

TRAFFIC IMPACT ANALYSIS

**VAN BUREN/CHICAGO GASOLINE STATION PROJECT
RIVERSIDE COUNTY, CALIFORNIA**



January 2020

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VAN BUREN/CHICAGO GASOLINE STATION PROJECT RIVERSIDE COUNTY, CALIFORNIA

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1.0 INTRODUCTION

The Traffic Impact Analysis (TIA) has been prepared to assess the potential circulation impacts associated with the proposed Van Buren/Chicago Gasoline Station Project (project) to be located at the northeast corner of Chicago Avenue – Alta Cresta Avenue and Van Buren Boulevard in unincorporated Riverside County (County). Figure 1-1 illustrates the regional and project location. (Figures and tables are located at the end of each chapter.)

This report is intended to satisfy the requirements established by the County of Riverside Transportation Department *Traffic Impact Analysis Preparation Guide* (dated April 2008), as well as the requirements for the disclosure of potential impacts and mitigation measures pursuant to the California Environmental Quality Act (CEQA). The scope of work for this TIA, including study area and analysis methodologies, has been approved by County staff via the Scoping Agreement process. A copy of the Scoping Agreement is included in Appendix A.

This study examines traffic operations in the vicinity of the proposed project under the following four scenarios:

- Existing Conditions;
- Existing with Project Conditions;
- Project Completion (2021) with Project Conditions; and
- Cumulative (2021) with Project Conditions.

Traffic conditions were examined for weekday a.m. and p.m. peak hour conditions. The a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 7:00 and 9:00 a.m. The p.m. peak hour is defined as the one hour of highest traffic volumes occurring between 4:00 and 6:00 p.m.

1.1 PROJECT DESCRIPTION

The proposed project will include a gasoline station with 16 fueling positions and a 3,800 square foot (sf) convenience store with a car wash. Access to the project site will be provided via two full-access driveways; one from Chicago Avenue and the other from Van Buren Boulevard. The driveway on Chicago Avenue will be a full-access driveway, while the one on Van Buren Boulevard will be a right-in/right-out (RIRO) driveway. Figure 1-2 illustrates the conceptual site plan for the project.

1.2 STUDY AREA

As per the County's TIA guidelines, the study area shall generally include any intersection of "Collector" or higher classification street, with "Collector" or higher classification streets, at which the proposed project will add 50 or more peak hour trips, not exceeding a 5-mile radius from the project site. Based on this criteria, LSA proposes to include the following intersections:

1. Gamble Avenue/Van Buren Boulevard (Riverside County/City of Riverside);

2. Chicago Avenue – Alta Cresta Avenue (Riverside County/City of Riverside);
3. Dauchy Avenue/Van Buren Boulevard (Riverside County/City of Riverside);
4. Chicago Avenue/Project Driveway (Riverside County); and
5. Project Driveway 2/Van Buren Boulevard (Riverside County/City of Riverside).

Figure 1-3 illustrates the locations of all analysis intersections.

1.3 LIST OF CHAPTER 1.0 FIGURES

- Figure 1-1: Regional and Project Location
- Figure 1-2: Conceptual Site Plan
- Figure 1-3: Study Area Intersections

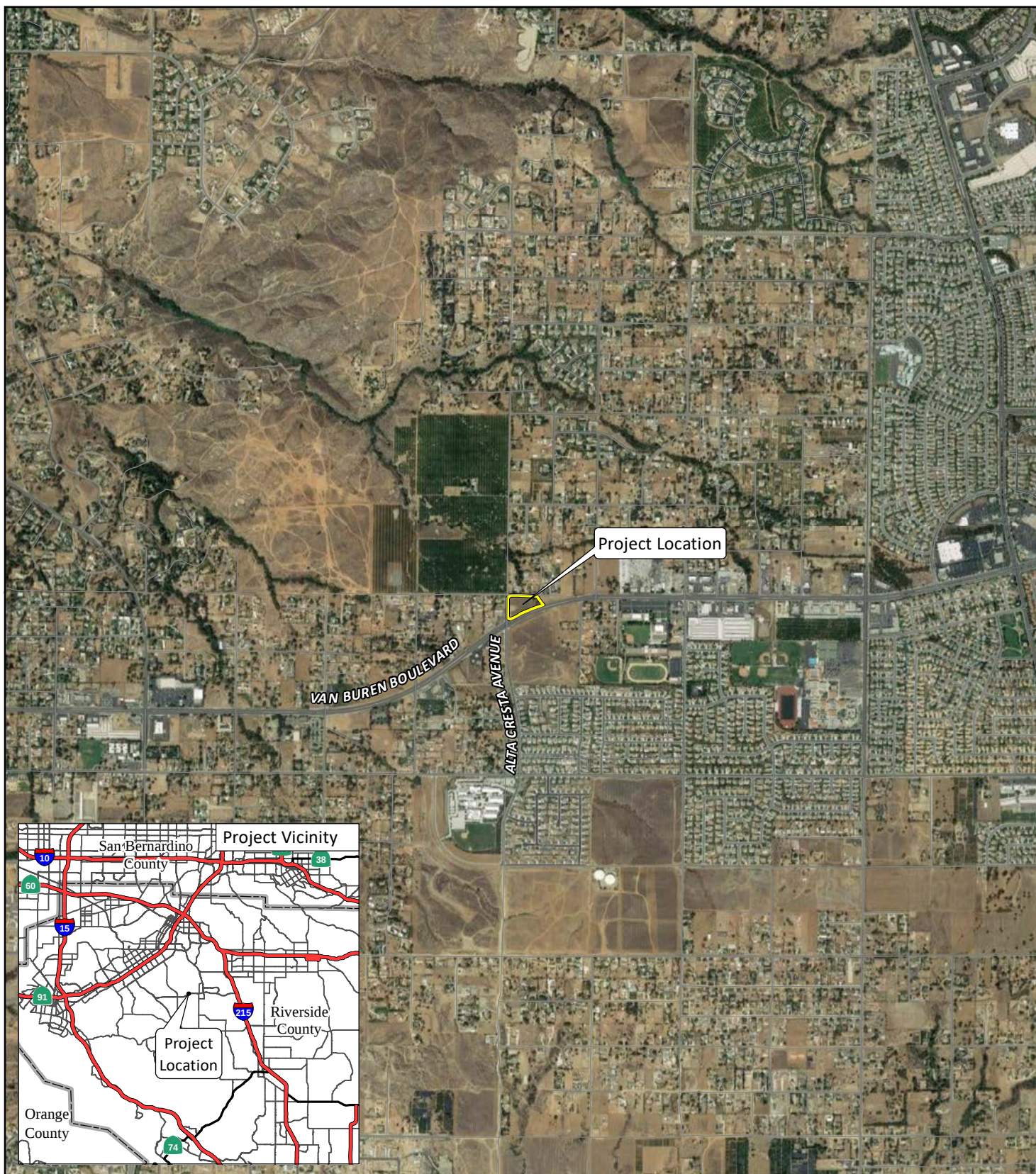
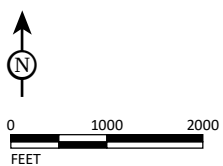


FIGURE 1-1

LSA



SOURCE: ESRI Streetmap, 2013; Google Earth, 2018.

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Van Buren/Chicago Gasoline Station Project
Traffic Impact Analysis
 Regional and Project Location

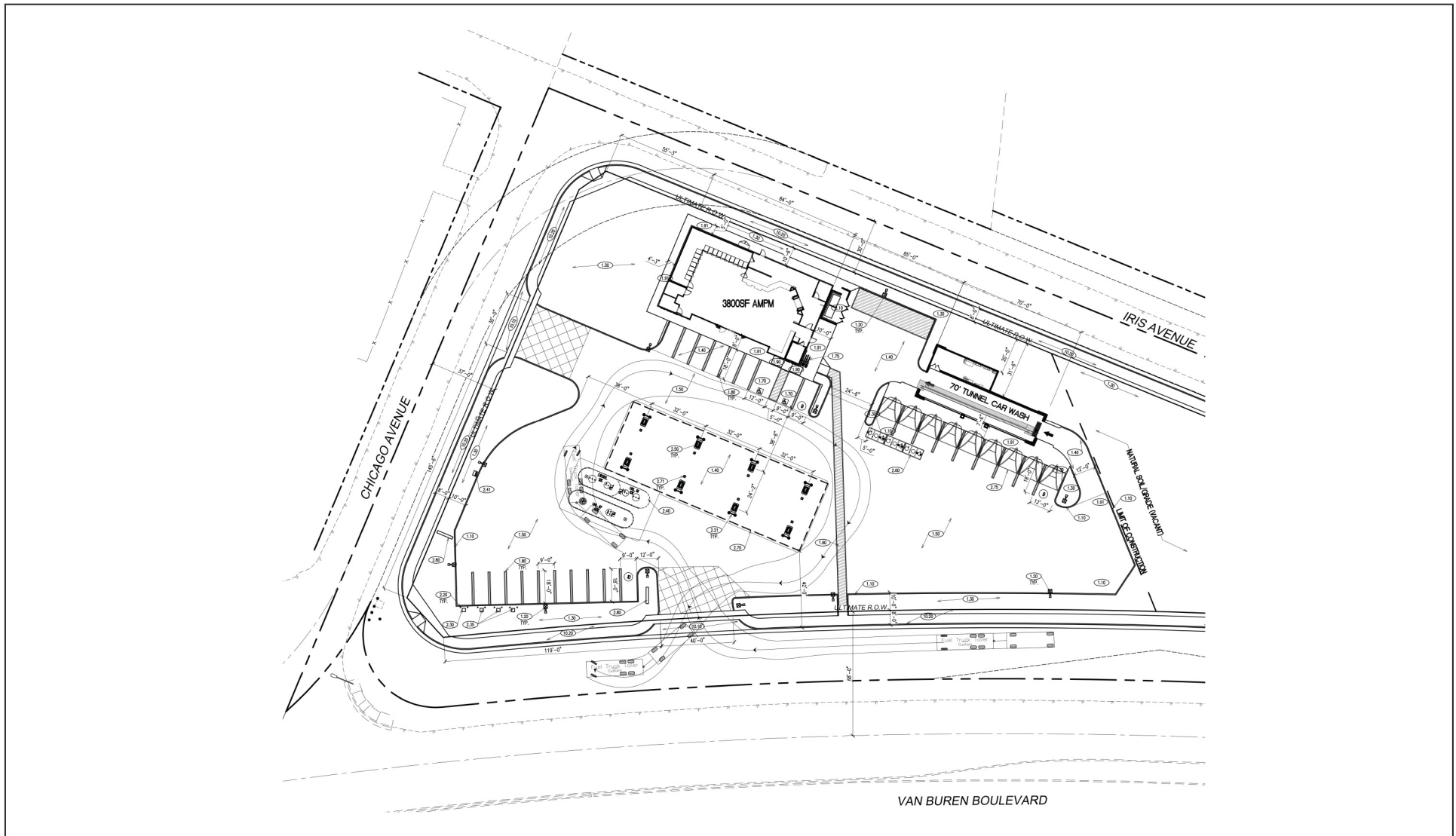
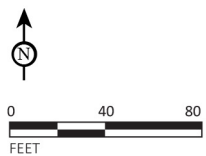


FIGURE 1-2

LSA

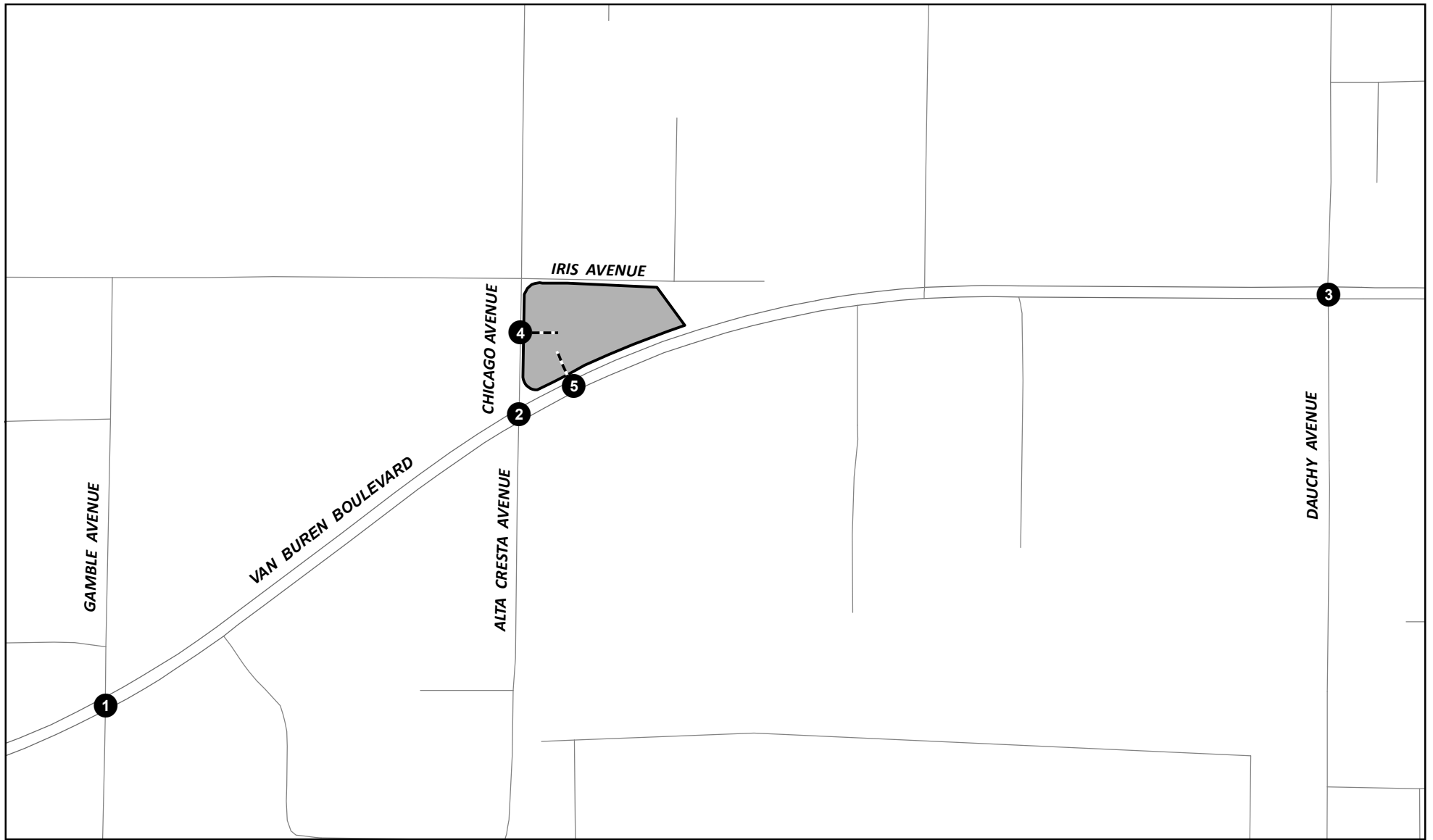


Van Buren/Chicago Gasoline Station Project
Traffic Impact Analysis

Conceptual Site Plan

SOURCE: CJC Design, Inc.

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LSA

LEGEND

- Project Location
- Project Driveways
- Study Intersections



0 225 450
FEET

SOURCE: ESRI Streetmap, 2013.

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FIGURE 1-3

Van Buren/Chicago Gasoline Station Project
Traffic Impact Analysis
Study Area Intersections

2.0 ANALYSIS METHODOLOGY

2.1 LEVEL OF SERVICE DEFINITIONS

Level of service (LOS) can be characterized for the whole intersection, each intersection approach, and by each lane group. Control delay alone is used to characterize LOS for the entire intersection. Control delay quantifies the increase in travel time due to the traffic signal control, and is a surrogate measure of driver discomfort and fuel consumption.

A complete description of the meaning of LOS can be found in the Transportation Research Board Special Report 209, *Highway Capacity Manual* (HCM). The HCM establishes LOS A through F for intersections. A description of LOS for signalized and unsignalized intersections is summarized in Table 2-A. Table 2-B shows the LOS criteria for unsignalized and signalized intersections.

For all study area intersections, the *Highway Capacity Manual 6th Edition* (HCM 6) analysis methodologies were used to determine intersection LOS. Intersection LOS was calculated using Synchro 10 software, which uses the HCM 6 methodologies.

2.2 LEVEL OF SERVICE PROCEDURES AND THRESHOLDS

Study intersections analyzed in this report are under the jurisdictions of the City of Riverside and Riverside County. As such, five out of the six study intersections fall under the jurisdictions of both the City and the County. Both the City and County of Riverside use LOS D as their minimum level of service criteria for intersections.

2.3 PROJECT SIGNIFICANCE THRESHOLD

At study intersections under the jurisdiction of the Riverside County, the determination of a significant circulation impact is based on the impact criteria contained in the County's TIA guidelines, which state that a significant impact occurs at a study intersection when the peak hour LOS falls below the target LOS, LOS D, with the addition of project traffic or when a project contributes to an unsatisfactory condition.

At study intersections under the jurisdiction of the City, the determination of a significant circulation impact is based on the impact criteria contained in the City's TIA guidelines. The guidelines state that, for projects in conformance with the City of Riverside *General Plan 2025*, a significant impact occurs at a study intersection when the peak hour LOS falls below the City's LOS standard, LOS D to E or F, or when the project contributes to an existing or forecast deficiency.

2.4 LIST OF CHAPTER 2.0 TABLES

- Table 2-A: Level of Service Definitions for Intersections
- Table 2-B: Level of Service Criteria for Unsignalized and Signalized Intersections

Table 2-A: Level of Service Definitions for Intersections

LOS	Description
A	No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily and nearly all drivers find freedom of operation.
B	This service level represents stable operation, where an occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel restricted within platoons of vehicles.
C	This level still represents stable operating conditions. Occasionally drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.
D	This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.
E	Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is seldom attained no matter how great the demand.
F	This level describes forced flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially and stoppages may occur for short or long periods of time due to the congestion. In the extreme case, both speed and volume can drop to zero.

Table 2-B: Level of Service Criteria for Unsignalized and Signalized Intersections

Level of Service	Unsignalized Intersection Average Delay per Vehicle (sec.)	Signalized Intersection Average Delay per Vehicle (sec.)
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80

3.0 CIRCULATION NETWORK SETTING

Figure 3-1 illustrates existing and existing plus project study intersection geometrics and traffic control. The project site is part of the Lake Mathews/Woodcrest Area Plan (Area Plan) in the County of Riverside. All major roadways within this Area Plan are classified based on the County's General Plan Circulation Element. Within the City of Riverside, all major roadways are classified based on the Master Plan of Roadways provided in the Circulation and Community Mobility Element of the City's General Plan. Following is a brief description of major roadways within the study area:

- **Van Buren Boulevard:** Within the study area, Van Buren Boulevard is classified as a 120 feet (ft) Arterial in the City's General Plan. However, in the Area Plan Circulation, it is classified as an Urban Arterial. Between Gamble Avenue and Dauchy Avenue, Van Buren Boulevard is a four-lane divided road with a raised median. Bicycle lanes are not present in this segment and there is no provision for on-street parking.
- **Chicago Avenue:** Within the study area, Chicago Avenue falls under the jurisdiction of the County of Riverside. However, it is not classified in the Area Plan Circulation. Between Iris Avenue and Van Buren Boulevard, Chicago Avenue is a two-lane undivided road. Bicycle lanes are not present in this segment and there is no provision for on-street parking.

3.1 LIST OF CHAPTER 3.0 FIGURES

- Figure 3-1: Existing with Project Study Intersection Geometrics and Traffic Control

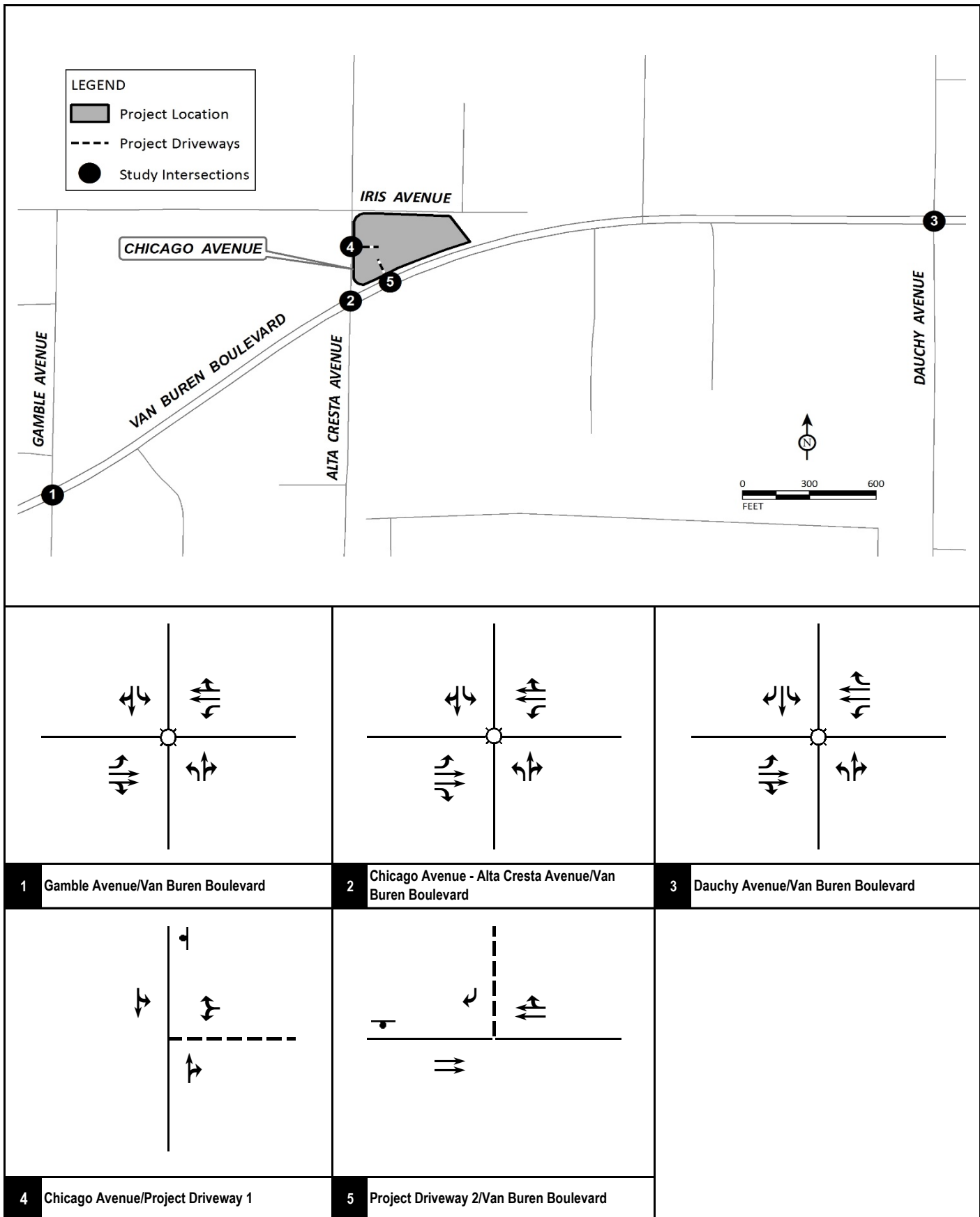


FIGURE 3-1

LSA

Legend

- Stop Sign
- Project Driveway
- Signal

Van Buren/Chicago Gasoline Station Project
Traffic Impact Analysis

Existing with Project Study Intersection Geometrics and Traffic Control

4.0 TRAFFIC VOLUMES FOR WITHOUT PROJECT SCENARIOS

4.1 EXISTING TRAFFIC VOLUMES

For all study intersections, existing traffic volumes are based on counts collected by Counts Unlimited in September 2019. Detailed count sheets are included in Appendix B.

Vehicle classification counts were conducted at the following intersections: Gamble Avenue/Van Buren Boulevard, Chicago Avenue – Alta Cresta Avenue/Van Buren Boulevard, and Dauchy Avenue/Van Buren Boulevard. At these locations, counts were converted to Passenger Car Equivalent (PCE) volumes. The concept of PCEs accounts for the larger impact of trucks on traffic operations. It does so by assigning each type of truck a PCE factor that represents the number of passenger vehicles that could travel through an intersection in the same time that a particular type of truck could. PCE volumes at study intersections were computed using a factor of 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for trucks with four or more axles.

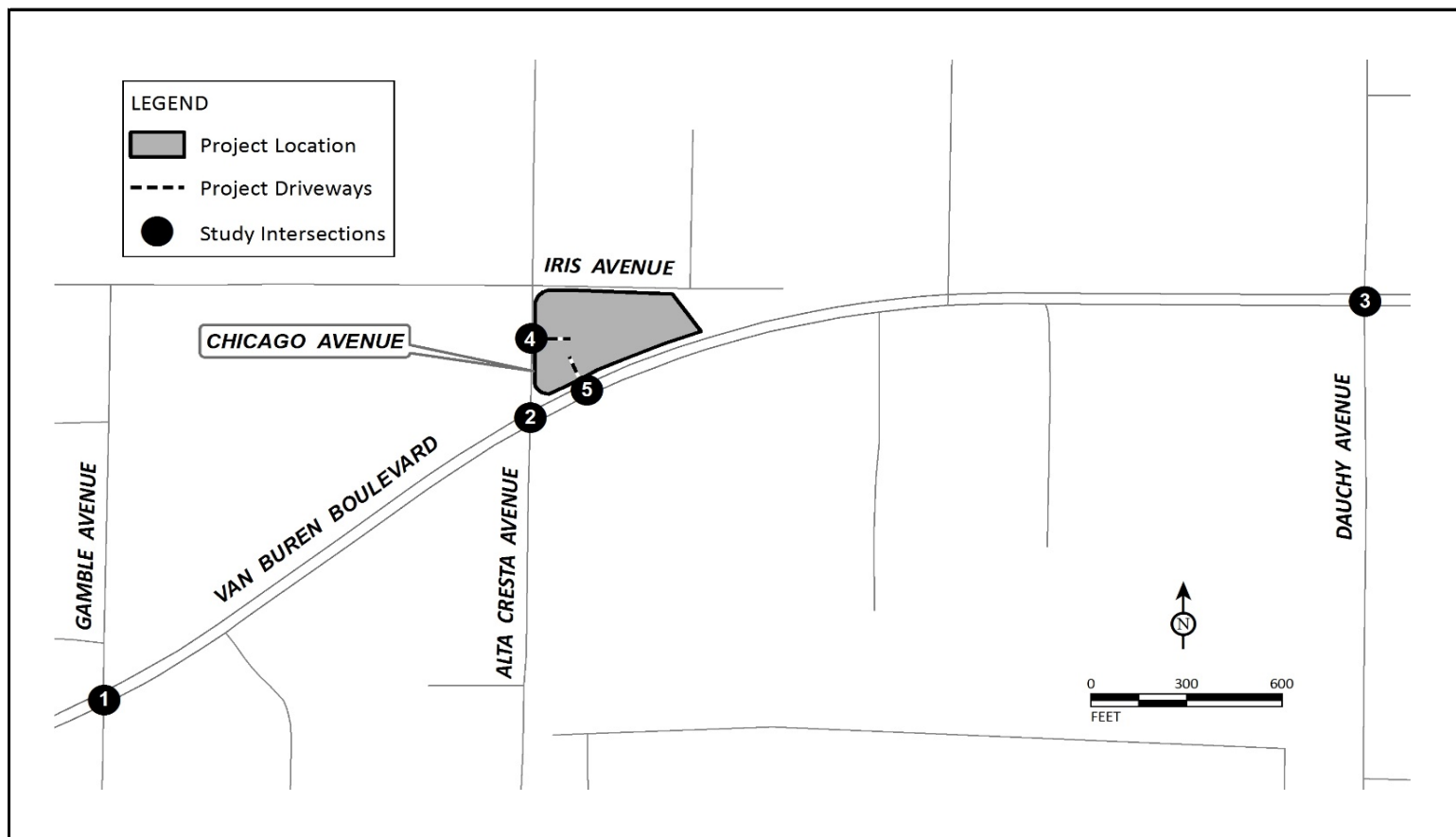
Traffic volumes at the intersections of Chicago Avenue/Project Driveway 1 and Project Driveway 2/Van Buren Boulevard were obtained based on the volumes at adjacent intersections by assuming no vehicle trip loss and balancing the traffic volumes to maintain the consistency of traffic flow.

Figure 4-1 illustrates existing peak hour traffic volumes at study intersections.

Detailed volume development worksheets are included in Appendix C.

4.2 LIST OF CHAPTER 4.0 FIGURES

- Figure 4-1: Existing Peak Hour Traffic Volumes



8 / 10 2 / 0 5 / 9 5 / 19 1188 / 1902 124 / 35 2 / 6 1874 / 1306 31 / 28 118 / 14 3 / 2 25 / 27		4 / 9 2 / 2 10 / 11 24 / 21 1158 / 1794 54 / 119 3 / 18 1763 / 1282 74 / 29 107 / 36 3 / 0 94 / 14		22 / 34 36 / 22 35 / 41 19 / 93 971 / 1502 153 / 126 13 / 20 1396 / 1196 126 / 116 248 / 99 37 / 41 121 / 45	
1	Gamble Avenue/Van Buren Boulevard	2	Chicago Avenue - Alta Cresta Avenue/Van Buren Boulevard	3	Dauchy Avenue/Van Buren Boulevard
Future Intersection		Future Intersection			
4	Chicago Avenue/Project Driveway 1	5	Project Driveway 2/Van Buren Boulevard		

FIGURE 4-1

LSA

XXXX / YYYY

AM / PM Peak Hour PCE Traffic Volumes

Van Buren/Chicago Gasoline Station Project
Traffic Impact Analysis

Existing Peak Hour Traffic Volumes

5.0 PROJECT TRAFFIC

5.1 PROJECT TRIP GENERATION

The trip generation for the proposed project was developed using rates from the Institute of Transportation (ITE) *Trip Generation Manual*, 10th Edition, for Land Uses 945 – “Gasoline/Service Station with Convenience Market.” Table 5-A summarizes the project trip generation.

Gas stations typically draw some of their trips from the adjacent street traffic. Therefore, some of the external project trips will come from the adjacent street traffic. These trips are not actually “new” trips added to the surrounding circulation system. These trips are referred to as “pass-by” trips and are made as intermediate stops en-route to a destination without diverting from the main route. For the proposed project, pass-by trips would occur on Chicago Avenue and Van Buren Boulevard en-route to a final destination.

The percentages of pass-by trips have been obtained from the ITE *Trip Generation Handbook* (3rd Edition). Project pass-by trip assignment has been developed based on traffic counts collected on the adjacent street system. Figure 5-1 illustrates the pass-by trip assignment that has been developed based on existing traffic volumes.

After deducting the pass-by trips from the overall external trips, the net project trip generation has been obtained. As illustrated in Table 5-A, the project is anticipated to generate 149 net trips in the a.m. peak hour, 167 net trips in the p.m. peak hour, and 2,464 net daily trips.

5.2 PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

The distribution of project trips was developed based on the regional roadway network and the locations of residential, employment, and commercial centers in relation to the proposed project. Figure 5-2 illustrates the trip distribution for the proposed project at the study area intersections. Trip assignment for project trips is the product of the project trip generation and the trip distribution percentages. Figures 5-3 illustrates the net project trip assignment.

5.3 LIST OF CHAPTER 5.0 FIGURES AND TABLES

- Figure 5-1: Pass-by Trip Assignment
- Figure 5-2: Project Trip Distribution
- Figure 5-3: Net Project Trip Assignment
- Table 5-A: Project Trip Generation

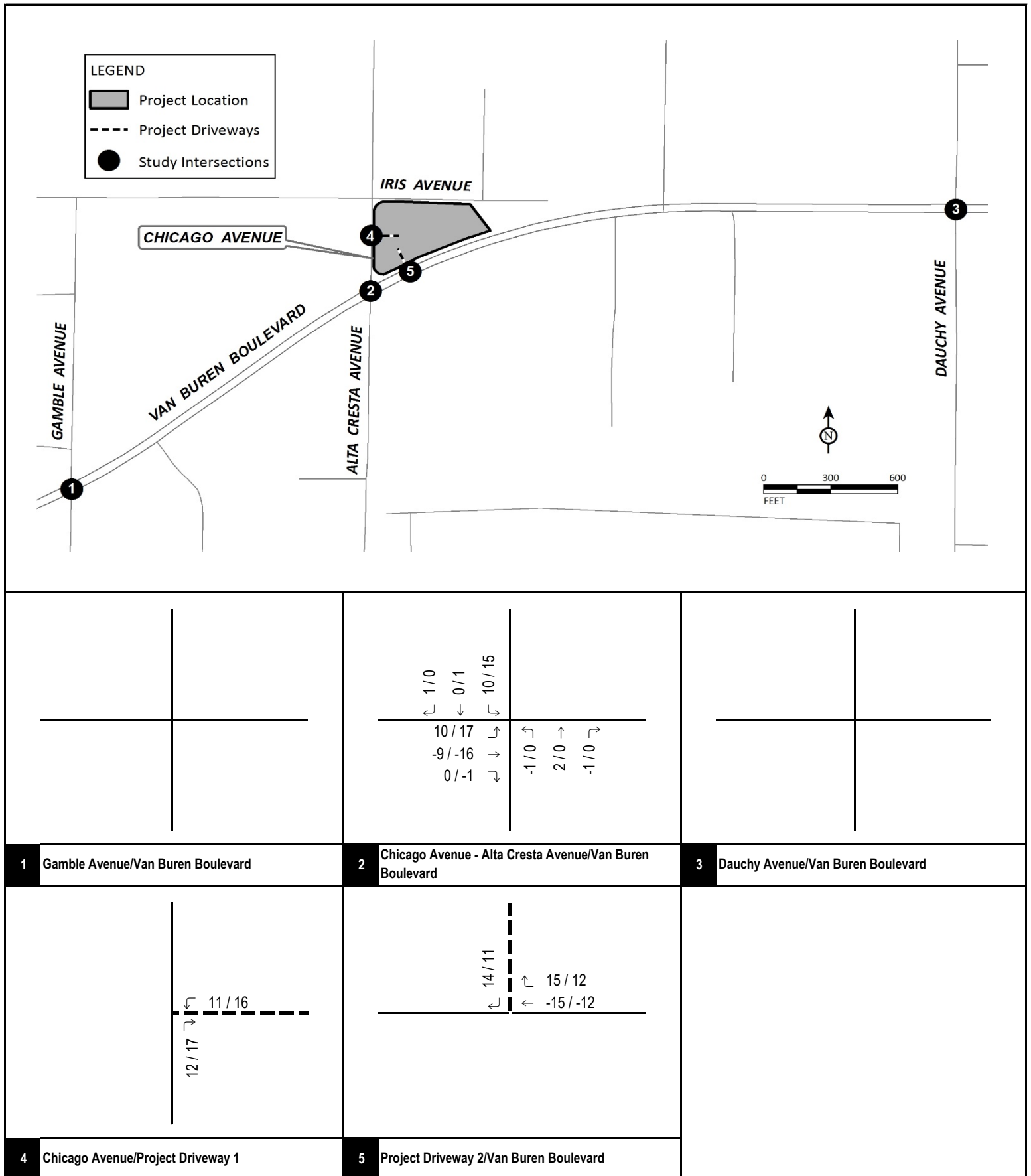


FIGURE 5-1

LSA

XX / YY
AM / PM Peak Hour Trips

Van Buren/Chicago Gasoline Station Project
Traffic Impact Analysis
Pass-by Trip Assignment

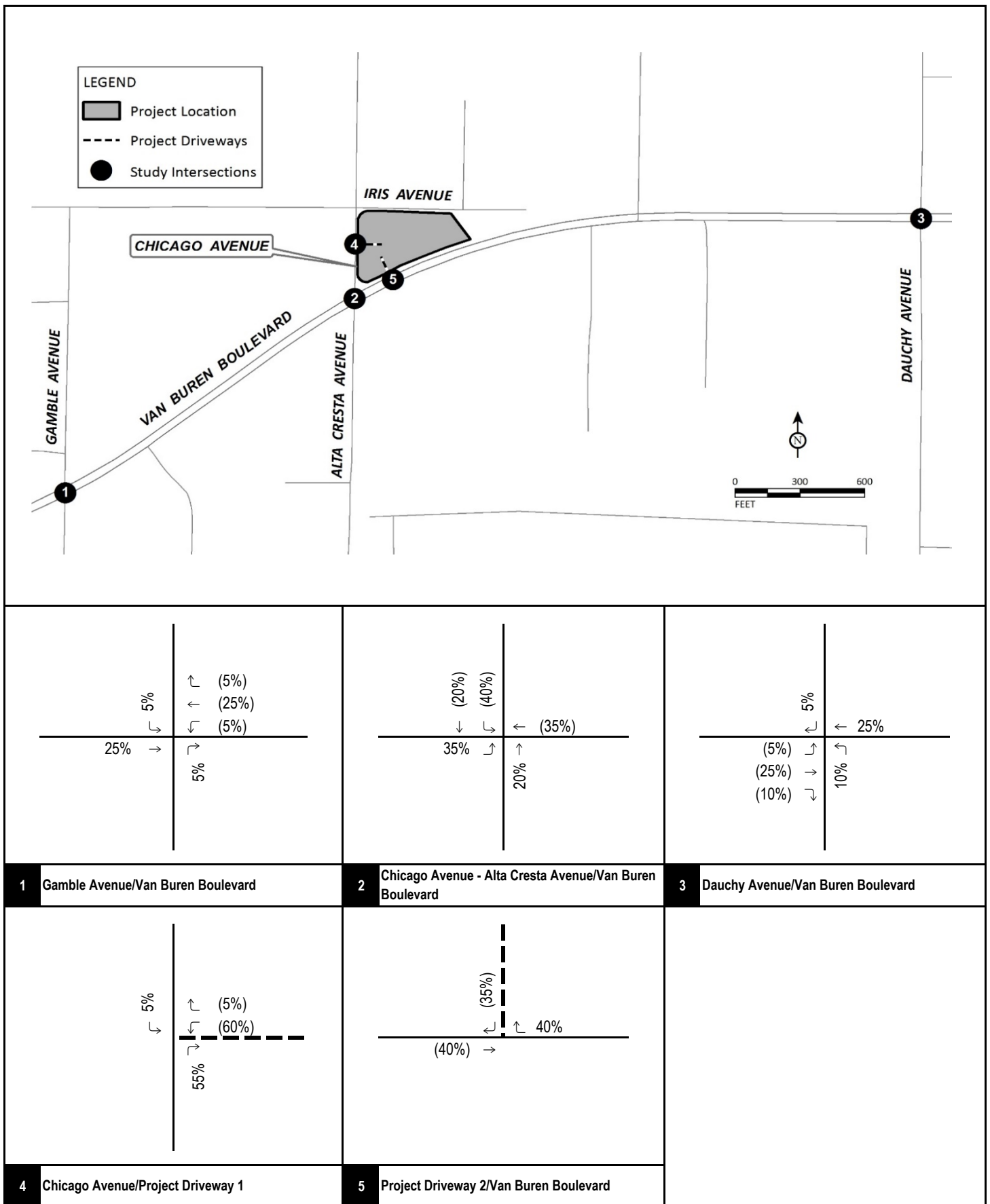


FIGURE 5-2

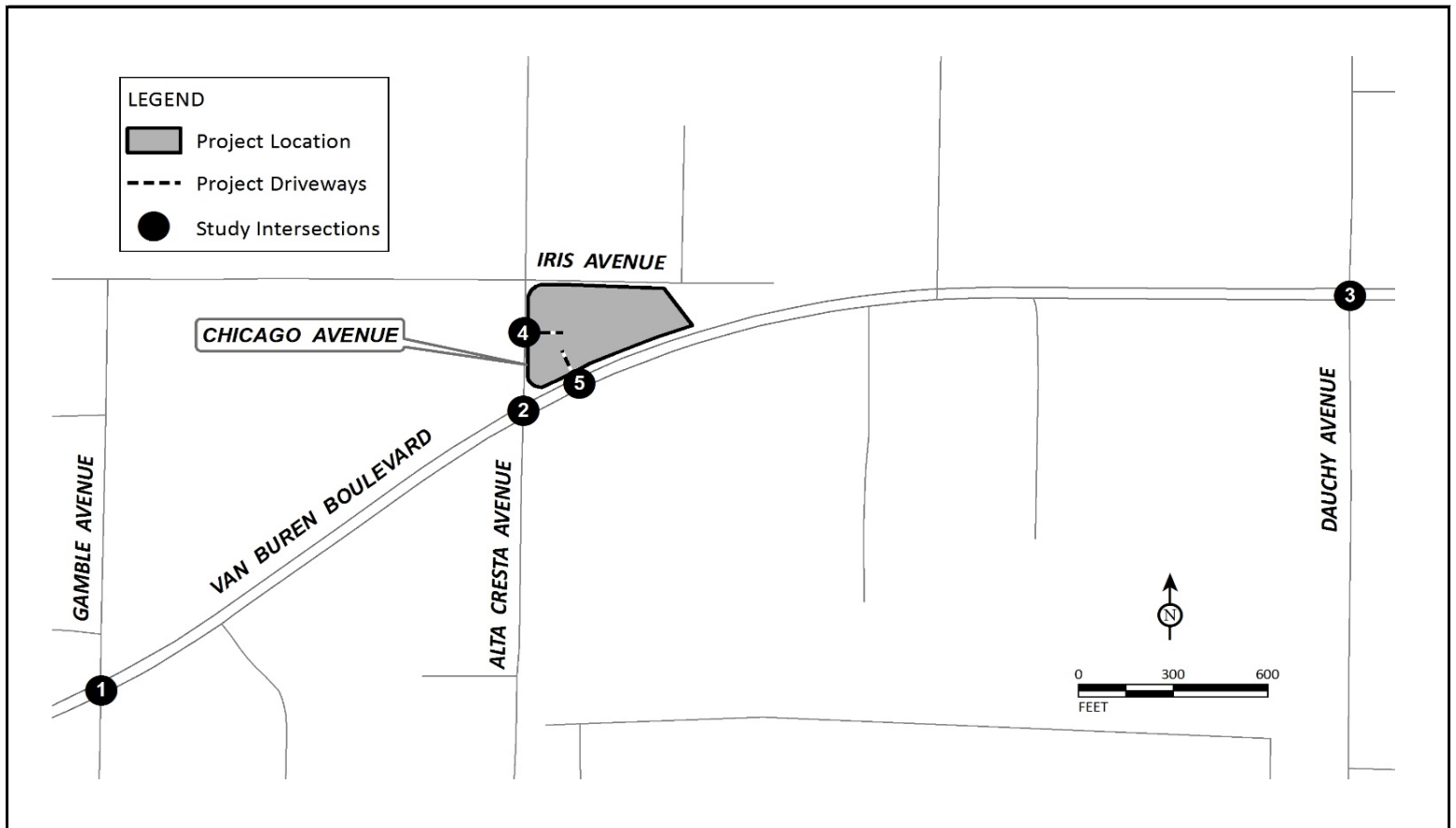
LSA

XX% (YY%)
Inbound% (Outbound%) Distribution

----- Project Driveway

Van Buren/Chicago Gasoline Station Project
Traffic Impact Analysis

Project Trip Distribution



1 Gamble Avenue/Van Buren Boulevard	2 Chicago Avenue - Alta Cresta Avenue/Van Buren Boulevard	3 Dauchy Avenue/Van Buren Boulevard
4 Chicago Avenue/Project Driveway 1	5 Project Driveway 2/Van Buren Boulevard	

FIGURE 5-3

LSA

XX / YY
AM / PM Peak Hour Trips

----- Project Driveway

Van Buren/Chicago Gasoline Station Project
Traffic Impact Analysis

Net Project Trip Assignment

Table 5-A - Project Trip Generation

Land Use	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Gas Station with Convenience Store/Car Wash	16 VFP							
Trips/Unit ¹		6.36	6.11	12.47	7.13	6.86	13.99	205.36
Trip Generation		102	98	200	114	110	224	3,286
Pass-by Trips ²		(26)	(25)	(51)	(29)	(28)	(57)	(822)
Total Net Trips		76	73	149	85	82	167	2,464

Note:

VFP = Vehicle Fueling Positions

¹ Rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (10th Edition), Land Use 945 - "Gasoline/Service Station with Convenience Market", Setting/Location - "General Urban/Suburban."

² As per the County of Riverside Transportation Department *Traffic Impact Analysis Preparation Guide*, dated April 2008, the pass-by rate shall not be assumed to exceed 25%. Since the pass-by rates provided for similar land uses in the ITE *Trip Generation Handbook* (3rd Edition) are higher than 25%, a pass-by rate of 25% was used.

6.0 TRAFFIC VOLUMES FOR WITH PROJECT SCENARIOS

6.1 EXISTING WITH PROJECT TRAFFIC VOLUMES

Traffic volumes for existing with project conditions were developed by adding project traffic to existing traffic volumes. Figure 6-1 illustrates existing with project peak hour traffic volumes.

6.2 PROJECT COMPLETION (2021) WITH PROJECT TRAFFIC VOLUMES

As approved during the County's scoping agreement process (Appendix A), traffic volumes for project completion with project conditions were developed by applying an ambient growth rate of 2.0 percent per annum to the existing traffic volumes and by adding project traffic to these volumes. Figure 6-2 illustrates peak hour traffic volumes at study intersections for project completion with project conditions.

6.3 CUMULATIVE (2021) WITH PROJECT TRAFFIC VOLUMES

Cumulative with project traffic volumes were developed by adding traffic volumes from approved and pending development projects to project completion with project traffic volumes. Information concerning cumulative projects in the vicinity of the proposed project was obtained from County staff and from the City of Riverside. Table 6-A lists the cumulative projects included in this analysis. Figure 6-3 illustrates the cumulative project locations. The trip generation for cumulative projects was developed using rates from the ITE *Trip Generation Manual*, 10th Edition. As shown in Table 6-A, the cumulative projects are expected to generate 1,073 net trips in the a.m. peak hour, 1,021 net trips in the p.m. peak hour, and 11,854 net daily trips. Project trips from these cumulative projects were assigned to the roadway network based on their locations in relation to surrounding land uses and regional arterials. Figure 6-4 illustrates the total peak hour cumulative project trips at study area intersections. Figure 6-5 illustrates the peak hour traffic volumes at study intersections for cumulative with project conditions.

Detailed volume development worksheets are included in Appendix C.

