35	0.35	0.20	0.54	0.54
Sat Flow, veh/h	165	400	394	1125	47	1610	1810	2644	899	1810	3647	49
Grp Volume(v), veh/h	56	0	0	159	0	108	5	453	437	301	513	538
Grp Sat Flow(s),veh/h/ln	959	0	0	1172	0	1610	1810	1805	1738	1810	1805	1891
Q Serve(g_s), s	0.2	0.0	0.0	0.0	0.0	3.5	0.2	13.2	13.2	9.6	11.0	11.0
Cycle Q Clear(g_c), s	8.5	0.0	0.0	8.3	0.0	3.5	0.2	13.2	13.2	9.6	11.0	11.0
Prop In Lane	0.36		0.41	0.97		1.00	1.00		0.52	1.00		0.03
Lane Grp Cap(c), veh/h	271	0	0	350	0	319	12	624	601	358	969	1016
V/C Ratio(X)	0.21	0.00	0.00	0.45	0.00	0.34	0.42	0.73	0.73	0.84	0.53	0.53
Avail Cap(c_a), veh/h	735	0	0	775	0	805	154	842	811	498	1185	1242
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.1	0.0	0.0	22.6	0.0	20.7	29.7	17.2	17.2	23.1	9.0	9.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	1.3	0.0	0.9	21.3	2.7	2.8	8.9	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	2.1	0.0	1.3	0.1	4.8	4.6	4.4	3.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.7	0.0	0.0	23.9	0.0	21.6	51.0	19.9	20.0	32.1	9.6	9.6
LnGrp LOS	C	A	A	C	A	C	D	B	B	C	A	A
Approach Vol, veh/h		56			267			895			1352	
Approach Delay, s/veh		20.7			23.0			20.1			14.6	
Approach LOS		C			C			C			B	

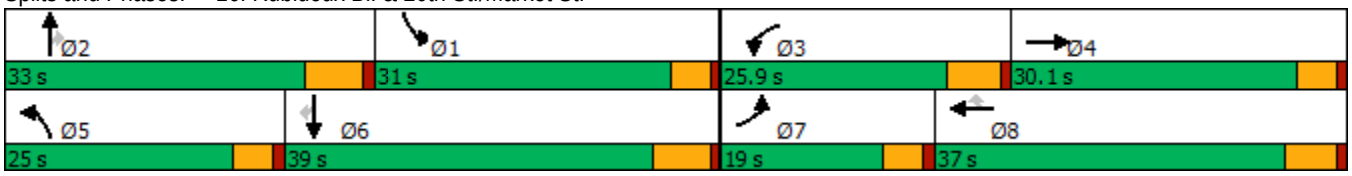
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.4	26.8		16.9	4.9	38.2		16.9				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	16.5	28.0		30.0	5.1	39.4		30.0				
Max Q Clear Time (g_c+I1), s	11.6	15.2		10.5	2.2	13.0		10.3				
Green Ext Time (p_c), s	0.4	5.6		0.3	0.0	9.6		1.8				

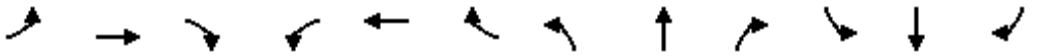
Intersection Summary			
HCM 6th Ctrl Delay		17.5	
HCM 6th LOS		B	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	125	160	372	159	558	189	255	430	564	528	102
Future Volume (vph)	125	160	372	159	558	189	255	430	564	528	102
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	14.6	14.6	15.8	27.8	27.8	9.6	28.2	28.2	9.6	35.2	35.2
Total Split (s)	19.0	30.1	25.9	37.0	37.0	25.0	33.0	33.0	31.0	39.0	39.0
Total Split (%)	15.8%	25.1%	21.6%	30.8%	30.8%	20.8%	27.5%	27.5%	25.8%	32.5%	32.5%
Yellow Time (s)	3.6	3.6	4.8	4.8	4.8	3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	5.8	5.8	5.8	4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	12.1	12.7	14.8	15.4	15.4	13.7	14.1	14.1	19.1	19.6	19.6
Actuated g/C Ratio	0.15	0.15	0.18	0.19	0.19	0.17	0.17	0.17	0.23	0.24	0.24
v/c Ratio	0.49	0.56	0.62	0.46	0.75	0.66	0.43	0.71	0.72	0.64	0.21
Control Delay	43.5	18.2	37.9	36.7	10.0	45.8	34.7	11.5	36.2	33.4	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.5	18.2	37.9	36.7	10.0	45.8	34.7	11.5	36.2	33.4	2.1
LOS	D	B	D	D	A	D	C	B	D	C	A
Approach Delay		24.5		23.4			25.7			32.0	
Approach LOS		C		C			C			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 82.8	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 26.9	Intersection LOS: C
Intersection Capacity Utilization 67.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	160	221	372	159	558	189	255	430	564	528	102
Future Volume (veh/h)	125	160	221	372	159	558	189	255	430	564	528	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	129	165	213	384	164	575	195	263	355	581	544	74
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	223	322	287	506	409	347	238	588	262	694	904	402
Arrive On Green	0.12	0.18	0.18	0.14	0.22	0.22	0.13	0.16	0.16	0.20	0.25	0.25
Sat Flow, veh/h	1810	1805	1610	3510	1900	1610	1810	3610	1610	3510	3610	1607
Grp Volume(v), veh/h	129	165	213	384	164	575	195	263	355	581	544	74
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1755	1900	1610	1810	1805	1610	1755	1805	1607
Q Serve(g_s), s	5.1	6.3	9.5	8.0	5.6	8.9	8.0	5.0	7.9	12.1	10.1	2.7
Cycle Q Clear(g_c), s	5.1	6.3	9.5	8.0	5.6	8.9	8.0	5.0	7.9	12.1	10.1	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	223	322	287	506	409	347	238	588	262	694	904	402
V/C Ratio(X)	0.58	0.51	0.74	0.76	0.40	1.66	0.82	0.45	1.35	0.84	0.60	0.18
Avail Cap(c_a), veh/h	344	607	542	931	782	663	487	1277	569	1223	1562	696
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.4	28.1	29.5	31.2	25.5	8.9	32.0	28.6	12.9	29.2	25.1	22.3
Incr Delay (d2), s/veh	2.4	1.3	3.8	2.4	0.6	306.4	2.7	0.5	169.0	1.1	0.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	2.8	3.9	3.3	2.4	34.5	3.4	2.0	16.4	4.7	3.9	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.7	29.4	33.2	33.5	26.2	315.3	34.7	29.2	181.9	30.3	25.7	22.5
LnGrp LOS	C	C	C	C	C	F	C	C	F	C	C	C
Approach Vol, veh/h		507			1123			813			1199	
Approach Delay, s/veh		32.1			176.7			97.2			27.7	
Approach LOS		C			F			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.2	18.5	16.7	19.3	14.6	25.2	13.9	22.1
Change Period (Y+Rc), s	6.2	* 6.2	5.8	* 5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	26.4	* 27	20.1	* 26	20.4	32.8	14.4	31.2
Max Q Clear Time (g_c+I1), s	14.1	9.9	10.0	11.5	10.0	12.1	7.1	10.9
Green Ext Time (p_c), s	0.9	2.5	1.0	2.0	0.2	3.3	0.2	2.9

Intersection Summary	
HCM 6th Ctrl Delay	89.8
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	156.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	9	13	34	18	18	22	851	57	171	945	5
Future Vol, veh/h	5	9	13	34	18	18	22	851	57	171	945	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	10	14	37	20	20	24	925	62	186	1027	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1923	2438	516	1896	2409	495	1032	0	0	988	0	0
Stage 1	1402	1402	-	1005	1005	-	-	-	-	-	-	-
Stage 2	521	1036	-	891	1404	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	41	32	509	43	33	525	681	-	-	708	-	-
Stage 1	150	209	-	263	322	-	-	-	-	-	-	-
Stage 2	512	311	-	308	208	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	11	509	~ 5	~ 12	525	681	-	-	707	-	-
Mov Cap-2 Maneuver	-	11	-	~ 5	~ 12	-	-	-	-	-	-	-
Stage 1	138	80	-	242	296	-	-	-	-	-	-	-
Stage 2	424	286	-	100	79	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s		$ 4734.9	0.6	4.1
HCM LOS	-	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	681	-	-	-	8	707	-	-
HCM Lane V/C Ratio	0.035	-	-	-	9.511	0.263	-	-
HCM Control Delay (s)	10.5	0.4	-	$ 4734.9	11.9	2.7	-	
HCM Lane LOS	B	A	-	-	F	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	-	11.1	1.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	5	9	5	5	7	18	918	17	10	976	5
Future Vol, veh/h	5	5	9	5	5	7	18	918	17	10	976	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	110	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	5	10	5	5	8	20	998	18	11	1061	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1628	2142	533	1602	2135	508	1066	0	0	1016	0	0
Stage 1	1086	1086	-	1047	1047	-	-	-	-	-	-	-
Stage 2	542	1056	-	555	1088	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	69	49	496	72	50	515	661	-	-	691	-	-
Stage 1	234	295	-	248	308	-	-	-	-	-	-	-
Stage 2	497	305	-	489	294	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	64	47	496	66	48	515	661	-	-	691	-	-
Mov Cap-2 Maneuver	163	153	-	169	151	-	-	-	-	-	-	-
Stage 1	227	290	-	241	299	-	-	-	-	-	-	-
Stage 2	466	296	-	463	289	-	-	-	-	-	-	-

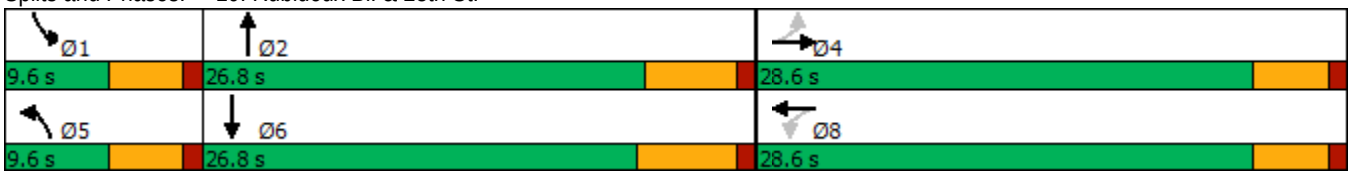
Approach	EB	WB	NB	SB
HCM Control Delay, s	21.9	22.6	0.2	0.1
HCM LOS	C	C		

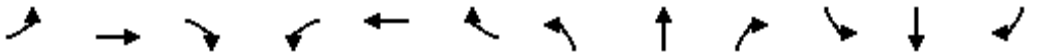
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	661	-	-	233	223	691	-	-
HCM Lane V/C Ratio	0.03	-	-	0.089	0.083	0.016	-	-
HCM Control Delay (s)	10.6	-	-	21.9	22.6	10.3	-	-
HCM Lane LOS	B	-	-	C	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.3	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	54	19	70	35	50	882	12	953
Future Volume (vph)	54	19	70	35	50	882	12	953
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	28.6	28.6	28.6	28.6	9.6	24.4	9.6	22.8
Total Split (s)	28.6	28.6	28.6	28.6	9.6	26.8	9.6	26.8
Total Split (%)	44.0%	44.0%	44.0%	44.0%	14.8%	41.2%	14.8%	41.2%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.4	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		14.7		14.7	6.3	26.7	6.3	23.1
Actuated g/C Ratio		0.33		0.33	0.14	0.60	0.14	0.52
v/c Ratio		0.29		0.27	0.21	0.46	0.05	0.57
Control Delay		10.3		16.3	26.8	11.1	25.5	15.6
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		10.3		16.3	26.8	11.1	25.5	15.6
LOS		B		B	C	B	C	B
Approach Delay		10.3		16.3		11.9		15.7
Approach LOS		B		B		B		B

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 44.5	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.57	
Intersection Signal Delay: 13.7	Intersection LOS: B
Intersection Capacity Utilization 54.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 19: Rubidoux Bl. & 28th St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	19	77	70	35	16	50	882	40	12	953	26
Future Volume (veh/h)	54	19	77	70	35	16	50	882	40	12	953	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	59	21	75	76	38	12	54	959	40	13	1036	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	205	79	155	299	133	31	101	1505	63	30	1394	36
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.06	0.43	0.43	0.02	0.39	0.39
Sat Flow, veh/h	433	395	777	811	666	155	1810	3527	147	1810	3594	94
Grp Volume(v), veh/h	155	0	0	126	0	0	54	491	508	13	520	543
Grp Sat Flow(s),veh/h/ln	1605	0	0	1632	0	0	1810	1805	1869	1810	1805	1883
Q Serve(g_s), s	0.9	0.0	0.0	0.0	0.0	0.0	1.2	9.0	9.0	0.3	10.4	10.4
Cycle Q Clear(g_c), s	3.4	0.0	0.0	2.4	0.0	0.0	1.2	9.0	9.0	0.3	10.4	10.4
Prop In Lane	0.38		0.48	0.60		0.10	1.00		0.08	1.00		0.05
Lane Grp Cap(c), veh/h	438	0	0	462	0	0	101	770	798	30	700	730
V/C Ratio(X)	0.35	0.00	0.00	0.27	0.00	0.00	0.54	0.64	0.64	0.43	0.74	0.74
Avail Cap(c_a), veh/h	1013	0	0	1015	0	0	216	920	953	216	903	942
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.8	0.0	0.0	14.4	0.0	0.0	19.3	9.5	9.5	20.4	11.0	11.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.3	0.0	0.0	1.6	1.1	1.1	3.5	2.4	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	0.9	0.0	0.0	0.5	2.5	2.6	0.1	2.9	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.3	0.0	0.0	14.8	0.0	0.0	20.9	10.6	10.5	24.0	13.5	13.4
LnGrp LOS	B	A	A	B	A	A	C	B	B	C	B	B
Approach Vol, veh/h		155			126			1053			1076	
Approach Delay, s/veh		15.3			14.8			11.1			13.6	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.3	23.7		13.0	6.9	22.1		13.0				
Change Period (Y+Rc), s	4.6	* 5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	5.0	* 21		24.0	5.0	21.0		24.0				
Max Q Clear Time (g_c+I1), s	2.3	11.0		5.4	3.2	12.4		4.4				
Green Ext Time (p_c), s	0.0	4.4		0.8	0.0	3.9		0.6				

Intersection Summary		
HCM 6th Ctrl Delay		12.7
HCM 6th LOS		B

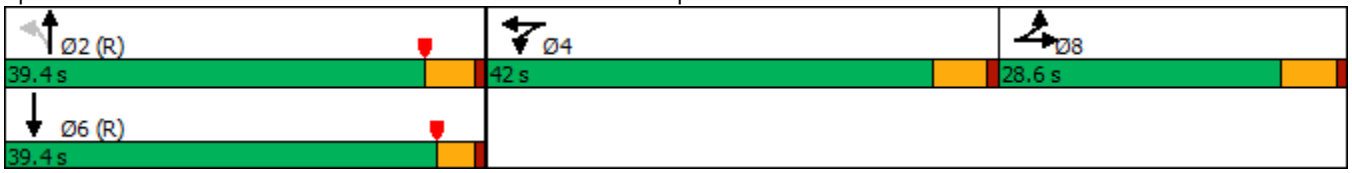
Notes

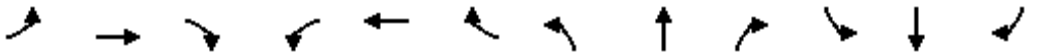
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	56	0	93	65	692	1066
Future Volume (vph)	56	0	93	65	692	1066
Turn Type	Split	NA	NA	Perm	NA	NA
Protected Phases	8	8	4		2	6
Permitted Phases				2		
Detector Phase	8	8	4	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.6	28.6	42.0	39.4	39.4	39.4
Total Split (%)	26.0%	26.0%	38.2%	35.8%	35.8%	35.8%
Yellow Time (s)	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	21.3	21.3	36.5	36.2	36.2	37.2
Actuated g/C Ratio	0.19	0.19	0.33	0.33	0.33	0.34
v/c Ratio	0.18	0.90	1.38	1.07	0.65	1.02
Control Delay	37.5	57.9	209.9	113.6	22.3	66.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.5	57.9	209.9	113.6	22.3	66.7
LOS	D	E	F	F	C	E
Approach Delay		54.7	209.9		30.1	66.7
Approach LOS		D	F		C	E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.38	
Intersection Signal Delay: 91.6	Intersection LOS: F
Intersection Capacity Utilization 120.5%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	0	306	419	93	225	65	692	0	0	1066	34
Future Volume (veh/h)	56	0	306	419	93	225	65	692	0	0	1066	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	63	0	260	471	104	219	73	778	0	0	1198	37
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	330	0	294	347	77	161	69	1229	0	0	1216	38
Arrive On Green	0.18	0.00	0.18	0.33	0.33	0.33	0.68	0.68	0.00	0.00	0.34	0.34
Sat Flow, veh/h	1810	0	1610	1044	231	486	458	3705	0	0	3667	110
Grp Volume(v), veh/h	63	0	260	794	0	0	73	778	0	0	605	630
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1760	0	0	458	1805	0	0	1805	1877
Q Serve(g_s), s	3.2	0.0	17.3	36.5	0.0	0.0	0.8	13.3	0.0	0.0	36.6	36.6
Cycle Q Clear(g_c), s	3.2	0.0	17.3	36.5	0.0	0.0	37.4	13.3	0.0	0.0	36.6	36.6
Prop In Lane	1.00		1.00	0.59		0.28	1.00		0.00	0.00		0.06
Lane Grp Cap(c), veh/h	330	0	294	584	0	0	69	1229	0	0	614	639
V/C Ratio(X)	0.19	0.00	0.89	1.36	0.00	0.00	1.06	0.63	0.00	0.00	0.99	0.99
Avail Cap(c_a), veh/h	380	0	338	584	0	0	69	1229	0	0	614	639
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.80	0.80
Uniform Delay (d), s/veh	38.1	0.0	43.8	36.8	0.0	0.0	36.3	13.7	0.0	0.0	36.0	36.0
Incr Delay (d2), s/veh	0.3	0.0	21.9	172.6	0.0	0.0	126.6	2.5	0.0	0.0	29.1	28.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	8.7	42.7	0.0	0.0	4.1	4.0	0.0	0.0	20.3	21.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.4	0.0	65.7	209.4	0.0	0.0	162.9	16.2	0.0	0.0	65.1	64.6
LnGrp LOS	D	A	E	F	A	A	F	B	A	A	E	E
Approach Vol, veh/h		323			794			851			1235	
Approach Delay, s/veh		60.4			209.4			28.8			64.8	
Approach LOS		E			F			C			E	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		42.4		42.0		42.4		25.6				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		34.4		36.5		* 35		23.1				
Max Q Clear Time (g_c+I1), s		39.4		38.5		38.6		19.3				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.7				

Intersection Summary												
HCM 6th Ctrl Delay			90.6									
HCM 6th LOS			F									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	10.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	325	757	814	977
Future Vol, veh/h	0	0	325	757	814	977
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	342	797	857	1028

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	944	1886	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	0	593	~ 337	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	-	593	~ 337	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	26.7	0
HCM LOS	A		

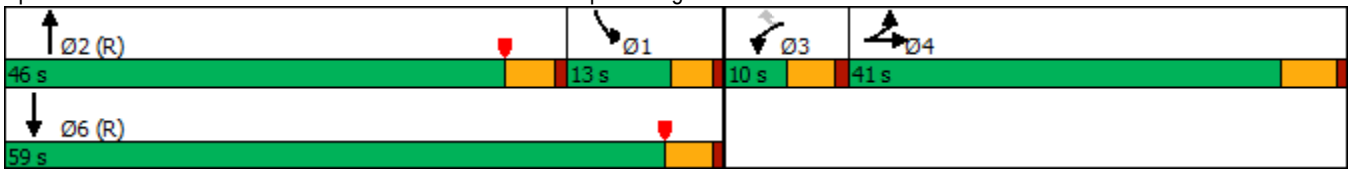
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	~ 337	-	-	-	-
HCM Lane V/C Ratio	1.015	-	-	-	-
HCM Control Delay (s)	89	-	0	-	-
HCM Lane LOS	F	-	A	-	-
HCM 95th %tile Q(veh)	11.7	-	-	-	-

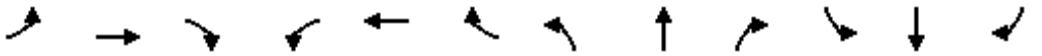
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	19	115	45	530	304	510
Future Volume (vph)	19	115	45	530	304	510
Turn Type	NA	Prot	Perm	NA	Prot	NA
Protected Phases	4	3		2	1	6
Permitted Phases			3			
Detector Phase	4	3	3	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	10.0	10.0	45.0	9.5	30.0
Total Split (s)	41.0	10.0	10.0	46.0	13.0	59.0
Total Split (%)	37.3%	9.1%	9.1%	41.8%	11.8%	53.6%
Yellow Time (s)	4.5	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	35.5	5.0	5.0	35.2	14.3	54.0
Actuated g/C Ratio	0.32	0.05	0.05	0.32	0.13	0.49
v/c Ratio	1.37	1.46	0.25	0.88	1.35	0.30
Control Delay	207.6	301.2	3.0	35.5	194.9	10.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	207.6	301.2	3.0	35.5	194.9	10.5
LOS	F	F	A	D	F	B
Approach Delay	207.6			35.5		79.4
Approach LOS	F			D		E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.46	
Intersection Signal Delay: 106.4	Intersection LOS: F
Intersection Capacity Utilization 113.1%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	507	19	240	115	0	45	0	530	504	304	510	0
Future Volume (veh/h)	507	19	240	115	0	45	0	530	504	304	510	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	528	20	153	120	0	45	0	552	416	317	531	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	429	16	124	0	0	0	0	614	463	397	2100	0
Arrive On Green	0.32	0.32	0.32	0.00	0.00	0.00	0.00	0.32	0.32	0.44	1.00	0.00
Sat Flow, veh/h	1329	50	385		0		0	2034	1461	1810	3705	0
Grp Volume(v), veh/h	701	0	0		0.0		0	514	454	317	531	0
Grp Sat Flow(s),veh/h/ln	1764	0	0				0	1805	1595	1810	1805	0
Q Serve(g_s), s	35.5	0.0	0.0				0.0	29.9	29.9	16.6	0.0	0.0
Cycle Q Clear(g_c), s	35.5	0.0	0.0				0.0	29.9	29.9	16.6	0.0	0.0
Prop In Lane	0.75		0.22				0.00		0.92	1.00		0.00
Lane Grp Cap(c), veh/h	569	0	0				0	572	505	397	2100	0
V/C Ratio(X)	1.23	0.00	0.00				0.00	0.90	0.90	0.80	0.25	0.00
Avail Cap(c_a), veh/h	569	0	0				0	673	594	397	2100	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.77	0.77	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.3	0.0	0.0				0.0	35.9	35.9	28.8	0.0	0.0
Incr Delay (d2), s/veh	118.8	0.0	0.0				0.0	15.9	17.5	10.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	33.2	0.0	0.0				0.0	15.1	13.6	6.5	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	156.0	0.0	0.0				0.0	51.8	53.4	38.9	0.3	0.0
LnGrp LOS	F	A	A				A	D	D	D	A	A
Approach Vol, veh/h		701						968			848	
Approach Delay, s/veh		156.0						52.5			14.7	
Approach LOS		F						D			B	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	29.1	39.9		41.0		69.0						
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0						
Max Green Setting (Gmax), s	8.5	* 41		35.5		54.0						
Max Q Clear Time (g_c+I1), s	18.6	31.9		37.5		2.0						
Green Ext Time (p_c), s	0.0	2.9		0.0		2.3						

Intersection Summary		
HCM 6th Ctrl Delay		68.6
HCM 6th LOS		E

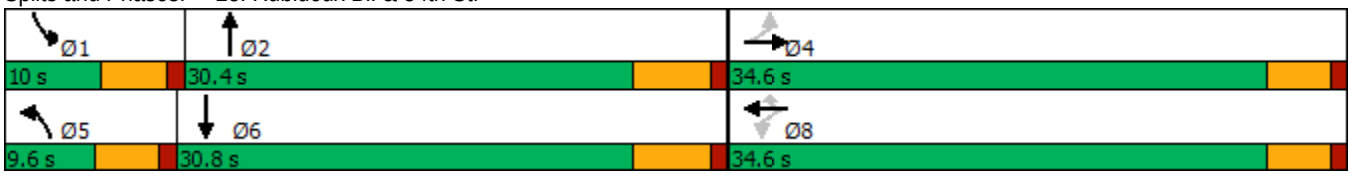
Notes

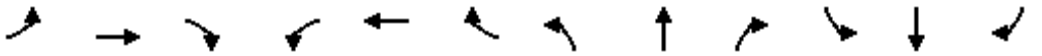
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	182	41	33	21	139	36	713	61	744
Future Volume (vph)	182	41	33	21	139	36	713	61	744
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	30.6	30.6	34.6	34.6	34.6	9.6	29.4	9.6	22.4
Total Split (s)	34.6	34.6	34.6	34.6	34.6	9.6	30.4	10.0	30.8
Total Split (%)	46.1%	46.1%	46.1%	46.1%	46.1%	12.8%	40.5%	13.3%	41.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	4.6	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		17.8		17.8	17.8	5.5	19.9	5.8	21.9
Actuated g/C Ratio		0.33		0.33	0.33	0.10	0.37	0.11	0.41
v/c Ratio		0.60		0.12	0.24	0.22	0.66	0.35	0.62
Control Delay		22.2		15.4	4.2	32.5	18.5	35.2	16.3
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		22.2		15.4	4.2	32.5	18.5	35.2	16.3
LOS		C		B	A	C	B	D	B
Approach Delay		22.2		7.4			19.1		17.7
Approach LOS		C		A			B		B

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 53.7	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 17.8	Intersection LOS: B
Intersection Capacity Utilization 61.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 23: Rubidoux Bl. & 34th St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	41	24	33	21	139	36	713	66	61	744	59
Future Volume (veh/h)	182	41	24	33	21	139	36	713	66	61	744	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.98		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	204	46	18	37	24	86	40	801	67	69	836	58
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	420	88	27	378	218	475	78	1142	96	113	1230	85
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.04	0.34	0.34	0.06	0.36	0.36
Sat Flow, veh/h	977	297	92	873	739	1610	1810	3364	281	1810	3425	238
Grp Volume(v), veh/h	268	0	0	61	0	86	40	430	438	69	441	453
Grp Sat Flow(s),veh/h/ln	1366	0	0	1612	0	1610	1810	1805	1841	1810	1805	1857
Q Serve(g_s), s	7.3	0.0	0.0	0.0	0.0	1.9	1.0	10.0	10.0	1.8	10.0	10.0
Cycle Q Clear(g_c), s	8.4	0.0	0.0	1.1	0.0	1.9	1.0	10.0	10.0	1.8	10.0	10.0
Prop In Lane	0.76		0.07	0.61		1.00	1.00		0.15	1.00		0.13
Lane Grp Cap(c), veh/h	535	0	0	596	0	475	78	613	625	113	648	667
V/C Ratio(X)	0.50	0.00	0.00	0.10	0.00	0.18	0.51	0.70	0.70	0.61	0.68	0.68
Avail Cap(c_a), veh/h	990	0	0	1089	0	1001	188	935	954	203	950	978
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.0	0.0	0.0	12.4	0.0	12.7	22.6	13.8	13.8	22.0	13.1	13.1
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.1	0.0	0.2	1.9	1.5	1.4	2.0	1.3	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	0.0	0.4	0.0	0.6	0.4	3.4	3.4	0.7	3.3	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.8	0.0	0.0	12.4	0.0	12.8	24.5	15.3	15.3	24.0	14.4	14.3
LnGrp LOS	B	A	A	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		268			147			908			963	
Approach Delay, s/veh		15.8			12.7			15.7			15.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	21.8		18.8	6.7	22.7		18.8				
Change Period (Y+Rc), s	4.6	5.4		4.6	4.6	5.4		4.6				
Max Green Setting (Gmax), s	5.4	25.0		30.0	5.0	25.4		30.0				
Max Q Clear Time (g_c+I1), s	3.8	12.0		10.4	3.0	12.0		3.9				
Green Ext Time (p_c), s	0.0	4.3		1.7	0.0	4.5		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		15.2	
HCM 6th LOS		B	

Intersection	
Int Delay, s/veh	5.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	758	69	0	0	160	37
Future Vol, veh/h	758	69	0	0	160	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	781	71	0	0	165	38

Major/Minor	Major1			Minor1	
Conflicting Flow All	0	0		817	817
Stage 1	-	-		817	-
Stage 2	-	-		0	-
Critical Hdwy	-	-		6.4	6.2
Critical Hdwy Stg 1	-	-		5.4	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	-		3.5	3.3
Pot Cap-1 Maneuver	-	-		349	380
Stage 1	-	-		438	-
Stage 2	-	-		-	-
Platoon blocked, %	-	-			
Mov Cap-1 Maneuver	-	-		349	380
Mov Cap-2 Maneuver	-	-		349	-
Stage 1	-	-		438	-
Stage 2	-	-		-	-

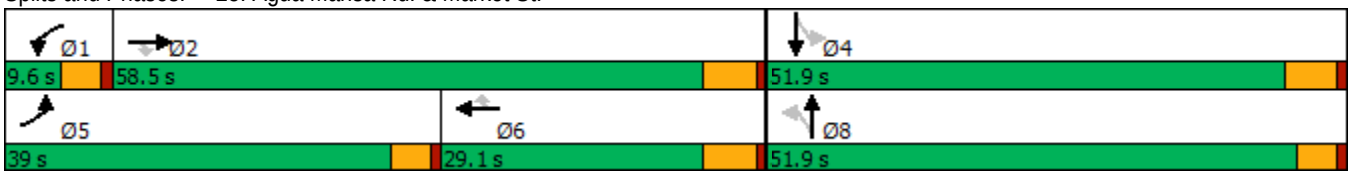
Approach	EB	NB
HCM Control Delay, s	0	28
HCM LOS		D

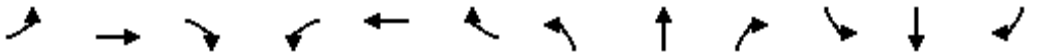
Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	354	-	-
HCM Lane V/C Ratio	0.574	-	-
HCM Control Delay (s)	28	-	-
HCM Lane LOS	D	-	-
HCM 95th %tile Q(veh)	3.4	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	528	609	17	10	609	294	13	5	193	18
Future Volume (vph)	528	609	17	10	609	294	13	5	193	18
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	5	2		1	6			8		4
Permitted Phases			2			6	8		4	
Detector Phase	5	2	2	1	6	6	8	8	4	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	31.8	31.8	9.6	26.8	26.8	14.6	14.6	43.8	43.8
Total Split (s)	39.0	58.5	58.5	9.6	29.1	29.1	51.9	51.9	51.9	51.9
Total Split (%)	32.5%	48.8%	48.8%	8.0%	24.3%	24.3%	43.3%	43.3%	43.3%	43.3%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None
Act Effct Green (s)	34.4	60.4	60.4	5.0	23.3	23.3		47.3		46.1
Actuated g/C Ratio	0.29	0.50	0.50	0.04	0.19	0.19		0.39		0.38
v/c Ratio	1.14	0.37	0.02	0.15	0.97	0.57		0.07		1.15
Control Delay	122.1	19.5	0.1	60.0	75.1	8.8		14.9		113.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	122.1	19.5	0.1	60.0	75.1	8.8		14.9		113.2
LOS	F	B	A	E	E	A		B		F
Approach Delay		66.1			53.6			14.9		113.2
Approach LOS		E			D			B		F

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.15	
Intersection Signal Delay: 72.9	Intersection LOS: E
Intersection Capacity Utilization 107.2%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	528	609	17	10	609	294	13	5	15	193	18	466
Future Volume (veh/h)	528	609	17	10	609	294	13	5	15	193	18	466
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	587	677	16	11	677	288	14	6	15	214	20	424
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	519	1690	754	23	701	312	192	90	180	232	20	385
Arrive On Green	0.29	0.47	0.47	0.01	0.19	0.19	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1810	3610	1610	1810	3610	1606	391	233	468	501	52	1003
Grp Volume(v), veh/h	587	677	16	11	677	288	35	0	0	658	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1606	1091	0	0	1556	0	0
Q Serve(g_s), s	34.4	14.7	0.6	0.7	22.3	21.1	0.0	0.0	0.0	44.6	0.0	0.0
Cycle Q Clear(g_c), s	34.4	14.7	0.6	0.7	22.3	21.1	1.5	0.0	0.0	46.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.40		0.43	0.33		0.64
Lane Grp Cap(c), veh/h	519	1690	754	23	701	312	461	0	0	638	0	0
V/C Ratio(X)	1.13	0.40	0.02	0.48	0.97	0.92	0.08	0.00	0.00	1.03	0.00	0.00
Avail Cap(c_a), veh/h	519	1690	754	75	701	312	474	0	0	638	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	42.8	20.9	17.1	58.8	48.0	47.5	23.2	0.0	0.0	38.3	0.0	0.0
Incr Delay (d2), s/veh	81.0	0.7	0.1	5.5	26.6	34.7	0.1	0.0	0.0	44.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	26.4	6.1	0.2	0.4	12.3	11.2	0.6	0.0	0.0	26.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	123.8	21.6	17.2	64.4	74.6	82.2	23.3	0.0	0.0	82.4	0.0	0.0
LnGrp LOS	F	C	B	E	E	F	C	A	A	F	A	A
Approach Vol, veh/h		1280			976			35			658	
Approach Delay, s/veh		68.4			76.7			23.3			82.4	
Approach LOS		E			E			C			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	62.0		51.9	39.0	29.1		51.9				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	52.7		46.1	34.4	23.3		* 47				
Max Q Clear Time (g_c+I1), s	2.7	16.7		48.1	36.4	24.3		3.5				
Green Ext Time (p_c), s	0.0	4.7		0.0	0.0	0.0		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		73.7
HCM 6th LOS		E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	184	16	29	21	14	8	32	57	5	31	5
Future Vol, veh/h	9	184	16	29	21	14	8	32	57	5	31	5
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	224	20	35	26	17	10	39	70	6	38	6
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	9.9	8.4	8.2	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	8%	5%	0%	58%	0%	12%
Vol Thru, %	33%	95%	0%	42%	0%	76%
Vol Right, %	59%	0%	100%	0%	100%	12%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	97	193	16	50	14	41
LT Vol	8	9	0	29	0	5
Through Vol	32	184	0	21	0	31
RT Vol	57	0	16	0	14	5
Lane Flow Rate	118	235	20	61	17	50
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.146	0.326	0.023	0.092	0.021	0.067
Departure Headway (Hd)	4.449	4.987	4.26	5.413	4.416	4.816
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	806	720	839	662	809	743
Service Time	2.476	2.718	1.991	3.15	2.153	2.85
HCM Lane V/C Ratio	0.146	0.326	0.024	0.092	0.021	0.067
HCM Control Delay	8.2	10.1	7.1	8.7	7.2	8.2
HCM Lane LOS	A	B	A	A	A	A
HCM 95th-tile Q	0.5	1.4	0.1	0.3	0.1	0.2

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	7	5	41	37	5	7	13	116	9	5	157	7
Future Vol, veh/h	7	5	41	37	5	7	13	116	9	5	157	7
Conflicting Peds, #/hr	0	0	1	0	0	1	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	6	52	47	6	9	16	147	11	6	199	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	409	406	205	431	405	154	208	0	0	158	0	0
Stage 1	216	216	-	185	185	-	-	-	-	-	-	-
Stage 2	193	190	-	246	220	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	556	537	841	538	538	897	1375	-	-	1434	-	-
Stage 1	791	728	-	821	751	-	-	-	-	-	-	-
Stage 2	813	747	-	762	725	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	538	527	840	493	528	896	1375	-	-	1434	-	-
Mov Cap-2 Maneuver	538	527	-	493	528	-	-	-	-	-	-	-
Stage 1	781	724	-	810	741	-	-	-	-	-	-	-
Stage 2	787	737	-	704	721	-	-	-	-	-	-	-

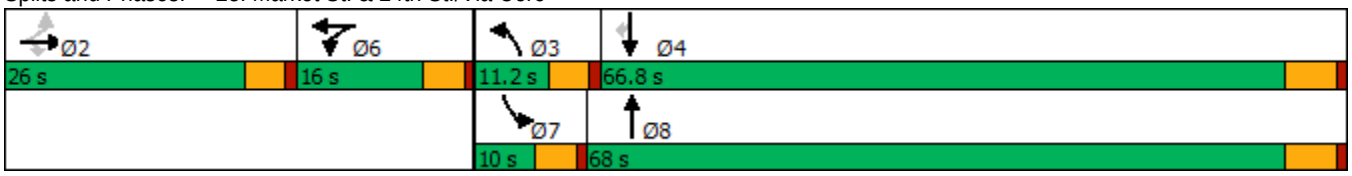
Approach	EB	WB	NB	SB
HCM Control Delay, s	10.3	12.7	0.7	0.2
HCM LOS	B	B		

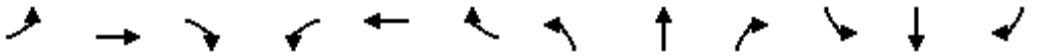
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1375	-	-	743	531	1434	-	-
HCM Lane V/C Ratio	0.012	-	-	0.09	0.117	0.004	-	-
HCM Control Delay (s)	7.7	0	-	10.3	12.7	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.4	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	44	37	190	110	9	40	1056	33	796	9
Future Volume (vph)	44	37	190	110	9	40	1056	33	796	9
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	26.0	26.0	26.0	16.0	16.0	11.2	68.0	10.0	66.8	66.8
Total Split (%)	21.7%	21.7%	21.7%	13.3%	13.3%	9.3%	56.7%	8.3%	55.7%	55.7%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		21.4	21.4	11.1	11.1	6.1	64.2	5.3	61.4	61.4
Actuated g/C Ratio		0.18	0.18	0.09	0.09	0.05	0.55	0.05	0.52	0.52
v/c Ratio		1.73	0.44	0.68	0.37	0.45	1.29	0.43	0.85	0.01
Control Delay		430.1	9.1	72.9	19.4	70.3	164.6	72.1	34.6	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		430.1	9.1	72.9	19.4	70.3	164.6	72.1	34.6	0.0
LOS		F	A	E	B	E	F	E	C	A
Approach Delay		134.7			50.7		161.7		35.7	
Approach LOS		F			D		F		D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 117.6	
Natural Cycle: 115	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.73	
Intersection Signal Delay: 109.8	Intersection LOS: F
Intersection Capacity Utilization 88.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	37	190	110	9	69	40	1056	187	33	796	9
Future Volume (veh/h)	44	37	190	110	9	69	40	1056	187	33	796	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	46	39	107	116	9	72	42	1112	175	35	838	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	96	82	154	172	17	138	61	949	149	55	1119	948
Arrive On Green	0.10	0.10	0.10	0.09	0.09	0.09	0.03	0.59	0.59	0.03	0.59	0.59
Sat Flow, veh/h	1001	849	1605	1810	182	1456	1810	1602	252	1810	1900	1610
Grp Volume(v), veh/h	85	0	107	116	0	81	42	0	1287	35	838	9
Grp Sat Flow(s),veh/h/ln	1850	0	1605	1810	0	1638	1810	0	1854	1810	1900	1610
Q Serve(g_s), s	4.6	0.0	6.8	6.5	0.0	4.9	2.4	0.0	62.2	2.0	34.1	0.2
Cycle Q Clear(g_c), s	4.6	0.0	6.8	6.5	0.0	4.9	2.4	0.0	62.2	2.0	34.1	0.2
Prop In Lane	0.54		1.00	1.00		0.89	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	178	0	154	172	0	155	61	0	1098	55	1119	948
V/C Ratio(X)	0.48	0.00	0.69	0.68	0.00	0.52	0.69	0.00	1.17	0.64	0.75	0.01
Avail Cap(c_a), veh/h	377	0	327	196	0	178	114	0	1098	93	1119	948
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.0	0.0	46.0	46.0	0.0	45.3	50.2	0.0	21.4	50.4	15.9	8.9
Incr Delay (d2), s/veh	2.0	0.0	5.5	7.4	0.0	2.7	5.1	0.0	87.4	4.4	4.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	2.8	3.3	0.0	2.1	1.1	0.0	49.1	0.9	14.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.0	0.0	51.5	53.4	0.0	48.0	55.3	0.0	108.9	54.8	20.5	8.9
LnGrp LOS	D	A	D	D	A	D	E	A	F	D	C	A
Approach Vol, veh/h		192			197			1329			882	
Approach Delay, s/veh		49.5			51.2			107.2			21.7	
Approach LOS		D			D			F			C	

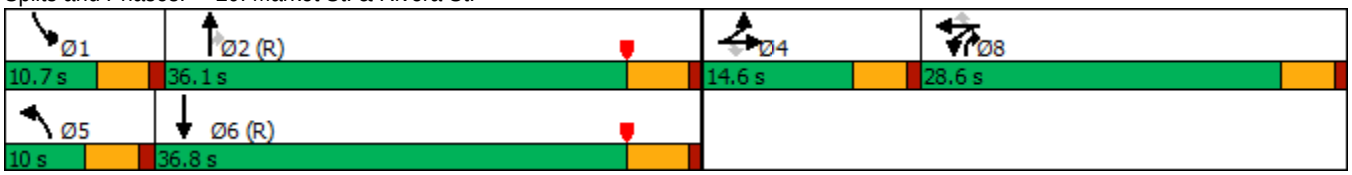
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.7	8.1	67.7		14.6	7.8	68.0				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		21.4	6.6	61.0		11.4	5.4	62.2				
Max Q Clear Time (g_c+I1), s		8.8	4.4	36.1		8.5	4.0	64.2				
Green Ext Time (p_c), s		0.6	0.0	6.1		0.2	0.0	0.0				

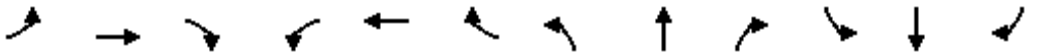
Intersection Summary												
HCM 6th Ctrl Delay			69.7									
HCM 6th LOS			E									

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	5	20	356	5	53	26	871	352	43	899
Future Volume (vph)	5	20	356	5	53	26	871	352	43	899
Turn Type	NA	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	4		8	8		5	2	8	1	6
Permitted Phases		4			8			2		
Detector Phase	4	4	8	8	8	5	2	8	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	14.6	14.6	28.6	28.6	28.6	9.6	35.1	28.6	9.6	29.1
Total Split (s)	14.6	14.6	28.6	28.6	28.6	10.0	36.1	28.6	10.7	36.8
Total Split (%)	16.2%	16.2%	31.8%	31.8%	31.8%	11.1%	40.1%	31.8%	11.9%	40.9%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.1	3.6	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	4.6	5.1	4.6	4.6	5.1
Lead/Lag						Lead	Lag		Lead	Lag
Lead-Lag Optimize?						Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	10.0	10.0	17.2	17.2	17.2	5.6	47.5	65.2	6.2	50.1
Actuated g/C Ratio	0.11	0.11	0.19	0.19	0.19	0.06	0.53	0.72	0.07	0.56
v/c Ratio	0.05	0.07	0.57	0.56	0.13	0.24	0.47	0.29	0.35	0.46
Control Delay	36.5	0.5	38.9	38.5	0.7	42.6	19.8	0.7	48.1	17.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Total Delay	36.5	0.5	38.9	38.5	0.7	42.6	20.0	0.7	48.1	17.1
LOS	D	A	D	D	A	D	B	A	D	B
Approach Delay	12.1			33.8			15.0			18.5
Approach LOS	B			C			B			B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 2 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.57	
Intersection Signal Delay: 19.2	Intersection LOS: B
Intersection Capacity Utilization 57.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 29: Market St. & Rivera St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	5	20	356	5	53	26	871	352	43	899	5
Future Volume (veh/h)	5	5	20	356	5	53	26	871	352	43	899	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	5	5	7	371	0	31	27	898	257	44	927	5
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	36	36	62	486	0	211	49	2094	1150	67	2171	12
Arrive On Green	0.04	0.04	0.04	0.13	0.00	0.13	0.05	1.00	1.00	0.04	0.59	0.59
Sat Flow, veh/h	927	927	1610	3619	0	1574	1810	3610	1609	1810	3681	20
Grp Volume(v), veh/h	10	0	7	371	0	31	27	898	257	44	455	477
Grp Sat Flow(s),veh/h/ln	1854	0	1610	1810	0	1574	1810	1805	1609	1810	1805	1896
Q Serve(g_s), s	0.5	0.0	0.4	8.9	0.0	1.6	1.3	0.0	0.0	2.2	12.4	12.4
Cycle Q Clear(g_c), s	0.5	0.0	0.4	8.9	0.0	1.6	1.3	0.0	0.0	2.2	12.4	12.4
Prop In Lane	0.50		1.00	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	71	0	62	486	0	211	49	2094	1150	67	1065	1118
V/C Ratio(X)	0.14	0.00	0.11	0.76	0.00	0.15	0.55	0.43	0.22	0.66	0.43	0.43
Avail Cap(c_a), veh/h	206	0	179	965	0	420	109	2094	1150	123	1065	1118
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.87	0.87	0.87	0.57	0.57	0.57
Uniform Delay (d), s/veh	41.8	0.0	41.8	37.6	0.0	34.4	42.0	0.0	0.0	42.8	10.1	10.1
Incr Delay (d2), s/veh	0.9	0.0	0.8	2.5	0.0	0.3	3.0	0.6	0.4	2.3	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.2	4.0	0.0	0.6	0.6	0.2	0.1	1.0	4.3	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.7	0.0	42.6	40.1	0.0	34.7	45.0	0.6	0.4	45.1	10.8	10.8
LnGrp LOS	D	A	D	D	A	C	D	A	A	D	B	B
Approach Vol, veh/h		17			402			1182			976	
Approach Delay, s/veh		42.7			39.7			1.5			12.4	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.9	57.3		8.1	7.1	58.2		16.7				
Change Period (Y+Rc), s	4.6	5.1		4.6	4.6	5.1		4.6				
Max Green Setting (Gmax), s	6.1	31.0		10.0	5.4	31.7		24.0				
Max Q Clear Time (g_c+I1), s	4.2	2.0		2.5	3.3	14.4		10.9				
Green Ext Time (p_c), s	0.0	7.5		0.0	0.0	5.0		1.2				

Intersection Summary			
HCM 6th Ctrl Delay		11.9	
HCM 6th LOS		B	

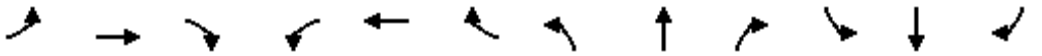
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	928	291	321	1050	225
Future Volume (vph)	0	928	291	321	1050	225
Turn Type	NA	Free	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		Free				6
Detector Phase	8		5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	10.0		10.0	24.5	10.5	10.5
Total Split (s)	15.0		26.0	75.0	49.0	49.0
Total Split (%)	16.7%		28.9%	83.3%	54.4%	54.4%
Yellow Time (s)	4.0		4.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	C-Min	C-Min	C-Min
Act Effct Green (s)	11.1	90.0	18.8	68.4	44.6	44.6
Actuated g/C Ratio	0.12	1.00	0.21	0.76	0.50	0.50
v/c Ratio	0.67	0.60	0.81	0.12	0.62	0.26
Control Delay	54.0	1.7	35.1	7.3	14.5	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0
Total Delay	54.0	1.7	35.1	7.3	14.6	2.9
LOS	D	A	D	A	B	A
Approach Delay	8.6			20.5	12.6	
Approach LOS	A			C	B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 12.8	Intersection LOS: B
Intersection Capacity Utilization 77.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 30: Market St. & SR-60 WB On-Ramp/SR-60 WB Off-Ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	141	0	928	291	321	0	0	1050	225
Future Volume (veh/h)	0	0	0	141	0	928	291	321	0	0	1050	225
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				148	0	0	306	338	0	0	1105	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				182	0		348	2827	0	0	1932	
Arrive On Green				0.10	0.00	0.00	0.13	0.52	0.00	0.00	1.00	0.00
Sat Flow, veh/h				1810	0	1610	1810	3705	0	0	3705	1610
Grp Volume(v), veh/h				148	0	0	306	338	0	0	1105	0
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1805	1610
Q Serve(g_s), s				7.2	0.0	0.0	15.0	4.3	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				7.2	0.0	0.0	15.0	4.3	0.0	0.0	0.0	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				182	0		348	2827	0	0	1932	
V/C Ratio(X)				0.82	0.00		0.88	0.12	0.00	0.00	0.57	
Avail Cap(c_a), veh/h				201	0		422	2827	0	0	1932	
HCM Platoon Ratio				1.00	1.00	1.00	0.67	0.67	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	0.00	0.00	0.76	0.76	0.00	0.00	0.88	0.00
Uniform Delay (d), s/veh				39.7	0.0	0.0	38.2	5.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				20.6	0.0	0.0	13.2	0.1	0.0	0.0	1.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.1	0.0	0.0	8.0	1.0	0.0	0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				60.2	0.0	0.0	51.4	5.7	0.0	0.0	1.1	0.0
LnGrp LOS				E	A		D	A	A	A	A	
Approach Vol, veh/h					148			644			1105	
Approach Delay, s/veh					60.2			27.4			1.1	
Approach LOS					E			C			A	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		76.0			22.3	53.7		14.0				
Change Period (Y+Rc), s		5.5			5.0	5.5		5.0				
Max Green Setting (Gmax), s		69.5			21.0	43.5		10.0				
Max Q Clear Time (g_c+I1), s		6.3			17.0	2.0		9.2				
Green Ext Time (p_c), s		2.2			0.4	9.1		0.0				

Intersection Summary		
HCM 6th Ctrl Delay	14.6	
HCM 6th LOS	B	

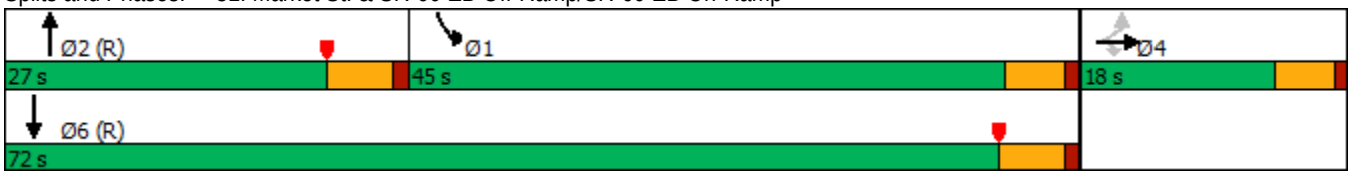
Notes

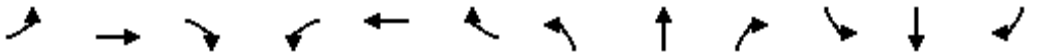
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	0	570	450	728	464
Future Volume (vph)	0	570	450	728	464
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	24.5	10.0	10.5
Total Split (s)	18.0	18.0	27.0	45.0	72.0
Total Split (%)	20.0%	20.0%	30.0%	50.0%	80.0%
Yellow Time (s)	4.0	4.0	4.5	4.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.0	5.5
Lead/Lag			Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Min	None	C-Min
Act Effct Green (s)	12.0	12.0	23.1	39.4	67.5
Actuated g/C Ratio	0.13	0.13	0.26	0.44	0.75
v/c Ratio	0.69	0.66	0.61	0.94	0.17
Control Delay	52.5	7.2	32.0	51.3	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	52.5	7.2	32.0	51.3	7.1
LOS	D	A	C	D	A
Approach Delay	17.2		32.0		34.1
Approach LOS	B		C		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 15 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 28.6	Intersection LOS: C
Intersection Capacity Utilization 77.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 31: Market St. & SR-60 EB Off-Ramp/SR-60 EB On-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	162	0	570	0	0	0	0	450	101	728	464	0
Future Volume (veh/h)	162	0	570	0	0	0	0	450	101	728	464	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	165	0	317				0	459	0	743	473	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	243	0	381				0	592		948	2703	0
Arrive On Green	0.13	0.00	0.13				0.00	0.16	0.00	0.87	1.00	0.00
Sat Flow, veh/h	1810	0	2834				0	3800	0	1810	3705	0
Grp Volume(v), veh/h	165	0	317				0	459	0	743	473	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1805	0	1810	1805	0
Q Serve(g_s), s	7.8	0.0	9.8				0.0	11.0	0.0	14.7	0.0	0.0
Cycle Q Clear(g_c), s	7.8	0.0	9.8				0.0	11.0	0.0	14.7	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	243	0	381				0	592		948	2703	0
V/C Ratio(X)	0.68	0.00	0.83				0.00	0.78		0.78	0.17	0.00
Avail Cap(c_a), veh/h	261	0	409				0	862		948	2703	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.75	0.75	0.00
Uniform Delay (d), s/veh	37.1	0.0	38.0				0.0	36.0	0.0	3.6	0.0	0.0
Incr Delay (d2), s/veh	6.3	0.0	12.9				0.0	9.6	0.0	3.3	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	3.9				0.0	5.4	0.0	2.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.4	0.0	50.9				0.0	45.6	0.0	6.9	0.1	0.0
LnGrp LOS	D	A	D				A	D		A	A	A
Approach Vol, veh/h		482						459			1216	
Approach Delay, s/veh		48.3						45.6			4.3	
Approach LOS		D						D			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	52.6	20.3		17.1		72.9
Change Period (Y+Rc), s	5.5	* 5.5		5.0		5.5
Max Green Setting (Gmax), s	40.0	* 22		13.0		66.5
Max Q Clear Time (g_c+I1), s	16.7	13.0		11.8		2.0
Green Ext Time (p_c), s	2.6	1.8		0.3		3.3

Intersection Summary	
HCM 6th Ctrl Delay	22.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	1	16	5	0	6	11	519	5	121	878	35
Future Vol, veh/h	26	1	16	5	0	6	11	519	5	121	878	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	145	-	-	140	-	110
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	27	1	17	5	0	6	11	541	5	126	915	36

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1460	1737	458	1278	1771	275	951	0	0	548	0	0
Stage 1	1167	1167	-	568	568	-	-	-	-	-	-	-
Stage 2	293	570	-	710	1203	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	213	138	*740	*330	128	729	*1110	-	-	1032	-	-
Stage 1	468	454	-	*480	510	-	-	-	-	-	-	-
Stage 2	696	509	-	*698	431	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	190	120	*740	*289	111	728	*1110	-	-	1030	-	-
Mov Cap-2 Maneuver	316	231	-	*368	243	-	-	-	-	-	-	-
Stage 1	463	398	-	*474	504	-	-	-	-	-	-	-
Stage 2	683	503	-	*597	378	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.2	12.3	0.2	1.1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 1110	-	-	397	504	1030	-	-
HCM Lane V/C Ratio	0.01	-	-	0.113	0.023	0.122	-	-
HCM Control Delay (s)	8.3	-	-	15.2	12.3	9	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.1	0.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	16.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	216	56	154	562	558	210
Future Vol, veh/h	216	56	154	562	558	210
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	230	60	164	598	594	223

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1333	706	817	0	-	0
Stage 1	706	-	-	-	-	-
Stage 2	627	-	-	-	-	-
Critical Hdwy	6.6	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	~ 159	439	820	-	-	-
Stage 1	493	-	-	-	-	-
Stage 2	500	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 127	439	820	-	-	-
Mov Cap-2 Maneuver	258	-	-	-	-	-
Stage 1	394	-	-	-	-	-
Stage 2	500	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	100.6	2.3	0
HCM LOS	F		

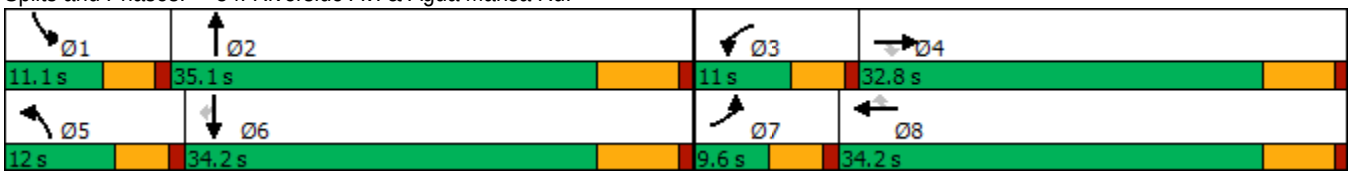
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	820	-	282	-	-
HCM Lane V/C Ratio	0.2	-	1.026	-	-
HCM Control Delay (s)	10.5	-	100.6	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.7	-	10.9	-	-

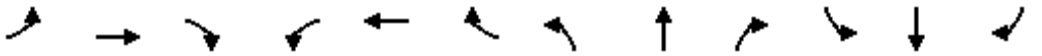
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	171	339	177	153	443	145	196	600	92	681	202
Future Volume (vph)	171	339	177	153	443	145	196	600	92	681	202
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	9.6	32.8	32.8	11.0	34.2	34.2	12.0	35.1	11.1	34.2	34.2
Total Split (%)	10.7%	36.4%	36.4%	12.2%	38.0%	38.0%	13.3%	39.0%	12.3%	38.0%	38.0%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	5.1	22.5	22.5	6.5	23.9	23.9	7.5	23.4	6.5	22.4	22.4
Actuated g/C Ratio	0.06	0.28	0.28	0.08	0.30	0.30	0.09	0.29	0.08	0.28	0.28
v/c Ratio	1.61	0.68	0.32	1.12	0.84	0.26	1.24	0.67	0.68	0.72	0.36
Control Delay	341.8	33.7	5.5	152.3	41.7	5.3	186.9	28.7	64.6	31.3	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	341.8	33.7	5.5	152.3	41.7	5.3	186.9	28.7	64.6	31.3	5.4
LOS	F	C	A	F	D	A	F	C	E	C	A
Approach Delay		103.2			57.5			65.1		29.1	
Approach LOS		F			E			E		C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 80.7	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.61	
Intersection Signal Delay: 60.6	Intersection LOS: E
Intersection Capacity Utilization 80.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	252	485	248	94	296	80	201	525	127	118	573	139
Future Volume (veh/h)	252	485	248	94	296	80	201	525	127	118	573	139
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	182	361	124	163	471	130	209	638	57	98	724	196
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	120	513	434	153	548	464	177	975	87	126	947	423
Arrive On Green	0.07	0.27	0.27	0.08	0.29	0.29	0.10	0.29	0.29	0.07	0.26	0.26
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3352	299	1810	3610	1610
Grp Volume(v), veh/h	182	361	124	163	471	130	209	343	352	98	724	196
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1846	1810	1805	1610
Q Serve(g_s), s	5.0	12.9	4.6	6.4	17.7	4.7	7.4	12.6	12.6	4.0	14.0	7.7
Cycle Q Clear(g_c), s	5.0	12.9	4.6	6.4	17.7	4.7	7.4	12.6	12.6	4.0	14.0	7.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	120	513	434	153	548	464	177	525	537	126	947	423
V/C Ratio(X)	1.52	0.70	0.29	1.06	0.86	0.28	1.18	0.65	0.66	0.78	0.76	0.46
Avail Cap(c_a), veh/h	120	680	576	153	715	606	177	684	699	156	1325	591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.2	24.8	21.8	34.5	25.4	20.8	34.0	23.4	23.4	34.5	25.7	23.4
Incr Delay (d2), s/veh	270.9	2.2	0.4	90.1	8.3	0.3	123.5	1.4	1.4	13.9	1.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	5.5	1.6	6.5	8.4	1.6	9.0	4.8	4.9	2.1	5.4	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	306.2	27.0	22.2	124.7	33.7	21.1	157.6	24.8	24.8	48.5	27.4	24.2
LnGrp LOS	F	C	C	F	C	C	F	C	C	D	C	C
Approach Vol, veh/h		667			764			904			1018	
Approach Delay, s/veh		102.3			51.0			55.5			28.8	
Approach LOS		F			D			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	28.4	11.0	26.2	12.0	26.3	9.6	27.6
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	6.5	28.6	6.4	27.0	7.4	27.7	5.0	28.4
Max Q Clear Time (g_c+I1), s	6.0	14.6	8.4	14.9	9.4	16.0	7.0	19.7
Green Ext Time (p_c), s	0.0	3.1	0.0	1.9	0.0	3.8	0.0	2.1

Intersection Summary	
HCM 6th Ctrl Delay	55.7
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	7.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	0	0	0	0	1
Future Vol, veh/h	5	0	0	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	92	92	92	92	62
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	8	0	0	0	0	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1	1	2	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	1027	1090	1634	-	-	-
Stage 1	1028	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1027	1090	1634	-	-	-
Mov Cap-2 Maneuver	1027	-	-	-	-	-
Stage 1	1028	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1634	-	1027	-	-
HCM Lane V/C Ratio	-	-	0.008	-	-
HCM Control Delay (s)	0	-	8.5	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	495	0	29	314	2	30
Future Vol, veh/h	495	0	29	314	2	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	635	0	37	403	3	38

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	635	0	1112	635
Stage 1	-	-	-	-	635	-
Stage 2	-	-	-	-	477	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	958	-	233	482
Stage 1	-	-	-	-	532	-
Stage 2	-	-	-	-	629	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	958	-	221	482
Mov Cap-2 Maneuver	-	-	-	-	221	-
Stage 1	-	-	-	-	532	-
Stage 2	-	-	-	-	598	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	13.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	449	-	-	958	-
HCM Lane V/C Ratio	0.091	-	-	0.039	-
HCM Control Delay (s)	13.8	-	-	8.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	8	472	44	27	319	4	20	9	32	1	15	4
Future Vol, veh/h	8	472	44	27	319	4	20	9	32	1	15	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	576	54	33	389	5	24	11	39	1	18	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	394	0	0	630	0	0	1095	1083	603	1106	1108	395
Stage 1	-	-	-	-	-	-	623	623	-	458	458	-
Stage 2	-	-	-	-	-	-	472	460	-	648	650	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1176	-	-	962	-	-	193	219	503	190	212	659
Stage 1	-	-	-	-	-	-	477	481	-	587	570	-
Stage 2	-	-	-	-	-	-	576	569	-	462	468	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1176	-	-	962	-	-	170	207	503	161	200	657
Mov Cap-2 Maneuver	-	-	-	-	-	-	170	207	-	161	200	-
Stage 1	-	-	-	-	-	-	471	475	-	579	545	-
Stage 2	-	-	-	-	-	-	527	544	-	411	462	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.7	23.2	22.6
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	271	1176	-	-	962	-	-	229
HCM Lane V/C Ratio	0.275	0.008	-	-	0.034	-	-	0.107
HCM Control Delay (s)	23.2	8.1	0	-	8.9	0	-	22.6
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.1	0	-	-	0.1	-	-	0.4

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	19	22	39	19	23	64
Future Vol, veh/h	19	22	39	19	23	64
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	100	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	26	45	22	27	74

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	184	56	0	0	67	0
Stage 1	56	-	-	-	-	-
Stage 2	128	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	810	1016	-	-	1547	-
Stage 1	972	-	-	-	-	-
Stage 2	903	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	795	1016	-	-	1547	-
Mov Cap-2 Maneuver	795	-	-	-	-	-
Stage 1	972	-	-	-	-	-
Stage 2	887	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	1.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	795	1016	1547	-
HCM Lane V/C Ratio	-	-	0.028	0.025	0.017	-
HCM Control Delay (s)	-	-	9.7	8.6	7.4	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	0.1	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	15	0	10	0	39	13	11	66	0
Future Vol, veh/h	0	0	0	15	0	10	0	39	13	11	66	0
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	16	0	11	0	43	14	12	73	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	154	155	75	148	148	50	74	0	0	57	0	0
Stage 1	98	98	-	50	50	-	-	-	-	-	-	-
Stage 2	56	57	-	98	98	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	817	741	992	825	747	1024	1538	-	-	1560	-	-
Stage 1	913	818	-	968	857	-	-	-	-	-	-	-
Stage 2	961	851	-	913	818	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	802	734	990	819	740	1024	1537	-	-	1560	-	-
Mov Cap-2 Maneuver	802	734	-	819	740	-	-	-	-	-	-	-
Stage 1	912	811	-	968	857	-	-	-	-	-	-	-
Stage 2	951	851	-	905	811	-	-	-	-	-	-	-

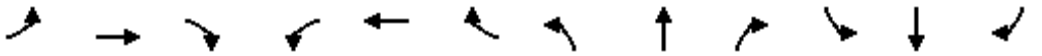
Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.2	0	1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1537	-	-	-	890	1560	-	-
HCM Lane V/C Ratio	-	-	-	-	0.031	0.008	-	-
HCM Control Delay (s)	0	-	-	0	9.2	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	6	433	214	1440	1335	463
Future Volume (vph)	6	433	214	1440	1335	463
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	41.0	41.0	22.0	69.0	47.0	47.0
Total Split (%)	37.3%	37.3%	20.0%	62.7%	42.7%	42.7%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	37.0	37.0	16.9	64.5	43.7	43.7
Actuated g/C Ratio	0.34	0.34	0.15	0.59	0.40	0.40
v/c Ratio	0.97	0.76	0.83	0.73	0.70	0.54
Control Delay	66.9	38.4	81.2	11.5	30.1	4.5
Queue Delay	40.9	0.0	0.0	0.2	0.1	0.0
Total Delay	107.8	38.4	81.2	11.7	30.3	4.5
LOS	F	D	F	B	C	A
Approach Delay	78.0			20.7	23.6	
Approach LOS	E			C	C	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 33.8	Intersection LOS: C
Intersection Capacity Utilization 102.1%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	469	6	433	214	1440	0	0	1335	463
Future Volume (veh/h)	0	0	0	469	6	433	214	1440	0	0	1335	463
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				504	6	431	230	1548	0	0	1435	311
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				553	7	498	256	2216	0	0	2260	698
Arrive On Green				0.31	0.31	0.31	0.28	1.00	0.00	0.00	0.44	0.44
Sat Flow, veh/h				1789	21	1610	1810	3705	0	0	5358	1601
Grp Volume(v), veh/h				510	0	431	230	1548	0	0	1435	311
Grp Sat Flow(s),veh/h/ln				1811	0	1610	1810	1805	0	0	1729	1601
Q Serve(g_s), s				29.8	0.0	27.8	13.4	0.0	0.0	0.0	23.7	15.0
Cycle Q Clear(g_c), s				29.8	0.0	27.8	13.4	0.0	0.0	0.0	23.7	15.0
Prop In Lane				0.99		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				559	0	498	256	2216	0	0	2260	698
V/C Ratio(X)				0.91	0.00	0.87	0.90	0.70	0.00	0.00	0.63	0.45
Avail Cap(c_a), veh/h				609	0	542	296	2216	0	0	2260	698
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.73	0.73	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				36.6	0.0	35.9	38.6	0.0	0.0	0.0	24.2	21.7
Incr Delay (d2), s/veh				17.3	0.0	13.1	20.2	1.4	0.0	0.0	1.4	2.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				15.2	0.0	12.2	6.4	0.4	0.0	0.0	9.5	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				53.8	0.0	49.0	58.9	1.4	0.0	0.0	25.6	23.8
LnGrp LOS				D	A	D	E	A	A	A	C	C
Approach Vol, veh/h					941			1778			1746	
Approach Delay, s/veh					51.6			8.8			25.3	
Approach LOS					D			A			C	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		72.0			19.6	52.4		38.0				
Change Period (Y+Rc), s		4.5			4.0	4.5		4.0				
Max Green Setting (Gmax), s		64.5			18.0	42.5		37.0				
Max Q Clear Time (g_c+I1), s		2.0			15.4	25.7		31.8				
Green Ext Time (p_c), s		18.0			0.2	10.0		2.2				

Intersection Summary		
HCM 6th Ctrl Delay	24.3	
HCM 6th LOS	C	

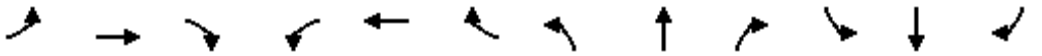
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	358	3	1296	859	462	1342
Future Volume (vph)	358	3	1296	859	462	1342
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	37.1	37.1	32.8	32.8	40.1	72.9
Total Split (%)	33.7%	33.7%	29.8%	29.8%	36.5%	66.3%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	21.1	21.1	45.8	45.8	32.1	81.4
Actuated g/C Ratio	0.19	0.19	0.42	0.42	0.29	0.74
v/c Ratio	0.73	0.66	0.61	0.87	0.90	0.51
Control Delay	54.4	42.8	24.1	22.6	47.8	3.0
Queue Delay	0.1	0.1	0.0	0.0	12.3	0.5
Total Delay	54.5	42.8	24.1	22.6	60.1	3.5
LOS	D	D	C	C	E	A
Approach Delay		48.8	23.5			18.0
Approach LOS		D	C			B

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 23.9	Intersection LOS: C
Intersection Capacity Utilization 102.1%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	358	3	98	0	0	0	0	1296	859	462	1342	0
Future Volume (veh/h)	358	3	98	0	0	0	0	1296	859	462	1342	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	229	194	90				0	1322	672	471	1369	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	340	231	107				0	1358	419	806	2685	0
Arrive On Green	0.19	0.19	0.19				0.00	0.09	0.09	0.45	0.74	0.00
Sat Flow, veh/h	1810	1228	570				0	5358	1601	1810	3705	0
Grp Volume(v), veh/h	229	0	284				0	1322	672	471	1369	0
Grp Sat Flow(s),veh/h/ln	1810	0	1797				0	1729	1601	1810	1805	0
Q Serve(g_s), s	12.9	0.0	16.8				0.0	28.0	28.8	21.5	17.2	0.0
Cycle Q Clear(g_c), s	12.9	0.0	16.8				0.0	28.0	28.8	21.5	17.2	0.0
Prop In Lane	1.00		0.32				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	340	0	338				0	1358	419	806	2685	0
V/C Ratio(X)	0.67	0.00	0.84				0.00	0.97	1.60	0.58	0.51	0.00
Avail Cap(c_a), veh/h	553	0	549				0	1358	419	806	2685	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.24	0.24	0.65	0.65	0.00
Uniform Delay (d), s/veh	41.5	0.0	43.1				0.0	49.9	50.2	22.8	5.8	0.0
Incr Delay (d2), s/veh	2.3	0.0	6.3				0.0	7.3	274.2	0.5	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.0	7.8				0.0	13.8	44.2	8.8	5.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.8	0.0	49.3				0.0	57.1	324.4	23.3	6.3	0.0
LnGrp LOS	D	A	D				A	E	F	C	A	A
Approach Vol, veh/h		513						1994			1840	
Approach Delay, s/veh		46.9						147.2			10.6	
Approach LOS		D						F			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	53.0	32.8		24.2		85.8
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	36.6	* 29		33.6		68.9
Max Q Clear Time (g_c+I1), s	23.5	30.8		18.8		19.2
Green Ext Time (p_c), s	0.6	0.0		1.9		8.0

