FEHR PEERS

Sunnyvale Downtown Specific Plan Amendments Project

Final Transportation Impact Analysis

Prepared for:

Sunnyvale

March 19, 2019 (Revised)
SJ17-1787

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AUTO TRIP REDUCTION STATEMENT

UPDATED: October 2014

Santa Clara Valley Transportation Authority

PROJECT INFORMATION	***Relevant TIA Section:***	1.0 Introduction

Project Name: Cityline Sunnyvale

Location: Sunnyvale Downtown Specific Plan area. Caltrain north, Bayview Avenue east, El Camino Real south, Charles St west.

Description:
The Project consists of amendments to the DSP to change the land use mix and associated specific development proposals for six development sites in the DSP area. Net increase is 823 residential units, 79,063 s.f. commerical uses, and 852,624 s.f office.

Size (net new):	823	*D.U. Residential*	79,063 + 852,624	*Sq. Ft. Comm.*	125	*Acres (Gr.)*
Density:		*D.U. / Acre*				*Floor Area Ratio (FAR)*

Located within 2000 feet walking distance of an LRT, BRT, BART or Caltrain station or major bus stop? Yes

PROJECT AUTO TRIP GENERATION	***Relevant TIA Section:***	3.1 Project Traffic Estimates

Auto Trips Generated:	1,186	*AM Pk Hr*	1,424	*PM Pk Hr*	13,250	*Total Weekday*
Methodology (check one)	☒ **ITE**		☐ **Other** *(Please describe below)*			

AUTO TRIP REDUCTION APPROACH	***Relevant TIA Section:***	3.1 Project Traffic Estimates

☒ **Standard** *Complete Table A below*	☐ **Peer/Study-Based** *Complete Table B below*	☐ **Target-Based** *Complete Table C below*	☐ **None Taken**

TRIP REDUCTION REQUIREMENTS	***Relevant TIA Section:***	3.1 Project Traffic Estimates

Is the project required to meet any trip reduction requirements or targets? No **If so, specify percent:**

Reference code or requirement:

TRIP REDUCTION APPROACHES

A. STANDARD APPROACH	***Relevant TIA Section:***	3.1 Project Traffic Estimates

Type of Reduction *Specify reduction. See Table 2 in TIA Guidelines*		**% Reduction from ITE Rates**	**Total Trips Reduced (AM/PM/Daily)**	**TOTAL REDUCTION CLAIMED**	
				%	**Trips**
Transit	Housing and employment near Transit	6% to 9%	85/90/901	11%/9%/9%	169/220/ 2515
Mixed-Use	Housing/Retail, Housing/Employment	3% to 15%	84/130/1614		
Financial Incentives					
Shuttle					

B. PEER/STUDY-BASED APPROACH	***Relevant TIA Section:***	

Basis of Reduction	**TOTAL REDUCTION CLAIMED**	
	%	**Trips**

C. TARGET-BASED APPROACH			*Relevant TIA Section:*			
Type of Reduction (check all that apply)					TOTAL REDUCTION CLAIMED	
❐ % Trip Reduction		❐ % SOV mode share		❐ Trip Cap	%	Trips
Description						
Time period for reduction	Peak Hour		Peak Period	Full Day		
	❐ AM/PM		❐ AM/PM	❐		

OTHER TDM/REDUCTION MEASURES			
Bicycle/Pedestrian	No	*Relevant TIA Section:*	
Parking Management	No	*Relevant TIA Section:*	
Transit	No	*Relevant TIA Section:*	
Site Planning and Design	No	*Relevant TIA Section:*	
TDM Program	No	*Relevant TIA Section:*	

IMPLEMENTATION	*Relevant TIA Section:*	
Have the project sponsor and Lead Agency agreed to any of the following measures?		
❐Monitoring		
❐Enforcement		
❐Data Sharing		

EXECUTIVE SUMMARY

This report presents the results of the transportation impact analysis (TIA) for the proposed Sunnyvale Downtown Specific Plan Amendment in the City of Sunnyvale, California. The project consists of six sites within the Downtown Specific Plan (DSP) area. The DSP area is located in the heart of Sunnyvale and is generally bounded by Mathilda Avenue to the west, Caltrain tracks to the north, Sunnyvale Avenue to the east, and Iowa Avenue to the south. Compared to existing land uses, the proposed project includes a net increase of 852,624 square feet of office space, 79,063 square feet of commercial uses, and 823 residential units.

Project Traffic Estimates

The Project is expected to generate 13,250 daily net new vehicle trips, 1,186 net new AM peak hour trips (870 inbound and 316 outbound) and 1,424 net new PM peak hour trips (430 inbound and 994 outbound).

Intersection Impacts and Mitigation Measures

As identified in **Chapter 1,** the operations of 79 intersections in multiple jurisdictions were evaluated during the peak morning and evening commute hours for existing conditions and for two future conditions. The two future conditions are called Background Conditions and Cumulative Conditions. Traffic estimates for the Project were added to the base volumes for Existing, Background, and Cumulative conditions ("No Project" scenarios) and intersection operations were reevaluated with the added traffic ("Plus Project" scenarios). The effect of the Project was then identified by comparing operations before project traffic is added to conditions after project traffic is added. The effect is considered a significant impact if certain standards or parameters are exceeded.

The intersections with significant impacts for the various analysis scenarios are summarized in **Table ES-1**. **Table ES-1** summarizes whether the intersection impacts could be reduced to "less-than-significant" levels through the identified physical mitigation measures. In some cases, mitigating a motor vehicle traffic impact at a study intersection would result in secondary impacts to other modes of travel (such as a street widening that would result in longer pedestrian distances). For some intersections there are no feasible improvements that eliminate the impact. This is often due to lack of available right-of-way. In these cases, the impact is called "significant and unavoidable."

TABLE ES-1: INTERSECTION IMPACT AND MITIGATION SUMMARY

ID	Impacted Intersection	Plus Project Scenario			Physical Mitigating Measure	Feasible?	Impact Status with Physical Mitigation under Plus Project Scenario[1,2]		
		Existing	Back-ground	Cumu-lative			Existing	Back-ground	Cumu-lative
19	Hollenbeck Avenue / Remington Drive	No Impact	No Impact	Impact	Restripe northbound and southbound approaches to add a dedicated left-turn lane and convert an all-movement lane to a shared through/right-turn lane. This improvement includes removal of on-street parking for 75 to 125 feet in each direction on Hollenbeck Avenue.[3]	Yes	n/a	n/a	LTS
20	Hollenbeck Avenue / Fremont Avenue	No Impact	No Impact	Impact	Add eastbound right-turn lane on Fremont Avenue.	Yes	n/a	n/a	LTS
26	Mathilda Avenue / Indio Avenue	No Impact	Impact	Impact	Add southbound through lane on Mathilda Avenue.	No (ROW Constraints)	n/a	SU	SU
27	Mathilda Avenue / California Avenue	No Impact	No Impact	Impact	Add northbound right-turn lane or southbound through lane on Mathilda Avenue.	No (ROW Constraints)	n/a	n/a	SU
29	Mathilda Avenue / Washington Avenue	No Impact	No Impact	Impact	Add southbound through lane on Mathilda Avenue. [3]	No (ROW Constraints)	n/a	n/a	SU
30	Mathilda Avenue / McKinley Avenue	No Impact	No Impact	Impact	Add southbound through lane on Mathilda Avenue.	No (ROW Constraints)	n/a	n/a	SU
33	Mathilda Avenue / El Camino Real	No Impact	No Impact	Impact	Add third eastbound left-turn lane on El Camino Real.	Yes	n/a	n/a	LTS
38	Washington Avenue/Frances Street	No Impact	No Impact	Impact	Install all-way stop (preferred) or traffic signal.	Yes	n/a	n/a	LTS
52	Sunnyvale-Saratoga Road / Remington Drive	No Impact	No Impact	Impact	Add northbound right-turn (City TIF Program) and eastbound right-turn on Sunnyvale-Saratoga Road	Yes	n/a	n/a	LTS

TABLE ES-1: INTERSECTION IMPACT AND MITIGATION SUMMARY

ID	Impacted Intersection	Plus Project Scenario			Physical Mitigating Measure	Feasible?	Impact Status with Physical Mitigation under Plus Project Scenario[1,2]		
		Existing	Back-ground	Cumu-lative			Existing	Back-ground	Cumu-lative
53	Sunnyvale-Saratoga Road / Fremont Ave	No Impact	No Impact	Impact	Add southbound right-turn lane on Sunnyvale-Saratoga Road and a third eastbound left-turn lane on Fremont Avenue.	Yes	n/a	n/a	LTS
55	De Anza Boulevard / Homestead Road	No Impact	Impact	Impact	Add third westbound left-turn lane on Homestead Road.	No (Jurisdictional Constraints)	n/a	SU	SU
60	Fair Oaks Avenue / Duane Avenue	No Impact	No Impact	Impact	Provide second westbound left-turn lane on Duane Avenue. [3]	Yes	n/a	n/a	LTS
76	Lawrence Expressway / Homestead Road	No Impact	Impact	Impact	Grade Separation	Yes	n/a	SU	SU

Notes:
1. For impacted project scenarios the mitigation measures are the same for each of the identified analysis scenarios.
2. Impact Status: n/a = Not Applicable; SU = Significant and Unavoidable; LTS = Less-than-Significant.
3. Parking removal would be necessary to implement this mitigation measure.
Source: Fehr & Peers, March 2019.

Reduced Project Scenario

Compared to the Project the reduced Project has six fewer intersection LOS impacts. Specifically, with the reduced Project, impacts are no longer identified at the following intersections.

- Intersection 19: Hollenbeck Avenue / Remington Drive (Sunnyvale)
- Intersection 30: Mathilda Avenue / McKinley Avenue (Sunnyvale)
- Intersection 33: Mathilda Avenue / El Camino Real (CMP/Sunnyvale)
- Intersection 55: De Anza Boulevard / Homestead Road (Cupertino/CMP)
- Intersection 60: Fair Oaks Avenue / Duane Avenue (Sunnyvale)
- Intersection 76: Lawrence Expressway / Homestead Road (CMP)

The same mitigation measures as identified in under Cumulative Plus Project conditions (**see Table ES-1**) would be applicable for the reduced Project scenario.

Freeway Impacts and Mitigation Measures

Impacts to the freeways occur when the amount of added traffic causes a substantial increase in congestion. The Project is projected to impact one freeway segment (SR 237 Eastbound between Mathilda Avenue and Fair Oaks Avenue). Relevant to the impacted segment, Santa Clara Valley Transportation Authority's (VTA's) *Valley Transportation Plan 2040 (VTP 2040)*[1] identifies project ID H3: SR 237 Express Lanes between Mathilda Avenue and N. First Street.

As a mitigation requirement, the Project would be required to pay their fair share contribution towards VTA's *VTP 2040* project H3 to improve traffic operations of the impacted freeway segment. (This fair share contribution is separate from the City's Traffic Impact Fee (TIF) program.)

Parking

Based on the City's parking requirements within the Downtown Specific Plan District, the Project will be required to provide between 4,888 and 5,274 parking spaces, depending on the type of residential units provided.

The Project is also required to provide at least 381 bicycle parking spaces, 241 of which should be Class I storage facilities such as a bike locker, and the remaining 140 spaces Class II such as a bicycle rack.

Bicycle and Pedestrian Facilities

Sidewalk, crosswalks, bicycle lanes, and bicycle routes are provided near the Project site on Mathilda Avenue, Washington Avenue, Sunnyvale Avenue and Evelyn Avenue, creating an adequate bicycle network that connects bicyclists to nearby attractions and transit stops.

Transit Vehicle Delay

TRAFFIX outputs were used to calculate the change in transit delay between the No Project and Plus Project scenarios for Existing, Background, and Cumulative conditions. Overall, the added transit delay along each of the study corridors evaluated is about 60 seconds or less, except for transit routes along Mathilda Avenue (Route 54) and Sunnyvale Avenue (Route 55). The City of Sunnyvale will work with VTA to identify feasible transit priority measures near the affected facility and include contributions to any applicable projects that improve transit speed and reliability in the TIA.

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[1] The Valley Transportation Plan is a long-range vision for transportation in Santa Clara. The VTA is responsible for preparing and updating the VTP. The VTP 2040 identifies the programs, projects, and policies VTA would like to pursue over the lifetime of the plan. It connects projects with anticipated funds and lays out a framework for the development and maintenance of the transportation system over the next 25 years.

Left-Turn Queueing

Five intersections near the Project site were selected for the left-turn queue evaluation based on where the Project would add the most left turning vehicles during either the AM or PM peak hour. The 95th percentile left-turn queues from TRAFFIX were compared between No Project and Plus Project scenarios under Existing and Background Conditions. Four of the five intersections have projected 95th percentile queue lengths that exceed the left-turn storage. Where feasible physical measures are recommended to add left-turn queue storage. If physical improvements are not feasible, it is recommended that ITS improvements consistent with Sunnyvale's TIF program are implemented to improve signal operations and queueing. **Table ES-2** summarizes the recommended improvements to address left-turn queuing at select intersections.

TABLE ES-2: LEFT-TURN VEHICLE QUEUE IMPROVEMENTS

	Intersection	Move-ment	Available Storage Length[1] (feet)	Peak Hour	Number of Project Trips Added[5]	Improvements
29	Mathilda Avenue/ Washington Avenue	SBL	600	AM	38	No Improvements needed.
				PM	11	
30	Mathilda Avenue/ McKinley Avenue	SBL	400	AM	252	Implement ITS technologies to improve signal operations and queueing.
				PM	145	
45	Sunnyvale Avenue/ Washington Avenue	NBL	100	AM	19	As part of the Project, the existing driveways on the west side of Sunnyvale Avenue are proposed to be removed. The consolidation of driveways could allow for the removal of the two-way left turn lane and the addition of approximately 200 feet of storage for the northbound left-turn at Washington Avenue. This would not increase the storage capacity to meet the demand. The Project should also include ITS technologies to improve signal operations and queueing.
				PM	14	
46	Sunnyvale Avenue/ McKinley Avenue	NBL	160	AM	71	An additional capacity of approximately 150 feet may be available by narrowing the median. This would increase the storage capacity to meet the demand. However, this would require removing the median and trees and the Project should include ITS technologies to improve signal operations and queueing.
				PM	33	
47	Sunnyvale Avenue/ Iowa Avenue	NBL	150	AM	56	An additional capacity of approximately 150 feet may be available by converting the entire two-way left-turn (TWLT) lane into a left-turn only lane. This would increase the storage capacity to meet the demand. However, this would limit the accessibility of the TWLT lane for adjacent properties. By maintaining the TWLT lane, excess northbound left-turn queues can still use for storage, while maintaining access to adjacent properties. The Project should also include ITS technologies to improve signal operations and queueing.
				PM	22	

Source: Fehr & Peers, March 2019.

1.0 INTRODUCTION

This report presents results of the Transportation Impact Analysis (TIA) conducted for the proposed Downtown Specific Plan Project in the City of Sunnyvale, California (hereafter referred to as the "Project"). The purpose of this analysis is to identify potentially significant adverse impacts of the Project on the surrounding transportation system and recommend mitigation measures. The TIA was prepared following guidelines of the City of Sunnyvale and the Santa Clara Valley Transportation Authority (VTA), the congestion management agency for Santa Clara County. This chapter provides a detailed project description and outlines the Project study area, study scenarios, analysis methodologies, level of service (LOS) standards, and significance criteria.

1.1 PROJECT DESCRIPTION

The City of Sunnyvale originally adopted the Downtown Specific Plan (DSP) in 1993 and updated it in 2003 and 2013. The DSP area consists of approximately 125 acres, generally bounded by Caltrain to the north, Bayview Avenue to the east, El Camino Real to the south, and Charles Street to the west. The DSP area is currently developed with a total of 1,446 residential units, 1,042,995 square feet of commercial uses, 983,073 square feet of office uses, and 85 hotel rooms.

The Project consists of amendments to the DSP to change the land use mix and associated specific development proposals for six development sites in the DSP area. **Table 1** shows the land use mix for those six development sites under the various land use scenarios. The last column, Net Increase between Proposed DSP and Existing, represents the net land use increase that is studied in this report under existing plus project conditions.

TABLE 1: DOWNTOWN SPECIFIC PLAN CHANGES

Land Use	Land Use Scenario				
	Existing *Existing Development*	**Approved** *Existing plus Under Construction/ Planned Development*	**Allowed DSP** *Previously approved DSP land uses (Approved DSP/ Approved Plans for Cityline Town Center)*	**Proposed DSP**	**Net Increase between Proposed DSP and Existing** ***Net increase studied in this TIA***
Residential (units)	20	70	93	843	**823**
Commercial (square feet)	181,000	181,000	181,000	260,063	**79,063**
Office (square feet)	8,000	8,000	17,896	860,624	**852,624**
Hotel (rooms)	0	0	200	0	**0**

Source: City of Sunnyvale, 2018.

Figure 1 shows the site plan. **Figure 2** shows the Project location and study intersections.

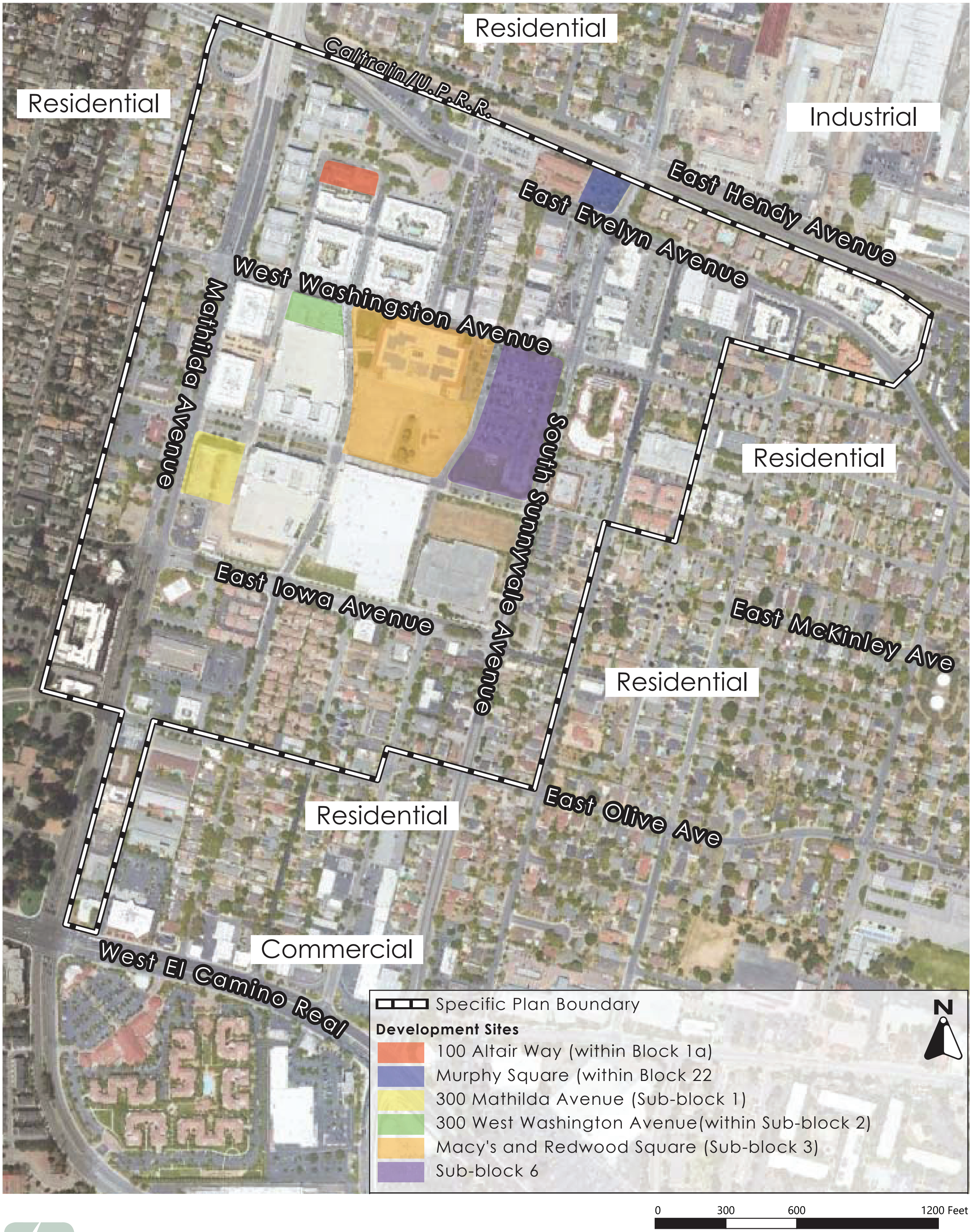


Figure 1

Project Site Plan

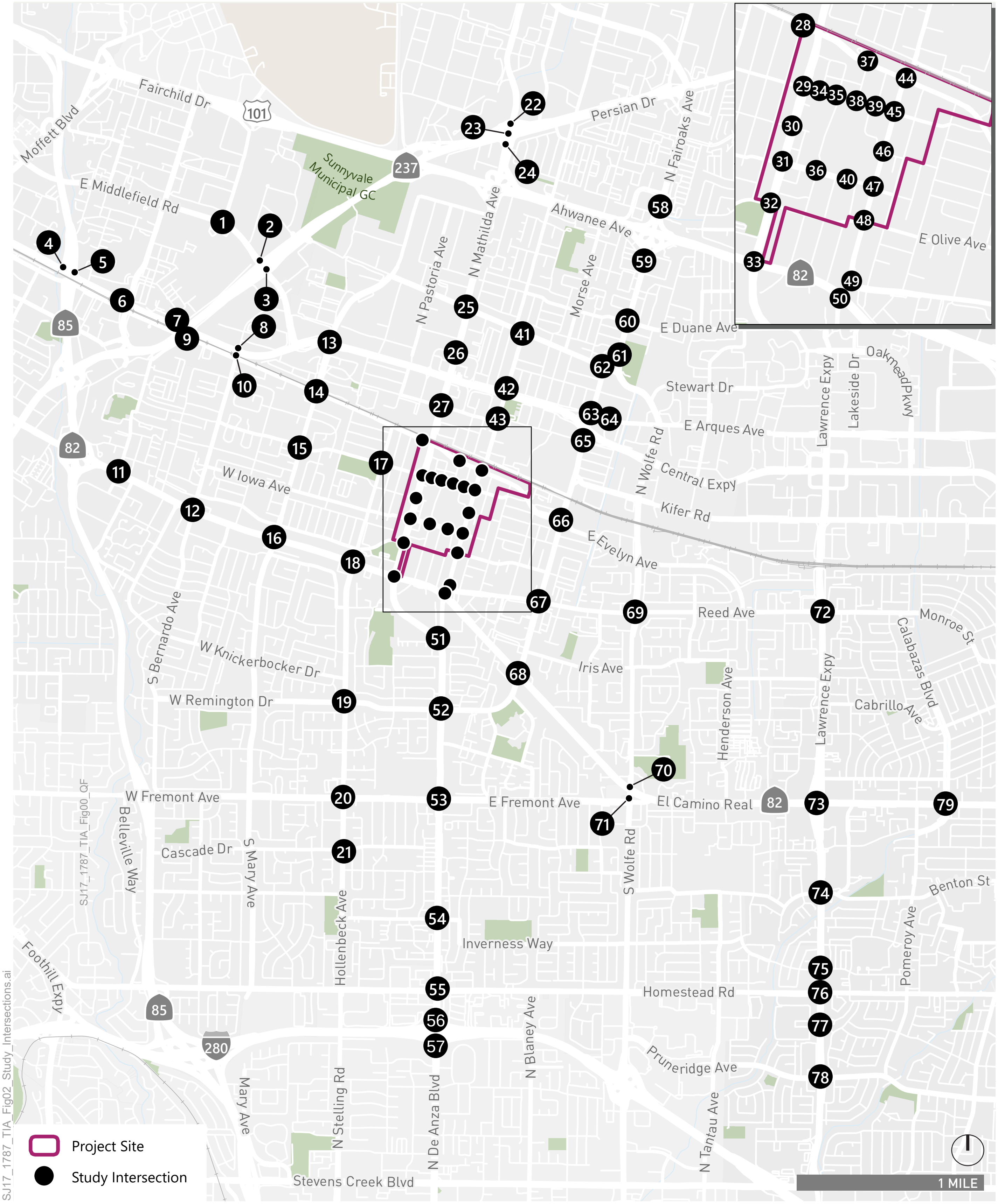


Figure 2

Study Intersections

Cityline Sunnyvale TIA

1.2 STUDY AREA

The study area is generally bounded by US 101 to the north, SR 237 and SR 85 to the west, Homestead Road to the south, and Lawrence Expressway to the east. Project impacts were evaluated at the study intersection and freeway segments discussed below.

Study Intersections

The intersections listed below were selected in consultation with the City of Sunnyvale and generally determined based on VTA's ten trip per lane guideline, which indicates that intersections should be included if the proposed project adds 10 or more peak hour vehicles per lane to any intersection movement.

All intersections are signalized except for those with an asterisk (*), and the applicable jurisdictions for each intersection is noted in parenthesis[2].

1. Ellis Street / Middlefield Road (City of Mountain View)
2. SR 237 WB / Middlefield Road (City of Mountain View)
3. SR 237 EB / Middlefield Road (City of Mountain View)
4. SR-85 SB Off-Ramp / Central Expressway (Santa Clara County)
5. SR-85 NB On-Ramp - Easy Street / Central Expressway (Santa Clara County) *
6. Whisman Station Drive / Central Expressway (Santa Clara County/CMP)
7. Ferguson Drive / Central Expressway (Santa Clara County/CMP)
8. Bernardo Avenue / Central Expressway (Santa Clara County)
9. Moorpark Way / Evelyn Avenue (City of Mountain View)
10. Bernardo Avenue / Evelyn Avenue (City of Sunnyvale)
11. Sylvan Avenue / El Camino Real (City of Mountain View/CMP)
12. Bernardo Avenue / El Camino Real (City of Sunnyvale/Caltrans)
13. Mary Avenue / Central Expressway (Santa Clara County/CMP)
14. Mary Avenue / Evelyn Avenue (City of Sunnyvale)
15. Mary Avenue / Washington Avenue (City of Sunnyvale)
16. Mary Avenue / El Camino Real (CMP/Caltrans)
17. Pastoria Avenue / Washington Avenue (City of Sunnyvale)
18. El Camino Real / Hollenbeck Avenue - Pastoria Avenue (City of Sunnyvale/Caltrans)
19. Hollenbeck Avenue / Remington Drive (City of Sunnyvale)
20. Hollenbeck Avenue / Fremont Avenue (City of Sunnyvale)
21. Hollenbeck Avenue / Cascade Drive (City of Sunnyvale)
22. Mathilda Avenue / SR 237 WB (City of Sunnyvale)

[2] The following jurisdictions are shown: Caltrans; (CMP) VTA Congestion Management Program; City of Cupertino; City of Mountain View; City of Santa Clara; City of Sunnyvale.

23. Mathilda Avenue / SR 237 EB (City of Sunnyvale)
24. Mathilda Avenue / Ross Drive (City of Sunnyvale)
25. Mathilda Avenue / Maude Avenue (City of Sunnyvale/CMP)
26. Mathilda Avenue / Indio Avenue (City of Sunnyvale)
27. Mathilda Avenue / California Avenue (City of Sunnyvale)
28. Mathilda Avenue Southbound Off-Ramp / Evelyn Avenue (City of Sunnyvale)
29. Mathilda Avenue / Washington Avenue (City of Sunnyvale)
30. Mathilda Avenue / McKinley Avenue (City of Sunnyvale)
31. Mathilda Avenue / Iowa Avenue (City of Sunnyvale)
32. Mathilda Avenue / Olive Avenue (City of Sunnyvale)
33. Mathilda Avenue / El Camino Real (City of Sunnyvale/CMP)
34. Washington Avenue / Aries Way (City of Sunnyvale) *
35. Washington Avenue / Taaffe Street (City of Sunnyvale)
36. Iowa Avenue / Taaffe Street (City of Sunnyvale)
37. Evelyn Avenue / Frances Street (City of Sunnyvale)
38. Washington Avenue / Frances Street (City of Sunnyvale) *
39. Murphy Avenue / Washington Avenue (City of Sunnyvale) *
40. Iowa Avenue / Murphy Avenue (City of Sunnyvale) *
41. Sunnyvale Avenue / Maude Avenue (City of Sunnyvale)
42. Sunnyvale Avenue / Arques Avenue (City of Sunnyvale)
43. Sunnyvale Avenue / California Avenue (City of Sunnyvale)
44. Sunnyvale Avenue / Evelyn Avenue (City of Sunnyvale)
45. Sunnyvale Avenue / Washington Avenue (City of Sunnyvale)
46. Sunnyvale Avenue / McKinley Avenue (City of Sunnyvale)
47. Sunnyvale Avenue / Iowa Avenue (City of Sunnyvale)
48. Sunnyvale Avenue / Olive Avenue (City of Sunnyvale)
49. Sunnyvale Avenue / Old San Francisco Road (City of Sunnyvale)
50. Sunnyvale Avenue / El Camino Real (CMP/City of Sunnyvale/Caltrans)
51. Mathilda Avenue / Saratoga-Sunnyvale Road - Talisman Drive (City of Sunnyvale)
52. Sunnyvale-Saratoga Road / Remington Drive (City of Sunnyvale/CMP)
53. Sunnyvale-Saratoga Road / Fremont Avenue (City of Sunnyvale/CMP)
54. Sunnyvale-Saratoga Road / Alberta Avenue - Harwick Way (City of Sunnyvale)
55. De Anza Boulevard / Homestead Road (Cupertino/CMP)
56. De Anza Boulevard / I-280 Northbound Ramps (Cupertino/CMP)
57. De Anza Boulevard / I-280 Southbound Ramps (Cupertino/CMP)
58. Fair Oaks Avenue / US 101 Northbound Ramp (Sunnyvale/Caltrans)
59. Fair Oaks Avenue / Ahwanee Avenue (City of Sunnyvale)
60. Fair Oaks Avenue / Duane Avenue (City of Sunnyvale)
61. Fair Oaks Avenue / Wolfe Road (City of Sunnyvale)

62. Fair Oaks Avenue / Maude Avenue (City of Sunnyvale)
63. Fair Oaks Avenue / Arques Avenue (City of Sunnyvale)
64. Central Expressway WB Off-Ramp / Arques Avenue (Santa Clara County) *
65. Fair Oaks Avenue / California Avenue (City of Sunnyvale)
66. Fair Oaks Avenue / Evelyn Avenue (City of Sunnyvale)
67. Fair Oaks Avenue / Old San Francisco Road (City of Sunnyvale)
68. Fair Oaks Avenue / El Camino Real (CMP/City of Sunnyvale/Caltrans)
69. Wolfe Road / Old San Francisco Road (City of Sunnyvale)
70. Wolfe Road / El Camino Real (CMP/City of Sunnyvale/Caltrans)
71. Wolfe Road / Fremont Avenue (City of Sunnyvale)
72. Lawrence Expressway / Monroe Street (Santa Clara County/CMP)
73. Lawrence Expressway / El Camino Real (Santa Clara County/CMP)
74. Lawrence Expressway / Benton Street (Santa Clara County)
75. Lawrence Expressway / Lochinvar Avenue (Santa Clara County)
76. Lawrence Expressway / Homestead Road (Santa Clara County/CMP)
77. Lawrence Expressway / Lehigh Drive (Santa Clara County)
78. Lawrence Expressway / Pruneridge Avenue (Santa Clara County)
79. Calabazas Boulevard / El Camino Real (City of Santa Clara)

<u>Freeway Segments</u>

According to the VTA guidelines, a freeway segment shall be included in the TIA if it meets any one of the following conditions:

1. The proposed development project is expected to add traffic equal to or greater than one percent of the freeway segment's capacity. The TIA must provide a tabulation to show that freeway segments have been assessed to determine if freeway analysis is required, even in the case where it is determined that no freeway segments meet the one percent threshold, or include text indicating that this assessment has been conducted;
2. The proposed development project is adjacent to a freeway segment's access or egress points;
3. Based on engineering judgment, the Lead Agency staff determines that the freeway segment should be included in the analysis.

Based on VTA's guidelines for selecting freeway segments, this TIA includes the following freeway segments:

- **I-280 (Northbound/Southbound)**
  - Magdalena Avenue to Foothill Expressway
  - Foothill Expressway to SR 85
  - SR 85 to De Anza Boulevard
  - De Anza Boulevard to Wolfe Road
  - Wolfe Road to Lawrence Expressway
  - Lawrence Expressway to Saratoga Avenue
  - Saratoga Avenue to Winchester Boulevard
- **SR 237 (Eastbound/Westbound)**
  - Sylvan Avenue to Maude Avenue
  - Maude Avenue to US 101
  - US 101 to Mathilda Avenue
  - Mathilda Avenue to Fair Oaks Avenue
  - Fair Oaks Avenue to Lawrence Expressway
  - Lawrence Expressway to Great America Parkway
- **US 101 (Northbound/Southbound)**
  - De La Cruz Boulevard to Montague Expressway
  - Montague Expressway to Bowers Avenue
  - Bowers Avenue to Lawrence Expressway
  - Lawrence Expressway to Fair Oaks Avenue
  - Fair Oaks Avenue to Mathilda Avenue
  - Mathilda Avenue to SR 237
  - SR 237 to Moffett Boulevard
  - Moffett Boulevard to SR 85
  - SR 85 to Shoreline Boulevard

1.3 ANALYSIS SCENARIOS

The operations of the study intersections were evaluated during the weekday morning (7:00 to 9:00 AM) and weekday evening (4:00 to 6:00 PM) peak hours for the following scenarios as presented in **Chapters 2, 3, 4, 5**:

Scenario 1: *Existing Conditions* – Existing volumes obtained from counts.

Scenario 2: *Existing Plus Project Conditions* – Scenario 1 volumes plus traffic generated by the Project.

Scenario 3: *Background No Project Conditions* – Existing volumes plus traffic from "approved but not yet built" and "not occupied" developments in the area. This scenario also includes approved and funded intersection geometry improvements, provided by City of Sunnyvale staff.

Scenario 4: *Background Plus Project Conditions* – Scenario 3 plus traffic generated by the Project.

Scenario 5: *Cumulative No Project Conditions* – Scenario 3 plus traffic from pending developments in the area and a 1.5 percent per year compound growth factor applied to existing volumes.

Scenario 6: *Cumulative Plus Project Conditions* – Scenario 5 plus traffic generated by the Project.

Scenario 7: *Cumulative Plus Reduced Project Conditions* – Scenario 5 plus traffic generated by a reduced Project description.

Land use data from **Table 1** were used to calculate the land use mix for the project site under each scenario, as shown in **Table 2**.

TABLE 2: DOWNTOWN SPECIFIC PLAN TRANSPORTATION ANALYSIS LAND USE SUMMARY

Land Use	Analysis Scenario					
	Existing	Existing Plus Project	Background	Background Plus Project	Cumulative	Cumulative Plus Project
Residential (units)	20	843	70	843	93	843
Commercial (square feet)	181,000	260,063	181,000	260,063	181,000	260,063
Office (square feet)	8,000	860,624	8,000	860,624	17,896	860,624
Hotel (rooms)	0	0	0	0	200	0

Source: Fehr & Peers, 2019.

1.4 ANALYSIS METHODS

The operations of roadway facilities are described with the term *level of service*. Level of Service (LOS) is a qualitative description of traffic flow from a driver's perspective based on factors such as speed, travel time, delay, and freedom to maneuver. There are six levels from LOS A, with little or no delay, to LOS F, with excessive delay. LOS E represents "at-capacity" operations. When traffic volumes exceed the capacity, stop-and-go conditions result, and operations are designated as LOS F.

1.4.1 Signalized Intersections

The method described in Chapter 16 of the 2000 *Highway Capacity Manual* (HCM) (Special Report 209, Transportation Research Board) was used to prepare the level of service calculations for the signalized study intersections. This level of service method, which is approved by the City of Sunnyvale and VTA, analyzes a signalized intersection's operation based on average control delay per vehicle. Control delay includes the initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The average control delay for signalized intersections is calculated using TRAFFIX analysis software and is correlated to a LOS designation as shown in **Table 3**.

TABLE 3: SIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS USING AVERAGE CONTROL VEHICULAR DELAY

Level of Service	Description	Average Control Delay Per Vehicle (Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	≤ 10.0
B+ B B-	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 12.0 12.1 to 18.0 18.1 to 20.0
C+ C C-	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 23.0 23.1 to 32.0 32.1 to 35.0
D+ D D-	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 39.0 39.1 to 51.0 51.1 to 55.0
E+ E E-	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	55.1 to 60.0 60.1 to 75.0 75.1 to 80.0
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	> 80.0

Source: *Traffic Level of Service Analysis Guidelines*, October 2014; VTA Congestion Management Program, June 2003; *Highway Capacity Manual*, Transportation Research Board, 2000.

Three of the Mathilda Avenue intersections near SR 237 are part of the *Mathilda Avenue Improvements SR 237 and US 101* project. To be consistent with previous analysis, the following three Mathilda Avenue intersections were evaluated with Synchro LOS software:

- Intersection 22: Mathilda Ave/Westbound SR 237 Ramps
- Intersection 23: Mathilda Ave/Eastbound SR 237 Ramps
- Intersection 24: Mathilda Avenue/Ross Drive

The Synchro results for these three intersections are included in the main LOS Tables under each scenario.

1.4.2 Unsignalized Intersections

The operations of the unsignalized study intersections were evaluated using the method contained in Chapter 17 of the *2000 HCM*. LOS ratings for stop-sign-controlled intersections are based on the average control delay expressed in seconds per vehicle. At two-way or side-street-controlled intersections, the average control delay is calculated for each stopped movement, not for the intersection as a whole. For approaches composed of a single lane, the control delay is computed as the average of all movements in that lane. **Table 4** summarizes the relationship between delay and LOS for unsignalized intersections. Additionally, the City of Sunnyvale applies the 2014 *California Manual on Uniform Traffic Control Devices* (MUTCD) peak-hour volume signal warrant to evaluate operations at unsignalized intersections.

TABLE 4: UNSIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS USING AVERAGE CONTROL VEHICULAR DELAY

Level of Service	Description	Average Control Delay Per Vehicle (Seconds)
A	Little or no delay.	≤ 10.0
B	Short traffic delay.	10.1 to 15.0
C	Average traffic delays.	15.1 to 25.0
D	Long traffic delays.	25.1 to 35.0
E	Very long traffic delays.	35.1 to 50.0
F	Extreme traffic delays with intersection capacity exceeded.	> 50.0

Sources: *Traffic Level of Service Analysis Guidelines*, October 2014; VTA Congestion Management Program, June 2003; *Highway Capacity Manual*, Transportation Research Board, 2000.

1.5 LEVEL OF SERVICE STANDARDS AND IMPACT CRITERIA

The following LOS standards and impact criteria were applied to the intersection analysis.

1.5.1 Intersection Level of Service Standards Impact Criteria

1.5.1.1 Signalized Intersections

Signalized intersection operations and impacts are evaluated based on the appropriate jurisdiction's LOS standards (i.e., minimum threshold for acceptable operations). The LOS standard for City of Sunnyvale intersections is LOS D except for City of Sunnyvale intersections that are designated regionally significant. Regionally significant roadways within the study area include Mathilda Avenue and El Camino Real. The threshold for regionally significant and CMP intersections is LOS E. The LOS standard for City of Santa Clara is LOS D except for designated CMP intersections and Expressway intersections. The threshold for designated CMP intersections and Expressway intersections is LOS E. The LOS standards for applicable jurisdictions are summarized below in **Table 5**. The LOS standards applied for each study intersection are summarized in **Table 6**.

Traffic impacts on City of Sunnyvale, City of Cupertino, City of Santa Clara, and CMP intersections would occur if the addition of traffic associated with implementation of the Project causes:

1. Intersection operations to deteriorate from an acceptable level (LOS D or better for City of Sunnyvale, City of Cupertino, and City of Santa Clara intersections and LOS E or better for regionally significant and CMP intersections) under "No Project" Conditions to an unacceptable level (LOS E or LOS F for City of Sunnyvale, City of Cupertino, and City of Santa Clara intersections and LOS F for regionally significant, expressway, and CMP intersections) under the corresponding "Plus Project" Condition.
2. Exacerbation of unacceptable "No Project" operations (LOS E or F for City of Sunnyvale, City of Cupertino, and City of Santa Clara intersections and LOS F for regionally significant, expressway, and CMP intersections) by increasing the average critical delay by more than 4 seconds <u>and</u> increasing the critical volume-to-capacity (V/C) ratio by 0.01 or more.
3. An increase in the critical V/C ratio of 0.01 or more at an intersection with unacceptable operations (LOS E or F for City of Sunnyvale, City of Cupertino, and City of Satna Clara intersections and LOS F for regionally significant, expressway, and CMP intersections) when the change in critical delay is negative (i.e., decreases). This can occur if the intersection critical movements change.

TABLE 5: SIGNALIZED INTERSECTION LOS STANDARDS

Jurisdiction	Intersection LOS Standard	Citation
City of Sunnyvale	LOS D for all City-controlled signalized intersections, except for CMP intersections and regionally significant roadways	City of Sunnyvale Intersection Operations Level of Service Impact Guidelines (2019).
City of Mountain View	LOS D for all City of Mountain View intersections; LOS E for Downtown Mountain View; LOS E for San Antonio Shopping Center; LOS E for CMP facilities	City of Mountain View 2030 General Plan and Greenhouse Gas Reduction Program EIR, page 121 (2011).
City of Santa Clara	LOS D, except designated CMP and Expressway intersections (LOS E threshold).	City of Santa Clara General Plan (2011).
City of Cupertino	LOS D for all City of Cupertino intersections, except three key intersections (LOS E+)	City of Cupertino General Plan, Policy M-1.2 (2015).
County of Santa Clara	LOS E for all County expressway intersections	Santa Clara County General Plan, Pages F-18 and F-19 (1994).

TABLE 5: SIGNALIZED INTERSECTION LOS STANDARDS

Jurisdiction	Intersection LOS Standard	Citation
Congestion Management Program (CMP)	LOS E for all CMP intersections	VTA Congestion Management Program, page 29 (2013).

Sources: Sunnyvale, 2019; Mountain View, 2011; City of Santa Clara, 2011; Cupertino, 2015; County of Santa Clara, 1994; VTA, 2013.

1.5.1.2 Unsignalized Intersections

Level of service analysis at unsignalized intersections is generally used to determine the need for modification in type of intersection control (i.e., all-way stop or signalization). As part of this evaluation, traffic volumes and delays are evaluated to determine if the existing intersection control is appropriate. The peak hour signal warrant is evaluated if the unsignalized intersection operates at unacceptable levels of service.

All unsignalized intersections are within the City of Sunnyvale; none of the unsignalized study intersections are CMP intersections. Traffic impacts on City of Sunnyvale unsignalized intersections would occur if one of the following criteria are met:

1. Intersection operates at an acceptable level (LOS D or better) without the project and degrades to an unacceptable level (LOS E or F) with the addition of project traffic.
2. Intersection operates at an unacceptable level (LOS E or F) without the project and the addition of project traffic increases:
    a. The average intersection delay by four (4) seconds or more <u>and</u> the volume-to-capacity (V/C) ratio by 0.01 or more for all-way stop controlled intersections; or
    b. The worst movement delay by four (4) seconds or more <u>and</u> the volume-to-capacity (V/C) ratio by 0.01 or more for side-street stop-controlled intersections.
3. Intersection meets the peak hour volume warrant for installation of a traffic signal as per the latest edition of the California Manual on Uniform Traffic Control Devices (CA MUTCD).[3]

1.5.1.3 Summary of Intersection LOS Thresholds

The LOS standards applied for each study intersection as discussed above are summarized in **Table 6**.

[3] For this report, Warrant 3B: Peak Hour Volume signal warrant was conducted for all unsignalized as described in Section 4C.04 of the CA MUTCD.

TABLE 6: STUDY INTERSECTION LOS STANDARDS

#	Intersection	Intersection Control[1]	Jurisdiction	CMP intersection or Regionally Significant roadway?	LOS Standard
1	Ellis Street / Middlefield Road	Signalized	Mountain View	No	D
2	SR 237 WB / Middlefield Road	Signalized	Mountain View	No	D
3	SR 237 EB / Middlefield Road	Signalized	Mountain View	No	D
4	SR-85 SB Off-Ramp / Central Expressway	Signalized	Santa Clara County	No	E
5	SR-85 NB On-Ramp - Easy Street / Central Expressway	SSSC	Santa Clara County	No	E
6	Whisman Station Drive / Central Expressway	Signalized	VTA/Santa Clara County	Yes	E
7	Ferguson Drive / Central Expressway	Signalized	VTA/Santa Clara County	Yes	E
8	Bernardo Avenue / Central Expressway	Signalized	Santa Clara County	No	E
9	Moorpark Way / Evelyn Avenue	Signalized	Mountain View	No	D
10	Bernardo Avenue / Evelyn Avenue	Signalized	Sunnyvale	No	D
11	Sylvan Avenue / El Camino Real	Signalized	CMP/Mountain View	Yes	E
12	Bernardo Avenue / El Camino Real	Signalized	Sunnyvale/ Caltrans	Yes	E
13	Mary Avenue / Central Expressway	Signalized	VTA/Santa Clara County	Yes	E
14	Mary Avenue / Evelyn Avenue	Signalized	Sunnyvale	No	D
15	Mary Avenue / Washington Avenue	Signalized	Sunnyvale	No	D
16	Mary Avenue / El Camino Real	Signalized	CMP/Sunnyvale /Caltrans	Yes	E
17	Pastoria Avenue / Washington Avenue	Signalized	Sunnyvale	No	D
18	El Camino Real / Hollenbeck Avenue - Pastoria Avenue	Signalized	Sunnyvale/ Caltrans	Yes	E
19	Hollenbeck Avenue / Remington Drive	Signalized	Sunnyvale	No	D
20	Hollenbeck Avenue / Fremont Avenue	Signalized	Sunnyvale	No	D
21	Hollenbeck Avenue / Cascade Drive	Signalized	Sunnyvale	No	D
22	Mathilda Avenue / SR 237 WB	Signalized	Sunnyvale	Yes	E
23	Mathilda Avenue / SR 237 EB	Signalized	Sunnyvale	Yes	E
24	Mathilda Avenue / Ross Drive	Signalized	Sunnyvale	Yes	E
25	Mathilda Avenue / Maude Avenue	Signalized	VTA/Sunnyvale	Yes	E

TABLE 6: STUDY INTERSECTION LOS STANDARDS

#	Intersection	Intersection Control[1]	Jurisdiction	CMP intersection or Regionally Significant roadway?	LOS Standard
26	Mathilda Avenue / Indio Avenue	Signalized	Sunnyvale	Yes	E
27	Mathilda Avenue / California Avenue	Signalized	Sunnyvale	Yes	E
28	Mathilda Avenue Southbound Off-Ramp / Evelyn Avenue	Signalized	Sunnyvale	Yes	E
29	Mathilda Avenue / Washington Avenue	Signalized	Sunnyvale	Yes	E
30	Mathilda Avenue / McKinley Avenue	Signalized	Sunnyvale	Yes	E
31	Mathilda Avenue / Iowa Avenue	Signalized	Sunnyvale	Yes	E
32	Mathilda Avenue / Olive Avenue	Signalized	Sunnyvale	Yes	E
33	Mathilda Avenue / El Camino Real	Signalized	VTA/Sunnyvale	Yes	E
34	Washington Avenue / Aries Way	SSSC	Sunnyvale	No	D
35	Washington Avenue / Taaffe Street	Signalized	Sunnyvale	No	D
36	Iowa Avenue / Taaffe Street	Signalized	Sunnyvale	No	D
37	Evelyn Avenue / Frances Street	Signalized	Sunnyvale	No	D
38	Washington Avenue / Frances Street	SSSC	Sunnyvale	No	D
39	Murphy Avenue / Washington Avenue	AWSC	Sunnyvale	No	D
40	Iowa Avenue / Murphy Avenue	SSSC	Sunnyvale	No	D
41	Sunnyvale Avenue / Maude Avenue	Signalized	Sunnyvale	No	D
42	Sunnyvale Avenue / Arques Avenue	Signalized	Sunnyvale	No	D
43	Sunnyvale Avenue / California Avenue	Signalized	Sunnyvale	No	D
44	Sunnyvale Avenue / Evelyn Avenue	Signalized	Sunnyvale	No	D
45	Sunnyvale Avenue / Washington Avenue	Signalized	Sunnyvale	No	D
46	Sunnyvale Avenue / McKinley Avenue	Signalized	Sunnyvale	No	D
47	Sunnyvale Avenue / Iowa Avenue	Signalized	Sunnyvale	No	D
48	Sunnyvale Avenue / Olive Avenue	Signalized	Sunnyvale	No	D
49	Sunnyvale Avenue / Old San Francisco Road	Signalized	Sunnyvale/ Caltrans	No	D
50	Sunnyvale Avenue / El Camino Real	Signalized	VTA/Sunnyvale /Caltrans	Yes	E
51	Mathilda Avenue / Saratoga-Sunnyvale Road - Talisman Drive	Signalized	Sunnyvale	Yes	E
52	Sunnyvale-Saratoga Road / Remington Drive	Signalized	VTA/Sunnyvale	Yes	E
53	Sunnyvale-Saratoga Road / Fremont Avenue	Signalized	VTA/Sunnyvale	Yes	E
54	Sunnyvale-Saratoga Road / Alberta Avenue - Harwick Way	Signalized	Sunnyvale	Yes	E

TABLE 6: STUDY INTERSECTION LOS STANDARDS

#	Intersection	Intersection Control[1]	Jurisdiction	CMP intersection or Regionally Significant roadway?	LOS Standard
55	De Anza Boulevard / Homestead Road	Signalized	Cupertino/VTA	Yes	D
56	De Anza Boulevard / I-280 Northbound Ramps	Signalized	Cupertino/VTA	Yes	D
57	De Anza Boulevard / I-280 Southbound Ramps	Signalized	Cupertino/VTA	Yes	D
58	Fair Oaks Avenue / US 101 Northbound Ramp	Signalized	Sunnyvale/ Caltrans	No	D
59	Fair Oaks Avenue / Ahwanee Avenue	Signalized	Sunnyvale	No	D
60	Fair Oaks Avenue / Duane Avenue	Signalized	Sunnyvale	No	D
61	Fair Oaks Avenue / Wolfe Road	Signalized	Sunnyvale	No	D
62	Fair Oaks Avenue / Maude Avenue	Signalized	Sunnyvale	No	D
63	Fair Oaks Avenue / Arques Avenue	Signalized	Sunnyvale	No	D
64	Central Expressway WB Off-Ramp / Arques Avenue	SSSC	Santa Clara County	No	E
65	Fair Oaks Avenue / California Avenue	Signalized	Sunnyvale	No	D
66	Fair Oaks Avenue / Evelyn Avenue	Signalized	Sunnyvale	No	D
67	Fair Oaks Avenue / Old San Francisco Road	Signalized	Sunnyvale	No	D
68	Fair Oaks Avenue / El Camino Real	Signalized	CMP/Sunnyvale /Caltrans	Yes	E
69	Wolfe Road / Old San Francisco Road	Signalized	Sunnyvale/ Caltrans	No	D
70	Wolfe Road / El Camino Real	Signalized	CMP/Sunnyvale /Caltrans	Yes	E
71	Wolfe Road / Fremont Avenue	Signalized	Sunnyvale	No	D
72	Lawrence Expressway / Monroe Street	Signalized	VTA/Santa Clara County	Yes	E
73	Lawrence Expressway / El Camino Real	Signalized	VTA/Santa Clara County	Yes	E
74	Lawrence Expressway / Benton Street	Signalized	Santa Clara County	No	E
75	Lawrence Expressway / Lochinvar Avenue	Signalized	Santa Clara County	No	E
76	Lawrence Expressway / Homestead Road	Signalized	VTA/Santa Clara County	Yes	E
77	Lawrence Expressway / Lehigh Drive	Signalized	Santa Clara County	No	E

TABLE 6: STUDY INTERSECTION LOS STANDARDS

#	Intersection	Intersection Control[1]	Jurisdiction	CMP intersection or Regionally Significant roadway?	LOS Standard
78	Lawrence Expressway / Pruneridge Avenue	Signalized	Santa Clara County	No	E
79	Calabazas Boulevard / El Camino Real	Signalized	Santa Clara	No	D

Notes:

1. Signal = signalized intersection, SSSC = side-street stop-controlled intersection

Sources: Sunnyvale, 2017; Santa Clara, 2010; VTA, 2014.

1.5.2 Freeway Impact Criteria

As required by VTA, the applicable LOS standard for freeway segments is LOS E. Per VTA's *Transportation Impact Analysis Guidelines*, traffic impacts on a CMP freeway segment occurs when the addition of project traffic causes:

- Freeway segment operations to deteriorate from an acceptable level (LOS E or better) under Existing Conditions to an unacceptable level (LOS F), or
- An increase in traffic of more than one percent of the capacity of a segment that operates at LOS F under Existing Conditions.

Freeway impacts are evaluated under Existing Plus Project Conditions

1.5.3 Pedestrian and Bicycle Impact Criteria

Pedestrian and bicycle impacts are considered significant if the Project would potentially disrupt existing pedestrian and bicycle facilities, eliminate existing pedestrian and/or bicycle facilities, interfere with planned pedestrian and bicycle facilities, increase conflicts between drivers, pedestrians, and/or bicyclists, or create inconsistencies or conflicts with adopted pedestrian and bicycle plans, guidelines, policies, or standards. These impacts are discussed in **Chapter 6.**

1.5.4 Transit Impact Criteria

Transit impacts are considered significant if the Project conflicts with existing or planned transit facilities, increases transit delay, or does not provide adequate facilities for pedestrians and bicyclists to access transit routes and stops. These impacts are discussed in **Chapter 6.**

1.6 CITY OF SUNNYVALE'S DEFICIENCY PLAN AND TRANSPORTATION IMPACT FEE PROGRAM

In compliance with VTA, the City of Sunnyvale maintains a *Citywide Deficiency Plan* (CDP, September 2005) to address existing and anticipated deficiencies in the level of service of Congestion Management Program (CMP) intersection within the City. The objective of the CDP is to set forth a comprehensive citywide solution of offsetting improvements to LOS deficiencies at CMP facilities for which no localized mitigation is feasible. The CDP includes a list of intersection and roadway improvements, as well as pedestrian, bicycle, and transit infrastructure improvements to facilitate multi-modal access throughout the City.

To help implementation of the improvements identified in the CDP, the City of Sunnyvale has a two-tiered traffic impact fee (TIF), which identifies a separate fee structure for the Moffett Park Specific Plan area north of SR 237 and the remainder of the City south of SR 237. Fees are adopted pursuant to the Transportation Strategic Program and associated Impact Fee Study. The purpose of the fee is to help provide adequate transportation-related improvements to serve cumulative development within the City. The most recently available Traffic Impact Fee Update Study is dated June 2017.

1.7 REPORT ORGANIZATION

The remainder of this report is divided into the following chapters:

- ***Chapter 2*** describes the **existing transportation system** near the Project site and the current operating conditions of the key intersections and freeway segments.
- ***Chapter 3*** describes **Existing Plus Project Conditions**, including the method used to estimate the amount of traffic added to the surrounding roadways by the Project and its impacts on the transportation system.
- ***Chapter 4*** describes **Background No Project and Background Plus Project Conditions** and associated roadway impacts and mitigation measures.
- ***Chapter 5*** describes **Cumulative No Project and Cumulative Plus Project Conditions** and associated roadway impacts and mitigation measures.
- ***Chapter 6*** describes **Cumulative Plus Reduced Project Conditions**, including the method used to estimate the amount of traffic added to the surrounding roadways by the reduced Project and its impacts on the transportation system.
- ***Chapter 7*** provides an assessment of **site access, on-site circulation, parking, multi-modal transportation, and transit vehicle delay,**
- ***Chapter 8*** presents the results of the **left-turn queuing analysis.**

2.0 EXISTING CONDITIONS

This chapter describes the existing conditions of the roadway network, pedestrian and bicycle facilities, and transit service in the study area. It also presents existing traffic volumes and operations for the study intersections and freeway segments with the results of level of service calculations.

2.1 EXISTING ROADWAY NETWORK

US-101, State Route 237, I-280, Central Expressway, Lawrence Expressway, and El Camino Real, provide regional access near the Project site. Local access is provided via Evelyn Avenue, Sunnyvale Avenue, Mathilda Avenue, Iowa Street, Washington Avenue, Taaffe Street, Aries Way, and Murphy Avenue. Descriptions of these roadways, and others, are presented below. **Figure 1**: Project Site Plan

Figure 2 shows the locations of these facilities in relation to the Project site.

- *US-101* extends north through San Francisco and south through San Jose. Near the Project site, US-101 travels in an east-west direction with approximately 170,000 daily vehicles. The freeway has three mixed-flow lanes and one high-occupancy vehicle (HOV) lane in each direction. HOV lanes, also known as diamond or carpool lanes, restrict use to vehicles with two or more persons (carpool, vanpool, and buses), motorcycles, or qualified clean air vehicles during the morning (5:00 AM to 9:00 AM) and evening (3:00 PM to 7:00 PM) commute periods. Primary access to the Project area is provided via the Mathilda Avenue interchange.
- *SR 237* is a primarily east-west freeway located northwest of the Project site providing two to three travel lanes in each direction. One travel lane in each direction is designated as a high-occupancy vehicle (HOV) lane for some segments of this freeway. SR 237 merges into Grant Road in Mountain View and extends east to I-680 in Milpitas. SR 237 provides access to the sites via El Camino Real, Mathilda Avenue and Central Expressway via the Middlefield Road interchange.
- *I-280* is located south of the Project site. It provides regional access between San Francisco and San Jose. I-280 is a north-south freeway with three mixed-flow lanes and one high occupancy vehicle lane (HOV) in each direction. I-280 provides access via interchanges with De Anza Boulevard, Wolfe Road and Lawrence Expressway.
- *Central Expressway* is a divided four-lane east-west expressway between San Antonio Road in the City of Mountain View and De La Cruz Boulevard in the City of Santa Clara. West of San Antonio Road, Central Expressway continues to Menlo Park as Alma Road. Central Expressway provides access to the sites via an interchange at Mathilda Avenue and ramps at Fair Oaks Avenue.
- *Lawrence Expressway* is a limited access north-south expressway that extends between San Jose to the north and Saratoga to the south. South of I-280 it is a six-lane facility, north of I-280 it is an eight-lane expressway with one high occupancy vehicle lane (HOV) in each direction. It is located east of the Project area and provides access via Reed Avenue.

- *El Camino Real (SR 82)* connects the cities of San Francisco and San Jose. It is a divided six-lane Class I Arterial traveling northwest-southeast providing access to the Project sites via Mathilda Avenue, Sunnyvale Avenue, and Fair Oaks Avenue.

Other local access streets included in the study are listed below.

- *Aries Way* is a private, two-lane north-south roadway that extends from Altair Way to Washington Avenue. Aries Way provides direct access to several blocks of the DSP area.
- *Evelyn Avenue* is a two-lane east-west roadway extending from Castro Street in Mountain View to Reed Avenue in Sunnyvale. This road provides access to the Project sites via Mathilda Avenue, Frances Street, Murphy Avenue and Sunnyvale Avenue.
- *Fair Oaks Avenue* is a four-lane north-south roadway that extends from El Camino Real to SR 237. Fair Oaks Avenue provides access to the Project sites via Olive Avenue, Evelyn Avenue, and McKinley Avenue.
- *Iowa Street* is a four-lane east-west roadway that extends from Bernardo Avenue to Flora Vista Avenue. Iowa Street runs parallel to Washington Avenue and McKinley Avenue. Between Mathilda Avenue and Sunnyvale Avenue, Iowa Street is the southern border of the Project area.
- *Mathilda Avenue* is a six- to eight-lane north-south arterial that extends from Caribbean Drive to north to Talisman Drive to the south where it merges with Sunnyvale-Saratoga Road. This road provides access to the Project sites via Washington Avenue, McKinley Avenue, and Iowa Street.
- *McKinley Avenue* is a two- to four-lane east-west roadway extending from Sunset Avenue to Bayview Avenue. McKinley Avenue runs parallel to Washington Avenue, and the roadway passes directly through the Project area between Mathilda Avenue and Sunnyvale Avenue.
- *Murphy Avenue* is a two-lane north-south roadway that extends from Evelyn Avenue to El Camino Real. Murphy Avenue runs parallel to Sunnyvale Avenue, and the roadway passes directly through the Project area.
- *Sunnyvale Avenue/Sunnyvale-Saratoga Road* is a north-south roadway that extends from Maude Avenue to Junipero Serra Freeway. Sunnyvale Avenue runs parallel to Mathilda Avenue. North of El Camino Real, Sunnyvale Avenue is a two-lane roadway. South of El Camino Real, Sunnyvale-Saratoga Avenue is a six-lane roadway. This road provides Project area site access via Washington Avenue, Evelyn Avenue, McKinley Avenue, and Iowa Street.
- *Taaffe Street* is a two-lane north-south roadway extending from Altair Way to El Camino Real. Taaffe Street runs parallel to Murphy Avenue and Sunnyvale Avenue. This road provides direct access to the Project sites.
- *Washington Avenue* is a two-lane east-west roadway that extends from Acalanes Drive to Evelyn Avenue and passes through the Project area. Washington Avenue connects to Aries Way and Taaffe Street which provide direct access to the Project sites.

- *Wolfe Road* is a four-lane north-south roadway that extends from Stevens Creek Boulevard to Maude Avenue. South of Reed Avenue, Wolfe Road is a two-lane north-south avenue. This road provides access to the Project area via Evelyn Avenue.

2.2 PEDESTRIAN FACILITIES

Pedestrian facilities comprise sidewalks and crosswalks. Sidewalks border the proposed Project site along Charles Street, Evelyn Avenue, Sunnyvale Avenue, Carroll Street, Olive Avenue, Mathilda Avenue, and El Camino Real. Within the DSP area, crosswalks are provided on all legs of the study intersections with the following exceptions:

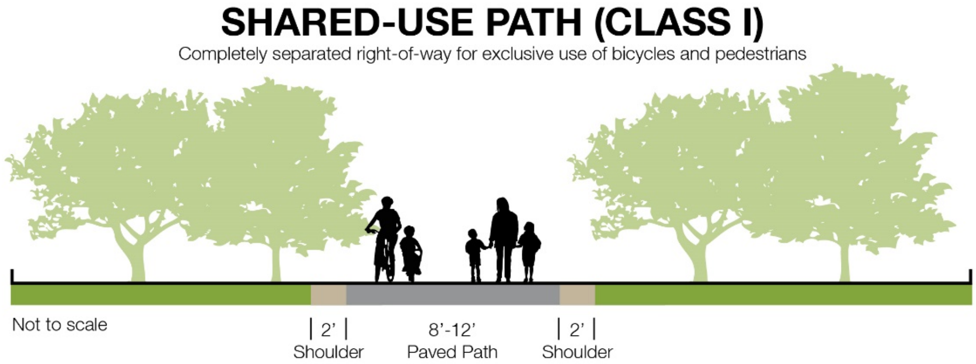
- Evelyn Avenue/Carroll Street: all three legs
- Evelyn Avenue/S. Murphy Street: east leg
- Evelyn Avenue/Southbound Mathilda Avenue Off-Ramp: east leg
- Washington Avenue/Carroll Street: east and west legs
- Washington Avenue/Aries Way: east and west legs
- McKinley Avenue/Carroll Street: east and west legs
- Iowa Avenue/Carroll Street: all four legs
- Olive Avenue/Carroll Street: east and west legs.

The sidewalk network is complete without gaps near the proposed Project sites. The proposed Project is approximately 0.3 miles away from the Sunnyvale Caltrain using the pedestrian network. The sites are also 0.3 miles from the Evelyn Avenue/Frances Street VTA bus stop and 0.3 miles from the Mathilda Avenue/ Washington Avenue VTA bus stop using the pedestrian sidewalk network.

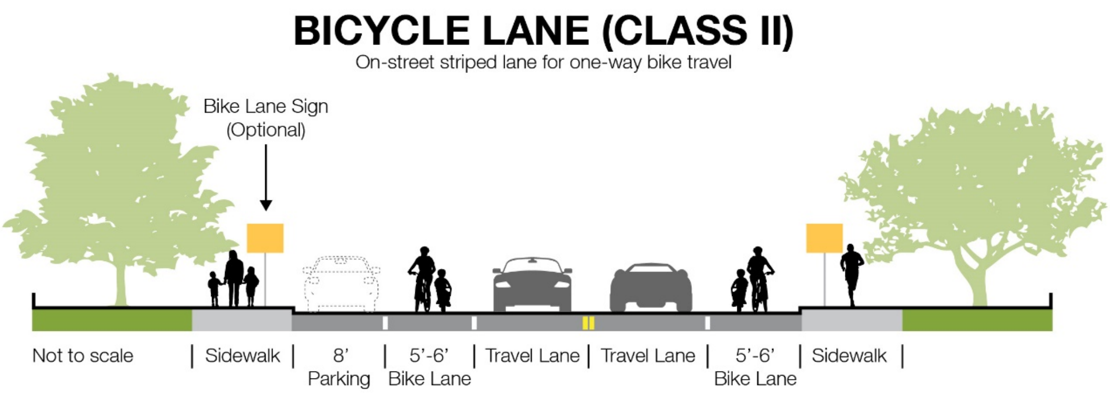
2.3 BICYCLE FACILITIES

Bikeway planning and design in California typically relies on guidelines and design standards established by California Department of Transportation (Caltrans) in the Highway Design Manual (Chapter 1000: Bikeway Planning and Design). Caltrans provides for four distinct types of bikeway facilities, as described below and shown in the accompanying figures.

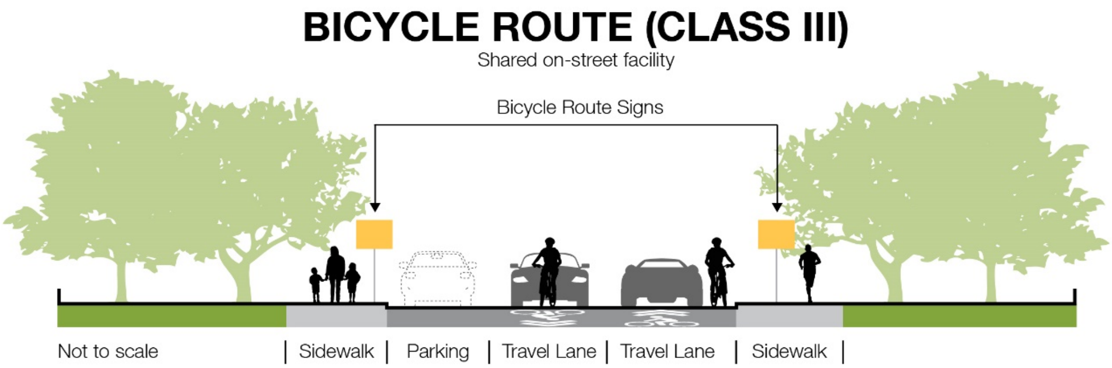
- *Class I Bikeways (Bike Path)* provide a completely separate right-of-way and are designated for the exclusive use of bicycles and pedestrians with vehicle and pedestrian cross-flow minimized. In general, bike paths serve corridors not served by streets and highways or where sufficient right-of-way exists to allow such facilities to be constructed away from the influence of parallel streets and vehicle conflicts.



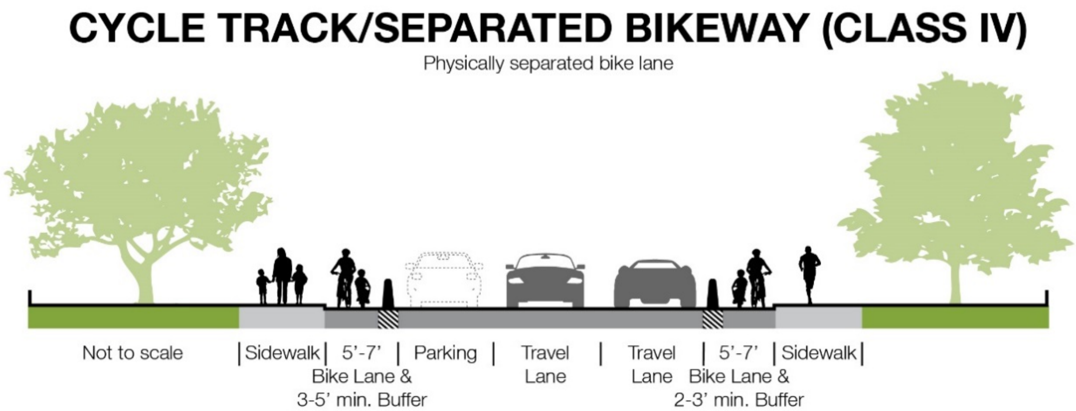
- *Class II Bikeways (Bike Lanes)* are lanes for bicyclists generally adjacent to the outer vehicle travel lanes. These lanes have special lane markings, pavement legends, and signage. Bicycle lanes are generally five (5) feet wide. Adjacent vehicle parking and vehicle/pedestrian cross-flow are permitted.



- *Class III Bikeways (Bike Route)* are designated by signs or pavement markings for shared use with pedestrians or motor vehicles, but have no separated bike right-of-way or lane striping. Bike routes serve either to: a) provide continuity to other bicycle facilities, or b) designate preferred routes through high demand corridors.

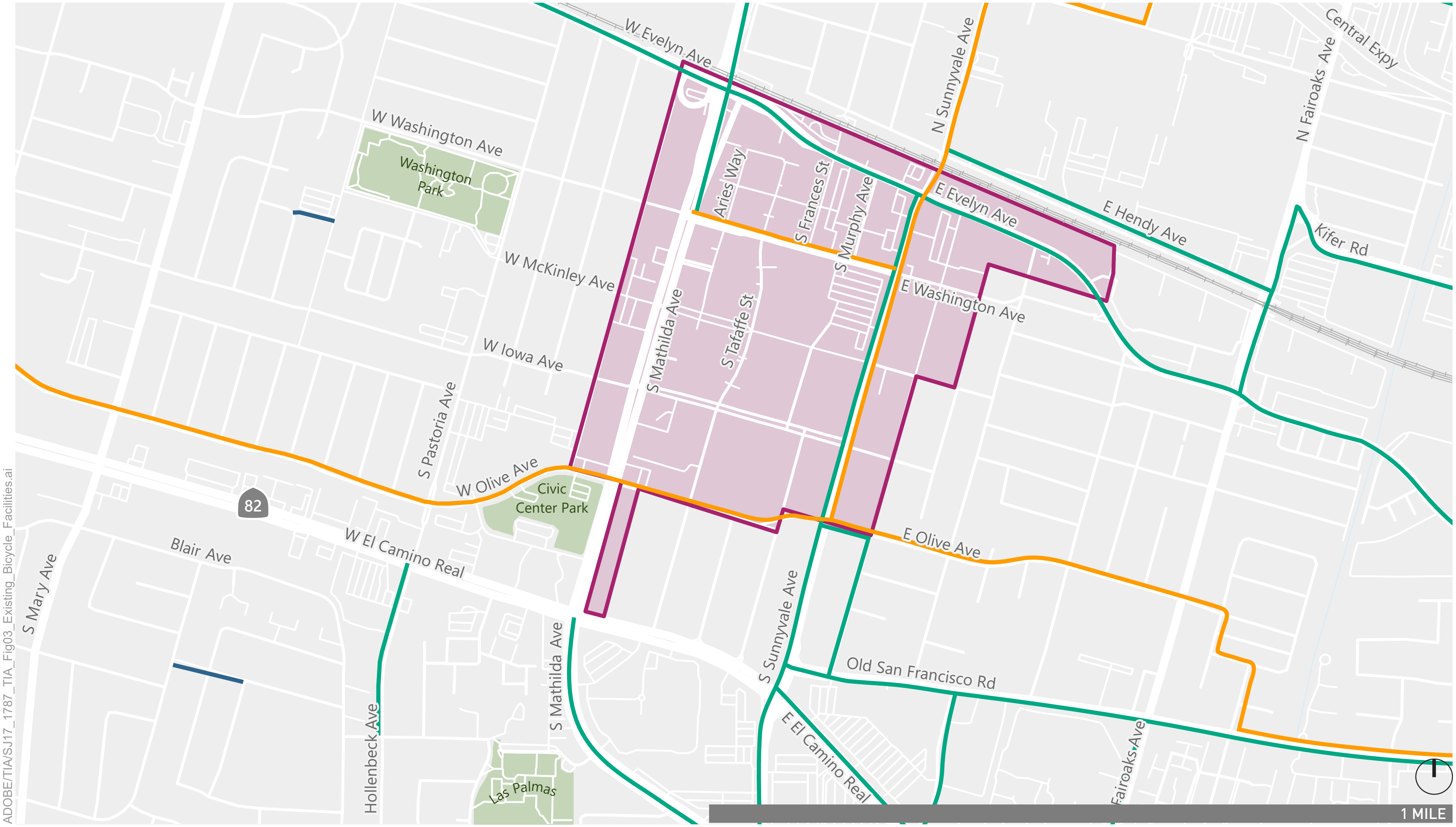


- *Class IV Bikeways (Cycle tracks or Protected Bike Lanes)*[4] provide a right-of-way designated exclusively for bicycle travel within a roadway and which are protected from other vehicle traffic with devices, including, but not limited to, grade separation, flexible posts, inflexible physical barriers, or parked cars.



The *VTA Bicycle Technical Guidelines* (December 2007) recommends that Caltrans standards regarding bicycle facility dimensions be used as a minimum and provides supplemental information and guidance on when and how to better accommodate the many types of bicyclists. **Figure 3** shows the location of the existing bicycle facilities near the Project sites.

[4] 3-5' minimum buffer needed to account for space for car door openings from parked cars. 5' buffer needed for handicap vehicle door openings.



Project Site

Existing Bicycle Facilities

Class I- Bicycle Path

Class II- Bicycle Lane

Class III- Bicycle Route

Figure 3

Existing Bicycle Facilities

Cityline Sunnyvale TIA

Class II bicycle lanes are provided along the following roadways within 0.5 miles of the Project sites:

- Evelyn Avenue
- Mathilda Avenue (north of Washington Avenue and south of El Camino Real; northbound between Olive Avenue and McKinley Avenue)
- Sunnyvale Avenue (south of Evenly Avenue)
- Hendy Avenue (between Sunnyvale Avenue and Fair Oaks Avenue)
- Old San Francisco Road (east of Sunnyvale Avenue)
- El Camino Real (east of Sunnyvale Avenue)

The City of Sunnyvale designates several bike routes near the Project, which include the following:

- Washington Avenue (within the Project area)
- Olive Avenue (between Bernardo Avenue and Fair Oaks Avenue)
- Sunnyvale Avenue (north of Evelyn Avenue)

There are no existing Class I or Class IV bikeways within 0.5 miles of the Project sites.

2.4 EXISTING TRANSIT SERVICE

The Project area is located near several transit routes including bus service operated by the VTA and passenger rail service operated by Caltrain, as shown on **Figure 4** and summarized in **Table 7**. The table includes the origins and destinations, operating hours and headways. Descriptions of transit services are provided below.

2.4.1 VTA Bus Service

VTA operates bus service in the area. A summary of each route serving the Project area is provided below:

- *Route 22* – Service from Palo Alto Transit Center to Eastridge Transit Center via El Camino Real. On weekdays, frequencies are 10 to 15 minutes during the AM and PM peak periods and 15 to 20 minutes during off-peak time periods. Route 22 stops at El Camino/Mathilda, a walking distance of 0.7 miles from the Project area.
- *Route 26* – Service from Sunnyvale/Lockheed Martin Transit Center to Eastridge Transit Center. On weekdays, frequencies are 30 minutes during the AM and PM peak periods and 40 to 60 minutes during off-peak time periods. Route 26 stops at Fair Oaks Avenue/Evelyn Avenue, a walking distance of 0.8 miles from the Project area.
- *Route 32* – Service from San Antonio Shopping Center to Santa Clara Transit Center. On weekdays, frequencies are 30 minutes and 30 to 60 minutes off-peak. Route 32 stops at the Sunnyvale Caltrain Station, a walking distance of 0.3 miles from the Project area.
- *Route 53* – Service from West Valley College to Sunnyvale Transit Center. On weekdays, frequencies are approximately 60 minutes in the AM and PM peak periods as well as off-peak. Route 53 stops at Frances Street/Olson Way, a walking distance of approximately 0.3 miles from the Project area.
- *Route 54* – Service from De Anza College in the City of Cupertino to Sunnyvale/Lockheed Martin Transit Center. On weekdays, frequencies are 30 minutes during the AM and PM peak periods and approximately 40 minutes off-peak. Route 54 stops at Frances Street/Olson Way, a walking distance of approximately 0.3 miles from the Project area.
- *Route 55* – Service from De Anza College in the City of Cupertino, the Sunnyvale Transit Center, and Great America amusement park in Santa Clara. On weekdays, frequencies are 15 minutes during the AM and PM peak periods and 30 minutes off-peak. Route 55 stops at Frances Street/Olson Way, a walking distance of 0.3 miles from the Project area.
- *Route 304* – Limited service from the Sunnyvale Transit Center to the Santa Teresa light rail station via Downtown San Jose. This route provides four trips northbound in the AM peak period and four southbound trips in the PM peak period. Route 304 stops at Frances Street/Olson Way, a walking distance of approximately 0.3 miles from the Project area.

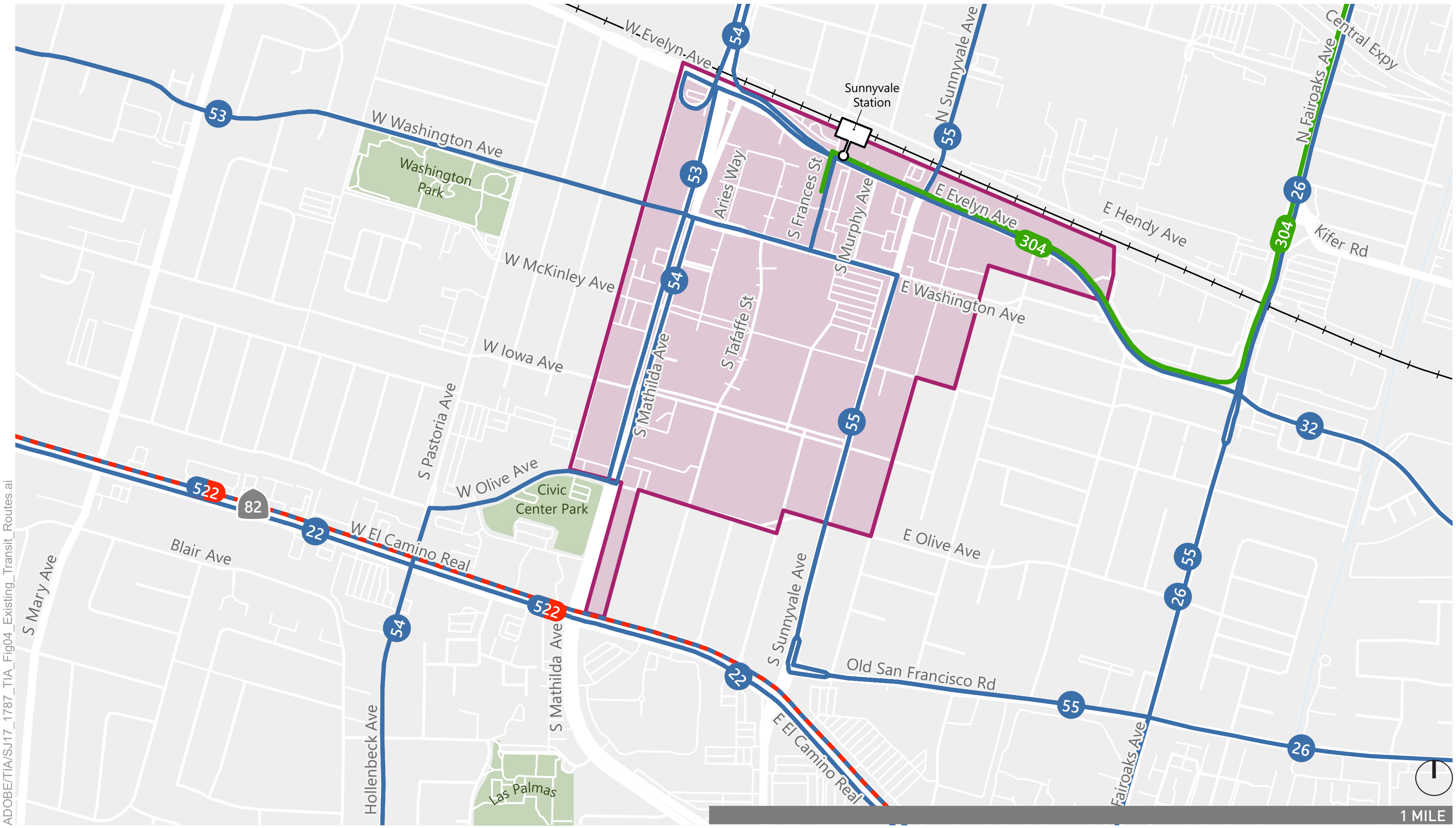
- *Route 522* - Service from Palo Alto Transit Center to Eastridge Transit Center. On weekdays, frequencies are 10 to 15 minutes during the AM and PM peak periods and 15 to 20 minutes during off-peak time periods. Route 522 stops at El Camino/Hollenbeck, a walking distance of 0.7 miles from the Project area.
- *Route 822* – Limited service to the Altamont Corridor Express commuter rail at the Great America-Santa Clara Station. Service includes four trips southbound in the AM peak period and four northbound in the PM peak period. Route 304 stops at Kifer Road/Hendy Avenue, a walking distance of approximately 1 mile from the Project area.

2.4.2 VTA Next Network

VTA's Fiscal Year 18-19 Transit Service Plan adopted in May 2017 outlines the redesign of the transit network to increase ridership and to improve cost-effectiveness. The redesigned transit network strives for better balance between the service frequency and coverage in VTA's service area. The redesigned system, called the Next Network, is shown on **Figure 5.** Route realignment and service frequency changes have been proposed for VTA bus routes in the Project area. Route 32 stops at the Sunnyvale Caltrain Station, a walking distance of 0.3 miles from the Project area; it will be replaced with new Route 21. The frequency will remain at 30 minutes on weekdays and will decrease to 45 minutes on Saturdays. Route 54 runs along Mathilda Avenue and stops at Frances Street/Olson Way, a walking distance of approximately one-tenth of a mile from the Project area. This route will be discontinued due to low ridership and replaced with new Rapid Route 523, which provides service on the Mathilda Avenue / De Anza Boulevard corridor. Route 55 stops at Frances Street/Olson Way, a walking distance of 0.3 miles from the Project area. This route's weekday peak headway will increase from 15 minutes to 30 minutes. Route 304 stops at Frances Street/Olson Way, a walking distance of approximately 0.3 miles from the Project area. This route will be discontinued due to low ridership. To replace the service by Route 304, riders could use the new Route 20 that would connect Milpitas BART Station, Mission College, Santa Clara Square and Downtown Sunnyvale with weekday peak headways of 15 minutes.

2.4.3 Caltrain Service

Caltrain provides regional passenger rail service between San Francisco and San Jose, with extended service to Morgan Hill and Gilroy during weekday commute hours. The Sunnyvale Caltrain station is located just 0.3 miles from the Project area. The station is accessible from the Project site via walking, biking, driving, and public transit; the walk time is approximately seven minutes and the cycling time is approximately 2 minutes. A limited amount of paid parking is available at Sunnyvale's Caltrain station. This station is a stop for the Caltrain baby bullet during morning and evening commute hours with one-hour headways.



Project Site

Caltrain Rail & Station

Existing Transit Routes

Local Bus Routes

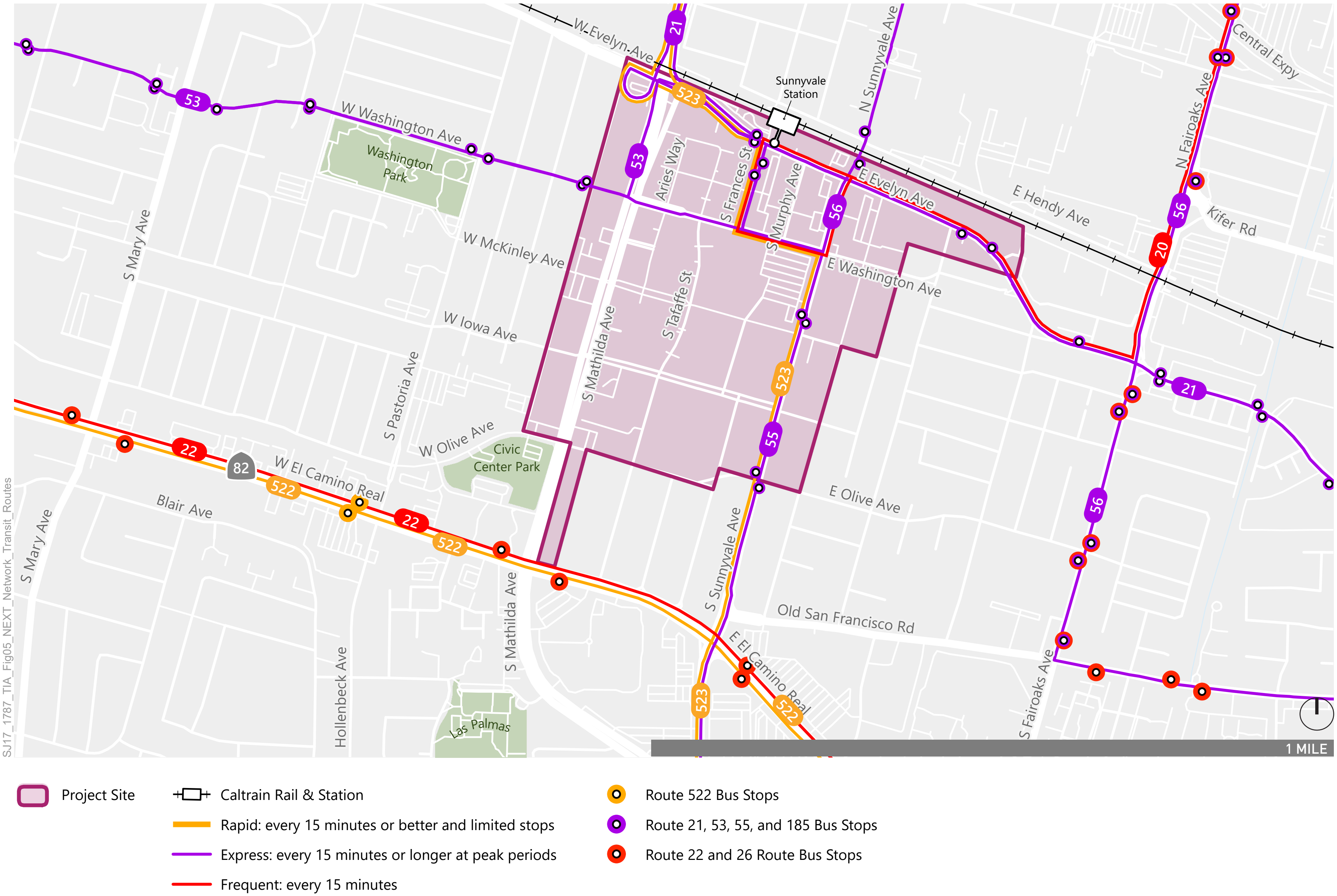
Limited Stop Bus Routes

Rapid 522

Figure 4

Existing Transit Routes

Cityline Sunnyvale TIA



SJ17_1787_TIA_Fig05_NEXT_Network_Transit_Routes

Figure 5

Next Network Transit Routes

Cityline Sunnyvale TIA

TABLE 7: EXISTING TRANSIT SERVICE

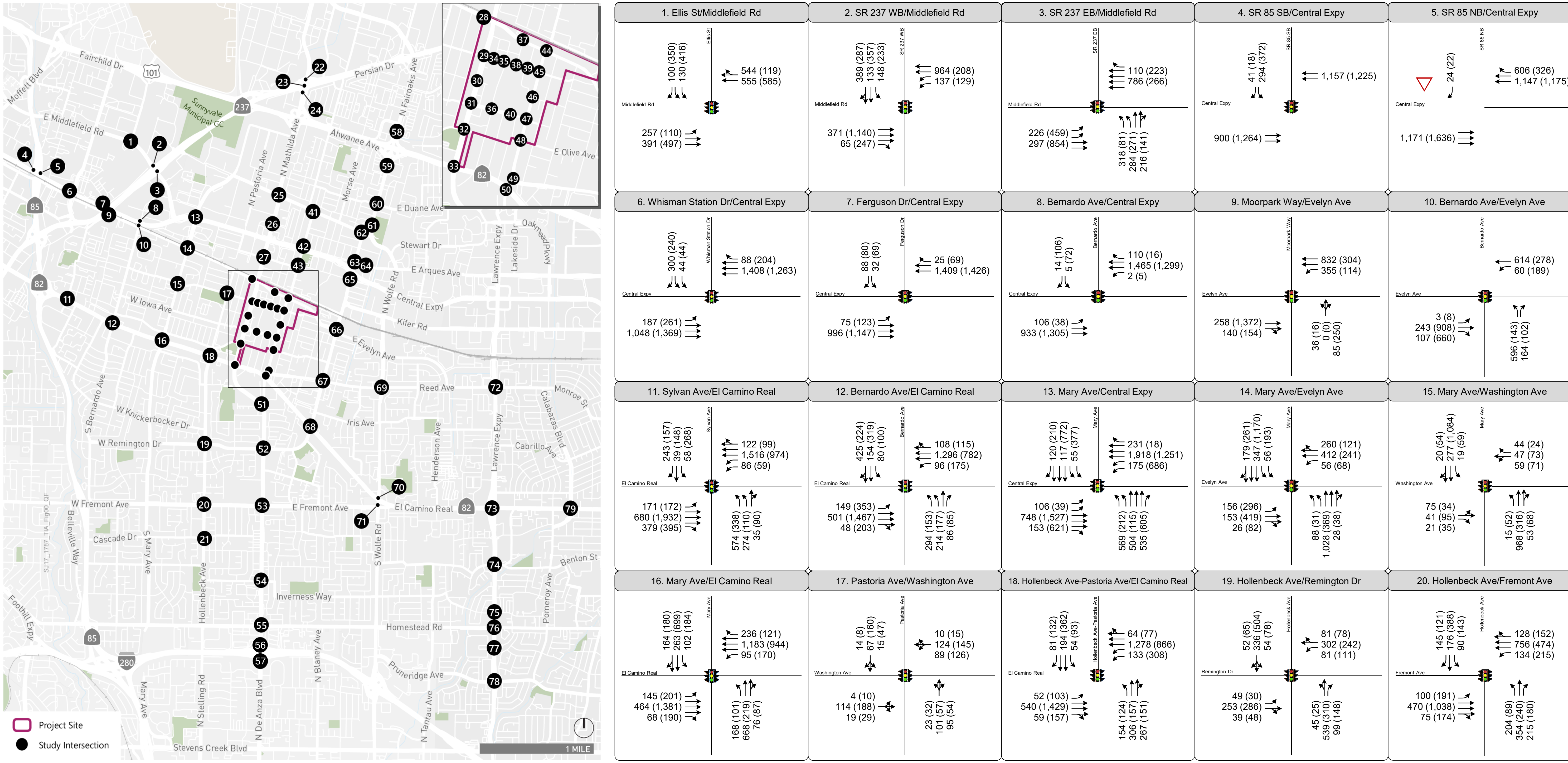
Route	From	To	Weekdays		Weekends	
			Operating Hours¹	Peak Headway² (minutes)	Operating Hours¹	Headway (minutes)²
VTA Route 22	Palo Alto Transit Center	Eastridge Transit Center	24 Hours	15	24 Hours	15
VTA Route 26	Sunnyvale/ Lockheed Martin Transit Center	Eastridge Transit Center	5:15 AM – 11:50 PM	30	6:15 AM – 10:55 PM	30
VTA Route 32	San Antonio Shopping Center	Santa Clara Transit Center	5:45 AM – 8:15 PM	30	8:45 AM – 6:00 PM	60
VTA Route 53	West Valley College	Sunnyvale/ Lockheed Martin Transit Center	7:00 AM – 7:00 PM	60	N/A	N/A
VTA Route 54	De Anza College	Sunnyvale/ Lockheed Martin Transit Center	6:00 AM – 9:30 PM	30	8:00 AM – 8:00 PM	45
VTA Route 55	De Anza College	Great America Station	5:30 AM – 10:50 PM	15	7:40 AM – 9:05 PM	30
VTA Route 304	Sunnyvale/ Lockheed Martin Transit Center	Santa Teresa Light Rail Station	5:50 AM – 8:50 AM, 3:30 PM – 7:10 PM	45	N/A	N/A
VTA Route 522	Palo Alto Transit Center	Eastridge Transit Center	5:00 AM – 11:00 PM	12	6:00 AM – 11:00 PM	15
VTA Route 822	Kifer Road & Uranium Drive	Great America Station	6:15 AM – 9:40 AM, 3:10 PM – 6:40 PM	60	N/A	N/A
Caltrain	San Jose Diridon (Gilroy)	San Francisco	4:30 AM – 12:40 AM	15	7:00 AM – 12:15 AM Saturday 8:40 AM -11:50 PM Sunday	60

Notes:
1. Operating hours rounded to the nearest 5-minute interval.
2. Headways are defined as the time interval between two transit vehicles traveling in the same direction over the same route. Caltrain headways are measured from Sunnyvale Station.