6.4 LIST OF CHAPTER 6.0 FIGURES AND TABLES

- Figure 6-1: Existing with Project Peak Hour Traffic Volumes
- Figure 6-2: Project Completion (2021) with Project Peak Hour Traffic Volumes
- Figure 6-3: Cumulative Project Locations
- Figure 6-4: Cumulative Projects Trip Assignment
- Figure 6-5: Cumulative (2021) with Project Peak Hour Traffic Volumes
- Table 6-A: Cumulative Project Trip Generation

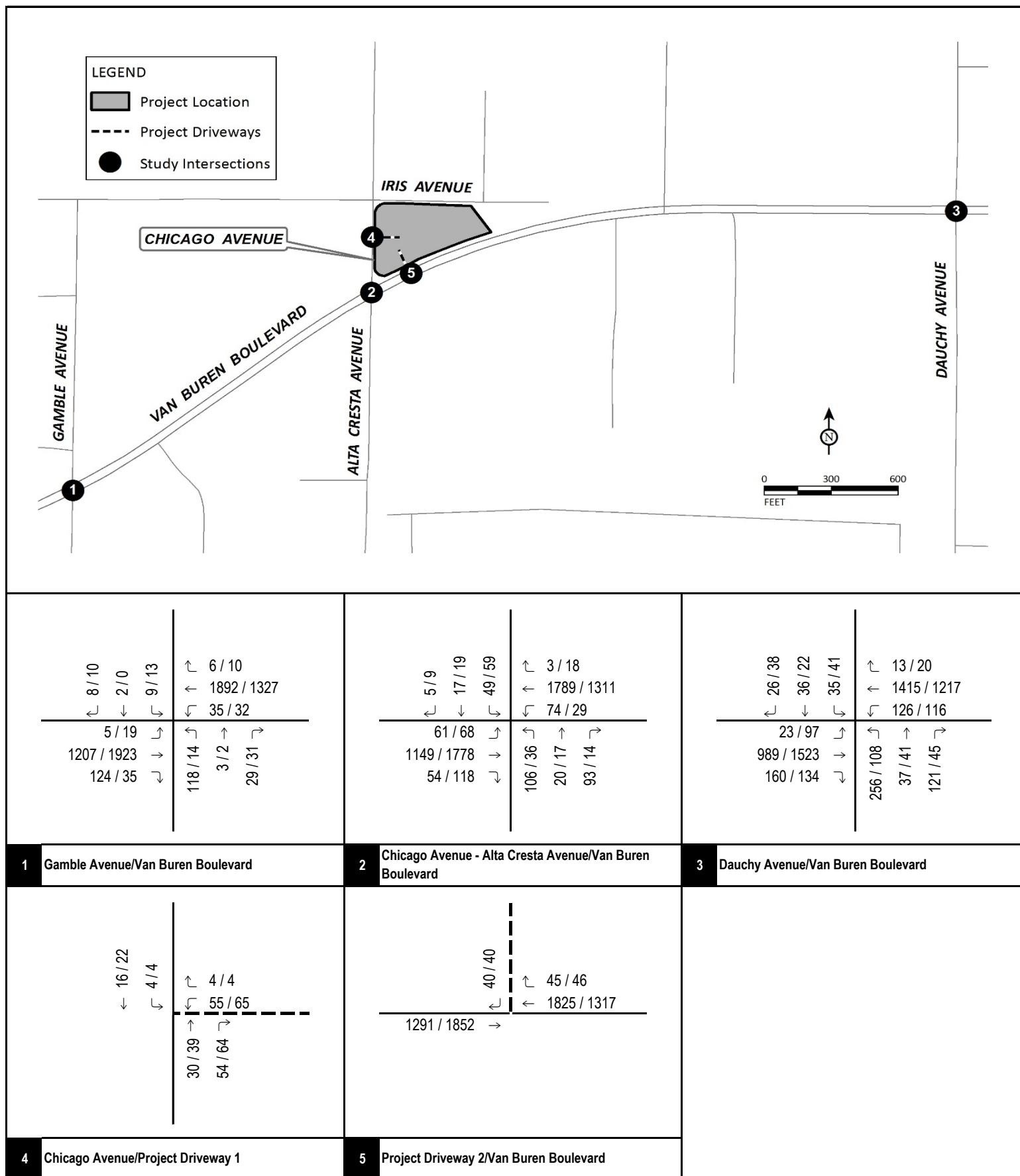


FIGURE 6-1

LSA

XXXX / YYYY
AM / PM Peak Hour PCE Traffic Volumes

Van Buren/Chicago Gasoline Station Project
Traffic Impact Analysis
Existing with Project Peak Hour Traffic Volumes

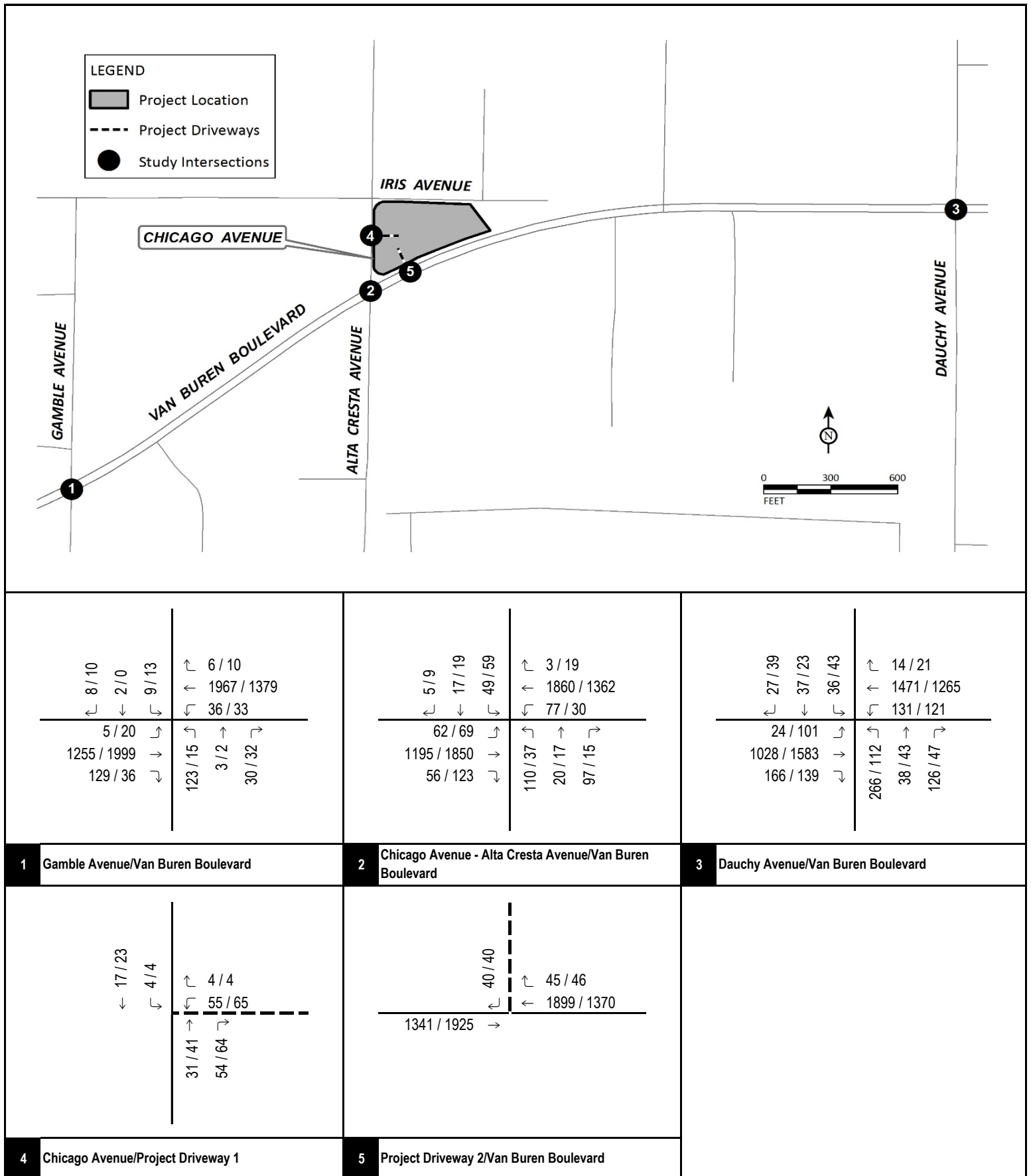


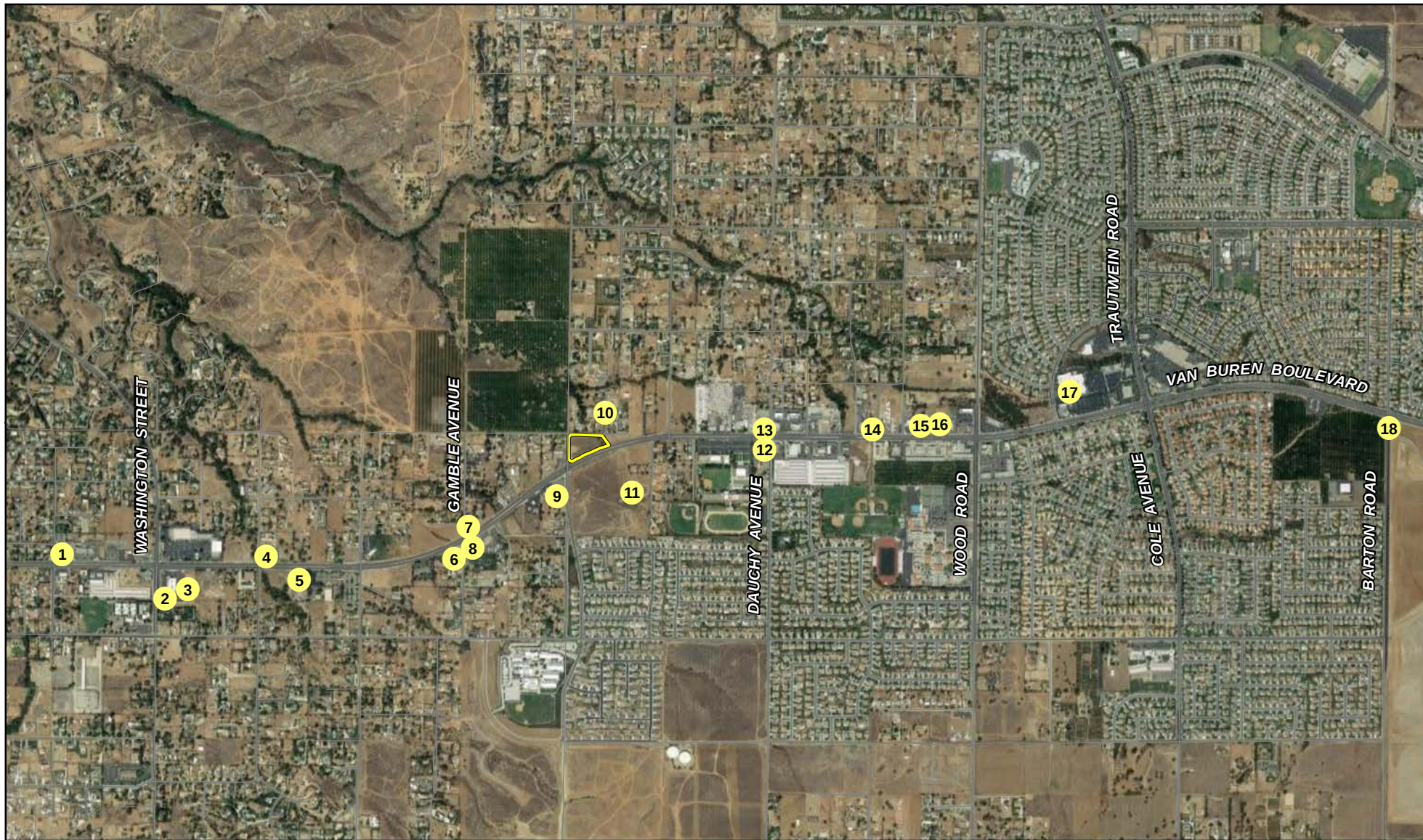
FIGURE 6-2

LSA

XXXX / YYYY
AM / PM Peak Hour PCE Traffic Volumes

Van Buren/Chicago Gasoline Station Project
Traffic Impact Analysis

Project Completion (2021) with Project Peak Hour Traffic Volumes



LSA

LEGEND



Project Location



Cumulative Project



0 900 1800
FEET

SOURCE: ESRI Streetmap, 2013; Google Earth, 2018.

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FIGURE 6-3

Van Buren/Chicago Gasoline Station Project
Traffic Impact Analysis
Cumulative Project Locations

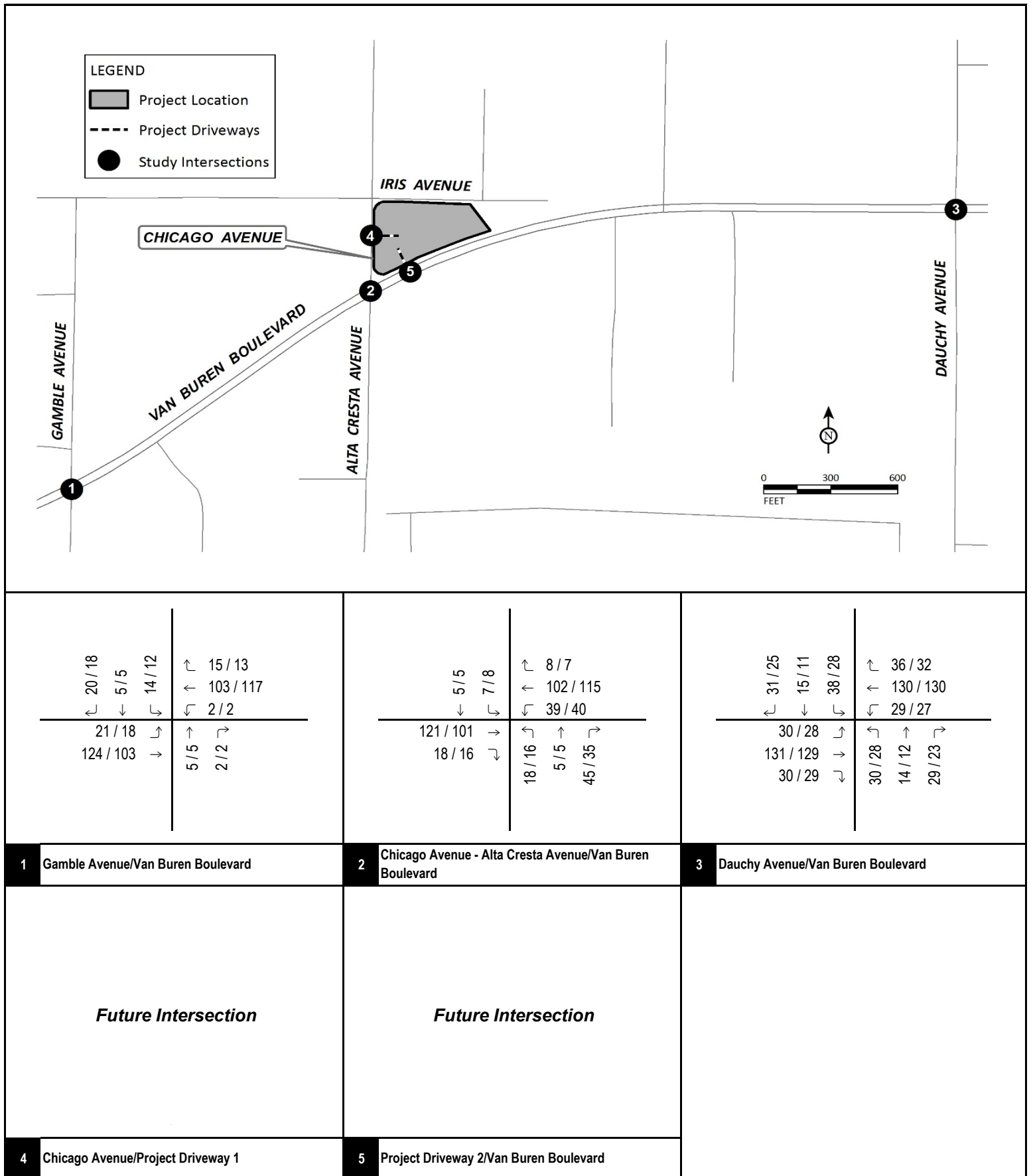


FIGURE 6-4

LSA

XXX / YYY
AM / PM Peak Hour Trips

Van Buren/Chicago Gasoline Station Project
Traffic Impact Analysis

Cumulative Projects Trip Assignment

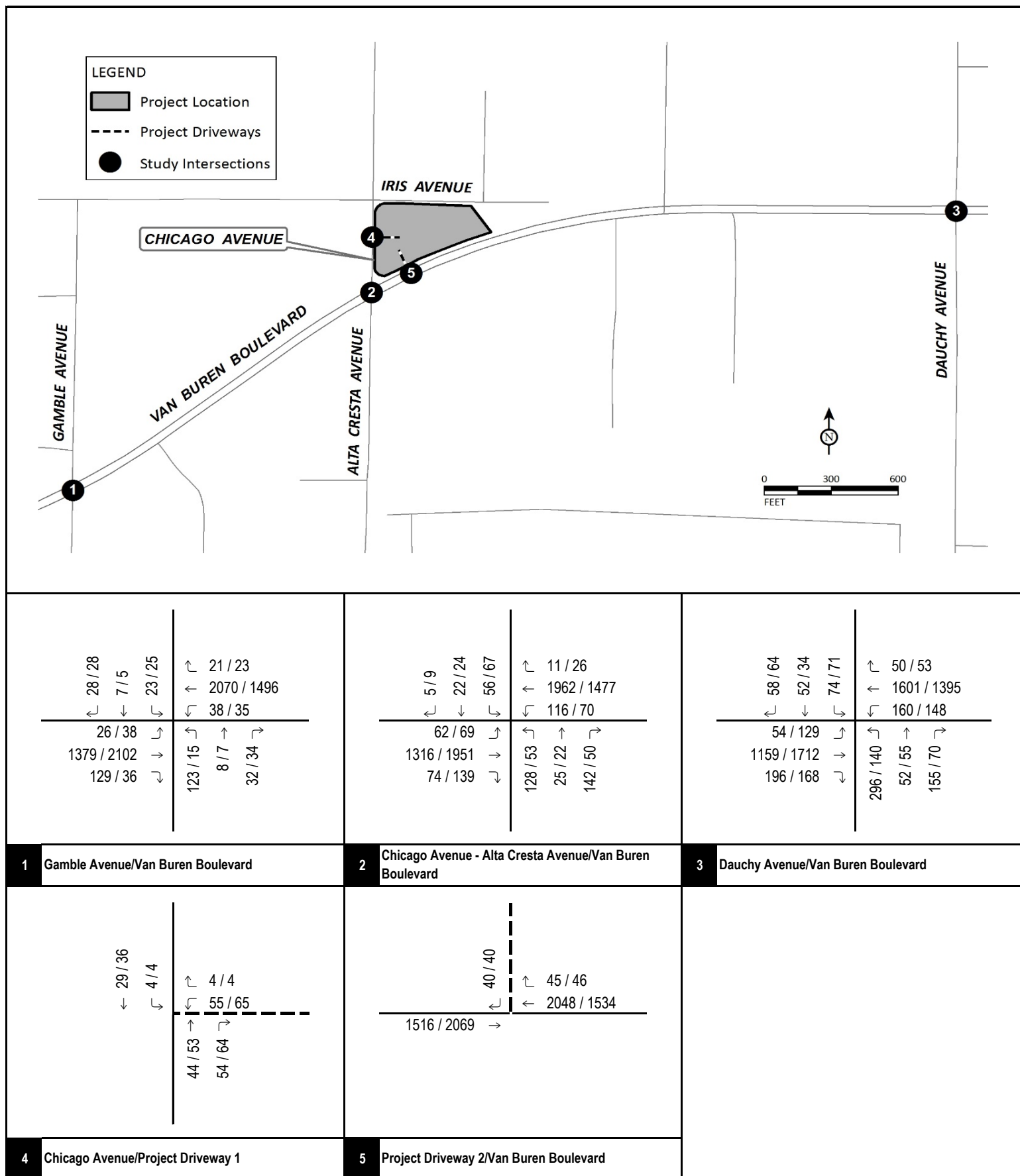


FIGURE 6-5

LSA

XXXX / YYYY

AM / PM Peak Hour PCE Traffic Volumes

Van Buren/Chicago Gasoline Station Project
Traffic Impact Analysis

Cumulative (2021) with Project Peak Hour Traffic Volumes

Table 6-A - Cumulative Project Trip Generation

Project	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
1. PAR180021/CUP180016								
County of Riverside	18.80 TSF							
Trips/Unit ¹		0.58	0.36	0.94	1.83	1.98	3.81	37.75
Trip Generation		11	7	18	34	37	71	710
Pass-by Trips ²		0	0	0	(9)	(9)	(18)	(177)
Net Trip Generation		11	7	18	25	28	53	533
2. CUP03766								
County of Riverside	4.82 TSF							
Trips/Unit ³		4.49	4.49	8.98	7.10	7.10	14.20	163.09
Trip Generation		22	22	44	34	34	68	786
Pass-by Trips ⁴		(6)	(6)	(12)	(9)	(9)	(18)	(197)
Net Trip Generation		16	16	32	25	25	50	589
3. CUP170002								
County of Riverside	4.44 TSF							
Trips/Unit ⁵		0.06	0.04	0.10	0.08	0.09	0.17	1.51
Trip Generation		0	0	0	0	0	0	7
4. PPT180002								
County of Riverside	2.11 TSF							
Trips/Unit ⁶		20.50	19.69	40.19	16.99	15.68	32.67	470.95
Trip Generation		43	42	85	36	33	69	994
Pass-by Trips ⁷		(11)	(11)	(22)	(9)	(8)	(17)	(248)
Net Trip Generation		32	31	63	27	25	52	746
5. P17-0686, P17-0687								
City of Riverside	2.56 TSF							
Trips/Unit ⁶		20.50	19.69	40.19	16.99	15.68	32.67	470.95
Trip Generation		52	50	102	43	40	83	1,206
Pass-by Trips ⁷		(13)	(13)	(26)	(11)	(10)	(21)	(301)
Net Trip Generation		39	37	76	32	30	62	905
6. PP26337								
County of Riverside	48 STU							
Trips/Unit ⁸		0.41	0.37	0.78	0.37	0.42	0.79	4.09
Trip Generation		20	18	38	18	20	38	196
7. P13-0263, P13-0264, P14-0769								
City of Riverside								
Retail	10.70 TSF							
Trips/Unit ¹		0.58	0.36	0.94	1.83	1.98	3.81	37.75
Trip Generation		6	4	10	20	21	41	404
Pass-by Trips ²		0	0	0	(5)	(5)	(10)	(101)
Net Trip Generation		6	4	10	15	16	31	303
Day Care Center	10.00 TSF							
Trips/Unit ⁸		5.83	5.17	11.00	5.23	5.89	11.12	47.62
Trip Generation		58	52	110	52	59	111	476
Fast-Food Restaurant with Drive-Through Window	2.50 TSF							
Trips/Unit ⁶		20.50	19.69	40.19	16.99	15.68	32.67	470.95
Trip Generation		51	49	100	42	39	81	1,177
Pass-by Trips ⁷		(13)	(12)	(25)	(11)	(10)	(21)	(294)
Net Trip Generation		38	37	75	31	29	60	883
Office	10.00 TSF							
Trips/Unit ⁹		1.00	0.16	1.16	0.18	0.97	1.15	9.74
Trip Generation		10	2	12	2	10	12	97
Medical Office Building	8.00 TSF							
Trips/Unit ¹⁰		2.17	0.61	2.78	0.97	2.49	3.46	34.80
Trip Generation		17	5	22	8	20	28	278
Total Trip Generation		129	100	229	108	134	242	2,037

Table 6-A - Cumulative Project Trip Generation

Project	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
8. P19-0042								
City of Riverside								
Office	9.92 TSF							
Trips/Unit ⁹		1.00	0.16	1.16	0.18	0.97	1.15	9.74
Trip Generation		10	2	12	2	10	12	97
High-Turnover (Sit-Down) Restaurant	4.30 TSF							
Trips/Unit ¹¹		5.47	4.47	9.94	6.06	3.71	9.77	112.18
Trip Generation		24	19	43	26	16	42	482
Pass-by Trips ¹²		0	0	0	(7)	(4)	(11)	(121)
Net Trip Generation		24	19	43	19	12	31	361
Total Trip Generation		34	21	55	21	22	43	458
9. PAR01526	4.40 TSF							
County of Riverside								
Trips/Unit ⁶		20.50	19.69	40.19	16.99	15.68	32.67	470.95
Trip Generation		90	87	177	75	69	144	2,072
Pass-by Trips ⁷		(23)	(22)	(45)	(19)	(17)	(36)	(518)
Net Trip Generation		67	65	132	56	52	108	1,554
10. P17-0688, P17-0689	5.44 TSF							
City of Riverside								
Trips/Unit ³		4.49	4.49	8.98	7.10	7.10	14.20	163.09
Trip Generation		24	24	48	39	39	78	887
Pass-by Trips ⁴		(6)	(6)	(12)	(10)	(10)	(20)	(222)
Net Trip Generation		18	18	36	29	29	58	665
11. P15-0075, P15-0076, P15-0819								
City of Riverside								
Tire Center	11.74 TSF							
Trips/Unit ¹³		1.74	0.98	2.72	1.71	2.27	3.98	28.52
Trip Generation		20	12	32	20	27	47	335
Pass-By Trips ¹⁴		0	0	0	(5)	(7)	(12)	(84)
Net Trip Generation		20	12	32	15	20	35	251
Dunkin Dounts	2.20 TSF							
Trips/Unit ¹⁵		45.38	43.61	88.99	21.69	21.69	43.38	820.38
Trip Generation		100	96	196	48	48	96	1,805
Pass-by Trips ¹⁶		(25)	(24)	(49)	(12)	(12)	(24)	(451)
Net Trip Generation		75	72	147	36	36	72	1,354
Total Trip Generation		95	84	179	51	56	107	1,605
12. P16-0671, P16-0672, P16-0673								
City of Riverside								
Medical Office Building	23.29 TSF							
Trips/Unit ¹⁰		2.17	0.61	2.78	0.97	2.49	3.46	34.80
Trip Generation		51	14	65	23	58	81	810
Condominium	18 DU							
Trips/Unit ¹⁷		0.11	0.35	0.46	0.35	0.21	0.56	7.32
Trip Generation		2	6	8	6	4	10	132
Total Trip Generation		53	20	73	29	62	91	942
13. Panera Bread	4.29 TSF							
City of Riverside								
Trips/Unit ⁶		20.50	19.69	40.19	16.99	15.68	32.67	470.95
Trip Generation		88	85	173	73	67	140	2,022
Pass-by Trips ⁷		(22)	(21)	(43)	(18)	(17)	(35)	(505)
Net Trip Generation		66	64	130	55	50	105	1,517

Table 6-A - Cumulative Project Trip Generation

Project	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
14. PP25382	10.28 TSF							
City of Riverside								
Trips/Unit ⁹		1.00	0.16	1.16	0.18	0.97	1.15	9.74
Trip Generation		10	2	12	2	10	12	100
Total Trip Generation		590	483	1,073	478	543	1,021	11,854

Notes:

TSF=Thousand Square Feet; STU = Students; DU = Dwelling Units

¹ Rates obtained from the Institute of Transportation Engineers *Trip Generation Manual* (10th Edition) for Land Use 820 – "Shopping Center", Setting/Location - "General Urban/Suburban."

² No a.m. and daily pass-by rates are provided for Land Use 820 - "Shopping Center" in the ITE *Trip Generation Handbook* (3rd Edition). The p.m. pass-by rate obtained from the handbook is 34 percent. However, as per the County of Riverside Transportation Department *Traffic Impact Analysis Preparation Guide*, dated April 2008, the pass-by rate shall not be assumed to exceed 25 percent. Therefore, a pass-by rate of 25 percent was considered for the p.m. peak hour. The p.m. peak hour pass-by rate was also used as the daily pass-by rate.

³ Rates obtained from the ITE *Trip Generation Manual* (10th Edition) for Land Use 948 - "Automated Car Wash", Setting/Location - "General Urban/Suburban." Only p.m. peak hour rates are available for this land use in the ITE manual. The a.m. peak hour and daily rates were obtained by using the p.m. peak hour trip generation rate ratio between Land Use 948 and Land Use 949 - "Car Wash and Detail Center" and applying the ratio to the a.m. peak hour and daily rates for Land Use 949. Also, the p.m. peak hour splits for Land Use 948 were used for the a.m. peak hour.

⁴ No pass-by rates are provided for Land Use 948 - "Automated Car Wash" in the ITE *Trip Generation Handbook* (3rd Edition). As per the County of Riverside Transportation Department *Traffic Impact Analysis Preparation Guide*, dated April 2008, the pass-by rate shall not be assumed to exceed 25 percent. Since the pass-by rates for similar land uses in the ITE Handbook are higher than 25 percent, a pass-by rate of 25 percent was considered for this land use.

⁵ Rates obtained from the ITE *Trip Generation Manual* (10th Edition) for Land Use 151 – "Mini-Warehouse", Setting/Location - "General Urban/Suburban."

⁶ Rates obtained from the ITE *Trip Generation Manual* (10th Edition) for Land Use 934 - "Fast-Food Restaurant with Drive-Through Window", Setting/Location - "General Urban/Suburban."

⁷ As per the County of Riverside Transportation Department *Traffic Impact Analysis Preparation Guide*, dated April 2008, the pass-by rate shall not be assumed to exceed 25 percent. Since the pass-by rates for Land Use 934 in the ITE Handbook are higher than 25 percent, a pass-by rate of 25 percent was considered for this land use.

⁸ Rates obtained from the ITE *Trip Generation Manual* (10th Edition) for Land Use 565 - "Day Care Center", Setting/Location - "General Urban/Suburban."

⁹ Rates obtained from the ITE *Trip Generation Manual* (10th Edition) for Land Use 710 – "General Office Building", Setting/Location - "General Urban/Suburban."

¹⁰ Rates obtained from the ITE *Trip Generation Manual* (10th Edition) for Land Use 720 - "Medical-Dental Office Building", Setting/Location - "General Urban/Suburban."

¹¹ Rates obtained from the ITE *Trip Generation Manual* (10th Edition) for Land Use 932 - "High-Turnover (Sit-Down) Restaurant", Setting/Location - "General Urban/Suburban."

¹² No a.m. and daily pass-by rates are provided for Land Use 932 - "High-Turnover (Sit-Down Restaurant)" in the ITE *Trip Generation Handbook* (3rd Edition). The p.m. pass-by rate obtained from the handbook is 43 percent. However, as per the County of Riverside Transportation Department *Traffic Impact Analysis Preparation Guide*, dated April 2008, the pass-by rate shall not be assumed to exceed 25 percent. Therefore, a pass-by rate of 25 percent was considered for the p.m. peak hour. The p.m. peak hour pass-by rate was also used as the daily pass-by rate.

¹³ Rates obtained from the ITE *Trip Generation Manual* (10th Edition) for Land Use 848 - "Tire Store", Setting/Location - "General Urban/Suburban."

¹⁴ No a.m. and daily pass-by rates are provided for Land Use 848 - "Tire Store" in the ITE *Trip Generation Handbook* (3rd Edition). The p.m. pass-by rate obtained from the handbook is 28 percent. However, as per the County of Riverside Transportation Department *Traffic Impact Analysis Preparation Guide*, dated April 2008, the pass-by rate shall not be assumed to exceed 25 percent. Therefore, a pass-by rate of 25 percent was considered for the p.m. peak hour. The p.m. peak hour pass-by rate was also used as the daily pass-by rate.

¹⁵ Rates obtained from the ITE *Trip Generation Manual* (10th Edition) for Land Use 937 - "Coffee/Donut Shop with Drive-Through Window", Setting/Location - "General Urban/Suburban."

¹⁶ No pass-by rates are provided for Land Use 937 - "Coffee/Donut Shop with Drive-Through Window" in the ITE *Trip Generation Handbook* (3rd Edition). As per the County of Riverside Transportation Department *Traffic Impact Analysis Preparation Guide*, dated April 2008, the pass-by rate shall not be assumed to exceed 25 percent. Since the pass-by rates for similar land uses in the ITE Handbook are higher than 25 percent, a pass-by rate of 25 percent was considered for this land use.

¹⁷ Rates obtained from the ITE *Trip Generation Manual* (10th Edition) for Land Use 220 - "Multifamily Housing (Low-Rise)", Setting/Location - "General Urban/Suburban."

7.0 INTERSECTION LEVELS OF SERVICE

7.1 EXISTING LEVELS OF SERVICE

Figure 3-1 illustrates existing with project study intersection geometrics and traffic control. An intersection LOS analysis was conducted for existing conditions using the methodologies previously discussed. Table 7-A summarizes the results of this analysis and shows that all study intersections are currently operating at a satisfactory LOS.

7.2 EXISTING WITH PROJECT LEVELS OF SERVICE

Analysis of the existing with project scenario is provided for CEQA compliance to identify direct project impacts if the project were to be built and in operation today. This scenario eliminates the effects of ambient growth and other cumulative projects and deals specifically with project impacts.

An intersection LOS analysis was conducted for existing with project conditions using the methodologies previously discussed. Table 7-A summarizes the results of this analysis and shows that all study intersections are forecast to operate at a satisfactory LOS under existing with project conditions.

7.3 PROJECT COMPLETION (2021) WITH PROJECT LEVELS OF SERVICE

An intersection LOS analysis was conducted for project completion with project conditions using the methodologies previously discussed. Table 7-A summarizes the results of this analysis and shows that all study intersections are forecast to operate at a satisfactory LOS under project completion with project conditions.

7.4 CUMULATIVE (2021) WITH PROJECT LEVELS OF SERVICE

An intersection LOS analysis was conducted for project completion with project conditions using the methodologies previously discussed. Table 7-C summarizes the results of this analysis and shows that all study intersections are forecast to operate at a satisfactory LOS under cumulative with project conditions.

Detailed Level of Service Worksheets are included in Appendix D.

7.5 LIST OF CHAPTER 7.0 TABLES

- Table 7-A: Existing Intersection Levels of Service

Table 7-A - Intersection Levels of Service

Intersection	Control	Jurisdiction	LOS Standard	Existing (2019)								Project Completion (2021)				Cumulative (2021)				Significant Impact
				Without Project				With Project				With Project				With Project				
				A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		
				Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	
1 . Gamble Avenue/Van Buren Boulevard	Signal	Riverside County/City of Riverside	D	8.9	A	6.6	A	9.1	A	6.9	A	9.1	A	7.4	A	11.5	B	8.8	A	No
2 . Chicago Avenue - Alta Cresta Avenue/Van Buren Boulevard	Signal	Riverside County/City of Riverside	D	15.4	B	12.4	B	21.5	C	18.9	B	23.8	C	20.8	C	25.6	C	26.2	C	No
3 . Dauchy Avenue/Van Buren Boulevard	Signal	Riverside County/City of Riverside	D	19.4	B	19.1	B	20.3	C	19.8	B	21.2	C	20.7	C	28.0	C	27.0	C	No
4 . Chicago Avenue/Project Driveway 1	OWSC	Riverside County	D	Does not Exist		Does not Exist		9.1	A	9.3	A	9.1	A	9.3	A	9.3	A	9.5	A	No
5 . Project Driveway 2/Van Buren Boulevard	OWSC	Riverside County/City of Riverside	D	Does not Exist		Does not Exist		20.6	C	15.1	C	21.6	C	15.5	C	24.1	C	17.1	C	No

Notes:

OWSC = One-Way Stop Control; LOS = Level of Service

Delay = Average control delay in seconds (For OWSC intersections, reported delay is for worst-case movement).

8.0 SUMMARY AND CONCLUSIONS

The proposed Van Buren/Chicago Gasoline Station Project will include a gasoline station with 16 fueling positions and a 3,800 sf convenience store with a car wash. The project is forecast to generate 149 net trips in the a.m. peak hour, 167 net trips in the p.m. peak hour, and 2,464 net daily trips.

8.1 EXISTING CONDITIONS SUMMARY

All study intersections operate at a satisfactory LOS under existing without and with project conditions.

8.2 PROJECT COMPLETION (2021) CONDITIONS SUMMARY

All study intersections are forecast to operate at a satisfactory LOS under project completion with project conditions.

8.3 CUMULATIVE (2021) CONDITIONS SUMMARY

All study intersections are forecast to operate at a satisfactory LOS under cumulative with project conditions.

APPENDIX A:

SCOPING AGREEMENT



CARLSBAD
FRESNO
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

August 19, 2019

Mr. Kevin Tsang, P.E.
Riverside County, TLMA
Transportation Department
4080 Lemon Street, 8th Floor
Riverside, California 92501

Subject: Scope of Work for the Van Buren/Chicago Gasoline Station Project (LSA Project No. FXP1901)

Dear Kevin,

LSA will be preparing a traffic impact analysis (TIA) for the proposed Van Buren/Chicago Gasoline Station Project to be located at the northeast corner of Chicago Avenue-Alta Cresta Avenue and Van Buren Boulevard in unincorporated Riverside County (County). Attached is Exhibit B, the "Scoping Agreement for Traffic Impact Study" form from the County's *Traffic Impact Analysis Preparation Guide*, dated April 2008, for your review.

The project will include a gas station with 16 fueling positions. In addition, the project will include a 3800 square feet (sf) convenience store and a car wash which will be considered ancillary uses to the proposed gas station. Figure 1 illustrates the regional and project location. Figure 2 illustrates the conceptual site plan of the project. As shown in the site plan, access to the project site will be provided via two driveways – Driveway 1: a full-access driveway on Chicago Avenue and Driveway 2: a right-in/right-out (RIRO) driveway on Van Buren Boulevard.

LSA anticipates that the following scope of work will be required to conduct the traffic study for the proposed project.

SCOPE OF WORK

Project Trip Generation

Total vehicle trip generation for the proposed project will be developed using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (10th Edition). Table A summarizes the trip generation for the proposed project. Rates for the gasoline station are based on Land Use 945 - "Gasoline/Service Station with Convenience Market."

Gas stations typically draw some of their trips from the adjacent street traffic. Therefore, some of the proposed project trips will come from the adjacent street traffic. These trips are not actually "new" trips to the surrounding circulation system. These trips are referred to as "pass-by" trips and are made as intermediate stops en route to a destination without diverting from the main route. As per the County of Riverside Transportation Department *Traffic Impact Analysis Preparation Guide*, dated April 2008, the pass-by rate shall not be assumed to exceed 25%. Since the pass-by rates

provided for similar land uses in the ITE Trip Generation Handbook (3rd Edition) are higher than 25%, a pass-by rate of 25% was used.

As shown in Table A, after accounting for pass-by trips, the project is estimated to generate 149 net a.m. peak hour trips, 167 net p.m. peak hour trips, and 2,464 net daily trips.

Based on the project's location, the TIA will be prepared to satisfy the requirements established by the County and City's TIA guidelines as well as the requirements for the disclosure of potential impacts and mitigation measures pursuant to the California Environmental Quality Act (CEQA). Based on these TIA guidelines, the study area shall generally include any intersection of "Collector" or higher classification street on which the proposed project will add 50 or more peak hour trips or other intersections where addition of project trips may create significant impact. As such, LSA proposes the following intersections to be analyzed for the study:

1. Gamble Avenue/Van Buren Boulevard;
2. Chicago Avenue – Alta Cresta Avenue/Van Buren Boulevard;
3. Dauchy Avenue/ Van Buren Boulevard;
4. Chicago Avenue/Project Driveway 1; and
5. Project Driveway 2/Van Buren Boulevard.

Figure 3 illustrates the study area intersections.

Project trip distribution patterns are based on the locations of residential, employment, educational, institutional, and commercial centers in relation to the proposed project. Figure 4 illustrates the project trip distribution of the proposed project. The project trip generation was applied to the trip distribution patterns to develop the project trip assignment. Figure 5 illustrates the net project trip assignment.

Analysis Scenarios

The TIA for the proposed project will be prepared to meet the requirements stated in the County's TIA guidelines. LSA proposes to analyze a.m. and p.m. peak hour traffic operations at the study intersections for the following scenarios:

- Existing Conditions;
- Existing with Project Conditions;
- Project Completion with Project Conditions; and
- Cumulative with Project Conditions.

Volume Development and Analysis Methodology

Traffic volumes for existing year traffic conditions will be based on existing a.m. and p.m. peak hour traffic counts collected for the intersections identified for the analysis. The a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 7:00 and 9:00 a.m., while the p.m. peak hour is defined as the one hour of highest traffic volume occurring between 4:00 and 6:00 p.m. Existing with project traffic volumes will be developed by adding project traffic to the existing traffic volumes.

Project completion with project traffic volumes will be developed by applying an annual growth rate of 2 percent per year to existing peak hour traffic volumes and by adding project traffic to these volumes. The proposed project is estimated to be completed in 2021.

Cumulative with project traffic volumes will be developed by adding project trips from approved and pending development projects in the vicinity of the proposed project to the project completion without project traffic volumes and by adding project traffic to these volumes.

The TIA will analyze study intersections during the a.m. and p.m. peak hours. Intersection levels of service (LOS) will be calculated using the *Highway Capacity Manual 6* (HCM 6) analysis methodologies and using Synchro 10.1 software.

Project Impact Assessment and Mitigation Measures

Intersection LOS without the project will be compared to the intersection LOS plus the project for each of the analysis scenarios to determine potential project impacts. Determination of the significance of project impacts will be made based on the County's LOS and threshold of significance criteria. At significantly affected intersections, mitigation measures will be recommended to improve intersection performance to satisfactory conditions. Mitigation measures may include intersection turn lanes, signalization, and segment lane additions. The LOS with mitigation will be calculated and summarized, along with a comparison of the LOS without mitigation.

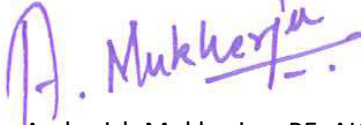
DIF/TUMF/Fair Share Contributions

LSA will evaluate whether the mitigation measures identified in the TIA are included as part of the Western Riverside Council of Governments (WRCOG) Transportation Uniform Mitigation Fee (TUMF) or the County's Development Impact Fees (DIF). If it is determined that the improvement is not covered through the DIF or the TUMF program, the project's fair share contribution will be calculated based on the project traffic as a percentage of total growth from existing to cumulative conditions.

Should you have any questions, please do not hesitate to contact me at (951) 781-9310 or email me at Ambarish.Mukherjee@lsa.net.

Sincerely,

LSA ASSOCIATES, INC.

A handwritten signature in purple ink, appearing to read "A. Mukherjee", with a horizontal line underneath.

Ambarish Mukherjee, PE, AICP
Associate/Senior Transportation Planner

Attachments:

Exhibit B: Scoping Agreement For Traffic Impact Analysis

Table A: Project Trip Generation

Figure 1: Regional and Project Location

Figure 2: Conceptual Site Plan

Figure 3: Study Area Intersections

Figure 4: Project Trip Distribution

Figure 5: Net Project Trip Assignment

SCOPING AGREEMENT FOR TRAFFIC IMPACT STUDY

Exhibit B – Scoping Agreement – Page 2

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

- | | |
|---|-----------|
| 1. <u>Gamble Avenue/Van Buren Boulevard</u> | 6. _____ |
| 2. <u>Chicago Avenue - Alta Cresta Avenue/Van Buren Boulevard</u> | 7. _____ |
| 3. <u>Dauchy Avenue/Van Buren Boulevard</u> | 8. _____ |
| 4. <u>Chicago Avenue/Project Driveway 1</u> | 9. _____ |
| 5. <u>Project Driveway 2/Van Buren Boulevard</u> | 10. _____ |

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

- | | |
|----------|-----------|
| 1. _____ | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

E. Other Jurisdictional Impacts

Is this project within a City's Sphere of Influence or one-mile radius of City boundaries? ☒ Yes ☐ No

If so, name of City Jurisdiction: City of Riverside

F. Site Plan (please attach reduced copy)

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

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

H. Existing Conditions

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

Date of counts 2019

NOTE Traffic Study Submittal Form and appropriate fee must be submitted with, or prior to submittal of this form. Transportation Department staff will not process the Scoping Agreement prior to receipt of the fee.

Recommended by:

Ambarish Mukherjee 8/19/19
Consultant's Representative Date

Scoping Agreement Submitted on 8/19/19

Revised on _____

Approved Scoping Agreement:



Riverside County Transportation Department

09/12/2019
Date

Table A - Project Trip Generation

Land Use	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Gas Station with Convenience Store/Car Wash	16 VFP							
Trips/Unit ¹		6.36	6.11	12.47	7.13	6.86	13.99	205.36
Trip Generation		102	98	200	114	110	224	3,286
Pass-by Trips ²		(26)	(25)	(51)	(29)	(28)	(57)	(822)
Total Net Trips		76	73	149	85	82	167	2,464

Note:

VFP = Vehicle Fueling Positions

¹ Rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (10th Edition), Land Use 945 - "Gasoline/Service Station with Convenience Market", Setting/Location - "General Urban/Suburban."

² As per the County of Riverside Transportation Department *Traffic Impact Analysis Preparation Guide*, dated April 2008, the pass-by rate shall not be assumed to exceed 25%. Since the pass-by rates provided for similar land uses in the ITE *Trip Generation Handbook* (3rd Edition) are higher than 25%, a pass-by rate of 25% was

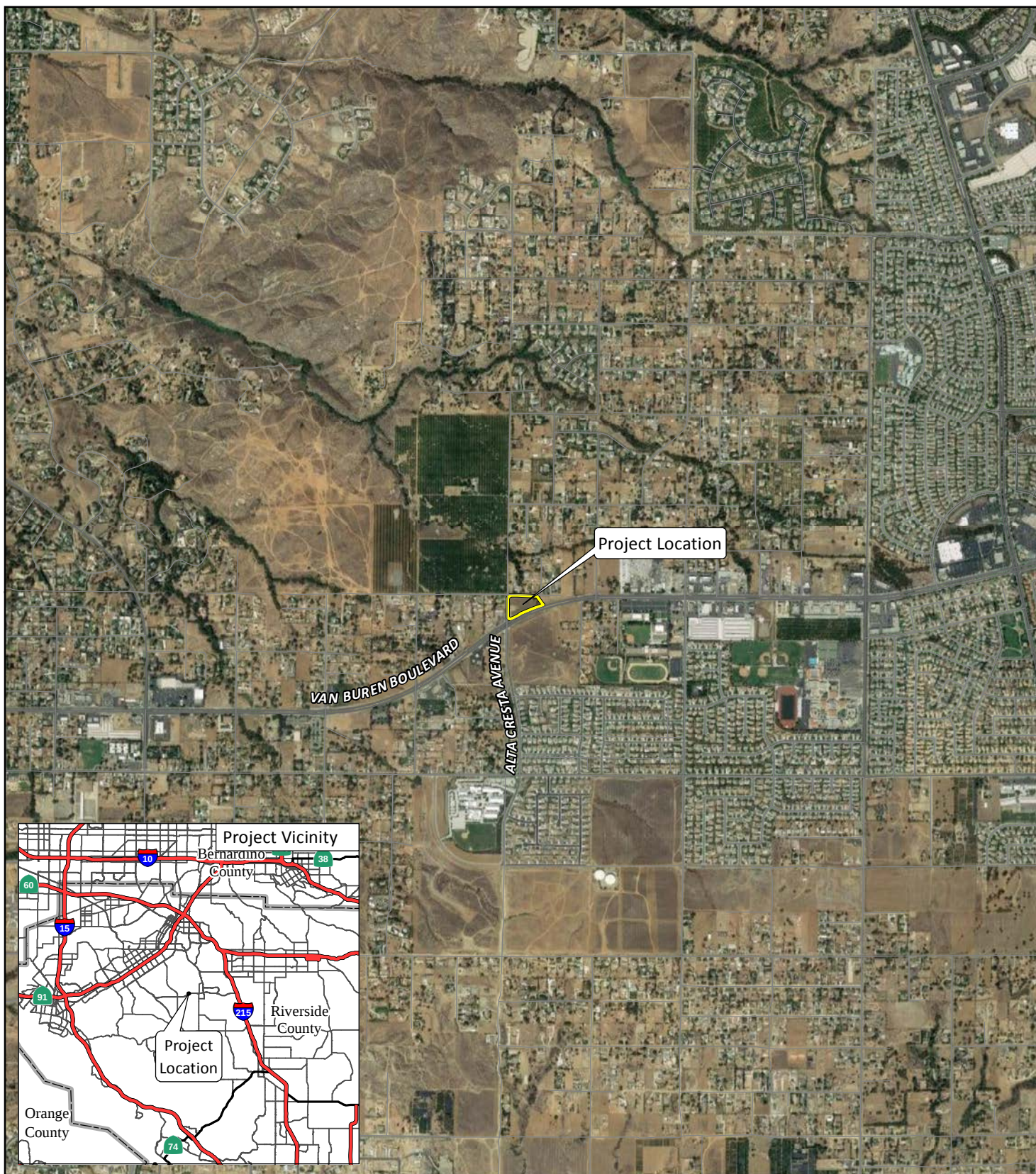
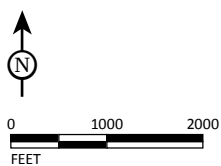


FIGURE 1

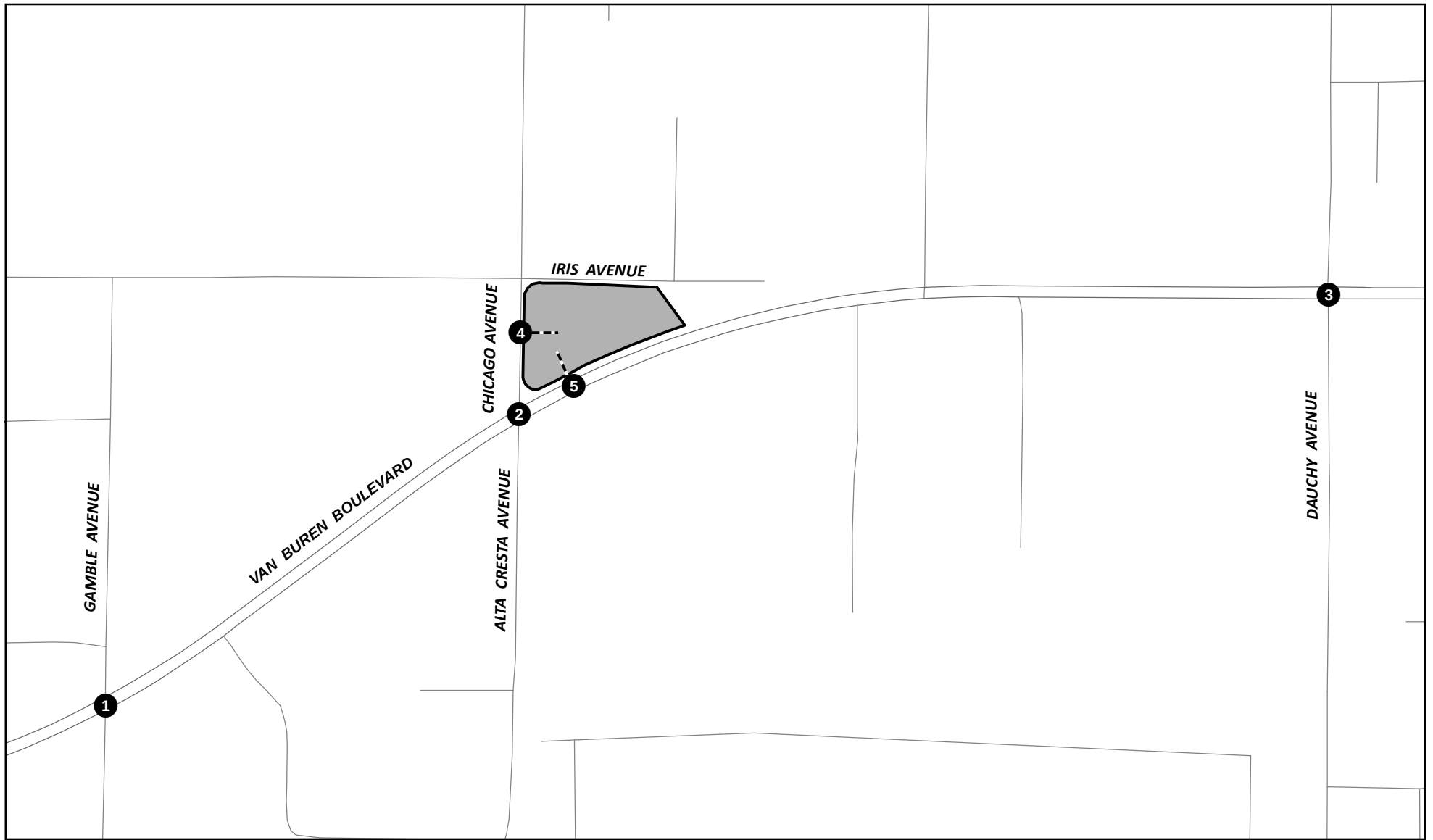
LSA



SOURCE: ESRI Streetmap, 2013; Google Earth, 2018.

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Van Buren/Chicago Gasoline Station Project
Traffic Impact Analysis
Regional and Project Location



LSA

LEGEND

- Project Location
- Project Driveways
- Study Intersections



0 225 450
FEET

SOURCE: ESRI Streetmap, 2013.