Intersection Summary	
HCM 6th Ctrl Delay	77.6
HCM 6th LOS	E

Notes

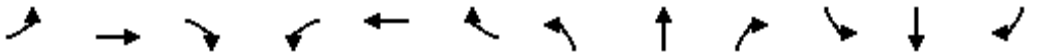
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	270	5	30	5	20	1680	57	1093	290
Future Volume (vph)	270	5	30	5	20	1680	57	1093	290
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases		4		8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	30.0	30.0	10.2	10.2	16.2	28.2	16.2	28.2	28.2
Total Split (s)	40.0	40.0	40.0	40.0	16.2	53.8	16.2	53.8	53.8
Total Split (%)	36.4%	36.4%	36.4%	36.4%	14.7%	48.9%	14.7%	48.9%	48.9%
Yellow Time (s)	5.0	5.0	5.0	5.0	3.0	4.7	3.0	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.0	5.7	4.0	5.7	5.7
Lead/Lag					Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min	C-Min
Act Effct Green (s)	31.2	31.2	31.2	31.2	64.7	58.0	67.7	62.8	62.8
Actuated g/C Ratio	0.28	0.28	0.28	0.28	0.59	0.53	0.62	0.57	0.57
v/c Ratio	1.00	0.09	0.08	0.36	0.07	0.93	0.32	0.55	0.31
Control Delay	92.4	10.5	27.9	5.9	6.0	20.1	12.2	21.0	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	8.5	0.0	0.0	0.0
Total Delay	92.4	10.5	27.9	5.9	6.0	28.7	12.2	21.0	9.4
LOS	F	B	C	A	A	C	B	C	A
Approach Delay		81.6		8.7		28.4		18.3	
Approach LOS		F		A		C		B	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 68.3 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.00	
Intersection Signal Delay: 27.7	Intersection LOS: C
Intersection Capacity Utilization 90.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 10: Cedar Av. & Orange St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	5	36	30	5	205	20	1680	11	57	1093	290
Future Volume (veh/h)	270	5	36	30	5	205	20	1680	11	57	1093	290
Initial Q (Qb), veh	0	0	0	0	0	0	0	44	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	281	5	33	31	5	168	21	1750	11	59	1139	241
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	344	67	440	472	14	485	193	1912	6	121	1917	835
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.03	1.00	1.00	0.01	0.18	0.18
Sat Flow, veh/h	1231	216	1424	1389	47	1571	1810	3678	23	1810	3610	1572
Grp Volume(v), veh/h	281	0	38	31	0	173	21	858	903	59	1139	241
Grp Sat Flow(s),veh/h/ln	1231	0	1640	1389	0	1617	1810	1805	1896	1810	1805	1572
Q Serve(g_s), s	24.9	0.0	1.8	1.8	0.0	9.1	0.6	0.0	0.0	1.7	32.0	14.6
Cycle Q Clear(g_c), s	34.0	0.0	1.8	3.6	0.0	9.1	0.6	0.0	0.0	1.7	32.0	14.6
Prop In Lane	1.00		0.87	1.00		0.97	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	344	0	507	472	0	500	193	935	983	121	1917	835
V/C Ratio(X)	0.82	0.00	0.07	0.07	0.00	0.35	0.11	0.92	0.92	0.49	0.59	0.29
Avail Cap(c_a), veh/h	344	0	507	472	0	500	362	935	982	409	1917	835
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	0.85	0.85	0.85
Uniform Delay (d), s/veh	42.7	0.0	26.9	28.1	0.0	29.4	16.2	0.0	0.0	26.9	34.5	27.3
Incr Delay (d2), s/veh	14.2	0.0	0.1	0.1	0.0	0.4	0.0	1.9	1.8	2.6	1.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.0	43.9	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	0.0	0.7	0.6	0.0	3.6	0.2	12.9	12.5	0.8	15.6	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.8	0.0	26.9	28.2	0.0	29.8	16.2	49.8	45.7	29.4	35.6	28.1
LnGrp LOS	E	A	C	C	A	C	B	D	D	C	D	C
Approach Vol, veh/h		319			204			1782			1439	
Approach Delay, s/veh		53.3			29.6			47.3			34.1	
Approach LOS		D			C			D			C	

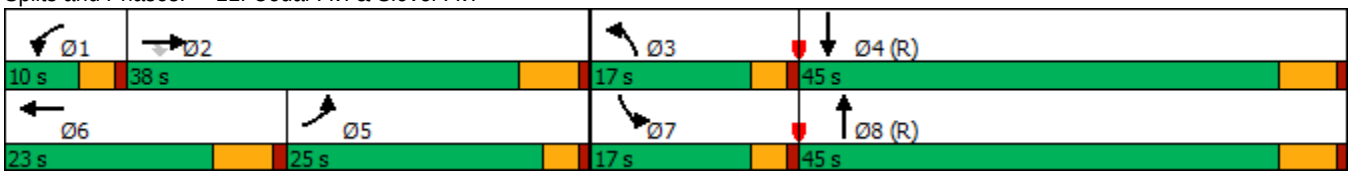
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.3	62.7		40.0	5.9	64.1		40.0				
Change Period (Y+Rc), s	4.0	5.7		6.0	4.0	5.7		6.0				
Max Green Setting (Gmax), s	12.2	48.1		34.0	12.2	48.1		34.0				
Max Q Clear Time (g_c+I1), s	3.7	2.0		36.0	2.6	34.0		11.1				
Green Ext Time (p_c), s	0.1	19.6		0.0	0.0	7.3		1.2				

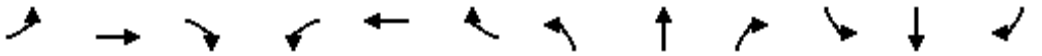
Intersection Summary			
HCM 6th Ctrl Delay		41.8	
HCM 6th LOS		D	

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	293	622	133	55	363	94	1141	186	821
Future Volume (vph)	293	622	133	55	363	94	1141	186	821
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2		1	6	3	8	7	4
Permitted Phases			2						
Detector Phase	5	2	2	1	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	29.0	29.0	8.0	23.0	8.0	32.7	8.0	24.7
Total Split (s)	25.0	38.0	38.0	10.0	23.0	17.0	45.0	17.0	45.0
Total Split (%)	22.7%	34.5%	34.5%	9.1%	20.9%	15.5%	40.9%	15.5%	40.9%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	4.7	3.0	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	4.0	5.7	4.0	5.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	20.7	33.7	33.7	6.0	17.0	10.8	39.3	13.3	41.8
Actuated g/C Ratio	0.19	0.31	0.31	0.05	0.15	0.10	0.36	0.12	0.38
v/c Ratio	0.93	0.61	0.24	0.60	1.07	0.57	1.05	0.92	0.78
Control Delay	78.7	35.8	6.0	76.6	89.9	55.3	82.6	97.6	32.4
Queue Delay	0.0	0.0	0.0	0.0	13.8	0.0	20.0	0.0	0.0
Total Delay	78.7	35.8	6.0	76.6	103.7	55.3	102.6	97.6	32.4
LOS	E	D	A	E	F	E	F	F	C
Approach Delay		44.0			101.6		99.3		42.9
Approach LOS		D			F		F		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 70.7	Intersection LOS: E
Intersection Capacity Utilization 97.0%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 11: Cedar Av. & Slover Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	293	622	133	55	363	278	94	1141	111	186	821	152
Future Volume (veh/h)	293	622	133	55	363	278	94	1141	111	186	821	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	315	669	99	59	390	245	101	1227	117	200	883	155
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	342	1154	508	76	331	205	128	1672	159	214	1684	295
Arrive On Green	0.19	0.32	0.32	0.04	0.15	0.15	0.07	0.50	0.50	0.16	0.73	0.73
Sat Flow, veh/h	1810	3610	1590	1810	2139	1327	1810	3331	317	1810	3062	537
Grp Volume(v), veh/h	315	669	99	59	328	307	101	664	680	200	520	518
Grp Sat Flow(s),veh/h/ln	1810	1805	1590	1810	1805	1661	1810	1805	1843	1810	1805	1795
Q Serve(g_s), s	18.8	17.0	5.0	3.6	17.0	17.0	6.0	31.8	32.1	12.0	13.8	13.8
Cycle Q Clear(g_c), s	18.8	17.0	5.0	3.6	17.0	17.0	6.0	31.8	32.1	12.0	13.8	13.8
Prop In Lane	1.00		1.00	1.00		0.80	1.00		0.17	1.00		0.30
Lane Grp Cap(c), veh/h	342	1154	508	76	279	257	128	906	925	214	992	987
V/C Ratio(X)	0.92	0.58	0.19	0.77	1.18	1.19	0.79	0.73	0.74	0.94	0.52	0.52
Avail Cap(c_a), veh/h	345	1154	508	99	279	257	214	906	925	214	992	987
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.66	0.66	0.66	0.83	0.83	0.83
Uniform Delay (d), s/veh	43.8	31.2	27.1	52.2	46.5	46.5	50.3	21.6	21.6	45.9	8.5	8.5
Incr Delay (d2), s/veh	28.9	0.7	0.2	24.0	110.5	119.3	7.1	3.5	3.5	38.8	1.6	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	7.1	1.8	2.1	16.2	15.5	2.9	13.1	13.5	7.4	4.4	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.6	32.0	27.3	76.2	157.0	165.8	57.4	25.0	25.1	84.8	10.2	10.2
LnGrp LOS	E	C	C	E	F	F	E	C	C	F	B	B
Approach Vol, veh/h		1083			694			1445			1238	
Approach Delay, s/veh		43.4			154.0			27.3			22.2	
Approach LOS		D			F			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	41.2	11.8	66.2	26.8	23.0	17.0	60.9
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	6.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	6.0	32.0	13.0	39.3	21.0	* 17	13.0	39.3
Max Q Clear Time (g_c+I1), s	5.6	19.0	8.0	15.8	20.8	19.0	14.0	34.1
Green Ext Time (p_c), s	0.0	3.6	0.1	6.9	0.0	0.0	0.0	3.4

Intersection Summary	
HCM 6th Ctrl Delay	49.5
HCM 6th LOS	D

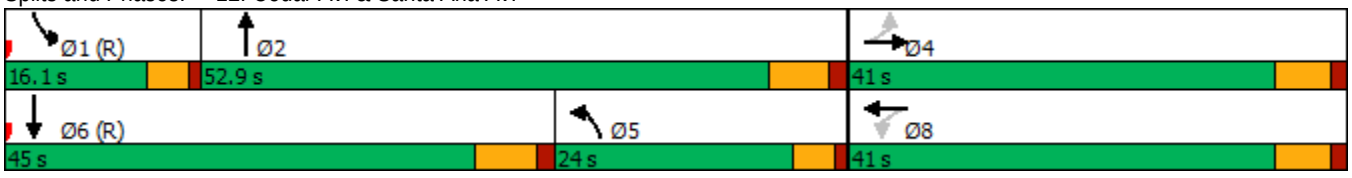
Notes

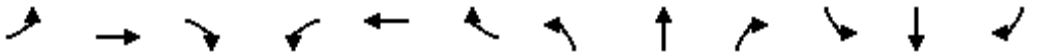
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	184	193	62	147	145	832	69	726
Future Volume (vph)	184	193	62	147	145	832	69	726
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	9.5	27.5	9.5	27.5
Total Split (s)	41.0	41.0	41.0	41.0	24.0	52.9	16.1	45.0
Total Split (%)	37.3%	37.3%	37.3%	37.3%	21.8%	48.1%	14.6%	40.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	4.5	6.5	4.5	6.5
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min
Act Effct Green (s)		41.9		41.9	15.2	42.5	8.6	35.9
Actuated g/C Ratio		0.38		0.38	0.14	0.39	0.08	0.33
v/c Ratio		1.13		0.59	0.61	0.69	0.52	0.72
Control Delay		116.3		32.3	34.5	11.8	42.9	43.2
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		116.3		32.3	34.5	11.8	42.9	43.2
LOS		F		C	C	B	D	D
Approach Delay		116.3		32.3		14.9		43.2
Approach LOS		F		C		B		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 90 (82%), Referenced to phase 1:SBL and 6:SBT, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.13	
Intersection Signal Delay: 45.1	Intersection LOS: D
Intersection Capacity Utilization 95.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 12: Cedar Av. & Santa Ana Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	193	152	62	147	103	145	832	81	69	726	68
Future Volume (veh/h)	184	193	152	62	147	103	145	832	81	69	726	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	194	203	117	65	155	68	153	876	83	73	764	65
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	198	166	94	121	279	111	368	1154	109	328	1030	88
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.41	0.69	0.69	0.06	0.10	0.10
Sat Flow, veh/h	479	522	295	255	876	349	1810	3332	316	1810	3366	286
Grp Volume(v), veh/h	514	0	0	288	0	0	153	474	485	73	410	419
Grp Sat Flow(s),veh/h/ln	1296	0	0	1480	0	0	1810	1805	1843	1810	1805	1847
Q Serve(g_s), s	18.1	0.0	0.0	0.0	0.0	0.0	6.6	18.7	18.7	4.2	24.3	24.3
Cycle Q Clear(g_c), s	35.0	0.0	0.0	16.9	0.0	0.0	6.6	18.7	18.7	4.2	24.3	24.3
Prop In Lane	0.38		0.23	0.23		0.24	1.00		0.17	1.00		0.15
Lane Grp Cap(c), veh/h	457	0	0	511	0	0	368	625	638	328	552	565
V/C Ratio(X)	1.12	0.00	0.00	0.56	0.00	0.00	0.42	0.76	0.76	0.22	0.74	0.74
Avail Cap(c_a), veh/h	457	0	0	511	0	0	368	761	777	328	632	647
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.65	0.65	0.65	0.64	0.64	0.64
Uniform Delay (d), s/veh	40.4	0.0	0.0	30.9	0.0	0.0	28.0	13.9	13.9	44.3	45.2	45.2
Incr Delay (d2), s/veh	80.3	0.0	0.0	1.8	0.0	0.0	0.2	4.7	4.7	0.1	5.7	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.6	0.0	0.0	6.4	0.0	0.0	2.5	5.0	5.1	1.9	12.5	12.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	120.7	0.0	0.0	32.7	0.0	0.0	28.2	18.7	18.6	44.4	50.9	50.8
LnGrp LOS	F	A	A	C	A	A	C	B	B	D	D	D
Approach Vol, veh/h		514			288			1112			902	
Approach Delay, s/veh		120.7			32.7			19.9			50.4	
Approach LOS		F			C			B			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	24.4	44.6		41.0	28.9	40.1		41.0				
Change Period (Y+Rc), s	4.5	6.5		6.0	6.5	* 6.5		6.0				
Max Green Setting (Gmax), s	11.6	46.4		35.0	19.5	* 39		35.0				
Max Q Clear Time (g_c+I1), s	6.2	20.7		37.0	8.6	26.3		18.9				
Green Ext Time (p_c), s	0.0	14.3		0.0	0.1	7.4		2.1				

Intersection Summary			
HCM 6th Ctrl Delay		49.4	
HCM 6th LOS		D	

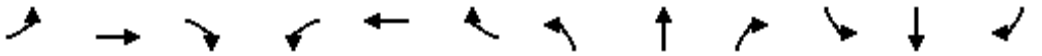
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	63	287	101	86	145	142	156	900	179	796
Future Volume (vph)	63	287	101	86	145	142	156	900	179	796
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	19.0	51.0	24.0	56.0
Total Split (%)	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	17.3%	46.4%	21.8%	50.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)		34.3	34.3		34.3	34.3	13.5	43.3	16.3	46.2
Actuated g/C Ratio		0.31	0.31		0.31	0.31	0.12	0.39	0.15	0.42
v/c Ratio		0.80	0.19		0.96	0.26	0.77	0.76	0.73	0.62
Control Delay		50.7	5.7		87.0	8.3	69.9	20.0	35.0	33.4
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		50.7	5.7		87.0	8.3	69.9	20.0	35.0	33.4
LOS		D	A		F	A	E	C	D	C
Approach Delay		40.6			57.1			26.9		33.7
Approach LOS		D			E			C		C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 35.0	Intersection LOS: D
Intersection Capacity Utilization 87.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	287	101	86	145	142	156	900	85	179	796	60
Future Volume (veh/h)	63	287	101	86	145	142	156	900	85	179	796	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	68	312	85	93	158	108	170	978	79	195	865	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	39	80	426	45	44	424	458	1554	125	230	1142	79
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.51	0.92	0.92	0.04	0.11	0.11
Sat Flow, veh/h	0	299	1588	0	165	1579	1810	3383	273	1810	3425	238
Grp Volume(v), veh/h	380	0	85	251	0	108	170	522	535	195	456	469
Grp Sat Flow(s),veh/h/ln	299	0	1588	165	0	1579	1810	1805	1851	1810	1805	1857
Q Serve(g_s), s	0.0	0.0	4.6	0.0	0.0	5.9	6.3	6.1	6.1	11.8	27.0	27.0
Cycle Q Clear(g_c), s	29.5	0.0	4.6	29.5	0.0	5.9	6.3	6.1	6.1	11.8	27.0	27.0
Prop In Lane	0.18		1.00	0.37		1.00	1.00		0.15	1.00		0.13
Lane Grp Cap(c), veh/h	119	0	426	89	0	424	458	829	850	230	602	619
V/C Ratio(X)	3.20	0.00	0.20	2.81	0.00	0.25	0.37	0.63	0.63	0.85	0.76	0.76
Avail Cap(c_a), veh/h	119	0	426	89	0	424	458	829	850	321	820	844
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.56	0.56	0.56	0.63	0.63	0.63
Uniform Delay (d), s/veh	36.6	0.0	31.1	41.0	0.0	31.6	21.9	2.7	2.7	51.6	44.6	44.6
Incr Delay (d2), s/veh	1010.0	0.0	0.3	846.0	0.0	0.4	0.3	2.0	2.0	9.3	2.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	35.8	0.0	1.7	23.4	0.0	2.3	2.3	1.5	1.6	6.2	13.3	13.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1046.7	0.0	31.4	886.9	0.0	32.1	22.1	4.7	4.7	61.0	46.8	46.8
LnGrp LOS	F	A	C	F	A	C	C	A	A	E	D	D
Approach Vol, veh/h		465			359			1227			1120	
Approach Delay, s/veh		861.1			629.7			7.1			49.3	
Approach LOS		F			F			A			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.5	56.5		35.0	32.3	42.7		35.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	19.5	45.0		29.5	14.5	50.0		29.5				
Max Q Clear Time (g_c+I1), s	13.8	8.1		31.5	8.3	29.0		31.5				
Green Ext Time (p_c), s	0.2	11.3		0.0	0.2	7.7		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		217.7	
HCM 6th LOS		F	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	145	51	37	34	294	1155	78	765
Future Volume (vph)	145	51	37	34	294	1155	78	765
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	10.0	10.0	9.5	24.0	9.5	24.0
Total Split (s)	41.0	41.0	41.0	41.0	23.0	53.0	16.0	46.0
Total Split (%)	37.3%	37.3%	37.3%	37.3%	20.9%	48.2%	14.5%	41.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)		35.7		35.7	20.5	51.3	9.8	38.3
Actuated g/C Ratio		0.32		0.32	0.19	0.47	0.09	0.35
v/c Ratio		0.96		0.23	0.95	0.76	0.53	0.80
Control Delay		61.5		24.4	84.5	29.5	37.3	41.4
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		61.5		24.4	84.5	29.5	37.3	41.4
LOS		E		C	F	C	D	D
Approach Delay		61.5		24.4		40.4		41.0
Approach LOS		E		C		D		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 74 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 43.4	Intersection LOS: D
Intersection Capacity Utilization 87.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 14: Rubidoux Bl./Cedar Av. & 7th St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	51	276	37	34	21	294	1155	25	78	765	147
Future Volume (veh/h)	145	51	276	37	34	21	294	1155	25	78	765	147
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	158	55	218	40	37	13	320	1255	27	85	832	159
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	209	67	237	185	164	51	304	1820	39	109	1197	229
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.17	0.50	0.50	0.06	0.40	0.40
Sat Flow, veh/h	559	226	803	468	555	173	1810	3611	78	1810	3023	578
Grp Volume(v), veh/h	431	0	0	90	0	0	320	627	655	85	497	494
Grp Sat Flow(s),veh/h/ln	1588	0	0	1196	0	0	1810	1805	1884	1810	1805	1795
Q Serve(g_s), s	23.7	0.0	0.0	0.0	0.0	0.0	18.5	29.0	29.1	5.1	25.2	25.2
Cycle Q Clear(g_c), s	28.7	0.0	0.0	5.0	0.0	0.0	18.5	29.0	29.1	5.1	25.2	25.2
Prop In Lane	0.37		0.51	0.44		0.14	1.00		0.04	1.00		0.32
Lane Grp Cap(c), veh/h	513	0	0	400	0	0	304	910	950	109	715	711
V/C Ratio(X)	0.84	0.00	0.00	0.22	0.00	0.00	1.05	0.69	0.69	0.78	0.70	0.70
Avail Cap(c_a), veh/h	563	0	0	446	0	0	304	910	950	189	715	711
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.61	0.61	0.61	0.80	0.80	0.80
Uniform Delay (d), s/veh	37.1	0.0	0.0	28.9	0.0	0.0	45.8	20.7	20.7	51.0	27.7	27.7
Incr Delay (d2), s/veh	10.8	0.0	0.0	0.4	0.0	0.0	54.5	2.6	2.5	9.3	4.4	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.7	0.0	0.0	1.8	0.0	0.0	12.5	11.6	12.1	2.5	11.1	11.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.9	0.0	0.0	29.3	0.0	0.0	100.2	23.4	23.3	60.3	32.1	32.2
LnGrp LOS	D	A	A	C	A	A	F	C	C	E	C	C
Approach Vol, veh/h		431			90			1602			1076	
Approach Delay, s/veh		47.9			29.3			38.7			34.4	
Approach LOS		D			C			D			C	

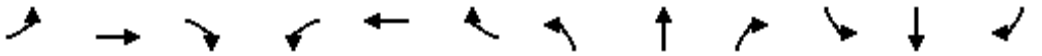
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	61.4		37.4	23.0	49.6		37.4				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	11.5	47.0		36.0	18.5	40.0		36.0				
Max Q Clear Time (g_c+I1), s	7.1	31.1		30.7	20.5	27.2		7.0				
Green Ext Time (p_c), s	0.1	9.3		1.7	0.0	6.3		0.7				

Intersection Summary			
HCM 6th Ctrl Delay		38.2	
HCM 6th LOS		D	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	11	10	297	9	334	14	728	241	835
Future Volume (vph)	11	10	297	9	334	14	728	241	835
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	35.0	35.0	35.0	9.5	24.0	9.5	24.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.6	35.0	20.0	45.4
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%	10.7%	38.9%	22.2%	50.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	5.0	4.5	6.0	4.5	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min
Act Effct Green (s)		19.2		24.6	24.6	5.2	26.9	14.2	44.0
Actuated g/C Ratio		0.24		0.30	0.30	0.06	0.33	0.17	0.54
v/c Ratio		0.09		0.76	0.47	0.12	0.82	0.77	0.45
Control Delay		15.6		39.8	5.0	42.7	31.8	52.3	13.7
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		15.6		39.8	5.0	42.7	31.8	52.3	13.7
LOS		B		D	A	D	C	D	B
Approach Delay		15.6		21.6			32.0		22.1
Approach LOS		B		C			C		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 81.6	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 25.4	Intersection LOS: C
Intersection Capacity Utilization 77.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 15: Rubidoux Bl. & Tarragona Dr./El Rivino Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	10	12	297	9	334	14	728	226	241	835	26
Future Volume (veh/h)	11	10	12	297	9	334	14	728	226	241	835	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	11	10	8	300	9	262	14	735	221	243	843	25
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	58	50	19	337	8	564	30	852	256	282	1620	48
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.02	0.31	0.31	0.16	0.45	0.45
Sat Flow, veh/h	0	143	54	726	22	1610	1810	2719	818	1810	3580	106
Grp Volume(v), veh/h	29	0	0	309	0	262	14	488	468	243	425	443
Grp Sat Flow(s),veh/h/ln	197	0	0	748	0	1610	1810	1805	1732	1810	1805	1881
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	10.8	0.7	21.8	21.8	11.2	14.5	14.5
Cycle Q Clear(g_c), s	30.0	0.0	0.0	30.0	0.0	10.8	0.7	21.8	21.8	11.2	14.5	14.5
Prop In Lane	0.38		0.28	0.97		1.00	1.00		0.47	1.00		0.06
Lane Grp Cap(c), veh/h	127	0	0	345	0	564	30	566	543	282	817	851
V/C Ratio(X)	0.23	0.00	0.00	0.90	0.00	0.46	0.47	0.86	0.86	0.86	0.52	0.52
Avail Cap(c_a), veh/h	127	0	0	345	0	564	108	611	586	327	830	865
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.6	0.0	0.0	30.1	0.0	21.6	41.8	27.7	27.7	35.3	16.8	16.8
Incr Delay (d2), s/veh	1.3	0.0	0.0	25.2	0.0	0.9	10.9	12.0	12.5	18.5	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	8.9	0.0	4.1	0.4	10.3	9.9	6.0	5.3	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.8	0.0	0.0	55.3	0.0	22.5	52.7	39.7	40.2	53.8	17.6	17.5
LnGrp LOS	C	A	A	E	A	C	D	D	D	D	B	B
Approach Vol, veh/h		29			571			970			1111	
Approach Delay, s/veh		23.8			40.2			40.1			25.5	
Approach LOS		C			D			D			C	

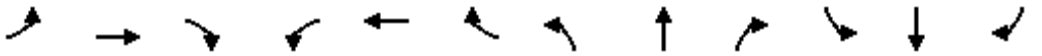
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.8	32.9		35.0	5.9	44.8		35.0				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	15.5	29.0		30.0	5.1	39.4		30.0				
Max Q Clear Time (g_c+I1), s	13.2	23.8		32.0	2.7	16.5		32.0				
Green Ext Time (p_c), s	0.2	3.1		0.0	0.0	7.2		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		33.9	
HCM 6th LOS		C	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	79	196	483	110	628	172	280	583	673	382	67
Future Volume (vph)	79	196	483	110	628	172	280	583	673	382	67
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	14.6	10.8	27.8	27.8	9.6	28.2	28.2	9.6	35.2	35.2
Total Split (s)	13.0	19.2	26.4	32.6	32.6	24.9	42.2	42.2	32.2	49.5	49.5
Total Split (%)	10.8%	16.0%	22.0%	27.2%	27.2%	20.8%	35.2%	35.2%	26.8%	41.3%	41.3%
Yellow Time (s)	3.6	3.6	4.8	4.8	4.8	3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	5.8	5.8	5.8	4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	8.2	12.8	18.5	26.3	26.3	14.4	25.5	25.5	23.7	34.8	34.8
Actuated g/C Ratio	0.08	0.12	0.18	0.26	0.26	0.14	0.25	0.25	0.23	0.34	0.34
v/c Ratio	0.56	0.74	0.78	0.23	0.74	0.70	0.32	0.89	0.85	0.32	0.11
Control Delay	67.2	33.0	51.9	37.4	10.1	59.6	32.5	31.9	50.5	26.2	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.2	33.0	51.9	37.4	10.1	59.6	32.5	31.9	50.5	26.2	0.3
LOS	E	C	D	D	B	E	C	C	D	C	A
Approach Delay		38.4		29.1			36.7			39.2	
Approach LOS		D		C			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 102.6	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 35.3	Intersection LOS: D
Intersection Capacity Utilization 80.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	196	230	483	110	628	172	280	583	673	382	67
Future Volume (veh/h)	79	196	230	483	110	628	172	280	583	673	382	67
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	81	200	107	493	112	422	176	286	416	687	390	52
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	105	293	150	614	492	417	216	598	267	798	1060	472
Arrive On Green	0.06	0.13	0.13	0.17	0.26	0.26	0.12	0.17	0.17	0.23	0.29	0.29
Sat Flow, veh/h	1810	2308	1184	3510	1900	1610	1810	3610	1610	3510	3610	1607
Grp Volume(v), veh/h	81	155	152	493	112	422	176	286	416	687	390	52
Grp Sat Flow(s),veh/h/ln	1810	1805	1687	1755	1900	1610	1810	1805	1610	1755	1805	1607
Q Serve(g_s), s	3.5	6.4	6.8	10.6	3.6	9.9	7.5	5.6	7.9	14.8	6.7	1.9
Cycle Q Clear(g_c), s	3.5	6.4	6.8	10.6	3.6	9.9	7.5	5.6	7.9	14.8	6.7	1.9
Prop In Lane	1.00		0.70	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	105	229	214	614	492	417	216	598	267	798	1060	472
V/C Ratio(X)	0.77	0.67	0.71	0.80	0.23	1.01	0.81	0.48	1.56	0.86	0.37	0.11
Avail Cap(c_a), veh/h	193	335	313	920	648	549	467	1653	737	1232	1988	885
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.5	32.8	32.9	31.1	22.9	6.9	33.8	29.7	12.1	29.2	22.0	20.3
Incr Delay (d2), s/veh	11.2	3.4	4.3	3.1	0.2	38.2	2.8	0.6	257.3	2.5	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	3.0	3.0	4.4	1.5	10.3	3.2	2.3	23.4	5.9	2.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.7	36.2	37.3	34.3	23.2	45.1	36.6	30.3	269.4	31.7	22.2	20.4
LnGrp LOS	D	D	D	C	C	F	D	C	F	C	C	C
Approach Vol, veh/h		388			1027			878			1129	
Approach Delay, s/veh		39.0			37.5			144.8			27.9	
Approach LOS		D			D			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.1	19.2	19.6	15.8	14.0	29.3	9.2	26.2
Change Period (Y+Rc), s	6.2	* 6.2	5.8	* 5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	27.6	* 36	20.6	* 15	20.3	43.3	8.4	26.8
Max Q Clear Time (g_c+I1), s	16.8	9.9	12.6	8.8	9.5	8.7	5.5	11.9
Green Ext Time (p_c), s	1.1	3.1	1.1	0.9	0.2	2.5	0.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay	62.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↕			↕	
Traffic Vol, veh/h	5	25	12	47	12	15	24	1016	110	177	913	5
Future Vol, veh/h	5	25	12	47	12	15	24	1016	110	177	913	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	26	12	48	12	15	24	1037	112	181	932	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1870	2495	469	1983	2441	576	937	0	0	1150	0	0
Stage 1	1297	1297	-	1142	1142	-	-	-	-	-	-	-
Stage 2	573	1198	-	841	1299	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	45	29	546	~ 37	32	466	739	-	-	615	-	-
Stage 1	174	234	-	217	278	-	-	-	-	-	-	-
Stage 2	477	261	-	330	234	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 10	546	-	~ 11	466	739	-	-	614	-	-
Mov Cap-2 Maneuver	-	~ 10	-	-	~ 11	-	-	-	-	-	-	-
Stage 1	158	90	-	197	252	-	-	-	-	-	-	-
Stage 2	398	236	-	89	90	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.6	4.6
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	739	-	-	-	-	614	-	-
HCM Lane V/C Ratio	0.033	-	-	-	-	0.294	-	-
HCM Control Delay (s)	10	0.4	-	-	-	13.3	2.9	-
HCM Lane LOS	B	A	-	-	-	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-	1.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	5	14	5	5	8	10	1136	19	8	954	10
Future Vol, veh/h	5	5	14	5	5	8	10	1136	19	8	954	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	110	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	5	15	5	5	9	11	1248	21	9	1048	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1722	2366	531	1828	2361	637	1060	0	0	1271	0	0
Stage 1	1073	1073	-	1283	1283	-	-	-	-	-	-	-
Stage 2	649	1293	-	545	1078	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	59	36	498	49	36	425	665	-	-	553	-	-
Stage 1	239	299	-	178	238	-	-	-	-	-	-	-
Stage 2	430	235	-	495	297	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	55	35	498	45	35	424	664	-	-	552	-	-
Mov Cap-2 Maneuver	158	131	-	131	132	-	-	-	-	-	-	-
Stage 1	235	294	-	175	233	-	-	-	-	-	-	-
Stage 2	404	231	-	463	292	-	-	-	-	-	-	-

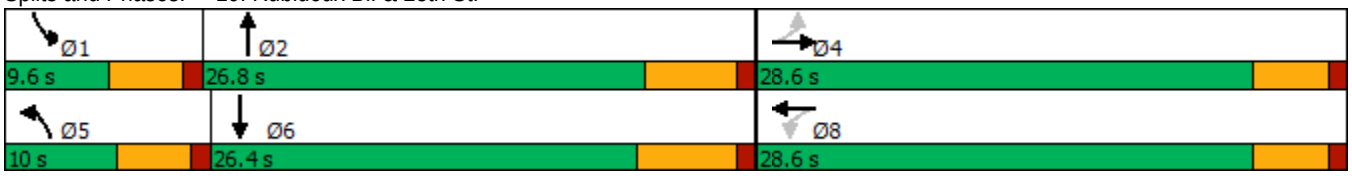
Approach	EB	WB	NB	SB
HCM Control Delay, s	21.5	26.1	0.1	0.1
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	664	-	-	245	190	552	-	-
HCM Lane V/C Ratio	0.017	-	-	0.108	0.104	0.016	-	-
HCM Control Delay (s)	10.5	-	-	21.5	26.1	11.6	-	-
HCM Lane LOS	B	-	-	C	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.3	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	60	16	91	13	103	1090	23	885
Future Volume (vph)	60	16	91	13	103	1090	23	885
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	28.6	28.6	28.6	28.6	9.6	24.4	9.6	22.8
Total Split (s)	28.6	28.6	28.6	28.6	10.0	26.8	9.6	26.4
Total Split (%)	44.0%	44.0%	44.0%	44.0%	15.4%	41.2%	14.8%	40.6%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.4	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		13.3		13.3	5.9	30.7	5.5	24.6
Actuated g/C Ratio		0.27		0.27	0.12	0.63	0.11	0.50
v/c Ratio		0.35		0.35	0.51	0.55	0.12	0.57
Control Delay		11.4		18.3	37.1	12.9	26.5	16.4
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		11.4		18.3	37.1	12.9	26.5	16.4
LOS		B		B	D	B	C	B
Approach Delay		11.4		18.3		14.9		16.7
Approach LOS		B		B		B		B

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 49.1	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.57	
Intersection Signal Delay: 15.5	Intersection LOS: B
Intersection Capacity Utilization 60.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 19: Rubidoux Bl. & 28th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	16	76	91	13	15	103	1090	64	23	885	65
Future Volume (veh/h)	60	16	76	91	13	15	103	1090	64	23	885	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	65	17	54	98	14	10	111	1172	69	25	952	70
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	232	74	120	370	51	24	155	1498	88	54	1286	95
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.09	0.43	0.43	0.03	0.38	0.38
Sat Flow, veh/h	576	398	641	1168	272	129	1810	3460	204	1810	3409	251
Grp Volume(v), veh/h	136	0	0	122	0	0	111	611	630	25	504	518
Grp Sat Flow(s),veh/h/ln	1615	0	0	1569	0	0	1810	1805	1858	1810	1805	1855
Q Serve(g_s), s	0.4	0.0	0.0	0.0	0.0	0.0	2.6	12.4	12.5	0.6	10.3	10.3
Cycle Q Clear(g_c), s	2.9	0.0	0.0	2.5	0.0	0.0	2.6	12.4	12.5	0.6	10.3	10.3
Prop In Lane	0.48		0.40	0.80		0.08	1.00		0.11	1.00		0.14
Lane Grp Cap(c), veh/h	426	0	0	445	0	0	155	781	804	54	681	700
V/C Ratio(X)	0.32	0.00	0.00	0.27	0.00	0.00	0.72	0.78	0.78	0.46	0.74	0.74
Avail Cap(c_a), veh/h	999	0	0	973	0	0	228	901	928	211	868	892
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.3	0.0	0.0	15.2	0.0	0.0	19.1	10.4	10.4	20.4	11.5	11.5
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.3	0.0	0.0	2.3	3.9	3.9	2.2	2.5	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	1.0	0.0	0.0	1.0	4.0	4.1	0.2	3.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.8	0.0	0.0	15.5	0.0	0.0	21.4	14.4	14.3	22.7	14.1	14.0
LnGrp LOS	B	A	A	B	A	A	C	B	B	C	B	B
Approach Vol, veh/h		136			122			1352			1047	
Approach Delay, s/veh		15.8			15.5			14.9			14.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	24.4		12.6	8.3	22.0		12.6				
Change Period (Y+Rc), s	4.6	* 5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	5.0	* 21		24.0	5.4	20.6		24.0				
Max Q Clear Time (g_c+I1), s	2.6	14.5		4.9	4.6	12.3		4.5				
Green Ext Time (p_c), s	0.0	4.1		0.7	0.0	3.6		0.6				

Intersection Summary		
HCM 6th Ctrl Delay		14.7
HCM 6th LOS		B

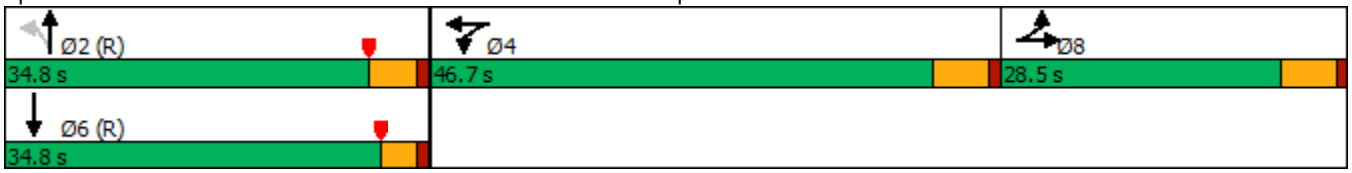
Notes

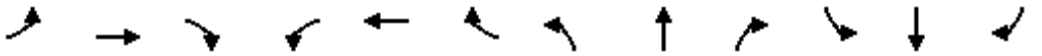
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	48	0	125	112	1011	990
Future Volume (vph)	48	0	125	112	1011	990
Turn Type	Split	NA	NA	Perm	NA	NA
Protected Phases	8	8	4		2	6
Permitted Phases				2		
Detector Phase	8	8	4	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.5	28.5	46.7	34.8	34.8	34.8
Total Split (%)	25.9%	25.9%	42.5%	31.6%	31.6%	31.6%
Yellow Time (s)	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	17.9	17.9	41.2	34.9	34.9	35.9
Actuated g/C Ratio	0.16	0.16	0.37	0.32	0.32	0.33
v/c Ratio	0.18	0.79	1.46	1.77	0.96	0.98
Control Delay	38.9	48.4	243.9	376.8	28.9	59.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.9	48.4	243.9	376.8	28.9	59.1
LOS	D	D	F	F	C	E
Approach Delay		46.8	243.9		63.6	59.1
Approach LOS		D	F		E	E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.77	
Intersection Signal Delay: 109.5	Intersection LOS: F
Intersection Capacity Utilization 124.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	0	236	589	125	197	112	1011	0	0	990	61
Future Volume (veh/h)	48	0	236	589	125	197	112	1011	0	0	990	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	52	0	195	640	136	185	122	1099	0	0	1076	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	262	0	233	444	94	128	83	1211	0	0	1162	68
Arrive On Green	0.14	0.00	0.14	0.37	0.37	0.37	0.67	0.67	0.00	0.00	0.34	0.34
Sat Flow, veh/h	1810	0	1610	1185	252	342	502	3705	0	0	3560	203
Grp Volume(v), veh/h	52	0	195	961	0	0	122	1099	0	0	560	579
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1779	0	0	502	1805	0	0	1805	1863
Q Serve(g_s), s	2.8	0.0	13.0	41.2	0.0	0.0	3.9	28.2	0.0	0.0	32.9	32.9
Cycle Q Clear(g_c), s	2.8	0.0	13.0	41.2	0.0	0.0	36.9	28.2	0.0	0.0	32.9	32.9
Prop In Lane	1.00		1.00	0.67		0.19	1.00		0.00	0.00		0.11
Lane Grp Cap(c), veh/h	262	0	233	666	0	0	83	1211	0	0	605	625
V/C Ratio(X)	0.20	0.00	0.84	1.44	0.00	0.00	1.46	0.91	0.00	0.00	0.93	0.93
Avail Cap(c_a), veh/h	378	0	337	666	0	0	83	1211	0	0	605	625
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.80	0.80
Uniform Delay (d), s/veh	41.4	0.0	45.8	34.4	0.0	0.0	36.1	16.7	0.0	0.0	35.2	35.2
Incr Delay (d2), s/veh	0.4	0.0	12.8	207.4	0.0	0.0	262.0	11.5	0.0	0.0	18.9	18.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	6.0	55.0	0.0	0.0	8.1	7.4	0.0	0.0	17.0	17.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.9	0.0	58.6	241.8	0.0	0.0	298.1	28.1	0.0	0.0	54.2	53.8
LnGrp LOS	D	A	E	F	A	A	F	C	A	A	D	D
Approach Vol, veh/h		247			961			1221			1139	
Approach Delay, s/veh		55.1			241.8			55.1			54.0	
Approach LOS		E			F			E			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.9		46.7		41.9		21.4				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		29.8		41.2		* 31		23.0				
Max Q Clear Time (g_c+I1), s		38.9		43.2		34.9		15.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		1.0				

Intersection Summary												
HCM 6th Ctrl Delay			105.0									
HCM 6th LOS			F									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	262	1123	898	917
Future Vol, veh/h	0	0	262	1123	898	917
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	282	1208	966	986

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	977	1953	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	0	685	318	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	-	684	317	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

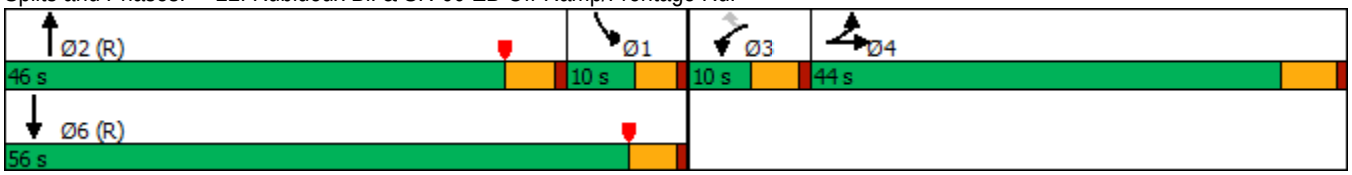
Approach	EB	NB	SB
HCM Control Delay, s	0	12	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	317	-	-	-	-
HCM Lane V/C Ratio	0.889	-	-	-	-
HCM Control Delay (s)	63.2	-	0	-	-
HCM Lane LOS	F	-	A	-	-
HCM 95th %tile Q(veh)	8.3	-	-	-	-

Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	53	103	17	832	196	702
Future Volume (vph)	53	103	17	832	196	702
Turn Type	NA	Prot	Perm	NA	Prot	NA
Protected Phases	4	3		2	1	6
Permitted Phases			3			
Detector Phase	4	3	3	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	10.0	10.0	45.0	9.5	30.0
Total Split (s)	44.0	10.0	10.0	46.0	10.0	56.0
Total Split (%)	40.0%	9.1%	9.1%	41.8%	9.1%	50.9%
Yellow Time (s)	4.5	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	38.5	5.0	5.0	39.3	7.2	51.0
Actuated g/C Ratio	0.35	0.05	0.05	0.36	0.07	0.46
v/c Ratio	1.71	1.30	0.09	0.92	1.73	0.44
Control Delay	352.3	243.3	1.0	44.7	359.5	14.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	352.3	243.3	1.0	44.7	359.5	14.6
LOS	F	F	A	D	F	B
Approach Delay	352.3			44.7		89.8
Approach LOS	F			D		F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.73	
Intersection Signal Delay: 164.4	Intersection LOS: F
Intersection Capacity Utilization 122.6%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	536	53	454	103	0	17	0	832	290	196	702	0
Future Volume (veh/h)	536	53	454	103	0	17	0	832	290	196	702	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	558	55	381	107	0	16	0	867	254	204	731	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	340	34	232	0	0	0	0	944	276	301	2002	0
Arrive On Green	0.35	0.35	0.35	0.00	0.00	0.00	0.00	0.34	0.34	0.33	1.00	0.00
Sat Flow, veh/h	972	96	664		0		0	2849	806	1810	3705	0
Grp Volume(v), veh/h	994	0	0		0.0		0	568	553	204	731	0
Grp Sat Flow(s),veh/h/ln	1732	0	0				0	1805	1755	1810	1805	0
Q Serve(g_s), s	38.5	0.0	0.0				0.0	33.2	33.3	10.7	0.0	0.0
Cycle Q Clear(g_c), s	38.5	0.0	0.0				0.0	33.2	33.3	10.7	0.0	0.0
Prop In Lane	0.56		0.38				0.00		0.46	1.00		0.00
Lane Grp Cap(c), veh/h	606	0	0				0	619	602	301	2002	0
V/C Ratio(X)	1.64	0.00	0.00				0.00	0.92	0.92	0.68	0.37	0.00
Avail Cap(c_a), veh/h	606	0	0				0	673	654	301	2002	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.62	0.62	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.8	0.0	0.0				0.0	34.7	34.7	34.2	0.0	0.0
Incr Delay (d2), s/veh	295.3	0.0	0.0				0.0	14.5	15.0	5.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	64.9	0.0	0.0				0.0	16.4	16.0	4.4	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	331.1	0.0	0.0				0.0	49.1	49.7	39.1	0.5	0.0
LnGrp LOS	F	A	A				A	D	D	D	A	A
Approach Vol, veh/h		994						1121			935	
Approach Delay, s/veh		331.1						49.4			8.9	
Approach LOS		F						D			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	23.3	42.7		44.0		66.0
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0
Max Green Setting (Gmax), s	5.5	* 41		38.5		51.0
Max Q Clear Time (g_c+I1), s	12.7	35.3		40.5		2.0
Green Ext Time (p_c), s	0.0	2.4		0.0		3.3

Intersection Summary		
HCM 6th Ctrl Delay		128.8
HCM 6th LOS		F

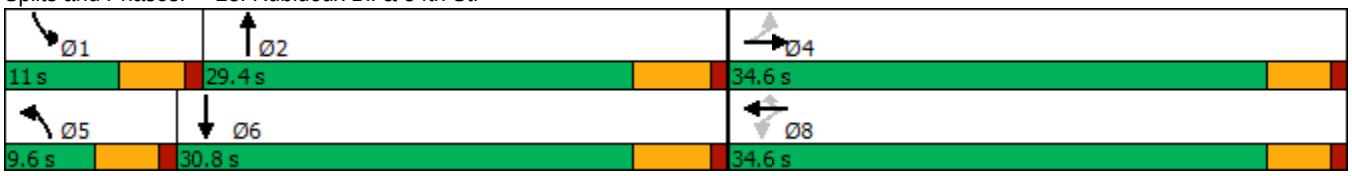
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	111	55	17	18	99	24	912	271	831
Future Volume (vph)	111	55	17	18	99	24	912	271	831
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	30.6	30.6	34.6	34.6	34.6	9.6	29.4	9.6	22.4
Total Split (s)	34.6	34.6	34.6	34.6	34.6	9.6	29.4	11.0	30.8
Total Split (%)	46.1%	46.1%	46.1%	46.1%	46.1%	12.8%	39.2%	14.7%	41.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	4.6	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		14.7		14.7	14.7	5.1	23.1	6.5	32.8
Actuated g/C Ratio		0.25		0.25	0.25	0.09	0.39	0.11	0.55
v/c Ratio		0.53		0.09	0.22	0.16	0.77	1.42	0.53
Control Delay		23.0		16.8	5.1	31.5	21.9	243.8	12.3
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		23.0		16.8	5.1	31.5	21.9	243.8	12.3
LOS		C		B	A	C	C	F	B
Approach Delay		23.0		8.2			22.1		62.0
Approach LOS		C		A			C		E

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 59.2	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.42	
Intersection Signal Delay: 40.5	Intersection LOS: D
Intersection Capacity Utilization 74.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 23: Rubidoux Bl. & 34th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	55	24	17	18	99	24	912	117	271	831	158
Future Volume (veh/h)	111	55	24	17	18	99	24	912	117	271	831	158
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	116	57	19	18	19	50	25	950	118	282	866	146
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	277	119	31	240	218	326	53	1234	153	229	1474	249
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.03	0.38	0.38	0.13	0.48	0.48
Sat Flow, veh/h	802	588	153	659	1074	1605	1810	3231	401	1810	3078	519
Grp Volume(v), veh/h	192	0	0	37	0	50	25	531	537	282	508	504
Grp Sat Flow(s),veh/h/ln	1543	0	0	1734	0	1605	1810	1805	1828	1810	1805	1792
Q Serve(g_s), s	4.4	0.0	0.0	0.0	0.0	1.3	0.7	13.0	13.0	6.4	10.3	10.3
Cycle Q Clear(g_c), s	5.6	0.0	0.0	0.8	0.0	1.3	0.7	13.0	13.0	6.4	10.3	10.3
Prop In Lane	0.60		0.10	0.49		1.00	1.00		0.22	1.00		0.29
Lane Grp Cap(c), veh/h	427	0	0	458	0	326	53	689	698	229	865	858
V/C Ratio(X)	0.45	0.00	0.00	0.08	0.00	0.15	0.47	0.77	0.77	1.23	0.59	0.59
Avail Cap(c_a), veh/h	1014	0	0	1073	0	953	179	857	868	229	907	900
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	0.0	0.0	16.4	0.0	16.6	24.2	13.7	13.7	22.1	9.5	9.5
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.1	0.0	0.2	2.4	3.4	3.4	135.9	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.0	0.3	0.0	0.5	0.3	4.7	4.7	11.0	3.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.9	0.0	0.0	16.5	0.0	16.8	26.6	17.1	17.1	158.0	10.5	10.5
LnGrp LOS	B	A	A	B	A	B	C	B	B	F	B	B
Approach Vol, veh/h		192			87			1093			1294	
Approach Delay, s/veh		18.9			16.6			17.3			42.6	
Approach LOS		B			B			B			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.0	24.7		14.9	6.1	29.6		14.9				
Change Period (Y+Rc), s	4.6	5.4		4.6	4.6	5.4		4.6				
Max Green Setting (Gmax), s	6.4	24.0		30.0	5.0	25.4		30.0				
Max Q Clear Time (g_c+I1), s	8.4	15.0		7.6	2.7	12.3		3.3				
Green Ext Time (p_c), s	0.0	4.3		1.1	0.0	5.1		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		29.7	
HCM 6th LOS		C	

Intersection	
Int Delay, s/veh	3.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	447	91	0	0	120	16
Future Vol, veh/h	447	91	0	0	120	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	508	103	0	0	136	18

Major/Minor	Major1			Minor1	
Conflicting Flow All	0	0		560	560
Stage 1	-	-		560	-
Stage 2	-	-		0	-
Critical Hdwy	-	-		6.4	6.2
Critical Hdwy Stg 1	-	-		5.4	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	-		3.5	3.3
Pot Cap-1 Maneuver	-	-		493	532
Stage 1	-	-		576	-
Stage 2	-	-		-	-
Platoon blocked, %	-	-			
Mov Cap-1 Maneuver	-	-		493	532
Mov Cap-2 Maneuver	-	-		493	-
Stage 1	-	-		576	-
Stage 2	-	-		-	-

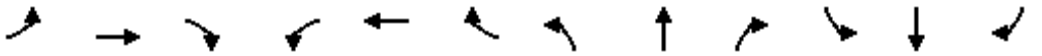
Approach	EB	NB
HCM Control Delay, s	0	15.5
HCM LOS		C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	497	-	-
HCM Lane V/C Ratio	0.311	-	-
HCM Control Delay (s)	15.5	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	1.3	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	438	1007	7	5	933	231	5	4	287	3
Future Volume (vph)	438	1007	7	5	933	231	5	4	287	3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	5	2		1	6			8		4
Permitted Phases			2			6	8		4	
Detector Phase	5	2	2	1	6	6	8	8	4	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	31.8	31.8	9.6	26.8	26.8	14.6	14.6	43.8	43.8
Total Split (s)	42.0	66.6	66.6	9.6	34.2	34.2	43.8	43.8	43.8	43.8
Total Split (%)	35.0%	55.5%	55.5%	8.0%	28.5%	28.5%	36.5%	36.5%	36.5%	36.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None
Act Effct Green (s)	32.8	64.7	64.7	5.0	29.1	29.1		39.2		38.0
Actuated g/C Ratio	0.28	0.56	0.56	0.04	0.25	0.25		0.34		0.33
v/c Ratio	0.92	0.53	0.01	0.06	1.10	0.42		0.03		1.19
Control Delay	64.1	17.8	0.0	57.0	101.5	6.9		21.5		135.9
Queue Delay	0.0	0.8	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	64.1	18.6	0.0	57.0	101.5	6.9		21.5		135.9
LOS	E	B	A	E	F	A		C		F
Approach Delay		32.3			82.6			21.5		135.9
Approach LOS		C			F			C		F

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 116.2	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.19	
Intersection Signal Delay: 69.1	Intersection LOS: E
Intersection Capacity Utilization 103.6%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	438	1007	7	5	933	231	5	4	5	287	3	283
Future Volume (veh/h)	438	1007	7	5	933	231	5	4	5	287	3	283
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	466	1071	6	5	993	208	5	4	5	305	3	169
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	494	1896	846	12	934	416	210	170	187	365	3	174
Arrive On Green	0.27	0.53	0.53	0.01	0.26	0.26	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1810	3610	1610	1810	3610	1610	510	517	571	957	9	530
Grp Volume(v), veh/h	466	1071	6	5	993	208	14	0	0	477	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1610	1598	0	0	1496	0	0
Q Serve(g_s), s	29.2	23.2	0.2	0.3	29.9	12.7	0.0	0.0	0.0	35.8	0.0	0.0
Cycle Q Clear(g_c), s	29.2	23.2	0.2	0.3	29.9	12.7	0.6	0.0	0.0	36.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.36		0.36	0.64		0.35
Lane Grp Cap(c), veh/h	494	1896	846	12	934	416	567	0	0	542	0	0
V/C Ratio(X)	0.94	0.56	0.01	0.43	1.06	0.50	0.02	0.00	0.00	0.88	0.00	0.00
Avail Cap(c_a), veh/h	585	1896	846	78	934	416	582	0	0	542	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	41.2	18.5	13.1	57.3	42.9	36.5	26.3	0.0	0.0	38.3	0.0	0.0
Incr Delay (d2), s/veh	20.8	1.2	0.0	9.1	47.9	4.2	0.0	0.0	0.0	15.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.3	9.2	0.1	0.2	19.0	5.3	0.3	0.0	0.0	14.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.0	19.8	13.1	66.4	90.8	40.8	26.3	0.0	0.0	53.6	0.0	0.0
LnGrp LOS	E	B	B	E	F	D	C	A	A	D	A	A
Approach Vol, veh/h		1543			1206			14			477	
Approach Delay, s/veh		32.5			82.1			26.3			53.6	
Approach LOS		C			F			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.3	66.6		43.8	36.2	35.7		43.8				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	60.8		38.0	37.4	28.4		* 39				
Max Q Clear Time (g_c+I1), s	2.3	25.2		38.4	31.2	31.9		2.6				
Green Ext Time (p_c), s	0.0	8.5		0.0	0.4	0.0		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		54.0
HCM 6th LOS		D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	250	80	59	16	5	19	18	100	5	50	5
Future Vol, veh/h	5	250	80	59	16	5	19	18	100	5	50	5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	278	89	66	18	6	21	20	111	6	56	6
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	10.5	9.4	8.9	8.8
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	14%	2%	0%	79%	0%	8%
Vol Thru, %	13%	98%	0%	21%	0%	83%
Vol Right, %	73%	0%	100%	0%	100%	8%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	137	255	80	75	5	60
LT Vol	19	5	0	59	0	5
Through Vol	18	250	0	16	0	50
RT Vol	100	0	80	0	5	5
Lane Flow Rate	152	283	89	83	6	67
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.198	0.404	0.109	0.134	0.007	0.096
Departure Headway (Hd)	4.671	5.131	4.416	5.788	4.685	5.159
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	764	700	806	616	757	690
Service Time	2.723	2.886	2.171	3.559	2.455	3.223
HCM Lane V/C Ratio	0.199	0.404	0.11	0.135	0.008	0.097
HCM Control Delay	8.9	11.4	7.7	9.5	7.5	8.8
HCM Lane LOS	A	B	A	A	A	A
HCM 95th-tile Q	0.7	2	0.4	0.5	0	0.3

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	20	5	38	18	5	5	12	163	10	15	159	17
Future Vol, veh/h	20	5	38	18	5	5	12	163	10	15	159	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	23	6	44	21	6	6	14	190	12	17	185	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	459	460	195	479	464	197	205	0	0	203	0	0
Stage 1	229	229	-	225	225	-	-	-	-	-	-	-
Stage 2	230	231	-	254	239	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	516	501	851	500	498	849	1378	-	-	1381	-	-
Stage 1	778	718	-	782	721	-	-	-	-	-	-	-
Stage 2	777	717	-	755	711	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	498	488	851	461	485	848	1378	-	-	1380	-	-
Mov Cap-2 Maneuver	498	488	-	461	485	-	-	-	-	-	-	-
Stage 1	769	708	-	773	712	-	-	-	-	-	-	-
Stage 2	757	708	-	700	701	-	-	-	-	-	-	-

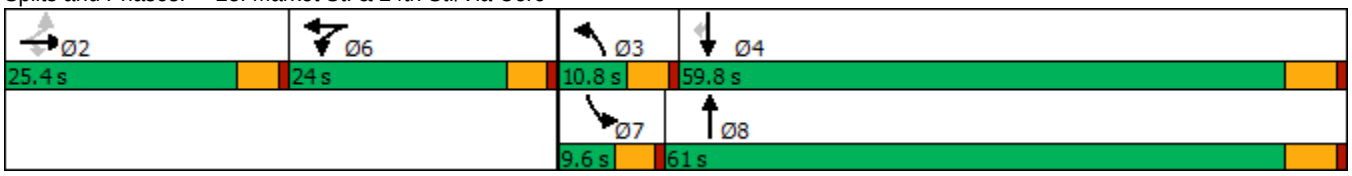
Approach	EB	WB	NB	SB
HCM Control Delay, s	11.1	12.6	0.5	0.6
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1378	-	-	663	507	1380	-	-
HCM Lane V/C Ratio	0.01	-	-	0.11	0.064	0.013	-	-
HCM Control Delay (s)	7.6	0	-	11.1	12.6	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.2	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	9	34	222	258	43	52	919	28	1017	8
Future Volume (vph)	9	34	222	258	43	52	919	28	1017	8
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	25.4	25.4	25.4	24.0	24.0	10.8	61.0	9.6	59.8	59.8
Total Split (%)	21.2%	21.2%	21.2%	20.0%	20.0%	9.0%	50.8%	8.0%	49.8%	49.8%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		15.7	15.7	19.5	19.5	6.0	57.4	5.0	54.5	54.5
Actuated g/C Ratio		0.14	0.14	0.17	0.17	0.05	0.51	0.04	0.48	0.48
v/c Ratio		0.52	0.80	0.96	0.29	0.63	1.22	0.40	1.28	0.01
Control Delay		65.0	44.7	89.5	31.4	83.2	134.1	70.2	161.7	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		65.0	44.7	89.5	31.4	83.2	134.1	70.2	161.7	0.0
LOS		E	D	F	C	F	F	E	F	A
Approach Delay		48.0			75.3		131.6		158.1	
Approach LOS		D			E		F		F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 113.2	
Natural Cycle: 115	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.28	
Intersection Signal Delay: 126.6	Intersection LOS: F
Intersection Capacity Utilization 94.6%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	34	222	258	43	41	52	919	87	28	1017	8
Future Volume (veh/h)	9	34	222	258	43	41	52	919	87	28	1017	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	10	39	170	297	49	38	60	1056	99	32	1169	9
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	49	191	204	313	172	133	78	847	79	51	915	776
Arrive On Green	0.13	0.13	0.13	0.17	0.17	0.17	0.04	0.50	0.50	0.03	0.48	0.48
Sat Flow, veh/h	384	1497	1599	1810	992	769	1810	1707	160	1810	1900	1610
Grp Volume(v), veh/h	49	0	170	297	0	87	60	0	1155	32	1169	9
Grp Sat Flow(s),veh/h/ln	1881	0	1599	1810	0	1762	1810	0	1867	1810	1900	1610
Q Serve(g_s), s	2.6	0.0	11.6	18.2	0.0	4.8	3.7	0.0	55.7	2.0	54.0	0.3
Cycle Q Clear(g_c), s	2.6	0.0	11.6	18.2	0.0	4.8	3.7	0.0	55.7	2.0	54.0	0.3
Prop In Lane	0.20		1.00	1.00		0.44	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	240	0	204	313	0	305	78	0	927	51	915	776
V/C Ratio(X)	0.20	0.00	0.83	0.95	0.00	0.29	0.77	0.00	1.25	0.63	1.28	0.01
Avail Cap(c_a), veh/h	349	0	297	313	0	305	100	0	927	81	915	776
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.8	0.0	47.7	45.9	0.0	40.3	53.1	0.0	28.2	53.9	29.1	15.1
Incr Delay (d2), s/veh	0.4	0.0	12.5	37.3	0.0	0.5	17.8	0.0	119.8	4.7	133.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	5.2	11.5	0.0	2.2	2.0	0.0	53.2	0.9	56.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.2	0.0	60.3	83.1	0.0	40.8	70.9	0.0	148.1	58.6	162.3	15.2
LnGrp LOS	D	A	E	F	A	D	E	A	F	E	F	B
Approach Vol, veh/h		219			384			1215			1210	
Approach Delay, s/veh		56.7			73.6			144.3			158.5	
Approach LOS		E			E			F			F	

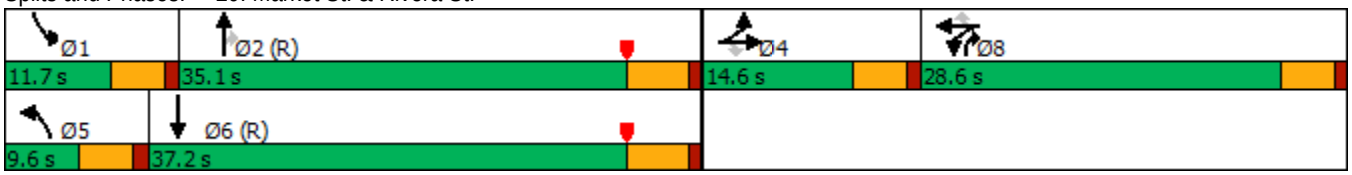
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		18.9	9.4	59.8		24.0	7.8	61.5				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		20.8	6.2	54.0		19.4	5.0	55.2				
Max Q Clear Time (g_c+I1), s		13.6	5.7	56.0		20.2	4.0	57.7				
Green Ext Time (p_c), s		0.5	0.0	0.0		0.0	0.0	0.0				

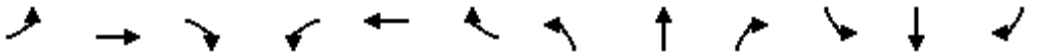
Intersection Summary												
HCM 6th Ctrl Delay			134.6									
HCM 6th LOS			F									

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	15	83	257	5	39	7	744	284	143	984
Future Volume (vph)	15	83	257	5	39	7	744	284	143	984
Turn Type	NA	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	4		8	8		5	2	8	1	6
Permitted Phases		4			8			2		
Detector Phase	4	4	8	8	8	5	2	8	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	14.6	14.6	28.6	28.6	28.6	9.6	35.1	28.6	9.6	29.1
Total Split (s)	14.6	14.6	28.6	28.6	28.6	9.6	35.1	28.6	11.7	37.2
Total Split (%)	16.2%	16.2%	31.8%	31.8%	31.8%	10.7%	39.0%	31.8%	13.0%	41.3%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.1	3.6	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	4.6	5.1	4.6	4.6	5.1
Lead/Lag						Lead	Lag		Lead	Lag
Lead-Lag Optimize?						Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	10.0	10.0	14.8	14.8	14.8	5.0	36.9	53.0	12.4	51.9
Actuated g/C Ratio	0.11	0.11	0.16	0.16	0.16	0.06	0.41	0.59	0.14	0.58
v/c Ratio	0.11	0.29	0.48	0.48	0.11	0.07	0.52	0.27	0.59	0.49
Control Delay	37.4	4.4	38.5	38.5	0.6	36.4	25.8	1.5	49.7	15.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1
Total Delay	37.4	4.4	38.5	38.5	0.6	36.4	26.1	1.5	49.7	15.2
LOS	D	A	D	D	A	D	C	A	D	B
Approach Delay	11.1			33.6			19.4			19.6
Approach LOS	B			C			B			B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 2 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 20.8	Intersection LOS: C
Intersection Capacity Utilization 57.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 29: Market St. & Rivera St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	15	83	257	5	39	7	744	284	143	984	5
Future Volume (veh/h)	7	15	83	257	5	39	7	744	284	143	984	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	7	15	43	269	0	21	7	767	192	147	1014	5
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	53	114	144	409	0	181	16	1837	1001	143	2132	11
Arrive On Green	0.09	0.09	0.09	0.11	0.00	0.11	0.02	1.00	1.00	0.08	0.58	0.58
Sat Flow, veh/h	595	1275	1610	3619	0	1603	1810	3610	1610	1810	3683	18
Grp Volume(v), veh/h	22	0	43	269	0	21	7	767	192	147	497	522
Grp Sat Flow(s),veh/h/ln	1870	0	1610	1810	0	1603	1810	1805	1610	1810	1805	1896
Q Serve(g_s), s	1.0	0.0	2.2	6.4	0.0	1.1	0.3	0.0	0.0	7.1	14.4	14.4
Cycle Q Clear(g_c), s	1.0	0.0	2.2	6.4	0.0	1.1	0.3	0.0	0.0	7.1	14.4	14.4
Prop In Lane	0.32		1.00	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	167	0	144	409	0	181	16	1837	1001	143	1045	1098
V/C Ratio(X)	0.13	0.00	0.30	0.66	0.00	0.12	0.43	0.42	0.19	1.03	0.48	0.48
Avail Cap(c_a), veh/h	208	0	179	965	0	427	101	1837	1001	143	1045	1098
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.95	0.95	0.95	0.09	0.09	0.09
Uniform Delay (d), s/veh	37.8	0.0	38.4	38.2	0.0	35.9	44.0	0.0	0.0	41.4	11.0	11.0
Incr Delay (d2), s/veh	0.4	0.0	1.2	1.8	0.0	0.3	6.4	0.7	0.4	30.6	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.9	2.9	0.0	0.4	0.2	0.2	0.1	4.2	4.8	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.1	0.0	39.5	40.1	0.0	36.2	50.3	0.7	0.4	72.0	11.2	11.1
LnGrp LOS	D	A	D	D	A	D	D	A	A	F	B	B
Approach Vol, veh/h		65			290			966			1166	
Approach Delay, s/veh		39.0			39.8			1.0			18.8	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.7	50.9		12.6	5.4	57.2		14.8				
Change Period (Y+Rc), s	4.6	5.1		4.6	4.6	5.1		4.6				
Max Green Setting (Gmax), s	7.1	30.0		10.0	5.0	32.1		24.0				
Max Q Clear Time (g_c+I1), s	9.1	2.0		4.2	2.3	16.4		8.4				
Green Ext Time (p_c), s	0.0	5.9		0.1	0.0	5.4		0.9				

Intersection Summary			
HCM 6th Ctrl Delay		14.9	
HCM 6th LOS		B	

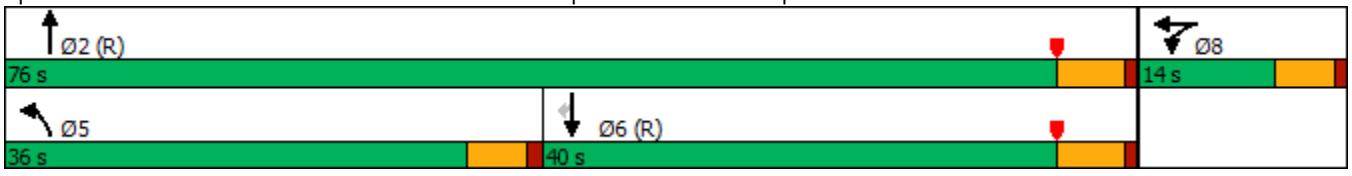
Notes

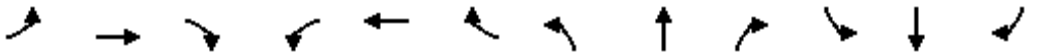
User approved volume balancing among the lanes for turning movement.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	9	704	548	331	1124	201
Future Volume (vph)	9	704	548	331	1124	201
Turn Type	NA	Free	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		Free				6
Detector Phase	8		5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	10.0		10.0	24.5	10.5	10.5
Total Split (s)	14.0		36.0	76.0	40.0	40.0
Total Split (%)	15.6%		40.0%	84.4%	44.4%	44.4%
Yellow Time (s)	4.0		4.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	C-Min	C-Min	C-Min
Act Effct Green (s)	9.3	90.0	30.0	70.2	35.2	35.2
Actuated g/C Ratio	0.10	1.00	0.33	0.78	0.39	0.39
v/c Ratio	0.86	0.44	0.93	0.12	0.81	0.27
Control Delay	79.9	0.9	46.8	10.1	26.4	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.7	0.0
Total Delay	79.9	0.9	46.8	10.1	27.1	4.3
LOS	E	A	D	B	C	A
Approach Delay	15.4			33.0	23.6	
Approach LOS	B			C	C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 24.0	Intersection LOS: C
Intersection Capacity Utilization 83.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 30: Market St. & SR-60 WB On-Ramp/SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	150	9	704	548	331	0	0	1124	201
Future Volume (veh/h)	0	0	0	150	9	704	548	331	0	0	1124	201
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				153	9	0	559	338	0	0	1147	0
Peak Hour Factor				0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				171	10		584	2828	0	0	1463	
Arrive On Green				0.10	0.10	0.00	0.54	1.00	0.00	0.00	0.81	0.00
Sat Flow, veh/h				1714	101	1610	1810	3705	0	0	3705	1610
Grp Volume(v), veh/h				162	0	0	559	338	0	0	1147	0
Grp Sat Flow(s),veh/h/ln				1814	0	1610	1810	1805	0	0	1805	1610
Q Serve(g_s), s				7.9	0.0	0.0	26.5	0.0	0.0	0.0	14.9	0.0
Cycle Q Clear(g_c), s				7.9	0.0	0.0	26.5	0.0	0.0	0.0	14.9	0.0
Prop In Lane				0.94		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				181	0		584	2828	0	0	1463	
V/C Ratio(X)				0.89	0.00		0.96	0.12	0.00	0.00	0.78	
Avail Cap(c_a), veh/h				181	0		623	2828	0	0	1463	
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	0.00	0.00	0.56	0.56	0.00	0.00	0.88	0.00
Uniform Delay (d), s/veh				40.0	0.0	0.0	20.2	0.0	0.0	0.0	6.5	0.0
Incr Delay (d2), s/veh				38.3	0.0	0.0	17.2	0.0	0.0	0.0	3.8	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.3	0.0	0.0	9.7	0.0	0.0	0.0	3.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				78.4	0.0	0.0	37.4	0.0	0.0	0.0	10.3	0.0
LnGrp LOS				E	A		D	A	A	A	B	
Approach Vol, veh/h					162			897			1147	
Approach Delay, s/veh					78.4			23.3			10.3	
Approach LOS					E			C			B	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	76.0		34.0	42.0		14.0						
Change Period (Y+Rc), s	5.5		5.0	5.5		5.0						
Max Green Setting (Gmax), s	70.5		31.0	34.5		9.0						
Max Q Clear Time (g_c+I1), s	2.0		28.5	16.9		9.9						
Green Ext Time (p_c), s	2.3		0.5	7.2		0.0						