Source: VTA, Caltrain, March 2019.

2.5 EXISTING INTERSECTION VOLUMES AND LANE CONFIGURATIONS

The existing operations of the study intersections were evaluated for the highest one-hour volumes during the weekday morning and evening peak periods. The City of Sunnyvale provided recent traffic counts for several of the study intersections. For the intersections without recent counts, new traffic counts were conducted in October 2018. Copies of the traffic counts are included in **Appendix A. Figure 6** presents the existing AM and PM peak-hour turning movement volumes, lane configurations, and traffic control devices at the study intersections.



LEGEND

- Study Intersection
- Stop Sign
- AM (PM) Peak Hour Traffic Volume
- Signalized
- Lane Configuration
- Yield Sign
- High Occupancy Vehicle (HOV) and Bus Only Lane 6:00 AM - 9:00 AM, 3:00 PM - 7:00 PM, Monday through Friday

Figure 6
Existing Conditions Traffic Volumes and Lane Configurations

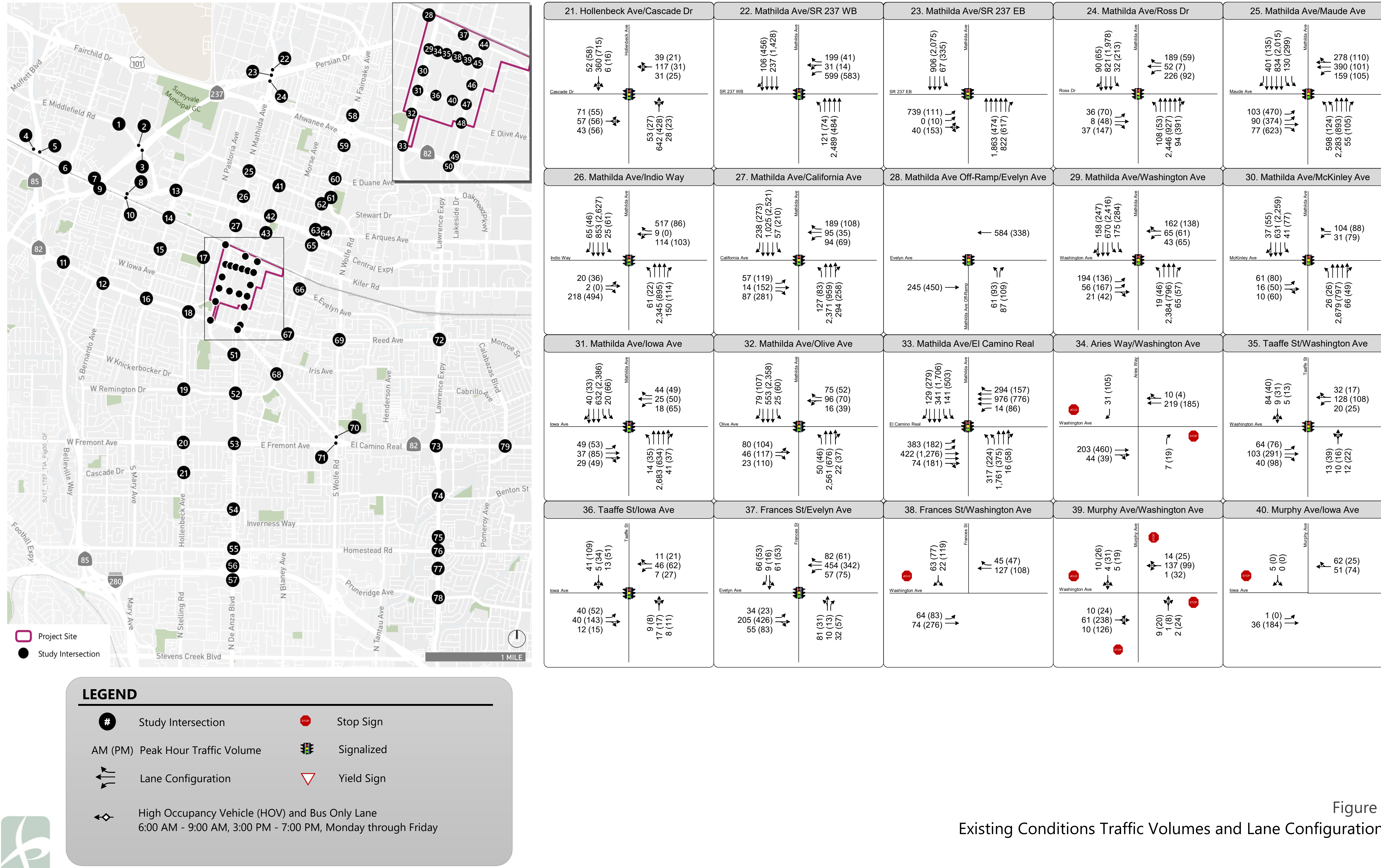
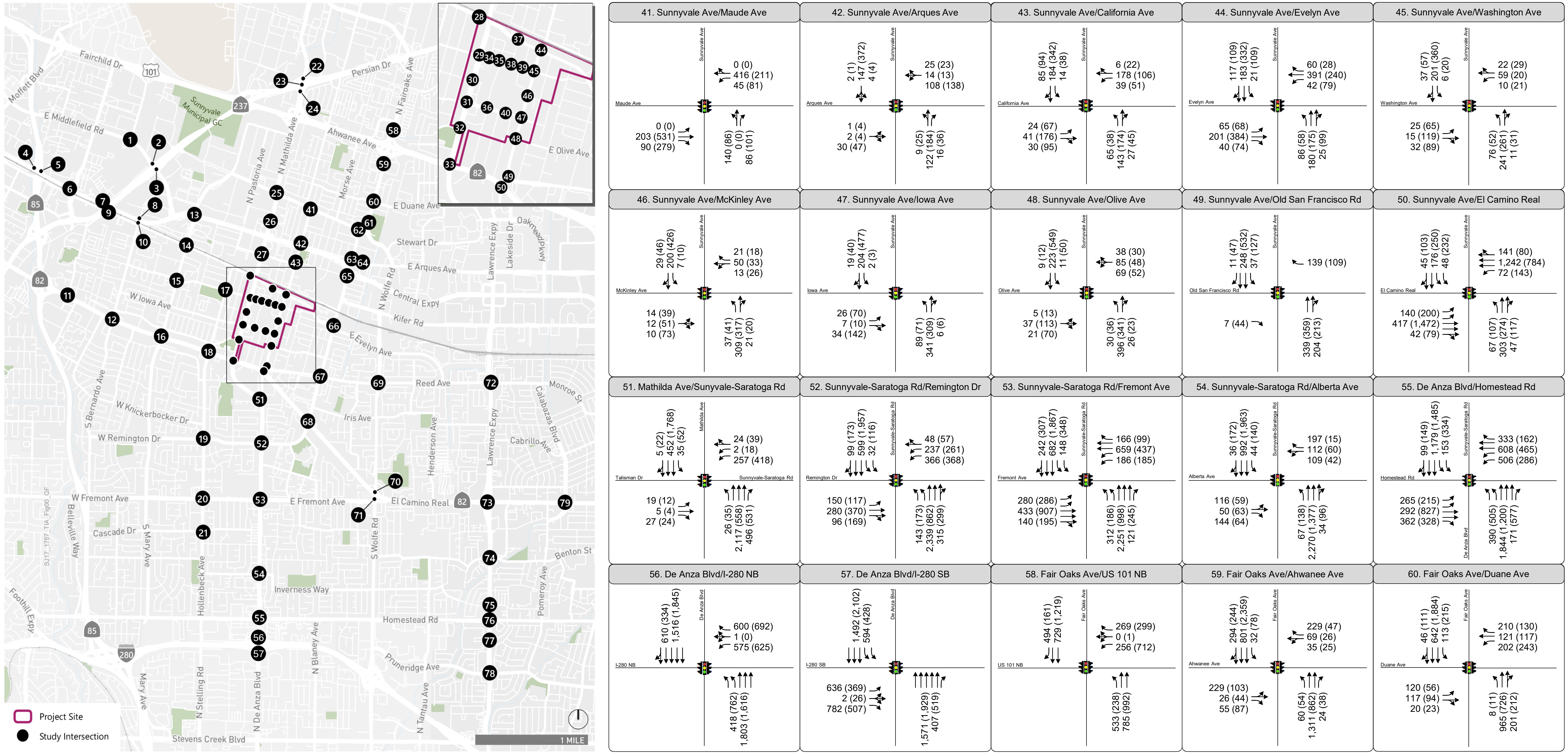


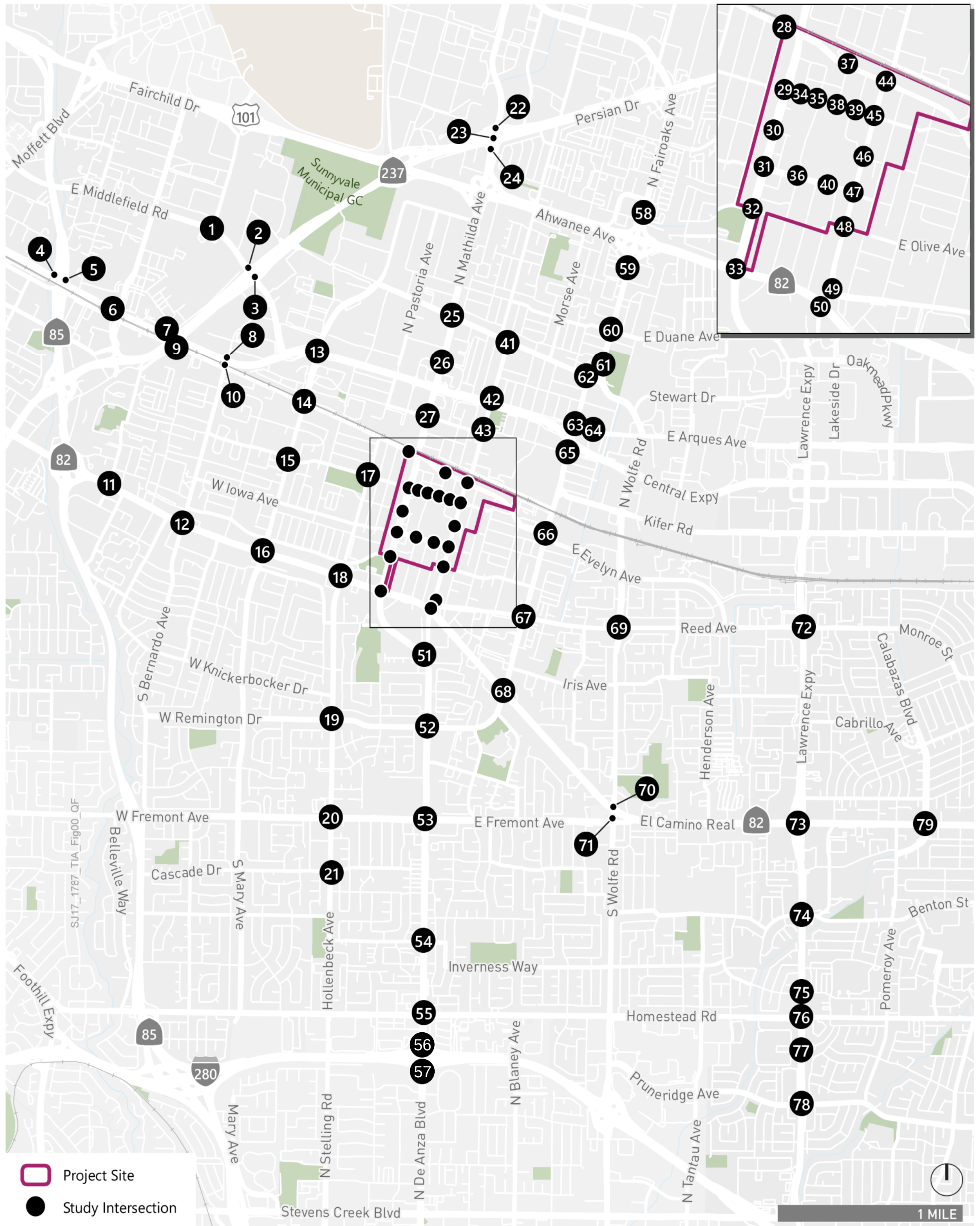
Figure 6
Existing Conditions Traffic Volumes and Lane Configurations

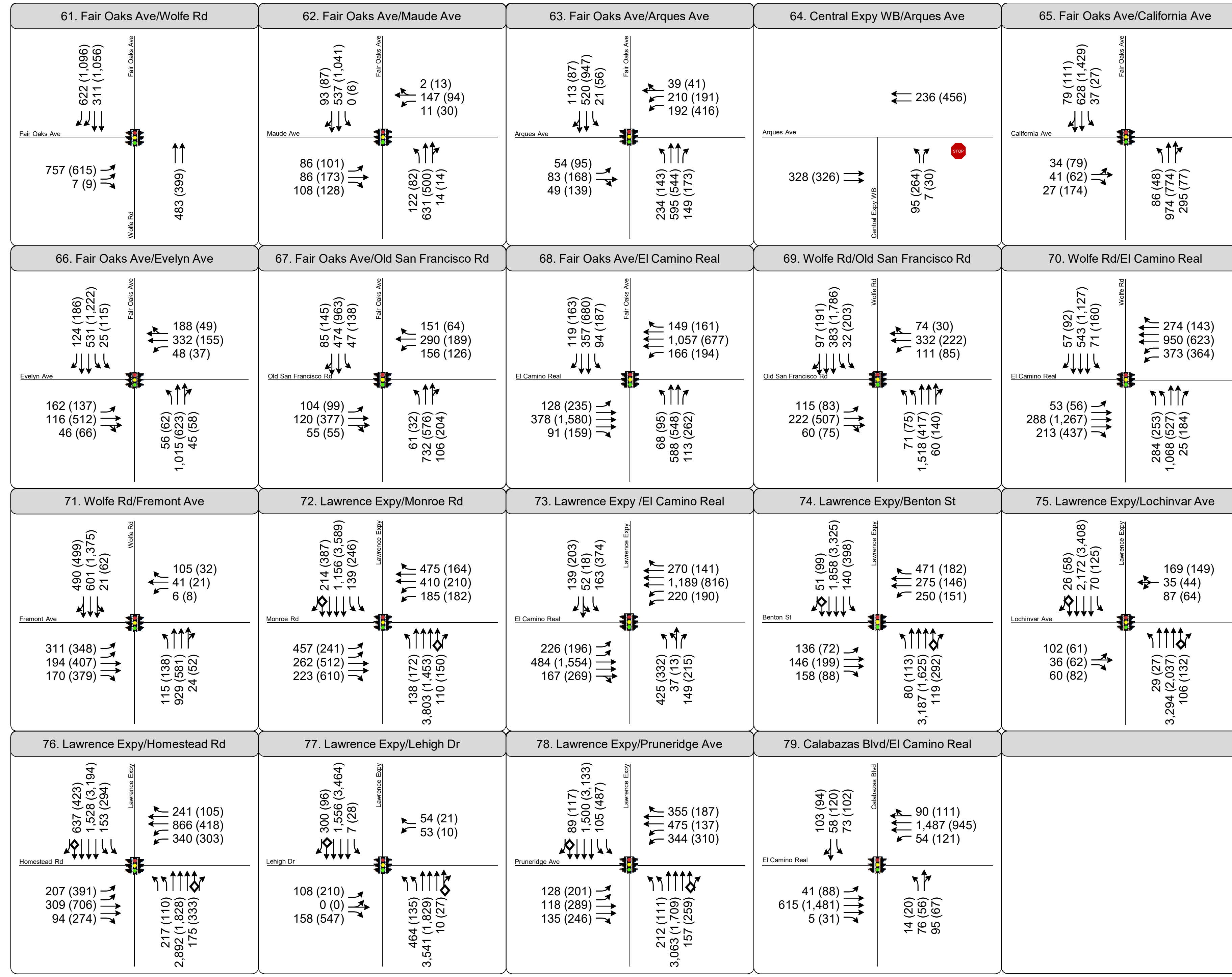


LEGEND

- # Study Intersection
- AM (PM) Peak Hour Traffic Volume
- Lane Configuration
- High Occupancy Vehicle (HOV) and Bus Only Lane 6:00 AM - 9:00 AM, 3:00 PM - 7:00 PM, Monday through Friday
- Stop Sign
- Signalized
- Yield Sign

Figure 6
Existing Conditions Traffic Volumes and Lane Configurations





LEGEND

- Study Intersection
- AM (PM) Peak Hour Traffic Volume
- Lane Configuration
- High Occupancy Vehicle (HOV) and Bus Only Lane 6:00 AM - 9:00 AM, 3:00 PM - 7:00 PM, Monday through Friday
- Stop Sign
- Signalized
- Yield Sign

Figure 6
Existing Conditions Traffic Volumes and Lane Configurations

2.6 EXISTING INTERSECTION LEVELS OF SERVICE

Existing intersection lane configurations, signal timings, and peak-hour turning movement volumes were used to calculate the levels of service for study intersections during each peak hour. LOS calculations were generally conducted using TRAFFIX analysis software. The Mathilda Avenue intersections at SR 237 Westbound Ramps (#22), SR 237 Eastbound Ramps (#23), and Ross Drive (#24) were evaluated using Synchro analysis software. The results of the LOS analysis for Existing Conditions are presented in **Table 8. Appendix B** contains the corresponding calculation sheets. The results indicate that all study intersections operate at acceptable service levels (generally LOS D or better for City intersections and LOS E or better for regionally significant, expressway, and CMP intersections) during the AM and PM peak hours.

TABLE 8: EXISTING INTERSECTION LEVELS OF SERVICE

Int. #	Intersection Name	Count Date	Intersection Control[1]	Jurisdiction	LOS Standard[2]	Existing Conditions		
						Peak Hour[3]	Delay[4]	LOS[5]
1	Ellis Street / Middlefield Road	October 2018	Signal	Mountain View	D	AM PM	14.8 15.3	B B
2	SR 237 WB / Middlefield Road	May 2017	Signal	Mountain View	D	AM PM	19.7 14.6	B- B
3	SR 237 EB / Middlefield Road	May 2017	Signal	Mountain View	D	AM PM	22.5 20.3	C+ C+
4	SR-85 SB Off-Ramp / Central Expressway	October 2018	Signal	Santa Clara County	E	AM PM	11.8 14.3	B+ B
5	SR-85 NB On-Ramp - Easy Street / Central Expressway	October 2018	SSSC	Santa Clara County	E	AM PM	13.1 13.3	B B
6	Whisman Station Drive / Central Expressway	October 2018	Signal	VTA/Santa Clara County	E	AM PM	18.0 12.0	B- B
7	Ferguson Drive / Central Expressway	October 2018	Signal	VTA/Santa Clara County	E	AM PM	7.6 8.5	A A
8	Bernardo Avenue / Central Expressway	October 2018	Signal	Santa Clara County	E	AM PM	9.8 7.0	A A
9	Moorpark Way / Evelyn Avenue	October 2018	Signal	Mountain View	D	AM PM	13.7 17.0	B B
10	Bernardo Avenue / Evelyn Avenue	October 2018	Signal	Sunnyvale	D	AM PM	26.6 15.7	C B
11	Sylvan Avenue / El Camino Real	October 2018	Signal	CMP/Mountain View	E	AM PM	39.7 35.7	D D+
12	Bernardo Avenue / El Camino Real	October 2018	Signal	Sunnyvale/ Caltrans	E	AM PM	39.8 38.9	D D+
13	Mary Avenue / Central Expressway	May 2017	Signal	VTA/Santa Clara County	E	AM PM	42.0 52.8	D D-

TABLE 8: EXISTING INTERSECTION LEVELS OF SERVICE

Int. #	Intersection Name	Count Date	Intersection Control[1]	Jurisdiction	LOS Standard[2]	Existing Conditions		
						Peak Hour[3]	Delay[4]	LOS[5]
14	Mary Avenue / Evelyn Avenue	December 2016	Signal	Sunnyvale	D	AM PM	37.5 44.1	D+ D
15	Mary Avenue / Washington Avenue	November 2017	Signal	Sunnyvale	D	AM PM	15.9 17.5	B B
16	Mary Avenue / El Camino Real	December 2016	Signal	CMP/Sunnyvale/ Caltrans	E	AM PM	46.2 48.4	D D
17	Pastoria Avenue / Washington Avenue	December 2017	Signal	Sunnyvale	D	AM PM	26.0 25.9	C C
18	El Camino Real / Hollenbeck Avenue - Pastoria Avenue	December 2016	Signal	Sunnyvale/ Caltrans	E	AM PM	38.7 40.8	D+ D
19	Hollenbeck Avenue / Remington Drive	October 2018	Signal	Sunnyvale	D	AM PM	24.2 27.2	C C
20	Hollenbeck Avenue / Fremont Avenue	May 2017	Signal	Sunnyvale	D	AM PM	45.5 48.3	D D
21	Hollenbeck Avenue / Cascade Drive	October 2018	Signal	Sunnyvale	D	AM PM	9.1 8.1	A A
22	Mathilda Avenue / SR 237 WB[6]	December 2017	Signal	Sunnyvale	E	AM PM	21.5 29.6	C C
23	Mathilda Avenue / SR 237 EB[6]	December 2017	Signal	Sunnyvale	E	AM PM	38.2 60.5	D E
24	Mathilda Avenue / Ross Drive[6]	December 2017	Signal	Sunnyvale	E	AM PM	24.6 26.4	C C
25	Mathilda Avenue / Maude Avenue	December 2017	Signal	VTA/Sunnyvale	E	AM PM	40.3 47.0	D D
26	Mathilda Avenue / Indio Avenue	December 2017	Signal	Sunnyvale	E	AM PM	31.7 29.6	C C
27	Mathilda Avenue / California Avenue	December 2017	Signal	Sunnyvale	E	AM PM	25.2 30.0	C C
28	Mathilda Avenue Southbound Off-Ramp / Evelyn Avenue	April 2017	Signal	Sunnyvale	E	AM PM	6.2 10.1	A B+
29	Mathilda Avenue / Washington Avenue	December 2017	Signal	Sunnyvale	E	AM PM	34.3 35.6	C- D+
30	Mathilda Avenue / McKinley Avenue	December 2017	Signal	Sunnyvale	E	AM PM	15.4 19.7	B B-
31	Mathilda Avenue / Iowa Avenue	December 2017	Signal	Sunnyvale	E	AM PM	12.8 19.9	B B-
32	Mathilda Avenue / Olive Avenue	December 2017	Signal	Sunnyvale	E	AM PM	14.0 20.7	B C+

TABLE 8: EXISTING INTERSECTION LEVELS OF SERVICE

Int. #	Intersection Name	Count Date	Intersection Control[1]	Jurisdiction	LOS Standard[2]	Existing Conditions		
						Peak Hour[3]	Delay[4]	LOS[5]
33	Mathilda Avenue / El Camino Real	December 2017	Signal	VTA/Sunnyvale	E	AM PM	47.8 46.1	D D
34	Washington Avenue / Aries Way	April 2017	SSSC	Sunnyvale	D	AM PM	9.0 9.9	A A
35	Washington Avenue / Taaffe Street	April 2017	Signal	Sunnyvale	D	AM PM	15.0 12.3	B B
36	Iowa Avenue / Taaffe Street	December 2017	Signal	Sunnyvale	D	AM PM	24.8 23.6	C C
37	Evelyn Avenue / Frances Street	April 2017	Signal	Sunnyvale	D	AM PM	19.1 15.2	B- B
38	Washington Avenue / Frances Street	December 2017	SSSC	Sunnyvale	D	AM PM	9.8 14.0	A B
39	Murphy Avenue / Washington Avenue	May 2018	AWSC	Sunnyvale	D	AM PM	7.6 9.8	A A
40	Iowa Avenue / Murphy Avenue	December 2017	SSSC	Sunnyvale	D	AM PM	7.4 0.1	A A
41	Sunnyvale Avenue / Maude Avenue	October 2018	Signal	Sunnyvale	D	AM PM	14.7 13.8	B B
42	Sunnyvale Avenue / Arques Avenue	October 2018	Signal	Sunnyvale	D	AM PM	21.1 14.3	C+ B
43	Sunnyvale Avenue / California Avenue	April 2017	Signal	Sunnyvale	D	AM PM	7.7 14.0	A B
44	Sunnyvale Avenue / Evelyn Avenue	April 2017	Signal	Sunnyvale	D	AM PM	25.6 20.0	C C+
45	Sunnyvale Avenue / Washington Avenue	April 2017	Signal	Sunnyvale	D	AM PM	16.2 17.5	B B
46	Sunnyvale Avenue / McKinley Avenue	April 2017	Signal	Sunnyvale	D	AM PM	12.0 25.5	B C
47	Sunnyvale Avenue / Iowa Avenue	April 2017	Signal	Sunnyvale	D	AM PM	13.2 20.8	B C+
48	Sunnyvale Avenue / Olive Avenue	April 2017	Signal	Sunnyvale	D	AM PM	14.2 17.2	B B
49	Sunnyvale Avenue / Old San Francisco Road	December 2017	Signal	Sunnyvale/ Caltrans	D	AM PM	13.8 14.0	B B
50	Sunnyvale Avenue / El Camino Real	April 2017	Signal	VTA/Sunnyvale/ Caltrans	E	AM PM	38.2 36.4	D+ D+
51	Mathilda Avenue / Saratoga-Sunnyvale Road - Talisman Drive	December 2016	Signal	Sunnyvale	E	AM PM	22.5 29.8	C+ C

TABLE 8: EXISTING INTERSECTION LEVELS OF SERVICE

Int. #	Intersection Name	Count Date	Intersection Control[1]	Jurisdiction	LOS Standard [2]	Existing Conditions		
						Peak Hour[3]	Delay [4]	LOS [5]
52	Sunnyvale-Saratoga Road / Remington Drive	December 2016	Signal	VTA/Sunnyvale	E	AM PM	40.8 43.7	D D
53	Sunnyvale-Saratoga Road / Fremont Avenue	December 2016	Signal	VTA/Sunnyvale	E	AM PM	45.0 46.1	D D
54	Sunnyvale-Saratoga Road / Alberta Avenue - Harwick Way	October 2018	Signal	Sunnyvale	E	AM PM	33.3 27.8	C- C
55	De Anza Boulevard / Homestead Road	May 2017	Signal	Cupertino/VTA	D	AM PM	52.9 53.9	D- D-
56	De Anza Boulevard / I-280 Northbound Ramps	December 2017	Signal	Cupertino/VTA	D	AM PM	38.5 43.5	D+ D
57	De Anza Boulevard / I-280 Southbound Ramps	December 2017	Signal	Cupertino/VTA	D	AM PM	46.1 35.9	D D+
58	Fair Oaks Avenue / US 101 Northbound Ramp	April 2017	Signal	Sunnyvale/ Caltrans	D	AM PM	16.4 20.1	B C+
59	Fair Oaks Avenue / Ahwanee Avenue	April 2017	Signal	Sunnyvale/ Caltrans	D	AM PM	16.7 10.9	B B+
60	Fair Oaks Avenue / Duane Avenue	April 2017	Signal	Sunnyvale	D	AM PM	27.0 25.1	C C
61	Fair Oaks Avenue / Wolfe Road	April 2017	Signal	Sunnyvale	D	AM PM	8.4 8.1	A A
62	Fair Oaks Avenue / Maude Avenue	May 2017	Signal	Sunnyvale	D	AM PM	22.9 23.7	C+ C
63	Fair Oaks Avenue / Arques Avenue	December 2017	Signal	Sunnyvale	D	AM PM	36.3 39.5	D+ D
64	Central Expressway WB Off-Ramp / Arques Avenue	October 2018	SSSC	Santa Clara County	E	AM PM	12.7 20.9	B C
65	Fair Oaks Avenue / California Avenue	December 2017	Signal	Sunnyvale	D	AM PM	11.8 16.7	B+ B
66	Fair Oaks Avenue / Evelyn Avenue	December 2017	Signal	Sunnyvale	D	AM PM	31.3 30.0	C C
67	Fair Oaks Avenue / Old San Francisco Road	December 2017	Signal	Sunnyvale	D	AM PM	34.8 31.4	C- C
68	Fair Oaks Avenue / El Camino Real	May 2017	Signal	CMP/Sunnyvale/ Caltrans	E	AM PM	31.0 36.9	C D+
69	Wolfe Road / Old San Francisco Road	December 2017	Signal	Sunnyvale	D	AM PM	34.9 37.7	C- D+
70	Wolfe Road / El Camino Real	May 2017	Signal	CMP/Sunnyvale/ Caltrans	E	AM PM	35.9 45.2	D+ D

TABLE 8: EXISTING INTERSECTION LEVELS OF SERVICE

Int. #	Intersection Name	Count Date	Intersection Control[1]	Jurisdiction	LOS Standard[2]	Existing Conditions		
						Peak Hour[3]	Delay[4]	LOS[5]
71	Wolfe Road / Fremont Avenue	May 2017	Signal	Sunnyvale	D	AM PM	48.6 49.8	D D
72	Lawrence Expressway / Monroe Street	May 2018	Signal	VTA/Santa Clara County	E	AM PM	65.8 74.1	E E
73	Lawrence Expressway / El Camino Real	January 2018	Signal	VTA/Santa Clara County	E	AM PM	37.1 28.7	D+ C
74	Lawrence Expressway / Benton Street	October 2018	Signal	Santa Clara County	E	AM PM	54.8 43.2	D- D
75	Lawrence Expressway / Lochinvar Avenue	October 2018	Signal	Santa Clara County	E	AM PM	35.6 35.2	D+ D+
76	Lawrence Expressway / Homestead Road	January 2018	Signal	VTA/Santa Clara County	E	AM PM	59.3 74.8	E+ E
77	Lawrence Expressway / Lehigh Drive	October 2018	Signal	Santa Clara County	E	AM PM	29.2 50.0	C D
78	Lawrence Expressway / Pruneridge Avenue	January 2018	Signal	Santa Clara County	E	AM PM	38.5 46.6	D+ D
79	Calabazas Boulevard / El Camino Real	October 2018	Signal	Santa Clara	D	AM PM	23.6 27.8	C C

Notes: **Bold text** indicates intersection operates at unacceptable level of service.

1. Signal = Signalized Intersection; SSSC = Side-Street Stop Controlled Intersection.
2. LOS Standard of intersection's jurisdiction.
3. AM = morning peak hour (between 7:00 and 9:00 AM), PM = evening peak hour (between 4:00 and 6:00 PM).
4. Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop control intersections. Total control delay for the worst movement is presented for side-street stop-controlled intersections.
5. LOS = Level of Service calculations conducted using the TRAFFIX level of service analysis software package, which applies the methodology described in the *2000 HCM*.
6. Level of Service calculations for the three Mathilda Avenue intersections at SR 237 Westbound, SR 237 Eastbound, and Ross Drive are evaluated using the Synchro level of service analysis software package, to better model LOS of these closely spaced intersections that are part of the *Mathilda Avenue Improvements at SR 237 and US 101* project.

Source: Fehr & Peers, March 2019.

2.7 EXISTING FREEWAY OPERATIONS

Existing freeway operations are described with the LOS results from the *2016 VTA Monitoring and Conformance Report*, which is the most recent report available as of the date of the DSP Notice of Preparation (NOP). **Table 9** summarizes the existing freeway segment levels of service for the mixed-flow and HOV lanes.

TABLE 9: EXISTING FREEWAY SEGMENT LEVELS OF SERVICE

Freeway Segment	Direction	Peak Hour[1]	Capacity[4]		Number of Lanes		Density[5]		LOS[6]	
			Mixed[2]	HOV[3]	Mixed	HOV	Mixed	HOV	Mixed	HOV
I-280, between Magdalena Avenue to Foothill Expressway	EB	AM	6,900	1,650	3	1	25	10	C	A
		PM	6,900	1,650	3	1	31	22	D	C
	WB	AM	6,900	1,650	3	1	48	56	E	E
		PM	6,900	1,650	3	1	23	13	C	B
I-280, between Foothill Expressway to SR 85	EB	AM	6,900	1,650	3	1	23	11	C	A
		PM	6,900	1,650	3	1	**71**	40	**F**	D
	WB	AM	6,900	1,650	3	1	**70**	**60**	**F**	**F**
		PM	6,900	1,650	3	1	28	12	D	B
I-280, between SR-85 to De Anza Boulevard	EB	AM	6,900	1,650	3	1	22	12	C	B
		PM	6,900	1,650	3	1	**106**	**83**	**F**	**F**
	WB	AM	6,900	1,650	3	1	**76**	46	**F**	D
		PM	6,900	1,650	3	1	27	10	D	A
I-280, between De Anza Boulevard to Wolfe Road	EB	AM	6,900	1,650	3	1	22	22	C	C
		PM	6,900	1,650	3	1	**74**	**63**	**F**	**F**
	WB	AM	6,900	1,650	3	1	**75**	48	**F**	E
		PM	6,900	1,650	3	1	27	14	D	B
I-280, between Wolfe Road to Lawrence Expressway	EB	AM	6,900	1,650	3	1	21	12	C	B
		PM	6,900	1,650	3	1	**61**	42	**F**	D
	WB	AM	6,900	1,650	3	1	**72**	**70**	**F**	**F**
		PM	6,900	1,650	3	1	25	12	C	B
I-280, between Lawrence Expressway to Saratoga Avenue	EB	AM	6,900	1,650	3	1	37	14	D	B
		PM	6,900	1,650	3	1	**77**	52	**F**	E
	WB	AM	6,900	1,650	3	1	**78**	**70**	**F**	**F**
		PM	6,900	1,650	3	1	27	15	D	B
I-280, between Saratoga Avenue to Winchester Boulevard	EB	AM	6,900	1,650	3	1	34	13	D	B
		PM	6,900	1,650	3	1	**96**	**63**	**F**	**F**
	WB	AM	6,900	1,650	3	1	**90**	**82**	**F**	**F**
		PM	6,900	1,650	3	1	40	16	D	B

US-101, between De La Cruz Boulevard to Montague Expressway	NB	AM	6,900	1,650	3	1	**76**	**71**	**F**	**F**
		PM	6,900	1,650	3	1	24	11	C	A
	SB	AM	6,900	1,650	3	1	25	11	C	A
		PM	6,900	1,650	3	1	**111**	**71**	**F**	**F**
US-101, between Montague Expressway to Bowers Avenue	NB	AM	6,900	1,650	3	1	**97**	**86**	**F**	**F**
		PM	6,900	1,650	3	1	28	11	D	A
	SB	AM	6,900	1,650	3	1	21	14	C	B
		PM	6,900	1,650	3	1	**108**	**109**	**F**	**F**
US-101, between Bowers Avenue to Lawrence Expressway	NB	AM	6,900	1,650	3	1	**93**	**81**	**F**	**F**
		PM	6,900	1,650	3	1	29	16	D	B
	SB	AM	6,900	1,650	3	1	35	15	D	B
		PM	6,900	1,650	3	1	**111**	**102**	**F**	**F**
US-101 between Lawrence Expressway to Fair Oaks Avenue	NB	AM	6,900	1,650	3	1	**84**	**73**	**F**	**F**
		PM	6,900	1,650	3	1	29	12	D	B
	SB	AM	6,900	1,650	3	1	28	17	D	B
		PM	6,900	1,650	3	1	**92**	**106**	**F**	**F**
US-101, between N. Fair Oaks Avenue and Mathilda Avenue	NB	AM	6,900	1,650	3	1	**60**	54	**F**	E
		PM	6,900	1,650	3	1	24	11	C	A
	SB	AM	6,900	1,650	3	1	24	18	C	B
		PM	6,900	1,650	3	1	**72**	**68**	**F**	**F**
US-101, between Mathilda Avenue and SR 237	NB	AM	6,900	1,650	3	1	49	**71**	E	**F**
		PM	6,900	1,650	3	1	24	20	C	C
	SB	AM	6,900	1,650	3	1	23	40	C	D
		PM	6,900	1,650	3	1	**87**	**60**	**F**	**F**
US-101, between SR 237 to Moffett Boulevard	NB	AM	6,900	1,650	3	1	**67**	**64**	**F**	**F**
		PM	6,900	1,650	3	1	53	33	E	D
	SB	AM	6,900	1,650	3	1	44	31	D	D
		PM	6,900	1,650	3	1	**76**	57	**F**	E
US-101, between Moffett Boulevard to SR 85	NB	AM	6,900	1,650	3	1	**97**	**67**	**F**	**F**
		PM	6,900	1,650	3	1	**93**	36	**F**	D
	SB	AM	6,900	1,650	3	1	31	17	D	B
		PM	6,900	1,650	3	1	**95**	**84**	**F**	**F**

US-101, between SR 85 to Shoreline Boulevard	NB	AM	9,200	1,650	4	1	**75**	34	**F**	D
		PM	9,200	1,650	4	1	**68**	34	**F**	D
	SB	AM	6,900	1,650	3	1	38	37	D	D
		PM	6,900	1,650	3	1	**68**	51	**F**	E
SR-237, between Sylvan Avenue to Maude Avenue	EB	AM	4,400	N/A	2	0	51	N/A	E	N/A
		PM	4,400	N/A	2	0	33	N/A	D	N/A
	WB	AM	4,400	N/A	2	0	39	N/A	D	N/A
		PM	4,400	N/A	2	0	**77**	N/A	**F**	N/A
SR-237, between Maude Avenue to US-101	EB	AM	4,400	N/A	2	0	23	N/A	C	N/A
		PM	4,400	N/A	2	0	**99**	N/A	**F**	N/A
	WB	AM	4,400	N/A	2	0	36	N/A	D	N/A
		PM	4,400	N/A	2	0	**95**	N/A	**F**	N/A
SR-237 between US-101 and Mathilda Avenue	EB	AM	4,400	N/A	2	0	40	N/A	D	N/A
		PM	4,400	N/A	2	0	**121**	N/A	**F**	N/A
	WB	AM	4,400	N/A	2	0	51	N/A	E	N/A
		PM	4,400	N/A	2	0	**82**	N/A	**F**	N/A
SR-237 between Mathilda Avenue and Fair Oaks Avenue	EB	AM	4,600	1,650	2	1	33	12	D	B
		PM	4,600	1,650	2	1	**100**	**96**	**F**	**F**
	WB	AM	6,900	N/A	3	0	**89**	N/A	**F**	N/A
		PM	6,900	N/A	3	0	**84**	N/A	**F**	N/A
SR_237, between Fair Oaks Avenue to Lawrence Expressway	EB	AM	4,600	1,650	2	1	33	19	D	C
		PM	4,600	1,650	2	1	**115**	**62**	**F**	**F**
	WB	AM	4,600	1,650	2	1	**95**	**93**	**F**	**F**
		PM	4,600	1,650	2	1	**61**	38	**F**	D
SR-237, between Lawrence Expressway to Great America Parkway	EB	AM	4,600	1,650	2	1	32	18	D	B
		PM	4,600	1,650	2	1	**101**	**69**	**F**	**F**
	WB	AM	4,600	1,650	2	1	**103**	**82**	**F**	**F**
		PM	4,600	1,650	2	1	27	15	D	B

Notes:

1. AM = morning peak hour (between 7:00 and 9:00 AM), PM = evening peak hour (between 4:00 and 6:00 PM).
2. Mixed = Mixed-Flow Lanes
3. HOV = High-Occupancy Vehicle Lanes
4. Capacity in vehicles per hour (vph) based on number of lanes.
5. Measured in passenger cars per mile per lane.
6. LOS = Level of Service. Level of service based on density

Bold font indicates unacceptable operations based on VTA's LOS E Standard**.**
Source: *2016 Annual Monitoring and Conformance Report*, VTA.

2.8 FIELD OBSERVATIONS

Field observations at the Project site and study intersections were conducted on May 2017, April 2017, and November 2018 to verify the calculated intersection LOS operations for the Existing Conditions and to observe overall transportation characteristics. Observations indicated that all the study intersections are operating at or near the calculated LOS values.

Cycle lengths and signal phasings were observed at all signalized study intersections and applied to the calculation of existing intersection LOS described in **Section 2.6**.

3.0 EXISTING PLUS PROJECT CONDITIONS

This section presents the operations of the surrounding roadway system under Existing Plus Project Conditions. First, the method used to estimate the amount of traffic generated by the Project is described. Then, the results of the intersection and freeway segment level of service calculations for Existing Plus Project Conditions are presented. Existing Plus Project Conditions are defined as Existing Conditions plus traffic generated by the proposed Project. Impacts to the roadway system under this scenario are identified by comparing the level of service results under Existing with Project Conditions to those under Existing Conditions.

3.1 PROJECT TRAFFIC ESTIMATES

The amount of traffic added to the roadway system by the proposed development is estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. The first step estimates the amount of traffic added to the roadway network. The second step estimates the regional origin and destination areas for trips coming to/going from the Project site. The new trips are assigned to specific street segments and intersection turning movements during the third step. The results of the process for the proposed Project are described in the following sections.

3.1.1 Trip Generation

The amount of traffic anticipated to be added to the surrounding roadway system by the proposed Project was estimated by subtracting the amount of traffic estimated by the existing uses from the amount of traffic generated by the proposed uses in **Table 2**. The vehicle trips generated by the existing and proposed uses were estimated based on data published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual,* 10th Edition (2017). Additionally, transit reductions and mixed-use reductions were applied per VTA TIA Guidelines.

As outlined in **Table 10**, the Project is estimated to generate 13,250 net new daily trips, 1,186 net new AM peak hour trips (870 inbound and 316 outbound), and 1,424 PM peak hour trips (430 inbound and 994 outbound) under Existing Plus Project Conditions. The trip generation estimates for the Project are lower under Background and Cumulative Conditions, because the Project gets trip credits for already approved developments in the DSP under Background Conditions and for those uses allowed under the previously approved DSP Environmental Impact Report (EIR). Detailed trip generation estimates for Background and Cumulative Conditions are presented in **Appendix C**.

TABLE 10: DOWNTOWN SPECIFIC PLAN PROJECT VEHICLE TRIP GENERATION ESTIMATES – EXISTING CONDITIONS

Land Use	ITE Code	Size	Units[1]	Daily		AM Peak Hour				PM Peak Hour			
				Rate[2]	Trips	Rate[2]	In	Out	Total	Rate[2]	In	Out	Total
Proposed Land Uses													
Apartment	221	843	Du	5.44	4,586	0.36	79	224	303	0.44	226	145	371
Mixed-Use Reduction (Housing near Employment)[3]				*3%*	*(138)*	*3%*	*(2)*	*(7)*	*(9)*	*3%*	*(7)*	*(4)*	*(11)*
Transit Reduction (Housing near Caltrain)[4]				*9%*	*(413)*	*9%*	*(7)*	*(20)*	*(27)*	*9%*	*(20)*	*(13)*	*(33)*
Mixed-Use Reduction (Housing and Retail Reduction)[3]				*15%*	*(688)*	*15%*	*(14)*	*(23)*	*(37)*	*15%*	*(34)*	*(22)*	*(56)*
Proposed Apartment Subtotal (A)				**-**	**3,347**	**-**	**56**	**174**	**230**	**-**	**165**	**106**	**271**
Commercial	820	260.063	Ksf	37.75	9,817	0.94	151	93	244	3.81	476	515	991
Mixed-Use Reduction (Housing and Retail Reduction)[3]				*15%*	*(688)*	*15%*	*(23)*	*(14)*	*(37)*	*15%*	*(22)*	*(34)*	*(56)*
Proposed Commercial Subtotal (B)				-	**9,129**	**-**	**128**	**79**	**207**	**-**	**454**	**481**	**935**
Office	710	860.624	Ksf	9.74	8,382	1.16	858	140	998	1.15	158	832	990
Mixed-Use Reduction (Housing Near Employment)[3]				*3%*	*(138)*	*3%*	*(7)*	*(2)*	*(9)*	*3%*	*(4)*	*(7)*	*(11)*
Transit Reduction (Employment near Caltrain Station)[5]				*6%*	*(503)*	*6%*	*(52)*	*(8)*	*(60)*	*6%*	*(9)*	*(50)*	*(59)*
Proposed Office Subtotal (C)				**-**	**7,741**	**-**	**799**	**130**	**929**	**-**	**145**	**775**	**920**
Net Project Trips (D) = (A) + (B) + (C)				-	**20,217**	-	**983**	**383**	**1,366**	-	**764**	**1,362**	**2,126**
Existing Land Uses													
Apartment	221	20	Du	5.44	109	0.36	2	5	7	0.44	5	4	9
Mixed-Use Reduction (Housing near Employment)[3]				*3%*	*(3)*	*3%*	*(0)*	*(1)*	*(1)*	*3%*	*(1)*	*(0)*	*(1)*
Transit Reduction (Housing near Caltrain)[4]				*9%*	*(10)*	*9%*	*(0)*	*(1)*	*(1)*	*9%*	*(1)*	*(0)*	*(1)*
Mixed-Use Reduction (Housing and Retail Reduction)[3]				*15%*	*(16)*	*15%*	*(0)*	*(1)*	*(1)*	*15%*	*(1)*	*(0)*	*(1)*
Existing Apartment Subtotal (E)				**-**	**80**	-	**2**	**2**	**4**	-	**2**	**4**	**6**
Commercial	820	181	ksf	37.75	6,833	0.94	106	64	170	3.81	331	359	690
Mixed-Use Reduction (Housing and Retail Reduction)[3]				*15%*	*(16)*	*15%*	*(1)*	*(0)*	*(1)*	*15%*	*(0)*	*(1)*	*(1)*
Existing Commercial Subtotal (F)				-	**6,817**	-	**105**	**64**	**169**	-	**331**	**358**	**689**

TABLE 10: DOWNTOWN SPECIFIC PLAN PROJECT VEHICLE TRIP GENERATION ESTIMATES – EXISTING CONDITIONS

Land Use	ITE Code	Size	Units[1]	Daily		AM Peak Hour				PM Peak Hour			
				Rate[2]	Trips	Rate[2]	In	Out	Total	Rate[2]	In	Out	Total
Office	710	8	ksf	9.74	78	1.16	8	1	9	1.15	1	8	9
Mixed-Use Reduction (Housing Near Employment) [3]				*3%*	*(3)*	*3%*	*(1)*	*(0)*	*(1)*	*3%*	*(0)*	*(1)*	*(1)*
Transit Reduction (Employment near Caltrain Station) [5]				*6%*	*(5)*	*6%*	*(1)*	*(0)*	*(1)*	*6%*	*(0)*	*(1)*	*(1)*
Existing Office Subtotal (G)				-	**70**	-	**6**	**1**	**7**	-	**1**	**6**	**7**
Net Existing Trips (H) = (E) + (F) + (G)				-	**6,967**	-	**113**	**67**	**180**	-	**334**	**368**	**702**
Net New Trips (I) = (D) - (H)				-	***13,250***	-	***870***	***316***	***1,186***	-	***430***	***994***	***1,424***

Notes:

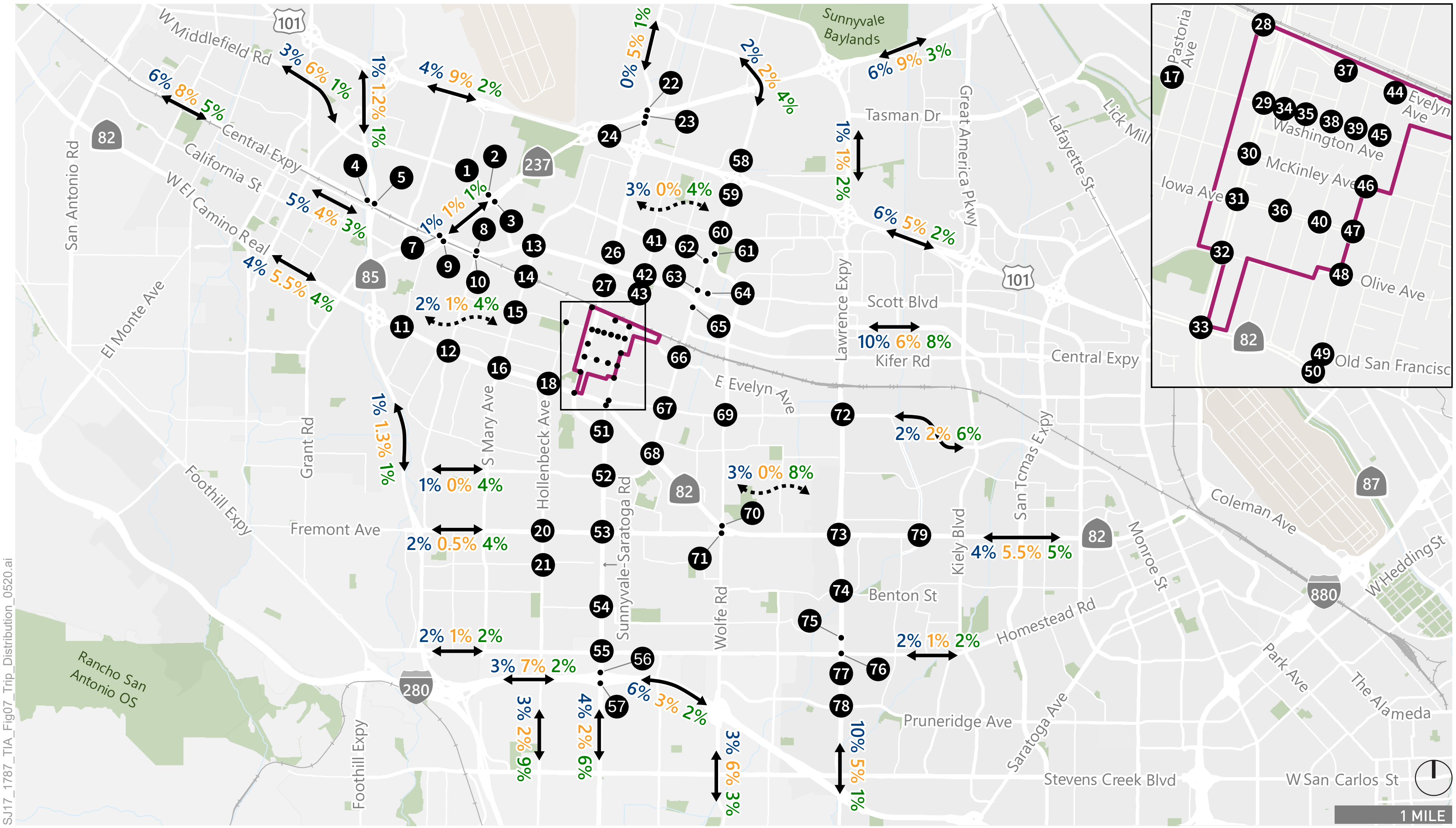
1. du = dwelling units; ksf = 1,000 square feet
2. Rate = vehicle trips per time period (day or hour)
3. Per VTA TIA Guidelines, the proposed trip reductions calculated for all land uses within the development area shall be based on the land use that produces the least amount of new trips. In other words, the same trip reduction rate for the land use that produces the least number of new trips should be used to determine the trip reduction for all developments.
4. Per VTA TIA Guidelines, housing developments where the walking distance from the unit or the front door of the housing complex to the station is 2,000 feet or less may reduce their trip generation volumes by nine percent.
5. Per VTA TIA Guidelines, employment sites where the walking distance from the front door of the development to the station is 2,000 feet or less may reduce their trip generation volumes by six percent.

Sources: Fehr & Peers (2019), *ITE Trip Generation Manual*, 10th edition (2017); *Transportation Impact Analysis Guidelines*, VTA Congestion Management Program (October 2014).

3.1.2 Trip Distribution and Assignment

The distribution of the traffic generated by the Project onto the roadway system was based on the locations of complementary land uses, prevailing travel patterns, surrounding population densities, and recent TIAs completed in the area. Input from the City of Sunnyvale staff was used to refine the trip distribution patterns. The trip distribution patterns are shown on **Figure 7.**

Project trips were assigned to the roadway network based on the trip distribution patterns discussed above. **Figure 8** shows the AM and PM peak hour Project trips assigned to each turning movement at the study intersections under Existing Plus Project Conditions. The trip assignment was added to the existing volumes to establish volumes under Existing Plus Project Conditions, as shown on **Figure 9.**



● Study Intersection

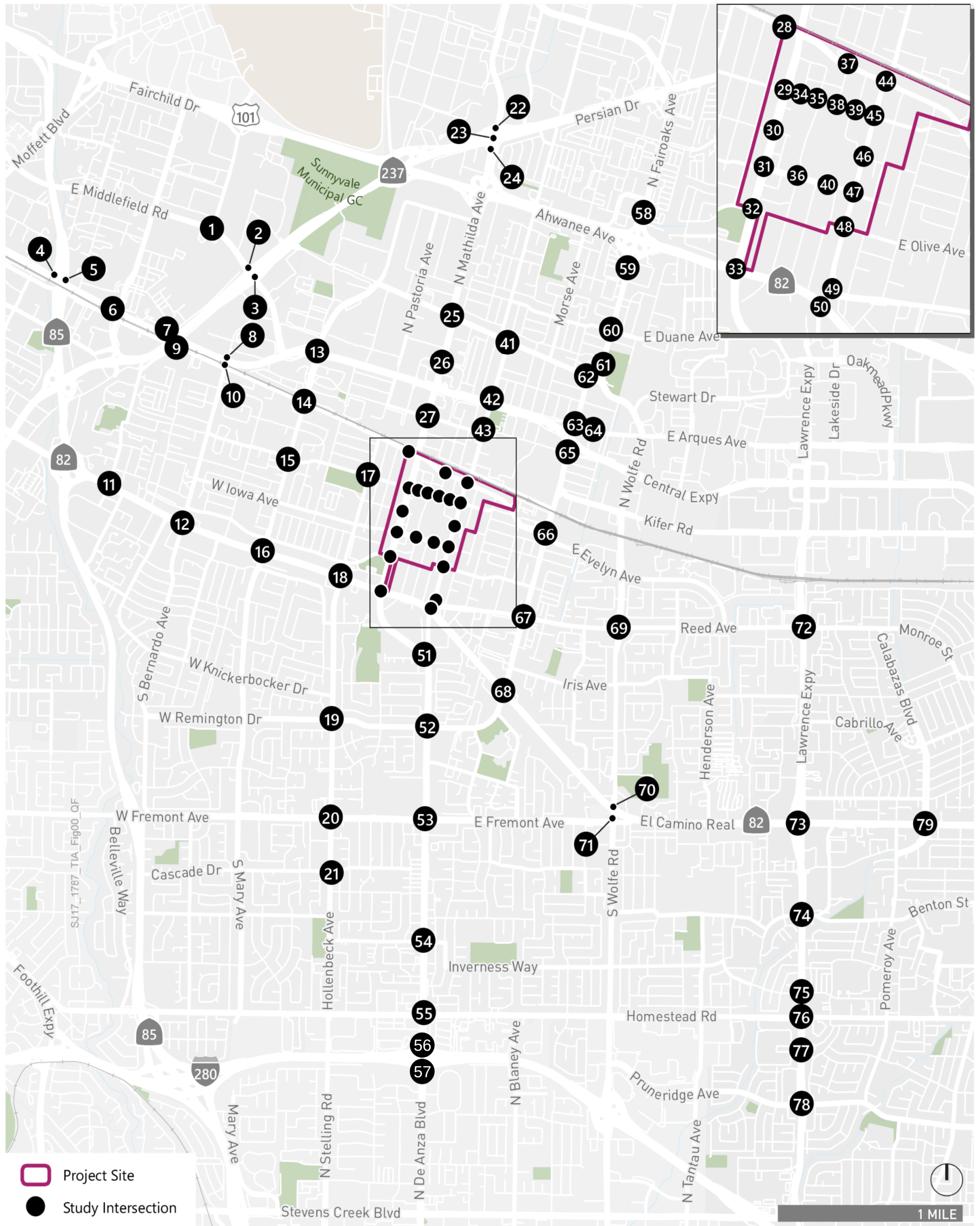
Project Site

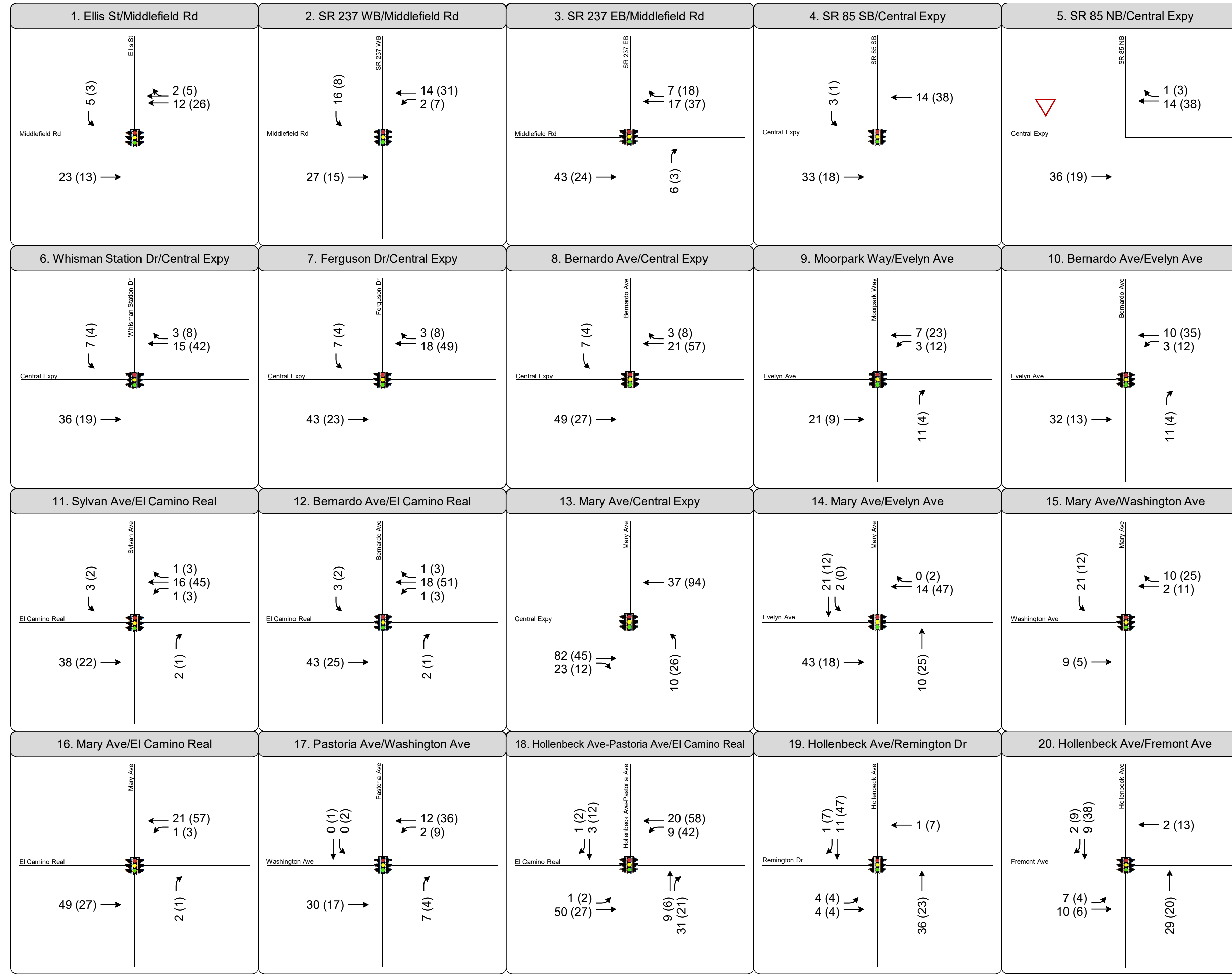
XX% Office Residential Retail
Trip Distribution

Figure 7

Project Trip Distribution

Cityline Sunnyvale



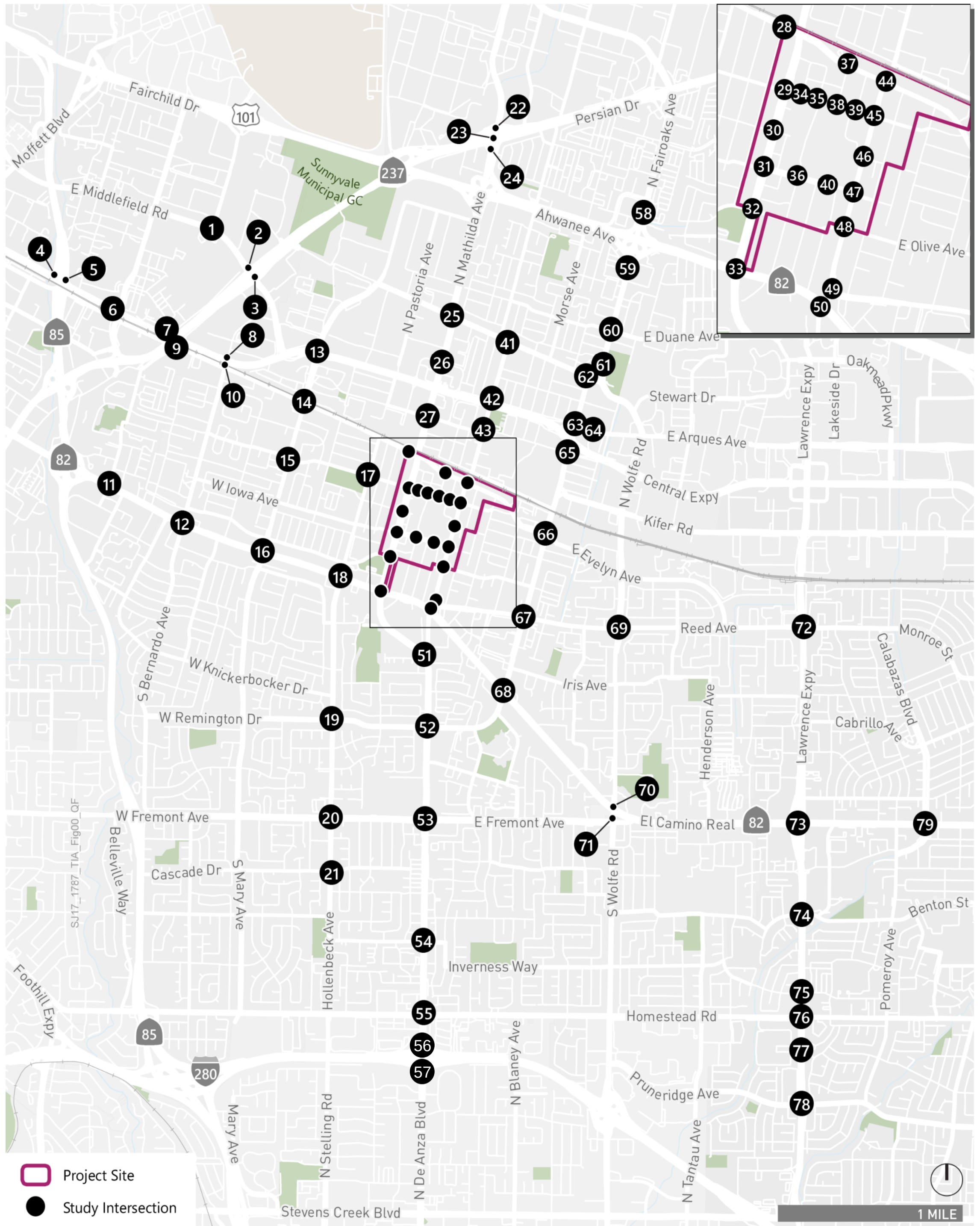


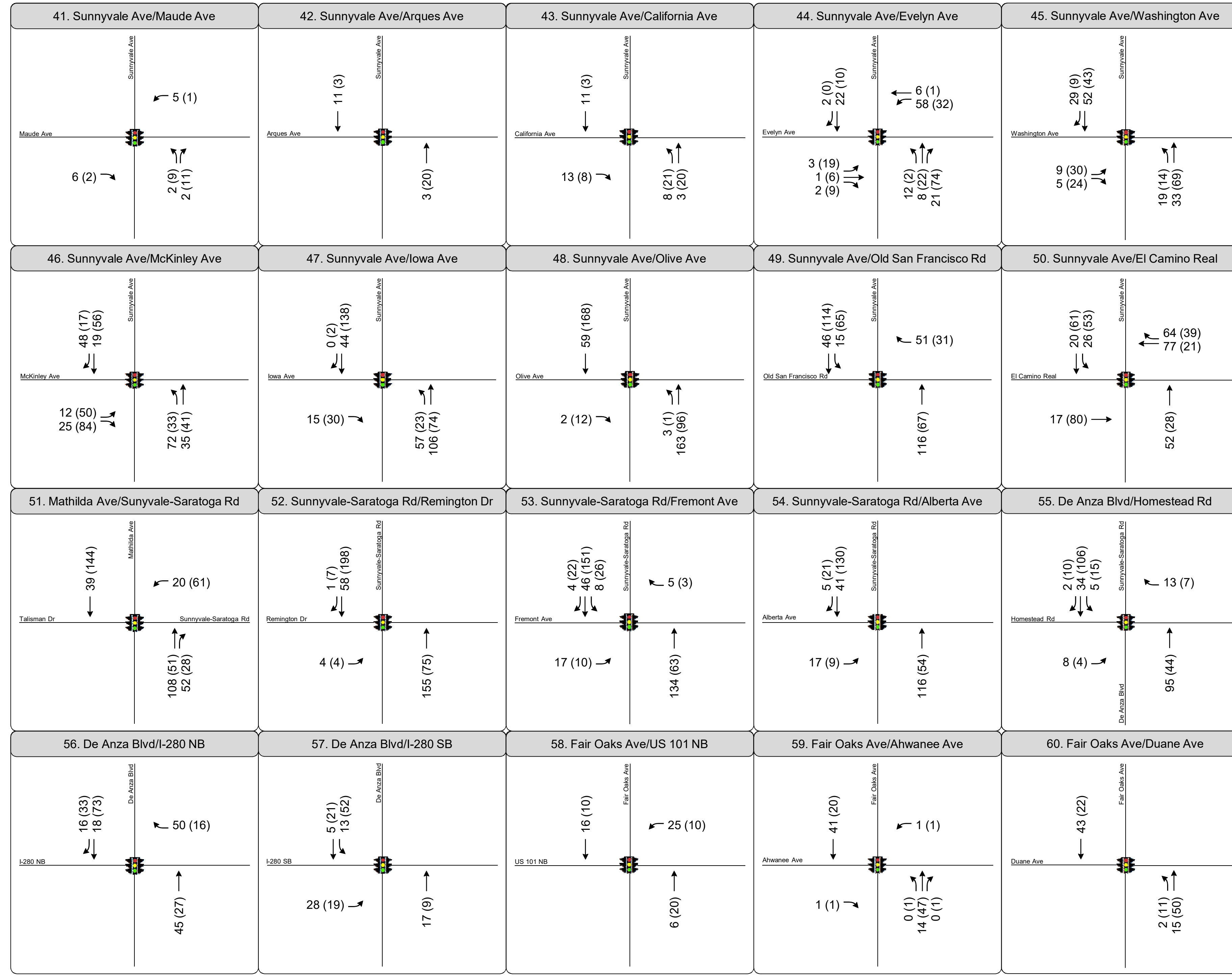
LEGEND

- Study Intersection
- AM (PM) Peak Hour Traffic Volume
- Project Trip Assignment
- Stop Sign
- Signalized
- Yield Sign

Figure 8
Project Trip Assignment

Figure 8
Project Trip Assignment

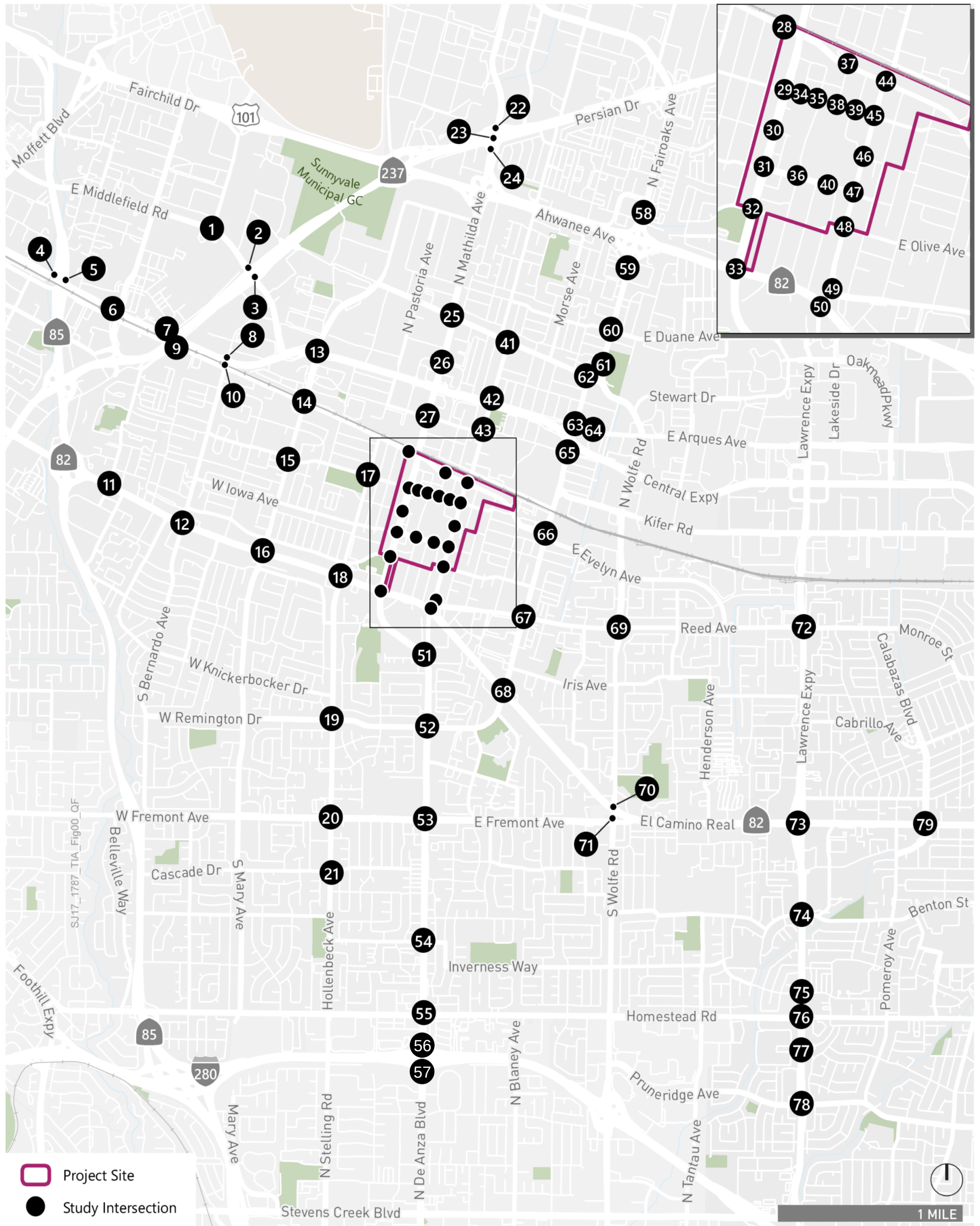


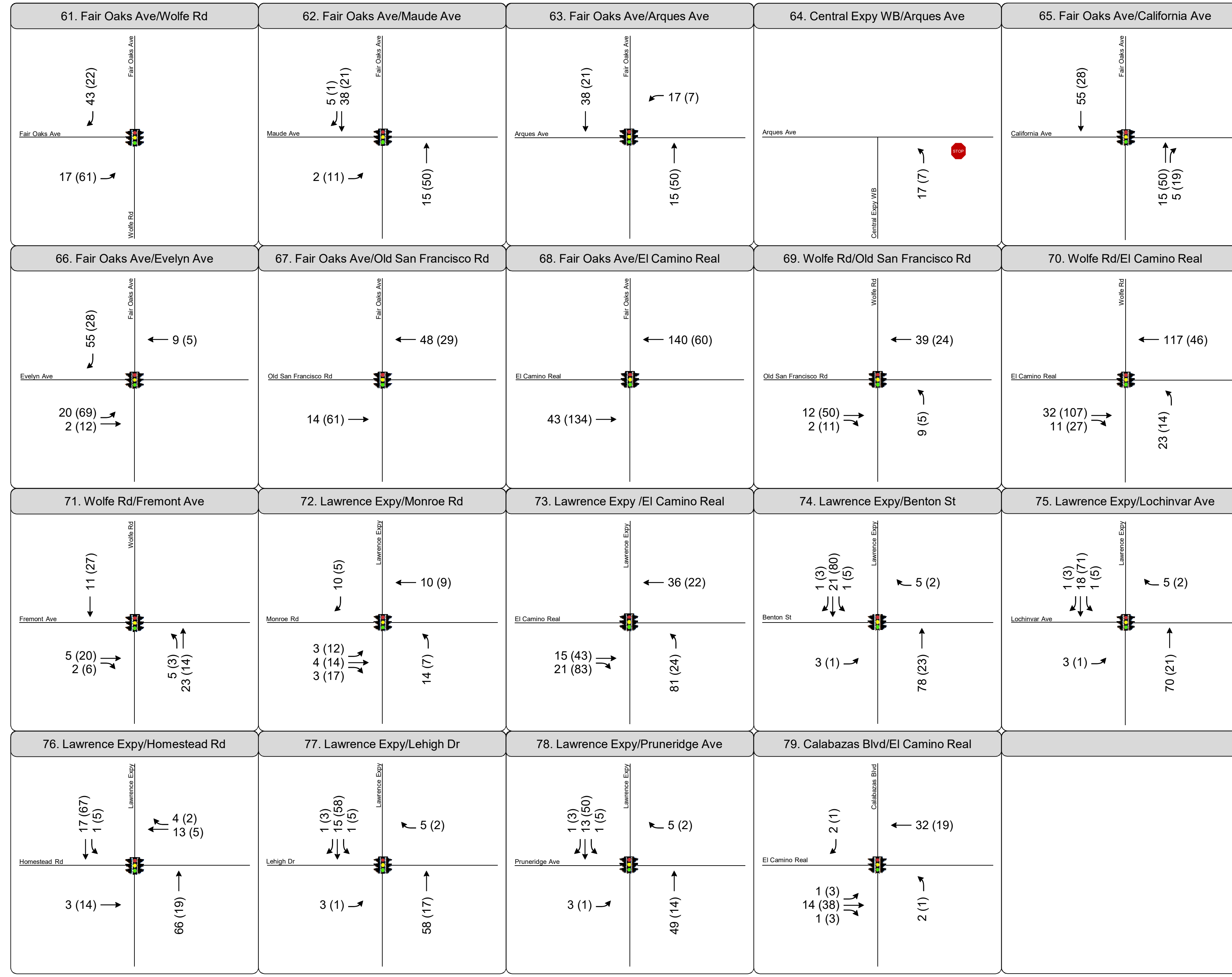


LEGEND

# Study Intersection	Stop Sign
AM (PM) Peak Hour Traffic Volume	Signalized
Project Trip Assignment	Yield Sign

Figure 8
Project Trip Assignment

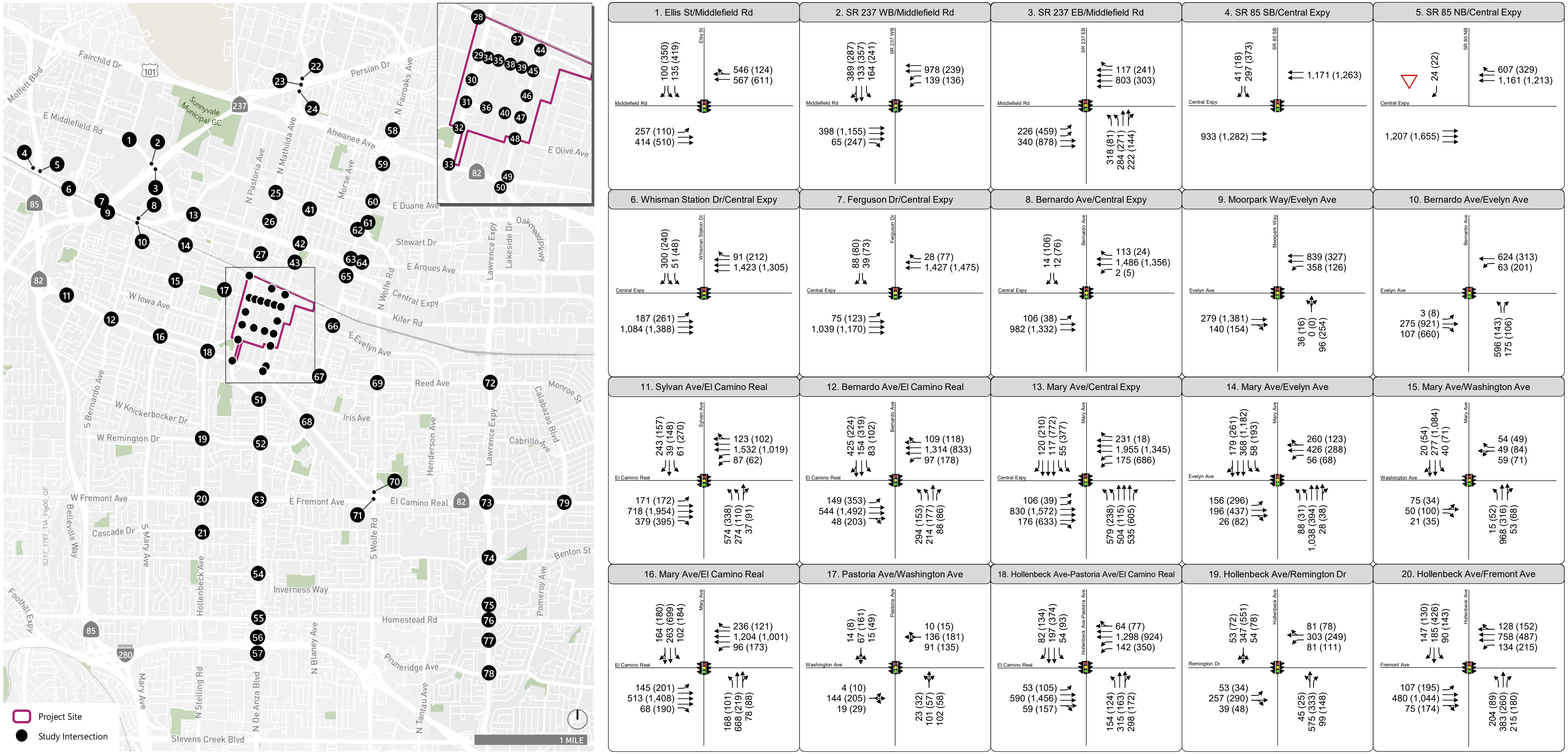




LEGEND

# Study Intersection	Stop Sign
AM (PM) Peak Hour Traffic Volume	Signalized
Project Trip Assignment	Yield Sign

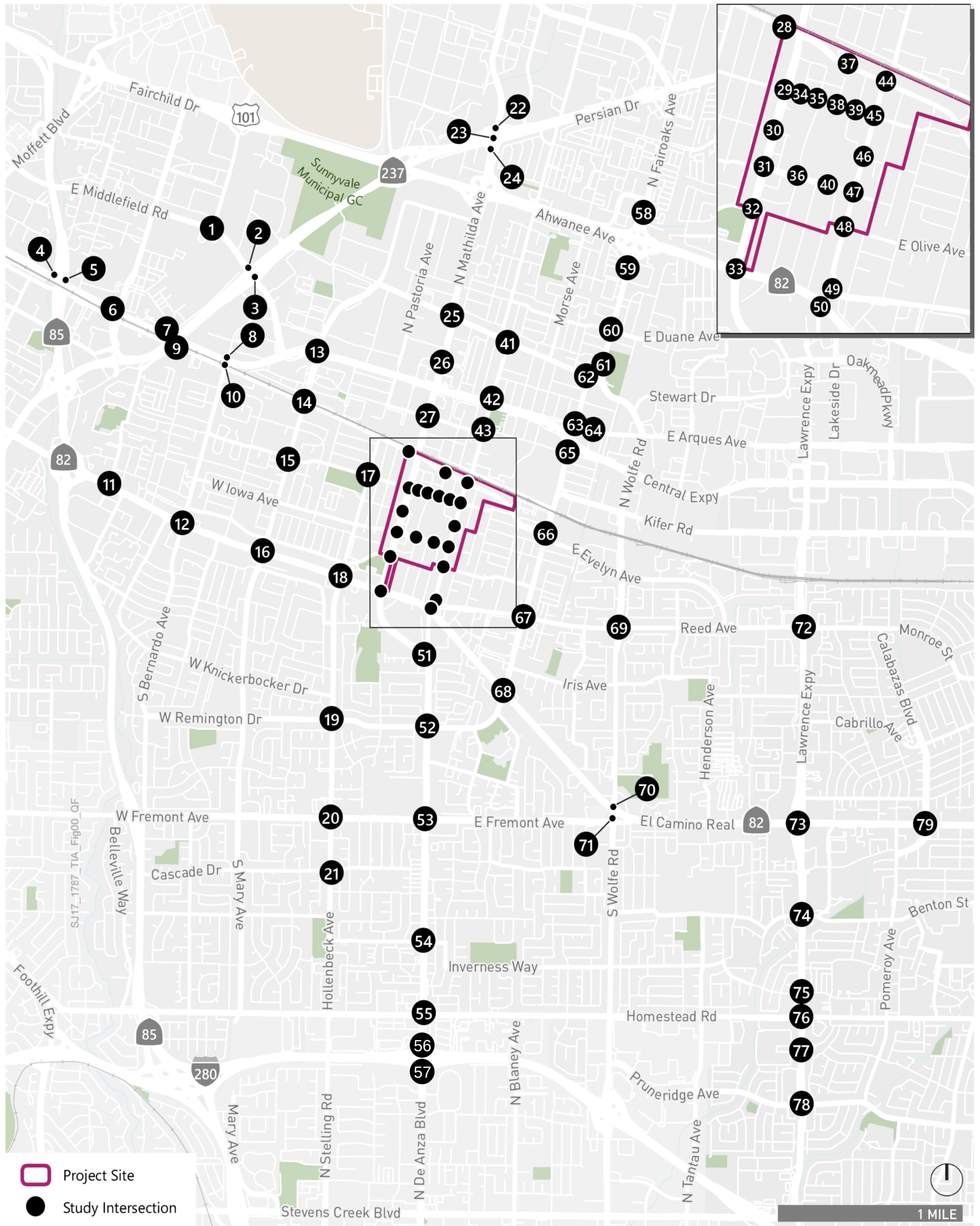
Figure 8
Project Trip Assignment

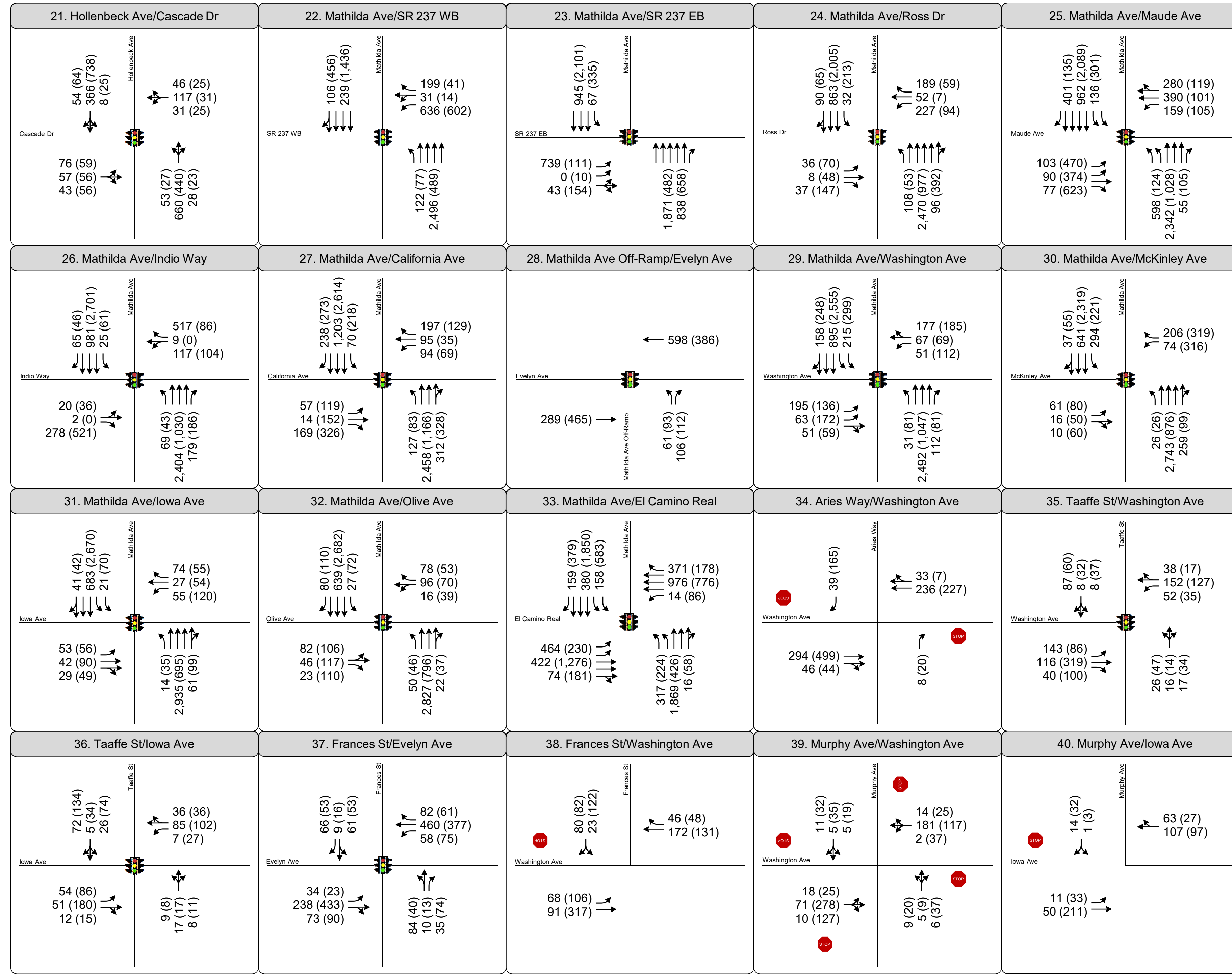


LEGEND

#	Study Intersection		Stop Sign
AM (PM)	Peak Hour Traffic Volume		Signalized
	Lane Configuration		Yield Sign
	High Occupancy Vehicle (HOV) and Bus Only Lane 6:00 AM - 9:00 AM, 3:00 PM - 7:00 PM, Monday through Friday		

Figure 9
Existing Plus Project Traffic Volumes and Lane Configurations





LEGEND

- Study Intersection
- AM (PM) Peak Hour Traffic Volume
- Lane Configuration
- High Occupancy Vehicle (HOV) and Bus Only Lane 6:00 AM - 9:00 AM, 3:00 PM - 7:00 PM, Monday through Friday
- Stop Sign
- Signalized
- Yield Sign

Figure 9
Existing Plus Project Traffic Volumes and Lane Configurations

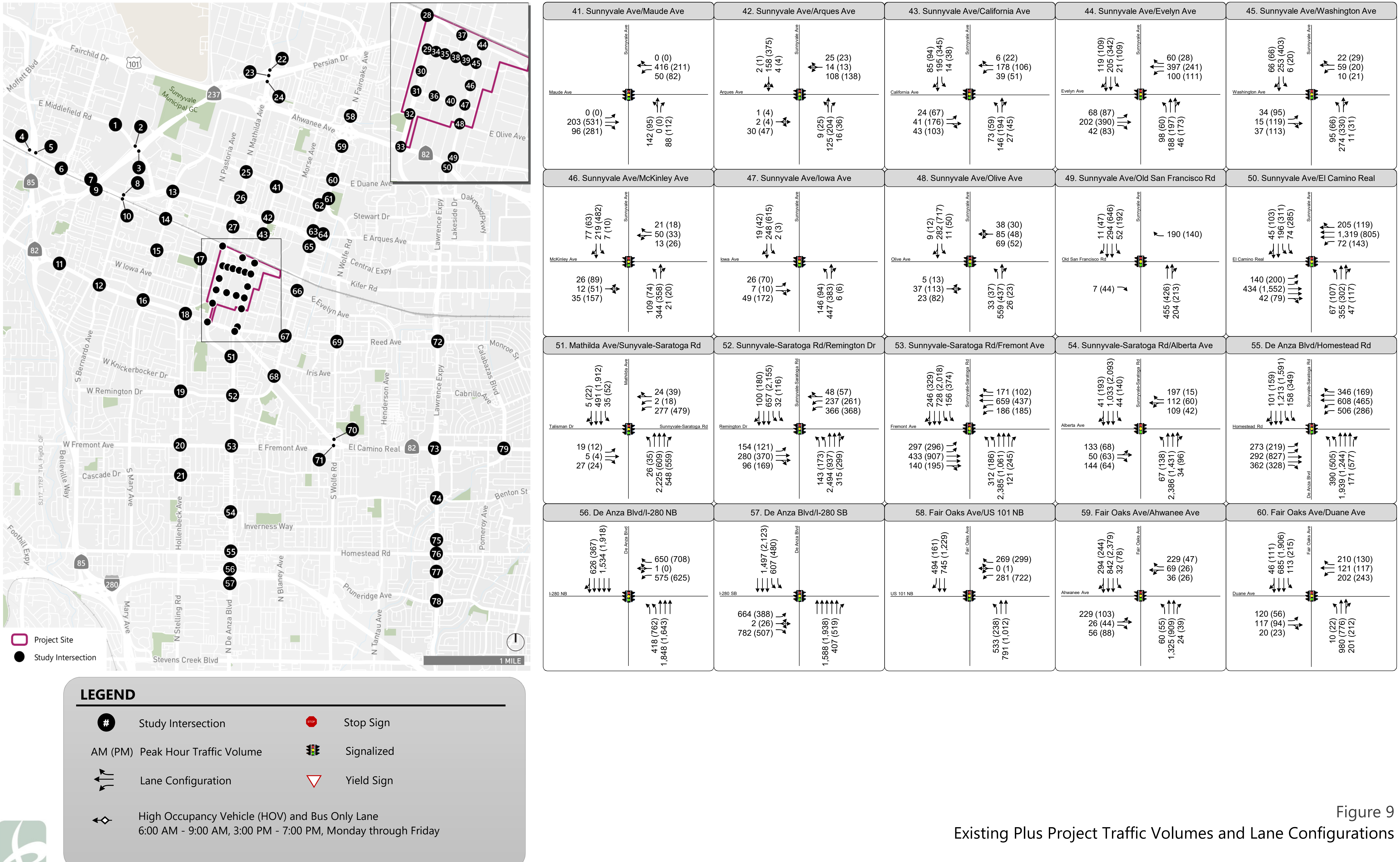
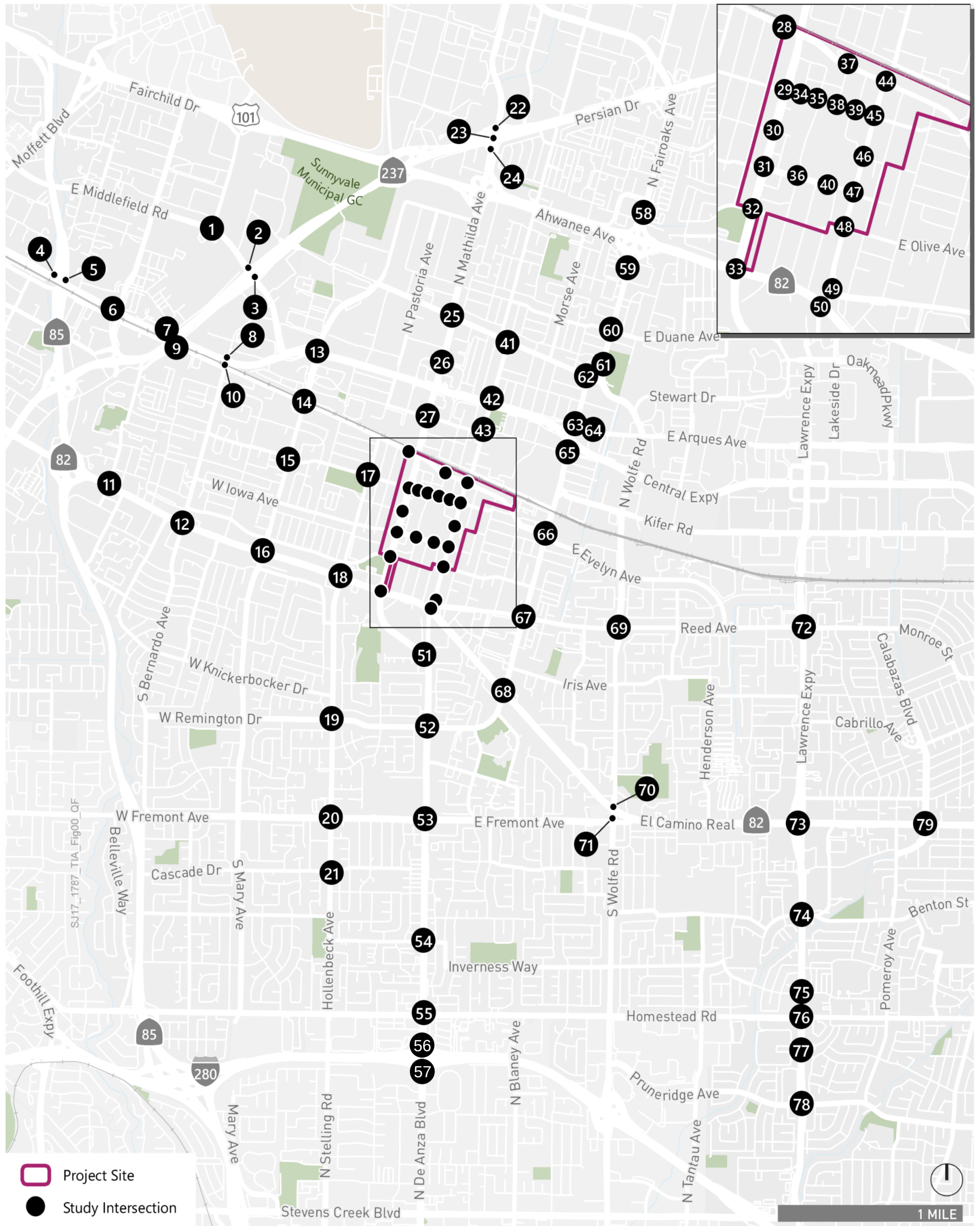
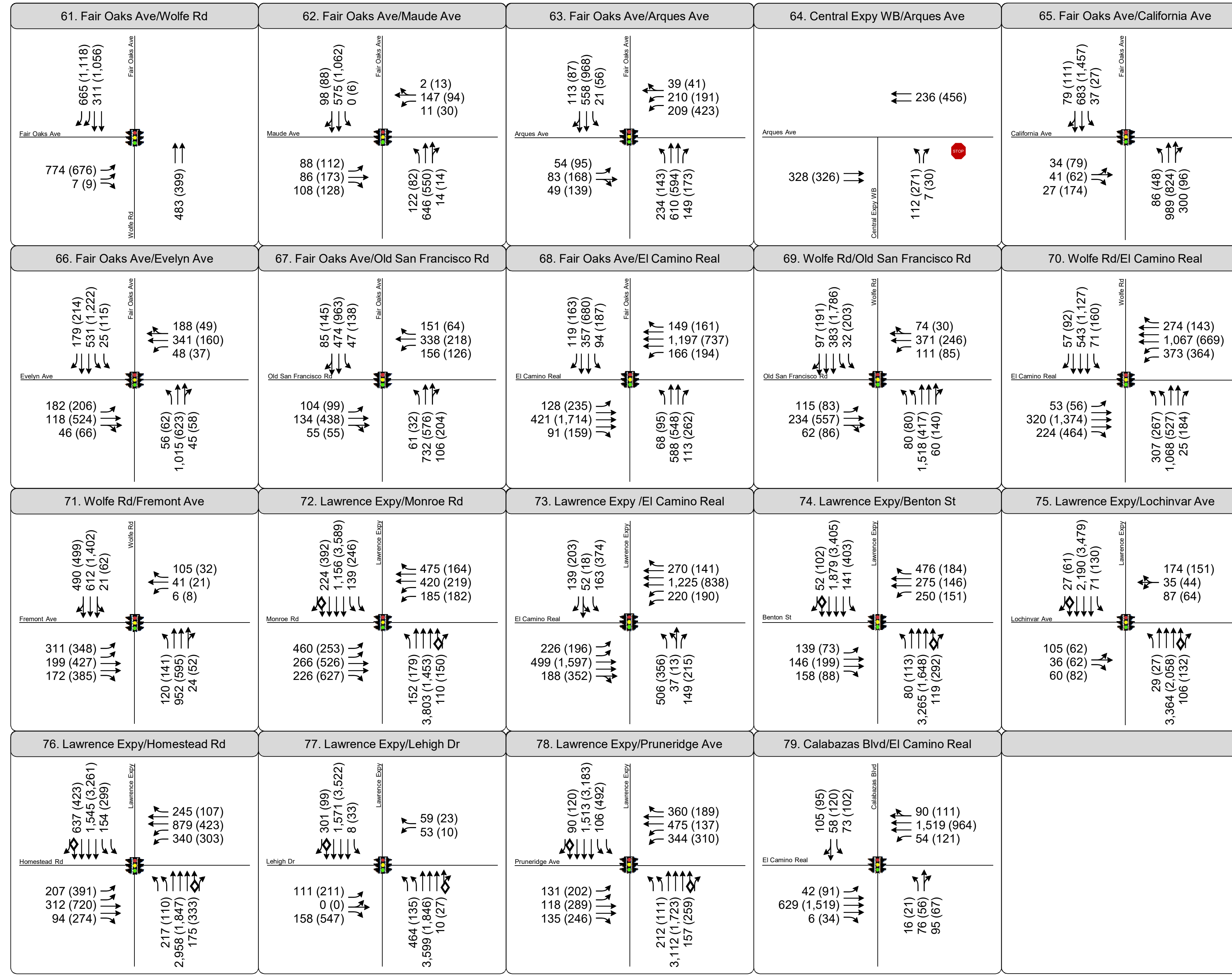


Figure 9
Existing Plus Project Traffic Volumes and Lane Configurations





LEGEND

- Study Intersection
- AM (PM) Peak Hour Traffic Volume
- Lane Configuration
- High Occupancy Vehicle (HOV) and Bus Only Lane 6:00 AM - 9:00 AM, 3:00 PM - 7:00 PM, Monday through Friday
- Stop Sign
- Signalized
- Yield Sign

Figure 9

Existing Plus Project Traffic Volumes and Lane Configurations

3.2 EXISTING PLUS PROJECT INTERSECTION LEVELS OF SERVICE

Intersection LOS was calculated with the net traffic added by the Project to evaluate the operating conditions of the intersections and identify potential impacts. LOS calculations were generally conducted using TRAFFIX analysis software. The Mathilda Avenue intersections at SR 237 Westbound Ramps (#22), SR 237 Eastbound Ramps (#23), and Ross Drive (#24) were evaluated using Synchro analysis software. The results for Existing Plus Project Conditions are presented in **Table 11. Appendix B** contains the corresponding calculation sheets. The results for Existing Conditions are included for comparison purposes, along with the projected increases in average critical delay and critical volume-to-capacity (V/C) ratios due to the Project. Average critical delay represents the delay associated with the critical movements of the intersection, or the movements that require the most "green time" and have the greatest effect on overall intersection operations. The changes in critical delay and critical V/C ratio between Existing and Existing Plus Project Conditions are used to identify significant impacts.