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FIGURE 3

Van Buren/Chicago Gasoline Station Project
Traffic Impact Analysis
Study Area Intersections

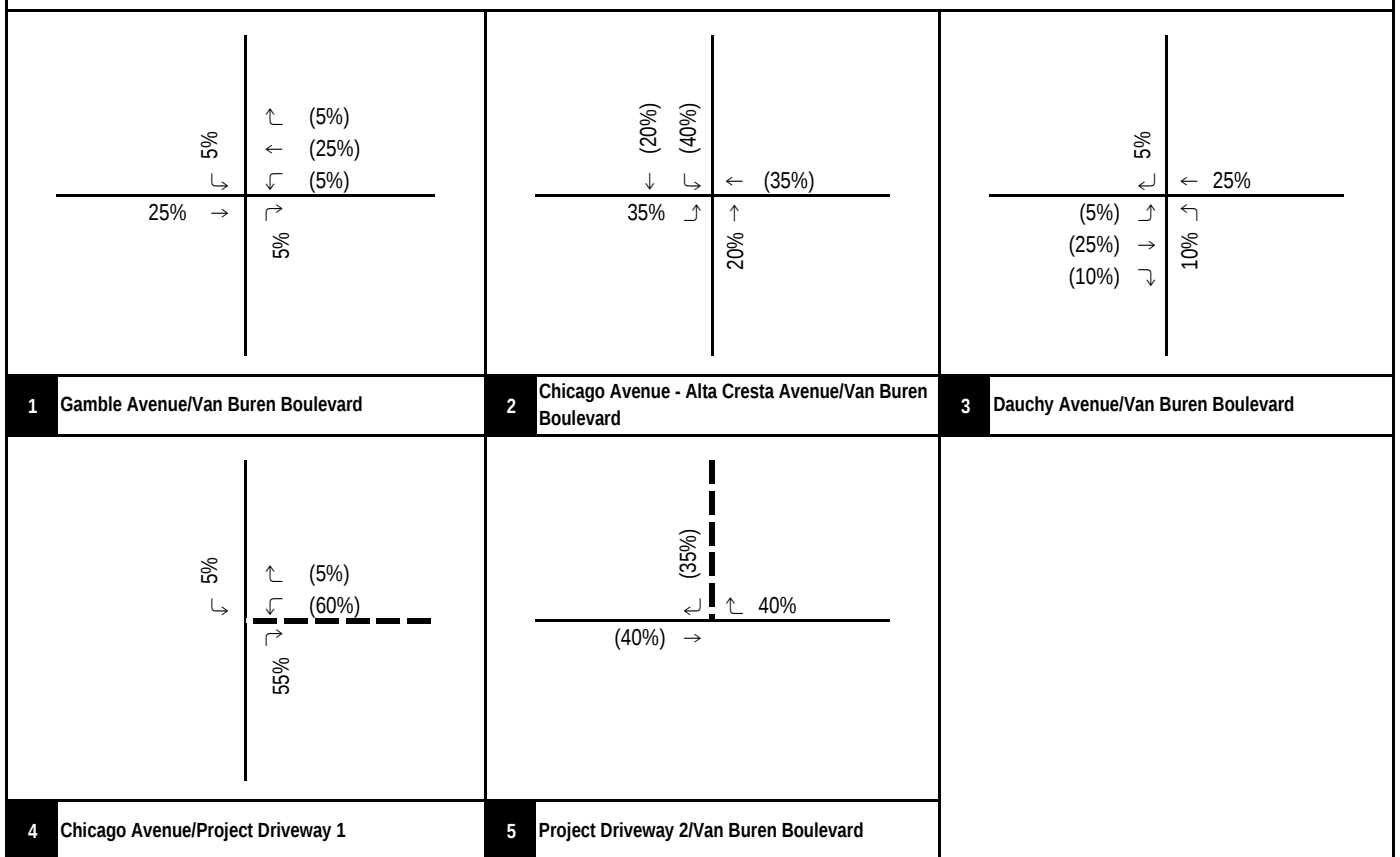
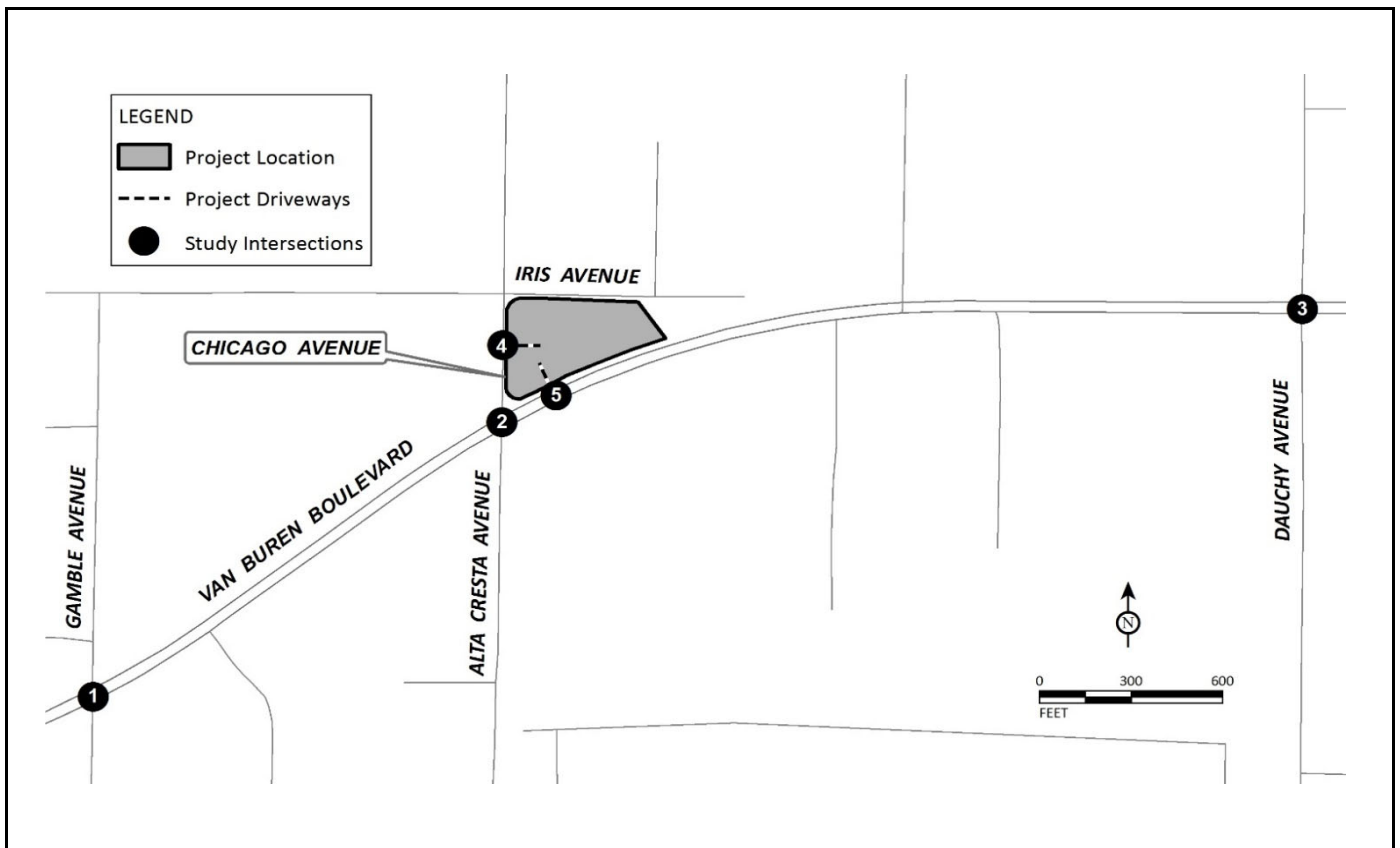


FIGURE 4

LSA

XX% (YY%)
Inbound% (Outbound%) Distribution

----- Project Driveway

Van Buren/Chicago Gasoline Station Project
Traffic Impact Analysis

Project Trip Distribution

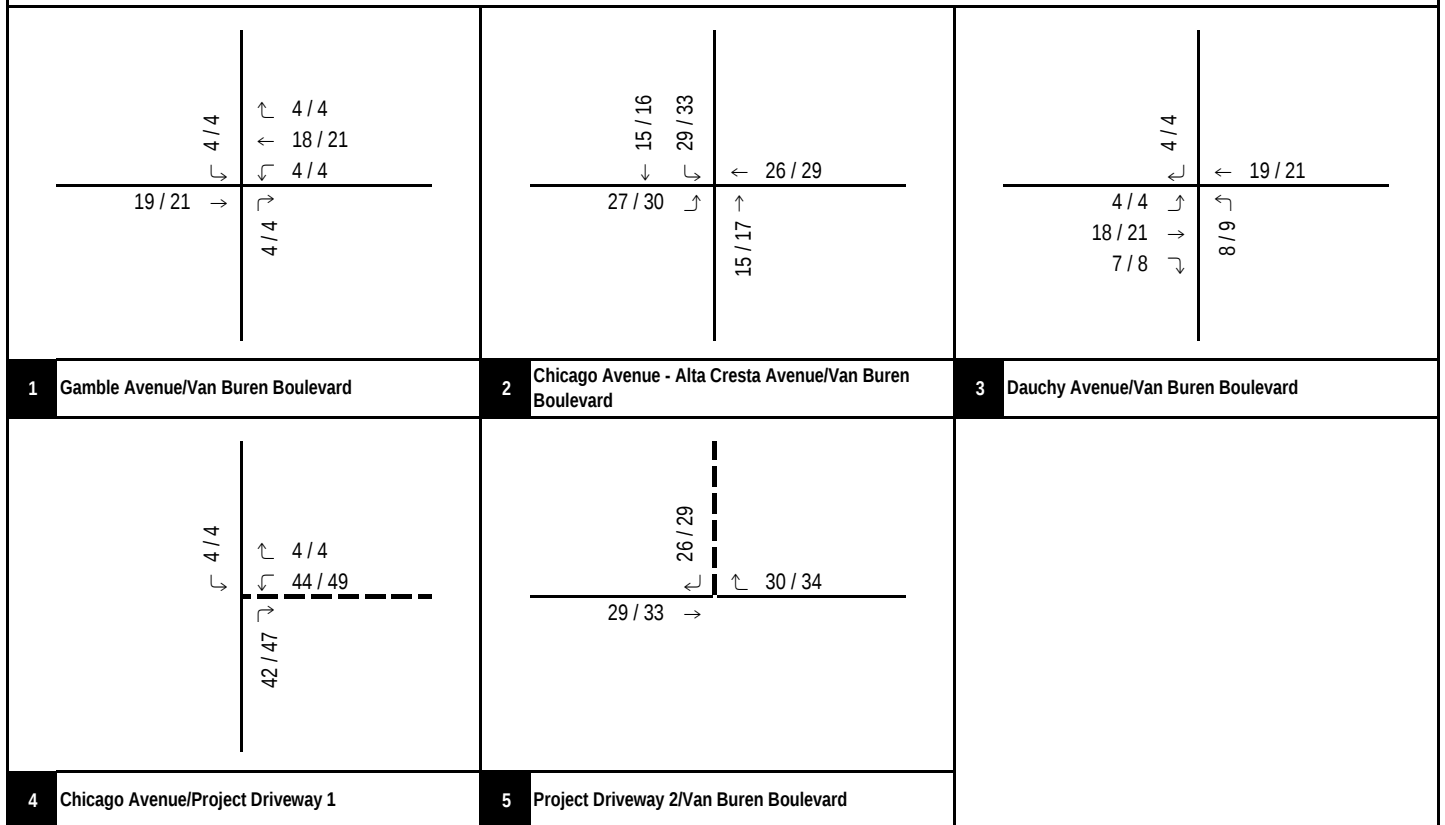
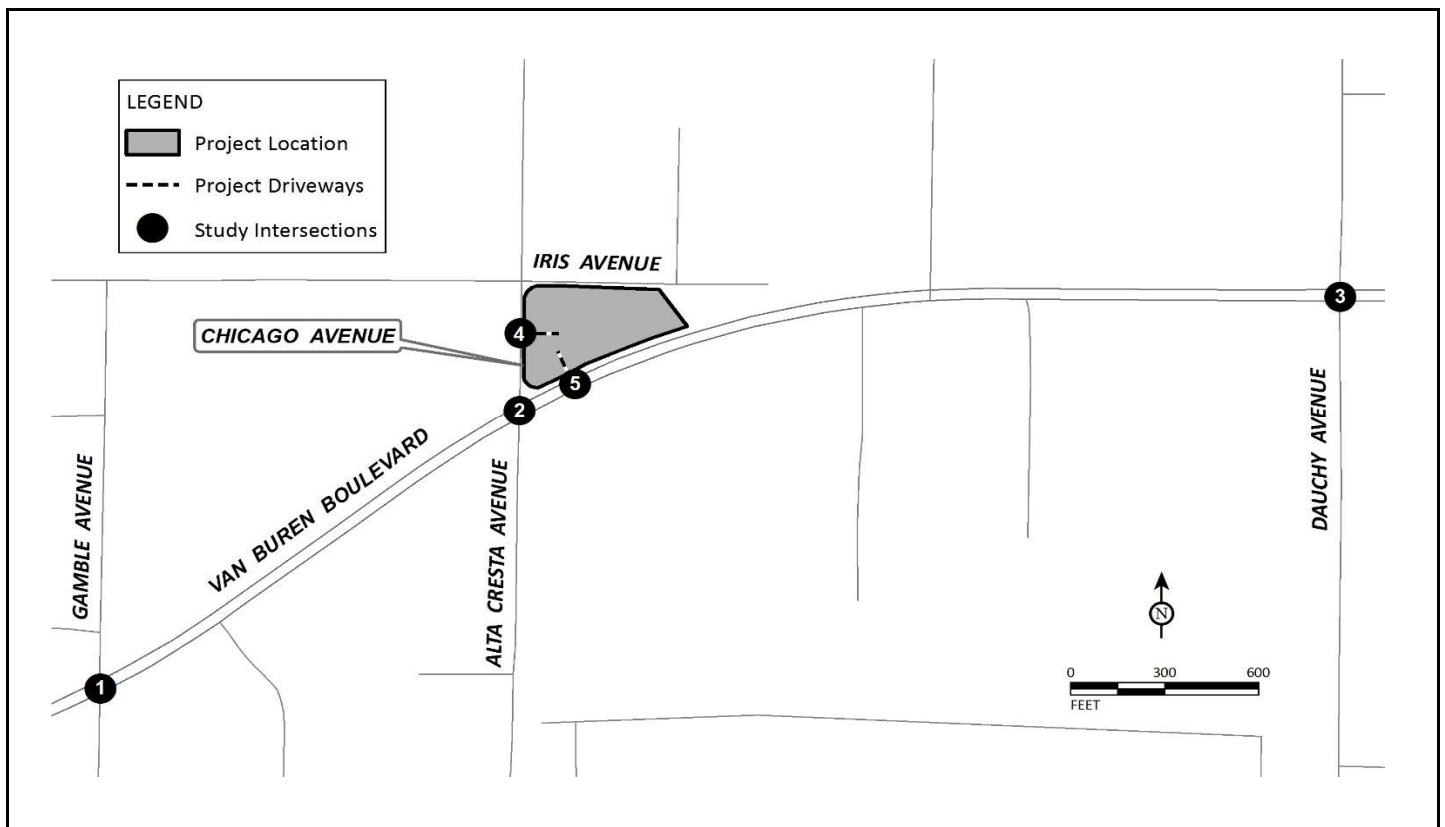


FIGURE 5

LSA

XX / YY
AM / PM Peak Hour Trips

----- Project Driveway

Van Buren/Chicago Gasoline Station Project
Traffic Impact Analysis

Net Project Trip Assignment

APPENDIX B:

TRAFFIC COUNT SHEETS

City of Riverside
N/S: Gamble Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 01_RIV_Gamble_Van Buren AM
Site Code : 00319643
Start Date : 9/18/2019
Page No : 1

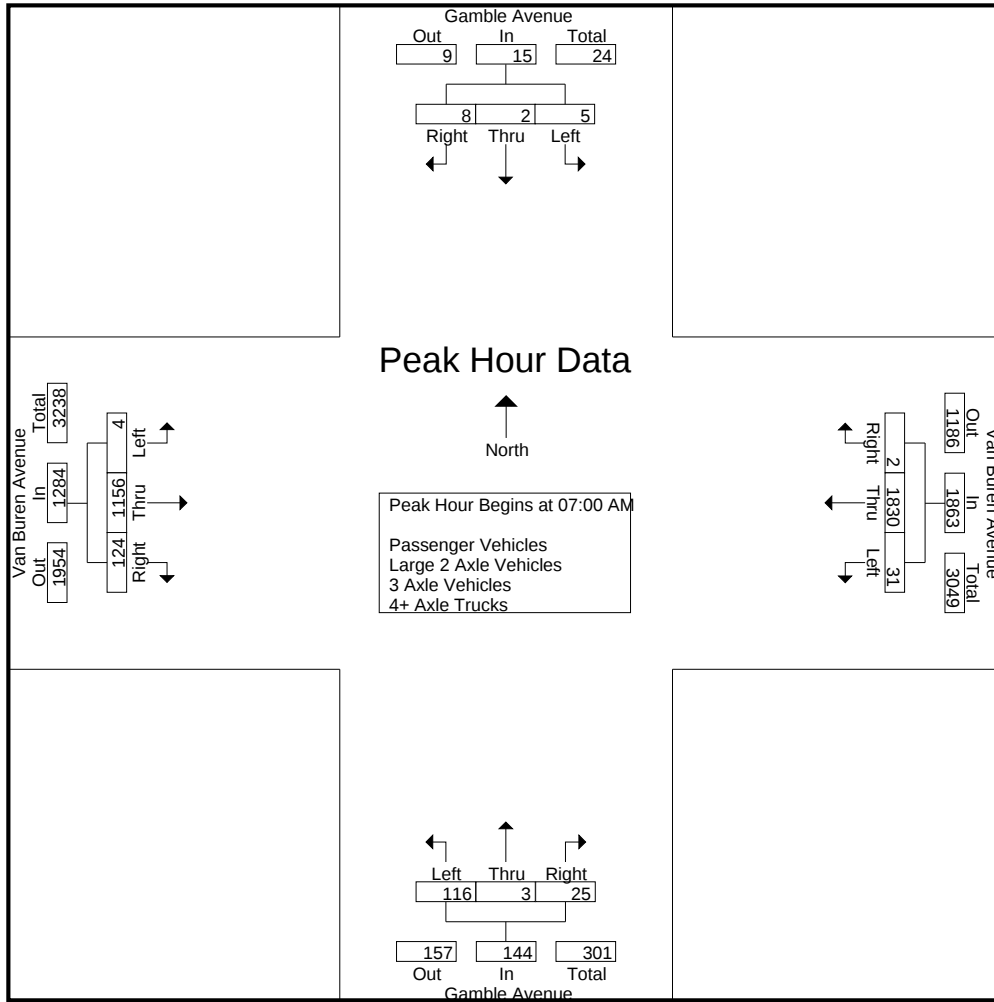
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Gamble Avenue Southbound				Van Buren Avenue Westbound				Gamble Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	0	0	1	9	455	0	464	37	1	7	45	1	305	57	363	873
07:15 AM	2	1	1	4	13	491	1	505	36	0	10	46	0	327	60	387	942
07:30 AM	2	1	3	6	3	460	1	464	35	2	4	41	2	239	5	246	757
07:45 AM	0	0	4	4	6	424	0	430	8	0	4	12	1	285	2	288	734
Total	5	2	8	15	31	1830	2	1863	116	3	25	144	4	1156	124	1284	3306
08:00 AM	0	1	5	6	2	395	0	397	7	1	6	14	2	277	4	283	700
08:15 AM	0	0	1	1	4	365	1	370	3	0	3	6	1	254	1	256	633
08:30 AM	1	0	1	2	1	384	1	386	1	0	1	2	1	208	1	210	600
08:45 AM	0	0	0	0	5	338	0	343	0	0	7	7	1	226	1	228	578
Total	1	1	7	9	12	1482	2	1496	11	1	17	29	5	965	7	977	2511
Grand Total	6	3	15	24	43	3312	4	3359	127	4	42	173	9	2121	131	2261	5817
Apprch %	25	12.5	62.5		1.3	98.6	0.1		73.4	2.3	24.3		0.4	93.8	5.8		
Total %	0.1	0.1	0.3	0.4	0.7	56.9	0.1	57.7	2.2	0.1	0.7	3	0.2	36.5	2.3	38.9	
Passenger Vehicles	6	2	14	22	41	3199	3	3243	123	4	42	169	7	2041	131	2179	5613
% Passenger Vehicles	100	66.7	93.3	91.7	95.3	96.6	75	96.5	96.9	100	100	97.7	77.8	96.2	100	96.4	96.5
Large 2 Axle Vehicles	0	1	0	1	2	74	0	76	4	0	0	4	2	59	0	61	142
% Large 2 Axle Vehicles	0	33.3	0	4.2	4.7	2.2	0	2.3	3.1	0	0	2.3	22.2	2.8	0	2.7	2.4
3 Axle Vehicles	0	0	1	1	0	7	1	8	0	0	0	0	0	8	0	8	17
% 3 Axle Vehicles	0	0	6.7	4.2	0	0.2	25	0.2	0	0	0	0	0	0.4	0	0.4	0.3
4+ Axle Trucks	0	0	0	0	0	32	0	32	0	0	0	0	0	13	0	13	45
% 4+ Axle Trucks	0	0	0	0	0	1	0	1	0	0	0	0	0	0.6	0	0.6	0.8

	Gamble Avenue Southbound				Van Buren Avenue Westbound				Gamble Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	1	0	0	1	9	455	0	464	37	1	7	45	1	305	57	363	873
07:15 AM	2	1	1	4	13	491	1	505	36	0	10	46	0	327	60	387	942
07:30 AM	2	1	3	6	3	460	1	464	35	2	4	41	2	239	5	246	757
07:45 AM	0	0	4	4	6	424	0	430	8	0	4	12	1	285	2	288	734
Total Volume	5	2	8	15	31	1830	2	1863	116	3	25	144	4	1156	124	1284	3306
% App. Total	33.3	13.3	53.3		1.7	98.2	0.1		80.6	2.1	17.4		0.3	90	9.7		
PHF	.625	.500	.500	.625	.596	.932	.500	.922	.784	.375	.625	.783	.500	.884	.517	.829	.877

City of Riverside
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	2	1	1	4	9	455	0	464	37	1	7	45	1	305	57	363
+15 mins.	2	1	3	6	13	491	1	505	36	0	10	46	0	327	60	387
+30 mins.	0	0	4	4	3	460	1	464	35	2	4	41	2	239	5	246
+45 mins.	0	1	5	6	6	424	0	430	8	0	4	12	1	285	2	288
Total Volume	4	3	13	20	31	1830	2	1863	116	3	25	144	4	1156	124	1284
% App. Total	20	15	65		1.7	98.2	0.1		80.6	2.1	17.4		0.3	90	9.7	
PHF	.500	.750	.650	.833	.596	.932	.500	.922	.784	.375	.625	.783	.500	.884	.517	.829

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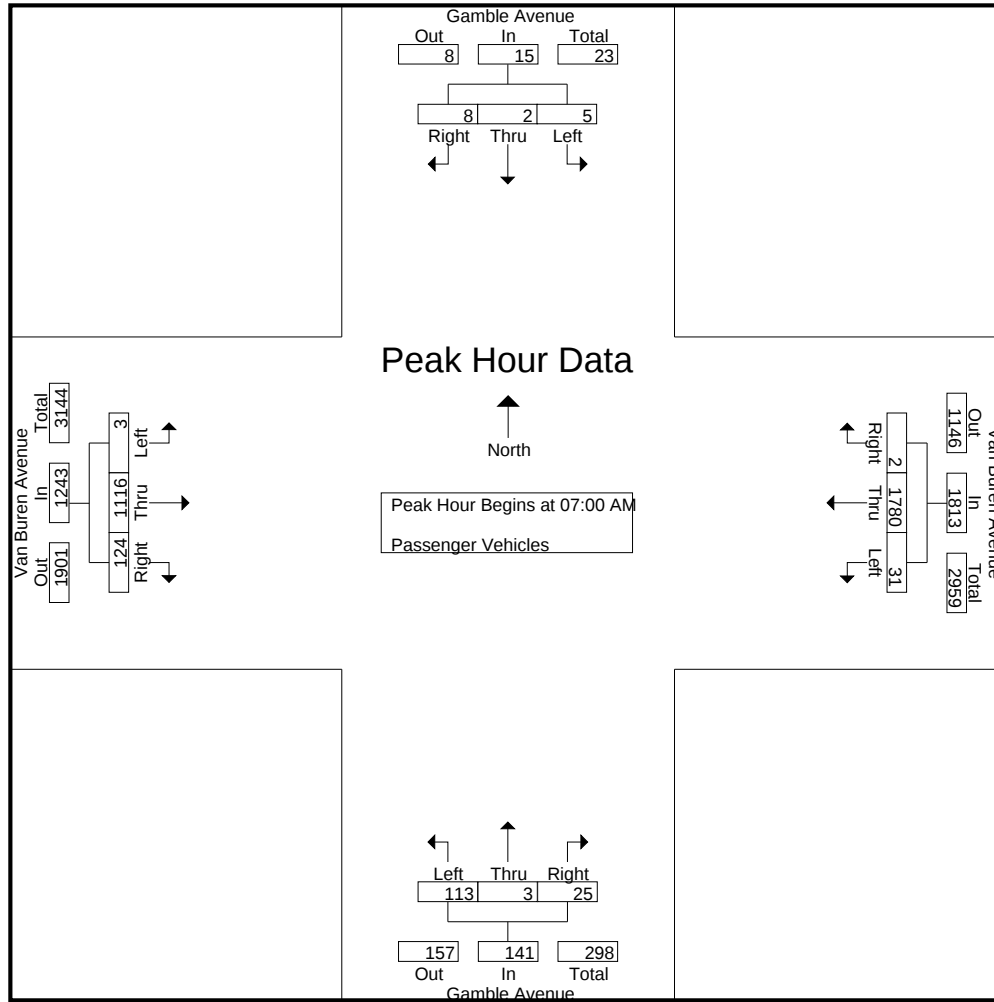
Groups Printed- Passenger Vehicles

	Gamble Avenue Southbound				Van Buren Avenue Westbound				Gamble Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	0	0	1	9	445	0	454	36	1	7	44	1	293	57	351	850
07:15 AM	2	1	1	4	13	480	1	494	36	0	10	46	0	317	60	377	921
07:30 AM	2	1	3	6	3	445	1	449	35	2	4	41	1	233	5	239	735
07:45 AM	0	0	4	4	6	410	0	416	6	0	4	10	1	273	2	276	706
Total	5	2	8	15	31	1780	2	1813	113	3	25	141	3	1116	124	1243	3212
08:00 AM	0	0	4	4	1	385	0	386	7	1	6	14	1	269	4	274	678
08:15 AM	0	0	1	1	4	350	0	354	2	0	3	5	1	243	1	245	605
08:30 AM	1	0	1	2	1	364	1	366	1	0	1	2	1	196	1	198	568
08:45 AM	0	0	0	0	4	320	0	324	0	0	7	7	1	217	1	219	550
Total	1	0	6	7	10	1419	1	1430	10	1	17	28	4	925	7	936	2401
Grand Total	6	2	14	22	41	3199	3	3243	123	4	42	169	7	2041	131	2179	5613
Apprch %	27.3	9.1	63.6		1.3	98.6	0.1		72.8	2.4	24.9		0.3	93.7	6		
Total %	0.1	0	0.2	0.4	0.7	57	0.1	57.8	2.2	0.1	0.7	3	0.1	36.4	2.3	38.8	

	Gamble Avenue Southbound				Van Buren Avenue Westbound				Gamble Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	1	0	0	1	9	445	0	454	36	1	7	44	1	293	57	351	850
07:15 AM	2	1	1	4	13	480	1	494	36	0	10	46	0	317	60	377	921
07:30 AM	2	1	3	6	3	445	1	449	35	2	4	41	1	233	5	239	735
07:45 AM	0	0	4	4	6	410	0	416	6	0	4	10	1	273	2	276	706
Total Volume	5	2	8	15	31	1780	2	1813	113	3	25	141	3	1116	124	1243	3212
% App. Total	33.3	13.3	53.3		1.7	98.2	0.1		80.1	2.1	17.7		0.2	89.8	10		
PHF	.625	.500	.500	.625	.596	.927	.500	.918	.785	.375	.625	.766	.750	.880	.517	.824	.872

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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	1	0	0	1	9	445	0	454	36	1	7	44	1	293	57	351
+15 mins.	2	1	1	4	13	480	1	494	36	0	10	46	0	317	60	377
+30 mins.	2	1	3	6	3	445	1	449	35	2	4	41	1	233	5	239
+45 mins.	0	0	4	4	6	410	0	416	6	0	4	10	1	273	2	276
Total Volume	5	2	8	15	31	1780	2	1813	113	3	25	141	3	1116	124	1243
% App. Total	33.3	13.3	53.3		1.7	98.2	0.1		80.1	2.1	17.7		0.2	89.8	10	
PHF	.625	.500	.500	.625	.596	.927	.500	.918	.785	.375	.625	.766	.750	.880	.517	.824

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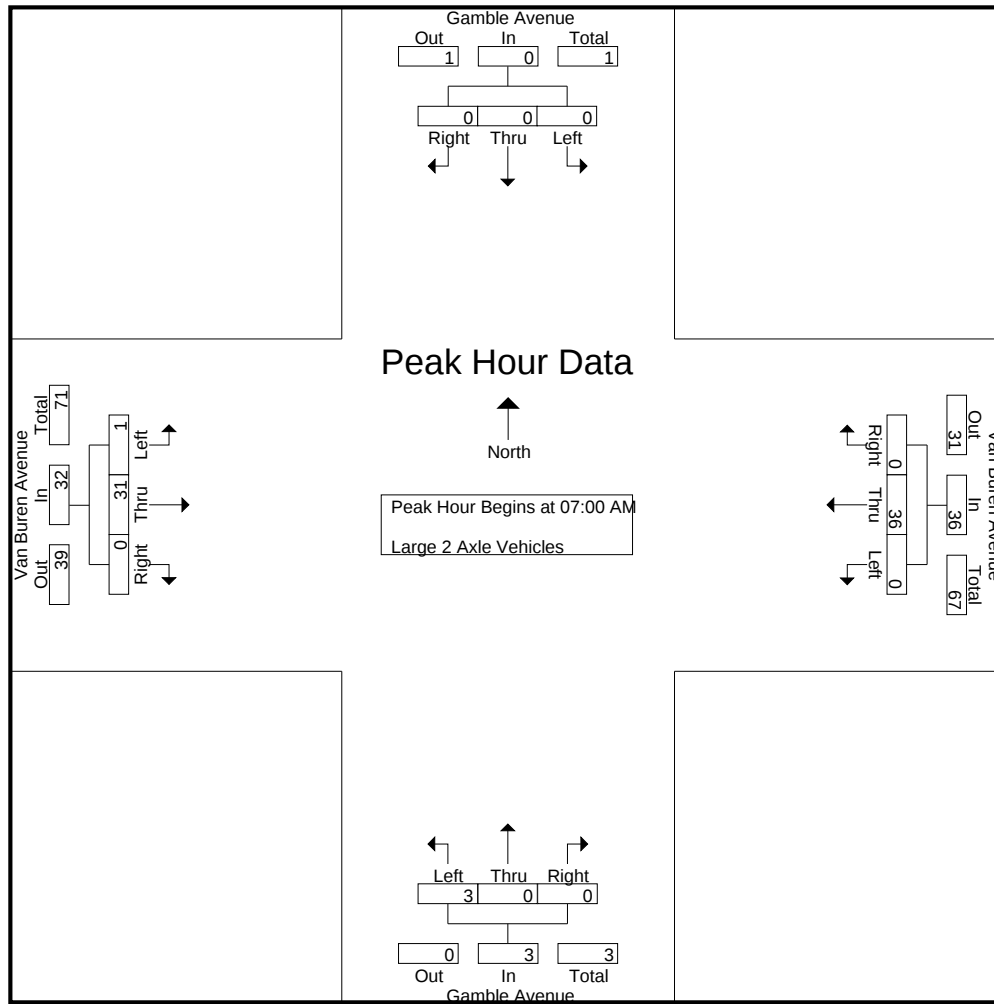
Groups Printed- Large 2 Axle Vehicles

	Gamble Avenue Southbound				Van Buren Avenue Westbound				Gamble Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	8	0	8	1	0	0	1	0	10	0	10	19
07:15 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	8	0	8	14
07:30 AM	0	0	0	0	0	13	0	13	0	0	0	0	1	5	0	6	19
07:45 AM	0	0	0	0	0	9	0	9	2	0	0	2	0	8	0	8	19
Total	0	0	0	0	0	36	0	36	3	0	0	3	1	31	0	32	71
08:00 AM	0	1	0	1	1	9	0	10	0	0	0	0	1	6	0	7	18
08:15 AM	0	0	0	0	0	9	0	9	1	0	0	1	0	8	0	8	18
08:30 AM	0	0	0	0	0	11	0	11	0	0	0	0	0	9	0	9	20
08:45 AM	0	0	0	0	1	9	0	10	0	0	0	0	0	5	0	5	15
Total	0	1	0	1	2	38	0	40	1	0	0	1	1	28	0	29	71
Grand Total	0	1	0	1	2	74	0	76	4	0	0	4	2	59	0	61	142
Apprch %	0	100	0		2.6	97.4	0		100	0	0		3.3	96.7	0		
Total %	0	0.7	0	0.7	1.4	52.1	0	53.5	2.8	0	0	2.8	1.4	41.5	0	43	

	Gamble Avenue Southbound				Van Buren Avenue Westbound				Gamble Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	8	0	8	1	0	0	1	0	10	0	10	19
07:15 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	8	0	8	14
07:30 AM	0	0	0	0	0	13	0	13	0	0	0	0	1	5	0	6	19
07:45 AM	0	0	0	0	0	9	0	9	2	0	0	2	0	8	0	8	19
Total Volume	0	0	0	0	0	36	0	36	3	0	0	3	1	31	0	32	71
% App. Total	0	0	0		0	100	0		100	0	0		3.1	96.9	0		
PHF	.000	.000	.000	.000	.000	.692	.000	.692	.375	.000	.000	.375	.250	.775	.000	.800	.934

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Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	8	0	8	1	0	0	1	0	10	0	10
+15 mins.	0	0	0	0	0	6	0	6	0	0	0	0	0	8	0	8
+30 mins.	0	0	0	0	0	13	0	13	0	0	0	0	1	5	0	6
+45 mins.	0	0	0	0	0	9	0	9	2	0	0	2	0	8	0	8
Total Volume	0	0	0	0	0	36	0	36	3	0	0	3	1	31	0	32
% App. Total	0	0	0	0	0	100	0		100	0	0		3.1	96.9	0	
PHF	.000	.000	.000	.000	.000	.692	.000	.692	.375	.000	.000	.375	.250	.775	.000	.800

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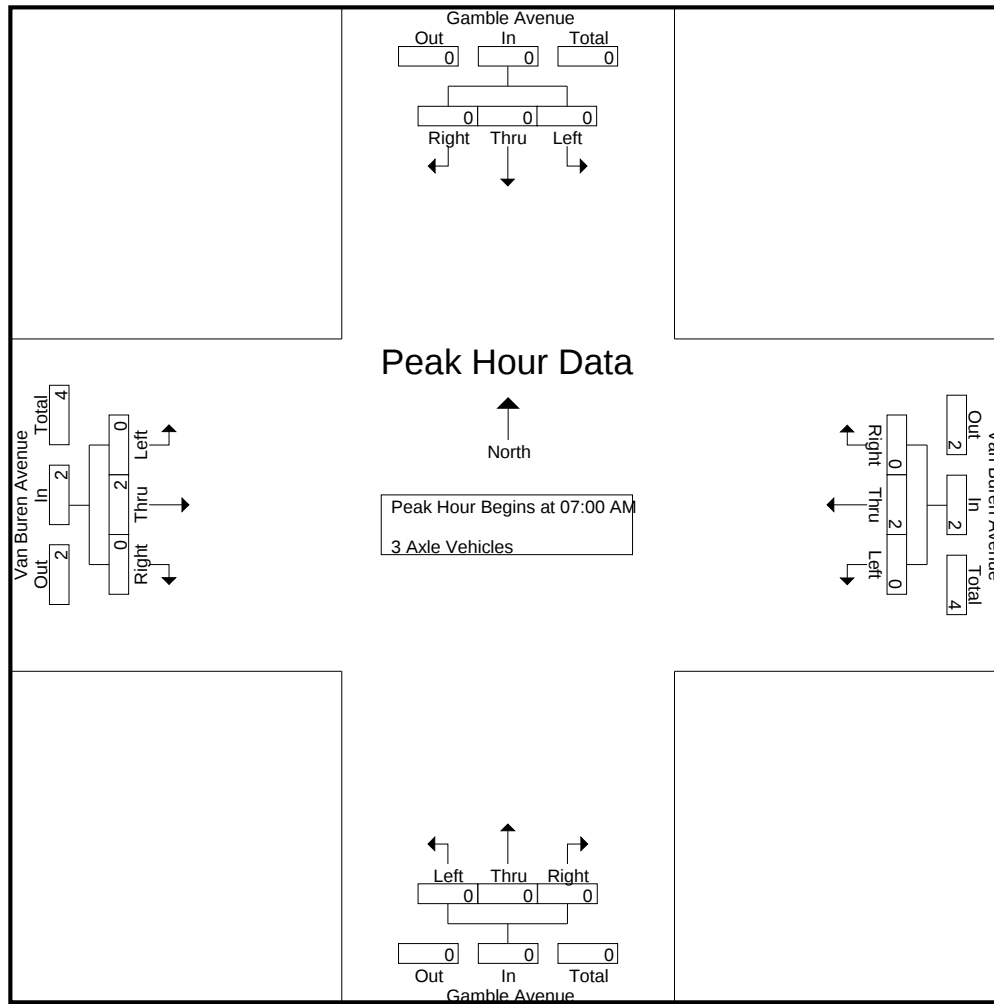
Groups Printed- 3 Axle Vehicles

	Gamble Avenue Southbound				Van Buren Avenue Westbound				Gamble Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
08:00 AM	0	0	1	1	0	1	0	1	0	0	0	0	0	1	0	1	3
08:15 AM	0	0	0	0	0	2	1	3	0	0	0	0	0	1	0	1	4
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
Total	0	0	1	1	0	5	1	6	0	0	0	0	0	6	0	6	13
Grand Total	0	0	1	1	0	7	1	8	0	0	0	0	0	8	0	8	17
Apprch %	0	0	100		0	87.5	12.5		0	0	0		0	100	0		
Total %	0	0	5.9	5.9	0	41.2	5.9	47.1	0	0	0	0	0	47.1	0	47.1	

	Gamble Avenue Southbound				Van Buren Avenue Westbound				Gamble Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.500	.000	.500	.500

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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.500	.000	.500

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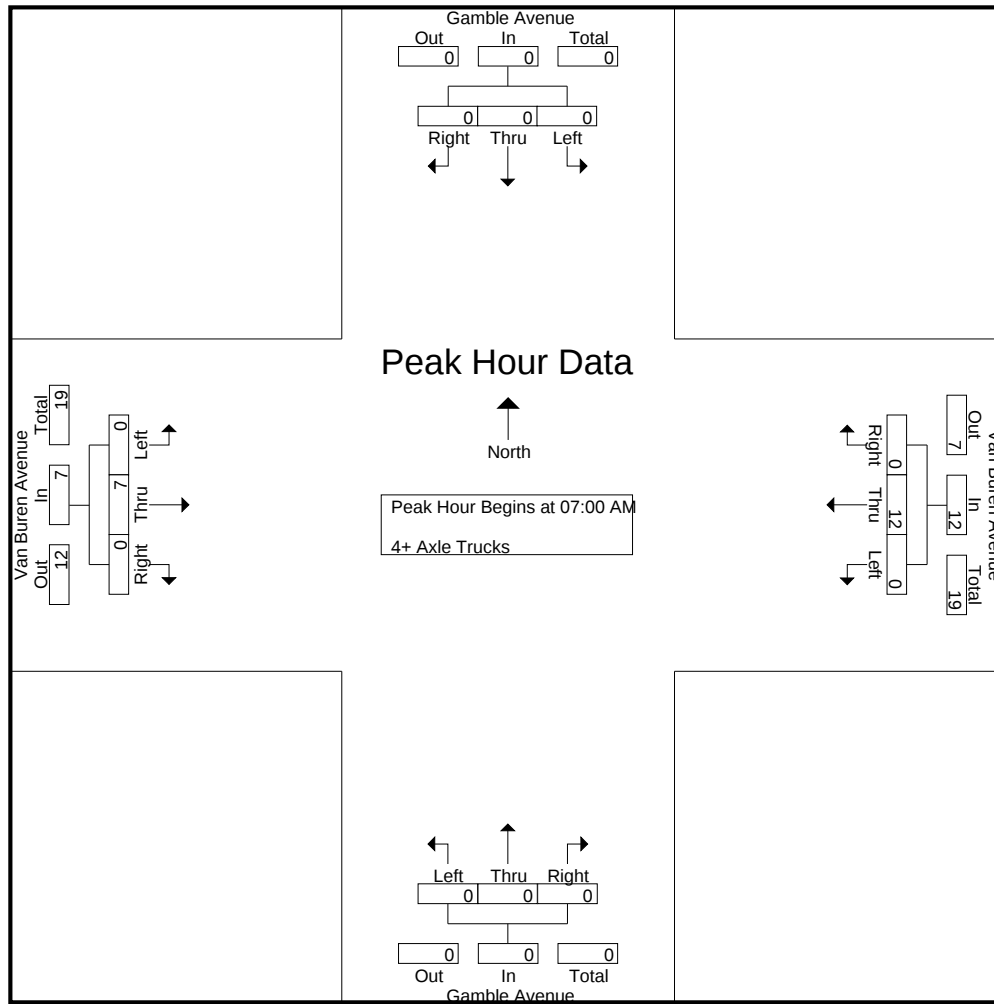
Groups Printed- 4+ Axle Trucks

	Gamble Avenue Southbound				Van Buren Avenue Westbound				Gamble Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
07:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
07:45 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	3	0	3	8
Total	0	0	0	0	0	12	0	12	0	0	0	0	0	7	0	7	19
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	2	0	2	6
08:30 AM	0	0	0	0	0	9	0	9	0	0	0	0	0	2	0	2	11
08:45 AM	0	0	0	0	0	7	0	7	0	0	0	0	0	1	0	1	8
Total	0	0	0	0	0	20	0	20	0	0	0	0	0	6	0	6	26
Grand Total	0	0	0	0	0	32	0	32	0	0	0	0	0	13	0	13	45
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	71.1	0	71.1	0	0	0	0	0	28.9	0	28.9	

	Gamble Avenue Southbound				Van Buren Avenue Westbound				Gamble Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
07:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
07:45 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	3	0	3	8
Total Volume	0	0	0	0	0	12	0	12	0	0	0	0	0	7	0	7	19
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.600	.000	.600	.000	.000	.000	.000	.000	.583	.000	.583	.594

City of Riverside
N/S: Gamble Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 01_RIV_Gamble_Van Buren AM
Site Code : 00319643
Start Date : 9/18/2019
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	3	0	3
Total Volume	0	0	0	0	0	12	0	12	0	0	0	0	0	7	0	7
% App. Total	0	0	0	0	0	100	0		0	0	0	0	0	100	0	
PHF	.000	.000	.000	.000	.000	.600	.000	.600	.000	.000	.000	.000	.000	.583	.000	.583

City of Riverside
N/S: Gamble Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 01_RIV_Gamble_Van Buren PM
Site Code : 00319643
Start Date : 9/18/2019
Page No : 1

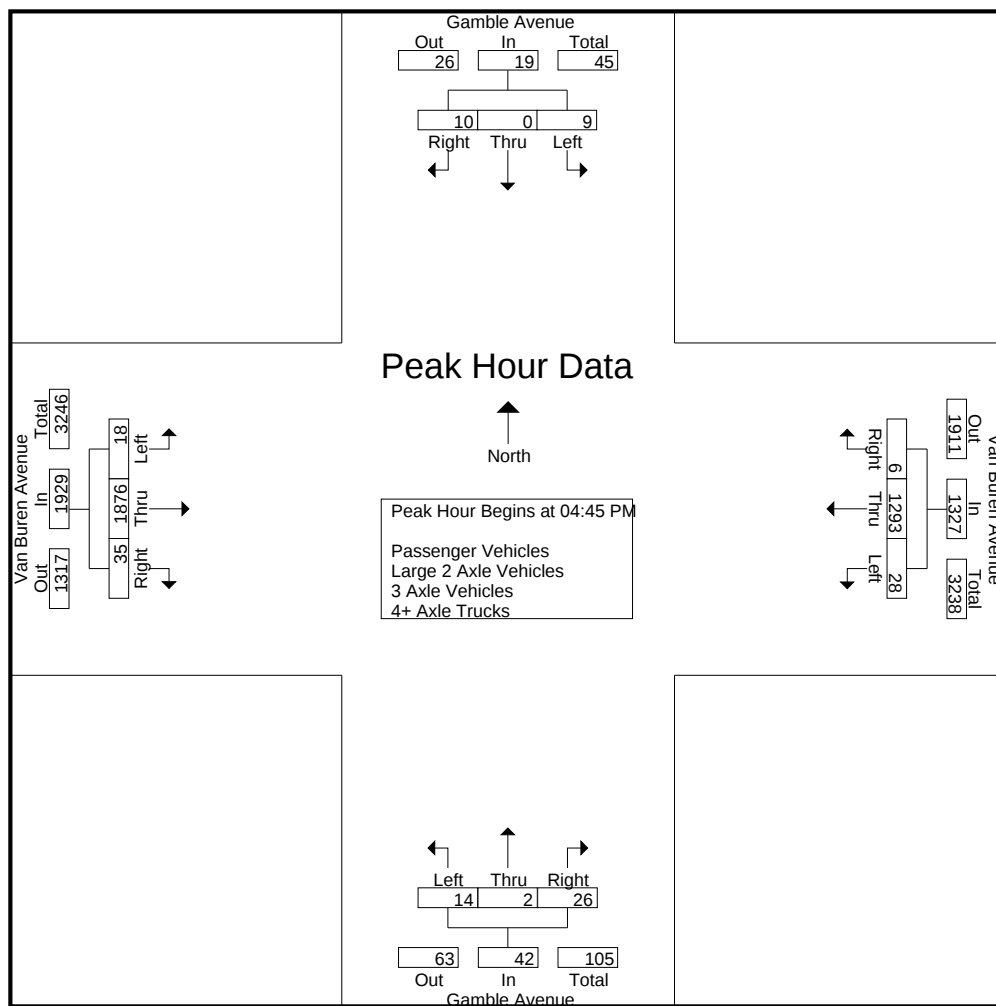
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Gamble Avenue Southbound				Van Buren Avenue Westbound				Gamble Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	2	0	1	3	5	330	0	335	8	0	7	15	4	386	9	399	752
04:15 PM	3	0	1	4	5	318	2	325	7	1	4	12	2	409	5	416	757
04:30 PM	1	0	1	2	6	272	1	279	6	0	5	11	6	426	7	439	731
04:45 PM	4	0	2	6	5	311	1	317	2	0	3	5	4	487	5	496	824
Total	10	0	5	15	21	1231	4	1256	23	1	19	43	16	1708	26	1750	3064
05:00 PM	1	0	2	3	7	307	2	316	1	1	6	8	2	459	10	471	798
05:15 PM	3	0	5	8	13	333	1	347	3	1	6	10	6	457	9	472	837
05:30 PM	1	0	1	2	3	342	2	347	8	0	11	19	6	473	11	490	858
05:45 PM	2	0	1	3	11	313	0	324	4	0	6	10	4	441	3	448	785
Total	7	0	9	16	34	1295	5	1334	16	2	29	47	18	1830	33	1881	3278
Grand Total	17	0	14	31	55	2526	9	2590	39	3	48	90	34	3538	59	3631	6342
Apprch %	54.8	0	45.2		2.1	97.5	0.3		43.3	3.3	53.3		0.9	97.4	1.6		
Total %	0.3	0	0.2	0.5	0.9	39.8	0.1	40.8	0.6	0	0.8	1.4	0.5	55.8	0.9	57.3	
Passenger Vehicles	15	0	14	29	55	2475	9	2539	38	3	46	87	32	3470	58	3560	6215
% Passenger Vehicles	88.2	0	100	93.5	100	98	100	98	97.4	100	95.8	96.7	94.1	98.1	98.3	98	98
Large 2 Axle Vehicles	2	0	0	2	0	36	0	36	1	0	1	2	2	44	1	47	87
% Large 2 Axle Vehicles	11.8	0	0	6.5	0	1.4	0	1.4	2.6	0	2.1	2.2	5.9	1.2	1.7	1.3	1.4
3 Axle Vehicles	0	0	0	0	0	7	0	7	0	0	1	1	0	6	0	6	14
% 3 Axle Vehicles	0	0	0	0	0	0.3	0	0.3	0	0	2.1	1.1	0	0.2	0	0.2	0.2
4+ Axle Trucks	0	0	0	0	0	8	0	8	0	0	0	0	0	18	0	18	26
% 4+ Axle Trucks	0	0	0	0	0	0.3	0	0.3	0	0	0	0	0	0.5	0	0.5	0.4

	Gamble Avenue Southbound				Van Buren Avenue Westbound				Gamble Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	4	0	2	6	5	311	1	317	2	0	3	5	4	487	5	496	824
05:00 PM	1	0	2	3	7	307	2	316	1	1	6	8	2	459	10	471	798
05:15 PM	3	0	5	8	13	333	1	347	3	1	6	10	6	457	9	472	837
05:30 PM	1	0	1	2	3	342	2	347	8	0	11	19	6	473	11	490	858
Total Volume	9	0	10	19	28	1293	6	1327	14	2	26	42	18	1876	35	1929	3317
% App. Total	47.4	0	52.6		2.1	97.4	0.5		33.3	4.8	61.9		0.9	97.3	1.8		
PHF	.563	.000	.500	.594	.538	.945	.750	.956	.438	.500	.591	.553	.750	.963	.795	.972	.966

City of Riverside
N/S: Gamble Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 01_RIV_Gamble_Van Buren PM
Site Code : 00319643
Start Date : 9/18/2019
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				05:00 PM				05:00 PM				04:45 PM			
+0 mins.	1	0	1	2	7	307	2	316	1	1	6	8	4	487	5	496
+15 mins.	4	0	2	6	13	333	1	347	3	1	6	10	2	459	10	471
+30 mins.	1	0	2	3	3	342	2	347	8	0	11	19	6	457	9	472
+45 mins.	3	0	5	8	11	313	0	324	4	0	6	10	6	473	11	490
Total Volume	9	0	10	19	34	1295	5	1334	16	2	29	47	18	1876	35	1929
% App. Total	47.4	0	52.6		2.5	97.1	0.4		34	4.3	61.7		0.9	97.3	1.8	
PHF	.563	.000	.500	.594	.654	.947	.625	.961	.500	.500	.659	.618	.750	.963	.795	.972

City of Riverside
N/S: Gamble Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 01_RIV_Gamble_Van Buren PM
Site Code : 00319643
Start Date : 9/18/2019
Page No : 1