Intersection Summary	
HCM 6th Ctrl Delay	20.6
HCM 6th LOS	C

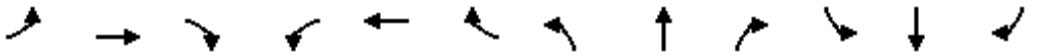
Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	4	768	772	691	582
Future Volume (vph)	4	768	772	691	582
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	24.5	10.0	10.5
Total Split (s)	21.0	21.0	32.0	37.0	69.0
Total Split (%)	23.3%	23.3%	35.6%	41.1%	76.7%
Yellow Time (s)	4.0	4.0	4.5	4.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.0	5.5
Lead/Lag			Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Min	None	C-Min
Act Effct Green (s)	12.7	12.7	27.9	33.9	66.8
Actuated g/C Ratio	0.14	0.14	0.31	0.38	0.74
v/c Ratio	0.44	0.82	0.76	1.04	0.22
Control Delay	39.9	14.9	33.3	78.8	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	39.9	14.9	33.3	78.8	3.8
LOS	D	B	C	E	A
Approach Delay	18.0		33.3		44.5
Approach LOS	B		C		D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 15 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.04	
Intersection Signal Delay: 33.6	Intersection LOS: C
Intersection Capacity Utilization 83.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 31: Market St. & SR-60 EB Off-Ramp/SR-60 EB On-Ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	4	768	0	0	0	0	772	58	691	582	0
Future Volume (veh/h)	106	4	768	0	0	0	0	772	58	691	582	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	108	4	519				0	788	0	705	594	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	311	12	504				0	928		701	2547	0
Arrive On Green	0.18	0.18	0.18				0.00	0.26	0.00	0.65	1.00	0.00
Sat Flow, veh/h	1748	65	2834				0	3800	0	1810	3705	0
Grp Volume(v), veh/h	112	0	519				0	788	0	705	594	0
Grp Sat Flow(s),veh/h/ln	1813	0	1417				0	1805	0	1810	1805	0
Q Serve(g_s), s	4.9	0.0	16.0				0.0	18.7	0.0	34.9	0.0	0.0
Cycle Q Clear(g_c), s	4.9	0.0	16.0				0.0	18.7	0.0	34.9	0.0	0.0
Prop In Lane	0.96		1.00				0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	322	0	504				0	928		701	2547	0
V/C Ratio(X)	0.35	0.00	1.03				0.00	0.85		1.01	0.23	0.00
Avail Cap(c_a), veh/h	322	0	504				0	1063		701	2547	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.48	0.48	0.00
Uniform Delay (d), s/veh	32.4	0.0	37.0				0.0	31.8	0.0	15.9	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	48.0				0.0	9.6	0.0	25.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	8.6				0.0	8.9	0.0	11.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.1	0.0	85.0				0.0	41.3	0.0	40.8	0.1	0.0
LnGrp LOS	C	A	F				A	D		F	A	A
Approach Vol, veh/h		631						788			1299	
Approach Delay, s/veh		75.8						41.3			22.2	
Approach LOS		E						D			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	40.4	28.6		21.0		69.0
Change Period (Y+Rc), s	5.5	* 5.5		5.0		5.5
Max Green Setting (Gmax), s	32.0	* 27		16.0		63.5
Max Q Clear Time (g_c+I1), s	36.9	20.7		18.0		2.0
Green Ext Time (p_c), s	0.0	2.5		0.0		4.3

Intersection Summary		
HCM 6th Ctrl Delay		40.2
HCM 6th LOS		D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	0	35	5	1	16	46	779	5	19	1225	106
Future Vol, veh/h	35	0	35	5	1	16	46	779	5	19	1225	106
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	145	-	-	140	-	110
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	36	0	36	5	1	17	48	811	5	20	1276	110

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1818	2229	638	1589	2337	409	1386	0	0	817	0	0
Stage 1	1316	1316	-	911	911	-	-	-	-	-	-	-
Stage 2	502	913	-	678	1426	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	*139	*59	*603	*275	44	597	844	-	-	820	-	-
Stage 1	*569	*498	-	*299	356	-	-	-	-	-	-	-
Stage 2	*525	*355	-	*569	427	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	*126	*54	*603	*242	41	596	844	-	-	819	-	-
Mov Cap-2 Maneuver	*283	*197	-	*252	179	-	-	-	-	-	-	-
Stage 1	*536	*486	-	*282	335	-	-	-	-	-	-	-
Stage 2	*480	*334	-	*521	417	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.5	14	0.5	0.1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	844	-	-	385	421	819	-	-
HCM Lane V/C Ratio	0.057	-	-	0.189	0.054	0.024	-	-
HCM Control Delay (s)	9.5	-	-	16.5	14	9.5	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.7	0.2	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	87.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	358	96	62	804	359	205
Future Vol, veh/h	358	96	62	804	359	205
Conflicting Peds, #/hr	0	0	0	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	448	120	78	1005	449	256

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1238	579	707	0	-	0
Stage 1	579	-	-	-	-	-
Stage 2	659	-	-	-	-	-
Critical Hdwy	6.6	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	~ 183	519	901	-	-	-
Stage 1	564	-	-	-	-	-
Stage 2	482	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 166	518	899	-	-	-
Mov Cap-2 Maneuver	~ 302	-	-	-	-	-
Stage 1	514	-	-	-	-	-
Stage 2	481	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 361.7	0.7	0
HCM LOS	F		

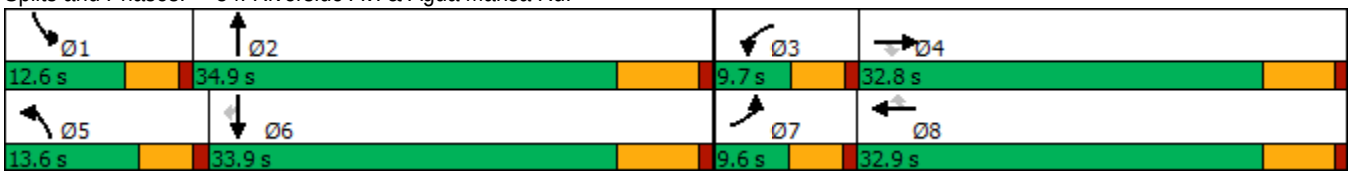
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	899	-	331	-	-
HCM Lane V/C Ratio	0.086	-	1.715	-	-
HCM Control Delay (s)	9.4	-	$ 361.7	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q(veh)	0.3	-	35.5	-	-

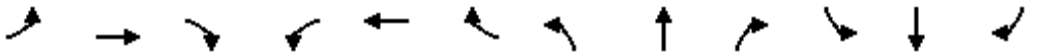
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	241	511	272	103	314	88	221	586	207	697	142
Future Volume (vph)	241	511	272	103	314	88	221	586	207	697	142
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	9.6	32.8	32.8	9.7	32.9	32.9	13.6	34.9	12.6	33.9	33.9
Total Split (%)	10.7%	36.4%	36.4%	10.8%	36.6%	36.6%	15.1%	38.8%	14.0%	37.7%	37.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	5.0	26.0	26.0	5.1	26.1	26.1	9.1	23.7	8.0	22.7	22.7
Actuated g/C Ratio	0.06	0.31	0.31	0.06	0.31	0.31	0.11	0.28	0.09	0.27	0.27
v/c Ratio	2.35	0.91	0.42	0.98	0.56	0.15	1.19	0.75	1.26	0.75	0.28
Control Delay	655.5	51.4	6.7	126.9	29.5	1.3	163.0	31.6	191.2	33.6	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	655.5	51.4	6.7	126.9	29.5	1.3	163.0	31.6	191.2	33.6	5.7
LOS	F	D	A	F	C	A	F	C	F	C	A
Approach Delay		181.8			44.4			62.2		61.0	
Approach LOS		F			D			E		E	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 84.5	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 2.35	
Intersection Signal Delay: 94.0	Intersection LOS: F
Intersection Capacity Utilization 82.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	241	511	272	103	314	88	221	586	142	207	697	142
Future Volume (veh/h)	241	511	272	103	314	88	221	586	142	207	697	142
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	251	532	185	107	327	77	230	610	142	216	726	140
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	111	586	495	113	588	498	200	778	181	177	922	410
Arrive On Green	0.06	0.31	0.31	0.06	0.31	0.31	0.11	0.27	0.27	0.10	0.26	0.26
Sat Flow, veh/h	1810	1900	1605	1810	1900	1609	1810	2908	676	1810	3610	1604
Grp Volume(v), veh/h	251	532	185	107	327	77	230	378	374	216	726	140
Grp Sat Flow(s),veh/h/ln	1810	1900	1605	1810	1900	1609	1810	1805	1778	1810	1805	1604
Q Serve(g_s), s	5.0	21.9	7.4	4.8	11.7	2.8	9.0	15.8	15.9	8.0	15.3	5.8
Cycle Q Clear(g_c), s	5.0	21.9	7.4	4.8	11.7	2.8	9.0	15.8	15.9	8.0	15.3	5.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	111	586	495	113	588	498	200	483	476	177	922	410
V/C Ratio(X)	2.26	0.91	0.37	0.95	0.56	0.15	1.15	0.78	0.79	1.22	0.79	0.34
Avail Cap(c_a), veh/h	111	629	531	113	631	534	200	628	619	177	1212	539
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.3	27.1	22.1	38.1	23.5	20.4	36.3	27.7	27.7	36.8	28.3	24.8
Incr Delay (d2), s/veh	596.3	16.5	0.5	66.9	0.9	0.1	110.8	4.8	5.0	138.1	2.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.5	11.6	2.6	4.1	4.9	1.0	9.8	6.7	6.6	10.0	6.2	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	634.6	43.6	22.5	105.0	24.4	20.6	147.1	32.5	32.7	174.9	30.9	25.3
LnGrp LOS	F	D	C	F	C	C	F	C	C	F	C	C
Approach Vol, veh/h		968			511			982			1082	
Approach Delay, s/veh		192.8			40.7			59.4			58.9	
Approach LOS		F			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	28.3	9.7	31.0	13.6	27.3	9.6	31.1
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	8.0	28.4	5.1	27.0	9.0	27.4	5.0	27.1
Max Q Clear Time (g_c+I1), s	10.0	17.9	6.8	23.9	11.0	17.3	7.0	13.7
Green Ext Time (p_c), s	0.0	3.0	0.0	1.1	0.0	3.4	0.0	1.6

Intersection Summary	
HCM 6th Ctrl Delay	93.0
HCM 6th LOS	F

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	0	0	0	0	9
Future Vol, veh/h	5	0	0	0	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	92	92	92	92	50
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	10	0	0	0	0	18

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	9	9	18	0	-	0
Stage 1	9	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	1017	1079	1612	-	-	-
Stage 1	1019	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1017	1079	1612	-	-	-
Mov Cap-2 Maneuver	1017	-	-	-	-	-
Stage 1	1019	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1612	-	1017	-	-
HCM Lane V/C Ratio	-	-	0.01	-	-
HCM Control Delay (s)	0	-	8.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

APPENDIX 10.2: CUMULATIVE HORIZON YEAR (2045) PLUS PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	13.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	460	5	742	474	5	228
Future Vol, veh/h	460	5	742	474	5	228
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	561	6	905	578	6	278

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	567	0	2949	561
Stage 1	-	-	-	-	561	-
Stage 2	-	-	-	-	2388	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1015	-	17	531
Stage 1	-	-	-	-	575	-
Stage 2	-	-	-	-	74	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1015	-	0	531
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	575	-
Stage 2	-	-	-	-	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	17.7	19.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	531	-	-	1015	-
HCM Lane V/C Ratio	0.535	-	-	0.892	-
HCM Control Delay (s)	19.3	-	-	29.1	0
HCM Lane LOS	C	-	-	D	A
HCM 95th %tile Q(veh)	3.1	-	-	12.8	-

Intersection	
Int Delay, s/veh	201.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	6	647	36	14	1131	0	58	9	18	2	21	28
Future Vol, veh/h	6	647	36	14	1131	0	58	9	18	2	21	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	799	44	17	1396	0	72	11	22	2	26	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1396	0	0	843	0	0	2296	2265	821	2282	2287	1396
Stage 1	-	-	-	-	-	-	835	835	-	1430	1430	-
Stage 2	-	-	-	-	-	-	1461	1430	-	852	857	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	496	-	-	802	-	-	~ 28	41	378	28	40	175
Stage 1	-	-	-	-	-	-	365	386	-	169	202	-
Stage 2	-	-	-	-	-	-	162	202	-	357	377	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	496	-	-	802	-	-	~ 8	36	378	18	35	175
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 8	36	-	18	35	-
Stage 1	-	-	-	-	-	-	355	376	-	164	183	-
Stage 2	-	-	-	-	-	-	101	183	-	317	367	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	$ 4511.4	253
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	11	496	-	-	802	-	-	59
HCM Lane V/C Ratio	9.54	0.015	-	-	0.022	-	-	1.067
HCM Control Delay (s)	$ 4511.4	12.4	0	-	9.6	0	-	253
HCM Lane LOS	F	B	A	-	A	A	-	F
HCM 95th %tile Q(veh)	14.5	0	-	-	0.1	-	-	5.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	34	50	9	18	54
Future Vol, veh/h	11	34	50	9	18	54
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	100	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	13	40	58	10	21	63

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	168	63	0	0	68	0
Stage 1	63	-	-	-	-	-
Stage 2	105	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	827	1007	-	-	1546	-
Stage 1	965	-	-	-	-	-
Stage 2	924	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	815	1007	-	-	1546	-
Mov Cap-2 Maneuver	815	-	-	-	-	-
Stage 1	965	-	-	-	-	-
Stage 2	911	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	1.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	815	1007	1546	-
HCM Lane V/C Ratio	-	-	0.016	0.039	0.014	-
HCM Control Delay (s)	-	-	9.5	8.7	7.4	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.1	0	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	43	0	6	0	39	14	11	67	0
Future Vol, veh/h	0	0	0	43	0	6	0	39	14	11	67	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	51	0	7	0	46	17	13	80	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	164	169	80	161	161	55	80	0	0	63	0	0
Stage 1	106	106	-	55	55	-	-	-	-	-	-	-
Stage 2	58	63	-	106	106	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	805	728	986	809	735	1018	1531	-	-	1553	-	-
Stage 1	905	811	-	962	853	-	-	-	-	-	-	-
Stage 2	959	846	-	905	811	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	794	721	986	803	728	1018	1531	-	-	1553	-	-
Mov Cap-2 Maneuver	794	721	-	803	728	-	-	-	-	-	-	-
Stage 1	905	804	-	962	853	-	-	-	-	-	-	-
Stage 2	952	846	-	897	804	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.7	0	1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1531	-	-	-	824	1553	-	-
HCM Lane V/C Ratio	-	-	-	-	0.071	0.008	-	-
HCM Control Delay (s)	0	-	-	0	9.7	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	0	0	48	88	22
Future Vol, veh/h	5	0	0	48	88	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	5	0	0	52	96	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	160	108	120	0	-	0
Stage 1	108	-	-	-	-	-
Stage 2	52	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	836	951	1480	-	-	-
Stage 1	921	-	-	-	-	-
Stage 2	976	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	836	951	1480	-	-	-
Mov Cap-2 Maneuver	836	-	-	-	-	-
Stage 1	921	-	-	-	-	-
Stage 2	976	-	-	-	-	-

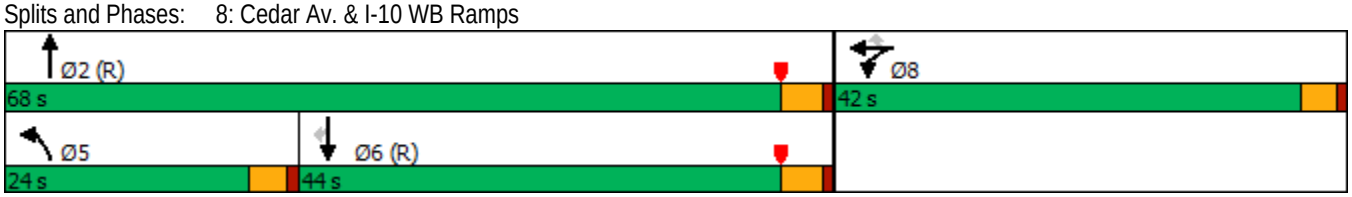
Approach	EB	NB	SB
HCM Control Delay, s	9.3	0	0
HCM LOS	A		

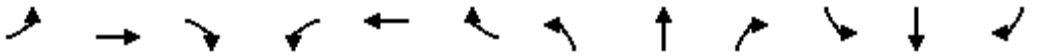
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1480	-	836	-	-
HCM Lane V/C Ratio	-	-	0.007	-	-
HCM Control Delay (s)	0	-	9.3	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	448	269	1165	1892	570
Future Volume (vph)	0	448	269	1165	1892	570
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	42.0	42.0	24.0	68.0	44.0	44.0
Total Split (%)	38.2%	38.2%	21.8%	61.8%	40.0%	40.0%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	37.5	37.5	19.3	64.0	40.7	40.7
Actuated g/C Ratio	0.34	0.34	0.18	0.58	0.37	0.37
v/c Ratio	0.97	0.74	0.89	0.58	1.03	0.67
Control Delay	62.0	36.1	66.0	16.8	62.8	10.7
Queue Delay	43.4	0.0	0.0	0.7	31.0	0.0
Total Delay	105.4	36.1	66.0	17.4	93.8	10.7
LOS	F	D	E	B	F	B
Approach Delay	76.8			26.5	74.5	
Approach LOS	E			C	E	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 60.9	Intersection LOS: E
Intersection Capacity Utilization 118.1%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	528	0	448	269	1165	0	0	1892	570
Future Volume (veh/h)	0	0	0	528	0	448	269	1165	0	0	1892	570
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				550	0	361	280	1214	0	0	1971	328
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				592	0	527	308	2150	0	0	2019	627
Arrive On Green				0.33	0.00	0.33	0.23	0.79	0.00	0.00	0.39	0.39
Sat Flow, veh/h				1810	0	1610	1810	3705	0	0	5358	1610
Grp Volume(v), veh/h				550	0	361	280	1214	0	0	1971	328
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1729	1610
Q Serve(g_s), s				32.3	0.0	21.4	16.6	13.9	0.0	0.0	41.2	17.2
Cycle Q Clear(g_c), s				32.3	0.0	21.4	16.6	13.9	0.0	0.0	41.2	17.2
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				592	0	527	308	2150	0	0	2019	627
V/C Ratio(X)				0.93	0.00	0.69	0.91	0.56	0.00	0.00	0.98	0.52
Avail Cap(c_a), veh/h				625	0	556	329	2150	0	0	2019	627
HCM Platoon Ratio				1.00	1.00	1.00	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.27	0.27	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				35.8	0.0	32.1	41.7	6.1	0.0	0.0	33.1	25.8
Incr Delay (d2), s/veh				20.0	0.0	3.3	9.8	0.3	0.0	0.0	15.1	3.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				16.7	0.0	8.4	7.6	3.5	0.0	0.0	19.1	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				55.7	0.0	35.4	51.6	6.4	0.0	0.0	48.2	28.9
LnGrp LOS				E	A	D	D	A	A	A	D	C
Approach Vol, veh/h					911			1494			2299	
Approach Delay, s/veh					47.7			14.8			45.5	
Approach LOS					D			B			D	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	70.0		22.7	47.3		40.0						
Change Period (Y+Rc), s	4.5		4.0	4.5		4.0						
Max Green Setting (Gmax), s	63.5		20.0	39.5		38.0						
Max Q Clear Time (g_c+I1), s	15.9		18.6	43.2		34.3						
Green Ext Time (p_c), s	11.3		0.1	0.0		1.6						

Intersection Summary		
HCM 6th Ctrl Delay	36.2	
HCM 6th LOS	D	

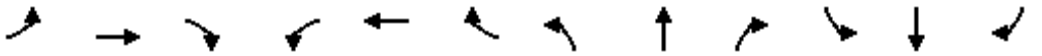
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	395	0	1039	788	551	1870
Future Volume (vph)	395	0	1039	788	551	1870
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	44.0	44.0	27.0	27.0	39.0	66.0
Total Split (%)	40.0%	40.0%	24.5%	24.5%	35.5%	60.0%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	40.5	40.5	23.0	23.0	35.5	62.0
Actuated g/C Ratio	0.37	0.37	0.21	0.21	0.32	0.56
v/c Ratio	0.61	1.10	1.03	1.02	1.02	0.99
Control Delay	33.2	99.9	65.5	51.0	56.4	26.6
Queue Delay	0.0	0.0	0.0	0.0	30.7	40.6
Total Delay	33.2	99.9	65.5	51.0	87.1	67.2
LOS	C	F	E	D	F	E
Approach Delay		75.5	59.3			71.7
Approach LOS		E	E			E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 68.1	Intersection LOS: E
Intersection Capacity Utilization 118.1%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	395	0	577	0	0	0	0	1039	788	551	1870	0
Future Volume (veh/h)	395	0	577	0	0	0	0	1039	788	551	1870	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	425	0	568				0	1117	573	592	2011	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	663	0	590				0	1085	336	688	2258	0
Arrive On Green	0.37	0.00	0.37				0.00	0.07	0.07	0.38	0.63	0.00
Sat Flow, veh/h	1810	0	1610				0	5358	1606	1810	3705	0
Grp Volume(v), veh/h	425	0	568				0	1117	573	592	2011	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1729	1606	1810	1805	0
Q Serve(g_s), s	21.4	0.0	38.0				0.0	23.0	23.0	33.2	51.8	0.0
Cycle Q Clear(g_c), s	21.4	0.0	38.0				0.0	23.0	23.0	33.2	51.8	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	663	0	590				0	1085	336	688	2258	0
V/C Ratio(X)	0.64	0.00	0.96				0.00	1.03	1.71	0.86	0.89	0.00
Avail Cap(c_a), veh/h	666	0	593				0	1085	336	688	2258	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.24	0.24	0.09	0.09	0.00
Uniform Delay (d), s/veh	28.9	0.0	34.1				0.0	51.2	51.2	31.4	17.4	0.0
Incr Delay (d2), s/veh	2.1	0.0	27.9				0.0	21.9	320.8	1.1	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	0.0	18.4				0.0	12.8	39.8	14.0	18.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.9	0.0	62.0				0.0	73.1	372.0	32.5	18.0	0.0
LnGrp LOS	C	A	E				A	F	F	C	B	A
Approach Vol, veh/h		993						1690			2603	
Approach Delay, s/veh		48.7						174.4			21.3	
Approach LOS		D						F			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	45.8	27.0		43.8		72.8
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	35.5	* 23		40.5		62.0
Max Q Clear Time (g_c+I1), s	35.2	25.0		40.0		53.8
Green Ext Time (p_c), s	0.1	0.0		0.3		5.9

Intersection Summary		
HCM 6th Ctrl Delay		75.4
HCM 6th LOS		E

Notes

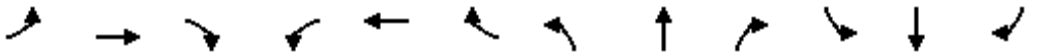
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	278	5	14	5	20	1382	219	1721	506
Future Volume (vph)	278	5	14	5	20	1382	219	1721	506
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases		4		8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	30.0	30.0	10.2	10.2	16.2	28.2	16.2	28.2	28.2
Total Split (s)	36.0	36.0	36.0	36.0	16.2	57.2	16.8	57.8	57.8
Total Split (%)	32.7%	32.7%	32.7%	32.7%	14.7%	52.0%	15.3%	52.5%	52.5%
Yellow Time (s)	5.0	5.0	5.0	5.0	3.0	4.7	3.0	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.0	5.7	4.0	5.7	5.7
Lead/Lag					Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min	C-Min
Act Effct Green (s)	30.0	30.0	30.0	30.0	59.7	52.0	70.0	64.1	64.1
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.54	0.47	0.64	0.58	0.58
v/c Ratio	1.04	0.07	0.04	0.33	0.13	0.91	0.89	0.90	0.54
Control Delay	103.9	13.4	29.9	6.7	7.8	28.0	41.6	19.2	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	6.1	0.0	0.0	0.0
Total Delay	103.9	13.4	29.9	6.7	7.8	34.1	41.6	19.2	3.9
LOS	F	B	C	A	A	C	D	B	A
Approach Delay		95.5		8.4		33.7		18.1	
Approach LOS		F		A		C		B	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 68.3 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.04	
Intersection Signal Delay: 28.2	Intersection LOS: C
Intersection Capacity Utilization 95.5%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 10: Cedar Av. & Orange St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	278	5	24	14	5	167	20	1382	33	219	1721	506
Future Volume (veh/h)	278	5	24	14	5	167	20	1382	33	219	1721	506
Initial Q (Qb), veh	0	0	0	0	0	0	0	44	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	305	5	21	15	5	97	22	1519	36	241	1891	465
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	359	87	365	432	22	421	108	1725	19	271	2046	910
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.02	0.49	0.49	0.06	0.38	0.38
Sat Flow, veh/h	1313	318	1337	1404	80	1543	1810	3604	85	1810	3610	1606
Grp Volume(v), veh/h	305	0	26	15	0	102	22	760	795	241	1891	465
Grp Sat Flow(s),veh/h/ln	1313	0	1656	1404	0	1622	1810	1805	1885	1810	1805	1606
Q Serve(g_s), s	24.6	0.0	1.3	0.9	0.0	5.4	0.7	40.6	40.8	8.0	55.1	24.5
Cycle Q Clear(g_c), s	30.0	0.0	1.3	2.2	0.0	5.4	0.7	40.6	40.8	8.0	55.1	24.5
Prop In Lane	1.00		0.81	1.00		0.95	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	359	0	452	432	0	442	108	851	895	271	2046	910
V/C Ratio(X)	0.85	0.00	0.06	0.03	0.00	0.23	0.20	0.89	0.89	0.89	0.92	0.51
Avail Cap(c_a), veh/h	359	0	452	432	0	442	276	888	927	317	2046	910
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.23	0.23	0.23	0.12	0.12	0.12
Uniform Delay (d), s/veh	43.1	0.0	29.6	30.4	0.0	31.0	25.1	29.0	28.7	36.1	31.9	22.4
Incr Delay (d2), s/veh	17.1	0.0	0.1	0.0	0.0	0.3	0.2	3.8	3.5	3.7	1.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.9	39.3	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	0.0	0.5	0.3	0.0	2.2	0.3	32.0	31.9	6.7	24.7	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.2	0.0	29.6	30.4	0.0	31.3	25.3	77.6	71.5	39.8	33.1	22.6
LnGrp LOS	E	A	C	C	A	C	C	E	E	D	C	C
Approach Vol, veh/h		331			117			1577			2597	
Approach Delay, s/veh		57.8			31.2			73.8			31.9	
Approach LOS		E			C			E			C	

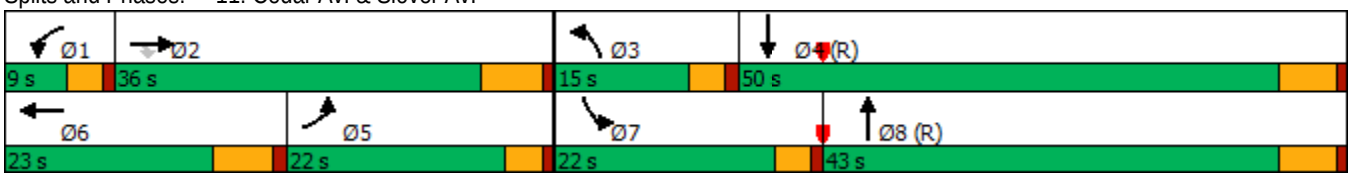
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.2	59.8		36.0	6.0	68.0		36.0				
Change Period (Y+Rc), s	4.0	5.7		6.0	4.0	5.7		6.0				
Max Green Setting (Gmax), s	12.8	51.5		30.0	12.2	52.1		30.0				
Max Q Clear Time (g_c+I1), s	10.0	42.8		32.0	2.7	57.1		7.4				
Green Ext Time (p_c), s	0.2	6.0		0.0	0.0	0.0		0.6				

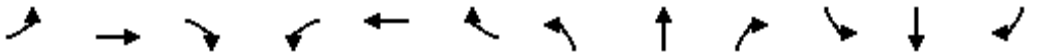
Intersection Summary			
HCM 6th Ctrl Delay		48.0	
HCM 6th LOS		D	

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	344	224	146	83	351	100	929	280	1354
Future Volume (vph)	344	224	146	83	351	100	929	280	1354
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2		1	6	3	8	7	4
Permitted Phases			2						
Detector Phase	5	2	2	1	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	29.0	29.0	8.0	23.0	8.0	32.7	8.0	24.7
Total Split (s)	22.0	36.0	36.0	9.0	23.0	15.0	43.0	22.0	50.0
Total Split (%)	20.0%	32.7%	32.7%	8.2%	20.9%	13.6%	39.1%	20.0%	45.5%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	4.7	3.0	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	4.0	5.7	4.0	5.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	18.1	30.0	30.0	5.0	16.9	10.0	37.3	18.0	45.3
Actuated g/C Ratio	0.16	0.27	0.27	0.05	0.15	0.09	0.34	0.16	0.41
v/c Ratio	1.20	0.23	0.28	1.05	0.92	0.63	0.85	0.98	1.04
Control Delay	157.2	31.9	6.4	165.0	63.1	63.2	56.0	83.0	63.4
Queue Delay	0.0	0.0	0.0	0.0	10.8	0.0	1.2	0.0	0.0
Total Delay	157.2	31.9	6.4	165.0	73.8	63.2	57.1	83.0	63.4
LOS	F	C	A	F	E	E	E	F	E
Approach Delay		87.1			86.6		57.7		66.5
Approach LOS		F			F		E		E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.20	
Intersection Signal Delay: 70.6	Intersection LOS: E
Intersection Capacity Utilization 97.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 11: Cedar Av. & Slover Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	344	224	146	83	351	162	100	929	73	280	1354	124
Future Volume (veh/h)	344	224	146	83	351	162	100	929	73	280	1354	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	355	231	129	86	362	136	103	958	73	289	1396	127
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	296	1050	467	82	399	147	129	1091	83	296	1382	125
Arrive On Green	0.16	0.29	0.29	0.05	0.15	0.15	0.07	0.32	0.32	0.05	0.14	0.14
Sat Flow, veh/h	1810	3610	1607	1810	2579	954	1810	3399	259	1810	3347	303
Grp Volume(v), veh/h	355	231	129	86	252	246	103	509	522	289	750	773
Grp Sat Flow(s),veh/h/ln	1810	1805	1607	1810	1805	1728	1810	1805	1853	1810	1805	1844
Q Serve(g_s), s	18.0	5.3	6.8	5.0	15.1	15.5	6.2	29.3	29.3	17.5	45.4	45.4
Cycle Q Clear(g_c), s	18.0	5.3	6.8	5.0	15.1	15.5	6.2	29.3	29.3	17.5	45.4	45.4
Prop In Lane	1.00		1.00	1.00		0.55	1.00		0.14	1.00		0.16
Lane Grp Cap(c), veh/h	296	1050	467	82	279	267	129	579	595	296	746	762
V/C Ratio(X)	1.20	0.22	0.28	1.05	0.90	0.92	0.80	0.88	0.88	0.98	1.01	1.01
Avail Cap(c_a), veh/h	296	1050	467	82	279	267	181	612	628	296	746	762
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.86	0.86	0.33	0.33	0.33
Uniform Delay (d), s/veh	46.0	29.5	30.1	52.5	45.7	45.8	50.3	35.3	35.3	51.8	47.5	47.5
Incr Delay (d2), s/veh	117.4	0.1	0.3	112.2	30.0	35.0	13.3	15.1	14.8	24.2	20.3	22.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.4	2.2	2.6	4.8	9.1	9.2	3.2	14.6	14.9	10.5	26.0	27.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	163.4	29.6	30.4	164.7	75.7	80.9	63.6	50.4	50.1	76.0	67.8	70.0
LnGrp LOS	F	C	C	F	E	F	E	D	D	E	F	F
Approach Vol, veh/h		715			584			1134			1812	
Approach Delay, s/veh		96.2			91.0			51.5			70.1	
Approach LOS		F			F			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	38.0	11.9	51.1	24.0	23.0	22.0	41.0
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	6.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	5.0	30.0	11.0	44.3	18.0	* 17	18.0	37.3
Max Q Clear Time (g_c+I1), s	7.0	8.8	8.2	47.4	20.0	17.5	19.5	31.3
Green Ext Time (p_c), s	0.0	1.6	0.1	0.0	0.0	0.0	0.0	3.0

Intersection Summary	
HCM 6th Ctrl Delay	72.4
HCM 6th LOS	E

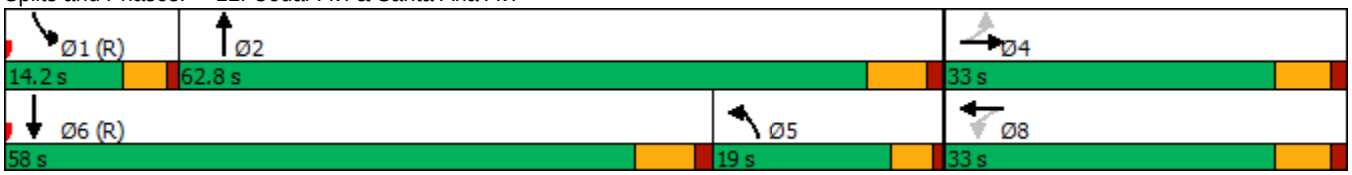
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	89	99	84	80	107	792	46	1303
Future Volume (vph)	89	99	84	80	107	792	46	1303
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	9.5	27.5	9.5	27.5
Total Split (s)	33.0	33.0	33.0	33.0	19.0	62.8	14.2	58.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	17.3%	57.1%	12.9%	52.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	4.5	6.5	4.5	6.5
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min
Act Effct Green (s)		30.4		30.4	11.1	55.2	7.4	51.5
Actuated g/C Ratio		0.28		0.28	0.10	0.50	0.07	0.47
v/c Ratio		0.91		0.83	0.64	0.50	0.41	0.87
Control Delay		65.0		56.6	55.4	10.9	39.1	54.2
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		65.0		56.6	55.4	10.9	39.1	54.2
LOS		E		E	E	B	D	D
Approach Delay		65.0		56.6		16.0		53.7
Approach LOS		E		E		B		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 90 (82%), Referenced to phase 1:SBL and 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 43.2	Intersection LOS: D
Intersection Capacity Utilization 81.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 12: Cedar Av. & Santa Ana Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	99	145	84	80	100	107	792	37	46	1303	44
Future Volume (veh/h)	89	99	145	84	80	100	107	792	37	46	1303	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	97	108	117	91	87	97	116	861	36	50	1416	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	127	125	119	126	113	106	216	1793	75	167	1658	47
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.24	1.00	1.00	0.03	0.15	0.15
Sat Flow, veh/h	346	507	487	336	460	434	1810	3531	148	1810	3586	101
Grp Volume(v), veh/h	322	0	0	275	0	0	116	440	457	50	712	744
Grp Sat Flow(s),veh/h/ln	1340	0	0	1230	0	0	1810	1805	1873	1810	1805	1882
Q Serve(g_s), s	2.5	0.0	0.0	0.0	0.0	0.0	6.2	0.0	0.0	3.0	42.3	42.4
Cycle Q Clear(g_c), s	26.4	0.0	0.0	23.9	0.0	0.0	6.2	0.0	0.0	3.0	42.3	42.4
Prop In Lane	0.30		0.36	0.33		0.35	1.00		0.08	1.00		0.05
Lane Grp Cap(c), veh/h	371	0	0	345	0	0	216	916	951	167	835	870
V/C Ratio(X)	0.87	0.00	0.00	0.80	0.00	0.00	0.54	0.48	0.48	0.30	0.85	0.86
Avail Cap(c_a), veh/h	371	0	0	345	0	0	239	924	959	167	845	881
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.85	0.85	0.85	0.16	0.16	0.16
Uniform Delay (d), s/veh	41.0	0.0	0.0	39.6	0.0	0.0	39.2	0.0	0.0	49.8	43.0	43.0
Incr Delay (d2), s/veh	19.4	0.0	0.0	12.8	0.0	0.0	0.7	1.2	1.2	0.1	1.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	0.0	0.0	8.2	0.0	0.0	2.5	0.3	0.3	1.3	20.7	21.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.4	0.0	0.0	52.4	0.0	0.0	39.9	1.2	1.2	49.9	44.9	44.9
LnGrp LOS	E	A	A	D	A	A	D	A	A	D	D	D
Approach Vol, veh/h		322			275			1013			1506	
Approach Delay, s/veh		60.4			52.4			5.6			45.1	
Approach LOS		E			D			A			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.7	62.3		33.0	19.6	57.4		33.0				
Change Period (Y+Rc), s	4.5	6.5		6.0	6.5	* 6.5		6.0				
Max Green Setting (Gmax), s	9.7	56.3		27.0	14.5	* 52		27.0				
Max Q Clear Time (g_c+I1), s	5.0	2.0		28.4	8.2	44.4		25.9				
Green Ext Time (p_c), s	0.0	18.7		0.0	0.1	6.5		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		34.5	
HCM 6th LOS		C	

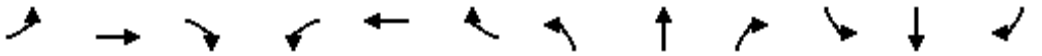
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	77	135	112	122	120	178	46	730	176	1505
Future Volume (vph)	77	135	112	122	120	178	46	730	176	1505
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	32.0	32.0	32.0	32.0	32.0	32.0	17.0	58.0	20.0	61.0
Total Split (%)	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%	15.5%	52.7%	18.2%	55.5%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)		27.3	27.3		27.3	27.3	9.2	52.0	14.7	57.6
Actuated g/C Ratio		0.25	0.25		0.25	0.25	0.08	0.47	0.13	0.52
v/c Ratio		0.97	0.27		1.07	0.39	0.34	0.53	0.81	0.90
Control Delay		92.8	16.8		116.8	11.2	70.0	15.6	51.0	36.9
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		92.8	16.8		116.8	11.2	70.0	15.6	51.0	36.9
LOS		F	B		F	B	E	B	D	D
Approach Delay		66.6			72.0			18.5		38.4
Approach LOS		E			E			B		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 40.3	Intersection LOS: D
Intersection Capacity Utilization 91.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	135	112	122	120	178	46	730	80	176	1505	15
Future Volume (veh/h)	77	135	112	122	120	178	46	730	80	176	1505	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	86	150	105	136	133	132	51	811	78	196	1672	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	45	44	388	49	5	383	215	1624	156	227	1816	14
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.98	0.98	0.08	0.33	0.33
Sat Flow, veh/h	0	182	1610	0	21	1589	1810	3327	320	1810	3671	29
Grp Volume(v), veh/h	236	0	105	269	0	132	51	440	449	196	821	864
Grp Sat Flow(s),veh/h/ln	182	0	1610	21	0	1589	1810	1805	1842	1810	1805	1895
Q Serve(g_s), s	0.0	0.0	5.8	0.0	0.0	7.6	2.5	1.3	1.3	11.8	48.2	48.3
Cycle Q Clear(g_c), s	26.5	0.0	5.8	26.5	0.0	7.6	2.5	1.3	1.3	11.8	48.2	48.3
Prop In Lane	0.36		1.00	0.51		1.00	1.00		0.17	1.00		0.02
Lane Grp Cap(c), veh/h	89	0	388	54	0	383	215	881	899	227	893	937
V/C Ratio(X)	2.66	0.00	0.27	4.96	0.00	0.34	0.24	0.50	0.50	0.86	0.92	0.92
Avail Cap(c_a), veh/h	89	0	388	54	0	383	215	881	899	255	903	947
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.95	0.95	0.95	0.37	0.37	0.37
Uniform Delay (d), s/veh	42.5	0.0	33.9	52.6	0.0	34.6	37.9	0.7	0.7	49.4	34.7	34.7
Incr Delay (d2), s/veh	779.8	0.0	0.5	1821.6	0.0	0.8	0.5	1.9	1.9	10.1	6.4	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.6	0.0	2.3	28.9	0.0	2.9	1.1	0.7	0.7	6.0	22.9	24.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	822.3	0.0	34.4	1874.2	0.0	35.3	38.4	2.6	2.6	59.5	41.1	40.9
LnGrp LOS	F	A	C	F	A	D	D	A	A	E	D	D
Approach Vol, veh/h		341			401			940			1881	
Approach Delay, s/veh		579.7			1268.9			4.5			42.9	
Approach LOS		F			F			A			D	

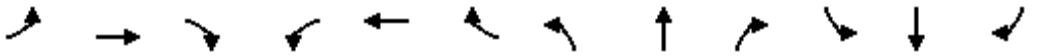
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.3	59.7		32.0	17.6	60.4		32.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	15.5	52.0		26.5	12.5	55.0		26.5				
Max Q Clear Time (g_c+I1), s	13.8	3.3		28.5	4.5	50.3		28.5				
Green Ext Time (p_c), s	0.1	9.3		0.0	0.0	4.2		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		222.2	
HCM 6th LOS		F	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	144	9	29	9	110	720	26	1670
Future Volume (vph)	144	9	29	9	110	720	26	1670
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	10.0	10.0	9.5	24.0	9.5	24.0
Total Split (s)	30.0	30.0	30.0	30.0	17.0	68.0	12.0	63.0
Total Split (%)	27.3%	27.3%	27.3%	27.3%	15.5%	61.8%	10.9%	57.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)		25.0		21.3	11.1	66.9	6.7	58.4
Actuated g/C Ratio		0.23		0.19	0.10	0.61	0.06	0.53
v/c Ratio		1.24		0.25	0.64	0.35	0.25	0.95
Control Delay		159.7		31.6	63.7	12.0	62.0	31.6
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		159.7		31.6	63.7	12.0	62.0	31.6
LOS		F		C	E	B	E	C
Approach Delay		159.7		31.6		18.8		32.1
Approach LOS		F		C		B		C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 74 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.24	
Intersection Signal Delay: 48.6	Intersection LOS: D
Intersection Capacity Utilization 97.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 14: Rubidoux Bl./Cedar Av. & 7th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	9	340	29	9	11	110	720	5	26	1670	53
Future Volume (veh/h)	144	9	340	29	9	11	110	720	5	26	1670	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	152	9	266	31	9	4	116	758	4	27	1758	56
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	169	11	224	191	52	19	144	2232	12	46	1972	63
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.08	0.61	0.61	0.03	0.55	0.55
Sat Flow, veh/h	549	48	986	596	230	83	1810	3682	19	1810	3571	113
Grp Volume(v), veh/h	427	0	0	44	0	0	116	372	390	27	885	929
Grp Sat Flow(s),veh/h/ln	1583	0	0	908	0	0	1810	1805	1896	1810	1805	1879
Q Serve(g_s), s	21.5	0.0	0.0	0.0	0.0	0.0	6.9	11.2	11.2	1.6	47.4	48.1
Cycle Q Clear(g_c), s	25.0	0.0	0.0	3.5	0.0	0.0	6.9	11.2	11.2	1.6	47.4	48.1
Prop In Lane	0.36		0.62	0.70		0.09	1.00		0.01	1.00		0.06
Lane Grp Cap(c), veh/h	404	0	0	262	0	0	144	1094	1150	46	997	1038
V/C Ratio(X)	1.06	0.00	0.00	0.17	0.00	0.00	0.81	0.34	0.34	0.58	0.89	0.89
Avail Cap(c_a), veh/h	404	0	0	262	0	0	206	1094	1150	123	997	1038
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.62	0.62	0.62	0.41	0.41	0.41
Uniform Delay (d), s/veh	43.6	0.0	0.0	34.0	0.0	0.0	49.8	10.7	10.7	53.0	21.6	21.8
Incr Delay (d2), s/veh	60.4	0.0	0.0	0.4	0.0	0.0	9.2	0.5	0.5	4.7	5.3	5.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.0	0.0	0.0	1.0	0.0	0.0	3.4	4.0	4.2	0.8	19.1	20.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	104.0	0.0	0.0	34.4	0.0	0.0	59.0	11.3	11.2	57.7	26.9	27.2
LnGrp LOS	F	A	A	C	A	A	E	B	B	E	C	C
Approach Vol, veh/h		427			44			878			1841	
Approach Delay, s/veh		104.0			34.4			17.6			27.5	
Approach LOS		F			C			B			C	

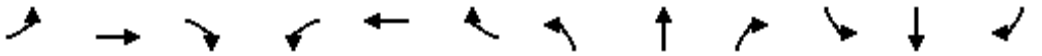
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.3	72.7		30.0	13.2	66.8		30.0				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	7.5	62.0		25.0	12.5	57.0		25.0				
Max Q Clear Time (g_c+I1), s	3.6	13.2		27.0	8.9	50.1		5.5				
Green Ext Time (p_c), s	0.0	7.2		0.0	0.1	6.1		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		35.1	
HCM 6th LOS		D	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	19	12	146	5	133	5	700	286	1310
Future Volume (vph)	19	12	146	5	133	5	700	286	1310
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	35.0	35.0	35.0	9.5	24.0	9.5	24.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.6	34.0	21.0	45.4
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%	10.7%	37.8%	23.3%	50.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	5.0	4.5	6.0	4.5	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min
Act Effct Green (s)		15.9		16.5	16.5	5.2	25.9	16.1	45.0
Actuated g/C Ratio		0.21		0.22	0.22	0.07	0.35	0.22	0.61
v/c Ratio		0.18		0.55	0.30	0.04	0.78	0.77	0.64
Control Delay		14.8		33.3	5.8	38.4	27.2	45.1	13.8
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		14.8		33.3	5.8	38.4	27.2	45.1	13.8
LOS		B		C	A	D	C	D	B
Approach Delay		14.8		20.4			27.2		19.3
Approach LOS		B		C			C		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 74.3	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 21.9	Intersection LOS: C
Intersection Capacity Utilization 70.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 15: Rubidoux Bl. & Tarragona Dr./El Rivino Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	12	30	146	5	133	5	700	221	286	1310	13
Future Volume (veh/h)	19	12	30	146	5	133	5	700	221	286	1310	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	20	13	23	154	5	108	5	737	226	301	1379	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	107	75	74	329	9	331	12	966	296	354	1993	20
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.01	0.36	0.36	0.20	0.54	0.54
Sat Flow, veh/h	148	367	359	1058	44	1610	1810	2721	834	1810	3661	37
Grp Volume(v), veh/h	56	0	0	159	0	108	5	489	474	301	680	713
Grp Sat Flow(s),veh/h/ln	874	0	0	1102	0	1610	1810	1805	1750	1810	1805	1893
Q Serve(g_s), s	0.2	0.0	0.0	0.0	0.0	3.6	0.2	15.3	15.3	10.2	17.5	17.6
Cycle Q Clear(g_c), s	9.8	0.0	0.0	9.6	0.0	3.6	0.2	15.3	15.3	10.2	17.5	17.6
Prop In Lane	0.36		0.41	0.97		1.00	1.00		0.48	1.00		0.02
Lane Grp Cap(c), veh/h	257	0	0	338	0	331	12	641	621	354	982	1030
V/C Ratio(X)	0.22	0.00	0.00	0.47	0.00	0.33	0.42	0.76	0.76	0.85	0.69	0.69
Avail Cap(c_a), veh/h	663	0	0	711	0	758	145	793	769	469	1116	1171
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.1	0.0	0.0	23.9	0.0	21.5	31.5	18.2	18.2	24.7	10.6	10.6
Incr Delay (d2), s/veh	0.6	0.0	0.0	1.4	0.0	0.8	21.5	4.1	4.2	10.8	1.9	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	2.3	0.0	1.4	0.1	5.8	5.7	4.8	5.2	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.7	0.0	0.0	25.3	0.0	22.3	53.0	22.3	22.4	35.5	12.5	12.4
LnGrp LOS	C	A	A	C	A	C	D	C	C	D	B	B
Approach Vol, veh/h		56			267			968			1694	
Approach Delay, s/veh		21.7			24.1			22.5			16.5	
Approach LOS		C			C			C			B	

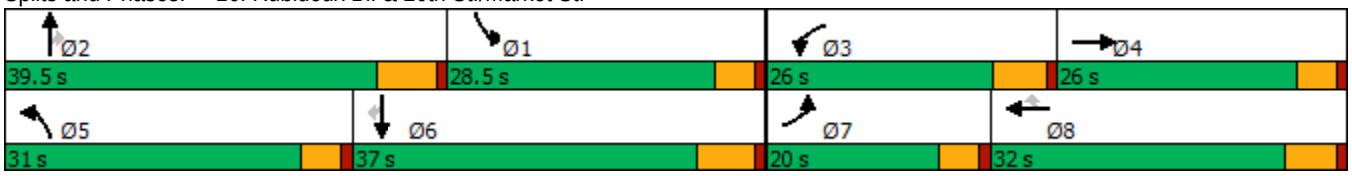
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.0	28.6		18.2	4.9	40.7		18.2				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	16.5	28.0		30.0	5.1	39.4		30.0				
Max Q Clear Time (g_c+I1), s	12.2	17.3		11.8	2.2	19.6		11.6				
Green Ext Time (p_c), s	0.3	5.4		0.3	0.0	11.7		1.7				

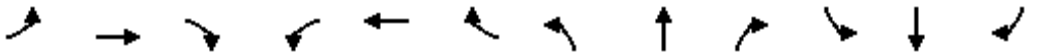
Intersection Summary			
HCM 6th Ctrl Delay		19.2	
HCM 6th LOS		B	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	192	211	374	371	558	357	257	431	564	538	417
Future Volume (vph)	192	211	374	371	558	357	257	431	564	538	417
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	14.6	10.8	27.8	27.8	9.6	28.2	28.2	9.6	35.2	35.2
Total Split (s)	20.0	26.0	26.0	32.0	32.0	31.0	39.5	39.5	28.5	37.0	37.0
Total Split (%)	16.7%	21.7%	21.7%	26.7%	26.7%	25.8%	32.9%	32.9%	23.8%	30.8%	30.8%
Yellow Time (s)	3.6	3.6	4.8	4.8	4.8	3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	5.8	5.8	5.8	4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	14.8	23.1	17.0	25.3	25.3	25.1	16.7	16.7	32.7	24.3	24.3
Actuated g/C Ratio	0.13	0.21	0.15	0.23	0.23	0.23	0.15	0.15	0.29	0.22	0.22
v/c Ratio	0.82	0.56	0.72	0.88	0.74	0.90	0.49	0.79	0.56	0.70	0.69
Control Delay	75.5	24.3	53.7	65.5	11.4	69.0	46.2	18.8	36.8	45.4	14.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.5	24.3	53.7	65.5	11.4	69.0	46.2	18.8	36.8	45.4	14.2
LOS	E	C	D	E	B	E	D	B	D	D	B
Approach Delay		39.0		38.9			42.7			33.6	
Approach LOS		D		D			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 110.9	
Natural Cycle: 105	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 38.0	Intersection LOS: D
Intersection Capacity Utilization 82.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	211	264	374	371	558	357	257	431	564	538	417
Future Volume (veh/h)	192	211	264	374	371	558	357	257	431	564	538	417
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	198	218	257	386	382	575	368	265	356	581	555	399
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	226	365	326	457	414	351	393	516	230	1129	941	419
Arrive On Green	0.12	0.20	0.20	0.13	0.22	0.22	0.22	0.14	0.14	0.32	0.26	0.26
Sat Flow, veh/h	1810	1805	1610	3510	1900	1610	1810	3610	1610	3510	3610	1607
Grp Volume(v), veh/h	198	218	257	386	382	575	368	265	356	581	555	399
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1755	1900	1610	1810	1805	1610	1755	1805	1607
Q Serve(g_s), s	12.7	12.9	17.9	12.7	23.2	11.8	23.6	8.0	12.3	15.9	15.9	28.8
Cycle Q Clear(g_c), s	12.7	12.9	17.9	12.7	23.2	11.8	23.6	8.0	12.3	15.9	15.9	28.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	226	365	326	457	414	351	393	516	230	1129	941	419
V/C Ratio(X)	0.88	0.60	0.79	0.85	0.92	1.64	0.94	0.51	1.55	0.51	0.59	0.95
Avail Cap(c_a), veh/h	236	365	326	600	421	357	404	1018	454	1129	941	419
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.8	42.7	44.7	50.2	45.2	9.7	45.4	46.8	27.0	32.6	38.1	42.9
Incr Delay (d2), s/veh	28.3	2.7	12.3	8.5	25.6	300.4	28.2	0.8	260.3	0.2	1.0	31.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	6.1	8.3	6.0	13.5	32.9	13.2	3.5	21.2	6.5	6.8	14.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.1	45.4	57.0	58.7	70.8	310.1	73.6	47.6	287.2	32.7	39.1	74.8
LnGrp LOS	E	D	E	E	E	F	E	D	F	C	D	E
Approach Vol, veh/h		673			1343			989			1535	
Approach Delay, s/veh		59.8			169.8			143.5			46.0	
Approach LOS		E			F			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	44.2	23.1	21.2	29.7	30.3	37.0	19.3	31.5
Change Period (Y+Rc), s	6.2	* 6.2	5.8	* 5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	23.9	* 33	20.2	* 21	26.4	30.8	15.4	26.2
Max Q Clear Time (g_c+I1), s	17.9	14.3	14.7	19.9	25.6	30.8	14.7	25.2
Green Ext Time (p_c), s	0.7	2.6	0.7	0.5	0.1	0.0	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	105.9
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	9	13	34	18	18	22	1022	57	171	999	5
Future Vol, veh/h	5	9	13	34	18	18	22	1022	57	171	999	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	10	14	37	20	20	24	1111	62	186	1086	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2075	2683	546	2111	2654	588	1091	0	0	1174	0	0
Stage 1	1461	1461	-	1191	1191	-	-	-	-	-	-	-
Stage 2	614	1222	-	920	1463	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	32	22	487	~ 30	23	457	647	-	-	602	-	-
Stage 1	138	195	-	202	263	-	-	-	-	-	-	-
Stage 2	451	254	-	296	195	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 4	487	-	~ 4	457	647	-	-	601	-	-
Mov Cap-2 Maneuver	-	~ 4	-	-	~ 4	-	-	-	-	-	-	-
Stage 1	123	42	-	180	234	-	-	-	-	-	-	-
Stage 2	352	226	-	47	42	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.8	5.4
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	647	-	-	-	-	601	-	-
HCM Lane V/C Ratio	0.037	-	-	-	-	0.309	-	-
HCM Control Delay (s)	10.8	0.6	-	-	-	13.6	4	-
HCM Lane LOS	B	A	-	-	-	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-	1.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	6	10	5	9	7	23	1086	17	10	1019	17
Future Vol, veh/h	8	6	10	5	9	7	23	1086	17	10	1019	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	110	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	7	11	5	10	8	25	1180	18	11	1108	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1784	2387	563	1819	2387	599	1126	0	0	1198	0	0
Stage 1	1139	1139	-	1239	1239	-	-	-	-	-	-	-
Stage 2	645	1248	-	580	1148	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	53	35	475	50	35	450	628	-	-	590	-	-
Stage 1	218	278	-	189	250	-	-	-	-	-	-	-
Stage 2	432	247	-	472	276	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	47	33	475	45	33	450	628	-	-	590	-	-
Mov Cap-2 Maneuver	142	128	-	132	126	-	-	-	-	-	-	-
Stage 1	209	273	-	181	240	-	-	-	-	-	-	-
Stage 2	391	237	-	442	271	-	-	-	-	-	-	-

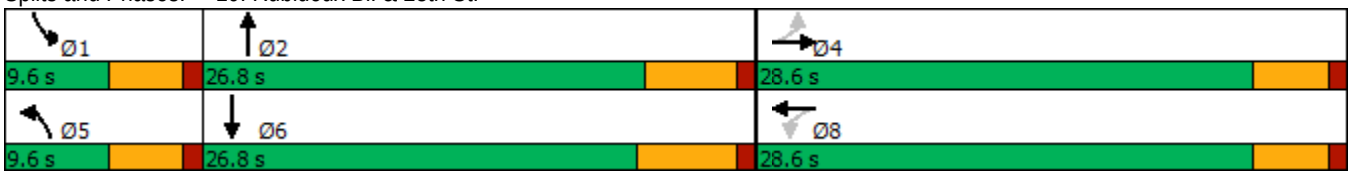
Approach	EB	WB	NB	SB
HCM Control Delay, s	26.5	29.8	0.2	0.1
HCM LOS	D	D		

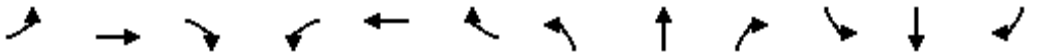
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	628	-	-	193	168	590	-	-
HCM Lane V/C Ratio	0.04	-	-	0.135	0.136	0.018	-	-
HCM Control Delay (s)	11	-	-	26.5	29.8	11.2	-	-
HCM Lane LOS	B	-	-	D	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.5	0.1	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	54	19	70	35	50	1055	12	997
Future Volume (vph)	54	19	70	35	50	1055	12	997
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	28.6	28.6	28.6	28.6	9.6	24.4	9.6	22.8
Total Split (s)	28.6	28.6	28.6	28.6	9.6	26.8	9.6	26.8
Total Split (%)	44.0%	44.0%	44.0%	44.0%	14.8%	41.2%	14.8%	41.2%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.4	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		13.4		13.4	5.6	28.5	5.6	24.7
Actuated g/C Ratio		0.29		0.29	0.12	0.61	0.12	0.53
v/c Ratio		0.33		0.31	0.25	0.54	0.06	0.58
Control Delay		10.8		17.0	27.8	12.7	25.7	16.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		10.8		17.0	27.8	12.7	25.7	16.0
LOS		B		B	C	B	C	B
Approach Delay		10.8		17.0		13.4		16.1
Approach LOS		B		B		B		B

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 46.7	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 14.5	Intersection LOS: B
Intersection Capacity Utilization 57.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 19: Rubidoux Bl. & 28th St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	19	77	70	35	16	50	1055	40	12	997	26
Future Volume (veh/h)	54	19	77	70	35	16	50	1055	40	12	997	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	59	21	75	76	38	12	54	1147	40	13	1084	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	202	78	153	295	131	31	100	1547	54	30	1427	36
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.06	0.44	0.44	0.02	0.40	0.40
Sat Flow, veh/h	435	394	778	813	665	156	1810	3555	124	1810	3599	90
Grp Volume(v), veh/h	155	0	0	126	0	0	54	582	605	13	544	567
Grp Sat Flow(s),veh/h/ln	1607	0	0	1634	0	0	1810	1805	1874	1810	1805	1884
Q Serve(g_s), s	0.9	0.0	0.0	0.0	0.0	0.0	1.2	11.5	11.5	0.3	11.1	11.1
Cycle Q Clear(g_c), s	3.4	0.0	0.0	2.5	0.0	0.0	1.2	11.5	11.5	0.3	11.1	11.1
Prop In Lane	0.38		0.48	0.60		0.10	1.00		0.07	1.00		0.05
Lane Grp Cap(c), veh/h	433	0	0	457	0	0	100	786	816	30	716	747
V/C Ratio(X)	0.36	0.00	0.00	0.28	0.00	0.00	0.54	0.74	0.74	0.43	0.76	0.76
Avail Cap(c_a), veh/h	996	0	0	998	0	0	212	904	939	212	887	926
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.1	0.0	0.0	14.8	0.0	0.0	19.6	10.1	10.1	20.8	11.1	11.1
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.3	0.0	0.0	1.7	2.8	2.7	3.5	3.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	1.0	0.0	0.0	0.5	3.5	3.6	0.1	3.2	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.6	0.0	0.0	15.1	0.0	0.0	21.3	12.9	12.8	24.3	14.2	14.0
LnGrp LOS	B	A	A	B	A	A	C	B	B	C	B	B
Approach Vol, veh/h		155			126			1241			1124	
Approach Delay, s/veh		15.6			15.1			13.2			14.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.3	24.4		13.0	7.0	22.7		13.0				
Change Period (Y+Rc), s	4.6	* 5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	5.0	* 21		24.0	5.0	21.0		24.0				
Max Q Clear Time (g_c+I1), s	2.3	13.5		5.4	3.2	13.1		4.5				
Green Ext Time (p_c), s	0.0	4.3		0.8	0.0	3.8		0.6				

Intersection Summary		
HCM 6th Ctrl Delay		13.9
HCM 6th LOS		B

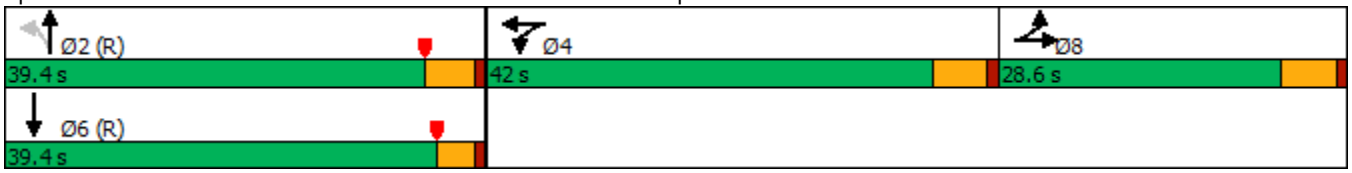
Notes

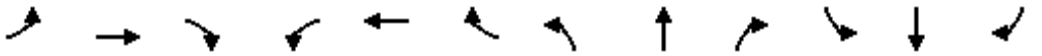
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	56	0	93	65	829	1110
Future Volume (vph)	56	0	93	65	829	1110
Turn Type	Split	NA	NA	Perm	NA	NA
Protected Phases	8	8	4		2	6
Permitted Phases				2		
Detector Phase	8	8	4	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.6	28.6	42.0	39.4	39.4	39.4
Total Split (%)	26.0%	26.0%	38.2%	35.8%	35.8%	35.8%
Yellow Time (s)	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	21.3	21.3	36.5	36.2	36.2	37.2
Actuated g/C Ratio	0.19	0.19	0.33	0.33	0.33	0.34
v/c Ratio	0.18	0.90	1.44	1.07	0.78	1.06
Control Delay	37.5	58.2	237.8	86.4	24.6	78.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.5	58.2	237.8	86.4	24.6	78.2
LOS	D	E	F	F	C	E
Approach Delay		55.0	237.8		29.1	78.2
Approach LOS		D	F		C	E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.44	
Intersection Signal Delay: 100.6	Intersection LOS: F
Intersection Capacity Utilization 123.9%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	0	306	419	93	261	65	829	0	0	1110	34
Future Volume (veh/h)	56	0	306	419	93	261	65	829	0	0	1110	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	63	0	260	471	104	259	73	931	0	0	1247	37
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	330	0	294	328	73	181	65	1229	0	0	1217	36
Arrive On Green	0.18	0.00	0.18	0.33	0.33	0.33	0.68	0.68	0.00	0.00	0.34	0.34
Sat Flow, veh/h	1810	0	1610	990	219	544	437	3705	0	0	3672	106
Grp Volume(v), veh/h	63	0	260	834	0	0	73	931	0	0	629	655
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1753	0	0	437	1805	0	0	1805	1878
Q Serve(g_s), s	3.2	0.0	17.3	36.5	0.0	0.0	0.0	18.7	0.0	0.0	37.4	37.4
Cycle Q Clear(g_c), s	3.2	0.0	17.3	36.5	0.0	0.0	37.4	18.7	0.0	0.0	37.4	37.4
Prop In Lane	1.00		1.00	0.56		0.31	1.00		0.00	0.00		0.06
Lane Grp Cap(c), veh/h	330	0	294	582	0	0	65	1229	0	0	614	639
V/C Ratio(X)	0.19	0.00	0.89	1.43	0.00	0.00	1.12	0.76	0.00	0.00	1.02	1.02
Avail Cap(c_a), veh/h	380	0	338	582	0	0	65	1229	0	0	614	639
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.78	0.78
Uniform Delay (d), s/veh	38.1	0.0	43.8	36.8	0.0	0.0	36.3	14.6	0.0	0.0	36.3	36.3
Incr Delay (d2), s/veh	0.3	0.0	21.9	205.1	0.0	0.0	146.2	4.4	0.0	0.0	38.2	37.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	8.7	47.8	0.0	0.0	4.2	5.1	0.0	0.0	22.2	23.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.4	0.0	65.7	241.9	0.0	0.0	182.5	19.0	0.0	0.0	74.5	74.2
LnGrp LOS	D	A	E	F	A	A	F	B	A	A	F	F
Approach Vol, veh/h		323			834			1004			1284	
Approach Delay, s/veh		60.4			241.9			30.9			74.4	
Approach LOS		E			F			C			E	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		42.4		42.0		42.4		25.6				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		34.4		36.5		* 35		23.1				
Max Q Clear Time (g_c+I1), s		39.4		38.5		39.4		19.3				
Green Ext Time (p_c), s		0.0		0.0		0.0		0.7				

Intersection Summary		
HCM 6th Ctrl Delay		100.9
HCM 6th LOS		F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	11.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	325	894	828	1007
Future Vol, veh/h	0	0	325	894	828	1007
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	342	941	872	1060

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	967	1933	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	0	627	~ 322	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	-	626	~ 322	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	27.9	0
HCM LOS	A		

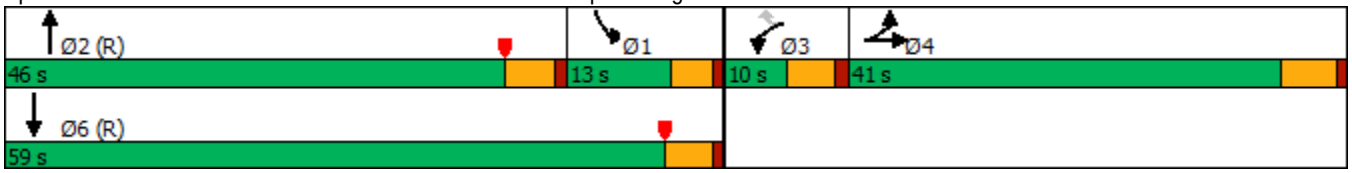
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	~ 322	-	-	-	-
HCM Lane V/C Ratio	1.062	-	-	-	-
HCM Control Delay (s)	104.7	-	0	-	-
HCM Lane LOS	F	-	A	-	-
HCM 95th %tile Q(veh)	12.7	-	-	-	-

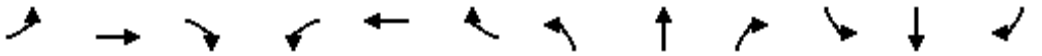
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	19	115	45	557	312	516
Future Volume (vph)	19	115	45	557	312	516
Turn Type	NA	Prot	Perm	NA	Prot	NA
Protected Phases	4	3		2	1	6
Permitted Phases			3			
Detector Phase	4	3	3	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	10.0	10.0	45.0	9.5	30.0
Total Split (s)	41.0	10.0	10.0	46.0	13.0	59.0
Total Split (%)	37.3%	9.1%	9.1%	41.8%	11.8%	53.6%
Yellow Time (s)	4.5	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	35.5	5.0	5.0	36.1	13.4	54.0
Actuated g/C Ratio	0.32	0.05	0.05	0.33	0.12	0.49
v/c Ratio	1.57	1.46	0.25	0.89	1.48	0.30
Control Delay	292.7	301.2	3.0	36.4	250.3	10.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	292.7	301.2	3.0	36.4	250.3	10.2
LOS	F	F	A	D	F	B
Approach Delay	292.7			36.4		100.6
Approach LOS	F			D		F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.57	
Intersection Signal Delay: 141.3	Intersection LOS: F
Intersection Capacity Utilization 119.6%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	617	19	240	115	0	45	0	557	504	312	516	0
Future Volume (veh/h)	617	19	240	115	0	45	0	557	504	312	516	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	643	20	153	120	0	45	0	580	416	325	538	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	450	14	107	0	0	0	0	642	461	385	2100	0
Arrive On Green	0.32	0.32	0.32	0.00	0.00	0.00	0.00	0.32	0.32	0.43	1.00	0.00
Sat Flow, veh/h	1395	43	332		0		0	2080	1423	1810	3705	0
Grp Volume(v), veh/h	816	0	0		0.0		0	528	468	325	538	0
Grp Sat Flow(s),veh/h/ln	1770	0	0				0	1805	1603	1810	1805	0
Q Serve(g_s), s	35.5	0.0	0.0				0.0	30.7	30.7	17.7	0.0	0.0
Cycle Q Clear(g_c), s	35.5	0.0	0.0				0.0	30.7	30.7	17.7	0.0	0.0
Prop In Lane	0.79		0.19				0.00		0.89	1.00		0.00
Lane Grp Cap(c), veh/h	571	0	0				0	584	519	385	2100	0
V/C Ratio(X)	1.43	0.00	0.00				0.00	0.90	0.90	0.84	0.26	0.00
Avail Cap(c_a), veh/h	571	0	0				0	673	597	385	2100	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.76	0.76	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.3	0.0	0.0				0.0	35.5	35.5	30.0	0.0	0.0
Incr Delay (d2), s/veh	202.6	0.0	0.0				0.0	16.0	17.5	14.9	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	46.6	0.0	0.0				0.0	15.5	14.0	7.2	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	239.9	0.0	0.0				0.0	51.5	53.1	44.9	0.3	0.0
LnGrp LOS	F	A	A				A	D	D	D	A	A
Approach Vol, veh/h		816						996			863	
Approach Delay, s/veh		239.9						52.2			17.1	
Approach LOS		F						D			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	28.4	40.6		41.0		69.0
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0
Max Green Setting (Gmax), s	8.5	* 41		35.5		54.0
Max Q Clear Time (g_c+I1), s	19.7	32.7		37.5		2.0
Green Ext Time (p_c), s	0.0	2.8		0.0		2.3

Intersection Summary		
HCM 6th Ctrl Delay		98.1
HCM 6th LOS		F

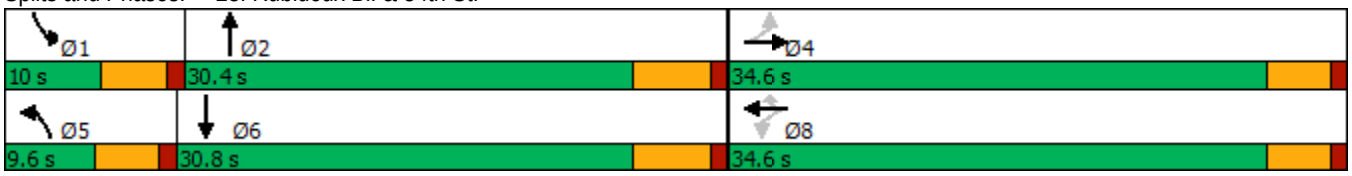
Notes

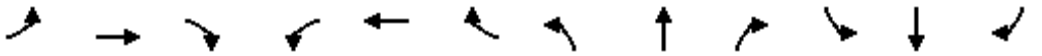
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	182	41	33	21	139	36	740	61	750
Future Volume (vph)	182	41	33	21	139	36	740	61	750
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	30.6	30.6	34.6	34.6	34.6	9.6	29.4	9.6	22.4
Total Split (s)	34.6	34.6	34.6	34.6	34.6	9.6	30.4	10.0	30.8
Total Split (%)	46.1%	46.1%	46.1%	46.1%	46.1%	12.8%	40.5%	13.3%	41.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	4.6	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		17.8		17.8	17.8	5.5	20.4	5.8	22.3
Actuated g/C Ratio		0.33		0.33	0.33	0.10	0.38	0.11	0.41
v/c Ratio		0.60		0.12	0.25	0.22	0.67	0.36	0.62
Control Delay		22.6		15.6	4.2	32.9	18.7	35.6	16.3
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		22.6		15.6	4.2	32.9	18.7	35.6	16.3
LOS		C		B	A	C	B	D	B
Approach Delay		22.6		7.4			19.3		17.6
Approach LOS		C		A			B		B