As shown in **Table 11**, the results indicate that all study intersections operate at acceptable service levels (generally LOS D or better for City intersections and LOS E or better for regionally significant, expressway, and CMP intersections) during the AM and PM peak hours under Existing Plus Project Conditions.

TABLE 11: EXISTING AND EXISTING PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

Intersection Name		Intersection Control[1]	LOS Standard[2]	Peak Hour[3]	Existing		Existing Plus Project			
					Delay[4]	LOS[5]	Delay[4]	LOS[5]	Change in Critical V/C[6]	Change in Average Critical Delay[7]
1	Ellis Street / Middlefield Road	Signal	D	AM PM	14.8 15.3	B B	14.8 15.3	B B	-0.002 0.010	0.0 0.0
2	SR 237 WB / Middlefield Road	Signal	D	AM PM	19.7 14.6	B- B	19.7 14.6	B- B	0.004 0.006	0.0 0.0
3	SR 237 EB / Middlefield Road	Signal	D	AM PM	22.5 20.3	C+ C+	22.4 20.3	C+ C+	0.004 0.012	0.0 0.3
4	SR-85 SB Off-Ramp / Central Expressway	Signal	E	AM PM	11.8 14.3	B+ B	11.9 14.4	B+ B	0.006 0.006	0.1 0.0
5	SR-85 NB On-Ramp - Easy Street / Central Expressway	SSSC	E	AM PM	13.1 13.3	B B	13.2 13.5	B B	0.001 0.001	0.0 0.0
6	Whisman Station Drive / Central Expressway	Signal	E	AM PM	18.0 12.0	B- B	17.9 12.0	B B	0.003 0.009	0.0 -0.1
7	Ferguson Drive / Central Expressway	Signal	E	AM PM	7.6 8.5	A A	7.6 8.6	A A	0.010 0.017	0.2 0.1
8	Bernardo Avenue / Central Expressway	Signal	E	AM PM	9.8 7.0	A A	9.8 7.1	A A	0.011 0.019	0.2 0.1
9	Moorpark Way / Evelyn Avenue	Signal	D	AM PM	13.7 17.0	B B	14.1 17.6	B B	0.015 0.013	0.4 0.8

TABLE 11: EXISTING AND EXISTING PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

	Intersection Name	Intersection Control[1]	LOS Standard[2]	Peak Hour[3]	Existing		Existing Plus Project			
					Delay[4]	LOS[5]	Delay[4]	LOS[5]	Change in Critical V/C[6]	Change in Average Critical Delay[7]
10	Bernardo Avenue / Evelyn Avenue	Signal	D	AM PM	26.6 15.7	C B	26.9 16.2	C B	0.006 0.015	0.5 0.9
11	Sylvan Avenue / El Camino Real	Signal	E	AM PM	39.7 35.7	D D+	39.7 35.8	D D+	0.003 0.007	0.1 0.2
12	Bernardo Avenue / El Camino Real	Signal	E	AM PM	39.8 38.9	D D+	39.7 39.0	D D+	0.004 0.007	0.0 0.1
13	Mary Avenue / Central Expressway	Signal	E	AM PM	42.0 52.8	D D-	42.0 52.9	D D-	0.007 -0.001	0.2 -0.4
14	Mary Avenue / Evelyn Avenue	Signal	D	AM PM	37.5 44.1	D+ D	37.6 44.8	D+ D	0.007 0.017	0.1 1.2
15	Mary Avenue / Washington Avenue	Signal	D	AM PM	15.9 17.5	B B	16.8 18.2	B B-	0.019 0.007	1.2 0.6
16	Mary Avenue / El Camino Real	Signal	E	AM PM	46.2 48.4	D D	46.1 48.5	D D	0.005 0.007	0.0 0.2
17	Pastoria Avenue / Washington Avenue	Signal	D	AM PM	26.0 25.9	C C	26.1 25.7	C C	0.013 0.030	0.2 -0.2
18	El Camino Real / Hollenbeck Avenue - Pastoria Avenue	Signal	E	AM PM	38.7 40.8	D+ D	39.1 41.5	D D	0.016 0.023	0.6 1.3
19	Hollenbeck Avenue / Remington Drive	Signal	D	AM PM	24.2 27.2	C C	24.6 28.1	C C	0.026 0.038	0.7 1.1
20	Hollenbeck Avenue / Fremont Avenue	Signal	D	AM PM	45.5 48.3	D D	45.9 48.9	D D	0.021 0.023	0.8 1.0
21	Hollenbeck Avenue / Cascade Drive	Signal	D	AM PM	9.1 8.1	A A	9.3 8.4	A A	0.016 0.026	0.3 0.3
22	Mathilda Avenue / SR 237 WB[8]	Signal	E	AM PM	21.5 29.6	C C	22.1 30.1	C C	0.000 0.001	7.2 0.3
23	Mathilda Avenue / SR 237 EB[8]	Signal	E	AM PM	38.2 60.5	D E	40.2 53.9	D D	0.005 0.008	5.4 0.3
24	Mathilda Avenue / Ross Drive[8]	Signal	E	AM PM	24.6 26.4	C C	24.7 26.4	C C	0.010 0.006	0.1 0.1
25	Mathilda Avenue / Maude Avenue	Signal	E	AM PM	40.3 47.0	D D	40.5 47.4	D D	0.014 0.011	0.3 0.0
26	Mathilda Avenue / Indio Avenue	Signal	E	AM PM	31.7 29.6	C C	31.5 30.9	C C	0.011 0.030	0.1 2.3
27	Mathilda Avenue / California Avenue	Signal	E	AM PM	25.2 30.0	C C	28.6 32.1	C C-	0.074 0.046	5.9 3.0
28	Mathilda Avenue Southbound Off-Ramp / Evelyn Avenue	Signal	E	AM PM	6.2 10.1	A B+	6.4 9.8	A A	0.008 0.008	0.0 -0.1

TABLE 11: EXISTING AND EXISTING PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

Intersection Name		Intersection Control[1]	LOS Standard[2]	Peak Hour[3]	Existing		Existing Plus Project			
					Delay[4]	LOS[5]	Delay[4]	LOS[5]	Change in Critical V/C[6]	Change in Average Critical Delay[7]
29	Mathilda Avenue / Washington Avenue	Signal	E	AM PM	34.3 35.6	C- D+	35.7 42.3	D+ D	0.045 0.090	2.9 9.6
30	Mathilda Avenue / McKinley Avenue	Signal	E	AM PM	15.4 19.7	B B-	31.8 35.7	C D+	0.217 0.159	21.8 16.3
31	Mathilda Avenue / Iowa Avenue	Signal	E	AM PM	12.8 19.9	B B-	14.1 23.0	B C	0.050 0.091	1.4 4.5
32	Mathilda Avenue / Olive Avenue	Signal	E	AM PM	14.0 20.7	B C+	13.8 20.1	B C+	0.053 0.061	0.3 -0.3
33	Mathilda Avenue / El Camino Real	Signal	E	AM PM	47.8 46.1	D D	50.2 46.5	D D	0.054 0.027	2.8 0.5
34	Washington Avenue / Aries Way	SSSC	D	AM PM	9.0 9.9	A A	9.3 10.1	A B	0.010 0.069	0.0 0.5
35	Washington Avenue / Taaffe Street	Signal	D	AM PM	15.0 12.3	B B	15.9 13.5	B B	0.076 0.054	1.2 1.7
36	Iowa Avenue / Taaffe Street	Signal	D	AM PM	24.8 23.6	C C	24.6 24.8	C C	0.078 0.055	-0.4 0.2
37	Evelyn Avenue / Frances Street	Signal	D	AM PM	19.1 15.2	B- B	18.9 15.3	B- B	0.005 0.009	0.1 -0.1
38	Washington Avenue / Frances Street	SSSC	D	AM PM	9.8 14.0	A B	10.2 16.2	B C	0.023 0.051	-0.1 0.3
39	Murphy Avenue / Washington Avenue	AWSC	D	AM PM	7.6 9.8	A A	7.9 10.6	A B	0.054 0.065	0.3 0.8
40	Iowa Avenue / Murphy Avenue	SSSC	D	AM PM	7.4 0.1	A A	9.6 10.9	A B	0.007 0.022	0.4 0.8
41	Sunnyvale Avenue / Maude Avenue	Signal	D	AM PM	14.7 13.8	B B	14.8 14.4	B B	0.001 0.006	0.1 0.7
42	Sunnyvale Avenue / Arques Avenue	Signal	D	AM PM	21.1 14.3	C+ B	20.9 14.3	C+ B	0.007 0.002	0.0 0.0
43	Sunnyvale Avenue / California Avenue	Signal	D	AM PM	7.7 14.0	A B	7.7 13.9	A B	0.007 0.007	0.0 0.1
44	Sunnyvale Avenue / Evelyn Avenue	Signal	D	AM PM	25.6 20.0	C C+	26.3 21.2	C C+	0.021 0.039	0.7 0.5
45	Sunnyvale Avenue / Washington Avenue	Signal	D	AM PM	16.2 17.5	B B	17.1 17.7	B B	0.099 0.057	4.1 0.7
46	Sunnyvale Avenue / McKinley Avenue	Signal	D	AM PM	12.0 25.5	B C	13.1 32.2	B C-	0.030 0.144	0.3 8.7
47	Sunnyvale Avenue / Iowa Avenue	Signal	D	AM PM	13.2 20.8	B C+	14.0 21.3	B C+	0.074 0.116	0.5 1.7

TABLE 11: EXISTING AND EXISTING PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

	Intersection Name	Intersection Control[1]	LOS Standard[2]	Peak Hour[3]	Existing		Existing Plus Project			
					Delay[4]	LOS[5]	Delay[4]	LOS[5]	Change in Critical V/C[6]	Change in Average Critical Delay[7]
48	Sunnyvale Avenue / Olive Avenue	Signal	D	AM PM	14.2 17.2	B B	14.3 17.2	B B	0.107 0.114	0.3 1.1
49	Sunnyvale Avenue / Old San Francisco Road	Signal	D	AM PM	13.8 14.0	B B	15.5 15.7	B B	0.073 0.078	1.8 2.9
50	Sunnyvale Avenue / El Camino Real	Signal	E	AM PM	38.2 36.4	D+ D+	39.2 37.6	D D+	0.051 0.042	1.6 1.7
51	Mathilda Avenue / Saratoga-Sunnyvale Road - Talisman	Signal	E	AM PM	22.5 29.8	C+ C	22.9 31.1	C+ C	0.027 0.049	0.7 1.8
52	Sunnyvale-Saratoga Road / Remington Drive	Signal	E	AM PM	40.8 43.7	D D	41.4 43.7	D D	0.032 0.040	1.2 0.1
53	Sunnyvale-Saratoga Road / Fremont Avenue	Signal	E	AM PM	45.0 46.1	D D	45.6 46.5	D D	0.034 0.033	1.1 0.3
54	Sunnyvale-Saratoga Road / Alberta Avenue - Harwick Way	Signal	E	AM PM	33.3 27.8	C- C	33.9 27.8	C- C	0.033 0.035	1.1 0.2
55	De Anza Boulevard / Homestead Road	Signal	D	AM PM	52.9 53.9	D- D-	53.2 54.4	D- D-	0.020 0.022	0.5 0.8
56	De Anza Boulevard / I-280 Northbound Ramps	Signal	D	AM PM	38.5 43.5	D+ D	39.3 43.9	D D	0.025 0.018	2.4 0.5
57	De Anza Boulevard / I-280 Southbound Ramps	Signal	D	AM PM	46.1 35.9	D D+	46.7 36.9	D D+	0.013 0.024	1.5 1.6
58	Fair Oaks Avenue / US 101 Northbound Ramp	Signal	D	AM PM	16.4 20.1	B C+	16.6 20.3	B C+	0.014 0.006	0.4 0.5
59	Fair Oaks Avenue / Ahwanee Avenue	Signal	D	AM PM	16.7 10.9	B B+	16.6 10.8	B B+	0.004 0.004	0.0 0.0
60	Fair Oaks Avenue / Duane Avenue	Signal	D	AM PM	27.0 25.1	C C	26.8 25.3	C C	0.005 0.012	0.0 0.1
61	Fair Oaks Avenue / Wolfe Road	Signal	D	AM PM	8.4 8.1	A A	8.3 8.6	A A	0.006 0.021	0.0 0.5
62	Fair Oaks Avenue / Maude Avenue	Signal	D	AM PM	22.9 23.7	C+ C	22.6 23.5	C+ C	0.015 0.014	-0.5 0.5
63	Fair Oaks Avenue / Arques Avenue	Signal	D	AM PM	36.3 39.5	D+ D	36.1 39.4	D+ D	0.011 0.009	-0.2 0.2
64	Central Expressway WB Off-Ramp / Arques Avenue	SSSC	E	AM PM	12.7 20.9	B C	13.0 21.5	B C	0.031 0.015	0.3 0.2
65	Fair Oaks Avenue / California Avenue	Signal	D	AM PM	11.8 16.7	B+ B	11.6 16.5	B+ B	0.006 0.008	-0.1 0.0
66	Fair Oaks Avenue / Evelyn Avenue	Signal	D	AM PM	31.3 30.0	C C	31.8 30.7	C C	0.015 0.004	1.1 0.2

TABLE 11: EXISTING AND EXISTING PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

	Intersection Name	Intersection Control[1]	LOS Standard[2]	Peak Hour[3]	Existing		Existing Plus Project			
					Delay[4]	LOS[5]	Delay[4]	LOS[5]	Change in Critical V/C[6]	Change in Average Critical Delay[7]
67	Fair Oaks Avenue / Old San Francisco Road	Signal	D	AM PM	34.8 31.4	C- C	35.6 32.3	D+ C-	0.028 0.018	1.4 1.2
68	Fair Oaks Avenue / El Camino Real	Signal	E	AM PM	31.0 36.9	C D+	30.8 37.0	C D+	0.028 0.026	-0.5 -0.1
69	Wolfe Road / Old San Francisco Road	Signal	D	AM PM	34.9 37.7	C- D+	35.7 39	D+ D+	0.011 0.020	1.0 1.6
70	Wolfe Road / El Camino Real	Signal	E	AM PM	35.9 45.2	D+ D	36.2 45.3	D+ D	0.023 0.025	0.6 0.5
71	Wolfe Road / Fremont Avenue	Signal	D	AM PM	48.6 49.8	D D	48.7 50.3	D D	0.006 0.011	0.2 0.5
72	Lawrence Expressway / Monroe Street	Signal	E	AM PM	65.8 74.1	E E	66.6 74.3	E E	0.001 0.133	0.3 3.8
73	Lawrence Expressway / El Camino Real	Signal	E	AM PM	37.1 28.7	D+ C	37.8 28.7	D+ C	0.032 0.025	0.8 -0.1
74	Lawrence Expressway / Benton Street	Signal	E	AM PM	54.8 43.2	D- D	56.2 43.4	E+ D	0.017 0.021	2.4 -0.9
75	Lawrence Expressway / Lochinvar Avenue	Signal	E	AM PM	35.6 35.2	D+ D+	36.2 35.5	D+ D+	0.016 0.012	0.8 0.3
76	Lawrence Expressway / Homestead Road	Signal	E	AM PM	59.3 74.8	E+ E	60.5 75.9	E E-	0.014 0.008	2.2 0.5
77	Lawrence Expressway / Lehigh Drive	Signal	E	AM PM	29.2 50.0	C D	29.3 50.6	C D	0.011 0.009	0.3 0.9
78	Lawrence Expressway / Pruneridge Avenue	Signal	E	AM PM	38.5 46.6	D+ D	38.7 46.8	D+ D	0.008 0.004	0.3 0.1
79	Calabazas Boulevard / El Camino Real	Signal	D	AM PM	23.6 27.8	C C	23.5 27.7	C C	0.007 0.009	-0.1 -0.2

Notes: **Bold text** indicates intersection operates at unacceptable level of service. **Bold and highlighted text** indicates a significant impact.

1. Signal = Signalized Intersection; SSSC = Side-Street Stop Controlled Intersection.
2. LOS Standard of intersection's jurisdiction.
3. AM = morning peak hour (between 7:00 and 9:00 AM), PM = evening peak hour (between 4:00 and 6:00 PM).
4. Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop control intersections. Total control delay for the worst movement is presented for side-street stop-controlled intersections.
5. LOS = Level of Service calculations conducted using the TRAFFIX level of service analysis software package, which applies the methodology described in the *2000 HCM*.
6. Change in critical volume-to-capacity ratio (V/C) between No Project and Plus Project Conditions.
7. Change in critical movement delay between No Project and Plus Project Conditions.
8. Operations of the three Mathilda Avenue intersections at SR 237 Westbound, SR 237 Eastbound, and Ross Drive are evaluated using the Synchro level of service analysis software package, to better model LOS of these closely spaced intersections that are part of the *Mathilda Avenue Improvements at SR 237 and US 101* project.

Source: Fehr & Peers, March 2019.

3.3 EXISTING PLUS PROJECT INTERSECTION IMPACTS AND MITIGATION MEASURES

This section of the report discusses those intersections that are projected to operate at unacceptable LOS (**Table 11)** and whether they meet their respective jurisdictions' impact thresholds. Possible mitigation measures are identified for significantly impacted intersections.

All study intersections operate at acceptable service levels during the AM and PM peak hours under Existing Plus Project Conditions. Thus, the Project's impact at all study intersections under Existing Plus Project Conditions is **less-than-significant**.

3.3.1 Existing Plus Project Unsignalized Intersection Signal warrants

All unsignalized intersections are within the City of Sunnyvale; none of the unsignalized study intersections are CMP intersections. Per City of Sunnyvale guidelines, the peak hour volume signal warrant from the CA MUTCD was assessed for each unsignalized intersection[5]. The results under Existing Plus Project Conditions are summarized in **Table 12.**

None of the six unsignalized study intersections meet the peak hour volume signal warrant in either peak hour. The Project is projected to have less-than-significant impacts at the unsignalized study intersections based on Sunnyvale's impact criteria. **(Less-Than-Significant).**

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[5] It should be noted that peak hour signal warrant analysis is intended to examine the general correlation between the planned level of future development and the need to install new traffic signals. It estimates future development-generated traffic compared against a sub-set of the standard traffic signal warrants recommended in the CA MUTCD. This analysis should not serve as the only basis for deciding whether and when to install a signal. To reach such a decision, the full set of warrants should be investigated based on field-measured, rather than forecast, traffic data and a thorough study of traffic and roadway conditions by an experienced engineer. Furthermore, the decision to install a signal should not be based solely upon the warrants, since the installation of signals can lead to certain types of collisions. The responsible state or local agency should undertake regular monitoring of actual traffic conditions and accident data, and timely re-evaluation of the full set of warrants in order to prioritize and program intersections for signalization.

TABLE 12: EXISTING PLUS PROJECT CONDITIONS UNSIGNALIZED INTERSECTION SIGNAL WARRANTS

Intersection Name		Peak Hour[1]	Signal Warrant Met?[2]
5	SR-85 NB On-Ramp-Easy Street/ Central Expressway	AM PM	No No
34	Washington Avenue/ Aries Way	AM PM	No No
38	Washington Avenue/ Frances Street	AM PM	No No
39	Murphy Avenue/ Washington Avenue	AM PM	No No
40	Iowa Avenue/ Murphy Avenue	AM PM	No No
64	Central Expressway WB Off-Ramp/ Arques Avenue	AM PM	No No

Notes:

1. AM = morning peak hour (between 7:00 and 9:00 AM), PM = evening peak hour (between 4:00 and 6:00 PM).
2. Peak hour volume traffic signal warrant analysis (as described in the California Manual on Uniform Traffic Control Devices) was conducted for all non-signalized intersections to determine significant impacts. **Yes** = signal warrant is met; No = signal warrant is not met.

Source: Fehr & Peers, March 2019.

3.4 EXISTING FREEWAY SEGMENT LEVELS OF SERVICE

The results of the mixed-flow and HOV lane freeway segment analysis during the AM and PM peak hours under Existing with Project Conditions are shown in **Table 13**. Freeway segments that operate at LOS F are highlighted in bold in the table.

With the Project, 23 mixed-flow segments are estimated to operate at unacceptable LOS F during the AM peak hour and 27 segments during the PM peak hour. Similar, 9 HOV lane segments are estimated to operate at unacceptable LOS F each during the AM and PM peak hours.

3.5 EXISTING FREEWAY SEGMENT IMPACTS AND MITIGATION MEASURES

The Project is determined to cause a significant impact to freeway facilities when the following thresholds are met (see **Chapter 1.5**)

- Freeway segment operations to deteriorate from an acceptable level (LOS E or better) under Existing Conditions to an unacceptable level (LOS F)
- An increase in traffic of more than one percent of the capacity of a segment that operates at LOS F under Existing Conditions.

Based on the results presented in **Table 13** the Project has one freeway impact on SR-237 between Mathilda Avenue and Fair Oaks Avenue during the PM peak hour. **(Significant Impact)**

There are limited options to widen the impacted freeway segment due to right-of-way constraints. Additionally, the widening of roadways can lead to other effects, such as induced travel demand (e.g., more vehicles on the roadway due to increased capacity), air quality degradation, increases in noise associated with motor vehicles, and reductions in transit use (less congestion or reduced driving time may make driving more attractive than transit travel).

The VTA's VTP 2040 identifies the following freeway project that is relevant to the identified freeway segment impact:

- **VTP ID H3: SR 237 Express Lanes (North First Street to Mathilda Avenue)**: This project converts HOV lanes to express lanes on SR 237 between North First Street and Mathilda Avenue. Cost in 2013 dollars: $20 million.

Complete mitigation of freeway impacts is considered beyond the scope of an individual development project, due to the inability of any individual project or City fully fund a major freeway mainline improvement. The City of Sunnyvale could potentially participate in development of a regional fee should it be proposed by regional agencies, such as VTA. For these reasons, the Project's freeway impacts would remain significant and unavoidable. **(Significant and Unavoidable)**

Nonetheless, the Project will be required to pay a fair share to VTP ID H3. In addition, implementation of the VTP projects is outside of the City of Sunnyvale's jurisdiction and the City cannot guarantee that it would be constructed.

TABLE 13: EXISTING PLUS PROJECT FREEWAY SEGMENT LEVELS OF SERVICE

Freeway Segment	Direction	Peak Hour[1]	Capacity[4]		Project Trips		% Added Volume[5]		Density[6]		LOS[7]	
			Mixed[2]	HOV[3]	Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
I-280, between Magdalena Avenue to Foothill Expressway	EB	AM	6,900	1,650	12	2	0.17	0.12	25	10	C	A
		PM	6,900	1,650	8	1	0.12	0.06	31	22	D	C
	WB	AM	6,900	1,650	6	1	0.09	0.06	48	56	E	E
		PM	6,900	1,650	14	2	0.20	0.12	23	13	C	B
I-280, between Foothill Expressway to SR 85	EB	AM	6,900	1,650	17	3	0.25	0.18	23	11	C	A
		PM	6,900	1,650	11	2	0.16	0.12	**71**	40	**F**	D
	WB	AM	6,900	1,650	9	2	0.13	0.12	**70**	**60**	**F**	**F**
		PM	6,900	1,650	19	3	0.28	0.18	28	12	D	B
I-280, between SR-85 to De Anza Boulevard	EB	AM	6,900	1,650	24	4	0.35	0.24	22	12	C	B
		PM	6,900	1,650	15	3	0.22	0.18	**107**	**83**	**F**	**F**
	WB	AM	6,900	1,650	13	2	0.19	0.12	**76**	46	**F**	D
		PM	6,900	1,650	28	4	0.41	0.24	27	10	D	A
I-280, between De Anza Boulevard to Wolfe Road	EB	AM	6,900	1,650	11	2	0.16	0.12	22	22	C	C
		PM	6,900	1,650	44	8	0.64	0.48	**75**	**63**	**F**	**F**
	WB	AM	6,900	1,650	42	7	0.61	0.42	**76**	48	**F**	E
		PM	6,900	1,650	14	2	0.20	0.12	27	14	D	B
I-280, between Wolfe Road to Lawrence Expressway	EB	AM	6,900	1,650	8	1	0.12	0.06	21	12	C	B
		PM	6,900	1,650	31	5	0.45	0.30	**61**	42	**F**	D
	WB	AM	6,900	1,650	29	5	0.42	0.30	**72**	**70**	**F**	**F**
		PM	6,900	1,650	9	2	0.13	0.12	25	12	C	B
I-280, between Lawrence Expressway to Saratoga Avenue	EB	AM	6,900	1,650	5	1	0.07	0.06	37	14	D	B
		PM	6,900	1,650	21	4	0.30	0.24	**77**	52	**F**	E
	WB	AM	6,900	1,650	20	4	0.29	0.24	**78**	**70**	**F**	**F**
		PM	6,900	1,650	7	1	0.10	0.06	27	15	D	B
I-280, between Saratoga Avenue to Winchester Boulevard	EB	AM	6,900	1,650	3	1	0.04	0.06	34	13	D	B
		PM	6,900	1,650	15	3	0.22	0.18	**96**	**63**	**F**	**F**
	WB	AM	6,900	1,650	14	3	0.20	0.18	**90**	**82**	**F**	**F**
		PM	6,900	1,650	4	1	0.06	0.06	40	16	D	B
US-101, between De La Cruz Boulevard to Montague Expressway	NB	AM	6,900	1,650	21	4	0.30	0.24	**76**	**71**	**F**	**F**
		PM	6,900	1,650	8	1	0.12	0.06	24	11	C	A
	SB	AM	6,900	1,650	7	1	0.10	0.06	25	11	C	A
		PM	6,900	1,650	22	4	0.32	0.24	**112**	**71**	**F**	**F**

TABLE 13: EXISTING PLUS PROJECT FREEWAY SEGMENT LEVELS OF SERVICE

Freeway Segment	Direction	Peak Hour[1]	Capacity[4]		Project Trips		% Added Volume[5]		Density[6]		LOS[7]	
			Mixed[2]	HOV[3]	Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
US-101, between Montague Expressway to Bowers Avenue	NB	AM	6,900	1,650	30	5	0.43	0.30	**98**	**87**	**F**	**F**
		PM	6,900	1,650	11	2	0.16	0.12	28	11	D	A
	SB	AM	6,900	1,650	9	2	0.13	0.12	21	14	C	B
		PM	6,900	1,650	31	6	0.45	0.36	**109**	**109**	**F**	**F**
US-101, between Bowers Avenue to Lawrence Expressway	NB	AM	6,900	1,650	42	8	0.61	0.48	**94**	**82**	**F**	**F**
		PM	6,900	1,650	16	3	0.23	0.18	29	16	D	B
	SB	AM	6,900	1,650	14	2	0.20	0.12	35	15	D	B
		PM	6,900	1,650	45	8	0.65	0.48	**113**	**102**	**F**	**F**
US-101 between Lawrence Expressway to Fair Oaks Avenue	NB	AM	6,900	1,650	46	8	0.67	0.48	**85**	**74**	**F**	**F**
		PM	6,900	1,650	18	3	0.26	0.18	29	12	D	B
	SB	AM	6,900	1,650	14	3	0.20	0.18	28	17	D	B
		PM	6,900	1,650	49	9	0.71	0.55	**93**	**106**	**F**	**F**
US-101, between N. Fair Oaks Avenue and Mathilda Avenue	NB	AM	6,900	1,650	25	4	0.36	0.24	**60**	54	**F**	E
		PM	6,900	1,650	10	2	0.14	0.12	24	11	C	A
	SB	AM	6,900	1,650	8	1	0.12	0.06	24	18	C	B
		PM	6,900	1,650	26	5	0.38	0.30	**72**	**68**	**F**	**F**
US-101, between Mathilda Avenue and SR 237	NB	AM	6,900	1,650	17	3	0.25	0.18	49	**71**	E	**F**
		PM	6,900	1,650	36	6	0.52	0.36	24	20	C	C
	SB	AM	6,900	1,650	31	6	0.45	0.36	23	40	C	D
		PM	6,900	1,650	19	3	0.28	0.18	**87**	**60**	**F**	**F**
US-101, between SR 237 to Moffett Boulevard	NB	AM	6,900	1,650	12	2	0.17	0.12	**67**	**64**	**F**	**F**
		PM	6,900	1,650	25	4	0.36	0.24	53	33	E	D
	SB	AM	6,900	1,650	22	4	0.32	0.24	44	31	D	D
		PM	6,900	1,650	13	2	0.19	0.12	**76**	57	**F**	E
US-101, between Moffett Boulevard to SR 85	NB	AM	6,900	1,650	9	1	0.13	0.06	**97**	67	**F**	**F**
		PM	6,900	1,650	18	3	0.26	0.18	**93**	36	**F**	D
	SB	AM	6,900	1,650	15	3	0.22	0.18	31	17	D	B
		PM	6,900	1,650	9	2	0.13	0.12	**95**	**84**	**F**	**F**
US-101, between SR 85 to Shoreline Boulevard	NB	AM	9,200	1,650	6	1	0.07	0.06	**75**	34	**F**	D
		PM	9,200	1,650	12	2	0.13	0.12	**68**	34	**F**	D
	SB	AM	6,900	1,650	11	2	0.16	0.12	38	37	D	D
		PM	6,900	1,650	7	1	0.10	0.06	**68**	51	**F**	E

TABLE 13: EXISTING PLUS PROJECT FREEWAY SEGMENT LEVELS OF SERVICE

Freeway Segment	Direction	Peak Hour[1]	Capacity[4]		Project Trips		% Added Volume[5]		Density[6]		LOS[7]	
			Mixed[2]	HOV[3]	Mixed	HOV	Mixed	HOV	Mixed	HOV	Mixed	HOV
SR-237, between Sylvan Avenue to Maude Avenue	EB	AM	4,400	N/A	9	0	0.20	N/A	51	N/A	E	N/A
		PM	4,400	N/A	4	0	0.09	N/A	33	N/A	D	N/A
	WB	AM	4,400	N/A	3	0	0.07	N/A	39	N/A	D	N/A
		PM	4,400	N/A	10	0	0.23	N/A	**77**	N/A	**F**	N/A
SR-237, between Maude Avenue to US-101	EB	AM	4,400	N/A	10	0	0.23	N/A	23	N/A	C	N/A
		PM	4,400	N/A	19	0	0.43	N/A	**100**	N/A	**F**	N/A
	WB	AM	4,400	N/A	17	0	0.39	N/A	36	N/A	D	N/A
		PM	4,400	N/A	11	0	0.25	N/A	**95**	N/A	**F**	N/A
SR-237 between US-101 and Mathilda Avenue	EB	AM	4,400	N/A	10	0	0.23	N/A	40	N/A	D	N/A
		PM	4,400	N/A	19	0	0.43	N/A	**122**	N/A	**F**	N/A
	WB	AM	4,400	N/A	17	0	0.39	N/A	51	N/A	E	N/A
		PM	4,400	N/A	11	0	0.25	N/A	**82**	N/A	**F**	N/A
SR-237 between Mathilda Avenue and Fair Oaks Avenue	EB	AM	4,600	1,650	20	3	0.43	0.18	33	12	D	B
		PM	4,600	1,650	50	9	**1.09**	0.55	**102**	**96**	**F**	**F**
	WB	AM	6,900	N/A	53	0	0.77	N/A	**90**	N/A	**F**	N/A
		PM	6,900	N/A	26	0	0.38	N/A	**84**	N/A	**F**	N/A
SR_237, between Fair Oaks Avenue to Lawrence Expressway	EB	AM	4,600	1650	14	2	0.30	0.12	33	19	D	C
		PM	4,600	1,650	35	6	0.76	0.36	**117**	**62**	**F**	**F**
	WB	AM	4,600	1,650	31	6	0.67	0.36	**96**	**94**	**F**	**F**
		PM	4,600	1,650	15	3	0.33	0.18	**61**	38	**F**	D
SR-237, between Lawrence Expressway to Great America Parkway	EB	AM	4,600	1,650	9	2	0.20	0.12	32	18	D	B
		PM	4,600	1,650	25	4	0.54	0.24	**102**	**69**	**F**	**F**
	WB	AM	4,600	1,650	22	4	0.48	0.24	**104**	**82**	**F**	**F**
		PM	4,600	1,650	11	2	0.24	0.12	27	15	D	B

Notes: **Bold** font indicates unacceptable operations based on VTA's LOS E Standard**.** **Bold and highlighted** text indicates a significant impact as discussed in Chapter 1.5.

1. AM = morning peak hour (between 7:00 and 9:00 AM), PM = evening peak hour (between 4:00 and 6:00 PM).
2. Mixed = Mixed-Flow Lanes
3. HOV = High-Occupancy Vehicle Lanes
4. Capacity in vehicles per hour (vph) based on number of lanes.
5. % Added Volume = (Project Trips / Capacity) * 100
6. Measured in passenger cars per mile per lane.
7. LOS = Level of Service. Level of service based on density

Source: *2016 Annual Monitoring and Conformance Report*, VTA. Fehr & Peers, March 2019.

4.0 BACKGROUND CONDITIONS

This chapter presents the results of the LOS calculations under Background Conditions without and with the Project. Traffic volumes for Background No Project Conditions comprise existing volumes plus traffic generated by "approved but not yet built" and "not occupied" developments in the area. This scenario also includes approved and funded intersection geometry improvements provided by City of Sunnyvale staff. Background Plus Project Conditions are defined as Background No Project Conditions plus net-added traffic generated by the Project.

4.1 BACKGROUND NO PROJECT TRAFFIC VOLUMES

Staff from the City of Sunnyvale provided a list of "approved but not yet built" and "not occupied" development projects. Traffic estimates for these development projects that would add traffic to the study intersections were obtained from their respective TIA reports or estimated based on trip generation rates published in the ITE *Trip Generation Manual* (10^{th} Edition). Vehicle trips for each of the background projects were then assigned to the roadway network based on population and employment data, existing and estimated future travel patterns, and recent TIAs completed in the area.

Appendix E contains a full list of approved and not occupied projects included in the background volume estimates. The trips for each of the background projects were added to the existing volumes discussed in **Chapter 2** to represent Background No Project Conditions, as shown in **Figure 10.**

4.2 BACKGROUND NO PROJECT ROADWAY IMPROVEMENTS

Existing intersection geometries were modified to include improvements that are currently under construction, are fully funded, or will reasonably be constructed within the next 10 years. The City of Sunnyvale provided the following intersection improvements to be included in the Background No Project conditions:

- Intersection 22: Mathilda Avenue/SR 237 Westbound Ramps
  - Realign westbound off-ramp to align with Moffett Park Drive, and reconfigure all legs with the following configurations:
    - Northbound leg: one shared U-turn/left-turn lane, one exclusive left turn-lane, three through-lanes
    - Eastbound leg: one shared left-turn/through/right-turn lane, one channelized right-turn lane
    - Southbound leg: one shared through/right-turn lane, two through lanes

        - Westbound leg: one left-turn lane, one shared left-turn/through lane, one shared through/right-turn lane

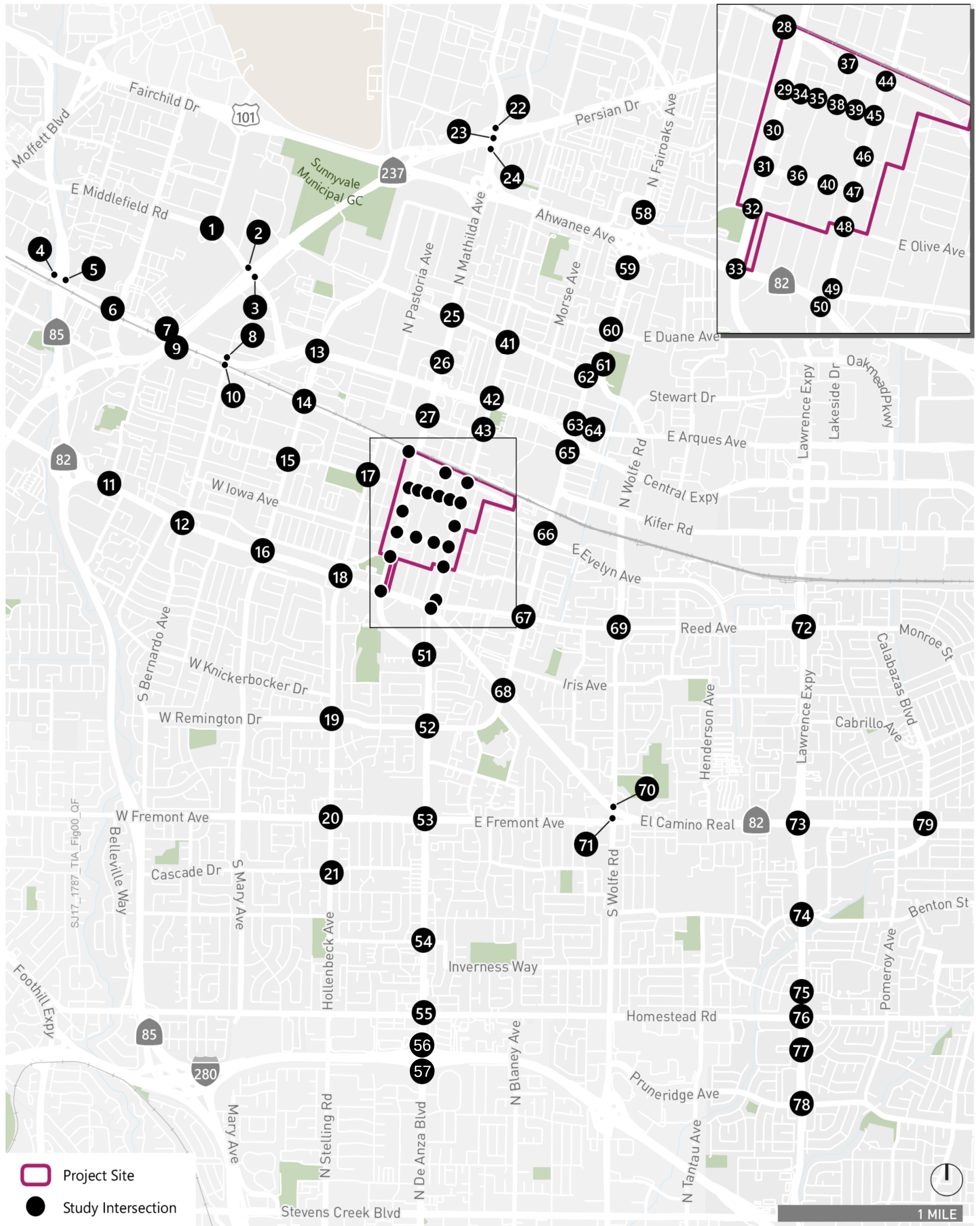
- Intersection 23: Mathilda Avenue/SR 237 Eastbound Ramps
    - Combine the eastbound shared left-turn/through lane and right-turn lane to one shared left-turn/through/right-turn lane
    - Add a second eastbound left-turn lane
    - Add a second northbound right-turn lane
- Intersection 26: Mathilda Avenue/Indio Avenue
    - Modify the east-west signal phasing from permitted phasing to protected phasing
    - Modify the eastbound and westbound approaches from one shared left/through lane and one dedicated right-turn lane to one dedicated left-turn lane and one shared through/right-turn lane
    - Combine the northbound and southbound through curb lane and right-turn lane to one shared through/right-turn lane
- Intersection 29: Mathilda Avenue/Washington Avenue
    - Add a second westbound left-turn lane
    - Combine the northbound through lane and right-turn lane to one shared through/right-turn lane
- Intersection 30: Mathilda Avenue/McKinley Avenue
    - Add a second southbound left-turn lane
    - Add a second westbound left-turn lane
    - Convert northbound cub lane to a bike lane, reconfiguring the northbound approach to two through lanes and one through/right-turn lane
- Intersection 31: Mathilda Avenue/Iowa Avenue
    - Add a second westbound left-turn lane
    - Modify the northbound shared through/right-turn lane to a right-turn lane
- Intersection 39: Murphy Avenue/Washington Avenue
    - Modify the eastbound and westbound approaches from one shared left/through/right lane to one dedicated left-turn lane and one shared through/right-turn lane

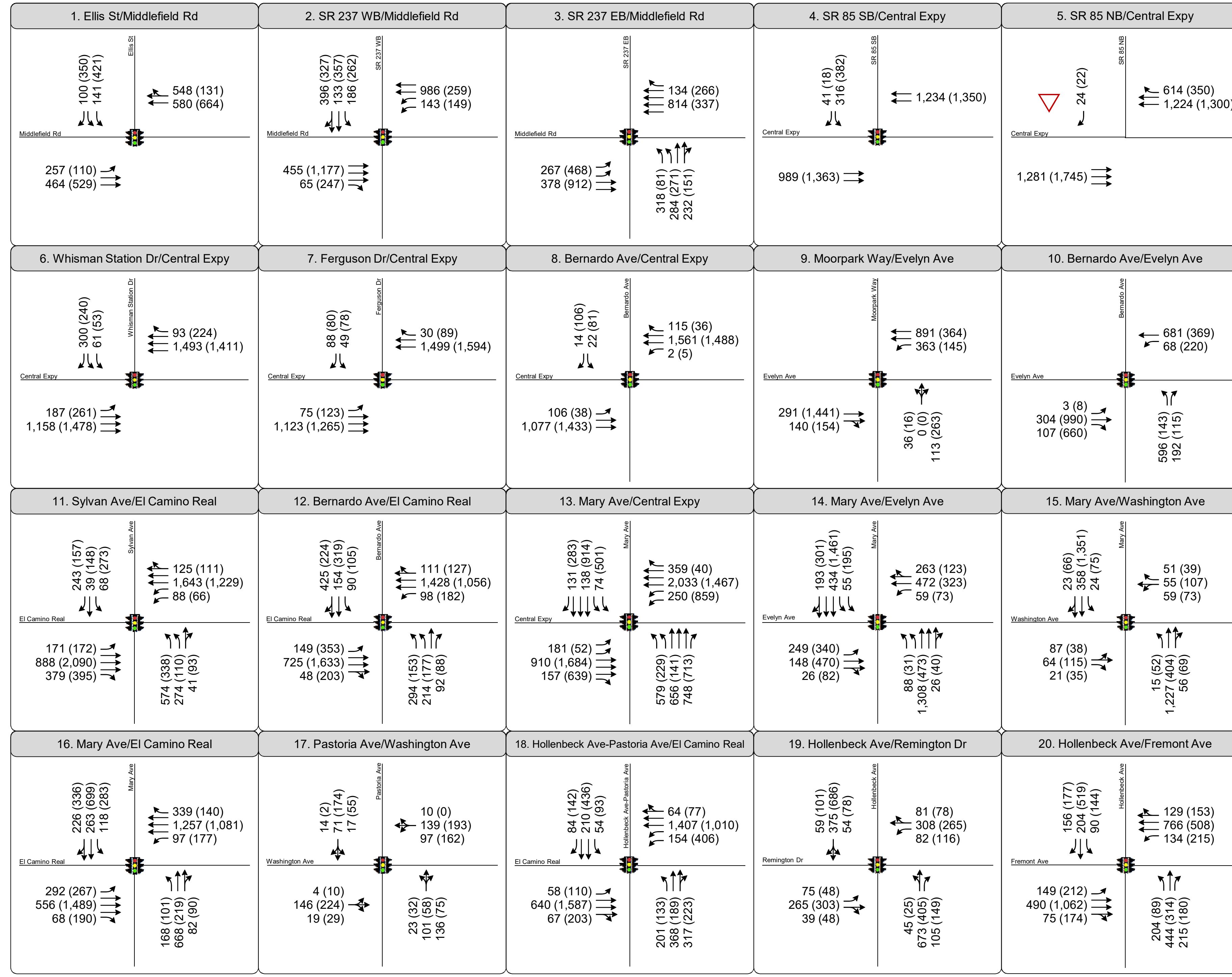
- Intersection 45: Sunnyvale Avenue/Washington Avenue
  - Modify the east-west signal phasing from permitted phasing to protected phasing
  - Modify the northbound approach from one dedicated left-turn lane and one shared through/right lane to one dedicated left-turn lane, one dedicated through lane and one shared through/right-turn lane
- Intersection 46: Sunnyvale Avenue/McKinley Avenue
  - Add a through-only lane to the northbound approach
- Intersection 52: Sunnyvale-Saratoga Road/Remington Drive
  - Modify the westbound approach from two left-turn lanes and one shared through/right-turn lane to two left-turn lanes, one through lane, and one right-turn lane
- Intersection 55: De Anza Boulevard/Homestead Road
  - Modify the southbound approach from two left-turn lanes, two through lanes and one shared through/right-turn lane to two left-turn lanes, three through lanes, and one right-turn lane

These improvements are included in both the “No Project” and “Plus Project” scenarios for the Background Conditions analysis and are reflected in the intersection operation results.

4.3 BACKGROUND PLUS PROJECT TRAFFIC VOLUMES

Net-added trips generated from the Project as shown in **Appendix C** were added to the background traffic projections to develop traffic volumes for Background Plus Project Conditions. The resulting volumes are shown on **Figure 11.**





LEGEND

- Study Intersection
- AM (PM) Peak Hour Traffic Volume
- Lane Configuration
- High Occupancy Vehicle (HOV) and Bus Only Lane 6:00 AM - 9:00 AM, 3:00 PM - 7:00 PM, Monday through Friday
- Stop Sign
- Signalized
- Yield Sign

Figure 10
Background No Project Volumes and Lane Configurations

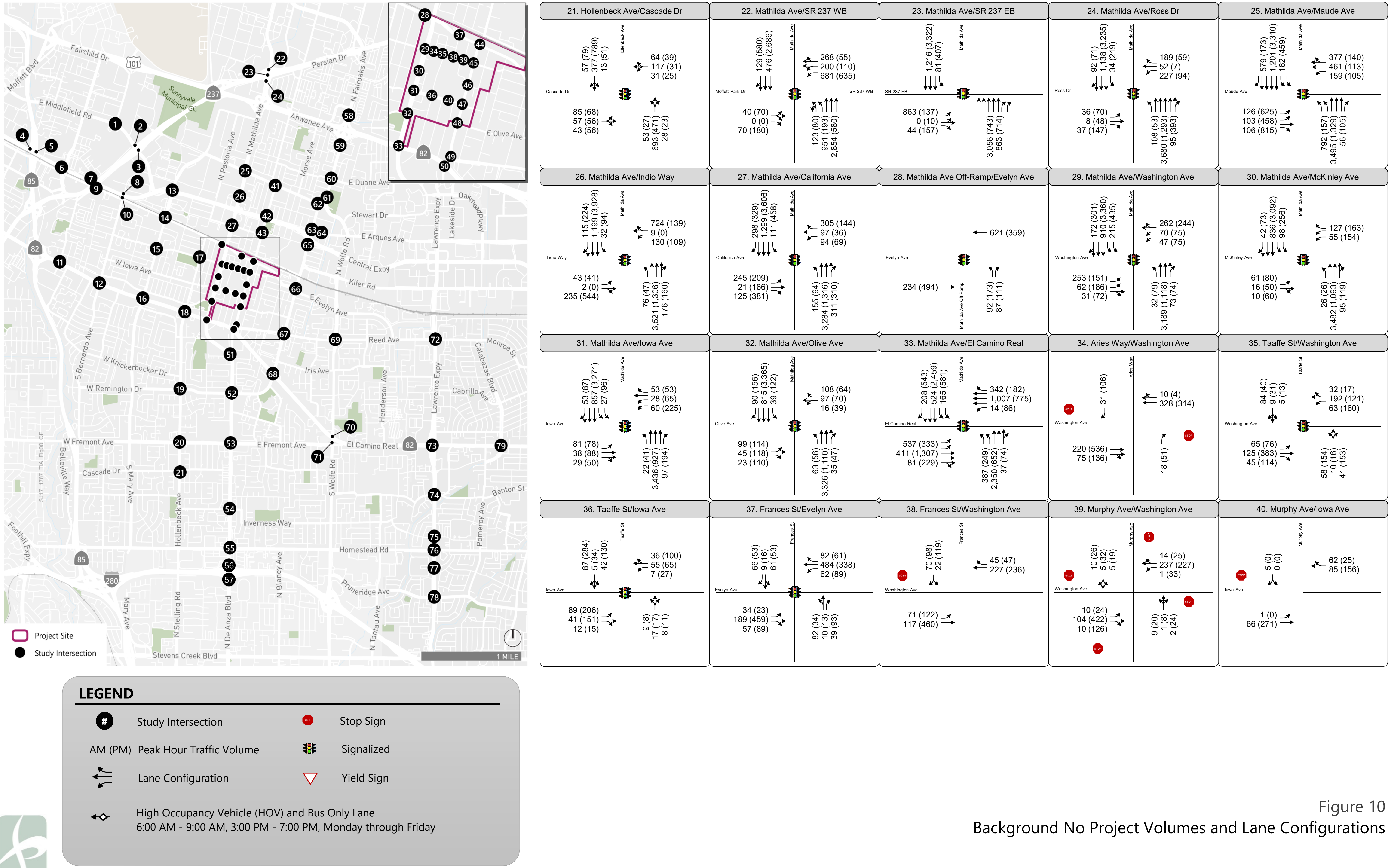
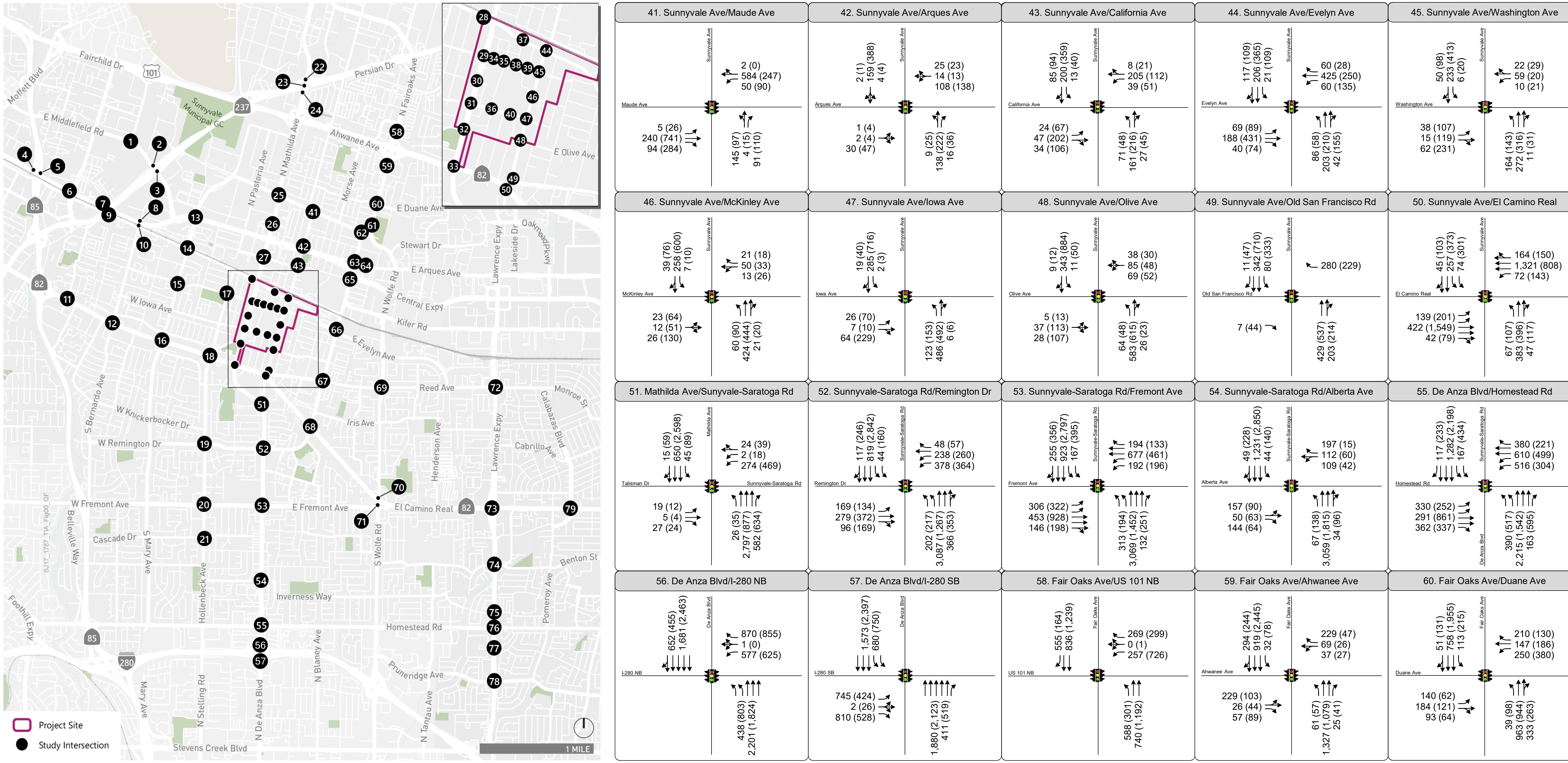


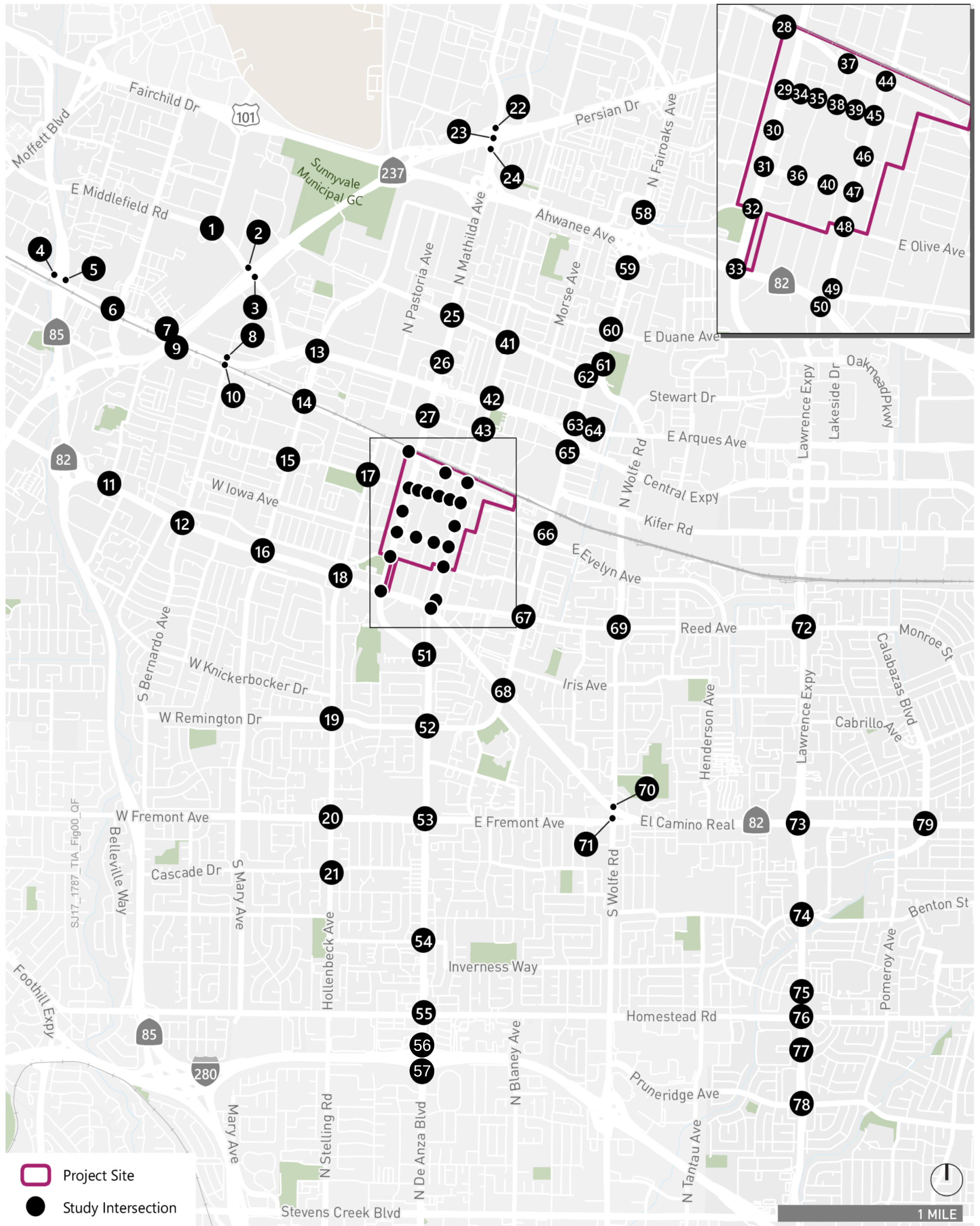
Figure 10
Background No Project Volumes and Lane Configurations

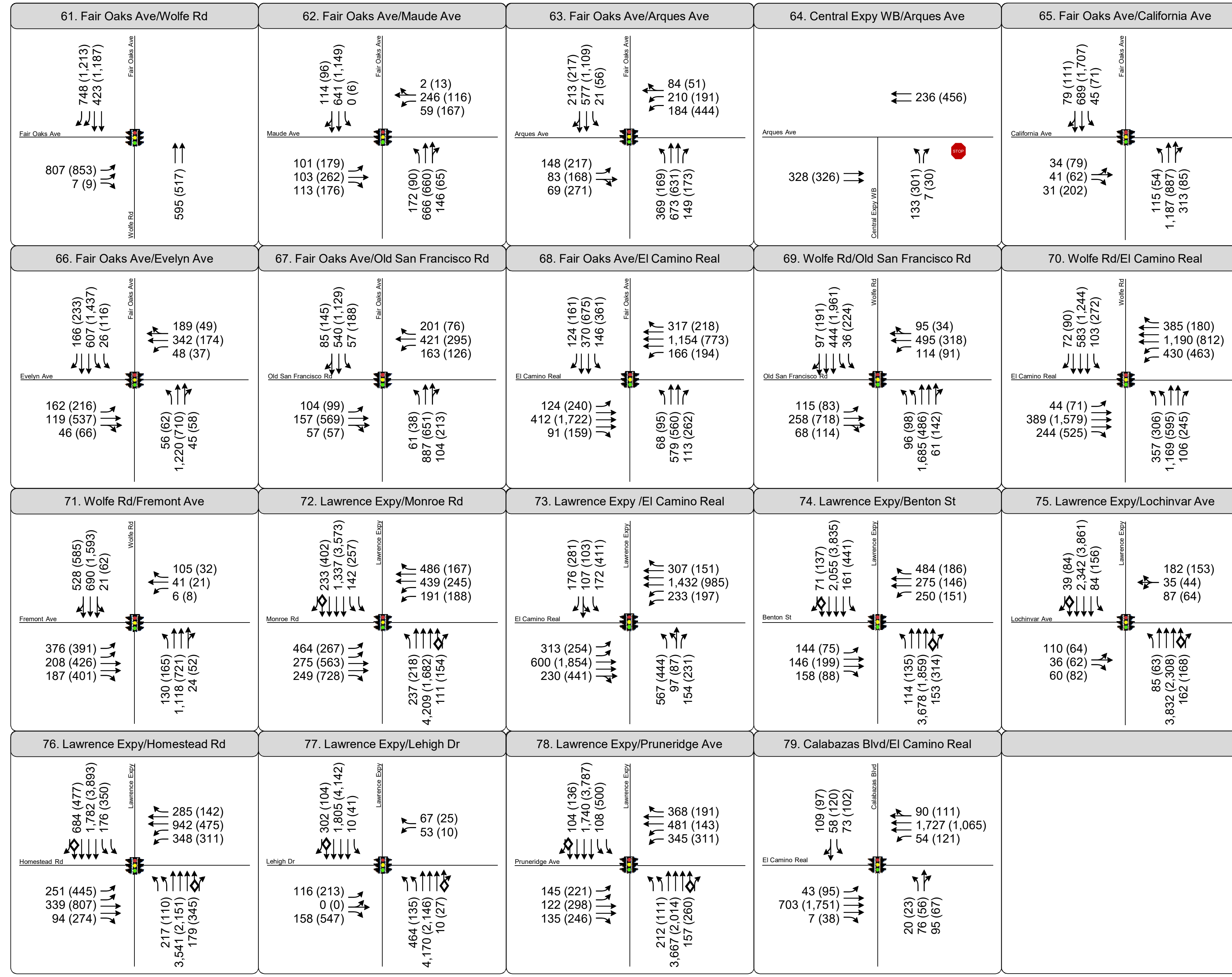


LEGEND

- Study Intersection
- AM (PM) Peak Hour Traffic Volume
- Lane Configuration
- High Occupancy Vehicle (HOV) and Bus Only Lane 6:00 AM - 9:00 AM, 3:00 PM - 7:00 PM, Monday through Friday
- Stop Sign
- Signalized
- Yield Sign

Figure 10
Background No Project Volumes and Lane Configurations

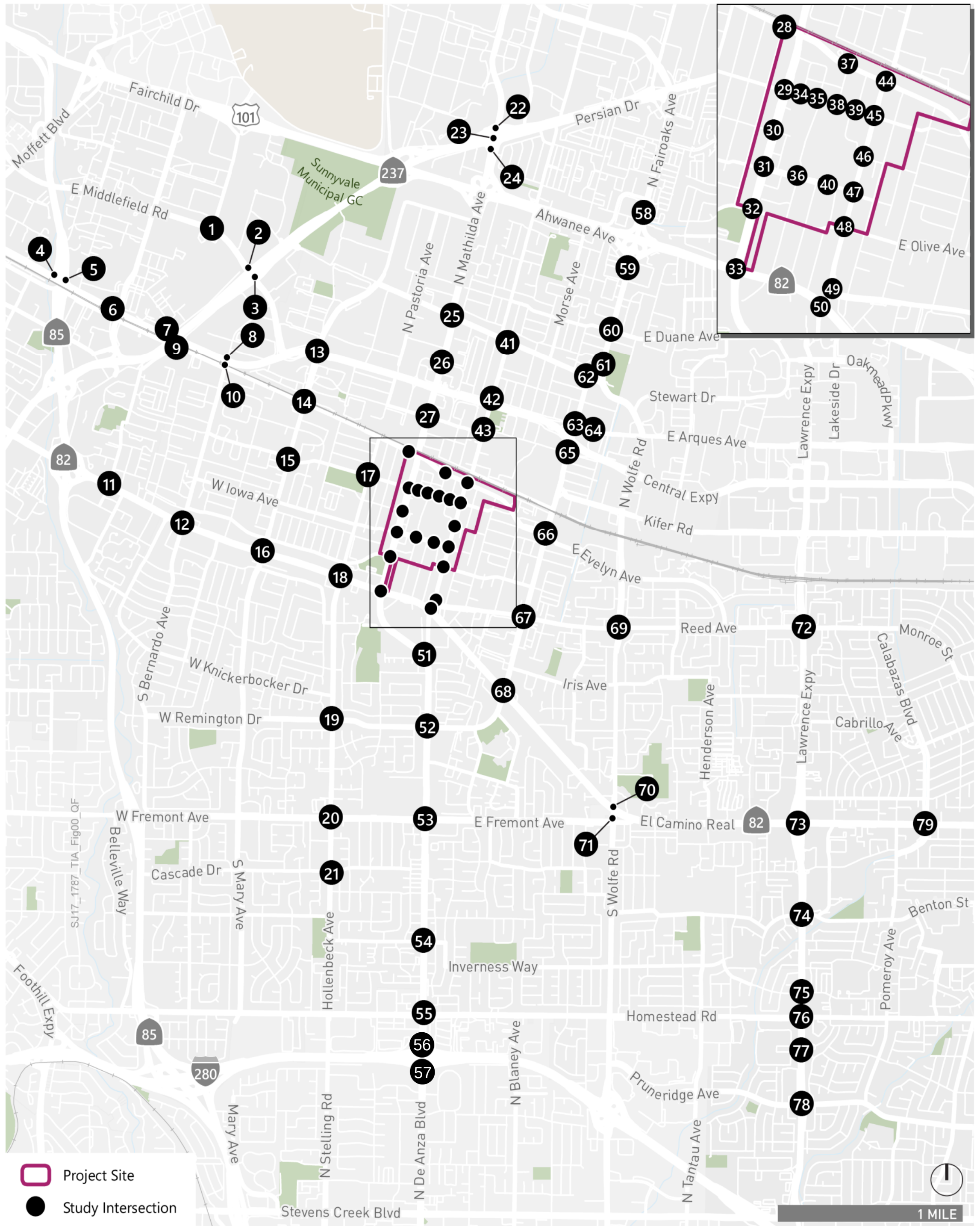


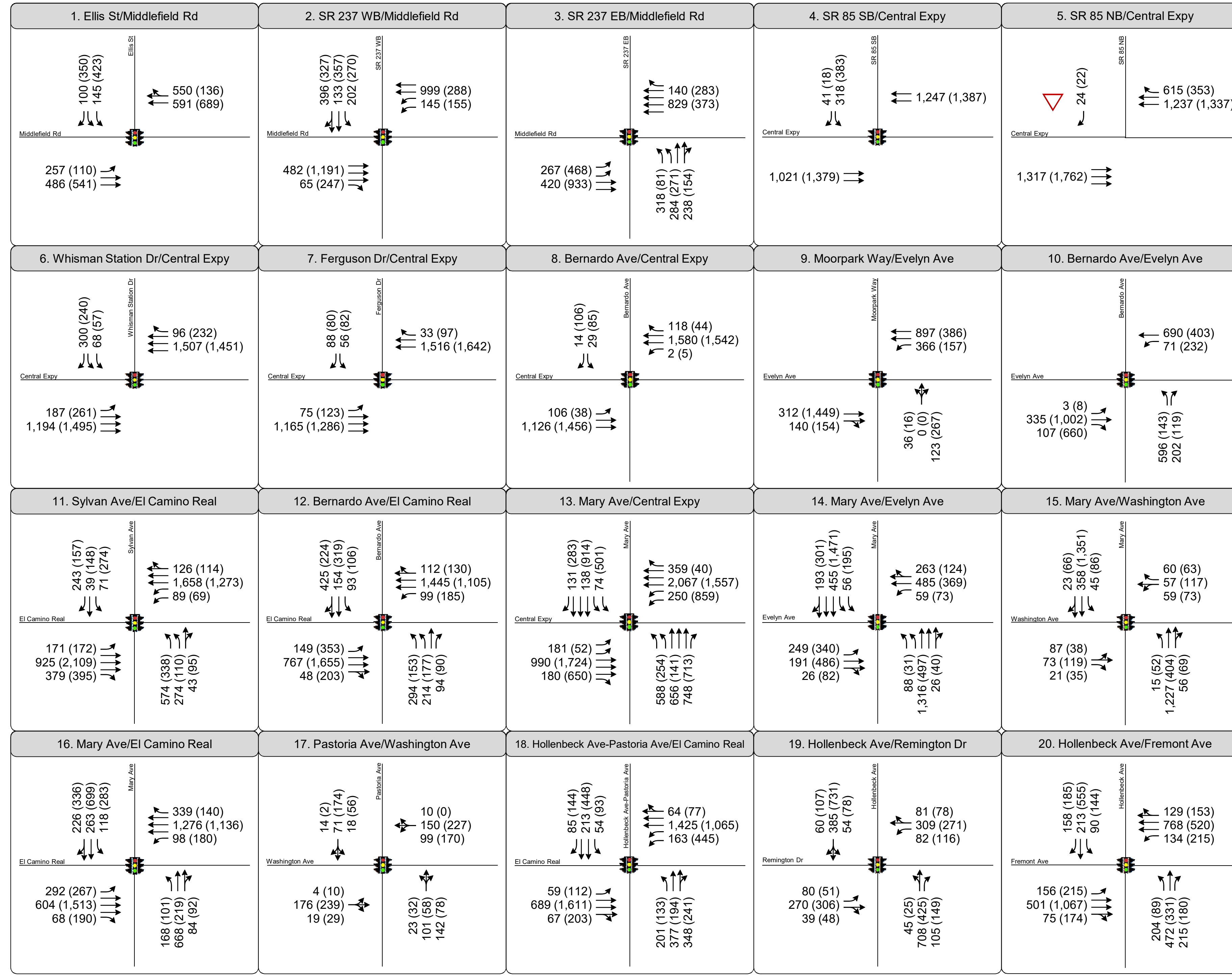


LEGEND

- Study Intersection
- Stop Sign
- AM (PM) Peak Hour Traffic Volume
- Signalized
- Lane Configuration
- Yield Sign
- High Occupancy Vehicle (HOV) and Bus Only Lane
  6:00 AM - 9:00 AM, 3:00 PM - 7:00 PM, Monday through Friday

Figure 10
Background No Project Volumes and Lane Configurations





LEGEND

- Study Intersection
- AM (PM) Peak Hour Traffic Volume
- Lane Configuration
- High Occupancy Vehicle (HOV) and Bus Only Lane 6:00 AM - 9:00 AM, 3:00 PM - 7:00 PM, Monday through Friday
- Stop Sign
- Signalized
- Yield Sign

Figure 11
Background Plus Project Volumes and Lane Configurations

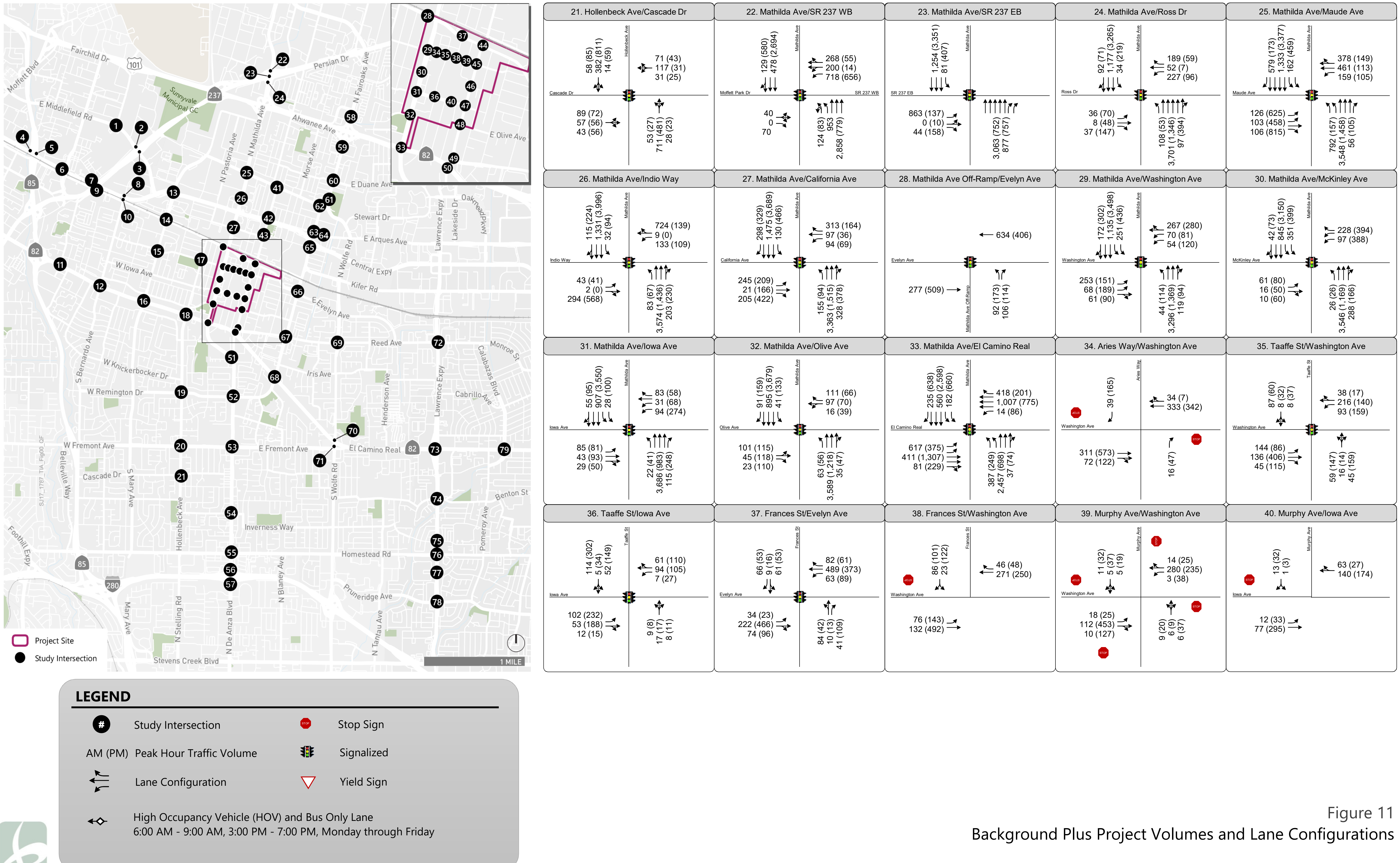
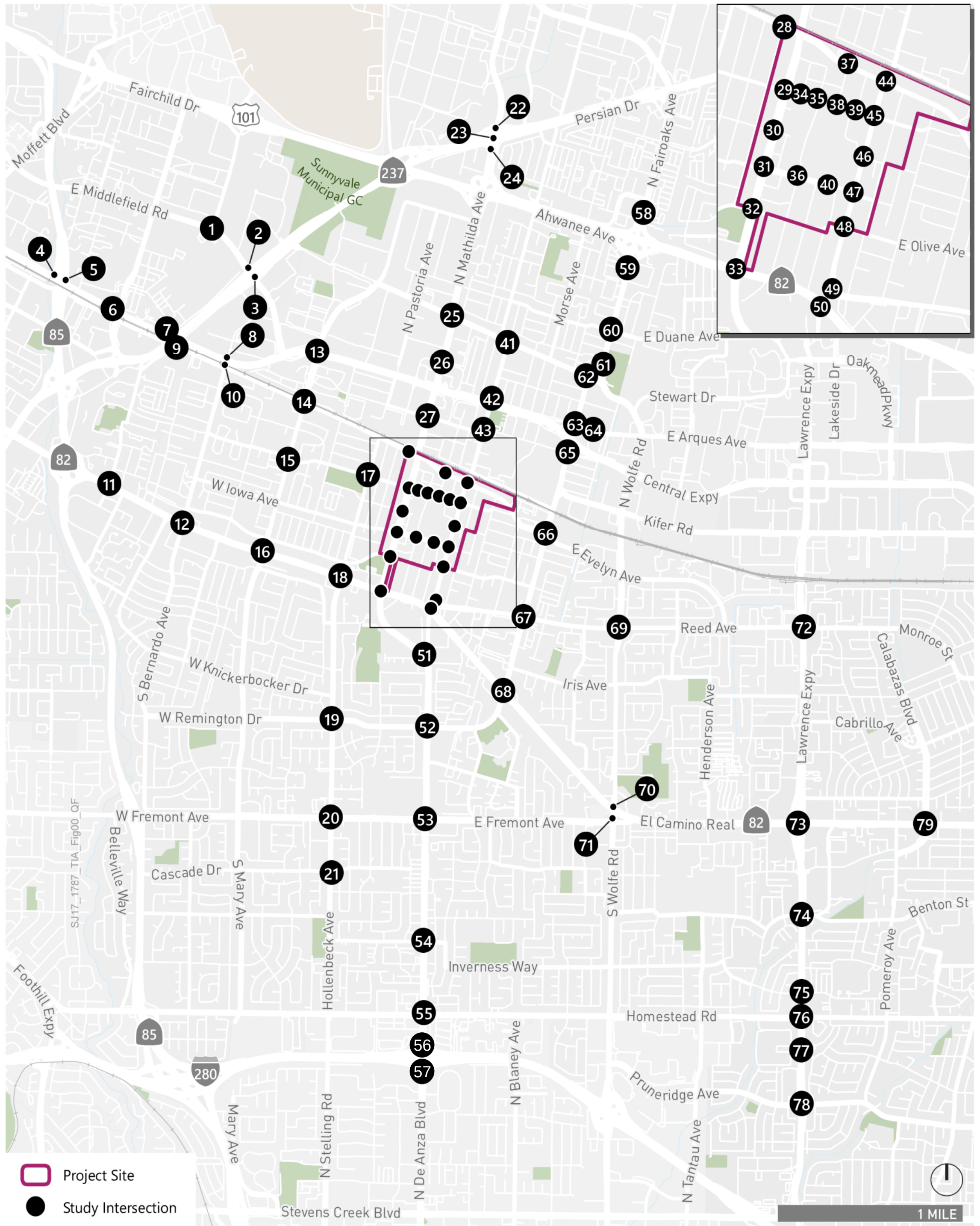
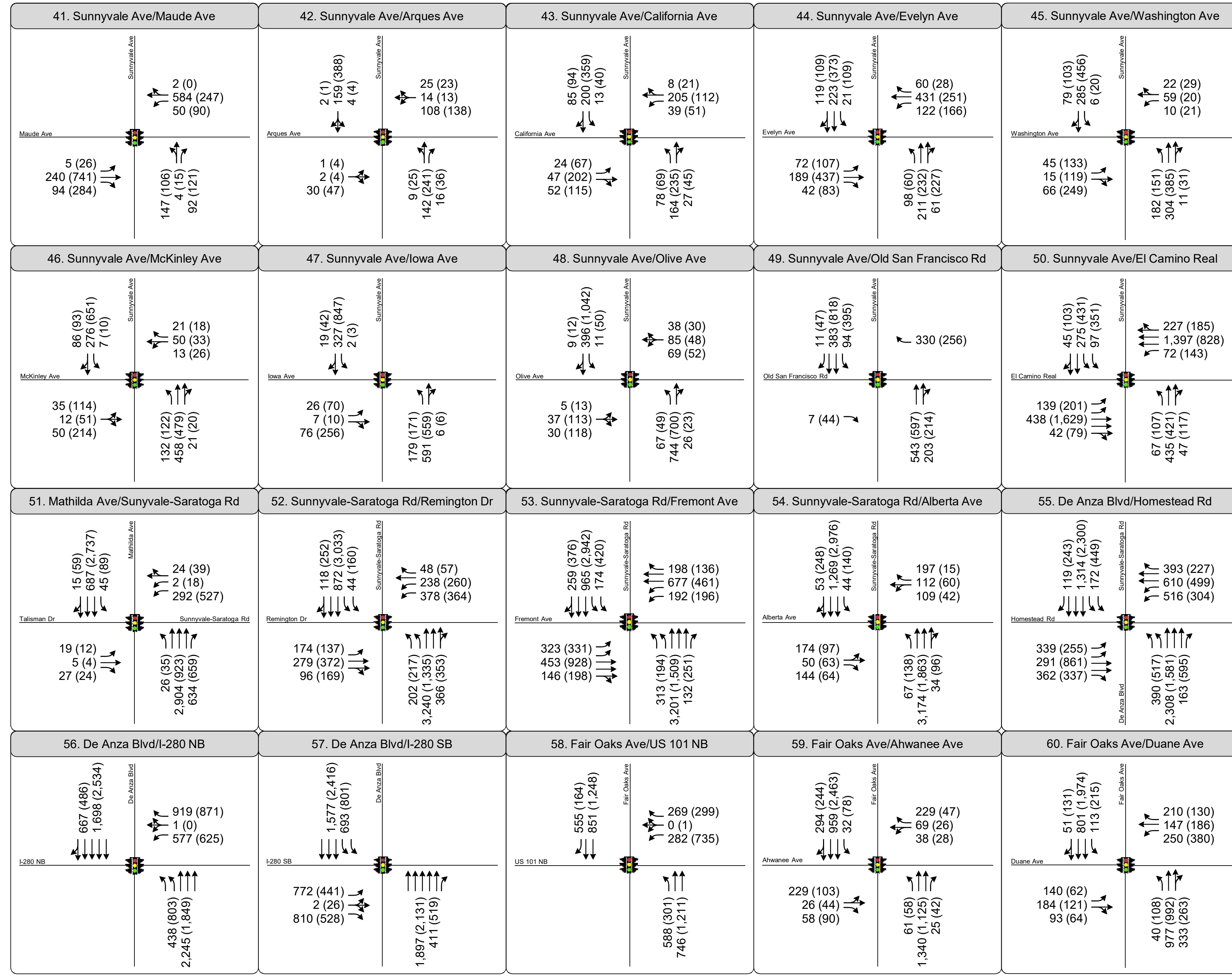


Figure 11
Background Plus Project Volumes and Lane Configurations



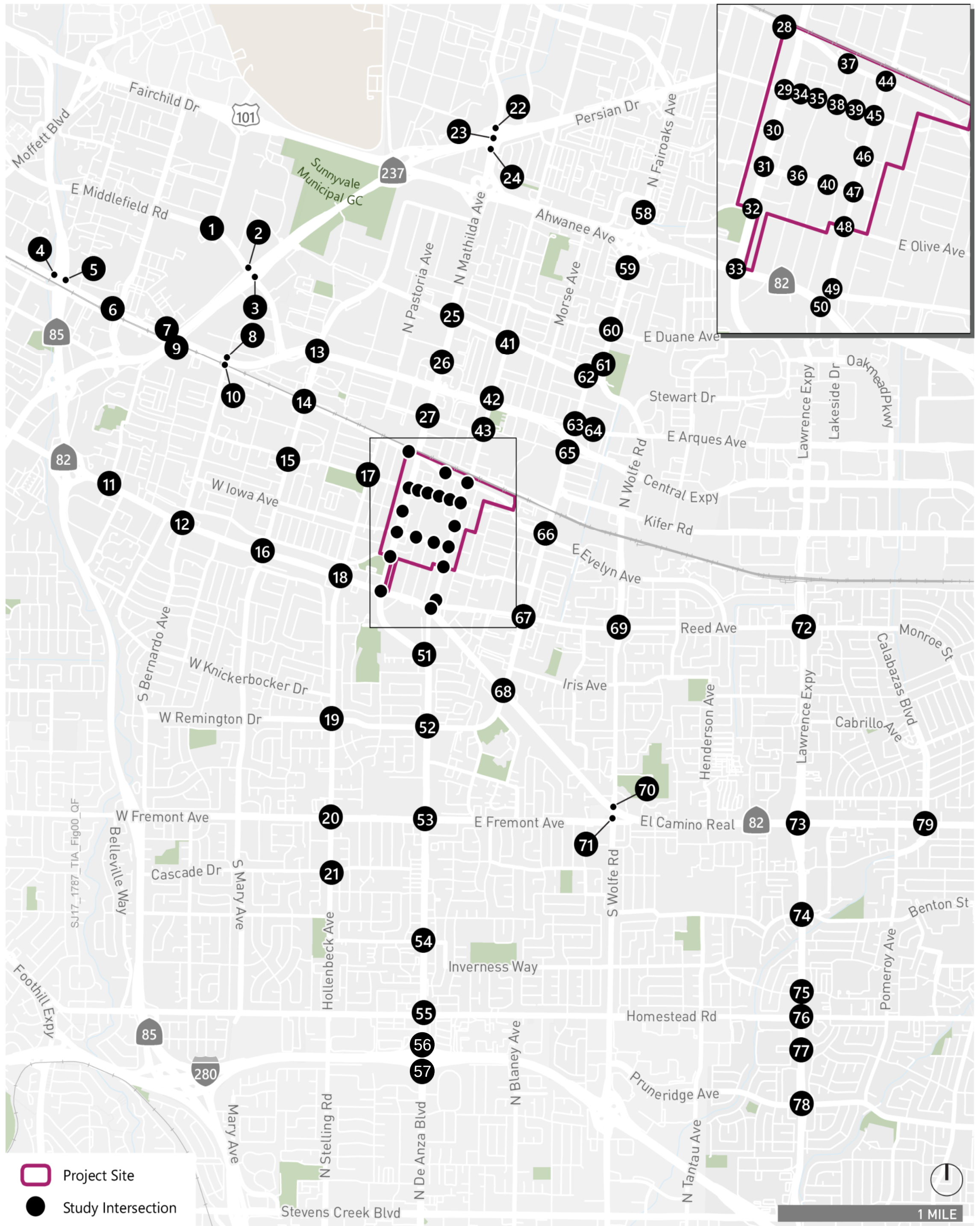


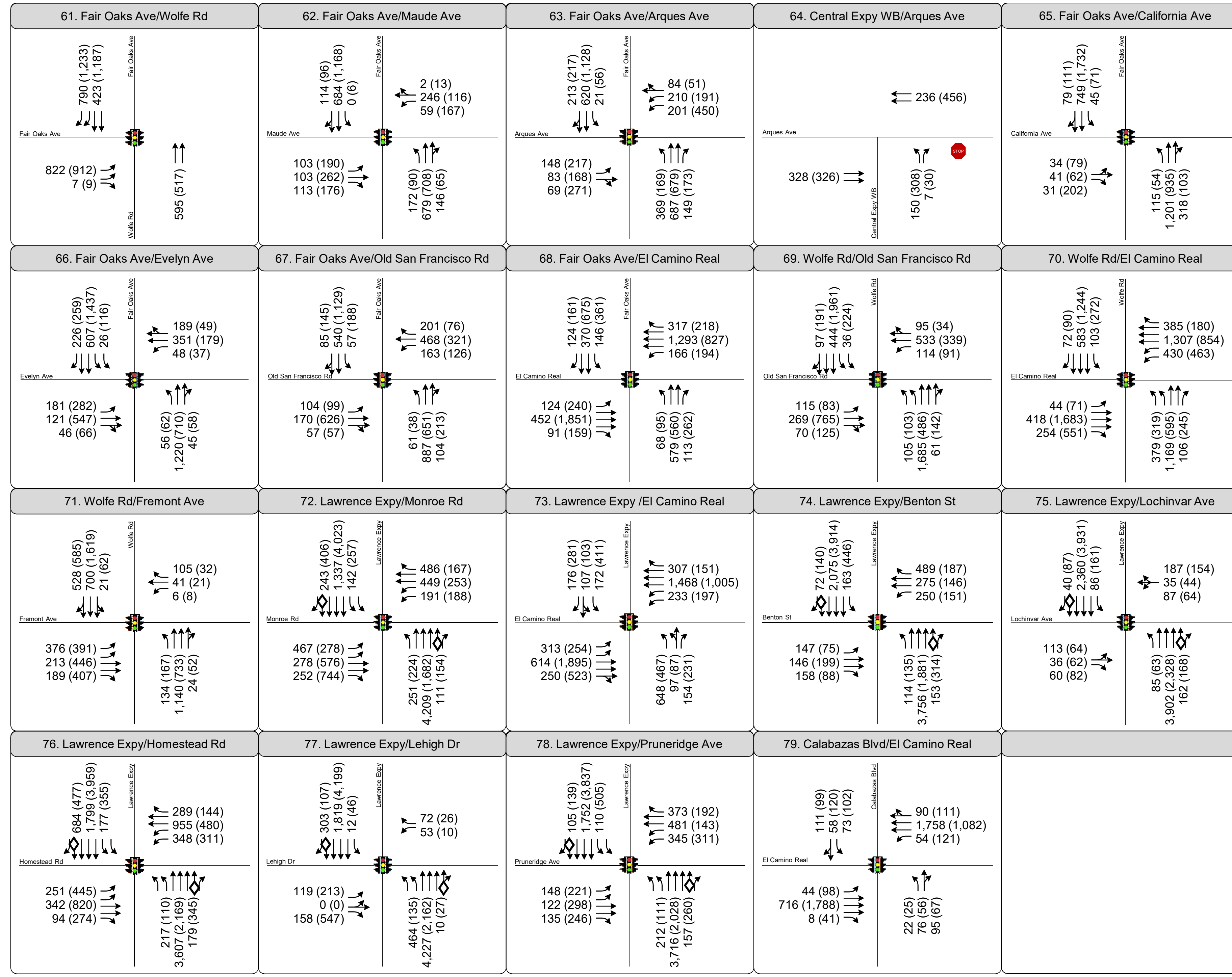
LEGEND

- Study Intersection
- AM (PM) Peak Hour Traffic Volume
- Lane Configuration
- High Occupancy Vehicle (HOV) and Bus Only Lane 6:00 AM - 9:00 AM, 3:00 PM - 7:00 PM, Monday through Friday
- Stop Sign
- Signalized
- Yield Sign

Figure 11

Background Plus Project Volumes and Lane Configurations





LEGEND

- # Study Intersection
- Stop Sign
- AM (PM) Peak Hour Traffic Volume
- Signalized
- Lane Configuration
- Yield Sign
- High Occupancy Vehicle (HOV) and Bus Only Lane 6:00 AM - 9:00 AM, 3:00 PM - 7:00 PM, Monday through Friday

Figure 11
Background Plus Project Volumes and Lane Configurations

4.4 BACKGROUND INTERSECTION LEVELS OF SERVICE

Table 14 presents the delays, levels of service, and impact criteria metrics for the study intersections under Background No Project and Background Plus Project Conditions. LOS calculations were generally conducted using TRAFFIX analysis software. The Mathilda Avenue intersections at SR 237 Westbound Ramps (#22), SR 237 Eastbound Ramps (#23), and Ross Drive (#24) were evaluated using Synchro analysis software. **Appendix B** contains the corresponding calculation sheets.