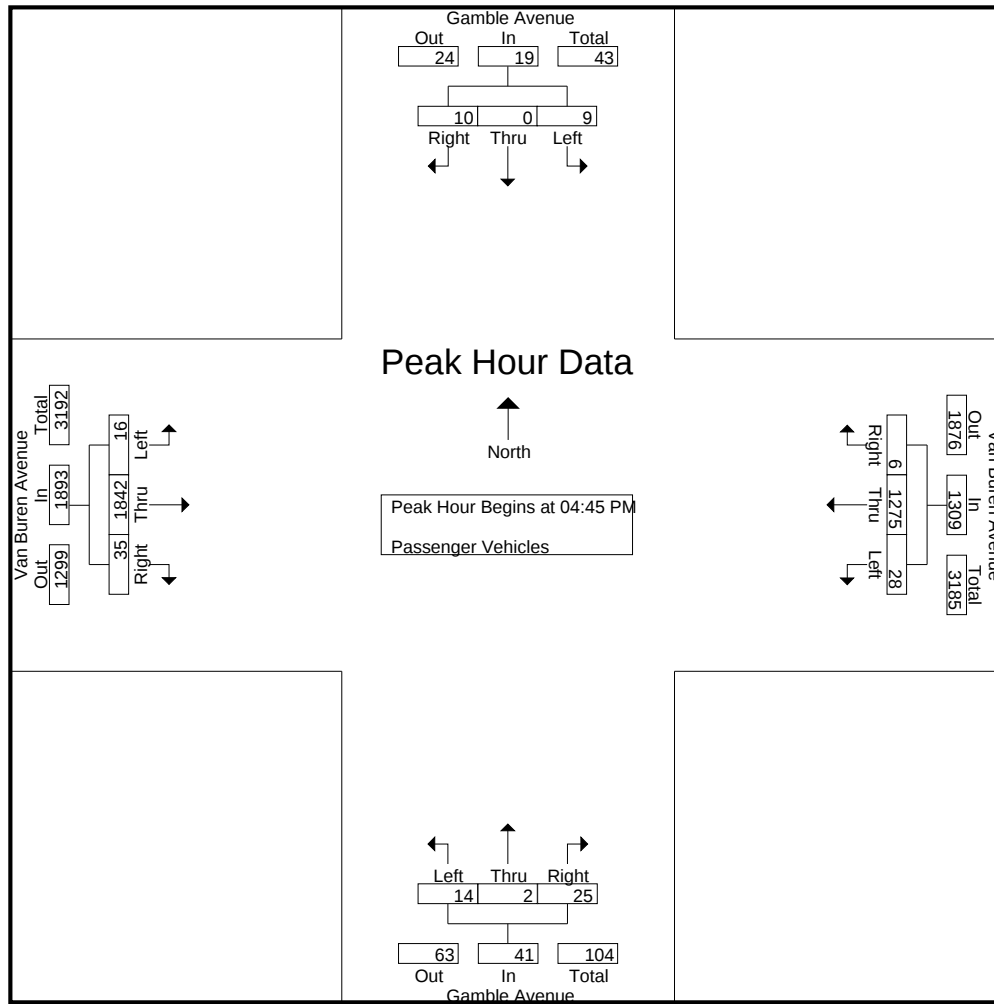
Groups Printed- Passenger Vehicles

	Gamble Avenue Southbound				Van Buren Avenue Westbound				Gamble Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	0	1	2	5	320	0	325	8	0	7	15	4	374	9	387	729
04:15 PM	3	0	1	4	5	305	2	312	6	1	4	11	2	398	5	405	732
04:30 PM	1	0	1	2	6	267	1	274	6	0	4	10	6	420	6	432	718
04:45 PM	4	0	2	6	5	306	1	312	2	0	3	5	3	480	5	488	811
Total	9	0	5	14	21	1198	4	1223	22	1	18	41	15	1672	25	1712	2990
05:00 PM	1	0	2	3	7	301	2	310	1	1	6	8	2	450	10	462	783
05:15 PM	3	0	5	8	13	330	1	344	3	1	5	9	6	448	9	463	824
05:30 PM	1	0	1	2	3	338	2	343	8	0	11	19	5	464	11	480	844
05:45 PM	1	0	1	2	11	308	0	319	4	0	6	10	4	436	3	443	774
Total	6	0	9	15	34	1277	5	1316	16	2	28	46	17	1798	33	1848	3225
Grand Total	15	0	14	29	55	2475	9	2539	38	3	46	87	32	3470	58	3560	6215
Apprch %	51.7	0	48.3		2.2	97.5	0.4		43.7	3.4	52.9		0.9	97.5	1.6		
Total %	0.2	0	0.2	0.5	0.9	39.8	0.1	40.9	0.6	0	0.7	1.4	0.5	55.8	0.9	57.3	

	Gamble Avenue Southbound				Van Buren Avenue Westbound				Gamble Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	4	0	2	6	5	306	1	312	2	0	3	5	3	480	5	488	811
05:00 PM	1	0	2	3	7	301	2	310	1	1	6	8	2	450	10	462	783
05:15 PM	3	0	5	8	13	330	1	344	3	1	5	9	6	448	9	463	824
05:30 PM	1	0	1	2	3	338	2	343	8	0	11	19	5	464	11	480	844
Total Volume	9	0	10	19	28	1275	6	1309	14	2	25	41	16	1842	35	1893	3262
% App. Total	47.4	0	52.6		2.1	97.4	0.5		34.1	4.9	61		0.8	97.3	1.8		
PHF	.563	.000	.500	.594	.538	.943	.750	.951	.438	.500	.568	.539	.667	.959	.795	.970	.966

City of Riverside
N/S: Gamble Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 01_RIV_Gamble_Van Buren PM
Site Code : 00319643
Start Date : 9/18/2019
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Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	4	0	2	6	5	306	1	312	2	0	3	5	3	480	5	488
+15 mins.	1	0	2	3	7	301	2	310	1	1	6	8	2	450	10	462
+30 mins.	3	0	5	8	13	330	1	344	3	1	5	9	6	448	9	463
+45 mins.	1	0	1	2	3	338	2	343	8	0	11	19	5	464	11	480
Total Volume	9	0	10	19	28	1275	6	1309	14	2	25	41	16	1842	35	1893
% App. Total	47.4	0	52.6		2.1	97.4	0.5		34.1	4.9	61		0.8	97.3	1.8	
PHF	.563	.000	.500	.594	.538	.943	.750	.951	.438	.500	.568	.539	.667	.959	.795	.970

City of Riverside
N/S: Gamble Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 01_RIV_Gamble_Van Buren PM
Site Code : 00319643
Start Date : 9/18/2019
Page No : 1

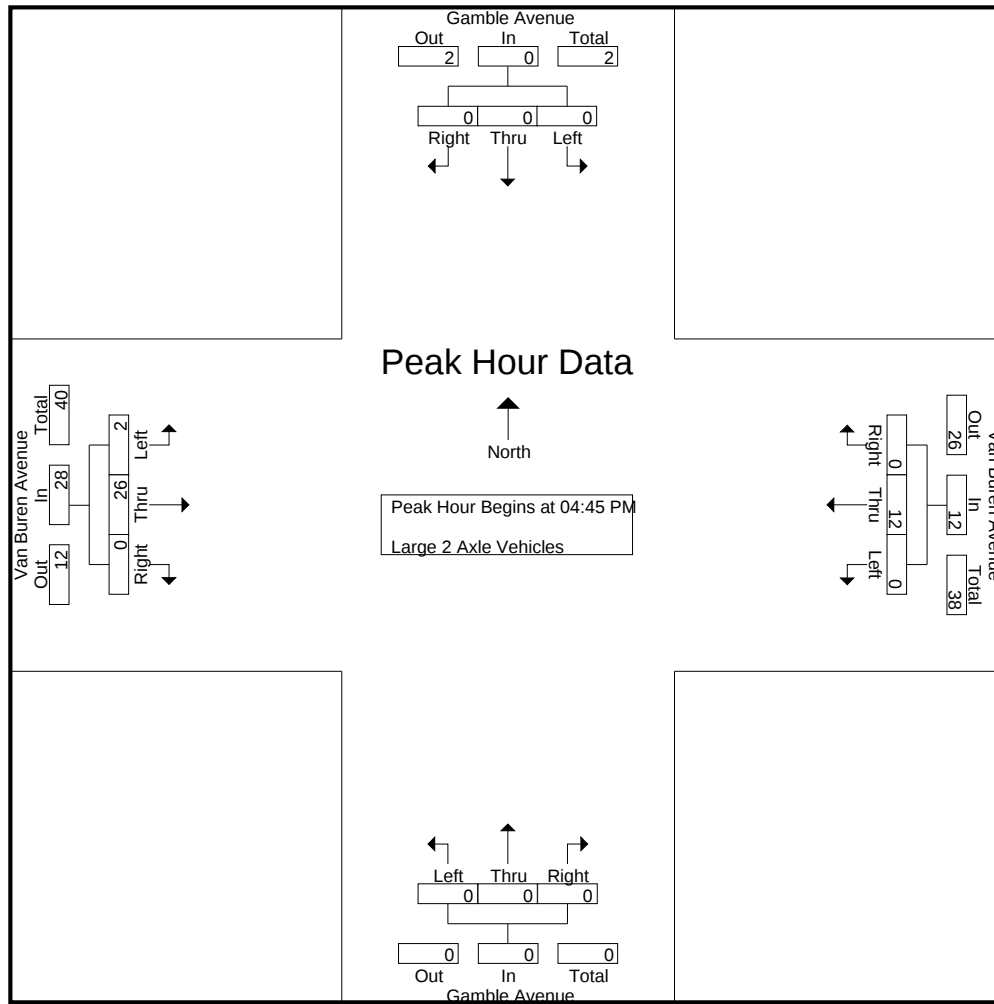
Groups Printed- Large 2 Axle Vehicles

	Gamble Avenue Southbound				Van Buren Avenue Westbound				Gamble Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	0	0	1	0	9	0	9	0	0	0	0	0	5	0	5	15
04:15 PM	0	0	0	0	0	8	0	8	1	0	0	1	0	8	0	8	17
04:30 PM	0	0	0	0	0	5	0	5	0	0	1	1	0	2	1	3	9
04:45 PM	0	0	0	0	0	3	0	3	0	0	0	0	1	6	0	7	10
Total	1	0	0	1	0	25	0	25	1	0	1	2	1	21	1	23	51
05:00 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	7	0	7	12
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	6	0	6	7
05:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	1	7	0	8	11
05:45 PM	1	0	0	1	0	2	0	2	0	0	0	0	0	3	0	3	6
Total	1	0	0	1	0	11	0	11	0	0	0	0	1	23	0	24	36
Grand Total	2	0	0	2	0	36	0	36	1	0	1	2	2	44	1	47	87
Apprch %	100	0	0		0	100	0		50	0	50		4.3	93.6	2.1		
Total %	2.3	0	0	2.3	0	41.4	0	41.4	1.1	0	1.1	2.3	2.3	50.6	1.1	54	

	Gamble Avenue Southbound				Van Buren Avenue Westbound				Gamble Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	3	0	3	0	0	0	0	1	6	0	7	10
05:00 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	7	0	7	12
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	6	0	6	7
05:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	1	7	0	8	11
Total Volume	0	0	0	0	0	12	0	12	0	0	0	0	2	26	0	28	40
% App. Total	0	0	0		0	100	0		0	0	0		7.1	92.9	0		
PHF	.000	.000	.000	.000	.000	.600	.000	.600	.000	.000	.000	.000	.500	.929	.000	.875	.833

City of Riverside
N/S: Gamble Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 01_RIV_Gamble_Van Buren PM
Site Code : 00319643
Start Date : 9/18/2019
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Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	0	0	0	3	0	3	0	0	0	0	1	6	0	7
+15 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	7	0	7
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	6	0	6
+45 mins.	0	0	0	0	0	3	0	3	0	0	0	0	1	7	0	8
Total Volume	0	0	0	0	0	12	0	12	0	0	0	0	2	26	0	28
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	7.1	92.9	0	0
PHF	.000	.000	.000	.000	.000	.600	.000	.600	.000	.000	.000	.000	.500	.929	.000	.875

City of Riverside
N/S: Gamble Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 01_RIV_Gamble_Van Buren PM
Site Code : 00319643
Start Date : 9/18/2019
Page No : 1

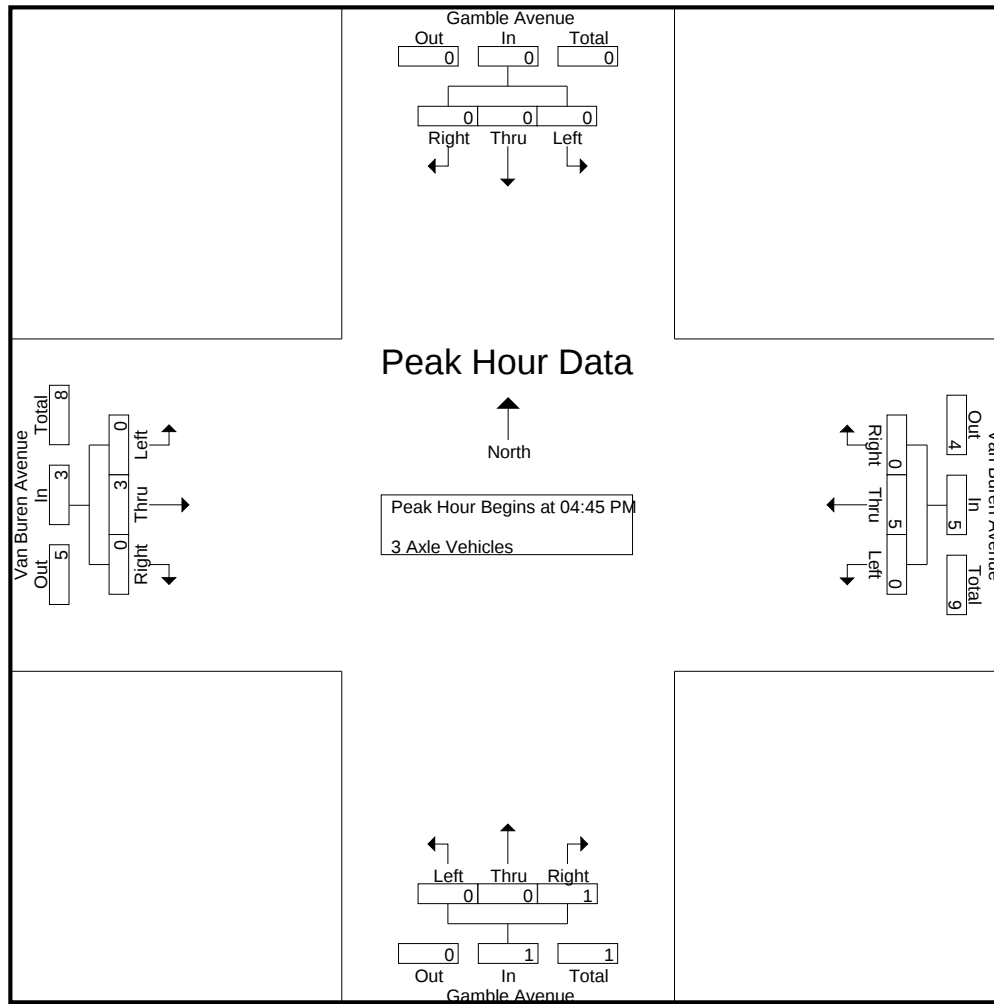
Groups Printed- 3 Axle Vehicles

	Gamble Avenue Southbound				Van Buren Avenue Westbound				Gamble Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	1	0	1	0	0	1	1	0	2	0	2	4
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	4	0	4	0	0	1	1	0	3	0	3	8
Grand Total	0	0	0	0	0	7	0	7	0	0	1	1	0	6	0	6	14
Apprch %	0	0	0		0	100	0		0	0	100		0	100	0		
Total %	0	0	0	0	0	50	0	50	0	0	7.1	7.1	0	42.9	0	42.9	

	Gamble Avenue Southbound				Van Buren Avenue Westbound				Gamble Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	1	0	1	0	0	1	1	0	2	0	2	4
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total Volume	0	0	0	0	0	5	0	5	0	0	1	1	0	3	0	3	9
% App. Total	0	0	0		0	100	0		0	0	100		0	100	0		
PHF	.000	.000	.000	.000	.000	.625	.000	.625	.000	.000	.250	.250	.000	.375	.000	.375	.563

City of Riverside
N/S: Gamble Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 01_RIV_Gamble_Van Buren PM
Site Code : 00319643
Start Date : 9/18/2019
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	1	0	1	0	0	1	1	0	2	0	2
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	5	0	5	0	0	1	1	0	3	0	3
% App. Total	0	0	0	0	0	100	0		0	0	100		0	100	0	
PHF	.000	.000	.000	.000	.000	.625	.000	.625	.000	.000	.250	.250	.000	.375	.000	.375

City of Riverside
N/S: Gamble Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 01_RIV_Gamble_Van Buren PM
Site Code : 00319643
Start Date : 9/18/2019
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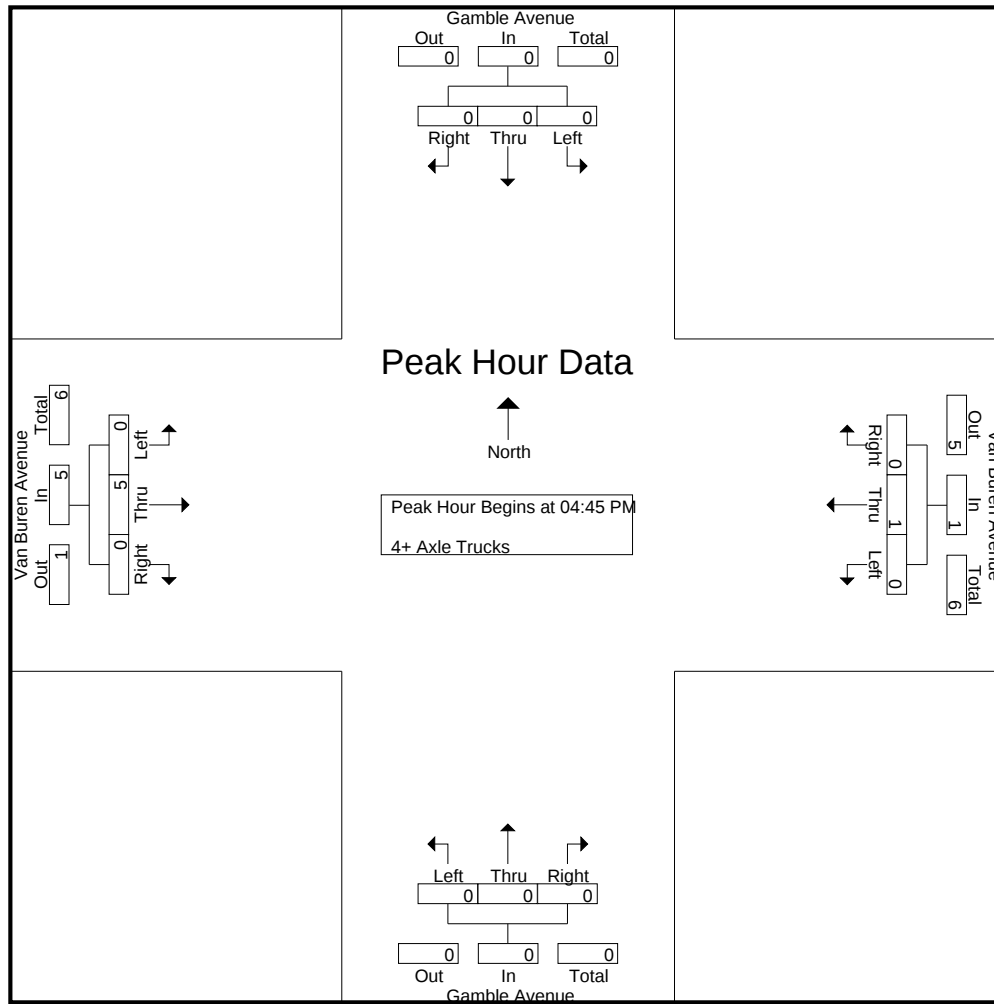
Groups Printed- 4+ Axle Trucks

	Gamble Avenue Southbound				Van Buren Avenue Westbound				Gamble Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
04:15 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	4
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	5	0	5	0	0	0	0	0	12	0	12	17
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
Total	0	0	0	0	0	3	0	3	0	0	0	0	0	6	0	6	9
Grand Total	0	0	0	0	0	8	0	8	0	0	0	0	0	18	0	18	26
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	30.8	0	30.8	0	0	0	0	0	69.2	0	69.2	

	Gamble Avenue Southbound				Van Buren Avenue Westbound				Gamble Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5	6
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.625	.000	.625	.750

City of Riverside
N/S: Gamble Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 01_RIV_Gamble_Van Buren PM
Site Code : 00319643
Start Date : 9/18/2019
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Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.625	.000	.625

Location: Riverside
 N/S: Gamble Avenue
 E/W: Van Buren Avenue



Date: 9/18/2019
 Day: Wednesday

PEDESTRIANS

	North Leg Gamble Avenue Pedestrians	East Leg Van Buren Avenue Pedestrians	South Leg Gamble Avenue Pedestrians	West Leg Van Buren Avenue Pedestrians	
7:00 AM	1	0	0	0	1
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	2	0	2
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	1	0	2	0	3

	North Leg Gamble Avenue Pedestrians	East Leg Van Buren Avenue Pedestrians	South Leg Gamble Avenue Pedestrians	West Leg Van Buren Avenue Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	1	0	0	1
5:30 PM	1	0	0	0	1
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	1	1	0	0	2

Location: Riverside
 N/S: Gamble Avenue
 E/W: Van Buren Avenue



Date: 9/18/2019
 Day: Wednesday

BICYCLES

		Southbound Gamble Avenue			Westbound Van Buren Avenue			Northbound Gamble Avenue			Eastbound Van Buren Avenue			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	0	0	0	0	0	0	0	0	1	0	0	1

		Southbound Gamble Avenue			Westbound Van Buren Avenue			Northbound Gamble Avenue			Eastbound Van Buren Avenue			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
	4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
	5:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
	5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	1	2	0	0	1	0	0	1	0	1	0	6

City of Riverside
N/S: Chicago Ave/Alta Cresta Ave
E/W: Van Buren Avenue
Weather: Clear

File Name : 02_RIV_Chicago_Van Buren AM
Site Code : 00319643
Start Date : 9/18/2019
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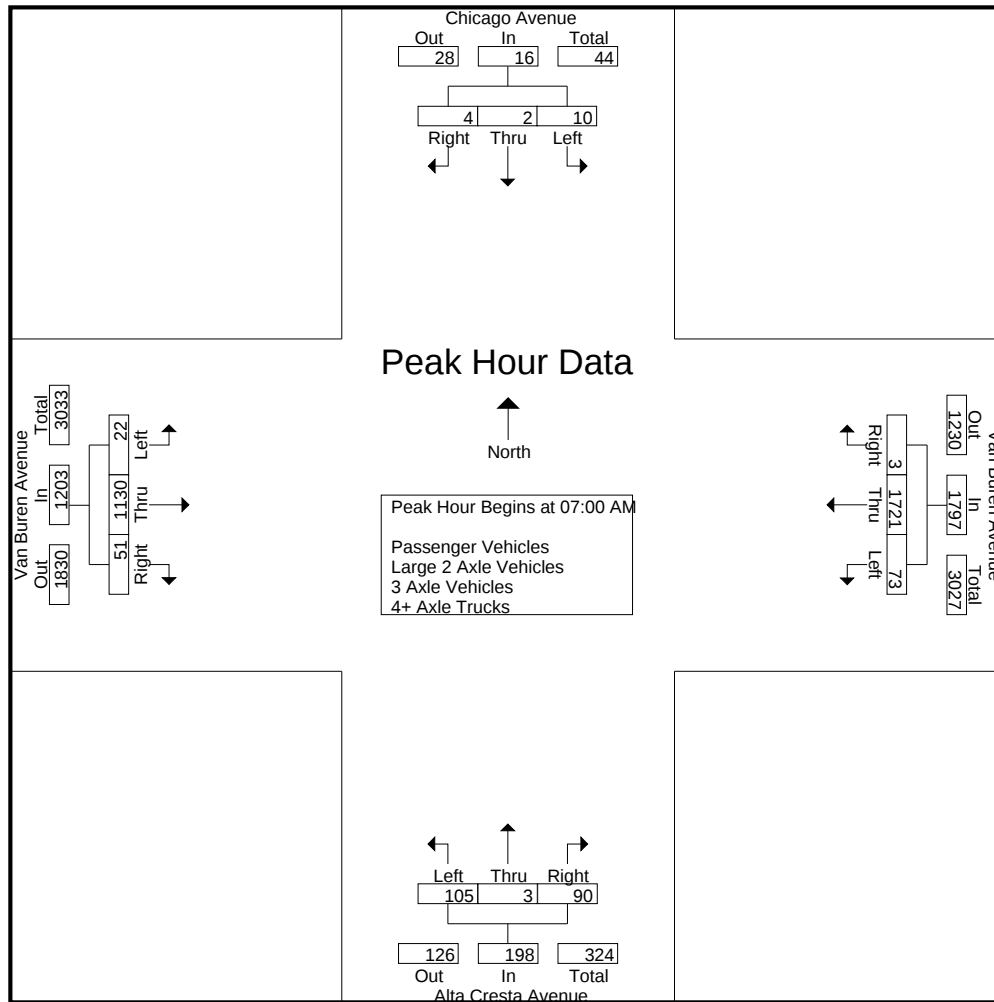
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Chicago Avenue Southbound				Van Buren Avenue Westbound				Alta Cresta Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	1	3	6	40	432	2	474	31	1	28	60	4	297	12	313	853
07:15 AM	1	0	0	1	27	449	1	477	36	1	39	76	4	304	22	330	884
07:30 AM	4	0	0	4	4	423	0	427	23	0	15	38	5	247	11	263	732
07:45 AM	3	1	1	5	2	417	0	419	15	1	8	24	9	282	6	297	745
Total	10	2	4	16	73	1721	3	1797	105	3	90	198	22	1130	51	1203	3214
08:00 AM	0	0	2	2	3	375	2	380	13	1	5	19	3	262	10	275	676
08:15 AM	2	0	2	4	3	344	1	348	10	0	4	14	5	227	9	241	607
08:30 AM	1	0	0	1	7	387	4	398	16	1	2	19	5	224	7	236	654
08:45 AM	0	0	1	1	3	321	2	326	11	0	4	15	6	207	7	220	562
Total	3	0	5	8	16	1427	9	1452	50	2	15	67	19	920	33	972	2499
Grand Total	13	2	9	24	89	3148	12	3249	155	5	105	265	41	2050	84	2175	5713
Apprch %	54.2	8.3	37.5		2.7	96.9	0.4		58.5	1.9	39.6		1.9	94.3	3.9		
Total %	0.2	0	0.2	0.4	1.6	55.1	0.2	56.9	2.7	0.1	1.8	4.6	0.7	35.9	1.5	38.1	
Passenger Vehicles	12	2	8	22	87	3038	11	3136	150	5	98	253	39	1977	79	2095	5506
% Passenger Vehicles	92.3	100	88.9	91.7	97.8	96.5	91.7	96.5	96.8	100	93.3	95.5	95.1	96.4	94	96.3	96.4
Large 2 Axle Vehicles	1	0	1	2	0	74	1	75	2	0	4	6	1	55	2	58	141
% Large 2 Axle Vehicles	7.7	0	11.1	8.3	0	2.4	8.3	2.3	1.3	0	3.8	2.3	2.4	2.7	2.4	2.7	2.5
3 Axle Vehicles	0	0	0	0	2	9	0	11	0	0	3	3	0	10	0	10	24
% 3 Axle Vehicles	0	0	0	0	2.2	0.3	0	0.3	0	0	2.9	1.1	0	0.5	0	0.5	0.4
4+ Axle Trucks	0	0	0	0	0	27	0	27	3	0	0	3	1	8	3	12	42
% 4+ Axle Trucks	0	0	0	0	0	0.9	0	0.8	1.9	0	0	1.1	2.4	0.4	3.6	0.6	0.7

	Chicago Avenue Southbound				Van Buren Avenue Westbound				Alta Cresta Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	2	1	3	6	40	432	2	474	31	1	28	60	4	297	12	313	853
07:15 AM	1	0	0	1	27	449	1	477	36	1	39	76	4	304	22	330	884
07:30 AM	4	0	0	4	4	423	0	427	23	0	15	38	5	247	11	263	732
07:45 AM	3	1	1	5	2	417	0	419	15	1	8	24	9	282	6	297	745
Total Volume	10	2	4	16	73	1721	3	1797	105	3	90	198	22	1130	51	1203	3214
% App. Total	62.5	12.5	25		4.1	95.8	0.2		53	1.5	45.5		1.8	93.9	4.2		
PHF	.625	.500	.333	.667	.456	.958	.375	.942	.729	.750	.577	.651	.611	.929	.580	.911	.909

City of Riverside
N/S: Chicago Ave/Alta Cresta Ave
E/W: Van Buren Avenue
Weather: Clear

File Name : 02_RIV_Chicago_Van Buren AM
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	2	1	3	6	40	432	2	474	31	1	28	60	4	297	12	313
+15 mins.	1	0	0	1	27	449	1	477	36	1	39	76	4	304	22	330
+30 mins.	4	0	0	4	4	423	0	427	23	0	15	38	5	247	11	263
+45 mins.	3	1	1	5	2	417	0	419	15	1	8	24	9	282	6	297
Total Volume	10	2	4	16	73	1721	3	1797	105	3	90	198	22	1130	51	1203
% App. Total	62.5	12.5	25		4.1	95.8	0.2		53	1.5	45.5		1.8	93.9	4.2	
PHF	.625	.500	.333	.667	.456	.958	.375	.942	.729	.750	.577	.651	.611	.929	.580	.911

City of Riverside
N/S: Chicago Ave/Alta Cresta Ave
E/W: Van Buren Avenue
Weather: Clear

File Name : 02_RIV_Chicago_Van Buren AM
Site Code : 00319643
Start Date : 9/18/2019
Page No : 1

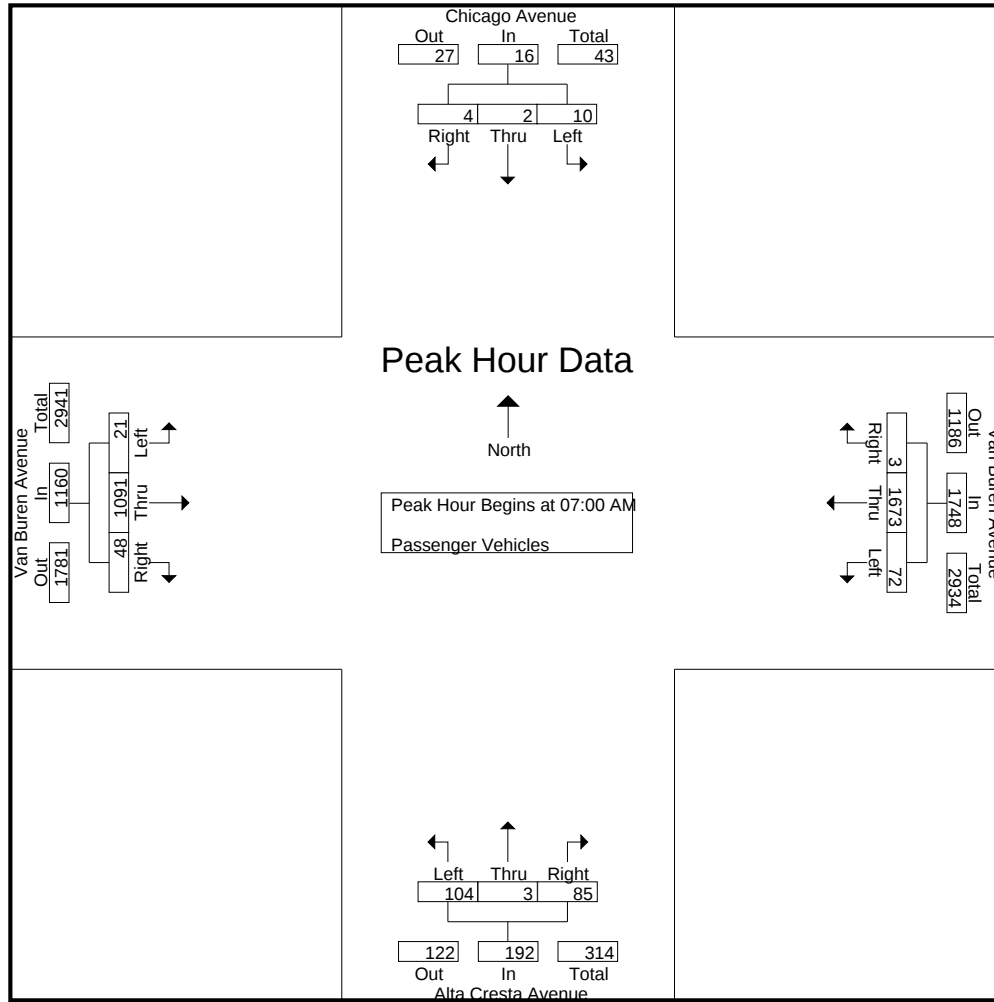
Groups Printed- Passenger Vehicles

	Chicago Avenue Southbound				Van Buren Avenue Westbound				Alta Cresta Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	1	3	6	39	423	2	464	30	1	27	58	4	285	10	299	827
07:15 AM	1	0	0	1	27	436	1	464	36	1	37	74	3	295	21	319	858
07:30 AM	4	0	0	4	4	412	0	416	23	0	13	36	5	240	11	256	712
07:45 AM	3	1	1	5	2	402	0	404	15	1	8	24	9	271	6	286	719
Total	10	2	4	16	72	1673	3	1748	104	3	85	192	21	1091	48	1160	3116
08:00 AM	0	0	2	2	3	364	1	368	12	1	4	17	3	254	10	267	654
08:15 AM	1	0	1	2	3	330	1	334	10	0	4	14	4	217	9	230	580
08:30 AM	1	0	0	1	6	369	4	379	15	1	2	18	5	216	6	227	625
08:45 AM	0	0	1	1	3	302	2	307	9	0	3	12	6	199	6	211	531
Total	2	0	4	6	15	1365	8	1388	46	2	13	61	18	886	31	935	2390
Grand Total	12	2	8	22	87	3038	11	3136	150	5	98	253	39	1977	79	2095	5506
Apprch %	54.5	9.1	36.4		2.8	96.9	0.4		59.3	2	38.7		1.9	94.4	3.8		
Total %	0.2	0	0.1	0.4	1.6	55.2	0.2	57	2.7	0.1	1.8	4.6	0.7	35.9	1.4	38	

	Chicago Avenue Southbound				Van Buren Avenue Westbound				Alta Cresta Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	2	1	3	6	39	423	2	464	30	1	27	58	4	285	10	299	827
07:15 AM	1	0	0	1	27	436	1	464	36	1	37	74	3	295	21	319	858
07:30 AM	4	0	0	4	4	412	0	416	23	0	13	36	5	240	11	256	712
07:45 AM	3	1	1	5	2	402	0	404	15	1	8	24	9	271	6	286	719
Total Volume	10	2	4	16	72	1673	3	1748	104	3	85	192	21	1091	48	1160	3116
% App. Total	62.5	12.5	25		4.1	95.7	0.2		54.2	1.6	44.3		1.8	94.1	4.1		
PHF	.625	.500	.333	.667	.462	.959	.375	.942	.722	.750	.574	.649	.583	.925	.571	.909	.908

City of Riverside
N/S: Chicago Ave/Alta Cresta Ave
E/W: Van Buren Avenue
Weather: Clear

File Name : 02_RIV_Chicago_Van Buren AM
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	2	1	3	6	39	423	2	464	30	1	27	58	4	285	10	299
+15 mins.	1	0	0	1	27	436	1	464	36	1	37	74	3	295	21	319
+30 mins.	4	0	0	4	4	412	0	416	23	0	13	36	5	240	11	256
+45 mins.	3	1	1	5	2	402	0	404	15	1	8	24	9	271	6	286
Total Volume	10	2	4	16	72	1673	3	1748	104	3	85	192	21	1091	48	1160
% App. Total	62.5	12.5	25		4.1	95.7	0.2		54.2	1.6	44.3		1.8	94.1	4.1	
PHF	.625	.500	.333	.667	.462	.959	.375	.942	.722	.750	.574	.649	.583	.925	.571	.909

City of Riverside
N/S: Chicago Ave/Alta Cresta Ave
E/W: Van Buren Avenue
Weather: Clear

File Name : 02_RIV_Chicago_Van Buren AM
Site Code : 00319643
Start Date : 9/18/2019
Page No : 1

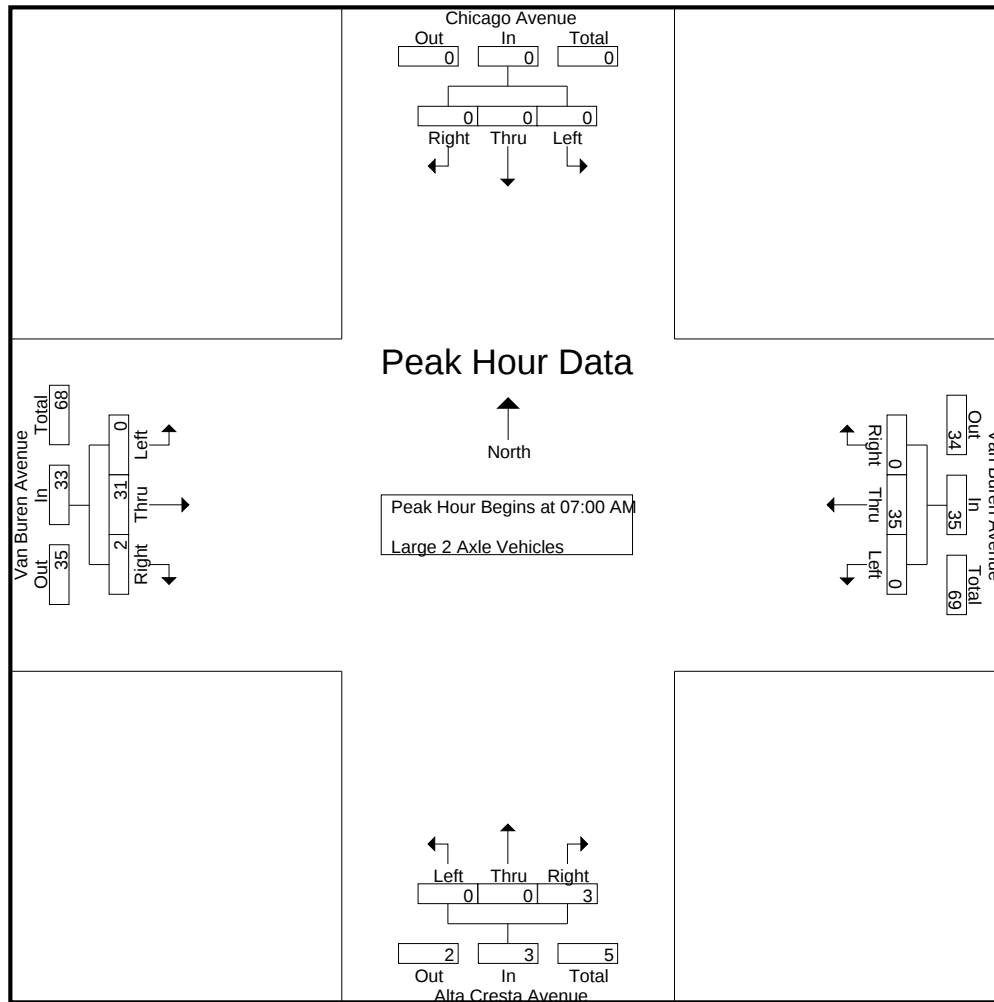
Groups Printed- Large 2 Axle Vehicles

	Chicago Avenue Southbound				Van Buren Avenue Westbound				Alta Cresta Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	8	0	8	0	0	0	0	0	11	1	12	20
07:15 AM	0	0	0	0	0	8	0	8	0	0	2	2	0	7	1	8	18
07:30 AM	0	0	0	0	0	9	0	9	0	0	1	1	0	5	0	5	15
07:45 AM	0	0	0	0	0	10	0	10	0	0	0	0	0	8	0	8	18
Total	0	0	0	0	0	35	0	35	0	0	3	3	0	31	2	33	71
08:00 AM	0	0	0	0	0	9	1	10	1	0	1	2	0	6	0	6	18
08:15 AM	1	0	1	2	0	8	0	8	0	0	0	0	1	7	0	8	18
08:30 AM	0	0	0	0	0	12	0	12	0	0	0	0	0	7	0	7	19
08:45 AM	0	0	0	0	0	10	0	10	1	0	0	1	0	4	0	4	15
Total	1	0	1	2	0	39	1	40	2	0	1	3	1	24	0	25	70
Grand Total	1	0	1	2	0	74	1	75	2	0	4	6	1	55	2	58	141
Apprch %	50	0	50		0	98.7	1.3		33.3	0	66.7		1.7	94.8	3.4		
Total %	0.7	0	0.7	1.4	0	52.5	0.7	53.2	1.4	0	2.8	4.3	0.7	39	1.4	41.1	

	Chicago Avenue Southbound				Van Buren Avenue Westbound				Alta Cresta Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	8	0	8	0	0	0	0	0	11	1	12	20
07:15 AM	0	0	0	0	0	8	0	8	0	0	2	2	0	7	1	8	18
07:30 AM	0	0	0	0	0	9	0	9	0	0	1	1	0	5	0	5	15
07:45 AM	0	0	0	0	0	10	0	10	0	0	0	0	0	8	0	8	18
Total Volume	0	0	0	0	0	35	0	35	0	0	3	3	0	31	2	33	71
% App. Total	0	0	0		0	100	0		0	0	100		0	93.9	6.1		
PHF	.000	.000	.000	.000	.000	.875	.000	.875	.000	.000	.375	.375	.000	.705	.500	.688	.888

City of Riverside
N/S: Chicago Ave/Alta Cresta Ave
E/W: Van Buren Avenue
Weather: Clear

File Name : 02_RIV_Chicago_Van Buren AM
Site Code : 00319643
Start Date : 9/18/2019
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	8	0	8	0	0	0	0	0	11	1	12
+15 mins.	0	0	0	0	0	8	0	8	0	0	2	2	0	7	1	8
+30 mins.	0	0	0	0	0	9	0	9	0	0	1	1	0	5	0	5
+45 mins.	0	0	0	0	0	10	0	10	0	0	0	0	0	8	0	8
Total Volume	0	0	0	0	0	35	0	35	0	0	3	3	0	31	2	33
% App. Total	0	0	0	0	0	100	0		0	0	100		0	93.9	6.1	
PHF	.000	.000	.000	.000	.000	.875	.000	.875	.000	.000	.375	.375	.000	.705	.500	.688

City of Riverside
N/S: Chicago Ave/Alta Cresta Ave
E/W: Van Buren Avenue
Weather: Clear

File Name : 02_RIV_Chicago_Van Buren AM
Site Code : 00319643
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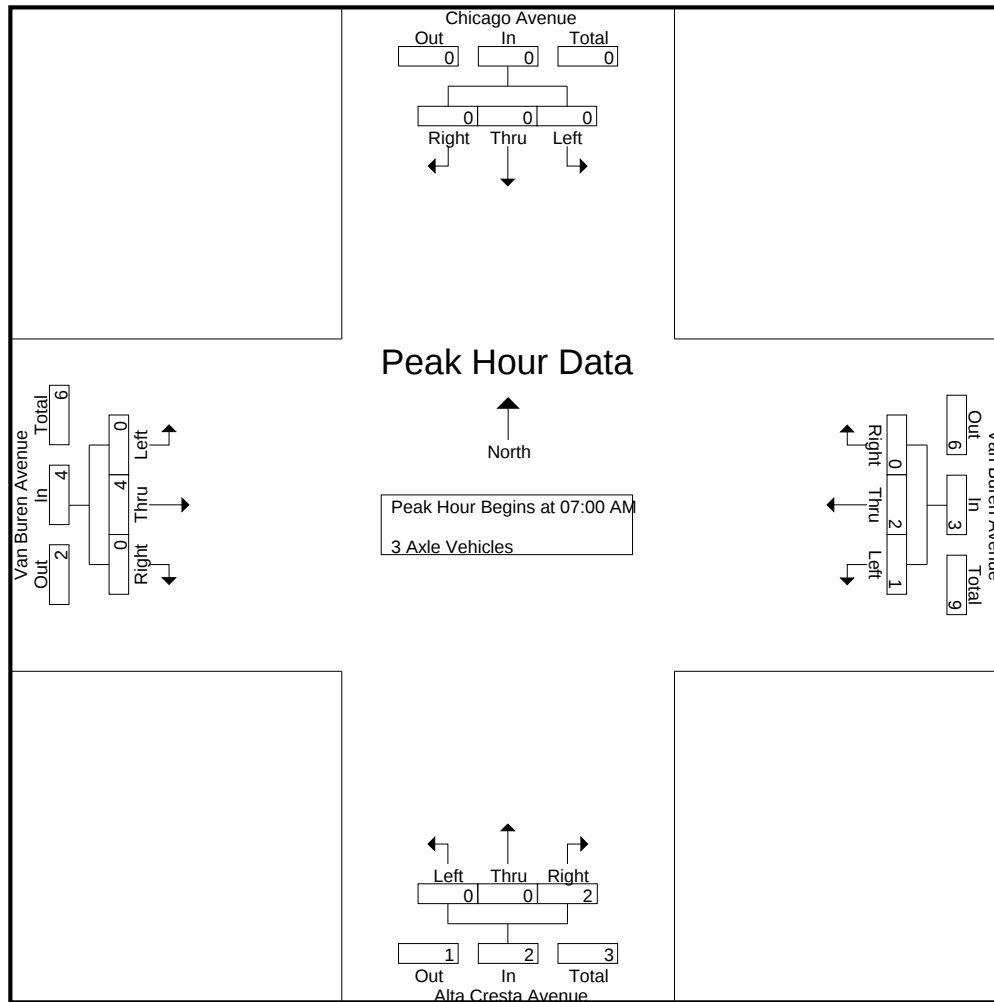
Groups Printed- 3 Axle Vehicles

	Chicago Avenue Southbound				Van Buren Avenue Westbound				Alta Cresta Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	1	1	0	2	0	0	1	1	0	1	0	1	4
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	1	2	0	3	0	0	2	2	0	4	0	4	9
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
08:15 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
08:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1	2
08:45 AM	0	0	0	0	0	3	0	3	0	0	1	1	0	3	0	3	7
Total	0	0	0	0	1	7	0	8	0	0	1	1	0	6	0	6	15
Grand Total	0	0	0	0	2	9	0	11	0	0	3	3	0	10	0	10	24
Apprch %	0	0	0		18.2	81.8	0		0	0	100		0	100	0		
Total %	0	0	0		8.3	37.5	0	45.8	0	0	12.5	12.5	0	41.7	0	41.7	

	Chicago Avenue Southbound				Van Buren Avenue Westbound				Alta Cresta Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	1	1	0	2	0	0	1	1	0	1	0	1	4
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	1	2	0	3	0	0	2	2	0	4	0	4	9
% App. Total	0	0	0		33.3	66.7	0		0	0	100		0	100	0		
PHF	.000	.000	.000	.000	.250	.500	.000	.375	.000	.000	.500	.500	.000	1.00	.000	1.00	.563

City of Riverside
N/S: Chicago Ave/Alta Cresta Ave
E/W: Van Buren Avenue
Weather: Clear

File Name : 02_RIV_Chicago_Van Buren AM
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	1	1	0	2	0	0	1	1	0	1	0	1
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	1	2	0	3	0	0	2	2	0	4	0	4
% App. Total	0	0	0	0	33.3	66.7	0		0	0	100		0	100	0	
PHF	.000	.000	.000	.000	.250	.500	.000	.375	.000	.000	.500	.500	.000	1.000	.000	1.000

City of Riverside
N/S: Chicago Ave/Alta Cresta Ave
E/W: Van Buren Avenue
Weather: Clear

File Name : 02_RIV_Chicago_Van Buren AM
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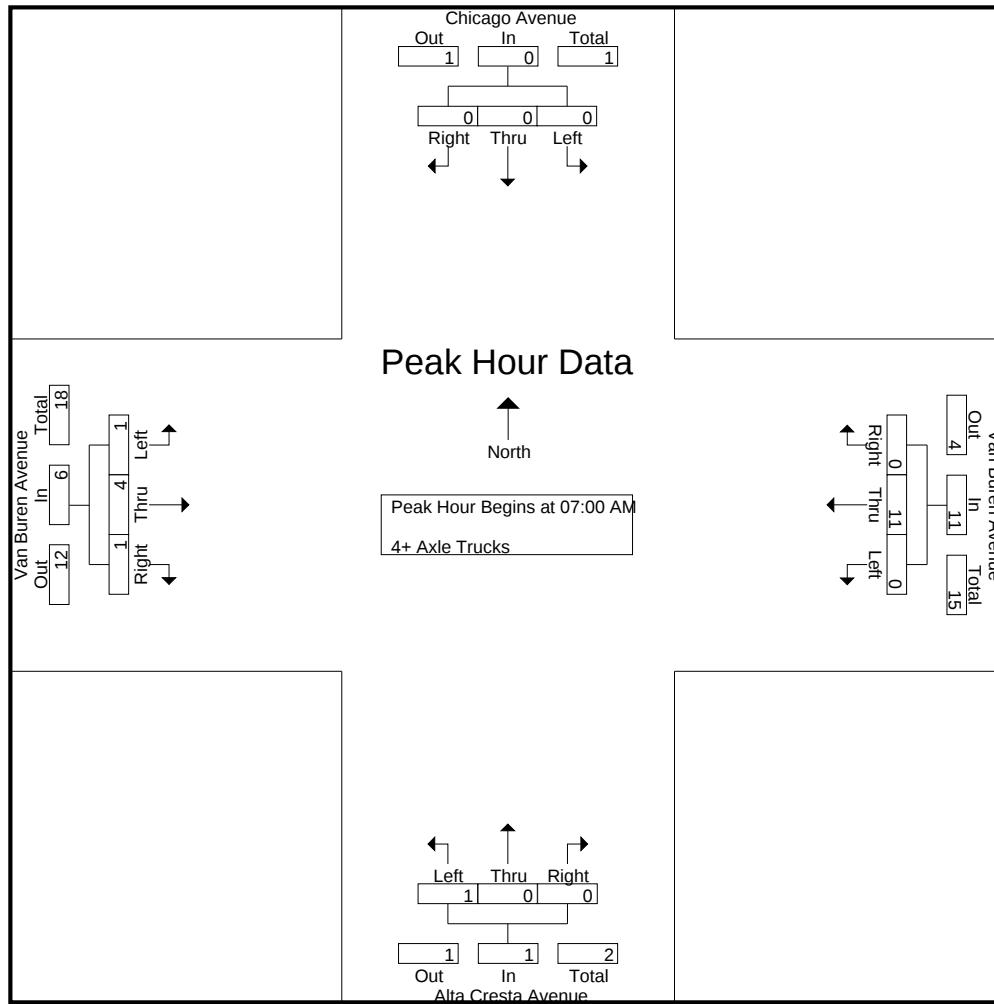
Groups Printed- 4+ Axle Trucks