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 54.2	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 17.9	Intersection LOS: B
Intersection Capacity Utilization 62.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 23: Rubidoux Bl. & 34th St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	41	24	33	21	139	36	740	66	61	750	59
Future Volume (veh/h)	182	41	24	33	21	139	36	740	66	61	750	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.98		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	204	46	18	37	24	86	40	831	67	69	843	58
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	417	87	27	375	217	474	78	1167	94	112	1251	86
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.04	0.35	0.35	0.06	0.37	0.37
Sat Flow, veh/h	977	296	92	873	737	1610	1810	3376	272	1810	3427	236
Grp Volume(v), veh/h	268	0	0	61	0	86	40	444	454	69	444	457
Grp Sat Flow(s),veh/h/ln	1365	0	0	1610	0	1610	1810	1805	1843	1810	1805	1858
Q Serve(g_s), s	7.5	0.0	0.0	0.0	0.0	2.0	1.1	10.5	10.5	1.8	10.2	10.2
Cycle Q Clear(g_c), s	8.6	0.0	0.0	1.1	0.0	2.0	1.1	10.5	10.5	1.8	10.2	10.2
Prop In Lane	0.76		0.07	0.61		1.00	1.00		0.15	1.00		0.13
Lane Grp Cap(c), veh/h	531	0	0	592	0	474	78	624	637	112	659	678
V/C Ratio(X)	0.50	0.00	0.00	0.10	0.00	0.18	0.52	0.71	0.71	0.61	0.67	0.67
Avail Cap(c_a), veh/h	974	0	0	1072	0	985	185	920	939	199	935	962
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.3	0.0	0.0	12.6	0.0	12.9	23.0	13.9	13.9	22.4	13.1	13.1
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.1	0.0	0.2	2.0	1.5	1.5	2.0	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	0.0	0.5	0.0	0.7	0.4	3.5	3.6	0.7	3.3	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.1	0.0	0.0	12.7	0.0	13.1	24.9	15.4	15.4	24.4	14.3	14.3
LnGrp LOS	B	A	A	B	A	B	C	B	B	C	B	B
Approach Vol, veh/h		268			147			938			970	
Approach Delay, s/veh		16.1			12.9			15.8			15.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	22.4		19.0	6.7	23.3		19.0				
Change Period (Y+Rc), s	4.6	5.4		4.6	4.6	5.4		4.6				
Max Green Setting (Gmax), s	5.4	25.0		30.0	5.0	25.4		30.0				
Max Q Clear Time (g_c+I1), s	3.8	12.5		10.6	3.1	12.2		4.0				
Green Ext Time (p_c), s	0.0	4.3		1.7	0.0	4.5		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		15.3	
HCM 6th LOS		B	

Intersection	
Int Delay, s/veh	5.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	766	69	0	0	160	37
Future Vol, veh/h	766	69	0	0	160	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	790	71	0	0	165	38

Major/Minor	Major1			Minor1	
Conflicting Flow All	0	0		826	826
Stage 1	-	-		826	-
Stage 2	-	-		0	-
Critical Hdwy	-	-		6.4	6.2
Critical Hdwy Stg 1	-	-		5.4	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	-		3.5	3.3
Pot Cap-1 Maneuver	-	-		345	375
Stage 1	-	-		433	-
Stage 2	-	-		-	-
Platoon blocked, %	-	-			
Mov Cap-1 Maneuver	-	-		345	375
Mov Cap-2 Maneuver	-	-		345	-
Stage 1	-	-		433	-
Stage 2	-	-		-	-

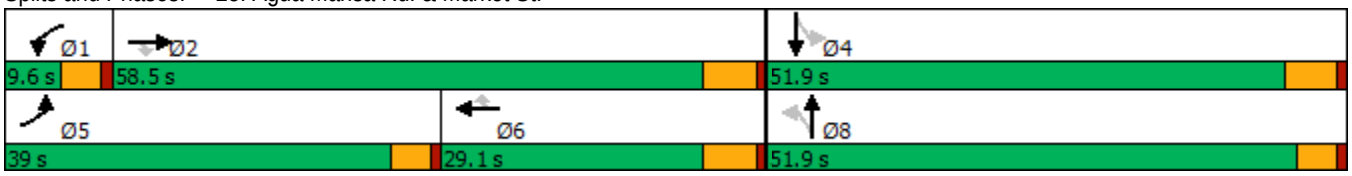
Approach	EB	NB
HCM Control Delay, s	0	28.6
HCM LOS		D

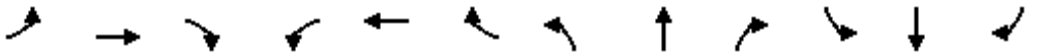
Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	350	-	-
HCM Lane V/C Ratio	0.58	-	-
HCM Control Delay (s)	28.6	-	-
HCM Lane LOS	D	-	-
HCM 95th %tile Q(veh)	3.5	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	545	644	17	10	752	294	13	5	193	18
Future Volume (vph)	545	644	17	10	752	294	13	5	193	18
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	5	2		1	6			8		4
Permitted Phases			2			6	8		4	
Detector Phase	5	2	2	1	6	6	8	8	4	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	31.8	31.8	9.6	26.8	26.8	14.6	14.6	43.8	43.8
Total Split (s)	39.0	58.5	58.5	9.6	29.1	29.1	51.9	51.9	51.9	51.9
Total Split (%)	32.5%	48.8%	48.8%	8.0%	24.3%	24.3%	43.3%	43.3%	43.3%	43.3%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None
Act Effct Green (s)	34.4	60.4	60.4	5.0	23.3	23.3		47.3		46.1
Actuated g/C Ratio	0.29	0.50	0.50	0.04	0.19	0.19		0.39		0.38
v/c Ratio	1.17	0.39	0.02	0.15	1.19	0.57		0.07		1.24
Control Delay	135.2	19.8	0.1	60.0	143.2	8.8		14.9		150.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	135.2	19.8	0.1	60.0	143.2	8.8		14.9		150.9
LOS	F	B	A	E	F	A		B		F
Approach Delay		71.7			105.0			14.9		150.9
Approach LOS		E			F			B		F

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.24	
Intersection Signal Delay: 102.1	Intersection LOS: F
Intersection Capacity Utilization 115.9%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	545	644	17	10	752	294	13	5	15	193	18	538
Future Volume (veh/h)	545	644	17	10	752	294	13	5	15	193	18	538
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	606	716	16	11	836	288	14	6	15	214	20	504
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	519	1690	754	23	701	312	182	85	168	211	18	410
Arrive On Green	0.29	0.47	0.47	0.01	0.19	0.19	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1810	3610	1610	1810	3610	1606	363	221	438	449	46	1067
Grp Volume(v), veh/h	606	716	16	11	836	288	35	0	0	738	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1606	1023	0	0	1563	0	0
Q Serve(g_s), s	34.4	15.8	0.6	0.7	23.3	21.1	0.0	0.0	0.0	44.6	0.0	0.0
Cycle Q Clear(g_c), s	34.4	15.8	0.6	0.7	23.3	21.1	1.5	0.0	0.0	46.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.40		0.43	0.29		0.68
Lane Grp Cap(c), veh/h	519	1690	754	23	701	312	435	0	0	639	0	0
V/C Ratio(X)	1.17	0.42	0.02	0.48	1.19	0.92	0.08	0.00	0.00	1.15	0.00	0.00
Avail Cap(c_a), veh/h	519	1690	754	75	701	312	447	0	0	639	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	42.8	21.2	17.1	58.8	48.3	47.5	23.2	0.0	0.0	38.2	0.0	0.0
Incr Delay (d2), s/veh	94.9	0.8	0.1	5.5	100.4	34.7	0.1	0.0	0.0	86.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	28.4	6.5	0.2	0.4	19.9	11.2	0.6	0.0	0.0	33.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	137.7	22.0	17.2	64.4	148.8	82.2	23.3	0.0	0.0	124.9	0.0	0.0
LnGrp LOS	F	C	B	E	F	F	C	A	A	F	A	A
Approach Vol, veh/h		1338			1135			35			738	
Approach Delay, s/veh		74.3			131.1			23.3			124.9	
Approach LOS		E			F			C			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	62.0		51.9	39.0	29.1		51.9				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	52.7		46.1	34.4	23.3		* 47				
Max Q Clear Time (g_c+I1), s	2.7	17.8		48.1	36.4	25.3		3.5				
Green Ext Time (p_c), s	0.0	5.0		0.0	0.0	0.0		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		105.1
HCM 6th LOS		F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	184	16	33	21	14	8	32	58	5	31	5
Future Vol, veh/h	9	184	16	33	21	14	8	32	58	5	31	5
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	224	20	40	26	17	10	39	71	6	38	6
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	9.9	8.5	8.3	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	8%	5%	0%	61%	0%	12%
Vol Thru, %	33%	95%	0%	39%	0%	76%
Vol Right, %	59%	0%	100%	0%	100%	12%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	98	193	16	54	14	41
LT Vol	8	9	0	33	0	5
Through Vol	32	184	0	21	0	31
RT Vol	58	0	16	0	14	5
Lane Flow Rate	120	235	20	66	17	50
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.148	0.327	0.023	0.099	0.021	0.067
Departure Headway (Hd)	4.458	4.996	4.269	5.433	4.421	4.831
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	804	720	838	659	808	741
Service Time	2.487	2.726	1.999	3.17	2.158	2.866
HCM Lane V/C Ratio	0.149	0.326	0.024	0.1	0.021	0.067
HCM Control Delay	8.3	10.1	7.1	8.8	7.3	8.2
HCM Lane LOS	A	B	A	A	A	A
HCM 95th-tile Q	0.5	1.4	0.1	0.3	0.1	0.2

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	8	5	41	37	5	7	13	116	9	5	157	11
Future Vol, veh/h	8	5	41	37	5	7	13	116	9	5	157	11
Conflicting Peds, #/hr	0	0	1	0	0	1	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	6	52	47	6	9	16	147	11	6	199	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	411	408	207	433	410	154	213	0	0	158	0	0
Stage 1	218	218	-	185	185	-	-	-	-	-	-	-
Stage 2	193	190	-	248	225	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	555	536	839	537	534	897	1369	-	-	1434	-	-
Stage 1	789	726	-	821	751	-	-	-	-	-	-	-
Stage 2	813	747	-	760	721	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	537	526	838	492	524	896	1369	-	-	1434	-	-
Mov Cap-2 Maneuver	537	526	-	492	524	-	-	-	-	-	-	-
Stage 1	779	722	-	810	741	-	-	-	-	-	-	-
Stage 2	787	737	-	702	717	-	-	-	-	-	-	-

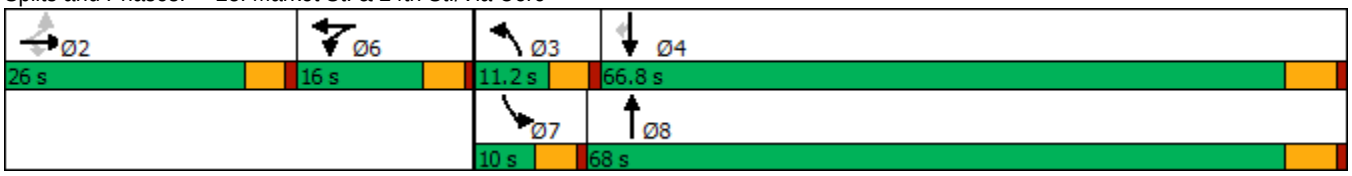
Approach	EB	WB	NB	SB
HCM Control Delay, s	10.4	12.7	0.7	0.2
HCM LOS	B	B		

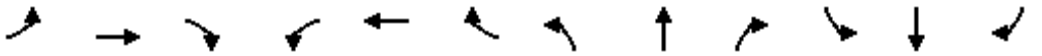
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1369	-	-	736	529	1434	-	-
HCM Lane V/C Ratio	0.012	-	-	0.093	0.117	0.004	-	-
HCM Control Delay (s)	7.7	0	-	10.4	12.7	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.4	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	44	37	191	110	9	44	1199	33	831	9
Future Volume (vph)	44	37	191	110	9	44	1199	33	831	9
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	26.0	26.0	26.0	16.0	16.0	11.2	68.0	10.0	66.8	66.8
Total Split (%)	21.7%	21.7%	21.7%	13.3%	13.3%	9.3%	56.7%	8.3%	55.7%	55.7%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		21.4	21.4	11.1	11.1	6.2	64.2	5.3	61.4	61.4
Actuated g/C Ratio		0.18	0.18	0.09	0.09	0.05	0.55	0.05	0.52	0.52
v/c Ratio		1.73	0.45	0.68	0.37	0.49	1.43	0.43	0.88	0.01
Control Delay		430.1	9.9	73.0	19.4	72.6	226.4	72.2	38.0	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		430.1	9.9	73.0	19.4	72.6	226.4	72.2	38.0	0.0
LOS		F	A	E	B	E	F	E	D	A
Approach Delay		134.8			50.8		221.7		38.9	
Approach LOS		F			D		F		D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 117.6	
Natural Cycle: 115	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.73	
Intersection Signal Delay: 143.8	Intersection LOS: F
Intersection Capacity Utilization 95.9%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	37	191	110	9	69	44	1199	187	33	831	9
Future Volume (veh/h)	44	37	191	110	9	69	44	1199	187	33	831	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	46	39	108	116	9	72	46	1262	175	35	875	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	96	82	154	172	17	138	64	967	134	55	1116	946
Arrive On Green	0.10	0.10	0.10	0.09	0.09	0.09	0.04	0.59	0.59	0.03	0.59	0.59
Sat Flow, veh/h	1001	849	1605	1810	182	1456	1810	1633	226	1810	1900	1610
Grp Volume(v), veh/h	85	0	108	116	0	81	46	0	1437	35	875	9
Grp Sat Flow(s),veh/h/ln	1850	0	1605	1810	0	1638	1810	0	1859	1810	1900	1610
Q Serve(g_s), s	4.6	0.0	6.9	6.5	0.0	4.9	2.6	0.0	62.2	2.0	37.0	0.2
Cycle Q Clear(g_c), s	4.6	0.0	6.9	6.5	0.0	4.9	2.6	0.0	62.2	2.0	37.0	0.2
Prop In Lane	0.54		1.00	1.00		0.89	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	178	0	154	172	0	155	64	0	1101	55	1116	946
V/C Ratio(X)	0.48	0.00	0.70	0.68	0.00	0.52	0.72	0.00	1.31	0.64	0.78	0.01
Avail Cap(c_a), veh/h	377	0	327	196	0	178	114	0	1101	93	1116	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.0	0.0	46.0	46.0	0.0	45.3	50.2	0.0	21.4	50.4	16.6	9.0
Incr Delay (d2), s/veh	2.0	0.0	5.6	7.4	0.0	2.7	5.7	0.0	144.2	4.4	5.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	2.9	3.3	0.0	2.1	1.3	0.0	66.6	0.9	15.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.0	0.0	51.7	53.4	0.0	48.0	55.8	0.0	165.7	54.8	22.1	9.0
LnGrp LOS	D	A	D	D	A	D	E	A	F	D	C	A
Approach Vol, veh/h		193			197			1483			919	
Approach Delay, s/veh		49.6			51.2			162.3			23.2	
Approach LOS		D			D			F			C	

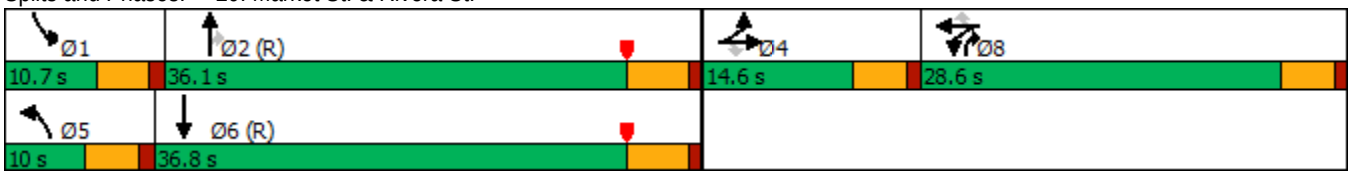
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.7	8.3	67.5		14.6	7.8	68.0				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		21.4	6.6	61.0		11.4	5.4	62.2				
Max Q Clear Time (g_c+I1), s		8.9	4.6	39.0		8.5	4.0	64.2				
Green Ext Time (p_c), s		0.6	0.0	6.2		0.2	0.0	0.0				

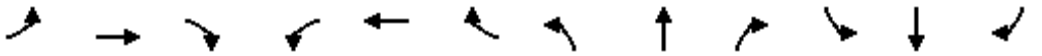
Intersection Summary												
HCM 6th Ctrl Delay			100.9									
HCM 6th LOS			F									

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	5	20	356	5	60	26	1011	352	44	933
Future Volume (vph)	5	20	356	5	60	26	1011	352	44	933
Turn Type	NA	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	4		8	8		5	2	8	1	6
Permitted Phases		4			8			2		
Detector Phase	4	4	8	8	8	5	2	8	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	14.6	14.6	28.6	28.6	28.6	9.6	35.1	28.6	9.6	29.1
Total Split (s)	14.6	14.6	28.6	28.6	28.6	10.0	36.1	28.6	10.7	36.8
Total Split (%)	16.2%	16.2%	31.8%	31.8%	31.8%	11.1%	40.1%	31.8%	11.9%	40.9%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.1	3.6	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	4.6	5.1	4.6	4.6	5.1
Lead/Lag						Lead	Lag		Lead	Lag
Lead-Lag Optimize?						Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	10.0	10.0	17.2	17.2	17.2	5.6	47.5	65.2	6.2	50.1
Actuated g/C Ratio	0.11	0.11	0.19	0.19	0.19	0.06	0.53	0.72	0.07	0.56
v/c Ratio	0.05	0.07	0.57	0.56	0.15	0.24	0.55	0.29	0.36	0.48
Control Delay	36.5	0.5	38.9	38.5	0.8	42.2	21.3	0.7	48.3	17.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Total Delay	36.5	0.5	38.9	38.5	0.8	42.2	21.5	0.7	48.3	17.3
LOS	D	A	D	D	A	D	C	A	D	B
Approach Delay	12.1			33.3			16.6			18.7
Approach LOS	B			C			B			B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 2 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.57	
Intersection Signal Delay: 19.8	Intersection LOS: B
Intersection Capacity Utilization 60.7%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 29: Market St. & Rivera St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	5	20	356	5	60	26	1011	352	44	933	5
Future Volume (veh/h)	5	5	20	356	5	60	26	1011	352	44	933	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	5	5	7	371	0	38	27	1042	257	45	962	5
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	36	36	62	487	0	212	49	2092	1149	68	2171	11
Arrive On Green	0.04	0.04	0.04	0.13	0.00	0.13	0.05	1.00	1.00	0.04	0.59	0.59
Sat Flow, veh/h	927	927	1610	3619	0	1574	1810	3610	1609	1810	3682	19
Grp Volume(v), veh/h	10	0	7	371	0	38	27	1042	257	45	472	495
Grp Sat Flow(s),veh/h/ln	1854	0	1610	1810	0	1574	1810	1805	1609	1810	1805	1896
Q Serve(g_s), s	0.5	0.0	0.4	8.9	0.0	1.9	1.3	0.0	0.0	2.2	13.1	13.1
Cycle Q Clear(g_c), s	0.5	0.0	0.4	8.9	0.0	1.9	1.3	0.0	0.0	2.2	13.1	13.1
Prop In Lane	0.50		1.00	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	71	0	62	487	0	212	49	2092	1149	68	1064	1118
V/C Ratio(X)	0.14	0.00	0.11	0.76	0.00	0.18	0.55	0.50	0.22	0.66	0.44	0.44
Avail Cap(c_a), veh/h	206	0	179	965	0	420	109	2092	1149	123	1064	1118
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.82	0.82	0.82	0.52	0.52	0.52
Uniform Delay (d), s/veh	41.8	0.0	41.8	37.6	0.0	34.5	42.0	0.0	0.0	42.7	10.3	10.3
Incr Delay (d2), s/veh	0.9	0.0	0.8	2.5	0.0	0.4	2.9	0.7	0.4	2.1	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.2	4.0	0.0	0.8	0.6	0.2	0.1	1.0	4.5	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.7	0.0	42.6	40.0	0.0	34.9	44.9	0.7	0.4	44.9	11.0	10.9
LnGrp LOS	D	A	D	D	A	C	D	A	A	D	B	B
Approach Vol, veh/h		17			409			1326			1012	
Approach Delay, s/veh		42.7			39.6			1.5			12.4	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.0	57.2		8.1	7.1	58.2		16.7				
Change Period (Y+Rc), s	4.6	5.1		4.6	4.6	5.1		4.6				
Max Green Setting (Gmax), s	6.1	31.0		10.0	5.4	31.7		24.0				
Max Q Clear Time (g_c+I1), s	4.2	2.0		2.5	3.3	15.1		10.9				
Green Ext Time (p_c), s	0.0	8.9		0.0	0.0	5.2		1.2				

Intersection Summary			
HCM 6th Ctrl Delay		11.4	
HCM 6th LOS		B	

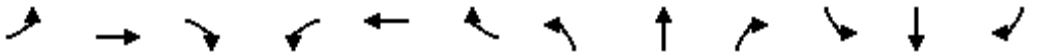
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	1041	291	348	1084	225
Future Volume (vph)	0	1041	291	348	1084	225
Turn Type	NA	Free	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		Free				6
Detector Phase	8		5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	10.0		10.0	24.5	10.5	10.5
Total Split (s)	15.0		26.0	75.0	49.0	49.0
Total Split (%)	16.7%		28.9%	83.3%	54.4%	54.4%
Yellow Time (s)	4.0		4.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	C-Min	C-Min	C-Min
Act Effct Green (s)	10.9	90.0	18.8	68.6	44.7	44.7
Actuated g/C Ratio	0.12	1.00	0.21	0.76	0.50	0.50
v/c Ratio	0.68	0.68	0.81	0.13	0.64	0.26
Control Delay	54.9	2.3	33.6	7.4	14.4	2.8
Queue Delay	0.0	0.2	0.0	0.0	0.1	0.0
Total Delay	54.9	2.5	33.6	7.4	14.6	2.8
LOS	D	A	C	A	B	A
Approach Delay	8.7			19.3	12.5	
Approach LOS	A			B	B	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 12.5	Intersection LOS: B
Intersection Capacity Utilization 79.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 30: Market St. & SR-60 WB On-Ramp/SR-60 WB Off-Ramp



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	141	0	1041	291	348	0	0	1084	225
Future Volume (veh/h)	0	0	0	141	0	1041	291	348	0	0	1084	225
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				148	0	0	306	366	0	0	1141	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				182	0		345	2827	0	0	1937	
Arrive On Green				0.10	0.00	0.00	0.19	0.78	0.00	0.00	1.00	0.00
Sat Flow, veh/h				1810	0	1610	1810	3705	0	0	3705	1610
Grp Volume(v), veh/h				148	0	0	306	366	0	0	1141	0
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1805	1610
Q Serve(g_s), s				7.2	0.0	0.0	14.8	2.2	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				7.2	0.0	0.0	14.8	2.2	0.0	0.0	0.0	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				182	0		345	2827	0	0	1937	
V/C Ratio(X)				0.82	0.00		0.89	0.13	0.00	0.00	0.59	
Avail Cap(c_a), veh/h				201	0		422	2827	0	0	1937	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	0.00	0.00	0.69	0.69	0.00	0.00	0.87	0.00
Uniform Delay (d), s/veh				39.7	0.0	0.0	35.5	2.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				20.6	0.0	0.0	12.7	0.1	0.0	0.0	1.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.1	0.0	0.0	7.4	0.5	0.0	0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				60.2	0.0	0.0	48.2	2.4	0.0	0.0	1.2	0.0
LnGrp LOS				E	A		D	A	A	A	A	
Approach Vol, veh/h					148			672			1141	
Approach Delay, s/veh					60.2			23.3			1.2	
Approach LOS					E			C			A	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	76.0		22.2	53.8		14.0						
Change Period (Y+Rc), s	5.5		5.0	5.5		5.0						
Max Green Setting (Gmax), s	69.5		21.0	43.5		10.0						
Max Q Clear Time (g_c+I1), s	4.2		16.8	2.0		9.2						
Green Ext Time (p_c), s	2.5		0.4	9.6		0.0						

Intersection Summary	
HCM 6th Ctrl Delay	13.2
HCM 6th LOS	B

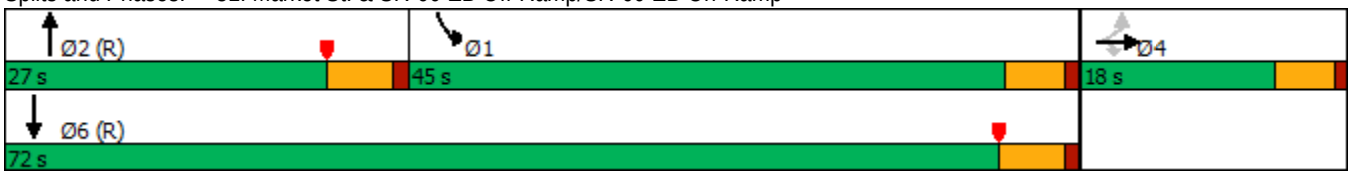
Notes

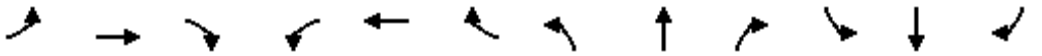
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	0	570	477	757	470
Future Volume (vph)	0	570	477	757	470
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	24.5	10.0	10.5
Total Split (s)	18.0	18.0	27.0	45.0	72.0
Total Split (%)	20.0%	20.0%	30.0%	50.0%	80.0%
Yellow Time (s)	4.0	4.0	4.5	4.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.0	5.5
Lead/Lag			Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Min	None	C-Min
Act Effct Green (s)	12.0	12.0	22.0	40.5	67.5
Actuated g/C Ratio	0.13	0.13	0.24	0.45	0.75
v/c Ratio	0.69	0.66	0.67	0.95	0.18
Control Delay	52.5	7.2	34.1	51.9	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	52.5	7.2	34.1	51.9	7.0
LOS	D	A	C	D	A
Approach Delay	17.2		34.1		34.7
Approach LOS	B		C		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 15 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 29.5	Intersection LOS: C
Intersection Capacity Utilization 79.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 31: Market St. & SR-60 EB Off-Ramp/SR-60 EB On-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	162	0	570	0	0	0	0	477	101	757	470	0
Future Volume (veh/h)	162	0	570	0	0	0	0	477	101	757	470	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	165	0	317				0	487	0	772	480	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	243	0	381				0	619		934	2703	0
Arrive On Green	0.13	0.00	0.13				0.00	0.17	0.00	0.86	1.00	0.00
Sat Flow, veh/h	1810	0	2834				0	3800	0	1810	3705	0
Grp Volume(v), veh/h	165	0	317				0	487	0	772	480	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1805	0	1810	1805	0
Q Serve(g_s), s	7.8	0.0	9.8				0.0	11.6	0.0	18.4	0.0	0.0
Cycle Q Clear(g_c), s	7.8	0.0	9.8				0.0	11.6	0.0	18.4	0.0	0.0
Prop In Lane	1.00		1.00				0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	243	0	381				0	619		934	2703	0
V/C Ratio(X)	0.68	0.00	0.83				0.00	0.79		0.83	0.18	0.00
Avail Cap(c_a), veh/h	261	0	409				0	862		934	2703	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.73	0.73	0.00
Uniform Delay (d), s/veh	37.1	0.0	38.0				0.0	35.7	0.0	4.3	0.0	0.0
Incr Delay (d2), s/veh	6.3	0.0	12.9				0.0	9.7	0.0	4.6	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	3.9				0.0	5.7	0.0	3.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.4	0.0	50.9				0.0	45.4	0.0	8.9	0.1	0.0
LnGrp LOS	D	A	D				A	D		A	A	A
Approach Vol, veh/h		482						487			1252	
Approach Delay, s/veh		48.3						45.4			5.5	
Approach LOS		D						D			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	52.0	20.9		17.1		72.9
Change Period (Y+Rc), s	5.5	* 5.5		5.0		5.5
Max Green Setting (Gmax), s	40.0	* 22		13.0		66.5
Max Q Clear Time (g_c+I1), s	20.4	13.6		11.8		2.0
Green Ext Time (p_c), s	2.7	1.8		0.3		3.3

Intersection Summary	
HCM 6th Ctrl Delay	23.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	1	16	5	0	6	11	546	5	121	884	35
Future Vol, veh/h	26	1	16	5	0	6	11	546	5	121	884	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	145	-	-	140	-	110
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	27	1	17	5	0	6	11	569	5	126	921	36

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1480	1771	461	1309	1805	289	957	0	0	576	0	0
Stage 1	1173	1173	-	596	596	-	-	-	-	-	-	-
Stage 2	307	598	-	713	1209	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	202	128	*740	*306	120	714	*1110	-	-	1007	-	-
Stage 1	463	450	-	*462	495	-	-	-	-	-	-	-
Stage 2	683	494	-	*698	427	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	180	111	*740	*267	104	713	*1110	-	-	1005	-	-
Mov Cap-2 Maneuver	308	223	-	*352	236	-	-	-	-	-	-	-
Stage 1	458	394	-	*456	489	-	-	-	-	-	-	-
Stage 2	670	488	-	*595	373	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.5	12.6	0.2	1.1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 1110	-	-	389	486	1005	-	-
HCM Lane V/C Ratio	0.01	-	-	0.115	0.024	0.125	-	-
HCM Control Delay (s)	8.3	-	-	15.5	12.6	9.1	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.1	0.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	20.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	216	56	154	579	630	210
Future Vol, veh/h	216	56	154	579	630	210
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	230	60	164	616	670	223

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1418	782	893	0	-	0
Stage 1	782	-	-	-	-	-
Stage 2	636	-	-	-	-	-
Critical Hdwy	6.6	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	~ 141	397	768	-	-	-
Stage 1	454	-	-	-	-	-
Stage 2	495	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 111	397	768	-	-	-
Mov Cap-2 Maneuver	238	-	-	-	-	-
Stage 1	357	-	-	-	-	-
Stage 2	495	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	132.9	2.3	0
HCM LOS	F		

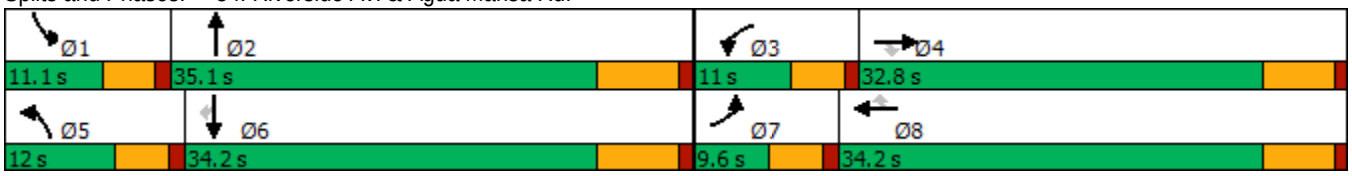
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	768	-	259	-	-
HCM Lane V/C Ratio	0.213	-	1.117	-	-
HCM Control Delay (s)	11	-	132.9	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.8	-	12.5	-	-

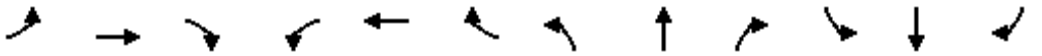
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	179	347	177	153	479	145	196	600	92	681	238
Future Volume (vph)	179	347	177	153	479	145	196	600	92	681	238
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	9.6	32.8	32.8	11.0	34.2	34.2	12.0	35.1	11.1	34.2	34.2
Total Split (%)	10.7%	36.4%	36.4%	12.2%	38.0%	38.0%	13.3%	39.0%	12.3%	38.0%	38.0%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	5.1	23.9	23.9	6.5	25.3	25.3	7.5	23.8	6.4	22.8	22.8
Actuated g/C Ratio	0.06	0.29	0.29	0.08	0.31	0.31	0.09	0.29	0.08	0.28	0.28
v/c Ratio	1.73	0.67	0.31	1.16	0.87	0.26	1.27	0.67	0.70	0.73	0.41
Control Delay	389.5	33.1	5.4	162.5	45.2	5.2	199.0	29.3	66.7	31.9	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	389.5	33.1	5.4	162.5	45.2	5.2	199.0	29.3	66.7	31.9	6.3
LOS	F	C	A	F	D	A	F	C	E	C	A
Approach Delay		116.8			60.9			68.3		29.0	
Approach LOS		F			E			E		C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 82.4	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.73	
Intersection Signal Delay: 64.9	Intersection LOS: E
Intersection Capacity Utilization 82.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	179	347	177	153	479	145	196	600	57	92	681	238
Future Volume (veh/h)	179	347	177	153	479	145	196	600	57	92	681	238
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	190	369	124	163	510	130	209	638	57	98	724	234
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	116	545	462	149	579	490	172	959	86	126	941	420
Arrive On Green	0.06	0.29	0.29	0.08	0.30	0.30	0.09	0.29	0.29	0.07	0.26	0.26
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3352	299	1810	3610	1610
Grp Volume(v), veh/h	190	369	124	163	510	130	209	343	352	98	724	234
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1846	1810	1805	1610
Q Serve(g_s), s	5.0	13.4	4.6	6.4	19.9	4.8	7.4	13.1	13.1	4.2	14.5	9.8
Cycle Q Clear(g_c), s	5.0	13.4	4.6	6.4	19.9	4.8	7.4	13.1	13.1	4.2	14.5	9.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	116	545	462	149	579	490	172	516	528	126	941	420
V/C Ratio(X)	1.64	0.68	0.27	1.10	0.88	0.27	1.22	0.66	0.67	0.78	0.77	0.56
Avail Cap(c_a), veh/h	116	658	558	149	692	587	172	662	677	151	1283	572
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.5	24.6	21.5	35.8	25.8	20.5	35.3	24.5	24.6	35.7	26.7	24.9
Incr Delay (d2), s/veh	322.2	2.1	0.3	102.3	11.2	0.3	138.9	1.7	1.7	15.5	2.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.5	5.8	1.6	6.9	9.8	1.7	9.6	5.1	5.2	2.2	5.7	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	358.7	26.8	21.8	138.1	37.0	20.8	174.2	26.2	26.2	51.2	28.6	26.1
LnGrp LOS	F	C	C	F	D	C	F	C	C	D	C	C
Approach Vol, veh/h		683			803			904			1056	
Approach Delay, s/veh		118.2			54.9			60.4			30.2	
Approach LOS		F			D			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	28.8	11.0	28.1	12.0	26.8	9.6	29.5
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	6.5	28.6	6.4	27.0	7.4	27.7	5.0	28.4
Max Q Clear Time (g_c+I1), s	6.2	15.1	8.4	15.4	9.4	16.5	7.0	21.9
Green Ext Time (p_c), s	0.0	3.0	0.0	1.9	0.0	3.9	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	61.3
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	0	0	160	694	1
Future Vol, veh/h	5	0	0	160	694	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	92	92	92	92	62
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	8	0	0	174	754	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	929	755	756	0	-	0
Stage 1	755	-	-	-	-	-
Stage 2	174	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	300	412	864	-	-	-
Stage 1	468	-	-	-	-	-
Stage 2	861	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	300	412	864	-	-	-
Mov Cap-2 Maneuver	300	-	-	-	-	-
Stage 1	468	-	-	-	-	-
Stage 2	861	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	864	-	300	-	-
HCM Lane V/C Ratio	-	-	0.027	-	-
HCM Control Delay (s)	0	-	17.3	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	155.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	495	0	229	314	2	667
Future Vol, veh/h	495	0	229	314	2	667
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	635	0	294	403	3	855

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	635	0	1626	635
Stage 1	-	-	-	-	635	-
Stage 2	-	-	-	-	991	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	958	-	114	~ 482
Stage 1	-	-	-	-	532	-
Stage 2	-	-	-	-	362	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	958	-	69	~ 482
Mov Cap-2 Maneuver	-	-	-	-	69	-
Stage 1	-	-	-	-	532	-
Stage 2	-	-	-	-	219	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.4	$ 393.1
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	474	-	-	958	-
HCM Lane V/C Ratio	1.809	-	-	0.306	-
HCM Control Delay (s)	$ 393.1	-	-	10.4	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	53.9	-	-	1.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	18.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	8	1109	44	27	519	4	20	9	33	1	15	4
Future Vol, veh/h	8	1109	44	27	519	4	20	9	33	1	15	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	1352	54	33	633	5	24	11	40	1	18	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	638	0	0	1406	0	0	2115	2103	1379	2127	2128	639
Stage 1	-	-	-	-	-	-	1399	1399	-	702	702	-
Stage 2	-	-	-	-	-	-	716	704	-	1425	1426	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	956	-	-	492	-	-	37	52	179	37	50	480
Stage 1	-	-	-	-	-	-	176	209	-	432	443	-
Stage 2	-	-	-	-	-	-	424	443	-	170	203	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	956	-	-	492	-	-	~ 22	44	179	21	43	479
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 22	44	-	21	43	-
Stage 1	-	-	-	-	-	-	167	199	-	411	397	-
Stage 2	-	-	-	-	-	-	358	397	-	118	193	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.6	$ 473.8	136.4
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	48	956	-	-	492	-	-	49
HCM Lane V/C Ratio	1.575	0.01	-	-	0.067	-	-	0.498
HCM Control Delay (s)	$ 473.8	8.8	0	-	12.8	0	-	136.4
HCM Lane LOS	F	A	A	-	B	A	-	F
HCM 95th %tile Q(veh)	7.3	0	-	-	0.2	-	-	1.9

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	19	22	40	19	23	64
Future Vol, veh/h	19	22	40	19	23	64
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	100	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	26	47	22	27	74

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	186	58	0	0	69	0
Stage 1	58	-	-	-	-	-
Stage 2	128	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	808	1014	-	-	1545	-
Stage 1	970	-	-	-	-	-
Stage 2	903	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	793	1014	-	-	1545	-
Mov Cap-2 Maneuver	793	-	-	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	887	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	1.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	793	1014	1545	-
HCM Lane V/C Ratio	-	-	0.028	0.025	0.017	-
HCM Control Delay (s)	-	-	9.7	8.6	7.4	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	0.1	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	0	0	0	21	0	10	0	40	32	11	66	0
Future Vol, veh/h	0	0	0	21	0	10	0	40	32	11	66	0
Conflicting Peds, #/hr	0	0	1	0	0	0	0	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	0	0	23	0	11	0	44	35	12	73	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	165	177	75	160	160	62	74	0	0	79	0	0
Stage 1	98	98	-	62	62	-	-	-	-	-	-	-
Stage 2	67	79	-	98	98	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	804	720	992	810	736	1009	1538	-	-	1532	-	-
Stage 1	913	818	-	954	847	-	-	-	-	-	-	-
Stage 2	948	833	-	913	818	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	790	714	990	804	729	1009	1537	-	-	1532	-	-
Mov Cap-2 Maneuver	790	714	-	804	729	-	-	-	-	-	-	-
Stage 1	912	811	-	954	847	-	-	-	-	-	-	-
Stage 2	938	833	-	905	811	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.4	0	1.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1537	-	-	-	860	1532	-	-
HCM Lane V/C Ratio	-	-	-	-	0.04	0.008	-	-
HCM Control Delay (s)	0	-	-	0	9.4	7.4	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	0	0	52	81	6
Future Vol, veh/h	20	0	0	52	81	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	0	0	57	88	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	149	92	95	0	-	0
Stage 1	92	-	-	-	-	-
Stage 2	57	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	848	971	1512	-	-	-
Stage 1	937	-	-	-	-	-
Stage 2	971	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	848	971	1512	-	-	-
Mov Cap-2 Maneuver	848	-	-	-	-	-
Stage 1	937	-	-	-	-	-
Stage 2	971	-	-	-	-	-

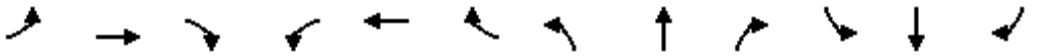
Approach	EB	NB	SB
HCM Control Delay, s	9.4	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1512	-	848	-	-
HCM Lane V/C Ratio	-	-	0.026	-	-
HCM Control Delay (s)	0	-	9.4	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	6	433	336	1465	1342	463
Future Volume (vph)	6	433	336	1465	1342	463
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.0	9.0	9.0	21.5	21.5	21.5
Total Split (s)	41.0	41.0	22.0	69.0	47.0	47.0
Total Split (%)	37.3%	37.3%	20.0%	62.7%	42.7%	42.7%
Yellow Time (s)	3.0	3.0	3.0	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.5	4.5	4.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	38.1	38.1	18.0	63.4	41.4	41.4
Actuated g/C Ratio	0.35	0.35	0.16	0.58	0.38	0.38
v/c Ratio	0.98	0.74	1.22	0.76	0.74	0.56
Control Delay	69.4	36.9	170.8	13.0	32.2	4.7
Queue Delay	38.2	0.0	0.0	0.4	0.2	0.0
Total Delay	107.6	36.9	170.8	13.4	32.5	4.7
LOS	F	D	F	B	C	A
Approach Delay	78.0			42.8	25.3	
Approach LOS	E			D	C	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.22	
Intersection Signal Delay: 43.1	Intersection LOS: D
Intersection Capacity Utilization 107.9%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 8: Cedar Av. & I-10 WB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	492	6	433	336	1465	0	0	1342	463
Future Volume (veh/h)	0	0	0	492	6	433	336	1465	0	0	1342	463
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				529	6	431	361	1575	0	0	1443	311
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				571	6	514	296	2179	0	0	2094	646
Arrive On Green				0.32	0.32	0.32	0.22	0.80	0.00	0.00	0.40	0.40
Sat Flow, veh/h				1790	20	1610	1810	3705	0	0	5358	1600
Grp Volume(v), veh/h				535	0	431	361	1575	0	0	1443	311
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1729	1600
Q Serve(g_s), s				31.4	0.0	27.4	18.0	22.5	0.0	0.0	25.3	15.8
Cycle Q Clear(g_c), s				31.4	0.0	27.4	18.0	22.5	0.0	0.0	25.3	15.8
Prop In Lane				0.99		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				578	0	514	296	2179	0	0	2094	646
V/C Ratio(X)				0.93	0.00	0.84	1.22	0.72	0.00	0.00	0.69	0.48
Avail Cap(c_a), veh/h				609	0	542	296	2179	0	0	2094	646
HCM Platoon Ratio				1.00	1.00	1.00	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.64	0.64	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				36.2	0.0	34.8	43.0	6.5	0.0	0.0	27.1	24.3
Incr Delay (d2), s/veh				19.8	0.0	10.8	116.9	1.4	0.0	0.0	1.9	2.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				16.3	0.0	11.7	17.0	4.8	0.0	0.0	10.3	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				56.0	0.0	45.6	159.9	7.9	0.0	0.0	29.0	26.8
LnGrp LOS				E	A	D	F	A	A	A	C	C
Approach Vol, veh/h					966			1936			1754	
Approach Delay, s/veh					51.4			36.2			28.6	
Approach LOS					D			D			C	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	70.9		22.0	48.9		39.1						
Change Period (Y+Rc), s	4.5		4.0	4.5		4.0						
Max Green Setting (Gmax), s	64.5		18.0	42.5		37.0						
Max Q Clear Time (g_c+I1), s	24.5		20.0	27.3		33.4						
Green Ext Time (p_c), s	16.4		0.0	9.4		1.7						

Intersection Summary		
HCM 6th Ctrl Delay	36.5	
HCM 6th LOS	D	

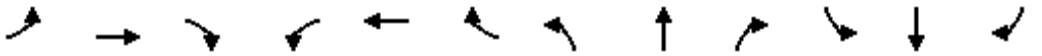
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	358	3	1443	935	462	1372
Future Volume (vph)	358	3	1443	935	462	1372
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	37.1	37.1	32.8	32.8	40.1	72.9
Total Split (%)	33.7%	33.7%	29.8%	29.8%	36.5%	66.3%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	22.5	22.5	44.4	44.4	32.1	80.0
Actuated g/C Ratio	0.20	0.20	0.40	0.40	0.29	0.73
v/c Ratio	0.75	0.65	0.70	0.96	0.90	0.53
Control Delay	54.0	38.5	26.0	28.3	46.1	3.9
Queue Delay	0.2	0.2	0.0	0.0	12.3	0.6
Total Delay	54.3	38.6	26.0	28.3	58.4	4.5
LOS	D	D	C	C	E	A
Approach Delay		46.7	26.9			18.1
Approach LOS		D	C			B

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 25.5	Intersection LOS: C
Intersection Capacity Utilization 107.9%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	358	3	135	0	0	0	0	1443	935	462	1372	0
Future Volume (veh/h)	358	3	135	0	0	0	0	1443	935	462	1372	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	248	167	128				0	1472	749	471	1400	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	358	197	151				0	1358	419	789	2650	0
Arrive On Green	0.20	0.20	0.20				0.00	0.09	0.09	0.44	0.73	0.00
Sat Flow, veh/h	1810	998	765				0	5358	1601	1810	3705	0
Grp Volume(v), veh/h	248	0	295				0	1472	749	471	1400	0
Grp Sat Flow(s),veh/h/ln	1810	0	1762				0	1729	1601	1810	1805	0
Q Serve(g_s), s	14.0	0.0	17.7				0.0	28.8	28.8	21.8	18.5	0.0
Cycle Q Clear(g_c), s	14.0	0.0	17.7				0.0	28.8	28.8	21.8	18.5	0.0
Prop In Lane	1.00		0.43				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	358	0	348				0	1358	419	789	2650	0
V/C Ratio(X)	0.69	0.00	0.85				0.00	1.08	1.79	0.60	0.53	0.00
Avail Cap(c_a), veh/h	553	0	538				0	1358	419	789	2650	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.09	0.09	0.60	0.60	0.00
Uniform Delay (d), s/veh	41.0	0.0	42.5				0.0	50.2	50.2	23.7	6.4	0.0
Incr Delay (d2), s/veh	2.4	0.0	7.5				0.0	39.2	355.0	0.5	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	8.1				0.0	18.2	53.6	9.0	5.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.4	0.0	50.0				0.0	89.5	405.2	24.2	6.8	0.0
LnGrp LOS	D	A	D				A	F	F	C	A	A
Approach Vol, veh/h		543						2221			1871	
Approach Delay, s/veh		47.0						196.0			11.2	
Approach LOS		D						F			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	52.0	32.8		25.2		84.8
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	36.6	* 29		33.6		68.9
Max Q Clear Time (g_c+I1), s	23.8	30.8		19.7		20.5
Green Ext Time (p_c), s	0.6	0.0		2.0		8.3

Intersection Summary	
HCM 6th Ctrl Delay	103.9
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	270	5	30	5	20	1903	57	1160	290
Future Volume (vph)	270	5	30	5	20	1903	57	1160	290
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases		4		8	5	2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	5	2	1	6	6
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	30.0	30.0	10.2	10.2	16.2	28.2	16.2	28.2	28.2
Total Split (s)	34.0	34.0	34.0	34.0	16.2	59.8	16.2	59.8	59.8
Total Split (%)	30.9%	30.9%	30.9%	30.9%	14.7%	54.4%	14.7%	54.4%	54.4%
Yellow Time (s)	5.0	5.0	5.0	5.0	3.0	4.7	3.0	4.7	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.0	5.7	4.0	5.7	5.7
Lead/Lag					Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min	C-Min
Act Effct Green (s)	28.0	28.0	28.0	28.0	68.0	61.5	70.9	66.1	66.1
Actuated g/C Ratio	0.25	0.25	0.25	0.25	0.62	0.56	0.64	0.60	0.60
v/c Ratio	1.16	0.10	0.09	0.39	0.08	0.99	0.33	0.56	0.29
Control Delay	146.5	12.3	32.2	7.9	4.0	20.7	11.6	16.4	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	39.5	0.0	0.0	0.0
Total Delay	146.5	12.3	32.2	7.9	4.0	60.1	11.6	16.4	5.7
LOS	F	B	C	A	A	E	B	B	A
Approach Delay		128.7		11.0		59.5		14.1	
Approach LOS		F		B		E		B	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 68.3 (62%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.16	
Intersection Signal Delay: 44.9	Intersection LOS: D
Intersection Capacity Utilization 95.6%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 10: Cedar Av. & Orange St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	5	36	30	5	205	20	1903	11	57	1160	290
Future Volume (veh/h)	270	5	36	30	5	205	20	1903	11	57	1160	290
Initial Q (Qb), veh	0	0	0	0	0	0	0	44	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	281	5	33	31	5	168	21	1982	11	59	1208	241
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	269	55	362	394	12	400	202	2113	6	120	2114	921
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.03	1.00	1.00	0.01	0.19	0.19
Sat Flow, veh/h	1231	216	1424	1388	47	1571	1810	3681	20	1810	3610	1573
Grp Volume(v), veh/h	281	0	38	31	0	173	21	971	1022	59	1208	241
Grp Sat Flow(s),veh/h/ln	1231	0	1640	1388	0	1617	1810	1805	1896	1810	1805	1573
Q Serve(g_s), s	18.2	0.0	1.9	1.9	0.0	9.8	0.5	0.0	0.0	1.5	33.4	14.3
Cycle Q Clear(g_c), s	28.0	0.0	1.9	3.9	0.0	9.8	0.5	0.0	0.0	1.5	33.4	14.3
Prop In Lane	1.00		0.87	1.00		0.97	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	269	0	417	394	0	412	202	1033	1086	120	2114	921
V/C Ratio(X)	1.05	0.00	0.09	0.08	0.00	0.42	0.10	0.94	0.94	0.49	0.57	0.26
Avail Cap(c_a), veh/h	269	0	417	394	0	412	371	1033	1085	392	2114	921
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.09	0.09	0.09	0.83	0.83	0.83
Uniform Delay (d), s/veh	48.1	0.0	31.3	32.8	0.0	34.2	14.0	0.0	0.0	27.6	31.9	24.2
Incr Delay (d2), s/veh	67.1	0.0	0.1	0.1	0.0	0.7	0.0	2.3	2.2	2.5	0.9	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.6	46.3	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.5	0.0	0.8	0.7	0.0	4.0	0.2	14.9	14.6	0.9	16.3	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	115.3	0.0	31.4	32.8	0.0	34.9	14.0	51.8	48.5	30.1	32.8	24.7
LnGrp LOS	F	A	C	C	A	C	B	D	D	C	C	C
Approach Vol, veh/h		319			204			2014			1508	
Approach Delay, s/veh		105.3			34.6			49.7			31.4	
Approach LOS		F			C			D			C	

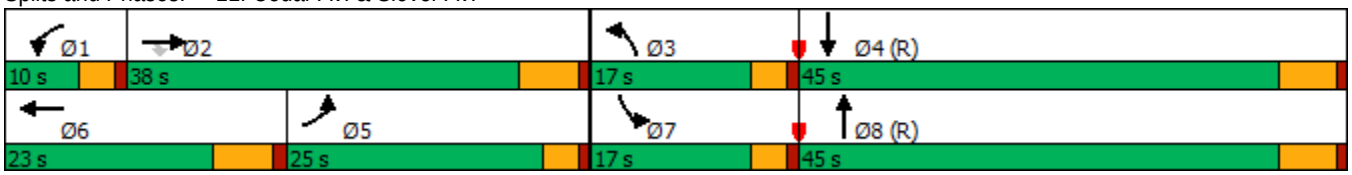
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.3	68.7		34.0	5.9	70.1		34.0				
Change Period (Y+Rc), s	4.0	5.7		6.0	4.0	5.7		6.0				
Max Green Setting (Gmax), s	12.2	54.1		28.0	12.2	54.1		28.0				
Max Q Clear Time (g_c+I1), s	3.5	2.0		30.0	2.5	35.4		11.8				
Green Ext Time (p_c), s	0.1	26.6		0.0	0.0	9.1		1.0				

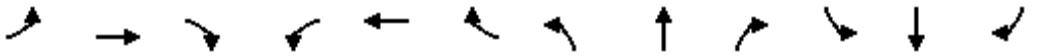
Intersection Summary			
HCM 6th Ctrl Delay		46.5	
HCM 6th LOS		D	

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	293	622	138	59	363	113	1364	186	888
Future Volume (vph)	293	622	138	59	363	113	1364	186	888
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2		1	6	3	8	7	4
Permitted Phases			2						
Detector Phase	5	2	2	1	6	3	8	7	4
Switch Phase									
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	29.0	29.0	8.0	23.0	8.0	32.7	8.0	24.7
Total Split (s)	25.0	38.0	38.0	10.0	23.0	17.0	45.0	17.0	45.0
Total Split (%)	22.7%	34.5%	34.5%	9.1%	20.9%	15.5%	40.9%	15.5%	40.9%
Yellow Time (s)	3.0	5.0	5.0	3.0	5.0	3.0	4.7	3.0	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	4.0	5.7	4.0	5.7
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	20.7	33.7	33.7	6.0	17.0	11.5	39.3	13.3	41.2
Actuated g/C Ratio	0.19	0.31	0.31	0.05	0.15	0.10	0.36	0.12	0.37
v/c Ratio	0.93	0.61	0.25	0.64	1.07	0.65	1.25	0.92	0.84
Control Delay	78.7	35.8	6.0	80.1	89.9	55.1	157.0	95.6	36.1
Queue Delay	0.0	0.0	0.0	0.0	13.9	0.0	1.4	0.0	0.0
Total Delay	78.7	35.8	6.0	80.1	103.8	55.1	158.4	95.6	36.1
LOS	E	D	A	F	F	E	F	F	D
Approach Delay		43.9			101.8		151.1		45.1
Approach LOS		D			F		F		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.25	
Intersection Signal Delay: 90.5	Intersection LOS: F
Intersection Capacity Utilization 103.5%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 11: Cedar Av. & Slover Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	293	622	138	59	363	278	113	1364	123	186	888	152
Future Volume (veh/h)	293	622	138	59	363	278	113	1364	123	186	888	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	315	669	104	63	390	245	122	1467	130	200	955	155
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	342	1144	504	81	331	205	151	2163	191	214	2109	342
Arrive On Green	0.19	0.32	0.32	0.04	0.15	0.15	0.08	0.64	0.64	0.16	0.90	0.90
Sat Flow, veh/h	1810	3610	1590	1810	2139	1327	1810	3356	296	1810	3103	503
Grp Volume(v), veh/h	315	669	104	63	328	307	122	785	812	200	555	555
Grp Sat Flow(s),veh/h/ln	1810	1805	1590	1810	1805	1661	1810	1805	1847	1810	1805	1802
Q Serve(g_s), s	18.8	17.1	5.3	3.8	17.0	17.0	7.3	30.1	30.7	12.0	5.5	5.5
Cycle Q Clear(g_c), s	18.8	17.1	5.3	3.8	17.0	17.0	7.3	30.1	30.7	12.0	5.5	5.5
Prop In Lane	1.00		1.00	1.00		0.80	1.00		0.16	1.00		0.28
Lane Grp Cap(c), veh/h	342	1144	504	81	279	257	151	1163	1190	214	1227	1224
V/C Ratio(X)	0.92	0.58	0.21	0.77	1.18	1.19	0.81	0.67	0.68	0.94	0.45	0.45
Avail Cap(c_a), veh/h	345	1144	504	99	279	257	214	1163	1190	214	1227	1224
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.51	0.51	0.51	0.79	0.79	0.79
Uniform Delay (d), s/veh	43.8	31.5	27.5	52.0	46.5	46.5	49.6	12.3	12.4	45.9	2.0	2.0
Incr Delay (d2), s/veh	28.9	0.8	0.2	26.1	110.5	119.3	7.8	1.6	1.6	37.6	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	7.1	2.0	2.3	16.2	15.5	3.5	10.7	11.1	7.3	1.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.6	32.3	27.7	78.1	157.0	165.8	57.4	13.9	14.0	83.6	2.9	2.9
LnGrp LOS	E	C	C	E	F	F	E	B	B	F	A	A
Approach Vol, veh/h		1088			698			1719			1310	
Approach Delay, s/veh		43.5			153.7			17.1			15.2	
Approach LOS		D			F			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	40.9	13.1	80.5	26.8	23.0	17.0	76.6
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	6.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	6.0	32.0	13.0	39.3	21.0	* 17	13.0	39.3
Max Q Clear Time (g_c+I1), s	5.8	19.1	9.3	7.5	20.8	19.0	14.0	32.7
Green Ext Time (p_c), s	0.0	3.6	0.1	8.2	0.0	0.0	0.0	4.8

Intersection Summary	
HCM 6th Ctrl Delay	42.3
HCM 6th LOS	D

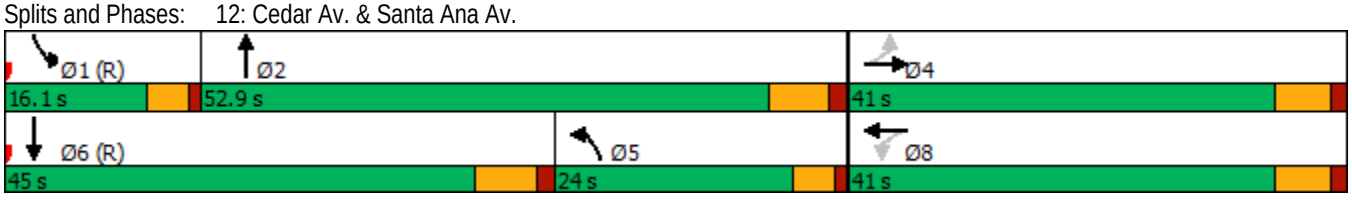
Notes

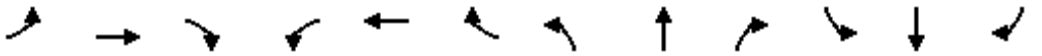
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	184	193	64	147	157	1086	69	802
Future Volume (vph)	184	193	64	147	157	1086	69	802
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	9.5	27.5	9.5	27.5
Total Split (s)	41.0	41.0	41.0	41.0	24.0	52.9	16.1	45.0
Total Split (%)	37.3%	37.3%	37.3%	37.3%	21.8%	48.1%	14.6%	40.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.0	1.5
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.0		6.0	4.5	6.5	4.5	6.5
Lead/Lag					Lag	Lag	Lead	Lead
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min
Act Effct Green (s)		36.7		36.7	19.0	47.7	8.6	37.2
Actuated g/C Ratio		0.33		0.33	0.17	0.43	0.08	0.34
v/c Ratio		1.34		0.69	0.53	0.80	0.52	0.76
Control Delay		197.9		38.8	27.2	11.3	41.8	44.3
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		197.9		38.8	27.2	11.3	41.8	44.3
LOS		F		D	C	B	D	D
Approach Delay		197.9		38.8		13.2		44.1
Approach LOS		F		D		B		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 90 (82%), Referenced to phase 1:SBL and 6:SBT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.34	
Intersection Signal Delay: 56.7	Intersection LOS: E
Intersection Capacity Utilization 101.4%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 12: Cedar Av. & Santa Ana Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	193	156	64	147	103	157	1086	87	69	802	68
Future Volume (veh/h)	184	193	156	64	147	103	157	1086	87	69	802	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	194	203	121	67	155	68	165	1143	90	73	844	65
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	196	164	96	123	275	109	340	1301	102	260	1090	84
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.38	0.77	0.77	0.05	0.11	0.11
Sat Flow, veh/h	474	517	302	260	863	344	1810	3390	267	1810	3395	261
Grp Volume(v), veh/h	518	0	0	290	0	0	165	608	625	73	449	460
Grp Sat Flow(s),veh/h/ln	1293	0	0	1467	0	0	1810	1805	1852	1810	1805	1852
Q Serve(g_s), s	17.7	0.0	0.0	0.0	0.0	0.0	7.7	26.4	26.6	4.3	26.6	26.6
Cycle Q Clear(g_c), s	35.0	0.0	0.0	17.3	0.0	0.0	7.7	26.4	26.6	4.3	26.6	26.6
Prop In Lane	0.37		0.23	0.23		0.23	1.00		0.14	1.00		0.14
Lane Grp Cap(c), veh/h	457	0	0	507	0	0	340	693	711	260	580	595
V/C Ratio(X)	1.13	0.00	0.00	0.57	0.00	0.00	0.48	0.88	0.88	0.28	0.77	0.77
Avail Cap(c_a), veh/h	457	0	0	507	0	0	340	761	781	260	632	648
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.44	0.44	0.44	0.56	0.56	0.56
Uniform Delay (d), s/veh	40.4	0.0	0.0	31.0	0.0	0.0	30.3	11.0	11.0	46.9	45.3	45.3
Incr Delay (d2), s/veh	84.5	0.0	0.0	1.9	0.0	0.0	0.2	6.7	6.6	0.1	5.6	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	23.1	0.0	0.0	6.5	0.0	0.0	2.9	5.3	5.4	1.9	13.7	14.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	124.8	0.0	0.0	32.9	0.0	0.0	30.4	17.6	17.6	47.0	50.9	50.8
LnGrp LOS	F	A	A	C	A	A	C	B	B	D	D	D
Approach Vol, veh/h		518			290			1398			982	
Approach Delay, s/veh		124.8			32.9			19.1			50.6	
Approach LOS		F			C			B			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.3	48.7		41.0	27.2	41.8		41.0				
Change Period (Y+Rc), s	4.5	6.5		6.0	6.5	* 6.5		6.0				
Max Green Setting (Gmax), s	11.6	46.4		35.0	19.5	* 39		35.0				
Max Q Clear Time (g_c+I1), s	6.3	28.6		37.0	9.7	28.6		19.3				
Green Ext Time (p_c), s	0.0	13.7		0.0	0.1	6.7		2.1				

Intersection Summary	
HCM 6th Ctrl Delay	47.2
HCM 6th LOS	D

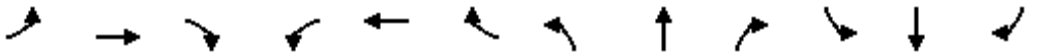
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	63	287	103	90	145	142	162	1173	179	877
Future Volume (vph)	63	287	103	90	145	142	162	1173	179	877
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4			8		5	2	1	6
Permitted Phases	4		4	8		8				
Detector Phase	4	4	4	8	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	19.0	51.0	24.0	56.0
Total Split (%)	31.8%	31.8%	31.8%	31.8%	31.8%	31.8%	17.3%	46.4%	21.8%	50.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.5	5.5		5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag							Lead	Lag	Lead	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)		30.1	30.1		30.1	30.1	13.7	47.5	16.3	50.2
Actuated g/C Ratio		0.27	0.27		0.27	0.27	0.12	0.43	0.15	0.46
v/c Ratio		1.01	0.21		1.45	0.29	0.79	0.89	0.73	0.62
Control Delay		90.1	6.2		266.7	8.9	64.3	22.8	31.7	33.3
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		90.1	6.2		266.7	8.9	64.3	22.8	31.7	33.3
LOS		F	A		F	A	E	C	C	C
Approach Delay		71.0			169.8			27.5		33.0
Approach LOS		E			F			C		C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.45	
Intersection Signal Delay: 51.1	Intersection LOS: D
Intersection Capacity Utilization 95.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	287	103	90	145	142	162	1173	97	179	877	60
Future Volume (veh/h)	63	287	103	90	145	142	162	1173	97	179	877	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	68	312	87	98	158	108	176	1275	92	195	953	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	39	80	426	45	39	424	411	1568	113	230	1239	78
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.45	0.92	0.92	0.04	0.12	0.12
Sat Flow, veh/h	0	299	1588	0	145	1579	1810	3415	246	1810	3449	217
Grp Volume(v), veh/h	380	0	87	256	0	108	176	673	694	195	499	514
Grp Sat Flow(s),veh/h/ln	299	0	1588	145	0	1579	1810	1805	1856	1810	1805	1861
Q Serve(g_s), s	0.0	0.0	4.7	0.0	0.0	5.9	7.3	13.1	13.3	11.8	29.5	29.5
Cycle Q Clear(g_c), s	29.5	0.0	4.7	29.5	0.0	5.9	7.3	13.1	13.3	11.8	29.5	29.5
Prop In Lane	0.18		1.00	0.38		1.00	1.00		0.13	1.00		0.12
Lane Grp Cap(c), veh/h	119	0	426	84	0	424	411	829	852	230	649	669
V/C Ratio(X)	3.20	0.00	0.20	3.04	0.00	0.25	0.43	0.81	0.81	0.85	0.77	0.77
Avail Cap(c_a), veh/h	119	0	426	84	0	424	411	829	852	321	820	846
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.21	0.21	0.21	0.57	0.57	0.57
Uniform Delay (d), s/veh	36.6	0.0	31.2	41.9	0.0	31.6	25.2	3.0	3.0	51.6	44.1	44.1
Incr Delay (d2), s/veh	1010.0	0.0	0.3	949.0	0.0	0.4	0.1	1.9	1.9	8.5	2.4	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	35.8	0.0	1.8	24.5	0.0	2.3	2.7	1.8	1.9	6.2	14.6	15.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	1046.7	0.0	31.5	990.9	0.0	32.1	25.3	4.9	4.9	60.2	46.4	46.3
LnGrp LOS	F	A	C	F	A	C	C	A	A	E	D	D
Approach Vol, veh/h		467			364			1543			1208	
Approach Delay, s/veh		857.6			706.4			7.2			48.6	
Approach LOS		F			F			A			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.5	56.5		35.0	29.5	45.5		35.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	19.5	45.0		29.5	14.5	50.0		29.5				
Max Q Clear Time (g_c+I1), s	13.8	15.3		31.5	9.3	31.5		31.5				
Green Ext Time (p_c), s	0.2	15.0		0.0	0.2	8.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		203.1	
HCM 6th LOS		F	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	145	51	37	34	300	1446	78	852
Future Volume (vph)	145	51	37	34	300	1446	78	852
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	10.0	10.0	9.5	24.0	9.5	24.0
Total Split (s)	41.0	41.0	41.0	41.0	23.0	53.0	16.0	46.0
Total Split (%)	37.3%	37.3%	37.3%	37.3%	20.9%	48.2%	14.5%	41.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)		35.4		35.4	19.1	51.5	9.8	40.0
Actuated g/C Ratio		0.32		0.32	0.17	0.47	0.09	0.36
v/c Ratio		0.96		0.24	1.04	0.95	0.53	0.84
Control Delay		63.7		24.6	107.5	42.5	37.3	42.4
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		63.7		24.6	107.5	42.5	37.3	42.4
LOS		E		C	F	D	D	D
Approach Delay		63.7		24.6		53.5		42.0
Approach LOS		E		C		D		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 74 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.04	
Intersection Signal Delay: 50.5	Intersection LOS: D
Intersection Capacity Utilization 91.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 14: Rubidoux Bl./Cedar Av. & 7th St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	51	278	37	34	21	300	1446	25	78	852	147
Future Volume (veh/h)	145	51	278	37	34	21	300	1446	25	78	852	147
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	158	55	220	40	37	13	326	1572	27	85	926	159
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	209	67	239	185	164	51	304	1826	31	109	1217	209
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.17	0.50	0.50	0.06	0.40	0.40
Sat Flow, veh/h	556	225	807	467	554	172	1810	3630	62	1810	3080	529
Grp Volume(v), veh/h	433	0	0	90	0	0	326	781	818	85	542	543
Grp Sat Flow(s),veh/h/ln	1588	0	0	1193	0	0	1810	1805	1887	1810	1805	1804
Q Serve(g_s), s	23.8	0.0	0.0	0.0	0.0	0.0	18.5	41.7	41.9	5.1	28.6	28.6
Cycle Q Clear(g_c), s	28.9	0.0	0.0	5.0	0.0	0.0	18.5	41.7	41.9	5.1	28.6	28.6
Prop In Lane	0.36		0.51	0.44		0.14	1.00		0.03	1.00		0.29
Lane Grp Cap(c), veh/h	515	0	0	400	0	0	304	908	949	109	713	713
V/C Ratio(X)	0.84	0.00	0.00	0.22	0.00	0.00	1.07	0.86	0.86	0.78	0.76	0.76
Avail Cap(c_a), veh/h	563	0	0	445	0	0	304	908	949	189	713	713
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.30	0.30	0.30	0.79	0.79	0.79
Uniform Delay (d), s/veh	37.1	0.0	0.0	28.8	0.0	0.0	45.8	23.9	24.0	51.0	28.8	28.8
Incr Delay (d2), s/veh	10.9	0.0	0.0	0.4	0.0	0.0	49.4	3.5	3.4	9.2	6.0	6.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.7	0.0	0.0	1.8	0.0	0.0	12.1	16.5	17.4	2.5	12.8	12.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.0	0.0	0.0	29.2	0.0	0.0	95.1	27.4	27.4	60.2	34.8	34.8
LnGrp LOS	D	A	A	C	A	A	F	C	C	E	C	C
Approach Vol, veh/h		433			90			1925			1170	
Approach Delay, s/veh		48.0			29.2			38.8			36.6	
Approach LOS		D			C			D			D	

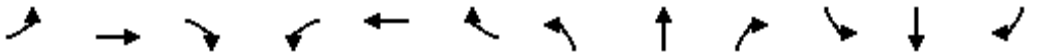
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	61.3		37.5	23.0	49.5		37.5				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	11.5	47.0		36.0	18.5	40.0		36.0				
Max Q Clear Time (g_c+I1), s	7.1	43.9		30.9	20.5	30.6		7.0				
Green Ext Time (p_c), s	0.1	2.7		1.7	0.0	5.5		0.7				