As shown in **Table 14,** the results indicate that all study intersections operate at acceptable service levels (generally LOS D or better for City intersections and LOS E or better for regionally significant, expressway, and CMP intersections) during the AM and PM peak hours under Background No Project and Background Plus Project Conditions except:

- Intersection 22: Mathilda Avenue / SR 237 Westbound Ramps (Sunnyvale)
  - Background No Project: AM and PM peak hours
  - Background Plus Project: AM and PM peak hours
- Intersection 24: Mathilda Avenue / Ross Drive (Sunnyvale)
  - Background No Project: PM peak hour
  - Background Plus Project: PM peak hour
- Intersection 26: Mathilda Avenue / Indio Avenue (Sunnyvale)
  - Background No Project: AM and PM peak hours
  - Background Plus Project: AM and PM peak hours
- Intersection 55: De Anza Boulevard / Homestead Road (Cupertino)
  - Background No Project: PM peak hour
  - Background Plus Project: AM and PM peak hours
- Intersection 72: Lawrence Expressway / Monroe Street (Santa Clara County)
  - Background No Project: AM and PM peak hours
  - Background Plus Project: AM and PM peak hours
- Intersection 76: Lawrence Expressway / Homestead Road (Santa Clara County)
  - Background No Project: AM and PM peak hours
  - Background Plus Project: AM and PM peak hours

TABLE 14: BACKGROUND NO PROJECT AND BACKGROUND PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

Intersection Name		Intersection Control[1]	LOS Standard[2]	Peak Hour[3]	Background		Background Plus Project			
					Delay[4]	LOS[5]	Delay[4]	LOS[5]	Change in Critical V/C[6]	Change in Average Critical Delay[7]
1	Ellis Street / Middlefield Road	Signal	D	AM PM	14.5 15.4	B B	14.5 15.4	B B	0.005 0.009	0.0 0.0
2	SR 237 WB / Middlefield Road	Signal	D	AM PM	20.0 14.9	B- B	20.1 14.9	C+ B	0.004 0.005	0.0 0.0
3	SR 237 EB / Middlefield Road	Signal	D	AM PM	22.9 20.3	C+ C+	22.7 20.3	C+ C+	0.004 0.012	0.0 0.2
4	SR-85 SB Off-Ramp / Central Expressway	Signal	E	AM PM	12.2 14.6	B B	12.3 14.5	B B	0.005 0.011	0.0 0.0
5	SR-85 NB On-Ramp - Easy Street / Central Expressway	SSSC	E	AM PM	13.6 14.1	B B	13.7 14.4	B B	0.001 0.001	0.0 0.0
6	Whisman Station Drive / Central Expressway	Signal	E	AM PM	17.6 11.9	B B+	17.6 11.9	B B+	0.003 0.009	0.0 -0.1
7	Ferguson Drive / Central Expressway	Signal	E	AM PM	7.8 8.7	A A	7.8 8.7	A A	0.009 0.017	0.2 0.1
8	Bernardo Avenue / Central Expressway	Signal	E	AM PM	10.0 7.2	A A	10.0 7.3	B+ A	0.010 0.018	0.2 0.2
9	Moorpark Way / Evelyn Avenue	Signal	D	AM PM	14.5 18.8	B B-	14.9 19.4	B B-	0.015 0.013	0.3 0.8
10	Bernardo Avenue / Evelyn Avenue	Signal	D	AM PM	28.9 18.1	C B-	29.2 18.8	C B-	0.005 0.015	0.6 1.4
11	Sylvan Avenue / El Camino Real	Signal	E	AM PM	39.7 35.6	D D+	39.7 35.7	D D+	0.003 0.007	0.1 0.2
12	Bernardo Avenue / El Camino Real	Signal	E	AM PM	39.4 38.8	D D+	39.3 38.9	D D+	0.004 0.006	0.1 0.1
13	Mary Avenue / Central Expressway	Signal	E	AM PM	48.2 61.1	D E	48.4 61.5	D E	0.006 0.008	0.6 1.0
14	Mary Avenue / Evelyn Avenue	Signal	D	AM PM	40.3 45.9	D D	40.4 46.6	D D	0.006 0.016	0.2 1.2
15	Mary Avenue / Washington Avenue	Signal	D	AM PM	16.5 18.2	B B-	17.3 18.8	B B-	0.019 0.006	1.0 0.5
16	Mary Avenue / El Camino Real	Signal	E	AM PM	50.8 51.7	D D-	50.6 51.8	D D-	0.004 0.006	0.0 0.3

TABLE 14: BACKGROUND NO PROJECT AND BACKGROUND PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

Intersection Name		Intersection Control[1]	LOS Standard[2]	Peak Hour[3]	Background		Background Plus Project			
					Delay[4]	LOS[5]	Delay[4]	LOS[5]	Change in Critical V/C[6]	Change in Average Critical Delay[7]
17	Pastoria Avenue / Washington Avenue	Signal	D	AM PM	26.7 26.0	C C	26.9 25.8	C C	0.012 0.026	0.2 -0.3
18	El Camino Real / Hollenbeck Avenue - Pastoria Avenue	Signal	E	AM PM	40.2 43.5	D D	40.7 44.4	D D	0.016 0.021	0.6 1.3
19	Hollenbeck Avenue / Remington Drive	Signal	D	AM PM	26.3 33.8	C C-	27.2 36.9	C D+	0.026 0.035	1.3 3.8
20	Hollenbeck Avenue / Fremont Avenue	Signal	D	AM PM	47.3 50.3	D D	47.6 50.9	D D	0.021 0.021	0.7 1.0
21	Hollenbeck Avenue / Cascade Drive	Signal	D	AM PM	9.8 9.2	A A	10.1 9.6	B+ A	0.016 0.025	0.3 0.6
22	Mathilda Avenue / SR 237 WB[8]	Signal	E	AM PM	**90.7** **219.3**	**F** **F**	**93.1** **220.4**	**F** **F**	0.013 0.003	2.1 1.5
23	Mathilda Avenue / SR 237 EB[8]	Signal	E	AM PM	19.5 37.4	B D	17.7 39.5	B D	0.000 0.010	-0.1 -0.9
24	Mathilda Avenue / Ross Drive[8]	Signal	E	AM PM	43.5 **93.7**	D **F**	44.6 **95.2**	D **F**	0.002 0.004	1.3 1.7
25	Mathilda Avenue / Maude Avenue	Signal	E	AM PM	57.7 68.7	E+ E	59.6 70.7	E+ E	0.012 0.009	3.5 2.8
26	Mathilda Avenue / Indio Avenue	Signal	E	AM PM	**127.5** **110.5**	**F** **F**	**130.3** **117.9**	**F** **F**	**0.015** **0.027**	**7.1** **12.8**
27	Mathilda Avenue / California Avenue	Signal	E	AM PM	57.3 56.9	E+ E+	62.2 69.8	E E	0.023 0.042	7.8 18.4
28	Mathilda Avenue Southbound Off-Ramp / Evelyn Avenue	Signal	E	AM PM	6.8 12.2	A B	7.0 11.9	A B+	0.008 0.008	0.0 -0.1
29	Mathilda Avenue / Washington Avenue	Signal	E	AM PM	53.4 55.2	D- E+	61.1 72.1	E E	0.045 0.073	12.3 25.0
30	Mathilda Avenue / McKinley Avenue	Signal	E	AM PM	18.8 22.2	B- C+	35.9 33.2	D+ C-	0.148 0.092	21.1 12.0
31	Mathilda Avenue / Iowa Avenue	Signal	E	AM PM	17.2 24.9	B C	19.5 28.4	B- C	0.052 0.073	2.2 5.0
32	Mathilda Avenue / Olive Avenue	Signal	E	AM PM	15.1 21.5	B C+	15.8 22.6	B C+	0.053 0.059	1.3 1.7

TABLE 14: BACKGROUND NO PROJECT AND BACKGROUND PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

Intersection Name		Intersection Control[1]	LOS Standard[2]	Peak Hour[3]	Background		Background Plus Project			
					Delay[4]	LOS[5]	Delay[4]	LOS[5]	Change in Critical V/C[6]	Change in Average Critical Delay[7]
33	Mathilda Avenue / El Camino Real	Signal	E	AM PM	54.6 51.2	D- D-	61.7 52.6	E D-	0.054 0.026	7.5 2.3
34	Washington Avenue / Aries Way	SSSC	D	AM PM	9.4 10.9	A B	9.5 10.9	A B	0.010 0.073	0.0 0.4
35	Washington Avenue / Taaffe Street	Signal	D	AM PM	15.0 17.7	B B	16.2 17.7	B B	0.08 0.012	1.9 0.1
36	Iowa Avenue / Taaffe Street	Signal	D	AM PM	25.6 27.7	C C	26.2 29.6	C C	0.073 0.072	0.6 2.6
37	Evelyn Avenue / Frances Street	Signal	D	AM PM	19.0 16.0	B- B	18.8 16.0	B- B	0.004 0.009	0.1 -0.1
38	Washington Avenue / Frances Street	SSSC	D	AM PM	10.7 25.2	B D	11.3 31.7	B D	0.026 0.075	0.1 1.2
39	Murphy Avenue / Washington Avenue	AWSC	D	AM PM	9.0 16.6	A C	9.4 19.6	A C	0.060 0.063	0.5 3.0
40	Iowa Avenue / Murphy Avenue	SSSC	D	AM PM	7.5 0.1	A A	10.0 12.4	B B	0.008 0.024	0.3 0.5
41	Sunnyvale Avenue / Maude Avenue	Signal	D	AM PM	15.1 16.4	B B	15.1 16.9	B B	0.001 0.006	0.1 0.7
42	Sunnyvale Avenue / Arques Avenue	Signal	D	AM PM	20.9 14.3	C+ B	20.6 14.3	C+ B	0.007 0.002	-0.1 0.0
43	Sunnyvale Avenue / California Avenue	Signal	D	AM PM	8.0 14.3	A B	7.9 14.2	A B	0.007 0.006	0.0 0.1
44	Sunnyvale Avenue / Evelyn Avenue	Signal	D	AM PM	25.9 21.4	C C+	26.6 22.9	C C+	0.021 0.059	0.7 1.3
45	Sunnyvale Avenue / Washington Avenue	Signal	D	AM PM	22.4 28.3	C+ C	22.4 30.6	C+ C	0.070 0.049	0.0 3.5
46	Sunnyvale Avenue / McKinley Avenue	Signal	D	AM PM	13.3 30.2	B C	14.8 38.1	B D+	0.113 0.141	3.2 10.2
47	Sunnyvale Avenue / Iowa Avenue	Signal	D	AM PM	13.7 25.5	B C	14.6 28.8	B C	0.071 0.107	0.3 5.1
48	Sunnyvale Avenue / Olive Avenue	Signal	D	AM PM	14.4 19.4	B B-	15.6 24.7	B C	0.105 0.107	2.2 9.0
49	Sunnyvale Avenue / Old San Francisco Road	Signal	D	AM PM	19.5 20.0	B- B-	20.3 21.0	C+ C+	0.072 0.071	0.8 1.9

TABLE 14: BACKGROUND NO PROJECT AND BACKGROUND PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

Intersection Name		Intersection Control[1]	LOS Standard[2]	Peak Hour[3]	Background		Background Plus Project			
					Delay[4]	LOS[5]	Delay[4]	LOS[5]	Change in Critical V/C[6]	Change in Average Critical Delay[7]
50	Sunnyvale Avenue / El Camino Real	Signal	E	AM PM	40.6 39.2	D D	41.4 40.2	D D	0.049 0.041	1.4 1.6
51	Mathilda Avenue / Saratoga-Sunnyvale Road - Talisman Drive	Signal	E	AM PM	22.1 29.9	C+ C	22.8 32.2	C+ C-	0.026 0.047	1.0 3.0
52	Sunnyvale-Saratoga Road / Remington Drive	Signal	E	AM PM	47.6 49.5	D D	52.1 54.2	D- D-	0.033 0.038	6.2 7.0
53	Sunnyvale-Saratoga Road / Fremont Avenue	Signal	E	AM PM	50.1 53.2	D D-	53.5 57.4	D- E+	0.033 0.032	5.5 6.2
54	Sunnyvale-Saratoga Road / Alberta Avenue - Harwick Way	Signal	E	AM PM	37.1 28.3	D+ C	39.8 29.3	D C	0.032 0.032	3.8 1.6
55	De Anza Boulevard / Homestead Road	Signal	D	AM PM	54.7 **59.5**	D- **E+**	**55.7** **61.1**	**E+** **E**	**0.019** **0.019**	**1.3** **2.9**
56	De Anza Boulevard / I-280 Northbound Ramps	Signal	D	AM PM	45.3 48.4	D D	46.9 49.7	D D	0.024 0.017	6.4 1.9
57	De Anza Boulevard / I-280 Southbound Ramps	Signal	D	AM PM	51.5 40.2	D- D	52.5 41.2	D- D	0.013 0.022	3.0 2.5
58	Fair Oaks Avenue / US 101 Northbound Ramp	Signal	D	AM PM	18.7 22.9	B- C+	19.0 23.3	B- C	0.014 0.006	0.4 0.8
59	Fair Oaks Avenue / Ahwanee Avenue	Signal	D	AM PM	16.5 10.7	B B+	16.4 10.7	B B+	0.004 0.004	0.0 0.0
60	Fair Oaks Avenue / Duane Avenue	Signal	D	AM PM	32.4 36.6	C- D+	32.4 37.2	C- D+	0.004 0.015	0.2 1.5
61	Fair Oaks Avenue / Wolfe Road	Signal	D	AM PM	8.7 9.9	A A	8.6 10.2	A B+	0.005 0.020	0.0 0.5
62	Fair Oaks Avenue / Maude Avenue	Signal	D	AM PM	25.9 29.7	C C	25.8 29.6	C C	0.015 0.006	-0.1 0.0
63	Fair Oaks Avenue / Arques Avenue	Signal	D	AM PM	42.1 51.6	D D-	42.3 52.2	D D-	0.011 0.008	0.3 1.2
64	Central Expressway WB Off-Ramp / Arques Avenue	SSSC	E	AM PM	13.5 24.1	B C	13.9 24.9	B C	0.031 0.015	0.3 0.3

TABLE 14: BACKGROUND NO PROJECT AND BACKGROUND PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

Intersection Name		Intersection Control[1]	LOS Standard[2]	Peak Hour[3]	Background		Background Plus Project			
					Delay[4]	LOS[5]	Delay[4]	LOS[5]	Change in Critical V/C[6]	Change in Average Critical Delay[7]
65	Fair Oaks Avenue / California Avenue	Signal	D	AM PM	10.7 18.0	B+ B-	10.6 17.9	B+ B	0.006 0.007	0.0 0.0
66	Fair Oaks Avenue / Evelyn Avenue	Signal	D	AM PM	30.7 30.6	C C	31.2 32.3	C C-	0.015 0.043	1.2 3.0
67	Fair Oaks Avenue / Old San Francisco Road	Signal	D	AM PM	36.7 35.1	D+ D+	37.5 35.9	D+ D+	0.027 0.017	1.3 1.0
68	Fair Oaks Avenue / El Camino Real	Signal	E	AM PM	31.3 41.6	C D	31.2 42.4	C D	0.027 0.025	-0.4 1.3
69	Wolfe Road / Old San Francisco Road	Signal	D	AM PM	37.4 42.8	D+ D	38.0 43.9	D+ D	0.011 0.019	0.8 1.5
70	Wolfe Road / El Camino Real	Signal	E	AM PM	37.7 50.2	D+ D	38.0 50.8	D+ D	0.023 0.020	0.6 0.4
71	Wolfe Road / Fremont Avenue	Signal	D	AM PM	49.6 53.9	D D-	49.7 54.6	D D-	0.005 0.010	0.2 0.7
72	Lawrence Expressway / Monroe Street	Signal	E	AM PM	**81.6** **103.0**	**F** **F**	**82.7** **104.3**	**F** **F**	0.001 0.009	0.5 2.2
73	Lawrence Expressway / El Camino Real	Signal	E	AM PM	40.8 34.5	D C-	41.7 35.9	D D+	0.032 0.031	1.1 2.1
74	Lawrence Expressway / Benton Street	Signal	E	AM PM	67.3 44.9	E D	70.5 45.1	E D	0.018 0.012	5.5 0.3
75	Lawrence Expressway / Lochinvar Avenue	Signal	E	AM PM	39.5 37.8	D D+	40.6 38.1	D D+	0.016 0.011	1.8 0.4
76	Lawrence Expressway / Homestead Road	Signal	E	AM PM	75.3 **99.4**	E- **F**	78.8 **102.8**	E- **F**	0.014 **0.011**	6.2 **5.9**
77	Lawrence Expressway / Lehigh Drive	Signal	E	AM PM	28.7 62.6	C E	28.6 64.2	C E	0.008 0.008	0.1 2.6
78	Lawrence Expressway / Pruneridge Avenue	Signal	E	AM PM	41.1 51.3	D D-	41.6 52.0	D D-	0.008 0.004	0.8 0.1
79	Calabazas Boulevard / El Camino Real	Signal	D	AM PM	22.5 26.6	C+ C	22.5 26.6	C+ C	0.007 0.010	-0.1 0.0

Notes: **Bold text** indicates intersection operates at unacceptable level of service. **Bold and highlighted text** indicates a significant impact.

1. Signal = Signalized Intersection; SSSC = Side-Street Stop Controlled Intersection.
2. LOS Standard of intersection's jurisdiction.
3. AM = morning peak hour (between 7:00 and 9:00 AM), PM = evening peak hour (between 4:00 and 6:00 PM).

4. Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop control intersections. Total control delay for the worst movement is presented for side-street stop-controlled intersections.
5. LOS = Level of Service calculations conducted using the TRAFFIX level of service analysis software package, which applies the methodology described in the *2000 HCM*.
6. Change in critical volume-to-capacity ratio (V/C) between No Project and Plus Project Conditions.
7. Change in critical movement delay between No Project and Plus Project Conditions.
8. Operations of the three Mathilda Avenue intersections at SR 237 Westbound, SR 237 Eastbound, and Ross Drive are evaluated using the Synchro level of service analysis software package, to better model LOS of these closely spaced intersections that are part of the *Mathilda Avenue Improvements at SR 237 and US 101* project.

Source: Fehr & Peers, March 2019.

4.5 BACKGROUND PLUS PROJECT INTERSECTION IMPACTS AND MITIGATION MEASURES

This section of the report discusses those intersections that are projected to operate at unacceptable LOS under Background Plus Project conditions (**Table 14**) and whether they meet their respective jurisdictions' impact thresholds. Possible mitigation measures are identified for significantly impacted intersections.

Intersection 22: Mathilda Avenue/SR 237 Westbound Ramps (City of Sunnyvale)

The Project would exacerbate unacceptable LOS F operations during the AM and PM peak hours. However, the Project does not meet City of Sunnyvale impact thresholds (increase critical delay by 4 or more seconds and increase critical V/C by 0.01 or more) and the Project is considered to have a less-than-significant impact. **(Less-than-Significant Impact)**

Intersection 24: Mathilda Avenue/Ross Drive (City of Sunnyvale)

The Project would exacerbate unacceptable LOS F operations during the PM peak hour. However, the Project does not meet City of Sunnyvale impact thresholds (increase critical delay by 4 or more seconds and increase critical V/C by 0.01 or more) and the Project is considered to have a less-than-significant impact. **(Less-than-Significant Impact)**

Intersection 26: Mathilda Avenue/Indio Avenue (City of Sunnyvale)

The Project would exacerbate unacceptable LOS F operations and meet impact thresholds based on City of Sunnyvale impact criteria (increase the critical delay by more than four seconds and the V/C ratio by more than 0.01) during the AM and PM peak hours and is projected to have a significant impact. **(Significant Impact)**

Improvements to mitigate the impact would require the addition of a southbound through lane on Mathilda Avenue. However, there are right-of-way constraints that limit the physical feasibility of this mitigation measure. An additional southbound through lane would require an additional 11 feet of right-of-way from existing properties along the west side of Mathilda Avenue. Thus, the mitigation measure would not be feasible, and the impact is considered significant and unavoidable. **(Significant and Unavoidable)**

Intersection 55: De Anza Boulevard/Homestead Road (City of Cupertino/CMP)

The Project would degrade operations from acceptable LOS D- to unacceptable LOS E+ operations during the AM peak hour. Additionally, the Project exacerbates unacceptable LOS E operations during the PM peak hour. However, the Project does not meet City of Cupertino impact thresholds (increase critical delay by 4 or more seconds and increase critical V/C by 0.01 or more). Thus, the intersection is projected to have a significant impact during the AM peak hour based on City of Cupertino impact criteria. **(Significant Impact)**

Improvements to mitigate the impact would require the addition of a third westbound left-turn lane from Homestead Road onto De Anza Boulevard. This improvement can be accommodated within the existing right-of-way with modifications to the median and lane widths. The project shall pay a fair-share contribution for this improvement. With the mitigation measure the intersection would not meet the City of Cupertino's significance thresholds and would operate with less delay than under No Project conditions during the AM and PM peak hours, as shown in **Table 15.** However, the implementation of this improvement is outside of the City of Sunnyvale's jurisdiction and the City cannot guarantee that it would be constructed. Thus, the mitigation measure would not be feasible, and the impact is considered significant and unavoidable. **(Significant and Unavoidable)**

TABLE 15: BACKGROUND WITH PROJECT IMPACTS AND MITIGATIONS AT DE ANZA BOULEVARD/HOMESTEAD ROAD (#55)

Intersection	LOS Threshold[1]	Peak Hour[2]	Cumulative Conditions		Cumulative with Project Conditions		Cumulative with Project Mitigations		Impact?[5]
			Delay[3]	LOS[4]	Delay[3]	LOS[4]	Delay[3]	LOS[4]	
De Anza Boulevard/ Homestead Road	D	AM PM	54.7 **59.5**	D- **E+**	**55.7** **61.1**	**E+** **E**	53.0 **57.2**	D- **E+**	SU

Notes:
Bold text indicates intersection operates at unacceptable level of service. **Bold and highlighted text** indicates a significant impact.

1. LOS Threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service).
2. AM = morning peak hour, PM = evening peak hour.
3. Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the 2000 Highway Capacity Manual, with adjusted saturation flow rates to reflect Santa Clara County Conditions for signalized intersections.
4. LOS = Level of Service. LOS calculations conducted using the TRAFFIX analysis software packages, which applies the methods described in the 2000 Highway Capacity Manual.
5. Impact after implementation of mitigation measure (not considering jurisdictional constraints). LTS = Less Than Significant, SU = Significant and Unavoidable

Intersection 72: Lawrence Expressway/Monroe Street (Santa Clara County)

The Project would exacerbate unacceptable LOS F operations during the AM and PM peak hours. However, the Project does not meet County of Santa Clara impact thresholds (increase critical delay by 4 or more seconds and increase critical V/C by 0.01 or more) and the Project is considered to have a less-than-significant impact. **(Less-than-Significant Impact)**

Intersection 76: Lawrence Expressway/Homestead Road (Santa Clara County/CMP)

This intersection operates at unacceptable LOS F during the PM peak hour under No Project Conditions. The Project would add more than 4.0 seconds of average critical delay and increase the critical V/C ratio by 0.010 or more during the PM peak hour, and it is projected to have a significant impact based on VTA impact criteria. **(Significant Impact)**

> Santa Clara County's Expressway Plan 2040 Study identifies an interim (near-term) improvement that includes the addition of an eastbound through lane on Homestead Road. With this improvement, intersection operations would improve, but the intersection would continue to operate at LOS F with delays greater than the Background Without Project scenario. The ultimate improvement identified by the County's Expressway Plan 2040 is to grade-separate the intersection. The County designates the grade separation as a Tier 1 improvement. The Project shall pay a fair-share contribution to this improvement. With the mitigation measure the intersection would no longer exist. However, it is unknown when this improvement will be completed. Thus, the impact is considered significant and unavoidable. **(Significant and Unavoidable)**

4.5.1 Background Plus Project Unsignalized Intersection Signal warrants

Per City of Sunnyvale guidelines, the peak hour volume signal warrant from the CA MUTCD was assessed for each unsignalized intersection. The results under Background Plus Project Conditions are summarized in **Table 16.**

None of the six unsignalized study intersections meet the peak hour volume signal warrant in either peak hour. The Project is projected to have less-than-significant impacts at the unsignalized study intersections based on Sunnyvale's impact criteria. **(Less-Than-Significant).**

TABLE 16: BACKGROUND PLUS PROJECT CONDITIONS UNSIGNALIZED INTERSECTION SIGNAL WARRANTS

Intersection Name		Peak Hour[1]	Signal Warrant Met?[2]
5	SR-85 NB On-Ramp-Easy Street/ Central Expressway	AM PM	No No
34	Washington Avenue/ Aries Way	AM PM	No No
38	Washington Avenue/ Frances Street	AM PM	No No
39	Murphy Avenue/ Washington Avenue	AM PM	No No
40	Iowa Avenue/ Murphy Avenue	AM PM	No No
64	Central Expressway WB Off-Ramp/ Arques Avenue	AM PM	No No

Notes:
1. AM = morning peak hour (between 7:00 and 9:00 AM), PM = evening peak hour (between 4:00 and 6:00 PM).
2. Peak hour volume traffic signal warrant analysis (as described in the California Manual on Uniform Traffic Control Devices) was conducted for all non-signalized intersections to determine significant impacts. **Yes** = signal warrant is met; No = signal warrant is not met.

Source: Fehr & Peers, March 2019.

5.0 CUMULATIVE CONDITIONS

This chapter presents the results of the level of service (LOS) calculations under Cumulative Conditions without and with the Project. Cumulative No Project Conditions are defined as conditions within the next ten years (2027). Traffic volumes for Cumulative No Project Conditions are comprised of existing volumes, added background volumes, volumes from pending ("not yet approved") developments in the area, plus an annual compounded growth factor that is applied to the existing volumes. Cumulative Plus Project Conditions are defined as Cumulative No Project Conditions plus net-added traffic generated by the Project.

5.1 CUMULATIVE NO PROJECT TRAFFIC VOLUMES

5.1.1 Approved, Not Occupied, and Pending Projects

In addition to the vehicle trips from "approved but not yet built" and "not occupied" development projects discussed under Background Conditions, vehicle trips from pending development projects were considered. As with the approved developments, trip generation estimates from the pending development projects that would add traffic to the study intersections were estimated based on trip generation rates published in the ITE *Trip Generation Manual* (10th Edition). The trips for each of the pending projects were then assigned to the roadway network based on population and employment data, existing and estimated future travel patterns, and recent TIAs completed in the area. **Appendix E** contains a full list of the included pending projects.

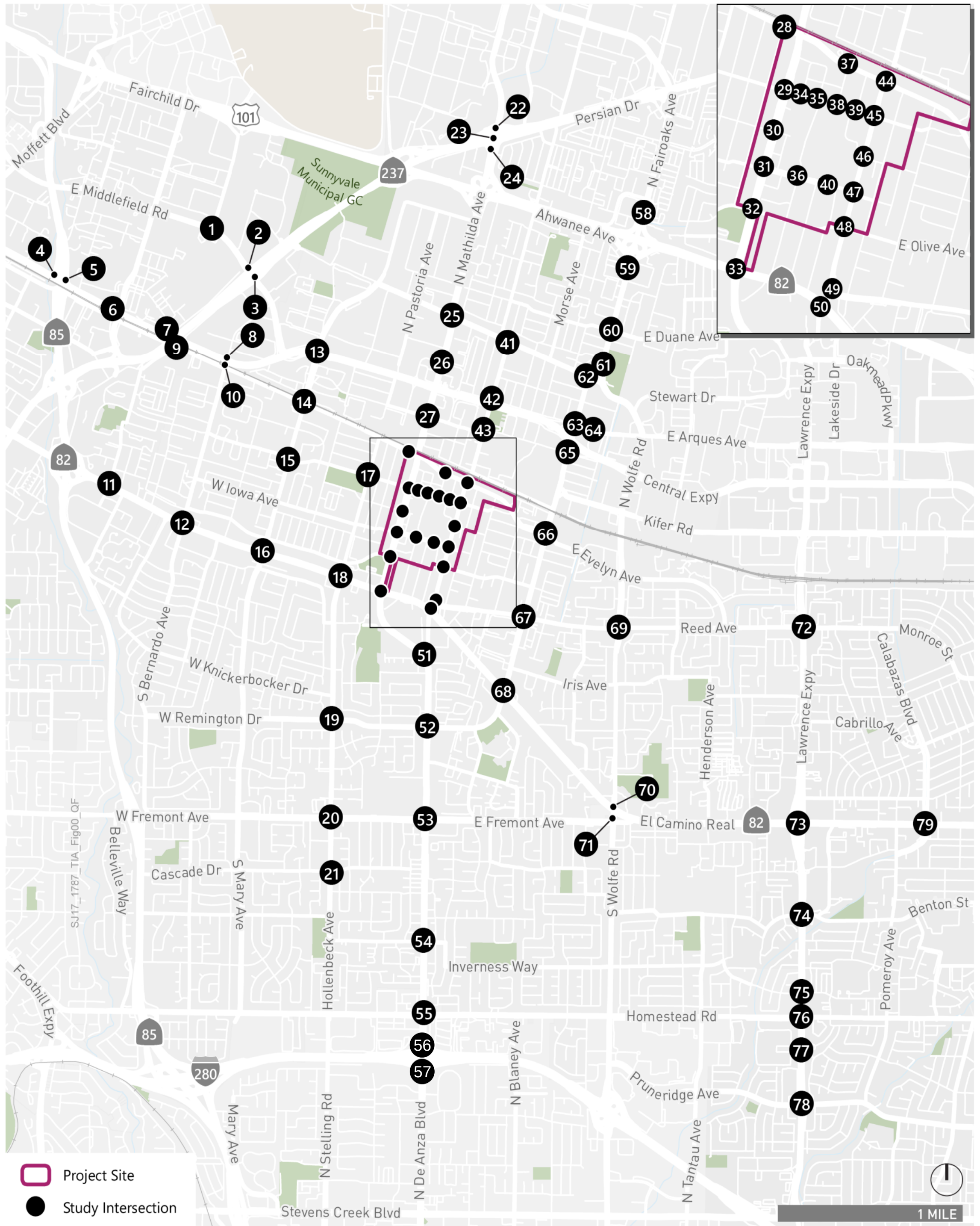
Consistent with City of Sunnyvale practices, a 1.5% annual growth factor was applied to the existing volumes at study intersections within Sunnyvale. The trips for each of the approved, not occupied, and pending development projects were then added to the increased existing volumes to represent Cumulative No Project Conditions, as shown on **Figure 12.**

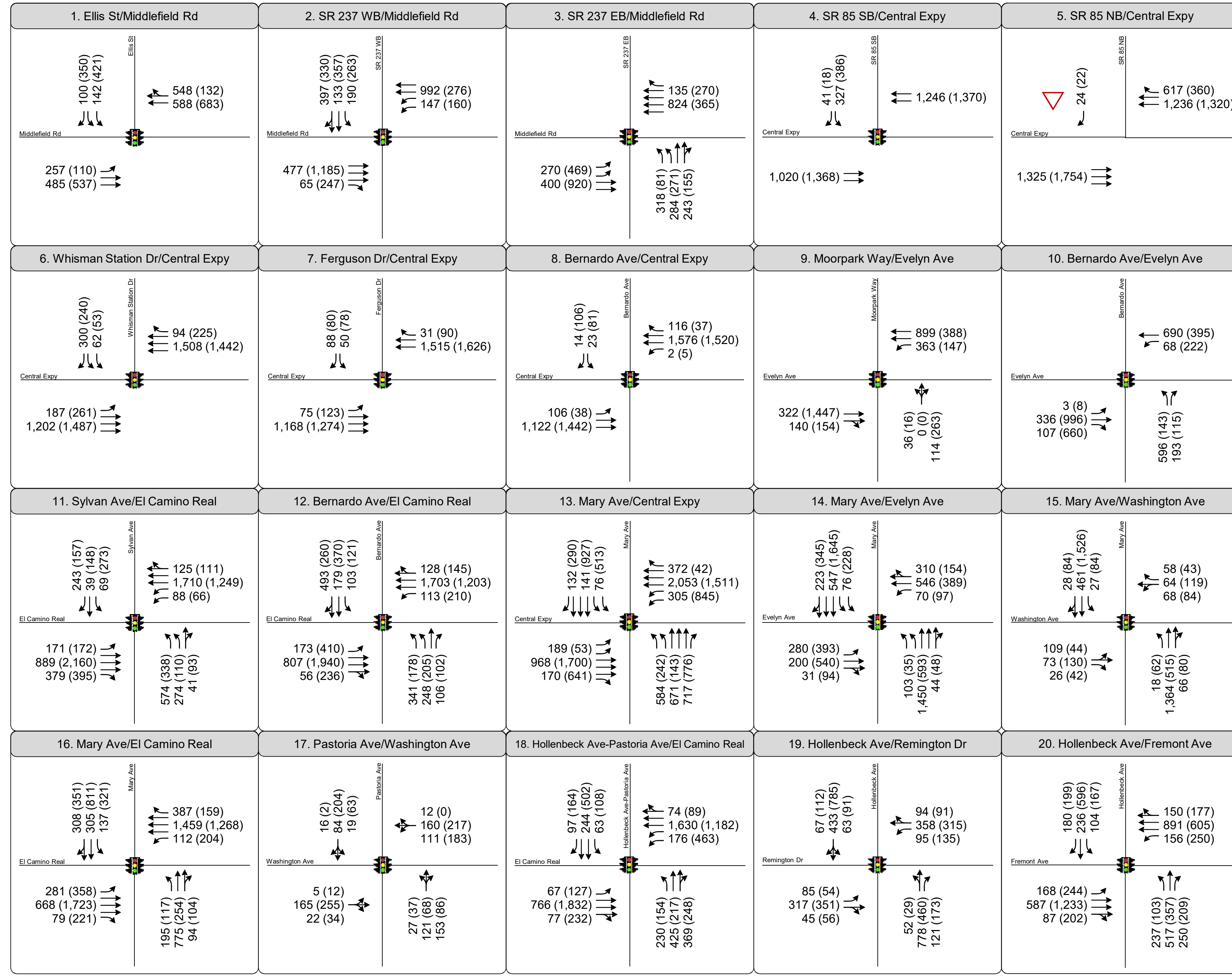
5.2 CUMULATIVE IMPROVEMENTS

Beyond the background roadway improvements discussed in Chapter 4, there were no reasonably foreseeable transportation network improvements identified for the study area; therefore, the background roadway network was used for the Cumulative No Project analysis.

5.3 CUMULATIVE PLUS PROJECT TRAFFIC VOLUMES

Vehicle trips generated from the Project and presented in **Appendix C** were added to the Cumulative No Project traffic projections to develop traffic volumes for Cumulative Plus Project Conditions. The resulting volumes are shown on **Figure 13.**

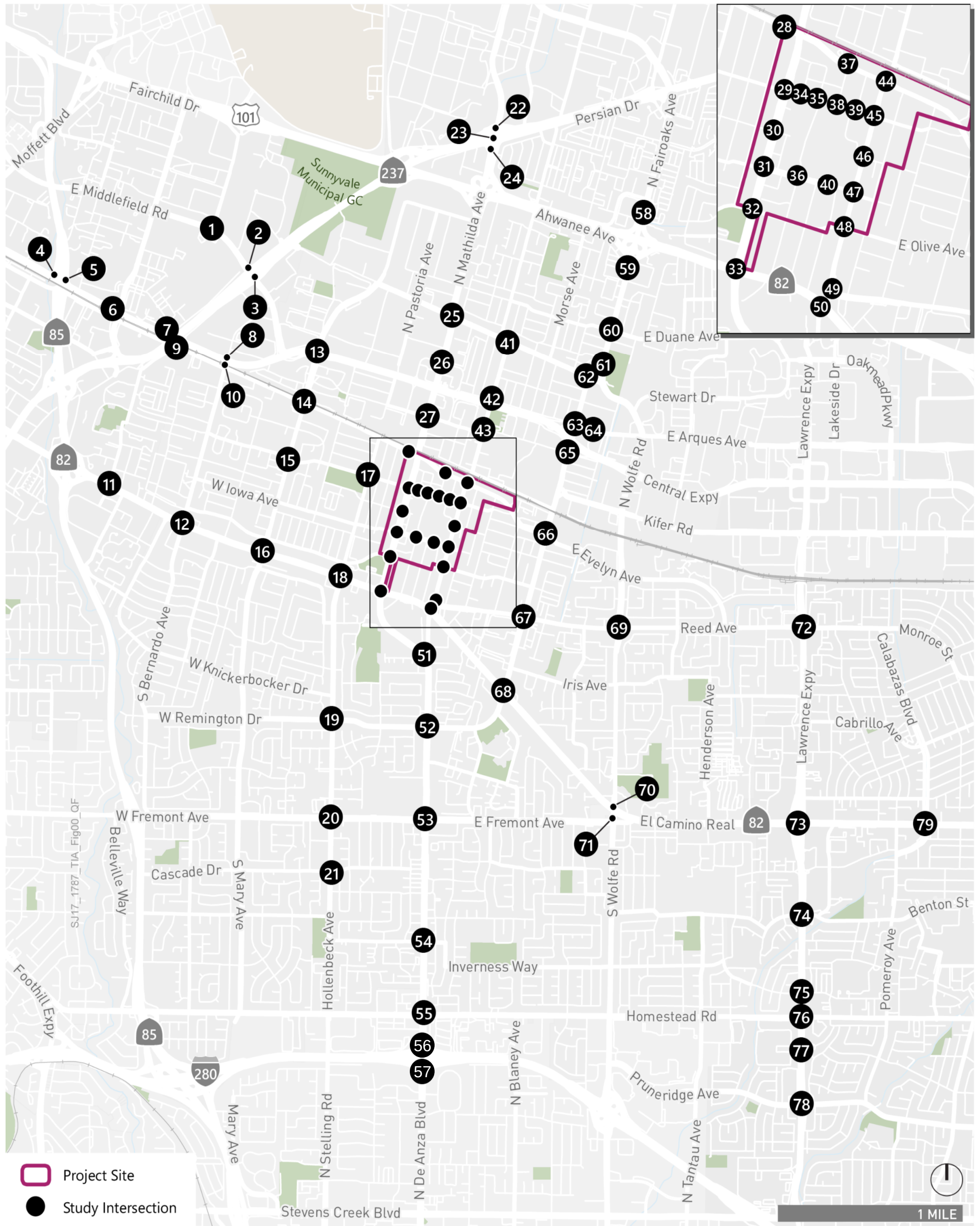


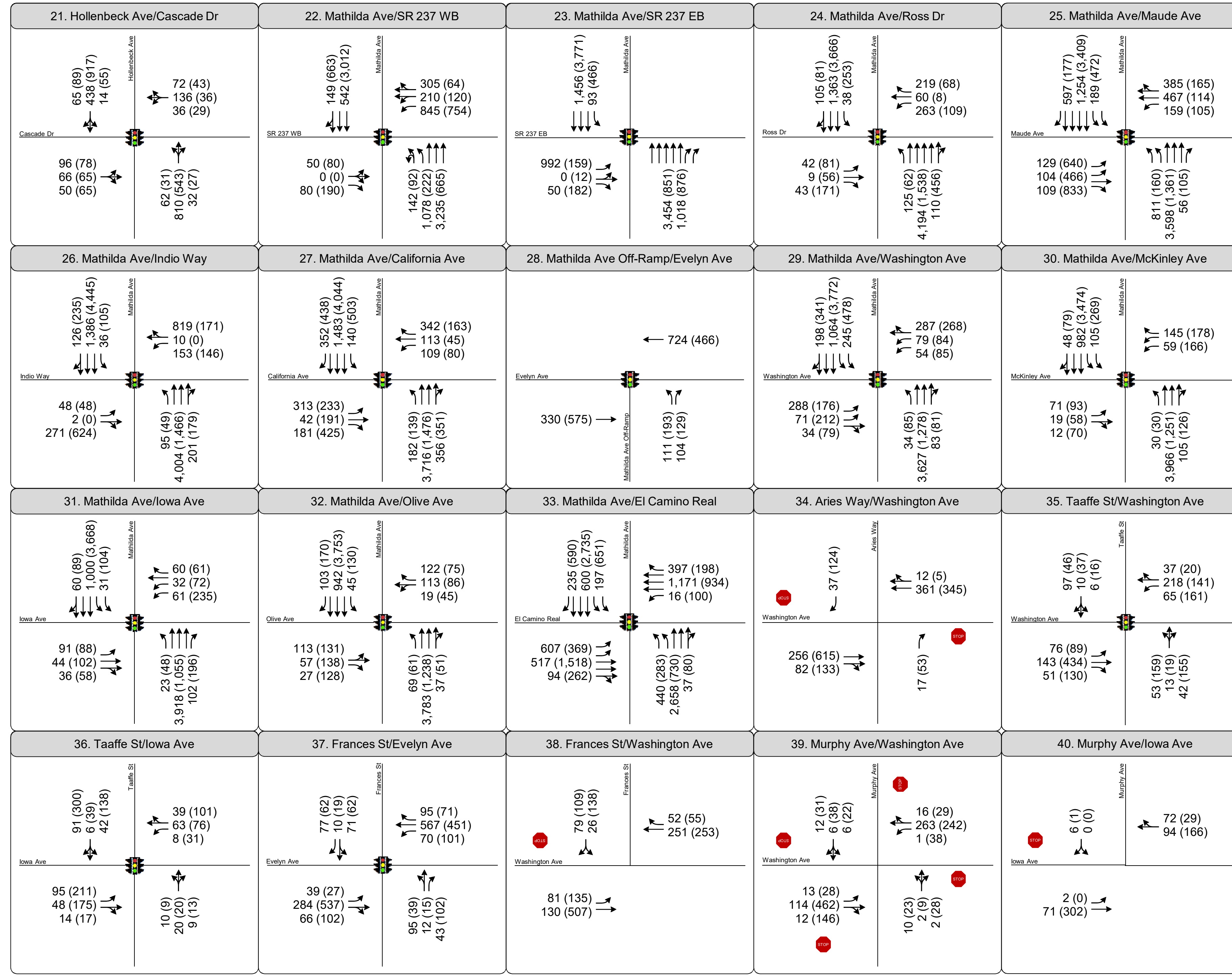


LEGEND

- Study Intersection
- AM (PM) Peak Hour Traffic Volume
- Lane Configuration
- High Occupancy Vehicle (HOV) and Bus Only Lane 6:00 AM - 9:00 AM, 3:00 PM - 7:00 PM, Monday through Friday
- Stop Sign
- Signalized
- Yield Sign

Figure 12
Cumulative No Project Volumes and Lane Configurations





LEGEND

#	Study Intersection		Stop Sign
AM (PM)	Peak Hour Traffic Volume		Signalized
	Lane Configuration		Yield Sign
	High Occupancy Vehicle (HOV) and Bus Only Lane 6:00 AM - 9:00 AM, 3:00 PM - 7:00 PM, Monday through Friday		

Figure 12
Cumulative No Project Volumes and Lane Configurations

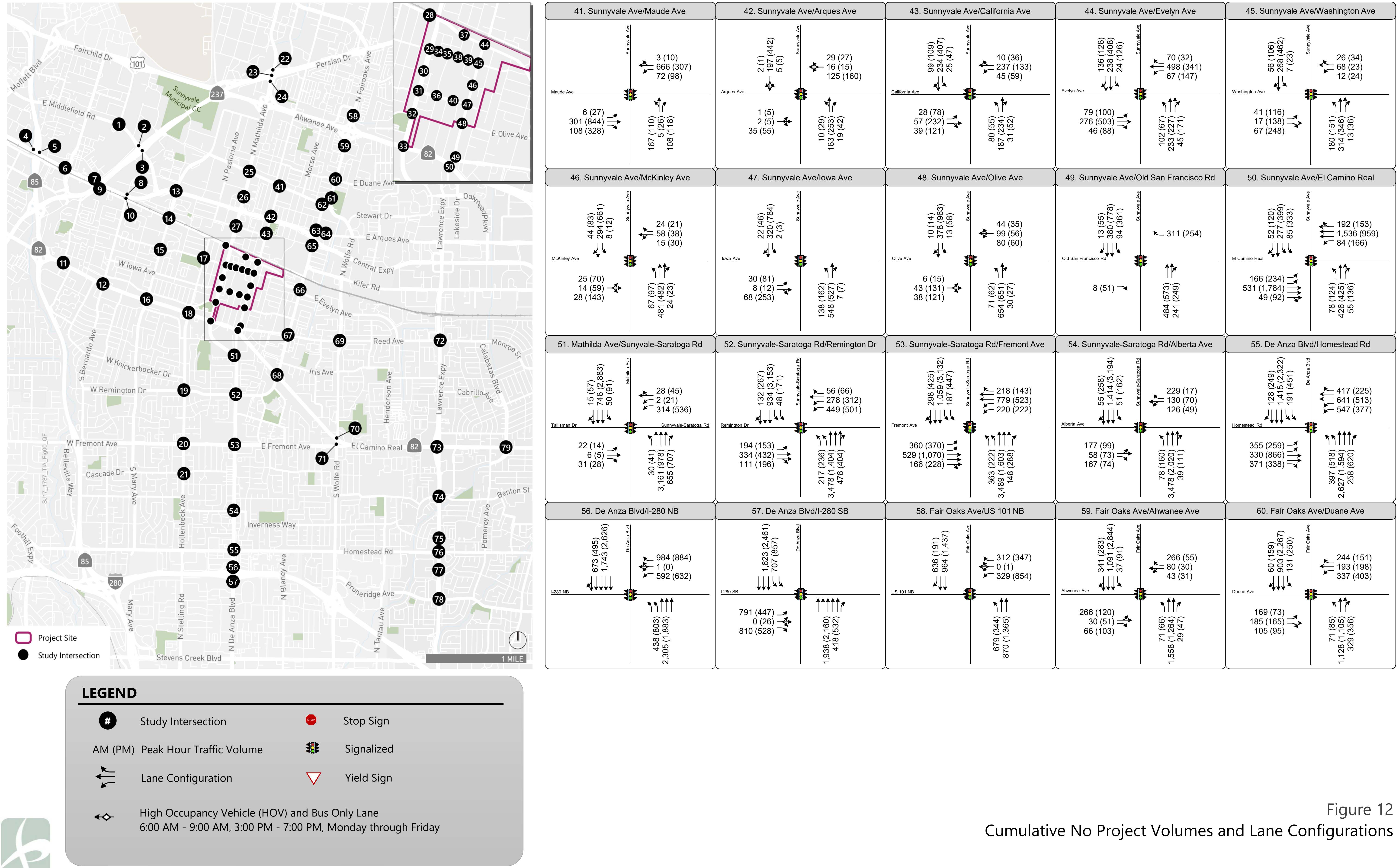
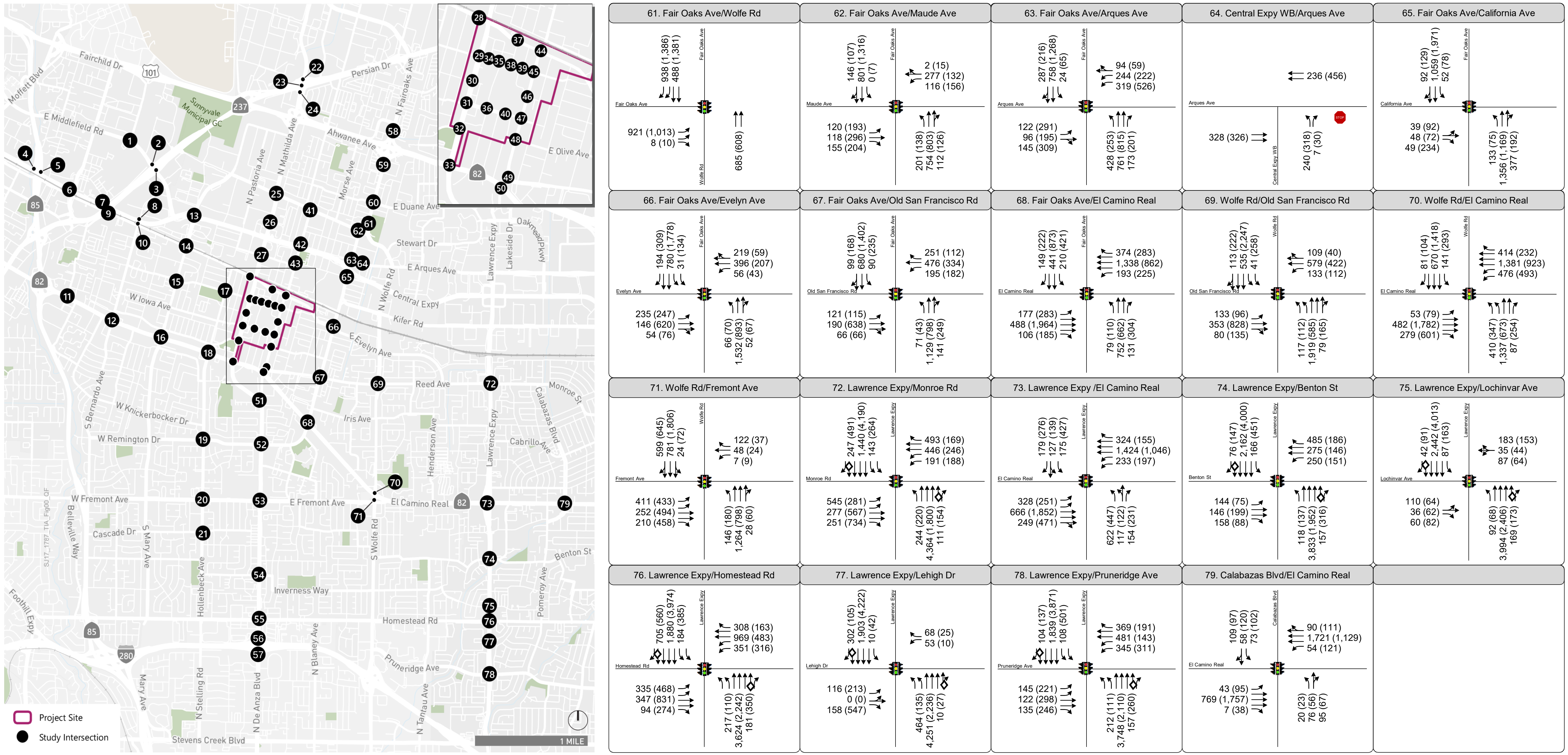


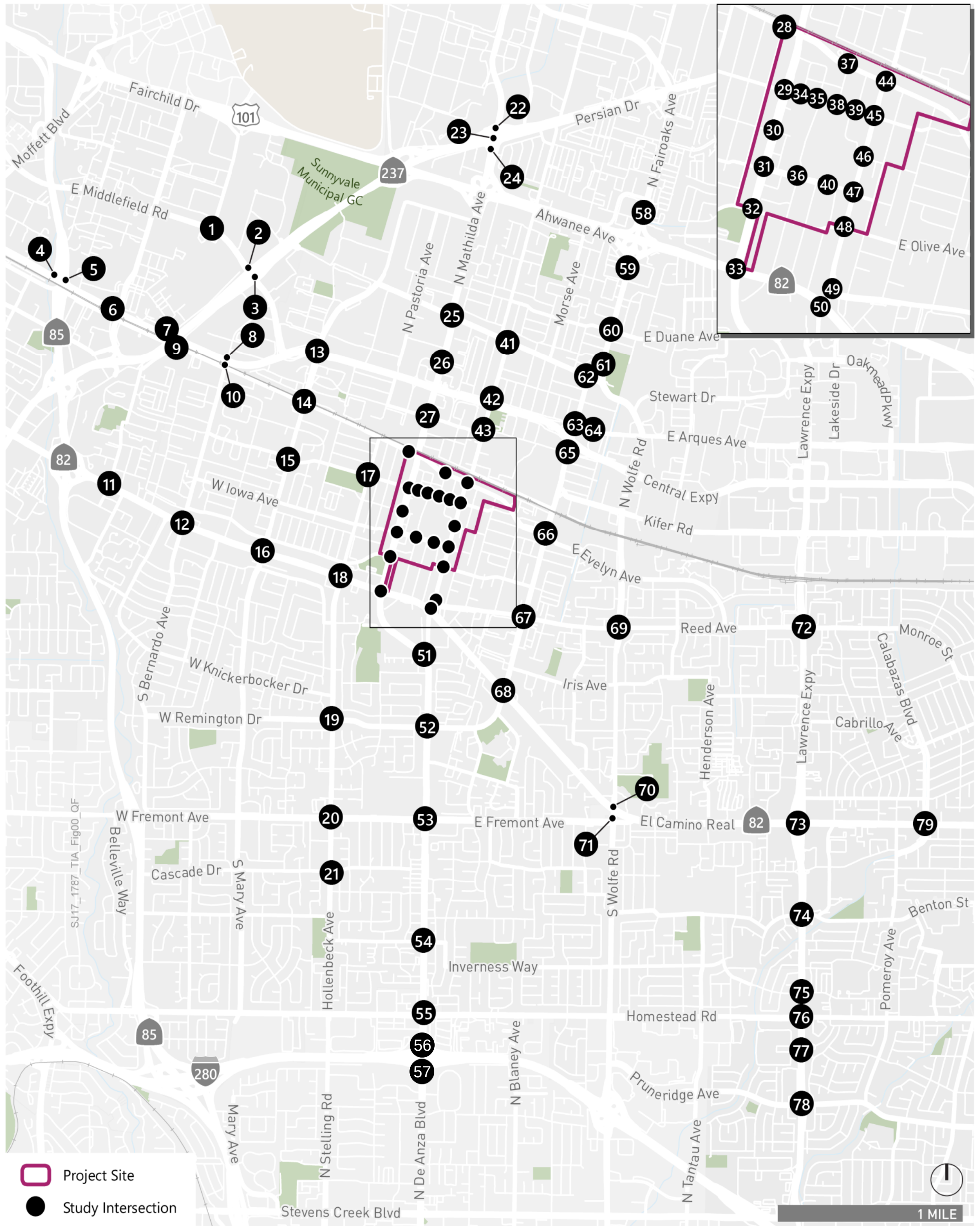
Figure 12
Cumulative No Project Volumes and Lane Configurations

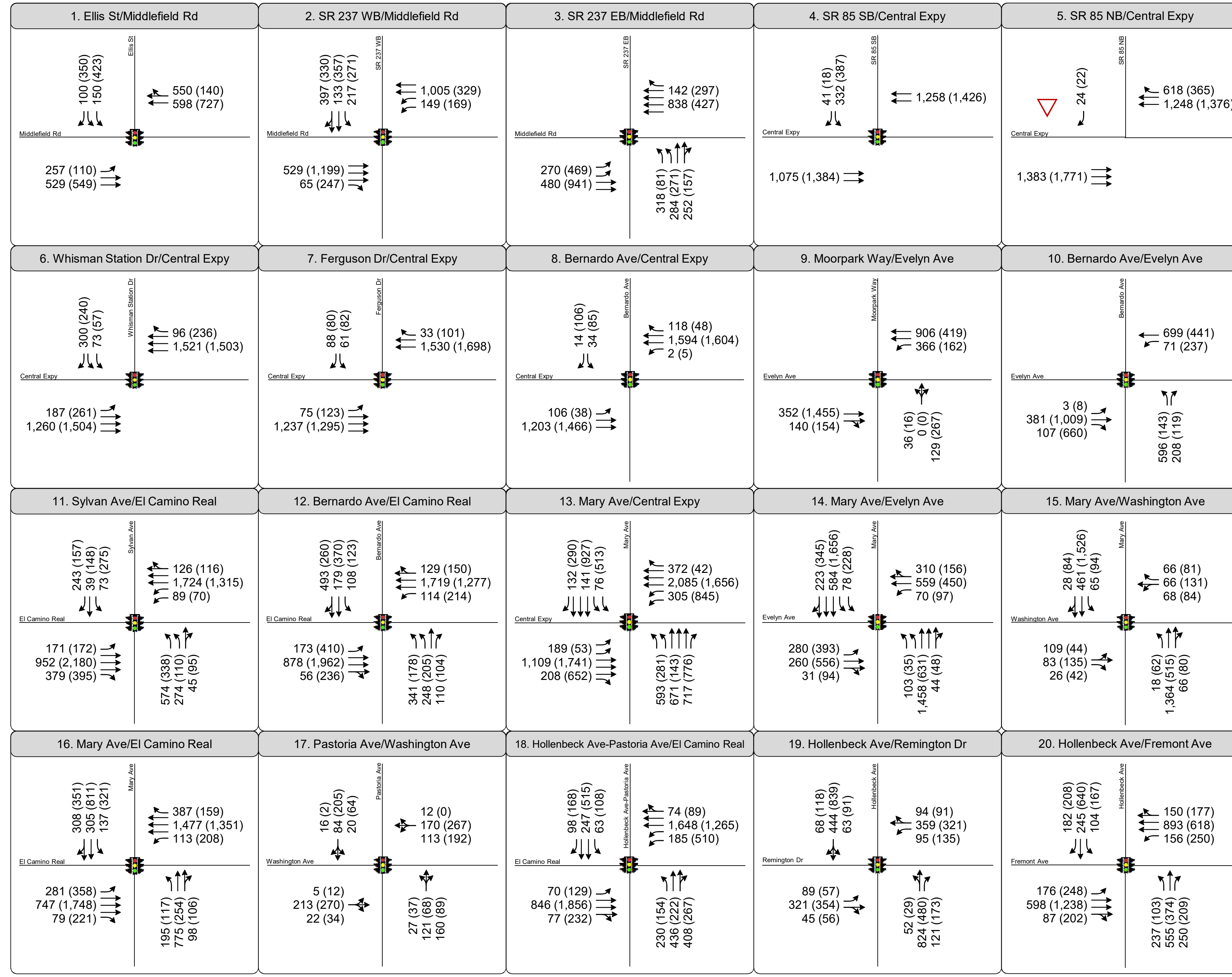


LEGEND

- Study Intersection
- AM (PM) Peak Hour Traffic Volume
- Lane Configuration
- High Occupancy Vehicle (HOV) and Bus Only Lane 6:00 AM - 9:00 AM, 3:00 PM - 7:00 PM, Monday through Friday
- Stop Sign
- Signalized
- Yield Sign

Figure 12
Cumulative No Project Volumes and Lane Configurations

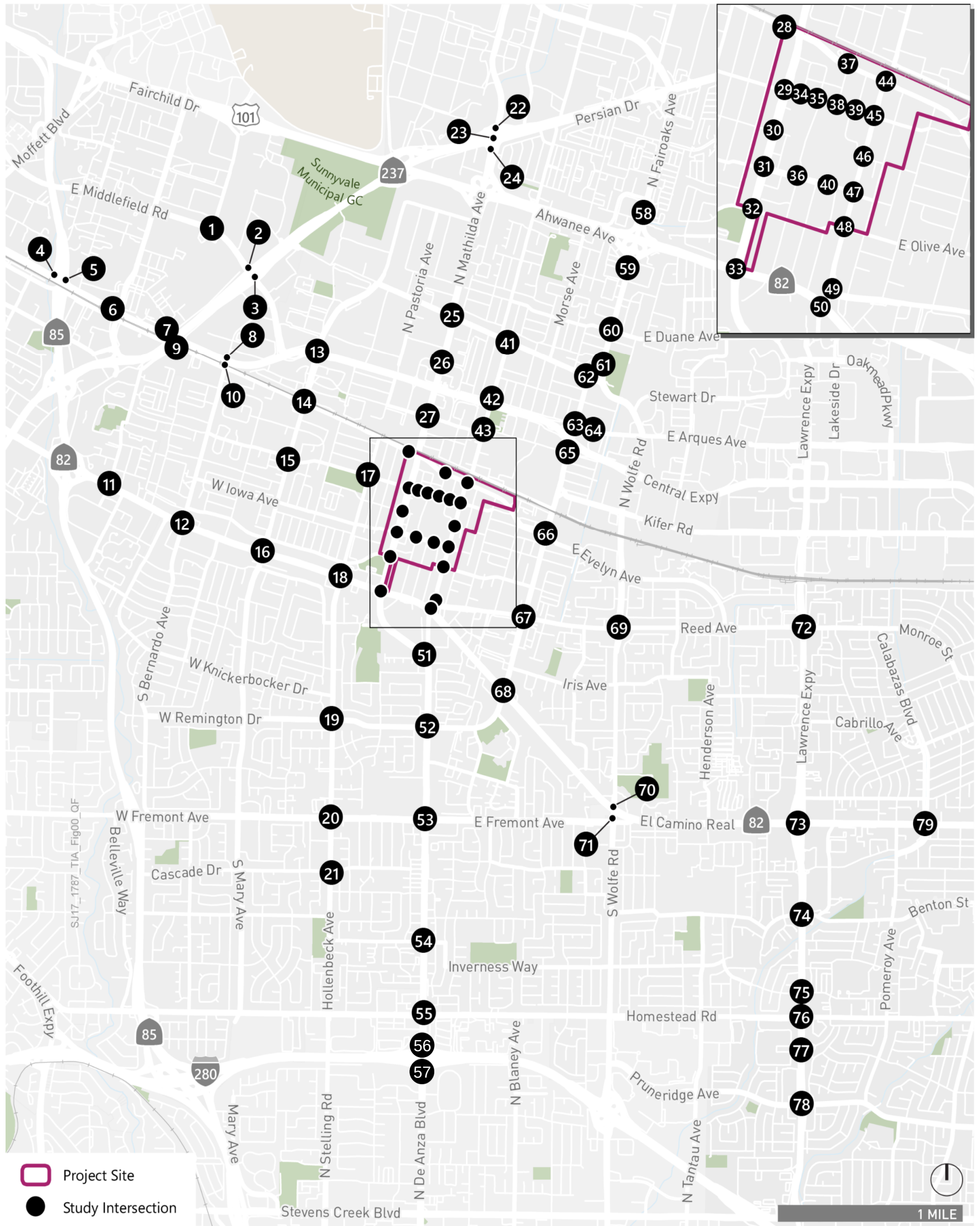


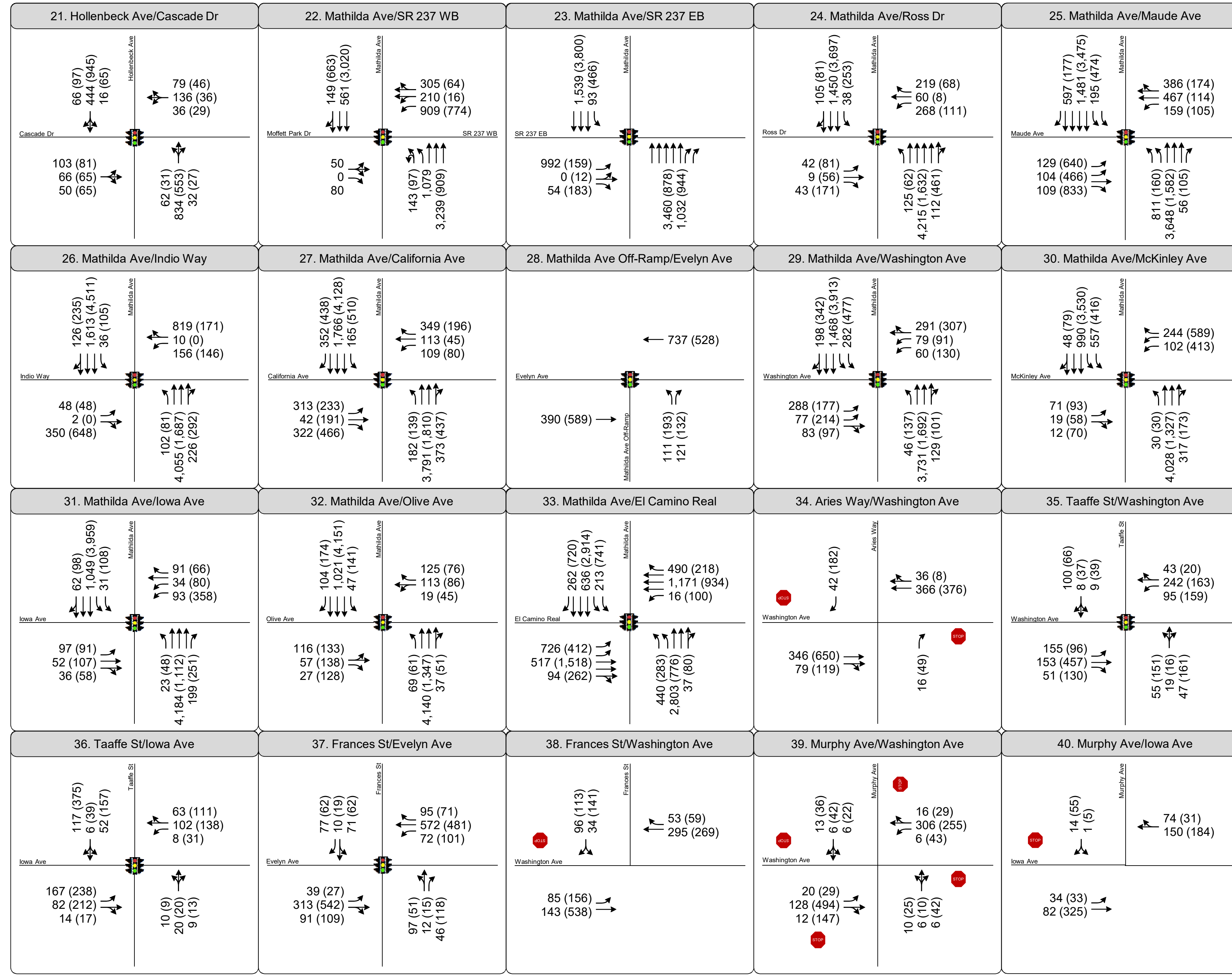


LEGEND

- Study Intersection
- AM (PM) Peak Hour Traffic Volume
- Lane Configuration
- High Occupancy Vehicle (HOV) and Bus Only Lane 6:00 AM - 9:00 AM, 3:00 PM - 7:00 PM, Monday through Friday
- Stop Sign
- Signalized
- Yield Sign

Figure 13
Cumulative Plus Project Volumes and Lane Configurations

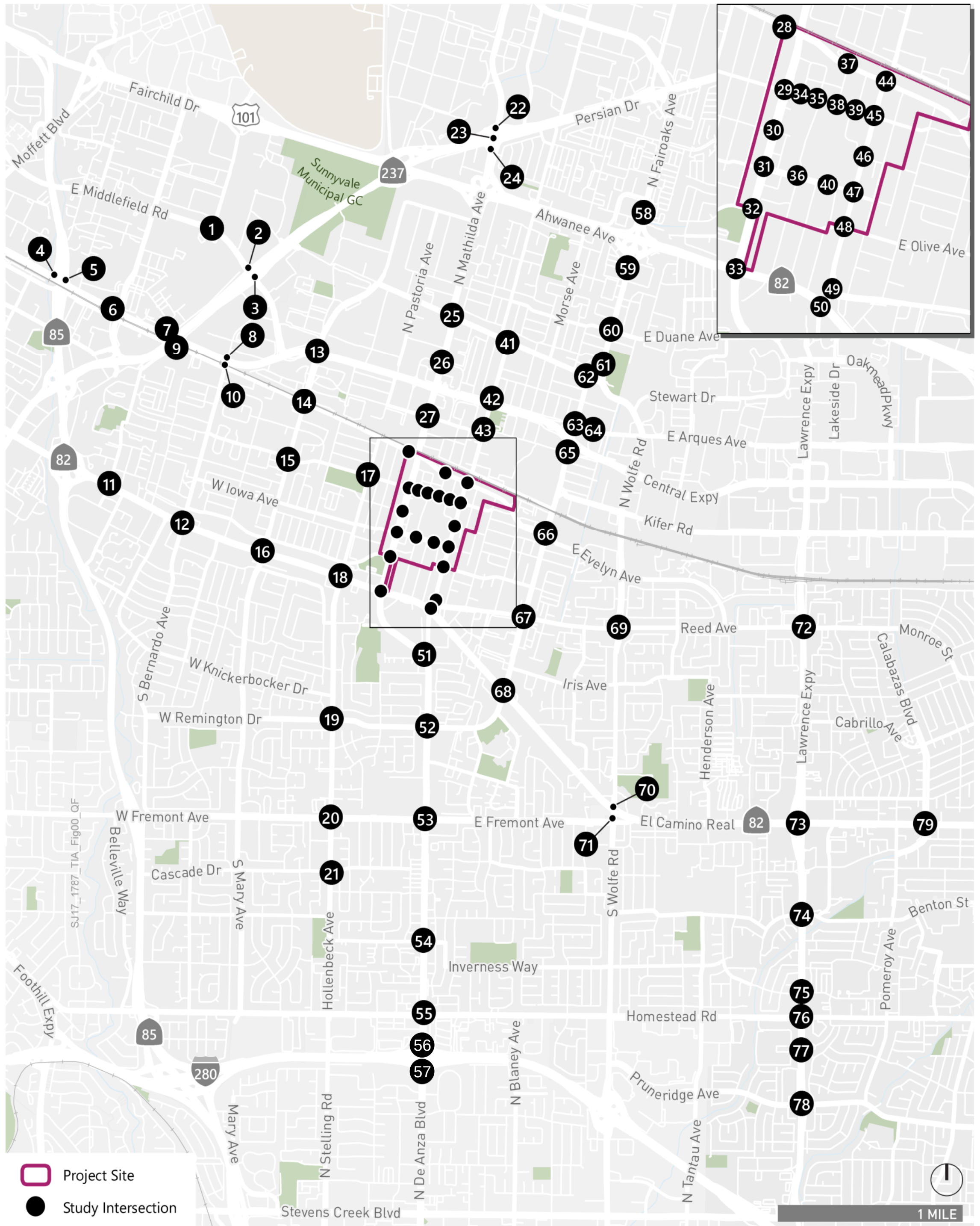


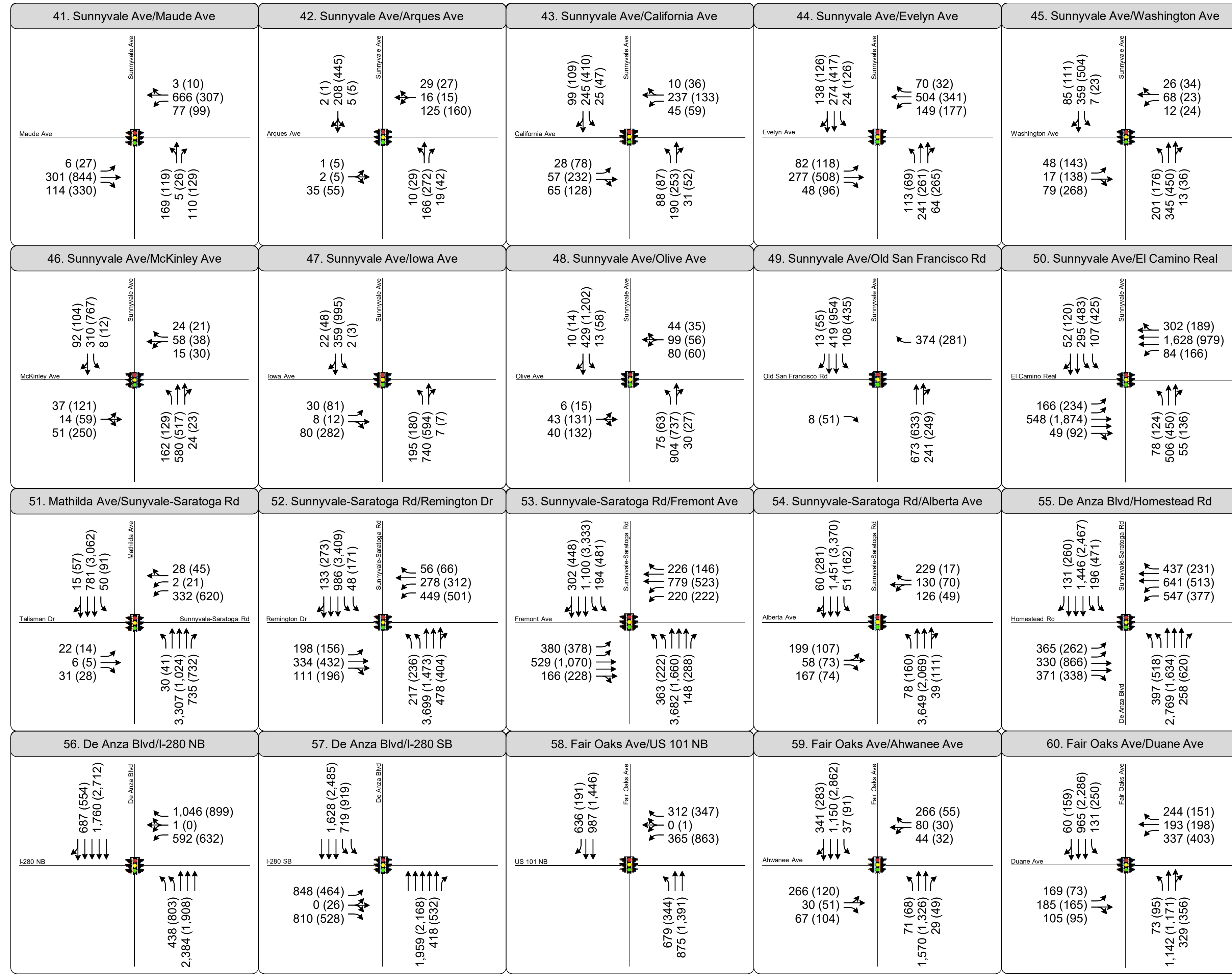


LEGEND

#	Study Intersection		Stop Sign
AM (PM)	Peak Hour Traffic Volume		Signalized
	Lane Configuration		Yield Sign
	High Occupancy Vehicle (HOV) and Bus Only Lane 6:00 AM - 9:00 AM, 3:00 PM - 7:00 PM, Monday through Friday		

Figure 13
Cumulative Plus Project Volumes and Lane Configurations

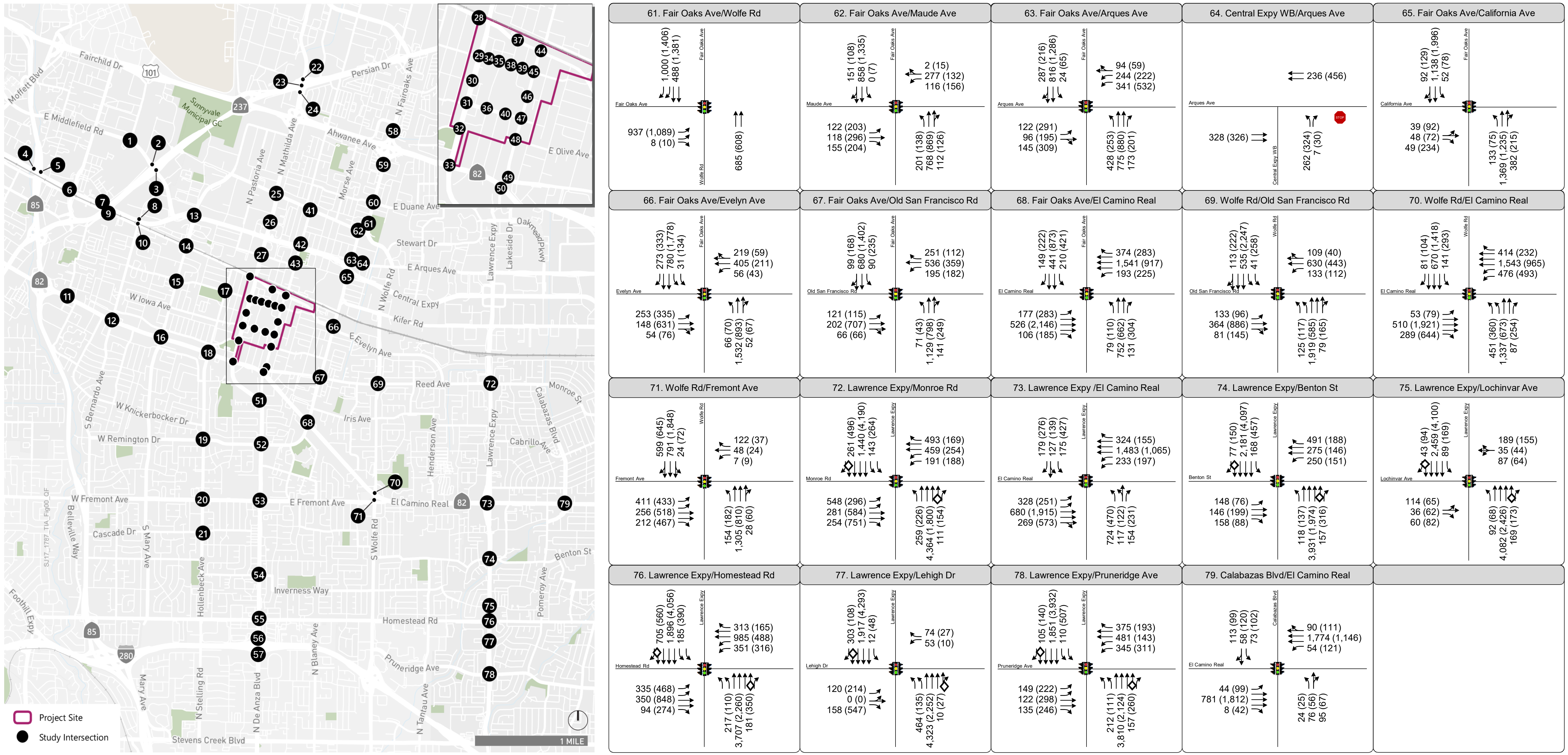




LEGEND

- Study Intersection
- AM (PM) Peak Hour Traffic Volume
- Lane Configuration
- High Occupancy Vehicle (HOV) and Bus Only Lane 6:00 AM - 9:00 AM, 3:00 PM - 7:00 PM, Monday through Friday
- Stop Sign
- Signalized
- Yield Sign

Figure 13
Cumulative Plus Project Volumes and Lane Configurations



LEGEND

- # Study Intersection
- AM (PM) Peak Hour Traffic Volume
- Lane Configuration
- High Occupancy Vehicle (HOV) and Bus Only Lane 6:00 AM - 9:00 AM, 3:00 PM - 7:00 PM, Monday through Friday
- Stop Sign
- Signalized
- Yield Sign

Figure 13
Cumulative Plus Project Volumes and Lane Configurations

5.4 CUMULATIVE INTERSECTION LEVELS OF SERVICE

Table 17 shows the delays, levels of service, and impact criteria metrics for the study intersections under Cumulative No Project and Cumulative Plus Project Conditions. LOS calculations were generally conducted using TRAFFIX analysis software. The Mathilda Avenue intersections at SR 237 Westbound Ramps (#22), SR 237 Eastbound Ramps (#23), and Ross Drive (#24) were evaluated using Synchro analysis software. **Appendix B** contains the corresponding calculation sheets. The results indicate that all study intersections operate at acceptable levels of service (LOS D or better for City intersections and LOS E or better for regionally significant and CMP intersections) under Cumulative No Project and Cumulative Plus Project Conditions during the AM and PM peak hours except:

- Intersection 19: Hollenbeck Avenue / Remington Drive (Sunnyvale)
    - Cumulative Plus Project: PM peak hour
- Intersection 20: Hollenbeck Avenue / Fremont Avenue (Sunnyvale)
    - Cumulative Plus Project: PM peak hour
- Intersection 22: Mathilda Avenue / SR 237 Westbound Ramps (Sunnyvale)
    - Cumulative No Project: AM and PM peak hours
    - Cumulative Plus Project: AM and PM peak hours
- Intersection 24: Mathilda Avenue / Ross Drive (Sunnyvale)
    - Cumulative No Project: AM and PM peak hours
    - Cumulative Plus Project: AM and PM peak hours
- Intersection 26: Mathilda Avenue / Indio Avenue (Sunnyvale)
    - Cumulative No Project: AM and PM peak hours
    - Cumulative Plus Project: AM and PM peak hours
- Intersection 27: Mathilda Avenue / California Avenue (Sunnyvale)
    - Cumulative No Project: AM and PM peak hours
    - Cumulative Plus Project: AM and PM peak hours

- Intersection 29: Mathilda Avenue / Washington Avenue (Sunnyvale)
  - Cumulative No Project: AM and PM peak hours
  - Cumulative Plus Project: AM and PM peak hours
- Intersection 30: Mathilda Avenue / McKinley Avenue (Sunnyvale)
  - Cumulative Plus Project: AM peak hour
- Intersection 33: Mathilda Avenue / El Camino Real (CMP)
  - Cumulative Plus Project: AM peak hour
- Intersection 38: Washington Avenue / Frances Street (Sunnyvale)
  - Cumulative No Project: PM peak hour
  - Cumulative Plus Project: PM peak hour
- Intersection 52: Sunnyvale-Saratoga Road / Remington Drive (Sunnyvale)
  - Cumulative No Project: AM and PM peak hours
  - Cumulative Plus Project: AM and PM peak hours
- Intersection 53: Sunnyvale-Saratoga Road / Fremont Avenue (Sunnyvale)
  - Cumulative Plus Project: AM and PM peak hours
- Intersection 55: De Anza Boulevard / Homestead Road (Cupertino)
  - Cumulative No Project: AM and PM peak hours
  - Cumulative Plus Project: AM and PM peak hours
- Intersection 60: Fair Oaks Avenue / Duane Avenue (Sunnyvale)
  - Cumulative No Project: PM peak hour
  - Cumulative Plus Project: PM peak hour
- Intersection 63: Fair Oaks Avenue / Arques Avenue (Sunnyvale)
  - Cumulative No Project: PM peak hour
  - Cumulative Plus Project: PM peak hour

- Intersection 71: Wolfe Road / Fremont Avenue (Sunnyvale)
  - Cumulative No Project: PM peak hour
  - Cumulative Plus Project: PM peak hour
- Intersection 72: Lawrence Expressway / Monroe Street (Santa Clara County)
  - Cumulative No Project: AM and PM peak hours
  - Cumulative Plus Project: AM and PM peak hours
- Intersection 76: Lawrence Expressway / Homestead (Santa Clara County)
  - Cumulative No Project: AM and PM peak hours
  - Cumulative Plus Project: AM and PM peak hours