	Chicago Avenue Southbound				Van Buren Avenue Westbound				Alta Cresta Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	2
07:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	1	1	0	2	6
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
07:45 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	2	0	2	7
Total	0	0	0	0	0	11	0	11	1	0	0	1	1	4	1	6	18
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
08:15 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
08:30 AM	0	0	0	0	0	6	0	6	1	0	0	1	0	0	1	1	8
08:45 AM	0	0	0	0	0	6	0	6	1	0	0	1	0	1	1	2	9
Total	0	0	0	0	0	16	0	16	2	0	0	2	0	4	2	6	24
Grand Total	0	0	0	0	0	27	0	27	3	0	0	3	1	8	3	12	42
Apprch %	0	0	0		0	100	0		100	0	0		8.3	66.7	25		
Total %	0	0	0	0	0	64.3	0	64.3	7.1	0	0	7.1	2.4	19	7.1	28.6	

	Chicago Avenue Southbound				Van Buren Avenue Westbound				Alta Cresta Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	2
07:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	1	1	0	2	6
07:30 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
07:45 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	2	0	2	7
Total Volume	0	0	0	0	0	11	0	11	1	0	0	1	1	4	1	6	18
% App. Total	0	0	0		0	100	0		100	0	0		16.7	66.7	16.7		
PHF	.000	.000	.000	.000	.000	.550	.000	.550	.250	.000	.000	.250	.250	.500	.250	.750	.643

City of Riverside
N/S: Chicago Ave/Alta Cresta Ave
E/W: Van Buren Avenue
Weather: Clear

File Name : 02_RIV_Chicago_Van Buren AM
Site Code : 00319643
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1
+15 mins.	0	0	0	0	0	4	0	4	0	0	0	0	1	1	0	2
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	2	0	2
Total Volume	0	0	0	0	0	11	0	11	1	0	0	1	1	4	1	6
% App. Total	0	0	0	0	0	100	0		100	0	0		16.7	66.7	16.7	
PHF	.000	.000	.000	.000	.000	.550	.000	.550	.250	.000	.000	.250	.250	.500	.250	.750

City of Riverside
N/S: Chicago Ave/Alta Cresta Ave
E/W: Van Buren Avenue
Weather: Clear

File Name : 02_RIV_Chicago_Van Buren PM
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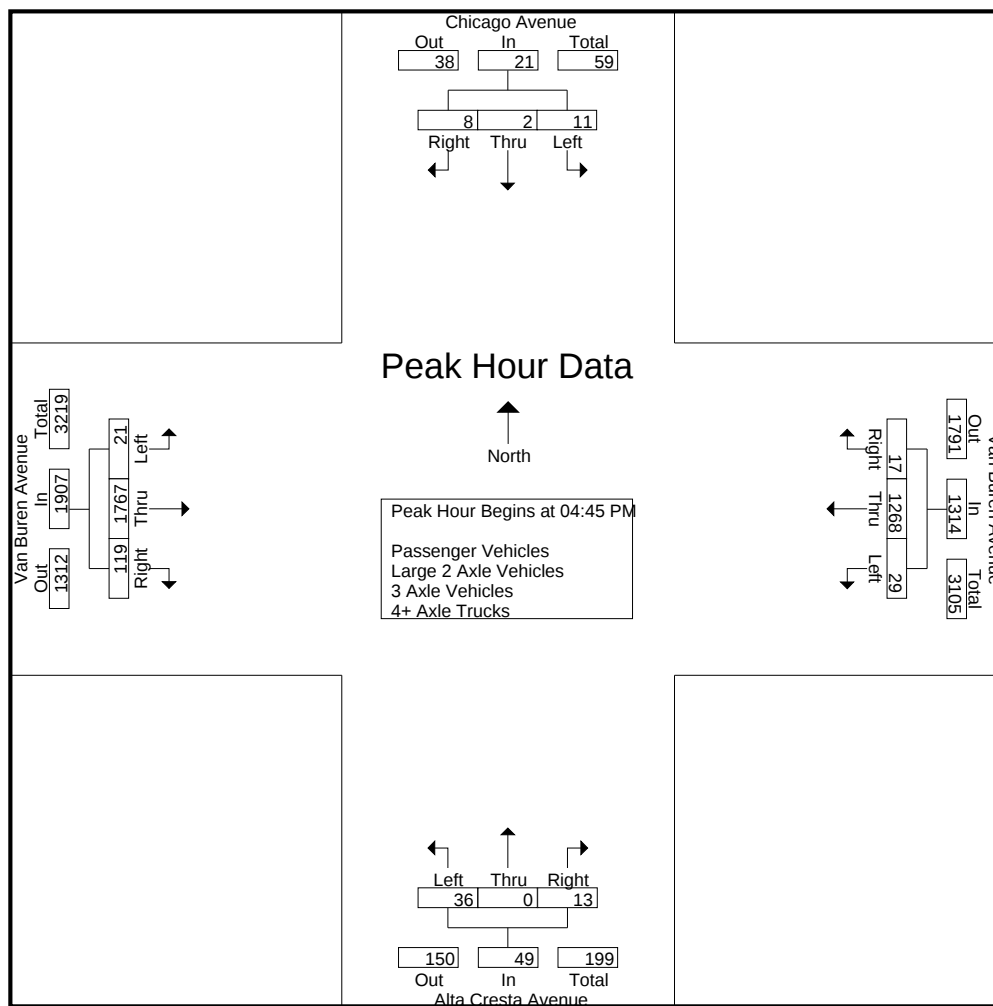
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Chicago Avenue Southbound				Van Buren Avenue Westbound				Alta Cresta Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	2	3	3	8	12	324	2	338	8	0	1	9	9	371	24	404	759
04:15 PM	2	1	1	4	7	329	3	339	3	1	3	7	9	360	28	397	747
04:30 PM	2	2	1	5	6	295	3	304	5	0	2	7	8	406	29	443	759
04:45 PM	2	0	2	4	2	277	2	281	6	0	1	7	4	457	25	486	778
Total	8	6	7	21	27	1225	10	1262	22	1	7	30	30	1594	106	1730	3043
05:00 PM	6	0	0	6	7	336	7	350	8	0	4	12	5	438	23	466	834
05:15 PM	1	1	3	5	11	317	5	333	11	0	3	14	3	440	29	472	824
05:30 PM	2	1	3	6	9	338	3	350	11	0	5	16	9	432	42	483	855
05:45 PM	0	2	0	2	13	306	5	324	8	0	3	11	3	392	37	432	769
Total	9	4	6	19	40	1297	20	1357	38	0	15	53	20	1702	131	1853	3282
Grand Total	17	10	13	40	67	2522	30	2619	60	1	22	83	50	3296	237	3583	6325
Apprch %	42.5	25	32.5		2.6	96.3	1.1		72.3	1.2	26.5		1.4	92	6.6		
Total %	0.3	0.2	0.2	0.6	1.1	39.9	0.5	41.4	0.9	0	0.3	1.3	0.8	52.1	3.7	56.6	
Passenger Vehicles	17	10	11	38	66	2473	29	2568	59	1	21	81	49	3232	235	3516	6203
% Passenger Vehicles	100	100	84.6	95	98.5	98.1	96.7	98.1	98.3	100	95.5	97.6	98	98.1	99.2	98.1	98.1
Large 2 Axle Vehicles	0	0	2	2	1	36	1	38	1	0	1	2	0	37	2	39	81
% Large 2 Axle Vehicles	0	0	15.4	5	1.5	1.4	3.3	1.5	1.7	0	4.5	2.4	0	1.1	0.8	1.1	1.3
3 Axle Vehicles	0	0	0	0	0	7	0	7	0	0	0	0	0	7	0	7	14
% 3 Axle Vehicles	0	0	0	0	0	0.3	0	0.3	0	0	0	0	0	0.2	0	0.2	0.2
4+ Axle Trucks	0	0	0	0	0	6	0	6	0	0	0	0	1	20	0	21	27
% 4+ Axle Trucks	0	0	0	0	0	0.2	0	0.2	0	0	0	0	2	0.6	0	0.6	0.4

	Chicago Avenue Southbound				Van Buren Avenue Westbound				Alta Cresta Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	2	0	2	4	2	277	2	281	6	0	1	7	4	457	25	486	778
05:00 PM	6	0	0	6	7	336	7	350	8	0	4	12	5	438	23	466	834
05:15 PM	1	1	3	5	11	317	5	333	11	0	3	14	3	440	29	472	824
05:30 PM	2	1	3	6	9	338	3	350	11	0	5	16	9	432	42	483	855
Total Volume	11	2	8	21	29	1268	17	1314	36	0	13	49	21	1767	119	1907	3291
% App. Total	52.4	9.5	38.1		2.2	96.5	1.3		73.5	0	26.5		1.1	92.7	6.2		
PHF	.458	.500	.667	.875	.659	.938	.607	.939	.818	.000	.650	.766	.583	.967	.708	.981	.962

City of Riverside
N/S: Chicago Ave/Alta Cresta Ave
E/W: Van Buren Avenue
Weather: Clear

File Name : 02_RIV_Chicago_Van Buren PM
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				05:00 PM				05:00 PM				04:45 PM			
+0 mins.	2	3	3	8	7	336	7	350	8	0	4	12	4	457	25	486
+15 mins.	2	1	1	4	11	317	5	333	11	0	3	14	5	438	23	466
+30 mins.	2	2	1	5	9	338	3	350	11	0	5	16	3	440	29	472
+45 mins.	2	0	2	4	13	306	5	324	8	0	3	11	9	432	42	483
Total Volume	8	6	7	21	40	1297	20	1357	38	0	15	53	21	1767	119	1907
% App. Total	38.1	28.6	33.3		2.9	95.6	1.5		71.7	0	28.3		1.1	92.7	6.2	
PHF	1.000	.500	.583	.656	.769	.959	.714	.969	.864	.000	.750	.828	.583	.967	.708	.981

City of Riverside
N/S: Chicago Ave/Alta Cresta Ave
E/W: Van Buren Avenue
Weather: Clear

File Name : 02_RIV_Chicago_Van Buren PM
Site Code : 00319643
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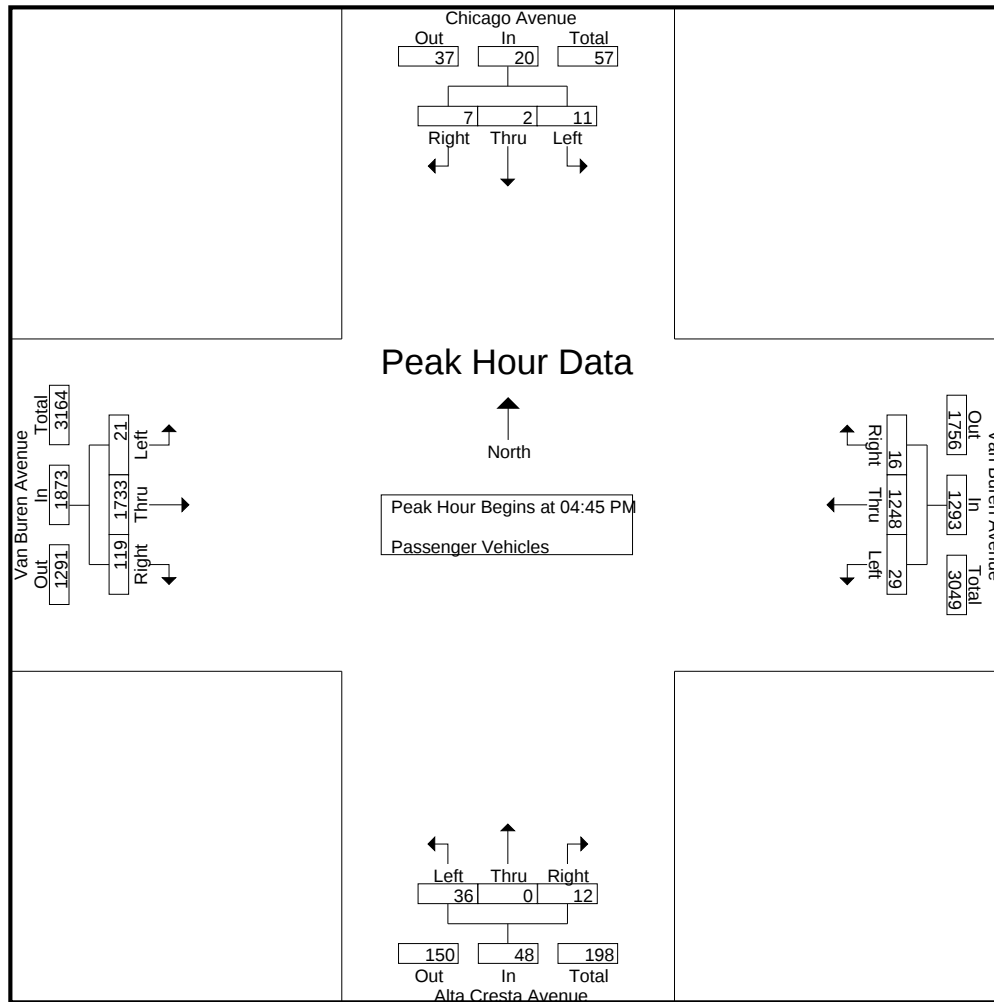
Groups Printed- Passenger Vehicles

	Chicago Avenue Southbound				Van Buren Avenue Westbound				Alta Cresta Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	2	3	2	7	12	316	2	330	7	0	1	8	9	358	24	391	736
04:15 PM	2	1	1	4	7	318	3	328	3	1	3	7	8	352	27	387	726
04:30 PM	2	2	1	5	5	290	3	298	5	0	2	7	8	401	29	438	748
04:45 PM	2	0	2	4	2	272	2	276	6	0	0	6	4	451	25	480	766
Total	8	6	6	20	26	1196	10	1232	21	1	6	28	29	1562	105	1696	2976
05:00 PM	6	0	0	6	7	330	7	344	8	0	4	12	5	429	23	457	819
05:15 PM	1	1	3	5	11	313	5	329	11	0	3	14	3	429	29	461	809
05:30 PM	2	1	2	5	9	333	2	344	11	0	5	16	9	424	42	475	840
05:45 PM	0	2	0	2	13	301	5	319	8	0	3	11	3	388	36	427	759
Total	9	4	5	18	40	1277	19	1336	38	0	15	53	20	1670	130	1820	3227
Grand Total	17	10	11	38	66	2473	29	2568	59	1	21	81	49	3232	235	3516	6203
Apprch %	44.7	26.3	28.9		2.6	96.3	1.1		72.8	1.2	25.9		1.4	91.9	6.7		
Total %	0.3	0.2	0.2	0.6	1.1	39.9	0.5	41.4	1	0	0.3	1.3	0.8	52.1	3.8	56.7	

	Chicago Avenue Southbound				Van Buren Avenue Westbound				Alta Cresta Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	2	0	2	4	2	272	2	276	6	0	0	6	4	451	25	480	766
05:00 PM	6	0	0	6	7	330	7	344	8	0	4	12	5	429	23	457	819
05:15 PM	1	1	3	5	11	313	5	329	11	0	3	14	3	429	29	461	809
05:30 PM	2	1	2	5	9	333	2	344	11	0	5	16	9	424	42	475	840
Total Volume	11	2	7	20	29	1248	16	1293	36	0	12	48	21	1733	119	1873	3234
% App. Total	55	10	35		2.2	96.5	1.2		75	0	25		1.1	92.5	6.4		
PHF	.458	.500	.583	.833	.659	.937	.571	.940	.818	.000	.600	.750	.583	.961	.708	.976	.963

City of Riverside
N/S: Chicago Ave/Alta Cresta Ave
E/W: Van Buren Avenue
Weather: Clear

File Name : 02_RIV_Chicago_Van Buren PM
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Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	2	0	2	4	2	272	2	276	6	0	0	6	4	451	25	480
+15 mins.	6	0	0	6	7	330	7	344	8	0	4	12	5	429	23	457
+30 mins.	1	1	3	5	11	313	5	329	11	0	3	14	3	429	29	461
+45 mins.	2	1	2	5	9	333	2	344	11	0	5	16	9	424	42	475
Total Volume	11	2	7	20	29	1248	16	1293	36	0	12	48	21	1733	119	1873
% App. Total	55	10	35		2.2	96.5	1.2		75	0	25		1.1	92.5	6.4	
PHF	.458	.500	.583	.833	.659	.937	.571	.940	.818	.000	.600	.750	.583	.961	.708	.976

City of Riverside
N/S: Chicago Ave/Alta Cresta Ave
E/W: Van Buren Avenue
Weather: Clear

File Name : 02_RIV_Chicago_Van Buren PM
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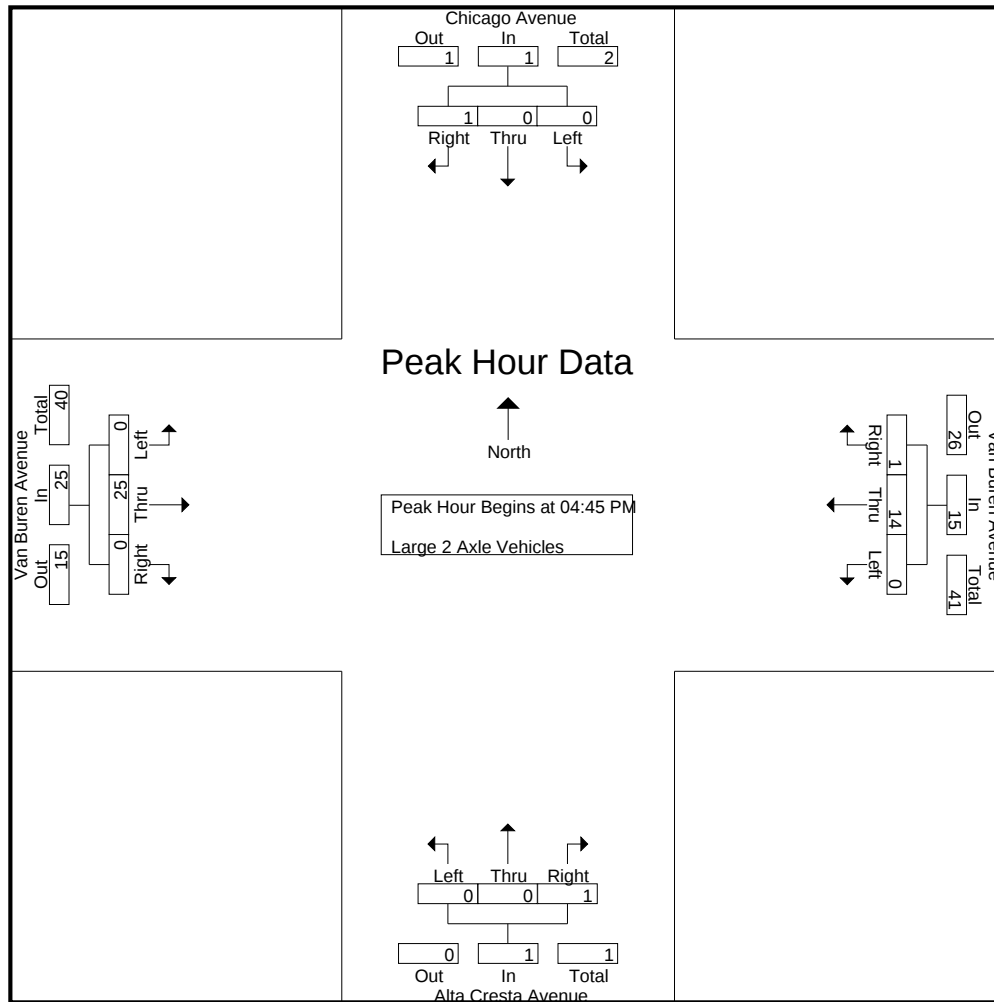
Groups Printed- Large 2 Axle Vehicles

	Chicago Avenue Southbound				Van Buren Avenue Westbound				Alta Cresta Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	1	1	0	7	0	7	1	0	0	1	0	6	0	6	15
04:15 PM	0	0	0	0	0	8	0	8	0	0	0	0	0	3	1	4	12
04:30 PM	0	0	0	0	1	5	0	6	0	0	0	0	0	1	0	1	7
04:45 PM	0	0	0	0	0	3	0	3	0	0	1	1	0	5	0	5	9
Total	0	0	1	1	1	23	0	24	1	0	1	2	0	15	1	16	43
05:00 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	8	0	8	13
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	6	0	6	8
05:30 PM	0	0	1	1	0	4	1	5	0	0	0	0	0	6	0	6	12
05:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	1	3	5
Total	0	0	1	1	0	13	1	14	0	0	0	0	0	22	1	23	38
Grand Total	0	0	2	2	1	36	1	38	1	0	1	2	0	37	2	39	81
Apprch %	0	0	100		2.6	94.7	2.6		50	0	50		0	94.9	5.1		
Total %	0	0	2.5	2.5	1.2	44.4	1.2	46.9	1.2	0	1.2	2.5	0	45.7	2.5	48.1	

	Chicago Avenue Southbound				Van Buren Avenue Westbound				Alta Cresta Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	3	0	3	0	0	1	1	0	5	0	5	9
05:00 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	8	0	8	13
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	6	0	6	8
05:30 PM	0	0	1	1	0	4	1	5	0	0	0	0	0	6	0	6	12
Total Volume	0	0	1	1	0	14	1	15	0	0	1	1	0	25	0	25	42
% App. Total	0	0	100		0	93.3	6.7		0	0	100		0	100	0		
PHF	.000	.000	.250	.250	.000	.700	.250	.750	.000	.000	.250	.250	.000	.781	.000	.781	.808

City of Riverside
N/S: Chicago Ave/Alta Cresta Ave
E/W: Van Buren Avenue
Weather: Clear

File Name : 02_RIV_Chicago_Van Buren PM
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Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	0	0	0	3	0	3	0	0	1	1	0	5	0	5
+15 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	8	0	8
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	6	0	6
+45 mins.	0	0	1	1	0	4	1	5	0	0	0	0	0	6	0	6
Total Volume	0	0	1	1	0	14	1	15	0	0	1	1	0	25	0	25
% App. Total	0	0	100		0	93.3	6.7		0	0	100		0	100	0	
PHF	.000	.000	.250	.250	.000	.700	.250	.750	.000	.000	.250	.250	.000	.781	.000	.781

City of Riverside
N/S: Chicago Ave/Alta Cresta Ave
E/W: Van Buren Avenue
Weather: Clear

File Name : 02_RIV_Chicago_Van Buren PM
Site Code : 00319643
Start Date : 9/18/2019
Page No : 1

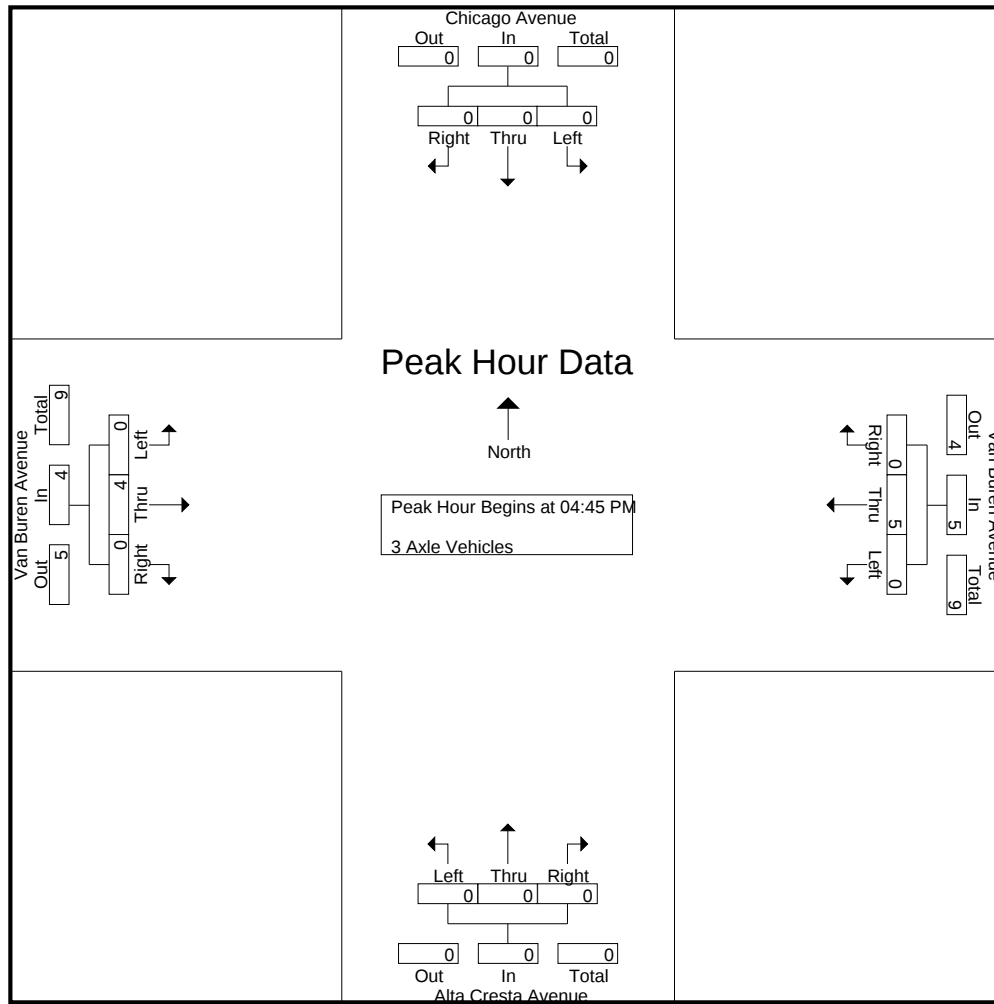
Groups Printed- 3 Axle Vehicles

	Chicago Avenue Southbound				Van Buren Avenue Westbound				Alta Cresta Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	8
Grand Total	0	0	0	0	0	7	0	7	0	0	0	0	0	7	0	7	14
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0		0	50	0	50	0	0	0		0	50	0	50	

	Chicago Avenue Southbound				Van Buren Avenue Westbound				Alta Cresta Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total Volume	0	0	0	0	0	5	0	5	0	0	0	0	0	4	0	4	9
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.625	.000	.625	.000	.000	.000	.000	.000	.333	.000	.333	.563

City of Riverside
N/S: Chicago Ave/Alta Cresta Ave
E/W: Van Buren Avenue
Weather: Clear

File Name : 02_RIV_Chicago_Van Buren PM
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Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	5	0	5	0	0	0	0	0	4	0	4
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.625	.000	.625	.000	.000	.000	.000	.000	.333	.000	.333

City of Riverside
N/S: Chicago Ave/Alta Cresta Ave
E/W: Van Buren Avenue
Weather: Clear

File Name : 02_RIV_Chicago_Van Buren PM
Site Code : 00319643
Start Date : 9/18/2019
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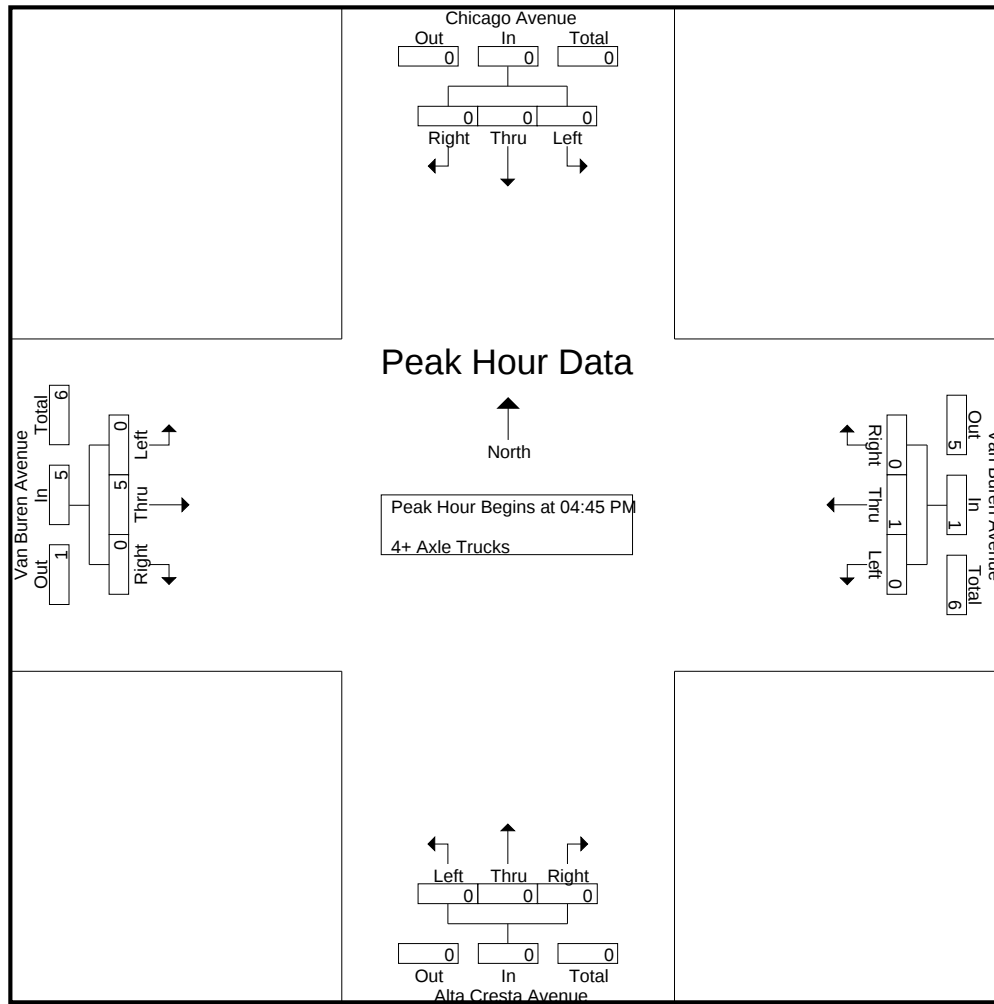
Groups Printed- 4+ Axle Trucks

	Chicago Avenue Southbound				Van Buren Avenue Westbound				Alta Cresta Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5	6
04:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	1	4	0	5	7
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	4
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	3	0	3	0	0	0	0	1	14	0	15	18
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
Total	0	0	0	0	0	3	0	3	0	0	0	0	0	6	0	6	9
Grand Total	0	0	0	0	0	6	0	6	0	0	0	0	1	20	0	21	27
Apprch %	0	0	0		0	100	0		0	0	0		4.8	95.2	0		
Total %	0	0	0		0	22.2	0	22.2	0	0	0		3.7	74.1	0	77.8	

	Chicago Avenue Southbound				Van Buren Avenue Westbound				Alta Cresta Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5	6
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.625	.000	.625	.500

City of Riverside
N/S: Chicago Ave/Alta Cresta Ave
E/W: Van Buren Avenue
Weather: Clear

File Name : 02_RIV_Chicago_Van Buren PM
Site Code : 00319643
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Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.625	.000	.625

Location: Riverside
 N/S: Chicago Ave/Alta Cresta Ave
 E/W: Van Buren Avenue



Date: 9/18/2019
 Day: Wednesday

PEDESTRIANS

	North Leg Chicago Avenue Pedestrians	East Leg Van Buren Avenue Pedestrians	South Leg Alta Cresta Avenue Pedestrians	West Leg Van Buren Avenue Pedestrians	
7:00 AM	1	0	1	0	2
7:15 AM	0	0	0	0	0
7:30 AM	0	0	1	0	1
7:45 AM	0	0	1	0	1
8:00 AM	0	0	0	0	0
8:15 AM	0	2	0	0	2
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	1	2	3	0	6

	North Leg Chicago Avenue Pedestrians	East Leg Van Buren Avenue Pedestrians	South Leg Alta Cresta Avenue Pedestrians	West Leg Van Buren Avenue Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	2	3	0	5
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	1	0	1
5:45 PM	0	0	2	0	2
TOTAL VOLUMES:	0	2	6	0	8

Location: Riverside
 N/S: Chicago Ave/Alta Cresta Ave
 E/W: Van Buren Avenue



Date: 9/18/2019
 Day: Wednesday

BICYCLES

		Southbound Chicago Avenue			Westbound Van Buren Avenue			Northbound Alta Cresta Avenue			Eastbound Van Buren Avenue			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	2	0	0	0	0	0	0	1	0	0	0	0	3
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		2	0	0	0	0	0	0	1	0	0	0	0	3

		Southbound Chicago Avenue			Westbound Van Buren Avenue			Northbound Alta Cresta Avenue			Eastbound Van Buren Avenue			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	0	0	0	0	0	0	0	0	0	1	0	1

City of Riverside
N/S: Dauchy Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 03_RIV_Dauchy_Van Buren AM
Site Code : 00319643
Start Date : 9/18/2019
Page No : 1

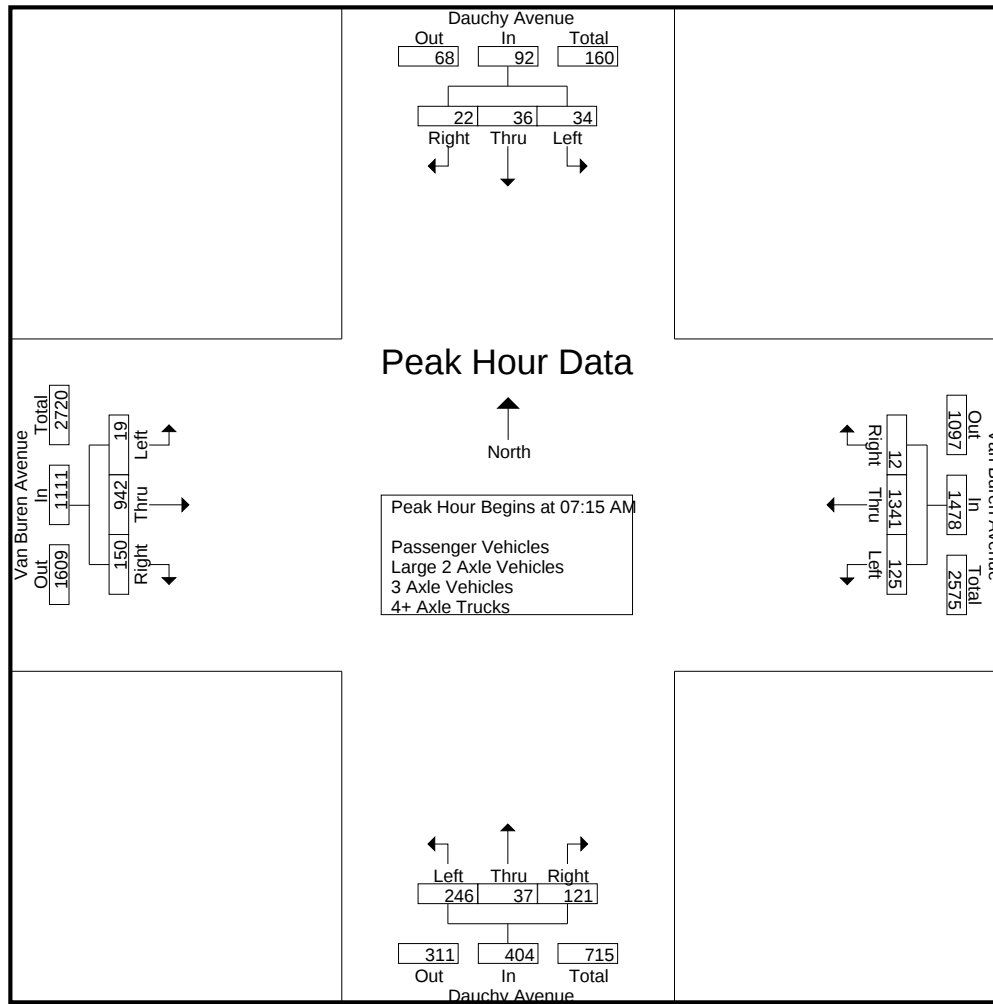
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Dauchy Avenue Southbound				Van Buren Avenue Westbound				Dauchy Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	8	2	5	15	15	370	1	386	60	4	17	81	2	234	25	261	743
07:15 AM	14	8	2	24	18	374	6	398	67	10	33	110	2	282	32	316	848
07:30 AM	10	7	11	28	21	330	2	353	74	9	17	100	7	243	33	283	764
07:45 AM	5	9	2	16	35	292	0	327	57	7	34	98	3	208	42	253	694
Total	37	26	20	83	89	1366	9	1464	258	30	101	389	14	967	132	1113	3049
08:00 AM	5	12	7	24	51	345	4	400	48	11	37	96	7	209	43	259	779
08:15 AM	9	8	5	22	20	264	8	292	45	9	41	95	7	191	25	223	632
08:30 AM	10	3	7	20	5	303	4	312	42	3	7	52	8	172	7	187	571
08:45 AM	8	0	12	20	6	263	2	271	14	6	16	36	9	204	9	222	549
Total	32	23	31	86	82	1175	18	1275	149	29	101	279	31	776	84	891	2531
Grand Total	69	49	51	169	171	2541	27	2739	407	59	202	668	45	1743	216	2004	5580
Apprch %	40.8	29	30.2		6.2	92.8	1		60.9	8.8	30.2		2.2	87	10.8		
Total %	1.2	0.9	0.9	3	3.1	45.5	0.5	49.1	7.3	1.1	3.6	12	0.8	31.2	3.9	35.9	
Passenger Vehicles	67	48	51	166	168	2443	26	2637	399	59	202	660	43	1685	210	1938	5401
% Passenger Vehicles	97.1	98	100	98.2	98.2	96.1	96.3	96.3	98	100	100	98.8	95.6	96.7	97.2	96.7	96.8
Large 2 Axle Vehicles	2	1	0	3	3	46	1	50	8	0	0	8	2	36	5	43	104
% Large 2 Axle Vehicles	2.9	2	0	1.8	1.8	1.8	3.7	1.8	2	0	0	1.2	4.4	2.1	2.3	2.1	1.9
3 Axle Vehicles	0	0	0	0	0	20	0	20	0	0	0	0	0	12	1	13	33
% 3 Axle Vehicles	0	0	0	0	0	0.8	0	0.7	0	0	0	0	0	0.7	0.5	0.6	0.6
4+ Axle Trucks	0	0	0	0	0	32	0	32	0	0	0	0	0	10	0	10	42
% 4+ Axle Trucks	0	0	0	0	0	1.3	0	1.2	0	0	0	0	0	0.6	0	0.5	0.8

	Dauchy Avenue Southbound				Van Buren Avenue Westbound				Dauchy Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	14	8	2	24	18	374	6	398	67	10	33	110	2	282	32	316	848
07:30 AM	10	7	11	28	21	330	2	353	74	9	17	100	7	243	33	283	764
07:45 AM	5	9	2	16	35	292	0	327	57	7	34	98	3	208	42	253	694
08:00 AM	5	12	7	24	51	345	4	400	48	11	37	96	7	209	43	259	779
Total Volume	34	36	22	92	125	1341	12	1478	246	37	121	404	19	942	150	1111	3085
% App. Total	37	39.1	23.9		8.5	90.7	0.8		60.9	9.2	30		1.7	84.8	13.5		
PHF	.607	.750	.500	.821	.613	.896	.500	.924	.831	.841	.818	.918	.679	.835	.872	.879	.909

City of Riverside
N/S: Dauchy Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 03_RIV_Dauchy_Van Buren AM
Site Code : 00319643
Start Date : 9/18/2019
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:00 AM			
+0 mins.	14	8	2	24	18	374	6	398	67	10	33	110	2	234	25	261
+15 mins.	10	7	11	28	21	330	2	353	74	9	17	100	2	282	32	316
+30 mins.	5	9	2	16	35	292	0	327	57	7	34	98	7	243	33	283
+45 mins.	5	12	7	24	51	345	4	400	48	11	37	96	3	208	42	253
Total Volume	34	36	22	92	125	1341	12	1478	246	37	121	404	14	967	132	1113
% App. Total	37	39.1	23.9		8.5	90.7	0.8		60.9	9.2	30		1.3	86.9	11.9	
PHF	.607	.750	.500	.821	.613	.896	.500	.924	.831	.841	.818	.918	.500	.857	.786	.881

City of Riverside
N/S: Dauchy Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 03_RIV_Dauchy_Van Buren AM
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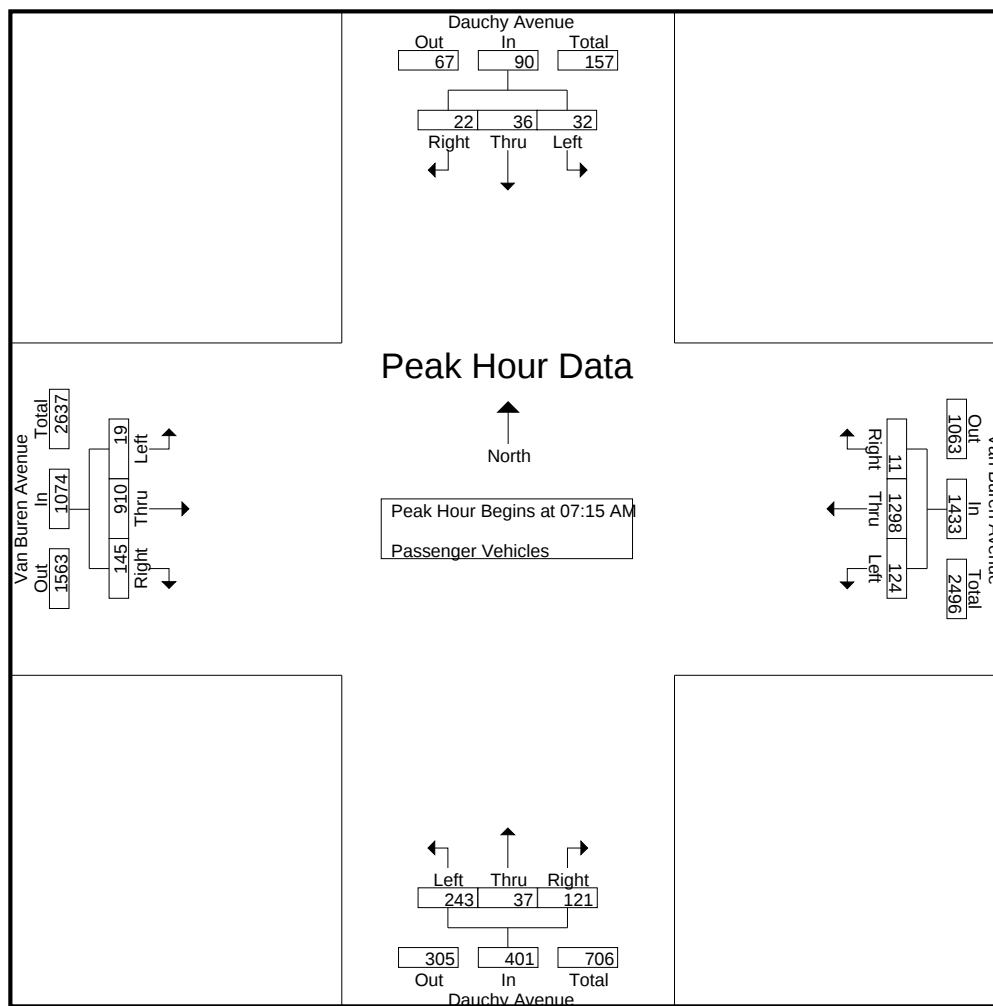
Groups Printed- Passenger Vehicles

	Dauchy Avenue Southbound				Van Buren Avenue Westbound				Dauchy Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	8	2	5	15	14	356	1	371	55	4	17	76	1	229	24	254	716
07:15 AM	14	8	2	24	17	363	5	385	66	10	33	109	2	277	32	311	829
07:30 AM	9	7	11	27	21	324	2	347	73	9	17	99	7	236	32	275	748
07:45 AM	5	9	2	16	35	281	0	316	56	7	34	97	3	196	40	239	668
Total	36	26	20	82	87	1324	8	1419	250	30	101	381	13	938	128	1079	2961
08:00 AM	4	12	7	23	51	330	4	385	48	11	37	96	7	201	41	249	753
08:15 AM	9	7	5	21	20	250	8	278	45	9	41	95	6	184	25	215	609
08:30 AM	10	3	7	20	5	290	4	299	42	3	7	52	8	164	7	179	550
08:45 AM	8	0	12	20	5	249	2	256	14	6	16	36	9	198	9	216	528
Total	31	22	31	84	81	1119	18	1218	149	29	101	279	30	747	82	859	2440
Grand Total	67	48	51	166	168	2443	26	2637	399	59	202	660	43	1685	210	1938	5401
Apprch %	40.4	28.9	30.7		6.4	92.6	1		60.5	8.9	30.6		2.2	86.9	10.8		
Total %	1.2	0.9	0.9	3.1	3.1	45.2	0.5	48.8	7.4	1.1	3.7	12.2	0.8	31.2	3.9	35.9	

	Dauchy Avenue Southbound				Van Buren Avenue Westbound				Dauchy Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	14	8	2	24	17	363	5	385	66	10	33	109	2	277	32	311	829
07:30 AM	9	7	11	27	21	324	2	347	73	9	17	99	7	236	32	275	748
07:45 AM	5	9	2	16	35	281	0	316	56	7	34	97	3	196	40	239	668
08:00 AM	4	12	7	23	51	330	4	385	48	11	37	96	7	201	41	249	753
Total Volume	32	36	22	90	124	1298	11	1433	243	37	121	401	19	910	145	1074	2998
% App. Total	35.6	40	24.4		8.7	90.6	0.8		60.6	9.2	30.2		1.8	84.7	13.5		
PHF	.571	.750	.500	.833	.608	.894	.550	.931	.832	.841	.818	.920	.679	.821	.884	.863	.904

City of Riverside
N/S: Dauchy Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 03_RIV_Dauchy_Van Buren AM
Site Code : 00319643
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	14	8	2	24	17	363	5	385	66	10	33	109	2	277	32	311
+15 mins.	9	7	11	27	21	324	2	347	73	9	17	99	7	236	32	275
+30 mins.	5	9	2	16	35	281	0	316	56	7	34	97	3	196	40	239
+45 mins.	4	12	7	23	51	330	4	385	48	11	37	96	7	201	41	249
Total Volume	32	36	22	90	124	1298	11	1433	243	37	121	401	19	910	145	1074
% App. Total	35.6	40	24.4		8.7	90.6	0.8		60.6	9.2	30.2		1.8	84.7	13.5	
PHF	.571	.750	.500	.833	.608	.894	.550	.931	.832	.841	.818	.920	.679	.821	.884	.863

City of Riverside
N/S: Dauchy Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 03_RIV_Dauchy_Van Buren AM
Site Code : 00319643
Start Date : 9/18/2019
Page No : 1

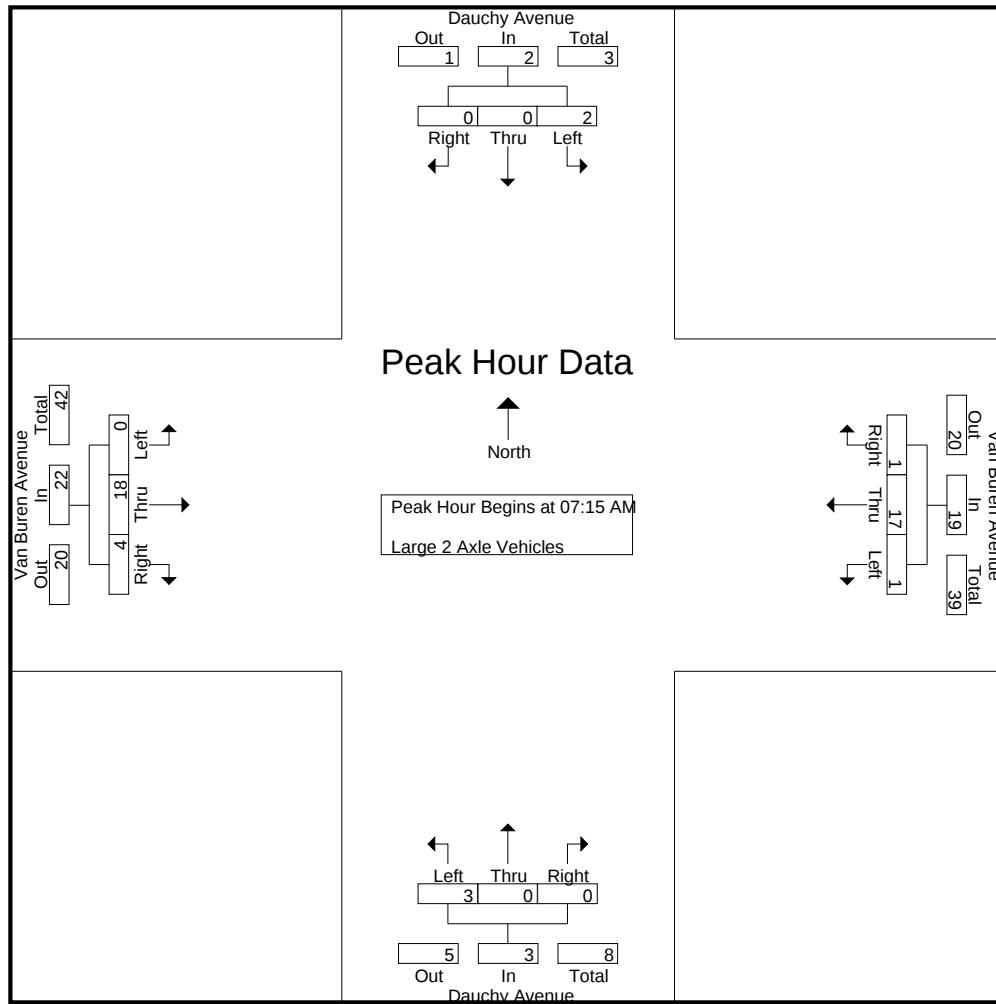
Groups Printed- Large 2 Axle Vehicles

	Dauchy Avenue Southbound				Van Buren Avenue Westbound				Dauchy Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	1	9	0	10	5	0	0	5	1	5	1	7	22
07:15 AM	0	0	0	0	1	3	1	5	1	0	0	1	0	2	0	2	8
07:30 AM	1	0	0	1	0	2	0	2	1	0	0	1	0	6	1	7	11
07:45 AM	0	0	0	0	0	3	0	3	1	0	0	1	0	5	1	6	10
Total	1	0	0	1	2	17	1	20	8	0	0	8	1	18	3	22	51
08:00 AM	1	0	0	1	0	9	0	9	0	0	0	0	0	5	2	7	17
08:15 AM	0	1	0	1	0	5	0	5	0	0	0	0	1	3	0	4	10
08:30 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	6	0	6	12
08:45 AM	0	0	0	0	1	9	0	10	0	0	0	0	0	4	0	4	14
Total	1	1	0	2	1	29	0	30	0	0	0	0	1	18	2	21	53
Grand Total	2	1	0	3	3	46	1	50	8	0	0	8	2	36	5	43	104
Apprch %	66.7	33.3	0		6	92	2		100	0	0		4.7	83.7	11.6		
Total %	1.9	1	0	2.9	2.9	44.2	1	48.1	7.7	0	0	7.7	1.9	34.6	4.8	41.3	