Intersection Summary			
HCM 6th Ctrl Delay		39.0	
HCM 6th LOS		D	

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	11	10	297	9	334	14	1026	241	924
Future Volume (vph)	11	10	297	9	334	14	1026	241	924
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	12.0	5.0	12.0
Minimum Split (s)	10.0	10.0	35.0	35.0	35.0	9.5	24.0	9.5	24.0
Total Split (s)	35.0	35.0	35.0	35.0	35.0	9.6	35.0	20.0	45.4
Total Split (%)	38.9%	38.9%	38.9%	38.9%	38.9%	10.7%	38.9%	22.2%	50.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0		5.0	5.0	4.5	6.0	4.5	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	Min
Act Effct Green (s)		19.5		24.8	24.8	5.1	29.3	14.3	46.3
Actuated g/C Ratio		0.23		0.30	0.30	0.06	0.35	0.17	0.55
v/c Ratio		0.09		0.78	0.48	0.13	1.02	0.79	0.48
Control Delay		15.7		41.6	6.3	42.9	60.1	54.7	14.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		15.7		41.6	6.3	42.9	60.1	54.7	14.0
LOS		B		D	A	D	E	D	B
Approach Delay		15.7		23.2			59.9		22.3
Approach LOS		B		C			E		C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 84	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 37.6	Intersection LOS: D
Intersection Capacity Utilization 85.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 15: Rubidoux Bl. & Tarragona Dr./El Rivino Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	10	12	297	9	334	14	1026	226	241	924	26
Future Volume (veh/h)	11	10	12	297	9	334	14	1026	226	241	924	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	11	10	8	300	9	262	14	1036	221	243	933	25
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	56	49	19	328	7	548	30	970	206	280	1679	45
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.02	0.33	0.33	0.15	0.47	0.47
Sat Flow, veh/h	0	143	54	726	22	1610	1810	2949	627	1810	3591	96
Grp Volume(v), veh/h	29	0	0	309	0	262	14	633	624	243	469	489
Grp Sat Flow(s),veh/h/ln	197	0	0	748	0	1610	1810	1805	1771	1810	1805	1883
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	11.3	0.7	29.0	29.0	11.6	16.5	16.5
Cycle Q Clear(g_c), s	30.0	0.0	0.0	30.0	0.0	11.3	0.7	29.0	29.0	11.6	16.5	16.5
Prop In Lane	0.38		0.28	0.97		1.00	1.00		0.35	1.00		0.05
Lane Grp Cap(c), veh/h	123	0	0	335	0	548	30	594	583	280	844	880
V/C Ratio(X)	0.23	0.00	0.00	0.92	0.00	0.48	0.47	1.07	1.07	0.87	0.56	0.56
Avail Cap(c_a), veh/h	123	0	0	335	0	548	105	594	583	318	844	880
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.5	0.0	0.0	31.7	0.0	22.9	43.0	29.6	29.6	36.4	16.9	16.9
Incr Delay (d2), s/veh	1.4	0.0	0.0	30.5	0.0	0.9	11.1	55.6	57.9	19.8	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	9.6	0.0	4.4	0.4	20.3	20.3	6.3	6.1	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.9	0.0	0.0	62.2	0.0	23.8	54.0	85.1	87.5	56.2	17.9	17.9
LnGrp LOS	C	A	A	E	A	C	D	F	F	E	B	B
Approach Vol, veh/h		29			571			1271			1201	
Approach Delay, s/veh		24.9			44.6			86.0			25.6	
Approach LOS		C			D			F			C	

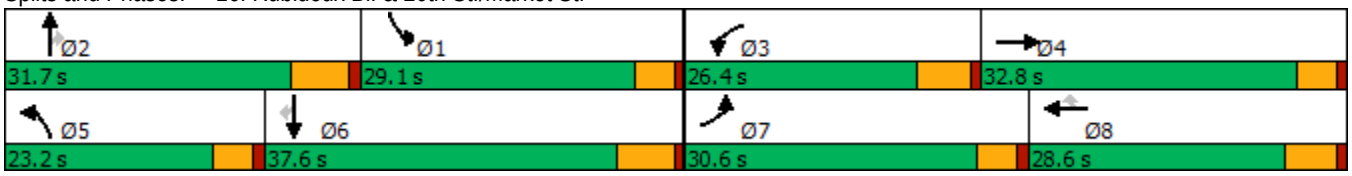
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.2	35.0		35.0	6.0	47.2		35.0				
Change Period (Y+Rc), s	4.5	6.0		5.0	4.5	6.0		5.0				
Max Green Setting (Gmax), s	15.5	29.0		30.0	5.1	39.4		30.0				
Max Q Clear Time (g_c+I1), s	13.6	31.0		32.0	2.7	18.5		32.0				
Green Ext Time (p_c), s	0.1	0.0		0.0	0.0	7.8		0.0				

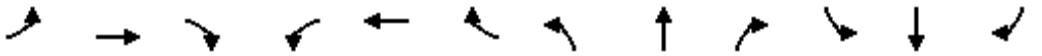
Intersection Summary												
HCM 6th Ctrl Delay			54.1									
HCM 6th LOS			D									

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	368	391	484	173	628	224	289	585	673	385	153
Future Volume (vph)	368	391	484	173	628	224	289	585	673	385	153
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	14.6	10.8	27.8	27.8	9.6	28.2	28.2	9.6	35.2	35.2
Total Split (s)	30.6	32.8	26.4	28.6	28.6	23.2	31.7	31.7	29.1	37.6	37.6
Total Split (%)	25.5%	27.3%	22.0%	23.8%	23.8%	19.3%	26.4%	26.4%	24.3%	31.3%	31.3%
Yellow Time (s)	3.6	3.6	4.8	4.8	4.8	3.6	5.2	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	5.8	5.8	5.8	4.6	6.2	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	25.5	26.0	19.3	19.8	19.8	17.0	23.1	23.1	23.9	30.0	30.0
Actuated g/C Ratio	0.22	0.23	0.17	0.17	0.17	0.15	0.20	0.20	0.21	0.26	0.26
v/c Ratio	0.93	0.87	0.83	0.53	0.95	0.85	0.40	0.94	0.93	0.41	0.29
Control Delay	75.4	43.0	59.6	49.9	36.5	76.4	41.7	41.3	66.2	37.0	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.4	43.0	59.6	49.9	36.5	76.4	41.7	41.3	66.2	37.0	7.0
LOS	E	D	E	D	D	E	D	D	E	D	A
Approach Delay		53.4		47.0			48.6			49.4	
Approach LOS		D		D			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 113.8	
Natural Cycle: 105	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 49.5	Intersection LOS: D
Intersection Capacity Utilization 91.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	368	391	384	484	173	628	224	289	585	673	385	153
Future Volume (veh/h)	368	391	384	484	173	628	224	289	585	673	385	153
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	376	399	264	494	177	422	229	295	418	687	393	140
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	412	485	317	582	345	293	263	515	230	762	833	371
Arrive On Green	0.23	0.23	0.23	0.17	0.18	0.18	0.15	0.14	0.14	0.22	0.23	0.23
Sat Flow, veh/h	1810	2091	1368	3510	1900	1610	1810	3610	1610	3510	3610	1607
Grp Volume(v), veh/h	376	344	319	494	177	422	229	295	418	687	393	140
Grp Sat Flow(s),veh/h/ln	1810	1805	1654	1755	1900	1610	1810	1805	1610	1755	1805	1607
Q Serve(g_s), s	20.0	17.9	18.1	13.5	8.3	10.5	12.2	7.5	9.4	18.8	9.3	7.3
Cycle Q Clear(g_c), s	20.0	17.9	18.1	13.5	8.3	10.5	12.2	7.5	9.4	18.8	9.3	7.3
Prop In Lane	1.00		0.83	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	412	418	383	582	345	293	263	515	230	762	833	371
V/C Ratio(X)	0.91	0.82	0.83	0.85	0.51	1.44	0.87	0.57	1.82	0.90	0.47	0.38
Avail Cap(c_a), veh/h	476	515	472	732	439	372	341	932	416	871	1148	511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.2	36.0	36.1	40.0	36.5	13.9	41.3	39.5	18.7	37.6	32.8	32.0
Incr Delay (d2), s/veh	20.1	8.6	10.1	7.7	1.2	217.2	14.7	1.0	385.9	10.7	0.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	8.8	8.4	6.2	3.8	21.1	6.2	3.2	27.8	8.7	3.9	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.3	44.6	46.3	47.7	37.6	231.0	56.1	40.5	404.6	48.3	33.2	32.7
LnGrp LOS	E	D	D	D	D	F	E	D	F	D	C	C
Approach Vol, veh/h		1039			1093			942			1220	
Approach Delay, s/veh		49.7			116.9			205.9			41.7	
Approach LOS		D			F			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.6	20.3	22.2	28.7	18.9	29.0	27.1	23.8
Change Period (Y+Rc), s	6.2	* 6.2	5.8	* 5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	24.5	* 26	20.6	* 28	18.6	31.4	26.0	22.8
Max Q Clear Time (g_c+I1), s	20.8	11.4	15.5	20.1	14.2	11.3	22.0	12.5
Green Ext Time (p_c), s	0.6	2.7	0.9	2.7	0.1	2.6	0.5	1.8

Intersection Summary	
HCM 6th Ctrl Delay	98.8
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↕			↕	
Traffic Vol, veh/h	5	25	12	47	12	15	24	1079	110	177	1071	5
Future Vol, veh/h	5	25	12	47	12	15	24	1079	110	177	1071	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	5	26	12	48	12	15	24	1101	112	181	1093	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2063	2720	549	2128	2666	608	1098	0	0	1214	0	0
Stage 1	1458	1458	-	1206	1206	-	-	-	-	-	-	-
Stage 2	605	1262	-	922	1460	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	32	~ 21	485	~ 29	23	444	643	-	-	582	-	-
Stage 1	138	196	-	198	259	-	-	-	-	-	-	-
Stage 2	456	243	-	295	196	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 4	485	-	~ 4	444	643	-	-	581	-	-
Mov Cap-2 Maneuver	-	~ 4	-	-	~ 4	-	-	-	-	-	-	-
Stage 1	122	39	-	174	228	-	-	-	-	-	-	-
Stage 2	367	214	-	~ 20	39	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			0.7	5.6
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	643	-	-	-	-	581	-	-
HCM Lane V/C Ratio	0.038	-	-	-	-	0.311	-	-
HCM Control Delay (s)	10.8	0.6	-	-	-	14	4.2	-
HCM Lane LOS	B	A	-	-	-	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-	1.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	9	18	5	6	8	11	1188	19	8	1108	13
Future Vol, veh/h	16	9	18	5	6	8	11	1188	19	8	1108	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	110	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	18	10	20	5	7	9	12	1305	21	9	1218	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1924	2596	617	1974	2593	665	1233	0	0	1328	0	0
Stage 1	1244	1244	-	1342	1342	-	-	-	-	-	-	-
Stage 2	680	1352	-	632	1251	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	41	25	438	38	25	407	572	-	-	527	-	-
Stage 1	188	248	-	163	223	-	-	-	-	-	-	-
Stage 2	412	220	-	440	246	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	37	24	438	33	24	406	571	-	-	526	-	-
Mov Cap-2 Maneuver	127	113	-	115	113	-	-	-	-	-	-	-
Stage 1	184	244	-	159	218	-	-	-	-	-	-	-
Stage 2	383	215	-	396	242	-	-	-	-	-	-	-

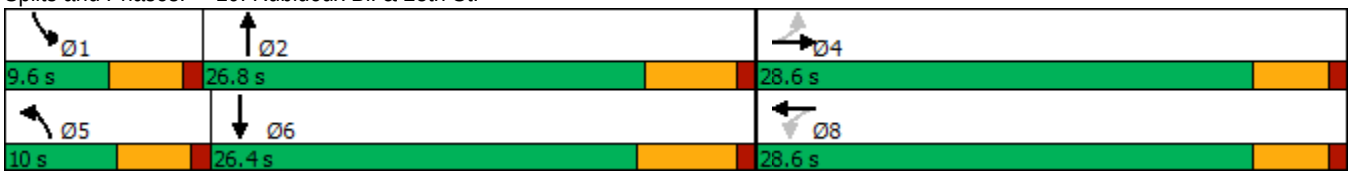
Approach	EB	WB	NB	SB
HCM Control Delay, s	33.2	30.3	0.1	0.1
HCM LOS	D	D		

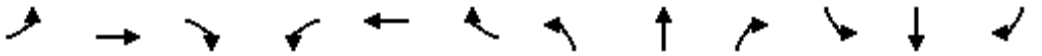
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	571	-	-	174	163	526	-	-
HCM Lane V/C Ratio	0.021	-	-	0.272	0.128	0.017	-	-
HCM Control Delay (s)	11.4	-	-	33.2	30.3	12	-	-
HCM Lane LOS	B	-	-	D	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1	0.4	0.1	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	60	16	91	13	103	1143	23	1044
Future Volume (vph)	60	16	91	13	103	1143	23	1044
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	28.6	28.6	28.6	28.6	9.6	24.4	9.6	22.8
Total Split (s)	28.6	28.6	28.6	28.6	10.0	26.8	9.6	26.4
Total Split (%)	44.0%	44.0%	44.0%	44.0%	15.4%	41.2%	14.8%	40.6%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.4	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		13.3		13.3	5.9	30.9	5.5	24.8
Actuated g/C Ratio		0.27		0.27	0.12	0.63	0.11	0.50
v/c Ratio		0.35		0.35	0.51	0.58	0.13	0.66
Control Delay		11.5		18.4	37.2	13.3	26.5	18.6
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		11.5		18.4	37.2	13.3	26.5	18.6
LOS		B		B	D	B	C	B
Approach Delay		11.5		18.4		15.2		18.7
Approach LOS		B		B		B		B

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 49.3	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 16.6	Intersection LOS: B
Intersection Capacity Utilization 62.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 19: Rubidoux Bl. & 28th St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	16	76	91	13	15	103	1143	64	23	1044	65
Future Volume (veh/h)	60	16	76	91	13	15	103	1143	64	23	1044	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	65	17	54	98	14	10	111	1229	69	25	1123	70
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	224	71	117	357	49	23	151	1584	89	54	1391	87
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.08	0.46	0.46	0.03	0.40	0.40
Sat Flow, veh/h	583	393	643	1175	271	129	1810	3470	195	1810	3451	215
Grp Volume(v), veh/h	136	0	0	122	0	0	111	638	660	25	587	606
Grp Sat Flow(s),veh/h/ln	1619	0	0	1574	0	0	1810	1805	1860	1810	1805	1861
Q Serve(g_s), s	0.5	0.0	0.0	0.0	0.0	0.0	2.7	13.4	13.5	0.6	13.0	13.0
Cycle Q Clear(g_c), s	3.1	0.0	0.0	2.6	0.0	0.0	2.7	13.4	13.5	0.6	13.0	13.0
Prop In Lane	0.48		0.40	0.80		0.08	1.00		0.10	1.00		0.12
Lane Grp Cap(c), veh/h	412	0	0	429	0	0	151	824	849	54	727	750
V/C Ratio(X)	0.33	0.00	0.00	0.28	0.00	0.00	0.74	0.78	0.78	0.46	0.81	0.81
Avail Cap(c_a), veh/h	950	0	0	926	0	0	217	856	882	201	824	850
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.4	0.0	0.0	16.2	0.0	0.0	20.2	10.3	10.3	21.5	11.9	11.9
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.4	0.0	0.0	3.4	4.3	4.3	2.3	5.4	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	1.0	0.0	0.0	1.1	4.4	4.6	0.2	4.3	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.8	0.0	0.0	16.6	0.0	0.0	23.6	14.7	14.6	23.8	17.3	17.2
LnGrp LOS	B	A	A	B	A	A	C	B	B	C	B	B
Approach Vol, veh/h		136			122			1409			1218	
Approach Delay, s/veh		16.8			16.6			15.3			17.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	26.4		12.8	8.4	24.0		12.8				
Change Period (Y+Rc), s	4.6	* 5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	5.0	* 21		24.0	5.4	20.6		24.0				
Max Q Clear Time (g_c+I1), s	2.6	15.5		5.1	4.7	15.0		4.6				
Green Ext Time (p_c), s	0.0	3.7		0.7	0.0	3.2		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		16.3	
HCM 6th LOS		B	

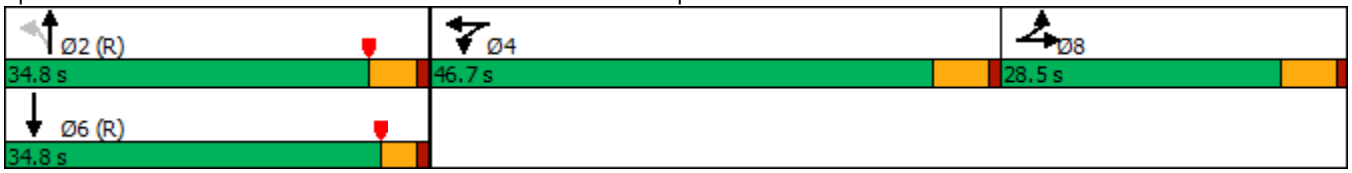
Notes

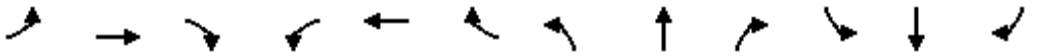
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	48	0	125	112	1054	1149
Future Volume (vph)	48	0	125	112	1054	1149
Turn Type	Split	NA	NA	Perm	NA	NA
Protected Phases	8	8	4		2	6
Permitted Phases				2		
Detector Phase	8	8	4	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.5	28.5	46.7	34.8	34.8	34.8
Total Split (%)	25.9%	25.9%	42.5%	31.6%	31.6%	31.6%
Yellow Time (s)	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	17.9	17.9	41.2	34.9	34.9	35.9
Actuated g/C Ratio	0.16	0.16	0.37	0.32	0.32	0.33
v/c Ratio	0.18	0.79	1.48	1.77	1.00	1.12
Control Delay	38.9	48.4	250.8	376.9	35.3	103.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.9	48.4	250.8	376.9	35.3	103.0
LOS	D	D	F	F	D	F
Approach Delay		46.8	250.8		68.2	103.0
Approach LOS		D	F		E	F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.77	
Intersection Signal Delay: 125.2	Intersection LOS: F
Intersection Capacity Utilization 129.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	0	236	589	125	207	112	1054	0	0	1149	61
Future Volume (veh/h)	48	0	236	589	125	207	112	1054	0	0	1149	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	52	0	195	640	136	196	122	1146	0	0	1249	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	262	0	233	438	93	134	65	1211	0	0	1173	59
Arrive On Green	0.14	0.00	0.14	0.37	0.37	0.37	0.67	0.67	0.00	0.00	0.34	0.34
Sat Flow, veh/h	1810	0	1610	1170	249	358	426	3705	0	0	3591	176
Grp Volume(v), veh/h	52	0	195	972	0	0	122	1146	0	0	644	668
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1777	0	0	426	1805	0	0	1805	1868
Q Serve(g_s), s	2.8	0.0	13.0	41.2	0.0	0.0	0.0	31.5	0.0	0.0	36.9	36.9
Cycle Q Clear(g_c), s	2.8	0.0	13.0	41.2	0.0	0.0	36.9	31.5	0.0	0.0	36.9	36.9
Prop In Lane	1.00		1.00	0.66		0.20	1.00		0.00	0.00		0.09
Lane Grp Cap(c), veh/h	262	0	233	666	0	0	65	1211	0	0	605	626
V/C Ratio(X)	0.20	0.00	0.84	1.46	0.00	0.00	1.86	0.95	0.00	0.00	1.06	1.07
Avail Cap(c_a), veh/h	378	0	337	666	0	0	65	1211	0	0	605	626
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.70	0.70
Uniform Delay (d), s/veh	41.4	0.0	45.8	34.4	0.0	0.0	36.6	17.2	0.0	0.0	36.6	36.6
Incr Delay (d2), s/veh	0.4	0.0	12.8	215.4	0.0	0.0	441.0	15.9	0.0	0.0	49.1	49.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	6.0	56.4	0.0	0.0	9.6	8.4	0.0	0.0	23.7	24.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.9	0.0	58.6	249.8	0.0	0.0	477.6	33.1	0.0	0.0	85.7	85.9
LnGrp LOS	D	A	E	F	A	A	F	C	A	A	F	F
Approach Vol, veh/h		247			972			1268			1312	
Approach Delay, s/veh		55.1			249.8			75.9			85.8	
Approach LOS		E			F			E			F	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		41.9		46.7		41.9		21.4				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		29.8		41.2		* 31		23.0				
Max Q Clear Time (g_c+I1), s		38.9		43.2		38.9		15.0				
Green Ext Time (p_c), s		0.0		0.0		0.0		1.0				

Intersection Summary												
HCM 6th Ctrl Delay			122.5									
HCM 6th LOS			F									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	10

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	262	1166	956	1018
Future Vol, veh/h	0	0	262	1166	956	1018
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	282	1254	1028	1095

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1063	2124	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	4.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	0	570	~ 255	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %		1	1	-	-	-
Mov Cap-1 Maneuver	-	570	~ 255	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	23.8	0
HCM LOS	A		

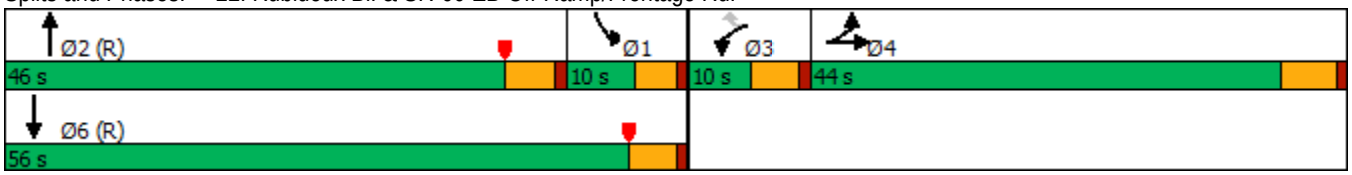
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	~ 255	-	-	-	-
HCM Lane V/C Ratio	1.105	-	-	-	-
HCM Control Delay (s)	129.7	-	0	-	-
HCM Lane LOS	F	-	A	-	-
HCM 95th %tile Q(veh)	12.1	-	-	-	-

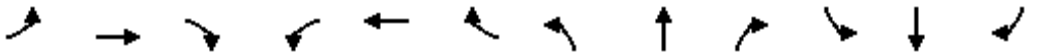
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	53	103	17	839	229	727
Future Volume (vph)	53	103	17	839	229	727
Turn Type	NA	Prot	Perm	NA	Prot	NA
Protected Phases	4	3		2	1	6
Permitted Phases			3			
Detector Phase	4	3	3	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	10.0	10.0	45.0	9.5	30.0
Total Split (s)	44.0	10.0	10.0	46.0	10.0	56.0
Total Split (%)	40.0%	9.1%	9.1%	41.8%	9.1%	50.9%
Yellow Time (s)	4.5	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	38.5	5.0	5.0	39.4	7.1	51.0
Actuated g/C Ratio	0.35	0.05	0.05	0.36	0.06	0.46
v/c Ratio	1.77	1.30	0.09	0.92	2.06	0.45
Control Delay	379.6	243.3	1.0	45.1	501.5	13.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	379.6	243.3	1.0	45.1	501.5	13.5
LOS	F	F	A	D	F	B
Approach Delay	379.6			45.1		130.6
Approach LOS	F			D		F

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.06	
Intersection Signal Delay: 185.9	Intersection LOS: F
Intersection Capacity Utilization 126.6%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	572	53	454	103	0	17	0	839	290	229	727	0
Future Volume (veh/h)	572	53	454	103	0	17	0	839	290	229	727	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	596	55	381	107	0	16	0	874	254	239	757	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	351	32	224	0	0	0	0	950	276	298	2002	0
Arrive On Green	0.35	0.35	0.35	0.00	0.00	0.00	0.00	0.34	0.34	0.33	1.00	0.00
Sat Flow, veh/h	1002	92	640		0		0	2855	801	1810	3705	0
Grp Volume(v), veh/h	1032	0	0		0.0		0	571	557	239	757	0
Grp Sat Flow(s),veh/h/ln	1735	0	0				0	1805	1756	1810	1805	0
Q Serve(g_s), s	38.5	0.0	0.0				0.0	33.4	33.5	13.2	0.0	0.0
Cycle Q Clear(g_c), s	38.5	0.0	0.0				0.0	33.4	33.5	13.2	0.0	0.0
Prop In Lane	0.58		0.37				0.00		0.46	1.00		0.00
Lane Grp Cap(c), veh/h	607	0	0				0	621	605	298	2002	0
V/C Ratio(X)	1.70	0.00	0.00				0.00	0.92	0.92	0.80	0.38	0.00
Avail Cap(c_a), veh/h	607	0	0				0	673	654	298	2002	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.62	0.62	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.8	0.0	0.0				0.0	34.6	34.6	35.2	0.0	0.0
Incr Delay (d2), s/veh	322.0	0.0	0.0				0.0	14.6	15.1	13.4	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	69.5	0.0	0.0				0.0	16.5	16.2	5.9	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	357.7	0.0	0.0				0.0	49.2	49.7	48.7	0.5	0.0
LnGrp LOS	F	A	A				A	D	D	D	A	A
Approach Vol, veh/h		1032						1128			996	
Approach Delay, s/veh		357.7						49.5			12.1	
Approach LOS		F						D			B	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	23.1	42.9		44.0		66.0						
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0						
Max Green Setting (Gmax), s	5.5	* 41		38.5		51.0						
Max Q Clear Time (g_c+I1), s	15.2	35.5		40.5		2.0						
Green Ext Time (p_c), s	0.0	2.4		0.0		3.5						

Intersection Summary		
HCM 6th Ctrl Delay		138.5
HCM 6th LOS		F

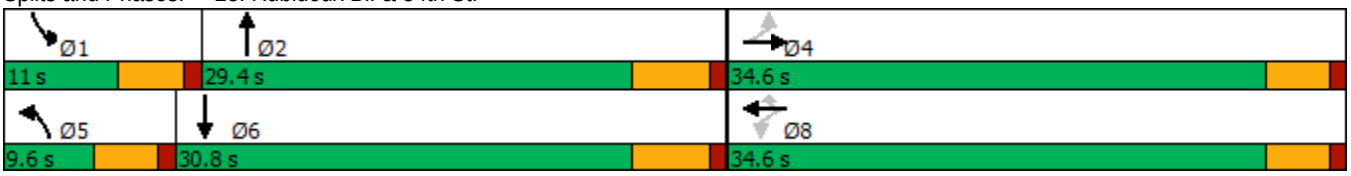
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	111	55	17	18	99	24	919	271	856
Future Volume (vph)	111	55	17	18	99	24	919	271	856
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	30.6	30.6	34.6	34.6	34.6	9.6	29.4	9.6	22.4
Total Split (s)	34.6	34.6	34.6	34.6	34.6	9.6	29.4	11.0	30.8
Total Split (%)	46.1%	46.1%	46.1%	46.1%	46.1%	12.8%	39.2%	14.7%	41.1%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.4	3.6	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	4.6	5.4	4.6	5.4
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None
Act Effct Green (s)		14.7		14.7	14.7	5.1	23.3	6.5	32.9
Actuated g/C Ratio		0.25		0.25	0.25	0.09	0.39	0.11	0.55
v/c Ratio		0.53		0.09	0.22	0.16	0.77	1.42	0.54
Control Delay		23.0		16.8	5.1	31.5	21.9	246.2	12.6
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		23.0		16.8	5.1	31.5	21.9	246.2	12.6
LOS		C		B	A	C	C	F	B
Approach Delay		23.0		8.2			22.2		61.8
Approach LOS		C		A			C		E

Intersection Summary	
Cycle Length: 75	
Actuated Cycle Length: 59.3	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.42	
Intersection Signal Delay: 40.6	Intersection LOS: D
Intersection Capacity Utilization 74.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 23: Rubidoux Bl. & 34th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	55	24	17	18	99	24	919	117	271	856	158
Future Volume (veh/h)	111	55	24	17	18	99	24	919	117	271	856	158
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	116	57	19	18	19	50	25	957	118	282	892	146
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	276	119	31	239	218	325	53	1239	153	229	1485	243
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.03	0.38	0.38	0.13	0.48	0.48
Sat Flow, veh/h	802	588	153	660	1074	1605	1810	3235	399	1810	3093	506
Grp Volume(v), veh/h	192	0	0	37	0	50	25	534	541	282	520	518
Grp Sat Flow(s),veh/h/ln	1543	0	0	1734	0	1605	1810	1805	1828	1810	1805	1794
Q Serve(g_s), s	4.4	0.0	0.0	0.0	0.0	1.3	0.7	13.1	13.1	6.4	10.7	10.7
Cycle Q Clear(g_c), s	5.6	0.0	0.0	0.8	0.0	1.3	0.7	13.1	13.1	6.4	10.7	10.7
Prop In Lane	0.60		0.10	0.49		1.00	1.00		0.22	1.00		0.28
Lane Grp Cap(c), veh/h	426	0	0	457	0	325	53	691	700	229	867	861
V/C Ratio(X)	0.45	0.00	0.00	0.08	0.00	0.15	0.47	0.77	0.77	1.23	0.60	0.60
Avail Cap(c_a), veh/h	1011	0	0	1070	0	951	179	855	866	229	905	900
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	0.0	0.0	16.4	0.0	16.6	24.2	13.7	13.7	22.1	9.6	9.6
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.1	0.0	0.2	2.4	3.5	3.5	137.1	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.0	0.3	0.0	0.5	0.3	4.7	4.8	11.0	3.2	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.0	0.0	0.0	16.5	0.0	16.8	26.6	17.2	17.2	159.2	10.7	10.7
LnGrp LOS	B	A	A	B	A	B	C	B	B	F	B	B
Approach Vol, veh/h		192			87			1100			1320	
Approach Delay, s/veh		19.0			16.7			17.4			42.4	
Approach LOS		B			B			B			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.0	24.8		14.9	6.1	29.7		14.9				
Change Period (Y+Rc), s	4.6	5.4		4.6	4.6	5.4		4.6				
Max Green Setting (Gmax), s	6.4	24.0		30.0	5.0	25.4		30.0				
Max Q Clear Time (g_c+I1), s	8.4	15.1		7.6	2.7	12.7		3.3				
Green Ext Time (p_c), s	0.0	4.3		1.1	0.0	5.2		0.3				

Intersection Summary			
HCM 6th Ctrl Delay		29.7	
HCM 6th LOS		C	

Intersection	
Int Delay, s/veh	3.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	480	91	0	0	120	16
Future Vol, veh/h	480	91	0	0	120	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	545	103	0	0	136	18

Major/Minor	Major1			Minor1	
Conflicting Flow All	0	0		597	597
Stage 1	-	-		597	-
Stage 2	-	-		0	-
Critical Hdwy	-	-		6.4	6.2
Critical Hdwy Stg 1	-	-		5.4	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	-		3.5	3.3
Pot Cap-1 Maneuver	-	-		469	507
Stage 1	-	-		554	-
Stage 2	-	-		-	-
Platoon blocked, %	-	-			
Mov Cap-1 Maneuver	-	-		469	507
Mov Cap-2 Maneuver	-	-		469	-
Stage 1	-	-		554	-
Stage 2	-	-		-	-

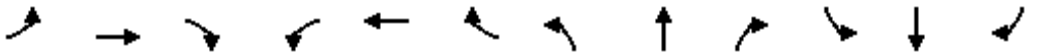
Approach	EB	NB
HCM Control Delay, s	0	16.3
HCM LOS		C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR
Capacity (veh/h)	473	-	-
HCM Lane V/C Ratio	0.327	-	-
HCM Control Delay (s)	16.3	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	1.4	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	504	1138	7	5	976	231	5	4	287	3
Future Volume (vph)	504	1138	7	5	976	231	5	4	287	3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	5	2		1	6			8		4
Permitted Phases			2			6	8		4	
Detector Phase	5	2	2	1	6	6	8	8	4	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	31.8	31.8	9.6	26.8	26.8	14.6	14.6	43.8	43.8
Total Split (s)	42.0	66.6	66.6	9.6	34.2	34.2	43.8	43.8	43.8	43.8
Total Split (%)	35.0%	55.5%	55.5%	8.0%	28.5%	28.5%	36.5%	36.5%	36.5%	36.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8		4.6		5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None
Act Effct Green (s)	36.5	67.6	67.6	5.0	28.4	28.4		39.2		38.0
Actuated g/C Ratio	0.31	0.57	0.57	0.04	0.24	0.24		0.33		0.32
v/c Ratio	0.97	0.59	0.01	0.07	1.21	0.43		0.03		1.25
Control Delay	72.8	18.7	0.0	57.2	143.5	7.1		21.7		161.8
Queue Delay	0.0	1.2	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	72.8	20.0	0.0	57.2	143.5	7.1		21.7		161.8
LOS	E	B	A	E	F	A		C		F
Approach Delay		36.0			117.1			21.7		161.8
Approach LOS		D			F			C		F

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 119.1	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.25	
Intersection Signal Delay: 85.8	Intersection LOS: F
Intersection Capacity Utilization 109.8%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	504	1138	7	5	976	231	5	4	5	287	3	304
Future Volume (veh/h)	504	1138	7	5	976	231	5	4	5	287	3	304
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	536	1211	6	5	1038	208	5	4	5	305	3	191
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	558	1949	869	12	858	383	200	162	178	340	3	183
Arrive On Green	0.31	0.54	0.54	0.01	0.24	0.24	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1810	3610	1610	1810	3610	1610	501	509	561	918	9	575
Grp Volume(v), veh/h	536	1211	6	5	1038	208	14	0	0	499	0	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1610	1571	0	0	1501	0	0
Q Serve(g_s), s	34.8	27.7	0.2	0.3	28.4	13.5	0.0	0.0	0.0	37.4	0.0	0.0
Cycle Q Clear(g_c), s	34.8	27.7	0.2	0.3	28.4	13.5	0.6	0.0	0.0	38.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.36		0.36	0.61		0.38
Lane Grp Cap(c), veh/h	558	1949	869	12	858	383	541	0	0	526	0	0
V/C Ratio(X)	0.96	0.62	0.01	0.43	1.21	0.54	0.03	0.00	0.00	0.95	0.00	0.00
Avail Cap(c_a), veh/h	567	1949	869	76	858	383	556	0	0	526	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	40.6	19.0	12.7	59.1	45.5	39.8	28.0	0.0	0.0	41.5	0.0	0.0
Incr Delay (d2), s/veh	27.6	1.5	0.0	9.2	105.1	5.4	0.0	0.0	0.0	26.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.0	11.1	0.1	0.2	24.8	5.8	0.3	0.0	0.0	18.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.2	20.5	12.7	68.3	150.6	45.3	28.0	0.0	0.0	68.3	0.0	0.0
LnGrp LOS	E	C	B	E	F	D	C	A	A	E	A	A
Approach Vol, veh/h		1753			1251			14			499	
Approach Delay, s/veh		35.1			132.8			28.0			68.3	
Approach LOS		D			F			C			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.4	70.3		43.8	41.4	34.2		43.8				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	60.8		38.0	37.4	28.4		* 39				
Max Q Clear Time (g_c+I1), s	2.3	29.7		40.0	36.8	30.4		2.6				
Green Ext Time (p_c), s	0.0	9.8		0.0	0.1	0.0		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		74.5
HCM 6th LOS		E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	250	80	60	16	5	19	18	104	5	50	5
Future Vol, veh/h	5	250	80	60	16	5	19	18	104	5	50	5
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	278	89	67	18	6	21	20	116	6	56	6
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	10.5	9.4	8.9	8.8
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	13%	2%	0%	79%	0%	8%
Vol Thru, %	13%	98%	0%	21%	0%	83%
Vol Right, %	74%	0%	100%	0%	100%	8%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	141	255	80	76	5	60
LT Vol	19	5	0	60	0	5
Through Vol	18	250	0	16	0	50
RT Vol	104	0	80	0	5	5
Lane Flow Rate	157	283	89	84	6	67
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.203	0.405	0.109	0.136	0.007	0.096
Departure Headway (Hd)	4.672	5.142	4.428	5.802	4.697	5.171
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	765	697	804	614	755	689
Service Time	2.723	2.898	2.183	3.573	2.467	3.234
HCM Lane V/C Ratio	0.205	0.406	0.111	0.137	0.008	0.097
HCM Control Delay	8.9	11.4	7.7	9.5	7.5	8.8
HCM Lane LOS	A	B	A	A	A	A
HCM 95th-tile Q	0.8	2	0.4	0.5	0	0.3

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	24	5	38	18	5	5	12	163	10	15	159	18
Future Vol, veh/h	24	5	38	18	5	5	12	163	10	15	159	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	28	6	44	21	6	6	14	190	12	17	185	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	460	461	196	480	465	197	206	0	0	203	0	0
Stage 1	230	230	-	225	225	-	-	-	-	-	-	-
Stage 2	230	231	-	255	240	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	515	500	850	499	498	849	1377	-	-	1381	-	-
Stage 1	777	718	-	782	721	-	-	-	-	-	-	-
Stage 2	777	717	-	754	711	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	497	487	850	460	485	848	1377	-	-	1380	-	-
Mov Cap-2 Maneuver	497	487	-	460	485	-	-	-	-	-	-	-
Stage 1	768	708	-	773	712	-	-	-	-	-	-	-
Stage 2	757	708	-	699	701	-	-	-	-	-	-	-

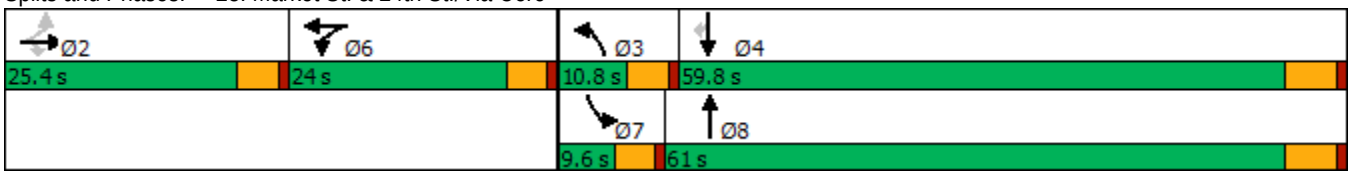
Approach	EB	WB	NB	SB
HCM Control Delay, s	11.3	12.6	0.5	0.6
HCM LOS	B	B		

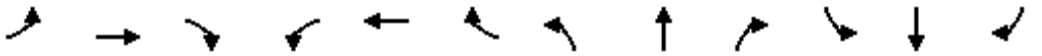
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1377	-	-	649	506	1380	-	-
HCM Lane V/C Ratio	0.01	-	-	0.12	0.064	0.013	-	-
HCM Control Delay (s)	7.6	0	-	11.3	12.6	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.2	0	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	9	34	226	258	43	53	962	28	1148	8
Future Volume (vph)	9	34	226	258	43	53	962	28	1148	8
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	25.4	25.4	25.4	24.0	24.0	10.8	61.0	9.6	59.8	59.8
Total Split (%)	21.2%	21.2%	21.2%	20.0%	20.0%	9.0%	50.8%	8.0%	49.8%	49.8%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		16.2	16.2	19.5	19.5	6.0	57.4	5.0	54.5	54.5
Actuated g/C Ratio		0.14	0.14	0.17	0.17	0.05	0.50	0.04	0.48	0.48
v/c Ratio		0.49	0.81	0.96	0.29	0.64	1.27	0.41	1.45	0.01
Control Delay		62.2	47.5	91.0	31.6	84.5	158.2	70.6	235.0	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		62.2	47.5	91.0	31.6	84.5	158.2	70.6	235.0	0.0
LOS		E	D	F	C	F	F	E	F	A
Approach Delay		49.8			76.5		154.7		229.6	
Approach LOS		D			E		F		F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 113.7	
Natural Cycle: 115	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.45	
Intersection Signal Delay: 166.3	Intersection LOS: F
Intersection Capacity Utilization 101.7%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	34	226	258	43	41	53	962	87	28	1148	8
Future Volume (veh/h)	9	34	226	258	43	41	53	962	87	28	1148	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	10	39	175	297	49	38	61	1106	99	32	1320	9
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	50	195	208	312	171	133	79	849	76	51	911	772
Arrive On Green	0.13	0.13	0.13	0.17	0.17	0.17	0.04	0.50	0.50	0.03	0.48	0.48
Sat Flow, veh/h	384	1497	1599	1810	992	769	1810	1715	154	1810	1900	1610
Grp Volume(v), veh/h	49	0	175	297	0	87	61	0	1205	32	1320	9
Grp Sat Flow(s),veh/h/ln	1881	0	1599	1810	0	1762	1810	0	1869	1810	1900	1610
Q Serve(g_s), s	2.6	0.0	12.0	18.3	0.0	4.8	3.8	0.0	55.7	2.0	54.0	0.3
Cycle Q Clear(g_c), s	2.6	0.0	12.0	18.3	0.0	4.8	3.8	0.0	55.7	2.0	54.0	0.3
Prop In Lane	0.20		1.00	1.00		0.44	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	245	0	208	312	0	304	79	0	925	51	911	772
V/C Ratio(X)	0.20	0.00	0.84	0.95	0.00	0.29	0.77	0.00	1.30	0.63	1.45	0.01
Avail Cap(c_a), veh/h	347	0	295	312	0	304	100	0	925	80	911	772
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	0.0	47.8	46.1	0.0	40.6	53.3	0.0	28.4	54.1	29.3	15.3
Incr Delay (d2), s/veh	0.4	0.0	13.7	38.3	0.0	0.5	18.9	0.0	144.0	4.7	208.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	5.4	11.6	0.0	2.2	2.1	0.0	59.4	0.9	74.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.1	0.0	61.5	84.5	0.0	41.1	72.2	0.0	172.4	58.8	237.3	15.4
LnGrp LOS	D	A	E	F	A	D	E	A	F	E	F	B
Approach Vol, veh/h		224			384			1266			1361	
Approach Delay, s/veh		57.7			74.6			167.6			231.6	
Approach LOS		E			E			F			F	

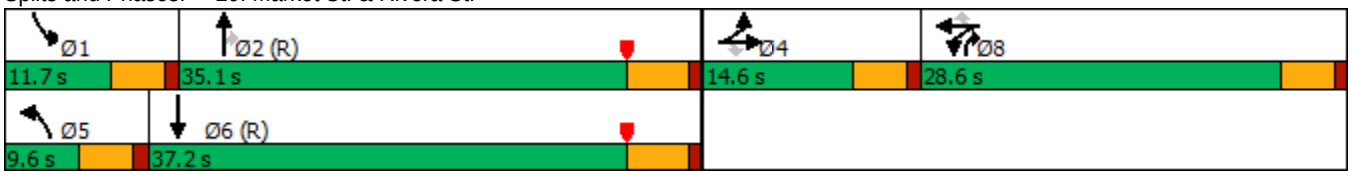
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		19.3	9.5	59.8		24.0	7.8	61.5				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		20.8	6.2	54.0		19.4	5.0	55.2				
Max Q Clear Time (g_c+I1), s		14.0	5.8	56.0		20.3	4.0	57.7				
Green Ext Time (p_c), s		0.4	0.0	0.0		0.0	0.0	0.0				

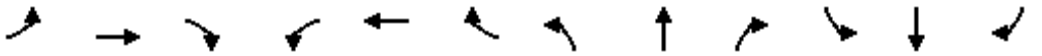
Intersection Summary												
HCM 6th Ctrl Delay			175.9									
HCM 6th LOS			F									

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	15	83	257	5	41	7	786	284	149	1113
Future Volume (vph)	15	83	257	5	41	7	786	284	149	1113
Turn Type	NA	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	4		8	8		5	2	8	1	6
Permitted Phases		4			8			2		
Detector Phase	4	4	8	8	8	5	2	8	1	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	14.6	14.6	28.6	28.6	28.6	9.6	35.1	28.6	9.6	29.1
Total Split (s)	14.6	14.6	28.6	28.6	28.6	9.6	35.1	28.6	11.7	37.2
Total Split (%)	16.2%	16.2%	31.8%	31.8%	31.8%	10.7%	39.0%	31.8%	13.0%	41.3%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.1	3.6	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6	4.6	4.6	5.1	4.6	4.6	5.1
Lead/Lag						Lead	Lag		Lead	Lag
Lead-Lag Optimize?						Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	None	None	C-Min
Act Effct Green (s)	10.0	10.0	14.8	14.8	14.8	5.0	36.1	52.3	13.1	51.9
Actuated g/C Ratio	0.11	0.11	0.16	0.16	0.16	0.06	0.40	0.58	0.15	0.58
v/c Ratio	0.11	0.29	0.48	0.48	0.11	0.07	0.56	0.28	0.59	0.55
Control Delay	37.4	4.4	38.5	38.5	0.6	37.3	27.4	1.1	48.7	16.5
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3
Total Delay	37.4	4.5	38.5	38.5	0.6	37.3	27.6	1.1	48.7	16.8
LOS	D	A	D	D	A	D	C	A	D	B
Approach Delay	11.2			33.4			20.7			20.5
Approach LOS	B			C			C			C

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 2 (2%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 21.7	Intersection LOS: C
Intersection Capacity Utilization 61.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 29: Market St. & Rivera St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	15	83	257	5	41	7	786	284	149	1113	5
Future Volume (veh/h)	7	15	83	257	5	41	7	786	284	149	1113	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	7	15	43	269	0	23	7	810	192	154	1147	5
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	53	114	144	409	0	181	16	1837	1001	143	2133	9
Arrive On Green	0.09	0.09	0.09	0.11	0.00	0.11	0.02	1.00	1.00	0.08	0.58	0.58
Sat Flow, veh/h	595	1275	1610	3619	0	1603	1810	3610	1610	1810	3686	16
Grp Volume(v), veh/h	22	0	43	269	0	23	7	810	192	154	562	590
Grp Sat Flow(s),veh/h/ln	1870	0	1610	1810	0	1603	1810	1805	1610	1810	1805	1897
Q Serve(g_s), s	1.0	0.0	2.2	6.4	0.0	1.2	0.3	0.0	0.0	7.1	17.1	17.1
Cycle Q Clear(g_c), s	1.0	0.0	2.2	6.4	0.0	1.2	0.3	0.0	0.0	7.1	17.1	17.1
Prop In Lane	0.32		1.00	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	167	0	144	409	0	181	16	1837	1001	143	1045	1098
V/C Ratio(X)	0.13	0.00	0.30	0.66	0.00	0.13	0.43	0.44	0.19	1.08	0.54	0.54
Avail Cap(c_a), veh/h	208	0	179	965	0	427	101	1837	1001	143	1045	1098
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.94	0.94	0.94	0.09	0.09	0.09
Uniform Delay (d), s/veh	37.8	0.0	38.4	38.2	0.0	35.9	44.0	0.0	0.0	41.4	11.6	11.6
Incr Delay (d2), s/veh	0.4	0.0	1.2	1.8	0.0	0.3	6.3	0.7	0.4	47.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.9	2.9	0.0	0.5	0.2	0.2	0.1	4.9	5.7	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.1	0.0	39.5	40.1	0.0	36.2	50.3	0.7	0.4	88.6	11.8	11.8
LnGrp LOS	D	A	D	D	A	D	D	A	A	F	B	B
Approach Vol, veh/h		65			292			1009			1306	
Approach Delay, s/veh		39.0			39.8			1.0			20.8	
Approach LOS		D			D			A			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.7	50.9		12.6	5.4	57.2		14.8				
Change Period (Y+Rc), s	4.6	5.1		4.6	4.6	5.1		4.6				
Max Green Setting (Gmax), s	7.1	30.0		10.0	5.0	32.1		24.0				
Max Q Clear Time (g_c+I1), s	9.1	2.0		4.2	2.3	19.1		8.4				
Green Ext Time (p_c), s	0.0	6.3		0.1	0.0	5.6		0.9				

Intersection Summary			
HCM 6th Ctrl Delay		15.9	
HCM 6th LOS		B	

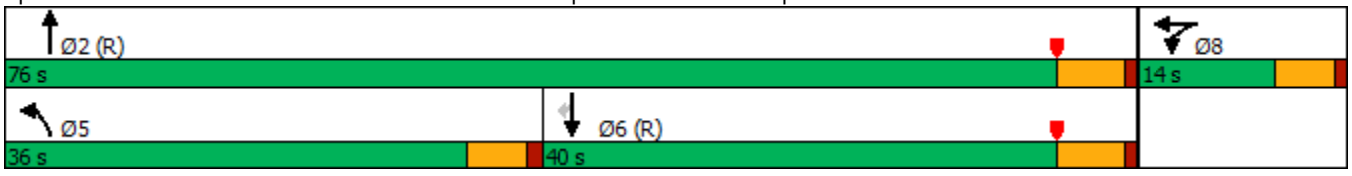
Notes

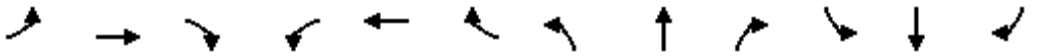
User approved volume balancing among the lanes for turning movement.

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	9	739	548	338	1253	201
Future Volume (vph)	9	739	548	338	1253	201
Turn Type	NA	Free	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		Free				6
Detector Phase	8		5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	10.0		10.0	24.5	10.5	10.5
Total Split (s)	14.0		36.0	76.0	40.0	40.0
Total Split (%)	15.6%		40.0%	84.4%	44.4%	44.4%
Yellow Time (s)	4.0		4.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0		5.0	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None		None	C-Min	C-Min	C-Min
Act Effct Green (s)	9.3	90.0	30.0	70.2	35.2	35.2
Actuated g/C Ratio	0.10	1.00	0.33	0.78	0.39	0.39
v/c Ratio	0.87	0.47	0.93	0.12	0.91	0.27
Control Delay	80.6	1.0	47.1	9.8	31.6	3.5
Queue Delay	0.0	0.0	0.0	0.0	2.2	0.0
Total Delay	80.6	1.0	47.1	9.8	33.8	3.5
LOS	F	A	D	A	C	A
Approach Delay	15.1			32.9	29.6	
Approach LOS	B			C	C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 26.5	Intersection LOS: C
Intersection Capacity Utilization 86.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 30: Market St. & SR-60 WB On-Ramp/SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	150	9	739	548	338	0	0	1253	201
Future Volume (veh/h)	0	0	0	150	9	739	548	338	0	0	1253	201
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				153	9	0	559	345	0	0	1279	0
Peak Hour Factor				0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				171	10		584	2828	0	0	1463	
Arrive On Green				0.10	0.10	0.00	0.54	1.00	0.00	0.00	0.81	0.00
Sat Flow, veh/h				1714	101	1610	1810	3705	0	0	3705	1610
Grp Volume(v), veh/h				162	0	0	559	345	0	0	1279	0
Grp Sat Flow(s),veh/h/ln				1814	0	1610	1810	1805	0	0	1805	1610
Q Serve(g_s), s				7.9	0.0	0.0	26.5	0.0	0.0	0.0	20.8	0.0
Cycle Q Clear(g_c), s				7.9	0.0	0.0	26.5	0.0	0.0	0.0	20.8	0.0
Prop In Lane				0.94		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				181	0		584	2828	0	0	1463	
V/C Ratio(X)				0.89	0.00		0.96	0.12	0.00	0.00	0.87	
Avail Cap(c_a), veh/h				181	0		623	2828	0	0	1463	
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	2.00	2.00
Upstream Filter(I)				1.00	0.00	0.00	0.55	0.55	0.00	0.00	0.83	0.00
Uniform Delay (d), s/veh				40.0	0.0	0.0	20.2	0.0	0.0	0.0	7.0	0.0
Incr Delay (d2), s/veh				38.3	0.0	0.0	17.0	0.0	0.0	0.0	6.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.3	0.0	0.0	9.6	0.0	0.0	0.0	3.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				78.4	0.0	0.0	37.2	0.0	0.0	0.0	13.4	0.0
LnGrp LOS				E	A		D	A	A	A	B	
Approach Vol, veh/h					162			904			1279	
Approach Delay, s/veh					78.4			23.0			13.4	
Approach LOS					E			C			B	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		76.0			34.0	42.0		14.0				
Change Period (Y+Rc), s		5.5			5.0	5.5		5.0				
Max Green Setting (Gmax), s		70.5			31.0	34.5		9.0				
Max Q Clear Time (g_c+I1), s		2.0			28.5	22.8		9.9				
Green Ext Time (p_c), s		2.3			0.5	6.4		0.0				

Intersection Summary		
HCM 6th Ctrl Delay	21.6	
HCM 6th LOS	C	

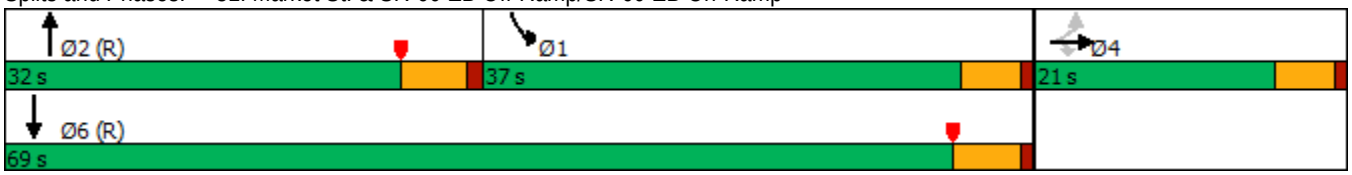
Notes

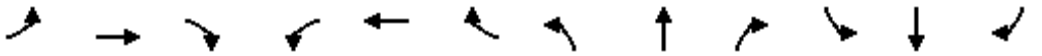
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations					
Traffic Volume (vph)	4	768	779	795	607
Future Volume (vph)	4	768	779	795	607
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	10.0	24.5	10.0	10.5
Total Split (s)	21.0	21.0	32.0	37.0	69.0
Total Split (%)	23.3%	23.3%	35.6%	41.1%	76.7%
Yellow Time (s)	4.0	4.0	4.5	4.0	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.5	5.0	5.5
Lead/Lag			Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Min	None	C-Min
Act Effct Green (s)	12.9	12.9	27.8	33.8	66.6
Actuated g/C Ratio	0.14	0.14	0.31	0.38	0.74
v/c Ratio	0.43	0.84	0.77	1.20	0.23
Control Delay	39.5	17.0	33.8	133.0	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	39.5	17.0	33.8	133.0	3.1
LOS	D	B	C	F	A
Approach Delay	19.8		33.8		76.7
Approach LOS	B		C		E

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 15 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.20	
Intersection Signal Delay: 49.2	Intersection LOS: D
Intersection Capacity Utilization 86.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 31: Market St. & SR-60 EB Off-Ramp/SR-60 EB On-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	4	768	0	0	0	0	779	58	795	607	0
Future Volume (veh/h)	106	4	768	0	0	0	0	779	58	795	607	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	108	4	519				0	795	0	811	619	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	311	12	504				0	934		698	2547	0
Arrive On Green	0.18	0.18	0.18				0.00	0.26	0.00	0.64	1.00	0.00
Sat Flow, veh/h	1748	65	2834				0	3800	0	1810	3705	0
Grp Volume(v), veh/h	112	0	519				0	795	0	811	619	0
Grp Sat Flow(s),veh/h/ln	1813	0	1417				0	1805	0	1810	1805	0
Q Serve(g_s), s	4.9	0.0	16.0				0.0	18.8	0.0	34.7	0.0	0.0
Cycle Q Clear(g_c), s	4.9	0.0	16.0				0.0	18.8	0.0	34.7	0.0	0.0
Prop In Lane	0.96		1.00				0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	322	0	504				0	934		698	2547	0
V/C Ratio(X)	0.35	0.00	1.03				0.00	0.85		1.16	0.24	0.00
Avail Cap(c_a), veh/h	322	0	504				0	1063		698	2547	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.67	1.67	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.30	0.30	0.00
Uniform Delay (d), s/veh	32.4	0.0	37.0				0.0	31.7	0.0	16.0	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	48.0				0.0	9.7	0.0	77.9	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	8.6				0.0	9.0	0.0	21.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.1	0.0	85.0				0.0	41.4	0.0	93.9	0.1	0.0
LnGrp LOS	C	A	F				A	D		F	A	A
Approach Vol, veh/h		631						795			1430	
Approach Delay, s/veh		75.8						41.4			53.3	
Approach LOS		E						D			D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	40.2	28.8		21.0		69.0
Change Period (Y+Rc), s	5.5	* 5.5		5.0		5.5
Max Green Setting (Gmax), s	32.0	* 27		16.0		63.5
Max Q Clear Time (g_c+I1), s	36.7	20.8		18.0		2.0
Green Ext Time (p_c), s	0.0	2.4		0.0		4.5

Intersection Summary		
HCM 6th Ctrl Delay		55.0
HCM 6th LOS		D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	0	35	5	1	16	46	786	5	19	1250	106
Future Vol, veh/h	35	0	35	5	1	16	46	786	5	19	1250	106
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	145	-	-	140	-	110
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	36	0	36	5	1	17	48	819	5	20	1302	110

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1848	2263	651	1610	2371	413	1412	0	0	825	0	0
Stage 1	1342	1342	-	919	919	-	-	-	-	-	-	-
Stage 2	506	921	-	691	1452	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	*147	*57	*569	*312	42	594	*854	-	-	814	-	-
Stage 1	*536	*469	-	*296	353	-	-	-	-	-	-	-
Stage 2	*522	*352	-	*536	454	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	*134	*52	*569	*274	39	593	*854	-	-	813	-	-
Mov Cap-2 Maneuver	*280	*192	-	*255	182	-	-	-	-	-	-	-
Stage 1	*506	*458	-	*279	333	-	-	-	-	-	-	-
Stage 2	*477	*332	-	*490	442	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.9	14	0.5	0.1
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	* 854	-	-	375	422	813	-	-
HCM Lane V/C Ratio	0.056	-	-	0.194	0.054	0.024	-	-
HCM Control Delay (s)	9.5	-	-	16.9	14	9.5	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.7	0.2	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	92.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	358	96	62	870	380	205
Future Vol, veh/h	358	96	62	870	380	205
Conflicting Peds, #/hr	0	0	0	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	448	120	78	1088	475	256

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1305	605	733	0	-	0
Stage 1	605	-	-	-	-	-
Stage 2	700	-	-	-	-	-
Critical Hdwy	6.6	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	~ 166	501	881	-	-	-
Stage 1	549	-	-	-	-	-
Stage 2	459	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 151	500	879	-	-	-
Mov Cap-2 Maneuver	~ 287	-	-	-	-	-
Stage 1	499	-	-	-	-	-
Stage 2	458	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 401.2	0.6	0
HCM LOS	F		

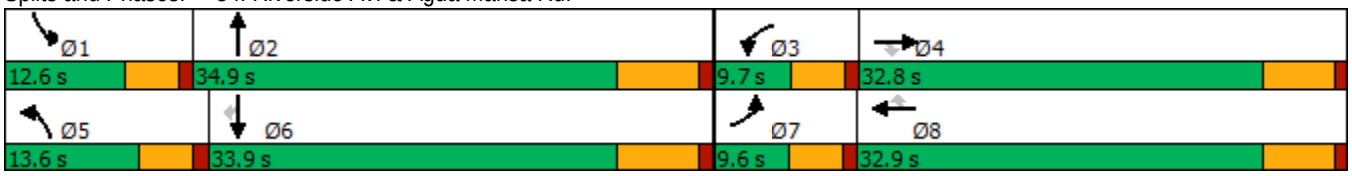
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	879	-	315	-	-
HCM Lane V/C Ratio	0.088	-	1.802	-	-
HCM Control Delay (s)	9.5	-	$ 401.2	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q(veh)	0.3	-	37.3	-	-

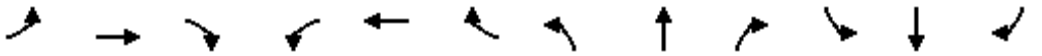
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	274	544	272	103	324	88	221	586	207	697	152
Future Volume (vph)	274	544	272	103	324	88	221	586	207	697	152
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	9.6	32.8	32.8	9.7	32.9	32.9	13.6	34.9	12.6	33.9	33.9
Total Split (%)	10.7%	36.4%	36.4%	10.8%	36.6%	36.6%	15.1%	38.8%	14.0%	37.7%	37.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	5.0	27.1	27.1	5.1	27.2	27.2	9.0	23.9	8.0	22.9	22.9
Actuated g/C Ratio	0.06	0.32	0.32	0.06	0.32	0.32	0.11	0.28	0.09	0.27	0.27
v/c Ratio	2.71	0.94	0.42	1.00	0.56	0.15	1.21	0.76	1.28	0.75	0.29
Control Delay	814.8	56.6	6.6	131.9	29.5	1.3	170.5	32.2	199.4	34.1	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	814.8	56.6	6.6	131.9	29.5	1.3	170.5	32.2	199.4	34.1	5.7
LOS	F	E	A	F	C	A	F	C	F	C	A
Approach Delay		234.5			45.1			64.4		62.5	
Approach LOS		F			D			E		E	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 85.6	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 2.71	
Intersection Signal Delay: 112.4	Intersection LOS: F
Intersection Capacity Utilization 84.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	274	544	272	103	324	88	221	586	142	207	697	152
Future Volume (veh/h)	274	544	272	103	324	88	221	586	142	207	697	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	285	567	185	107	338	77	230	610	142	216	726	150
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	109	605	512	111	608	515	196	773	180	174	916	407
Arrive On Green	0.06	0.32	0.32	0.06	0.32	0.32	0.11	0.27	0.27	0.10	0.25	0.25
Sat Flow, veh/h	1810	1900	1606	1810	1900	1609	1810	2908	676	1810	3610	1604
Grp Volume(v), veh/h	285	567	185	107	338	77	230	378	374	216	726	150
Grp Sat Flow(s),veh/h/ln	1810	1900	1606	1810	1900	1609	1810	1805	1778	1810	1805	1604
Q Serve(g_s), s	5.0	24.1	7.4	4.9	12.3	2.8	9.0	16.2	16.3	8.0	15.6	6.4
Cycle Q Clear(g_c), s	5.0	24.1	7.4	4.9	12.3	2.8	9.0	16.2	16.3	8.0	15.6	6.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	109	605	512	111	608	515	196	480	473	174	916	407
V/C Ratio(X)	2.62	0.94	0.36	0.97	0.56	0.15	1.18	0.79	0.79	1.24	0.79	0.37
Avail Cap(c_a), veh/h	109	616	521	111	618	524	196	616	607	174	1188	528
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.1	27.5	21.8	39.0	23.4	20.2	37.1	28.4	28.4	37.6	29.0	25.6
Incr Delay (d2), s/veh	756.2	21.8	0.4	73.9	1.1	0.1	119.8	5.2	5.4	148.2	2.8	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.9	13.5	2.6	4.3	5.2	1.0	10.2	6.9	6.8	10.4	6.4	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	795.3	49.3	22.3	112.9	24.5	20.4	157.0	33.6	33.8	185.8	31.9	26.1
LnGrp LOS	F	D	C	F	C	C	F	C	C	F	C	C
Approach Vol, veh/h		1037			522			982			1092	
Approach Delay, s/veh		249.5			42.0			62.6			61.5	
Approach LOS		F			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	28.6	9.7	32.3	13.6	27.6	9.6	32.4
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	8.0	28.4	5.1	27.0	9.0	27.4	5.0	27.1
Max Q Clear Time (g_c+I1), s	10.0	18.3	6.9	26.1	11.0	17.6	7.0	14.3
Green Ext Time (p_c), s	0.0	2.9	0.0	0.4	0.0	3.4	0.0	1.6

Intersection Summary	
HCM 6th Ctrl Delay	112.7
HCM 6th LOS	F

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	0	0	637	200	9
Future Vol, veh/h	5	0	0	637	200	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	92	92	92	92	50
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	10	0	0	692	217	18

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	918	226	235	0	-	0
Stage 1	226	-	-	-	-	-
Stage 2	692	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	304	818	1344	-	-	-
Stage 1	816	-	-	-	-	-
Stage 2	500	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	304	818	1344	-	-	-
Mov Cap-2 Maneuver	304	-	-	-	-	-
Stage 1	816	-	-	-	-	-
Stage 2	500	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.2	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1344	-	304	-	-
HCM Lane V/C Ratio	-	-	0.033	-	-
HCM Control Delay (s)	0	-	17.2	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

APPENDIX 10.3: CUMULATIVE HORIZON YEAR (2045) NO PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2045) Without Project Conditions - Weekday AM Peak Hour**

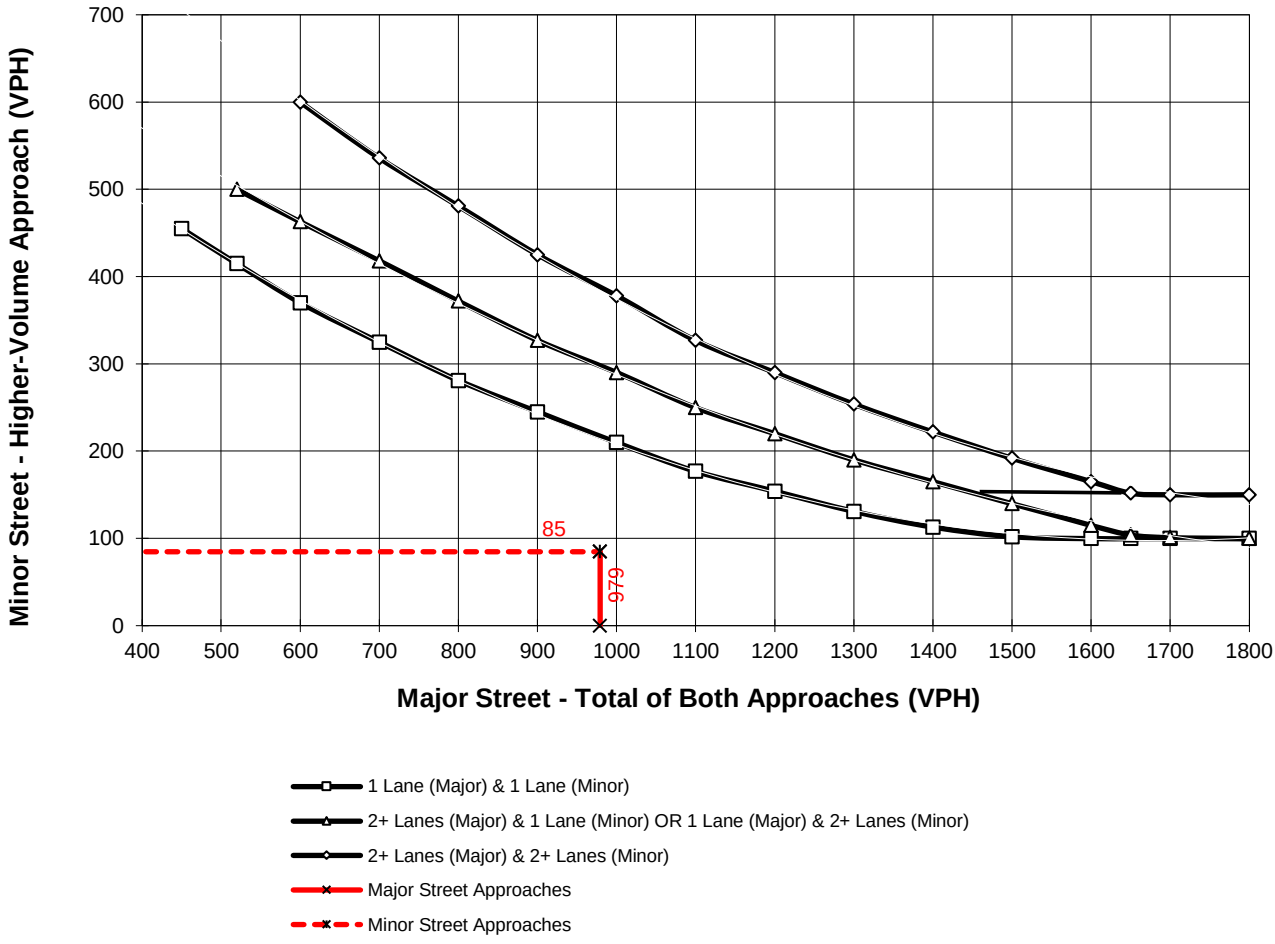
Major Street Name = **20th St.**

Total of Both Approaches (VPH) = **979**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Avalon Rd.**

High Volume Approach (VPH) = **85**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2045) Without Project Conditions - Weekday AM Peak Hour**

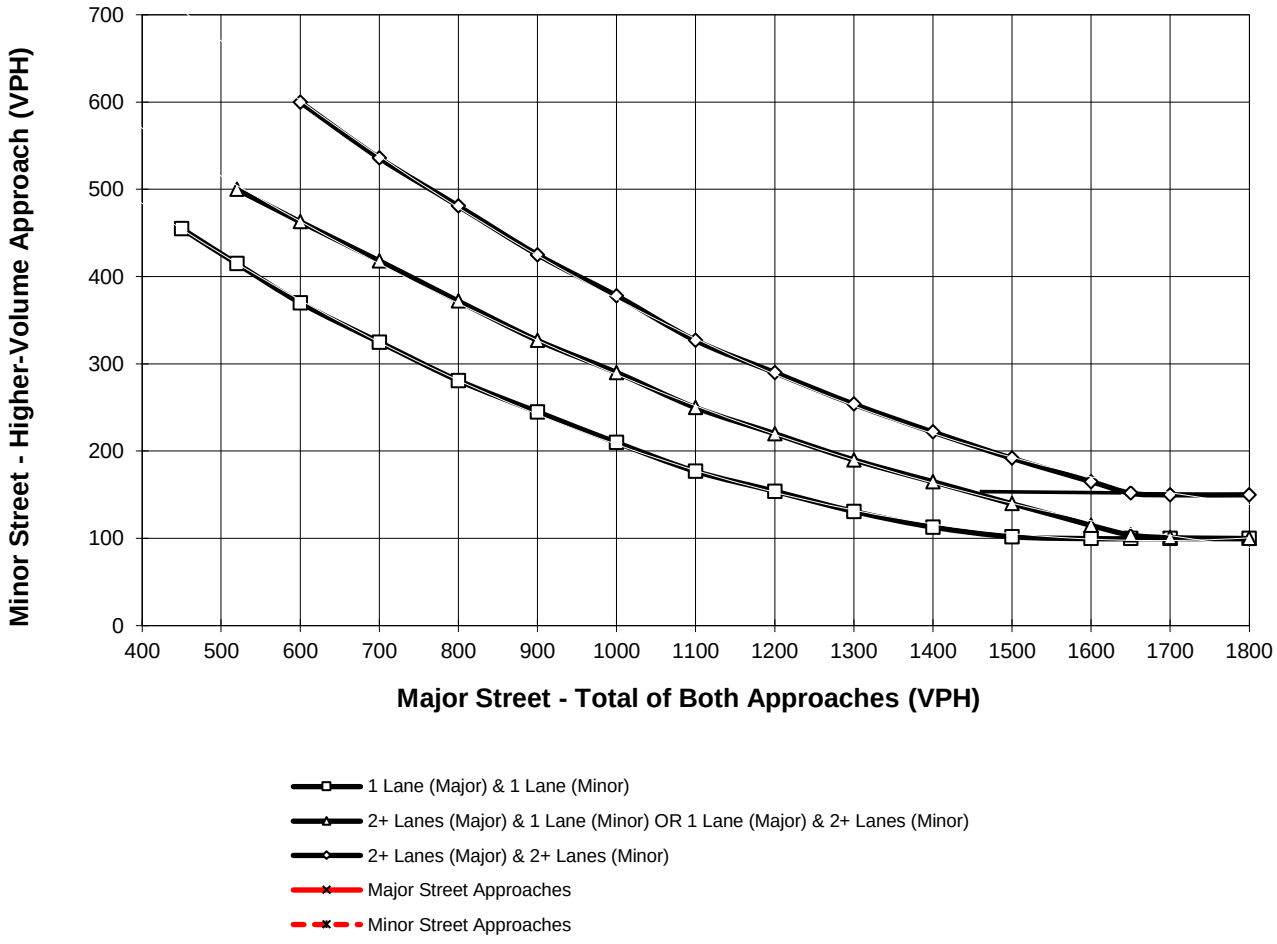
Major Street Name = **Avalon St.**

Total of Both Approaches (VPH) = **130**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **24th St.**

High Volume Approach (VPH) = **45**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2045) Without Project Conditions - Weekday AM Peak Hour**