TABLE 17: CUMULATIVE AND CUMULATIVE PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

Intersection Name		Intersection Control[1]	LOS Standard[2]	Peak Hour[3]	Cumulative		Cumulative Plus Project			
					Delay[4]	LOS[5]	Delay[4]	LOS[5]	Change in Critical V/C[6]	Change in Average Critical Delay[7]
1	Ellis Street / Middlefield Road	Signal	D	AM PM	14.4 15.4	B B	14.3 15.4	B B	0.007 0.016	0.1 0.0
2	SR 237 WB / Middlefield Road	Signal	D	AM PM	20.1 14.9	C+ B	20.2 14.9	C+ B	0.004 0.006	0.0 0.1
3	SR 237 EB / Middlefield Road	Signal	D	AM PM	22.9 20.4	C+ C+	22.6 20.3	C+ C+	0.005 0.018	0.0 0.3
4	SR-85 SB Off-Ramp / Central Expressway	Signal	E	AM PM	12.6 14.7	B B	12.7 14.5	B B	0.006 0.016	0.1 0.0
5	SR-85 NB On-Ramp - Easy Street / Central Expressway	SSSC	E	AM PM	13.7 14.2	B B	13.8 14.7	B B	0.000 0.002	0.0 0.0
6	Whisman Station Drive / Central Expressway	Signal	E	AM PM	17.5 11.9	B B+	17.4 11.9	B B+	0.003 0.013	0.0 -0.2
7	Ferguson Drive / Central Expressway	Signal	E	AM PM	7.7 8.7	A A	7.8 8.9	A A	0.011 0.024	0.2 0.2
8	Bernardo Avenue / Central Expressway	Signal	E	AM PM	9.9 7.3	A A	10.0 7.4	B+ A	0.012 0.027	0.2 0.3
9	Moorpark Way / Evelyn Avenue	Signal	D	AM PM	14.7 18.7	B B-	15.2 19.4	B B-	0.021 0.015	0.4 1.0
10	Bernardo Avenue / Evelyn Avenue	Signal	D	AM PM	29.2 18.2	C B-	29.6 19.1	C B-	0.005 0.017	0.6 1.8

TABLE 17: CUMULATIVE AND CUMULATIVE PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

	Intersection Name	Intersection Control[1]	LOS Standard[2]	Peak Hour[3]	Cumulative		Cumulative Plus Project			
					Delay[4]	LOS[5]	Delay[4]	LOS[5]	Change in Critical V/C[6]	Change in Average Critical Delay[7]
11	Sylvan Avenue / El Camino Real	Signal	E	AM PM	40.0 35.5	D D+	40.0 35.7	D D+	0.003 0.008	0.1 0.3
12	Bernardo Avenue / El Camino Real	Signal	E	AM PM	45.7 42.7	D D	45.7 43.0	D D	0.003 0.007	0.3 0.3
13	Mary Avenue / Central Expressway	Signal	E	AM PM	47.4 65.6	D E	47.6 66.1	D E	0.006 0.008	0.7 1.7
14	Mary Avenue / Evelyn Avenue	Signal	D	AM PM	42.5 50.1	D D	42.5 51.3	D D-	0.006 0.021	0.2 2.0
15	Mary Avenue / Washington Avenue	Signal	D	AM PM	17.4 19.0	B B-	18.4 19.8	B- B-	0.031 0.008	1.4 0.6
16	Mary Avenue / El Camino Real	Signal	E	AM PM	52.8 58.3	D- E+	52.6 59.0	D- E+	0.005 0.016	0.1 1.4
17	Pastoria Avenue / Washington Avenue	Signal	D	AM PM	27.3 26.9	C C	27.6 26.7	C C	0.012 0.037	0.2 -0.2
18	El Camino Real / Hollenbeck Avenue - Pastoria Avenue	Signal	E	AM PM	42.0 46.7	D D	42.6 48.0	D D	0.020 0.024	1.0 2.0
19	Hollenbeck Avenue / Remington Drive	Signal	D	AM PM	33.2 50.2	C- D	36.2 **58.3**	D+ **E+**	0.033 0.041	4.9 10.4
20	Hollenbeck Avenue / Fremont Avenue	Signal	D	AM PM	49.1 54.7	D D-	49.7 **56.0**	D **E+**	0.027 0.026	1.1 2.3
21	Hollenbeck Avenue / Cascade Drive	Signal	D	AM PM	11.6 11.6	B+ B+	12.2 12.6	B B	0.020 0.031	0.7 1.5
22	Mathilda Avenue / SR 237 WB[8]	Signal	E	AM PM	**152.4** **282.0**	**F** **F**	**158.3** **283.6**	**F** **F**	**0.007** **0.014**	**3.8** **2.8**
23	Mathilda Avenue / SR 237 EB[8]	Signal	E	AM PM	23.7 41.3	C D	23.9 37.1	C C	0.000 0.010	0.1 1.2
24	Mathilda Avenue / Ross Drive[8]	Signal	E	AM PM	**82.8** **134.9**	**F** **F**	**81.4** **135.8**	**F** **F**	**0.009** **0.003**	**1.2** **0.7**
25	Mathilda Avenue / Maude Avenue	Signal	E	AM PM	64.5 74.0	E E	66.6 76.8	E E-	0.012 0.009	4.2 3.2
26	Mathilda Avenue / Indio Avenue	Signal	E	AM PM	**180.6** **170.1**	**F** **F**	**180.6** **174.0**	**F** **F**	**0.015** **0.027**	**6.9** **12.5**
27	Mathilda Avenue / California Avenue	Signal	E	AM PM	**100.0** **94.4**	**F** **F**	**106.9** **114.6**	**F** **F**	**0.022** **0.042**	**9.4** **19.6**

TABLE 17: CUMULATIVE AND CUMULATIVE PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

	Intersection Name	Intersection Control[1]	LOS Standard[2]	Peak Hour[3]	Cumulative		Cumulative Plus Project			
					Delay[4]	LOS[5]	Delay[4]	LOS[5]	Change in Critical V/C[6]	Change in Average Critical Delay[7]
28	Mathilda Avenue Southbound Off-Ramp / Evelyn Avenue	Signal	E	AM PM	7.0 12.2	A B	7.1 12.0	A B	0.008 0.008	0.0 -0.1
29	Mathilda Avenue / Washington Avenue	Signal	E	AM PM	**85.2** **82.8**	**F** **F**	**94.1** **107.8**	**F** **F**	**0.044** **0.086**	**18.1** **39.4**
30	Mathilda Avenue / McKinley Avenue	Signal	E	AM PM	23.8 25.3	C C	**85.8** 51.0	**F** D-	0.219 0.156	76.0 30.3
31	Mathilda Avenue / Iowa Avenue	Signal	E	AM PM	21.3 28.2	C+ C	27.1 42.3	C D	0.055 0.100	7.6 19.3
32	Mathilda Avenue / Olive Avenue	Signal	E	AM PM	18.5 25.8	B- C	22.8 31.6	C+ C	0.071 0.075	6.1 8.7
33	Mathilda Avenue / El Camino Real	Signal	E	AM PM	71.1 65.7	E E	**93.0** 71.6	**F** E	0.074 0.034	25.9 10.2
34	Washington Avenue / Aries Way	SSSC	D	AM PM	9.5 11.2	A B	9.7 11.3	A B	0.007 0.074	0.0 0.4
35	Washington Avenue / Taaffe Street	Signal	D	AM PM	15.1 18.0	B B	16.2 18.0	B B	0.078 0.010	1.7 0.1
36	Iowa Avenue / Taaffe Street	Signal	D	AM PM	25.8 28.3	C C	27.1 31.4	C C	0.110 0.124	1.6 4.1
37	Evelyn Avenue / Frances Street	Signal	D	AM PM	18.8 15.8	B- B	18.6 16.0	B- B	0.004 0.007	0.1 0.0
38	Washington Avenue / Frances Street	SSSC	D	AM PM	11.2 **37.6**	B **E**	12.2 **53.4**	B **F**	0.028 **0.100**	0.3 **3.0**
39	Murphy Avenue / Washington Avenue	AWSC	D	AM PM	9.3 22.1	A C	9.8 28.4	A D	0.060 0.071	0.6 6.3
40	Iowa Avenue / Murphy Avenue	SSSC	D	AM PM	7.5 0.1	A A	10.5 12.8	B B	0.024 0.024	0.7 0.6
41	Sunnyvale Avenue / Maude Avenue	Signal	D	AM PM	15.8 17.1	B B	15.9 17.6	B B	0.001 0.006	0.1 0.7
42	Sunnyvale Avenue / Arques Avenue	Signal	D	AM PM	20.9 15.4	C+ B	20.7 15.4	C+ B	0.007 0.002	-0.1 0.0
43	Sunnyvale Avenue / California Avenue	Signal	D	AM PM	8.1 14.9	A B	8.2 14.8	A B	0.007 0.006	0.0 0.1
44	Sunnyvale Avenue / Evelyn Avenue	Signal	D	AM PM	26.3 23.1	C C	27.4 25.3	C C	0.025 0.076	0.9 2.5

TABLE 17: CUMULATIVE AND CUMULATIVE PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

	Intersection Name	Intersection Control[1]	LOS Standard[2]	Peak Hour[3]	Cumulative		Cumulative Plus Project			
					Delay[4]	LOS[5]	Delay[4]	LOS[5]	Change in Critical V/C[6]	Change in Average Critical Delay[7]
45	Sunnyvale Avenue / Washington Avenue	Signal	D	AM PM	22.6 31.8	C+ C	23.1 37.0	C D+	0.097 0.061	0.4 8.4
46	Sunnyvale Avenue / McKinley Avenue	Signal	D	AM PM	13.4 31.5	B C	15.1 43.5	B D	0.125 0.190	3.6 16.0
47	Sunnyvale Avenue / Iowa Avenue	Signal	D	AM PM	13.8 27.6	B C	14.6 36.9	B D+	0.125 0.156	0.5 13.7
48	Sunnyvale Avenue / Olive Avenue	Signal	D	AM PM	15.8 23.4	B C	22.3 43.7	C+ D	0.163 0.157	10.0 32.7
49	Sunnyvale Avenue / Old San Francisco Road	Signal	D	AM PM	19.9 20.7	B- C+	20.9 21.8	C+ C+	0.101 0.079	1.0 2.5
50	Sunnyvale Avenue / El Camino Real	Signal	E	AM PM	41.3 41.1	D D	42.6 43.5	D D	0.069 0.057	2.1 3.5
51	Mathilda Avenue / Saratoga-Sunnyvale Road - Talisman Drive	Signal	E	AM PM	24.5 33.2	C C-	25.9 38.5	C D+	0.034 0.063	1.8 6.8
52	Sunnyvale-Saratoga Road / Remington Drive	Signal	E	AM PM	**83.2** **80.2**	**F** **F**	**96.8** **93.2**	**F** **F**	**0.043** **0.051**	**17.3** **18.9**
53	Sunnyvale-Saratoga Road / Fremont Avenue	Signal	E	AM PM	72.9 79.1	E E-	**83.9** **90.4**	**F** **F**	0.046 0.043	17.3 16.3
54	Sunnyvale-Saratoga Road / Alberta Avenue - Harwick Way	Signal	E	AM PM	54.7 35.4	D- D+	66.7 40.0	E D	0.046 0.043	16.9 7.2
55	De Anza Boulevard / Homestead Road	Signal	D	AM PM	**62.5** **66.1**	**E** **E**	**67.1** **69.5**	**E** **E**	**0.029** **0.028**	**6.4** **6.3**
56	De Anza Boulevard / I-280 Northbound Ramps	Signal	D	AM PM	49.4 51.2	D D-	52.0 53.8	D- D-	0.028 0.021	9.9 3.8
57	De Anza Boulevard / I-280 Southbound Ramps	Signal	D	AM PM	45.5 42.2	D D	46.5 43.8	D D	0.018 0.026	1.0 4.5
58	Fair Oaks Avenue / US 101 Northbound Ramp	Signal	D	AM PM	25.8 40.2	C D	27.0 41.0	C D	0.020 0.006	1.8 2.0
59	Fair Oaks Avenue / Ahwanee Avenue	Signal	D	AM PM	17.3 11.9	B B+	17.2 11.9	B B+	0.003 0.005	0.0 0.1
60	Fair Oaks Avenue / Duane Avenue	Signal	D	AM PM	41.8 **60.0**	D **E**	42.0 **62.2**	D **E**	0.004 **0.021**	0.7 **6.3**
61	Fair Oaks Avenue / Wolfe Road	Signal	D	AM PM	8.8 11.3	A B+	8.7 11.9	A B+	0.006 0.026	0.0 0.9

TABLE 17: CUMULATIVE AND CUMULATIVE PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

Intersection Name		Intersection Control[1]	LOS Standard[2]	Peak Hour[3]	Cumulative		Cumulative Plus Project			
					Delay[4]	LOS[5]	Delay[4]	LOS[5]	Change in Critical V/C[6]	Change in Average Critical Delay[7]
62	Fair Oaks Avenue / Maude Avenue	Signal	D	AM PM	28.0 32.3	C C-	28.1 32.4	C C-	0.020 0.006	0.2 0.2
63	Fair Oaks Avenue / Arques Avenue	Signal	D	AM PM	48.5 **83.1**	D **F**	50.0 **84.1**	D **F**	0.017 0.008	1.5 2.7
64	Central Expressway WB Off-Ramp / Arques Avenue	SSSC	E	AM PM	16.5 26.0	C D	17.3 26.8	C D	0.040 0.013	0.6 0.3
65	Fair Oaks Avenue / California Avenue	Signal	D	AM PM	11.2 20.5	B+ C+	11.2 20.5	B+ C+	0.005 0.007	0.1 0.2
66	Fair Oaks Avenue / Evelyn Avenue	Signal	D	AM PM	36.0 33.4	D+ C-	36.8 36.3	D+ D+	0.014 0.057	1.9 6.0
67	Fair Oaks Avenue / Old San Francisco Road	Signal	D	AM PM	40.2 41.2	D D	42.0 42.9	D D	0.035 0.021	2.9 2.3
68	Fair Oaks Avenue / El Camino Real	Signal	E	AM PM	34.9 52.4	C- D-	35.3 57.1	D+ E+	0.040 0.035	0.5 8.1
69	Wolfe Road / Old San Francisco Road	Signal	D	AM PM	39.5 48.0	D D	40.4 49.8	D D	0.015 0.022	1.1 2.5
70	Wolfe Road / El Camino Real	Signal	E	AM PM	40.8 54.7	D D-	41.5 56.8	D E+	0.031 0.031	1.5 3.4
71	Wolfe Road / Fremont Avenue	Signal	D	AM PM	51.4 **63.0**	D- **E**	51.7 **65.1**	D- **E**	0.008 0.015	0.5 2.0
72	Lawrence Expressway / Monroe Street	Signal	E	AM PM	**97.2** **111.5**	**F** **F**	**98.5** **112.9**	**F** **F**	0.001 0.010	0.5 2.2
73	Lawrence Expressway / El Camino Real	Signal	E	AM PM	41.9 35.9	D D+	43.2 38.3	D D+	0.043 0.040	1.5 3.1
74	Lawrence Expressway / Benton Street	Signal	E	AM PM	71.8 45.3	E D	76.4 45.7	E- D	0.022 0.016	7.7 0.7
75	Lawrence Expressway / Lochinvar Avenue	Signal	E	AM PM	40.8 38.6	D D+	42.6 39.2	D D	0.020 0.015	2.8 0.9
76	Lawrence Expressway / Homestead Road	Signal	E	AM PM	**80.6** **104.5**	**F** **F**	**85.2** **108.7**	**F** **F**	**0.017** **0.013**	**8.2** **7.5**
77	Lawrence Expressway / Lehigh Drive	Signal	E	AM PM	28.5 64.6	C E	28.4 66.8	C E	0.009 0.011	0.1 3.5
78	Lawrence Expressway / Pruneridge Avenue	Signal	E	AM PM	41.7 52.7	D D-	42.5 53.9	D D-	0.010 0.004	1.3 0.2
79	Calabazas Boulevard / El Camino Real	Signal	D	AM PM	22.4 26.4	C+ C	22.3 26.4	C+ C	0.011 0.013	-0.1 -0.1

Notes: **Bold text** indicates intersection operates at unacceptable level of service. **Bold and highlighted text** indicates a significant impact.

1. Signal = Signalized Intersection; SSSC = Side-Street Stop Controlled Intersection.
2. LOS Standard of intersection's jurisdiction.
3. AM = morning peak hour (between 7:00 and 9:00 AM), PM = evening peak hour (between 4:00 and 6:00 PM).
4. Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop control intersections. Total control delay for the worst movement is presented for side-street stop-controlled intersections.
5. LOS = Level of Service calculations conducted using the TRAFFIX level of service analysis software package, which applies the methodology described in the *2000 HCM*.
6. Change in critical volume-to-capacity ratio (V/C) between No Project and Plus Project Conditions.
7. Change in critical movement delay between No Project and Plus Project Conditions.
8. Operations of the three Mathilda Avenue intersections at SR 237 Westbound, SR 237 Eastbound, and Ross Drive are evaluated using the Synchro level of service analysis software package, to better model LOS of these closely spaced intersections that are part of the *Mathilda Avenue Improvements at SR 237 and US 101* project

Source: Fehr & Peers, March 2019.

5.5 CUMULATIVE PLUS PROJECT INTERSECTION IMPACTS AND MITIGATION MEASURES

This section of the report discusses those intersections that are projected to operate at unacceptable LOS (**Table 17)** and whether they meet their respective jurisdictions' impact thresholds. Possible mitigation measures are identified for significantly impacted intersections. Intersection LOSs with mitigation for intersections with feasible mitigation measures are also presented.

Intersection 19: Hollenbeck Avenue/Remington Drive (City of Sunnyvale)

The Project would degrade operations from acceptable LOS D to unacceptable LOS E+ operations during the PM peak hour and is projected to have a significant impact based on City of Sunnyvale impact criteria. **(Significant Impact)**

> Improvements to mitigate the impact would require the restriping of the northbound and southbound approaches on Hollenbeck Avenue to provide for a dedicated left-turn lane and a shared through/right-turn lane. This improvement would require parking restrictions on east side of the northbound approach and the west side of the southbound approach for about 75 to 125 feet to accommodate the striping of the dedicated left-turn lane. The signal phasing on the northbound and southbound approaches could remain "permitted." With the mitigation measure the intersection LOS would improve from LOS E to LOS D during the PM peak hour, as shown in **Table 18** and the impact is considered less-than-significant. **(Less-Than-Significant with Mitigation)**

TABLE 18: CUMULATIVE WITH PROJECT IMPACTS AND MITIGATIONS AT HOLLENBECK AVENUE/REMINGTON DRIVE (#19)

Intersection	LOS Threshold[1]	Peak Hour[2]	Cumulative Conditions		Cumulative with Project Conditions		Cumulative with Project Mitigations		Impact?[5]
			Delay[3]	LOS[4]	Delay[3]	LOS[4]	Delay[3]	LOS[4]	
Hollenbeck Avenue/ Remington Drive	D	AM PM	33.2 50.2	C- D	36.2 **58.3**	D+ **E+**	42.6 43.8	D D	LTS

Notes:
Bold text indicates intersection operates at unacceptable level of service. **Bold and highlighted text** indicates a significant impact.
1. LOS Threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service).
2. AM = morning peak hour, PM = evening peak hour.
3. Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the 2000 Highway Capacity Manual, with adjusted saturation flow rates to reflect Santa Clara County Conditions for signalized intersections.
4. LOS = Level of Service. LOS calculations conducted using the TRAFFIX analysis software packages, which applies the methods described in the 2000 Highway Capacity Manual.
5. Impact after implementation of mitigation measure (not considering jurisdictional constraints). LTS = Less Than Significant, SU = Significant and Unavoidable

Source: Fehr & Peers, March 2019.

Intersection 20: Hollenbeck Avenue/Fremont Avenue (City of Sunnyvale)

The Project would degrade operations from acceptable LOS D- to unacceptable LOS E+ operations during the PM peak hour and is projected to have a significant impact based on City of Sunnyvale impact criteria. **(Significant Impact)**

> Improvements to mitigate the impact would require the addition of an eastbound right-turn lane from Fremont Avenue onto southbound Hollenbeck Avenue. A dedicated right-turn lane, through lane, and a bike lane would require a minimum width of 25 feet. The available width between the number two through lane and the curb is about 19 feet. This mitigation measure would require removing the raised median on the eastbound approach to allow for adequate right-of way. With the mitigation measure the intersection LOS would improve from LOS E to LOS D during the PM peak hour, as shown in **Table 19** and the impact is considered less-than-significant. **(Less-Than-Significant with Mitigation)**

TABLE 19: CUMULATIVE WITH PROJECT IMPACTS AND MITIGATIONS AT HOLLENBECK AVENUE/FREMONT AVENUE (#20)

Intersection	LOS Threshold[1]	Peak Hour[2]	Cumulative Conditions		Cumulative with Project Conditions		Cumulative with Project Mitigations		Impact?[5]
			Delay[3]	LOS[4]	Delay[3]	LOS[4]	Delay[3]	LOS[4]	
Hollenbeck Avenue/ Fremont Avenue	D	AM PM	49.1 54.7	D D-	49.7 **56.0**	D **E+**	49.7 54.4	D D-	LTS

Notes:
Bold text indicates intersection operates at unacceptable level of service. **Bold and highlighted text** indicates a significant impact.

1. LOS Threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service).
2. AM = morning peak hour, PM = evening peak hour.
3. Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the 2000 Highway Capacity Manual, with adjusted saturation flow rates to reflect Santa Clara County Conditions for signalized intersections.
4. LOS = Level of Service. LOS calculations conducted using the TRAFFIX analysis software packages, which applies the methods described in the 2000 Highway Capacity Manual.
5. Impact after implementation of mitigation measure (not considering jurisdictional constraints). LTS = Less Than Significant, SU = Significant and Unavoidable

Source: Fehr & Peers, March 2019.

Intersection 22: Mathilda Avenue/SR 237 Westbound Ramps (City of Sunnyvale)

The Project would exacerbate **unacceptable** LOS F operations during the AM and PM peak hours. However, the Project does not meet City of Sunnyvale impact thresholds (increase critical delay by 4 or more seconds and increase critical V/C by 0.01 or more) and the Project is considered to have a less-than-significant impact. **(Less-than-Significant Impact)**

Intersection 24: Mathilda Avenue/Ross Drive (City of Sunnyvale)

The Project would exacerbate **unacceptable** LOS F operations during the AM and PM peak hours. However, the Project does not meet City of Sunnyvale impact thresholds (increase critical delay by 4 or more seconds and increase critical V/C by 0.01 or more) and the Project is considered to have a less-than-significant impact. **(Less-than-Significant Impact)**

Intersection 26: Mathilda Avenue/Indio Avenue (City of Sunnyvale)

This intersection operates at unacceptable LOS F without the Project. The Project would add more than 4.0 seconds of average critical delay and increase the critical V/C ratio by 0.010 or more during the AM and PM peak hours, and it is projected to have a significant impact based on City of Sunnyvale impact criteria. **(Significant Impact)**

> As discussed under Background Conditions, improvements to mitigate the impact would require the addition of a southbound through lane on Mathilda Avenue. However, there are right-of-way constraints that limit the physical feasibility of this mitigation measure. Thus, the mitigation measure would not be feasible, and the impact is considered significant and unavoidable. **(Significant and Unavoidable)**

Intersection 27: Mathilda Avenue/California Avenue (City of Sunnyvale)

During the AM and PM peak hours, this intersection operates at unacceptable LOS F without the Project. The Project would add more than 4.0 seconds of average critical delay and increase the critical V/C ratio by 0.010 or more during both peak hours, and it is projected to have a significant impact based on City of Sunnyvale impact criteria. **(Significant Impact)**

> Improvements to mitigate the impact would require the addition of a northbound right-turn lane from Mathilda Avenue onto eastbound California Avenue or a fourth southbound through lane on Mathilda Avenue. However, there are right-of-way constraints that limit the physical feasibility of either mitigation measure. A dedicated right-turn lane, through lane, and a bike lane would require a minimum width of 25 feet. The available width between the number two through lane and the curb on northbound Mathilda Avenue is about 18 feet. An additional southbound through lane would require an additional 11 feet of right-of-way from existing properties along the west side of Mathilda Avenue. Thus, both mitigation measures would not be feasible, and the impact is considered significant and unavoidable. **(Significant and Unavoidable)**

Intersection 29: Mathilda Avenue/Washington Avenue (City of Sunnyvale)

During the AM and PM peak hours, this intersection operates at unacceptable LOS F without the Project. The Project would add more than 4.0 seconds of average critical delay and increase the critical V/C ratio by 0.010 or more during both peak hours, and it is projected to have a significant impact based on City of Sunnyvale impact criteria. **(Significant Impact)**

> Improvements to mitigate the impact would require the addition of a fourth southbound through lane on Mathilda Avenue. However, there are right-of-way constraints that limit the physical feasibility of this mitigation measure. An additional southbound through lane would require an additional 11 feet of right-of-way from existing properties along the west side of Mathilda Avenue. Thus, the mitigation measure would not be feasible, and the impact is considered significant and unavoidable. **(Significant and Unavoidable)**
>
> The City has planned improvements along Mathilda Avenue to provide bike lanes between El Camino Real and Washington Avenue. Consistent with City of Sunnyvale LUTE Goal LT-3 to prioritize investment in pedestrian, bicycle, and transit improvements to achieve greater mobility within the community, the Project will be required to pay its fair share to these future bicycle improvements. Since the fair share contribution does not mitigate the LOS impact, the impact continues to be considered significant and unavoidable.

Intersection 30: Mathilda Avenue/McKinley Avenue (City of Sunnyvale)

The Project would degrade operations from acceptable LOS C to unacceptable LOS F operations during the AM peak hour. Thus, the project is projected to have a significant impact during the AM peak hour based on City of Sunnyvale impact criteria. **(Significant Impact)**

> Improvements to mitigate the impact would require the addition of a southbound right-turn lane on Mathilda Avenue. However, there are right-of-way constraints that limit the physical feasibility of this mitigation measure. An additional southbound right-turn lane would require an additional 11 feet of right-of-way from existing properties along the west side of Mathilda Avenue. Thus, the mitigation measure would not be feasible, and the impact is considered significant and unavoidable. **(Significant and Unavoidable)**
>
> As discussed above under Intersection 29 (Mathilda Avenue/Washington Avenue), The City has planned improvements along Mathilda Avenue to provide bike lanes between El Camino Real and Washington Avenue. The Project will be required to pay its fair share to future bicycle improvements on Mathilda Avenue. Since the fair share contribution does not mitigate the LOS impact, the impact continues to be considered significant and unavoidable.

Intersection 33: Mathilda Avenue/El Camino Real (City of Sunnyvale/CMP)

The Project would degrade operations from acceptable LOS E to unacceptable LOS F operations during the AM peak hour and is projected to have a significant impact based VTA impact criteria. **(Significant Impact)**

Improvements to mitigate the impact would require the provision of a third eastbound left-turn lane. The available width between the raised median and the curb is approximately 60 feet. Six 10-foot lanes can be accommodated within the existing right-of-way. If wider lanes are desired, part of or all the median may be removed to add up to five feet of right-of-way. With the mitigation measure the intersection LOS would improve from LOS F to LOS E during the AM peak hour, as shown in **Table 20** and the impact is considered less-than-significant. **(Less-Than-Significant with Mitigation)**

The City's TIF Program includes ITS Improvements for intersections along major corridors, including Mathilda Avenue and El Camino Real. The Project would be required to pay the applicable TIF amounts.

TABLE 20: CUMULATIVE WITH PROJECT IMPACTS AND MITIGATIONS AT MATHILDA AVENUE/EL CAMINO REAL (#33)

Intersection	LOS Threshold[1]	Peak Hour[2]	Cumulative Conditions		Cumulative with Project Conditions		Cumulative with Project Mitigations		Impact?[5]
			Delay[3]	LOS[4]	Delay[3]	LOS[4]	Delay[3]	LOS[4]	
Mathilda Avenue/ El Camino Real	E	AM PM	71.1 65.7	E E	**93.0** 71.6	**F** E	72.5 70.8	E E	LTS

Notes:
Bold text indicates intersection operates at unacceptable level of service. **Bold and highlighted text** indicates a significant impact.
1. LOS Threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service).
2. AM = morning peak hour, PM = evening peak hour.
3. Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the 2000 Highway Capacity Manual, with adjusted saturation flow rates to reflect Santa Clara County Conditions for signalized intersections.
4. LOS = Level of Service. LOS calculations conducted using the TRAFFIX analysis software packages, which applies the methods described in the 2000 Highway Capacity Manual.
5. Impact after implementation of mitigation measure (not considering jurisdictional constraints). LTS = Less Than Significant, SU = Significant and Unavoidable

Source: Fehr & Peers, March 2019.

Intersection 38: Washington Avenue/Frances Street (City of Sunnyvale)

During the PM peak hour, this intersection operates at unacceptable LOS E without the Project. The Project would add more than 4.0 seconds of average critical delay and increase the critical V/C ratio by 0.010 or more during the PM peak hour. In addition, the MUTCD peak-hour volume signal warrant is met and based on City of Sunnyvale impact criteria and the Project is projected to have significant impact related to both LOS and signal warrants. **(Significant Impact)**

Improvement options to mitigate the impact at this side-street stop-controlled intersection include converting the intersection to an all-way stop-controlled intersection or installing traffic signals. The impact at is considered less-than-significant with either of these mitigation options. The mitigation measure will be installed when warranted by traffic volumes. Since this is a cumulative impact, the Project shall pay its fair share for the mitigation measure. **(Less-Than-Significant with Mitigation)**

The selection of the future traffic control device at this intersection by the City should take into consideration the control devices at other intersections on the Washington Avenue corridor, as there are several closely-spaced intersections with varying traffic controls between Mathilda Avenue and Sunnyvale Avenue. The Taaffe Street intersection, approximately 310 feet to the west of Frances Street, is signalized while the Murphy Street intersection, 330 feet to the east, is side-street stop controlled. The Mathilda Avenue intersection (about 500 feet west of Taaffe Street) and Sunnyvale Avenue intersection (about 300 feet east of Murphy Street) are signalized. Signalizing the Frances Street intersection would provide consistent traffic controls along the corridor, should the City determine that it is the appropriate mitigation measure.

Intersection 52: Sunnyvale-Saratoga Road/Remington Drive (City of Sunnyvale/CMP)

During both peak hours, the Project exacerbates unacceptable LOS F and adds more than 4.0 seconds of average critical delay and increases the critical V/C ratio by 0.010 or more. Thus, the Project projected to have a significant impact during both peak periods based on VTA impact criteria. **(Significant Impact)**

Improvements to mitigate the impact would require the addition of a northbound right-turn lane and an eastbound right-turn lane. The addition of a northbound right-turn lane is included in the City's TIF program. To mitigate this impact, the Project also would be required to pay the applicable TIF amounts. As shown in **Table 21,** the intersection LOS with the mitigation measure would improve from unacceptable LOS F to acceptable LOS E during the AM peak hour; the impact would remain significant an unavoidable during the PM peak hour. This is consistent with the results presented in the TIF Nexus Study. A dedicated eastbound right-turn lane would be needed to fully mitigate the impact during the PM peak hour. A separated eastbound right-turn lane would require an additional 5 to 11 feet of right-of-way from existing properties along the south side of

Remington Drive. With both mitigation measures the intersection LOS would improve from LOS F to LOS E during the AM and PM peak hours, as shown in **Table 21** and the impact is considered less-than-significant. **(Less-Than-Significant with Mitigation)**

TABLE 21: CUMULATIVE WITH PROJECT IMPACTS AND MITIGATIONS AT SUNNYVALE-SARATOGA ROAD/REMINGTON DRIVE (#52)

Intersection	LOS Threshold[1]	Peak Hour[2]	Cumulative Conditions		Cumulative with Project Conditions		Cumulative with Project Mitigations		Impact?[5]
			Delay[3]	LOS[4]	Delay[3]	LOS[4]	Delay[3]	LOS[4]	
Sunnyvale-Saratoga Road / Remington Drive	E	AM PM	**83.2** **80.2**	**F** **F**	**96.8** **93.2**	**F** **F**	57.1 78.0	E+ E	LTS

Notes:
Bold text indicates intersection operates at unacceptable level of service. **Bold and highlighted text** indicates a significant impact.
1. LOS Threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service).
2. AM = morning peak hour, PM = evening peak hour.
3. Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the 2000 Highway Capacity Manual, with adjusted saturation flow rates to reflect Santa Clara County Conditions for signalized intersections.
4. LOS = Level of Service. LOS calculations conducted using the TRAFFIX analysis software packages, which applies the methods described in the 2000 Highway Capacity Manual.
5. Impact after implementation of mitigation measure (not considering jurisdictional constraints). LTS = Less Than Significant, SU = Significant and Unavoidable

Source: Fehr & Peers, March 2019.

Intersection 53: Sunnyvale-Saratoga Road/Fremont Avenue (City of Sunnyvale/CMP)

The Project would degrade operations from acceptable LOS E/E- to unacceptable LOS F operations during the AM and PM peak hours and is projected to have a significant impact based VTA impact criteria based on City of Sunnyvale impact criteria. **(Significant Impact)**

Improvements to mitigate the impact would require the addition of a dedicated southbound right-turn lane and a third eastbound left-turn lane. A dedicated right-turn lane, through lane, and a bike lane would require a minimum width of 25 feet. The available width between the number two through lane and the curb is about 17 feet. The additional southbound right-turn lane would require modifying the bus duckout and northwest corner at Sunnyvale-Saratoga Road and Fremont Avenue. The project shall pay a fair-share contribution for this improvement. With both mitigation measures the intersection LOS would improve from LOS F to LOS E during the AM and PM peak hours, as shown in **Table 22** and the impact is considered less-than-significant. **(Less-Than-Significant with Mitigation)**

TABLE 22: CUMULATIVE WITH PROJECT IMPACTS AND MITIGATIONS AT SUNNYVALE-SARATOGA ROAD/FREMONT AVENUE (#53)

Intersection	LOS Threshold[1]	Peak Hour[2]	Cumulative Conditions		Cumulative with Project Conditions		Cumulative with Project Mitigations		Impact?[5]
			Delay[3]	LOS[4]	Delay[3]	LOS[4]	Delay[3]	LOS[4]	
Sunnyvale-Saratoga Road / Fremont Avenue	E	AM PM	72.9 79.1	E E-	**83.9** **90.4**	**F** **F**	73.2 63.6	E E	LTS

Notes:
Bold text indicates intersection operates at unacceptable level of service. **Bold and highlighted text** indicates a significant impact.

1. LOS Threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service).
2. AM = morning peak hour, PM = evening peak hour.
3. Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the 2000 Highway Capacity Manual, with adjusted saturation flow rates to reflect Santa Clara County Conditions for signalized intersections.
4. LOS = Level of Service. LOS calculations conducted using the TRAFFIX analysis software packages, which applies the methods described in the 2000 Highway Capacity Manual.
5. Impact after implementation of mitigation measure (not considering jurisdictional constraints). LTS = Less Than Significant, SU = Significant and Unavoidable

Source: Fehr & Peers, March 2019.

Intersection 55: De Anza Boulevard/Homestead Road (City of Cupertino)

The Project would exacerbate unacceptable LOS E operations during the AM and PM peak hours. The Project meets City of Cupertino impact thresholds (increase critical delay by 4 or more seconds and increase critical V/C by 0.01 or more) during both peak hours. The Project is projected to have a significant impact during both peak hours based on City of Cupertino impact criteria. **(Significant Impact)**

> Improvements to mitigate the impact would require the addition of a third westbound left-turn lane from Homestead Road onto De Anza Boulevard. This improvement can be accommodated within the existing right-of-way with modifications to the median and lane widths. The project shall pay a fair-share contribution for this improvement. With the mitigation measure the project's impact would not meet the City of Cupertino's significance thresholds and would operate with less delay than under No Project conditions during the AM and PM peak hours, as shown in **Table 23.** However, the implementation of this improvement is outside of the City of Sunnyvale's jurisdiction and the City cannot guarantee that it would be constructed. Thus, the mitigation measure would not be feasible, and the impact is considered significant and unavoidable. **(Significant and Unavoidable)**

TABLE 23: CUMULATIVE WITH PROJECT IMPACTS AND MITIGATIONS AT DE ANZA BOULEVARD/HOMESTEAD ROAD (#55)

Intersection	LOS Threshold[1]	Peak Hour[2]	Cumulative Conditions		Cumulative with Project Conditions		Cumulative with Project Mitigations		Impact?[5]
			Delay[3]	LOS[4]	Delay[3]	LOS[4]	Delay[3]	LOS[4]	
De Anza Boulevard/ Homestead Road	D	AM PM	**62.5** **66.1**	**E** **E**	**67.1** **69.5**	**E** **E**	**62.1** **62.7**	**E** **E**	SU

Notes:
Bold text indicates intersection operates at unacceptable level of service. **Bold and highlighted text** indicates a significant impact.

1. LOS Threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service).
2. AM = morning peak hour, PM = evening peak hour.
3. Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the 2000 Highway Capacity Manual, with adjusted saturation flow rates to reflect Santa Clara County Conditions for signalized intersections.
4. LOS = Level of Service. LOS calculations conducted using the TRAFFIX analysis software packages, which applies the methods described in the 2000 Highway Capacity Manual.
5. Impact after implementation of mitigation measure (not considering jurisdictional constraints). LTS = Less Than Significant, SU = Significant and Unavoidable

Intersection 60: Fair Oaks Avenue/Duane Avenue (City of Sunnyvale)

This intersection operates at unacceptable LOS E without the Project. The Project would add more than 4.0 seconds of average critical delay and increase the critical V/C ratio by 0.010 or more during the PM peak hour, and it is projected to have a significant impact based on City of Sunnyvale impact criteria. **(Significant Impact)**

> Improvements to mitigate the impact would require the provision of a second westbound left-turn lane from Duane Avenue onto southbound Fair Oaks Avenue. Prior to the installation of bike lanes on Duane Avenue in 2016 the westbound approach had dual left-turn lanes. To provide dual left-turn lanes while maintaining the bike lanes on Duane Avenue would require restriping of the intersection and the removal of on-street parking on the south side of Duane Avenue for about 200 feet from the intersection. On-street parking is already prohibited for the first 100 feet, so this mitigation measure would affect on-street parking in front of an additional two homes.
>
> With the mitigation measure the intersection LOS would improve from LOS E to LOS D during the PM peak hour, as shown in **Table 24** and the impact is considered less-than-significant. **(Less-Than-Significant with Mitigation)**

TABLE 24: CUMULATIVE WITH PROJECT IMPACTS AND MITIGATIONS AT FAIR OAKS AVENUE/DUANE AVENUE (#60)

Intersection	LOS Threshold[1]	Peak Hour[2]	Cumulative Conditions		Cumulative with Project Conditions		Cumulative with Project Mitigations		Impact?[5]
			Delay[3]	LOS[4]	Delay[3]	LOS[4]	Delay[3]	LOS[4]	
Fair Oaks Avenue/Duane Avenue	D	AM PM	41.8 **60.0**	D **E**	42.0 **62.2**	D **E**	33.5 38.4	C- D+	LTS

Notes:
Bold text indicates intersection operates at unacceptable level of service. **Bold and highlighted text** indicates a significant impact.
1. LOS Threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service).
2. AM = morning peak hour, PM = evening peak hour.
3. Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the 2000 Highway Capacity Manual, with adjusted saturation flow rates to reflect Santa Clara County Conditions for signalized intersections.
4. LOS = Level of Service. LOS calculations conducted using the TRAFFIX analysis software packages, which applies the methods described in the 2000 Highway Capacity Manual.
5. Impact after implementation of mitigation measure (not considering jurisdictional constraints). LTS = Less Than Significant, SU = Significant and Unavoidable

Source: Fehr & Peers, March 2019.

Intersection 63: Fair Oaks Avenue/Arques Avenue (City of Sunnyvale)

The Project would exacerbate unacceptable LOS F operations during the PM peak hour. However, the Project does not meet City of Sunnyvale impact thresholds (increase critical delay by 4 or more seconds and increase critical V/C by 0.01 or more) and the Project is considered to have a less-than-significant impact. **(Less-than-Significant Impact)**

Intersection 71: Wolfe Road/Fremont Avenue (City of Sunnyvale)

The Project would exacerbate unacceptable LOS E operations during the PM peak hour. However, the Project does not meet City of Sunnyvale impact thresholds (increase critical delay by 4 or more seconds and increase critical V/C by 0.01 or more) and the Project is considered to have a less-than-significant impact. **(Less-than-Significant Impact)**

Intersection 72: Lawrence Expressway / Monroe Street (County of Santa Clara)

The Project would exacerbate unacceptable LOS F operations during the AM and PM peak hours. However, the Project does not meet County of Santa Clara impact thresholds (increase critical delay by 4 or more seconds and increase critical V/C by 0.01 or more) and the Project is considered to have a less-than-significant impact. **(Less-than-Significant Impact)**

Intersection 76: Lawrence Expressway/Homestead Road (Santa Clara County/CMP)

This intersection operates at unacceptable LOS F without the Project. The Project would add more than 4.0 seconds of average critical delay and increase the critical V/C ratio by 0.010 or more during the AM peak hour, and it is projected to have a significant impact based on VTA impact criteria. **(Significant Impact)**

> Santa Clara County's Expressway Plan 2040 Study identifies an interim (near-term) improvement that includes the addition of an eastbound through lane on Homestead Road. With this improvement, intersection operations would improve, but the intersection would continue to operate at LOS F with delays greater than the Cumulative Without Project scenario. The ultimate improvement identified by the County's Expressway Plan 2040 is to grade-separate the intersection. The County designates the grade separation as a Tier 1 improvement. The Project shall pay a fair-share contribution to this improvement. With the mitigation measure the intersection would no longer exist. However, it is unknown when this improvement will be completed. Thus, the impact is considered significant and unavoidable. **(Significant and Unavoidable)**

5.6.1 Cumulative Plus Project Unsignalized Intersection Signal warrants

Per City of Sunnyvale guidelines, the peak hour volume signal warrant from the CA MUTCD was conducted for each unsignalized intersection. The results of the signal warrant analysis for all unsignalized intersections under Cumulative Plus Project Conditions are summarized in **Table 25.**

None of unsignalized intersections meet the CA MUTCD peak hour volume warrant, except for the Washington Avenue/Frances Street intersection (#38) during the PM peak hour; thus, the intersection is considered to have a significant impact based on the City's impact threshold[6]. Since the intersection also met the City's LOS impact threshold, the mitigation measures for this intersection is discussed above under **Section 5.5.**

[6] The CA MUTCD peak hour volume warrant should not serve as the only basis for deciding whether and when to install a signal. To reach such a decision, the full set of warrants should be investigated based on field-measured, rather than forecast, traffic data and a thorough study of traffic and roadway conditions by an experienced engineer. Furthermore, the decision to install a signal should not be based solely upon the warrants, since the installation of signals can lead to certain types of collisions. The responsible state or local agency should undertake regular monitoring of actual traffic conditions and accident data, and timely re-evaluation of the full set of warrants in order to prioritize and program intersections for signalization

TABLE 25: CUMULATIVE PLUS PROJECT CONDITIONS UNSIGNALIZED INTERSECTION SIGNAL WARRANTS

Intersection Name		Peak Hour[1]	Signal Warrant Met?[2]
5	SR-85 NB On-Ramp-Easy Street/ Central Expressway	AM PM	No No
34	Washington Avenue/ Aries Way	AM PM	No No
38	Washington Avenue/ Frances Street	AM PM	No **Yes**
39	Murphy Avenue/ Washington Avenue	AM PM	No No
40	Iowa Avenue/ Murphy Avenue	AM PM	No No
64	Central Expressway WB Off-Ramp/ Arques Avenue	AM PM	No No

Notes:
1. AM = morning peak hour (between 7:00 and 9:00 AM), PM = evening peak hour (between 4:00 and 6:00 PM).
2. Peak hour volume traffic signal warrant analysis (as described in the California Manual on Uniform Traffic Control Devices) was conducted for all non-signalized intersections to determine significant impacts. **Yes** = signal warrant is met; No = signal warrant is not met.

Source: Fehr & Peers, March 2019.

6.0 CUMULATIVE PLUS REDUCED PROJECT CONDITIONS

The City of Sunnyvale also developed a reduced Project description with the intent of reducing Project related transportation impacts. First, the method used to estimate the amount of traffic generated by the reduced Project is described. Then, the results of the intersection level of service calculations for Cumulative Plus Reduced Project Conditions are presented. Cumulative Plus Reduced Project Conditions are defined as Cumulative Conditions plus traffic generated by the reduced Project. Intersection impacts under this scenario are identified by comparing the level of service results under Cumulative Plus Reduced Project Conditions to those under Cumulative No Project Conditions.

For this section, only intersections with significant impacts under Cumulative Plus Project Conditions were analyzed.

6.1 REDUCED PROJECT DESCRIPTION

Table 26 shows the land use mix for the reduced Project. The reduced Project has fewer residential units and square feet of office space than the Project. The reduced Project has the same amount of commercial space as the Project.

TABLE 26: REDUCED PROJECT LAND USE MIX

Land Use	Project Description	Reduced Project Description
Residential (units)	843	520
Commercial (square feet)	260,063	260,063
Office (square feet)	860,624	408,000

Source: City of Sunnyvale, March 2019.

6.2 REDUCED PROJECT TRAFFIC ESTIMATES

6.2.1 Trip Generation

The amount of traffic anticipated to be added to the surrounding roadway system by the reduced Project was estimated by subtracting the amount of traffic estimated by the existing uses from the amount of traffic generated by the proposed uses in **Table 2**. The vehicle trips generated by the existing and proposed uses were estimated based on data published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual,* 10th Edition (2017). Additionally, transit reductions and mixed-use reductions were applied per VTA TIA Guidelines.

Detailed trip generation estimates for the reduced Project are presented in **Appendix C**. As outlined in **Table 27**, the reduced Project is estimated to generate 8,142 net new daily trips, 596 net new AM peak hour trips (423 inbound and 173 outbound), and 855 PM peak hour trips (298 inbound and 557 outbound). The reduced Project generates 590 fewer net AM peak hour trips and 569 fewer net PM peak hour trips than the Project.

TABLE 27: DOWNTOWN SPECIFIC PLAN REDUCED PROJECT NET NEW VEHICLE TRIP GENERATION ESTIMATES & COMPARISON

Project Scenario	Daily	AM Peak Hour			PM Peak Hour		
	Trips	In	Out	Total	In	Out	Total
Project Description (A)	**13,250**	**870**	**316**	**1,186**	**430**	**994**	**1,424**
Reduced Project Description (B)	**8,142**	**423**	**173**	**596**	**298**	**557**	**855**
Difference (A – B)	*(5,108)*	*(447)*	*(143)*	*(590)*	*(132)*	*(437)*	*(569)*

Notes:
Sources: Fehr & Peers (2019), *ITE Trip Generation Manual*, 10th edition (2017).

6.2.2 Trip Distribution and Assignment

The same trip distribution patters as for the Project (**Figure 7**) were applied for the reduced Project scenario**.** Project trips were assigned to the roadway network based on the trip distribution patterns. The trip assignment was added to the Cumulative No Project volumes (**Figure 12**) to establish volumes under Cumulative Plus Reduced Project Conditions.

6.3 CUMULATIVE PLUS REDUCED PROJECT INTERSECTION LEVELS OF SERVICE

Table 28 shows the delays, levels of service, and impact criteria metrics for the study intersections under Cumulative No Project and Cumulative Plus Reduced Project Conditions. Only intersections with significant impacts under Cumulative Plus Project Conditions were included in this analysis. **Appendix B** contains the corresponding calculation sheets. The results indicate that all study intersections operate at acceptable levels of service (generally LOS D or better for City intersections and LOS E or better for regionally significant and CMP intersections) under Cumulative Plus Reduced Project Conditions during the AM and PM peak hours except:

- Intersection 20: Hollenbeck Avenue / Fremont Avenue (Sunnyvale) (PM peak hour)
- Intersection 26: Mathilda Avenue / Indio Avenue (Sunnyvale) (PM peak hour)
- Intersection 27: Mathilda Avenue / California Avenue (Sunnyvale) (AM and PM peak hours)
- Intersection 29: Mathilda Avenue / Washington Avenue (Sunnyvale) (AM and PM peak hours)
- Intersection 38: Washington Avenue / Frances Street (Sunnyvale) (PM peak hour)
- Intersection 52: Sunnyvale-Saratoga Road / Remington Drive (Sunnyvale) (AM and PM peak hours)
- Intersection 53: Sunnyvale-Saratoga Road / Fremont Avenue (Sunnyvale) (PM peak hour)
- Intersection 55: De Anza Boulevard / Homestead Road (Cupertino) (AM and PM peak hours)

- Intersection 60: Fair Oaks Avenue / Duane Avenue (Sunnyvale) (PM peak hour)
- Intersection 76: Lawrence Expressway / Homestead (CMP) AM peak hour

Compared to the Project the reduced Project has six fewer intersection LOS impacts. Specifically, with the reduced Project, impacts are no longer identified at the following intersections.

- Intersection 19: Hollenbeck Avenue / Remington Drive (Sunnyvale)
- Intersection 30: Mathilda Avenue / McKinley Avenue (Sunnyvale)
- Intersection 33: Mathilda Avenue / El Camino Real (CMP/Sunnyvale)
- Intersection 38: Washington Avenue / Frances Street (Sunnyvale)
- Intersection 55: De Anza Boulevard / Homestead Road (Cupertino)
- Intersection 60: Fair Oaks Avenue / Duane Avenue (Sunnyvale)
- Intersection 76: Lawrence Expressway / Homestead Road (CMP)

The reduced Project would continue to have a significant PM peak hour impact at the Mathilda Avenue/Indio Avenue (#26) and Sunnyvale-Saratoga Road / Fremont Avenue (#53) intersections; though the reduced Project would not have the AM peak hour impact at these two intersections that the proposed Project would have.

The same mitigation measures as identified in under Cumulative Plus Project conditions (**Section 5.5**) would be applicable for the reduced Project scenario for the intersections that would continue to have significant impacts.

None of unsignalized intersections meet the CA MUTCD peak hour volume warrant, except for the Washington Avenue/Frances Street intersection (#38) during the PM peak hour; thus, the intersection is considered to have a significant impact based on the City's impact threshold[7]. Since the intersection also met the City's LOS impact threshold, the mitigation measures for this intersection is discussed above under **Section 5.5.**

[7] The CA MUTCD peak hour volume warrant should not serve as the only basis for deciding whether and when to install a signal. To reach such a decision, the full set of warrants should be investigated based on field-measured, rather than forecast, traffic data and a thorough study of traffic and roadway conditions by an experienced engineer. Furthermore, the decision to install a signal should not be based solely upon the warrants, since the installation of signals can lead to certain types of collisions. The responsible state or local agency should undertake regular monitoring of actual traffic conditions and accident data, and timely re-evaluation of the full set of warrants in order to prioritize and program intersections for signalization

TABLE 28: CUMULATIVE AND CUMULATIVE PLUS REDUCED PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

Intersection Name		Intersection Control[1]	LOS Standard[2]	Peak Hour[3]	Cumulative		Cumulative Plus Reduced Project			
					Delay[4]	LOS[5]	Delay[4]	LOS[5]	Change in Critical V/C[6]	Change in Average Critical Delay[7]
19	Hollenbeck Avenue / Remington Drive	Signal	D	AM PM	33.2 50.2	C- D	34.3 54.4	C- D-	0.013 0.022	1.7 5.7
20	Hollenbeck Avenue / Fremont Avenue	Signal	D	AM PM	49.1 54.7	D D-	49.3 **55.4**	D **E+**	0.010 0.013	0.4 1.1
26	Mathilda Avenue / Indio Avenue	Signal	E	AM PM	**180.6** **170.1**	**F** **F**	**181.9** **174.8**	**F** **F**	0.008 **0.018**	3.9 **8.3**
27	Mathilda Avenue / California Avenue	Signal	E	AM PM	**100.0** **94.4**	**F** **F**	**103.0** **104.2**	**F** **F**	**0.012** **0.027**	**5.3** **12.6**
29	Mathilda Avenue / Washington Avenue	Signal	E	AM PM	**85.2** **82.8**	**F** **F**	**90.7** **95.5**	**F** **F**	**0.022** **0.042**	**9.0** **18.8**
30	Mathilda Avenue / McKinley Avenue	Signal	E	AM PM	23.8 25.3	C C	36.5 32.0	D+ C	0.072 0.044	15.5 7.2
33	Mathilda Avenue / El Camino Real	Signal	E	AM PM	71.1 65.7	E E	77.6 68.1	E- E	0.026 0.014	8.2 4.0
38	Washington Avenue / Frances Street	SSSC	D	AM PM	11.2 **37.6**	B **E**	11.5 **45.3**	B **E**	0.013 0.054	0.0 1.4
52	Sunnyvale-Saratoga Road / Remington Drive	Signal	E	AM PM	**83.2** **80.2**	**F** **F**	**87.6** **85.3**	**F** **F**	**0.014** **0.021**	**5.7** **7.5**
53	Sunnyvale-Saratoga Road / Fremont Avenue	Signal	E	AM PM	72.9 79.1	E E-	76.7 **83.7**	E- **F**	0.016 0.018	6.1 6.6
55	De Anza Boulevard / Homestead Road	Signal	D	AM PM	**62.5** **66.1**	**E** **E**	**78.6** **79.1**	**E-** **E-**	0.002 0.011	1.0 3.1
60	Fair Oaks Avenue / Duane Avenue	Signal	D	AM PM	41.8 **60.0**	D **E**	42.0 **61.0**	D **E**	0.002 0.008	0.4 2.4
76	Lawrence Expressway / Homestead Road	Signal	E	AM PM	**80.6** **104.5**	**F** **F**	**82.3** **106.1**	**F** **F**	0.006 0.006	3.0 2.9

Notes: **Bold text** indicates intersection operates at unacceptable level of service. **Bold and highlighted text** indicates a significant impact.

1. Signal = Signalized Intersection; SSSC = Side-Street Stop Controlled Intersection.
2. LOS Standard of intersection's jurisdiction.
3. AM = morning peak hour (between 7:00 and 9:00 AM), PM = evening peak hour (between 4:00 and 6:00 PM).
4. Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections. Total control delay for the worst movement is presented for side-street stop-controlled intersections.
5. LOS = Level of Service calculations conducted using the TRAFFIX level of service analysis software package, which applies the methodology described in the *2000 HCM*.
6. Change in critical volume-to-capacity ratio (V/C) between No Project and Plus Reduced Project Conditions.
7. Change in critical movement delay between No Project and Plus Reduced Project Conditions.

Source: Fehr & Peers, March 2019.

7.0 SITE ACCESS, ON-SITE CIRCULATION, PARKING, MULTI-MODAL TRANSPORTATION

This chapter discusses accessing and navigating the Project site for all travel modes. Topics discussed include site-access, on-site circulation, and parking.

7.1 SITE ACCESS & ON-SITE CIRCULATION

The site plans for each block are marked-up on **Appendix F**, indicate the locations of the Project driveways and the circulation system for vehicular and pedestrian traffic. The driveways and site circulation for each block is discussed in their respective sections below.

7.1.1 Block 1: 100 Altair Way

100 Altair Way has one vehicle driveway on Aries Way. The Pedestrian access point (main building entrance) is located on the north side of the site. Sidewalks would be provided around the site perimeter. The design of the building driveway adequately accommodates vehicle ingress and egress to the site. Fehr & Peers recommends the following adjustments to the current project site plan to better accommodate vehicle and pedestrian circulation.

1) The project should add a stop sign, if possible, at the exit of the Project driveway. This would ensure that exiting vehicles stop to check for adequate gaps in traffic before exiting the parking structure.
2) The project applicant should consider adding an enhanced pedestrian crosswalk across Altair Way to Plaza del Sol for pedestrians and bicyclists who are traveling between the Project site and the Sunnyvale Caltrain station and the Sunnyvale Transit Center. Currently, the closest crosswalk is at the intersection of Taaffe Street/Olson Way, which is not along the desired path line to/from the transit centers. Since vehicles coming around the corner between Aries Way and Taaffe Street may have trouble seeing pedestrians crossing, a high visibility crosswalk is recommended at the proposed pedestrian crosswalk location. When traffic volumes on Altair Way increase, pedestrian-actuated warning systems such as a Rectangular Rapid Flashing Beacon should be considered.
3) The site plan should label the driveway and aisle dimensions to demonstrate that the plan satisfies the minimum driveway width of 20 feet for a two-way driveway and 24 feet for a two-way aisle.

7.1.2 Block 18 Sub-block 1: 300 Mathilda Avenue

300 Mathilda Avenue has three site-access driveways. One full-access vehicle driveway is on McKinley Avenue where an extension of Aries Way is proposed. There are also two right-in-right-out driveways: one

on Mathilda Avenue between Iowa Avenue and McKinley Avenue, and one on Iowa Avenue between Mathilda Avenue and Taaffe Street. All three site-access driveways lead to the proposed below-ground parking garage and surface parking lot. Pedestrian access to the development would be provided via sidewalks on South Mathilda Avenue, West McKinley Avenue, and the proposed extension of Aries Way. Fehr & Peers recommends the following adjustments to the current conceptual site plan to better accommodate vehicle and pedestrian circulation.

1) A stop sign should be added, if possible, at the exit of the driveways and ramp from the parking structure. This would ensure that exiting vehicles stop to check for adequate gaps in traffic before exiting.

2) The site plan should label the driveway and aisle dimensions to demonstrate that the plan satisfies the minimum driveway width of 20 feet for a two-way driveway and 24 feet for a two-way aisle.

7.1.3 Block 18 Sub-block 2: 300 West Washington Avenue

300 West Washington Avenue has two site-access driveways. One full-access driveway is on the Aries Way extension south of Washington Street, and a second full access driveway is on Taaffe Street near the corner with Washington Avenue. Pedestrian access points are near each of the site-access driveway. Sidewalks are provided along building frontages at Aries Way extension, Washington Avenue, and Taaffe Street, and all pedestrian crossings near the building are enhanced by decorative pavers. The design of the building driveways adequately accommodates vehicle, pedestrian and bicyclist ingress and egress to the site.

7.1.4 Block 18 Sub-block 3: Macy’s & Redwood Square

Block 18 Sub-block 3 is divided by an east-west access road into two distinct building groups: the buildings north of the access road are collectively labeled “Macy’s”, and the buildings south of the access road are collectively labeled “Redwood Square.” (A second access road runs in the north-south direction in the middle of the Macy’s buildings, terminating at the east-west access road. The Macy’s Conceptual Site Plan identifies this north-south road as “One Way,” but it is unclear which movements are restricted.) Macy’s has two full access driveways on the east-west access road. One driveway is east of the north-south access road, and the other driveway is west of the north-south access road. Additionally, Redwood Square has two full access driveways on the east-west access road. Again, one driveway is east of the north-south access road, and the other driveway is west of the north-south access road. (Redwood Square’s eastern driveway is for deliveries only.)

All frontages of Macy’s and Redwood Square have sidewalks. The primary pedestrian access points for Macy’s are along Washington Avenue and along the north-south access road. (Some minor access points are along Taaffe Street, Murphy Avenue, and the east-west access road.) The primary pedestrian access points for Redwood Square are along Taaffe Street, the east-west roadway, and accessing an open pavilion on the south side of the block. (Some minor access points are along McKinley Avenue and the east-west access road.) Parallel parking and passenger pick-up/drop-off stalls are also provided along Washington Avenue and along the north-south access road for Macy's and along Taaffe Street for Redwood Square. Most pedestrian crossings near Macy's and Redwood Square are enhanced by decorative pavers, including all pedestrian crossings at intersections and two mid-block crossing on Taaffe Street. One mid-block pedestrian crossing along Murphy Avenue has continental striping and yield signing and striping.

Fehr & Peers recommends the following adjustments to the current conceptual site plan to better accommodate vehicle and pedestrian circulation.

1) The site plan should label which movements are restricted on the north-south access road. (I.e., is it a northbound road or a southbound road?)

2) The project should add a stop sign, if possible, at the exit of the Project driveways. This would ensure that exiting vehicles stop to check for adequate gaps in traffic before exiting the parking structure. The project should also consider adding stop signs at the intersection of the east-west and north-south access roads.

3) The project should consider adding an enhanced pedestrian crosswalk across the east-west access road for pedestrians and bicyclists who are going between Macy's and Redwood Square. The site plan does not identify where new crosswalks will be installed, if any. If traffic volumes on the east-west access road increase, pedestrian-actuated warning systems such as a Rectangular Rapid Flashing Beacon should be considered.

7.1.5 Block 18 Sub-block 6

Block 18 Sub-block 6 has two site-access driveways. One full access driveway is on Sunnyvale Avenue between Washington Avenue and McKinley Avenue, and a second full access driveway is on McKinley Avenue between Murphy Avenue and Sunnyvale Avenue. Pedestrian access points are near each of the site-access driveways. Two additional pedestrian access points are on Washington Avenue and on Murphy Avenue. Sidewalks are provided along all building frontages, and all pedestrian crossings near the building are enhanced by decorative pavers. The design of the building driveways adequately accommodates vehicle, pedestrian and bicyclist ingress and egress to the site. Fehr & Peers recommends the following adjustments be made to the current project site plan in order to better accommodate vehicle and pedestrian circulation.

1) The project should add a midblock crosswalk on Sunnyvale Avenue between Washington Avenue and McKinley Avenue. The distance between the two existing crosswalks is approximately 580 feet, and pedestrians and bicyclists may be tempted to cross illegally rather than go out of their way to the nearest crosswalk. Adding an additional crosswalk at between Washington Avenue and McKinley Avenue would provide pedestrians and bicyclists an opportunity to cross safely.

2) The project should add a stop sign, if possible, at the exit of the driveways. This would ensure that exiting vehicles stop to check for adequate gaps in traffic before exiting the parking structure.

7.1.6 Block 22: Murphy Square

Murphy Square has one vehicle driveway on Evelyn Avenue near the corner with Sunnyvale Avenue. The main pedestrian access points to Murphy Square is on the northwest corner of the intersection of Evelyn Avenue and Sunnyvale Avenue (the southwest corner of the building). The design of the building driveway adequately accommodates vehicle, pedestrian and bicyclist ingress and egress to the site.

These comments are illustrated on the site plan in **Appendix F.**

7.2 PARKING

This section of the report discusses both vehicle and bicycle parking requirements for the Project site.

7.2.1 Vehicle Parking

Chapter 19.28 Downtown Specific Plan District of the City of Sunnyvale Municipal Code guides the parking requirements for the Project site. The minimum parking ratio for multi-family residential studios or 1-bedrooms is 1.5 spaces per unit (1.0 assigned plus 0.5 unassigned) and 2.0 spaces (1.0 assigned and 1.0 unassigned) for multi-family residential units with 2 or more bedrooms. Since the type of residential units is not known at this time, a range of the parking supply requirements are presented. On the low end, this range assumes all residential units have a parking requirement of 1.5 spaces and on the high end all residential units have a parking requirement of 2.0 spaces. For office/retail located within the Downtown Specific Plan District is 1 space per 250 square feet (4 spaces per 1,000 square feet), resulting in 401 spaces for 100,200 square feet of office/retail. The Project vehicle parking supply requirements are summarized in **Table 29**.

TABLE 29: VEHICLE PARKING SUPPLY

Land Use	Project Size	Parking Rate (per unit or 1,000 s.f.)	Required Minimum Vehicle Parking Supply
Residential (units)	823	1.5 to 2.0	1,235 to 1,646
Commercial (square feet)	79,063	4.0	317
Office (square feet)	852,624	4.0	3,411
Total			**4,963 to 5,374**

Source: Fehr & Peers, March 2019. Sunnyvale Municipal Code Chapter 19.28

Based on the City's parking requirements within the Downtown Specific Plan District, the Project will be required to provide between 4,963 and 5,374 parking spaces, depending on the type of residential units provided.

7.2.2 Bicycle Parking

The City of Sunnyvale (Zoning Code 19.46.150) provides both Class I and Class II bicycle parking requirements. Class I facilities protect the entire bicycle from theft, vandalism, and inclement weather and are appropriate for long-term storage. Examples include bike lockers, rooms with key access, guarded parking areas, and valet/check-in parking. Class II parking facilities include bicycle racks to which the frame and at least one wheel can be secured with a user-provided lock.

The City of Sunnyvale requires residential uses to provide one bicycle parking space for every four units, with a minimum of 4 spaces, and non-residential uses to provide five percent of the total number of vehicular parking spaces. All residential bicycle parking must be secure parking (Class I) and seventy-five percent of the office/retail parking must be Class I bicycle parking. The project's bicycle requirements are summarized in **Table 30.**

TABLE 30: BICYCLE PARKING SUPPLY

Land Use	Project Size	Total Required Bicycle Parking Supply	Class I Parking Supply	Class II Parking Supply
Residential (units)	823	206	206	-
Commercial (square feet)	79,063	16	4	12
Office (square feet)	852,624	171	43	128
Total		**393**	**253**	**140**

Source: Fehr & Peers, March 2019. Sunnyvale Municipal Code Chapter 19.46

Based on City of Sunnyvale requirements, the Project will be required to provide at least 393 bicycle parking spaces, 253 of which should be Class I storage facilities such as a bike locker, and the remaining 140 spaces Class II facilities, such as a bicycle rack.

7.3 PEDESTRIAN AND BICYCLE IMPACTS

Pedestrian and bicycle impacts are considered significant if the Project would potentially disrupt existing pedestrian and bicycle facilities, eliminate existing pedestrian and/or bicycle facilities, interfere with planned pedestrian and bicycle facilities, increase conflicts between drivers, pedestrians, and/or bicyclists, or create inconsistencies or conflicts with adopted pedestrian and bicycle plans, guidelines, policies, or standards.

The site access and on-site circulation section discusses specific pedestrian and bicycle recommendations for each of the site plans. However, as the Project relates surrounding pedestrian and bicycle network, the Project would not meet the City's criteria for pedestrian and bicycle impacts and not mitigation measures are required.

7.4 TRANSIT VEHICLE DELAY

Transit vehicles operating in the Project vicinity could incur additional delay due to increased auto congestion. The affected corridors around the Project site include El Camino Real, Mathilda Avenue, Sunnyvale Avenue, Evelyn Avenue, Fair Oaks Avenue, Wolfe Road, Frances Street and Washington Avenue. The through and turning movement delays along these corridors (from the detailed calculation sheets presented in **Appendix B**) were utilized to determine the potential added transit vehicle delay. The difference between the No Project and Plus Project values for Existing, Background, and Cumulative conditions is the added transit vehicle delay. **Table 31** shows the transit delay results and affected corridors for VTA bus routes 22/522, 26, 32, 53, 54, and 55.

TABLE 31: ADDITIONAL TRANSIT VEHICLE DELAY BY ROUTE

VTA Transit Route	Peak Hour	Projected Additional Delay (seconds per vehicle)						Affected Corridors
		Existing Plus Project		Background Plus Project		Cumulative Plus Project		
		NB/WB	SB/EB	NB/WB	SB/EB	NB/WB	SB/EB	
22/522	AM PM	NC NC	NC NC	NC 8	10 NC	NC 28	30 NC	El Camino Real
26	AM PM	NC NC	NC NC	NC 7	NC 9	NC 21	5 20	Fair Oaks Avenue, Wolfe Road
32	AM PM	NC NC	6 NC	6 17	25 14	61 18	36 49	Mathilda Avenue, Evelyn Avenue
53	AM PM	NC 8	NC 5	NC NC	NC 23	NC 8	NC 38	Washington Avenue, Frances Street, Evelyn Avenue, Mathilda Avenue
54	AM PM	27 23	NC 24	51 27	NC 83	148 71	6 147	Mathilda Avenue
55	AM PM	17 6	8 18	33 17	16 51	93 34	31 120	Sunnyvale Avenue, Evelyn Avenue, Frances Street, Washington Avenue

Notes:
NC = The Project was considered to have no change if the increase in travel time was less than five seconds or the travel time improved slightly (due to changes in critical movement changes, lane geometry changes, etc.).
Source: Fehr & Peers, March 2019.

Overall, the added transit delay along each of the study corridors evaluated is about 60 seconds or less, except for transit routes along Mathilda Avenue (Route 54) and Sunnyvale Avenue (Route 55).

The City of Sunnyvale and the VTA do not have adopted standards related to transit corridor performance associated with congestion resulting from new development projects. Per the VTA TIA Guidelines (dated October 2014), *if increased transit vehicle delay is found, the Lead Agency [City of Sunnyvale] should work with VTA to identify feasible transit priority measures near the affected facility and include contributions to any applicable projects that improve transit speed and reliability in the TIA.*

8.0 LEFT-TURN QUEUING ANALYSIS

The addition of Project traffic along the roadway network has the potential to add vehicles to left-turn movements, causing left-turn queues to exceed the turn pocket storage lengths. Queues that exceed the turn pocket storage length have the potential to impede adjacent through traffic movements. Potentially affected study intersections were selected for this evaluation based on where the Proposed Project would add the most left turning vehicles during either the AM or PM peak hour. The following five intersections were selected:

- Mathilda Avenue / Washington Avenue (#29) – Southbound left-turn pocket
- Mathilda Avenue / McKinley Avenue (#30) – Southbound left-turn pocket & Westbound left-turn pocket
- Sunnyvale Avenue / Washington Avenue (#45) – Northbound left-turn & Eastbound left-turn
- Sunnyvale Avenue / McKinley Avenue (#46) – Northbound left-turn
- Sunnyvale Avenue / Iowa Avenue (#47) – Northbound left-turn

Table 32 compares the 95th percentile left-turn queues from TRAFFIX between No Project and Plus Project scenarios under Existing and Background Conditions. Per TIA guidelines, the queuing evaluation is required for only the near-term analysis and was not conducted for Cumulative Conditions. All five intersections have projected 95th percentile queue lengths that exceed the left-turn storage. Recommended improvements are summarized in **Table 32.**

TABLE 32: LEFT-TURN VEHICLE QUEUE ANALYSIS

#	Intersection	Move-ment	Available Storage Length[1] (feet)	Peak Hour	Number of Project Trips Added[5]	Projected Queue Length (feet)[2] Existing (Existing Plus Project)	Projected Queue Length (feet)[2] Background (Background Plus Project)	Improvements
29	Mathilda Avenue/ Washington Avenue	SBL	600	AM	38	325 (375)	450 (500)	No Improvements needed.
				PM	11	350 (375)	500 (525)	
30	Mathilda Avenue/ McKinley Avenue	SBL	400	AM	252	150 **(725)**	250 **(650)**	Implement ITS technologies to improve signal operations and queueing.
				PM	145	150 (400)	300 **(450)**	
45	Sunnyvale Avenue/ Washington Avenue	NBL	100	AM	19	75 **(125)**	**200 (225)**	As part of the Project, the existing driveways on the west side of Sunnyvale Avenue are proposed to be removed. The consolidation of driveways could allow for the removal of the two-way left turn lane and the addition of approximately 200 feet of storage for the northbound left-turn at Washington Avenue. This would not increase the storage capacity to meet the demand. The Project should also include ITS technologies to improve signal operations and queueing.
				PM	14	75 (100)	**225 (250)**	
46	Sunnyvale Avenue/ McKinley Avenue	NBL	160	AM	71	25 (100)	75 (150)	An additional capacity of approximately 150 feet may be available by narrowing the median. This would increase the storage capacity to meet the demand. However, this would require removing the median and trees and the Project should include ITS technologies to improve signal operations and queueing.
				PM	33	125 **(225)**	**250 (350)**	
47	Sunnyvale Avenue/ Iowa Avenue	NBL	150	AM	56	100 **(175)**	150 **(225)**	An additional capacity of approximately 150 feet may be available by converting the entire two-way left-turn (TWLT) lane into a left-turn only lane. This would increase the storage capacity to meet the demand. However, this would limit the accessibility of the TWLT lane for adjacent properties. By maintaining the TWLT lane, excess northbound left-turn queues can still use for storage, while maintaining access to adjacent properties. The Project should also include ITS technologies to improve signal operations and queueing.
				PM	22	125 **(175)**	**275 (300)**	

Notes:

1. Maximum storage length for single lane. Where no pocket exists, the length of the left-turn lane is reported.
2. 95% queue length for single lane with longest queue. Assumes 25 feet per vehicle in queue.

Bold text indicates available storage is exceeded.

Source: Fehr & Peers, March 2019.

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APPENDIX A: EXISTING TRAFFIC COUNTS

Appendix A: Intersection Turning Movement Counts													
		AM Peak Hour											
Int ID	**Date Collected**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**
01. Ellis Street / Middlefield Road	October 2018	0	555	544	257	391	0	0	0	0	130	0	100
02. SR 237 WB and Middlefield Road	May 2017	137	964	0	0	371	65	0	0	0	148	133	389
03. SR 237 EB and Middlefield Road	May 2017	0	786	110	226	297	0	318	284	216	0	0	0
04. SR-85 SB Off-Ramp / Central Expressway	October 2018	0	0	0	294	0	41	0	900	0	0	1157	0
05. SR-85 NB On-Ramp - Easy Street / Central Expressway	October 2018	0	0	0	0	0	24	0	1171	0	0	1147	606
06. Whisman Station Drive / Central Expressway	October 2018	0	0	0	44	0	300	187	1048	0	0	1408	88
07. Ferguson Drive / Central Expressway	October 2018	0	0	0	32	0	88	75	996	0	1	1409	25
08. Bernardo Avenue / Central Expressway	October 2018	0	0	0	5	0	14	106	933	0	2	1465	110
09. Moorpark Way / Evelyn Avenue	October 2018	36	0	85	0	0	0	1	258	140	355	832	0
10. Bernardo Avenue / Evelyn Avenue	October 2018	596	0	164	0	0	0	3	243	107	60	614	0
11. Sylvan Avenue / El Camino Real	October 2018	574	274	35	58	39	243	171	680	379	86	1516	122
12. Bernardo Avenue / El Camino Real	October 2018	294	214	86	80	154	425	149	501	48	96	1296	108
13. Mary Avenue and Central Expressway	May 2017	569	504	535	55	117	120	106	748	153	175	1918	231
14. Mary Avenue and Evelyn Avenue	December 2016	88	1028	28	56	347	179	156	153	26	56	412	260
15. Mary Avenue / Washington Avenue	November 2017	15	968	53	19	277	20	75	41	21	59	47	44
16. Mary Avenue and El Camino Real	December 2016	168	668	76	102	263	164	145	464	68	95	1183	236
17. Hollenbeck Avenue-Pastoria Aveue / Washington Avenue	December 2017	23	101	95	15	67	14	4	114	19	89	124	10
18. El Camino Real and Hollenbeck Avenue - Pastoria Avenue	December 2016	154	306	267	54	194	81	52	540	59	133	1278	64
19. Hollenbeck Avenue / Remington Drive	October 2018	45	539	99	54	336	52	49	253	39	81	302	81
20. Hollenbeck Avenue / Fremont Avenue	May 2017	204	354	215	90	176	145	100	470	75	134	756	128
21. Hollenbeck Avenue / Cascade Drive	October 2018	53	642	28	6	360	52	71	57	43	31	117	39
22. Mathilda Avenue and SR 237 WB	December 2017	121	2489	0	0	237	106	0	0	0	599	31	199
23. Mathilda Avenue and SR 237 EB	December 2017	0	1863	822	67	906	0	739	0	40	0	0	0
24. Mathilda Avenue and Ross Drive	December 2017	108	2446	94	32	821	90	36	8	37	226	52	189
25. Mathilda Avenue and Maude Avenue	December 2017	598	2283	55	130	834	401	103	90	77	159	390	278
26. Mathilda Avenue and Indio Way	December 2017	61	2345	150	25	853	65	20	2	218	114	9	517
27. Mathilda Avenue and California Avenue	December 2017	127	2371	294	57	1025	238	57	14	87	94	95	189
28. Mathilda Avenue Southbound Off-Ramp and Evelyn Avenue	April 2017	61	0	87	0	0	0	0	245	0	0	584	0
29. Mathilda Avenue and Washington Avenue	December 2017	19	2384	65	175	670	158	194	56	21	43	65	162
30. Mathilda Avenue and McKinley Avenue	December 2017	26	2679	66	41	631	37	61	16	10	31	1	104
31. Mathilda Avenue and Iowa Avenue	December 2017	14	2683	41	20	632	40	49	37	29	18	25	44
32. Mathilda Avenue and Olive Avenue	December 2017	50	2561	22	25	553	79	80	46	23	16	96	75
33. Mathilda Avenue and El Camino Real	December 2017	317	1761	16	141	341	129	383	422	74	14	976	294
34. Washington Avenue and Aries Way	April 2017	0	0	7	0	0	31	0	203	44	0	219	10
35. Washington Avenue and Taaffe Street	April 2017	13	10	12	5	9	84	64	103	40	20	128	32
36. Iowa Avenue and Taaffe Street	December 2017	9	17	8	13	5	41	40	40	12	7	46	11
37. Evelyn Avenue and Frances Street	April 2017	81	10	32	61	9	66	34	205	55	57	454	82
38. Washington Avenue and Frances Street	December 2017	0	0	0	22	0	63	64	74	0	0	127	45
39. Murphy Avenue / Washington Avenue	May 2018	9	1	2	5	4	10	10	61	10	1	137	14
40. Iowa Avenue and Murphy Avenue	December 2017	0	0	23	0	0	5	1	36	8	0	51	62
41. Sunnyvale Avenue / Maude Avenue	October 2018	140	0	86	0	0	0	0	203	90	45	416	0
42. Sunnyvale Avenue / Arques Avenue	October 2018	9	122	16	4	147	2	1	2	30	108	14	25
43. Sunnyvale Avenue and California Avenue	April 2017	65	143	27	14	184	85	24	41	30	39	178	6
44. Sunnyvale Avenue and Evelyn Avenue	April 2017	86	180	25	21	183	117	65	201	40	42	391	60
45. Sunnyvale Avenue and Washington Avenue	April 2017	76	241	11	6	201	37	25	15	32	10	59	22
46. Sunnyvale Avenue and McKinley Avenue	April 2017	37	309	21	7	200	29	14	12	10	13	50	21
47. Sunnyvale Avenue and Iowa Avenue	April 2017	89	341	6	2	204	19	26	7	34	0	0	0
48. Sunnyvale Avenue and Olive Avenue	April 2017	30	396	26	11	223	9	5	37	21	69	85	38
49. Sunnyvale Avenue and Old San Francisco Road	December 2017	0	339	204	37	248	11	0	0	7	0	0	139
50. Sunnyvale Avenue and El Camino Real	April 2017	67	303	47	48	176	45	140	417	42	72	1242	141
51. Mathilda Avenue and Talisman Drive	December 2016	26	2117	496	35	452	5	19	5	27	257	2	24
52. Sunnyvale-Saratoga Road and Remington Drive	December 2016	143	2339	315	32	599	99	150	280	96	366	237	48
53. Sunnyvale-Saratoga Road and Fremont Avenue	December 2016	312	2251	121	148	682	242	280	433	140	186	659	166

54. Sunnyvale Avenue / Alberta Avenue - Harwick Way	October 2018	67	2270	34	44	992	36	116	50	144	109	112	197
55. De Anza Boulevard and Homestead Road	May 2017	390	1844	171	153	1179	99	265	292	362	506	608	333
56. De Anza Boulevard and I-280 Northbound Ramps	December 2017	418	1803	0	0	1516	610	0	0	0	575	1	600
57. De Anza Boulevard and I-280 Southbound Ramps	December 2017	0	1571	407	594	1492	0	636	2	782	0	0	0
58. Fair Oaks Avenue and US 101 Northbound Ramp	April 2017	533	785	0	0	729	494	0	0	0	256	0	269
59. Fair Oaks Avenue and Ahwanee Avenue	April 2017	60	1311	24	32	801	294	229	26	55	35	69	229
60. Fair Oaks Avenue and Duane Avenue	April 2017	8	965	201	113	642	46	120	117	20	202	121	210
61. Fair Oaks Avenue and Wolfe Road	April 2017	0	483	0	0	311	622	757	0	7	0	0	0
62. Fair Oaks Avenue and Maude Avenue	May 2017	122	631	14	0	537	93	86	86	108	11	147	2
63. Fair Oaks Avenue and Arques Avenue	December 2017	234	595	149	21	520	113	54	83	49	192	210	39
64. Central Expressway WB Off-Ramp / Arques Avenue	October 2018	95	0	7	0	0	0	0	328	0	0	236	0
65. Fair Oaks Avenue and California Avenue	December 2017	86	974	295	37	628	79	34	41	27	0	0	0
66. Fair Oaks Avenue and Evelyn Avenue	December 2017	56	1015	45	25	531	124	162	116	46	48	332	188
67. Fair Oaks Avenue and Old San Francisco Road	December 2017	61	732	106	47	474	85	104	120	55	156	290	151
68. Fair Oaks Avenue and El Camino Real	May 2017	68	588	113	94	357	119	128	378	91	166	1057	149
69. Wolfe Road and Old San Francisco Road	December 2017	71	1518	60	32	383	97	115	222	60	111	332	74
70. Wolfe Road and El Camino Real	May 2017	284	1068	25	71	543	57	53	288	213	373	950	274
71. Wolfe Road and Fremont Avenue	May 2017	115	929	24	21	601	490	311	194	170	6	41	105
72. Lawrence Expressway and Monroe Street	May 2018	113	3529	67	123	901	169	390	226	228	218	364	492
73. Lawrence Expressway and El Camino Real	January 2018	537	48	219	163	25	119	156	704	170	223	1260	233
74. Lawrence Expressway / Benton Street	October 2018	80	3187	119	140	1858	51	136	146	158	250	275	471
75. Lawrence Expressway / Lochinvar Avenue	October 2018	29	3294	106	70	2172	26	102	36	60	87	35	169
76. Lawrence Expressway / Homestead Road	January 2018	225	2936	176	141	1354	565	235	275	107	344	759	243
77. Lawrence Expressway / Lehigh Drive	October 2018	464	3541	10	7	1556	300	108	0	158	53	12	54
78. Lawrence Expressway / Pruneridge Avenue	January 2018	110	3361	139	100	1427	52	111	130	117	367	295	527
79. Calabazas Boulevard / El Camino Real	October 2018	14	76	95	73	58	103	41	615	5	54	1487	90

Int ID	Date Collected	PM Peak Hour											
		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
01. Ellis Street / Middlefield Road	October 2018	0	585	119	110	497	0	0	0	0	416	0	350
02. SR 237 WB and Middlefield Road	May 2017	129	208	0	0	1140	247	0	0	0	233	357	287
03. SR 237 EB and Middlefield Road	May 2017	0	266	233	459	854	0	81	271	141	0	0	0
04. SR-85 SB Off-Ramp / Central Expressway	October 2018	0	0	0	372	0	18	0	1264	0	0	1225	0
05. SR-85 NB On-Ramp - Easy Street / Central Expressway	October 2018	0	0	0	0	0	22	0	1636	0	0	1175	326
06. Whisman Station Drive / Central Expressway	October 2018	0	0	0	44	0	240	261	1369	0	0	1263	204
07. Ferguson Drive / Central Expressway	October 2018	0	0	0	69	0	80	123	1147	0	0	1426	69
08. Bernardo Avenue / Central Expressway	October 2018	0	0	0	72	0	106	38	1305	0	5	1299	16
09. Moorpark Way / Evelyn Avenue	October 2018	16	0	250	0	0	0	1	1372	154	114	304	0
10. Bernardo Avenue / Evelyn Avenue	October 2018	143	0	102	0	0	0	8	308	660	189	278	0
11. Sylvan Avenue / El Camino Real	October 2018	338	110	90	268	148	157	172	1932	395	59	974	99
12. Bernardo Avenue / El Camino Real	October 2018	153	177	85	100	319	224	353	1467	203	175	782	115
13. Mary Avenue and Central Expressway	May 2017	212	115	605	377	772	210	39	1527	621	686	1251	18
14. Mary Avenue and Evelyn Avenue	December 2016	31	369	38	193	1170	261	296	419	82	68	241	121
15. Mary Avenue / Washington Avenue	November 2017	52	316	68	59	1084	54	34	95	35	71	73	24
16. Mary Avenue and El Camino Real	December 2016	101	219	87	184	699	180	201	1381	190	170	944	121
17. Hollenbeck Avenue-Pastoria Aveue / Washington Avenue	December 2017	32	57	54	47	160	8	10	188	29	126	145	15
18. El Camino Real and Hollenbeck Avenue - Pastoria Avenue	December 2016	124	157	151	93	362	132	103	1429	157	308	866	77
19. Hollenbeck Avenue / Remington Drive	October 2018	25	310	148	78	504	65	30	286	48	111	242	78
20. Hollenbeck Avenue / Fremont Avenue	May 2017	89	240	180	143	388	121	191	1038	174	215	474	152
21. Hollenbeck Avenue / Cascade Drive	October 2018	27	428	23	16	715	58	55	56	56	25	31	21
22. Mathilda Avenue and SR 237 WB	December 2017	74	484	0	0	1428	456	0	0	0	583	14	41
23. Mathilda Avenue and SR 237 EB	December 2017	0	474	617	335	2075	0	111	10	153	0	0	0
24. Mathilda Avenue and Ross Drive	December 2017	53	927	391	213	1978	65	70	48	147	92	7	59
25. Mathilda Avenue and Maude Avenue	December 2017	124	893	105	299	2015	135	470	374	623	105	101	110
26. Mathilda Avenue and Indio Way	December 2017	22	895	114	61	2627	46	36	0	494	103	0	86
27. Mathilda Avenue and California Avenue	December 2017	83	959	258	210	2521	273	119	152	281	69	35	108
28. Mathilda Avenue Southbound Off-Ramp and Evelyn Avenue	April 2017	93	0	109	0	0	0	0	450	0	0	338	0

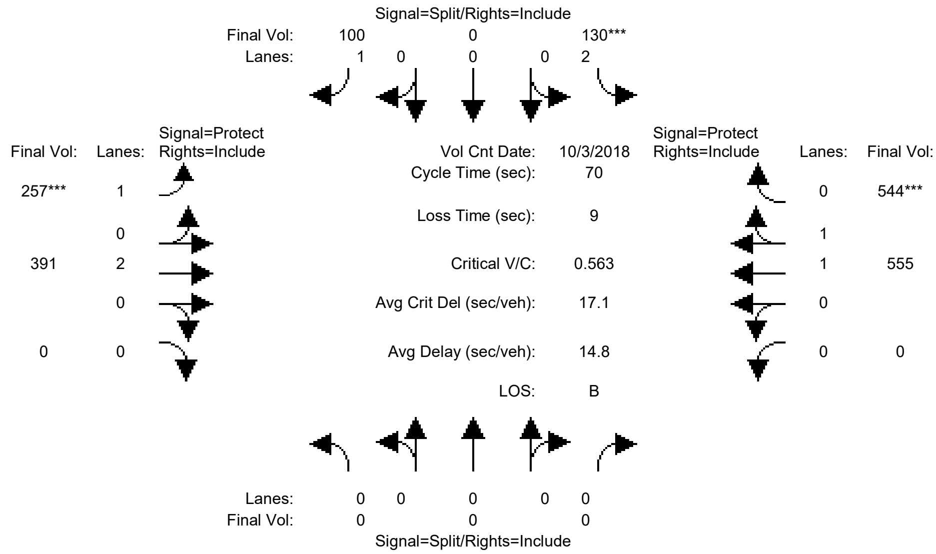
29. Mathilda Avenue and Washington Avenue	December 2017	46	796	57	284	2416	247	136	167	42	65	61	138
30. Mathilda Avenue and McKinley Avenue	December 2017	26	797	49	77	2259	55	80	50	60	79	0	88
31. Mathilda Avenue and Iowa Avenue	December 2017	35	634	37	66	2386	33	53	85	49	65	50	49
32. Mathilda Avenue and Olive Avenue	December 2017	46	676	37	60	2358	107	104	117	110	39	70	52
33. Mathilda Avenue and El Camino Real	December 2017	224	375	58	503	1706	279	182	1276	181	86	776	157
34. Washington Avenue and Aries Way	April 2017	0	0	19	0	0	105	0	460	39	0	185	4
35. Washington Avenue and Taaffe Street	April 2017	39	16	22	13	31	40	76	291	98	25	108	17
36. Iowa Avenue and Taaffe Street	December 2017	8	17	11	51	34	109	52	143	15	27	62	21
37. Evelyn Avenue and Frances Street	April 2017	31	13	57	53	16	53	23	426	83	75	342	61
38. Washington Avenue and Frances Street	December 2017	0	0	0	119	0	77	83	276	0	0	108	47
39. Murphy Avenue / Washington Avenue	May 2018	20	8	24	19	31	26	24	238	126	32	99	25
40. Iowa Avenue and Murphy Avenue	December 2017	0	0	36	0	0	35	0	184	31	0	74	25
41. Sunnyvale Avenue / Maude Avenue	October 2018	86	0	101	0	0	0	0	531	279	81	211	0
42. Sunnyvale Avenue / Arques Avenue	October 2018	25	184	36	4	372	1	4	4	47	138	13	23
43. Sunnyvale Avenue and California Avenue	April 2017	38	174	45	38	342	94	67	176	95	51	106	22
44. Sunnyvale Avenue and Evelyn Avenue	April 2017	58	175	99	109	332	109	68	384	74	79	240	28
45. Sunnyvale Avenue and Washington Avenue	April 2017	52	261	31	20	360	57	65	119	89	21	20	29
46. Sunnyvale Avenue and McKinley Avenue	April 2017	41	317	20	10	426	46	39	51	73	26	33	18
47. Sunnyvale Avenue and Iowa Avenue	April 2017	71	309	6	3	477	40	70	10	142	0	0	0
48. Sunnyvale Avenue and Olive Avenue	April 2017	36	341	23	50	549	12	13	113	70	52	48	30
49. Sunnyvale Avenue and Old San Francisco Road	December 2017	0	359	213	127	532	47	0	1	44	0	0	109
50. Sunnyvale Avenue and El Camino Real	April 2017	107	274	117	232	250	103	200	1472	79	143	784	80
51. Mathilda Avenue and Talisman Drive	December 2016	35	558	531	52	1768	22	12	4	24	418	18	39
52. Sunnyvale-Saratoga Road and Remington Drive	December 2016	173	862	299	116	1957	173	117	370	169	368	261	57
53. Sunnyvale-Saratoga Road and Fremont Avenue	December 2016	186	998	245	348	1867	307	286	907	195	185	437	99
54. Sunnyvale Avenue / Alberta Avenue - Harwick Way	October 2018	138	1377	96	140	1963	172	59	63	64	42	60	15
55. De Anza Boulevard and Homestead Road	May 2017	505	1200	577	334	1485	149	215	827	328	286	465	162
56. De Anza Boulevard and I-280 Northbound Ramps	December 2017	762	1616	0	0	1845	334	0	0	0	625	0	692
57. De Anza Boulevard and I-280 Southbound Ramps	December 2017	1	1929	519	428	2102	0	369	26	507	0	0	0
58. Fair Oaks Avenue and US 101 Northbound Ramp	April 2017	238	992	0	0	1219	161	0	0	0	712	1	299
59. Fair Oaks Avenue and Ahwanee Avenue	April 2017	54	862	38	78	2359	244	103	44	87	25	26	47
60. Fair Oaks Avenue and Duane Avenue	April 2017	11	726	212	215	1884	111	56	94	23	243	117	130
61. Fair Oaks Avenue and Wolfe Road	April 2017	0	399	0	0	1056	1096	615	0	9	0	0	0
62. Fair Oaks Avenue and Maude Avenue	May 2017	82	500	14	6	1041	87	101	173	128	30	94	13
63. Fair Oaks Avenue and Arques Avenue	December 2017	143	544	173	56	947	87	95	168	139	416	191	41
64. Central Expressway WB Off-Ramp / Arques Avenue	October 2018	264	0	30	0	0	0	0	326	2	0	456	0
65. Fair Oaks Avenue and California Avenue	December 2017	48	774	77	27	1429	111	79	62	174	0	0	0
66. Fair Oaks Avenue and Evelyn Avenue	December 2017	62	623	58	115	1222	186	137	512	66	37	155	49
67. Fair Oaks Avenue and Old San Francisco Road	December 2017	32	576	204	138	963	145	99	377	55	126	189	64
68. Fair Oaks Avenue and El Camino Real	May 2017	95	548	262	187	680	163	235	1580	159	194	677	161
69. Wolfe Road and Old San Francisco Road	December 2017	75	417	140	203	1786	191	83	507	75	85	222	30
70. Wolfe Road and El Camino Real	May 2017	253	527	184	160	1127	92	56	1267	437	364	623	143
71. Wolfe Road and Fremont Avenue	May 2017	138	581	52	62	1375	499	348	407	379	8	21	32
72. Lawrence Expressway and Monroe Street	October 2016	172	1453	150	246	3589	387	241	512	610	182	210	164
73. Lawrence Expressway and El Camino Real	January 2018	338	10	189	409	21	187	217	1788	257	166	1077	126
74. Lawrence Expressway / Benton Street	October 2018	113	1625	292	398	3325	99	72	199	88	151	146	182
75. Lawrence Expressway / Lochinvar Avenue	October 2018	27	2037	132	125	3408	58	61	62	82	64	44	149
76. Lawrence Expressway / Homestead Road	October 2016	110	1828	333	294	3194	423	391	706	274	303	418	105
77. Lawrence Expressway / Lehigh Drive	October 2018	135	1829	27	28	3464	96	210	0	547	21	0	10
78. Lawrence Expressway / Pruneridge Avenue	January 2018	131	1657	201	498	3360	120	168	269	199	251	119	155
79. Calabazas Boulevard / El Camino Real	October 2018	20	56	67	102	120	94	88	1481	31	121	945	111

APPENDIX B: INTERSECTION LEVEL OF SERVICE CALCULATIONS

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #1: Ellis Street / Middlefield Road



Street Name:	Ellis Street						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	130	0	100	257	391	0	0	555	544
Growth 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
Initial Bse:	0	0	0	130	0	100	257	391	0	0	555	544
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	130	0	100	257	391	0	0	555	544
User 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
PHF 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
PHF Volume:	0	0	0	130	0	100	257	391	0	0	555	544
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	130	0	100	257	391	0	0	555	544
PCE 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
MLF 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
FinalVolume:	0	0	0	130	0	100	257	391	0	0	555	544
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.95
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	3150	0	1750	1750	3800	0	0	1899	1800
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.06	0.15	0.10	0.00	0.00	0.29	0.30
Crit Moves:				****			****					****
Green Time:	0.0	0.0	0.0	10.0	0.0	10.0	16.7	51.0	0.0	0.0	34.3	34.3
Volume/Cap:	0.00	0.00	0.00	0.29	0.00	0.40	0.62	0.14	0.00	0.00	0.60	0.62
Delay/Veh:	0.0	0.0	0.0	27.2	0.0	28.3	26.6	2.9	0.0	0.0	13.4	13.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	27.2	0.0	28.3	26.6	2.9	0.0	0.0	13.4	13.7
LOS by Move:	A	A	A	C	A	C	C	A	A	A	B	B
HCM2kAvgQ:	0	0	0	2	0	3	5	1	0	0	8	9

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #1: Ellis Street / Middlefield Road

Signal=Split/Rights=Include
Final Vol: 100 0 135***
Lanes: 1 0 0 0 2

Signal=Protect Rights=Include
Final Vol: Lanes:
257*** 1
0
414 2
0
0 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 70
Loss Time (sec): 9
Critical V/C: 0.560
Avg Crit Del (sec/veh): 17.1
Avg Delay (sec/veh): 14.8
LOS: B

Signal=Protect Rights=Include
Lanes: Final Vol:
0 546
1
1 567***
0
0 0

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Ellis Street						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	130	0	100	257	391	0	0	555	544
Growth 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
Initial Bse:	0	0	0	130	0	100	257	391	0	0	555	544
Added Vol:	0	0	0	5	0	0	0	23	0	0	12	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	135	0	100	257	414	0	0	567	546
User 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
PHF 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
PHF Volume:	0	0	0	135	0	100	257	414	0	0	567	546
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	135	0	100	257	414	0	0	567	546
PCE 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
MLF 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
FinalVolume:	0	0	0	135	0	100	257	414	0	0	567	546
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.95
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	3150	0	1750	1750	3800	0	0	1898	1800
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.06	0.15	0.11	0.00	0.00	0.30	0.30
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	10.0	16.8	51.0	0.0	0.0	34.2	34.2
Volume/Cap:	0.00	0.00	0.00	0.30	0.00	0.40	0.61	0.15	0.00	0.00	0.61	0.62
Delay/Veh:	0.0	0.0	0.0	27.2	0.0	28.3	26.3	2.9	0.0	0.0	13.7	13.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	27.2	0.0	28.3	26.3	2.9	0.0	0.0	13.7	13.8
LOS by Move:	A	A	A	C	A	C	C	A	A	A	B	B
HCM2kAvgQ:	0	0	0	2	0	3	5	1	0	0	9	9

Note: Queue reported is the number of cars per lane.