	Dauchy Avenue Southbound				Van Buren Avenue Westbound				Dauchy Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	1	3	1	5	1	0	0	1	0	2	0	2	8
07:30 AM	1	0	0	1	0	2	0	2	1	0	0	1	0	6	1	7	11
07:45 AM	0	0	0	0	0	3	0	3	1	0	0	1	0	5	1	6	10
08:00 AM	1	0	0	1	0	9	0	9	0	0	0	0	0	5	2	7	17
Total Volume	2	0	0	2	1	17	1	19	3	0	0	3	0	18	4	22	46
% App. Total	100	0	0		5.3	89.5	5.3		100	0	0		0	81.8	18.2		
PHF	.500	.000	.000	.500	.250	.472	.250	.528	.750	.000	.000	.750	.000	.750	.500	.786	.676

City of Riverside
N/S: Dauchy Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 03_RIV_Dauchy_Van Buren AM
Site Code : 00319643
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	1	3	1	5	1	0	0	1	0	2	0	2
+15 mins.	1	0	0	1	0	2	0	2	1	0	0	1	0	6	1	7
+30 mins.	0	0	0	0	0	3	0	3	1	0	0	1	0	5	1	6
+45 mins.	1	0	0	1	0	9	0	9	0	0	0	0	0	5	2	7
Total Volume	2	0	0	2	1	17	1	19	3	0	0	3	0	18	4	22
% App. Total	100	0	0		5.3	89.5	5.3		100	0	0		0	81.8	18.2	
PHF	.500	.000	.000	.500	.250	.472	.250	.528	.750	.000	.000	.750	.000	.750	.500	.786

City of Riverside
N/S: Dauchy Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 03_RIV_Dauchy_Van Buren AM
Site Code : 00319643
Start Date : 9/18/2019
Page No : 1

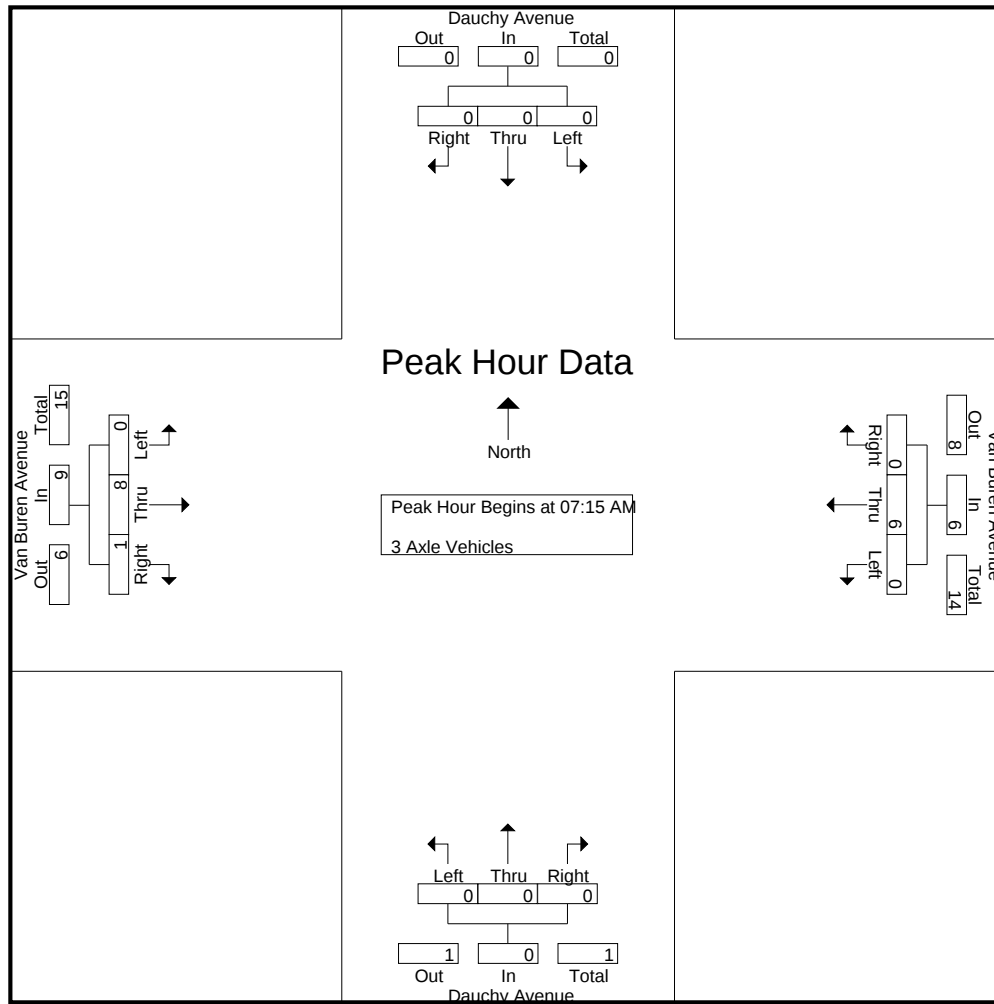
Groups Printed- 3 Axle Vehicles

	Dauchy Avenue Southbound				Van Buren Avenue Westbound				Dauchy Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
07:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	4	1	5	7
Total	0	0	0	0	0	8	0	8	0	0	0	0	0	5	1	6	14
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
08:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	8
08:30 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	4
08:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
Total	0	0	0	0	0	12	0	12	0	0	0	0	0	7	0	7	19
Grand Total	0	0	0	0	0	20	0	20	0	0	0	0	0	12	1	13	33
Apprch %	0	0	0		0	100	0		0	0	0		0	92.3	7.7		
Total %	0	0	0		0	60.6	0	60.6	0	0	0		0	36.4	3	39.4	

	Dauchy Avenue Southbound				Van Buren Avenue Westbound				Dauchy Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	4	1	5	7
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
Total Volume	0	0	0	0	0	6	0	6	0	0	0	0	0	8	1	9	15
% App. Total	0	0	0		0	100	0		0	0	0		0	88.9	11.1		
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.000	.500	.250	.450	.536

City of Riverside
N/S: Dauchy Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 03_RIV_Dauchy_Van Buren AM
Site Code : 00319643
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	4	1	5
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3
Total Volume	0	0	0	0	0	6	0	6	0	0	0	0	0	8	1	9
% App. Total	0	0	0	0	0	100	0		0	0	0	0	0	88.9	11.1	
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.000	.500	.250	.450

City of Riverside
N/S: Dauchy Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 03_RIV_Dauchy_Van Buren AM
Site Code : 00319643
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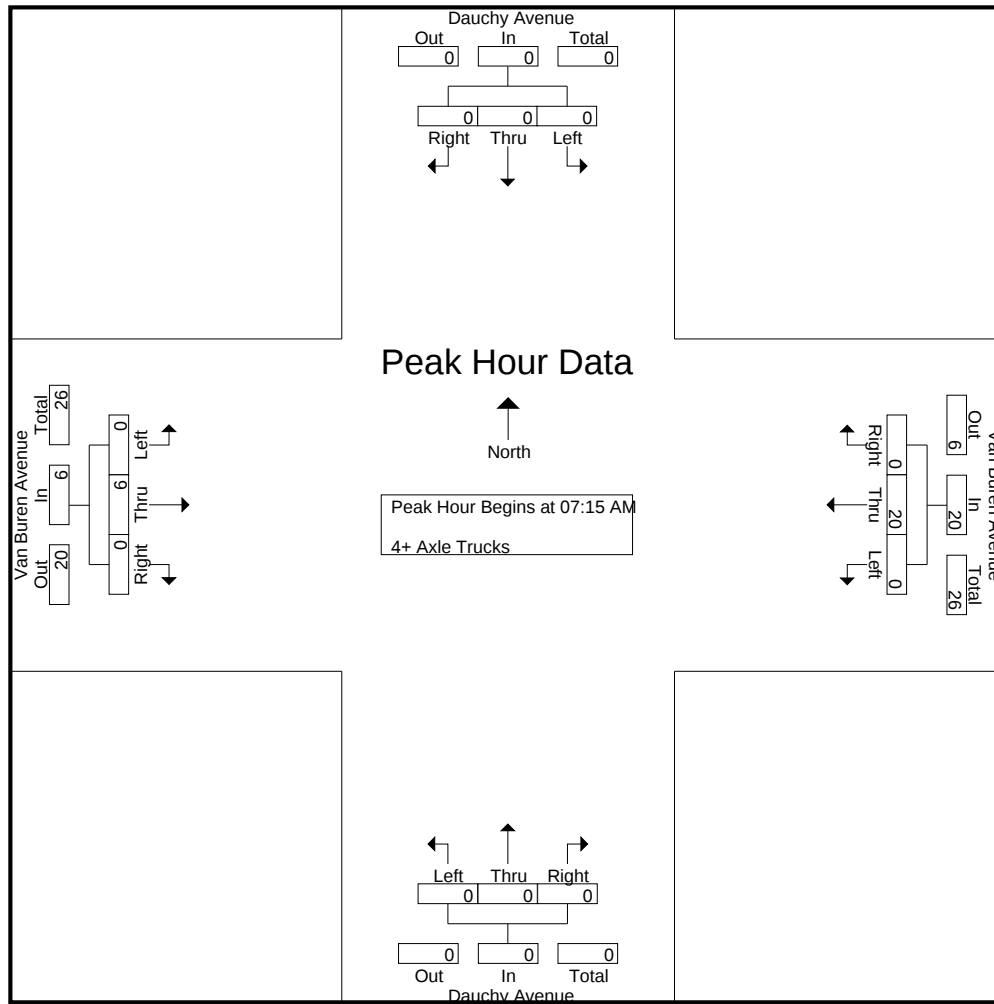
Groups Printed- 4+ Axle Trucks

	Dauchy Avenue Southbound				Van Buren Avenue Westbound				Dauchy Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
07:15 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	3	0	3	9
07:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
07:45 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	3	0	3	9
Total	0	0	0	0	0	17	0	17	0	0	0	0	0	6	0	6	23
08:00 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	5
08:15 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	5
08:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
08:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
Total	0	0	0	0	0	15	0	15	0	0	0	0	0	4	0	4	19
Grand Total	0	0	0	0	0	32	0	32	0	0	0	0	0	10	0	10	42
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0		0	76.2	0	76.2	0	0	0		0	23.8	0	23.8	

	Dauchy Avenue Southbound				Van Buren Avenue Westbound				Dauchy Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	3	0	3	9
07:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
07:45 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	3	0	3	9
08:00 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	5
Total Volume	0	0	0	0	0	20	0	20	0	0	0	0	0	6	0	6	26
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.833	.000	.833	.000	.000	.000	.000	.000	.500	.000	.500	.722

City of Riverside
N/S: Dauchy Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 03_RIV_Dauchy_Van Buren AM
Site Code : 00319643
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	6	0	6	0	0	0	0	0	3	0	3
+15 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	6	0	6	0	0	0	0	0	3	0	3
+45 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	20	0	20	0	0	0	0	0	6	0	6
% App. Total	0	0	0	0	0	100	0		0	0	0	0	0	100	0	
PHF	.000	.000	.000	.000	.000	.833	.000	.833	.000	.000	.000	.000	.000	.500	.000	.500

City of Riverside
N/S: Dauchy Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 03_RIV_Dauchy_Van Buren PM
Site Code : 00319643
Start Date : 9/18/2019
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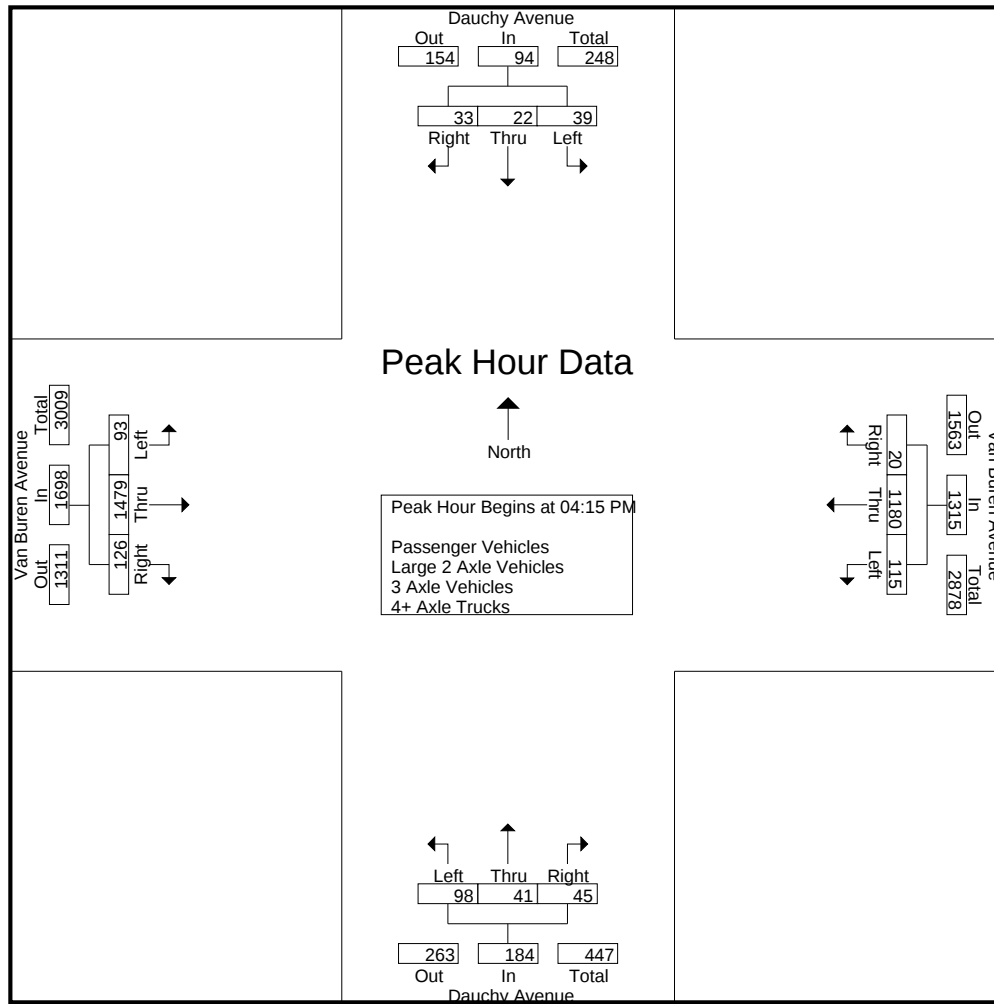
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Dauchy Avenue Southbound				Van Buren Avenue Westbound				Dauchy Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	13	6	5	24	27	292	3	322	27	5	16	48	14	329	20	363	757
04:15 PM	11	3	9	23	22	312	5	339	15	3	6	24	23	365	26	414	800
04:30 PM	8	5	6	19	39	289	6	334	21	9	11	41	33	372	24	429	823
04:45 PM	7	9	11	27	32	282	8	322	27	17	9	53	27	357	37	421	823
Total	39	23	31	93	120	1175	22	1317	90	34	42	166	97	1423	107	1627	3203
05:00 PM	13	5	7	25	22	297	1	320	35	12	19	66	10	385	39	434	845
05:15 PM	9	6	10	25	17	287	6	310	23	8	12	43	31	361	22	414	792
05:30 PM	15	7	4	26	27	291	4	322	20	6	13	39	16	364	17	397	784
05:45 PM	13	6	10	29	24	306	7	337	13	4	10	27	17	384	25	426	819
Total	50	24	31	105	90	1181	18	1289	91	30	54	175	74	1494	103	1671	3240
Grand Total	89	47	62	198	210	2356	40	2606	181	64	96	341	171	2917	210	3298	6443
Apprch %	44.9	23.7	31.3		8.1	90.4	1.5		53.1	18.8	28.2		5.2	88.4	6.4		
Total %	1.4	0.7	1	3.1	3.3	36.6	0.6	40.4	2.8	1	1.5	5.3	2.7	45.3	3.3	51.2	
Passenger Vehicles	87	47	60	194	208	2328	40	2576	180	64	96	340	171	2870	208	3249	6359
% Passenger Vehicles	97.8	100	96.8	98	99	98.8	100	98.8	99.4	100	100	99.7	100	98.4	99	98.5	98.7
Large 2 Axle Vehicles	1	0	2	3	2	16	0	18	1	0	0	1	0	28	2	30	52
% Large 2 Axle Vehicles	1.1	0	3.2	1.5	1	0.7	0	0.7	0.6	0	0	0.3	0	1	1	0.9	0.8
3 Axle Vehicles	1	0	0	1	0	4	0	4	0	0	0	0	0	3	0	3	8
% 3 Axle Vehicles	1.1	0	0	0.5	0	0.2	0	0.2	0	0	0	0	0	0.1	0	0.1	0.1
4+ Axle Trucks	0	0	0	0	0	8	0	8	0	0	0	0	0	16	0	16	24
% 4+ Axle Trucks	0	0	0	0	0	0.3	0	0.3	0	0	0	0	0	0.5	0	0.5	0.4

	Dauchy Avenue Southbound				Van Buren Avenue Westbound				Dauchy Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	11	3	9	23	22	312	5	339	15	3	6	24	23	365	26	414	800
04:30 PM	8	5	6	19	39	289	6	334	21	9	11	41	33	372	24	429	823
04:45 PM	7	9	11	27	32	282	8	322	27	17	9	53	27	357	37	421	823
05:00 PM	13	5	7	25	22	297	1	320	35	12	19	66	10	385	39	434	845
Total Volume	39	22	33	94	115	1180	20	1315	98	41	45	184	93	1479	126	1698	3291
% App. Total	41.5	23.4	35.1		8.7	89.7	1.5		53.3	22.3	24.5		5.5	87.1	7.4		
PHF	.750	.611	.750	.870	.737	.946	.625	.970	.700	.603	.592	.697	.705	.960	.808	.978	.974

City of Riverside
N/S: Dauchy Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 03_RIV_Dauchy_Van Buren PM
Site Code : 00319643
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:30 PM				04:15 PM			
+0 mins.	13	5	7	25	27	292	3	322	21	9	11	41	23	365	26	414
+15 mins.	9	6	10	25	22	312	5	339	27	17	9	53	33	372	24	429
+30 mins.	15	7	4	26	39	289	6	334	35	12	19	66	27	357	37	421
+45 mins.	13	6	10	29	32	282	8	322	23	8	12	43	10	385	39	434
Total Volume	50	24	31	105	120	1175	22	1317	106	46	51	203	93	1479	126	1698
% App. Total	47.6	22.9	29.5		9.1	89.2	1.7		52.2	22.7	25.1		5.5	87.1	7.4	
PHF	.833	.857	.775	.905	.769	.942	.688	.971	.757	.676	.671	.769	.705	.960	.808	.978

City of Riverside
N/S: Dauchy Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 03_RIV_Dauchy_Van Buren PM
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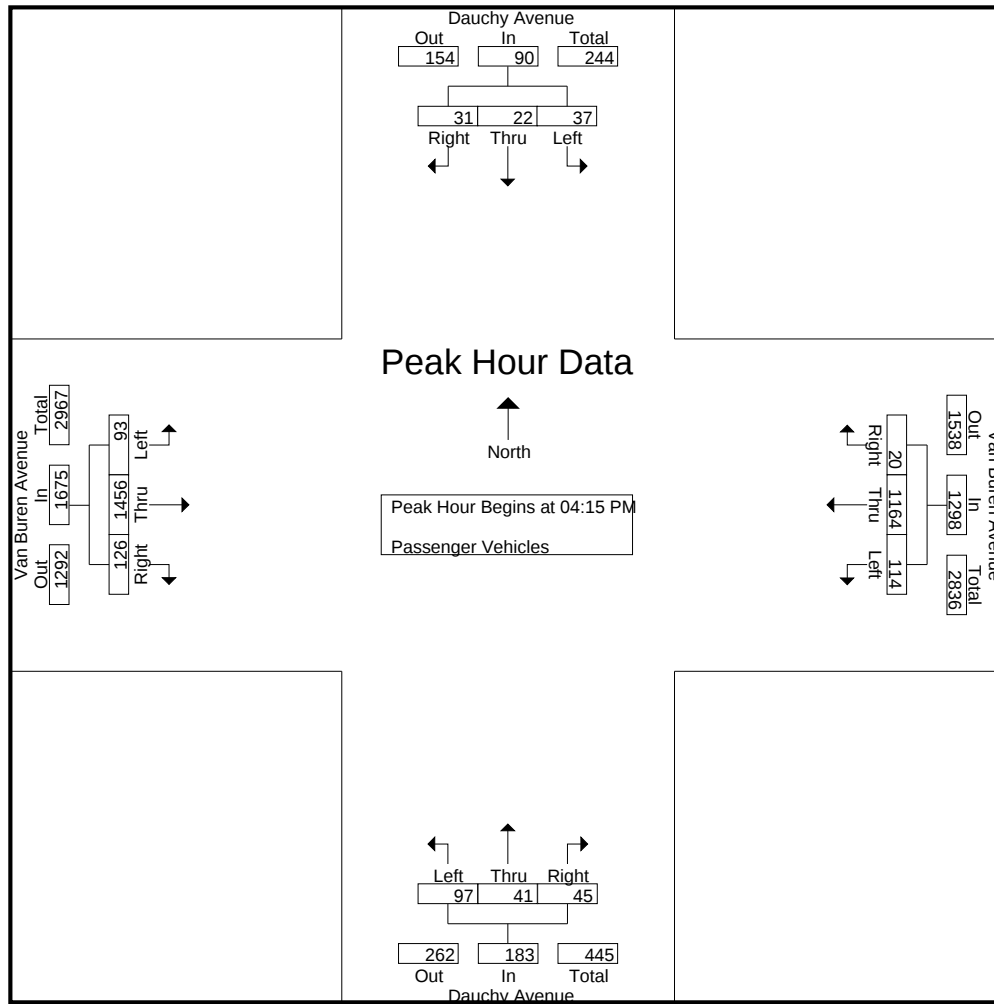
Groups Printed- Passenger Vehicles

	Dauchy Avenue Southbound				Van Buren Avenue Westbound				Dauchy Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	13	6	5	24	26	289	3	318	27	5	16	48	14	321	19	354	744
04:15 PM	11	3	7	21	22	308	5	335	15	3	6	24	23	360	26	409	789
04:30 PM	8	5	6	19	38	285	6	329	20	9	11	40	33	366	24	423	811
04:45 PM	7	9	11	27	32	279	8	319	27	17	9	53	27	352	37	416	815
Total	39	23	29	91	118	1161	22	1301	89	34	42	165	97	1399	106	1602	3159
05:00 PM	11	5	7	23	22	292	1	315	35	12	19	66	10	378	39	427	831
05:15 PM	9	6	10	25	17	284	6	307	23	8	12	43	31	354	22	407	782
05:30 PM	15	7	4	26	27	287	4	318	20	6	13	39	16	359	16	391	774
05:45 PM	13	6	10	29	24	304	7	335	13	4	10	27	17	380	25	422	813
Total	48	24	31	103	90	1167	18	1275	91	30	54	175	74	1471	102	1647	3200
Grand Total	87	47	60	194	208	2328	40	2576	180	64	96	340	171	2870	208	3249	6359
Apprch %	44.8	24.2	30.9		8.1	90.4	1.6		52.9	18.8	28.2		5.3	88.3	6.4		
Total %	1.4	0.7	0.9	3.1	3.3	36.6	0.6	40.5	2.8	1	1.5	5.3	2.7	45.1	3.3	51.1	

	Dauchy Avenue Southbound				Van Buren Avenue Westbound				Dauchy Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	11	3	7	21	22	308	5	335	15	3	6	24	23	360	26	409	789
04:30 PM	8	5	6	19	38	285	6	329	20	9	11	40	33	366	24	423	811
04:45 PM	7	9	11	27	32	279	8	319	27	17	9	53	27	352	37	416	815
05:00 PM	11	5	7	23	22	292	1	315	35	12	19	66	10	378	39	427	831
Total Volume	37	22	31	90	114	1164	20	1298	97	41	45	183	93	1456	126	1675	3246
% App. Total	41.1	24.4	34.4		8.8	89.7	1.5		53	22.4	24.6		5.6	86.9	7.5		
PHF	.841	.611	.705	.833	.750	.945	.625	.969	.693	.603	.592	.693	.705	.963	.808	.981	.977

City of Riverside
N/S: Dauchy Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 03_RIV_Dauchy_Van Buren PM
Site Code : 00319643
Start Date : 9/18/2019
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Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	11	3	7	21	22	308	5	335	15	3	6	24	23	360	26	409
+15 mins.	8	5	6	19	38	285	6	329	20	9	11	40	33	366	24	423
+30 mins.	7	9	11	27	32	279	8	319	27	17	9	53	27	352	37	416
+45 mins.	11	5	7	23	22	292	1	315	35	12	19	66	10	378	39	427
Total Volume	37	22	31	90	114	1164	20	1298	97	41	45	183	93	1456	126	1675
% App. Total	41.1	24.4	34.4		8.8	89.7	1.5		53	22.4	24.6		5.6	86.9	7.5	
PHF	.841	.611	.705	.833	.750	.945	.625	.969	.693	.603	.592	.693	.705	.963	.808	.981

City of Riverside
N/S: Dauchy Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 03_RIV_Dauchy_Van Buren PM
Site Code : 00319643
Start Date : 9/18/2019
Page No : 1

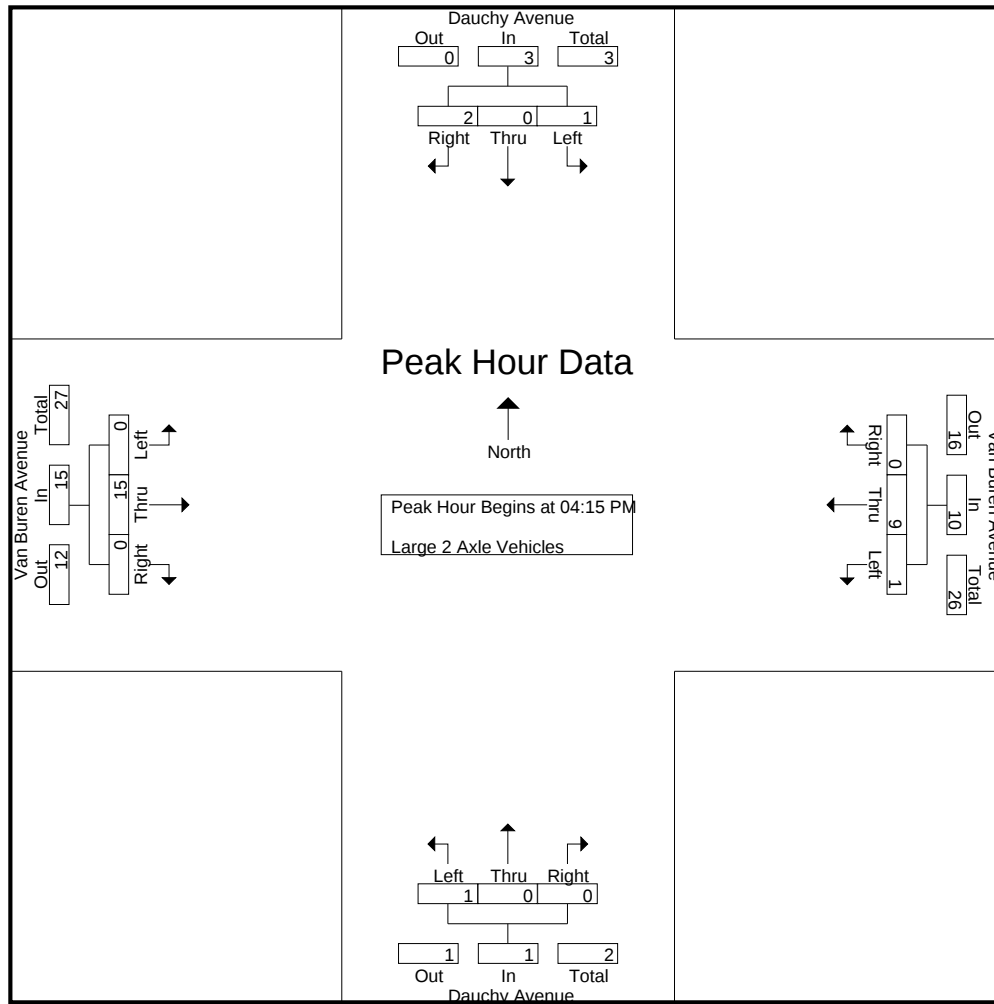
Groups Printed- Large 2 Axle Vehicles

	Dauchy Avenue Southbound				Van Buren Avenue Westbound				Dauchy Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	1	2	0	3	0	0	0	0	0	6	1	7	10
04:15 PM	0	0	2	2	0	0	0	0	0	0	0	0	0	4	0	4	6
04:30 PM	0	0	0	0	1	3	0	4	1	0	0	1	0	4	0	4	9
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
Total	0	0	2	2	2	7	0	9	1	0	0	1	0	17	1	18	30
05:00 PM	1	0	0	1	0	4	0	4	0	0	0	0	0	4	0	4	9
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	5	1	6	8
05:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
Total	1	0	0	1	0	9	0	9	0	0	0	0	0	11	1	12	22
Grand Total	1	0	2	3	2	16	0	18	1	0	0	1	0	28	2	30	52
Apprch %	33.3	0	66.7		11.1	88.9	0		100	0	0		0	93.3	6.7		
Total %	1.9	0	3.8	5.8	3.8	30.8	0	34.6	1.9	0	0	1.9	0	53.8	3.8	57.7	

	Dauchy Avenue Southbound				Van Buren Avenue Westbound				Dauchy Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	2	2	0	0	0	0	0	0	0	0	0	4	0	4	6
04:30 PM	0	0	0	0	1	3	0	4	1	0	0	1	0	4	0	4	9
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
05:00 PM	1	0	0	1	0	4	0	4	0	0	0	0	0	4	0	4	9
Total Volume	1	0	2	3	1	9	0	10	1	0	0	1	0	15	0	15	29
% App. Total	33.3	0	66.7		10	90	0		100	0	0		0	100	0		
PHF	.250	.000	.250	.375	.250	.563	.000	.625	.250	.000	.000	.250	.000	.938	.000	.938	.806

City of Riverside
N/S: Dauchy Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 03_RIV_Dauchy_Van Buren PM
Site Code : 00319643
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Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	2	2	0	0	0	0	0	0	0	0	0	4	0	4
+15 mins.	0	0	0	0	1	3	0	4	1	0	0	1	0	4	0	4
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3
+45 mins.	1	0	0	1	0	4	0	4	0	0	0	0	0	4	0	4
Total Volume	1	0	2	3	1	9	0	10	1	0	0	1	0	15	0	15
% App. Total	33.3	0	66.7		10	90	0		100	0	0		0	100	0	
PHF	.250	.000	.250	.375	.250	.563	.000	.625	.250	.000	.000	.250	.000	.938	.000	.938

City of Riverside
N/S: Dauchy Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 03_RIV_Dauchy_Van Buren PM
Site Code : 00319643
Start Date : 9/18/2019
Page No : 1

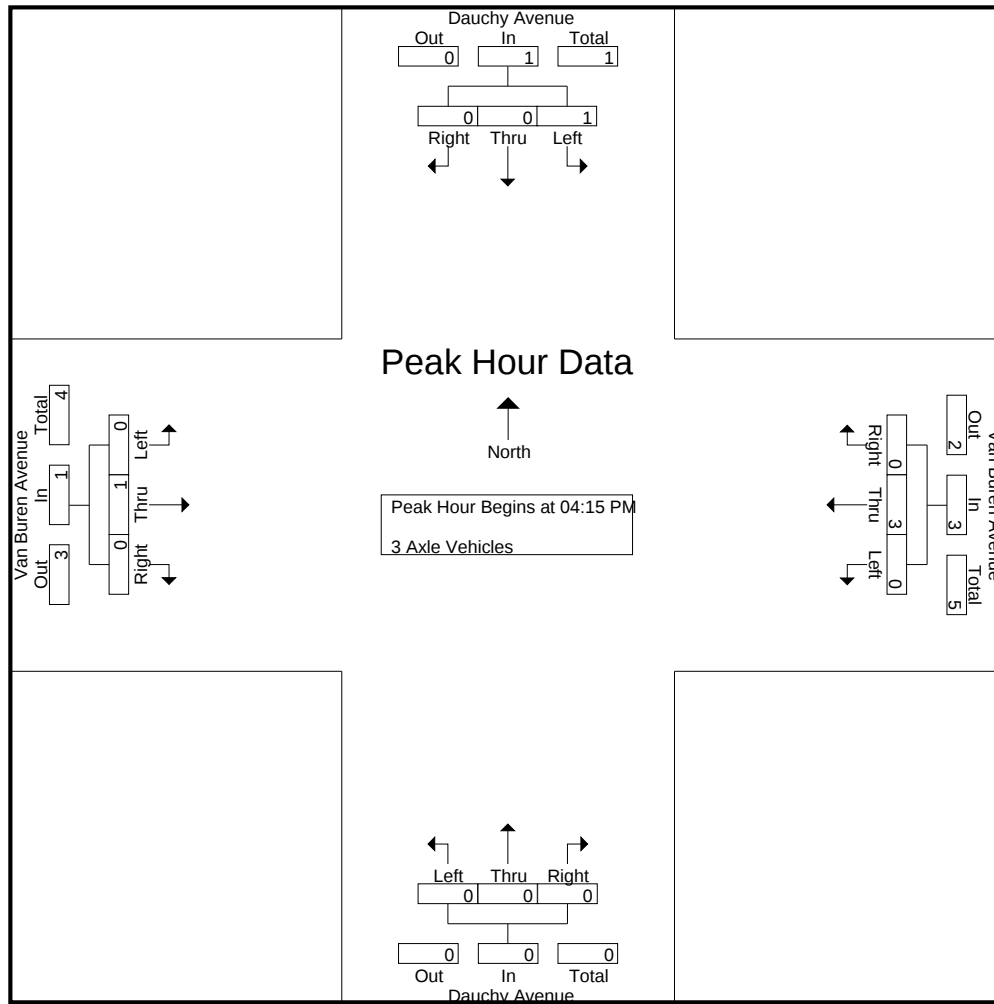
Groups Printed- 3 Axle Vehicles

	Dauchy Avenue Southbound				Van Buren Avenue Westbound				Dauchy Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:00 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	2	0	2	0	0	0	0	0	3	0	3	6
Grand Total	1	0	0	1	0	4	0	4	0	0	0	0	0	3	0	3	8
Apprch %	100	0	0		0	100	0		0	0	0		0	100	0		
Total %	12.5	0	0	12.5	0	50	0	50	0	0	0	0	0	37.5	0	37.5	

	Dauchy Avenue Southbound				Van Buren Avenue Westbound				Dauchy Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
Total Volume	1	0	0	1	0	3	0	3	0	0	0	0	0	1	0	1	5
% App. Total	100	0	0		0	100	0		0	0	0		0	100	0		
PHF	.250	.000	.000	.250	.000	.375	.000	.375	.000	.000	.000	.000	.000	.250	.000	.250	.417

City of Riverside
N/S: Dauchy Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 03_RIV_Dauchy_Van Buren PM
Site Code : 00319643
Start Date : 9/18/2019
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Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1
Total Volume	1	0	0	1	0	3	0	3	0	0	0	0	0	1	0	1
% App. Total	100	0	0		0	100	0		0	0	0		0	100	0	
PHF	.250	.000	.000	.250	.000	.375	.000	.375	.000	.000	.000	.000	.000	.250	.000	.250

City of Riverside
N/S: Dauchy Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 03_RIV_Dauchy_Van Buren PM
Site Code : 00319643
Start Date : 9/18/2019
Page No : 1

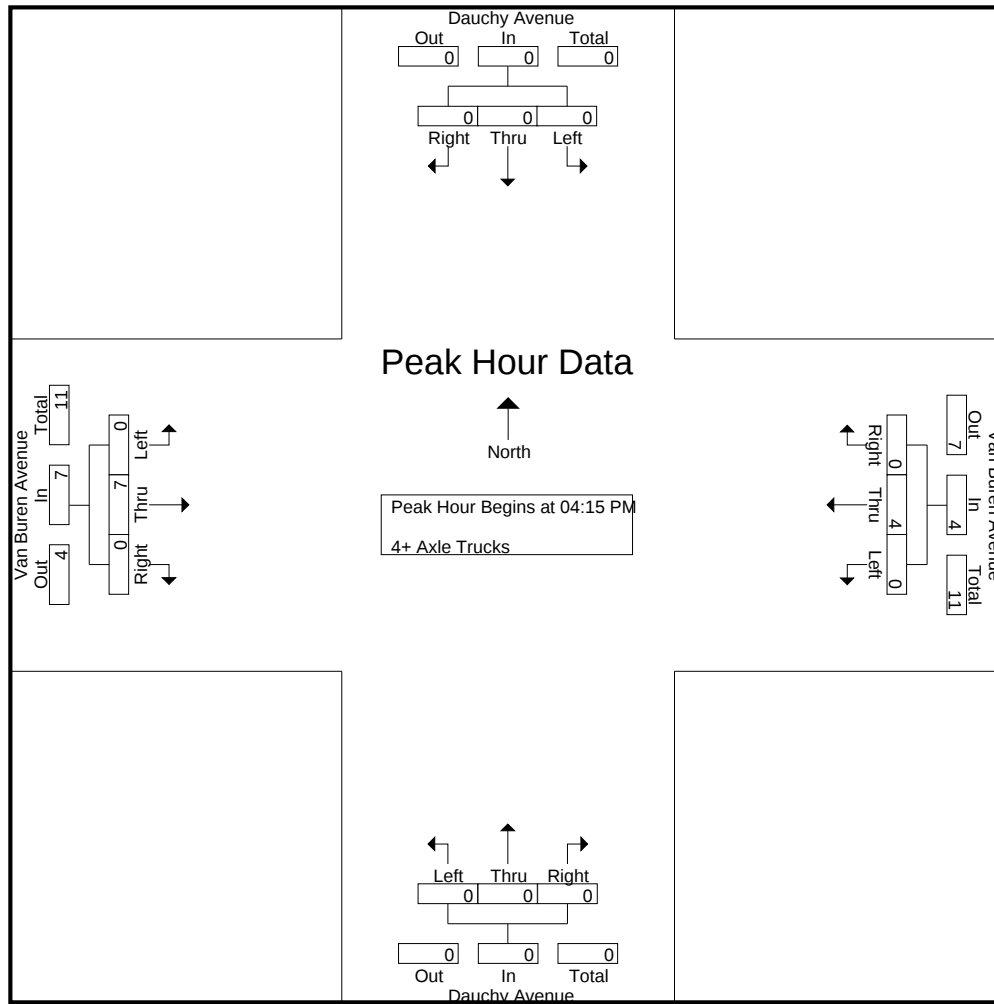
Groups Printed- 4+ Axle Trucks

	Dauchy Avenue Southbound				Van Buren Avenue Westbound				Dauchy Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
04:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
Total	0	0	0	0	0	5	0	5	0	0	0	0	0	7	0	7	12
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5	6
05:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	0	0	0	0	0	3	0	3	0	0	0	0	0	9	0	9	12
Grand Total	0	0	0	0	0	8	0	8	0	0	0	0	0	16	0	16	24
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0		0	33.3	0	33.3	0	0	0		0	66.7	0	66.7	

	Dauchy Avenue Southbound				Van Buren Avenue Westbound				Dauchy Avenue Northbound				Van Buren Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total Volume	0	0	0	0	0	4	0	4	0	0	0	0	0	7	0	7	11
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.875	.000	.875	.917

City of Riverside
N/S: Dauchy Avenue
E/W: Van Buren Avenue
Weather: Clear

File Name : 03_RIV_Dauchy_Van Buren PM
Site Code : 00319643
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Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Total Volume	0	0	0	0	0	4	0	4	0	0	0	0	0	7	0	7
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.875	.000	.875

Location: Riverside
 N/S: Dauchy Avenue
 E/W: Van Buren Avenue



Date: 9/18/2019
 Day: Wednesday

PEDESTRIANS

	North Leg Dauchy Avenue Pedestrians	East Leg Van Buren Avenue Pedestrians	South Leg Dauchy Avenue Pedestrians	West Leg Van Buren Avenue Pedestrians	
7:00 AM	1	0	1	1	3
7:15 AM	0	0	0	0	0
7:30 AM	1	0	0	1	2
7:45 AM	0	0	1	0	1
8:00 AM	0	0	0	0	0
8:15 AM	0	0	1	1	2
8:30 AM	0	0	0	1	1
8:45 AM	1	0	0	1	2
TOTAL VOLUMES:	3	0	3	5	11

	North Leg Dauchy Avenue Pedestrians	East Leg Van Buren Avenue Pedestrians	South Leg Dauchy Avenue Pedestrians	West Leg Van Buren Avenue Pedestrians	
4:00 PM	0	0	0	1	1
4:15 PM	1	0	0	0	1
4:30 PM	1	0	2	1	4
4:45 PM	1	0	0	1	2
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	3	0	2	3	8

Location: Riverside
 N/S: Dauchy Avenue
 E/W: Van Buren Avenue



Date: 9/18/2019
 Day: Wednesday

BICYCLES

		Southbound Dauchy Avenue			Westbound Van Buren Avenue			Northbound Dauchy Avenue			Eastbound Van Buren Avenue			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
TOTAL VOLUMES:		0	0	0	0	0	0	0	0	0	0	0	1	1

		Southbound Dauchy Avenue			Westbound Van Buren Avenue			Northbound Dauchy Avenue			Eastbound Van Buren Avenue			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	0	0	0	1	0	0	0	0	0	0	0	1

APPENDIX C:

VOLUME DEVELOPMENT WORKSHEETS

Table C-1 - Existing Peak Hour PCE Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Existing Without Project	Project Trips	Pass-By Trips	Existing With Project	Existing Without Project	Project Trips	Pass-By Trips	Existing With Project
1 Gamble Avenue/Van Buren Boulevard								
NBL	118	0	0	118	14	0	0	14
NBT	3	0	0	3	2	0	0	2
NBR	25	4	0	29	27	4	0	31
SBL	5	4	0	9	9	4	0	13
SBT	2	0	0	2	0	0	0	0
SBR	8	0	0	8	10	0	0	10
EBL	5	0	0	5	19	0	0	19
EBT	1,188	19	0	1,207	1,902	21	0	1,923
EBR	124	0	0	124	35	0	0	35
WBL	31	4	0	35	28	4	0	32
WBT	1,874	18	0	1,892	1,306	21	0	1,327
WBR	2	4	0	6	6	4	0	10
North Leg								
Approach	15	4	0	19	19	4	0	23
Departure	10	4	0	14	27	4	0	31
Total	25	8	0	33	46	8	0	54
South Leg								
Approach	146	4	0	150	43	4	0	47
Departure	157	4	0	161	63	4	0	67
Total	303	8	0	311	106	8	0	114
East Leg								
Approach	1,907	26	0	1,933	1,340	29	0	1,369
Departure	1,218	27	0	1,245	1,938	29	0	1,967
Total	3,125	53	0	3,178	3,278	58	0	3,336
West Leg								
Approach	1,317	19	0	1,336	1,956	21	0	1,977
Departure	2,000	18	0	2,018	1,330	21	0	1,351
Total	3,317	37	0	3,354	3,286	42	0	3,328
Total Approaches								
Approach	3,385	53	0	3,438	3,358	58	0	3,416
Departure	3,385	53	0	3,438	3,358	58	0	3,416
Total	6,770	106	0	6,876	6,716	116	0	6,832

Table C-1 - Existing Peak Hour PCE Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Existing Without Project	Project Trips	Pass-By Trips	Existing With Project	Existing Without Project	Project Trips	Pass-By Trips	Existing With Project
2 Chicago Avenue - Alta Cresta Avenue/Van Buren Boulevard								
NBL	107	0	-1	106	36	0	0	36
NBT	3	15	2	20	0	17	0	17
NBR	94	0	-1	93	14	0	0	14
SBL	10	29	10	49	11	33	15	59
SBT	2	15	0	17	2	16	1	19
SBR	4	0	1	5	9	0	0	9
EBL	24	27	10	61	21	30	17	68
EBT	1,158	0	-9	1,149	1,794	0	-16	1,778
EBR	54	0	0	54	119	0	-1	118
WBL	74	0	0	74	29	0	0	29
WBT	1,763	26	0	1,789	1,282	29	0	1,311
WBR	3	0	0	3	18	0	0	18
North Leg								
Approach	16	44	11	71	22	49	16	87
Departure	30	42	12	84	39	47	17	103
Total	46	86	23	155	61	96	33	190
South Leg								
Approach	204	15	0	219	50	17	0	67
Departure	130	15	0	145	150	16	0	166
Total	334	30	0	364	200	33	0	233
East Leg								
Approach	1,840	26	0	1,866	1,329	29	0	1,358
Departure	1,262	29	0	1,291	1,819	33	-1	1,851
Total	3,102	55	0	3,157	3,148	62	-1	3,209
West Leg								
Approach	1,236	27	1	1,264	1,934	30	0	1,964
Departure	1,874	26	0	1,900	1,327	29	0	1,356
Total	3,110	53	1	3,164	3,261	59	0	3,320
Total Approaches								
Approach	3,296	112	12	3,420	3,335	125	16	3,476
Departure	3,296	112	12	3,420	3,335	125	16	3,476
Total	6,592	224	24	6,840	6,670	250	32	6,952

Table C-1 - Existing Peak Hour PCE Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Existing Without Project	Project Trips	Pass-By Trips	Existing With Project	Existing Without Project	Project Trips	Pass-By Trips	Existing With Project
3 Dauchy Avenue/Van Buren Boulevard								
NBL	248	8	0	256	99	9	0	108
NBT	37	0	0	37	41	0	0	41
NBR	121	0	0	121	45	0	0	45
SBL	35	0	0	35	41	0	0	41
SBT	36	0	0	36	22	0	0	22
SBR	22	4	0	26	34	4	0	38
EBL	19	4	0	23	93	4	0	97
EBT	971	18	0	989	1,502	21	0	1,523
EBR	153	7	0	160	126	8	0	134
WBL	126	0	0	126	116	0	0	116
WBT	1,396	19	0	1,415	1,196	21	0	1,217
WBR	13	0	0	13	20	0	0	20
North Leg								
Approach	93	4	0	97	97	4	0	101
Departure	69	4	0	73	154	4	0	158
Total	162	8	0	170	251	8	0	259
South Leg								
Approach	406	8	0	414	185	9	0	194
Departure	315	7	0	322	264	8	0	272
Total	721	15	0	736	449	17	0	466
East Leg								
Approach	1,535	19	0	1,554	1,332	21	0	1,353
Departure	1,127	18	0	1,145	1,588	21	0	1,609
Total	2,662	37	0	2,699	2,920	42	0	2,962
West Leg								
Approach	1,143	29	0	1,172	1,721	33	0	1,754
Departure	1,666	31	0	1,697	1,329	34	0	1,363
Total	2,809	60	0	2,869	3,050	67	0	3,117
Total Approaches								
Approach	3,177	60	0	3,237	3,335	67	0	3,402
Departure	3,177	60	0	3,237	3,335	67	0	3,402
Total	6,354	120	0	6,474	6,670	134	0	6,804

Table C-1 - Existing Peak Hour PCE Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Existing Without Project	Project Trips	Pass-By Trips	Existing With Project	Existing Without Project	Project Trips	Pass-By Trips	Existing With Project
4 Chicago Avenue/Project Driveway 1								
NBL	0	0	0	0	0	0	0	0
NBT	30	0	0	30	39	0	0	39
NBR	0	42	12	54	0	47	17	64
SBL	0	4	0	4	0	4	0	4
SBT	16	0	0	16	22	0	0	22
SBR	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0
WBL	0	44	11	55	0	49	16	65
WBT	0	0	0	0	0	0	0	0
WBR	0	4	0	4	0	4	0	4
North Leg								
Approach	16	4	0	20	22	4	0	26
Departure	30	4	0	34	39	4	0	43
Total	46	8	0	54	61	8	0	69
South Leg								
Approach	30	42	12	84	39	47	17	103
Departure	16	44	11	71	22	49	16	87
Total	46	86	23	155	61	96	33	190
East Leg								
Approach	0	48	11	59	0	53	16	69
Departure	0	46	12	58	0	51	17	68
Total	0	94	23	117	0	104	33	137
West Leg								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Total Approaches								
Approach	46	94	23	163	61	104	33	198
Departure	46	94	23	163	61	104	33	198
Total	92	188	46	326	122	208	66	396

Table C-1 - Existing Peak Hour PCE Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Existing Without Project	Project Trips	Pass-By Trips	Existing With Project	Existing Without Project	Project Trips	Pass-By Trips	Existing With Project
5 Project Driveway 2/Van Buren Boulevard								
NBL	0	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0	0
NBR	0	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0	0
SBT	0	0	0	0	0	0	0	0
SBR	0	26	14	40	0	29	11	40
EBL	0	0	0	0	0	0	0	0
EBT	1,262	29	0	1,291	1,819	33	0	1,852
EBR	0	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0	0
WBT	1,840	0	-15	1,825	1,329	0	-12	1,317
WBR	0	30	15	45	0	34	12	46
North Leg								
Approach	0	26	14	40	0	29	11	40
Departure	0	30	15	45	0	34	12	46
Total	0	56	29	85	0	63	23	86
South Leg								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
East Leg								
Approach	1,840	30	0	1,870	1,329	34	0	1,363
Departure	1,262	29	0	1,291	1,819	33	0	1,852
Total	3,102	59	0	3,161	3,148	67	0	3,215
West Leg								
Approach	1,262	29	0	1,291	1,819	33	0	1,852
Departure	1,840	26	-1	1,865	1,329	29	-1	1,357
Total	3,102	55	-1	3,156	3,148	62	-1	3,209
Total Approaches								
Approach	3,102	85	14	3,201	3,148	96	11	3,255
Departure	3,102	85	14	3,201	3,148	96	11	3,255
Total	6,204	170	28	6,402	6,296	192	22	6,510