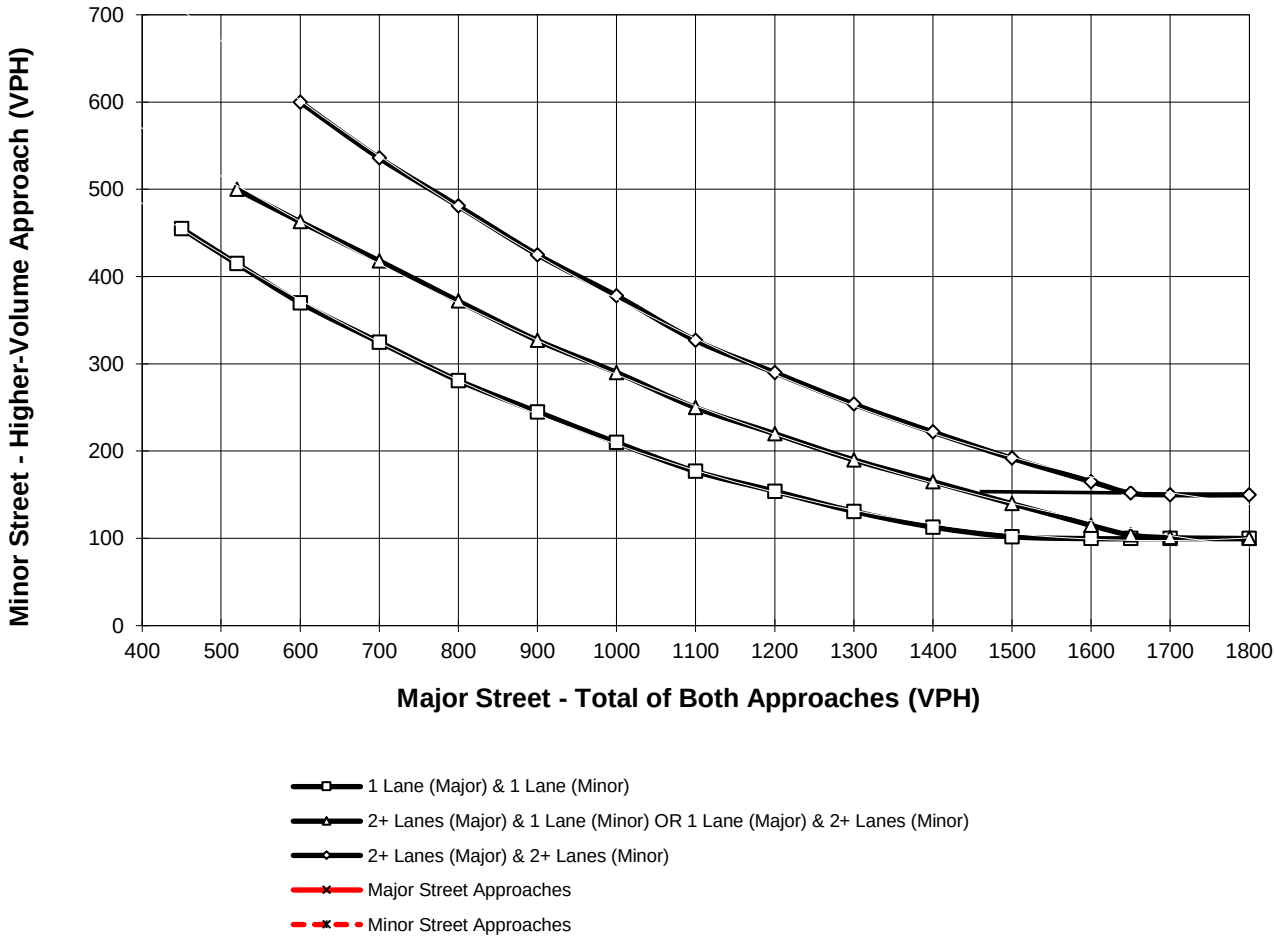
Major Street Name = **Avalon St.**

Total of Both Approaches (VPH) = **125**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **26th St.**

High Volume Approach (VPH) = **28**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

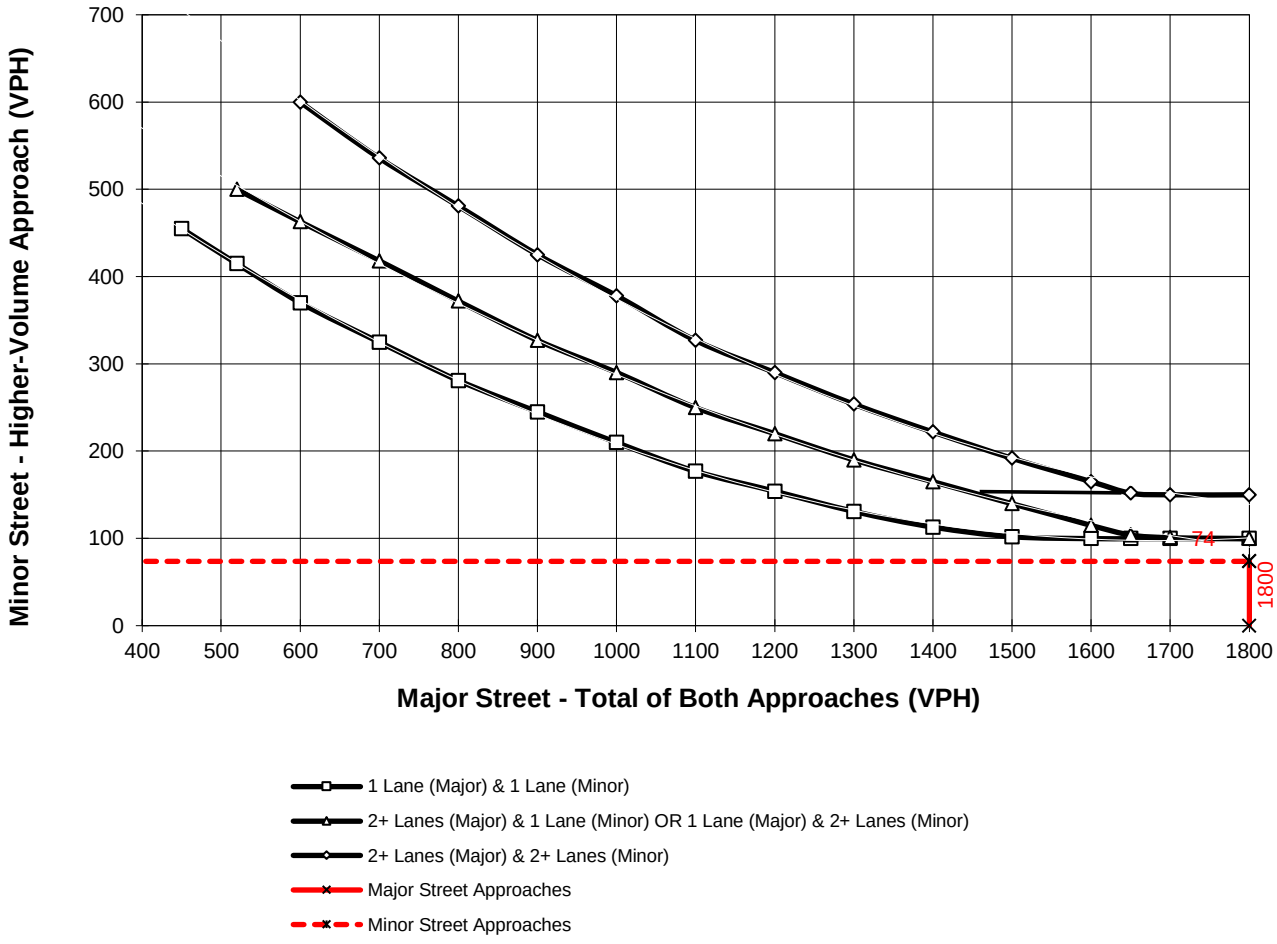
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2045) Without Project Conditions - Weekday PM Peak Hour**

Major Street Name = **Rubidoux St.**
Total of Both Approaches (VPH) = **2245**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **24th St.**
High Volume Approach (VPH) = **74**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

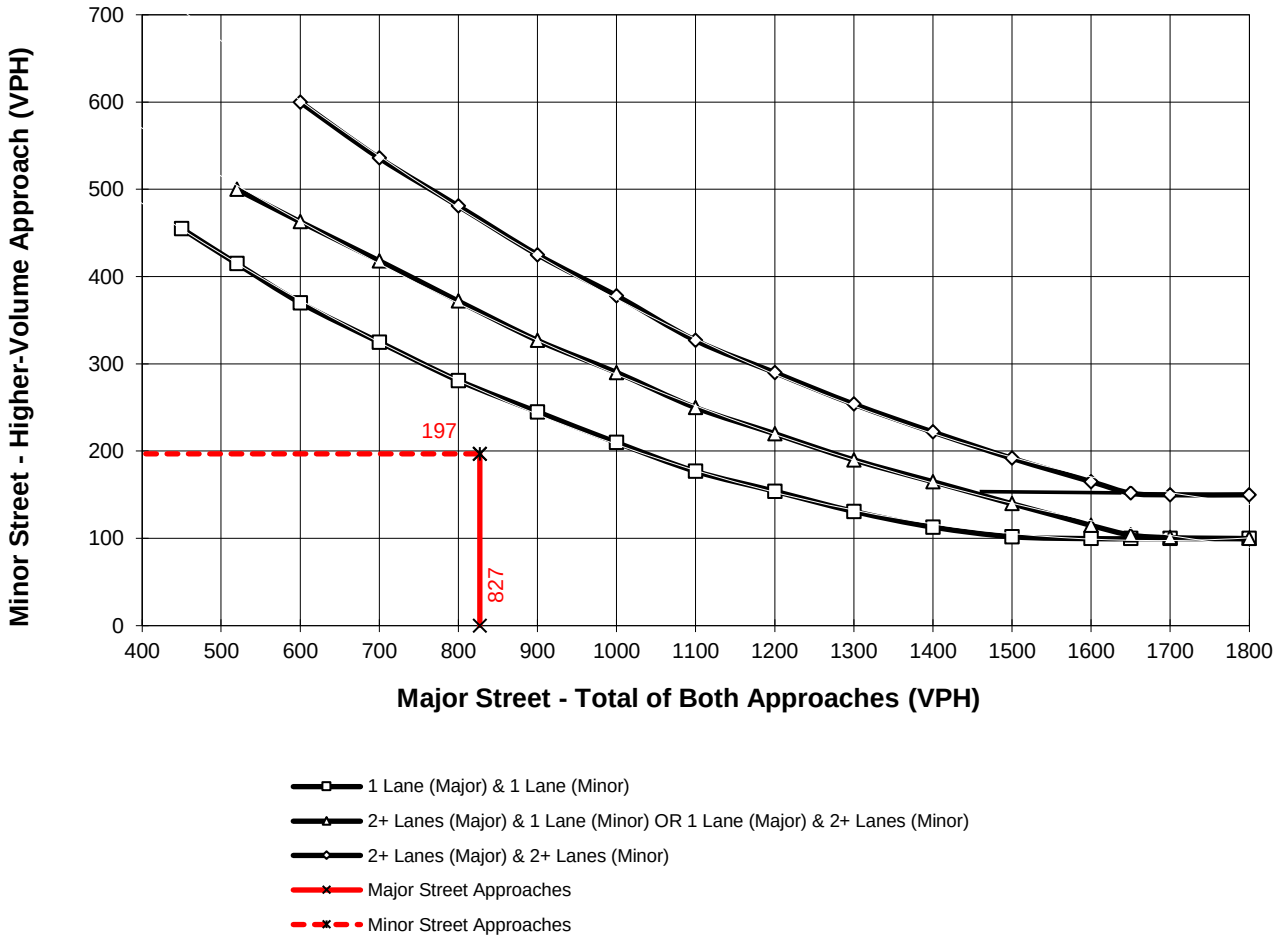
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2045) Without Project Conditions - Weekday AM Peak Hour**

Major Street Name = **Frontage Rd.**
Total of Both Approaches (VPH) = **827**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Hall Av.**
High Volume Approach (VPH) = **197**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

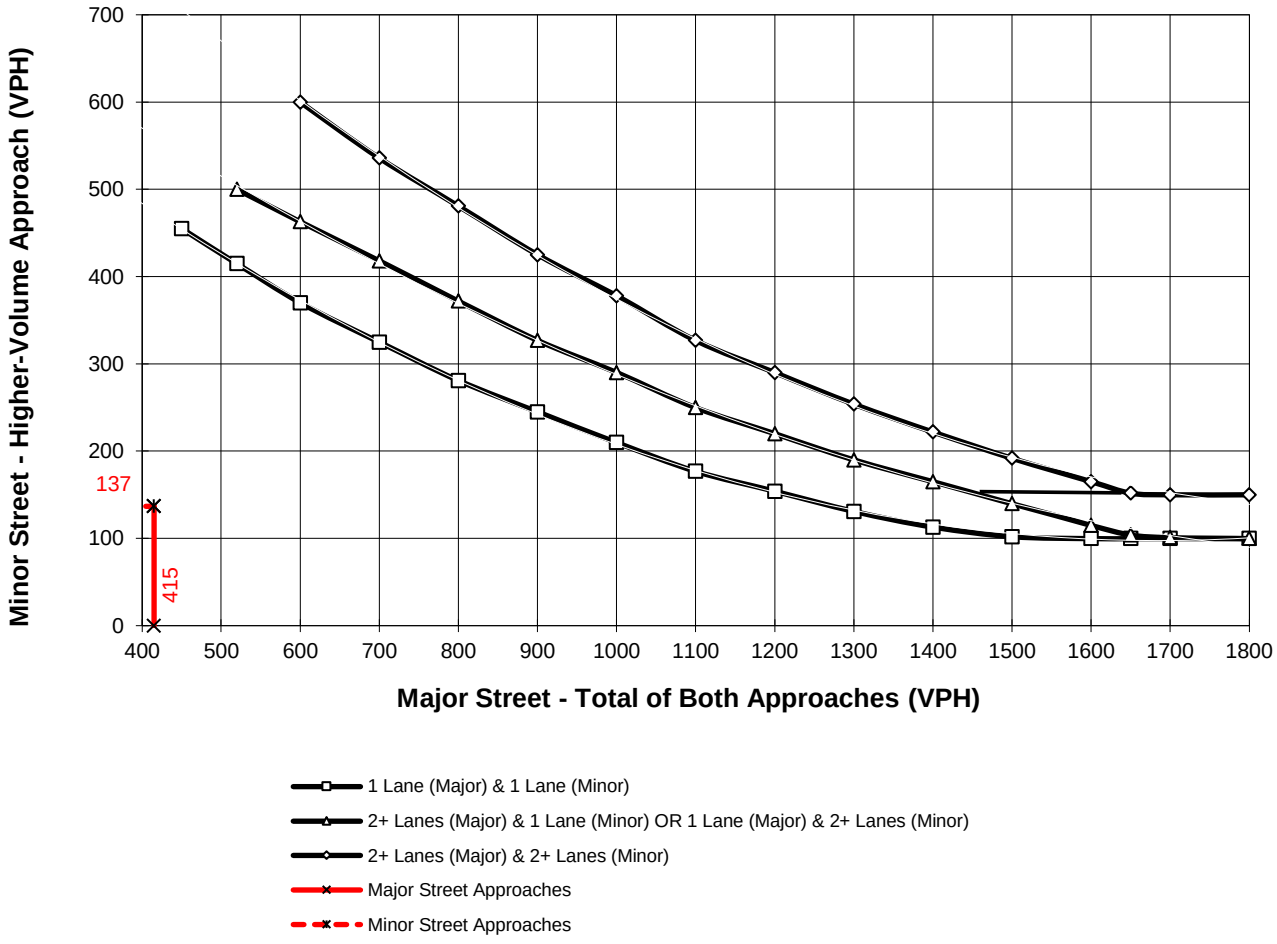
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2045) Without Project Conditions - Weekday PM Peak Hour**

Major Street Name = **24th St.**
Total of Both Approaches (VPH) = **415**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Hall Av.**
High Volume Approach (VPH) = **137**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2045) Without Project Conditions - Weekday PM Peak Hour**

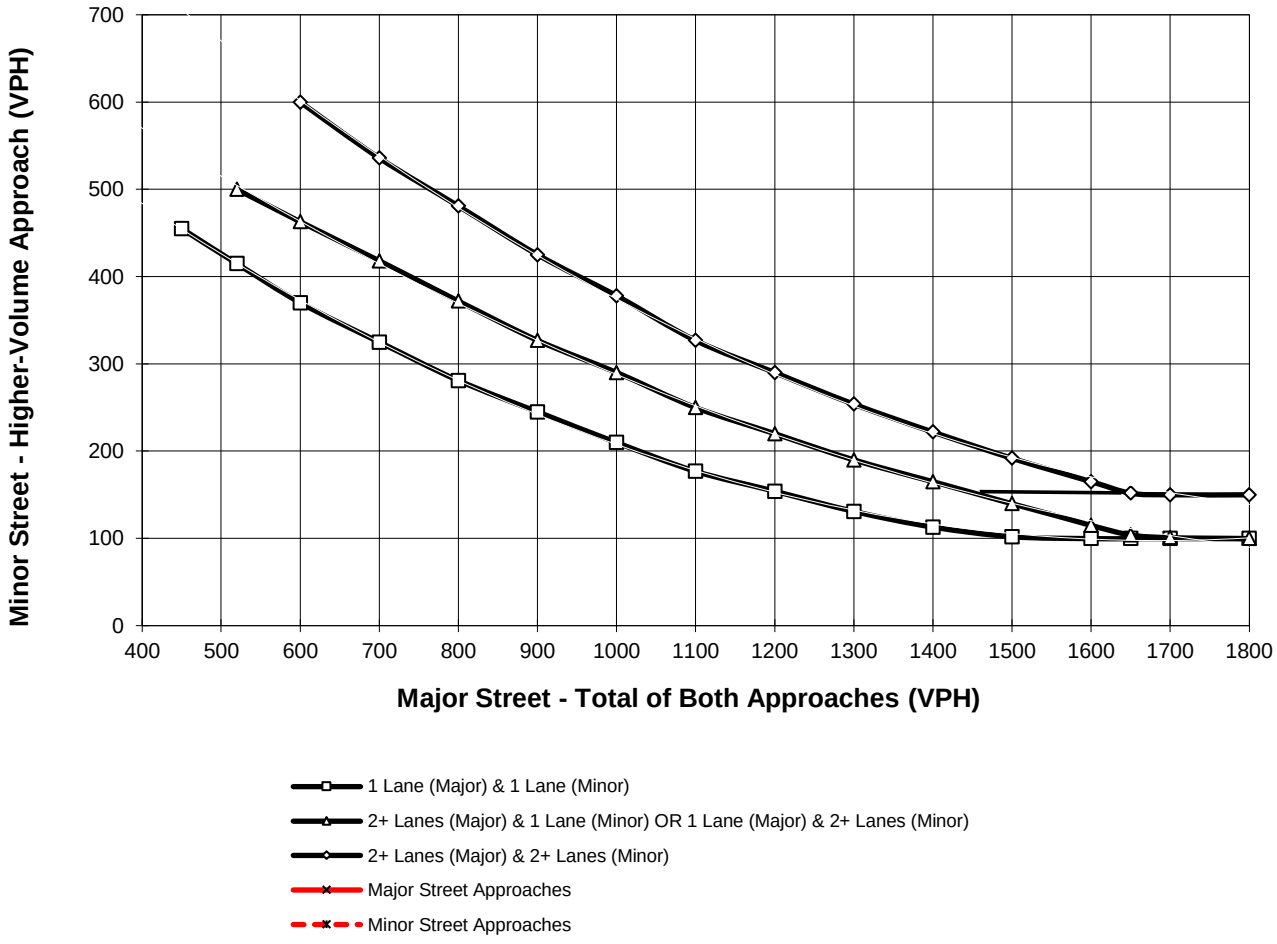
Major Street Name = **Hall Av.**

Total of Both Approaches (VPH) = **376**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **26th St.**

High Volume Approach (VPH) = **63**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

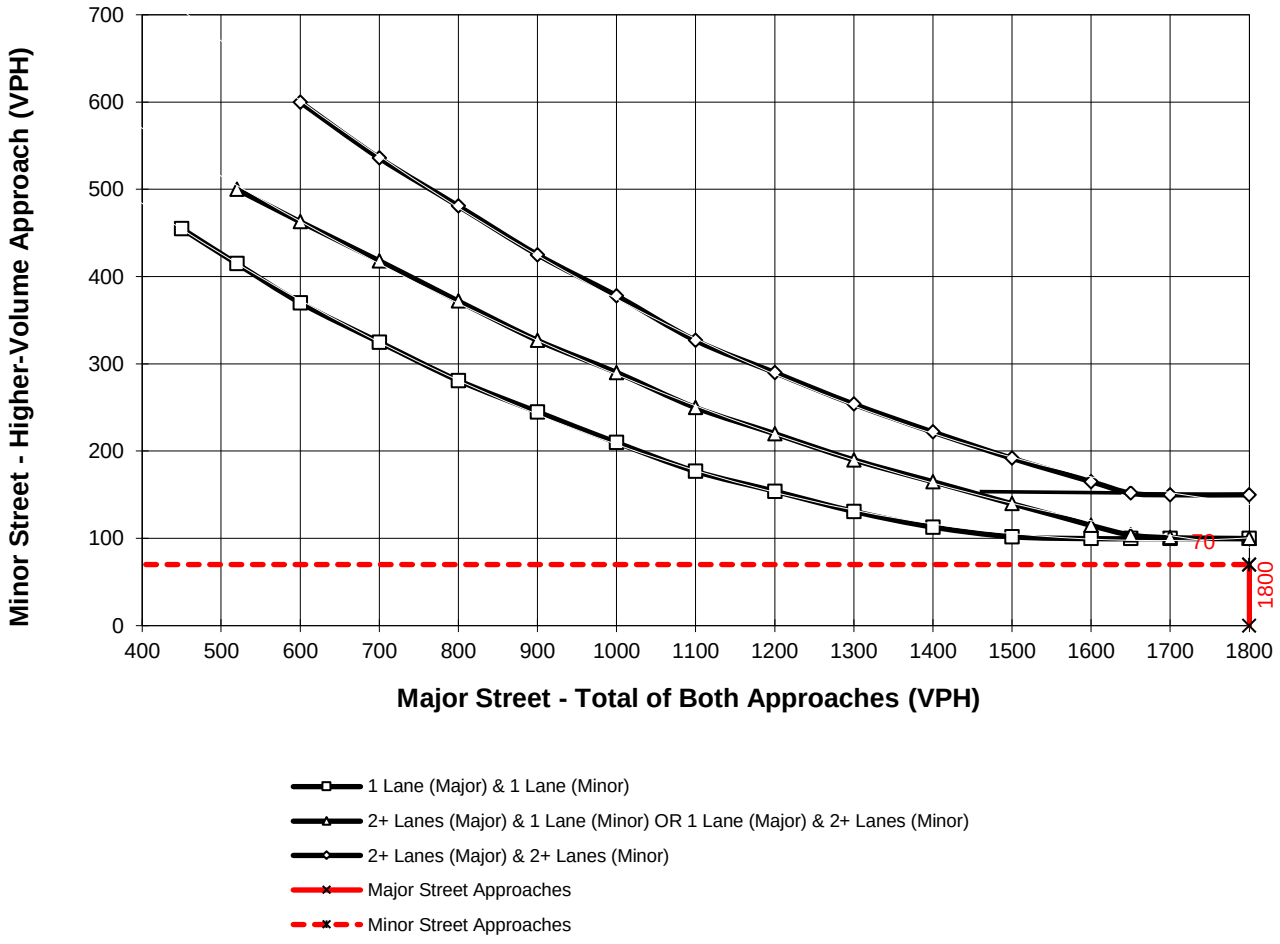
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2045) Without Project Conditions - Weekday PM Peak Hour**

Major Street Name = **Market St.**
Total of Both Approaches (VPH) = **2180**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Redwood Dr.**
High Volume Approach (VPH) = **70**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

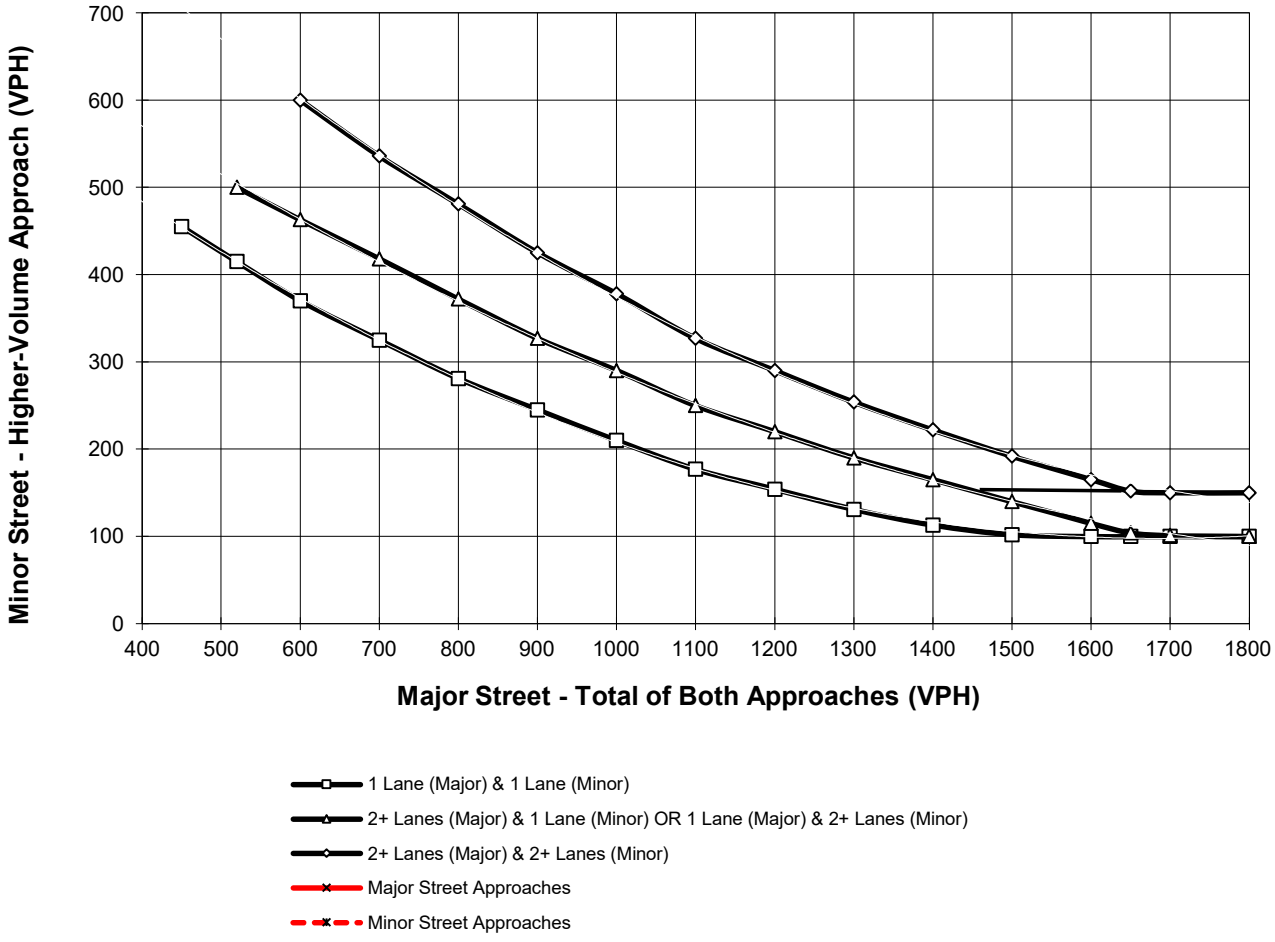
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2045) Without Project Conditions - Weekday PM Peak Hour**

Major Street Name = **Van Dell Rd.**
Total of Both Approaches (VPH) = **9**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **25th St.**
High Volume Approach (VPH) = **5**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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APPENDIX 10.4: CUMULATIVE HORIZON YEAR (2045) PLUS PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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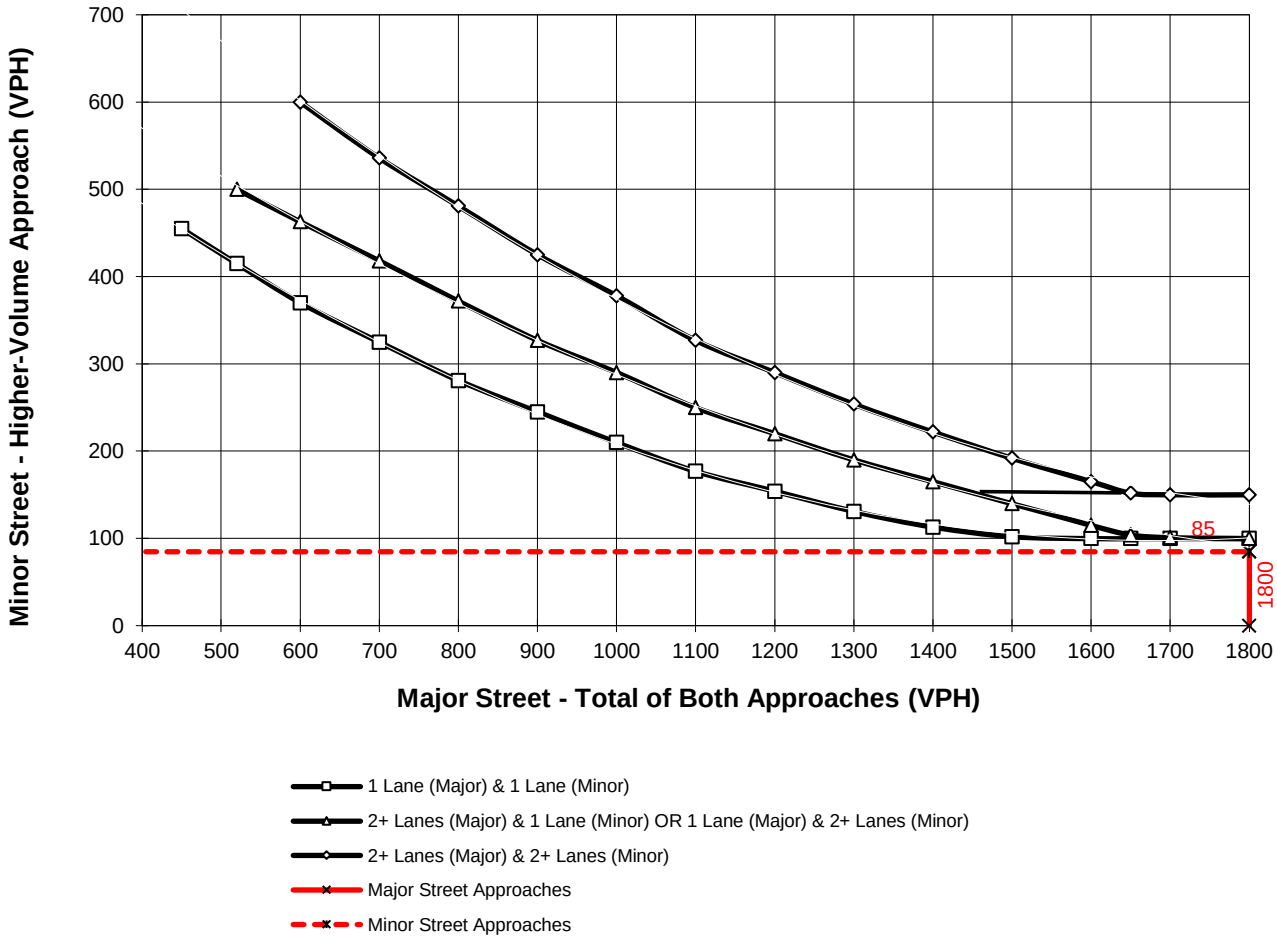
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2045) With Project Conditions - Weekday AM Peak Hour**

Major Street Name = **20th St.**
Total of Both Approaches (VPH) = **1834**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Avalon Rd.**
High Volume Approach (VPH) = **85**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2045) With Project Conditions - Weekday AM Peak Hour**

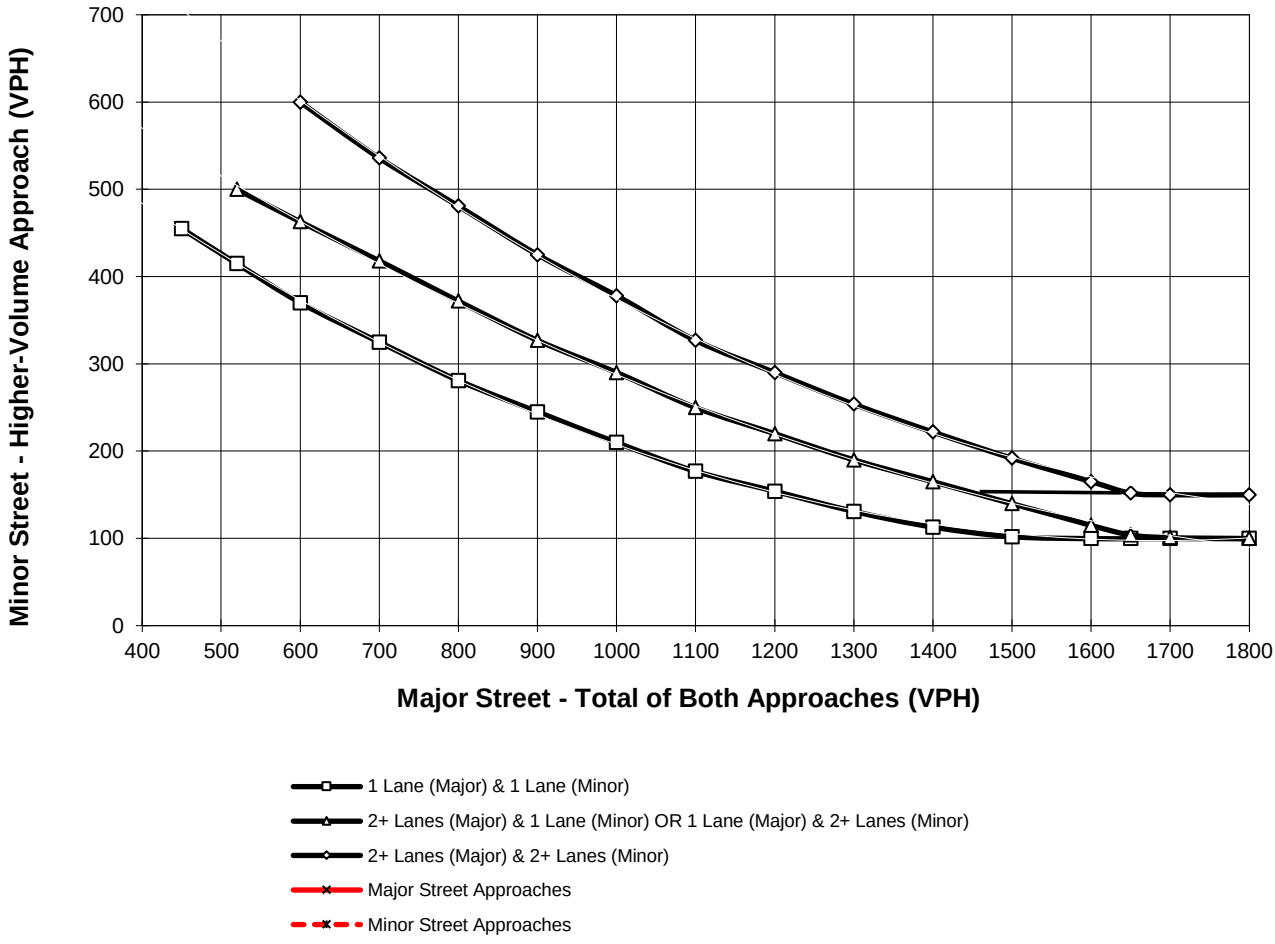
Major Street Name = **Avalon St.**

Total of Both Approaches (VPH) = **131**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **24th St.**

High Volume Approach (VPH) = **45**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2045) With Project Conditions - Weekday AM Peak Hour**

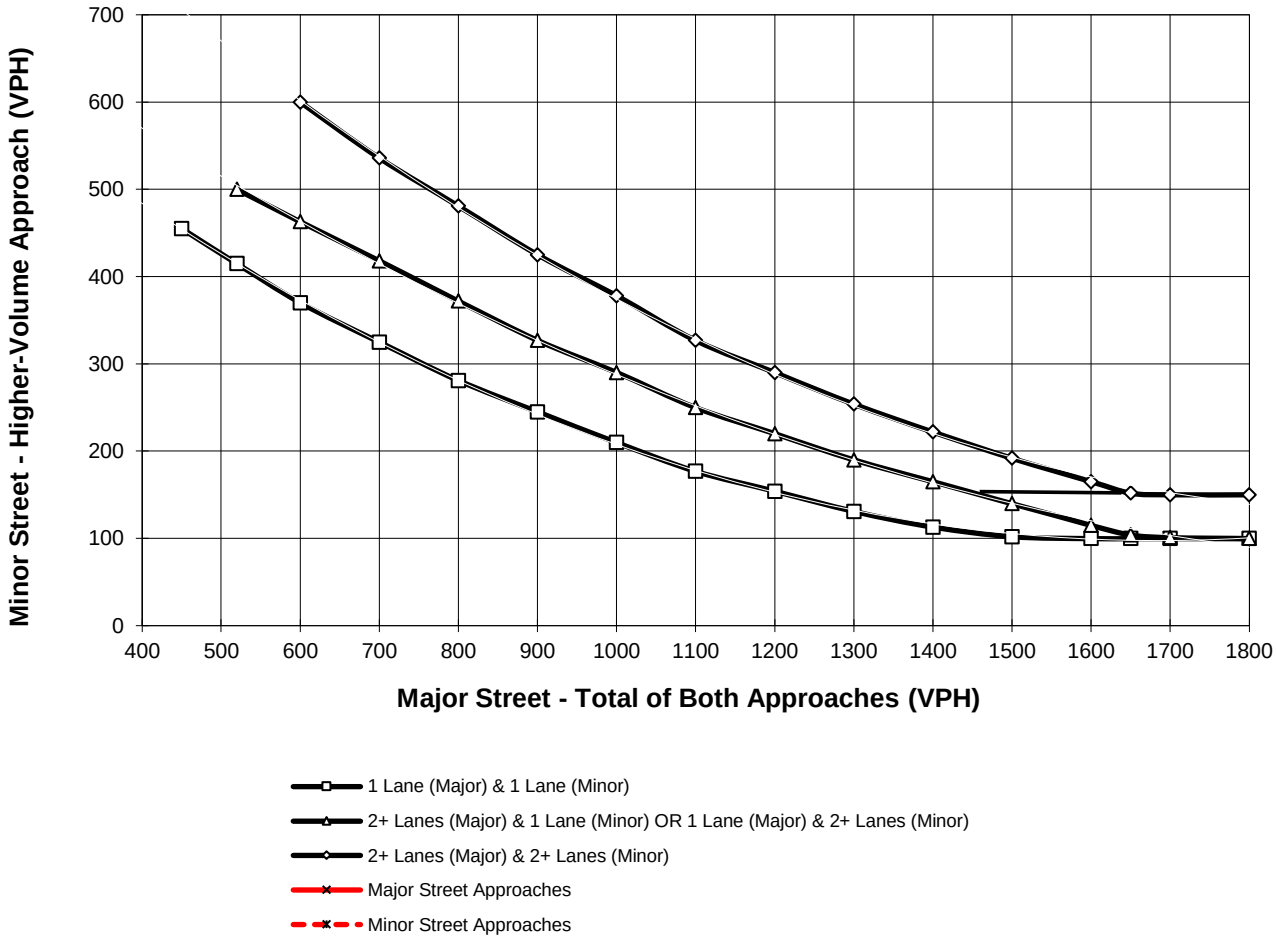
Major Street Name = **Avalon St.**

Total of Both Approaches (VPH) = **131**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **26th St.**

High Volume Approach (VPH) = **49**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		2045 WP
				CALC CS	DATE	11/29/22
Jurisdiction: City of Jurupa Valley				CHK CS	DATE	11/29/22
Major Street: **Avalon Rd.**				Critical Approach Speed (Major)		45 mph
Minor Street: **Driveway 7**				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **1,515** vpd Minor Street Future ADT = **90** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. √

or

In built up area of isolated community of < 10,000 population ……

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Number of lanes for moving traffic on each approach: Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
CONDITION A - Minimum Vehicular Volume						
Satisfied / Not Satisfied: XX						
RURAL	*1* **1,515**	*1* **90**	8,000	5,600	2,400	1,680
	2 +	*1*	9,600	6,720	2,400	1,680
	2 +	*2* +	9,600	6,720	3,200	2,240
	1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic						
Satisfied / Not Satisfied: XX						
RURAL	*1* **1,515**	*1* **90**	12,000	8,400	1,200	850
	2 +	*1*	14,400	10,080	1,200	850
	2 +	*2* +	14,400	10,080	1,600	1,120
	1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B						
Satisfied / Not Satisfied: XX						
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 5% B: 11%			2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

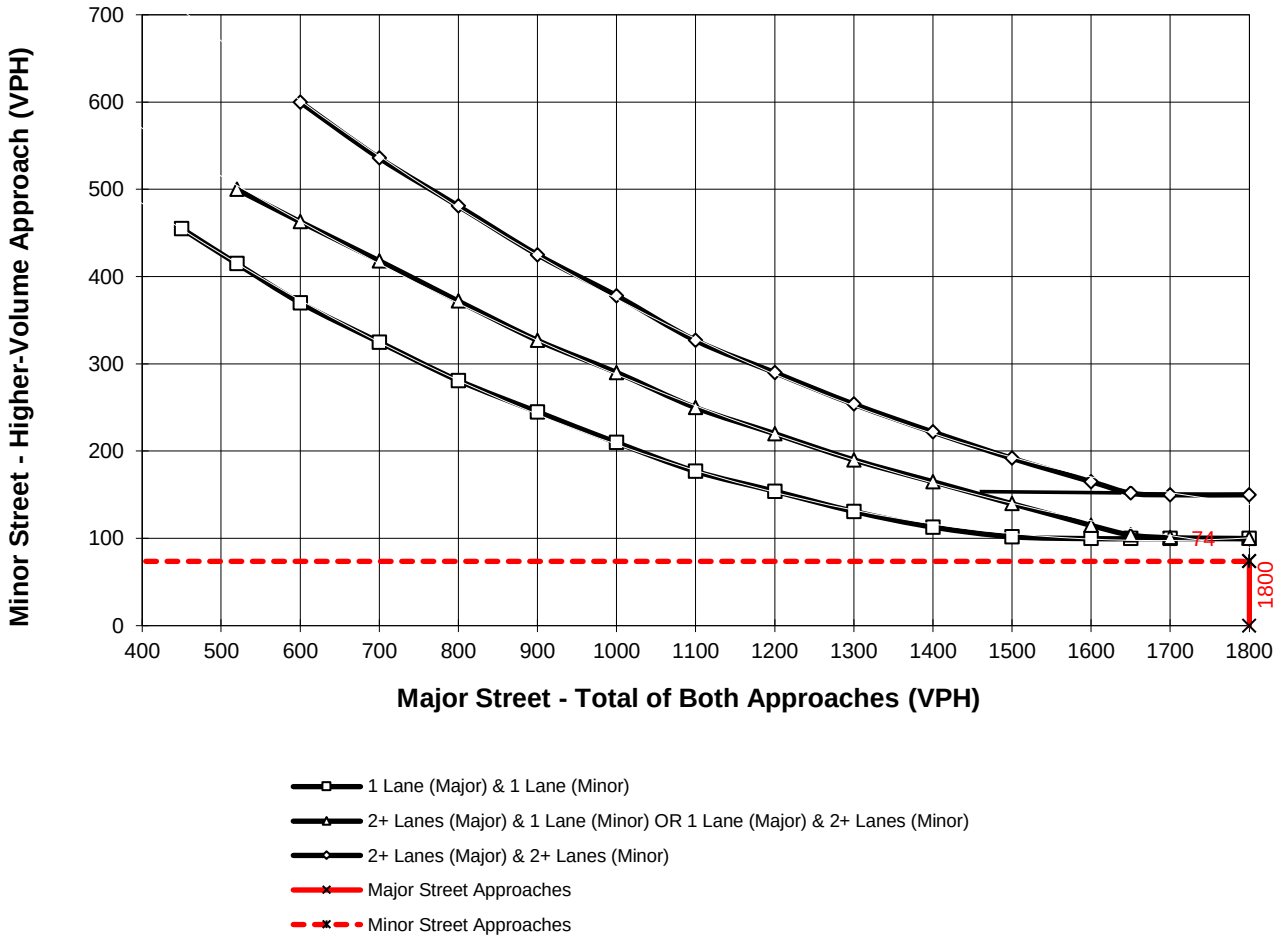
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2045) With Project Conditions - Weekday PM Peak Hour**

Major Street Name = **Rubidoux St.**
Total of Both Approaches (VPH) = **2466**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **24th St.**
High Volume Approach (VPH) = **74**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

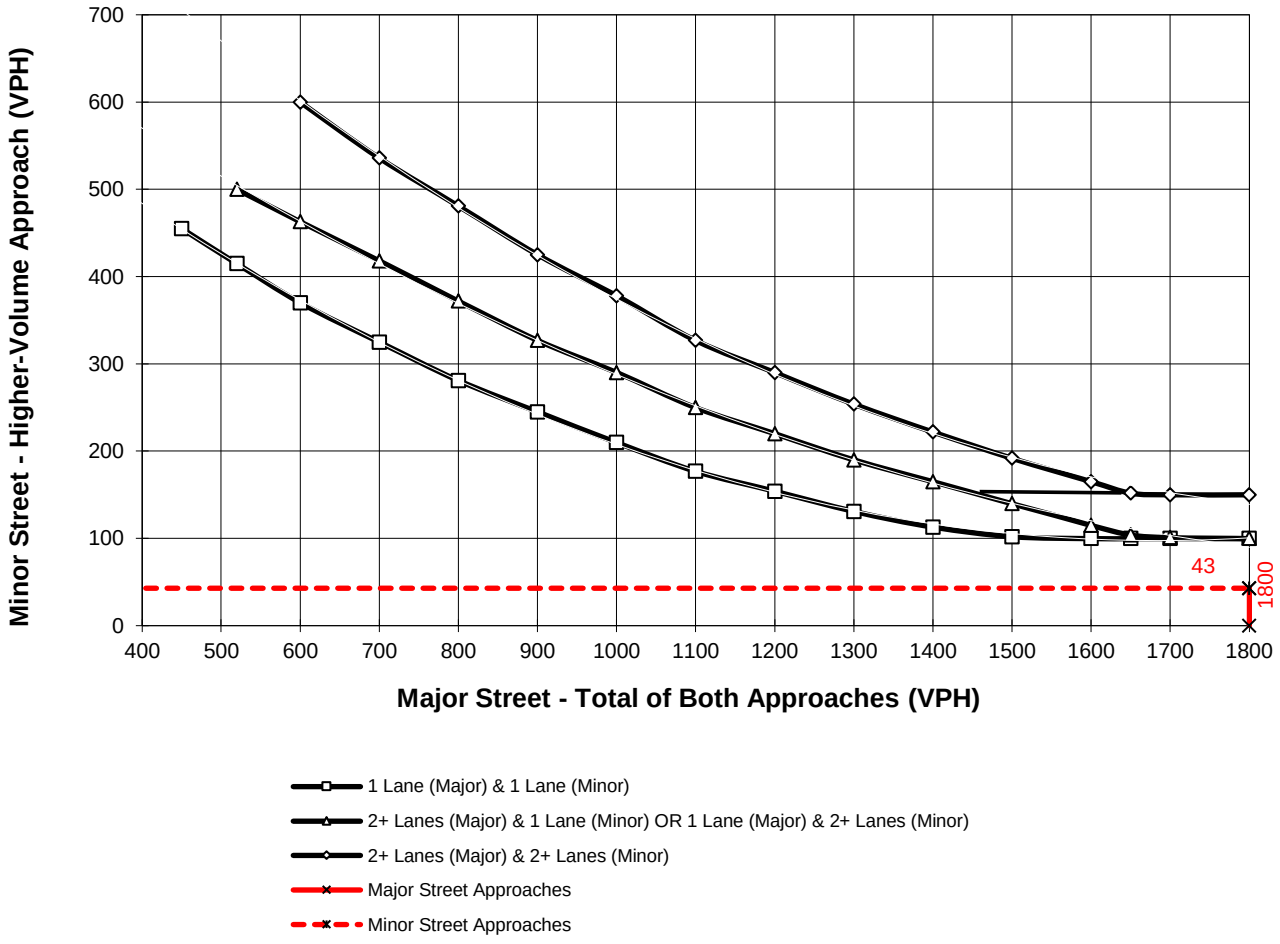
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2045) With Project Conditions - Weekday PM Peak Hour**

Major Street Name = **Rubidoux St.**
Total of Both Approaches (VPH) = **2347**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **26th St.**
High Volume Approach (VPH) = **43**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

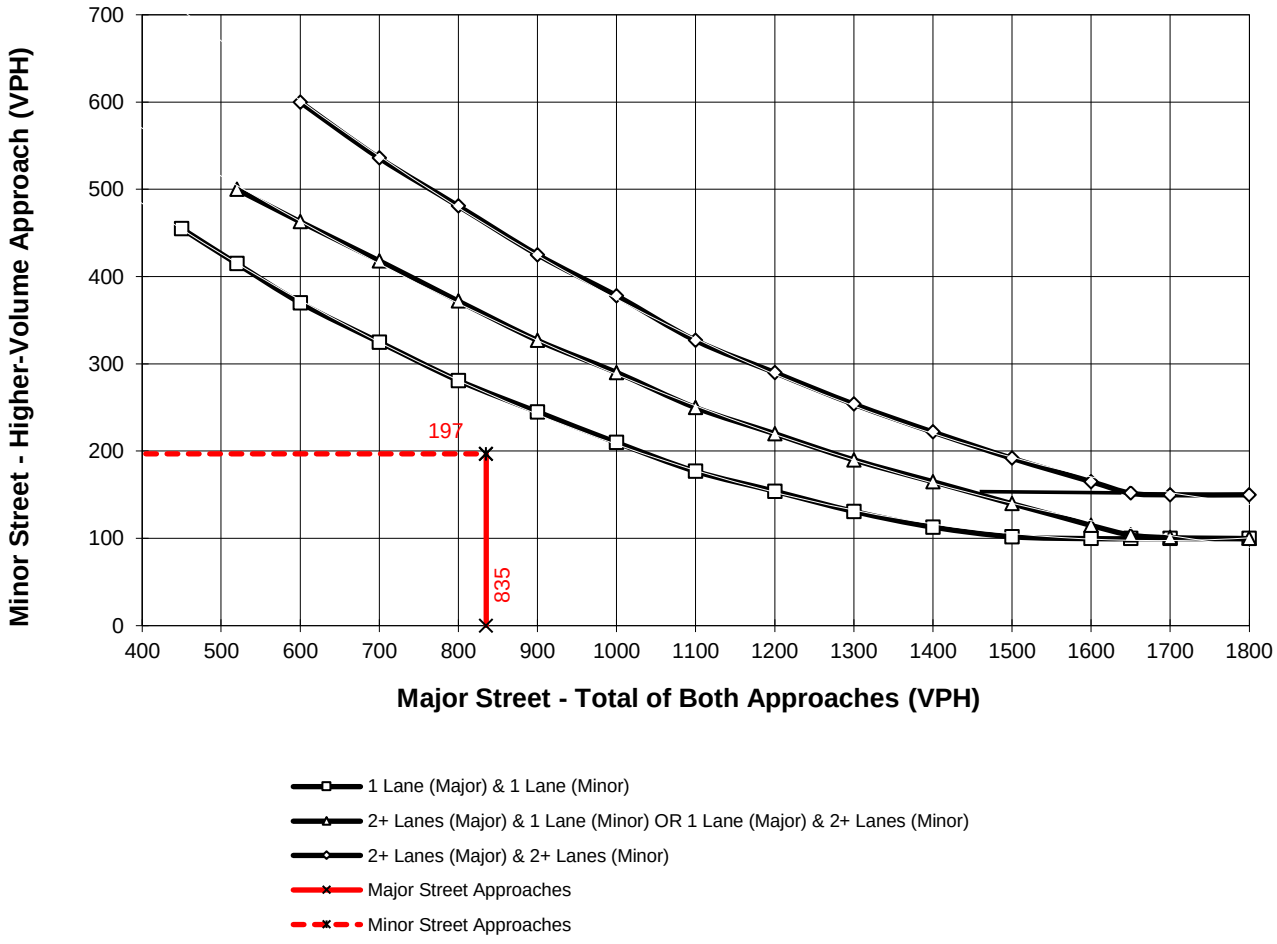
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2045) With Project Conditions - Weekday AM Peak Hour**

Major Street Name = **Frontage Rd.**
Total of Both Approaches (VPH) = **835**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Hall Av.**
High Volume Approach (VPH) = **197**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

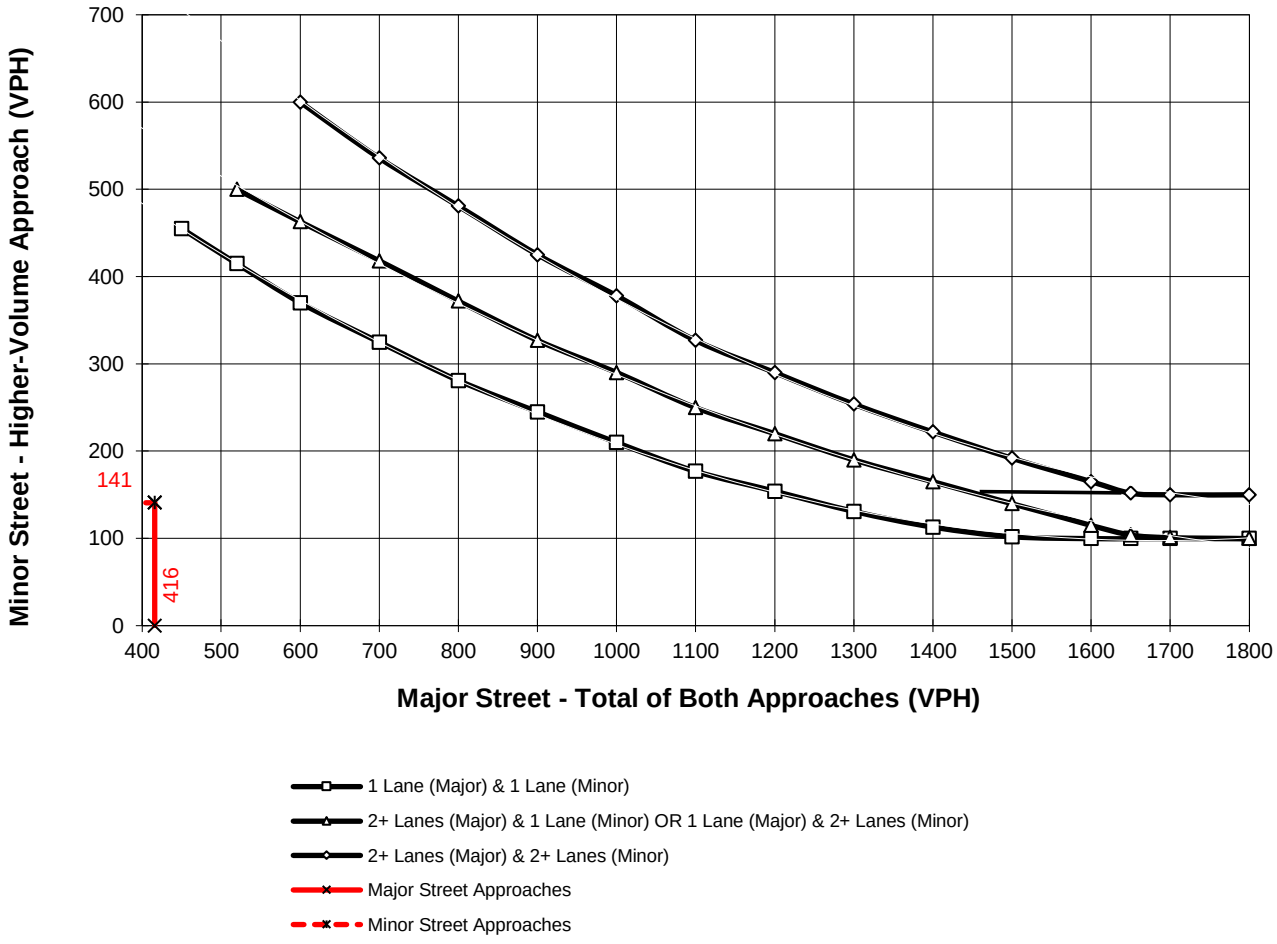
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2045) With Project Conditions - Weekday PM Peak Hour**

Major Street Name = **24th St.**
Total of Both Approaches (VPH) = **416**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Hall Av.**
High Volume Approach (VPH) = **141**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2045) With Project Conditions - Weekday PM Peak Hour**

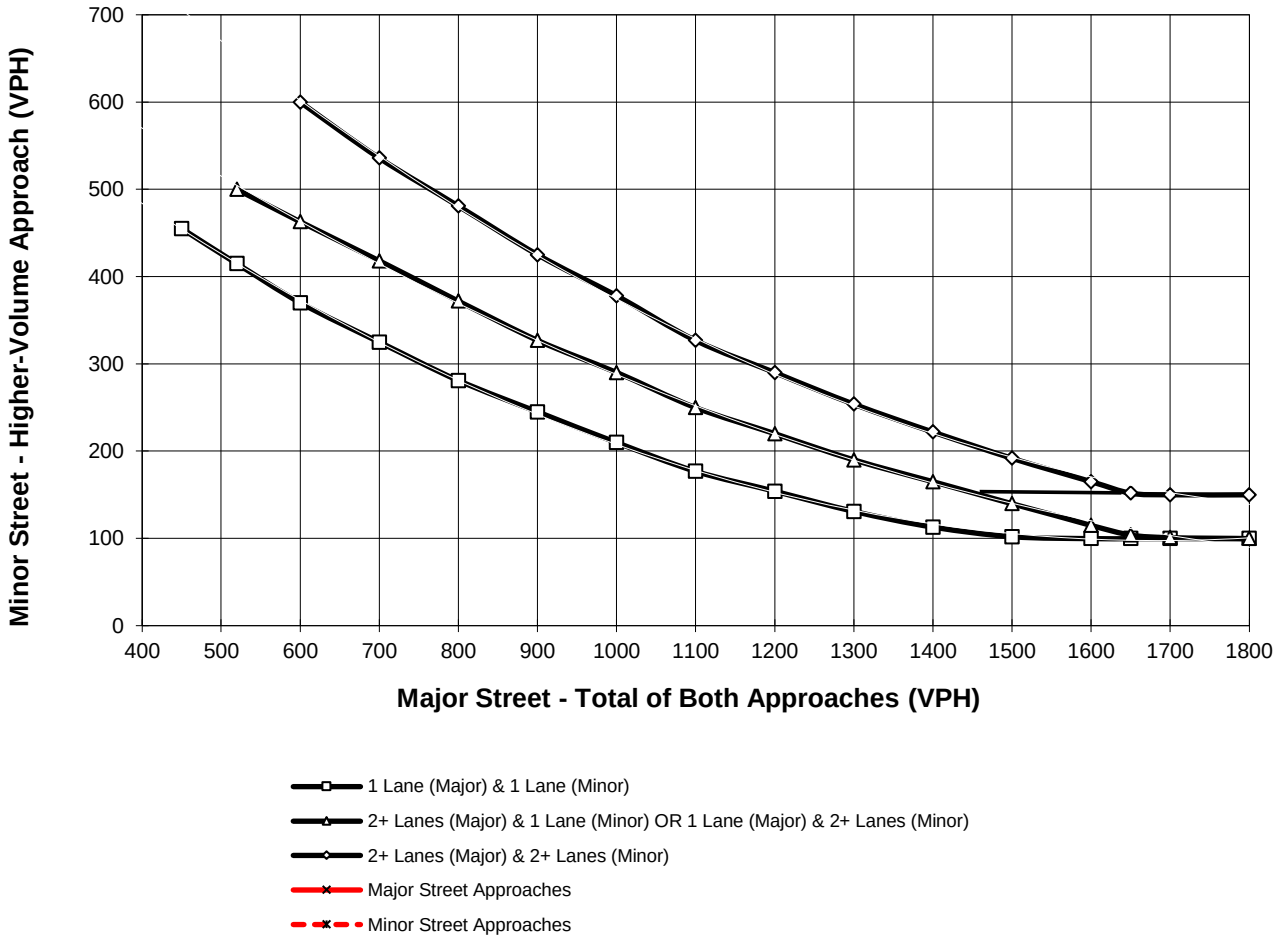
Major Street Name = **Hall Av.**

Total of Both Approaches (VPH) = **377**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **26th St.**

High Volume Approach (VPH) = **67**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

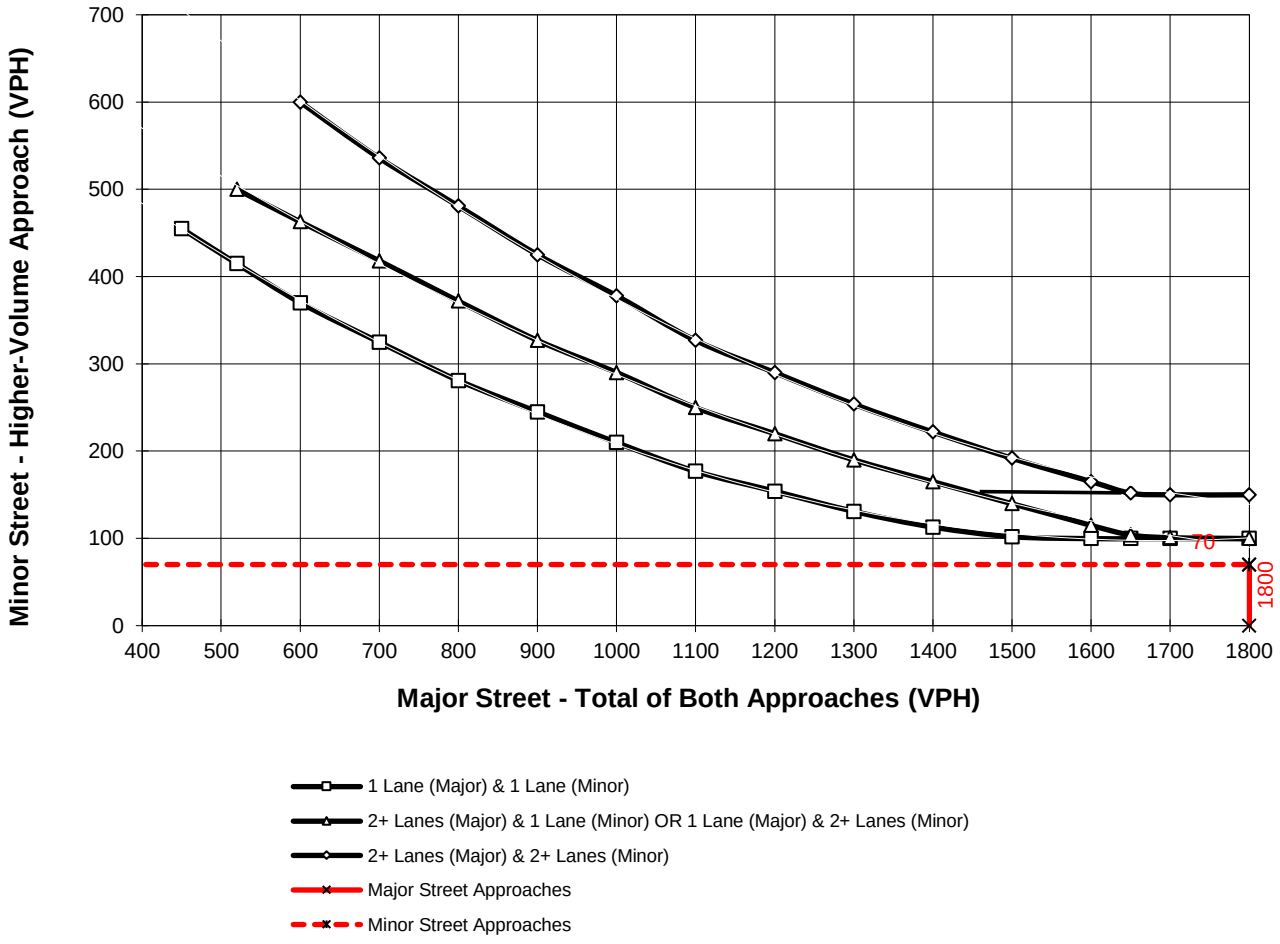
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2045) With Project Conditions - Weekday PM Peak Hour**

Major Street Name = **Market St.**
Total of Both Approaches (VPH) = **2212**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Redwood Dr.**
High Volume Approach (VPH) = **70**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

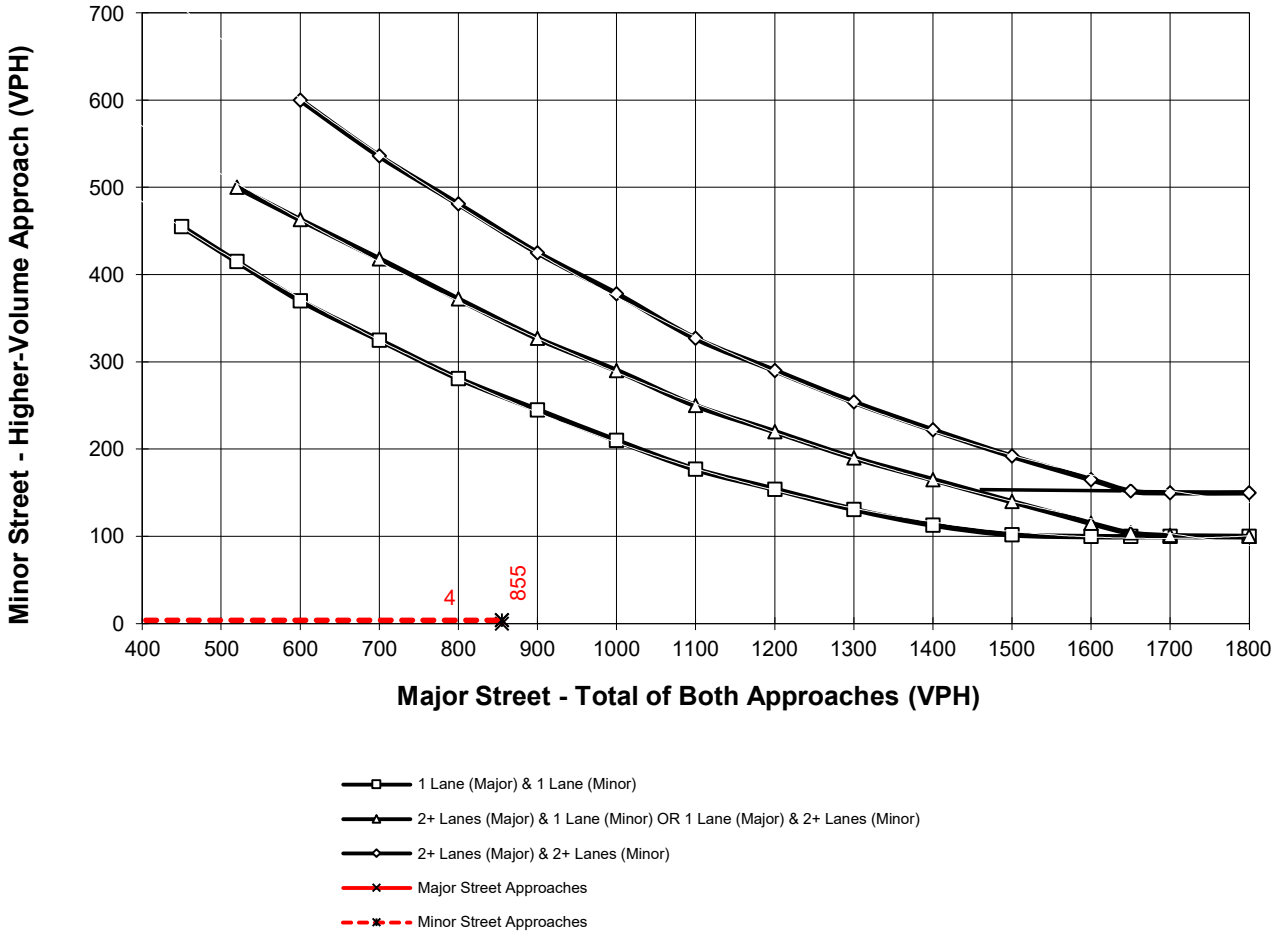
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **EAPC (2025) Conditions - Weekday AM Peak Hour**

Major Street Name = **25th St.**
Total of Both Approaches (VPH) = **855**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Van Dell Rd.**
High Volume Approach (VPH) = **4**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

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APPENDIX 10.5: CUMULATIVE HORIZON YEAR (2045) NO PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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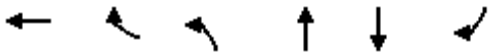


Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	511	420	250	1207	1943	594
v/c Ratio	0.89	0.79	0.83	0.55	0.93	0.64
Control Delay	49.9	40.2	68.5	14.3	42.0	9.7
Queue Delay	38.2	0.0	0.0	0.5	46.0	0.0
Total Delay	88.0	40.2	68.5	14.7	88.0	9.7
Queue Length 50th (ft)	310	232	164	149	~545	61
Queue Length 95th (ft)	#498	363	m211	m212	#642	190
Internal Link Dist (ft)	1745			340	476	
Turn Bay Length (ft)		480				
Base Capacity (vph)	624	572	328	2188	2087	930
Starvation Cap Reductn	0	0	0	478	0	0
Spillback Cap Reductn	144	0	0	0	766	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.06	0.73	0.76	0.71	1.47	0.64

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

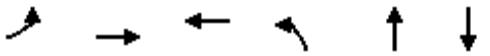
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	382	520	1080	828	592	1891
v/c Ratio	0.65	0.92	0.90	0.98	1.02	0.89
Control Delay	35.7	53.5	43.9	39.5	63.5	19.4
Queue Delay	0.0	0.0	0.0	0.0	30.7	46.9
Total Delay	35.7	53.5	43.9	39.5	94.2	66.4
Queue Length 50th (ft)	228	325	289	~372	~449	689
Queue Length 95th (ft)	335	#535	m#357	m#543	m#548	m#789
Internal Link Dist (ft)		2158	960			340
Turn Bay Length (ft)	340			555	400	
Base Capacity (vph)	631	602	1206	849	582	2119
Starvation Cap Reductn	0	0	0	0	124	743
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.86	0.90	0.98	1.29	1.37

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	63	344	828	73	778	1236
v/c Ratio	0.18	0.90	1.38	1.07	0.65	1.02
Control Delay	37.5	57.9	209.9	113.6	22.3	66.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.5	57.9	209.9	113.6	22.3	66.7
Queue Length 50th (ft)	37	177	~771	~60	219	~510
Queue Length 95th (ft)	74	#325	#996	m#70	m227	#635
Internal Link Dist (ft)		471	1307		110	1510
Turn Bay Length (ft)				75		
Base Capacity (vph)	379	410	602	68	1189	1217
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.84	1.38	1.07	0.65	1.02