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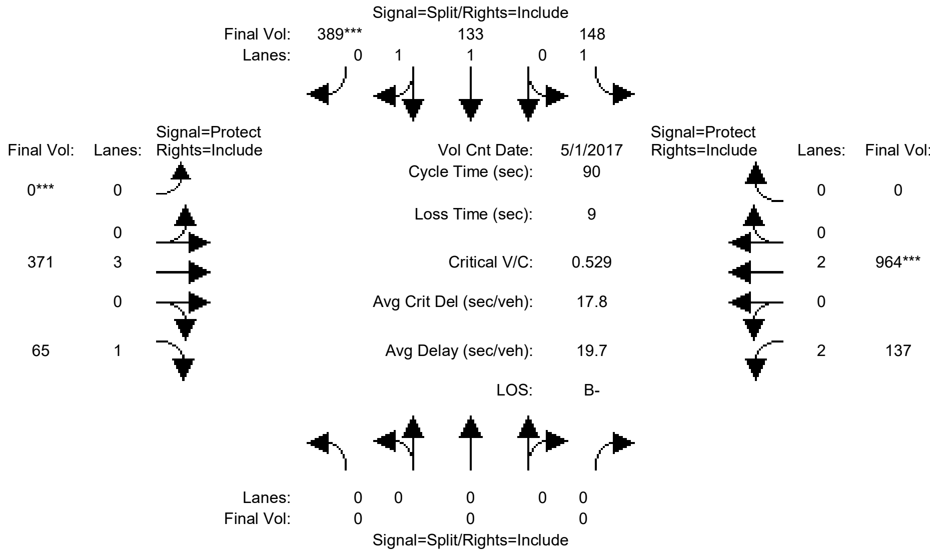
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #2: SR 237 WB / Middlefield Road



Street Name:	SR 237 WB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	10	10	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	0	0	0	148	133	389	0	371	65	137	964	0
Growth 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
Initial Bse:	0	0	0	148	133	389	0	371	65	137	964	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	148	133	389	0	371	65	137	964	0
User 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
PHF 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
PHF Volume:	0	0	0	148	133	389	0	371	65	137	964	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	148	133	389	0	371	65	137	964	0
PCE 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
MLF 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
FinalVolume:	0	0	0	148	133	389	0	371	65	137	964	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1750	1900	1750	0	5700	1750	3150	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.08	0.07	0.22	0.00	0.07	0.04	0.04	0.25	0.00
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	37.8	37.8	37.8	0.0	25.4	25.4	17.8	43.2	0.0
Volume/Cap:	0.00	0.00	0.00	0.20	0.17	0.53	0.00	0.23	0.13	0.22	0.53	0.00
Delay/Veh:	0.0	0.0	0.0	16.7	16.3	20.0	0.0	24.9	24.2	30.5	16.6	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	16.7	16.3	20.0	0.0	24.9	24.2	30.5	16.6	0.0
LOS by Move:	A	A	A	B	B	B-	A	C	C	C	B	A
HCM2kAvgQ:	0	0	0	3	2	9	0	3	1	2	9	0

Note: Queue reported is the number of cars per lane.

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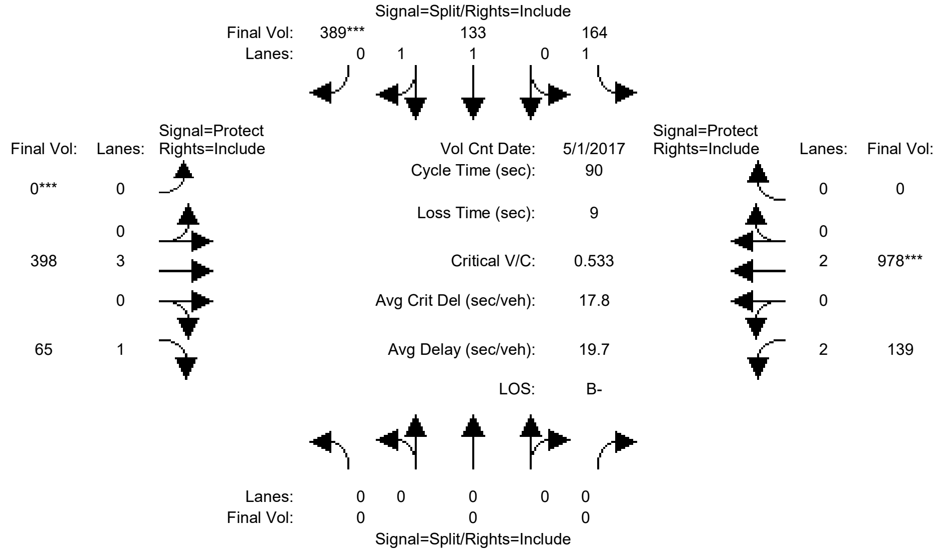
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #2: SR 237 WB / Middlefield Road



Street Name:	SR 237 WB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	10	10	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	0	0	0	148	133	389	0	371	65	137	964	0
Growth 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
Initial Bse:	0	0	0	148	133	389	0	371	65	137	964	0
Added Vol:	0	0	0	16	0	0	0	27	0	2	14	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	164	133	389	0	398	65	139	978	0
User 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
PHF 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
PHF Volume:	0	0	0	164	133	389	0	398	65	139	978	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	164	133	389	0	398	65	139	978	0
PCE 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
MLF 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
FinalVolume:	0	0	0	164	133	389	0	398	65	139	978	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1750	1900	1750	0	5700	1750	3150	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.09	0.07	0.22	0.00	0.07	0.04	0.04	0.26	0.00
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	37.5	37.5	37.5	0.0	25.6	25.6	17.9	43.5	0.0
Volume/Cap:	0.00	0.00	0.00	0.22	0.17	0.53	0.00	0.25	0.13	0.22	0.53	0.00
Delay/Veh:	0.0	0.0	0.0	17.0	16.5	20.2	0.0	24.9	24.1	30.4	16.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	17.0	16.5	20.2	0.0	24.9	24.1	30.4	16.5	0.0
LOS by Move:	A	A	A	B	B	C+	A	C	C	C	B	A
HCM2kAvgQ:	0	0	0	3	2	9	0	3	1	2	9	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #3: SR 237 EB / Middlefield Road

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	5/1/2017			
226***	2		Cycle Time (sec):	95		1	110
	0		Loss Time (sec):	9		0	
297	2		Critical V/C:	0.343		4	786***
	0		Avg Crit Del (sec/veh):	25.0		0	
0	0		Avg Delay (sec/veh):	22.5		0	0
			LOS:	C+			

Lanes: 2 0 1 1 0
Final Vol: 318 284*** 216
Signal=Split/Rights=Include

Street Name:	SR 237 EB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	318	284	216	0	0	0	226	297	0	0	786	110
Growth 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
Initial Bse:	318	284	216	0	0	0	226	297	0	0	786	110
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	318	284	216	0	0	0	226	297	0	0	786	110
User 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
PHF 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
PHF Volume:	318	284	216	0	0	0	226	297	0	0	786	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	318	284	216	0	0	0	226	297	0	0	786	110
PCE 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
MLF 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
FinalVolume:	318	284	216	0	0	0	226	297	0	0	786	110
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	1.11	0.89	0.00	0.00	0.00	2.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	3150	2100	1598	0	0	0	3150	3800	0	0	7600	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.14	0.14	0.00	0.00	0.00	0.07	0.08	0.00	0.00	0.10	0.06
Crit Moves:		****					****				****	
Green Time:	37.5	37.5	37.5	0.0	0.0	0.0	19.9	48.5	0.0	0.0	28.7	28.7
Volume/Cap:	0.26	0.34	0.34	0.00	0.00	0.00	0.34	0.15	0.00	0.00	0.34	0.21
Delay/Veh:	19.5	20.3	20.3	0.0	0.0	0.0	32.3	12.4	0.0	0.0	25.9	24.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.5	20.3	20.3	0.0	0.0	0.0	32.3	12.4	0.0	0.0	25.9	24.9
LOS by Move:	B-	C+	C+	A	A	A	C-	B	A	A	C	C
HCM2kAvgQ:	4	5	5	0	0	0	3	2	0	0	5	3

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #3: SR 237 EB / Middlefield Road

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	5/1/2017			
226***	2		Cycle Time (sec):	95		1	117
			Loss Time (sec):	9			
	0					0	
340	2		Critical V/C:	0.347		4	803***
	0		Avg Crit Del (sec/veh):	25.0		0	
0	0		Avg Delay (sec/veh):	22.4		0	0
			LOS:	C+			

Lanes: 2 0 1 1 0
Final Vol: 318 284*** 222
Signal=Split/Rights=Include

Street Name:	SR 237 EB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	318	284	216	0	0	0	226	297	0	0	786	110
Growth 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
Initial Bse:	318	284	216	0	0	0	226	297	0	0	786	110
Added Vol:	0	0	6	0	0	0	0	43	0	0	17	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	318	284	222	0	0	0	226	340	0	0	803	117
User 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
PHF 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
PHF Volume:	318	284	222	0	0	0	226	340	0	0	803	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	318	284	222	0	0	0	226	340	0	0	803	117
PCE 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
MLF 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
FinalVolume:	318	284	222	0	0	0	226	340	0	0	803	117
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	1.10	0.90	0.00	0.00	0.00	2.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	3150	2075	1622	0	0	0	3150	3800	0	0	7600	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.14	0.14	0.00	0.00	0.00	0.07	0.09	0.00	0.00	0.11	0.07
Crit Moves:		****					****				****	
Green Time:	37.4	37.4	37.4	0.0	0.0	0.0	19.6	48.6	0.0	0.0	28.9	28.9
Volume/Cap:	0.26	0.35	0.35	0.00	0.00	0.00	0.35	0.18	0.00	0.00	0.35	0.22
Delay/Veh:	19.5	20.3	20.3	0.0	0.0	0.0	32.5	12.5	0.0	0.0	25.8	24.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.5	20.3	20.3	0.0	0.0	0.0	32.5	12.5	0.0	0.0	25.8	24.8
LOS by Move:	B-	C+	C+	A	A	A	C-	B	A	A	C	C
HCM2kAvgQ:	4	5	5	0	0	0	3	3	0	0	5	3

Note: Queue reported is the number of cars per lane.

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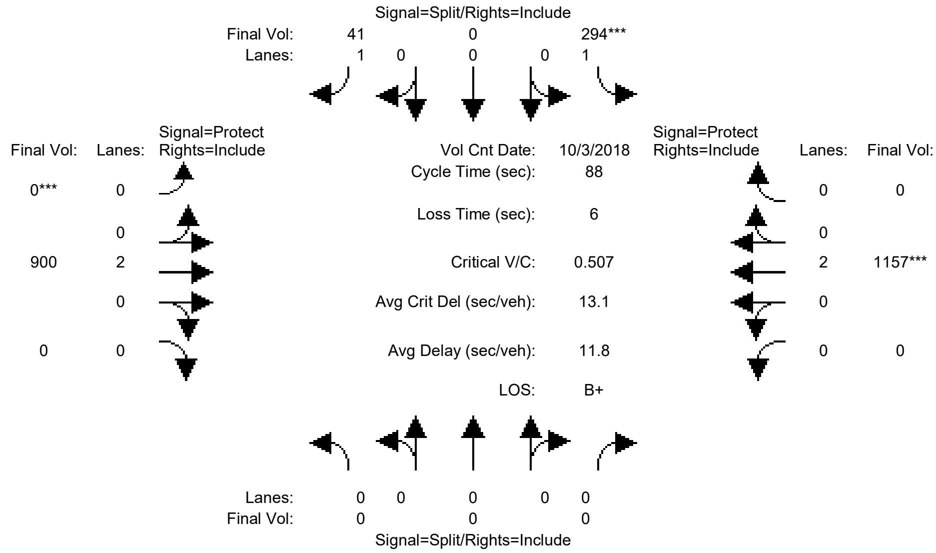
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #4: SR-85 SB Off-Ramp / Central Expressway



Street Name:	SR-85 SB Off-Ramp						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	0	0	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	294	0	41	0	900	0	0	1157	0
Growth 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
Initial Bse:	0	0	0	294	0	41	0	900	0	0	1157	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	294	0	41	0	900	0	0	1157	0
User 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
PHF 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
PHF Volume:	0	0	0	294	0	41	0	900	0	0	1157	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	294	0	41	0	900	0	0	1157	0
PCE 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
MLF 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
FinalVolume:	0	0	0	294	0	41	0	900	0	0	1157	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	1750	0	1750	0	3800	0	0	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.00	0.02	0.00	0.24	0.00	0.00	0.30	0.00
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	29.2	0.0	29.2	0.0	52.8	0.0	0.0	52.8	0.0
Volume/Cap:	0.00	0.00	0.00	0.51	0.00	0.07	0.00	0.39	0.00	0.00	0.51	0.00
Delay/Veh:	0.0	0.0	0.0	24.4	0.0	20.2	0.0	9.3	0.0	0.0	10.3	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	24.4	0.0	20.2	0.0	9.3	0.0	0.0	10.3	0.0
LOS by Move:	A	A	A	C	A	C+	A	A	A	A	B+	A
HCM2kAvgQ:	0	0	0	7	0	1	0	6	0	0	9	0

Note: Queue reported is the number of cars per lane.

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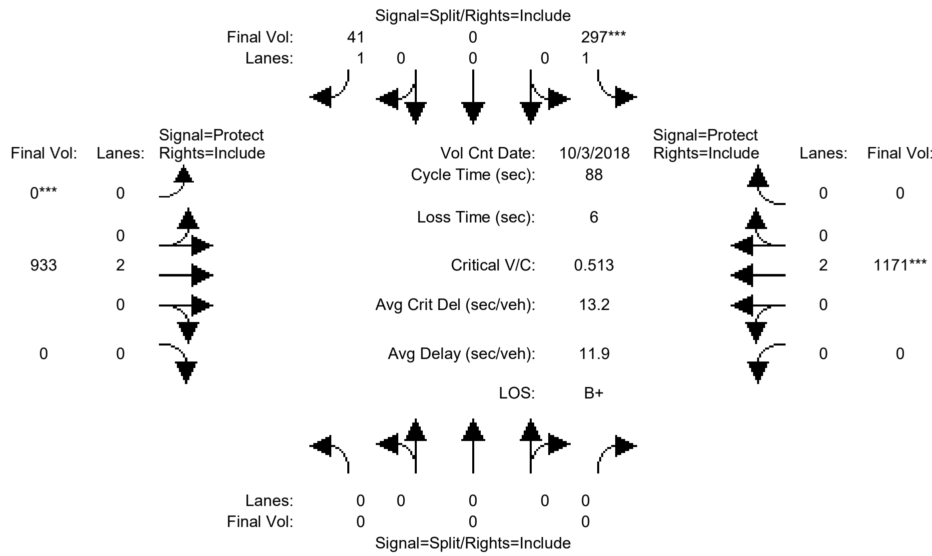
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #4: SR-85 SB Off-Ramp / Central Expressway



Street Name:	SR-85 SB Off-Ramp						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	0	0	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	294	0	41	0	900	0	0	1157	0
Growth 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
Initial Bse:	0	0	0	294	0	41	0	900	0	0	1157	0
Added Vol:	0	0	0	3	0	0	0	33	0	0	14	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	297	0	41	0	933	0	0	1171	0
User 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
PHF 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
PHF Volume:	0	0	0	297	0	41	0	933	0	0	1171	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	297	0	41	0	933	0	0	1171	0
PCE 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
MLF 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
FinalVolume:	0	0	0	297	0	41	0	933	0	0	1171	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	1750	0	1750	0	3800	0	0	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.00	0.02	0.00	0.25	0.00	0.00	0.31	0.00
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	29.1	0.0	29.1	0.0	52.9	0.0	0.0	52.9	0.0
Volume/Cap:	0.00	0.00	0.00	0.51	0.00	0.07	0.00	0.41	0.00	0.00	0.51	0.00
Delay/Veh:	0.0	0.0	0.0	24.5	0.0	20.2	0.0	9.4	0.0	0.0	10.3	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	24.5	0.0	20.2	0.0	9.4	0.0	0.0	10.3	0.0
LOS by Move:	A	A	A	C	A	C+	A	A	A	A	B+	A
HCM2kAvgQ:	0	0	0	7	0	1	0	7	0	0	9	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing AM

Intersection #5: SR-85 NB On-Ramp - Easy Street / Central Expressway

Signal=Yield/Rights=Include
Final Vol: 24 0 0
Lanes: 1 0 0 0 0

Final Vol:	Lanes:	Signal=Uncontrol Rights=Include			Signal=Uncontrol Rights=Include	Lanes:	Final Vol:
0	0		Vol Cnt Date:	10/3/2018		1	606
			Cycle Time (sec):	100			
	0		Loss Time (sec):	0		0	
1171	3		Critical V/C:	0.051		2	1147
	0		Avg Crit Del (sec/veh):	0.1		0	
0	0		Avg Delay (sec/veh):	0.1		0	0
			LOS:	B			

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Yield/Rights=Include

```
Street Name:  SR-85 NB On-Ramp - Easy Street          Central Expressway
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 3 Oct 2018 <<
Base Vol:       0    0    0     0    0    24     0 1171     0     0 1147   606
Growth 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
Initial Bse:    0    0    0     0    0    24     0 1171     0     0 1147   606
Added Vol:      0    0    0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0    0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0    0     0    0    24     0 1171     0     0 1147   606
User 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
PHF 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
PHF Volume:     0    0    0     0    0    24     0 1171     0     0 1147   606
Reduct Vol:     0    0    0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0    0     0    0    24     0 1171     0     0 1147   606
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx   574  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx   467  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx   467  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  0.05  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx  13.1 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *    *     *    *     B     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *    *     *    *     *     *    *     *     *    *     *
ApproachDel:    xxxxxx             13.1            xxxxxx           xxxxxx
ApproachLOS:         *                B                 *                *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    0  0  3  0  0    0  0  2  0  1
Initial Vol:    0    0     0     0    0    24     0 1171     0     0 1147   606
ApproachDel:    xxxxxx              13.1            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Yield Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Controller not stop sign.
Signal Warrant Rule #2: [approach volume=24]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=2948]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    0  0  3  0  0    0  0  2  0  1
Initial Vol:    0    0     0     0    0    24     0 1171     0     0 1147   606
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            2924
Minor Approach Volume:          24
Minor Approach Volume Threshold: -85 [less than minimum of 100]
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PP AM

Intersection #5: SR-85 NB On-Ramp - Easy Street / Central Expressway

```
                         Signal=Yield/Rights=Include
          Final Vol:   24          0          0
             Lanes:     1    0     0      0   0

                  Signal=Uncontrol                                Signal=Uncontrol
Final Vol:  Lanes:  Rights=Include      Vol Cnt Date:   10/3/2018  Rights=Include     Lanes:  Final Vol:
                                        Cycle Time (sec):  100
    0         0                                                                         1       607
                                        Loss Time (sec):    0
              0                                                                         0
 1207         3                         Critical V/C:     0.052                         2      1161
              0                         Avg Crit Del (sec/veh):  0.1                    0
    0         0                         Avg Delay (sec/veh):     0.1                    0         0
                                        LOS:               B

             Lanes:     0    0     0      0   0
          Final Vol:    0          0          0
                         Signal=Yield/Rights=Include
```

```
Street Name:  SR-85 NB On-Ramp - Easy Street         Central Expressway
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 3 Oct 2018 <<
Base Vol:        0    0     0     0    0    24     0 1171     0     0 1147   606
Growth 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
Initial Bse:     0    0     0     0    0    24     0 1171     0     0 1147   606
Added Vol:       0    0     0     0    0     0     0   36     0     0   14     1
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:     0    0     0     0    0    24     0 1207     0     0 1161   607
User 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
PHF 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
PHF Volume:      0    0     0     0    0    24     0 1207     0     0 1161   607
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:     0    0     0     0    0    24     0 1207     0     0 1161   607
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx   581  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx   462  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx   462  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  0.05  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx  13.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:     *    *     *     *    *     B     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:     xxxxxx            13.2            xxxxxx            xxxxxx
ApproachLOS:        *                B                *                 *
Note: Queue reported is the number of cars per lane.
                     Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0   0  0  0  0  1   0  0  3  0  0   0  0  2  0  1
Initial Vol:    0    0     0     0     0    24     0 1207     0     0 1161   607
ApproachDel:    xxxxxx              13.2            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Yield Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Controller not stop sign.
Signal Warrant Rule #2: [approach volume=24]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=2999]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0   0  0  0  0  1   0  0  3  0  0   0  0  2  0  1
Initial Vol:    0    0     0     0     0    24     0 1207     0     0 1161   607
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             2975
Minor Approach Volume:           24
Minor Approach Volume Threshold: -91 [less than minimum of 100]
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

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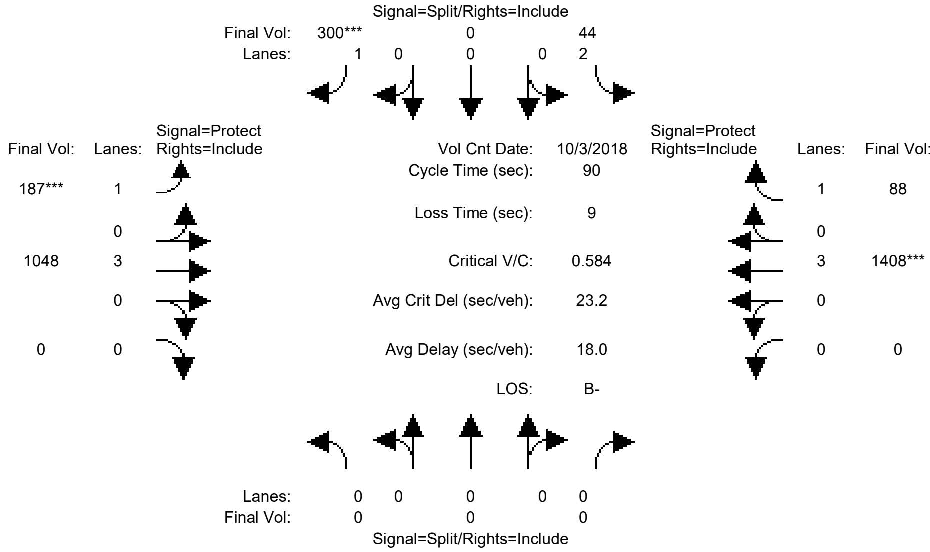
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #6: Whisman Station Drive / Central Expressway (CMP)



Street Name:	Whisman Station Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	44	0	300	187	1048	0	0	1408	88
Growth 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
Initial Bse:	0	0	0	44	0	300	187	1048	0	0	1408	88
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	44	0	300	187	1048	0	0	1408	88
User 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
PHF 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
PHF Volume:	0	0	0	44	0	300	187	1048	0	0	1408	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	44	0	300	187	1048	0	0	1408	88
PCE 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
MLF 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
FinalVolume:	0	0	0	44	0	300	187	1048	0	0	1408	88
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3150	0	1750	1750	5700	0	0	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.01	0.00	0.17	0.11	0.18	0.00	0.00	0.25	0.05
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	26.4	0.0	26.4	16.5	54.6	0.0	0.0	38.1	38.1
Volume/Cap:	0.00	0.00	0.00	0.05	0.00	0.58	0.58	0.30	0.00	0.00	0.58	0.12
Delay/Veh:	0.0	0.0	0.0	22.8	0.0	28.8	36.4	8.6	0.0	0.0	20.3	15.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	22.8	0.0	28.8	36.4	8.6	0.0	0.0	20.3	15.8
LOS by Move:	A	A	A	C+	A	C	D+	A	A	A	C+	B
HCM2kAvgQ:	0	0	0	1	0	8	5	5	0	0	10	2

Note: Queue reported is the number of cars per lane.

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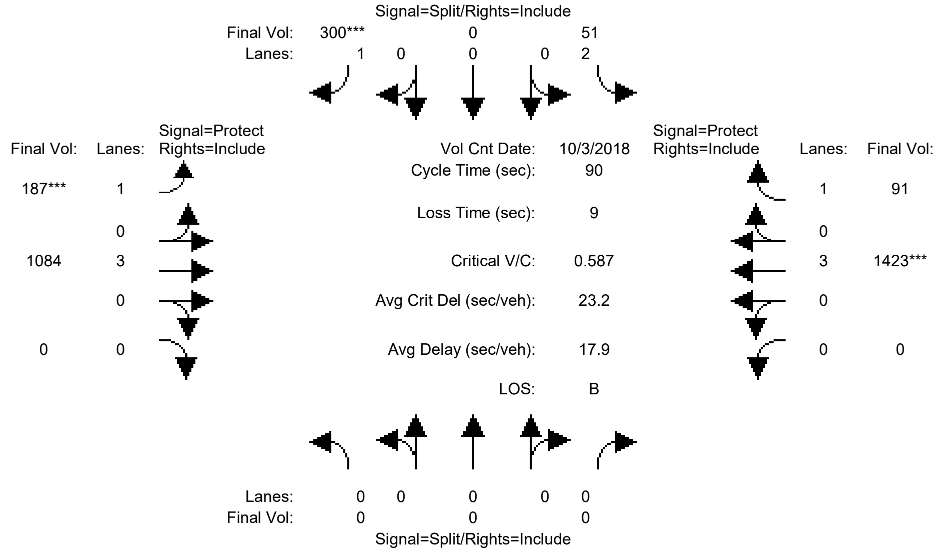
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #6: Whisman Station Drive / Central Expressway (CMP)



Street Name:	Whisman Station Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	44	0	300	187	1048	0	0	1408	88
Growth 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
Initial Bse:	0	0	0	44	0	300	187	1048	0	0	1408	88
Added Vol:	0	0	0	7	0	0	0	36	0	0	15	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	51	0	300	187	1084	0	0	1423	91
User 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
PHF 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
PHF Volume:	0	0	0	51	0	300	187	1084	0	0	1423	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	51	0	300	187	1084	0	0	1423	91
PCE 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
MLF 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
FinalVolume:	0	0	0	51	0	300	187	1084	0	0	1423	91
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3150	0	1750	1750	5700	0	0	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.17	0.11	0.19	0.00	0.00	0.25	0.05
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	26.3	0.0	26.3	16.4	54.7	0.0	0.0	38.3	38.3
Volume/Cap:	0.00	0.00	0.00	0.06	0.00	0.59	0.59	0.31	0.00	0.00	0.59	0.12
Delay/Veh:	0.0	0.0	0.0	22.9	0.0	29.0	36.5	8.6	0.0	0.0	20.2	15.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	22.9	0.0	29.0	36.5	8.6	0.0	0.0	20.2	15.7
LOS by Move:	A	A	A	C+	A	C	D+	A	A	A	C+	B
HCM2kAvgQ:	0	0	0	1	0	8	5	5	0	0	10	2

Note: Queue reported is the number of cars per lane.

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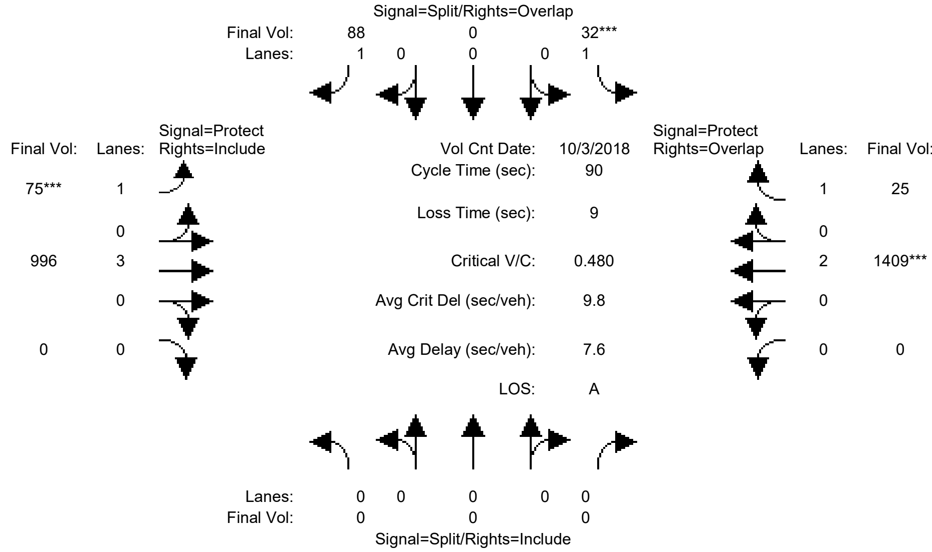
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #7: Ferguson Drive / Central Expressway (CMP)



Street Name:	Ferguson Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	10	10	0	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	32	0	88	75	996	0	0	1409	25
Growth 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
Initial Bse:	0	0	0	32	0	88	75	996	0	0	1409	25
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	32	0	88	75	996	0	0	1409	25
User 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
PHF 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
PHF Volume:	0	0	0	32	0	88	75	996	0	0	1409	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	32	0	88	75	996	0	0	1409	25
PCE 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
MLF 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
FinalVolume:	0	0	0	32	0	88	75	996	0	0	1409	25
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	5700	0	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.05	0.04	0.17	0.00	0.00	0.37	0.01
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	20.0	10.0	71.0	0.0	0.0	61.0	71.0
Volume/Cap:	0.00	0.00	0.00	0.16	0.00	0.23	0.39	0.22	0.00	0.00	0.55	0.02
Delay/Veh:	0.0	0.0	0.0	36.6	0.0	29.0	38.4	2.5	0.0	0.0	7.7	2.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	36.6	0.0	29.0	38.4	2.5	0.0	0.0	7.7	2.0
LOS by Move:	A	A	A	D+	A	C	D+	A	A	A	A	A
HCM2kAvgQ:	0	0	0	1	0	2	2	2	0	0	10	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #7: Ferguson Drive / Central Expressway (CMP)

Signal=Split/Rights=Overlap
Final Vol: 88 0 39***
Lanes: 1 0 0 0 1

Signal=Protect Rights=Include
Final Vol: Lanes:
75*** 1
0
1039 3
0
0 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 90
Loss Time (sec): 9
Critical V/C: 0.490
Avg Crit Del (sec/veh): 10.0
Avg Delay (sec/veh): 7.6
LOS: A

Signal=Protect Rights=Overlap
Lanes: Final Vol:
1 28
0
2 1427***
0
0 0

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Ferguson Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	10	10	0	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	32	0	88	75	996	0	0	1409	25
Growth 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
Initial Bse:	0	0	0	32	0	88	75	996	0	0	1409	25
Added Vol:	0	0	0	7	0	0	0	43	0	0	18	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	39	0	88	75	1039	0	0	1427	28
User 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
PHF 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
PHF Volume:	0	0	0	39	0	88	75	1039	0	0	1427	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	39	0	88	75	1039	0	0	1427	28
PCE 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
MLF 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
FinalVolume:	0	0	0	39	0	88	75	1039	0	0	1427	28
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	5700	0	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.05	0.04	0.18	0.00	0.00	0.38	0.02
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	20.0	10.0	71.0	0.0	0.0	61.0	71.0
Volume/Cap:	0.00	0.00	0.00	0.20	0.00	0.23	0.39	0.23	0.00	0.00	0.55	0.02
Delay/Veh:	0.0	0.0	0.0	36.9	0.0	29.0	38.4	2.5	0.0	0.0	7.7	2.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	36.9	0.0	29.0	38.4	2.5	0.0	0.0	7.7	2.0
LOS by Move:	A	A	A	D+	A	C	D+	A	A	A	A	A
HCM2kAvgQ:	0	0	0	1	0	2	2	2	0	0	10	0

Note: Queue reported is the number of cars per lane.

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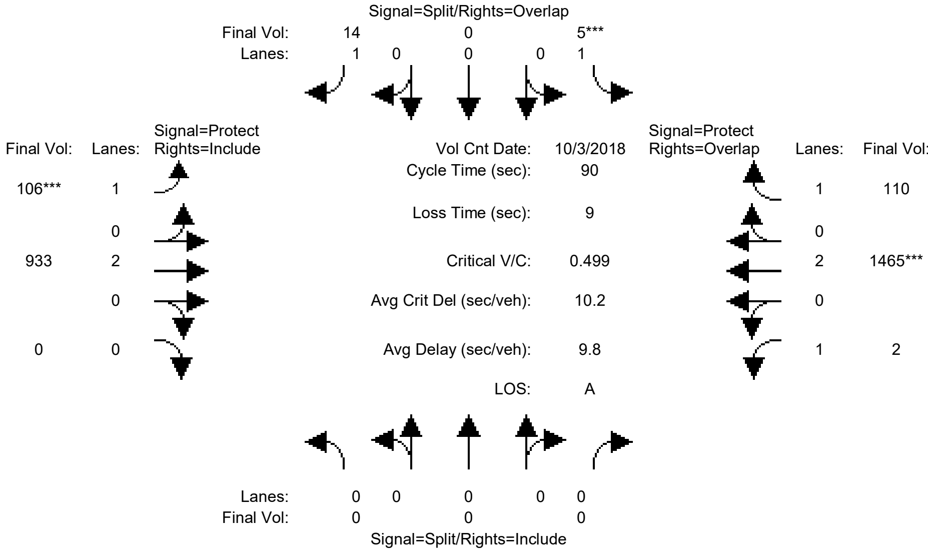
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #8: Bernardo Avenue / Central Expressway



Street Name:	Bernardo Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	10	10	0	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	5	0	14	106	933	0	2	1465	110
Growth 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
Initial Bse:	0	0	0	5	0	14	106	933	0	2	1465	110
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	5	0	14	106	933	0	2	1465	110
User 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
PHF 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
PHF Volume:	0	0	0	5	0	14	106	933	0	2	1465	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	5	0	14	106	933	0	2	1465	110
PCE 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
MLF 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
FinalVolume:	0	0	0	5	0	14	106	933	0	2	1465	110
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	3800	0	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.25	0.00	0.00	0.39	0.06
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	20.0	10.0	53.9	0.0	17.1	61.0	71.0
Volume/Cap:	0.00	0.00	0.00	0.03	0.00	0.04	0.55	0.41	0.00	0.01	0.57	0.08
Delay/Veh:	0.0	0.0	0.0	35.7	0.0	27.5	41.0	9.7	0.0	29.6	7.9	2.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	35.7	0.0	27.5	41.0	9.7	0.0	29.6	7.9	2.2
LOS by Move:	A	A	A	D+	A	C	D	A	A	C	A	A
HCM2kAvgQ:	0	0	0	0	0	0	3	7	0	0	10	1

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #8: Bernardo Avenue / Central Expressway

Signal=Split/Rights=Overlap
Final Vol: 14 0 12***
Lanes: 1 0 0 0 1

Signal=Protect
Rights=Include

Final Vol:	Lanes:
106***	1
	0
982	2
	0
0	0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 90
Loss Time (sec): 9
Critical V/C: 0.509
Avg Crit Del (sec/veh): 10.4
Avg Delay (sec/veh): 9.8
LOS: A

Signal=Protect
Rights=Overlap

Lanes:	Final Vol:
1	113
0	
2	1486***
0	
1	2

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Bernardo Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	10	10	0	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	5	0	14	106	933	0	2	1465	110
Growth 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
Initial Bse:	0	0	0	5	0	14	106	933	0	2	1465	110
Added Vol:	0	0	0	7	0	0	0	49	0	0	21	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	12	0	14	106	982	0	2	1486	113
User 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
PHF 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
PHF Volume:	0	0	0	12	0	14	106	982	0	2	1486	113
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	12	0	14	106	982	0	2	1486	113
PCE 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
MLF 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
FinalVolume:	0	0	0	12	0	14	106	982	0	2	1486	113
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	3800	0	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.01	0.00	0.01	0.06	0.26	0.00	0.00	0.39	0.06
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	20.0	10.0	54.6	0.0	16.4	61.0	71.0
Volume/Cap:	0.00	0.00	0.00	0.06	0.00	0.04	0.55	0.43	0.00	0.01	0.58	0.08
Delay/Veh:	0.0	0.0	0.0	35.9	0.0	27.5	41.0	9.5	0.0	30.1	8.0	2.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	35.9	0.0	27.5	41.0	9.5	0.0	30.1	8.0	2.2
LOS by Move:	A	A	A	D+	A	C	D	A	A	C	A	A
HCM2kAvgQ:	0	0	0	0	0	0	3	7	0	0	11	1

Note: Queue reported is the number of cars per lane.

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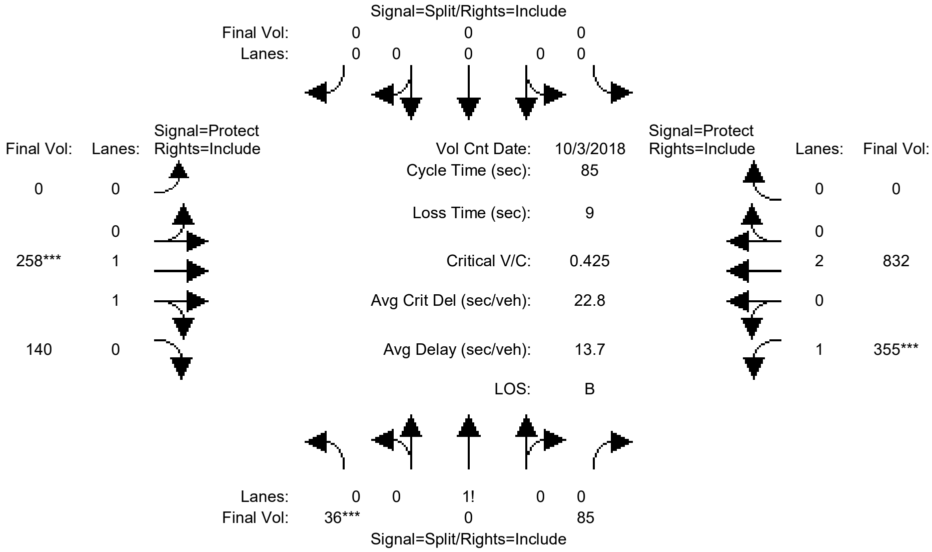
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #9: Moorpark Way / Evelyn Avenue



Street Name:	Moorpark Way						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	36	0	85	0	0	0	0	258	140	355	832	0
Growth 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
Initial Bse:	36	0	85	0	0	0	0	258	140	355	832	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	0	85	0	0	0	0	258	140	355	832	0
User 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
PHF 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
PHF Volume:	36	0	85	0	0	0	0	258	140	355	832	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	0	85	0	0	0	0	258	140	355	832	0
PCE 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
MLF 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
FinalVolume:	36	0	85	0	0	0	0	258	140	355	832	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.92	1.00	0.92
Lanes:	0.30	0.00	0.70	0.00	0.00	0.00	0.00	1.28	0.72	1.00	2.00	0.00
Final Sat.:	521	0	1229	0	0	0	0	2398	1301	1750	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.00	0.07	0.00	0.00	0.00	0.00	0.11	0.11	0.20	0.22	0.00
Crit Moves:	****							****		****		
Green Time:	13.8	0.0	13.8	0.0	0.0	0.0	0.0	21.5	21.5	40.6	62.2	0.0
Volume/Cap:	0.42	0.00	0.42	0.00	0.00	0.00	0.00	0.42	0.42	0.42	0.30	0.00
Delay/Veh:	33.0	0.0	33.0	0.0	0.0	0.0	0.0	26.9	26.9	14.9	4.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.0	0.0	33.0	0.0	0.0	0.0	0.0	26.9	26.9	14.9	4.0	0.0
LOS by Move:	C-	A	C-	A	A	A	A	C	C	B	A	A
HCM2kAvgQ:	4	0	4	0	0	0	0	5	5	6	4	0

Note: Queue reported is the number of cars per lane.

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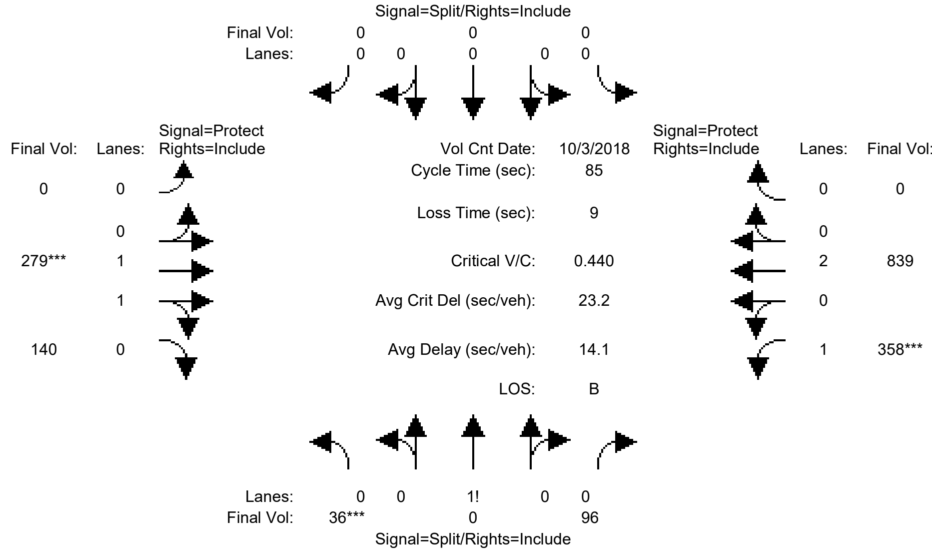
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #9: Moorpark Way / Evelyn Avenue



Street Name:	Moorpark Way						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	36	0	85	0	0	0	0	258	140	355	832	0
Growth 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
Initial Bse:	36	0	85	0	0	0	0	258	140	355	832	0
Added Vol:	0	0	11	0	0	0	0	21	0	3	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	0	96	0	0	0	0	279	140	358	839	0
User 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
PHF 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
PHF Volume:	36	0	96	0	0	0	0	279	140	358	839	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	0	96	0	0	0	0	279	140	358	839	0
PCE 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
MLF 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
FinalVolume:	36	0	96	0	0	0	0	279	140	358	839	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.92	1.00	0.92
Lanes:	0.27	0.00	0.73	0.00	0.00	0.00	0.00	1.31	0.69	1.00	2.00	0.00
Final Sat.:	477	0	1273	0	0	0	0	2463	1236	1750	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.08	0.00	0.00	0.00	0.00	0.11	0.11	0.20	0.22	0.00
Crit Moves:	****							****		****		
Green Time:	14.6	0.0	14.6	0.0	0.0	0.0	0.0	21.9	21.9	39.5	61.4	0.0
Volume/Cap:	0.44	0.00	0.44	0.00	0.00	0.00	0.00	0.44	0.44	0.44	0.31	0.00
Delay/Veh:	32.6	0.0	32.6	0.0	0.0	0.0	0.0	26.7	26.7	15.7	4.3	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.6	0.0	32.6	0.0	0.0	0.0	0.0	26.7	26.7	15.7	4.3	0.0
LOS by Move:	C-	A	C-	A	A	A	A	C	C	B	A	A
HCM2kAvgQ:	4	0	4	0	0	0	0	5	5	6	4	0

Note: Queue reported is the number of cars per lane.

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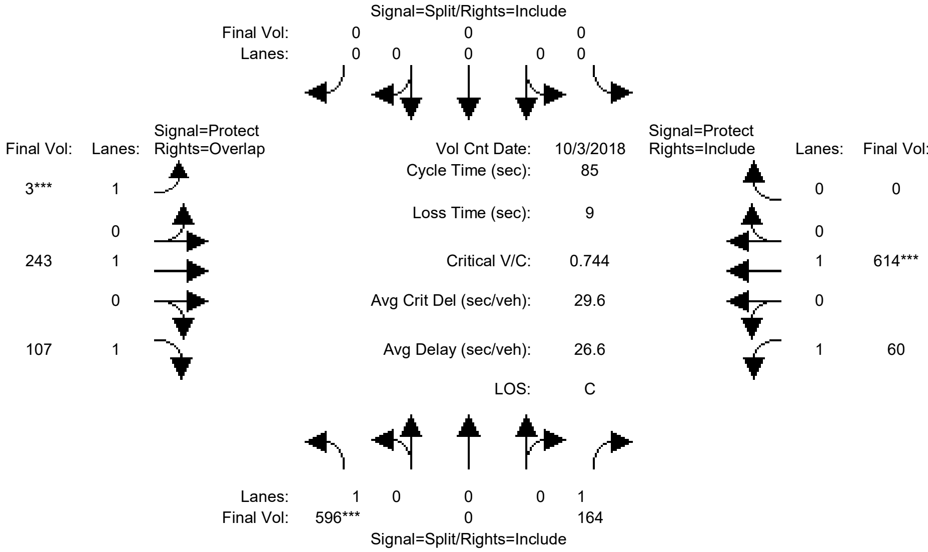
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #10: Bernardo Avenue / Evelyn Avenue




```
Street Name:          Bernardo Avenue                      Evelyn Avenue
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Min. Green:    10    0    10     0    0     0     7   10    10    10   10     0
Y+R:          4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 3 Oct 2018 <<
Base Vol:     596    0   164     0    0     0     3  243   107    60  614     0
Growth 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
Initial Bse:  596    0   164     0    0     0     3  243   107    60  614     0
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  596    0   164     0    0     0     3  243   107    60  614     0
User 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
PHF 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
PHF Volume:   596    0   164     0    0     0     3  243   107    60  614     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  596    0   164     0    0     0     3  243   107    60  614     0
PCE 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
MLF 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
FinalVolume:  596    0   164     0    0     0     3  243   107    60  614     0
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.92 1.00  0.92  0.92 1.00  0.92  0.92 1.00  0.92  0.92 1.00  0.92
Lanes:       1.00 0.00  1.00  0.00 0.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00
Final Sat.:  1750    0  1750     0    0     0  1750 1900  1750  1750 1900     0
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:     0.34 0.00  0.09  0.00 0.00  0.00  0.00 0.13  0.06  0.03 0.32  0.00
Crit Moves:  ****                              ****                   ****
Green Time:  35.4  0.0  35.4   0.0  0.0   0.0   7.0 21.1  56.5  19.5 33.6   0.0
Volume/Cap:  0.82 0.00  0.22  0.00 0.00  0.00  0.02 0.51  0.09  0.15 0.82  0.00
Delay/Veh:   29.1  0.0  16.1   0.0  0.0   0.0  35.9 28.5   5.1  26.3 30.0   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  29.1  0.0  16.1   0.0  0.0   0.0  35.9 28.5   5.1  26.3 30.0   0.0
LOS by Move:    C    A     B     A    A     A    D+    C     A     C    C     A
HCM2kAvgQ:     17    0     3     0    0     0     0    5     1     1   15     0
Note: Queue reported is the number of cars per lane.
```

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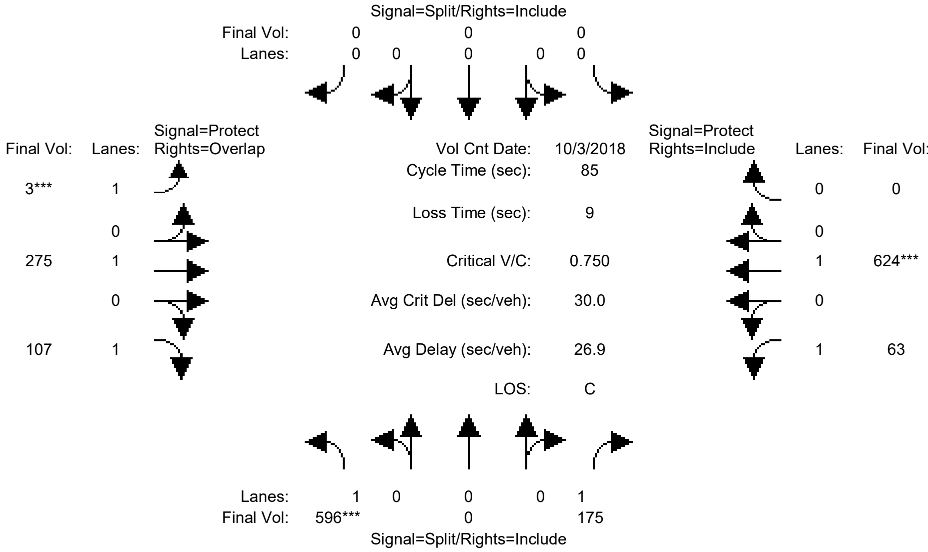
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #10: Bernardo Avenue / Evelyn Avenue



Street Name:	Bernardo Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	7	10	10	10	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	596	0	164	0	0	0	3	243	107	60	614	0
Growth 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
Initial Bse:	596	0	164	0	0	0	3	243	107	60	614	0
Added Vol:	0	0	11	0	0	0	0	32	0	3	10	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	596	0	175	0	0	0	3	275	107	63	624	0
User 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
PHF 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
PHF Volume:	596	0	175	0	0	0	3	275	107	63	624	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	596	0	175	0	0	0	3	275	107	63	624	0
PCE 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
MLF 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
FinalVolume:	596	0	175	0	0	0	3	275	107	63	624	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	1750	1900	1750	1750	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.34	0.00	0.10	0.00	0.00	0.00	0.00	0.14	0.06	0.04	0.33	0.00
Crit Moves:	****						****				****	
Green Time:	35.1	0.0	35.1	0.0	0.0	0.0	7.0	22.5	57.7	18.3	33.9	0.0
Volume/Cap:	0.82	0.00	0.24	0.00	0.00	0.00	0.02	0.55	0.09	0.17	0.82	0.00
Delay/Veh:	29.8	0.0	16.4	0.0	0.0	0.0	35.9	28.1	4.7	27.3	30.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.8	0.0	16.4	0.0	0.0	0.0	35.9	28.1	4.7	27.3	30.2	0.0
LOS by Move:	C	A	B	A	A	A	D+	C	A	C	C	A
HCM2kAvgQ:	17	0	3	0	0	0	0	6	1	1	15	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #11: Sylvan Avenue / El Camino Real

Signal=Split/Rights=Include
Final Vol: 243*** 39 58
Lanes: 1 0 1 0 1

Signal=Protect Rights=Include (Eastbound)
Final Vol: 171*** / Lanes: 1
Lanes: 0
Final Vol: 680 / Lanes: 3
Lanes: 0
Final Vol: 379 / Lanes: 1

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 120
Loss Time (sec): 12
Critical V/C: 0.790
Avg Crit Del (sec/veh): 43.1
Avg Delay (sec/veh): 39.7
LOS: D

Signal=Protect Rights=Include (Westbound)
Lanes: 0 / Final Vol: 122
Lanes: 1
Lanes: 2 / Final Vol: 1516***
Lanes: 0
Lanes: 2 / Final Vol: 86

Lanes: 2 0 0 1 0
Final Vol: 574*** 274 35
Signal=Split/Rights=Include

Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	574	274	35	58	39	243	171	680	379	86	1516	122
Growth 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
Initial Bse:	574	274	35	58	39	243	171	680	379	86	1516	122
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	574	274	35	58	39	243	171	680	379	86	1516	122
User 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
PHF 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
PHF Volume:	574	274	35	58	39	243	171	680	379	86	1516	122
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	574	274	35	58	39	243	171	680	379	86	1516	122
PCE 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
MLF 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
FinalVolume:	574	274	35	58	39	243	171	680	379	86	1516	122
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.95	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.99	0.95
Lanes:	2.00	0.89	0.11	1.00	1.00	1.00	1.00	3.00	1.00	2.00	2.77	0.23
Final Sat.:	3150	1596	204	1750	1900	1750	1750	5700	1750	3150	5182	417
Capacity Analysis Module:												
Vol/Sat:	0.18	0.17	0.17	0.03	0.02	0.14	0.10	0.12	0.22	0.03	0.29	0.29
Crit Moves:	****					****	****				****	
Green Time:	27.7	27.7	27.7	21.1	21.1	21.1	14.8	46.7	46.7	12.6	44.4	44.4
Volume/Cap:	0.79	0.74	0.74	0.19	0.12	0.79	0.79	0.31	0.56	0.26	0.79	0.79
Delay/Veh:	49.3	50.1	50.1	42.5	41.8	60.3	68.7	25.5	29.6	49.9	35.8	35.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.3	50.1	50.1	42.5	41.8	60.3	68.7	25.5	29.6	49.9	35.8	35.8
LOS by Move:	D	D	D	D	D	E	E	C	C	D	D+	D+
HCM2kAvgQ:	14	13	13	2	1	11	9	6	12	2	18	18

Note: Queue reported is the number of cars per lane.

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #11: Sylvan Avenue / El Camino Real

Signal=Split/Rights=Include
Final Vol: 243*** 39 61
Lanes: 1 0 1 0 1

Signal=Protect
Rights=Include

Final Vol:	Lanes:
171***	1
	0
718	3
	0
379	1

Vol Cnt Date:	10/2/2018
Cycle Time (sec):	120
Loss Time (sec):	12
Critical V/C:	0.794
Avg Crit Del (sec/veh):	43.2
Avg Delay (sec/veh):	39.7
LOS:	D

Signal=Protect
Rights=Include

Lanes:	Final Vol:
0	123
1	
2	1532***
0	
2	87

Lanes: 2 0 0 1 0
Final Vol: 574*** 274 37
Signal=Split/Rights=Include

```
Street Name:          Sylvan Avenue                        El Camino Real
Approach:       North Bound       South Bound        East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Min. Green:    10    10    10    10    10    10     7    10    10     7    10    10
Y+R:          4.0   4.0   4.0   4.0   4.0   4.0   4.0   4.0   4.0   4.0   4.0   4.0
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 2 Oct 2018 <<
Base Vol:     574   274    35    58    39   243   171   680   379    86  1516   122
Growth 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
Initial Bse:  574   274    35    58    39   243   171   680   379    86  1516   122
Added Vol:      0     0     2     3     0     0     0    38     0     1    16     1
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:  574   274    37    61    39   243   171   718   379    87  1532   123
User 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
PHF 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
PHF Volume:   574   274    37    61    39   243   171   718   379    87  1532   123
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:  574   274    37    61    39   243   171   718   379    87  1532   123
PCE 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
MLF 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
FinalVolume:  574   274    37    61    39   243   171   718   379    87  1532   123
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:    1900  1900  1900  1900  1900  1900  1900  1900  1900  1900  1900  1900
Adjustment:  0.83  0.95  0.95  0.92  1.00  0.92  0.92  1.00  0.92  0.83  0.99  0.95
Lanes:       2.00  0.88  0.12  1.00  1.00  1.00  1.00  3.00  1.00  2.00  2.77  0.23
Final Sat.:  3150  1586   214  1750  1900  1750  1750  5700  1750  3150  5183   416
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:     0.18  0.17  0.17  0.03  0.02  0.14  0.10  0.13  0.22  0.03  0.30  0.30
Crit Moves:  ****                          ****  ****                    ****
Green Time:  27.5  27.5  27.5  21.0  21.0  21.0  14.8  46.8  46.8  12.6  44.7  44.7
Volume/Cap:  0.79  0.75  0.75  0.20  0.12  0.79  0.79  0.32  0.55  0.26  0.79  0.79
Delay/Veh:   49.6  50.7  50.7  42.6  41.9  60.7  69.2  25.6  29.5  49.8  35.7  35.7
User DelAdj: 1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
AdjDel/Veh:  49.6  50.7  50.7  42.6  41.9  60.7  69.2  25.6  29.5  49.8  35.7  35.7
LOS by Move:    D     D     D     D     D     E     E     C     C     D    D+    D+
HCM2kAvgQ:     14    13    13     2     1    11     9     6    12     2    18    18
Note: Queue reported is the number of cars per lane.
```


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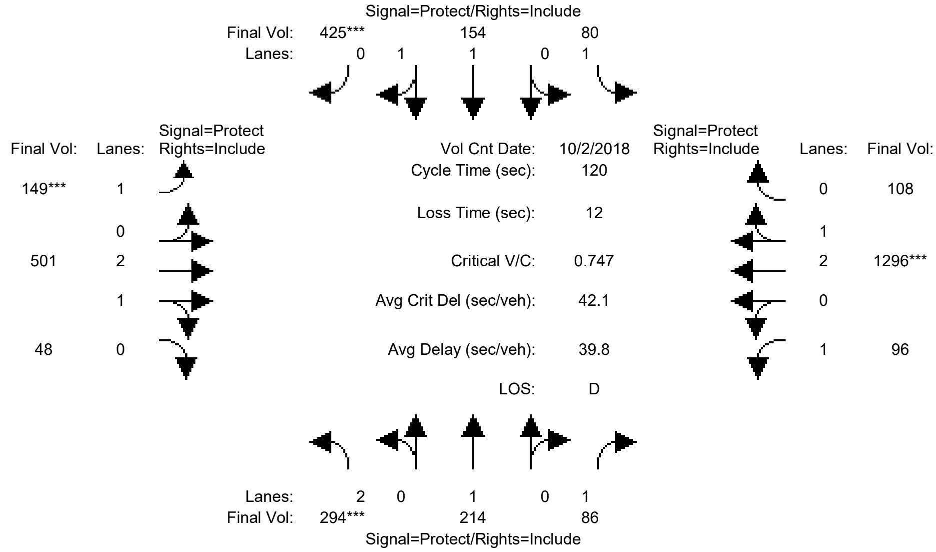
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #12: Bernardo Avenue / El Camino Real



Street Name:	Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	294	214	86	80	154	425	149	501	48	96	1296	108
Growth 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
Initial Bse:	294	214	86	80	154	425	149	501	48	96	1296	108
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	294	214	86	80	154	425	149	501	48	96	1296	108
User 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
PHF 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
PHF Volume:	294	214	86	80	154	425	149	501	48	96	1296	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	294	214	86	80	154	425	149	501	48	96	1296	108
PCE 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
MLF 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
FinalVolume:	294	214	86	80	154	425	149	501	48	96	1296	108
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.73	0.27	1.00	2.76	0.24
Final Sat.:	3150	1900	1750	1750	1900	1750	1750	5110	490	1750	5169	431
Capacity Analysis Module:												
Vol/Sat:	0.09	0.11	0.05	0.05	0.08	0.24	0.09	0.10	0.10	0.05	0.25	0.25
Crit Moves:	****					****	****				****	
Green Time:	15.0	35.6	35.6	18.4	39.0	39.0	13.7	33.8	33.8	20.1	40.3	40.3
Volume/Cap:	0.75	0.38	0.17	0.30	0.25	0.75	0.75	0.35	0.35	0.33	0.75	0.75
Delay/Veh:	58.3	33.9	31.4	45.7	29.8	40.1	65.8	34.4	34.4	44.6	37.0	37.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.3	33.9	31.4	45.7	29.8	40.1	65.8	34.4	34.4	44.6	37.0	37.0
LOS by Move:	E+	C-	C	D	C	D	E	C-	C-	D	D+	D+
HCM2kAvgQ:	8	6	3	3	4	16	6	5	5	3	15	15

Note: Queue reported is the number of cars per lane.

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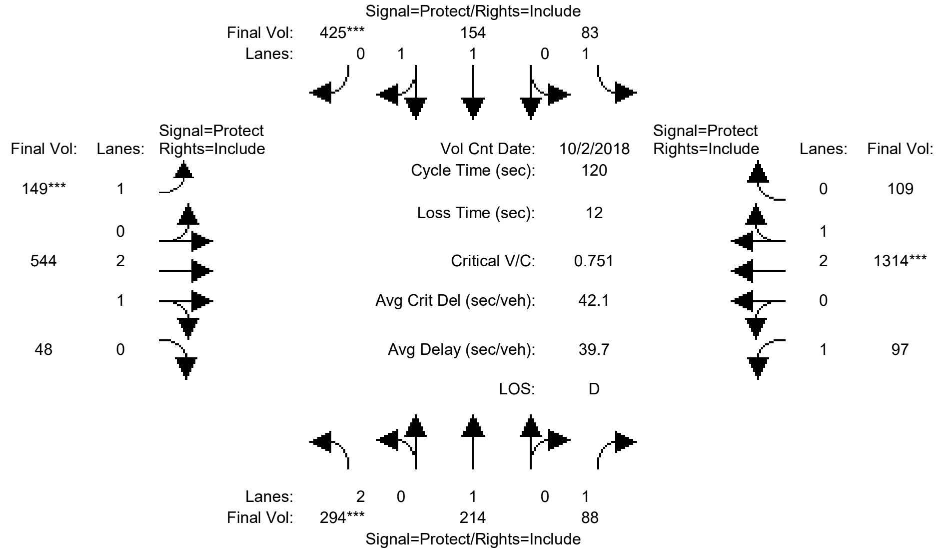
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #12: Bernardo Avenue / El Camino Real



Street Name:	Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	294	214	86	80	154	425	149	501	48	96	1296	108
Growth 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
Initial Bse:	294	214	86	80	154	425	149	501	48	96	1296	108
Added Vol:	0	0	2	3	0	0	0	43	0	1	18	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	294	214	88	83	154	425	149	544	48	97	1314	109
User 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
PHF 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
PHF Volume:	294	214	88	83	154	425	149	544	48	97	1314	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	294	214	88	83	154	425	149	544	48	97	1314	109
PCE 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
MLF 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
FinalVolume:	294	214	88	83	154	425	149	544	48	97	1314	109
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.75	0.25	1.00	2.76	0.24
Final Sat.:	3150	1900	1750	1750	1900	1750	1750	5145	454	1750	5170	429
Capacity Analysis Module:												
Vol/Sat:	0.09	0.11	0.05	0.05	0.08	0.24	0.09	0.11	0.11	0.06	0.25	0.25
Crit Moves:	****					****	****				****	
Green Time:	14.9	35.4	35.4	18.3	38.8	38.8	13.6	35.0	35.0	19.3	40.6	40.6
Volume/Cap:	0.75	0.38	0.17	0.31	0.25	0.75	0.75	0.36	0.36	0.34	0.75	0.75
Delay/Veh:	58.6	34.0	31.5	45.9	29.9	40.4	66.3	33.8	33.8	45.5	36.9	36.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.6	34.0	31.5	45.9	29.9	40.4	66.3	33.8	33.8	45.5	36.9	36.9
LOS by Move:	E+	C-	C	D	C	D	E	C-	C-	D	D+	D+
HCM2kAvgQ:	8	6	3	3	4	16	6	6	6	3	16	16

Note: Queue reported is the number of cars per lane.

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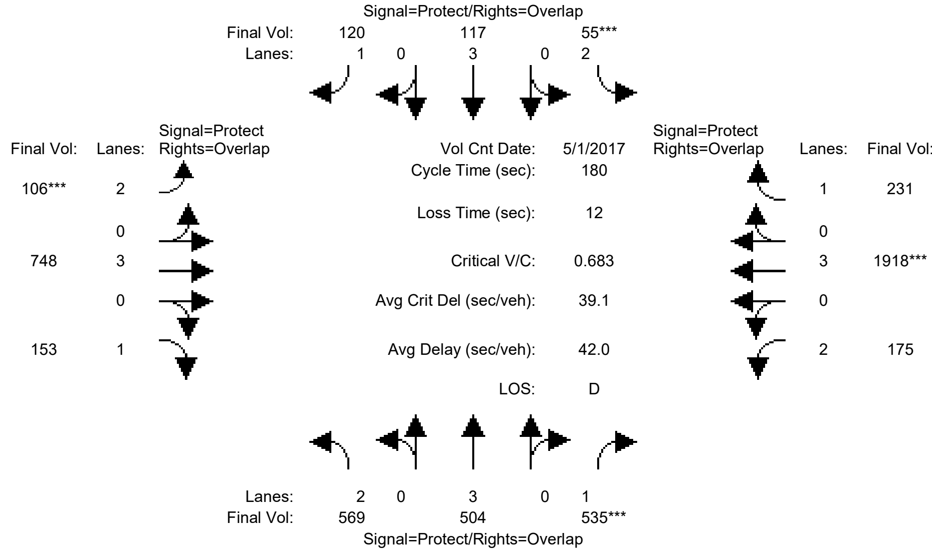
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #13: Mary Avenue / Central Expressway (CMP)



Street Name:	Mary Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	569	504	535	55	117	120	106	748	153	175	1918	231
Growth 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
Initial Bse:	569	504	535	55	117	120	106	748	153	175	1918	231
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	569	504	535	55	117	120	106	748	153	175	1918	231
User 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
PHF 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
PHF Volume:	569	504	535	55	117	120	106	748	153	175	1918	231
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	569	504	535	55	117	120	106	748	153	175	1918	231
PCE 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
MLF 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
FinalVolume:	569	504	535	55	117	120	106	748	153	175	1918	231
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.18	0.09	0.31	0.02	0.02	0.07	0.03	0.13	0.09	0.06	0.34	0.13
Crit Moves:			****	****			****				****	
Green Time:	55.0	64.9	93.5	7.0	16.9	25.7	8.7	67.5	122.5	28.6	87.3	94.3
Volume/Cap:	0.59	0.25	0.59	0.45	0.22	0.48	0.69	0.35	0.13	0.35	0.69	0.25
Delay/Veh:	53.9	40.4	31.0	87.2	75.6	72.5	97.2	40.6	10.1	67.9	36.7	23.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.9	40.4	31.0	87.2	75.6	72.5	97.2	40.6	10.1	67.9	36.7	23.6
LOS by Move:	D-	D	C	F	E-	E	F	D	B+	E	D+	C
HCM2kAvgQ:	15	6	21	2	2	7	4	9	3	5	27	7

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #13: Mary Avenue / Central Expressway (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 120 117 55***
Lanes: 1 0 3 0 2

Final Vol:	Lanes:	Signal=Protect Rights=Overlap			Signal=Protect Rights=Overlap	Lanes:	Final Vol:
			Vol Cnt Date:	5/1/2017			
106***	2		Cycle Time (sec):	180		1	231
	0		Loss Time (sec):	12		0	
830	3		Critical V/C:	0.690		3	1955***
	0		Avg Crit Del (sec/veh):	39.3		0	
176	1		Avg Delay (sec/veh):	42.0		2	175
			LOS:	D			

Lanes: 2 0 3 0 1
Final Vol: 579 504 535***
Signal=Protect/Rights=Overlap

Street Name:	Mary Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	569	504	535	55	117	120	106	748	153	175	1918	231
Growth 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
Initial Bse:	569	504	535	55	117	120	106	748	153	175	1918	231
Added Vol:	10	0	0	0	0	0	0	82	23	0	37	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	579	504	535	55	117	120	106	830	176	175	1955	231
User 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
PHF 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
PHF Volume:	579	504	535	55	117	120	106	830	176	175	1955	231
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	579	504	535	55	117	120	106	830	176	175	1955	231
PCE 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
MLF 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
FinalVolume:	579	504	535	55	117	120	106	830	176	175	1955	231
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.18	0.09	0.31	0.02	0.02	0.07	0.03	0.15	0.10	0.06	0.34	0.13
Crit Moves:			****	****			****				****	
Green Time:	54.7	64.3	91.0	7.0	16.5	25.2	8.6	70.0	124.7	26.7	88.1	95.1
Volume/Cap:	0.60	0.25	0.60	0.45	0.22	0.49	0.70	0.37	0.15	0.37	0.70	0.25
Delay/Veh:	54.5	40.9	32.9	87.2	76.0	73.0	98.1	39.4	9.5	69.6	36.5	23.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	54.5	40.9	32.9	87.2	76.0	73.0	98.1	39.4	9.5	69.6	36.5	23.2
LOS by Move:	D-	D	C-	F	E-	E	F	D	A	E	D+	C
HCM2kAvgQ:	16	6	22	2	2	7	4	10	3	5	28	7

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #14: Mary Avenue / Evelyn Avenue

Signal=Protect/Rights=Include

Final Vol: 179 347 56***
Lanes: 0 1 2 0 2

Signal=Protect Rights=Include (West) — Final Vol: / Lanes:
156*** 1
0
153 1
1
26 0

Vol Cnt Date: 12/1/2016
Cycle Time (sec): 130
Loss Time (sec): 12
Critical V/C: 0.526
Avg Crit Del (sec/veh): 36.7
Avg Delay (sec/veh): 37.5
LOS: D+

Signal=Protect Rights=Include (East) — Lanes: / Final Vol:
0 260
1
1 412***
0
1 56

Lanes: 2 0 2 1 0
Final Vol: 88 1028*** 28
Signal=Protect/Rights=Include

Street Name:	Mary Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	88	1028	28	56	347	179	156	153	26	56	412	260
Growth 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
Initial Bse:	88	1028	28	56	347	179	156	153	26	56	412	260
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	88	1028	28	56	347	179	156	153	26	56	412	260
User 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
PHF 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
PHF Volume:	88	1028	28	56	347	179	156	153	26	56	412	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	1028	28	56	347	179	156	153	26	56	412	260
PCE 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
MLF 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
FinalVolume:	88	1028	28	56	347	179	156	153	26	56	412	260
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	1.00	0.92	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	2.00	2.92	0.08	2.00	2.00	1.00	1.00	1.70	0.30	1.00	1.21	0.79
Final Sat.:	3150	5451	148	3150	3800	1750	1750	3162	537	1750	2267	1431
Capacity Analysis Module:												
Vol/Sat:	0.03	0.19	0.19	0.02	0.09	0.10	0.09	0.05	0.05	0.03	0.18	0.18
Crit Moves:		****		****			****				****	
Green Time:	18.1	45.6	45.6	7.0	34.4	34.4	21.5	38.5	38.5	26.9	43.9	43.9
Volume/Cap:	0.20	0.54	0.54	0.33	0.34	0.39	0.54	0.16	0.16	0.15	0.54	0.54
Delay/Veh:	49.7	34.1	34.1	60.4	38.8	39.3	51.7	33.9	33.9	42.4	35.3	35.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.7	34.1	34.1	60.4	38.8	39.3	51.7	33.9	33.9	42.4	35.3	35.3
LOS by Move:	D	C-	C-	E	D+	D	D-	C-	C-	D	D+	D+
HCM2kAvgQ:	2	11	11	1	5	6	6	3	3	2	11	11

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #14: Mary Avenue / Evelyn Avenue

Signal=Protect/Rights=Include
Final Vol: 179 368 58***
Lanes: 0 1 2 0 2

Signal=Protect
Rights=Include
Final Vol: Lanes:
156*** 1
0
196 1
1
26 0

Vol Cnt Date: 12/1/2016
Cycle Time (sec): 130
Loss Time (sec): 12
Critical V/C: 0.533
Avg Crit Del (sec/veh): 36.8
Avg Delay (sec/veh): 37.6
LOS: D+

Signal=Protect
Rights=Include
Lanes: Final Vol:
0 260
1
1 426***
0
1 56

Lanes: 2 0 2 1 0
Final Vol: 88 1038*** 28
Signal=Protect/Rights=Include

Street Name:	Mary Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	88	1028	28	56	347	179	156	153	26	56	412	260
Growth 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
Initial Bse:	88	1028	28	56	347	179	156	153	26	56	412	260
Added Vol:	0	10	0	2	21	0	0	43	0	0	14	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	88	1038	28	58	368	179	156	196	26	56	426	260
User 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
PHF 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
PHF Volume:	88	1038	28	58	368	179	156	196	26	56	426	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	1038	28	58	368	179	156	196	26	56	426	260
PCE 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
MLF 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
FinalVolume:	88	1038	28	58	368	179	156	196	26	56	426	260
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	1.00	0.95	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	2.00	2.92	0.08	2.00	2.00	1.00	1.00	1.76	0.24	1.00	1.22	0.78
Final Sat.:	3150	5453	147	3150	3798	1800	1750	3266	433	1750	2297	1402
Capacity Analysis Module:												
Vol/Sat:	0.03	0.19	0.19	0.02	0.10	0.10	0.09	0.06	0.06	0.03	0.19	0.19
Crit Moves:		****		****			****				****	
Green Time:	18.4	45.4	45.4	7.0	34.0	34.0	21.3	38.6	38.6	27.0	44.3	44.3
Volume/Cap:	0.20	0.54	0.54	0.34	0.37	0.38	0.54	0.20	0.20	0.15	0.54	0.54
Delay/Veh:	49.5	34.3	34.3	60.5	39.4	39.5	52.1	34.3	34.3	42.4	35.2	35.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.5	34.3	34.3	60.5	39.4	39.5	52.1	34.3	34.3	42.4	35.2	35.2
LOS by Move:	D	C-	C-	E	D	D	D-	C-	C-	D	D+	D+
HCM2kAvgQ:	2	11	11	1	6	6	6	3	3	2	11	11

Note: Queue reported is the number of cars per lane.

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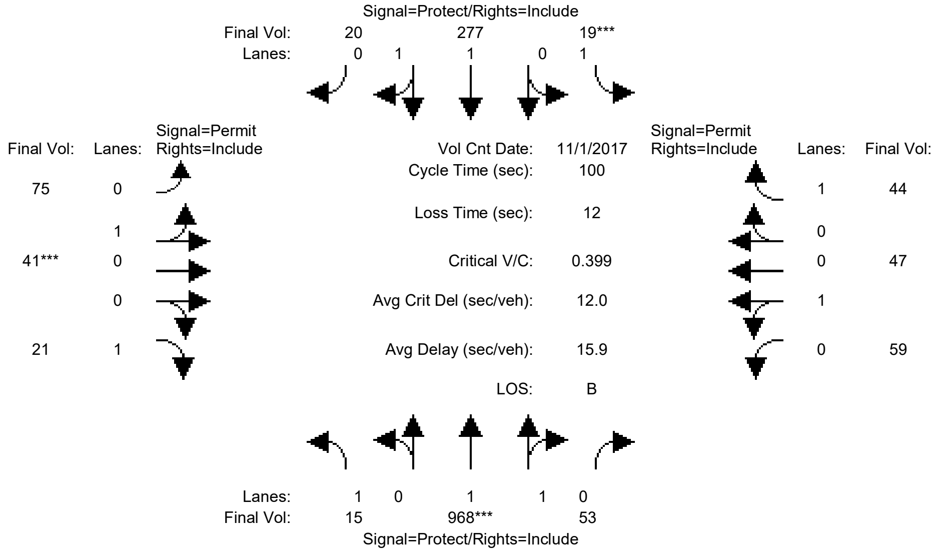
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #15: Mary Avenue / Washington Avenue



Street Name:	Mary Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Nov 2017 <<												
Base Vol:	15	968	53	19	277	20	75	41	21	59	47	44
Growth 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
Initial Bse:	15	968	53	19	277	20	75	41	21	59	47	44
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	968	53	19	277	20	75	41	21	59	47	44
User 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
PHF 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
PHF Volume:	15	968	53	19	277	20	75	41	21	59	47	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	968	53	19	277	20	75	41	21	59	47	44
PCE 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
MLF 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
FinalVolume:	15	968	53	19	277	20	75	41	21	59	47	44
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	1.89	0.11	1.00	1.86	0.14	0.65	0.35	1.00	0.56	0.44	1.00
Final Sat.:	1750	3508	192	1750	3451	249	1164	636	1750	1002	798	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.28	0.28	0.01	0.08	0.08	0.06	0.06	0.01	0.06	0.06	0.03
Crit Moves:		****		****				****				
Green Time:	29.9	65.7	65.7	7.0	42.7	42.7	15.3	15.3	15.3	15.3	15.3	15.3
Volume/Cap:	0.03	0.42	0.42	0.16	0.19	0.19	0.42	0.42	0.08	0.38	0.38	0.16
Delay/Veh:	24.8	8.3	8.3	44.3	17.9	17.9	39.3	39.3	36.4	39.0	39.0	37.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.8	8.3	8.3	44.3	17.9	17.9	39.3	39.3	36.4	39.0	39.0	37.1
LOS by Move:	C	A	A	D	B	B	D	D	D+	D+	D+	D+
HCM2kAvgQ:	0	8	8	1	3	3	4	4	1	3	3	1

Note: Queue reported is the number of cars per lane.

Cityline Sunnyvale TIA
SJ17-1787
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Intersection #15: Mary Avenue / Washington Avenue

Signal=Protect/Rights=Include
Final Vol: 20 277 40***
Lanes: 0 1 1 0 1

Signal=Permit Rights=Include (westbound side)
Final Vol: 75 / 50*** / 21; Lanes: 0, 1, 0, 0, 1

Vol Cnt Date: 11/1/2017
Cycle Time (sec): 100
Loss Time (sec): 12
Critical V/C: 0.418
Avg Crit Del (sec/veh): 13.1
Avg Delay (sec/veh): 16.8
LOS: B

Signal=Permit Rights=Include
Lanes: 1, 0, 0, 1, 0; Final Vol: 54 / 49 / 59

Lanes: 1 0 1 1 0
Final Vol: 15 968*** 53
Signal=Protect/Rights=Include

Street Name:	Mary Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Nov 2017 <<												
Base Vol:	15	968	53	19	277	20	75	41	21	59	47	44
Growth 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
Initial Bse:	15	968	53	19	277	20	75	41	21	59	47	44
Added Vol:	0	0	0	21	0	0	0	9	0	0	2	10
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	968	53	40	277	20	75	50	21	59	49	54
User 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
PHF 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
PHF Volume:	15	968	53	40	277	20	75	50	21	59	49	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	968	53	40	277	20	75	50	21	59	49	54
PCE 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
MLF 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
FinalVolume:	15	968	53	40	277	20	75	50	21	59	49	54
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	1.89	0.11	1.00	1.86	0.14	0.60	0.40	1.00	0.55	0.45	1.00
Final Sat.:	1750	3508	192	1750	3451	249	1080	720	1750	983	817	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.28	0.28	0.02	0.08	0.08	0.07	0.07	0.01	0.06	0.06	0.03
Crit Moves:		****		****				****				
Green Time:	29.5	64.7	64.7	7.0	42.2	42.2	16.3	16.3	16.3	16.3	16.3	16.3
Volume/Cap:	0.03	0.43	0.43	0.33	0.19	0.19	0.43	0.43	0.07	0.37	0.37	0.19
Delay/Veh:	25.1	8.7	8.7	45.8	18.2	18.2	38.7	38.7	35.6	38.1	38.1	36.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.1	8.7	8.7	45.8	18.2	18.2	38.7	38.7	35.6	38.1	38.1	36.5
LOS by Move:	C	A	A	D	B-	B-	D+	D+	D+	D+	D+	D+
HCM2kAvgQ:	0	8	8	1	3	3	4	4	1	3	3	1

Note: Queue reported is the number of cars per lane.