Table C-2 - Project Completion (2021) Peak Hour PCE Volume Summary

AM Peak Hour							PM Peak Hour						
	Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	Pass-By Trips	OY With Project		Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	Pass-By Trips	OY With Project
1 Gamble Avenue/Van Buren Boulevard							1 Gamble Avenue/Van Buren Boulevard						
NBL	118	5	123	0	0	123	NBL	14	1	15	0	0	15
NBT	3	0	3	0	0	3	NBT	2	0	2	0	0	2
NBR	25	1	26	4	0	30	NBR	27	1	28	4	0	32
SBL	5	0	5	4	0	9	SBL	9	0	9	4	0	13
SBT	2	0	2	0	0	2	SBT	0	0	0	0	0	0
SBR	8	0	8	0	0	8	SBR	10	0	10	0	0	10
EBL	5	0	5	0	0	5	EBL	19	1	20	0	0	20
EBT	1,188	48	1,236	19	0	1,255	EBT	1,902	76	1,978	21	0	1,999
EBR	124	5	129	0	0	129	EBR	35	1	36	0	0	36
WBL	31	1	32	4	0	36	WBL	28	1	29	4	0	33
WBT	1,874	75	1,949	18	0	1,967	WBT	1,306	52	1,358	21	0	1,379
WBR	2	0	2	4	0	6	WBR	6	0	6	4	0	10
North Leg							North Leg						
Approach	15	0	15	4	0	19	Approach	19	0	19	4	0	23
Departure	10	0	10	4	0	14	Departure	27	1	28	4	0	32
Total	25	0	25	8	0	33	Total	46	1	47	8	0	55
South Leg							South Leg						
Approach	146	6	152	4	0	156	Approach	43	2	45	4	0	49
Departure	157	6	163	4	0	167	Departure	63	2	65	4	0	69
Total	303	12	315	8	0	323	Total	106	4	110	8	0	118
East Leg							East Leg						
Approach	1,907	76	1,983	26	0	2,009	Approach	1,340	53	1,393	29	0	1,422
Departure	1,218	49	1,267	27	0	1,294	Departure	1,938	77	2,015	29	0	2,044
Total	3,125	125	3,250	53	0	3,303	Total	3,278	130	3,408	58	0	3,466
West Leg							West Leg						
Approach	1,317	53	1,370	19	0	1,389	Approach	1,956	78	2,034	21	0	2,055
Departure	2,000	80	2,080	18	0	2,098	Departure	1,330	53	1,383	21	0	1,404
Total	3,317	133	3,450	37	0	3,487	Total	3,286	131	3,417	42	0	3,459
Total Approaches							Total Approaches						
Approach	3,385	135	3,520	53	0	3,573	Approach	3,358	133	3,491	58	0	3,549
Departure	3,385	135	3,520	53	0	3,573	Departure	3,358	133	3,491	58	0	3,549
Total	6,770	270	7,040	106	0	7,146	Total	6,716	266	6,982	116	0	7,098

Table C-2 - Project Completion (2021) Peak Hour PCE Volume Summary

		AM Peak Hour								PM Peak Hour					
	Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	Pass-By Trips	OY With Project		Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	Pass-By Trips	OY With Project		
2	Chicago Avenue - Alta Cresta Avenue/Van Buren Boulevard						2	Chicago Avenue - Alta Cresta Avenue/Van Buren Boulevard							
NBL	107	4	111	0	-1	110	NBL	36	1	37	0	0	37		
NBT	3	0	3	15	2	20	NBT	0	0	0	17	0	17		
NBR	94	4	98	0	-1	97	NBR	14	1	15	0	0	15		
SBL	10	0	10	29	10	49	SBL	11	0	11	33	15	59		
SBT	2	0	2	15	0	17	SBT	2	0	2	16	1	19		
SBR	4	0	4	0	1	5	SBR	9	0	9	0	0	9		
EBL	24	1	25	27	10	62	EBL	21	1	22	30	17	69		
EBT	1,158	46	1,204	0	-9	1,195	EBT	1,794	72	1,866	0	-16	1,850		
EBR	54	2	56	0	0	56	EBR	119	5	124	0	-1	123		
WBL	74	3	77	0	0	77	WBL	29	1	30	0	0	30		
WBT	1,763	71	1,834	26	0	1,860	WBT	1,282	51	1,333	29	0	1,362		
WBR	3	0	3	0	0	3	WBR	18	1	19	0	0	19		
North Leg							North Leg								
Approach	16	0	16	44	11	71	Approach	22	0	22	49	16	87		
Departure	30	1	31	42	12	85	Departure	39	2	41	47	17	105		
Total	46	1	47	86	23	156	Total	61	2	63	96	33	192		
South Leg							South Leg								
Approach	204	8	212	15	0	227	Approach	50	2	52	17	0	69		
Departure	130	5	135	15	0	150	Departure	150	6	156	16	0	172		
Total	334	13	347	30	0	377	Total	200	8	208	33	0	241		
East Leg							East Leg								
Approach	1,840	74	1,914	26	0	1,940	Approach	1,329	53	1,382	29	0	1,411		
Departure	1,262	50	1,312	29	0	1,341	Departure	1,819	73	1,892	33	-1	1,924		
Total	3,102	124	3,226	55	0	3,281	Total	3,148	126	3,274	62	-1	3,335		
West Leg							West Leg								
Approach	1,236	49	1,285	27	1	1,313	Approach	1,934	78	2,012	30	0	2,042		
Departure	1,874	75	1,949	26	0	1,975	Departure	1,327	52	1,379	29	0	1,408		
Total	3,110	124	3,234	53	1	3,288	Total	3,261	130	3,391	59	0	3,450		
Total Approaches							Total Approaches								
Approach	3,296	131	3,427	112	12	3,551	Approach	3,335	133	3,468	125	16	3,609		
Departure	3,296	131	3,427	112	12	3,551	Departure	3,335	133	3,468	125	16	3,609		
Total	6,592	262	6,854	224	24	7,102	Total	6,670	266	6,936	250	32	7,218		

Table C-2 - Project Completion (2021) Peak Hour PCE Volume Summary

AM Peak Hour							PM Peak Hour						
	Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	Pass-By Trips	OY With Project		Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	Pass-By Trips	OY With Project
3	Dauchy Avenue/Van Buren Boulevard						3	Dauchy Avenue/Van Buren Boulevard					
NBL	248	10	258	8	0	266	NBL	99	4	103	9	0	112
NBT	37	1	38	0	0	38	NBT	41	2	43	0	0	43
NBR	121	5	126	0	0	126	NBR	45	2	47	0	0	47
SBL	35	1	36	0	0	36	SBL	41	2	43	0	0	43
SBT	36	1	37	0	0	37	SBT	22	1	23	0	0	23
SBR	22	1	23	4	0	27	SBR	34	1	35	4	0	39
EBL	19	1	20	4	0	24	EBL	93	4	97	4	0	101
EBT	971	39	1,010	18	0	1,028	EBT	1,502	60	1,562	21	0	1,583
EBR	153	6	159	7	0	166	EBR	126	5	131	8	0	139
WBL	126	5	131	0	0	131	WBL	116	5	121	0	0	121
WBT	1,396	56	1,452	19	0	1,471	WBT	1,196	48	1,244	21	0	1,265
WBR	13	1	14	0	0	14	WBR	20	1	21	0	0	21
North Leg							North Leg						
Approach	93	3	96	4	0	100	Approach	97	4	101	4	0	105
Departure	69	3	72	4	0	76	Departure	154	7	161	4	0	165
Total	162	6	168	8	0	176	Total	251	11	262	8	0	270
South Leg							South Leg						
Approach	406	16	422	8	0	430	Approach	185	8	193	9	0	202
Departure	315	12	327	7	0	334	Departure	264	11	275	8	0	283
Total	721	28	749	15	0	764	Total	449	19	468	17	0	485
East Leg							East Leg						
Approach	1,535	62	1,597	19	0	1,616	Approach	1,332	54	1,386	21	0	1,407
Departure	1,127	45	1,172	18	0	1,190	Departure	1,588	64	1,652	21	0	1,673
Total	2,662	107	2,769	37	0	2,806	Total	2,920	118	3,038	42	0	3,080
West Leg							West Leg						
Approach	1,143	46	1,189	29	0	1,218	Approach	1,721	69	1,790	33	0	1,823
Departure	1,666	67	1,733	31	0	1,764	Departure	1,329	53	1,382	34	0	1,416
Total	2,809	113	2,922	60	0	2,982	Total	3,050	122	3,172	67	0	3,239
Total Approaches							Total Approaches						
Approach	3,177	127	3,304	60	0	3,364	Approach	3,335	135	3,470	67	0	3,537
Departure	3,177	127	3,304	60	0	3,364	Departure	3,335	135	3,470	67	0	3,537
Total	6,354	254	6,608	120	0	6,728	Total	6,670	270	6,940	134	0	7,074

Table C-2 - Project Completion (2021) Peak Hour PCE Volume Summary

AM Peak Hour							PM Peak Hour						
	Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	Pass-By Trips	OY With Project		Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	Pass-By Trips	OY With Project
4	Chicago Avenue/Project Driveway 1						4	Chicago Avenue/Project Driveway 1					
NBL	0	0	0	0	0	0	NBL	0	0	0	0	0	0
NBT	30	1	31	0	0	31	NBT	39	2	41	0	0	41
NBR	0	0	0	42	12	54	NBR	0	0	0	47	17	64
SBL	0	0	0	4	0	4	SBL	0	0	0	4	0	4
SBT	16	1	17	0	0	17	SBT	22	1	23	0	0	23
SBR	0	0	0	0	0	0	SBR	0	0	0	0	0	0
EBL	0	0	0	0	0	0	EBL	0	0	0	0	0	0
EBT	0	0	0	0	0	0	EBT	0	0	0	0	0	0
EBR	0	0	0	0	0	0	EBR	0	0	0	0	0	0
WBL	0	0	0	44	11	55	WBL	0	0	0	49	16	65
WBT	0	0	0	0	0	0	WBT	0	0	0	0	0	0
WBR	0	0	0	4	0	4	WBR	0	0	0	4	0	4
North Leg							North Leg						
Approach	16	1	17	4	0	21	Approach	22	1	23	4	0	27
Departure	30	1	31	4	0	35	Departure	39	2	41	4	0	45
Total	46	2	48	8	0	56	Total	61	3	64	8	0	72
South Leg							South Leg						
Approach	30	1	31	42	12	85	Approach	39	2	41	47	17	105
Departure	16	1	17	44	11	72	Departure	22	1	23	49	16	88
Total	46	2	48	86	23	157	Total	61	3	64	96	33	193
East Leg							East Leg						
Approach	0	0	0	48	11	59	Approach	0	0	0	53	16	69
Departure	0	0	0	46	12	58	Departure	0	0	0	51	17	68
Total	0	0	0	94	23	117	Total	0	0	0	104	33	137
West Leg							West Leg						
Approach	0	0	0	0	0	0	Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0	Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0	Total	0	0	0	0	0	0
Total Approaches							Total Approaches						
Approach	46	2	48	94	23	165	Approach	61	3	64	104	33	201
Departure	46	2	48	94	23	165	Departure	61	3	64	104	33	201
Total	92	4	96	188	46	330	Total	122	6	128	208	66	402

Table C-2 - Project Completion (2021) Peak Hour PCE Volume Summary

AM Peak Hour							PM Peak Hour						
	Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	Pass-By Trips	OY With Project		Existing (2019) PCE	2019- 2021 Growth	OY Without Project	Project Trips	Pass-By Trips	OY With Project
5	Project Driveway 2/Van Buren Boulevard						5	Project Driveway 2/Van Buren Boulevard					
NBL	0	0	0	0	0	0	NBL	0	0	0	0	0	0
NBT	0	0	0	0	0	0	NBT	0	0	0	0	0	0
NBR	0	0	0	0	0	0	NBR	0	0	0	0	0	0
SBL	0	0	0	0	0	0	SBL	0	0	0	0	0	0
SBT	0	0	0	0	0	0	SBT	0	0	0	0	0	0
SBR	0	0	0	26	14	40	SBR	0	0	0	29	11	40
EBL	0	0	0	0	0	0	EBL	0	0	0	0	0	0
EBT	1,262	50	1,312	29	0	1,341	EBT	1,819	73	1,892	33	0	1,925
EBR	0	0	0	0	0	0	EBR	0	0	0	0	0	0
WBL	0	0	0	0	0	0	WBL	0	0	0	0	0	0
WBT	1,840	74	1,914	0	-15	1,899	WBT	1,329	53	1,382	0	-12	1,370
WBR	0	0	0	30	15	45	WBR	0	0	0	34	12	46
North Leg							North Leg						
Approach	0	0	0	26	14	40	Approach	0	0	0	29	11	40
Departure	0	0	0	30	15	45	Departure	0	0	0	34	12	46
Total	0	0	0	56	29	85	Total	0	0	0	63	23	86
South Leg							South Leg						
Approach	0	0	0	0	0	0	Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0	Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0	Total	0	0	0	0	0	0
East Leg							East Leg						
Approach	1,840	74	1,914	30	0	1,944	Approach	1,329	53	1,382	34	0	1,416
Departure	1,262	50	1,312	29	0	1,341	Departure	1,819	73	1,892	33	0	1,925
Total	3,102	124	3,226	59	0	3,285	Total	3,148	126	3,274	67	0	3,341
West Leg							West Leg						
Approach	1,262	50	1,312	29	0	1,341	Approach	1,819	73	1,892	33	0	1,925
Departure	1,840	74	1,914	26	-1	1,939	Departure	1,329	53	1,382	29	-1	1,410
Total	3,102	124	3,226	55	-1	3,280	Total	3,148	126	3,274	62	-1	3,335
Total Approaches							Total Approaches						
Approach	3,102	124	3,226	85	14	3,325	Approach	3,148	126	3,274	96	11	3,381
Departure	3,102	124	3,226	85	14	3,325	Departure	3,148	126	3,274	96	11	3,381
Total	6,204	248	6,452	170	28	6,650	Total	6,296	252	6,548	192	22	6,762

Table C-3- Cumulative (2021) Peak Hour PCE Volume Summary

	AM Peak Hour						PM Peak Hour					
	Opening Year 2021	Cumulative Project Trips	Cumulative Without Project	Project Trips	Pass-By Trips	Cumulative With Project	Opening Year 2021	Cumulative Project Trips	Cumulative Without Project	Project Trips	Pass-By Trips	Cumulative With Project
1 Gamble Avenue/Van Buren Boulevard												
NBL	123	0	123	0	0	123	15	0	15	0	0	15
NBT	3	5	8	0	0	8	2	5	7	0	0	7
NBR	26	2	28	4	0	32	28	2	30	4	0	34
SBL	5	14	19	4	0	23	9	12	21	4	0	25
SBT	2	5	7	0	0	7	0	5	5	0	0	5
SBR	8	20	28	0	0	28	10	18	28	0	0	28
EBL	5	21	26	0	0	26	20	18	38	0	0	38
EBT	1,236	124	1,360	19	0	1,379	1,978	103	2,081	21	0	2,102
EBR	129	0	129	0	0	129	36	0	36	0	0	36
WBL	32	2	34	4	0	38	29	2	31	4	0	35
WBT	1,949	103	2,052	18	0	2,070	1,358	117	1,475	21	0	1,496
WBR	2	15	17	4	0	21	6	13	19	4	0	23
North Leg												
Approach	15	39	54	4	0	58	19	35	54	4	0	58
Departure	10	41	51	4	0	55	28	36	64	4	0	68
Total	25	80	105	8	0	113	47	71	118	8	0	126
South Leg												
Approach	152	7	159	4	0	163	45	7	52	4	0	56
Departure	163	7	170	4	0	174	65	7	72	4	0	76
Total	315	14	329	8	0	337	110	14	124	8	0	132
East Leg												
Approach	1,983	120	2,103	26	0	2,129	1,393	132	1,525	29	0	1,554
Departure	1,267	140	1,407	27	0	1,434	2,015	117	2,132	29	0	2,161
Total	3,250	260	3,510	53	0	3,563	3,408	249	3,657	58	0	3,715
West Leg												
Approach	1,370	145	1,515	19	0	1,534	2,034	121	2,155	21	0	2,176
Departure	2,080	123	2,203	18	0	2,221	1,383	135	1,518	21	0	1,539
Total	3,450	268	3,718	37	0	3,755	3,417	256	3,673	42	0	3,715
Total Approaches												
Approach	3,520	311	3,831	53	0	3,884	3,491	295	3,786	58	0	3,844
Departure	3,520	311	3,831	53	0	3,884	3,491	295	3,786	58	0	3,844
Total	7,040	622	7,662	106	0	7,768	6,982	590	7,572	116	0	7,688

Table C-3- Cumulative (2021) Peak Hour PCE Volume Summary

	AM Peak Hour						PM Peak Hour					
	Opening Year 2021	Cumulative Project Trips	Cumulative Without Project	Project Trips	Pass-By Trips	Cumulative With Project	Opening Year 2021	Cumulative Project Trips	Cumulative Without Project	Project Trips	Pass-By Trips	Cumulative With Project
2 Chicago Avenue - Alta Cresta Avenue/Van Buren Boulevard												
NBL	111	18	129	0	-1	128	37	16	53	0	0	53
NBT	3	5	8	15	2	25	0	5	5	17	0	22
NBR	98	45	143	0	-1	142	15	35	50	0	0	50
SBL	10	7	17	29	10	56	11	8	19	33	15	67
SBT	2	5	7	15	0	22	2	5	7	16	1	24
SBR	4	0	4	0	1	5	9	0	9	0	0	9
EBL	25	0	25	27	10	62	22	0	22	30	17	69
EBT	1,204	121	1,325	0	-9	1,316	1,866	101	1,967	0	-16	1,951
EBR	56	18	74	0	0	74	124	16	140	0	-1	139
WBL	77	39	116	0	0	116	30	40	70	0	0	70
WBT	1,834	102	1,936	26	0	1,962	1,333	115	1,448	29	0	1,477
WBR	3	8	11	0	0	11	19	7	26	0	0	26
North Leg												
Approach	16	12	28	44	11	83	22	13	35	49	16	100
Departure	31	13	44	42	12	98	41	12	53	47	17	117
Total	47	25	72	86	23	181	63	25	88	96	33	217
South Leg												
Approach	212	68	280	15	0	295	52	56	108	17	0	125
Departure	135	62	197	15	0	212	156	61	217	16	0	233
Total	347	130	477	30	0	507	208	117	325	33	0	358
East Leg												
Approach	1,914	149	2,063	26	0	2,089	1,382	162	1,544	29	0	1,573
Departure	1,312	173	1,485	29	0	1,514	1,892	144	2,036	33	-1	2,068
Total	3,226	322	3,548	55	0	3,603	3,274	306	3,580	62	-1	3,641
West Leg												
Approach	1,285	139	1,424	27	1	1,452	2,012	117	2,129	30	0	2,159
Departure	1,949	120	2,069	26	0	2,095	1,379	131	1,510	29	0	1,539
Total	3,234	259	3,493	53	1	3,547	3,391	248	3,639	59	0	3,698
Total Approaches												
Approach	3,427	368	3,795	112	12	3,919	3,468	348	3,816	125	16	3,957
Departure	3,427	368	3,795	112	12	3,919	3,468	348	3,816	125	16	3,957
Total	6,854	736	7,590	224	24	7,838	6,936	696	7,632	250	32	7,914

Table C-3- Cumulative (2021) Peak Hour PCE Volume Summary

	AM Peak Hour						PM Peak Hour					
	Opening Year 2021	Cumulative Project Trips	Cumulative Without Project	Project Trips	Pass-By Trips	Cumulative With Project	Opening Year 2021	Cumulative Project Trips	Cumulative Without Project	Project Trips	Pass-By Trips	Cumulative With Project
3 Dauchy Avenue/Van Buren Boulevard												
NBL	258	30	288	8	0	296	103	28	131	9	0	140
NBT	38	14	52	0	0	52	43	12	55	0	0	55
NBR	126	29	155	0	0	155	47	23	70	0	0	70
SBL	36	38	74	0	0	74	43	28	71	0	0	71
SBT	37	15	52	0	0	52	23	11	34	0	0	34
SBR	23	31	54	4	0	58	35	25	60	4	0	64
EBL	20	30	50	4	0	54	97	28	125	4	0	129
EBT	1,010	131	1,141	18	0	1,159	1,562	129	1,691	21	0	1,712
EBR	159	30	189	7	0	196	131	29	160	8	0	168
WBL	131	29	160	0	0	160	121	27	148	0	0	148
WBT	1,452	130	1,582	19	0	1,601	1,244	130	1,374	21	0	1,395
WBR	14	36	50	0	0	50	21	32	53	0	0	53
North Leg												
Approach	96	84	180	4	0	184	101	64	165	4	0	169
Departure	72	80	152	4	0	156	161	72	233	4	0	237
Total	168	164	332	8	0	340	262	136	398	8	0	406
South Leg												
Approach	422	73	495	8	0	503	193	63	256	9	0	265
Departure	327	74	401	7	0	408	275	67	342	8	0	350
Total	749	147	896	15	0	911	468	130	598	17	0	615
East Leg												
Approach	1,597	195	1,792	19	0	1,811	1,386	189	1,575	21	0	1,596
Departure	1,172	198	1,370	18	0	1,388	1,652	180	1,832	21	0	1,853
Total	2,769	393	3,162	37	0	3,199	3,038	369	3,407	42	0	3,449
West Leg												
Approach	1,189	191	1,380	29	0	1,409	1,790	186	1,976	33	0	2,009
Departure	1,733	191	1,924	31	0	1,955	1,382	183	1,565	34	0	1,599
Total	2,922	382	3,304	60	0	3,364	3,172	369	3,541	67	0	3,608
Total Approaches												
Approach	3,304	543	3,847	60	0	3,907	3,470	502	3,972	67	0	4,039
Departure	3,304	543	3,847	60	0	3,907	3,470	502	3,972	67	0	4,039
Total	6,608	1,086	7,694	120	0	7,814	6,940	1,004	7,944	134	0	8,078

Table C-3- Cumulative (2021) Peak Hour PCE Volume Summary

	AM Peak Hour						PM Peak Hour					
	Opening Year 2021	Cumulative Project Trips	Cumulative Without Project	Project Trips	Pass-By Trips	Cumulative With Project	Opening Year 2021	Cumulative Project Trips	Cumulative Without Project	Project Trips	Pass-By Trips	Cumulative With Project
4 Chicago Avenue/Project Driveway 1												
NBL	0	0	0	0	0	0	0	0	0	0	0	0
NBT	31	13	44	0	0	44	41	12	53	0	0	53
NBR	0	0	0	42	12	54	0	0	0	47	17	64
SBL	0	0	0	4	0	4	0	0	0	4	0	4
SBT	17	12	29	0	0	29	23	13	36	0	0	36
SBR	0	0	0	0	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0	0	0	0	0
WBL	0	0	0	44	11	55	0	0	0	49	16	65
WBT	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	4	0	4	0	0	0	4	0	4
North Leg												
Approach	17	12	29	4	0	33	23	13	36	4	0	40
Departure	31	13	44	4	0	48	41	12	53	4	0	57
Total	48	25	73	8	0	81	64	25	89	8	0	97
South Leg												
Approach	31	13	44	42	12	98	41	12	53	47	17	117
Departure	17	12	29	44	11	84	23	13	36	49	16	101
Total	48	25	73	86	23	182	64	25	89	96	33	218
East Leg												
Approach	0	0	0	48	11	59	0	0	0	53	16	69
Departure	0	0	0	46	12	58	0	0	0	51	17	68
Total	0	0	0	94	23	117	0	0	0	104	33	137
West Leg												
Approach	0	0	0	0	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
Total Approaches												
Approach	48	25	73	94	23	190	64	25	89	104	33	226
Departure	48	25	73	94	23	190	64	25	89	104	33	226
Total	96	50	146	188	46	380	128	50	178	208	66	452

Table C-3- Cumulative (2021) Peak Hour PCE Volume Summary

	AM Peak Hour						PM Peak Hour					
	Opening Year 2021	Cumulative Project Trips	Cumulative Without Project	Project Trips	Pass-By Trips	Cumulative With Project	Opening Year 2021	Cumulative Project Trips	Cumulative Without Project	Project Trips	Pass-By Trips	Cumulative With Project
5 Project Driveway 2/Van Buren Boulevard												
NBL	0	0	0	0	0	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0	0	0	0	0	0
NBR	0	0	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0	0	0	0	0	0
SBT	0	0	0	0	0	0	0	0	0	0	0	0
SBR	0	0	0	26	14	40	0	0	0	29	11	40
EBL	0	0	0	0	0	0	0	0	0	0	0	0
EBT	1,312	175	1,487	29	0	1,516	1,892	144	2,036	33	0	2,069
EBR	0	0	0	0	0	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0	0	0	0	0	0
WBT	1,914	149	2,063	0	-15	2,048	1,382	164	1,546	0	-12	1,534
WBR	0	0	0	30	15	45	0	0	0	34	12	46
North Leg												
Approach	0	0	0	26	14	40	0	0	0	29	11	40
Departure	0	0	0	30	15	45	0	0	0	34	12	46
Total	0	0	0	56	29	85	0	0	0	63	23	86
South Leg												
Approach	0	0	0	0	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
East Leg												
Approach	1,914	149	2,063	30	0	2,093	1,382	164	1,546	34	0	1,580
Departure	1,312	175	1,487	29	0	1,516	1,892	144	2,036	33	0	2,069
Total	3,226	324	3,550	59	0	3,609	3,274	308	3,582	67	0	3,649
West Leg												
Approach	1,312	175	1,487	29	0	1,516	1,892	144	2,036	33	0	2,069
Departure	1,914	149	2,063	26	-1	2,088	1,382	164	1,546	29	-1	1,574
Total	3,226	324	3,550	55	-1	3,604	3,274	308	3,582	62	-1	3,643
Total Approaches												
Approach	3,226	324	3,550	85	14	3,649	3,274	308	3,582	96	11	3,689
Departure	3,226	324	3,550	85	14	3,649	3,274	308	3,582	96	11	3,689
Total	6,452	648	7,100	170	28	7,298	6,548	616	7,164	192	22	7,378

APPENDIX D:

LEVEL OF SERVICE WORKSHEETS

HCM 6th Signalized Intersection Summary

1: Gamble Avenue & Van Buren Boulevard

Van Buren/Chicago Gasoline Station Project
Existing NP - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1188	124	31	1874	2	118	3	25	5	2	8
Future Volume (veh/h)	5	1188	124	31	1874	2	118	3	25	5	2	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	6	1350	141	35	2130	2	134	3	28	6	2	9
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	19	2283	237	167	2862	3	217	18	171	199	35	157
Arrive On Green	0.01	0.69	0.69	0.12	1.00	1.00	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1810	3300	343	1810	3701	3	1426	158	1476	1400	301	1355
Grp Volume(v), veh/h	6	735	756	35	1039	1093	134	0	31	6	0	11
Grp Sat Flow(s),veh/h/ln	1810	1805	1838	1810	1805	1899	1426	0	1634	1400	0	1656
Q Serve(g_s), s	0.4	25.4	25.8	2.1	0.0	0.0	11.1	0.0	2.1	0.5	0.0	0.7
Cycle Q Clear(g_c), s	0.4	25.4	25.8	2.1	0.0	0.0	11.8	0.0	2.1	2.5	0.0	0.7
Prop In Lane	1.00		0.19	1.00		0.00	1.00		0.90	1.00		0.82
Lane Grp Cap(c), veh/h	19	1248	1271	167	1396	1469	217	0	190	199	0	192
V/C Ratio(X)	0.31	0.59	0.59	0.21	0.74	0.74	0.62	0.00	0.16	0.03	0.00	0.06
Avail Cap(c_a), veh/h	106	1248	1271	167	1396	1469	265	0	245	246	0	248
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.64	0.64	0.64	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.9	9.6	9.7	48.7	0.0	0.0	52.4	0.0	47.8	48.9	0.0	47.2
Incr Delay (d2), s/veh	9.0	2.0	2.1	0.4	2.4	2.2	2.9	0.0	0.4	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	9.9	10.2	1.0	0.9	0.9	4.1	0.0	0.9	0.2	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.0	11.7	11.7	49.1	2.4	2.2	55.4	0.0	48.2	49.0	0.0	47.3
LnGrp LOS	E	B	B	D	A	A	E	A	D	D	A	D
Approach Vol, veh/h	1497				2167				165			
Approach Delay, s/veh	11.9				3.0				54.0			
Approach LOS	B				A				D			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.1	87.0		17.9	5.3	96.8		17.9				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	7.0	83.0		18.0	7.0	83.0		18.0				
Max Q Clear Time (g_c+I1), s	4.1	27.8		4.5	2.4	2.0		13.8				
Green Ext Time (p_c), s	0.0	16.9		0.0	0.0	42.5		0.2				
Intersection Summary												
HCM 6th Ctrl Delay	8.9											
HCM 6th LOS	A											

HCM 6th Signalized Intersection Summary

Van Buren/Chicago Gasoline Station Project

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard

Existing NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	1158	54	74	1763	3	107	3	94	10	2	4
Future Volume (veh/h)	24	1158	54	74	1763	3	107	3	94	10	2	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	26	1273	59	81	1937	3	118	3	103	11	2	4
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	61	1865	830	386	2574	4	144	5	184	32	32	65
Arrive On Green	0.03	0.52	0.52	0.43	1.00	1.00	0.08	0.12	0.12	0.02	0.06	0.06
Sat Flow, veh/h	1810	3610	1605	1810	3698	6	1810	45	1550	1810	565	1131
Grp Volume(v), veh/h	26	1273	59	81	945	995	118	0	106	11	0	6
Grp Sat Flow(s),veh/h/ln	1810	1805	1605	1810	1805	1899	1810	0	1595	1810	0	1696
Q Serve(g_s), s	1.7	31.6	1.5	3.4	0.0	0.0	7.7	0.0	7.5	0.7	0.0	0.4
Cycle Q Clear(g_c), s	1.7	31.6	1.5	3.4	0.0	0.0	7.7	0.0	7.5	0.7	0.0	0.4
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.97	1.00		0.67
Lane Grp Cap(c), veh/h	61	1865	830	386	1256	1322	144	0	190	32	0	97
V/C Ratio(X)	0.42	0.68	0.07	0.21	0.75	0.75	0.82	0.00	0.56	0.34	0.00	0.06
Avail Cap(c_a), veh/h	106	1865	830	386	1256	1322	151	0	253	136	0	254
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.81	0.81	0.70	0.70	0.70	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.8	21.7	7.1	28.0	0.0	0.0	54.4	0.0	49.9	58.2	0.0	53.5
Incr Delay (d2), s/veh	3.8	1.7	0.1	0.2	3.0	2.8	28.2	0.0	2.6	6.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	13.4	0.8	1.4	1.0	1.0	4.6	0.0	3.1	0.4	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.6	23.3	7.2	28.2	3.0	2.8	82.6	0.0	52.5	64.3	0.0	53.8
LnGrp LOS	E	C	A	C	A	A	F	A	D	E	A	D
Approach Vol, veh/h	1358		2021			224			17			
Approach Delay, s/veh	23.3		3.9			68.3			60.6			
Approach LOS	C		A			E			E			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	29.6	66.0	13.5	10.9	8.1	87.5	6.1	18.3				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	14.0	62.0	10.0	18.0	7.0	69.0	9.0	19.0				
Max Q Clear Time (g_c+I), s	15.4	33.6	9.7	2.4	3.7	2.0	2.7	9.5				
Green Ext Time (p_c), s	0.1	11.8	0.0	0.0	0.0	31.2	0.0	0.3				

Intersection Summary

HCM 6th Ctrl Delay	15.4
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary 3: Dauchy Avenue & Van Buren Boulevard

Van Buren/Chicago Gasoline Station Project
Existing NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	971	153	126	1396	13	248	37	121	35	36	22
Future Volume (veh/h)	19	971	153	126	1396	13	248	37	121	35	36	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	21	1067	168	138	1534	14	273	41	133	38	40	24
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	53	1458	229	356	2290	1020	372	63	205	211	117	98
Arrive On Green	0.06	0.93	0.93	0.20	0.63	0.63	0.14	0.16	0.16	0.04	0.06	0.06
Sat Flow, veh/h	1810	3125	491	1810	3610	1609	1810	393	1275	1810	1900	1602
Grp Volume(v), veh/h	21	615	620	138	1534	14	273	0	174	38	40	24
Grp Sat Flow(s),veh/h/ln	1810	1805	1811	1810	1805	1609	1810	0	1668	1810	1900	1602
Q Serve(g_s), s	1.3	8.6	8.7	8.0	32.4	0.4	16.6	0.0	11.7	2.3	2.4	1.7
Cycle Q Clear(g_c), s	1.3	8.6	8.7	8.0	32.4	0.4	16.6	0.0	11.7	2.3	2.4	1.7
Prop In Lane	1.00		0.27	1.00		1.00	1.00		0.76	1.00		1.00
Lane Grp Cap(c), veh/h	53	842	845	356	2290	1020	372	0	269	211	117	98
V/C Ratio(X)	0.40	0.73	0.73	0.39	0.67	0.01	0.73	0.00	0.65	0.18	0.34	0.24
Avail Cap(c_a), veh/h	106	842	845	356	2290	1020	372	0	389	241	285	240
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.4	2.4	2.4	41.9	14.0	8.1	43.1	0.0	47.1	49.3	54.0	53.7
Incr Delay (d2), s/veh	4.1	4.8	4.8	0.7	1.6	0.0	7.3	0.0	2.6	0.4	1.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.3	2.3	3.6	12.9	0.1	8.2	0.0	5.1	1.1	1.2	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.5	7.2	7.3	42.6	15.5	8.1	50.4	0.0	49.8	49.7	55.7	54.9
LnGrp LOS	E	A	A	D	B	A	D	A	D	D	E	D
Approach Vol, veh/h	1256			1686			447			102		
Approach Delay, s/veh	8.1			17.7			50.2			53.3		
Approach LOS	A			B			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	27.6	60.0	21.0	11.4	7.5	80.1	9.0	23.3				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	13.0	56.0	17.0	18.0	7.0	62.0	7.0	28.0				
Max Q Clear Time (g_c+10.0), s	10.7	10.7	18.6	4.4	3.3	34.4	4.3	13.7				
Green Ext Time (p_c), s	0.1	11.6	0.0	0.1	0.0	14.5	0.0	0.8				

Intersection Summary

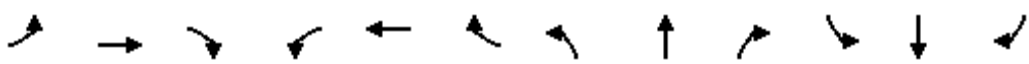
HCM 6th Ctrl Delay	19.4
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary

1: Gamble Avenue & Van Buren Boulevard

Van Buren/Chicago Gasoline Station Project

Existing NP - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	1902	35	28	1306	6	14	2	27	9	0	10
Future Volume (veh/h)	19	1902	35	28	1306	6	14	2	27	9	0	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	20	1961	36	29	1346	6	14	2	28	9	0	10
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	307	2886	53	68	2446	11	139	6	87	121	0	91
Arrive On Green	0.17	0.80	0.80	0.07	1.00	1.00	0.06	0.06	0.06	0.06	0.00	0.06
Sat Flow, veh/h	1810	3627	66	1810	3686	16	1420	108	1512	1396	0	1578
Grp Volume(v), veh/h	20	973	1024	29	659	693	14	0	30	9	0	10
Grp Sat Flow(s),veh/h/ln	1810	1805	1888	1810	1805	1897	1420	0	1619	1396	0	1578
Q Serve(g_s), s	1.0	26.3	26.6	1.7	0.0	0.0	1.0	0.0	2.0	0.7	0.0	0.7
Cycle Q Clear(g_c), s	1.0	26.3	26.6	1.7	0.0	0.0	1.7	0.0	2.0	2.6	0.0	0.7
Prop In Lane	1.00		0.04	1.00		0.01	1.00		0.93	1.00		1.00
Lane Grp Cap(c), veh/h	307	1436	1503	68	1198	1259	139	0	93	121	0	91
V/C Ratio(X)	0.07	0.68	0.68	0.43	0.55	0.55	0.10	0.00	0.32	0.07	0.00	0.11
Avail Cap(c_a), veh/h	307	1436	1503	115	1198	1259	289	0	265	269	0	258
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.90	0.90	0.90	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.4	5.0	5.0	49.8	0.0	0.0	50.0	0.0	49.8	51.0	0.0	49.1
Incr Delay (d2), s/veh	0.1	2.6	2.5	3.8	1.6	1.6	0.3	0.0	2.0	0.3	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	8.1	8.6	0.8	0.5	0.5	0.4	0.0	0.8	0.2	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.4	7.6	7.5	53.6	1.6	1.6	50.3	0.0	51.7	51.3	0.0	49.7
LnGrp LOS	D	A	A	D	A	A	D	A	D	D	A	D
Approach Vol, veh/h	2017				1381				44			
Approach Delay, s/veh	7.9				2.7				51.3			
Approach LOS	A				A				D			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.1	91.5		10.3	22.7	77.0		10.3				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	7.0	73.0		18.0	7.0	73.0		18.0				
Max Q Clear Time (g_c+I1), s	3.7	28.6		4.6	3.0	2.0		4.0				
Green Ext Time (p_c), s	0.0	27.0		0.0	0.0	14.2		0.1				
Intersection Summary												
HCM 6th Ctrl Delay	6.6											
HCM 6th LOS	A											

HCM 6th Signalized Intersection Summary

Van Buren/Chicago Gasoline Station Project

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard

Existing NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	1794	119	29	1282	18	36	0	14	11	2	9
Future Volume (veh/h)	21	1794	119	29	1282	18	36	0	14	11	2	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	22	1869	124	30	1335	19	38	0	15	11	2	9
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	402	2035	907	369	1988	28	79	0	111	33	13	58
Arrive On Green	0.30	0.75	0.75	0.41	1.00	1.00	0.04	0.00	0.07	0.02	0.04	0.04
Sat Flow, veh/h	1810	3610	1609	1810	3644	52	1810	0	1610	1810	301	1355
Grp Volume(v), veh/h	22	1869	124	30	661	693	38	0	15	11	0	11
Grp Sat Flow(s),veh/h/ln	1810	1805	1609	1810	1805	1891	1810	0	1610	1810	0	1656
Q Serve(g_s), s	1.0	45.8	1.7	1.1	0.0	0.0	2.3	0.0	1.0	0.7	0.0	0.7
Cycle Q Clear(g_c), s	1.0	45.8	1.7	1.1	0.0	0.0	2.3	0.0	1.0	0.7	0.0	0.7
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		0.82
Lane Grp Cap(c), veh/h	402	2035	907	369	985	1031	79	0	111	33	0	71
V/C Ratio(X)	0.05	0.92	0.14	0.08	0.67	0.67	0.48	0.00	0.14	0.33	0.00	0.15
Avail Cap(c_a), veh/h	402	2035	907	369	985	1031	115	0	263	115	0	271
HCM Platoon Ratio	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.71	0.71	0.71	0.81	0.81	0.81	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.5	11.7	3.4	26.2	0.0	0.0	51.4	0.0	48.2	53.3	0.0	50.7
Incr Delay (d2), s/veh	0.0	6.1	0.2	0.1	3.0	2.8	4.5	0.0	0.6	5.8	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	13.1	0.8	0.5	0.8	0.8	1.1	0.0	0.4	0.4	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.5	17.8	3.6	26.3	3.0	2.8	55.8	0.0	48.7	59.2	0.0	51.7
LnGrp LOS	C	B	A	C	A	A	E	A	D	E	A	D
Approach Vol, veh/h	2015		1384				53		22			
Approach Delay, s/veh	17.1		3.4				53.8		55.4			
Approach LOS	B		A				D		E			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	26.5	66.0	8.8	8.7	28.5	64.0	6.0	11.5				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	7.0	62.0	7.0	18.0	9.0	60.0	7.0	18.0				
Max Q Clear Time (g_c+I), s	47.8	4.3	2.7	3.0	2.0	2.7	3.0					
Green Ext Time (p_c), s	0.0	11.3	0.0	0.0	0.0	13.9	0.0	0.0				

Intersection Summary

HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary 3: Dauchy Avenue & Van Buren Boulevard

Van Buren/Chicago Gasoline Station Project
Existing NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	1502	126	116	1196	20	99	41	45	41	22	34
Future Volume (veh/h)	93	1502	126	116	1196	20	99	41	45	41	22	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	96	1548	130	120	1233	21	102	42	46	42	23	35
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	401	2158	180	147	1805	803	259	72	79	199	132	111
Arrive On Green	0.29	0.85	0.85	0.08	0.50	0.50	0.06	0.09	0.09	0.05	0.07	0.07
Sat Flow, veh/h	1810	3373	281	1810	3610	1605	1810	826	904	1810	1900	1596
Grp Volume(v), veh/h	96	823	855	120	1233	21	102	0	88	42	23	35
Grp Sat Flow(s),veh/h/ln	1810	1805	1849	1810	1805	1605	1810	0	1730	1810	1900	1596
Q Serve(g_s), s	4.4	19.0	19.7	7.2	28.5	0.6	5.7	0.0	5.4	2.3	1.3	1.6
Cycle Q Clear(g_c), s	4.4	19.0	19.7	7.2	28.5	0.6	5.7	0.0	5.4	2.3	1.3	1.6
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.52	1.00		1.00
Lane Grp Cap(c), veh/h	401	1155	1183	147	1805	803	259	0	151	199	132	111
V/C Ratio(X)	0.24	0.71	0.72	0.81	0.68	0.03	0.39	0.00	0.58	0.21	0.17	0.32
Avail Cap(c_a), veh/h	401	1155	1183	165	1805	803	259	0	283	231	311	261
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.75	0.75	0.75	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	4.4	4.4	49.7	20.9	8.1	43.8	0.0	48.3	44.1	48.2	22.8
Incr Delay (d2), s/veh	0.2	2.8	2.9	23.9	2.1	0.1	1.0	0.0	3.6	0.5	0.6	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	4.3	4.5	4.2	12.1	0.3	2.6	0.0	2.5	1.1	0.6	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.0	7.2	7.3	73.6	23.0	8.2	44.8	0.0	51.8	44.6	48.8	24.4
LnGrp LOS	C	A	A	E	C	A	D	A	D	D	D	C
Approach Vol, veh/h	1774				1374				190		100	
Approach Delay, s/veh	8.6				27.2				48.0		38.5	
Approach LOS	A				C				D		D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.0	74.4	11.0	11.6	28.4	59.0	9.1	13.6				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	10.0	59.0	7.0	18.0	14.0	55.0	7.0	18.0				
Max Q Clear Time (g_c+I), s	19.2	21.7	7.7	3.6	6.4	30.5	4.3	7.4				
Green Ext Time (p_c), s	0.0	18.3	0.0	0.1	0.1	10.4	0.0	0.3				

Intersection Summary

HCM 6th Ctrl Delay	19.1
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary

1: Gamble Avenue & Van Buren Boulevard

Van Buren/Chicago Gasoline Station Project

Existing WP - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1207	124	35	1892	6	118	3	29	9	2	8
Future Volume (veh/h)	5	1207	124	35	1892	6	118	3	29	9	2	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	6	1372	141	40	2150	7	134	3	33	10	2	9
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	19	2259	231	182	2854	9	217	16	174	194	35	157
Arrive On Green	0.01	0.68	0.68	0.13	1.00	1.00	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1810	3306	338	1810	3691	12	1426	136	1495	1394	301	1355
Grp Volume(v), veh/h	6	746	767	40	1051	1106	134	0	36	10	0	11
Grp Sat Flow(s),veh/h/ln	1810	1805	1839	1810	1805	1898	1426	0	1631	1394	0	1656
Q Serve(g_s), s	0.4	26.7	27.2	2.4	0.0	0.0	11.1	0.0	2.4	0.8	0.0	0.7
Cycle Q Clear(g_c), s	0.4	26.7	27.2	2.4	0.0	0.0	11.8	0.0	2.4	3.2	0.0	0.7
Prop In Lane	1.00		0.18	1.00		0.01	1.00		0.92	1.00		0.82
Lane Grp Cap(c), veh/h	19	1233	1257	182	1396	1467	217	0	190	194	0	192
V/C Ratio(X)	0.31	0.60	0.61	0.22	0.75	0.75	0.62	0.00	0.19	0.05	0.00	0.06
Avail Cap(c_a), veh/h	106	1233	1257	182	1396	1467	265	0	245	241	0	248
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.49	0.49	0.49	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.9	10.3	10.3	47.8	0.0	0.0	52.4	0.0	47.9	49.4	0.0	47.2
Incr Delay (d2), s/veh	9.0	2.2	2.2	0.3	1.9	1.8	2.9	0.0	0.5	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	10.5	10.9	1.1	0.7	0.7	4.1	0.0	1.0	0.3	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.0	12.5	12.5	48.1	1.9	1.8	55.4	0.0	48.4	49.5	0.0	47.3
LnGrp LOS	E	B	B	D	A	A	E	A	D	D	A	D
Approach Vol, veh/h	1519				2197				170			
Approach Delay, s/veh	12.7				2.7				53.9			
Approach LOS	B				A				D			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.1	86.0		17.9	5.3	96.8		17.9				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	8.0	82.0		18.0	7.0	83.0		18.0				
Max Q Clear Time (g_c+I1), s	4.4	29.2		5.2	2.4	2.0		13.8				
Green Ext Time (p_c), s	0.0	17.2		0.0	0.0	43.8		0.2				
Intersection Summary												
HCM 6th Ctrl Delay	9.1											
HCM 6th LOS	A											

HCM 6th Signalized Intersection Summary

Van Buren/Chicago Gasoline Station Project

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard

Existing WP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	1149	54	74	1789	3	106	20	93	49	17	5
Future Volume (veh/h)	61	1149	54	74	1789	3	106	20	93	49	17	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	67	1263	59	81	1966	3	116	22	102	54	19	5
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	94	1865	830	375	2485	4	142	27	126	88	93	25
Arrive On Green	0.03	0.35	0.35	0.41	1.00	1.00	0.08	0.09	0.09	0.05	0.06	0.06
Sat Flow, veh/h	1810	3610	1605	1810	3698	6	1810	290	1345	1810	1450	382
Grp Volume(v), veh/h	67	1263	59	81	959	1010	116	0	124	54	0	24
Grp Sat Flow(s),veh/h/ln	1810	1805	1605	1810	1805	1899	1810	0	1635	1810	0	1831
Q Serve(g_s), s	4.4	35.9	2.1	3.5	0.0	0.0	7.6	0.0	8.9	3.5	0.0	1.5
Cycle Q Clear(g_c), s	4.4	35.9	2.1	3.5	0.0	0.0	7.6	0.0	8.9	3.5	0.0	1.5
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.82	1.00		0.21
Lane Grp Cap(c), veh/h	94	1865	830	375	1213	1276	142	0	154	88	0	118
V/C Ratio(X)	0.71	0.68	0.07	0.22	0.79	0.79	0.82	0.00	0.81	0.61	0.00	0.20
Avail Cap(c_a), veh/h	106	1865	830	375	1213	1276	151	0	259	136	0	275
HCM Platoon Ratio	0.67	0.67	0.67	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.79	0.79	0.79	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.0	30.7	9.8	28.8	0.0	0.0	54.5	0.0	53.3	56.0	0.0	53.2
Incr Delay (d2), s/veh	14.3	1.6	0.1	0.3	5.3	5.1	27.5	0.0	9.6	6.7	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	16.8	1.1	1.5	1.8	1.8	4.5	0.0	4.1	1.8	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.3	32.3	9.9	29.1	5.3	5.1	82.0	0.0	62.9	62.7	0.0	54.1
LnGrp LOS	E	C	A	C	A	A	F	A	E	E	A	D
Approach Vol, veh/h	1389			2050			240			78		
Approach Delay, s/veh	33.2			6.1			72.1			60.0		
Approach LOS	C			A			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	28.9	66.0	13.4	11.7	10.2	84.6	9.8	15.3				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	14.0	62.0	10.0	18.0	7.0	69.0	9.0	19.0				
Max Q Clear Time (g_c+I), s	15.5	37.9	9.6	3.5	6.4	2.0	5.5	10.9				
Green Ext Time (p_c), s	0.1	10.8	0.0	0.0	0.0	32.3	0.0	0.3				

Intersection Summary

HCM 6th Ctrl Delay	21.5
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary 3: Dauchy Avenue & Van Buren Boulevard

Van Buren/Chicago Gasoline Station Project
Existing WP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	989	160	126	1415	13	256	37	121	35	36	26
Future Volume (veh/h)	23	989	160	126	1415	13	256	37	121	35	36	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	25	1087	176	138	1555	14	281	41	133	38	40	29
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	60	1452	235	356	2277	1015	372	63	205	211	117	98
Arrive On Green	0.07	0.93	0.93	0.20	0.63	0.63	0.14	0.16	0.16	0.04	0.06	0.06
Sat Flow, veh/h	1810	3111	503	1810	3610	1609	1810	393	1275	1810	1900	1602
Grp Volume(v), veh/h	25	629	634	138	1555	14	281	0	174	38	40	29
Grp Sat Flow(s),veh/h/ln	1810	1805	1809	1810	1805	1609	1810	0	1668	1810	1900	1602
Q Serve(g_s), s	1.6	9.2	9.4	8.0	33.5	0.4	17.0	0.0	11.7	2.3	2.4	2.1
Cycle Q Clear(g_c), s	1.6	9.2	9.4	8.0	33.5	0.4	17.0	0.0	11.7	2.3	2.4	2.1
Prop In Lane	1.00		0.28	1.00		1.00	1.00		0.76	1.00		1.00
Lane Grp Cap(c), veh/h	60	842	844	356	2277	1015	372	0	269	211	117	98
V/C Ratio(X)	0.42	0.75	0.75	0.39	0.68	0.01	0.76	0.00	0.65	0.18	0.34	0.29
Avail Cap(c_a), veh/h	106	842	844	356	2277	1015	372	0	389	241	285	240
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.9	2.4	2.4	41.9	14.4	8.3	43.4	0.0	47.1	49.3	54.0	53.8
Incr Delay (d2), s/veh	4.6	6.0	6.1	0.7	1.7	0.0	8.6	0.0	2.6	0.4	1.7	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	2.6	2.7	3.6	13.4	0.1	8.6	0.0	5.1	1.1	1.2	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.6	8.4	8.5	42.6	16.1	8.3	52.0	0.0	49.8	49.7	55.7	55.5
LnGrp LOS	E	A	A	D	B	A	D	A	D	D	E	E
Approach Vol, veh/h	1288			1707			455			107		
Approach Delay, s/veh	9.5			18.1			51.1			53.5		
Approach LOS	A			B			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	27.6	60.0	21.0	11.4	8.0	79.7	9.0	23.3				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	13.0	56.0	17.0	18.0	7.0	62.0	7.0	28.0				
Max Q Clear Time (g_c+110), s	11.0	11.4	19.0	4.4	3.6	35.5	4.3	13.7				
Green Ext Time (p_c), s	0.1	12.0	0.0	0.2	0.0	14.5	0.0	0.8				

Intersection Summary

HCM 6th Ctrl Delay 20.3
HCM 6th LOS C

HCM 6th TWSC
4: Chicago Avenue & Project Driveway 1

Van Buren/Chicago Gasoline Station Project
Existing WP - AM Peak Hour

Intersection						
Int Delay, s/veh	3.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	55	4	30	54	4	16
Future Vol, veh/h	55	4	30	54	4	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	55	4	30	54	4	16
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	81	57	0	0	84	0
Stage 1	57	-	-	-	-	-
Stage 2	24	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	926	1015	-	-	1526	-
Stage 1	971	-	-	-	-	-
Stage 2	1004	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	923	1015	-	-	1526	-
Mov Cap-2 Maneuver	923	-	-	-	-	-
Stage 1	971	-	-	-	-	-
Stage 2	1001	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	9.1	0	1.5			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	929	1526	-	
HCM Lane V/C Ratio	-	-	0.064	0.003	-	
HCM Control Delay (s)	-	-	9.1	7.4	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