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

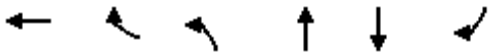
Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	798	120	47	1077	317	531
v/c Ratio	1.37	1.46	0.25	0.88	1.35	0.30
Control Delay	207.6	301.2	3.0	35.5	194.9	10.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	207.6	301.2	3.0	35.5	194.9	10.5
Queue Length 50th (ft)	~740	~116	0	296	~308	71
Queue Length 95th (ft)	#980	#236	0	360	m#353	m63
Internal Link Dist (ft)	1049			1396		322
Turn Bay Length (ft)			25		90	
Base Capacity (vph)	583	82	191	1389	234	1772
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.37	1.46	0.25	0.78	1.35	0.30

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	148	977	306	338	1105	237
v/c Ratio	0.67	0.60	0.81	0.12	0.62	0.26
Control Delay	54.0	1.7	35.1	7.3	14.5	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0
Total Delay	54.0	1.7	35.1	7.3	14.6	2.9
Queue Length 50th (ft)	79	0	189	63	150	10
Queue Length 95th (ft)	#177	0	#286	105	184	24
Internal Link Dist (ft)	1457			561	315	
Turn Bay Length (ft)			125			
Base Capacity (vph)	228	1615	421	2800	1831	936
Starvation Cap Reductn	0	0	0	0	137	0
Spillback Cap Reductn	0	23	0	53	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.61	0.73	0.12	0.65	0.25

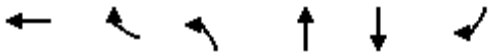
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	165	582	562	743	473
v/c Ratio	0.69	0.66	0.61	0.94	0.17
Control Delay	52.5	7.2	32.0	51.3	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	52.5	7.2	32.0	51.3	7.1
Queue Length 50th (ft)	90	0	148	346	83
Queue Length 95th (ft)	#166	50	201	#608	100
Internal Link Dist (ft)	1642		355		561
Turn Bay Length (ft)		350		125	
Base Capacity (vph)	260	908	937	810	2708
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.63	0.64	0.60	0.92	0.17

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	557	419	230	1548	1435	498
v/c Ratio	0.97	0.76	0.83	0.73	0.70	0.54
Control Delay	66.9	38.4	81.2	11.5	30.1	4.5
Queue Delay	40.9	0.0	0.0	0.2	0.1	0.0
Total Delay	107.8	38.4	81.2	11.7	30.3	4.5
Queue Length 50th (ft)	401	242	150	95	310	0
Queue Length 95th (ft)	#641	375	#279	237	365	65
Internal Link Dist (ft)	1745			340	476	
Turn Bay Length (ft)		480				
Base Capacity (vph)	577	553	295	2120	2059	918
Starvation Cap Reductn	0	0	0	105	0	0
Spillback Cap Reductn	76	0	0	0	95	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.11	0.76	0.78	0.77	0.73	0.54

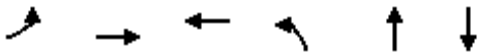
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	241	227	1322	877	471	1369
v/c Ratio	0.73	0.66	0.61	0.87	0.90	0.51
Control Delay	54.4	42.8	24.1	22.6	47.8	3.0
Queue Delay	0.1	0.1	0.0	0.0	12.3	0.5
Total Delay	54.5	42.8	24.1	22.6	60.1	3.5
Queue Length 50th (ft)	170	132	321	447	325	41
Queue Length 95th (ft)	240	201	m383	m#587	m410	m36
Internal Link Dist (ft)		2158	960			340
Turn Bay Length (ft)	340			555	400	
Base Capacity (vph)	523	526	2158	1006	600	2671
Starvation Cap Reductn	0	0	0	0	112	759
Spillback Cap Reductn	15	14	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.44	0.61	0.87	0.97	0.72

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	52	257	990	122	1099	1142
v/c Ratio	0.18	0.79	1.46	1.77	0.96	0.98
Control Delay	38.9	48.4	243.9	376.8	28.9	59.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.9	48.4	243.9	376.8	28.9	59.1
Queue Length 50th (ft)	32	125	~960	~128	338	420
Queue Length 95th (ft)	65	210	#1211	m#127	m#405	#632
Internal Link Dist (ft)		471	1307		110	1510
Turn Bay Length (ft)				75		
Base Capacity (vph)	377	396	678	69	1144	1169
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.65	1.46	1.77	0.96	0.98

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

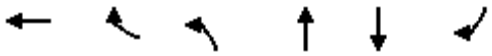
Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	1086	107	18	1169	204	731
v/c Ratio	1.71	1.30	0.09	0.92	1.73	0.44
Control Delay	352.3	243.3	1.0	44.7	359.5	14.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	352.3	243.3	1.0	44.7	359.5	14.6
Queue Length 50th (ft)	~1125	~97	0	387	~234	128
Queue Length 95th (ft)	#1380	#211	0	#495	m#224	m111
Internal Link Dist (ft)	1049			1396		322
Turn Bay Length (ft)			25		90	
Base Capacity (vph)	635	82	191	1324	118	1673
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.71	1.30	0.09	0.88	1.73	0.44

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	162	718	559	338	1147	205
v/c Ratio	0.86	0.44	0.93	0.12	0.81	0.27
Control Delay	79.9	0.9	46.8	10.1	26.4	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.7	0.0
Total Delay	79.9	0.9	46.8	10.1	27.1	4.3
Queue Length 50th (ft)	93	0	350	72	323	28
Queue Length 95th (ft)	#208	0	#518	m103	187	11
Internal Link Dist (ft)	1457			561	315	
Turn Bay Length (ft)			125			
Base Capacity (vph)	188	1615	621	2827	1412	756
Starvation Cap Reductn	0	0	0	0	71	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.44	0.90	0.12	0.86	0.27

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	112	784	847	705	594
v/c Ratio	0.44	0.82	0.76	1.04	0.22
Control Delay	39.9	14.9	33.3	78.8	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	39.9	14.9	33.3	78.8	3.8
Queue Length 50th (ft)	59	40	217	~480	33
Queue Length 95th (ft)	106	107	303	m#677	m70
Internal Link Dist (ft)	1642		355		561
Turn Bay Length (ft)		350		125	
Base Capacity (vph)	322	1036	1112	678	2678
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.35	0.76	0.76	1.04	0.22

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

APPENDIX 10.6: CUMULATIVE HORIZON YEAR (2045) PLUS PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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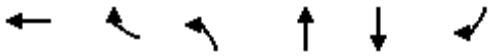


Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	597	420	280	1214	1971	594
v/c Ratio	0.97	0.74	0.89	0.58	1.03	0.67
Control Delay	62.0	36.1	66.0	16.8	62.8	10.7
Queue Delay	43.4	0.0	0.0	0.7	31.0	0.0
Total Delay	105.4	36.1	66.0	17.4	93.8	10.7
Queue Length 50th (ft)	398	232	189	158	~560	64
Queue Length 95th (ft)	#643	363	m214	m160	#657	196
Internal Link Dist (ft)	1745			340	476	
Turn Bay Length (ft)		480				
Base Capacity (vph)	625	571	328	2099	1919	888
Starvation Cap Reductn	0	0	0	486	0	0
Spillback Cap Reductn	143	0	0	0	853	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.24	0.74	0.85	0.75	1.85	0.67

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

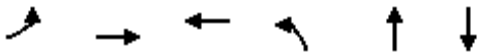
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	382	663	1117	847	592	2011
v/c Ratio	0.61	1.10	1.03	1.02	1.02	0.99
Control Delay	33.2	99.9	65.5	51.0	56.4	26.6
Queue Delay	0.0	0.0	0.0	0.0	30.7	40.6
Total Delay	33.2	99.9	65.5	51.0	87.1	67.2
Queue Length 50th (ft)	228	~537	~315	~414	~451	760
Queue Length 95th (ft)	335	#777	m#364	m#540	m#449	m755
Internal Link Dist (ft)		2158	960			340
Turn Bay Length (ft)	340			555	400	
Base Capacity (vph)	631	601	1084	827	582	2034
Starvation Cap Reductn	0	0	0	0	124	731
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	1.10	1.03	1.02	1.29	1.54

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	63	344	868	73	931	1285
v/c Ratio	0.18	0.90	1.44	1.07	0.78	1.06
Control Delay	37.5	58.2	237.8	86.4	24.6	78.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.5	58.2	237.8	86.4	24.6	78.2
Queue Length 50th (ft)	37	177	~829	~60	295	~548
Queue Length 95th (ft)	74	#327	#1056	m#64	m271	#673
Internal Link Dist (ft)		471	1307		110	1510
Turn Bay Length (ft)				75		
Base Capacity (vph)	379	409	602	68	1187	1217
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.84	1.44	1.07	0.78	1.06

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

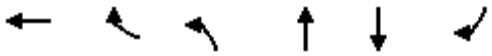
Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	913	120	47	1105	325	538
v/c Ratio	1.57	1.46	0.25	0.89	1.48	0.30
Control Delay	292.7	301.2	3.0	36.4	250.3	10.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	292.7	301.2	3.0	36.4	250.3	10.2
Queue Length 50th (ft)	~916	~116	0	311	~335	69
Queue Length 95th (ft)	#1162	#236	0	381	m#347	m60
Internal Link Dist (ft)	1049			1396		322
Turn Bay Length (ft)			25		90	
Base Capacity (vph)	582	82	191	1384	219	1772
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.57	1.46	0.25	0.80	1.48	0.30

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	148	1096	306	366	1141	237
v/c Ratio	0.68	0.68	0.81	0.13	0.64	0.26
Control Delay	54.9	2.3	33.6	7.4	14.4	2.8
Queue Delay	0.0	0.2	0.0	0.0	0.1	0.0
Total Delay	54.9	2.5	33.6	7.4	14.6	2.8
Queue Length 50th (ft)	79	0	190	73	155	9
Queue Length 95th (ft)	#177	0	#286	115	195	22
Internal Link Dist (ft)	1457			561	315	
Turn Bay Length (ft)			125			
Base Capacity (vph)	225	1615	421	2800	1831	936
Starvation Cap Reductn	0	0	0	0	122	0
Spillback Cap Reductn	0	74	0	166	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.71	0.73	0.14	0.67	0.25

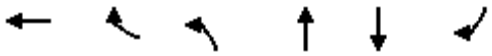
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	165	582	590	772	480
v/c Ratio	0.69	0.66	0.67	0.95	0.18
Control Delay	52.5	7.2	34.1	51.9	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	52.5	7.2	34.1	51.9	7.0
Queue Length 50th (ft)	90	0	156	378	91
Queue Length 95th (ft)	#166	50	213	#647	104
Internal Link Dist (ft)	1642		355		561
Turn Bay Length (ft)		350		125	
Base Capacity (vph)	260	908	909	820	2708
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.63	0.64	0.65	0.94	0.18

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	582	419	361	1575	1443	498
v/c Ratio	0.98	0.74	1.22	0.76	0.74	0.56
Control Delay	69.4	36.9	170.8	13.0	32.2	4.7
Queue Delay	38.2	0.0	0.0	0.4	0.2	0.0
Total Delay	107.6	36.9	170.8	13.4	32.5	4.7
Queue Length 50th (ft)	~435	242	~315	76	312	0
Queue Length 95th (ft)	#684	375	#508	302	368	65
Internal Link Dist (ft)	1745			340	476	
Turn Bay Length (ft)		480				
Base Capacity (vph)	593	567	295	2116	2004	907
Starvation Cap Reductn	0	0	0	152	0	0
Spillback Cap Reductn	77	0	0	0	110	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.13	0.74	1.22	0.80	0.76	0.55

Intersection Summary

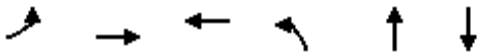
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	263	243	1472	954	471	1400
v/c Ratio	0.75	0.65	0.70	0.96	0.90	0.53
Control Delay	54.0	38.5	26.0	28.3	46.1	3.9
Queue Delay	0.2	0.2	0.0	0.0	12.3	0.6
Total Delay	54.3	38.6	26.0	28.3	58.4	4.5
Queue Length 50th (ft)	185	130	376	532	325	47
Queue Length 95th (ft)	256	201	m386	m#549	m407	m103
Internal Link Dist (ft)		2158	960			340
Turn Bay Length (ft)	340			555	400	
Base Capacity (vph)	523	531	2092	994	600	2625
Starvation Cap Reductn	0	0	0	0	112	756
Spillback Cap Reductn	31	29	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.48	0.70	0.96	0.97	0.75

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	52	257	1001	122	1146	1315
v/c Ratio	0.18	0.79	1.48	1.77	1.00	1.12
Control Delay	38.9	48.4	250.8	376.9	35.3	103.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.9	48.4	250.8	376.9	35.3	103.0
Queue Length 50th (ft)	32	125	~977	~129	~402	~576
Queue Length 95th (ft)	65	210	#1229	m#124	m#423	#771
Internal Link Dist (ft)		471	1307		110	1510
Turn Bay Length (ft)				75		
Base Capacity (vph)	377	396	678	69	1144	1170
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.65	1.48	1.77	1.00	1.12

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

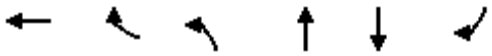
Lane Group	EBT	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	1124	107	18	1176	239	757
v/c Ratio	1.77	1.30	0.09	0.92	2.06	0.45
Control Delay	379.6	243.3	1.0	45.1	501.5	13.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	379.6	243.3	1.0	45.1	501.5	13.5
Queue Length 50th (ft)	~1183	~97	0	390	~285	123
Queue Length 95th (ft)	#1441	#211	0	#520	m#245	m96
Internal Link Dist (ft)	1049			1396		322
Turn Bay Length (ft)			25		90	
Base Capacity (vph)	634	82	191	1324	116	1673
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.77	1.30	0.09	0.89	2.06	0.45

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	162	754	559	345	1279	205
v/c Ratio	0.87	0.47	0.93	0.12	0.91	0.27
Control Delay	80.6	1.0	47.1	9.8	31.6	3.5
Queue Delay	0.0	0.0	0.0	0.0	2.2	0.0
Total Delay	80.6	1.0	47.1	9.8	33.8	3.5
Queue Length 50th (ft)	93	0	350	78	374	17
Queue Length 95th (ft)	#208	0	#520	m105	#476	10
Internal Link Dist (ft)	1457			561	315	
Turn Bay Length (ft)			125			
Base Capacity (vph)	187	1615	621	2827	1412	756
Starvation Cap Reductn	0	0	0	0	59	0
Spillback Cap Reductn	0	13	0	29	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.47	0.90	0.12	0.95	0.27

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	112	784	854	811	619
v/c Ratio	0.43	0.84	0.77	1.20	0.23
Control Delay	39.5	17.0	33.8	133.0	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	39.5	17.0	33.8	133.0	3.1
Queue Length 50th (ft)	58	49	224	~613	39
Queue Length 95th (ft)	106	120	306	m#725	m64
Internal Link Dist (ft)	1642		355		561
Turn Bay Length (ft)		350		125	
Base Capacity (vph)	322	1012	1108	677	2670
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.35	0.77	0.77	1.20	0.23

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

APPENDIX 10.7: CUMULATIVE HORIZON YEAR (2045) PLUS PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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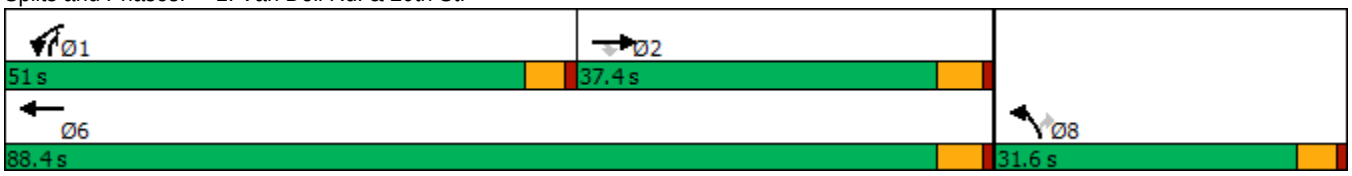
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	460	5	742	474	5	228
Future Volume (vph)	460	5	742	474	5	228
Turn Type	NA	Perm	Prot	NA	Prot	pm+ov
Protected Phases	2		1	6	8	1
Permitted Phases		2				8
Detector Phase	2	2	1	6	8	1
Switch Phase						
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	27.2	27.2	9.6	15.2	31.6	9.6
Total Split (s)	37.4	37.4	51.0	88.4	31.6	51.0
Total Split (%)	31.2%	31.2%	42.5%	73.7%	26.3%	42.5%
Yellow Time (s)	4.2	4.2	3.6	4.2	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.2	4.6	5.2	4.6	4.6
Lead/Lag	Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes	Yes			Yes
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)	32.7	32.7	47.1	87.9	12.9	55.0
Actuated g/C Ratio	0.34	0.34	0.48	0.90	0.13	0.56
v/c Ratio	0.88	0.01	1.04	0.34	0.03	0.30
Control Delay	49.7	19.2	68.8	3.6	38.4	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.7	19.2	68.8	3.6	38.4	8.6
LOS	D	B	E	A	D	A
Approach Delay	49.4			43.4	9.3	
Approach LOS	D			D	A	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 97.6	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.04	
Intersection Signal Delay: 40.7	Intersection LOS: D
Intersection Capacity Utilization 85.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 1: Van Dell Rd. & 20th St.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	460	5	742	474	5	228
Future Volume (veh/h)	460	5	742	474	5	228
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	561	6	905	578	6	217
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	590	500	818	1534	176	885
Arrive On Green	0.31	0.31	0.45	0.81	0.10	0.10
Sat Flow, veh/h	1900	1610	1810	1900	1810	1610
Grp Volume(v), veh/h	561	6	905	578	6	217
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1900	1810	1610
Q Serve(g_s), s	29.7	0.3	46.4	8.6	0.3	7.2
Cycle Q Clear(g_c), s	29.7	0.3	46.4	8.6	0.3	7.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	590	500	818	1534	176	885
V/C Ratio(X)	0.95	0.01	1.11	0.38	0.03	0.25
Avail Cap(c_a), veh/h	596	505	818	1540	476	1152
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.6	24.5	28.1	2.7	42.0	12.0
Incr Delay (d2), s/veh	25.2	0.0	64.7	0.2	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.9	0.1	32.7	1.7	0.1	2.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	59.8	24.5	92.9	2.9	42.0	12.2
LnGrp LOS	E	C	F	A	D	B
Approach Vol, veh/h	567			1483	223	
Approach Delay, s/veh	59.5			57.8	13.0	
Approach LOS	E			E	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	51.0	37.1				88.1	14.6
Change Period (Y+Rc), s	4.6	5.2				5.2	4.6
Max Green Setting (Gmax), s	46.4	32.2				83.2	27.0
Max Q Clear Time (g_c+I1), s	48.4	31.7				10.6	9.2
Green Ext Time (p_c), s	0.0	0.2				3.8	0.7

Intersection Summary		
HCM 6th Ctrl Delay		53.8
HCM 6th LOS		D

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	6	647	14	1131	58	9	2	21
Future Volume (vph)	6	647	14	1131	58	9	2	21
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	27.8	27.8	27.8	27.8	31.6	31.6	31.6	31.6
Total Split (s)	88.4	88.4	88.4	88.4	31.6	31.6	31.6	31.6
Total Split (%)	73.7%	73.7%	73.7%	73.7%	26.3%	26.3%	26.3%	26.3%
Yellow Time (s)	4.8	4.8	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8		4.6		4.6
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	82.9	82.9	82.9	82.9		14.4		14.4
Actuated g/C Ratio	0.77	0.77	0.77	0.77		0.13		0.13
v/c Ratio	0.10	0.58	0.04	0.95		0.52		0.24
Control Delay	8.7	8.1	4.6	28.3		48.1		23.6
Queue Delay	0.0	0.0	0.0	21.8		0.0		0.0
Total Delay	8.7	8.1	4.6	50.1		48.1		23.6
LOS	A	A	A	D		D		C
Approach Delay		8.1		49.5		48.1		23.6
Approach LOS		A		D		D		C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 107.7	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 34.3	Intersection LOS: C
Intersection Capacity Utilization 79.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4: Avalon St. & 20th St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	647	36	14	1131	0	58	9	18	2	21	28
Future Volume (veh/h)	6	647	36	14	1131	0	58	9	18	2	21	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	7	799	44	17	1396	0	72	11	22	2	26	35
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	154	1403	77	485	1494	0	167	25	33	42	75	97
Arrive On Green	0.79	0.79	0.79	0.79	0.79	0.00	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	393	1784	98	663	1900	0	1000	251	331	18	747	956
Grp Volume(v), veh/h	7	0	843	17	1396	0	105	0	0	63	0	0
Grp Sat Flow(s),veh/h/ln	393	0	1882	663	1900	0	1582	0	0	1721	0	0
Q Serve(g_s), s	1.3	0.0	16.0	0.9	54.6	0.0	2.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	56.0	0.0	16.0	16.9	54.6	0.0	5.6	0.0	0.0	3.1	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.00	0.69		0.21	0.03		0.56
Lane Grp Cap(c), veh/h	154	0	1480	485	1494	0	225	0	0	214	0	0
V/C Ratio(X)	0.05	0.00	0.57	0.04	0.93	0.00	0.47	0.00	0.00	0.29	0.00	0.00
Avail Cap(c_a), veh/h	197	0	1684	556	1699	0	503	0	0	541	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	30.5	0.0	3.8	7.1	7.9	0.0	39.7	0.0	0.0	38.7	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.3	0.0	9.4	0.0	1.5	0.0	0.0	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	3.1	0.1	14.0	0.0	2.4	0.0	0.0	1.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.6	0.0	4.2	7.1	17.3	0.0	41.2	0.0	0.0	39.5	0.0	0.0
LnGrp LOS	C	A	A	A	B	A	D	A	A	D	A	A
Approach Vol, veh/h		850			1413			105			63	
Approach Delay, s/veh		4.4			17.2			41.2			39.5	
Approach LOS		A			B			D			D	

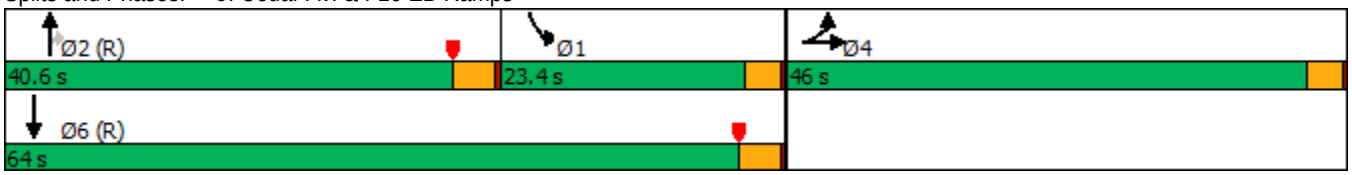
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		78.4		13.9		78.4		13.9				
Change Period (Y+Rc), s		5.8		4.6		5.8		4.6				
Max Green Setting (Gmax), s		82.6		27.0		82.6		27.0				
Max Q Clear Time (g_c+I1), s		58.0		5.1		56.6		7.6				
Green Ext Time (p_c), s		6.3		0.3		16.0		0.5				

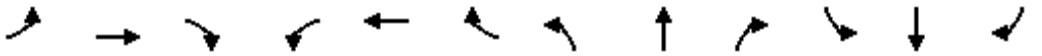
Intersection Summary												
HCM 6th Ctrl Delay			14.3									
HCM 6th LOS			B									

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	395	0	1039	788	551	1870
Future Volume (vph)	395	0	1039	788	551	1870
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	46.0	46.0	40.6	40.6	23.4	64.0
Total Split (%)	41.8%	41.8%	36.9%	36.9%	21.3%	58.2%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	42.5	42.5	33.4	33.4	23.1	60.0
Actuated g/C Ratio	0.39	0.39	0.30	0.30	0.21	0.55
v/c Ratio	0.58	1.06	0.71	0.84	0.81	1.02
Control Delay	30.9	83.0	29.5	19.0	34.6	31.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	31.5
Total Delay	30.9	83.0	29.5	19.0	34.6	63.0
LOS	C	F	C	B	C	E
Approach Delay		64.0	24.9			56.6
Approach LOS		E	C			E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.06	
Intersection Signal Delay: 46.9	Intersection LOS: D
Intersection Capacity Utilization 103.3%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	395	0	577	0	0	0	0	1039	788	551	1870	0
Future Volume (veh/h)	395	0	577	0	0	0	0	1039	788	551	1870	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	425	0	568				0	1117	573	592	2011	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	675	0	601				0	1726	535	665	2017	0
Arrive On Green	0.37	0.00	0.37				0.00	0.11	0.11	0.38	1.00	0.00
Sat Flow, veh/h	1810	0	1610				0	5358	1609	3510	3705	0
Grp Volume(v), veh/h	425	0	568				0	1117	573	592	2011	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1729	1609	1755	1805	0
Q Serve(g_s), s	21.2	0.0	37.6				0.0	22.7	36.6	17.4	0.0	0.0
Cycle Q Clear(g_c), s	21.2	0.0	37.6				0.0	22.7	36.6	17.4	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	675	0	601				0	1726	535	665	2017	0
V/C Ratio(X)	0.63	0.00	0.95				0.00	0.65	1.07	0.89	1.00	0.00
Avail Cap(c_a), veh/h	699	0	622				0	1726	535	665	2017	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.24	0.24	0.09	0.09	0.00
Uniform Delay (d), s/veh	28.2	0.0	33.4				0.0	42.8	49.0	33.1	0.0	0.0
Incr Delay (d2), s/veh	1.7	0.0	23.1				0.0	0.5	41.2	1.5	5.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	0.0	17.5				0.0	10.5	21.8	5.7	1.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.0	0.0	56.4				0.0	43.2	90.1	34.6	5.4	0.0
LnGrp LOS	C	A	E				A	D	F	C	A	A
Approach Vol, veh/h		993						1690			2603	
Approach Delay, s/veh		45.1						59.1			12.1	
Approach LOS		D						E			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	24.8	40.6		44.6		65.4
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	19.9	* 37		42.5		60.0
Max Q Clear Time (g_c+I1), s	19.4	38.6		39.6		2.0
Green Ext Time (p_c), s	0.1	0.0		1.5		17.2

Intersection Summary	
HCM 6th Ctrl Delay	33.3
HCM 6th LOS	C

Notes

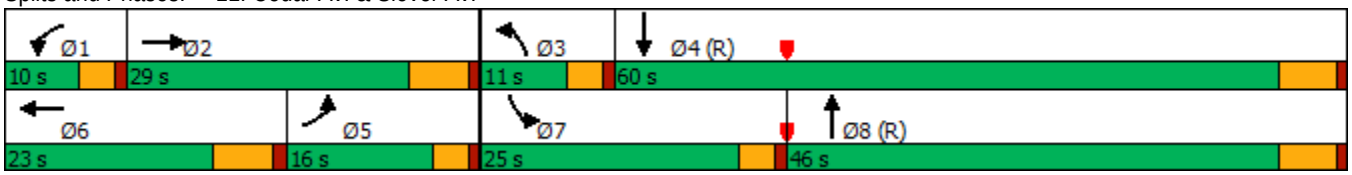
User approved volume balancing among the lanes for turning movement.

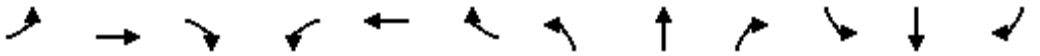
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	344	224	83	351	100	929	280	1354
Future Volume (vph)	344	224	83	351	100	929	280	1354
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	29.0	8.0	23.0	8.0	32.7	8.0	24.7
Total Split (s)	16.0	29.0	10.0	23.0	11.0	46.0	25.0	60.0
Total Split (%)	14.5%	26.4%	9.1%	20.9%	10.0%	41.8%	22.7%	54.5%
Yellow Time (s)	3.0	5.0	3.0	5.0	3.0	4.7	3.0	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	6.0	4.0	5.7	4.0	5.7
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	12.4	22.8	6.7	17.1	7.5	40.7	20.1	53.3
Actuated g/C Ratio	0.11	0.21	0.06	0.16	0.07	0.37	0.18	0.48
v/c Ratio	0.90	0.48	0.78	0.91	0.84	0.78	0.88	0.88
Control Delay	75.2	27.6	94.5	61.2	92.5	49.3	62.3	34.9
Queue Delay	0.0	0.0	0.0	4.5	0.0	0.7	0.0	0.5
Total Delay	75.2	27.6	94.5	65.7	92.5	50.0	62.3	35.4
LOS	E	C	F	E	F	D	E	D
Approach Delay		50.5		69.7		53.8		39.7
Approach LOS		D		E		D		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 49.6	Intersection LOS: D
Intersection Capacity Utilization 88.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 11: Cedar Av. & Slover Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	344	224	146	83	351	162	100	929	73	280	1354	124
Future Volume (veh/h)	344	224	146	83	351	162	100	929	73	280	1354	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	355	231	129	86	362	136	103	958	73	289	1396	127
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	383	515	277	99	399	147	115	1227	93	322	1591	144
Arrive On Green	0.11	0.23	0.23	0.05	0.15	0.15	0.06	0.36	0.36	0.06	0.16	0.16
Sat Flow, veh/h	3510	2264	1218	1810	2579	954	1810	3399	259	1810	3347	303
Grp Volume(v), veh/h	355	182	178	86	252	246	103	509	522	289	750	773
Grp Sat Flow(s),veh/h/ln	1755	1805	1677	1810	1805	1728	1810	1805	1853	1810	1805	1845
Q Serve(g_s), s	11.0	9.6	10.1	5.2	15.1	15.5	6.2	27.6	27.6	17.5	44.6	45.1
Cycle Q Clear(g_c), s	11.0	9.6	10.1	5.2	15.1	15.5	6.2	27.6	27.6	17.5	44.6	45.1
Prop In Lane	1.00		0.73	1.00		0.55	1.00		0.14	1.00		0.16
Lane Grp Cap(c), veh/h	383	410	381	99	279	267	115	652	669	322	858	877
V/C Ratio(X)	0.93	0.44	0.47	0.87	0.90	0.92	0.89	0.78	0.78	0.90	0.87	0.88
Avail Cap(c_a), veh/h	383	410	381	99	279	267	115	661	679	345	891	911
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.86	0.86	0.33	0.33	0.33
Uniform Delay (d), s/veh	48.6	36.5	36.7	51.6	45.7	45.8	51.1	31.3	31.3	50.8	43.1	43.3
Incr Delay (d2), s/veh	28.4	0.8	0.9	52.0	30.0	35.0	47.5	7.8	7.6	9.8	4.4	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	4.1	4.0	3.8	9.1	9.2	4.3	12.7	13.0	9.3	22.5	23.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.9	37.3	37.6	103.6	75.7	80.9	98.7	39.1	38.9	60.6	47.6	48.0
LnGrp LOS	E	D	D	F	E	F	F	D	D	E	D	D
Approach Vol, veh/h		715			584			1134			1812	
Approach Delay, s/veh		57.1			82.0			44.4			49.8	
Approach LOS		E			F			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	31.0	11.0	58.0	18.0	23.0	23.6	45.4
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	6.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	6.0	23.0	7.0	54.3	12.0	* 17	21.0	40.3
Max Q Clear Time (g_c+I1), s	7.2	12.1	8.2	47.1	13.0	17.5	19.5	29.6
Green Ext Time (p_c), s	0.0	1.4	0.0	5.0	0.0	0.0	0.1	4.5

Intersection Summary	
HCM 6th Ctrl Delay	54.0
HCM 6th LOS	D

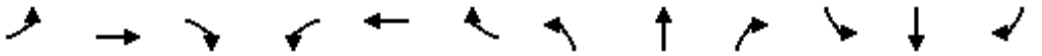
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	77	135	122	120	46	730	176	1505
Future Volume (vph)	77	135	122	120	46	730	176	1505
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	33.0	33.0	33.0	33.0	16.0	51.6	25.4	61.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	14.5%	46.9%	23.1%	55.5%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)	24.0	24.0	24.0	24.0	13.2	53.4	16.6	56.8
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.12	0.49	0.15	0.52
v/c Ratio	0.88	0.66	0.95	0.78	0.24	0.52	0.72	0.91
Control Delay	105.3	41.4	106.0	45.1	62.8	15.5	46.1	35.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	105.3	41.4	106.0	45.1	62.8	15.5	46.1	35.0
LOS	F	D	F	D	E	B	D	D
Approach Delay		56.7		62.8		18.0		36.2
Approach LOS		E		E		B		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 36.9	Intersection LOS: D
Intersection Capacity Utilization 90.6%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	135	112	122	120	178	46	730	80	176	1505	15
Future Volume (veh/h)	77	135	112	122	120	178	46	730	80	176	1505	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	86	150	105	136	133	132	51	811	78	196	1672	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	195	260	182	207	217	216	199	1588	153	230	1816	14
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.22	0.95	0.95	0.09	0.33	0.33
Sat Flow, veh/h	1132	1041	728	1142	869	862	1810	3327	320	1810	3671	29
Grp Volume(v), veh/h	86	0	255	136	0	265	51	440	449	196	821	864
Grp Sat Flow(s),veh/h/ln	1132	0	1769	1142	0	1731	1810	1805	1842	1810	1805	1895
Q Serve(g_s), s	8.0	0.0	13.9	13.0	0.0	14.9	2.6	2.4	2.4	11.8	48.2	48.3
Cycle Q Clear(g_c), s	22.9	0.0	13.9	26.9	0.0	14.9	2.6	2.4	2.4	11.8	48.2	48.3
Prop In Lane	1.00		0.41	1.00		0.50	1.00		0.17	1.00		0.02
Lane Grp Cap(c), veh/h	195	0	442	207	0	433	199	862	879	230	893	937
V/C Ratio(X)	0.44	0.00	0.58	0.66	0.00	0.61	0.26	0.51	0.51	0.85	0.92	0.92
Avail Cap(c_a), veh/h	195	0	442	207	0	433	199	862	879	344	903	947
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.95	0.95	0.95	0.37	0.37	0.37
Uniform Delay (d), s/veh	46.7	0.0	36.1	47.9	0.0	36.5	39.2	1.4	1.4	49.3	34.7	34.7
Incr Delay (d2), s/veh	2.2	0.0	2.3	8.4	0.0	3.0	0.6	2.1	2.0	5.0	6.4	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	6.1	4.1	0.0	6.5	1.1	1.0	1.0	5.7	22.9	24.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.9	0.0	38.4	56.3	0.0	39.5	39.8	3.4	3.4	54.3	41.1	40.9
LnGrp LOS	D	A	D	E	A	D	D	A	A	D	D	D
Approach Vol, veh/h		341			401			940			1881	
Approach Delay, s/veh		41.1			45.2			5.4			42.4	
Approach LOS		D			D			A			D	

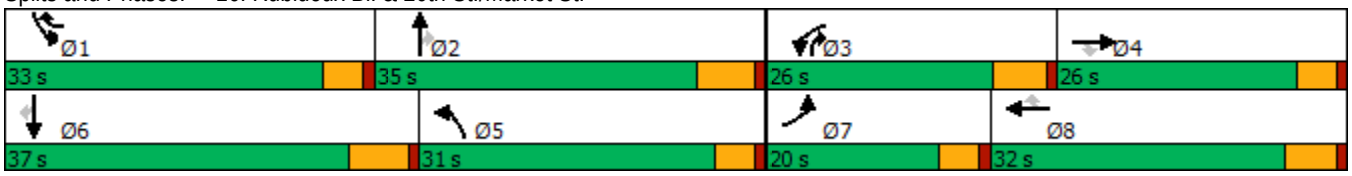
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.5	58.5		33.0	16.6	60.4		33.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	20.9	45.6		27.5	11.5	55.0		27.5				
Max Q Clear Time (g_c+I1), s	13.8	4.4		24.9	4.6	50.3		28.9				
Green Ext Time (p_c), s	0.3	9.1		0.6	0.0	4.2		0.0				

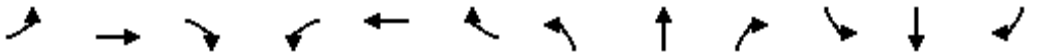
Intersection Summary			
HCM 6th Ctrl Delay		32.8	
HCM 6th LOS		C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	192	211	264	374	371	558	357	257	431	564	538	417
Future Volume (vph)	192	211	264	374	371	558	357	257	431	564	538	417
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	7	4		3	8	1	5	2	3	1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	1	5	2	3	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	9.6	14.6	14.6	10.8	27.8	9.6	9.6	28.2	10.8	9.6	35.2	35.2
Total Split (s)	20.0	26.0	26.0	26.0	32.0	33.0	31.0	35.0	26.0	33.0	37.0	37.0
Total Split (%)	16.7%	21.7%	21.7%	21.7%	26.7%	27.5%	25.8%	29.2%	21.7%	27.5%	30.8%	30.8%
Yellow Time (s)	3.6	3.6	3.6	4.8	4.8	3.6	3.6	5.2	4.8	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.8	5.8	4.6	4.6	6.2	5.8	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	14.8	22.6	22.6	17.2	25.0	53.7	25.1	26.6	50.1	22.7	24.3	24.3
Actuated g/C Ratio	0.13	0.20	0.20	0.16	0.23	0.49	0.23	0.24	0.45	0.21	0.22	0.22
v/c Ratio	0.82	0.30	0.50	0.71	0.89	0.64	0.90	0.31	0.56	0.81	0.70	0.68
Control Delay	75.2	40.6	8.5	53.0	66.3	16.6	68.7	36.5	19.3	51.8	45.3	13.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.2	40.6	8.5	53.0	66.3	17.1	68.7	36.5	19.3	51.8	45.3	13.5
LOS	E	D	A	D	E	B	E	D	B	D	D	B
Approach Delay		37.9			41.4			40.5			39.0	
Approach LOS		D			D			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 110.6	
Natural Cycle: 105	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 39.9	Intersection LOS: D
Intersection Capacity Utilization 82.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	211	264	374	371	558	357	257	431	564	538	417
Future Volume (veh/h)	192	211	264	374	371	558	357	257	431	564	538	417
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	198	218	143	386	382	353	368	265	264	581	555	363
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	231	754	336	471	432	670	399	905	620	662	734	326
Arrive On Green	0.13	0.21	0.21	0.13	0.23	0.23	0.22	0.25	0.25	0.19	0.20	0.20
Sat Flow, veh/h	1810	3610	1610	3510	1900	1610	1810	3610	1610	3510	3610	1606
Grp Volume(v), veh/h	198	218	143	386	382	353	368	265	264	581	555	363
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1755	1900	1610	1810	1805	1610	1755	1805	1606
Q Serve(g_s), s	11.0	5.2	4.6	11.0	20.0	16.9	20.5	6.1	12.4	16.6	14.9	14.8
Cycle Q Clear(g_c), s	11.0	5.2	4.6	11.0	20.0	16.9	20.5	6.1	12.4	16.6	14.9	14.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	231	754	336	471	432	670	399	905	620	662	734	326
V/C Ratio(X)	0.86	0.29	0.43	0.82	0.88	0.53	0.92	0.29	0.43	0.88	0.76	1.11
Avail Cap(c_a), veh/h	271	754	336	689	484	713	464	1010	666	968	1080	481
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.0	34.3	11.6	43.4	38.5	22.5	39.3	31.2	23.3	40.6	38.6	20.6
Incr Delay (d2), s/veh	20.7	0.2	0.9	5.1	16.3	0.6	20.7	0.2	0.5	4.7	1.8	73.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	2.3	2.9	4.9	10.8	6.1	10.8	2.5	4.5	7.2	6.4	11.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.7	34.5	12.5	48.4	54.8	23.1	60.0	31.4	23.8	45.3	40.4	94.2
LnGrp LOS	E	C	B	D	D	C	E	C	C	D	D	F
Approach Vol, veh/h		559			1121			897			1499	
Approach Delay, s/veh		39.6			42.6			40.9			55.3	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	32.0	19.6	27.3	28.9	27.1	17.7	29.2
Change Period (Y+Rc), s	4.6	6.2	5.8	* 5.8	6.2	* 6.2	4.6	5.8
Max Green Setting (Gmax), s	28.4	28.8	20.2	* 21	26.4	* 31	15.4	26.2
Max Q Clear Time (g_c+I1), s	18.6	14.4	13.0	7.2	22.5	16.9	13.0	22.0
Green Ext Time (p_c), s	0.9	2.0	0.8	1.6	0.2	3.9	0.1	1.4

Intersection Summary	
HCM 6th Ctrl Delay	46.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	5	9	34	18	22	1022	171	999
Future Volume (vph)	5	9	34	18	22	1022	171	999
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.6	31.6	31.6	31.6	9.6	28.2	9.6	28.2
Total Split (s)	31.6	31.6	31.6	31.6	9.6	34.2	14.2	38.8
Total Split (%)	39.5%	39.5%	39.5%	39.5%	12.0%	42.8%	17.8%	48.5%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	6.2	4.6	6.2
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		13.3		13.3	5.4	26.1	9.7	41.4
Actuated g/C Ratio		0.22		0.22	0.09	0.43	0.16	0.68
v/c Ratio		0.08		0.22	0.15	0.76	0.65	0.44
Control Delay		14.5		18.4	33.6	21.1	41.4	9.5
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		14.5		18.4	33.6	21.1	41.4	9.5
LOS		B		B	C	C	D	A
Approach Delay		14.5		18.4		21.4		14.1
Approach LOS		B		B		C		B

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 60.7	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 17.6	Intersection LOS: B
Intersection Capacity Utilization 61.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 17: Rubidoux Bl. & 24th St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	9	13	34	18	18	22	1022	57	171	999	5
Future Volume (veh/h)	5	9	13	34	18	18	22	1022	57	171	999	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	5	10	14	37	20	20	24	1111	62	186	1086	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	103	100	109	182	87	56	51	1474	82	236	1939	9
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.03	0.42	0.42	0.13	0.53	0.53
Sat Flow, veh/h	129	752	823	554	654	424	1810	3476	194	1810	3685	17
Grp Volume(v), veh/h	29	0	0	77	0	0	24	577	596	186	532	559
Grp Sat Flow(s),veh/h/ln	1704	0	0	1631	0	0	1810	1805	1865	1810	1805	1897
Q Serve(g_s), s	0.0	0.0	0.0	0.2	0.0	0.0	0.6	13.3	13.3	4.9	9.7	9.7
Cycle Q Clear(g_c), s	0.7	0.0	0.0	1.9	0.0	0.0	0.6	13.3	13.3	4.9	9.7	9.7
Prop In Lane	0.17		0.48	0.48		0.26	1.00		0.10	1.00		0.01
Lane Grp Cap(c), veh/h	311	0	0	324	0	0	51	765	791	236	950	998
V/C Ratio(X)	0.09	0.00	0.00	0.24	0.00	0.00	0.47	0.75	0.75	0.79	0.56	0.56
Avail Cap(c_a), veh/h	1000	0	0	976	0	0	184	1028	1062	353	1197	1258
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.8	0.0	0.0	19.3	0.0	0.0	23.5	12.0	12.0	20.7	7.8	7.8
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.4	0.0	0.0	2.4	2.2	2.1	3.5	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.8	0.0	0.0	0.3	3.9	4.0	1.9	2.2	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.0	0.0	0.0	19.7	0.0	0.0	26.0	14.2	14.1	24.3	8.4	8.3
LnGrp LOS	B	A	A	B	A	A	C	B	B	C	A	A
Approach Vol, veh/h		29			77			1197			1277	
Approach Delay, s/veh		19.0			19.7			14.4			10.7	
Approach LOS		B			B			B			B	

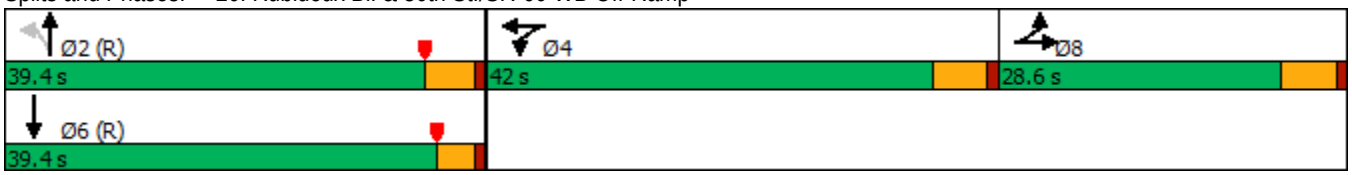
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.0	27.1		11.1	6.0	32.1		11.1				
Change Period (Y+Rc), s	4.6	6.2		4.6	4.6	6.2		4.6				
Max Green Setting (Gmax), s	9.6	28.0		27.0	5.0	32.6		27.0				
Max Q Clear Time (g_c+I1), s	6.9	15.3		2.7	2.6	11.7		3.9				
Green Ext Time (p_c), s	0.1	5.5		0.1	0.0	6.4		0.4				

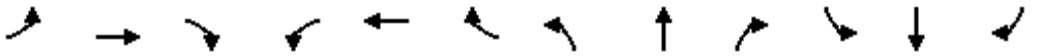
Intersection Summary												
HCM 6th Ctrl Delay			12.8									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Configurations							
Traffic Volume (vph)	56	0	419	93	65	829	1110
Future Volume (vph)	56	0	419	93	65	829	1110
Turn Type	Split	NA	Split	NA	Perm	NA	NA
Protected Phases	8	8	4	4		2	6
Permitted Phases					2		
Detector Phase	8	8	4	4	2	2	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.6	28.6	42.0	42.0	39.4	39.4	39.4
Total Split (%)	26.0%	26.0%	38.2%	38.2%	35.8%	35.8%	35.8%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	21.6	21.6	32.6	32.6	39.8	39.8	40.8
Actuated g/C Ratio	0.20	0.20	0.30	0.30	0.36	0.36	0.37
v/c Ratio	0.18	0.89	0.84	0.81	1.06	0.71	0.96
Control Delay	37.2	56.4	51.0	40.2	158.2	26.7	52.9
Queue Delay	0.0	3.5	72.3	65.6	0.0	36.3	7.3
Total Delay	37.2	59.9	123.2	105.8	158.2	63.0	60.2
LOS	D	E	F	F	F	E	E
Approach Delay		56.4		114.3		69.9	60.2
Approach LOS		E		F		E	E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.06	
Intersection Signal Delay: 75.7	Intersection LOS: E
Intersection Capacity Utilization 101.9%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	0	306	419	93	261	65	829	0	0	1110	34
Future Volume (veh/h)	56	0	306	419	93	261	65	829	0	0	1110	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	63	0	260	417	179	259	73	931	0	0	1247	37
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	330	0	294	522	203	293	89	1385	0	0	1372	41
Arrive On Green	0.18	0.00	0.18	0.29	0.29	0.29	0.13	0.13	0.00	0.00	0.38	0.38
Sat Flow, veh/h	1810	0	1610	1810	702	1015	437	3705	0	0	3672	106
Grp Volume(v), veh/h	63	0	260	417	0	438	73	931	0	0	629	655
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1810	0	1717	437	1805	0	0	1805	1878
Q Serve(g_s), s	3.2	0.0	17.3	23.4	0.0	26.8	5.9	27.1	0.0	0.0	36.3	36.3
Cycle Q Clear(g_c), s	3.2	0.0	17.3	23.4	0.0	26.8	42.2	27.1	0.0	0.0	36.3	36.3
Prop In Lane	1.00		1.00	1.00		0.59	1.00		0.00	0.00		0.06
Lane Grp Cap(c), veh/h	330	0	294	522	0	496	89	1385	0	0	692	720
V/C Ratio(X)	0.19	0.00	0.89	0.80	0.00	0.88	0.82	0.67	0.00	0.00	0.91	0.91
Avail Cap(c_a), veh/h	380	0	338	600	0	570	89	1385	0	0	692	720
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.98	0.98	0.00	0.00	0.78	0.78
Uniform Delay (d), s/veh	38.1	0.0	43.8	36.2	0.0	37.4	68.2	41.4	0.0	0.0	32.1	32.1
Incr Delay (d2), s/veh	0.3	0.0	21.9	7.0	0.0	14.3	54.6	2.6	0.0	0.0	14.8	14.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	8.7	10.9	0.0	12.7	3.5	13.5	0.0	0.0	17.8	18.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.4	0.0	65.7	43.1	0.0	51.7	122.8	44.0	0.0	0.0	46.9	46.5
LnGrp LOS	D	A	E	D	A	D	F	D	A	A	D	D
Approach Vol, veh/h		323			855			1004			1284	
Approach Delay, s/veh		60.4			47.5			49.7			46.7	
Approach LOS		E			D			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		47.2		37.2		47.2		25.6				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		34.4		36.5		* 35		23.1				
Max Q Clear Time (g_c+I1), s		44.2		28.8		38.3		19.3				
Green Ext Time (p_c), s		0.0		2.9		0.0		0.7				

Intersection Summary												
HCM 6th Ctrl Delay			49.1									
HCM 6th LOS			D									

Notes

User approved volume balancing among the lanes for turning movement.

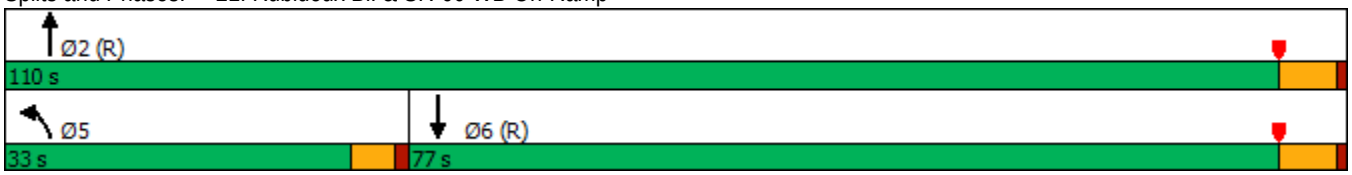
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

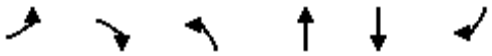
Lane Group	NBL	NBT	SBT
Lane Configurations			
Traffic Volume (vph)	325	894	828
Future Volume (vph)	325	894	828
Turn Type	Prot	NA	NA
Protected Phases	5	2	6
Permitted Phases			
Detector Phase	5	2	6
Switch Phase			
Minimum Initial (s)	5.0	10.0	10.0
Minimum Split (s)	9.6	27.8	27.8
Total Split (s)	33.0	110.0	77.0
Total Split (%)	30.0%	100.0%	70.0%
Yellow Time (s)	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8
Lead/Lag	Lead		Lag
Lead-Lag Optimize?	Yes		Yes
Recall Mode	None	C-Min	C-Min
Act Effct Green (s)	24.3	110.0	75.3
Actuated g/C Ratio	0.22	1.00	0.68
v/c Ratio	0.86	0.26	0.90dr
Control Delay	76.8	0.2	15.5
Queue Delay	1.7	0.1	47.2
Total Delay	78.5	0.2	62.7
LOS	E	A	E
Approach Delay		21.1	62.7
Approach LOS		C	E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 46.1	Intersection LOS: D
Intersection Capacity Utilization 82.0%	ICU Level of Service E
Analysis Period (min) 15	

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 21: Rubidoux Bl. & SR-60 WB On-Ramp





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	325	894	828	1007
Future Volume (veh/h)	0	0	325	894	828	1007
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			0.98
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach				No	No	
Adj Sat Flow, veh/h/ln			1900	1900	1900	1900
Adj Flow Rate, veh/h			342	941	872	1060
Peak Hour Factor			0.95	0.95	0.95	0.95
Percent Heavy Veh, %			0	0	0	0
Cap, veh/h			366	3420	1270	1109
Arrive On Green			0.40	1.00	1.00	1.00
Sat Flow, veh/h			1810	3705	1900	1576
Grp Volume(v), veh/h			342	941	872	1060
Grp Sat Flow(s),veh/h/ln			1810	1805	1805	1576
Q Serve(g_s), s			19.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s			19.9	0.0	0.0	0.0
Prop In Lane			1.00			1.00
Lane Grp Cap(c), veh/h			366	3420	1270	1109
V/C Ratio(X)			0.94	0.28	0.69	0.96
Avail Cap(c_a), veh/h			467	3420	1270	1109
HCM Platoon Ratio			2.00	2.00	1.67	1.67
Upstream Filter(I)			0.76	0.76	0.25	0.25
Uniform Delay (d), s/veh			32.1	0.0	0.0	0.0
Incr Delay (d2), s/veh			17.3	0.2	0.8	6.6
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			8.1	0.1	0.3	2.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			49.4	0.2	0.8	6.6
LnGrp LOS			D	A	A	A
Approach Vol, veh/h				1283	1932	
Approach Delay, s/veh				13.3	4.0	
Approach LOS				B	A	

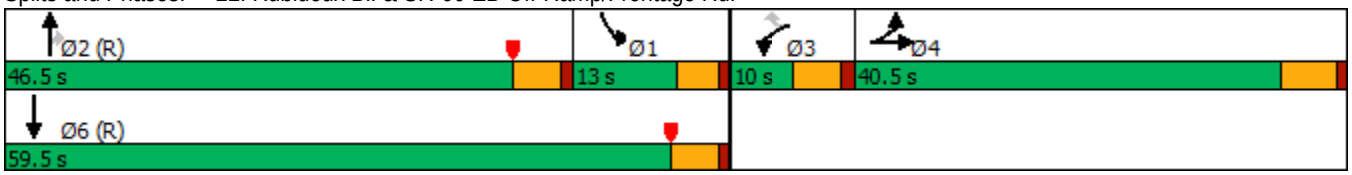
Timer - Assigned Phs	2			5	6
Phs Duration (G+Y+Rc), s	110.0			26.8	83.2
Change Period (Y+Rc), s	5.8			4.6	5.8
Max Green Setting (Gmax), s	104.2			28.4	71.2
Max Q Clear Time (g_c+I1), s	2.0			21.9	2.0
Green Ext Time (p_c), s	7.8			0.3	31.5

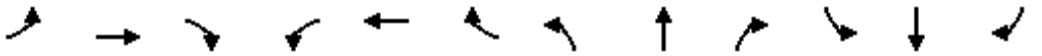
Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Lane Group	EBL	EBT	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	617	19	115	45	557	504	312	516
Future Volume (vph)	617	19	115	45	557	504	312	516
Turn Type	Split	NA	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4	4	3		2		1	6
Permitted Phases				3		2		
Detector Phase	4	4	3	3	2	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	10.0	10.0	45.0	45.0	9.5	30.0
Total Split (s)	40.5	40.5	10.0	10.0	46.5	46.5	13.0	59.5
Total Split (%)	36.8%	36.8%	9.1%	9.1%	42.3%	42.3%	11.8%	54.1%
Yellow Time (s)	4.5	4.5	4.0	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.0	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	32.7	32.7	5.0	5.0	28.1	28.1	24.2	56.8
Actuated g/C Ratio	0.30	0.30	0.05	0.05	0.26	0.26	0.22	0.52
v/c Ratio	0.92	0.85	1.46	0.25	0.63	0.66	0.82	0.29
Control Delay	62.1	46.6	301.2	3.0	39.1	6.9	48.2	9.6
Queue Delay	0.0	0.1	0.0	0.3	0.1	0.0	0.0	0.0
Total Delay	62.1	46.7	301.2	3.3	39.2	6.9	48.2	9.6
LOS	E	D	F	A	D	A	D	A
Approach Delay		54.6			23.9			24.1
Approach LOS		D			C			C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.46	
Intersection Signal Delay: 43.7	Intersection LOS: D
Intersection Capacity Utilization 97.7%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	617	19	240	115	0	45	0	557	504	312	516	0
Future Volume (veh/h)	617	19	240	115	0	45	0	557	504	312	516	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	408	349	153	120	0	45	0	580	416	325	538	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	539	373	164	0	0	0	0	1031	449	498	2189	0
Arrive On Green	0.30	0.30	0.30	0.00	0.00	0.00	0.00	0.29	0.29	0.09	0.20	0.00
Sat Flow, veh/h	1810	1252	549		0		0	3705	1571	1810	3705	0
Grp Volume(v), veh/h	408	0	502		0.0		0	580	416	325	538	0
Grp Sat Flow(s),veh/h/ln	1810	0	1801				0	1805	1571	1810	1805	0
Q Serve(g_s), s	22.5	0.0	29.8				0.0	15.0	26.5	19.1	13.8	0.0
Cycle Q Clear(g_c), s	22.5	0.0	29.8				0.0	15.0	26.5	19.1	13.8	0.0
Prop In Lane	1.00		0.30				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	539	0	537				0	1031	449	498	2189	0
V/C Ratio(X)	0.76	0.00	0.93				0.00	0.56	0.93	0.65	0.25	0.00
Avail Cap(c_a), veh/h	576	0	573				0	1362	593	498	2189	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.76	0.76	0.43	0.43	0.00
Uniform Delay (d), s/veh	35.0	0.0	37.6				0.0	33.4	33.5	44.9	22.8	0.0
Incr Delay (d2), s/veh	4.6	0.0	21.5				0.0	1.7	22.9	1.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	0.0	15.7				0.0	6.6	12.4	9.4	6.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.6	0.0	59.0				0.0	35.1	56.3	46.0	22.9	0.0
LnGrp LOS	D	A	E				A	D	E	D	C	A
Approach Vol, veh/h		910						996			863	
Approach Delay, s/veh		50.3						44.0			31.6	
Approach LOS		D						D			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	35.3	36.4		38.3		71.7						
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0						
Max Green Setting (Gmax), s	8.5	* 42		35.0		54.5						
Max Q Clear Time (g_c+I1), s	21.1	28.5		31.8		15.8						
Green Ext Time (p_c), s	0.0	2.8		1.0		2.3						

Intersection Summary			
HCM 6th Ctrl Delay		42.2	
HCM 6th LOS		D	

Notes

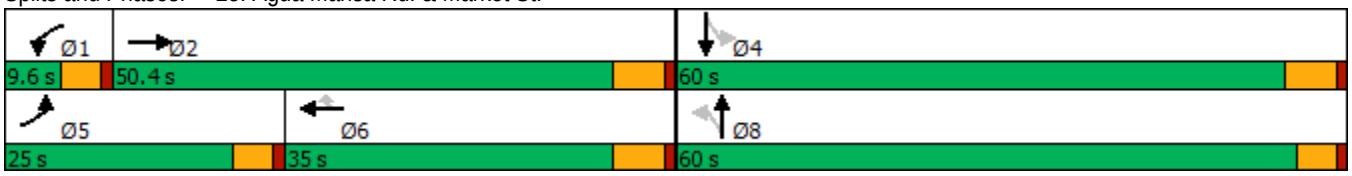
User approved volume balancing among the lanes for turning movement.

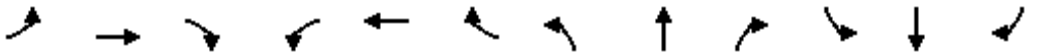
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	545	644	10	752	294	13	5	193	18
Future Volume (vph)	545	644	10	752	294	13	5	193	18
Turn Type	Prot	NA	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	5	2	1	6			8		4
Permitted Phases					6	8		4	
Detector Phase	5	2	1	6	6	8	8	4	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	31.8	9.6	26.8	26.8	14.6	14.6	43.8	43.8
Total Split (s)	25.0	50.4	9.6	35.0	35.0	60.0	60.0	60.0	60.0
Total Split (%)	20.8%	42.0%	8.0%	29.2%	29.2%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8		4.6		5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	None	Max	Max	None	None	None	None
Act Effct Green (s)	20.4	52.3	5.0	29.2	29.2		55.4		54.2
Actuated g/C Ratio	0.17	0.44	0.04	0.24	0.24		0.46		0.45
v/c Ratio	1.02	0.47	0.15	0.95	0.51		0.06		1.07
Control Delay	90.9	25.7	60.0	65.8	7.1		11.7		81.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	90.9	25.7	60.0	65.8	7.1		11.7		81.9
LOS	F	C	E	E	A		B		F
Approach Delay		55.2		49.4			11.7		81.9
Approach LOS		E		D			B		F

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 59.3	Intersection LOS: E
Intersection Capacity Utilization 101.2%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	545	644	17	10	752	294	13	5	15	193	18	538
Future Volume (veh/h)	545	644	17	10	752	294	13	5	15	193	18	538
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	606	716	16	11	836	288	14	6	15	214	20	392
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	624	1513	34	23	918	409	220	102	209	264	25	414
Arrive On Green	0.18	0.42	0.42	0.01	0.25	0.25	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	3510	3610	81	1810	3610	1608	414	239	490	521	59	971
Grp Volume(v), veh/h	606	358	374	11	836	288	35	0	0	626	0	0
Grp Sat Flow(s),veh/h/ln	1755	1805	1885	1810	1805	1608	1142	0	0	1550	0	0
Q Serve(g_s), s	19.7	16.5	16.5	0.7	25.8	18.7	0.0	0.0	0.0	43.2	0.0	0.0
Cycle Q Clear(g_c), s	19.7	16.5	16.5	0.7	25.8	18.7	1.3	0.0	0.0	44.5	0.0	0.0
Prop In Lane	1.00		0.04	1.00		1.00	0.40		0.43	0.34		0.63
Lane Grp Cap(c), veh/h	624	757	790	23	918	409	531	0	0	704	0	0
V/C Ratio(X)	0.97	0.47	0.47	0.47	0.91	0.70	0.07	0.00	0.00	0.89	0.00	0.00
Avail Cap(c_a), veh/h	624	757	790	79	918	409	605	0	0	774	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	46.9	24.1	24.1	56.3	41.5	38.9	19.2	0.0	0.0	31.5	0.0	0.0
Incr Delay (d2), s/veh	28.7	2.1	2.0	5.4	14.6	9.7	0.1	0.0	0.0	11.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	7.1	7.4	0.3	12.9	8.2	0.6	0.0	0.0	17.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.6	26.3	26.2	61.7	56.1	48.6	19.3	0.0	0.0	43.2	0.0	0.0
LnGrp LOS	E	C	C	E	E	D	B	A	A	D	A	A
Approach Vol, veh/h		1338			1135			35			626	
Approach Delay, s/veh		48.6			54.3			19.3			43.2	
Approach LOS		D			D			B			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	53.9		54.8	25.0	35.0		54.8				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	44.6		54.2	20.4	29.2		* 55				
Max Q Clear Time (g_c+I1), s	2.7	18.5		46.5	21.7	27.8		3.3				
Green Ext Time (p_c), s	0.0	4.2		2.4	0.0	0.9		0.2				

Intersection Summary		
HCM 6th Ctrl Delay	49.2	
HCM 6th LOS	D	

Notes

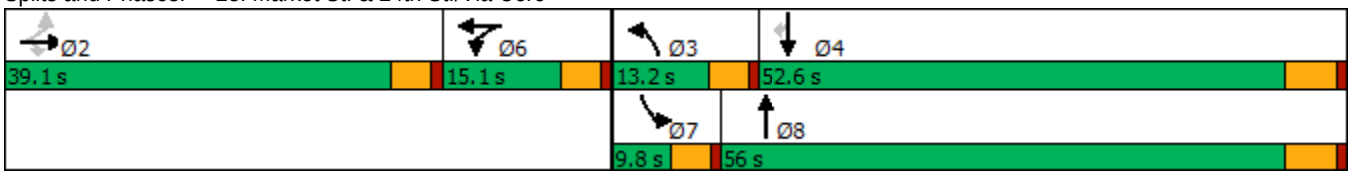
User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	44	37	191	110	9	44	1199	33	831	9
Future Volume (vph)	44	37	191	110	9	44	1199	33	831	9
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	39.1	39.1	39.1	15.1	15.1	13.2	56.0	9.8	52.6	52.6
Total Split (%)	32.6%	32.6%	32.6%	12.6%	12.6%	11.0%	46.7%	8.2%	43.8%	43.8%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		29.2	29.2	10.5	10.5	7.1	52.2	5.2	48.3	48.3
Actuated g/C Ratio		0.26	0.26	0.09	0.09	0.06	0.46	0.05	0.43	0.43
v/c Ratio		0.97	0.38	0.69	0.37	0.41	0.89	0.42	0.56	0.01
Control Delay		132.3	10.5	73.8	20.0	64.3	37.2	71.2	28.0	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		132.3	10.5	73.8	20.0	64.3	37.2	71.2	28.0	0.0
LOS		F	B	E	B	E	D	E	C	A
Approach Delay		46.7			51.5		38.0		29.3	
Approach LOS		D			D		D		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 112.6	
Natural Cycle: 105	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 37.0	Intersection LOS: D
Intersection Capacity Utilization 60.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	37	191	110	9	69	44	1199	187	33	831	9
Future Volume (veh/h)	44	37	191	110	9	69	44	1199	187	33	831	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	46	39	108	116	9	72	46	1262	175	35	875	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	108	92	174	194	19	156	68	1724	238	58	1934	863
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.04	0.54	0.54	0.03	0.54	0.54
Sat Flow, veh/h	1001	849	1606	1810	182	1456	1810	3186	439	1810	3610	1610
Grp Volume(v), veh/h	85	0	108	116	0	81	46	712	725	35	875	9
Grp Sat Flow(s),veh/h/ln	1850	0	1606	1810	0	1638	1810	1805	1820	1810	1805	1610
Q Serve(g_s), s	4.0	0.0	6.0	5.7	0.0	4.3	2.3	27.7	28.2	1.8	13.8	0.2
Cycle Q Clear(g_c), s	4.0	0.0	6.0	5.7	0.0	4.3	2.3	27.7	28.2	1.8	13.8	0.2
Prop In Lane	0.54		1.00	1.00		0.89	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	200	0	174	194	0	175	68	977	985	58	1934	863
V/C Ratio(X)	0.42	0.00	0.62	0.60	0.00	0.46	0.68	0.73	0.74	0.60	0.45	0.01
Avail Cap(c_a), veh/h	688	0	597	205	0	185	168	977	985	101	1934	863
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	0.0	39.5	39.5	0.0	38.9	44.1	16.1	16.2	44.3	13.2	10.1
Incr Delay (d2), s/veh	1.4	0.0	3.6	4.3	0.0	1.9	4.4	4.8	4.9	3.7	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	2.4	2.8	0.0	1.8	1.1	11.0	11.3	0.8	5.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.1	0.0	43.1	43.8	0.0	40.8	48.5	20.9	21.1	48.0	14.0	10.1
LnGrp LOS	D	A	D	D	A	D	D	C	C	D	B	B
Approach Vol, veh/h		193			197			1483			919	
Approach Delay, s/veh		41.8			42.6			21.9			15.2	
Approach LOS		D			D			C			B	

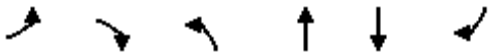
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.6	8.1	55.5		14.5	7.6	56.0				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		34.5	8.6	46.8		10.5	5.2	50.2				
Max Q Clear Time (g_c+I1), s		8.0	4.3	15.8		7.7	3.8	30.2				
Green Ext Time (p_c), s		0.8	0.0	6.3		0.2	0.0	9.5				

Intersection Summary												
HCM 6th Ctrl Delay			22.5									
HCM 6th LOS			C									

Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	216	154	579	630
Future Volume (vph)	216	154	579	630
Turn Type	Prot	Prot	NA	NA
Protected Phases	4	5	2	6
Permitted Phases				
Detector Phase	4	5	2	6
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	32.8	9.6	15.8	27.8
Total Split (s)	32.8	14.7	67.2	52.5
Total Split (%)	32.8%	14.7%	67.2%	52.5%
Yellow Time (s)	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.8
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	None	None
Act Effct Green (s)	19.4	10.1	61.6	46.9
Actuated g/C Ratio	0.21	0.11	0.67	0.51
v/c Ratio	0.76	0.84	0.26	0.95
Control Delay	45.9	76.1	7.2	43.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	45.9	76.1	7.2	43.4
LOS	D	E	A	D
Approach Delay	45.9		21.7	43.4
Approach LOS	D		C	D

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 92.6	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 35.1	Intersection LOS: D
Intersection Capacity Utilization 83.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 33: Agua Mansa Rd. & El Rivino Rd.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	216	56	154	579	630	210
Future Volume (veh/h)	216	56	154	579	630	210
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	230	0	164	616	670	223
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	279		201	2523	723	240
Arrive On Green	0.15	0.00	0.11	0.70	0.53	0.53
Sat Flow, veh/h	1802	0	1810	3705	1364	454
Grp Volume(v), veh/h	231	0	164	616	0	893
Grp Sat Flow(s),veh/h/ln	1810	0	1810	1805	0	1818
Q Serve(g_s), s	9.8	0.0	7.0	4.9	0.0	35.9
Cycle Q Clear(g_c), s	9.8	0.0	7.0	4.9	0.0	35.9
Prop In Lane	1.00	0.00	1.00			0.25
Lane Grp Cap(c), veh/h	280		201	2523	0	963
V/C Ratio(X)	0.83		0.82	0.24	0.00	0.93
Avail Cap(c_a), veh/h	617		231	2800	0	1073
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.4	0.0	34.4	4.3	0.0	17.2
Incr Delay (d2), s/veh	6.1	0.0	15.6	0.0	0.0	12.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.0	3.8	1.1	0.0	15.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	38.5	0.0	50.0	4.4	0.0	29.9
LnGrp LOS	D		D	A	A	C
Approach Vol, veh/h	231			780	893	
Approach Delay, s/veh	38.5			14.0	29.9	
Approach LOS	D			B	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		61.1		18.0	13.4	47.7
Change Period (Y+Rc), s		5.8		5.8	4.6	5.8
Max Green Setting (Gmax), s		61.4		27.0	10.1	46.7
Max Q Clear Time (g_c+I1), s		6.9		11.8	9.0	37.9
Green Ext Time (p_c), s		4.3		0.5	0.0	4.0

Intersection Summary		
HCM 6th Ctrl Delay	24.4	
HCM 6th LOS	C	

Notes

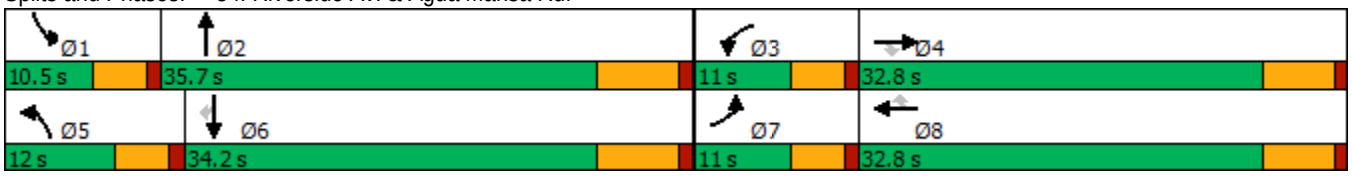
User approved volume balancing among the lanes for turning movement.