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SJ17-1787
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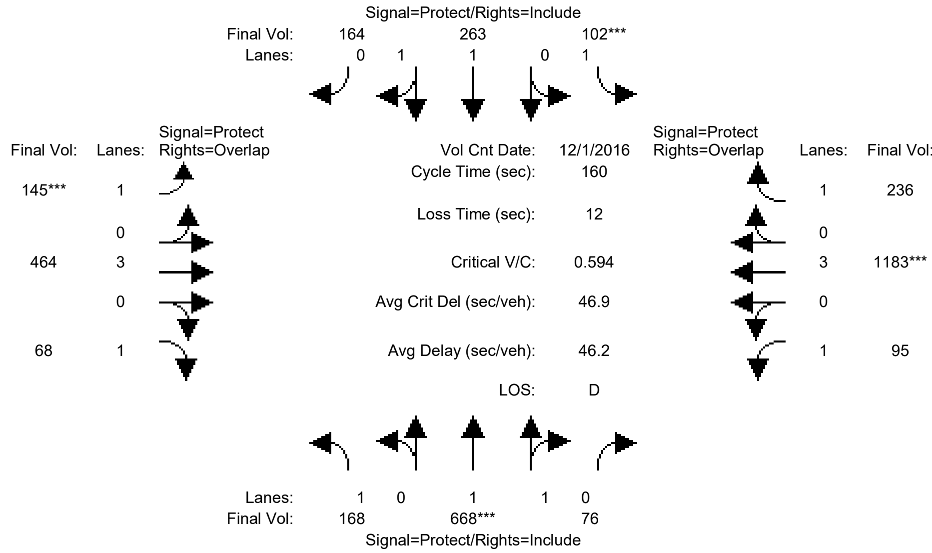
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #16: Mary Avenue / El Camino Real (CMP)



Street Name:	Mary Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	168	668	76	102	263	164	145	464	68	95	1183	236
Growth 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
Initial Bse:	168	668	76	102	263	164	145	464	68	95	1183	236
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	168	668	76	102	263	164	145	464	68	95	1183	236
User 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
PHF 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
PHF Volume:	168	668	76	102	263	164	145	464	68	95	1183	236
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	168	668	76	102	263	164	145	464	68	95	1183	236
PCE 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
MLF 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
FinalVolume:	168	668	76	102	263	164	145	464	68	95	1183	236
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.79	0.21	1.00	1.21	0.79	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	3322	378	1750	2278	1420	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.20	0.20	0.06	0.12	0.12	0.08	0.08	0.04	0.05	0.21	0.13
Crit Moves:		****		****			****				****	
Green Time:	31.7	54.1	54.1	15.7	38.1	38.1	22.3	46.9	78.6	31.3	55.9	71.6
Volume/Cap:	0.48	0.59	0.59	0.59	0.48	0.48	0.59	0.28	0.08	0.28	0.59	0.30
Delay/Veh:	58.0	44.6	44.6	74.6	52.9	52.9	68.5	43.6	21.6	55.2	43.2	28.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.0	44.6	44.6	74.6	52.9	52.9	68.5	43.6	21.6	55.2	43.2	28.5
LOS by Move:	E+	D	D	E	D-	D-	E	D	C+	E+	D	C
HCM2kAvgQ:	8	15	15	5	9	9	7	6	2	4	15	8

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
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Level Of Service Computation Report
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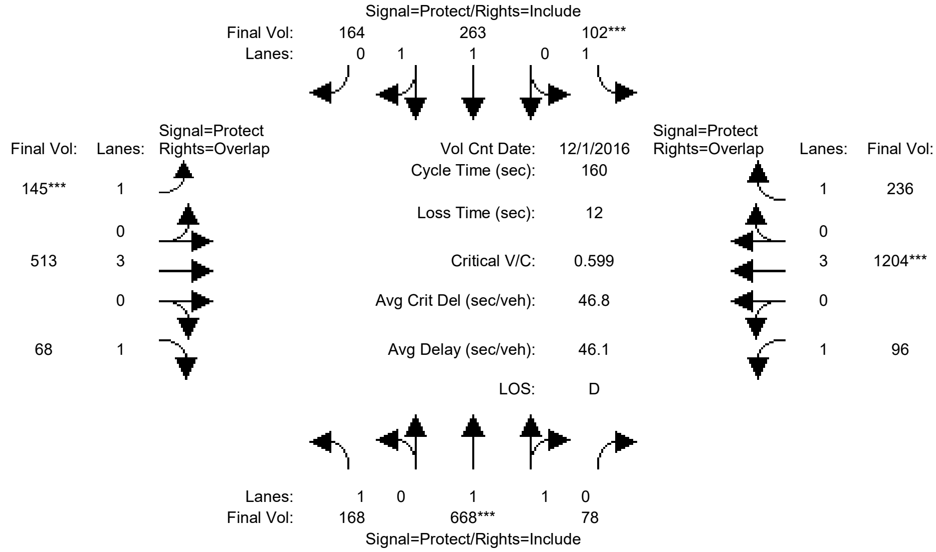
Existing PP AM

Intersection #16: Mary Avenue / El Camino Real (CMP)



Street Name:	Mary Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	168	668	76	102	263	164	145	464	68	95	1183	236
Growth 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
Initial Bse:	168	668	76	102	263	164	145	464	68	95	1183	236
Added Vol:	0	0	2	0	0	0	0	49	0	1	21	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	168	668	78	102	263	164	145	513	68	96	1204	236
User 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
PHF 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
PHF Volume:	168	668	78	102	263	164	145	513	68	96	1204	236
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	168	668	78	102	263	164	145	513	68	96	1204	236
PCE 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
MLF 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
FinalVolume:	168	668	78	102	263	164	145	513	68	96	1204	236
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.79	0.21	1.00	1.21	0.79	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	3313	387	1750	2278	1420	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.20	0.20	0.06	0.12	0.12	0.08	0.09	0.04	0.05	0.21	0.13
Crit Moves:		****		****			****				****	
Green Time:	31.5	53.9	53.9	15.6	37.9	37.9	22.1	48.8	80.3	29.8	56.4	72.0
Volume/Cap:	0.49	0.60	0.60	0.60	0.49	0.49	0.60	0.30	0.08	0.30	0.60	0.30
Delay/Veh:	58.1	44.9	44.9	75.0	53.1	53.1	68.9	42.6	20.7	56.6	43.0	28.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.1	44.9	44.9	75.0	53.1	53.1	68.9	42.6	20.7	56.6	43.0	28.2
LOS by Move:	E+	D	D	E-	D-	D-	E	D	C+	E+	D	C
HCM2kAvgQ:	8	16	16	5	9	9	7	6	2	4	16	8

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
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Level Of Service Computation Report
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Existing AM

Intersection #17: Pastoria Avenue / Washington Avenue

Signal=Permit/Rights=Include

Final Vol: 14 67 15
Lanes: 0 0 1! 0 0

Final Vol:	Lanes:	Signal=Permit Rights=Include			Signal=Permit Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	12/1/2017			
4	0		Cycle Time (sec):	160		0	10
	0		Loss Time (sec):	12		0	
114	1!		Critical V/C:	0.273		1!	124***
	0		Avg Crit Del (sec/veh):	26.6		0	
19	0		Avg Delay (sec/veh):	26.0		0	89
			LOS:	C			

Lanes: 0 0 1! 0 0
Final Vol: 23 101*** 95
Signal=Permit/Rights=Include

Street Name:	Pastoria Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	23	101	95	15	67	14	4	114	19	89	124	10
Growth 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
Initial Bse:	23	101	95	15	67	14	4	114	19	89	124	10
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	101	95	15	67	14	4	114	19	89	124	10
User 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
PHF 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
PHF Volume:	23	101	95	15	67	14	4	114	19	89	124	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	101	95	15	67	14	4	114	19	89	124	10
PCE 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
MLF 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
FinalVolume:	23	101	95	15	67	14	4	114	19	89	124	10
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.11	0.46	0.43	0.16	0.70	0.14	0.03	0.83	0.14	0.40	0.56	0.04
Final Sat.:	184	807	759	273	1221	255	51	1456	243	698	973	78
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.13	0.05	0.05	0.05	0.08	0.08	0.08	0.13	0.13	0.13
Crit Moves:		****									****	
Green Time:	73.3	73.3	73.3	73.3	73.3	73.3	74.7	74.7	74.7	74.7	74.7	74.7
Volume/Cap:	0.27	0.27	0.27	0.12	0.12	0.12	0.17	0.17	0.17	0.27	0.27	0.27
Delay/Veh:	27.0	27.0	27.0	24.9	24.9	24.9	24.8	24.8	24.8	26.3	26.3	26.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.0	27.0	27.0	24.9	24.9	24.9	24.8	24.8	24.8	26.3	26.3	26.3
LOS by Move:	C	C	C	C	C	C	C	C	C	C	C	C
HCM2kAvgQ:	7	7	7	3	3	3	4	4	4	7	7	7

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
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Intersection #17: Pastoria Avenue / Washington Avenue

Signal=Permit/Rights=Include
Final Vol: 14 67 15
Lanes: 0 0 1! 0 0

Westbound (left approach): Signal=Permit, Rights=Include
Final Vol: 4, 144, 19
Lanes: 0, 0, 1!, 0, 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.286
Avg Crit Del (sec/veh): 26.8
Avg Delay (sec/veh): 26.1
LOS: C

Signal=Permit
Rights=Include
Lanes: 0, 0, 1!, 0, 0
Final Vol: 10, 136***, 91

Lanes: 0 0 1! 0 0
Final Vol: 23 101*** 102
Signal=Permit/Rights=Include

Street Name:	Pastoria Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	23	101	95	15	67	14	4	114	19	89	124	10
Growth 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
Initial Bse:	23	101	95	15	67	14	4	114	19	89	124	10
Added Vol:	0	0	7	0	0	0	0	30	0	2	12	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	101	102	15	67	14	4	144	19	91	136	10
User 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
PHF 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
PHF Volume:	23	101	102	15	67	14	4	144	19	91	136	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	101	102	15	67	14	4	144	19	91	136	10
PCE 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
MLF 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
FinalVolume:	23	101	102	15	67	14	4	144	19	91	136	10
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.10	0.45	0.45	0.16	0.70	0.14	0.02	0.87	0.11	0.38	0.58	0.04
Final Sat.:	178	782	790	273	1221	255	42	1509	199	672	1004	74
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.13	0.05	0.05	0.05	0.10	0.10	0.10	0.14	0.14	0.14
Crit Moves:		****									****	
Green Time:	72.2	72.2	72.2	72.2	72.2	72.2	75.8	75.8	75.8	75.8	75.8	75.8
Volume/Cap:	0.29	0.29	0.29	0.12	0.12	0.12	0.20	0.20	0.20	0.29	0.29	0.29
Delay/Veh:	27.8	27.8	27.8	25.5	25.5	25.5	24.6	24.6	24.6	25.8	25.8	25.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.8	27.8	27.8	25.5	25.5	25.5	24.6	24.6	24.6	25.8	25.8	25.8
LOS by Move:	C	C	C	C	C	C	C	C	C	C	C	C
HCM2kAvgQ:	7	7	7	3	3	3	5	5	5	7	7	7

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #18: El Camino Real / Hollenbeck Avenue-Pastoria Avenue

Signal=Protect/Rights=Overlap
Final Vol: 81 194 54***
Lanes: 1 0 2 0 1

Signal=Protect Rights=Include (Westbound, left side)
Final Vol: 52*** / 540 / 59
Lanes: 1 / 0 / 2 / 1 / 0

Vol Cnt Date: 12/1/2016
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.492
Avg Crit Del (sec/veh): 35.2
Avg Delay (sec/veh): 38.7
LOS: D+

Signal=Protect Rights=Include
Lanes: 0 / 1 / 2 / 0 / 2
Final Vol: 64 / 1278*** / 133

Lanes: 1 0 1 1 0
Final Vol: 154 306*** 267
Signal=Protect/Rights=Include

Street Name:	Hollenbeck Avenue-Pastoria Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	154	306	267	54	194	81	52	540	59	133	1278	64
Growth 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
Initial Bse:	154	306	267	54	194	81	52	540	59	133	1278	64
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	154	306	267	54	194	81	52	540	59	133	1278	64
User 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
PHF 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
PHF Volume:	154	306	267	54	194	81	52	540	59	133	1278	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	154	306	267	54	194	81	52	540	59	133	1278	64
PCE 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
MLF 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
FinalVolume:	154	306	267	54	194	81	52	540	59	133	1278	64
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.95	0.92	1.00	0.92	0.92	0.99	0.95	0.83	0.98	0.95
Lanes:	1.00	1.04	0.96	1.00	2.00	1.00	1.00	2.69	0.31	2.00	2.85	0.15
Final Sat.:	1750	1975	1723	1750	3800	1750	1750	5048	552	3150	5333	267
Capacity Analysis Module:												
Vol/Sat:	0.09	0.15	0.15	0.03	0.05	0.05	0.03	0.11	0.11	0.04	0.24	0.24
Crit Moves:		****		****			****				****	
Green Time:	35.3	50.4	50.4	10.0	25.1	34.8	9.7	62.2	62.2	25.4	77.9	77.9
Volume/Cap:	0.40	0.49	0.49	0.49	0.33	0.21	0.49	0.28	0.28	0.27	0.49	0.49
Delay/Veh:	53.9	44.8	44.8	76.0	60.3	51.7	76.4	33.6	33.6	59.4	27.8	27.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.9	44.8	44.8	76.0	60.3	51.7	76.4	33.6	33.6	59.4	27.8	27.8
LOS by Move:	D-	D	D	E-	E	D-	E-	C-	C-	E+	C	C
HCM2kAvgQ:	7	11	11	3	4	3	3	6	6	3	14	14

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #18: El Camino Real / Hollenbeck Avenue-Pastoria Avenue

Signal=Protect/Rights=Overlap

Final Vol: 82 197 54***
Lanes: 1 0 2 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	12/1/2016			
			Cycle Time (sec):	160			
53***	1					0	64
			Loss Time (sec):	12			
	0					1	
590	2		Critical V/C:	0.508		2	1298***
	1		Avg Crit Del (sec/veh):	35.8		0	
59	0		Avg Delay (sec/veh):	39.1		2	142
			LOS:	D			

Lanes: 1 0 1 1 0
Final Vol: 154 315*** 298
Signal=Protect/Rights=Include

Street Name:	Hollenbeck Avenue-Pastoria Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	154	306	267	54	194	81	52	540	59	133	1278	64
Growth 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
Initial Bse:	154	306	267	54	194	81	52	540	59	133	1278	64
Added Vol:	0	9	31	0	3	1	1	50	0	9	20	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	154	315	298	54	197	82	53	590	59	142	1298	64
User 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
PHF 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
PHF Volume:	154	315	298	54	197	82	53	590	59	142	1298	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	154	315	298	54	197	82	53	590	59	142	1298	64
PCE 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
MLF 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
FinalVolume:	154	315	298	54	197	82	53	590	59	142	1298	64
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.95	0.92	1.00	0.92	0.92	0.99	0.95	0.83	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.72	0.28	2.00	2.85	0.15
Final Sat.:	1750	1900	1797	1750	3800	1750	1750	5090	509	3150	5337	263
Capacity Analysis Module:												
Vol/Sat:	0.09	0.17	0.17	0.03	0.05	0.05	0.03	0.12	0.12	0.05	0.24	0.24
Crit Moves:		****		****			****				****	
Green Time:	36.2	52.2	52.2	9.7	25.7	35.2	9.5	62.0	62.0	24.1	76.6	76.6
Volume/Cap:	0.39	0.51	0.51	0.51	0.32	0.21	0.51	0.30	0.30	0.30	0.51	0.51
Delay/Veh:	53.2	43.9	43.9	76.8	59.7	51.3	77.0	34.0	34.0	60.8	28.9	28.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.2	43.9	43.9	76.8	59.7	51.3	77.0	34.0	34.0	60.8	28.9	28.9
LOS by Move:	D-	D	D	E-	E+	D-	E-	C-	C-	E	C	C
HCM2kAvgQ:	7	12	12	3	4	3	3	7	7	3	15	15

Note: Queue reported is the number of cars per lane.

Cityline Sunnyvale TIA
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Level Of Service Computation Report
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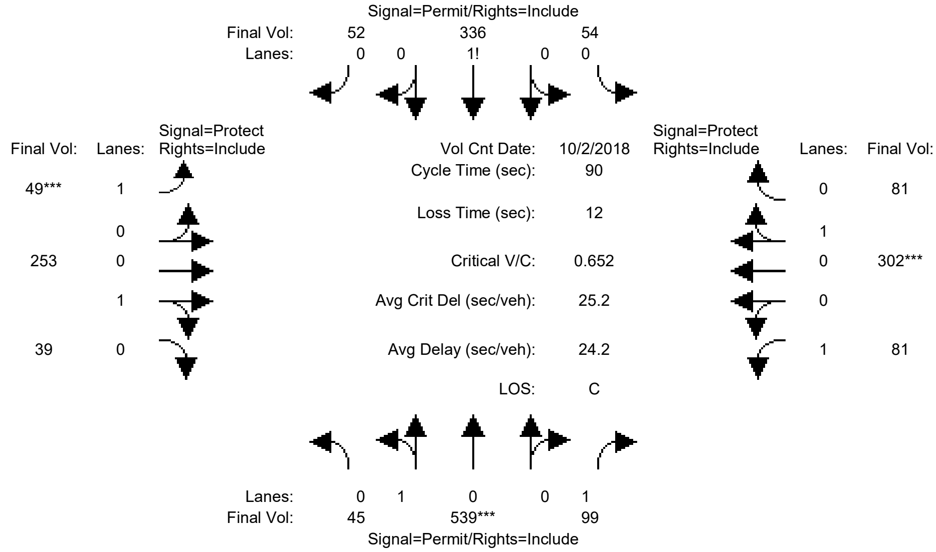
Existing AM

Intersection #19: Hollenbeck Avenue / Remington Avenue



Street Name:	Hollenbeck Avenue						Remington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	45	539	99	54	336	52	49	253	39	81	302	81
Growth 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
Initial Bse:	45	539	99	54	336	52	49	253	39	81	302	81
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	539	99	54	336	52	49	253	39	81	302	81
User 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
PHF 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
PHF Volume:	45	539	99	54	336	52	49	253	39	81	302	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	539	99	54	336	52	49	253	39	81	302	81
PCE 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
MLF 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
FinalVolume:	45	539	99	54	336	52	49	253	39	81	302	81
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.08	0.92	1.00	0.12	0.76	0.12	1.00	0.87	0.13	1.00	0.79	0.21
Final Sat.:	139	1661	1750	214	1330	206	1750	1560	240	1750	1419	381
Capacity Analysis Module:												
Vol/Sat:	0.32	0.32	0.06	0.25	0.25	0.25	0.03	0.16	0.16	0.05	0.21	0.21
Crit Moves:		****					****				****	
Green Time:	42.9	42.9	42.9	42.9	42.9	42.9	7.0	23.7	23.7	11.4	28.1	28.1
Volume/Cap:	0.68	0.68	0.12	0.53	0.53	0.53	0.36	0.62	0.62	0.37	0.68	0.68
Delay/Veh:	20.5	20.5	13.1	17.2	17.2	17.2	41.0	31.5	31.5	37.0	30.4	30.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.5	20.5	13.1	17.2	17.2	17.2	41.0	31.5	31.5	37.0	30.4	30.4
LOS by Move:	C+	C+	B	B	B	B	D	C	C	D+	C	C
HCM2kAvgQ:	13	13	2	9	9	9	2	8	8	2	9	9

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
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Existing PP AM

Intersection #19: Hollenbeck Avenue / Remington Avenue

Signal=Permit/Rights=Include
Final Vol: 53 347 54
Lanes: 0 0 1! 0 0

Signal=Protect Rights=Include (West approach)
Final Vol: 53*** — Lanes: 1
Lanes: 0
Final Vol: 257 — Lanes: 0
Lanes: 1
Final Vol: 39 — Lanes: 0

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 90
Loss Time (sec): 12
Critical V/C: 0.679
Avg Crit Del (sec/veh): 25.9
Avg Delay (sec/veh): 24.6
LOS: C

Signal=Protect Rights=Include (East approach)
Lanes: 0 — Final Vol: 81
Lanes: 1
Lanes: 0 — Final Vol: 303***
Lanes: 0
Lanes: 1 — Final Vol: 81

Lanes: 0 1 0 0 1
Final Vol: 45 575*** 99
Signal=Permit/Rights=Include

Street Name:	Hollenbeck Avenue						Remington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	45	539	99	54	336	52	49	253	39	81	302	81
Growth 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
Initial Bse:	45	539	99	54	336	52	49	253	39	81	302	81
Added Vol:	0	36	0	0	11	1	4	4	0	0	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	575	99	54	347	53	53	257	39	81	303	81
User 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
PHF 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
PHF Volume:	45	575	99	54	347	53	53	257	39	81	303	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	575	99	54	347	53	53	257	39	81	303	81
PCE 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
MLF 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
FinalVolume:	45	575	99	54	347	53	53	257	39	81	303	81
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.07	0.93	1.00	0.12	0.76	0.12	1.00	0.87	0.13	1.00	0.79	0.21
Final Sat.:	131	1669	1750	208	1338	204	1750	1563	237	1750	1420	380
Capacity Analysis Module:												
Vol/Sat:	0.34	0.34	0.06	0.26	0.26	0.26	0.03	0.16	0.16	0.05	0.21	0.21
Crit Moves:		****					****				****	
Green Time:	43.8	43.8	43.8	43.8	43.8	43.8	7.0	23.2	23.2	11.0	27.2	27.2
Volume/Cap:	0.71	0.71	0.12	0.53	0.53	0.53	0.39	0.64	0.64	0.38	0.71	0.71
Delay/Veh:	20.7	20.7	12.6	16.6	16.6	16.6	41.3	32.6	32.6	37.5	32.2	32.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.7	20.7	12.6	16.6	16.6	16.6	41.3	32.6	32.6	37.5	32.2	32.2
LOS by Move:	C+	C+	B	B	B	B	D	C-	C-	D+	C-	C-
HCM2kAvgQ:	14	14	2	9	9	9	2	9	9	2	9	9

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

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2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #20: Hollenbeck Avenue / Fremont Avenue

Signal=Protect/Rights=Overlap
Final Vol: 145 176 90***
Lanes: 1 0 1 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
100***	1		Vol Cnt Date:	5/1/2017		0	128
			Cycle Time (sec):	160			
	0		Loss Time (sec):	12		1	
470	2		Critical V/C:	0.489		2	756***
	1		Avg Crit Del (sec/veh):	45.7		0	
75	0		Avg Delay (sec/veh):	45.5		1	134
			LOS:	D			

Lanes: 1 0 1 0 1
Final Vol: 204 354*** 215
Signal=Protect/Rights=Overlap

Street Name:	Hollenbeck Avenue						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	204	354	215	90	176	145	100	470	75	134	756	128
Growth 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
Initial Bse:	204	354	215	90	176	145	100	470	75	134	756	128
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	204	354	215	90	176	145	100	470	75	134	756	128
User 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
PHF 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
PHF Volume:	204	354	215	90	176	145	100	470	75	134	756	128
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	204	354	215	90	176	145	100	470	75	134	756	128
PCE 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
MLF 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
FinalVolume:	204	354	215	90	176	145	100	470	75	134	756	128
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.57	0.43	1.00	2.55	0.45
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	4828	770	1750	4788	811
Capacity Analysis Module:												
Vol/Sat:	0.12	0.19	0.12	0.05	0.09	0.08	0.06	0.10	0.10	0.08	0.16	0.16
Crit Moves:		****		****			****				****	
Green Time:	43.3	60.9	91.8	16.8	34.4	53.1	18.7	39.3	39.3	30.9	51.6	51.6
Volume/Cap:	0.43	0.49	0.21	0.49	0.43	0.25	0.49	0.40	0.40	0.40	0.49	0.49
Delay/Veh:	48.8	38.2	16.7	69.6	55.1	39.2	68.0	50.6	50.6	57.1	43.8	43.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.8	38.2	16.7	69.6	55.1	39.2	68.0	50.6	50.6	57.1	43.8	43.8
LOS by Move:	D	D+	B	E	E+	D	E	D	D	E+	D	D
HCM2kAvgQ:	9	13	5	4	7	5	5	8	8	6	11	11

Note: Queue reported is the number of cars per lane.

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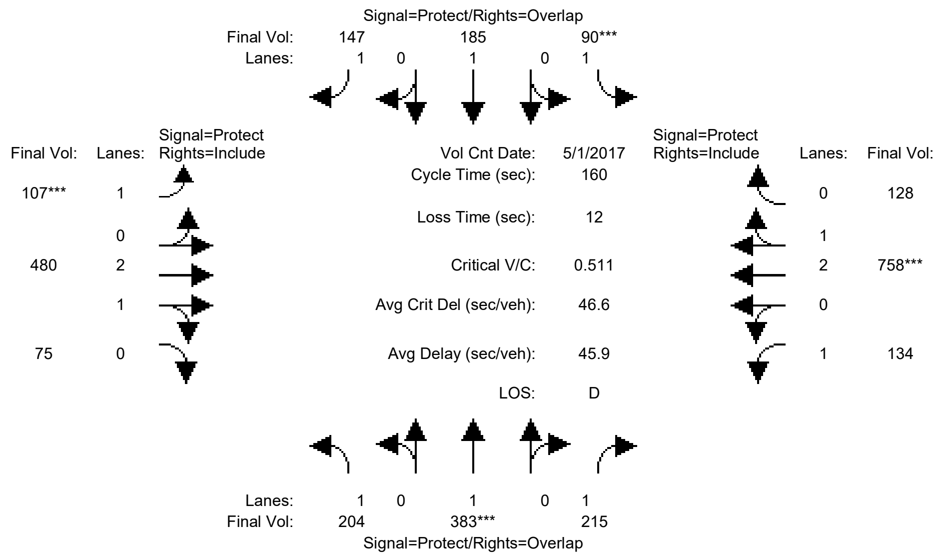
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #20: Hollenbeck Avenue / Fremont Avenue



Street Name:	Hollenbeck Avenue						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	204	354	215	90	176	145	100	470	75	134	756	128
Growth 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
Initial Bse:	204	354	215	90	176	145	100	470	75	134	756	128
Added Vol:	0	29	0	0	9	2	7	10	0	0	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	204	383	215	90	185	147	107	480	75	134	758	128
User 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
PHF 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
PHF Volume:	204	383	215	90	185	147	107	480	75	134	758	128
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	204	383	215	90	185	147	107	480	75	134	758	128
PCE 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
MLF 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
FinalVolume:	204	383	215	90	185	147	107	480	75	134	758	128
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.58	0.42	1.00	2.55	0.45
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	4842	757	1750	4790	809
Capacity Analysis Module:												
Vol/Sat:	0.12	0.20	0.12	0.05	0.10	0.08	0.06	0.10	0.10	0.08	0.16	0.16
Crit Moves:		****		****			****				****	
Green Time:	43.2	63.2	93.1	16.1	36.1	55.2	19.2	38.8	38.8	30.0	49.6	49.6
Volume/Cap:	0.43	0.51	0.21	0.51	0.43	0.24	0.51	0.41	0.41	0.41	0.51	0.51
Delay/Veh:	48.9	37.3	16.0	70.7	53.9	37.7	68.1	51.2	51.2	58.1	45.5	45.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.9	37.3	16.0	70.7	53.9	37.7	68.1	51.2	51.2	58.1	45.5	45.5
LOS by Move:	D	D+	B	E	D-	D+	E	D-	D-	E+	D	D
HCM2kAvgQ:	9	14	5	4	7	5	6	8	8	6	11	11

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #21: Hollenbeck Avenue / Cascade Drive

Signal=Permit/Rights=Include
Final Vol: 52 360 6
Lanes: 0 0 1! 0 0

Final Vol:	Lanes:	Signal=Permit Rights=Include			Signal=Permit Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	10/2/2018			
71	0		Cycle Time (sec):	60		0	39
	0		Loss Time (sec):	6		0	
57	1!		Critical V/C:	0.578		1!	117***
	0		Avg Crit Del (sec/veh):	9.0		0	
43	0		Avg Delay (sec/veh):	9.1		0	31
			LOS:	A			

Lanes: 0 0 1! 0 0
Final Vol: 53 642*** 28
Signal=Permit/Rights=Include

Street Name:	Hollenbeck Avenue						Cascade Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	53	642	28	6	360	52	71	57	43	31	117	39
Growth 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
Initial Bse:	53	642	28	6	360	52	71	57	43	31	117	39
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	53	642	28	6	360	52	71	57	43	31	117	39
User 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
PHF 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
PHF Volume:	53	642	28	6	360	52	71	57	43	31	117	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	642	28	6	360	52	71	57	43	31	117	39
PCE 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
MLF 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
FinalVolume:	53	642	28	6	360	52	71	57	43	31	117	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.07	0.89	0.04	0.01	0.87	0.12	0.42	0.33	0.25	0.17	0.62	0.21
Final Sat.:	128	1554	68	25	1507	218	727	583	440	290	1095	365
Capacity Analysis Module:												
Vol/Sat:	0.41	0.41	0.41	0.24	0.24	0.24	0.10	0.10	0.10	0.11	0.11	0.11
Crit Moves:		****									****	
Green Time:	42.9	42.9	42.9	42.9	42.9	42.9	11.1	11.1	11.1	11.1	11.1	11.1
Volume/Cap:	0.58	0.58	0.58	0.33	0.33	0.33	0.53	0.53	0.53	0.58	0.58	0.58
Delay/Veh:	4.8	4.8	4.8	3.4	3.4	3.4	23.7	23.7	23.7	24.9	24.9	24.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	4.8	4.8	4.8	3.4	3.4	3.4	23.7	23.7	23.7	24.9	24.9	24.9
LOS by Move:	A	A	A	A	A	A	C	C	C	C	C	C
HCM2kAvgQ:	7	7	7	3	3	3	4	4	4	4	4	4

Note: Queue reported is the number of cars per lane.

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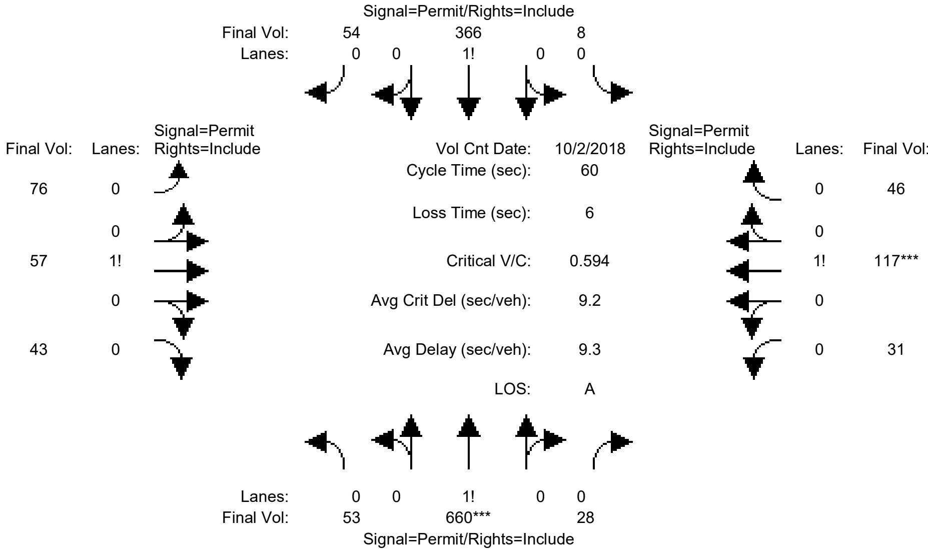
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #21: Hollenbeck Avenue / Cascade Drive



Street Name:	Hollenbeck Avenue						Cascade Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	53	642	28	6	360	52	71	57	43	31	117	39
Growth 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
Initial Bse:	53	642	28	6	360	52	71	57	43	31	117	39
Added Vol:	0	18	0	2	6	2	5	0	0	0	0	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	53	660	28	8	366	54	76	57	43	31	117	46
User 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
PHF 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
PHF Volume:	53	660	28	8	366	54	76	57	43	31	117	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	660	28	8	366	54	76	57	43	31	117	46
PCE 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
MLF 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
FinalVolume:	53	660	28	8	366	54	76	57	43	31	117	46
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.07	0.89	0.04	0.02	0.85	0.13	0.44	0.32	0.24	0.16	0.60	0.24
Final Sat.:	125	1559	66	33	1496	221	756	567	428	280	1055	415
Capacity Analysis Module:												
Vol/Sat:	0.42	0.42	0.42	0.24	0.24	0.24	0.10	0.10	0.10	0.11	0.11	0.11
Crit Moves:		****									****	
Green Time:	42.8	42.8	42.8	42.8	42.8	42.8	11.2	11.2	11.2	11.2	11.2	11.2
Volume/Cap:	0.59	0.59	0.59	0.34	0.34	0.34	0.54	0.54	0.54	0.59	0.59	0.59
Delay/Veh:	5.1	5.1	5.1	3.4	3.4	3.4	23.9	23.9	23.9	25.2	25.2	25.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.1	5.1	5.1	3.4	3.4	3.4	23.9	23.9	23.9	25.2	25.2	25.2
LOS by Move:	A	A	A	A	A	A	C	C	C	C	C	C
HCM2kAvgQ:	8	8	8	3	3	3	4	4	4	5	5	5

Note: Queue reported is the number of cars per lane.

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	599	31	199	121	2489	0	0	237	106
Future Volume (vph)	0	0	0	599	31	199	121	2489	0	0	237	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				7.0	7.0	7.0	6.3	6.0			6.3	
Lane Util. Factor				0.95	0.95	1.00	1.00	0.86			0.86	
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.95	
Flt Protected				0.95	0.96	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1681	1693	1583	1770	6408			6111	
Flt Permitted				0.95	0.96	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1681	1693	1583	1770	6408			6111	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	0	599	31	199	121	2489	0	0	237	106
RTOR Reduction (vph)	0	0	0	0	0	52	0	0	0	0	51	0
Lane Group Flow (vph)	0	0	0	311	319	147	121	2489	0	0	292	0
Confl. Peds. (#/hr)									12			
Turn Type				Split	NA	Perm	Prot	NA			NA	
Protected Phases				8	8		5	2			6	
Permitted Phases						8						
Actuated Green, G (s)				43.0	43.0	43.0	14.9	84.0			62.5	
Effective Green, g (s)				43.0	43.0	43.0	14.9	84.0			62.5	
Actuated g/C Ratio				0.31	0.31	0.31	0.11	0.60			0.45	
Clearance Time (s)				7.0	7.0	7.0	6.3	6.0			6.3	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				516	519	486	188	3844			2728	
v/s Ratio Prot				0.18	c0.19		0.07	c0.39			0.05	
v/s Ratio Perm						0.09						
v/c Ratio				0.60	0.61	0.30	0.64	0.65			0.11	
Uniform Delay, d1				41.2	41.4	37.0	60.0	18.3			22.5	
Progression Factor				1.00	1.00	1.00	1.27	0.59			0.71	
Incremental Delay, d2				5.1	5.4	1.6	6.5	0.8			0.0	
Delay (s)				46.4	46.8	38.6	83.0	11.5			15.9	
Level of Service				D	D	D	F	B			B	
Approach Delay (s)		0.0			44.7			14.8			15.9	
Approach LOS		A			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	21.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	103.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	739	0	40	0	0	0	0	1863	822	67	906	0
Future Volume (vph)	739	0	40	0	0	0	0	1863	822	67	906	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0						6.2	6.2	6.4	5.9	
Lane Util. Factor	0.91	0.91						0.81	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.98						1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.96						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3221	1588						7544	1561	1770	5085	
Flt Permitted	0.95	0.96						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3221	1588						7544	1561	1770	5085	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	739	0	40	0	0	0	0	1863	822	67	906	0
RTOR Reduction (vph)	0	51	0	0	0	0	0	0	421	0	0	0
Lane Group Flow (vph)	525	203	0	0	0	0	0	1863	401	67	906	0
Confl. Bikes (#/hr)									5			
Turn Type	Split	NA						NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases									2			
Actuated Green, G (s)	44.0	44.0						68.3	68.3	8.1	83.1	
Effective Green, g (s)	44.0	44.0						68.3	68.3	8.1	83.1	
Actuated g/C Ratio	0.31	0.31						0.49	0.49	0.06	0.59	
Clearance Time (s)	7.0	7.0						6.2	6.2	6.4	5.9	
Vehicle Extension (s)	3.0	3.0						3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1012	499						3680	761	102	3018	
v/s Ratio Prot	c0.16	0.13						0.25		c0.04	0.18	
v/s Ratio Perm									c0.26			
v/c Ratio	0.52	0.41						0.51	0.53	0.66	0.30	
Uniform Delay, d1	39.3	37.7						24.4	24.7	64.6	14.1	
Progression Factor	1.00	1.00						0.30	5.32	1.26	0.56	
Incremental Delay, d2	1.9	2.4						0.4	2.1	14.2	0.1	
Delay (s)	41.2	40.2						7.6	133.5	95.3	8.0	
Level of Service	D	D						A	F	F	A	
Approach Delay (s)		40.9			0.0			46.2			14.0	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM 2000 Control Delay	38.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	103.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	8	37	226	52	189	108	2446	94	32	821	90
Future Volume (vph)	36	8	37	226	52	189	108	2446	94	32	821	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.81		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1555	1759	1863	1583	1770	7493		1770	5010	
Flt Permitted	0.72	1.00	1.00	0.75	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1347	1863	1555	1393	1863	1583	1770	7493		1770	5010	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	36	8	37	226	52	189	108	2446	94	32	821	90
RTOR Reduction (vph)	0	0	27	0	0	107	0	5	0	0	9	0
Lane Group Flow (vph)	36	8	10	226	52	82	108	2535	0	32	902	0
Confl. Peds. (#/hr)			5	5					5			
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Actuated Green, G (s)	36.0	36.0	36.0	36.0	36.0	36.0	11.9	73.6		10.0	71.5	
Effective Green, g (s)	36.0	36.0	36.0	36.0	36.0	36.0	11.9	73.6		10.0	71.5	
Actuated g/C Ratio	0.26	0.26	0.26	0.26	0.26	0.26	0.09	0.53		0.07	0.51	
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	346	479	399	358	479	407	150	3939		126	2558	
v/s Ratio Prot		0.00			0.03		0.06	c0.34		0.02	c0.18	
v/s Ratio Perm	0.03		0.01	c0.16		0.05						
v/c Ratio	0.10	0.02	0.02	0.63	0.11	0.20	0.72	0.64		0.25	0.35	
Uniform Delay, d1	39.7	38.8	38.9	46.1	39.7	40.7	62.4	23.8		61.5	20.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.51	0.29	
Incremental Delay, d2	0.6	0.1	0.1	3.6	0.1	0.2	15.2	0.8		4.6	0.1	
Delay (s)	40.3	38.9	39.0	49.7	39.8	41.0	77.7	24.6		36.2	6.0	
Level of Service	D	D	D	D	D	D	E	C		D	A	
Approach Delay (s)		39.6			45.1			26.8			7.1	
Approach LOS		D			D			C			A	

Intersection Summary			
HCM 2000 Control Delay	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	636	31	199	122	2496	0	0	239	106
Future Volume (vph)	0	0	0	636	31	199	122	2496	0	0	239	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				7.0	7.0	7.0	6.3	6.0			6.3	
Lane Util. Factor				0.95	0.95	1.00	1.00	0.86			0.86	
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.95	
Flt Protected				0.95	0.96	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1681	1693	1583	1770	6408			6113	
Flt Permitted				0.95	0.96	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1681	1693	1583	1770	6408			6113	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	0	636	31	199	122	2496	0	0	239	106
RTOR Reduction (vph)	0	0	0	0	0	52	0	0	0	0	51	0
Lane Group Flow (vph)	0	0	0	331	336	147	122	2496	0	0	294	0
Confl. Peds. (#/hr)									12			
Turn Type				Split	NA	Perm	Prot	NA			NA	
Protected Phases				8	8		5	2			6	
Permitted Phases						8						
Actuated Green, G (s)				43.0	43.0	43.0	15.0	84.0			62.4	
Effective Green, g (s)				43.0	43.0	43.0	15.0	84.0			62.4	
Actuated g/C Ratio				0.31	0.31	0.31	0.11	0.60			0.45	
Clearance Time (s)				7.0	7.0	7.0	6.3	6.0			6.3	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				516	519	486	189	3844			2724	
v/s Ratio Prot				0.20	c0.20		0.07	c0.39			0.05	
v/s Ratio Perm						0.09						
v/c Ratio				0.64	0.65	0.30	0.65	0.65			0.11	
Uniform Delay, d1				41.8	41.9	37.0	59.9	18.3			22.6	
Progression Factor				1.00	1.00	1.00	1.27	0.60			0.72	
Incremental Delay, d2				6.0	6.1	1.6	6.5	0.8			0.0	
Delay (s)				47.9	48.1	38.6	82.9	11.7			16.3	
Level of Service				D	D	D	F	B			B	
Approach Delay (s)		0.0			45.8			15.0			16.3	
Approach LOS		A			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	22.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	106.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	739	0	43	0	0	0	0	1871	838	67	945	0
Future Volume (vph)	739	0	43	0	0	0	0	1871	838	67	945	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0						6.2	6.2	6.4	5.9	
Lane Util. Factor	0.91	0.91						0.81	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.97						1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.96						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3221	1587						7544	1561	1770	5085	
Flt Permitted	0.95	0.96						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3221	1587						7544	1561	1770	5085	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	739	0	43	0	0	0	0	1871	838	67	945	0
RTOR Reduction (vph)	0	51	0	0	0	0	0	0	429	0	0	0
Lane Group Flow (vph)	525	206	0	0	0	0	0	1871	409	67	945	0
Confl. Bikes (#/hr)									5			
Turn Type	Split	NA						NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases									2			
Actuated Green, G (s)	44.0	44.0						68.3	68.3	8.1	83.1	
Effective Green, g (s)	44.0	44.0						68.3	68.3	8.1	83.1	
Actuated g/C Ratio	0.31	0.31						0.49	0.49	0.06	0.59	
Clearance Time (s)	7.0	7.0						6.2	6.2	6.4	5.9	
Vehicle Extension (s)	3.0	3.0						3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1012	498						3680	761	102	3018	
v/s Ratio Prot	c0.16	0.13						0.25		c0.04	0.19	
v/s Ratio Perm									c0.26			
v/c Ratio	0.52	0.41						0.51	0.54	0.66	0.31	
Uniform Delay, d1	39.3	37.8						24.4	24.9	64.6	14.2	
Progression Factor	1.00	1.00						0.30	5.70	1.15	0.62	
Incremental Delay, d2	1.9	2.5						0.4	2.1	14.2	0.1	
Delay (s)	41.2	40.3						7.6	143.9	88.3	8.9	
Level of Service	D	D						A	F	F	A	
Approach Delay (s)		40.9			0.0			49.7			14.2	
Approach LOS		D			A			D			B	

Intersection Summary			
HCM 2000 Control Delay	40.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	106.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

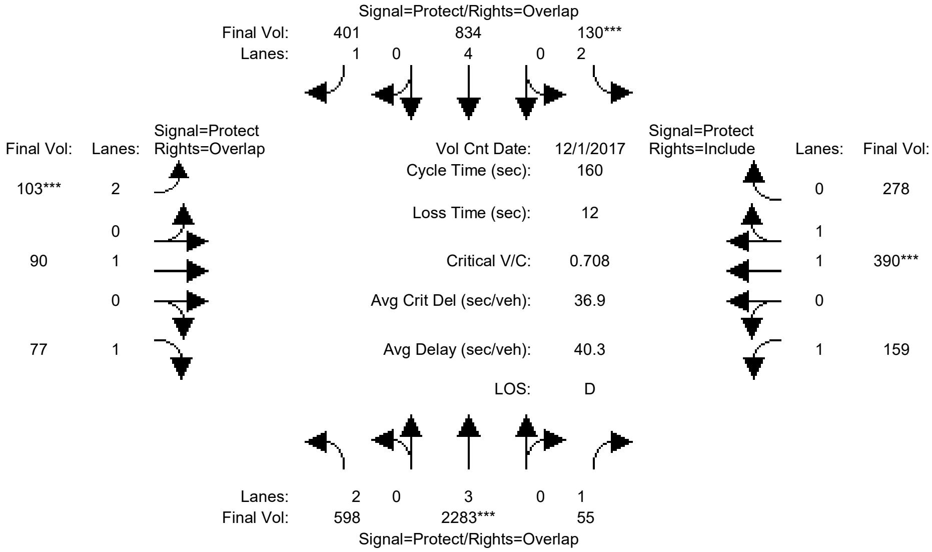
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	8	37	227	52	189	108	2470	96	32	863	90
Future Volume (vph)	36	8	37	227	52	189	108	2470	96	32	863	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.81		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1555	1759	1863	1583	1770	7492		1770	5013	
Flt Permitted	0.72	1.00	1.00	0.75	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1347	1863	1555	1393	1863	1583	1770	7492		1770	5013	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	36	8	37	227	52	189	108	2470	96	32	863	90
RTOR Reduction (vph)	0	0	27	0	0	107	0	5	0	0	9	0
Lane Group Flow (vph)	36	8	10	227	52	82	108	2561	0	32	944	0
Confl. Peds. (#/hr)			5	5					5			
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Actuated Green, G (s)	36.0	36.0	36.0	36.0	36.0	36.0	11.9	73.6		10.0	71.5	
Effective Green, g (s)	36.0	36.0	36.0	36.0	36.0	36.0	11.9	73.6		10.0	71.5	
Actuated g/C Ratio	0.26	0.26	0.26	0.26	0.26	0.26	0.09	0.53		0.07	0.51	
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	346	479	399	358	479	407	150	3938		126	2560	
v/s Ratio Prot		0.00			0.03		0.06	c0.34		0.02	c0.19	
v/s Ratio Perm	0.03		0.01	c0.16		0.05						
v/c Ratio	0.10	0.02	0.02	0.63	0.11	0.20	0.72	0.65		0.25	0.37	
Uniform Delay, d1	39.7	38.8	38.9	46.2	39.7	40.7	62.4	23.9		61.5	20.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.55	0.32	
Incremental Delay, d2	0.6	0.1	0.1	3.6	0.1	0.2	15.2	0.8		4.6	0.1	
Delay (s)	40.3	38.9	39.0	49.8	39.8	41.0	77.7	24.8		38.7	6.6	
Level of Service	D	D	D	D	D	D	E	C		D	A	
Approach Delay (s)		39.6			45.1			26.9			7.7	
Approach LOS		D			D			C			A	

Intersection Summary			
HCM 2000 Control Delay	24.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	78.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #25: Mathilda Avenue / Maude Avenue (CMP)



Street Name:	Mathilda Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	598	2283	55	130	834	401	103	90	77	159	390	278
Growth 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
Initial Bse:	598	2283	55	130	834	401	103	90	77	159	390	278
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	598	2283	55	130	834	401	103	90	77	159	390	278
User 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
PHF 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
PHF Volume:	598	2283	55	130	834	401	103	90	77	159	390	278
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	598	2283	55	130	834	401	103	90	77	159	390	278
PCE 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
MLF 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
FinalVolume:	598	2283	55	130	834	401	103	90	77	159	390	278
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.92	0.99	0.95
Lanes:	2.00	3.00	1.00	2.00	4.00	1.00	2.00	1.00	1.00	1.00	1.14	0.86
Final Sat.:	3150	5700	1750	3150	7600	1750	3150	1900	1750	1750	2159	1539
Capacity Analysis Module:												
Vol/Sat:	0.19	0.40	0.03	0.04	0.11	0.23	0.03	0.05	0.04	0.09	0.18	0.18
Crit Moves:		****		****			****				****	
Green Time:	49.0	90.5	119.0	9.3	50.8	58.1	7.4	19.6	68.7	28.6	40.8	40.8
Volume/Cap:	0.62	0.71	0.04	0.71	0.35	0.63	0.71	0.39	0.10	0.51	0.71	0.71
Delay/Veh:	48.7	25.9	5.4	86.0	42.0	44.1	90.1	65.7	27.3	60.8	56.7	56.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.7	25.9	5.4	86.0	42.0	44.1	90.1	65.7	27.3	60.8	56.7	56.7
LOS by Move:	D	C	A	F	D	D	F	E	C	E	E+	E+
HCM2kAvgQ:	14	26	1	4	7	17	4	4	2	7	15	15

Note: Queue reported is the number of cars per lane.

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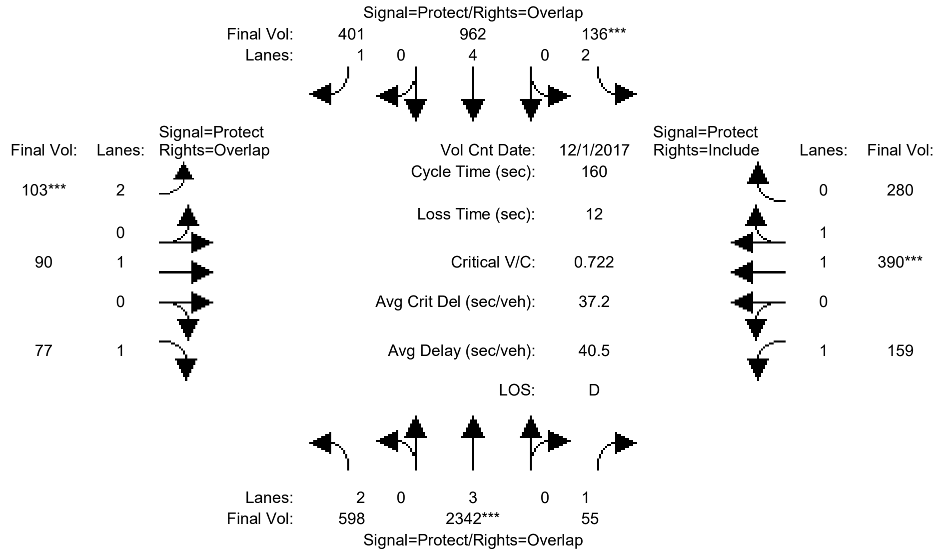
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #25: Mathilda Avenue / Maude Avenue (CMP)



Street Name:	Mathilda Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	598	2283	55	130	834	401	103	90	77	159	390	278
Growth 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
Initial Bse:	598	2283	55	130	834	401	103	90	77	159	390	278
Added Vol:	0	59	0	0	134	0	0	0	0	0	0	2
PasserByVol:	0	0	0	6	-6	0	0	0	0	0	0	0
Initial Fut:	598	2342	55	136	962	401	103	90	77	159	390	280
User 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
PHF 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
PHF Volume:	598	2342	55	136	962	401	103	90	77	159	390	280
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	598	2342	55	136	962	401	103	90	77	159	390	280
PCE 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
MLF 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
FinalVolume:	598	2342	55	136	962	401	103	90	77	159	390	280
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.92	0.99	0.95
Lanes:	2.00	3.00	1.00	2.00	4.00	1.00	2.00	1.00	1.00	1.00	1.14	0.86
Final Sat.:	3150	5700	1750	3150	7600	1750	3150	1900	1750	1750	2153	1545
Capacity Analysis Module:												
Vol/Sat:	0.19	0.41	0.03	0.04	0.13	0.23	0.03	0.05	0.04	0.09	0.18	0.18
Crit Moves:		****		****			****				****	
Green Time:	49.4	91.0	119.1	9.6	51.2	58.4	7.2	19.3	68.8	28.1	40.1	40.1
Volume/Cap:	0.61	0.72	0.04	0.72	0.40	0.63	0.72	0.39	0.10	0.52	0.72	0.72
Delay/Veh:	48.3	26.0	5.4	86.8	42.5	43.8	91.9	66.0	27.3	61.4	57.6	57.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.3	26.0	5.4	86.8	42.5	43.8	91.9	66.0	27.3	61.4	57.6	57.6
LOS by Move:	D	C	A	F	D	D	F	E	C	E	E+	E+
HCM2kAvgQ:	14	27	1	4	9	17	4	4	2	7	15	15

Note: Queue reported is the number of cars per lane.

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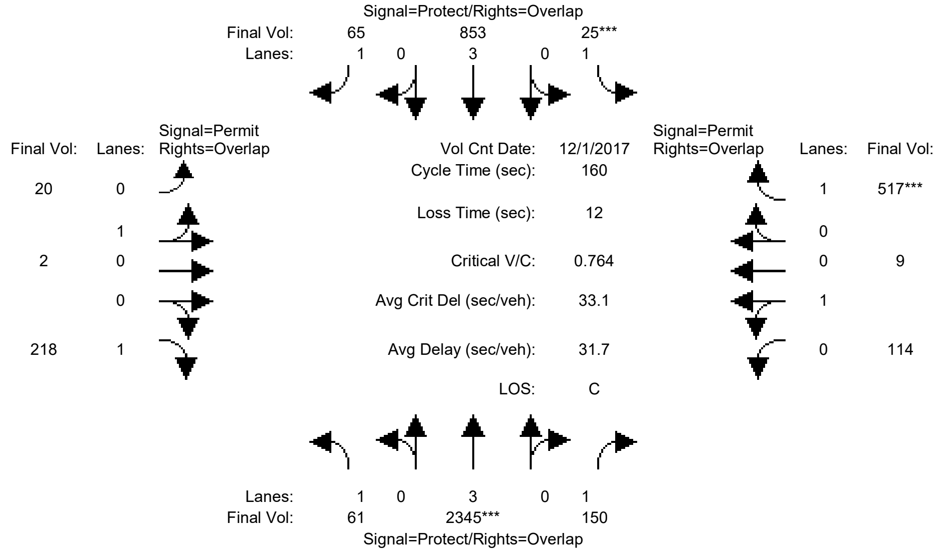
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #26: Mathilda Avenue / Indio Avenue



Street Name:	Mathilda Avenue						Indio Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	61	2345	150	25	853	65	20	2	218	114	9	517
Growth 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
Initial Bse:	61	2345	150	25	853	65	20	2	218	114	9	517
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	2345	150	25	853	65	20	2	218	114	9	517
User 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
PHF 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
PHF Volume:	61	2345	150	25	853	65	20	2	218	114	9	517
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	2345	150	25	853	65	20	2	218	114	9	517
PCE 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
MLF 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
FinalVolume:	61	2345	150	25	853	65	20	2	218	114	9	517
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.91	0.09	1.00	0.93	0.07	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1636	164	1750	1668	132	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.41	0.09	0.01	0.15	0.04	0.01	0.01	0.12	0.07	0.07	0.30
Crit Moves:		****		****								****
Green Time:	21.4	87.5	87.5	7.0	73.1	73.1	53.5	53.5	74.9	53.5	53.5	60.5
Volume/Cap:	0.26	0.75	0.16	0.33	0.33	0.08	0.04	0.04	0.27	0.20	0.20	0.78
Delay/Veh:	62.8	29.0	18.1	76.7	27.8	24.5	35.9	35.9	26.0	38.2	38.2	49.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	62.8	29.0	18.1	76.7	27.8	24.5	35.9	35.9	26.0	38.2	38.2	49.9
LOS by Move:	E	C	B-	E-	C	C	D+	D+	C	D+	D+	D
HCM2kAvgQ:	3	29	4	1	8	2	1	1	7	4	4	25

Note: Queue reported is the number of cars per lane.

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #26: Mathilda Avenue / Indio Avenue

Signal=Protect/Rights=Overlap
Final Vol: 65 981 25***
Lanes: 1 0 3 0 1

Signal=Permit
Rights=Overlap
Final Vol: 20, 2, 278
Lanes: 0, 1, 0, 0, 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.775
Avg Crit Del (sec/veh): 33.2
Avg Delay (sec/veh): 31.5
LOS: C

Signal=Permit
Rights=Overlap
Lanes: 1, 0, 0, 1, 0
Final Vol: 517***, 9, 117

Lanes: 1 0 3 0 1
Final Vol: 69 2404*** 179
Signal=Protect/Rights=Overlap

Street Name:	Mathilda Avenue						Indio Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	61	2345	150	25	853	65	20	2	218	114	9	517
Growth 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
Initial Bse:	61	2345	150	25	853	65	20	2	218	114	9	517
Added Vol:	8	59	29	0	134	0	0	0	60	3	0	0
PasserByVol:	0	0	0	0	-6	0	0	0	0	0	0	0
Initial Fut:	69	2404	179	25	981	65	20	2	278	117	9	517
User 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
PHF 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
PHF Volume:	69	2404	179	25	981	65	20	2	278	117	9	517
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	69	2404	179	25	981	65	20	2	278	117	9	517
PCE 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
MLF 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
FinalVolume:	69	2404	179	25	981	65	20	2	278	117	9	517
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.91	0.09	1.00	0.93	0.07	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1636	164	1750	1671	129	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.42	0.10	0.01	0.17	0.04	0.01	0.01	0.16	0.07	0.07	0.30
Crit Moves:		****		****								****
Green Time:	19.3	88.3	88.3	7.0	76.0	76.0	52.7	52.7	72.0	52.7	52.7	59.7
Volume/Cap:	0.33	0.76	0.19	0.33	0.36	0.08	0.04	0.04	0.35	0.21	0.21	0.79
Delay/Veh:	65.3	28.9	18.0	76.7	26.7	22.9	36.5	36.5	29.0	38.9	38.9	51.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	65.3	28.9	18.0	76.7	26.7	22.9	36.5	36.5	29.0	38.9	38.9	51.2
LOS by Move:	E	C	B	E-	C	C+	D+	D+	C	D+	D+	D-
HCM2kAvgQ:	3	29	4	1	10	2	1	1	9	5	5	25

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #27: Mathilda Avenue / California Avenue

Signal=Protect/Rights=Overlap
Final Vol: 238 1025 57***
Lanes: 1 0 3 0 1

Westbound (left side): Signal=Protect, Rights=Include
Final Vol: 57*** / 14 / 87
Lanes: 1 / 0 / 1 / 0 / 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 165
Loss Time (sec): 12
Critical V/C: 0.665
Avg Crit Del (sec/veh): 20.4
Avg Delay (sec/veh): 25.2
LOS: C

Signal=Protect
Rights=Overlap
Lanes: 1 / 0 / 1 / 0 / 1
Final Vol: 189*** / 95 / 94

Lanes: 1 0 2 1 0
Final Vol: 127 2371*** 294
Signal=Protect/Rights=Include

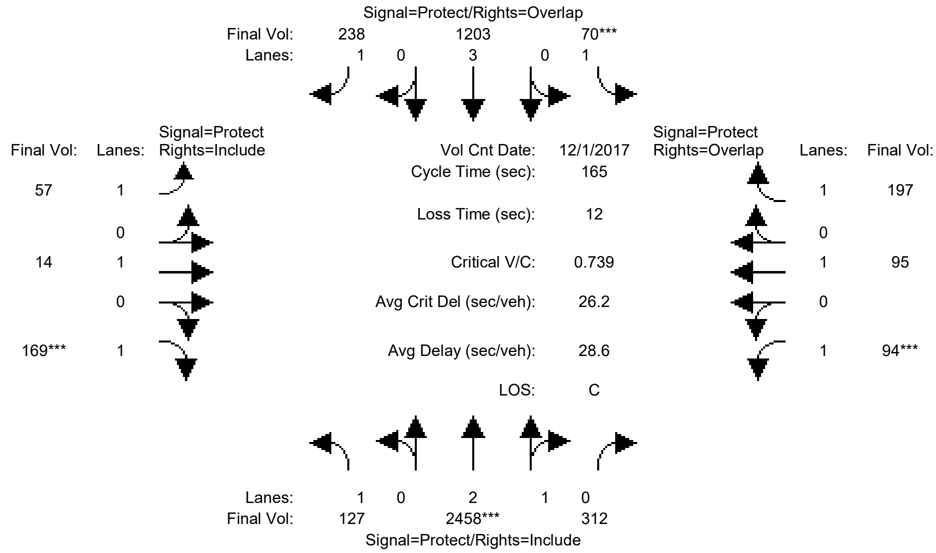
Street Name:	Mathilda Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	127	2371	294	57	1025	238	57	14	87	94	95	189
Growth 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
Initial Bse:	127	2371	294	57	1025	238	57	14	87	94	95	189
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	127	2371	294	57	1025	238	57	14	87	94	95	189
User 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
PHF 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
PHF Volume:	127	2371	294	57	1025	238	57	14	87	94	95	189
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	127	2371	294	57	1025	238	57	14	87	94	95	189
PCE 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
MLF 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
FinalVolume:	127	2371	294	57	1025	238	57	14	87	94	95	189
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.66	0.34	1.00	3.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	4981	618	1750	5700	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.48	0.48	0.03	0.18	0.14	0.03	0.01	0.05	0.05	0.05	0.11
Crit Moves:		****		****			****					****
Green Time:	36.3	118	118.1	8.1	89.9	98.0	8.1	12.9	12.9	11.4	16.3	24.4
Volume/Cap:	0.33	0.66	0.66	0.66	0.33	0.23	0.66	0.09	0.64	0.77	0.51	0.73
Delay/Veh:	54.6	13.1	13.1	95.1	20.9	15.9	95.1	70.9	83.2	101.6	72.8	77.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	54.6	13.1	13.1	95.1	20.9	15.9	95.1	70.9	83.2	101.6	72.8	77.4
LOS by Move:	D-	B	B	F	C+	B	F	E	F	F	E	E-
HCM2kAvgQ:	6	24	24	3	9	6	4	1	6	5	4	10

Note: Queue reported is the number of cars per lane.

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #27: Mathilda Avenue / California Avenue



Street Name:	Mathilda Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	127	2371	294	57	1025	238	57	14	87	94	95	189
Growth 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
Initial Bse:	127	2371	294	57	1025	238	57	14	87	94	95	189
Added Vol:	0	87	18	19	178	0	0	0	82	0	0	8
PasserByVol:	0	0	0	-6	0	0	0	0	0	0	0	0
Initial Fut:	127	2458	312	70	1203	238	57	14	169	94	95	197
User 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
PHF 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
PHF Volume:	127	2458	312	70	1203	238	57	14	169	94	95	197
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	127	2458	312	70	1203	238	57	14	169	94	95	197
PCE 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
MLF 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
FinalVolume:	127	2458	312	70	1203	238	57	14	169	94	95	197
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.65	0.35	1.00	3.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	4968	631	1750	5700	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.49	0.49	0.04	0.21	0.14	0.03	0.01	0.10	0.05	0.05	0.11
Crit Moves:		****		****					****	****		
Green Time:	30.6	110	110.5	8.9	88.9	101.3	12.4	21.6	21.6	12.0	21.2	30.1
Volume/Cap:	0.39	0.74	0.74	0.74	0.39	0.22	0.43	0.06	0.74	0.74	0.39	0.62
Delay/Veh:	59.8	18.6	18.6	103.0	22.3	14.4	75.2	62.9	81.0	95.2	67.0	65.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	59.8	18.6	18.6	103.0	22.3	14.4	75.2	62.9	81.0	95.2	67.0	65.7
LOS by Move:	E+	B-	B-	F	C+	B	E-	E	F	F	E	E
HCM2kAvgQ:	6	31	31	4	11	6	3	1	10	5	4	10

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #28: Mathilda Avenue Off-Ramp / Evelyn Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Permit
Rights=Include

Final Vol:	Lanes:
0	0
	0
245	1
	0
0	0

Vol Cnt Date:	4/1/2017
Cycle Time (sec):	65
Loss Time (sec):	6
Critical V/C:	0.377
Avg Crit Del (sec/veh):	5.1
Avg Delay (sec/veh):	6.2
LOS:	A

Signal=Permit
Rights=Include

Lanes:	Final Vol:
0	0
0	
1	584***
0	
0	0

Lanes: 1 0 0 0 1
Final Vol: 61*** 0 87
Signal=Split/Rights=Overlap

Street Name:	Mathilda Avenue Off-Ramp						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	61	0	87	0	0	0	0	245	0	0	584	0
Growth 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
Initial Bse:	61	0	87	0	0	0	0	245	0	0	584	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	0	87	0	0	0	0	245	0	0	584	0
User 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
PHF 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
PHF Volume:	61	0	87	0	0	0	0	245	0	0	584	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	0	87	0	0	0	0	245	0	0	584	0
PCE 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
MLF 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
FinalVolume:	61	0	87	0	0	0	0	245	0	0	584	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	0	1900	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.05	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.31	0.00
Crit Moves:	****										****	
Green Time:	10.0	0.0	10.0	0.0	0.0	0.0	0.0	49.0	0.0	0.0	49.0	0.0
Volume/Cap:	0.23	0.00	0.32	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.41	0.00
Delay/Veh:	24.5	0.0	25.2	0.0	0.0	0.0	0.0	2.3	0.0	0.0	3.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.5	0.0	25.2	0.0	0.0	0.0	0.0	2.3	0.0	0.0	3.0	0.0
LOS by Move:	C	A	C	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	1	0	2	0	0	0	0	1	0	0	4	0

Note: Queue reported is the number of cars per lane.

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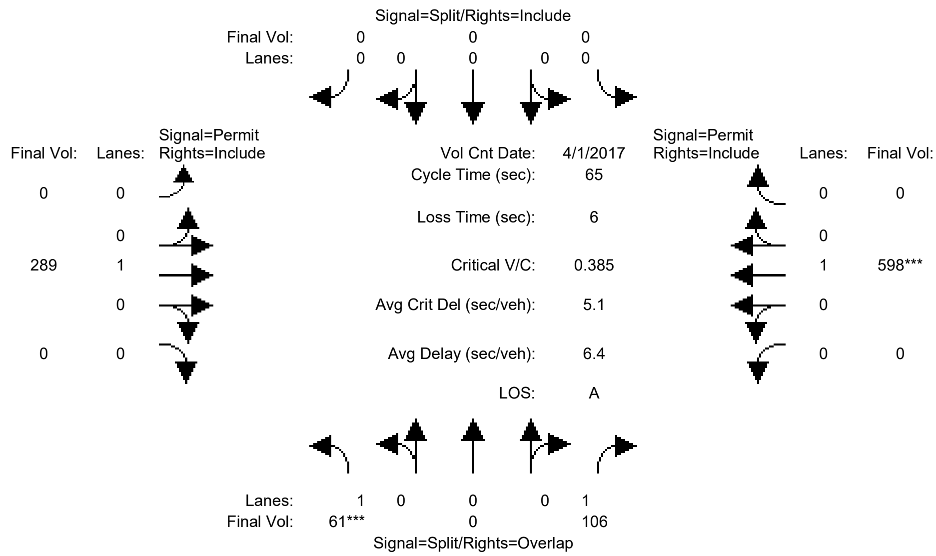
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #28: Mathilda Avenue Off-Ramp / Evelyn Avenue



Street Name:	Mathilda Avenue Off-Ramp						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	61	0	87	0	0	0	0	245	0	0	584	0
Growth 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
Initial Bse:	61	0	87	0	0	0	0	245	0	0	584	0
Added Vol:	0	0	19	0	0	0	0	44	0	0	14	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	0	106	0	0	0	0	289	0	0	598	0
User 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
PHF 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
PHF Volume:	61	0	106	0	0	0	0	289	0	0	598	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	0	106	0	0	0	0	289	0	0	598	0
PCE 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
MLF 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
FinalVolume:	61	0	106	0	0	0	0	289	0	0	598	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	0	1900	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.06	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.31	0.00
Crit Moves:	****										****	
Green Time:	10.2	0.0	10.2	0.0	0.0	0.0	0.0	48.8	0.0	0.0	48.8	0.0
Volume/Cap:	0.22	0.00	0.39	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.42	0.00
Delay/Veh:	24.3	0.0	25.5	0.0	0.0	0.0	0.0	2.5	0.0	0.0	3.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.3	0.0	25.5	0.0	0.0	0.0	0.0	2.5	0.0	0.0	3.2	0.0
LOS by Move:	C	A	C	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	1	0	2	0	0	0	0	2	0	0	4	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #29: Mathilda Avenue / Washington Avenue

Signal=Protect/Rights=Include
Final Vol: 158 670 175***
Lanes: 0 1 2 0 2

Signal=Protect
Rights=Include

Final Vol:	Lanes:
194***	2
	0
56	0
	1
21	0

Vol Cnt Date:	12/1/2017
Cycle Time (sec):	170
Loss Time (sec):	12
Critical V/C:	0.712
Avg Crit Del (sec/veh):	36.6
Avg Delay (sec/veh):	34.3
LOS:	C-

Signal=Protect
Rights=Include

Lanes:	Final Vol:
0	162
1	
0	65***
0	
1	43

Lanes: 1 0 3 0 1
Final Vol: 19 2384*** 65
Signal=Protect/Rights=Overlap

Street Name:	Mathilda Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	19	2384	65	175	670	158	194	56	21	43	65	162
Growth 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
Initial Bse:	19	2384	65	175	670	158	194	56	21	43	65	162
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	2384	65	175	670	158	194	56	21	43	65	162
User 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
PHF 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
PHF Volume:	19	2384	65	175	670	158	194	56	21	43	65	162
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	2384	65	175	670	158	194	56	21	43	65	162
PCE 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
MLF 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
FinalVolume:	19	2384	65	175	670	158	194	56	21	43	65	162
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.99	0.95	0.83	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	3.00	1.00	2.00	2.41	0.59	2.00	0.73	0.27	1.00	0.29	0.71
Final Sat.:	1750	5700	1750	3150	4530	1068	3150	1309	491	1750	515	1285
Capacity Analysis Module:												
Vol/Sat:	0.01	0.42	0.04	0.06	0.15	0.15	0.06	0.04	0.04	0.02	0.13	0.13
Crit Moves:		****		****			****				****	
Green Time:	24.6	99.9	118.4	13.3	88.5	88.5	14.7	26.4	26.4	18.5	30.1	30.1
Volume/Cap:	0.07	0.71	0.05	0.71	0.28	0.28	0.71	0.28	0.28	0.23	0.71	0.71
Delay/Veh:	62.9	25.6	8.2	85.9	23.0	23.0	84.1	63.9	63.9	69.9	73.2	73.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	62.9	25.6	8.2	85.9	23.0	23.0	84.1	63.9	63.9	69.9	73.2	73.2
LOS by Move:	E	C	A	F	C+	C+	F	E	E	E	E	E
HCM2kAvgQ:	1	29	1	7	8	8	6	4	4	2	12	12

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #29: Mathilda Avenue / Washington Avenue

Signal=Protect/Rights=Include
Final Vol: 158 895 215***
Lanes: 0 1 2 0 2

Final Vol: Lanes: Signal=Protect Rights=Include
195*** 2
0
63 0
1
51 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 170
Loss Time (sec): 12
Critical V/C: 0.756
Avg Crit Del (sec/veh): 39.4
Avg Delay (sec/veh): 35.7
LOS: D+

Signal=Protect Rights=Include Lanes: Final Vol:
0 177
1
0 67***
0
1 51

Lanes: 1 0 3 0 1
Final Vol: 31 2492*** 112
Signal=Protect/Rights=Overlap

Street Name:	Mathilda Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	19	2384	65	175	670	158	194	56	21	43	65	162
Growth 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
Initial Bse:	19	2384	65	175	670	158	194	56	21	43	65	162
Added Vol:	12	108	47	40	225	0	1	7	30	8	2	15
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	2492	112	215	895	158	195	63	51	51	67	177
User 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
PHF 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
PHF Volume:	31	2492	112	215	895	158	195	63	51	51	67	177
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	2492	112	215	895	158	195	63	51	51	67	177
PCE 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
MLF 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
FinalVolume:	31	2492	112	215	895	158	195	63	51	51	67	177
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.99	0.95	0.83	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	3.00	1.00	2.00	2.53	0.47	2.00	0.55	0.45	1.00	0.27	0.73
Final Sat.:	1750	5700	1750	3150	4759	840	3150	995	805	1750	494	1306
Capacity Analysis Module:												
Vol/Sat:	0.02	0.44	0.06	0.07	0.19	0.19	0.06	0.06	0.06	0.03	0.14	0.14
Crit Moves:		****		****			****				****	
Green Time:	20.4	98.3	115.8	15.3	93.2	93.2	13.9	26.9	26.9	17.5	30.5	30.5
Volume/Cap:	0.15	0.76	0.09	0.76	0.34	0.34	0.76	0.40	0.40	0.28	0.76	0.76
Delay/Veh:	67.3	27.9	9.3	86.6	21.4	21.4	88.5	65.2	65.2	71.3	76.1	76.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	67.3	27.9	9.3	86.6	21.4	21.4	88.5	65.2	65.2	71.3	76.1	76.1
LOS by Move:	E	C	A	F	C+	C+	F	E	E	E	E-	E-
HCM2kAvgQ:	2	32	2	8	10	10	6	5	5	3	13	13

Note: Queue reported is the number of cars per lane.

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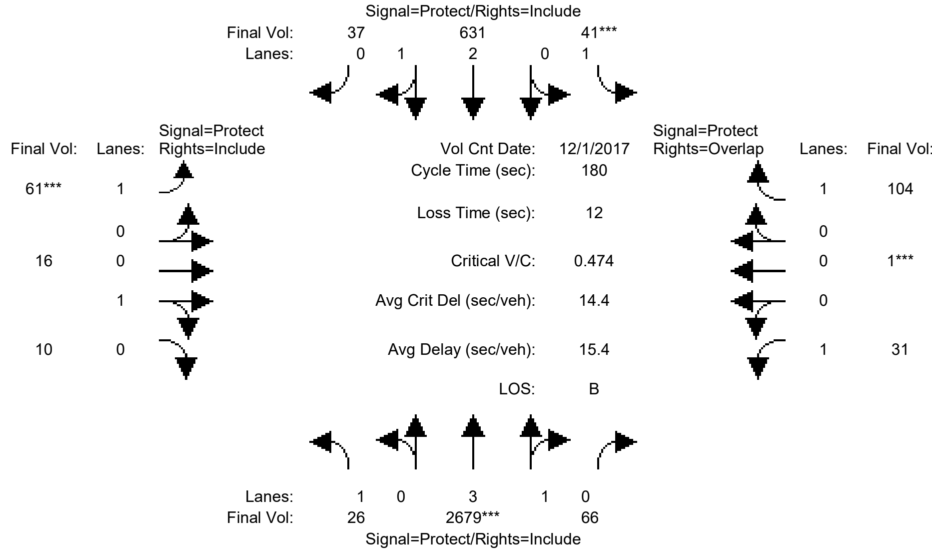
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #30: Mathilda Avenue / McKinley Avenue



Street Name:	Mathilda Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	26	2679	66	41	631	37	61	16	10	31	1	104
Growth 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
Initial Bse:	26	2679	66	41	631	37	61	16	10	31	1	104
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	2679	66	41	631	37	61	16	10	31	1	104
User 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
PHF 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
PHF Volume:	26	2679	66	41	631	37	61	16	10	31	1	104
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	2679	66	41	631	37	61	16	10	31	1	104
PCE 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
MLF 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
FinalVolume:	26	2679	66	41	631	37	61	16	10	31	1	104
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	0.95	0.95	0.95	0.95	0.95
Lanes:	1.00	3.90	0.10	1.00	2.83	0.17	1.00	0.62	0.38	0.97	0.03	1.00
Final Sat.:	1750	7319	180	1750	5289	310	1750	1108	692	1744	56	1800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.37	0.37	0.02	0.12	0.12	0.03	0.01	0.01	0.02	0.02	0.06
Crit Moves:		****		****			****				****	
Green Time:	35.7	136	136.3	8.7	109	109.4	13.0	13.5	13.5	9.5	10.0	18.7
Volume/Cap:	0.08	0.48	0.48	0.48	0.20	0.20	0.48	0.19	0.19	0.34	0.32	0.56
Delay/Veh:	58.8	8.4	8.4	87.7	15.8	15.8	83.2	78.8	78.8	82.8	82.2	79.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.8	8.4	8.4	87.7	15.8	15.8	83.2	78.8	78.8	82.8	82.2	79.5
LOS by Move:	E+	A	A	F	B	B	F	E-	E-	F	F	E-
HCM2kAvgQ:	1	14	14	3	5	5	4	2	2	2	2	6

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #30: Mathilda Avenue / McKinley Avenue

Signal=Protect/Rights=Include
Final Vol: 37 641 294***
Lanes: 0 1 2 0 1

Signal=Protect
Rights=Include
Final Vol: Lanes:
61*** 1
0
16 0
1
10 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 180
Loss Time (sec): 12
Critical V/C: 0.691
Avg Crit Del (sec/veh): 36.3
Avg Delay (sec/veh): 31.8
LOS: C

Signal=Protect
Rights=Overlap
Lanes: Final Vol:
1 206
0
0 1***
0
1 74

Lanes: 1 0 3 1 0
Final Vol: 26 2743*** 259
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	26	2679	66	41	631	37	61	16	10	31	1	104
Growth 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
Initial Bse:	26	2679	66	41	631	37	61	16	10	31	1	104
Added Vol:	0	64	193	253	10	0	0	0	0	43	0	102
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	2743	259	294	641	37	61	16	10	74	1	206
User 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
PHF 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
PHF Volume:	26	2743	259	294	641	37	61	16	10	74	1	206
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	2743	259	294	641	37	61	16	10	74	1	206
PCE 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
MLF 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
FinalVolume:	26	2743	259	294	641	37	61	16	10	74	1	206
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	0.95	0.95	0.95	0.95	0.95
Lanes:	1.00	3.64	0.36	1.00	2.83	0.17	1.00	0.62	0.38	0.99	0.01	1.00
Final Sat.:	1750	6852	647	1750	5294	306	1750	1108	692	1776	24	1800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.40	0.40	0.17	0.12	0.12	0.03	0.01	0.01	0.04	0.04	0.11
Crit Moves:		****		****			****				****	
Green Time:	36.0	104	104.3	43.8	112	112.1	9.1	11.4	11.4	8.5	10.9	54.6
Volume/Cap:	0.07	0.69	0.69	0.69	0.19	0.19	0.69	0.23	0.23	0.88	0.69	0.38
Delay/Veh:	58.6	27.0	27.0	66.8	14.6	14.6	104.9	81.2	81.2	108.1	87.9	49.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.6	27.0	27.0	66.8	14.6	14.6	104.9	81.2	81.2	108.1	87.9	49.6
LOS by Move:	E+	C	C	E	B	B	F	F	F	F	F	D
HCM2kAvgQ:	1	29	29	17	5	5	5	2	2	5	4	9

Note: Queue reported is the number of cars per lane.

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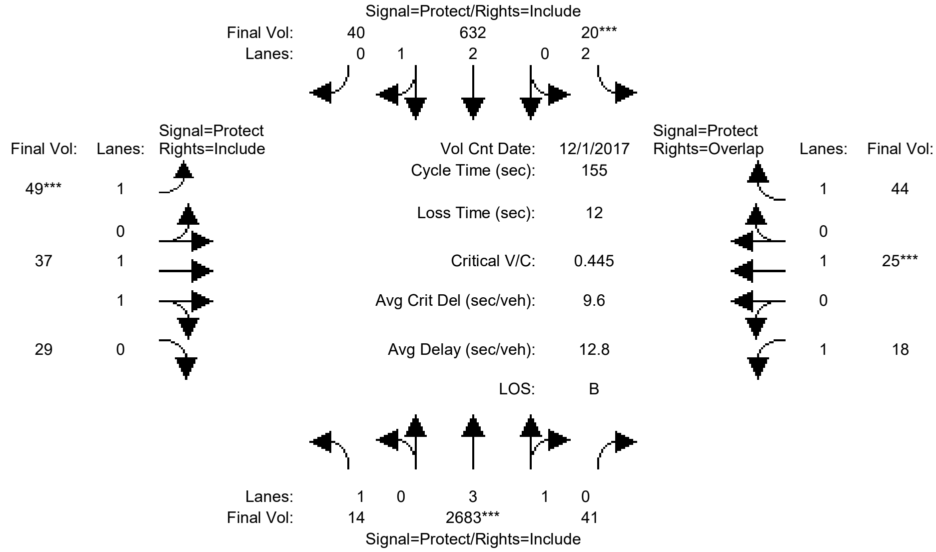
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #31: Mathilda Avenue / Iowa Avenue



Street Name:	Mathilda Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	14	2683	41	20	632	40	49	37	29	18	25	44
Growth 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
Initial Bse:	14	2683	41	20	632	40	49	37	29	18	25	44
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	2683	41	20	632	40	49	37	29	18	25	44
User 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
PHF 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
PHF Volume:	14	2683	41	20	632	40	49	37	29	18	25	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	2683	41	20	632	40	49	37	29	18	25	44
PCE 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
MLF 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
FinalVolume:	14	2683	41	20	632	40	49	37	29	18	25	44
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.83	0.98	0.95	0.92	0.99	0.95	0.92	1.00	0.92
Lanes:	1.00	3.94	0.06	2.00	2.81	0.19	1.00	1.10	0.90	1.00	1.00	1.00
Final Sat.:	1750	7387	113	3150	5266	333	1750	2073	1625	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.36	0.36	0.01	0.12	0.12	0.03	0.02	0.02	0.01	0.01	0.03
Crit Moves:		****		****			****				****	
Green Time:	33.9	117	117.0	7.0	90.1	90.1	9.0	11.2	11.2	7.8	10.0	17.0
Volume/Cap:	0.04	0.48	0.48	0.14	0.21	0.21	0.48	0.25	0.25	0.20	0.20	0.23
Delay/Veh:	47.7	7.4	7.4	71.6	15.5	15.5	74.3	68.4	68.4	71.7	69.6	63.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.7	7.4	7.4	71.6	15.5	15.5	74.3	68.4	68.4	71.7	69.6	63.6
LOS by Move:	D	A	A	E	B	B	E	E	E	E	E	E
HCM2kAvgQ:	1	12	12	1	5	5	2	1	1	1	1	2

Note: Queue reported is the number of cars per lane.

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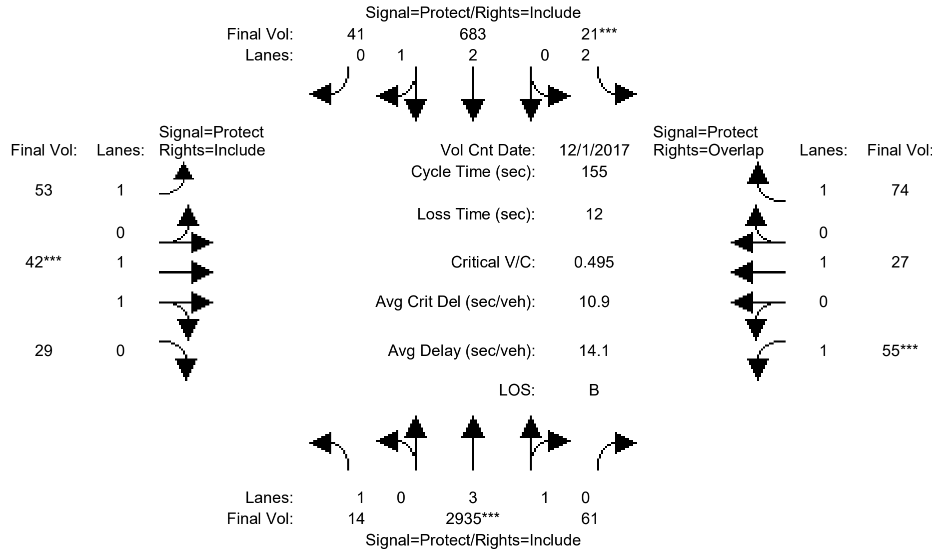
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #31: Mathilda Avenue / Iowa Avenue



Street Name:	Mathilda Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	14	2683	41	20	632	40	49	37	29	18	25	44
Growth 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
Initial Bse:	14	2683	41	20	632	40	49	37	29	18	25	44
Added Vol:	0	252	20	1	51	1	4	5	0	37	2	30
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	2935	61	21	683	41	53	42	29	55	27	74
User 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
PHF 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
PHF Volume:	14	2935	61	21	683	41	53	42	29	55	27	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	2935	61	21	683	41	53	42	29	55	27	74
PCE 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
MLF 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
FinalVolume:	14	2935	61	21	683	41	53	42	29	55	27	74
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.83	0.98	0.95	0.92	0.99	0.95	0.92	1.00	0.92
Lanes:	1.00	3.92	0.08	2.00	2.82	0.18	1.00	1.16	0.84	1.00	1.00	1.00
Final Sat.:	1750	7347	153	3150	5282	317	1750	2188	1510	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.40	0.40	0.01	0.13	0.13	0.03	0.02	0.02	0.03	0.01	0.04
Crit Moves:		****		****				****		****		
Green Time:	32.1	117	116.8	7.0	91.8	91.8	7.9	10.0	10.0	9.2	11.3	18.3
Volume/Cap:	0.04	0.53	0.53	0.15	0.22	0.22	0.59	0.30	0.30	0.53	0.20	0.36
Delay/Veh:	49.2	7.9	7.9	71.6	14.9	14.9	82.3	69.9	69.9	75.9	68.3	64.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.2	7.9	7.9	71.6	14.9	14.9	82.3	69.9	69.9	75.9	68.3	64.0
LOS by Move:	D	A	A	E	B	B	F	E	E	E-	E	E
HCM2kAvgQ:	1	14	14	1	5	5	3	2	2	3	1	3

Note: Queue reported is the number of cars per lane.

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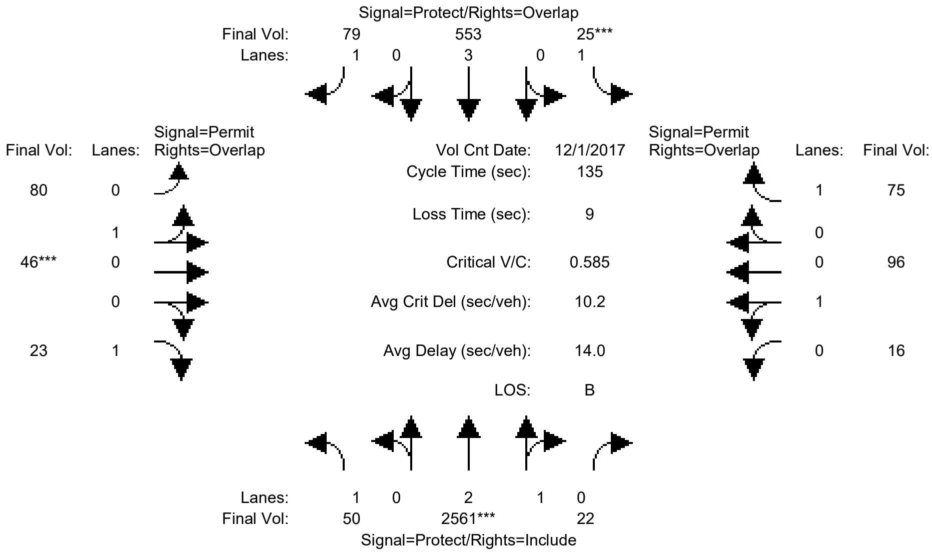
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #32: Mathilda Avenue / Olive Avenue



Street Name:	Mathilda Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	50	2561	22	25	553	79	80	46	23	16	96	75
Growth 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
Initial Bse:	50	2561	22	25	553	79	80	46	23	16	96	75
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	50	2561	22	25	553	79	80	46	23	16	96	75
User 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
PHF 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
PHF Volume:	50	2561	22	25	553	79	80	46	23	16	96	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	2561	22	25	553	79	80	46	23	16	96	75
PCE 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
MLF 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
FinalVolume:	50	2561	22	25	553	79	80	46	23	16	96	75
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.97	0.03	1.00	3.00	1.00	0.63	0.37	1.00	0.14	0.86	1.00
Final Sat.:	1750	5552	48	1750	5700	1750	1143	657	1750	257	1543	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.46	0.46	0.01	0.10	0.05	0.07	0.07	0.01	0.06	0.06	0.04
Crit Moves:		****		****				****				
Green Time:	38.4	103	103.3	7.0	71.9	71.9	15.7	15.7	54.1	15.7	15.7	22.7
Volume/Cap:	0.10	0.60	0.60	0.28	0.18	0.08	0.60	0.60	0.03	0.54	0.54	0.26
Delay/Veh:	35.6	7.1	7.1	63.2	16.4	15.5	61.6	61.6	24.6	58.9	58.9	49.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.6	7.1	7.1	63.2	16.4	15.5	61.6	61.6	24.6	58.9	58.9	49.3
LOS by Move:	D+	A	A	E	B	B	E	E	C	E+	E+	D
HCM2kAvgQ:	2	16	16	1	4	2	6	6	1	5	5	3

Note: Queue reported is the number of cars per lane.

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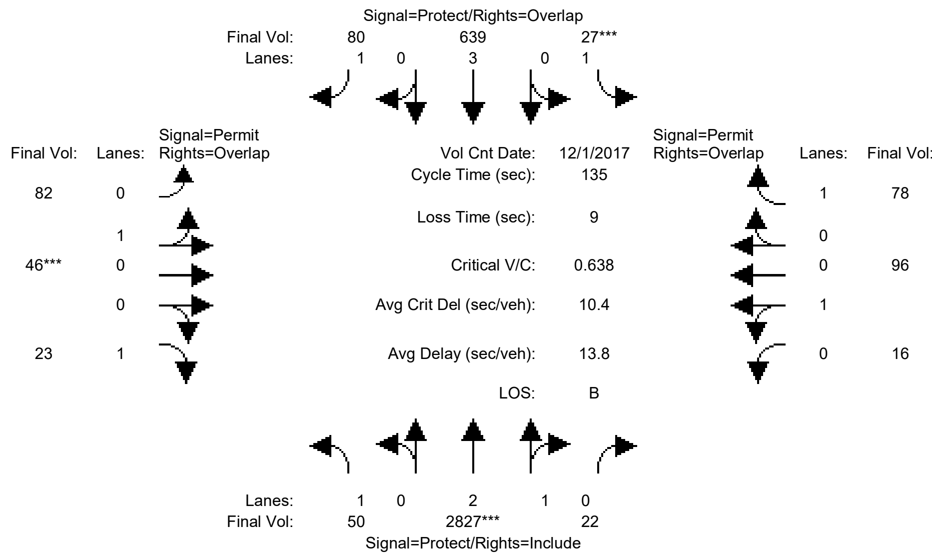
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #32: Mathilda Avenue / Olive Avenue



Street Name:	Mathilda Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	50	2561	22	25	553	79	80	46	23	16	96	75
Growth 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
Initial Bse:	50	2561	22	25	553	79	80	46	23	16	96	75
Added Vol:	0	266	0	2	86	1	2	0	0	0	0	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	50	2827	22	27	639	80	82	46	23	16	96	78
User 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
PHF 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
PHF Volume:	50	2827	22	27	639	80	82	46	23	16	96	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	2827	22	27	639	80	82	46	23	16	96	78
PCE 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
MLF 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
FinalVolume:	50	2827	22	27	639	80	82	46	23	16	96	78
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.98	0.02	1.00	3.00	1.00	0.64	0.36	1.00	0.14	0.86	1.00
Final Sat.:	1750	5557	43	1750	5700	1750	1153	647	1750	257	1543	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.51	0.51	0.02	0.11	0.05	0.07	0.07	0.01	0.06	0.06	0.04
Crit Moves:		****		****				****				
Green Time:	35.2	104	104.4	7.0	76.2	76.2	14.6	14.6	49.8	14.6	14.6	21.6
Volume/Cap:	0.11	0.66	0.66	0.30	0.20	0.08	0.66	0.66	0.04	0.58	0.58	0.28
Delay/Veh:	38.1	7.4	7.4	63.5	14.5	13.5	65.8	65.8	27.2	61.4	61.4	50.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.1	7.4	7.4	63.5	14.5	13.5	65.8	65.8	27.2	61.4	61.4	50.4
LOS by Move:	D+	A	A	E	B	B	E	E	C	E	E	D
HCM2kAvgQ:	2	19	19	1	4	2	6	6	1	5	5	3

Note: Queue reported is the number of cars per lane.

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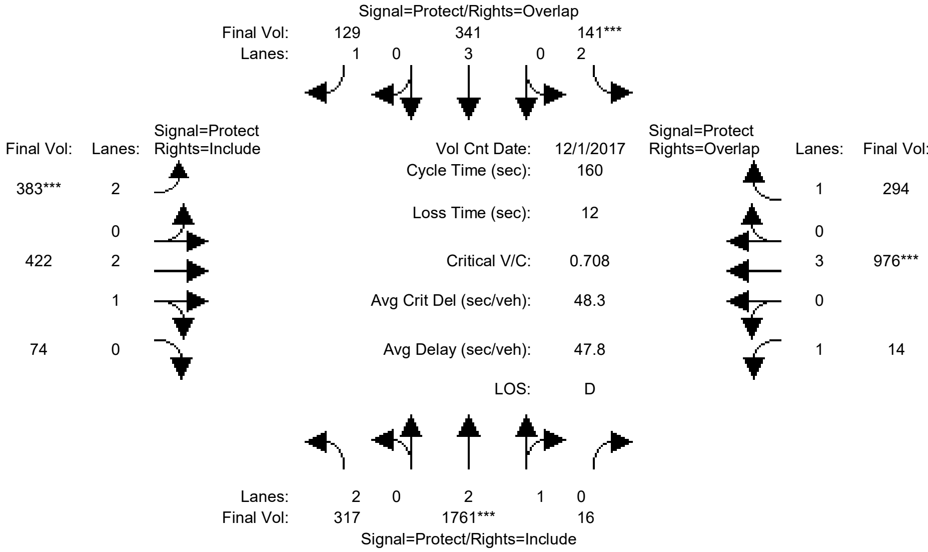
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #33: Mathilda Avenue / El Camino Real (CMP)



Street Name:	Mathilda Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	317	1761	16	141	341	129	383	422	74	14	976	294
Growth 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
Initial Bse:	317	1761	16	141	341	129	383	422	74	14	976	294
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	317	1761	16	141	341	129	383	422	74	14	976	294
User 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
PHF 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
PHF Volume:	317	1761	16	141	341	129	383	422	74	14	976	294
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	317	1761	16	141	341	129	383	422	74	14	976	294
PCE 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
MLF 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
FinalVolume:	317	1761	16	141	341	129	383	422	74	14	976	294
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	1.00	0.92	0.83	0.99	0.95	0.92	1.00	0.92
Lanes:	2.00	2.97	0.03	2.00	3.00	1.00	2.00	2.54	0.46	1.00	3.00	1.00
Final Sat.:	3150	5550	50	3150	5700	1750	3150	4763	835	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.32	0.32	0.04	0.06	0.07	0.12	0.09	0.09	0.01	0.17	0.17
Crit Moves:		****		****			****				****	
Green Time:	50.5	71.7	71.7	10.1	31.3	58.8	27.5	44.3	44.3	21.9	38.7	48.8
Volume/Cap:	0.32	0.71	0.71	0.71	0.31	0.20	0.71	0.32	0.32	0.06	0.71	0.55
Delay/Veh:	41.9	36.6	36.6	84.6	55.2	34.7	66.8	46.0	46.0	60.2	57.2	47.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.9	36.6	36.6	84.6	55.2	34.7	66.8	46.0	46.0	60.2	57.2	47.7
LOS by Move:	D	D+	D+	F	E+	C-	E	D	D	E	E+	D
HCM2kAvgQ:	7	23	23	5	5	4	11	6	6	1	14	13

Note: Queue reported is the number of cars per lane.