HCM 6th TWSC
5: Van Buren Boulevard & Project Driveway 2

Van Buren/Chicago Gasoline Station Project
Existing WP - AM Peak Hour

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↗
Traffic Vol, veh/h	0	1291	1825	45	0	40
Future Vol, veh/h	0	1291	1825	45	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1291	1825	45	0	40
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	935
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	271
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	271
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		20.6		
HCM LOS				C		
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	271		
HCM Lane V/C Ratio	-	-	-	0.148		
HCM Control Delay (s)	-	-	-	20.6		
HCM Lane LOS	-	-	-	C		
HCM 95th %tile Q(veh)	-	-	-	0.5		

HCM 6th Signalized Intersection Summary

1: Gamble Avenue & Van Buren Boulevard

Van Buren/Chicago Gasoline Station Project

Existing WP - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	1923	35	32	1327	10	14	2	31	13	0	10
Future Volume (veh/h)	19	1923	35	32	1327	10	14	2	31	13	0	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	20	1982	36	33	1368	10	14	2	32	13	0	10
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	303	2869	52	73	2438	18	142	6	91	120	0	94
Arrive On Green	0.17	0.79	0.79	0.08	1.00	1.00	0.06	0.06	0.06	0.06	0.00	0.06
Sat Flow, veh/h	1810	3627	66	1810	3673	27	1420	95	1522	1391	0	1578
Grp Volume(v), veh/h	20	983	1035	33	672	706	14	0	34	13	0	10
Grp Sat Flow(s),veh/h/ln	1810	1805	1888	1810	1805	1895	1420	0	1617	1391	0	1578
Q Serve(g_s), s	1.0	27.5	27.9	1.9	0.0	0.0	1.0	0.0	2.2	1.0	0.0	0.7
Cycle Q Clear(g_c), s	1.0	27.5	27.9	1.9	0.0	0.0	1.7	0.0	2.2	3.2	0.0	0.7
Prop In Lane	1.00		0.03	1.00		0.01	1.00		0.94	1.00		1.00
Lane Grp Cap(c), veh/h	303	1427	1493	73	1198	1258	142	0	96	120	0	94
V/C Ratio(X)	0.07	0.69	0.69	0.45	0.56	0.56	0.10	0.00	0.35	0.11	0.00	0.11
Avail Cap(c_a), veh/h	303	1427	1493	115	1198	1258	289	0	265	265	0	258
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.84	0.84	0.84	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.5	5.3	5.3	49.4	0.0	0.0	49.7	0.0	49.7	51.2	0.0	48.9
Incr Delay (d2), s/veh	0.1	2.7	2.7	3.6	1.6	1.5	0.3	0.0	2.2	0.4	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	8.7	9.2	0.9	0.5	0.5	0.4	0.0	1.0	0.4	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.6	8.0	8.0	53.0	1.6	1.5	50.0	0.0	51.9	51.6	0.0	49.4
LnGrp LOS	D	A	A	D	A	A	D	A	D	D	A	D
Approach Vol, veh/h	2038		1411				48				23	
Approach Delay, s/veh	8.3		2.8				51.3				50.7	
Approach LOS	A		A				D				D	
Timer - Assigned Phs	1	2	4		5	6	8					
Phs Duration (G+Y+Rc), s	8.4	91.0	10.6		22.4	77.0	10.6					
Change Period (Y+Rc), s	4.0	4.0	4.0		4.0	4.0	4.0					
Max Green Setting (Gmax), s	7.0	73.0	18.0		7.0	73.0	18.0					
Max Q Clear Time (g_c+I1), s	3.9	29.9	5.2		3.0	2.0	4.2					
Green Ext Time (p_c), s	0.0	27.0	0.0		0.0	14.7	0.1					
Intersection Summary												
HCM 6th Ctrl Delay			6.9									
HCM 6th LOS			A									

HCM 6th Signalized Intersection Summary

Van Buren/Chicago Gasoline Station Project

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard

Existing WP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	1778	118	29	1311	18	36	17	14	59	19	9
Future Volume (veh/h)	68	1778	118	29	1311	18	36	17	14	59	19	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	71	1852	123	30	1366	19	38	18	15	61	20	9
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	352	2035	907	319	1988	28	79	58	48	97	88	39
Arrive On Green	0.19	0.56	0.56	0.35	1.00	1.00	0.04	0.06	0.06	0.05	0.07	0.07
Sat Flow, veh/h	1810	3610	1609	1810	3645	51	1810	958	798	1810	1241	558
Grp Volume(v), veh/h	71	1852	123	30	676	709	38	0	33	61	0	29
Grp Sat Flow(s),veh/h/ln	1810	1805	1609	1810	1805	1891	1810	0	1756	1810	0	1799
Q Serve(g_s), s	3.6	50.6	2.9	1.2	0.0	0.0	2.3	0.0	2.0	3.6	0.0	1.7
Cycle Q Clear(g_c), s	3.6	50.6	2.9	1.2	0.0	0.0	2.3	0.0	2.0	3.6	0.0	1.7
Prop In Lane	1.00		1.00	1.00		0.03	1.00		0.45	1.00		0.31
Lane Grp Cap(c), veh/h	352	2035	907	319	985	1031	79	0	107	97	0	127
V/C Ratio(X)	0.20	0.91	0.14	0.09	0.69	0.69	0.48	0.00	0.31	0.63	0.00	0.23
Avail Cap(c_a), veh/h	352	2035	907	319	985	1031	115	0	287	115	0	294
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.70	0.70	0.70	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.1	21.5	6.1	29.7	0.0	0.0	51.4	0.0	49.5	51.0	0.0	48.3
Incr Delay (d2), s/veh	0.2	5.5	0.2	0.1	3.9	3.7	4.5	0.0	1.6	7.8	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	21.4	1.4	0.5	1.1	1.1	1.1	0.0	0.9	1.9	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.3	27.0	6.3	29.8	3.9	3.7	55.8	0.0	51.1	58.8	0.0	49.2
LnGrp LOS	D	C	A	C	A	A	E	A	D	E	A	D
Approach Vol, veh/h	2046		1415				71		90			
Approach Delay, s/veh	26.1		4.4				53.6		55.7			
Approach LOS	C		A				D		E			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	23.4	66.0	8.8	11.8	25.4	64.0	9.9	10.7				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	7.0	62.0	7.0	18.0	9.0	60.0	7.0	18.0				
Max Q Clear Time (g_c+1/3), s	13.2	52.6	4.3	3.7	5.6	2.0	5.6	4.0				
Green Ext Time (p_c), s	0.0	7.9	0.0	0.1	0.0	14.6	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay	18.9
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary 3: Dauchy Avenue & Van Buren Boulevard

Van Buren/Chicago Gasoline Station Project
Existing WP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	1523	134	116	1217	20	108	41	45	41	22	38
Future Volume (veh/h)	97	1523	134	116	1217	20	108	41	45	41	22	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	100	1570	138	120	1255	21	111	42	46	42	23	39
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	401	2150	187	147	1805	803	259	72	79	199	132	111
Arrive On Green	0.29	0.85	0.85	0.08	0.50	0.50	0.06	0.09	0.09	0.05	0.07	0.07
Sat Flow, veh/h	1810	3359	293	1810	3610	1605	1810	826	904	1810	1900	1596
Grp Volume(v), veh/h	100	837	871	120	1255	21	111	0	88	42	23	39
Grp Sat Flow(s),veh/h/ln	1810	1805	1847	1810	1805	1605	1810	0	1730	1810	1900	1596
Q Serve(g_s), s	4.6	19.8	20.7	7.2	29.3	0.6	6.2	0.0	5.4	2.3	1.3	1.8
Cycle Q Clear(g_c), s	4.6	19.8	20.7	7.2	29.3	0.6	6.2	0.0	5.4	2.3	1.3	1.8
Prop In Lane	1.00		0.16	1.00		1.00	1.00		0.52	1.00		1.00
Lane Grp Cap(c), veh/h	401	1155	1182	147	1805	803	259	0	151	199	132	111
V/C Ratio(X)	0.25	0.72	0.74	0.81	0.70	0.03	0.43	0.00	0.58	0.21	0.17	0.35
Avail Cap(c_a), veh/h	401	1155	1182	165	1805	803	259	0	283	231	311	261
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	4.4	4.5	49.7	21.1	8.1	44.0	0.0	48.3	44.1	48.2	22.8
Incr Delay (d2), s/veh	0.3	4.0	4.1	23.9	2.2	0.1	1.1	0.0	3.6	0.5	0.6	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	4.8	5.0	4.2	12.5	0.3	2.9	0.0	2.5	1.1	0.6	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.2	8.4	8.6	73.6	23.3	8.2	45.2	0.0	51.8	44.6	48.8	24.7
LnGrp LOS	C	A	A	E	C	A	D	A	D	D	D	C
Approach Vol, veh/h	1808			1396			199			104		
Approach Delay, s/veh	9.8			27.4			48.1			38.1		
Approach LOS	A			C			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	3.0	74.4	11.0	11.6	28.4	59.0	9.1	13.6				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	10.0	59.0	7.0	18.0	14.0	55.0	7.0	18.0				
Max Q Clear Time (g_c+I), s	19.2	22.7	8.2	3.8	6.6	31.3	4.3	7.4				
Green Ext Time (p_c), s	0.0	18.6	0.0	0.1	0.1	10.5	0.0	0.3				

Intersection Summary

HCM 6th Ctrl Delay	19.8
HCM 6th LOS	B

HCM 6th TWSC
4: Chicago Avenue & Project Driveway 1

Van Buren/Chicago Gasoline Station Project
Existing WP - PM Peak Hour

Intersection						
Int Delay, s/veh	3.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	65	4	39	64	4	22
Future Vol, veh/h	65	4	39	64	4	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	65	4	39	64	4	22
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	101	71	0	0	103	0
Stage 1	71	-	-	-	-	-
Stage 2	30	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	902	997	-	-	1502	-
Stage 1	957	-	-	-	-	-
Stage 2	998	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	899	997	-	-	1502	-
Mov Cap-2 Maneuver	899	-	-	-	-	-
Stage 1	957	-	-	-	-	-
Stage 2	995	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	9.3	0	1.1			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	904	1502	-	
HCM Lane V/C Ratio	-	-	0.076	0.003	-	
HCM Control Delay (s)	-	-	9.3	7.4	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

HCM 6th TWSC
5: Van Buren Boulevard & Project Driveway 2

Van Buren/Chicago Gasoline Station Project
Existing WP - PM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	1852	1317	46	0	40
Future Vol, veh/h	0	1852	1317	46	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1852	1317	46	0	40
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	682
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	397
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	397
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		15.1		
HCM LOS	C					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	397		
HCM Lane V/C Ratio	-	-	-	0.101		
HCM Control Delay (s)	-	-	-	15.1		
HCM Lane LOS	-	-	-	C		
HCM 95th %tile Q(veh)	-	-	-	0.3		

HCM 6th Signalized Intersection Summary

1: Gamble Avenue & Van Buren Boulevard

Van Buren/Chicago Gasoline Station Project
Project Completion (2021) WP - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1255	129	36	1967	6	123	3	30	9	2	8
Future Volume (veh/h)	5	1255	129	36	1967	6	123	3	30	9	2	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	6	1426	147	41	2235	7	140	3	34	10	2	9
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	19	2286	234	159	2839	9	223	16	180	199	36	163
Arrive On Green	0.01	0.69	0.69	0.12	1.00	1.00	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1810	3306	338	1810	3691	12	1426	132	1498	1393	301	1355
Grp Volume(v), veh/h	6	774	799	41	1092	1150	140	0	37	10	0	11
Grp Sat Flow(s),veh/h/ln	1810	1805	1839	1810	1805	1898	1426	0	1630	1393	0	1656
Q Serve(g_s), s	0.4	27.8	28.4	2.5	0.0	0.0	11.6	0.0	2.5	0.8	0.0	0.7
Cycle Q Clear(g_c), s	0.4	27.8	28.4	2.5	0.0	0.0	12.3	0.0	2.5	3.2	0.0	0.7
Prop In Lane	1.00		0.18	1.00		0.01	1.00		0.92	1.00		0.82
Lane Grp Cap(c), veh/h	19	1248	1272	159	1388	1460	223	0	196	199	0	199
V/C Ratio(X)	0.31	0.62	0.63	0.26	0.79	0.79	0.63	0.00	0.19	0.05	0.00	0.06
Avail Cap(c_a), veh/h	106	1248	1272	159	1388	1460	265	0	245	240	0	248
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.44	0.44	0.44	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.9	10.0	10.1	49.4	0.0	0.0	52.2	0.0	47.5	49.0	0.0	46.7
Incr Delay (d2), s/veh	9.0	2.3	2.4	0.4	2.1	2.0	3.4	0.0	0.5	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	10.8	11.3	1.1	0.8	0.8	4.3	0.0	1.0	0.3	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.0	12.3	12.4	49.8	2.1	2.0	55.6	0.0	48.0	49.1	0.0	46.9
LnGrp LOS	E	B	B	D	A	A	E	A	D	D	A	D
Approach Vol, veh/h	1579			2283			177			21		
Approach Delay, s/veh	12.6			2.9			54.0			47.9		
Approach LOS	B			A			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.6	87.0		18.4	5.3	96.3		18.4				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	7.0	83.0		18.0	7.0	83.0		18.0				
Max Q Clear Time (g_c+I1), s	4.5	30.4		5.2	2.4	2.0		14.3				
Green Ext Time (p_c), s	0.0	18.6		0.0	0.0	48.1		0.2				
Intersection Summary												
HCM 6th Ctrl Delay				9.1								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

Van Buren/Chicago Gasoline Station Project

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard Project Completion (2021) WP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	1195	56	77	1860	3	110	20	97	49	17	5
Future Volume (veh/h)	62	1195	56	77	1860	3	110	20	97	49	17	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	68	1313	62	85	2044	3	121	22	107	54	19	5
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	95	1715	762	445	2473	4	147	27	131	88	94	25
Arrive On Green	0.04	0.32	0.32	0.49	1.00	1.00	0.08	0.10	0.10	0.05	0.06	0.06
Sat Flow, veh/h	1810	3610	1605	1810	3699	5	1810	278	1355	1810	1450	382
Grp Volume(v), veh/h	68	1313	62	85	997	1050	121	0	129	54	0	24
Grp Sat Flow(s),veh/h/ln	1810	1805	1605	1810	1805	1899	1810	0	1633	1810	0	1831
Q Serve(g_s), s	4.5	39.3	2.3	3.2	0.0	0.0	7.9	0.0	9.3	3.5	0.0	1.5
Cycle Q Clear(g_c), s	4.5	39.3	2.3	3.2	0.0	0.0	7.9	0.0	9.3	3.5	0.0	1.5
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.83	1.00		0.21
Lane Grp Cap(c), veh/h	95	1715	762	445	1207	1270	147	0	159	88	0	118
V/C Ratio(X)	0.72	0.77	0.08	0.19	0.83	0.83	0.82	0.00	0.81	0.61	0.00	0.20
Avail Cap(c_a), veh/h	106	1715	762	445	1207	1270	151	0	259	136	0	275
HCM Platoon Ratio	0.67	0.67	0.67	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.77	0.77	0.77	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.0	34.9	11.7	23.8	0.0	0.0	54.3	0.0	53.1	56.0	0.0	53.2
Incr Delay (d2), s/veh	14.8	2.6	0.2	0.2	6.5	6.3	29.1	0.0	9.6	6.7	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	18.6	1.3	1.3	2.2	2.2	4.8	0.0	4.2	1.8	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.8	37.5	11.8	24.0	6.5	6.3	83.4	0.0	62.7	62.7	0.0	54.0
LnGrp LOS	E	D	B	C	A	A	F	A	E	E	A	D
Approach Vol, veh/h	1443		2132				250			78		
Approach Delay, s/veh	38.0		7.1				72.7			60.0		
Approach LOS	D		A				E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	33.5	61.0	13.7	11.8	10.3	84.2	9.8	15.6				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	19.0	57.0	10.0	18.0	7.0	69.0	9.0	19.0				
Max Q Clear Time (g_c+I), s	15.2	41.3	9.9	3.5	6.5	2.0	5.5	11.3				
Green Ext Time (p_c), s	0.1	8.8	0.0	0.0	0.0	35.3	0.0	0.4				

Intersection Summary

HCM 6th Ctrl Delay	23.8
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary 3: Dauchy Avenue & Van Buren Boulevard

Van Buren/Chicago Gasoline Station Project
Project Completion (2021) WP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	1028	166	131	1471	14	266	38	126	36	37	27
Future Volume (veh/h)	24	1028	166	131	1471	14	266	38	126	36	37	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	26	1130	182	144	1616	15	292	42	138	40	41	30
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	61	1453	233	356	2274	1013	371	62	205	209	117	98
Arrive On Green	0.07	0.93	0.93	0.20	0.63	0.63	0.14	0.16	0.16	0.04	0.06	0.06
Sat Flow, veh/h	1810	3114	500	1810	3610	1609	1810	389	1278	1810	1900	1602
Grp Volume(v), veh/h	26	653	659	144	1616	15	292	0	180	40	41	30
Grp Sat Flow(s),veh/h/ln	1810	1805	1809	1810	1805	1609	1810	0	1667	1810	1900	1602
Q Serve(g_s), s	1.7	10.5	10.7	8.3	36.0	0.4	17.0	0.0	12.2	2.4	2.5	2.1
Cycle Q Clear(g_c), s	1.7	10.5	10.7	8.3	36.0	0.4	17.0	0.0	12.2	2.4	2.5	2.1
Prop In Lane	1.00		0.28	1.00		1.00	1.00		0.77	1.00		1.00
Lane Grp Cap(c), veh/h	61	842	844	356	2274	1013	371	0	267	209	117	98
V/C Ratio(X)	0.42	0.78	0.78	0.40	0.71	0.01	0.79	0.00	0.67	0.19	0.35	0.30
Avail Cap(c_a), veh/h	106	842	844	356	2274	1013	371	0	389	237	285	240
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.8	2.5	2.5	42.0	14.9	8.3	43.9	0.0	47.4	49.2	54.0	53.9
Incr Delay (d2), s/veh	4.6	6.9	7.1	0.7	1.9	0.0	10.7	0.0	3.0	0.4	1.8	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	2.9	2.9	3.8	14.5	0.2	9.1	0.0	5.3	1.1	1.2	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.4	9.4	9.5	42.8	16.8	8.3	54.6	0.0	50.4	49.7	55.8	55.6
LnGrp LOS	E	A	A	D	B	A	D	A	D	D	E	E
Approach Vol, veh/h	1338				1775				472		111	
Approach Delay, s/veh	10.4				18.8				53.0		53.5	
Approach LOS	B				B				D		D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	27.6	60.0	21.0	11.4	8.1	79.6	9.2	23.2				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	13.0	56.0	17.0	18.0	7.0	62.0	7.0	28.0				
Max Q Clear Time (g_c+10), s	110.3	12.7	19.0	4.5	3.7	38.0	4.4	14.2				
Green Ext Time (p_c), s	0.1	12.8	0.0	0.2	0.0	14.3	0.0	0.8				

Intersection Summary

HCM 6th Ctrl Delay	21.2
HCM 6th LOS	C

HCM 6th TWSC
4: Chicago Avenue & Project Driveway 1

Van Buren/Chicago Gasoline Station Project
Project Completion (2021) WP - AM Peak Hour

Intersection						
Int Delay, s/veh	3.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	55	4	31	54	4	17
Future Vol, veh/h	55	4	31	54	4	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	55	4	31	54	4	17
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	83	58	0	0	85	0
Stage 1	58	-	-	-	-	-
Stage 2	25	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	924	1014	-	-	1524	-
Stage 1	970	-	-	-	-	-
Stage 2	1003	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	921	1014	-	-	1524	-
Mov Cap-2 Maneuver	921	-	-	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	1000	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9.1	0		1.4		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	927	1524	-	
HCM Lane V/C Ratio	-	-	0.064	0.003	-	
HCM Control Delay (s)	-	-	9.1	7.4	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

HCM 6th TWSC
5: Van Buren Boulevard & Project Driveway 2

Van Buren/Chicago Gasoline Station Project
Project Completion (2021) WP - AM Peak Hour

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	1341	1899	45	0	40
Future Vol, veh/h	0	1341	1899	45	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1341	1899	45	0	40
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	972
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	256
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	256
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		21.6		
HCM LOS				C		
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	256		
HCM Lane V/C Ratio	-	-	-	0.156		
HCM Control Delay (s)	-	-	-	21.6		
HCM Lane LOS	-	-	-	C		
HCM 95th %tile Q(veh)	-	-	-	0.5		

HCM 6th Signalized Intersection Summary

1: Gamble Avenue & Van Buren Boulevard

Van Buren/Chicago Gasoline Station Project
Project Completion (2021) WP - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	1999	36	33	1379	10	15	2	32	13	0	10
Future Volume (veh/h)	20	1999	36	33	1379	10	15	2	32	13	0	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	21	2061	37	34	1422	10	15	2	33	13	0	10
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	303	2865	51	74	2439	17	142	6	92	120	0	95
Arrive On Green	0.17	0.79	0.79	0.08	1.00	1.00	0.06	0.06	0.06	0.06	0.00	0.06
Sat Flow, veh/h	1810	3628	65	1810	3674	26	1420	92	1525	1390	0	1578
Grp Volume(v), veh/h	21	1022	1076	34	698	734	15	0	35	13	0	10
Grp Sat Flow(s),veh/h/ln	1810	1805	1888	1810	1805	1895	1420	0	1617	1390	0	1578
Q Serve(g_s), s	1.1	30.2	30.6	2.0	0.0	0.0	1.1	0.0	2.3	1.0	0.0	0.7
Cycle Q Clear(g_c), s	1.1	30.2	30.6	2.0	0.0	0.0	1.8	0.0	2.3	3.3	0.0	0.7
Prop In Lane	1.00		0.03	1.00		0.01	1.00		0.94	1.00		1.00
Lane Grp Cap(c), veh/h	303	1425	1491	74	1198	1258	142	0	97	120	0	95
V/C Ratio(X)	0.07	0.72	0.72	0.46	0.58	0.58	0.11	0.00	0.36	0.11	0.00	0.11
Avail Cap(c_a), veh/h	303	1425	1491	115	1198	1258	289	0	265	264	0	258
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.82	0.82	0.82	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.6	5.6	5.7	49.3	0.0	0.0	49.7	0.0	49.7	51.2	0.0	48.9
Incr Delay (d2), s/veh	0.1	3.1	3.1	3.6	1.7	1.6	0.3	0.0	2.2	0.4	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	9.6	10.1	0.9	0.6	0.6	0.4	0.0	1.0	0.4	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.7	8.7	8.7	52.9	1.7	1.6	50.1	0.0	51.9	51.6	0.0	49.4
LnGrp LOS	D	A	A	D	A	A	D	A	D	D	A	D
Approach Vol, veh/h	2119				1466				50		23	
Approach Delay, s/veh	9.0				2.9				51.3		50.7	
Approach LOS	A				A				D		D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	90.9		10.6	22.4	77.0		10.6				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	7.0	73.0		18.0	7.0	73.0		18.0				
Max Q Clear Time (g_c+I1), s	4.0	32.6		5.3	3.1	2.0		4.3				
Green Ext Time (p_c), s	0.0	27.5		0.0	0.0	15.9		0.1				
Intersection Summary												
HCM 6th Ctrl Delay	7.4											
HCM 6th LOS	A											

HCM 6th Signalized Intersection Summary

Van Buren/Chicago Gasoline Station Project

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard Project Completion (2021) WP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	1850	123	30	1362	19	37	17	15	59	19	9
Future Volume (veh/h)	69	1850	123	30	1362	19	37	17	15	59	19	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	72	1927	128	31	1419	20	39	18	16	61	20	9
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	352	2035	907	319	1988	28	80	56	50	97	87	39
Arrive On Green	0.19	0.56	0.56	0.35	1.00	1.00	0.04	0.06	0.06	0.05	0.07	0.07
Sat Flow, veh/h	1810	3610	1609	1810	3644	51	1810	927	824	1810	1241	558
Grp Volume(v), veh/h	72	1927	128	31	702	737	39	0	34	61	0	29
Grp Sat Flow(s),veh/h/ln	1810	1805	1609	1810	1805	1891	1810	0	1752	1810	0	1799
Q Serve(g_s), s	3.7	55.0	3.0	1.3	0.0	0.0	2.3	0.0	2.0	3.6	0.0	1.7
Cycle Q Clear(g_c), s	3.7	55.0	3.0	1.3	0.0	0.0	2.3	0.0	2.0	3.6	0.0	1.7
Prop In Lane	1.00		1.00	1.00		0.03	1.00		0.47	1.00		0.31
Lane Grp Cap(c), veh/h	352	2035	907	319	985	1031	80	0	107	97	0	126
V/C Ratio(X)	0.20	0.95	0.14	0.10	0.71	0.71	0.49	0.00	0.32	0.63	0.00	0.23
Avail Cap(c_a), veh/h	352	2035	907	319	985	1031	115	0	287	115	0	294
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.67	0.67	0.67	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.2	22.5	6.1	29.7	0.0	0.0	51.3	0.0	49.5	51.0	0.0	48.3
Incr Delay (d2), s/veh	0.2	7.9	0.2	0.1	4.4	4.2	4.5	0.0	1.7	7.8	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	23.8	1.5	0.6	1.2	1.2	1.1	0.0	0.9	1.9	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.4	30.4	6.3	29.9	4.4	4.2	55.8	0.0	51.2	58.8	0.0	49.2
LnGrp LOS	D	C	A	C	A	A	E	A	D	E	A	D
Approach Vol, veh/h	2127			1470			73			90		
Approach Delay, s/veh	29.2			4.8			53.7			55.7		
Approach LOS	C			A			D			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	23.4	66.0	8.9	11.7	25.4	64.0	9.9	10.7				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	7.0	62.0	7.0	18.0	9.0	60.0	7.0	18.0				
Max Q Clear Time (g_c+1/3), s	13.3	57.0	4.3	3.7	5.7	2.0	5.6	4.0				
Green Ext Time (p_c), s	0.0	4.5	0.0	0.1	0.0	15.7	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay	20.8
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary 3: Dauchy Avenue & Van Buren Boulevard

Van Buren/Chicago Gasoline Station Project
Project Completion (2021) WP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	1583	139	121	1265	21	112	43	47	43	23	39
Future Volume (veh/h)	101	1583	139	121	1265	21	112	43	47	43	23	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	104	1632	143	125	1304	22	115	44	48	44	24	40
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	401	2141	186	153	1805	803	258	71	78	196	132	111
Arrive On Green	0.29	0.85	0.85	0.08	0.50	0.50	0.06	0.09	0.09	0.05	0.07	0.07
Sat Flow, veh/h	1810	3361	291	1810	3610	1605	1810	827	903	1810	1900	1596
Grp Volume(v), veh/h	104	869	906	125	1304	22	115	0	92	44	24	40
Grp Sat Flow(s),veh/h/ln	1810	1805	1847	1810	1805	1605	1810	0	1730	1810	1900	1596
Q Serve(g_s), s	4.8	22.5	23.7	7.5	31.1	0.6	6.5	0.0	5.6	2.4	1.3	1.8
Cycle Q Clear(g_c), s	4.8	22.5	23.7	7.5	31.1	0.6	6.5	0.0	5.6	2.4	1.3	1.8
Prop In Lane	1.00		0.16	1.00		1.00	1.00		0.52	1.00		1.00
Lane Grp Cap(c), veh/h	401	1150	1177	153	1805	803	258	0	149	196	132	111
V/C Ratio(X)	0.26	0.76	0.77	0.82	0.72	0.03	0.45	0.00	0.62	0.22	0.18	0.36
Avail Cap(c_a), veh/h	401	1150	1177	165	1805	803	258	0	283	226	311	261
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.9	4.8	4.9	49.5	21.5	8.1	44.1	0.0	48.5	44.1	48.2	22.8
Incr Delay (d2), s/veh	0.3	4.6	4.9	25.3	2.5	0.1	1.2	0.0	4.1	0.6	0.7	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	5.3	5.6	4.4	13.3	0.3	3.0	0.0	2.6	1.1	0.6	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.3	9.4	9.8	74.9	24.1	8.1	45.3	0.0	52.6	44.6	48.9	24.8
LnGrp LOS	C	A	A	E	C	A	D	A	D	D	D	C
Approach Vol, veh/h	1879			1451			207			108		
Approach Delay, s/veh	10.8			28.2			48.6			38.2		
Approach LOS	B			C			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	3.3	74.1	11.0	11.7	28.3	59.0	9.2	13.5				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	10.0	59.0	7.0	18.0	14.0	55.0	7.0	18.0				
Max Q Clear Time (g_c+I), s	19.5	25.7	8.5	3.8	6.8	33.1	4.4	7.6				
Green Ext Time (p_c), s	0.0	18.9	0.0	0.1	0.1	10.5	0.0	0.3				

Intersection Summary

HCM 6th Ctrl Delay	20.7
HCM 6th LOS	C

HCM 6th TWSC
4: Chicago Avenue & Project Driveway 1

Van Buren/Chicago Gasoline Station Project
Project Completion (2021) WP - PM Peak Hour

Intersection						
Int Delay, s/veh	3.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	65	4	41	64	4	23
Future Vol, veh/h	65	4	41	64	4	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	65	4	41	64	4	23
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	104	73	0	0	105	0
Stage 1	73	-	-	-	-	-
Stage 2	31	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	899	995	-	-	1499	-
Stage 1	955	-	-	-	-	-
Stage 2	997	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	896	995	-	-	1499	-
Mov Cap-2 Maneuver	896	-	-	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	994	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	9.3	0	1.1			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	901	1499	-	
HCM Lane V/C Ratio	-	-	0.077	0.003	-	
HCM Control Delay (s)	-	-	9.3	7.4	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

HCM 6th TWSC
5: Van Buren Boulevard & Project Driveway 2

Van Buren/Chicago Gasoline Station Project
Project Completion (2021) WP - PM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↗
Traffic Vol, veh/h	0	1925	1370	46	0	40
Future Vol, veh/h	0	1925	1370	46	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1925	1370	46	0	40
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	708
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	382
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	382
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		15.5		
HCM LOS				C		
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	382		
HCM Lane V/C Ratio	-	-	-	0.105		
HCM Control Delay (s)	-	-	-	15.5		
HCM Lane LOS	-	-	-	C		
HCM 95th %tile Q(veh)	-	-	-	0.3		

HCM 6th Signalized Intersection Summary

1: Gamble Avenue & Van Buren Boulevard

Van Buren/Chicago Gasoline Station Project

Cumulative WP - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	1379	129	38	2070	21	123	8	32	23	7	28
Future Volume (veh/h)	26	1379	129	38	2070	21	123	8	32	23	7	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	30	1567	147	43	2352	24	140	9	36	26	8	32
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	67	2309	215	128	2656	27	222	46	183	217	46	183
Arrive On Green	0.04	0.69	0.69	0.09	0.96	0.96	0.14	0.14	0.14	0.14	0.14	0.14
Sat Flow, veh/h	1810	3339	310	1810	3661	37	1389	332	1329	1383	332	1329
Grp Volume(v), veh/h	30	840	874	43	1158	1218	140	0	45	26	0	40
Grp Sat Flow(s),veh/h/ln	1810	1805	1844	1810	1805	1893	1389	0	1661	1383	0	1661
Q Serve(g_s), s	1.9	32.2	33.3	2.7	18.4	18.9	11.9	0.0	2.9	2.0	0.0	2.6
Cycle Q Clear(g_c), s	1.9	32.2	33.3	2.7	18.4	18.9	14.4	0.0	2.9	4.9	0.0	2.6
Prop In Lane	1.00		0.17	1.00		0.02	1.00		0.80	1.00		0.80
Lane Grp Cap(c), veh/h	67	1248	1276	128	1309	1373	222	0	229	217	0	229
V/C Ratio(X)	0.45	0.67	0.68	0.34	0.88	0.89	0.63	0.00	0.20	0.12	0.00	0.17
Avail Cap(c_a), veh/h	106	1248	1276	128	1309	1373	239	0	249	234	0	249
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.33	0.33	0.33	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.6	10.7	10.8	51.7	0.9	0.9	52.1	0.0	45.9	48.0	0.0	45.7
Incr Delay (d2), s/veh	4.7	2.9	3.0	0.5	3.3	3.2	4.8	0.0	0.4	0.2	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	12.6	13.3	1.2	2.2	2.3	4.4	0.0	1.2	0.7	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.3	13.6	13.8	52.2	4.2	4.1	56.8	0.0	46.3	48.3	0.0	46.1
LnGrp LOS	E	B	B	D	A	A	E	A	D	D	A	D
Approach Vol, veh/h	1744			2419			185			66		
Approach Delay, s/veh	14.5			5.0			54.3			46.9		
Approach LOS	B			A			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.5	87.0		20.5	8.4	91.0		20.5				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	7.0	83.0		18.0	7.0	83.0		18.0				
Max Q Clear Time (g_c+I1), s	4.7	35.3		6.9	3.9	20.9		16.4				
Green Ext Time (p_c), s	0.0	21.2		0.1	0.0	45.6		0.1				
Intersection Summary												
HCM 6th Ctrl Delay				11.5								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary

Van Buren/Chicago Gasoline Station Project

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard

Cumulative WP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	1316	74	116	1962	11	128	25	142	56	22	5
Future Volume (veh/h)	62	1316	74	116	1962	11	128	25	142	56	22	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No		No				No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	68	1446	81	127	2156	12	141	27	156	62	24	5
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	95	1865	830	307	2333	13	151	31	180	92	148	31
Arrive On Green	0.05	0.52	0.52	0.34	1.00	1.00	0.08	0.13	0.13	0.05	0.10	0.10
Sat Flow, veh/h	1810	3610	1605	1810	3681	20	1810	240	1387	1810	1525	318
Grp Volume(v), veh/h	68	1446	81	127	1056	1112	141	0	183	62	0	29
Grp Sat Flow(s),veh/h/ln	1810	1805	1605	1810	1805	1896	1810	0	1628	1810	0	1843
Q Serve(g_s), s	4.4	38.8	2.1	6.5	0.0	0.0	9.3	0.0	13.2	4.0	0.0	1.7
Cycle Q Clear(g_c), s	4.4	38.8	2.1	6.5	0.0	0.0	9.3	0.0	13.2	4.0	0.0	1.7
Prop In Lane	1.00		1.00	1.00		0.01	1.00		0.85	1.00		0.17
Lane Grp Cap(c), veh/h	95	1865	830	307	1144	1202	151	0	211	92	0	179
V/C Ratio(X)	0.72	0.78	0.10	0.41	0.92	0.93	0.94	0.00	0.87	0.67	0.00	0.16
Avail Cap(c_a), veh/h	106	1865	830	307	1144	1202	151	0	258	136	0	276
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.71	0.71	0.71	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.0	23.4	7.0	35.1	0.0	0.0	54.7	0.0	51.2	56.0	0.0	49.7
Incr Delay (d2), s/veh	13.8	2.3	0.2	0.9	13.6	13.3	54.1	0.0	22.2	8.2	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	16.5	1.1	2.7	4.3	4.4	6.5	0.0	6.7	2.1	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.8	25.7	7.2	36.0	13.6	13.3	108.8	0.0	73.4	64.2	0.0	50.1
LnGrp LOS	E	C	A	D	B	B	F	A	E	E	A	D
Approach Vol, veh/h	1595				2295		324				91	
Approach Delay, s/veh	26.6				14.7		88.8				59.7	
Approach LOS	C				B		F				E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	24.3	66.0	14.0	15.7	10.3	80.1	10.1	19.6				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	14.0	62.0	10.0	18.0	7.0	69.0	9.0	19.0				
Max Q Clear Time (g_c+I), s	10.5	40.8	11.3	3.7	6.4	2.0	6.0	15.2				
Green Ext Time (p_c), s	0.1	11.9	0.0	0.1	0.0	40.1	0.0	0.3				

Intersection Summary

HCM 6th Ctrl Delay	25.6
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary 3: Dauchy Avenue & Van Buren Boulevard

Van Buren/Chicago Gasoline Station Project
Cumulative WP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	1159	196	160	1601	50	296	52	155	74	52	58
Future Volume (veh/h)	54	1159	196	160	1601	50	296	52	155	74	52	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	59	1274	215	176	1759	55	325	57	170	81	57	64
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	91	1444	242	342	2185	974	369	66	196	187	132	111
Arrive On Green	0.10	0.93	0.93	0.19	0.61	0.61	0.14	0.16	0.16	0.05	0.07	0.07
Sat Flow, veh/h	1810	3093	518	1810	3610	1609	1810	420	1252	1810	1900	1603
Grp Volume(v), veh/h	59	739	750	176	1759	55	325	0	227	81	57	64
Grp Sat Flow(s), veh/h/ln	1810	1805	1806	1810	1805	1609	1810	0	1672	1810	1900	1603
Q Serve(g_s), s	3.8	18.1	19.6	10.5	45.0	1.7	17.0	0.0	15.9	4.9	3.5	4.6
Cycle Q Clear(g_c), s	3.8	18.1	19.6	10.5	45.0	1.7	17.0	0.0	15.9	4.9	3.5	4.6
Prop In Lane	1.00		0.29	1.00		1.00	1.00		0.75	1.00		1.00
Lane Grp Cap(c), veh/h	91	842	843	342	2185	974	369	0	262	187	132	111
V/C Ratio(X)	0.65	0.88	0.89	0.52	0.80	0.06	0.88	0.00	0.87	0.43	0.43	0.57
Avail Cap(c_a), veh/h	106	842	843	342	2185	974	369	0	390	194	285	240
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.0	2.7	2.8	43.7	18.2	9.7	44.7	0.0	49.4	48.3	53.6	54.1
Incr Delay (d2), s/veh	10.6	12.5	13.5	1.3	3.3	0.1	21.1	0.0	12.6	1.6	2.2	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	4.4	4.6	4.8	18.6	0.6	3.4	0.0	7.5	2.3	1.7	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.6	15.2	16.3	45.1	21.5	9.8	65.8	0.0	62.0	49.9	55.8	58.7
LnGrp LOS	E	B	B	D	C	A	E	A	E	D	E	E
Approach Vol, veh/h	1548			1990			552			202		
Approach Delay, s/veh	17.6			23.3			64.3			54.4		
Approach LOS	B			C			E			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	26.7	60.0	21.0	12.3	10.0	76.6	10.5	22.8				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	13.0	56.0	17.0	18.0	7.0	62.0	7.0	28.0				
Max Q Clear Time (g_c+1/2), s	12.5	21.6	19.0	6.6	5.8	47.0	6.9	17.9				
Green Ext Time (p_c), s	0.0	14.7	0.0	0.3	0.0	11.1	0.0	0.9				

Intersection Summary

HCM 6th Ctrl Delay	28.0
HCM 6th LOS	C

HCM 6th TWSC
4: Chicago Avenue & Project Driveway 1

Van Buren/Chicago Gasoline Station Project
Cumulative WP - AM Peak Hour

Intersection						
Int Delay, s/veh	3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	55	4	44	54	4	29
Future Vol, veh/h	55	4	44	54	4	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	55	4	44	54	4	29
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	108	71	0	0	98	0
Stage 1	71	-	-	-	-	-
Stage 2	37	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	894	997	-	-	1508	-
Stage 1	957	-	-	-	-	-
Stage 2	991	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	891	997	-	-	1508	-
Mov Cap-2 Maneuver	891	-	-	-	-	-
Stage 1	957	-	-	-	-	-
Stage 2	988	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9.3	0		0.9		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	897	1508	-	
HCM Lane V/C Ratio	-	-	0.066	0.003	-	
HCM Control Delay (s)	-	-	9.3	7.4	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0.2	0	-	

HCM 6th TWSC
5: Van Buren Boulevard & Project Driveway 2

Van Buren/Chicago Gasoline Station Project
Cumulative WP - AM Peak Hour

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	1516	2048	45	0	40
Future Vol, veh/h	0	1516	2048	45	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1516	2048	45	0	40
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	-	0	-	0	-	1047
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	228
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	228
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		24.1		
HCM LOS				C		
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	228		
HCM Lane V/C Ratio	-	-	-	0.175		
HCM Control Delay (s)	-	-	-	24.1		
HCM Lane LOS	-	-	-	C		
HCM 95th %tile Q(veh)	-	-	-	0.6		

HCM 6th Signalized Intersection Summary 1: Gamble Avenue & Van Buren Boulevard

Van Buren/Chicago Gasoline Station Project
Cumulative (2021) WP - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	2102	36	35	1496	23	15	7	34	25	5	28
Future Volume (veh/h)	38	2102	36	35	1496	23	15	7	34	25	5	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	39	2167	37	36	1542	24	15	7	35	26	5	29
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	294	2846	48	77	2414	38	128	18	89	121	15	90
Arrive On Green	0.16	0.78	0.78	0.08	1.00	1.00	0.06	0.06	0.06	0.06	0.06	0.06
Sat Flow, veh/h	1810	3632	62	1810	3638	57	1391	274	1371	1381	238	1380
Grp Volume(v), veh/h	39	1074	1130	36	764	802	15	0	42	26	0	34
Grp Sat Flow(s),veh/h/ln	1810	1805	1889	1810	1805	1890	1391	0	1646	1381	0	1618
Q Serve(g_s), s	2.0	35.0	35.5	2.1	0.0	0.0	1.1	0.0	2.7	2.0	0.0	2.2
Cycle Q Clear(g_c), s	2.0	35.0	35.5	2.1	0.0	0.0	3.4	0.0	2.7	4.7	0.0	2.2
Prop In Lane	1.00		0.03	1.00		0.03	1.00		0.83	1.00		0.85
Lane Grp Cap(c), veh/h	294	1414	1480	77	1198	1254	128	0	107	121	0	105
V/C Ratio(X)	0.13	0.76	0.76	0.47	0.64	0.64	0.12	0.00	0.39	0.21	0.00	0.32
Avail Cap(c_a), veh/h	294	1414	1480	115	1198	1254	265	0	269	258	0	265
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.76	0.76	0.76	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.4	6.4	6.4	49.1	0.0	0.0	50.7	0.0	49.3	51.6	0.0	49.1
Incr Delay (d2), s/veh	0.2	3.9	3.8	3.3	2.0	1.9	0.4	0.0	2.3	0.9	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	11.5	12.1	1.0	0.7	0.7	0.4	0.0	1.2	0.7	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.6	10.2	10.2	52.5	2.0	1.9	51.1	0.0	51.7	52.5	0.0	50.9
LnGrp LOS	D	B	B	D	A	A	D	A	D	D	A	D
Approach Vol, veh/h	2243				1602				57			
Approach Delay, s/veh	10.7				3.1				51.5			
Approach LOS	B				A				D			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.7	90.2		11.1	21.9	77.0		11.1				
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	7.0	73.0		18.0	7.0	73.0		18.0				
Max Q Clear Time (g_c+I1), s	4.1	37.5		6.7	4.0	2.0		5.4				
Green Ext Time (p_c), s	0.0	26.9		0.1	0.0	19.4		0.1				
Intersection Summary												
HCM 6th Ctrl Delay	8.8											
HCM 6th LOS	A											

HCM 6th Signalized Intersection Summary

Van Buren/Chicago Gasoline Station Project

2: Alta Cresta Avenue/Chicago Avenue & Van Buren Boulevard

Cumulative (2021) WP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	1951	139	70	1477	26	53	22	50	67	24	9
Future Volume (veh/h)	69	1951	139	70	1477	26	53	22	50	67	24	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	72	2032	145	73	1539	27	55	23	52	70	25	9
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	343	2035	907	310	1980	35	94	33	74	102	90	32
Arrive On Green	0.19	0.56	0.56	0.34	1.00	1.00	0.05	0.06	0.06	0.06	0.07	0.07
Sat Flow, veh/h	1810	3610	1609	1810	3630	64	1810	518	1171	1810	1334	480
Grp Volume(v), veh/h	72	2032	145	73	764	802	55	0	75	70	0	34
Grp Sat Flow(s),veh/h/ln	1810	1805	1609	1810	1805	1889	1810	0	1689	1810	0	1814
Q Serve(g_s), s	3.7	61.8	3.4	3.2	0.0	0.0	3.3	0.0	4.8	4.2	0.0	2.0
Cycle Q Clear(g_c), s	3.7	61.8	3.4	3.2	0.0	0.0	3.3	0.0	4.8	4.2	0.0	2.0
Prop In Lane	1.00		1.00	1.00		0.03	1.00		0.69	1.00		0.26
Lane Grp Cap(c), veh/h	343	2035	907	310	985	1030	94	0	107	102	0	123
V/C Ratio(X)	0.21	1.00	0.16	0.24	0.78	0.78	0.59	0.00	0.70	0.69	0.00	0.28
Avail Cap(c_a), veh/h	343	2035	907	310	985	1030	115	0	276	115	0	297
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.58	0.58	0.58	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.6	24.0	5.9	31.0	0.0	0.0	51.0	0.0	50.5	51.0	0.0	48.7
Incr Delay (d2), s/veh	0.2	14.9	0.2	0.4	6.0	5.8	5.7	0.0	8.1	13.8	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	28.5	1.7	1.4	1.6	1.7	1.6	0.0	2.3	2.3	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.8	38.8	6.1	31.4	6.0	5.8	56.7	0.0	58.6	64.7	0.0	49.9
LnGrp LOS	D	D	A	C	A	A	E	A	E	E	A	D
Approach Vol, veh/h	2249		1639				130		104			
Approach Delay, s/veh	36.7		7.0				57.8		59.9			
Approach LOS	D		A				E		E			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.9	66.0	9.7	11.4	24.9	64.0	10.2	11.0				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	7.0	62.0	7.0	18.0	9.0	60.0	7.0	18.0				
Max Q Clear Time (g_c+I), s	15.2	63.8	5.3	4.0	5.7	2.0	6.2	6.8				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.1	0.0	18.6	0.0	0.2				

Intersection Summary

HCM 6th Ctrl Delay	26.2
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary 3: Dauchy Avenue & Van Buren Boulevard

Van Buren/Chicago Gasoline Station Project
Cumulative (2021) WP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	1712	168	148	1395	53	140	55	70	71	34	64
Future Volume (veh/h)	129	1712	168	148	1395	53	140	55	70	71	34	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	133	1765	173	153	1438	55	144	57	72	73	35	66
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	360	2023	195	165	1805	803	278	75	95	201	174	147
Arrive On Green	0.26	0.81	0.81	0.09	0.50	0.50	0.06	0.10	0.10	0.06	0.09	0.09
Sat Flow, veh/h	1810	3326	321	1810	3610	1605	1810	760	960	1810	1900	1600
Grp Volume(v), veh/h	133	944	994	153	1438	55	144	0	129	73	35	66
Grp Sat Flow(s),veh/h/ln	1810	1805	1842	1810	1805	1605	1810	0	1720	1810	1900	1600
Q Serve(g_s), s	6.6	36.2	40.2	9.2	36.4	1.4	7.0	0.0	8.0	3.9	1.9	3.0
Cycle Q Clear(g_c), s	6.6	36.2	40.2	9.2	36.4	1.4	7.0	0.0	8.0	3.9	1.9	3.0
Prop In Lane	1.00		0.17	1.00		1.00	1.00		0.56	1.00		1.00
Lane Grp Cap(c), veh/h	360	1098	1120	165	1805	803	278	0	170	201	174	147
V/C Ratio(X)	0.37	0.86	0.89	0.93	0.80	0.07	0.52	0.00	0.76	0.36	0.20	0.45
Avail Cap(c_a), veh/h	360	1098	1120	165	1805	803	278	0	281	213	311	262
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.8	7.6	8.0	49.7	22.9	7.8	42.9	0.0	48.3	41.8	46.2	23.2
Incr Delay (d2), s/veh	0.6	8.8	10.5	50.0	3.8	0.2	1.7	0.0	6.8	1.1	0.6	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	8.9	10.3	6.4	15.7	0.7	3.8	0.0	3.8	1.8	0.9	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.4	16.4	18.4	99.7	26.6	8.0	44.6	0.0	55.1	42.9	46.8	25.4
LnGrp LOS	D	B	B	F	C	A	D	A	E	D	D	C
Approach Vol, veh/h	2071			1646			273			174		
Approach Delay, s/veh	18.6			32.8			49.6			37.0		
Approach LOS	B			C			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.0	70.9	11.0	14.1	25.9	59.0	10.2	14.9				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	10.0	59.0	7.0	18.0	14.0	55.0	7.0	18.0				
Max Q Clear Time (g_c+ll), s	42.2	42.2	9.0	5.0	8.6	38.4	5.9	10.0				
Green Ext Time (p_c), s	0.0	13.0	0.0	0.2	0.1	10.0	0.0	0.4				

Intersection Summary

HCM 6th Ctrl Delay	27.0
HCM 6th LOS	C

HCM 6th TWSC
4: Chicago Avenue & Project Driveway 1

Van Buren/Chicago Gasoline Station Project
Cumulative (2021) WP - PM Peak Hour

Intersection						
Int Delay, s/veh	3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	65	4	53	64	4	36
Future Vol, veh/h	65	4	53	64	4	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	65	4	53	64	4	36
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	129	85	0	0	117	0
Stage 1	85	-	-	-	-	-
Stage 2	44	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	870	980	-	-	1484	-
Stage 1	943	-	-	-	-	-
Stage 2	984	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	867	980	-	-	1484	-
Mov Cap-2 Maneuver	867	-	-	-	-	-
Stage 1	943	-	-	-	-	-
Stage 2	981	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	9.5	0	0.7			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	873	1484	-	
HCM Lane V/C Ratio	-	-	0.079	0.003	-	
HCM Control Delay (s)	-	-	9.5	7.4	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0.3	0	-	

HCM 6th TWSC
5: Van Buren Boulevard & Project Driveway 2

Van Buren/Chicago Gasoline Station Project
Cumulative (2021) WP - PM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↗
Traffic Vol, veh/h	0	2069	1534	46	0	40
Future Vol, veh/h	0	2069	1534	46	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2069	1534	46	0	40
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	-	0	-	0	-	790
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	337
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	337
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		17.1		
HCM LOS	C					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	337		
HCM Lane V/C Ratio	-	-	-	0.119		
HCM Control Delay (s)	-	-	-	17.1		
HCM Lane LOS	-	-	-	C		
HCM 95th %tile Q(veh)	-	-	-	0.4		