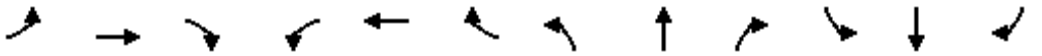
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	179	347	177	153	479	145	196	600	92	681	238
Future Volume (vph)	179	347	177	153	479	145	196	600	92	681	238
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	11.0	32.8	32.8	11.0	32.8	32.8	12.0	35.7	10.5	34.2	34.2
Total Split (%)	12.2%	36.4%	36.4%	12.2%	36.4%	36.4%	13.3%	39.7%	11.7%	38.0%	38.0%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	6.5	17.2	17.2	6.5	17.2	17.2	7.5	22.8	6.0	21.2	21.2
Actuated g/C Ratio	0.09	0.23	0.23	0.09	0.23	0.23	0.10	0.31	0.08	0.28	0.28
v/c Ratio	1.20	0.44	0.36	1.03	0.61	0.31	1.15	0.64	0.67	0.70	0.39
Control Delay	171.9	26.4	6.1	120.4	29.2	6.3	147.6	25.3	61.5	28.3	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	171.9	26.4	6.1	120.4	29.2	6.3	147.6	25.3	61.5	28.3	5.2
LOS	F	C	A	F	C	A	F	C	E	C	A
Approach Delay		58.3			42.9			53.4		25.9	
Approach LOS		E			D			D		C	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 74.4	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.20	
Intersection Signal Delay: 43.7	Intersection LOS: D
Intersection Capacity Utilization 70.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	179	347	177	153	479	145	196	600	57	92	681	238
Future Volume (veh/h)	179	347	177	153	479	145	196	600	57	92	681	238
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	190	369	124	163	510	130	209	638	57	98	724	234
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	171	745	332	171	745	332	197	1049	94	126	988	441
Arrive On Green	0.09	0.21	0.21	0.09	0.21	0.21	0.11	0.31	0.31	0.07	0.27	0.27
Sat Flow, veh/h	1810	3610	1610	1810	3610	1610	1810	3352	299	1810	3610	1610
Grp Volume(v), veh/h	190	369	124	163	510	130	209	343	352	98	724	234
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1610	1810	1805	1846	1810	1805	1610
Q Serve(g_s), s	6.4	6.1	4.5	6.1	8.9	4.7	7.4	11.0	11.0	3.6	12.4	8.4
Cycle Q Clear(g_c), s	6.4	6.1	4.5	6.1	8.9	4.7	7.4	11.0	11.0	3.6	12.4	8.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	171	745	332	171	745	332	197	565	578	126	988	441
V/C Ratio(X)	1.11	0.50	0.37	0.96	0.68	0.39	1.06	0.61	0.61	0.78	0.73	0.53
Avail Cap(c_a), veh/h	171	1436	640	171	1436	640	197	776	794	157	1473	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.7	23.8	23.2	30.6	24.9	23.3	30.2	19.8	19.8	31.1	22.4	21.0
Incr Delay (d2), s/veh	102.7	0.5	0.7	55.3	1.1	0.8	80.7	1.1	1.0	13.4	1.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	2.4	1.6	5.0	3.5	1.7	7.3	4.0	4.1	1.9	4.5	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	133.4	24.3	23.9	85.9	26.0	24.0	111.0	20.8	20.8	44.5	23.5	21.9
LnGrp LOS	F	C	C	F	C	C	F	C	C	D	C	C
Approach Vol, veh/h		683			803			904			1056	
Approach Delay, s/veh		54.6			37.9			41.7			25.1	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	27.7	11.0	19.8	12.0	25.1	11.0	19.8
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	5.9	29.2	6.4	27.0	7.4	27.7	6.4	27.0
Max Q Clear Time (g_c+I1), s	5.6	13.0	8.1	8.1	9.4	14.4	8.4	10.9
Green Ext Time (p_c), s	0.0	3.3	0.0	2.4	0.0	4.2	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	38.3
HCM 6th LOS	D

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations					
Traffic Volume (vph)	495	229	314	2	667
Future Volume (vph)	495	229	314	2	667
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	2	1	6	8	1
Permitted Phases					8
Detector Phase	2	1	6	8	1
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	27.5	9.6	15.5	31.6	9.6
Total Split (s)	36.4	22.0	58.4	31.6	22.0
Total Split (%)	40.4%	24.4%	64.9%	35.1%	24.4%
Yellow Time (s)	4.5	3.6	4.5	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	4.6	5.5	4.6	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	None	None	None	None	None
Act Effct Green (s)	27.5	18.2	45.9	12.8	22.5
Actuated g/C Ratio	0.45	0.30	0.76	0.21	0.37
v/c Ratio	0.74	0.54	0.28	0.01	1.30
Control Delay	22.9	26.7	5.2	21.0	165.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	22.9	26.7	5.2	21.0	165.4
LOS	C	C	A	C	F
Approach Delay	22.9		14.3	164.9	
Approach LOS	C		B	F	

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 60.5	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.30	
Intersection Signal Delay: 75.8	Intersection LOS: E
Intersection Capacity Utilization 75.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Van Dell Rd. & 20th St.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	495	0	229	314	2	667
Future Volume (veh/h)	495	0	229	314	2	667
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	635	0	294	403	3	599
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	662	561	329	1106	551	783
Arrive On Green	0.35	0.00	0.18	0.58	0.30	0.30
Sat Flow, veh/h	1900	1610	1810	1900	1810	1610
Grp Volume(v), veh/h	635	0	294	403	3	599
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1900	1810	1610
Q Serve(g_s), s	29.0	0.0	14.1	10.0	0.1	27.0
Cycle Q Clear(g_c), s	29.0	0.0	14.1	10.0	0.1	27.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	662	561	329	1106	551	783
V/C Ratio(X)	0.96	0.00	0.89	0.36	0.01	0.77
Avail Cap(c_a), veh/h	662	561	355	1133	551	783
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	0.0	35.5	9.8	21.5	18.7
Incr Delay (d2), s/veh	25.3	0.0	21.6	0.2	0.0	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.6	0.0	7.8	3.5	0.0	10.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	53.7	0.0	57.1	10.0	21.5	23.2
LnGrp LOS	D	A	E	B	C	C
Approach Vol, veh/h	635			697	602	
Approach Delay, s/veh	53.7			29.9	23.2	
Approach LOS	D			C	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	20.7	36.4				57.1	31.6
Change Period (Y+Rc), s	4.6	5.5				5.5	4.6
Max Green Setting (Gmax), s	17.4	30.9				52.9	27.0
Max Q Clear Time (g_c+I1), s	16.1	31.0				12.0	29.0
Green Ext Time (p_c), s	0.1	0.0				2.4	0.0

Intersection Summary		
HCM 6th Ctrl Delay	35.6	
HCM 6th LOS	D	

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	8	1109	27	519	20	9	1	15
Future Volume (vph)	8	1109	27	519	20	9	1	15
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		8		4
Permitted Phases	2		6		8		4	
Detector Phase	2	2	6	6	8	8	4	4
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	27.8	27.8	27.8	27.8	31.6	31.6	31.6	31.6
Total Split (s)	88.3	88.3	88.3	88.3	31.7	31.7	31.7	31.7
Total Split (%)	73.6%	73.6%	73.6%	73.6%	26.4%	26.4%	26.4%	26.4%
Yellow Time (s)	4.8	4.8	4.8	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8		4.6		4.6
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)	84.6	84.6	84.6	84.6		13.0		13.0
Actuated g/C Ratio	0.82	0.82	0.82	0.82		0.13		0.13
v/c Ratio	0.02	0.91	0.45	0.41		0.32		0.10
Control Delay	4.1	21.2	31.0	5.3		26.2		34.6
Queue Delay	0.0	0.0	0.0	0.3		0.0		0.0
Total Delay	4.1	21.2	31.0	5.6		26.2		34.6
LOS	A	C	C	A		C		C
Approach Delay		21.1		6.8		26.2		34.6
Approach LOS		C		A		C		C

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 103.4	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 17.0	Intersection LOS: B
Intersection Capacity Utilization 80.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 4: Avalon St. & 20th St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	1109	44	27	519	4	20	9	33	1	15	4
Future Volume (veh/h)	8	1109	44	27	519	4	20	9	33	1	15	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.99		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	10	1352	54	33	633	5	24	11	40	1	18	5
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	633	1441	58	153	1496	12	84	37	80	43	131	35
Arrive On Green	0.79	0.79	0.79	0.79	0.79	0.79	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	803	1813	72	389	1882	15	353	401	862	24	1414	378
Grp Volume(v), veh/h	10	0	1406	33	0	638	75	0	0	24	0	0
Grp Sat Flow(s),veh/h/ln	803	0	1885	389	0	1897	1615	0	0	1817	0	0
Q Serve(g_s), s	0.4	0.0	55.6	6.9	0.0	9.6	1.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	10.0	0.0	55.6	62.5	0.0	9.6	3.9	0.0	0.0	1.1	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.01	0.32		0.53	0.04		0.21
Lane Grp Cap(c), veh/h	633	0	1498	153	0	1508	201	0	0	209	0	0
V/C Ratio(X)	0.02	0.00	0.94	0.22	0.00	0.42	0.37	0.00	0.00	0.11	0.00	0.00
Avail Cap(c_a), veh/h	712	0	1685	192	0	1696	516	0	0	570	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.5	0.0	7.6	32.9	0.0	2.9	39.7	0.0	0.0	38.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	10.0	0.7	0.0	0.2	1.1	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	13.6	0.6	0.0	1.7	1.7	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.5	0.0	17.6	33.6	0.0	3.1	40.9	0.0	0.0	38.7	0.0	0.0
LnGrp LOS	A	A	B	C	A	A	D	A	A	D	A	A
Approach Vol, veh/h		1416			671			75			24	
Approach Delay, s/veh		17.5			4.6			40.9			38.7	
Approach LOS		B			A			D			D	

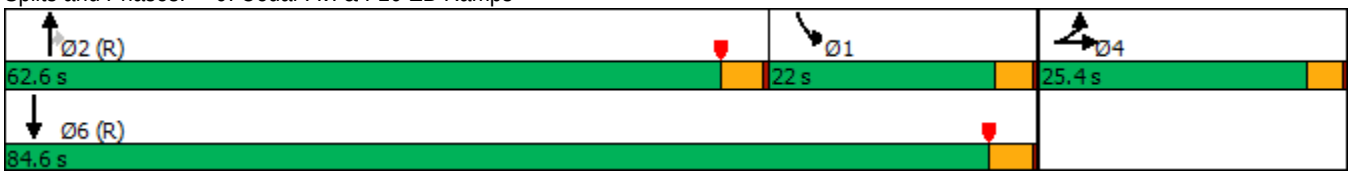
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		79.1		13.1		79.1		13.1				
Change Period (Y+Rc), s		5.8		4.6		5.8		4.6				
Max Green Setting (Gmax), s		82.5		27.1		82.5		27.1				
Max Q Clear Time (g_c+I1), s		57.6		3.1		64.5		5.9				
Green Ext Time (p_c), s		15.8		0.1		4.2		0.3				

Intersection Summary												
HCM 6th Ctrl Delay			14.6									
HCM 6th LOS			B									

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	358	3	1443	935	462	1372
Future Volume (vph)	358	3	1443	935	462	1372
Turn Type	Split	NA	NA	Perm	Prot	NA
Protected Phases	4	4	2		1	6
Permitted Phases				2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	8.5	8.5	21.0	21.0	8.5	22.0
Total Split (s)	25.4	25.4	62.6	62.6	22.0	84.6
Total Split (%)	23.1%	23.1%	56.9%	56.9%	20.0%	76.9%
Yellow Time (s)	3.0	3.0	3.5	3.5	3.0	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	3.5	4.0	4.0	3.5	4.0
Lead/Lag			Lead	Lead	Lag	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	20.2	20.2	61.2	61.2	17.6	82.3
Actuated g/C Ratio	0.18	0.18	0.56	0.56	0.16	0.75
v/c Ratio	0.84	0.71	0.51	0.83	0.84	0.52
Control Delay	66.0	44.6	9.6	11.7	45.0	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	66.0	44.6	9.7	11.7	45.0	4.5
LOS	E	D	A	B	D	A
Approach Delay		55.7	10.5			14.7
Approach LOS		E	B			B

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 16.9	Intersection LOS: B
Intersection Capacity Utilization 95.5%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 9: Cedar Av. & I-10 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	358	3	135	0	0	0	0	1443	935	462	1372	0
Future Volume (veh/h)	358	3	135	0	0	0	0	1443	935	462	1372	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	248	167	128				0	1472	749	471	1400	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	337	186	142				0	2566	795	753	2691	0
Arrive On Green	0.19	0.19	0.19				0.00	0.66	0.66	0.43	1.00	0.00
Sat Flow, veh/h	1810	998	765				0	5358	1607	3510	3705	0
Grp Volume(v), veh/h	248	0	295				0	1472	749	471	1400	0
Grp Sat Flow(s),veh/h/ln	1810	0	1762				0	1729	1607	1755	1805	0
Q Serve(g_s), s	14.2	0.0	18.0				0.0	17.1	46.1	11.5	0.0	0.0
Cycle Q Clear(g_c), s	14.2	0.0	18.0				0.0	17.1	46.1	11.5	0.0	0.0
Prop In Lane	1.00		0.43				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	337	0	328				0	2566	795	753	2691	0
V/C Ratio(X)	0.74	0.00	0.90				0.00	0.57	0.94	0.63	0.52	0.00
Avail Cap(c_a), veh/h	360	0	351				0	2763	856	753	2691	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.33	1.33	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.09	0.09	0.60	0.60	0.00
Uniform Delay (d), s/veh	42.2	0.0	43.7				0.0	12.4	17.4	28.0	0.0	0.0
Incr Delay (d2), s/veh	7.2	0.0	23.9				0.0	0.1	3.0	0.7	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	0.0	9.7				0.0	5.0	12.5	4.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.4	0.0	67.6				0.0	12.5	20.4	28.7	0.4	0.0
LnGrp LOS	D	A	E				A	B	C	C	A	A
Approach Vol, veh/h		543						2221			1871	
Approach Delay, s/veh		59.3						15.2			7.6	
Approach LOS		E						B			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	27.6	58.4		24.0		86.0
Change Period (Y+Rc), s	4.0	* 4		3.5		4.0
Max Green Setting (Gmax), s	18.5	* 59		21.9		80.6
Max Q Clear Time (g_c+I1), s	13.5	48.1		20.0		2.0
Green Ext Time (p_c), s	0.5	6.3		0.5		8.5

Intersection Summary	
HCM 6th Ctrl Delay	17.3
HCM 6th LOS	B

Notes

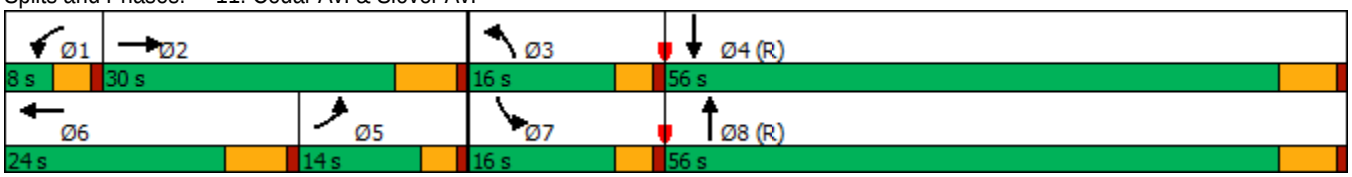
User approved volume balancing among the lanes for turning movement.

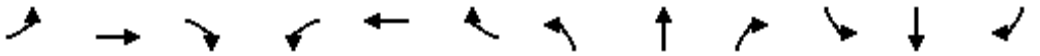
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	293	622	59	363	113	1364	186	888
Future Volume (vph)	293	622	59	363	113	1364	186	888
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases								
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	29.0	8.0	23.0	8.0	32.7	8.0	24.7
Total Split (s)	14.0	30.0	8.0	24.0	16.0	56.0	16.0	56.0
Total Split (%)	12.7%	27.3%	7.3%	21.8%	14.5%	50.9%	14.5%	50.9%
Yellow Time (s)	3.0	5.0	3.0	5.0	3.0	4.7	3.0	4.7
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	6.0	4.0	5.7	4.0	5.7
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
Act Effct Green (s)	10.0	24.0	4.0	18.0	11.0	50.3	12.0	51.3
Actuated g/C Ratio	0.09	0.22	0.04	0.16	0.10	0.46	0.11	0.47
v/c Ratio	0.99	1.05	0.97	1.02	0.68	0.98	1.02	0.68
Control Delay	98.8	86.0	157.8	75.2	58.0	45.9	125.1	14.7
Queue Delay	0.0	0.0	0.0	3.7	0.0	41.6	0.0	0.0
Total Delay	98.8	86.0	157.8	78.9	58.0	87.4	125.1	14.7
LOS	F	F	F	E	E	F	F	B
Approach Delay		89.6		85.5		85.4		31.5
Approach LOS		F		F		F		C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay: 71.9	Intersection LOS: E
Intersection Capacity Utilization 95.7%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 11: Cedar Av. & Slover Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	293	622	138	59	363	278	113	1364	123	186	888	152
Future Volume (veh/h)	293	622	138	59	363	278	113	1364	123	186	888	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	315	669	104	63	390	245	122	1467	130	200	955	155
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	319	739	115	66	350	217	150	1754	154	197	1703	276
Arrive On Green	0.09	0.24	0.24	0.04	0.16	0.16	0.08	0.52	0.52	0.22	1.00	1.00
Sat Flow, veh/h	3510	3125	485	1810	2139	1327	1810	3356	296	1810	3103	503
Grp Volume(v), veh/h	315	386	387	63	328	307	122	785	812	200	555	555
Grp Sat Flow(s),veh/h/ln	1755	1805	1805	1810	1805	1661	1810	1805	1847	1810	1805	1802
Q Serve(g_s), s	9.9	22.9	22.9	3.8	18.0	18.0	7.3	40.4	41.2	12.0	0.0	0.0
Cycle Q Clear(g_c), s	9.9	22.9	22.9	3.8	18.0	18.0	7.3	40.4	41.2	12.0	0.0	0.0
Prop In Lane	1.00		0.27	1.00		0.80	1.00		0.16	1.00		0.28
Lane Grp Cap(c), veh/h	319	427	427	66	295	272	150	943	965	197	990	989
V/C Ratio(X)	0.99	0.90	0.91	0.96	1.11	1.13	0.81	0.83	0.84	1.01	0.56	0.56
Avail Cap(c_a), veh/h	319	427	427	66	295	272	197	943	965	197	990	989
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.51	0.51	0.51	0.82	0.82	0.82
Uniform Delay (d), s/veh	49.9	40.8	40.8	52.9	46.0	46.0	49.6	22.2	22.4	43.0	0.0	0.0
Incr Delay (d2), s/veh	46.7	22.4	22.7	95.7	85.7	93.7	9.5	4.5	4.7	61.4	1.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	12.2	12.3	3.5	15.1	14.5	3.6	16.5	17.3	7.9	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	96.6	63.2	63.6	148.7	131.7	139.7	59.1	26.7	27.1	104.4	1.9	1.9
LnGrp LOS	F	E	E	F	F	F	E	C	C	F	A	A
Approach Vol, veh/h		1088			698			1719			1310	
Approach Delay, s/veh		73.0			136.7			29.2			17.5	
Approach LOS		E			F			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	32.0	13.1	66.1	16.0	24.0	16.0	63.2
Change Period (Y+Rc), s	4.0	6.0	4.0	5.7	6.0	* 6	4.0	5.7
Max Green Setting (Gmax), s	4.0	24.0	12.0	50.3	10.0	* 18	12.0	50.3
Max Q Clear Time (g_c+I1), s	5.8	24.9	9.3	2.0	11.9	20.0	14.0	43.2
Green Ext Time (p_c), s	0.0	0.0	0.1	8.8	0.0	0.0	0.0	5.1

Intersection Summary	
HCM 6th Ctrl Delay	51.5
HCM 6th LOS	D

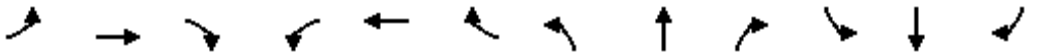
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	63	287	90	145	162	1173	179	877
Future Volume (vph)	63	287	90	145	162	1173	179	877
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0	10.0	8.0	10.0
Minimum Split (s)	27.5	27.5	27.5	27.5	12.5	39.0	12.5	39.0
Total Split (s)	38.0	38.0	38.0	38.0	23.7	53.0	19.0	48.3
Total Split (%)	34.5%	34.5%	34.5%	34.5%	21.5%	48.2%	17.3%	43.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.5	5.0	3.5	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	4.5	6.0	4.5	6.0
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Min	C-Min	None	None
Act Effct Green (s)	29.5	29.5	29.5	29.5	20.3	50.2	14.3	44.2
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.18	0.46	0.13	0.40
v/c Ratio	0.38	0.85	1.09	0.62	0.53	0.84	0.83	0.71
Control Delay	38.5	52.9	160.4	35.5	59.4	18.4	48.6	39.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.5	52.9	160.4	35.5	59.4	18.4	48.6	39.5
LOS	D	D	F	D	E	B	D	D
Approach Delay		50.9		65.3		23.0		40.9
Approach LOS		D		E		C		D

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 61 (55%), Referenced to phase 2:NBT and 5:NBL, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.09	
Intersection Signal Delay: 37.4	Intersection LOS: D
Intersection Capacity Utilization 91.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 13: Cedar Av. & Jurupa Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	287	103	90	145	142	162	1173	97	179	877	60
Future Volume (veh/h)	63	287	103	90	145	142	162	1173	97	179	877	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	68	312	87	98	158	108	176	1275	92	195	953	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	257	421	117	163	308	211	352	1481	107	227	1258	79
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.39	0.87	0.87	0.04	0.12	0.12
Sat Flow, veh/h	1129	1425	397	1001	1043	713	1810	3415	246	1810	3449	217
Grp Volume(v), veh/h	68	0	399	98	0	266	176	673	694	195	499	514
Grp Sat Flow(s),veh/h/ln	1129	0	1822	1001	0	1756	1810	1805	1856	1810	1805	1861
Q Serve(g_s), s	5.9	0.0	21.7	10.8	0.0	13.8	8.1	21.3	21.7	11.8	29.4	29.4
Cycle Q Clear(g_c), s	19.7	0.0	21.7	32.5	0.0	13.8	8.1	21.3	21.7	11.8	29.4	29.4
Prop In Lane	1.00		0.22	1.00		0.41	1.00		0.13	1.00		0.12
Lane Grp Cap(c), veh/h	257	0	538	163	0	519	352	783	805	227	658	679
V/C Ratio(X)	0.26	0.00	0.74	0.60	0.00	0.51	0.50	0.86	0.86	0.86	0.76	0.76
Avail Cap(c_a), veh/h	257	0	538	163	0	519	352	783	805	239	694	716
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.21	0.21	0.21	0.57	0.57	0.57
Uniform Delay (d), s/veh	40.4	0.0	35.0	49.6	0.0	32.2	29.6	5.5	5.6	51.8	43.7	43.7
Incr Delay (d2), s/veh	0.8	0.0	5.9	7.1	0.0	1.2	0.2	2.8	2.8	15.8	2.9	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	10.2	3.0	0.0	5.9	3.1	3.0	3.1	6.6	14.6	15.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.1	0.0	40.8	56.7	0.0	33.4	29.8	8.4	8.4	67.6	46.6	46.5
LnGrp LOS	D	A	D	E	A	C	C	A	A	E	D	D
Approach Vol, veh/h		467			364			1543			1208	
Approach Delay, s/veh		40.9			39.6			10.8			49.9	
Approach LOS		D			D			B			D	

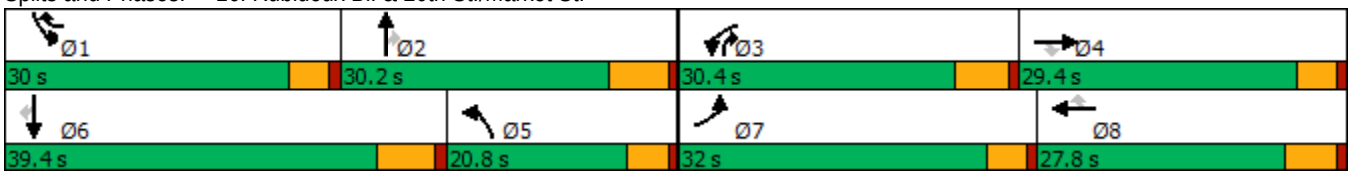
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.3	53.7		38.0	25.9	46.1		38.0				
Change Period (Y+Rc), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	14.5	47.0		32.5	19.2	42.3		32.5				
Max Q Clear Time (g_c+I1), s	13.8	23.7		23.7	10.1	31.4		34.5				
Green Ext Time (p_c), s	0.0	13.1		2.3	0.3	5.8		0.0				

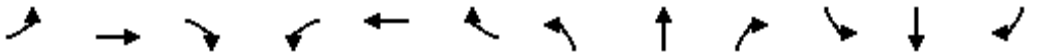
Intersection Summary			
HCM 6th Ctrl Delay		30.9	
HCM 6th LOS		C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	368	391	384	484	173	628	224	289	585	673	385	153
Future Volume (vph)	368	391	384	484	173	628	224	289	585	673	385	153
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	7	4		3	8	1	5	2	3	1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	1	5	2	3	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	9.6	14.6	14.6	10.8	27.8	9.6	9.6	28.2	10.8	9.6	35.2	35.2
Total Split (s)	32.0	29.4	29.4	30.4	27.8	30.0	20.8	30.2	30.4	30.0	39.4	39.4
Total Split (%)	26.7%	24.5%	24.5%	25.3%	23.2%	25.0%	17.3%	25.2%	25.3%	25.0%	32.8%	32.8%
Yellow Time (s)	3.6	3.6	3.6	4.8	4.8	3.6	3.6	5.2	4.8	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	5.8	5.8	4.6	4.6	6.2	5.8	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	25.2	19.2	19.2	22.3	16.2	45.8	20.2	14.5	43.0	23.6	17.9	17.9
Actuated g/C Ratio	0.25	0.19	0.19	0.22	0.16	0.45	0.20	0.14	0.42	0.23	0.18	0.18
v/c Ratio	0.84	0.58	0.69	0.64	0.58	0.80	0.64	0.57	0.82	0.84	0.62	0.38
Control Delay	55.1	42.2	15.7	41.5	49.1	27.6	49.1	46.4	34.2	48.9	43.6	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.1	42.2	15.7	41.5	49.1	28.6	49.1	46.4	34.2	48.9	43.6	8.8
LOS	E	D	B	D	D	C	D	D	C	D	D	A
Approach Delay		37.5			36.2			40.5			42.2	
Approach LOS		D			D			D			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 101.2	
Natural Cycle: 105	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 39.0	Intersection LOS: D
Intersection Capacity Utilization 80.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 16: Rubidoux Bl. & 20th St./Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	368	391	384	484	173	628	224	289	585	673	385	153
Future Volume (veh/h)	368	391	384	484	173	628	224	289	585	673	385	153
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	376	399	264	494	177	422	229	295	418	687	393	90
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	402	850	379	570	353	638	464	732	588	738	517	230
Arrive On Green	0.22	0.24	0.24	0.16	0.19	0.19	0.26	0.20	0.20	0.21	0.14	0.14
Sat Flow, veh/h	1810	3610	1610	3510	1900	1610	1810	3610	1610	3510	3610	1605
Grp Volume(v), veh/h	376	399	264	494	177	422	229	295	418	687	393	90
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1755	1900	1610	1810	1805	1610	1755	1805	1605
Q Serve(g_s), s	24.2	11.3	9.5	16.2	9.9	22.0	12.8	8.4	24.0	22.8	12.4	3.8
Cycle Q Clear(g_c), s	24.2	11.3	9.5	16.2	9.9	22.0	12.8	8.4	24.0	22.8	12.4	3.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	402	850	379	570	353	638	464	732	588	738	517	230
V/C Ratio(X)	0.93	0.47	0.70	0.87	0.50	0.66	0.49	0.40	0.71	0.93	0.76	0.39
Avail Cap(c_a), veh/h	419	850	379	729	353	638	464	732	588	753	1012	450
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.2	38.9	11.7	48.3	43.3	29.3	37.5	41.0	32.2	45.9	48.8	18.5
Incr Delay (d2), s/veh	27.7	0.4	5.5	8.8	1.1	2.6	0.3	0.4	4.0	17.6	2.3	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.0	5.1	3.7	7.6	4.6	9.8	5.5	3.6	10.4	11.3	5.5	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.9	39.3	17.2	57.1	44.4	31.8	37.8	41.4	36.2	63.5	51.1	19.6
LnGrp LOS	E	D	B	E	D	C	D	D	D	E	D	B
Approach Vol, veh/h		1039			1093			942			1170	
Approach Delay, s/veh		45.8			45.3			38.2			56.0	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.5	30.2	25.0	33.7	36.5	23.2	30.9	27.8
Change Period (Y+Rc), s	4.6	6.2	5.8	* 5.8	6.2	* 6.2	4.6	5.8
Max Green Setting (Gmax), s	25.4	24.0	24.6	* 25	16.2	* 33	27.4	22.0
Max Q Clear Time (g_c+I1), s	24.8	26.0	18.2	13.3	14.8	14.4	26.2	24.0
Green Ext Time (p_c), s	0.1	0.0	1.0	2.9	0.0	2.4	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	46.8
HCM 6th LOS	D

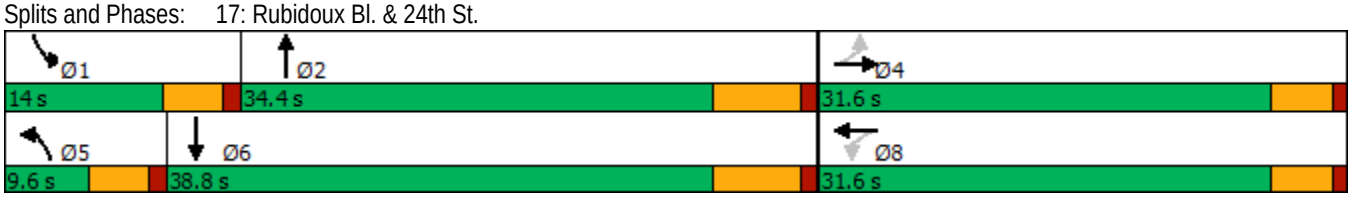
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	5	25	47	12	24	1079	177	1071
Future Volume (vph)	5	25	47	12	24	1079	177	1071
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	31.6	31.6	31.6	31.6	9.6	28.2	9.6	28.2
Total Split (s)	31.6	31.6	31.6	31.6	9.6	34.4	14.0	38.8
Total Split (%)	39.5%	39.5%	39.5%	39.5%	12.0%	43.0%	17.5%	48.5%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	6.2	4.6	6.2
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None
Act Effct Green (s)		13.2		13.2	5.3	27.0	9.4	41.9
Actuated g/C Ratio		0.22		0.22	0.09	0.44	0.15	0.68
v/c Ratio		0.11		0.23	0.15	0.77	0.65	0.45
Control Delay		16.9		19.9	33.7	21.3	42.5	9.5
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		16.9		19.9	33.7	21.3	42.5	9.5
LOS		B		B	C	C	D	A
Approach Delay		16.9		19.9		21.5		14.2
Approach LOS		B		B		C		B

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 61.3	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 17.8	Intersection LOS: B
Intersection Capacity Utilization 66.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 17: Rubidoux Bl. & 24th St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	25	12	47	12	15	24	1079	110	177	1071	5
Future Volume (veh/h)	5	25	12	47	12	15	24	1079	110	177	1071	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	5	26	12	48	12	15	24	1101	112	181	1093	5
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	93	154	64	222	58	40	51	1439	146	230	1966	9
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.03	0.43	0.43	0.13	0.53	0.53
Sat Flow, veh/h	93	1189	496	797	445	311	1810	3308	336	1810	3685	17
Grp Volume(v), veh/h	43	0	0	75	0	0	24	600	613	181	535	563
Grp Sat Flow(s),veh/h/ln	1778	0	0	1553	0	0	1810	1805	1839	1810	1805	1897
Q Serve(g_s), s	0.0	0.0	0.0	1.0	0.0	0.0	0.7	14.1	14.1	4.8	9.8	9.8
Cycle Q Clear(g_c), s	1.1	0.0	0.0	2.0	0.0	0.0	0.7	14.1	14.1	4.8	9.8	9.8
Prop In Lane	0.12		0.28	0.64		0.20	1.00		0.18	1.00		0.01
Lane Grp Cap(c), veh/h	311	0	0	319	0	0	51	785	800	230	963	1012
V/C Ratio(X)	0.14	0.00	0.00	0.23	0.00	0.00	0.47	0.76	0.77	0.79	0.56	0.56
Avail Cap(c_a), veh/h	1027	0	0	935	0	0	181	1020	1039	341	1179	1239
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	0.0	0.0	19.7	0.0	0.0	23.9	11.9	12.0	21.1	7.7	7.7
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.4	0.0	0.0	2.4	2.6	2.6	3.8	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.8	0.0	0.0	0.3	4.2	4.3	1.9	2.2	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.6	0.0	0.0	20.1	0.0	0.0	26.3	14.5	14.5	25.0	8.2	8.2
LnGrp LOS	B	A	A	C	A	A	C	B	B	C	A	A
Approach Vol, veh/h		43			75			1237			1279	
Approach Delay, s/veh		19.6			20.1			14.7			10.6	
Approach LOS		B			C			B			B	

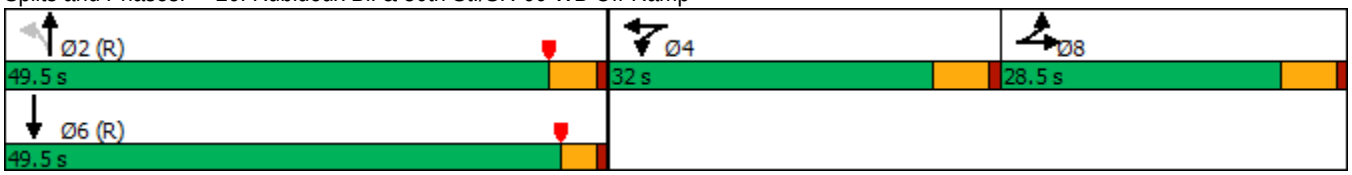
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.9	27.9		11.1	6.0	32.8		11.1				
Change Period (Y+Rc), s	4.6	6.2		4.6	4.6	6.2		4.6				
Max Green Setting (Gmax), s	9.4	28.2		27.0	5.0	32.6		27.0				
Max Q Clear Time (g_c+I1), s	6.8	16.1		3.1	2.7	11.8		4.0				
Green Ext Time (p_c), s	0.1	5.6		0.2	0.0	6.4		0.3				

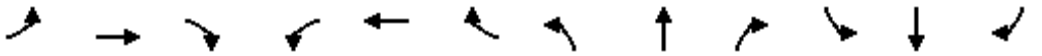
Intersection Summary												
HCM 6th Ctrl Delay			13.0									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Configurations							
Traffic Volume (vph)	48	0	589	125	112	1054	1149
Future Volume (vph)	48	0	589	125	112	1054	1149
Turn Type	Split	NA	Split	NA	Perm	NA	NA
Protected Phases	8	8	4	4		2	6
Permitted Phases					2		
Detector Phase	8	8	4	4	2	2	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	15.0	15.0	5.0
Minimum Split (s)	28.5	28.5	28.5	28.5	22.0	22.0	9.0
Total Split (s)	28.5	28.5	32.0	32.0	49.5	49.5	49.5
Total Split (%)	25.9%	25.9%	29.1%	29.1%	45.0%	45.0%	45.0%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.0	4.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.0	5.0	4.0
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	None	None	C-Min	C-Min	C-Min
Act Effct Green (s)	17.9	17.9	26.5	26.5	49.6	49.6	50.6
Actuated g/C Ratio	0.16	0.16	0.24	0.24	0.45	0.45	0.46
v/c Ratio	0.18	0.79	1.24	1.15	1.77	0.70	0.80
Control Delay	38.9	48.4	163.7	125.6	419.0	13.0	30.8
Queue Delay	0.0	0.9	11.4	9.9	0.0	12.2	0.0
Total Delay	38.9	49.3	175.1	135.5	419.0	25.2	30.8
LOS	D	D	F	F	F	C	C
Approach Delay		47.5		155.8		63.1	30.8
Approach LOS		D		F		E	C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.77	
Intersection Signal Delay: 74.8	Intersection LOS: E
Intersection Capacity Utilization 103.4%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 20: Rubidoux Bl. & 30th St./SR-60 WB Off-Ramp





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	0	236	589	125	207	112	1054	0	0	1149	61
Future Volume (veh/h)	48	0	236	589	125	207	112	1054	0	0	1149	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	52	0	86	431	428	87	122	1146	0	0	1249	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	135	0	120	436	369	75	186	1945	0	0	1884	95
Arrive On Green	0.07	0.00	0.07	0.24	0.24	0.24	0.18	0.18	0.00	0.00	0.54	0.54
Sat Flow, veh/h	1810	0	1610	1810	1532	311	426	3705	0	0	3592	176
Grp Volume(v), veh/h	52	0	86	431	0	515	122	1146	0	0	644	668
Grp Sat Flow(s),veh/h/ln	1810	0	1610	1810	0	1844	426	1805	0	0	1805	1868
Q Serve(g_s), s	3.0	0.0	5.7	26.1	0.0	26.5	31.0	32.1	0.0	0.0	28.1	28.2
Cycle Q Clear(g_c), s	3.0	0.0	5.7	26.1	0.0	26.5	59.3	32.1	0.0	0.0	28.1	28.2
Prop In Lane	1.00		1.00	1.00		0.17	1.00		0.00	0.00		0.09
Lane Grp Cap(c), veh/h	135	0	120	436	0	444	186	1945	0	0	973	1007
V/C Ratio(X)	0.38	0.00	0.71	0.99	0.00	1.16	0.66	0.59	0.00	0.00	0.66	0.66
Avail Cap(c_a), veh/h	378	0	337	436	0	444	186	1945	0	0	973	1007
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.95	0.95	0.00	0.00	0.70	0.70
Uniform Delay (d), s/veh	48.5	0.0	49.7	41.6	0.0	41.8	59.6	34.0	0.0	0.0	18.2	18.2
Incr Delay (d2), s/veh	2.1	0.0	9.1	40.0	0.0	94.2	16.0	1.3	0.0	0.0	2.5	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	2.6	16.0	0.0	23.1	4.4	15.7	0.0	0.0	11.5	11.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.6	0.0	58.8	81.6	0.0	135.9	75.6	35.3	0.0	0.0	20.7	20.6
LnGrp LOS	D	A	E	F	A	F	E	D	A	A	C	C
Approach Vol, veh/h		138			946			1268			1312	
Approach Delay, s/veh		55.7			111.2			39.2			20.7	
Approach LOS		E			F			D			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		64.3		32.0		64.3		13.7				
Change Period (Y+Rc), s		5.0		5.5		* 5		5.5				
Max Green Setting (Gmax), s		44.5		26.5		* 46		23.0				
Max Q Clear Time (g_c+I1), s		61.3		28.5		30.2		7.7				
Green Ext Time (p_c), s		0.0		0.0		8.6		0.6				

Intersection Summary												
HCM 6th Ctrl Delay			51.8									
HCM 6th LOS			D									

Notes

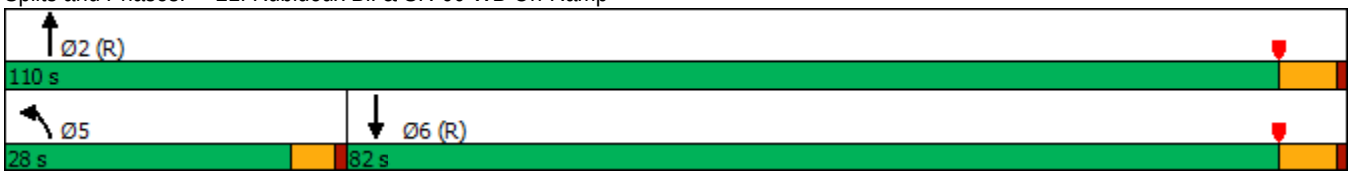
User approved volume balancing among the lanes for turning movement.

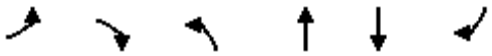
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	NBL	NBT	SBT
Lane Configurations			
Traffic Volume (vph)	262	1166	956
Future Volume (vph)	262	1166	956
Turn Type	Prot	NA	NA
Protected Phases	5	2	6
Permitted Phases			
Detector Phase	5	2	6
Switch Phase			
Minimum Initial (s)	5.0	10.0	10.0
Minimum Split (s)	9.6	27.8	27.8
Total Split (s)	28.0	110.0	82.0
Total Split (%)	25.5%	100.0%	74.5%
Yellow Time (s)	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8
Lead/Lag	Lead		Lag
Lead-Lag Optimize?	Yes		Yes
Recall Mode	None	C-Min	C-Min
Act Effct Green (s)	20.3	110.0	79.3
Actuated g/C Ratio	0.18	1.00	0.72
v/c Ratio	0.85	0.35	0.88
Control Delay	69.4	0.2	18.2
Queue Delay	0.0	0.2	46.8
Total Delay	69.4	0.4	65.0
LOS	E	A	E
Approach Delay		13.1	65.0
Approach LOS		B	E

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 43.2	Intersection LOS: D
Intersection Capacity Utilization 82.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 21: Rubidoux Bl. & SR-60 WB On-Ramp





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	262	1166	956	1018
Future Volume (veh/h)	0	0	262	1166	956	1018
Initial Q (Qb), veh			0	0	0	0
Ped-Bike Adj(A_pbT)			1.00			1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00
Work Zone On Approach				No	No	
Adj Sat Flow, veh/h/ln			1900	1900	1900	1900
Adj Flow Rate, veh/h			282	1254	1028	1095
Peak Hour Factor			0.93	0.93	0.93	0.93
Percent Heavy Veh, %			0	0	0	0
Cap, veh/h			307	3420	1328	1184
Arrive On Green			0.34	1.00	1.00	1.00
Sat Flow, veh/h			1810	3705	1900	1609
Grp Volume(v), veh/h			282	1254	1028	1095
Grp Sat Flow(s),veh/h/ln			1810	1805	1805	1609
Q Serve(g_s), s			16.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s			16.5	0.0	0.0	0.0
Prop In Lane			1.00			1.00
Lane Grp Cap(c), veh/h			307	3420	1328	1184
V/C Ratio(X)			0.92	0.37	0.77	0.92
Avail Cap(c_a), veh/h			385	3420	1328	1184
HCM Platoon Ratio			2.00	2.00	1.67	1.67
Upstream Filter(I)			0.65	0.65	0.12	0.12
Uniform Delay (d), s/veh			35.6	0.0	0.0	0.0
Incr Delay (d2), s/veh			15.5	0.2	0.6	2.1
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			7.0	0.1	0.2	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			51.1	0.2	0.6	2.1
LnGrp LOS			D	A	A	A
Approach Vol, veh/h				1536	2123	
Approach Delay, s/veh				9.5	1.4	
Approach LOS				A	A	

Timer - Assigned Phs	2			5	6
Phs Duration (G+Y+Rc), s	110.0			23.2	86.8
Change Period (Y+Rc), s	5.8			4.6	5.8
Max Green Setting (Gmax), s	104.2			23.4	76.2
Max Q Clear Time (g_c+I1), s	2.0			18.5	2.0
Green Ext Time (p_c), s	12.5			0.2	39.3

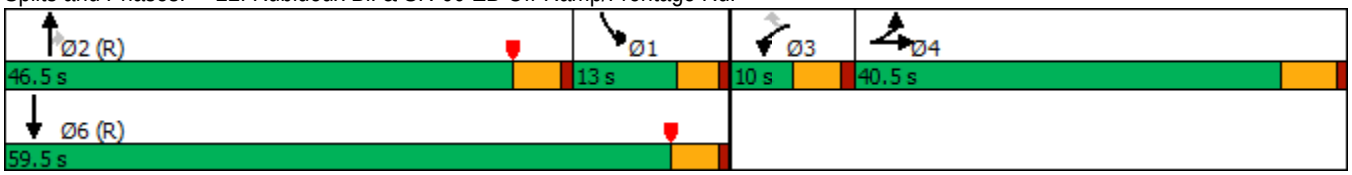
Intersection Summary	
HCM 6th Ctrl Delay	4.8
HCM 6th LOS	A

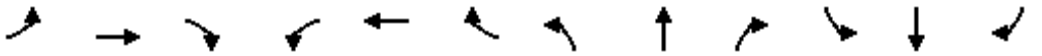
22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.

Lane Group	EBL	EBT	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	572	53	103	17	839	290	229	727
Future Volume (vph)	572	53	103	17	839	290	229	727
Turn Type	Split	NA	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	4	4	3		2		1	6
Permitted Phases				3		2		
Detector Phase	4	4	3	3	2	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	40.5	40.5	10.0	10.0	45.0	45.0	9.5	30.0
Total Split (s)	40.5	40.5	10.0	10.0	46.5	46.5	13.0	59.5
Total Split (%)	36.8%	36.8%	9.1%	9.1%	42.3%	42.3%	11.8%	54.1%
Yellow Time (s)	4.5	4.5	4.0	4.0	4.0	4.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.0	5.0	5.0	5.0	4.5	5.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	C-Min	C-Min	None	C-Min
Act Effct Green (s)	35.0	35.0	5.0	5.0	33.4	33.4	16.6	54.5
Actuated g/C Ratio	0.32	0.32	0.05	0.05	0.30	0.30	0.15	0.50
v/c Ratio	0.98	0.99	1.30	0.09	0.80	0.43	0.88	0.42
Control Delay	72.9	64.8	243.3	1.0	40.8	4.8	61.7	11.9
Queue Delay	0.0	2.0	0.0	0.1	0.1	0.0	0.0	1.1
Total Delay	72.9	66.8	243.3	1.1	40.8	4.8	61.7	13.0
LOS	E	E	F	A	D	A	E	B
Approach Delay		69.7			31.6			24.7
Approach LOS		E			C			C

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.30	
Intersection Signal Delay: 48.5	Intersection LOS: D
Intersection Capacity Utilization 88.6%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 22: Rubidoux Bl. & SR-60 EB Off-Ramp/Frontage Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	572	53	454	103	0	17	0	839	290	229	727	0
Future Volume (veh/h)	572	53	454	103	0	17	0	839	290	229	727	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	0	1900	0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	562	103	473	107	0	16	0	874	254	239	757	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	576	94	433	0	0	0	0	1018	454	468	2117	0
Arrive On Green	0.32	0.32	0.32	0.00	0.00	0.00	0.00	0.28	0.28	0.09	0.19	0.00
Sat Flow, veh/h	1810	296	1359		0		0	3705	1610	1810	3705	0
Grp Volume(v), veh/h	562	0	576		0.0		0	874	254	239	757	0
Grp Sat Flow(s),veh/h/ln	1810	0	1655				0	1805	1610	1810	1805	0
Q Serve(g_s), s	33.8	0.0	35.0				0.0	25.2	13.9	13.9	20.0	0.0
Cycle Q Clear(g_c), s	33.8	0.0	35.0				0.0	25.2	13.9	13.9	20.0	0.0
Prop In Lane	1.00		0.82				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	576	0	527				0	1018	454	468	2117	0
V/C Ratio(X)	0.98	0.00	1.09				0.00	0.86	0.56	0.51	0.36	0.00
Avail Cap(c_a), veh/h	576	0	527				0	1362	607	468	2117	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.62	0.62	0.36	0.36	0.00
Uniform Delay (d), s/veh	37.1	0.0	37.5				0.0	37.4	29.5	43.6	26.4	0.0
Incr Delay (d2), s/veh	31.3	0.0	67.2				0.0	6.1	3.1	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.1	0.0	23.2				0.0	11.6	5.5	6.7	9.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.3	0.0	104.7				0.0	43.5	32.6	43.8	26.6	0.0
LnGrp LOS	E	A	F				A	D	C	D	C	A
Approach Vol, veh/h		1138						1128			996	
Approach Delay, s/veh		86.7						41.0			30.7	
Approach LOS		F						D			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	33.5	36.0		40.5		69.5
Change Period (Y+Rc), s	5.0	* 5		5.5		5.0
Max Green Setting (Gmax), s	8.5	* 42		35.0		54.5
Max Q Clear Time (g_c+I1), s	15.9	27.2		37.0		22.0
Green Ext Time (p_c), s	0.0	3.8		0.0		3.4

Intersection Summary	
HCM 6th Ctrl Delay	53.8
HCM 6th LOS	D

Notes

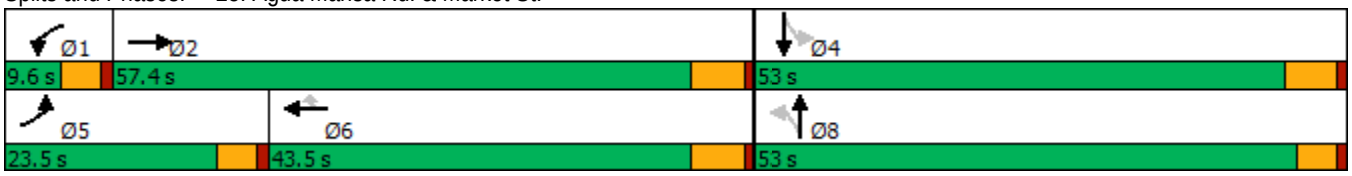
User approved volume balancing among the lanes for turning movement.

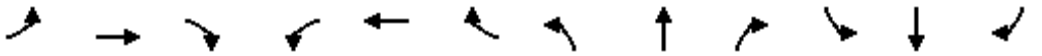
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	504	1138	5	976	231	5	4	287	3
Future Volume (vph)	504	1138	5	976	231	5	4	287	3
Turn Type	Prot	NA	Prot	NA	Perm	Perm	NA	Perm	NA
Protected Phases	5	2	1	6			8		4
Permitted Phases					6	8		4	
Detector Phase	5	2	1	6	6	8	8	4	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	31.8	9.6	26.8	26.8	14.6	14.6	43.8	43.8
Total Split (s)	23.5	57.4	9.6	43.5	43.5	53.0	53.0	53.0	53.0
Total Split (%)	19.6%	47.8%	8.0%	36.3%	36.3%	44.2%	44.2%	44.2%	44.2%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8		4.6		5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	None	Max	Max	None	None	None	None
Act Effct Green (s)	18.9	59.3	5.0	37.7	37.7		48.4		47.2
Actuated g/C Ratio	0.16	0.49	0.04	0.31	0.31		0.40		0.39
v/c Ratio	0.97	0.68	0.07	0.92	0.36		0.02		1.03
Control Delay	82.7	26.2	57.2	52.8	5.3		17.0		76.7
Queue Delay	0.0	2.0	0.0	0.0	0.0		0.0		0.0
Total Delay	82.7	28.2	57.2	52.8	5.3		17.0		76.7
LOS	F	C	E	D	A		B		E
Approach Delay		44.9		43.8			17.0		76.7
Approach LOS		D		D			B		E

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 49.8	Intersection LOS: D
Intersection Capacity Utilization 96.2%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 25: Agua Mansa Rd. & Market St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	504	1138	7	5	976	231	5	4	5	287	3	304
Future Volume (veh/h)	504	1138	7	5	976	231	5	4	5	287	3	304
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	536	1211	6	5	1038	208	5	4	5	305	3	191
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	587	1821	9	12	1204	537	222	179	199	378	3	204
Arrive On Green	0.17	0.49	0.49	0.01	0.33	0.33	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	3510	3683	18	1810	3610	1610	502	504	559	917	9	574
Grp Volume(v), veh/h	536	593	624	5	1038	208	14	0	0	499	0	0
Grp Sat Flow(s),veh/h/ln	1755	1805	1897	1810	1805	1610	1565	0	0	1500	0	0
Q Serve(g_s), s	17.0	28.0	28.0	0.3	30.4	11.2	0.0	0.0	0.0	35.7	0.0	0.0
Cycle Q Clear(g_c), s	17.0	28.0	28.0	0.3	30.4	11.2	0.6	0.0	0.0	36.3	0.0	0.0
Prop In Lane	1.00		0.01	1.00		1.00	0.36		0.36	0.61		0.38
Lane Grp Cap(c), veh/h	587	892	937	12	1204	537	600	0	0	585	0	0
V/C Ratio(X)	0.91	0.67	0.67	0.43	0.86	0.39	0.02	0.00	0.00	0.85	0.00	0.00
Avail Cap(c_a), veh/h	587	892	937	80	1204	537	708	0	0	677	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	46.3	21.5	21.5	56.0	35.2	28.8	23.6	0.0	0.0	35.1	0.0	0.0
Incr Delay (d2), s/veh	18.4	3.9	3.7	9.0	8.3	2.1	0.0	0.0	0.0	9.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	11.8	12.4	0.2	14.0	4.5	0.2	0.0	0.0	13.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.7	25.4	25.3	65.0	43.5	30.9	23.6	0.0	0.0	44.2	0.0	0.0
LnGrp LOS	E	C	C	E	D	C	C	A	A	D	A	A
Approach Vol, veh/h		1753			1251			14			499	
Approach Delay, s/veh		37.4			41.5			23.6			44.2	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.3	61.7		46.0	23.5	43.5		46.0				
Change Period (Y+Rc), s	4.6	5.8		5.8	4.6	5.8		* 5.8				
Max Green Setting (Gmax), s	5.0	51.6		47.2	18.9	37.7		* 48				
Max Q Clear Time (g_c+I1), s	2.3	30.0		38.3	19.0	32.4		2.6				
Green Ext Time (p_c), s	0.0	7.7		2.0	0.0	3.2		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		39.8	
HCM 6th LOS		D	

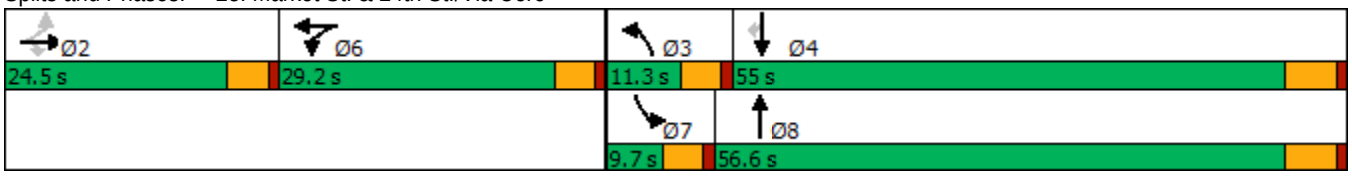
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	9	34	226	258	43	53	962	28	1148	8
Future Volume (vph)	9	34	226	258	43	53	962	28	1148	8
Turn Type	Perm	NA	Perm	Split	NA	Prot	NA	Prot	NA	Perm
Protected Phases		2		6	6	3	8	7	4	
Permitted Phases	2		2							4
Detector Phase	2	2	2	6	6	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	23.6	23.6	23.6	14.6	14.6	9.6	15.8	9.6	36.8	36.8
Total Split (s)	24.5	24.5	24.5	29.2	29.2	11.3	56.6	9.7	55.0	55.0
Total Split (%)	20.4%	20.4%	20.4%	24.3%	24.3%	9.4%	47.2%	8.1%	45.8%	45.8%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	5.8	4.6	5.8	5.8
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max	Max
Act Effct Green (s)		15.2	15.2	21.7	21.7	6.4	53.4	5.1	50.1	50.1
Actuated g/C Ratio		0.14	0.14	0.20	0.20	0.06	0.48	0.05	0.45	0.45
v/c Ratio		0.53	0.79	0.84	0.26	0.59	0.70	0.39	0.81	0.01
Control Delay		67.3	41.6	65.5	27.5	77.5	27.3	68.6	33.1	0.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		67.3	41.6	65.5	27.5	77.5	27.3	68.6	33.1	0.0
LOS		E	D	E	C	E	C	E	C	A
Approach Delay		45.7			56.2		29.7		33.7	
Approach LOS		D			E		C		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 110.8	
Natural Cycle: 95	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 36.0	Intersection LOS: D
Intersection Capacity Utilization 73.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 28: Market St. & 24th St./Via Cero



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	34	226	258	43	41	53	962	87	28	1148	8
Future Volume (veh/h)	9	34	226	258	43	41	53	962	87	28	1148	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	10	39	175	297	49	38	61	1106	99	32	1320	9
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	50	197	210	335	184	143	79	1580	141	52	1652	737
Arrive On Green	0.13	0.13	0.13	0.19	0.19	0.19	0.04	0.47	0.47	0.03	0.46	0.46
Sat Flow, veh/h	384	1497	1599	1810	992	769	1810	3345	299	1810	3610	1610
Grp Volume(v), veh/h	49	0	175	297	0	87	61	596	609	32	1320	9
Grp Sat Flow(s),veh/h/ln	1881	0	1599	1810	0	1762	1810	1805	1839	1810	1805	1610
Q Serve(g_s), s	2.5	0.0	11.5	17.2	0.0	4.6	3.6	28.0	28.1	1.9	33.6	0.3
Cycle Q Clear(g_c), s	2.5	0.0	11.5	17.2	0.0	4.6	3.6	28.0	28.1	1.9	33.6	0.3
Prop In Lane	0.20		1.00	1.00		0.44	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	247	0	210	335	0	326	79	853	869	52	1652	737
V/C Ratio(X)	0.20	0.00	0.83	0.89	0.00	0.27	0.77	0.70	0.70	0.62	0.80	0.01
Avail Cap(c_a), veh/h	348	0	296	414	0	403	113	853	869	86	1652	737
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.7	0.0	45.6	42.7	0.0	37.5	50.9	22.3	22.4	51.6	24.9	15.9
Incr Delay (d2), s/veh	0.4	0.0	13.1	17.4	0.0	0.4	10.9	4.7	4.7	4.4	4.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	5.2	9.3	0.0	2.0	1.8	12.0	12.2	0.9	14.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.0	0.0	58.7	60.1	0.0	38.0	61.8	27.1	27.0	56.0	29.1	15.9
LnGrp LOS	D	A	E	E	A	D	E	C	C	E	C	B
Approach Vol, veh/h		224			384			1266			1361	
Approach Delay, s/veh		55.0			55.1			28.7			29.6	
Approach LOS		E			E			C			C	

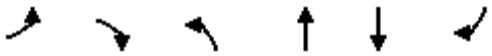
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		18.7	9.3	55.0		24.5	7.7	56.6				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		19.9	6.7	49.2		24.6	5.1	50.8				
Max Q Clear Time (g_c+I1), s		13.5	5.6	35.6		19.2	3.9	30.1				
Green Ext Time (p_c), s		0.4	0.0	7.3		0.7	0.0	7.6				

Intersection Summary												
HCM 6th Ctrl Delay			34.1									
HCM 6th LOS			C									

Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	358	62	870	380
Future Volume (vph)	358	62	870	380
Turn Type	Prot	Prot	NA	NA
Protected Phases	4	5	2	6
Permitted Phases				
Detector Phase	4	5	2	6
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	32.8	9.6	15.8	22.8
Total Split (s)	35.0	10.0	55.0	45.0
Total Split (%)	38.9%	11.1%	61.1%	50.0%
Yellow Time (s)	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.8
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	Min	Min
Act Effct Green (s)	28.5	5.5	43.7	36.2
Actuated g/C Ratio	0.34	0.07	0.52	0.43
v/c Ratio	0.93	0.66	0.58	0.92
Control Delay	51.9	69.0	15.0	41.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	51.9	69.0	15.0	41.0
LOS	D	E	B	D
Approach Delay	51.9		18.6	41.0
Approach LOS	D		B	D

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 84.1	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 32.9	Intersection LOS: C
Intersection Capacity Utilization 75.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 33: Agua Mansa Rd. & El Rivino Rd.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	358	96	62	870	380	205
Future Volume (veh/h)	358	96	62	870	380	205
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	448	0	78	1088	475	256
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	502		101	2046	522	281
Arrive On Green	0.28	0.00	0.06	0.57	0.45	0.45
Sat Flow, veh/h	1806	0	1810	3705	1160	625
Grp Volume(v), veh/h	449	0	78	1088	0	731
Grp Sat Flow(s),veh/h/ln	1810	0	1810	1805	0	1786
Q Serve(g_s), s	17.8	0.0	3.2	14.0	0.0	28.5
Cycle Q Clear(g_c), s	17.8	0.0	3.2	14.0	0.0	28.5
Prop In Lane	1.00	0.00	1.00			0.35
Lane Grp Cap(c), veh/h	503		101	2046	0	803
V/C Ratio(X)	0.89		0.78	0.53	0.00	0.91
Avail Cap(c_a), veh/h	706		131	2374	0	936
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.9	0.0	34.9	10.1	0.0	19.2
Incr Delay (d2), s/veh	10.4	0.0	14.1	0.2	0.0	11.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	0.0	1.7	4.3	0.0	12.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	36.3	0.0	48.9	10.3	0.0	30.8
LnGrp LOS	D		D	B	A	C
Approach Vol, veh/h	449			1166	731	
Approach Delay, s/veh	36.3			12.9	30.8	
Approach LOS	D			B	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		48.2		26.6	8.8	39.5
Change Period (Y+Rc), s		5.8		5.8	4.6	5.8
Max Green Setting (Gmax), s		49.2		29.2	5.4	39.2
Max Q Clear Time (g_c+I1), s		16.0		19.8	5.2	30.5
Green Ext Time (p_c), s		8.5		1.0	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	22.9
HCM 6th LOS	C

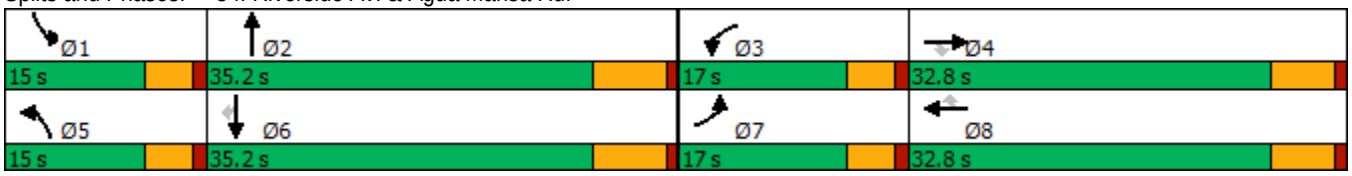
Notes

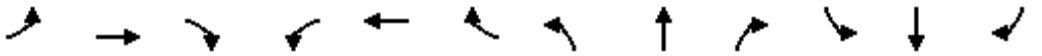
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	274	544	272	103	324	88	221	586	207	697	152
Future Volume (vph)	274	544	272	103	324	88	221	586	207	697	152
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	32.8	32.8	9.6	32.8	32.8	9.6	33.5	9.6	33.5	33.5
Total Split (s)	17.0	32.8	32.8	17.0	32.8	32.8	15.0	35.2	15.0	35.2	35.2
Total Split (%)	17.0%	32.8%	32.8%	17.0%	32.8%	32.8%	15.0%	35.2%	15.0%	35.2%	35.2%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effct Green (s)	12.6	23.5	23.5	9.2	17.6	17.6	10.6	23.2	10.6	23.2	23.2
Actuated g/C Ratio	0.15	0.27	0.27	0.11	0.20	0.20	0.12	0.27	0.12	0.27	0.27
v/c Ratio	1.08	0.57	0.44	0.55	0.46	0.21	1.04	0.78	0.97	0.75	0.29
Control Delay	116.3	31.5	6.1	50.0	32.0	2.8	111.8	34.9	96.5	34.5	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	116.3	31.5	6.1	50.0	32.0	2.8	111.8	34.9	96.5	34.5	6.1
LOS	F	C	A	D	C	A	F	C	F	C	A
Approach Delay		46.5			30.6			52.8		42.6	
Approach LOS		D			C			D		D	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 85.9	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 44.7	Intersection LOS: D
Intersection Capacity Utilization 74.7%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 34: Riverside Av. & Agua Mansa Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	274	544	272	103	324	88	221	586	142	207	697	152
Future Volume (veh/h)	274	544	272	103	324	88	221	586	142	207	697	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	285	567	185	107	338	77	230	610	142	216	726	150
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	299	843	374	138	521	232	251	772	179	251	958	426
Arrive On Green	0.17	0.23	0.23	0.08	0.14	0.14	0.14	0.27	0.27	0.14	0.27	0.27
Sat Flow, veh/h	1810	3610	1604	1810	3610	1607	1810	2908	676	1810	3610	1604
Grp Volume(v), veh/h	285	567	185	107	338	77	230	378	374	216	726	150
Grp Sat Flow(s),veh/h/ln	1810	1805	1604	1810	1805	1607	1810	1805	1778	1810	1805	1604
Q Serve(g_s), s	11.7	10.7	7.5	4.4	6.6	3.2	9.4	14.6	14.7	8.8	13.9	5.7
Cycle Q Clear(g_c), s	11.7	10.7	7.5	4.4	6.6	3.2	9.4	14.6	14.7	8.8	13.9	5.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	299	843	374	138	521	232	251	479	472	251	958	426
V/C Ratio(X)	0.95	0.67	0.49	0.78	0.65	0.33	0.92	0.79	0.79	0.86	0.76	0.35
Avail Cap(c_a), veh/h	299	1298	577	299	1298	578	251	690	680	251	1380	613
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.0	26.2	24.9	34.0	30.3	28.9	31.9	25.6	25.6	31.6	25.4	22.3
Incr Delay (d2), s/veh	39.2	0.9	1.0	3.5	1.4	0.8	34.9	3.9	4.1	24.0	1.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	4.3	2.7	1.9	2.8	1.2	6.1	5.9	5.9	5.1	5.3	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.3	27.1	25.9	37.5	31.7	29.7	66.8	29.6	29.7	55.7	26.8	22.8
LnGrp LOS	E	C	C	D	C	C	E	C	C	E	C	C
Approach Vol, veh/h		1037			522			982			1092	
Approach Delay, s/veh		38.8			32.6			38.3			32.0	
Approach LOS		D			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	26.4	10.3	23.3	15.0	26.4	17.0	16.6
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	10.4	28.7	12.4	27.0	10.4	28.7	12.4	27.0
Max Q Clear Time (g_c+I1), s	10.8	16.7	6.4	12.7	11.4	15.9	13.7	8.6
Green Ext Time (p_c), s	0.0	3.2	0.1	3.5	0.0	3.9	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	35.7
HCM 6th LOS	D

APPENDIX 10.8: CUMULATIVE HORIZON YEAR (2045) PLUS PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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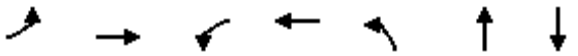
Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	382	663	1117	847	592	2011
v/c Ratio	0.58	1.06	0.71	0.84	0.81	1.02
Control Delay	30.9	83.0	29.5	19.0	34.6	31.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	31.5
Total Delay	30.9	83.0	29.5	19.0	34.6	63.0
Queue Length 50th (ft)	221	~516	280	342	220	~807
Queue Length 95th (ft)	325	#756	m292	m423	m222	m#796
Internal Link Dist (ft)		2158	960			340
Turn Bay Length (ft)	340			555	400	
Base Capacity (vph)	662	628	1725	1032	735	1969
Starvation Cap Reductn	0	0	0	0	0	396
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.58	1.06	0.65	0.82	0.81	1.28

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	63	344	424	444	73	931	1285
v/c Ratio	0.18	0.89	0.84	0.81	1.06	0.71	0.96
Control Delay	37.2	56.4	51.0	40.2	158.2	26.7	52.9
Queue Delay	0.0	3.5	72.3	65.6	0.0	36.3	7.3
Total Delay	37.2	59.9	123.2	105.8	158.2	63.0	60.2
Queue Length 50th (ft)	36	174	284	236	~53	364	~548
Queue Length 95th (ft)	74	#327	398	356	#161	417	#673
Internal Link Dist (ft)		471		1307		110	1510
Turn Bay Length (ft)					75		
Base Capacity (vph)	384	413	569	600	69	1306	1335
Starvation Cap Reductn	0	0	0	0	0	432	0
Spillback Cap Reductn	0	27	450	430	0	0	54
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.89	3.56	2.61	1.06	1.07	1.00

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	469	444	120	47	580	525	325	538
v/c Ratio	0.92	0.85	1.46	0.25	0.63	0.66	0.82	0.29
Control Delay	62.1	46.6	301.2	3.0	39.1	6.9	48.2	9.6
Queue Delay	0.0	0.1	0.0	0.3	0.1	0.0	0.0	0.0
Total Delay	62.1	46.7	301.2	3.3	39.2	6.9	48.2	9.6
Queue Length 50th (ft)	326	262	~116	0	201	0	216	96
Queue Length 95th (ft)	#516	#429	#236	0	212	72	m#465	m90
Internal Link Dist (ft)		1049			1396			322
Turn Bay Length (ft)	300			25		200	90	
Base Capacity (vph)	545	558	82	191	1361	921	397	1863
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	4	0	20	142	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.80	1.46	0.27	0.48	0.57	0.82	0.29

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

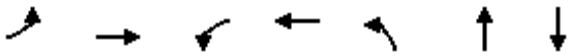
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	263	243	1472	954	471	1400
v/c Ratio	0.84	0.71	0.51	0.83	0.84	0.52
Control Delay	66.0	44.6	9.6	11.7	45.0	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	66.0	44.6	9.7	11.7	45.0	4.5
Queue Length 50th (ft)	185	129	220	530	176	127
Queue Length 95th (ft)	#314	225	m230	m518	m213	m119
Internal Link Dist (ft)		2158	960			340
Turn Bay Length (ft)	340			555	400	
Base Capacity (vph)	343	367	2899	1150	593	2705
Starvation Cap Reductn	0	0	0	0	0	345
Spillback Cap Reductn	0	0	102	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.66	0.53	0.83	0.79	0.59

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	52	257	512	489	122	1146	1315
v/c Ratio	0.18	0.79	0.86	0.81	1.77	0.92	1.04
Control Delay	38.9	48.4	48.6	40.5	419.0	36.0	72.0
Queue Delay	0.0	0.5	55.6	55.8	0.0	46.0	25.0
Total Delay	38.9	48.9	104.2	96.4	419.0	82.1	97.0
Queue Length 50th (ft)	32	125	334	286	~104	~462	~576
Queue Length 95th (ft)	65	210	#497	426	#224	#641	#771
Internal Link Dist (ft)		471		1307		110	1510
Turn Bay Length (ft)					75		
Base Capacity (vph)	377	396	642	649	69	1243	1268
Starvation Cap Reductn	0	0	0	0	0	297	0
Spillback Cap Reductn	0	18	312	305	0	0	128
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.68	1.55	1.42	1.77	1.21	1.15

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	536	588	107	18	874	302	239	757
v/c Ratio	0.98	0.99	1.30	0.09	0.80	0.43	0.88	0.42
Control Delay	72.9	64.8	243.3	1.0	40.8	4.8	61.7	11.9
Queue Delay	0.0	2.0	0.0	0.1	0.1	0.0	0.0	1.1
Total Delay	72.9	66.8	243.3	1.1	40.8	4.8	61.7	13.0
Queue Length 50th (ft)	393	355	~97	0	295	0	181	133
Queue Length 95th (ft)	#629	#608	#211	0	335	55	m#301	m157
Internal Link Dist (ft)		1049			1396			322
Turn Bay Length (ft)	300			25		200	90	
Base Capacity (vph)	545	593	82	191	1361	797	271	1788
Starvation Cap Reductn	0	0	0	0	0	0	0	731
Spillback Cap Reductn	0	5	0	16	25	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	1.00	1.30	0.10	0.65	0.38	0.88	0.72

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.