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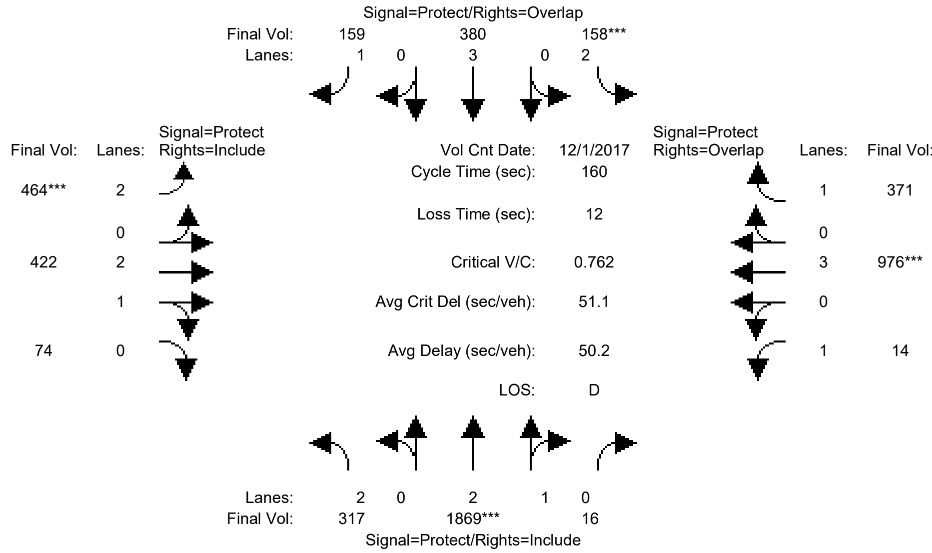
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #33: Mathilda Avenue / El Camino Real (CMP)



Street Name:	Mathilda Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	317	1761	16	141	341	129	383	422	74	14	976	294
Growth 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
Initial Bse:	317	1761	16	141	341	129	383	422	74	14	976	294
Added Vol:	0	108	0	17	39	30	81	0	0	0	0	77
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	317	1869	16	158	380	159	464	422	74	14	976	371
User 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
PHF 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
PHF Volume:	317	1869	16	158	380	159	464	422	74	14	976	371
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	317	1869	16	158	380	159	464	422	74	14	976	371
PCE 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
MLF 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
FinalVolume:	317	1869	16	158	380	159	464	422	74	14	976	371
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	1.00	0.92	0.83	0.99	0.95	0.92	1.00	0.92
Lanes:	2.00	2.97	0.03	2.00	3.00	1.00	2.00	2.54	0.46	1.00	3.00	1.00
Final Sat.:	3150	5552	48	3150	5700	1750	3150	4763	835	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.34	0.34	0.05	0.07	0.09	0.15	0.09	0.09	0.01	0.17	0.21
Crit Moves:		****		****			****				****	
Green Time:	48.8	70.6	70.6	10.5	32.3	63.3	30.9	44.7	44.7	22.1	35.9	46.5
Volume/Cap:	0.33	0.76	0.76	0.76	0.33	0.23	0.76	0.32	0.32	0.06	0.76	0.73
Delay/Veh:	43.2	39.1	39.1	88.8	54.7	32.3	66.7	45.7	45.7	60.0	60.8	56.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.2	39.1	39.1	88.8	54.7	32.3	66.7	45.7	45.7	60.0	60.8	56.5
LOS by Move:	D	D	D	F	D-	C-	E	D	D	E	E	E+
HCM2kAvgQ:	7	26	26	6	5	5	13	6	6	1	15	18

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing AM

Intersection #34: Aries Way / Washington Avenue

Signal=Stop/Rights=Include

Final Vol:	31		0		0
Lanes:	1	0	0	0	0

Final Vol:	Lanes:	Signal=Uncontrol Rights=Include			Signal=Uncontrol Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	4/1/2017			
0	0		Cycle Time (sec):	100		0	10
	0		Loss Time (sec):	0		1	
203	1		Critical V/C:	0.034		1	219
	1		Avg Crit Del (sec/veh):	0.7		0	
44	0		Avg Delay (sec/veh):	0.7		0	0
			LOS:	A			

Lanes:	0	0	0	0	1
Final Vol:	0		0		7

Signal=Stop/Rights=Include

```
Street Name:              Aries Way                     Washington Avenue
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 1 Apr 2017 <<
Base Vol:        0    0     7     0    0    31     0  203    44     0  219    10
Growth 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
Initial Bse:     0    0     7     0    0    31     0  203    44     0  219    10
Added Vol:       0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:     0    0     7     0    0    31     0  203    44     0  219    10
User 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
PHF 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
PHF Volume:      0    0     7     0    0    31     0  203    44     0  219    10
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:     0    0     7     0    0    31     0  203    44     0  219    10
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx   6.9 xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx   3.3 xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx   124  xxxx xxxx   115  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx   911  xxxx xxxx   923  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx   911  xxxx xxxx   923  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  0.01  xxxx xxxx  0.03  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2WayQ95thQ:  xxxx xxxx   0.0  xxxx xxxx   0.1  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx   9.0 xxxxx xxxx   9.0 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     A     *    *     A     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:       9.0              9.0            xxxxxx            xxxxxx
ApproachLOS:        A                A                *                 *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
**********************************************************************************
Intersection #34 Aries Way / Washington Avenue
**********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  1    0  0  1  1  0    0  0  1  1  0
Initial Vol:    0    0     7     0    0    31     0  203    44     0  219    10
ApproachDel:       9.0              9.0            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=7]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=514]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=31]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=514]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #34 Aries Way / Washington Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  1    0  0  1  1  0    0  0  1  1  0
Initial Vol:    0    0     7     0    0    31     0  203    44     0  219    10
------------|---------------||---------------||---------------||---------------|
Major Street Volume:              476
Minor Approach Volume:            31
Minor Approach Volume Threshold: 541
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PP AM

Intersection #34: Aries Way / Washington Avenue

```
                        Signal=Stop/Rights=Include
          Final Vol:   39            0            0
              Lanes:    1    0       0        0   0

              Signal=Uncontrol                               Signal=Uncontrol
Final Vol:  Lanes:  Rights=Include     Vol Cnt Date:   4/1/2017  Rights=Include   Lanes:  Final Vol:
                                    Cycle Time (sec):    100
    0         0                                                                     0        33
                                     Loss Time (sec):      0
              0                                                                     1
  294         1                       Critical V/C:    0.044                        1       236
              1                 Avg Crit Del (sec/veh):  0.7                        0
   46         0                     Avg Delay (sec/veh):  0.7                       0         0
                                               LOS:      A

              Lanes:    0    0       0        0   1
          Final Vol:    0            0            8
                        Signal=Stop/Rights=Include
```

```
Street Name:              Aries Way                     Washington Avenue
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 1 Apr 2017 <<
Base Vol:       0     0     7     0     0    31     0   203    44     0   219    10
Growth 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
Initial Bse:    0     0     7     0     0    31     0   203    44     0   219    10
Added Vol:      0     0     1     0     0     8     0    91     2     0    17    23
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:    0     0     8     0     0    39     0   294    46     0   236    33
User 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
PHF 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
PHF Volume:     0     0     8     0     0    39     0   294    46     0   236    33
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
FinalVolume:    0     0     8     0     0    39     0   294    46     0   236    33
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx   6.9 xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx   3.3 xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx   170  xxxx xxxx   135  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx   851  xxxx xxxx   896  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx   851  xxxx xxxx   896  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  0.01  xxxx xxxx  0.04  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx   0.0  xxxx xxxx   0.1  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx   9.3 xxxxx xxxx   9.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *     *     A     *     *     A     *     *     *     *     *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *     *     *     *     *     *     *     *     *     *     *     *
ApproachDel:        9.3              9.2             xxxxxx           xxxxxx
ApproachLOS:         A                A                 *                *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #34 Aries Way / Washington Avenue
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

```
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:       0  0  0  0  1    0  0  0  0  1    0  0  1  1  0    0  0  1  1  0
Initial Vol:   0    0    8      0    0   39      0  294   46      0  236   33
ApproachDel:      9.3              9.2            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=8]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=656]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=39]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=656]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

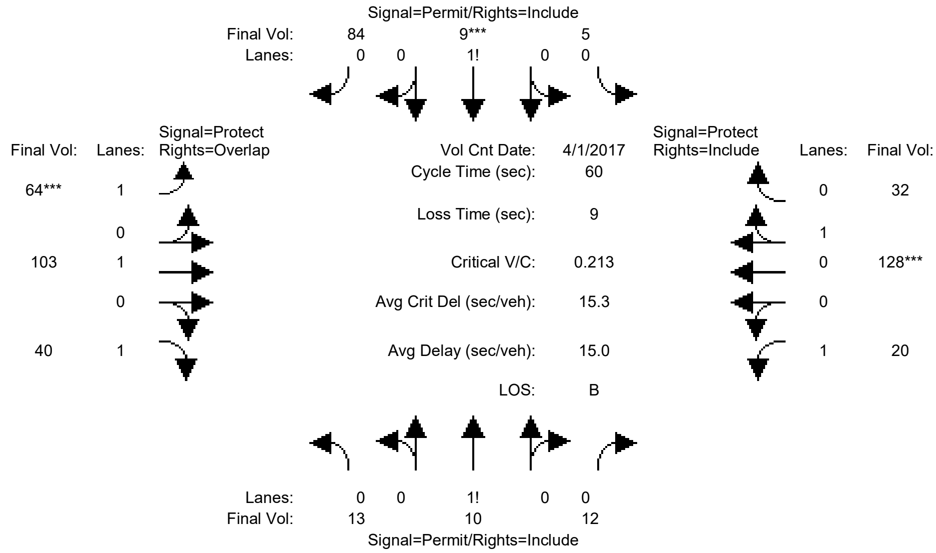
The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #34 Aries Way / Washington Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:       0  0  0  0  1    0  0  0  0  1    0  0  1  1  0    0  0  1  1  0
Initial Vol:   0    0    8      0    0   39      0  294   46      0  236   33
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            609
Minor Approach Volume:          39
Minor Approach Volume Threshold: 456
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #35: Taaffe Street / Washington Avenue



Street Name:	Taaffe Street						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	13	10	12	5	9	84	64	103	40	20	128	32
Growth 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
Initial Bse:	13	10	12	5	9	84	64	103	40	20	128	32
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	10	12	5	9	84	64	103	40	20	128	32
User 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
PHF 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
PHF Volume:	13	10	12	5	9	84	64	103	40	20	128	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	10	12	5	9	84	64	103	40	20	128	32
PCE 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
MLF 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
FinalVolume:	13	10	12	5	9	84	64	103	40	20	128	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	0.37	0.29	0.34	0.05	0.09	0.86	1.00	1.00	1.00	1.00	0.80	0.20
Final Sat.:	650	500	600	89	161	1500	1750	1900	1750	1750	1440	360
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.06	0.06	0.06	0.04	0.05	0.02	0.01	0.09	0.09
Crit Moves:					****		****				****	
Green Time:	15.7	15.7	15.7	15.7	15.7	15.7	10.3	20.7	20.7	14.5	25.0	25.0
Volume/Cap:	0.08	0.08	0.08	0.21	0.21	0.21	0.21	0.16	0.07	0.05	0.21	0.21
Delay/Veh:	16.7	16.7	16.7	17.5	17.5	17.5	21.7	13.7	13.2	17.5	11.4	11.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.7	16.7	16.7	17.5	17.5	17.5	21.7	13.7	13.2	17.5	11.4	11.4
LOS by Move:	B	B	B	B	B	B	C+	B	B	B	B+	B+
HCM2kAvgQ:	1	1	1	2	2	2	1	1	1	0	2	2

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #35: Taaffe Street / Washington Avenue

Signal=Permit/Rights=Include
Final Vol: 87 8*** 8
Lanes: 0 0 1! 0 0

Westbound (left side): Signal=Protect, Rights=Overlap
Final Vol: 143*** / Lanes: 1
Lanes: 0
Final Vol: 116 / Lanes: 1
Lanes: 0
Final Vol: 40 / Lanes: 1

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 60
Loss Time (sec): 9
Critical V/C: 0.290
Avg Crit Del (sec/veh): 16.5
Avg Delay (sec/veh): 15.9
LOS: B

Signal=Protect, Rights=Include
Lanes: 0 / Final Vol: 38
Lanes: 1
Lanes: 0 / Final Vol: 152***
Lanes: 0
Lanes: 1 / Final Vol: 52

Lanes: 0 0 1! 0 0
Final Vol: 26 16 17
Signal=Permit/Rights=Include

Street Name:	Taaffe Street						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	13	10	12	5	9	84	64	103	40	20	128	32
Growth 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
Initial Bse:	13	10	12	5	9	84	64	103	40	20	128	32
Added Vol:	13	6	5	3	-1	3	79	13	0	32	24	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	16	17	8	8	87	143	116	40	52	152	38
User 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
PHF 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
PHF Volume:	26	16	17	8	8	87	143	116	40	52	152	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	16	17	8	8	87	143	116	40	52	152	38
PCE 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
MLF 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
FinalVolume:	26	16	17	8	8	87	143	116	40	52	152	38
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	0.44	0.27	0.29	0.08	0.08	0.84	1.00	1.00	1.00	1.00	0.80	0.20
Final Sat.:	771	475	504	136	136	1478	1750	1900	1750	1750	1440	360
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.06	0.06	0.06	0.08	0.06	0.02	0.03	0.11	0.11
Crit Moves:					****		****				****	
Green Time:	12.2	12.2	12.2	12.2	12.2	12.2	16.9	22.8	22.8	16.0	21.9	21.9
Volume/Cap:	0.17	0.17	0.17	0.29	0.29	0.29	0.29	0.16	0.06	0.11	0.29	0.29
Delay/Veh:	19.9	19.9	19.9	20.7	20.7	20.7	17.2	12.4	11.8	16.8	13.8	13.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.9	19.9	19.9	20.7	20.7	20.7	17.2	12.4	11.8	16.8	13.8	13.8
LOS by Move:	B-	B-	B-	C+	C+	C+	B	B	B+	B	B	B
HCM2kAvgQ:	1	1	1	2	2	2	2	1	0	1	3	3

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #36: Iowa Avenue / Taaffe Street

Signal=Permit/Rights=Include
Final Vol: 41 5*** 13
Lanes: 0 0 1! 0 0

Westbound (left side): Signal=Protect Rights=Include
Final Vol: 40*** Lanes: 1
Lanes: 0
Final Vol: 40 Lanes: 0
Lanes: 1
Final Vol: 12 Lanes: 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 100
Loss Time (sec): 12
Critical V/C: 0.100
Avg Crit Del (sec/veh): 25.4
Avg Delay (sec/veh): 24.8
LOS: C

Signal=Protect Rights=Include
Lanes: 0 Final Vol: 11
Lanes: 1
Lanes: 0 Final Vol: 46***
Lanes: 0
Lanes: 1 Final Vol: 7

Lanes: 0 0 1! 0 0
Final Vol: 9 17 8
Signal=Permit/Rights=Include

Street Name:	Taaffe Street						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	9	17	8	13	5	41	40	40	12	7	46	11
Growth 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
Initial Bse:	9	17	8	13	5	41	40	40	12	7	46	11
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	17	8	13	5	41	40	40	12	7	46	11
User 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
PHF 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
PHF Volume:	9	17	8	13	5	41	40	40	12	7	46	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	17	8	13	5	41	40	40	12	7	46	11
PCE 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
MLF 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
FinalVolume:	9	17	8	13	5	41	40	40	12	7	46	11
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.26	0.50	0.24	0.22	0.08	0.70	1.00	0.77	0.23	1.00	0.81	0.19
Final Sat.:	463	875	412	386	148	1216	1750	1385	415	1750	1453	347
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.03	0.03	0.03	0.02	0.03	0.03	0.00	0.03	0.03
Crit Moves:					****		****				****	
Green Time:	33.6	33.6	33.6	33.6	33.6	33.6	22.8	32.0	32.0	22.4	31.6	31.6
Volume/Cap:	0.06	0.06	0.06	0.10	0.10	0.10	0.10	0.09	0.09	0.02	0.10	0.10
Delay/Veh:	22.5	22.5	22.5	22.9	22.9	22.9	30.6	23.9	23.9	30.3	24.2	24.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	22.5	22.5	22.5	22.9	22.9	22.9	30.6	23.9	23.9	30.3	24.2	24.2
LOS by Move:	C+	C+	C+	C+	C+	C+	C	C	C	C	C	C
HCM2kAvgQ:	1	1	1	1	1	1	1	1	1	0	1	1

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #36: Iowa Avenue / Taaffe Street

Signal=Permit/Rights=Include
Final Vol: 72 5*** 26
Lanes: 0 0 1! 0 0

Signal=Protect Rights=Include (Eastbound)
Final Vol: 54*** Lanes: 1
Lanes: 0
Final Vol: 51 Lanes: 0
Lanes: 1
Final Vol: 12 Lanes: 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 100
Loss Time (sec): 12
Critical V/C: 0.178
Avg Crit Del (sec/veh): 24.9
Avg Delay (sec/veh): 24.6
LOS: C

Signal=Protect Rights=Include (Westbound)
Lanes: 0 Final Vol: 36
Lanes: 1
Lanes: 0 Final Vol: 85***
Lanes: 0
Lanes: 1 Final Vol: 7

Lanes: 0 0 1! 0 0
Final Vol: 9 17 8
Signal=Permit/Rights=Include

Street Name:	Taaffe Street						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	9	17	8	13	5	41	40	40	12	7	46	11
Growth 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
Initial Bse:	9	17	8	13	5	41	40	40	12	7	46	11
Added Vol:	0	0	0	13	0	31	14	11	0	0	39	25
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	17	8	26	5	72	54	51	12	7	85	36
User 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
PHF 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
PHF Volume:	9	17	8	26	5	72	54	51	12	7	85	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	17	8	26	5	72	54	51	12	7	85	36
PCE 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
MLF 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
FinalVolume:	9	17	8	26	5	72	54	51	12	7	85	36
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.26	0.50	0.24	0.25	0.05	0.70	1.00	0.81	0.19	1.00	0.70	0.30
Final Sat.:	463	875	412	442	85	1223	1750	1457	343	1750	1264	536
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.06	0.06	0.06	0.03	0.04	0.04	0.00	0.07	0.07
Crit Moves:					****		****				****	
Green Time:	33.0	33.0	33.0	33.0	33.0	33.0	17.3	32.4	32.4	22.6	37.7	37.7
Volume/Cap:	0.06	0.06	0.06	0.18	0.18	0.18	0.18	0.11	0.11	0.02	0.18	0.18
Delay/Veh:	22.9	22.9	22.9	24.0	24.0	24.0	35.6	23.8	23.8	30.1	20.9	20.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	22.9	22.9	22.9	24.0	24.0	24.0	35.6	23.8	23.8	30.1	20.9	20.9
LOS by Move:	C+	C+	C+	C	C	C	D+	C	C	C	C+	C+
HCM2kAvgQ:	1	1	1	2	2	2	1	1	1	0	3	3

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #37: Frances Street / Evelyn Avenue

Signal=Permit/Rights=Overlap
Final Vol: 66 9 61
Lanes: 1 0 0 1 0

Signal=Protect Rights=Include (Eastbound)
Final Vol: 34*** / 205 / 55
Lanes: 1 / 0 / 0 / 1 / 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 120
Loss Time (sec): 9
Critical V/C: 0.334
Avg Crit Del (sec/veh): 15.7
Avg Delay (sec/veh): 19.1
LOS: B-

Signal=Protect Rights=Overlap (Westbound)
Lanes: 1 / 0 / 1 / 0 / 1
Final Vol: 82 / 454*** / 57

Lanes: 0 1 0 0 1
Final Vol: 81 10*** 32
Signal=Permit/Rights=Overlap

Street Name:	Frances Street						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	81	10	32	61	9	66	34	205	55	57	454	82
Growth 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
Initial Bse:	81	10	32	61	9	66	34	205	55	57	454	82
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	81	10	32	61	9	66	34	205	55	57	454	82
User 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
PHF 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
PHF Volume:	81	10	32	61	9	66	34	205	55	57	454	82
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	10	32	61	9	66	34	205	55	57	454	82
PCE 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
MLF 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
FinalVolume:	81	10	32	61	9	66	34	205	55	57	454	82
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	0.89	0.11	1.00	0.87	0.13	1.00	1.00	0.79	0.21	1.00	1.00	1.00
Final Sat.:	1602	198	1750	1569	231	1750	1750	1419	381	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.02	0.04	0.04	0.04	0.02	0.14	0.14	0.03	0.24	0.05
Crit Moves:		****					****				****	
Green Time:	18.2	18.2	44.9	18.2	18.2	25.2	7.0	66.1	66.1	26.7	85.8	85.8
Volume/Cap:	0.33	0.33	0.05	0.26	0.26	0.18	0.33	0.26	0.26	0.15	0.33	0.07
Delay/Veh:	46.2	46.2	24.0	45.5	45.5	39.2	56.2	14.3	14.3	37.7	6.5	5.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.2	46.2	24.0	45.5	45.5	39.2	56.2	14.3	14.3	37.7	6.5	5.1
LOS by Move:	D	D	C	D	D	D	E+	B	B	D+	A	A
HCM2kAvgQ:	3	3	1	3	3	2	1	5	5	2	6	1

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #37: Frances Street / Evelyn Avenue

Signal=Permit/Rights=Overlap
Final Vol: 66 9 61
Lanes: 1 0 0 1 0

Signal=Protect Rights=Include (Eastbound): Final Vol: 34*** (Lanes 1), Lanes 0, 238 (Lanes 0), Lanes 1, 73 (Lanes 0)

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 120
Loss Time (sec): 9
Critical V/C: 0.339
Avg Crit Del (sec/veh): 15.8
Avg Delay (sec/veh): 18.9
LOS: B-

Signal=Protect Rights=Overlap (Westbound): Lanes: 1, Final Vol: 82; Lanes 0; Lanes 1, 460***; Lanes 0; Lanes 1, 58

Lanes: 0 1 0 0 1
Final Vol: 84 10*** 35
Signal=Permit/Rights=Overlap

Street Name:	Frances Street						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	81	10	32	61	9	66	34	205	55	57	454	82
Growth 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
Initial Bse:	81	10	32	61	9	66	34	205	55	57	454	82
Added Vol:	3	0	3	0	0	0	0	33	18	1	6	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	84	10	35	61	9	66	34	238	73	58	460	82
User 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
PHF 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
PHF Volume:	84	10	35	61	9	66	34	238	73	58	460	82
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	10	35	61	9	66	34	238	73	58	460	82
PCE 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
MLF 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
FinalVolume:	84	10	35	61	9	66	34	238	73	58	460	82
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	0.89	0.11	1.00	0.87	0.13	1.00	1.00	0.77	0.23	1.00	1.00	1.00
Final Sat.:	1609	191	1750	1569	231	1750	1750	1377	423	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.02	0.04	0.04	0.04	0.02	0.17	0.17	0.03	0.24	0.05
Crit Moves:		****					****				****	
Green Time:	18.5	18.5	41.8	18.5	18.5	25.5	7.0	69.2	69.2	23.4	85.5	85.5
Volume/Cap:	0.34	0.34	0.06	0.25	0.25	0.18	0.33	0.30	0.30	0.17	0.34	0.07
Delay/Veh:	46.1	46.1	26.0	45.2	45.2	38.9	56.2	13.2	13.2	40.5	6.7	5.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.1	46.1	26.0	45.2	45.2	38.9	56.2	13.2	13.2	40.5	6.7	5.2
LOS by Move:	D	D	C	D	D	D+	E+	B	B	D	A	A
HCM2kAvgQ:	3	3	1	3	3	2	1	6	6	2	6	1

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing AM

Intersection #38: Washington Avenue / Frances Street

Signal=Stop/Rights=Include
Final Vol: 63 0 22
Lanes: 0 0 1! 0 0

Signal=Uncontrol Rights=Include (West approach)
Final Vol: 64, Lanes: 1
Lanes: 0
Final Vol: 74, Lanes: 1
Lanes: 0
Final Vol: 0, Lanes: 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 80
Loss Time (sec): 9
Critical V/C: 0.068
Avg Crit Del (sec/veh): 3.4
Avg Delay (sec/veh): 3.4
LOS: A

Signal=Uncontrol Rights=Include (East approach)
Lanes: 1, Final Vol: 45
Lanes: 0
Lanes: 1, Final Vol: 127
Lanes: 0
Lanes: 0, Final Vol: 0

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Stop/Rights=Include

Street Name:	Frances Street						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	0	0	22	0	63	64	74	0	0	127	45
Growth 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
Initial Bse:	0	0	0	22	0	63	64	74	0	0	127	45
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	22	0	63	64	74	0	0	127	45
User 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
PHF 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
PHF Volume:	0	0	0	22	0	63	64	74	0	0	127	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	22	0	63	64	74	0	0	127	45
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	329	329	127	172	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	670	593	929	1417	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	647	566	929	1417	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.03	0.00	0.07	0.05	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	834	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	9.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	*	*	*	*	*	*
ApproachDel:		xxxxxx			9.8			xxxxxx			xxxxxx	
ApproachLOS:		*			A			*			*	

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #38 Washington Avenue / Frances Street

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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```
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:       0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  1  0  1
Initial Vol:   0    0     0    22    0    63    64   74     0     0  127    45
ApproachDel:   xxxxxx              9.8            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=85]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=395]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #38 Washington Avenue / Frances Street
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:       0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  1  0  1
Initial Vol:   0    0     0    22    0    63    64   74     0     0  127    45
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            310
Minor Approach Volume:          85
Minor Approach Volume Threshold: 688
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


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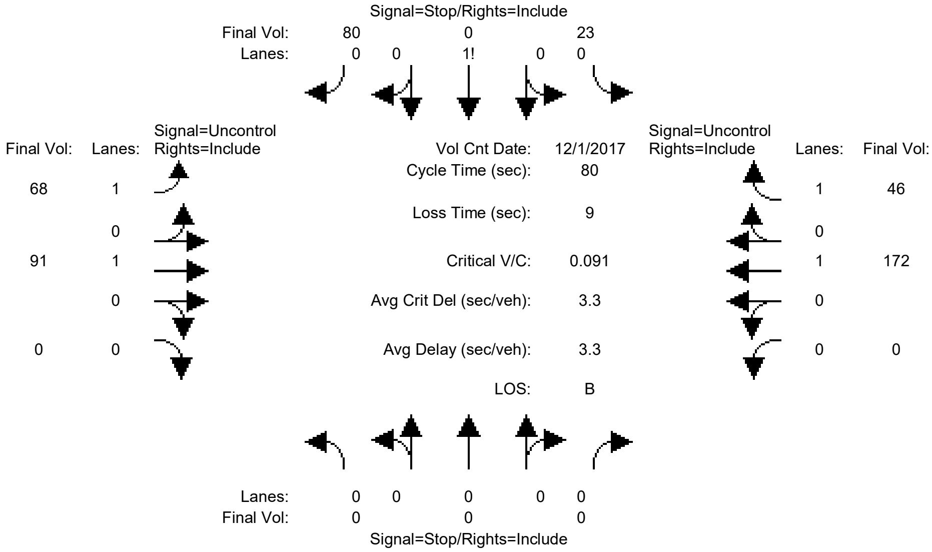
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PP AM

Intersection #38: Washington Avenue / Frances Street




```
Street Name:          Frances Street               Washington Avenue
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 1 Dec 2017 <<
Base Vol:        0    0     0    22    0    63    64   74     0     0  127    45
Growth 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
Initial Bse:     0    0     0    22    0    63    64   74     0     0  127    45
Added Vol:       0    0     0     1    0    17     4   17     0     0   45     1
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:     0    0     0    23    0    80    68   91     0     0  172    46
User 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
PHF 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
PHF Volume:      0    0     0    23    0    80    68   91     0     0  172    46
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:     0    0     0    23    0    80    68   91     0     0  172    46
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   399  399   172   218 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   611  542   877  1364 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   587  515   877  1364 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.04 0.00  0.09  0.05 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2WayQ95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.2 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.8 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:     *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  790 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.4 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 10.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    B     *     *    *     *     *    *     *
ApproachDel:     xxxxxx            10.2            xxxxxx           xxxxxx
ApproachLOS:        *                B                *                *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #38 Washington Avenue / Frances Street
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  1  0  1
Initial Vol:    0    0     0    23    0    80    68   91     0     0  172    46
ApproachDel:    xxxxxx              10.2          xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=103]
   SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=480]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #38 Washington Avenue / Frances Street
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  1  0  1
Initial Vol:    0    0     0    23    0    80    68   91     0     0  172    46
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            377
Minor Approach Volume:          103
Minor Approach Volume Threshold: 621
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing AM

Intersection #39: Murphy Avenue / Washington Avenue

Signal=Stop/Rights=Include
Final Vol: 10 4*** 5
Lanes: 0 0 1! 0 0

Final Vol:	Lanes:	Signal=Stop Rights=Include			Signal=Stop Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	5/22/2018			
10***	0		Cycle Time (sec):	80		0	14
			Loss Time (sec):	9			
	0					0	
61	1!		Critical V/C:	0.170		1!	137***
	0		Avg Crit Del (sec/veh):	7.6		0	
10	0		Avg Delay (sec/veh):	7.6		0	1
			LOS:	A			

Lanes: 0 0 1! 0 0
Final Vol: 9 1 2***
Signal=Stop/Rights=Include

Street Name:	Murphy Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 22 May 2018 <<												
Base Vol:	9	1	2	5	4	10	10	61	10	1	137	14
Growth 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
Initial Bse:	9	1	2	5	4	10	10	61	10	1	137	14
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	1	2	5	4	10	10	61	10	1	137	14
User 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
PHF 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
PHF Volume:	9	1	2	5	4	10	10	61	10	1	137	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	1	2	5	4	10	10	61	10	1	137	14
PCE 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
MLF 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
FinalVolume:	9	1	2	5	4	10	10	61	10	1	137	14
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.75	0.08	0.17	0.26	0.21	0.53	0.12	0.76	0.12	0.01	0.90	0.09
Final Sat.:	579	64	129	219	175	437	108	661	108	6	806	82
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.02	0.02	0.02	0.09	0.09	0.09	0.17	0.17	0.17
Crit Moves:			****		****		****				****	
Delay/Veh:	7.5	7.5	7.5	7.2	7.2	7.2	7.5	7.5	7.5	7.8	7.8	7.8
Delay 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
AdjDel/Veh:	7.5	7.5	7.5	7.2	7.2	7.2	7.5	7.5	7.5	7.8	7.8	7.8
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:		7.5			7.2			7.5			7.8	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.5			7.2			7.5			7.8	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2

Note: Queue reported is the number of cars per lane.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #39 Murphy Avenue / Washington Avenue

****

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Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0
Initial Vol:	9 1 2	5 4 10	10 61 10	1 137 14

Major Street Volume: 233
Minor Approach Volume: 19
Minor Approach Volume Threshold: 608

SIGNAL WARRANT DISCLAIMER
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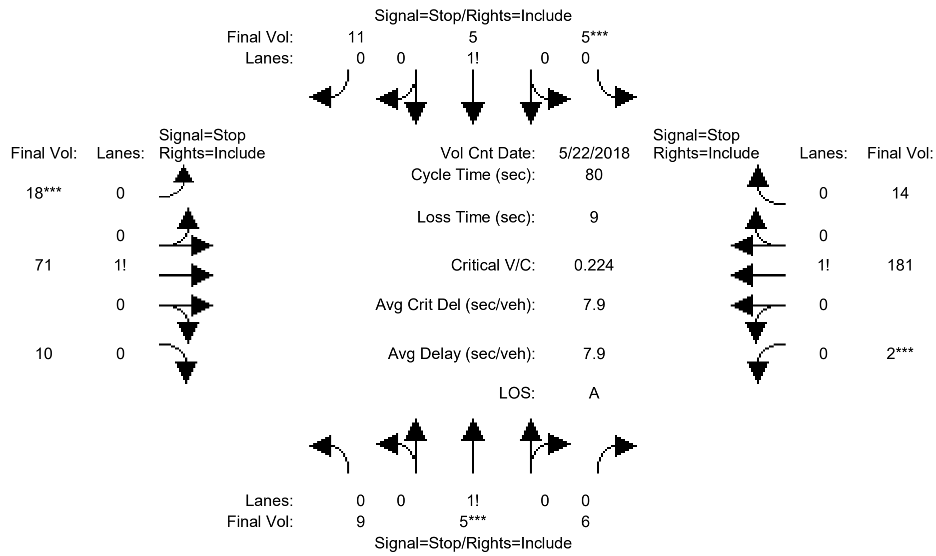
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing PP AM

Intersection #39: Murphy Avenue / Washington Avenue



Street Name:	Murphy Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 22 May 2018 <<												
Base Vol:	9	1	2	5	4	10	10	61	10	1	137	14
Growth 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
Initial Bse:	9	1	2	5	4	10	10	61	10	1	137	14
Added Vol:	0	4	4	0	1	1	8	10	0	1	44	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	5	6	5	5	11	18	71	10	2	181	14
User 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
PHF 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
PHF Volume:	9	5	6	5	5	11	18	71	10	2	181	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	5	6	5	5	11	18	71	10	2	181	14
PCE 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
MLF 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
FinalVolume:	9	5	6	5	5	11	18	71	10	2	181	14
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.45	0.25	0.30	0.24	0.24	0.52	0.18	0.72	0.10	0.01	0.92	0.07
Final Sat.:	344	191	229	189	189	416	155	613	86	9	810	63
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.03	0.03	0.03	0.12	0.12	0.12	0.22	0.22	0.22
Crit Moves:		****		****			****			****		
Delay/Veh:	7.5	7.5	7.5	7.4	7.4	7.4	7.7	7.7	7.7	8.2	8.2	8.2
Delay 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
AdjDel/Veh:	7.5	7.5	7.5	7.4	7.4	7.4	7.7	7.7	7.7	8.2	8.2	8.2
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:		7.5			7.4			7.7			8.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.5			7.4			7.7			8.2	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.3	0.3

Note: Queue reported is the number of cars per lane.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #39 Murphy Avenue / Washington Avenue

****

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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign        Stop Sign        Stop Sign
Lanes:        0  0  1! 0  0    0  0  1! 0  0    0  0  1! 0  0    0  0  1! 0  0
Initial Vol:    9    5     6     5    5    11    18   71    10     2  181    14
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            296
Minor Approach Volume:          21
Minor Approach Volume Threshold: 544
--------------------------------------------------------------------------------
```

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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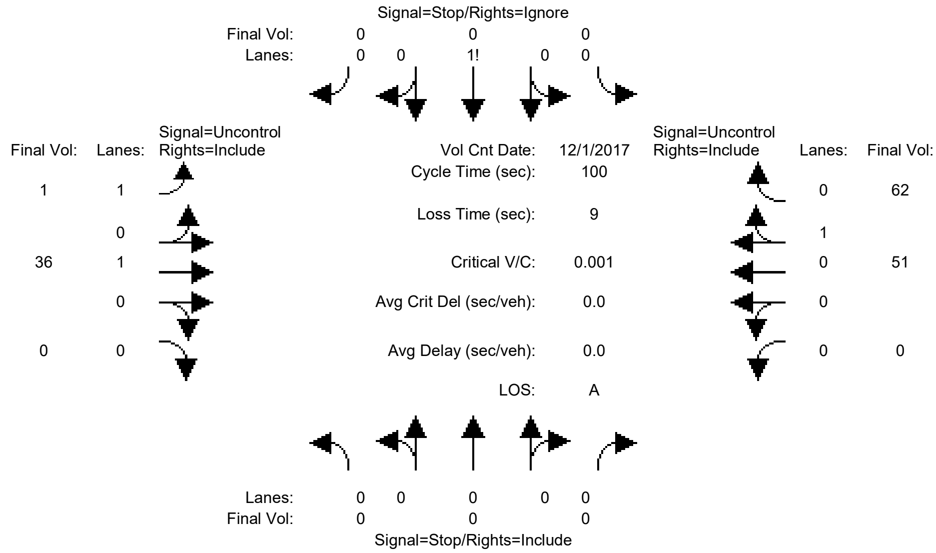
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing AM

Intersection #40: Iowa Avenue / Murphy Avenue



Street Name:	Murphy Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	0	0	0	0	5	1	36	0	0	51	62
Growth 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
Initial Bse:	0	0	0	0	0	5	1	36	0	0	51	62
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	5	1	36	0	0	51	62
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	1	36	0	0	51	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	0	1	36	0	0	51	62
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	82	113	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	983	1489	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	983	1489	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #40 Iowa Avenue / Murphy Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0     0     0    0     0     5    1   36     0    0   51    62
ApproachDel:    xxxxxx           xxxxxx           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=OVERFLOW]
   SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=5]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=155]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

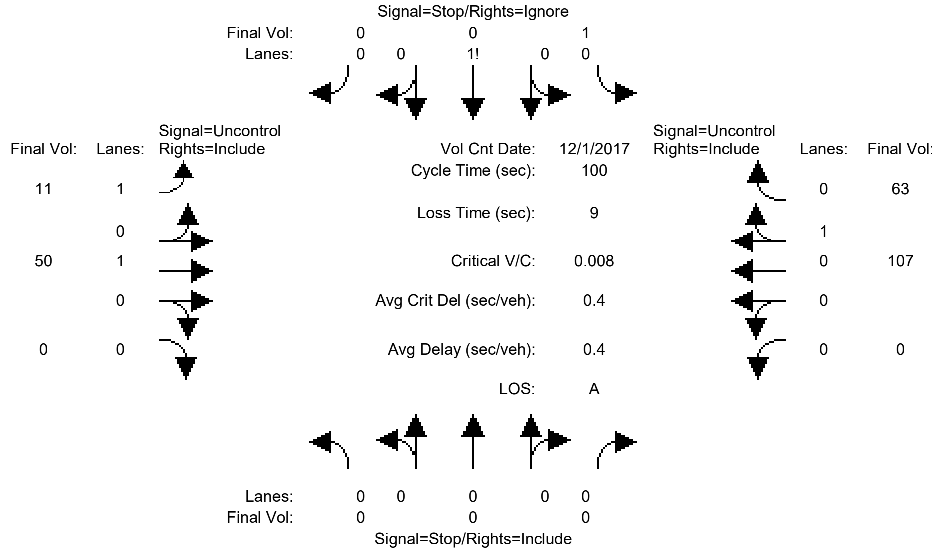
The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #40 Iowa Avenue / Murphy Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0     0     0    0     0     5    1   36     0    0   51    62
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             150
Minor Approach Volume:           5
Minor Approach Volume Threshold: 938
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PP AM

Intersection #40: Iowa Avenue / Murphy Avenue




```
Street Name:          Murphy Avenue                     Iowa Avenue
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 1 Dec 2017 <<
Base Vol:        0    0     0     0    0     5     1   36     0     0   51    62
Growth 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
Initial Bse:     0    0     0     0    0     5     1   36     0     0   51    62
Added Vol:       0    0     0     1    0     9    10   14     0     0   56     1
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:     0    0     0     1    0    14    11   50     0     0  107    63
User Adj:     1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0    0     0     1    0     0    11   50     0     0  107    63
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:     0    0     0     1    0     0    11   50     0     0  107    63
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   211  211   139   170 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   782  690   915  1420 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   778  685   915  1420 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.00 0.00  0.00  0.01 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.0 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.6 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  778 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.0 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx  9.6 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    A     *     *    *     *     *    *     *
ApproachDel:    xxxxxx             9.6             xxxxxx           xxxxxx
ApproachLOS:        *               A                 *                *
Note: Queue reported is the number of cars per lane.
                     Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #40 Iowa Avenue / Murphy Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

```
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Lanes:       0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0     0     0     1     0    14    11    50     0     0  107    63
ApproachDel:    xxxxxx             9.6            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=15]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=246]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
```

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

```
********************************************************************************
Intersection #40 Iowa Avenue / Murphy Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Lanes:       0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0     0     0     1     0    14    11    50     0     0  107    63
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            231
Minor Approach Volume:          15
Minor Approach Volume Threshold: 790
--------------------------------------------------------------------------------
```

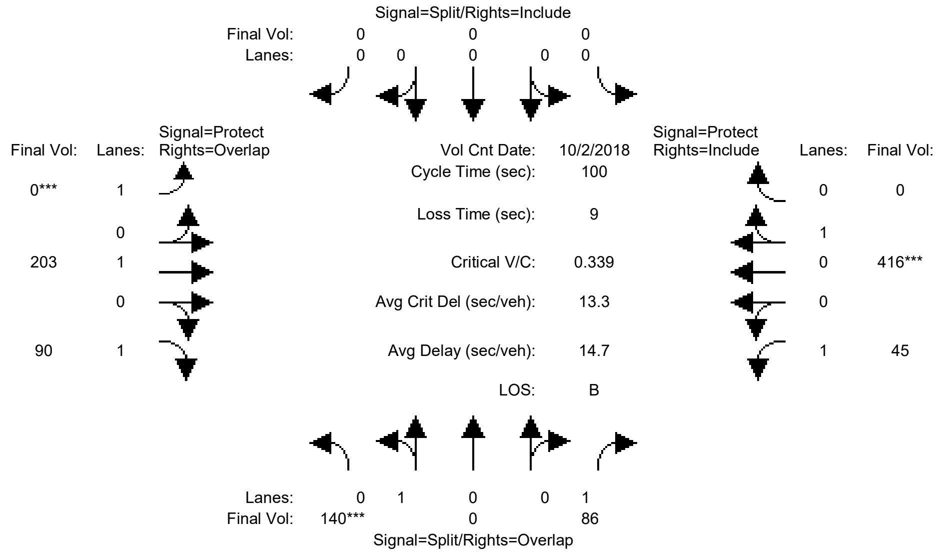
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #41: Sunnyvale Avenue / Maude Avenue



Street Name:	Sunnyvale Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	140	0	86	0	0	0	0	203	90	45	416	0
Growth 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
Initial Bse:	140	0	86	0	0	0	0	203	90	45	416	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	140	0	86	0	0	0	0	203	90	45	416	0
User 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
PHF 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
PHF Volume:	140	0	86	0	0	0	0	203	90	45	416	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	0	86	0	0	0	0	203	90	45	416	0
PCE 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
MLF 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
FinalVolume:	140	0	86	0	0	0	0	203	90	45	416	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1800	0	1750	0	0	0	1750	1900	1750	1750	1800	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.05	0.00	0.00	0.00	0.00	0.11	0.05	0.03	0.23	0.00
Crit Moves:	****						****				****	
Green Time:	22.9	0.0	49.9	0.0	0.0	0.0	0.0	41.1	64.0	27.0	68.1	0.0
Volume/Cap:	0.34	0.00	0.10	0.00	0.00	0.00	0.00	0.26	0.08	0.10	0.34	0.00
Delay/Veh:	32.7	0.0	13.3	0.0	0.0	0.0	0.0	19.6	6.8	27.5	6.8	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.7	0.0	13.3	0.0	0.0	0.0	0.0	19.6	6.8	27.5	6.8	0.0
LOS by Move:	C-	A	B	A	A	A	A	B-	A	C	A	A
HCM2kAvgQ:	4	0	1	0	0	0	0	4	1	1	5	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #41: Sunnyvale Avenue / Maude Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Westbound side (left)				Center			Eastbound side (right)		
Final Vol:	Lanes:	Signal=Protect Rights=Overlap		Vol Cnt Date:	10/2/2018		Signal=Protect Rights=Include	Lanes:	Final Vol:
0***	1			Cycle Time (sec):	100			0	0
	0			Loss Time (sec):	9			1	
203	1			Critical V/C:	0.341			0	416***
	0			Avg Crit Del (sec/veh):	13.4			0	
96	1			Avg Delay (sec/veh):	14.8			1	50
				LOS:	B				

Lanes: 0 1 0 0 1
Final Vol: 142*** 0 88
Signal=Split/Rights=Overlap

Street Name:	Sunnyvale Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	140	0	86	0	0	0	0	203	90	45	416	0
Growth 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
Initial Bse:	140	0	86	0	0	0	0	203	90	45	416	0
Added Vol:	2	0	2	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	6	5	0	0
Initial Fut:	142	0	88	0	0	0	0	203	96	50	416	0
User 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
PHF 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
PHF Volume:	142	0	88	0	0	0	0	203	96	50	416	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	142	0	88	0	0	0	0	203	96	50	416	0
PCE 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
MLF 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
FinalVolume:	142	0	88	0	0	0	0	203	96	50	416	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1800	0	1750	0	0	0	1750	1900	1750	1750	1800	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.05	0.00	0.00	0.00	0.00	0.11	0.05	0.03	0.23	0.00
Crit Moves:	****						****				****	
Green Time:	23.2	0.0	50.0	0.0	0.0	0.0	0.0	41.0	64.1	26.9	67.8	0.0
Volume/Cap:	0.34	0.00	0.10	0.00	0.00	0.00	0.00	0.26	0.09	0.11	0.34	0.00
Delay/Veh:	32.5	0.0	13.2	0.0	0.0	0.0	0.0	19.7	6.8	27.6	6.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.5	0.0	13.2	0.0	0.0	0.0	0.0	19.7	6.8	27.6	6.9	0.0
LOS by Move:	C-	A	B	A	A	A	A	B-	A	C	A	A
HCM2kAvgQ:	4	0	1	0	0	0	0	4	1	1	5	0

Note: Queue reported is the number of cars per lane.

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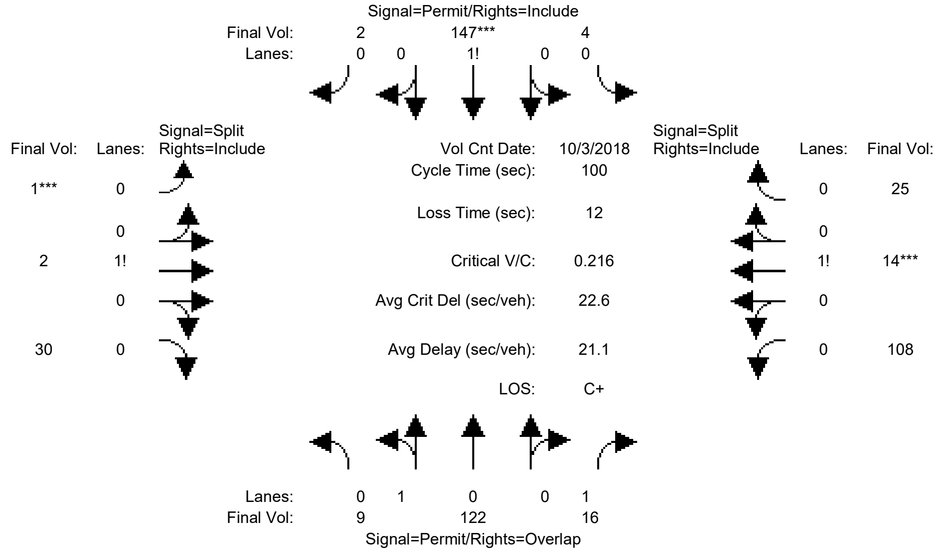
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #42: Sunnyvale Road / Arques Avenue



Street Name:	Sunnyvale Raod						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	9	122	16	4	147	2	1	2	30	108	14	25
Growth 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
Initial Bse:	9	122	16	4	147	2	1	2	30	108	14	25
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	122	16	4	147	2	1	2	30	108	14	25
User 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
PHF 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
PHF Volume:	9	122	16	4	147	2	1	2	30	108	14	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	122	16	4	147	2	1	2	30	108	14	25
PCE 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
MLF 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
FinalVolume:	9	122	16	4	147	2	1	2	30	108	14	25
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.07	0.93	1.00	0.03	0.96	0.01	0.03	0.06	0.91	0.73	0.10	0.17
Final Sat.:	124	1676	1750	46	1681	23	53	106	1591	1286	167	298
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.01	0.09	0.09	0.09	0.02	0.02	0.02	0.08	0.08	0.08
Crit Moves:					****		****				****	
Green Time:	39.8	39.8	78.0	39.8	39.8	39.8	10.0	10.0	10.0	38.2	38.2	38.2
Volume/Cap:	0.18	0.18	0.01	0.22	0.22	0.22	0.19	0.19	0.19	0.22	0.22	0.22
Delay/Veh:	19.7	19.7	2.4	20.0	20.0	20.0	41.8	41.8	41.8	21.0	21.0	21.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.7	19.7	2.4	20.0	20.0	20.0	41.8	41.8	41.8	21.0	21.0	21.0
LOS by Move:	B-	B-	A	C+	C+	C+	D	D	D	C+	C+	C+
HCM2kAvgQ:	3	3	0	3	3	3	1	1	1	3	3	3

Note: Queue reported is the number of cars per lane.

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #42: Sunnyvale Road / Arques Avenue

Signal=Permit/Rights=Include
Final Vol: 2 158*** 4
Lanes: 0 0 1! 0 0

Signal=Split Rights=Include
Final Vol: 1*** Lanes: 0
0
Final Vol: 2 Lanes: 1!
0
Final Vol: 30 Lanes: 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 100
Loss Time (sec): 12
Critical V/C: 0.223
Avg Crit Del (sec/veh): 22.6
Avg Delay (sec/veh): 20.9
LOS: C+

Signal=Split Rights=Include
Lanes: 0 Final Vol: 25
0
Lanes: 1! Final Vol: 14***
0
Lanes: 0 Final Vol: 108

Lanes: 0 1 0 0 1
Final Vol: 9 125 16
Signal=Permit/Rights=Overlap

Street Name:	Sunnyvale Raod						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	9	122	16	4	147	2	1	2	30	108	14	25
Growth 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
Initial Bse:	9	122	16	4	147	2	1	2	30	108	14	25
Added Vol:	0	3	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	11	0	0	0	0	0	0	0
Initial Fut:	9	125	16	4	158	2	1	2	30	108	14	25
User 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
PHF 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
PHF Volume:	9	125	16	4	158	2	1	2	30	108	14	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	125	16	4	158	2	1	2	30	108	14	25
PCE 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
MLF 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
FinalVolume:	9	125	16	4	158	2	1	2	30	108	14	25
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.07	0.93	1.00	0.02	0.97	0.01	0.03	0.06	0.91	0.73	0.10	0.17
Final Sat.:	121	1679	1750	43	1686	21	53	106	1591	1286	167	298
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.01	0.09	0.09	0.09	0.02	0.02	0.02	0.08	0.08	0.08
Crit Moves:					****		****				****	
Green Time:	41.1	41.1	78.0	41.1	41.1	41.1	10.0	10.0	10.0	36.9	36.9	36.9
Volume/Cap:	0.18	0.18	0.01	0.23	0.23	0.23	0.19	0.19	0.19	0.23	0.23	0.23
Delay/Veh:	18.8	18.8	2.4	19.3	19.3	19.3	41.8	41.8	41.8	21.9	21.9	21.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.8	18.8	2.4	19.3	19.3	19.3	41.8	41.8	41.8	21.9	21.9	21.9
LOS by Move:	B-	B-	A	B-	B-	B-	D	D	D	C+	C+	C+
HCM2kAvgQ:	3	3	0	3	3	3	1	1	1	3	3	3

Note: Queue reported is the number of cars per lane.

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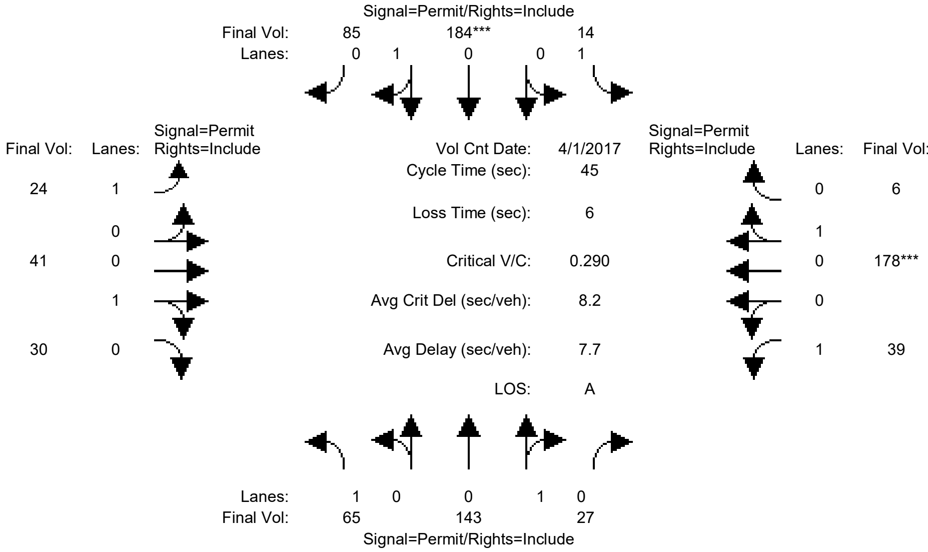
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #43: Sunnyvale Avenue / California Avenue



Street Name:	Sunnyvale Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	65	143	27	14	184	85	24	41	30	39	178	6
Growth 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
Initial Bse:	65	143	27	14	184	85	24	41	30	39	178	6
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	65	143	27	14	184	85	24	41	30	39	178	6
User 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
PHF 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
PHF Volume:	65	143	27	14	184	85	24	41	30	39	178	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	143	27	14	184	85	24	41	30	39	178	6
PCE 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
MLF 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
FinalVolume:	65	143	27	14	184	85	24	41	30	39	178	6
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.84	0.16	1.00	0.68	0.32	1.00	0.58	0.42	1.00	0.97	0.03
Final Sat.:	1750	1514	286	1750	1231	569	1750	1039	761	1750	1741	59
Capacity Analysis Module:												
Vol/Sat:	0.04	0.09	0.09	0.01	0.15	0.15	0.01	0.04	0.04	0.02	0.10	0.10
Crit Moves:					****						****	
Green Time:	23.2	23.2	23.2	23.2	23.2	23.2	15.8	15.8	15.8	15.8	15.8	15.8
Volume/Cap:	0.07	0.18	0.18	0.02	0.29	0.29	0.04	0.11	0.11	0.06	0.29	0.29
Delay/Veh:	5.5	5.9	5.9	5.4	6.4	6.4	9.6	9.9	9.9	9.7	10.8	10.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.5	5.9	5.9	5.4	6.4	6.4	9.6	9.9	9.9	9.7	10.8	10.8
LOS by Move:	A	A	A	A	A	A	A	A	A	A	B+	B+
HCM2kAvgQ:	0	1	1	0	2	2	0	1	1	0	2	2

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #43: Sunnyvale Avenue / California Avenue

Signal=Permit/Rights=Include
Final Vol: 85 195*** 14
Lanes: 0 1 0 0 1

Final Vol: | Lanes: | Signal=Permit Rights=Include
24 1
0
41 0
1
43 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 45
Loss Time (sec): 6
Critical V/C: 0.297
Avg Crit Del (sec/veh): 8.2
Avg Delay (sec/veh): 7.7
LOS: A

Signal=Permit Rights=Include | Lanes: | Final Vol:
0 6
1
0 178***
0
1 39

Lanes: 1 0 0 1 0
Final Vol: 73 146 27
Signal=Permit/Rights=Include

Street Name:	Sunnyvale Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	65	143	27	14	184	85	24	41	30	39	178	6
Growth 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
Initial Bse:	65	143	27	14	184	85	24	41	30	39	178	6
Added Vol:	8	3	0	0	0	0	0	0	19	0	0	0
PasserByVol:	0	0	0	0	11	0	0	0	-6	0	0	0
Initial Fut:	73	146	27	14	195	85	24	41	43	39	178	6
User 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
PHF 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
PHF Volume:	73	146	27	14	195	85	24	41	43	39	178	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	146	27	14	195	85	24	41	43	39	178	6
PCE 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
MLF 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
FinalVolume:	73	146	27	14	195	85	24	41	43	39	178	6
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.84	0.16	1.00	0.70	0.30	1.00	0.49	0.51	1.00	0.97	0.03
Final Sat.:	1750	1519	281	1750	1254	546	1750	879	921	1750	1741	59
Capacity Analysis Module:												
Vol/Sat:	0.04	0.10	0.10	0.01	0.16	0.16	0.01	0.05	0.05	0.02	0.10	0.10
Crit Moves:					****						****	
Green Time:	23.5	23.5	23.5	23.5	23.5	23.5	15.5	15.5	15.5	15.5	15.5	15.5
Volume/Cap:	0.08	0.18	0.18	0.02	0.30	0.30	0.04	0.14	0.14	0.06	0.30	0.30
Delay/Veh:	5.4	5.8	5.8	5.2	6.2	6.2	9.9	10.3	10.3	10.0	11.1	11.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.4	5.8	5.8	5.2	6.2	6.2	9.9	10.3	10.3	10.0	11.1	11.1
LOS by Move:	A	A	A	A	A	A	A	B+	B+	A	B+	B+
HCM2kAvgQ:	1	1	1	0	2	2	0	1	1	0	2	2

Note: Queue reported is the number of cars per lane.

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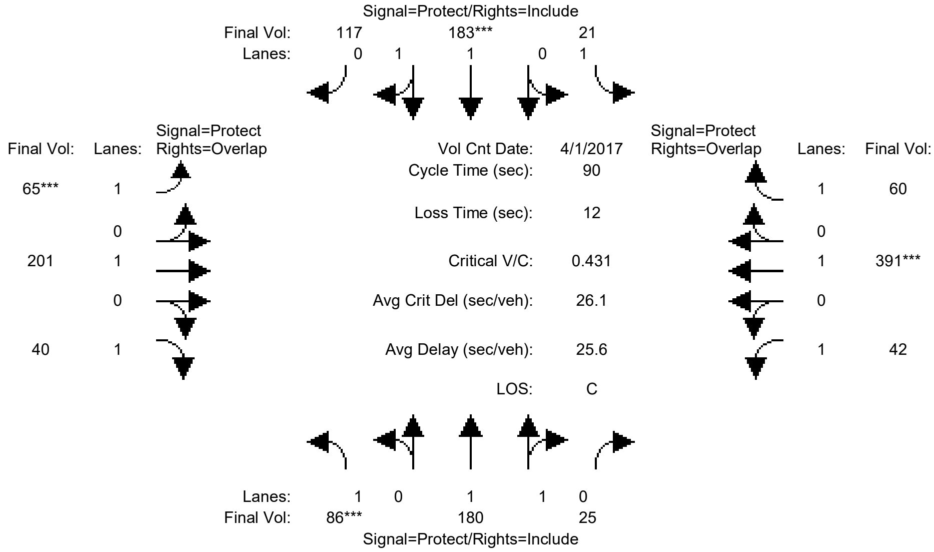
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #44: Sunnyvale Avenue / Evelyn Avenue



Street Name:	Sunnyvale Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	86	180	25	21	183	117	65	201	40	42	391	60
Growth 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
Initial Bse:	86	180	25	21	183	117	65	201	40	42	391	60
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	86	180	25	21	183	117	65	201	40	42	391	60
User 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
PHF 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
PHF Volume:	86	180	25	21	183	117	65	201	40	42	391	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	86	180	25	21	183	117	65	201	40	42	391	60
PCE 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
MLF 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
FinalVolume:	86	180	25	21	183	117	65	201	40	42	391	60
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.75	0.25	1.00	1.20	0.80	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3248	451	1750	2256	1442	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.06	0.06	0.01	0.08	0.08	0.04	0.11	0.02	0.02	0.21	0.03
Crit Moves:	****				****		****				****	
Green Time:	10.3	16.0	16.0	11.2	17.0	17.0	7.8	29.9	40.1	20.9	43.0	54.2
Volume/Cap:	0.43	0.31	0.31	0.10	0.43	0.43	0.43	0.32	0.05	0.10	0.43	0.06
Delay/Veh:	38.6	32.5	32.5	35.1	32.7	32.7	41.0	22.8	14.2	27.3	15.8	7.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.6	32.5	32.5	35.1	32.7	32.7	41.0	22.8	14.2	27.3	15.8	7.4
LOS by Move:	D+	C-	C-	D+	C-	C-	D	C+	B	C	B	A
HCM2kAvgQ:	2	2	2	1	4	4	2	4	1	1	7	1

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #44: Sunnyvale Avenue / Evelyn Avenue

Signal=Protect/Rights=Include
Final Vol: 119 205*** 21
Lanes: 0 1 1 0 1

Final Vol: Lanes: Signal=Protect Rights=Overlap
68*** 1
0
202 1
0
42 1

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 90
Loss Time (sec): 12
Critical V/C: 0.452
Avg Crit Del (sec/veh): 26.8
Avg Delay (sec/veh): 26.3
LOS: C

Signal=Protect Rights=Overlap Lanes: Final Vol:
1 60
0
1 397***
0
1 100

Lanes: 1 0 1 1 0
Final Vol: 98*** 188 46
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	86	180	25	21	183	117	65	201	40	42	391	60
Growth 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
Initial Bse:	86	180	25	21	183	117	65	201	40	42	391	60
Added Vol:	12	8	21	0	17	2	3	1	2	63	6	0
PasserByVol:	0	0	0	0	5	0	0	0	0	-5	0	0
Initial Fut:	98	188	46	21	205	119	68	202	42	100	397	60
User 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
PHF 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
PHF Volume:	98	188	46	21	205	119	68	202	42	100	397	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	98	188	46	21	205	119	68	202	42	100	397	60
PCE 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
MLF 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
FinalVolume:	98	188	46	21	205	119	68	202	42	100	397	60
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.60	0.40	1.00	1.25	0.75	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	2972	727	1750	2340	1358	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.06	0.01	0.09	0.09	0.04	0.11	0.02	0.06	0.21	0.03
Crit Moves:	****				****		****				****	
Green Time:	11.2	16.8	16.8	11.8	17.5	17.5	7.7	29.0	40.2	20.3	41.6	53.4
Volume/Cap:	0.45	0.34	0.34	0.09	0.45	0.45	0.45	0.33	0.05	0.25	0.45	0.06
Delay/Veh:	38.1	32.0	32.0	34.6	32.5	32.5	41.3	23.4	14.1	28.9	16.8	7.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.1	32.0	32.0	34.6	32.5	32.5	41.3	23.4	14.1	28.9	16.8	7.7
LOS by Move:	D+	C-	C-	C-	C-	C-	D	C	B	C	B	A
HCM2kAvgQ:	3	3	3	1	4	4	3	4	1	2	7	1

Note: Queue reported is the number of cars per lane.

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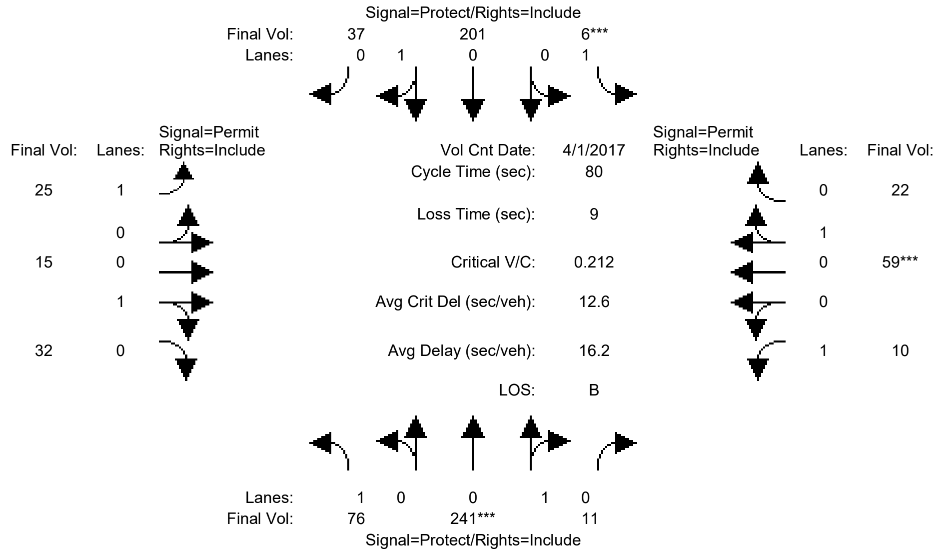
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #45: Sunnyvale Avenue / Washington Avenue



Street Name:	Sunnyvale Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	76	241	11	6	201	37	25	15	32	10	59	22
Growth 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
Initial Bse:	76	241	11	6	201	37	25	15	32	10	59	22
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	76	241	11	6	201	37	25	15	32	10	59	22
User 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
PHF 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
PHF Volume:	76	241	11	6	201	37	25	15	32	10	59	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	241	11	6	201	37	25	15	32	10	59	22
PCE 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
MLF 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
FinalVolume:	76	241	11	6	201	37	25	15	32	10	59	22
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.96	0.04	1.00	0.84	0.16	1.00	0.32	0.68	1.00	0.73	0.27
Final Sat.:	1750	1721	79	1750	1520	280	1750	574	1226	1750	1311	489
Capacity Analysis Module:												
Vol/Sat:	0.04	0.14	0.14	0.00	0.13	0.13	0.01	0.03	0.03	0.01	0.05	0.05
Crit Moves:		****		****							****	
Green Time:	22.1	48.4	48.4	7.0	33.4	33.4	15.6	15.6	15.6	15.6	15.6	15.6
Volume/Cap:	0.16	0.23	0.23	0.04	0.32	0.32	0.07	0.13	0.13	0.03	0.23	0.23
Delay/Veh:	22.1	7.4	7.4	33.5	15.9	15.9	26.4	26.8	26.8	26.1	27.5	27.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	22.1	7.4	7.4	33.5	15.9	15.9	26.4	26.8	26.8	26.1	27.5	27.5
LOS by Move:	C+	A	A	C-	B	B	C	C	C	C	C	C
HCM2kAvgQ:	2	3	3	0	4	4	1	1	1	0	2	2

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #45: Sunnyvale Avenue / Washington Avenue

Signal=Protect/Rights=Include
Final Vol: 66 253*** 6
Lanes: 0 1 0 0 1

Final Vol:	Lanes:	Signal=Permit Rights=Include			Signal=Permit Rights=Include	Lanes:	Final Vol:
34	1		Vol Cnt Date:	4/1/2017		0	22
			Cycle Time (sec):	80			
	0		Loss Time (sec):	9		1	
15	0		Critical V/C:	0.312		0	59***
	1		Avg Crit Del (sec/veh):	16.7		0	
37	0		Avg Delay (sec/veh):	17.1		1	10
			LOS:	B			

Lanes: 1 0 0 1 0
Final Vol: 95*** 274 11
Signal=Protect/Rights=Include

```
Street Name:          Sunnyvale Avenue                  Washington Avenue
Approach:       North Bound       South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Min. Green:     7   10    10     7   10    10    10   10    10    10   10    10
Y+R:          4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 1 Apr 2017 <<
Base Vol:      76  241    11     6  201    37    25   15    32    10   59    22
Growth 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
Initial Bse:   76  241    11     6  201    37    25   15    32    10   59    22
Added Vol:     19   33     0     0   52    29     9    0     5     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   95  274    11     6  253    66    34   15    37    10   59    22
User 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
PHF 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
PHF Volume:    95  274    11     6  253    66    34   15    37    10   59    22
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   95  274    11     6  253    66    34   15    37    10   59    22
PCE 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
MLF 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
FinalVolume:   95  274    11     6  253    66    34   15    37    10   59    22
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.92 0.95  0.95  0.92 0.95  0.95  0.92 0.95  0.95  0.92 0.95  0.95
Lanes:       1.00 0.96  0.04  1.00 0.79  0.21  1.00 0.29  0.71  1.00 0.73  0.27
Final Sat.:  1750 1731    69  1750 1428   372  1750  519  1281  1750 1311   489
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.16  0.16  0.00 0.18  0.18  0.02 0.03  0.03  0.01 0.05  0.05
Crit Moves:  ****                  ****                                 ****
Green Time:  13.9 38.3  38.3  21.2 45.5  45.5  11.6 11.6  11.6  11.6 11.6  11.6
Volume/Cap:  0.31 0.33  0.33  0.01 0.31  0.31  0.13 0.20  0.20  0.04 0.31  0.31
Delay/Veh:   29.4 13.1  13.1  21.7  9.2   9.2  30.1 30.5  30.5  29.5 31.3  31.3
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  29.4 13.1  13.1  21.7  9.2   9.2  30.1 30.5  30.5  29.5 31.3  31.3
LOS by Move:    C    B     B    C+    A     A     C    C     C     C    C     C
HCM2kAvgQ:      2    5     5     0    4     4     1    1     1     0    2     2
Note: Queue reported is the number of cars per lane.
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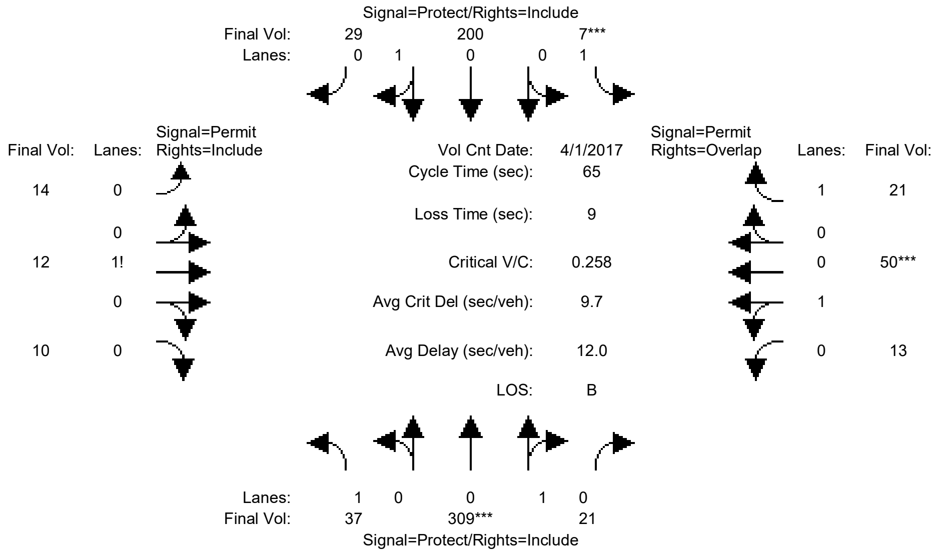
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #46: Sunnyvale Avenue / McKinley Avenue



Street Name:	Sunnyvale Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	37	309	21	7	200	29	14	12	10	13	50	21
Growth 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
Initial Bse:	37	309	21	7	200	29	14	12	10	13	50	21
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	37	309	21	7	200	29	14	12	10	13	50	21
User 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
PHF 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
PHF Volume:	37	309	21	7	200	29	14	12	10	13	50	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	309	21	7	200	29	14	12	10	13	50	21
PCE 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
MLF 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
FinalVolume:	37	309	21	7	200	29	14	12	10	13	50	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	1.00	0.94	0.06	1.00	0.87	0.13	0.39	0.33	0.28	0.21	0.79	1.00
Final Sat.:	1750	1685	115	1750	1572	228	681	583	486	371	1429	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.18	0.18	0.00	0.13	0.13	0.02	0.02	0.02	0.04	0.04	0.01
Crit Moves:		****		****							****	
Green Time:	18.9	39.0	39.0	7.0	27.1	27.1	10.0	10.0	10.0	10.0	10.0	17.0
Volume/Cap:	0.07	0.31	0.31	0.04	0.31	0.31	0.13	0.13	0.13	0.23	0.23	0.05
Delay/Veh:	16.7	6.5	6.5	26.1	12.9	12.9	24.0	24.0	24.0	24.5	24.5	18.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.7	6.5	6.5	26.1	12.9	12.9	24.0	24.0	24.0	24.5	24.5	18.0
LOS by Move:	B	A	A	C	B	B	C	C	C	C	C	B
HCM2kAvgQ:	1	4	4	0	3	3	1	1	1	1	1	0

Note: Queue reported is the number of cars per lane.

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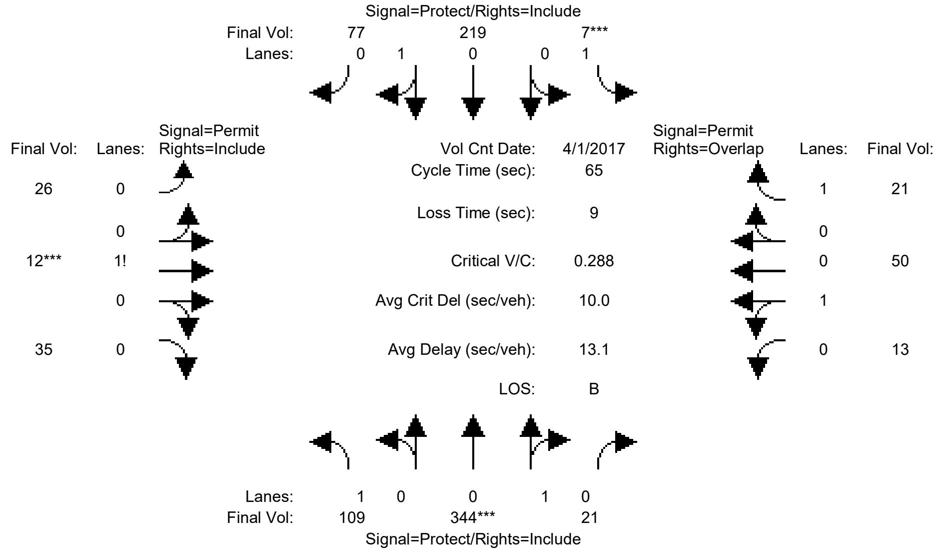
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #46: Sunnyvale Avenue / McKinley Avenue



Street Name:	Sunnyvale Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	37	309	21	7	200	29	14	12	10	13	50	21
Growth 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
Initial Bse:	37	309	21	7	200	29	14	12	10	13	50	21
Added Vol:	72	35	0	0	19	48	12	0	25	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	109	344	21	7	219	77	26	12	35	13	50	21
User 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
PHF 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
PHF Volume:	109	344	21	7	219	77	26	12	35	13	50	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	109	344	21	7	219	77	26	12	35	13	50	21
PCE 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
MLF 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
FinalVolume:	109	344	21	7	219	77	26	12	35	13	50	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	1.00	0.94	0.06	1.00	0.74	0.26	0.36	0.16	0.48	0.21	0.79	1.00
Final Sat.:	1750	1696	104	1750	1332	468	623	288	839	371	1429	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.20	0.20	0.00	0.16	0.16	0.04	0.04	0.04	0.04	0.04	0.01
Crit Moves:		****		****				****				
Green Time:	18.2	39.0	39.0	7.0	27.8	27.8	10.0	10.0	10.0	10.0	10.0	17.0
Volume/Cap:	0.22	0.34	0.34	0.04	0.38	0.38	0.27	0.27	0.27	0.23	0.23	0.05
Delay/Veh:	18.2	6.7	6.7	26.1	13.1	13.1	24.8	24.8	24.8	24.5	24.5	18.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.2	6.7	6.7	26.1	13.1	13.1	24.8	24.8	24.8	24.5	24.5	18.0
LOS by Move:	B-	A	A	C	B	B	C	C	C	C	C	B
HCM2kAvgQ:	2	4	4	0	4	4	1	1	1	1	1	0

Note: Queue reported is the number of cars per lane.

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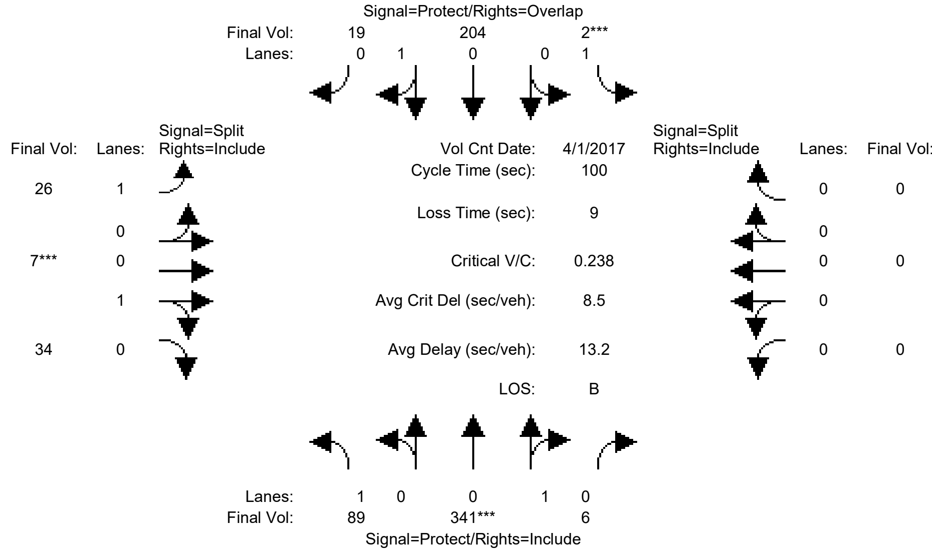
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #47: Sunnyvale Avenue / Iowa Avenue



Street Name:	Sunnyvale Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	89	341	6	2	204	19	26	7	34	0	0	0
Growth 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
Initial Bse:	89	341	6	2	204	19	26	7	34	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	89	341	6	2	204	19	26	7	34	0	0	0
User 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
PHF 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
PHF Volume:	89	341	6	2	204	19	26	7	34	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	89	341	6	2	204	19	26	7	34	0	0	0
PCE 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
MLF 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
FinalVolume:	89	341	6	2	204	19	26	7	34	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	0.98	0.02	1.00	0.91	0.09	1.00	0.17	0.83	0.00	0.00	0.00
Final Sat.:	1750	1769	31	1750	1647	153	1750	307	1493	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.19	0.19	0.00	0.12	0.12	0.01	0.02	0.02	0.00	0.00	0.00
Crit Moves:		****		****				****				
Green Time:	29.2	74.0	74.0	7.0	51.8	61.8	10.0	10.0	10.0	0.0	0.0	0.0
Volume/Cap:	0.17	0.26	0.26	0.02	0.24	0.20	0.15	0.23	0.23	0.00	0.00	0.00
Delay/Veh:	26.5	4.3	4.3	43.3	13.4	8.4	41.5	42.1	42.1	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.5	4.3	4.3	43.3	13.4	8.4	41.5	42.1	42.1	0.0	0.0	0.0
LOS by Move:	C	A	A	D	B	A	D	D	D	A	A	A
HCM2kAvgQ:	2	4	4	0	4	3	1	1	1	0	0	0

Note: Queue reported is the number of cars per lane.

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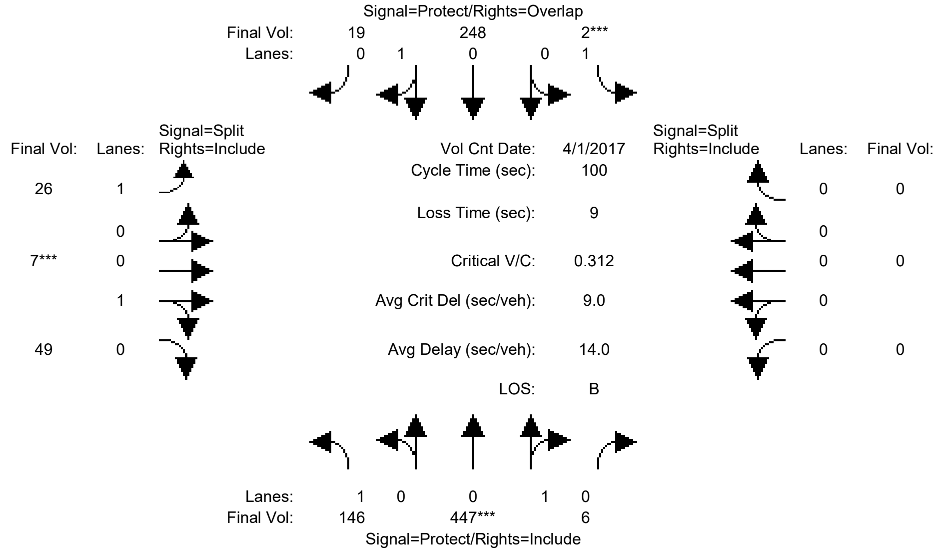
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #47: Sunnyvale Avenue / Iowa Avenue



Street Name:	Sunnyvale Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	89	341	6	2	204	19	26	7	34	0	0	0
Growth 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
Initial Bse:	89	341	6	2	204	19	26	7	34	0	0	0
Added Vol:	57	106	0	0	44	0	0	0	15	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	146	447	6	2	248	19	26	7	49	0	0	0
User 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
PHF 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
PHF Volume:	146	447	6	2	248	19	26	7	49	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	146	447	6	2	248	19	26	7	49	0	0	0
PCE 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
MLF 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
FinalVolume:	146	447	6	2	248	19	26	7	49	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	0.99	0.01	1.00	0.93	0.07	1.00	0.13	0.87	0.00	0.00	0.00
Final Sat.:	1750	1776	24	1750	1672	128	1750	225	1575	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.25	0.25	0.00	0.15	0.15	0.01	0.03	0.03	0.00	0.00	0.00
Crit Moves:		****		****				****				
Green Time:	29.2	74.0	74.0	7.0	51.8	61.8	10.0	10.0	10.0	0.0	0.0	0.0
Volume/Cap:	0.29	0.34	0.34	0.02	0.29	0.24	0.15	0.31	0.31	0.00	0.00	0.00
Delay/Veh:	27.7	4.7	4.7	43.3	13.8	8.7	41.5	42.8	42.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.7	4.7	4.7	43.3	13.8	8.7	41.5	42.8	42.8	0.0	0.0	0.0
LOS by Move:	C	A	A	D	B	A	D	D	D	A	A	A
HCM2kAvgQ:	4	5	5	0	5	4	1	2	2	0	0	0

Note: Queue reported is the number of cars per lane.

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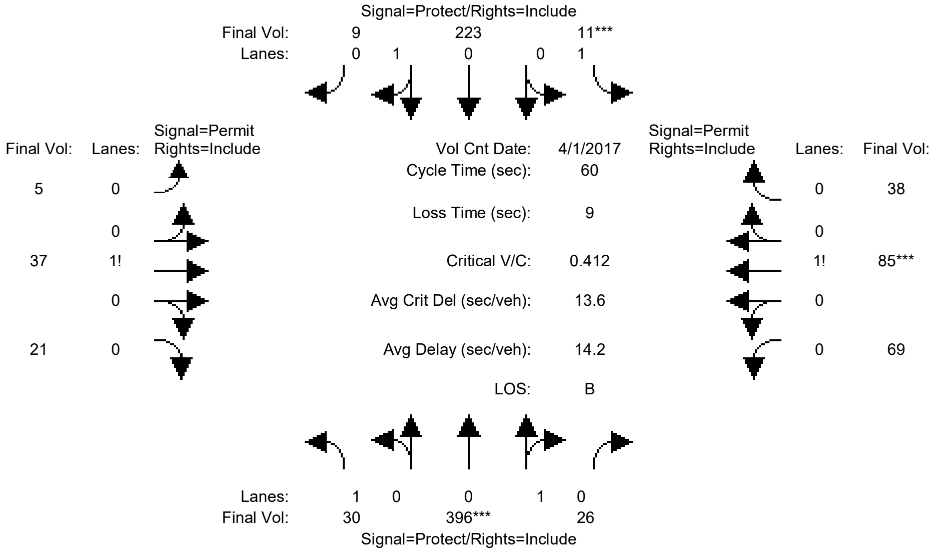
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #48: Sunnyvale Avenue / Olive Avenue



Street Name:	Sunnyvale Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	30	396	26	11	223	9	5	37	21	69	85	38
Growth 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
Initial Bse:	30	396	26	11	223	9	5	37	21	69	85	38
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	396	26	11	223	9	5	37	21	69	85	38
User 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
PHF 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
PHF Volume:	30	396	26	11	223	9	5	37	21	69	85	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	396	26	11	223	9	5	37	21	69	85	38
PCE 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
MLF 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
FinalVolume:	30	396	26	11	223	9	5	37	21	69	85	38
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	1.00	0.94	0.06	1.00	0.96	0.04	0.08	0.59	0.33	0.36	0.44	0.20
Final Sat.:	1750	1689	111	1750	1730	70	139	1028	583	629	775	346
Capacity Analysis Module:												
Vol/Sat:	0.02	0.23	0.23	0.01	0.13	0.13	0.04	0.04	0.04	0.11	0.11	0.11
Crit Moves:		****		****							****	
Green Time:	15.2	30.0	30.0	7.0	21.7	21.7	14.0	14.0	14.0	14.0	14.0	14.0
Volume/Cap:	0.07	0.47	0.47	0.05	0.36	0.36	0.15	0.15	0.15	0.47	0.47	0.47
Delay/Veh:	17.1	10.2	10.2	23.7	14.3	14.3	18.4	18.4	18.4	20.6	20.6	20.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.1	10.2	10.2	23.7	14.3	14.3	18.4	18.4	18.4	20.6	20.6	20.6
LOS by Move:	B	B+	B+	C	B	B	B-	B-	B-	C+	C+	C+
HCM2kAvgQ:	0	5	5	0	3	3	1	1	1	4	4	4

Note: Queue reported is the number of cars per lane.

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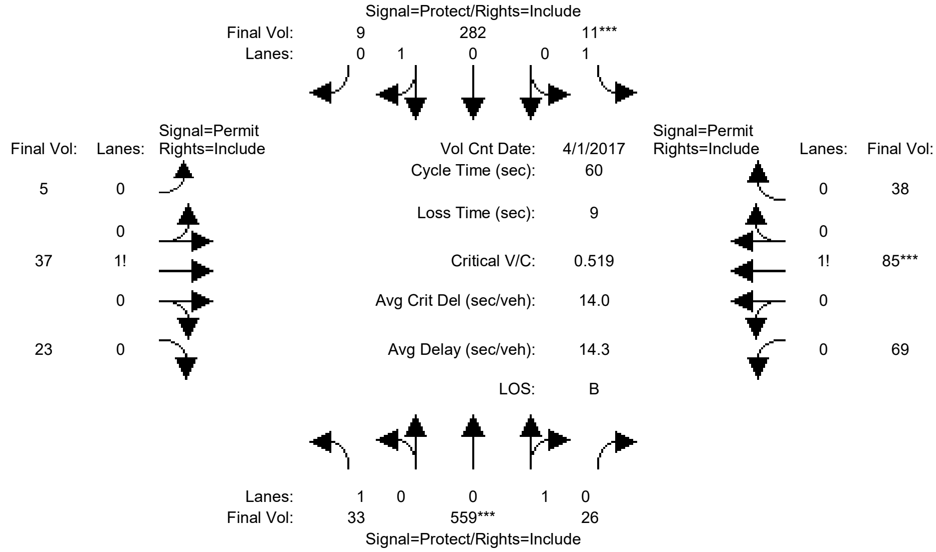
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #48: Sunnyvale Avenue / Olive Avenue



Street Name:	Sunnyvale Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	30	396	26	11	223	9	5	37	21	69	85	38
Growth 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
Initial Bse:	30	396	26	11	223	9	5	37	21	69	85	38
Added Vol:	3	163	0	0	59	0	0	0	2	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	559	26	11	282	9	5	37	23	69	85	38
User 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
PHF 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
PHF Volume:	33	559	26	11	282	9	5	37	23	69	85	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	559	26	11	282	9	5	37	23	69	85	38
PCE 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
MLF 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
FinalVolume:	33	559	26	11	282	9	5	37	23	69	85	38
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	1.00	0.96	0.04	1.00	0.97	0.03	0.08	0.57	0.35	0.36	0.44	0.20
Final Sat.:	1750	1720	80	1750	1744	56	135	996	619	629	775	346
Capacity Analysis Module:												
Vol/Sat:	0.02	0.33	0.33	0.01	0.16	0.16	0.04	0.04	0.04	0.11	0.11	0.11
Crit Moves:		****		****							****	
Green Time:	16.4	32.9	32.9	7.0	23.5	23.5	11.1	11.1	11.1	11.1	11.1	11.1
Volume/Cap:	0.07	0.59	0.59	0.05	0.41	0.41	0.20	0.20	0.20	0.59	0.59	0.59
Delay/Veh:	16.2	10.0	10.0	23.7	13.7	13.7	21.0	21.0	21.0	25.3	25.3	25.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.2	10.0	10.0	23.7	13.7	13.7	21.0	21.0	21.0	25.3	25.3	25.3
LOS by Move:	B	B+	B+	C	B	B	C+	C+	C+	C	C	C
HCM2kAvgQ:	0	8	8	0	4	4	1	1	1	5	5	5

Note: Queue reported is the number of cars per lane.

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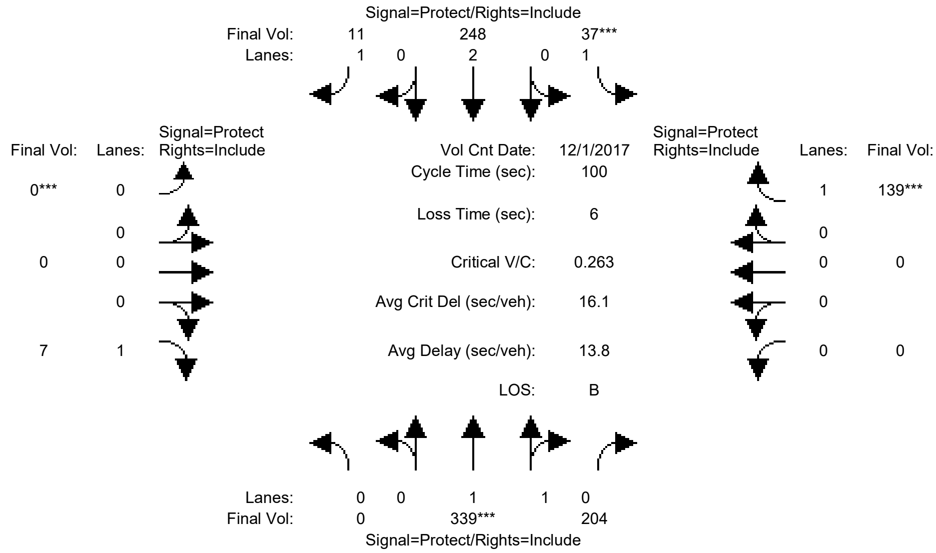
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #49: Sunnyvale Avenue / Old San Francisco Road



Street Name:	Sunnyvale Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	10	0	0	10	0	0	10
Y+R:	0.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	339	204	37	248	11	0	0	7	0	0	139
Growth 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
Initial Bse:	0	339	204	37	248	11	0	0	7	0	0	139
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	339	204	37	248	11	0	0	7	0	0	139
User 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
PHF 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
PHF Volume:	0	339	204	37	248	11	0	0	7	0	0	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	339	204	37	248	11	0	0	7	0	0	139
PCE 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
MLF 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
FinalVolume:	0	339	204	37	248	11	0	0	7	0	0	139
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	1.23	0.77	1.00	2.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Final Sat.:	0	2309	1389	1750	3800	1750	0	0	1750	0	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.15	0.02	0.07	0.01	0.00	0.00	0.00	0.00	0.00	0.08
Crit Moves:		****		****			****					****
Green Time:	0.0	55.8	55.8	8.0	63.8	63.8	0.0	0.0	30.2	0.0	0.0	30.2
Volume/Cap:	0.00	0.26	0.26	0.26	0.10	0.01	0.00	0.00	0.01	0.00	0.00	0.26
Delay/Veh:	0.0	11.5	11.5	44.2	7.0	6.6	0.0	0.0	24.5	0.0	0.0	26.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	11.5	11.5	44.2	7.0	6.6	0.0	0.0	24.5	0.0	0.0	26.7
LOS by Move:	A	B+	B+	D	A	A	A	A	C	A	A	C
HCM2kAvgQ:	0	4	4	1	1	0	0	0	0	0	0	3

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #49: Sunnyvale Avenue / Old San Francisco Road

Signal=Protect/Rights=Include
Final Vol: 11 294 52***
Lanes: 1 0 2 0 1

Westbound side (Signal=Protect, Rights=Include): Final Vol: 0*** (Lanes: 0); 0 (Lanes: 0, 0, 0); 7 (Lanes: 1)

Signal=Protect
Rights=Include

Vol Cnt Date:	12/1/2017
Cycle Time (sec):	100
Loss Time (sec):	6
Critical V/C:	0.337
Avg Crit Del (sec/veh):	18.0
Avg Delay (sec/veh):	15.5
LOS:	B

Signal=Protect
Rights=Include
Lanes: Final Vol: 1 190***; 0; 0 0; 0; 0 0

Lanes: 0 0 1 1 0
Final Vol: 0 455*** 204
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	10	0	0	10	0	0	10
Y+R:	0.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	339	204	37	248	11	0	0	7	0	0	139
Growth 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
Initial Bse:	0	339	204	37	248	11	0	0	7	0	0	139
Added Vol:	0	116	0	15	46	0	0	0	0	0	0	51
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	455	204	52	294	11	0	0	7	0	0	190
User 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
PHF 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
PHF Volume:	0	455	204	52	294	11	0	0	7	0	0	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	455	204	52	294	11	0	0	7	0	0	190
PCE 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
MLF 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
FinalVolume:	0	455	204	52	294	11	0	0	7	0	0	190
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	1.36	0.64	1.00	2.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Final Sat.:	0	2554	1145	1750	3800	1750	0	0	1750	0	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.18	0.03	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.11
Crit Moves:		****		****			****					****
Green Time:	0.0	52.9	52.9	8.8	61.7	61.7	0.0	0.0	32.3	0.0	0.0	32.3
Volume/Cap:	0.00	0.34	0.34	0.34	0.13	0.01	0.00	0.00	0.01	0.00	0.00	0.34
Delay/Veh:	0.0	13.6	13.6	44.1	8.0	7.4	0.0	0.0	23.1	0.0	0.0	26.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	13.6	13.6	44.1	8.0	7.4	0.0	0.0	23.1	0.0	0.0	26.1
LOS by Move:	A	B	B	D	A	A	A	A	C	A	A	C
HCM2kAvgQ:	0	6	6	2	2	0	0	0	0	0	0	5

Note: Queue reported is the number of cars per lane.

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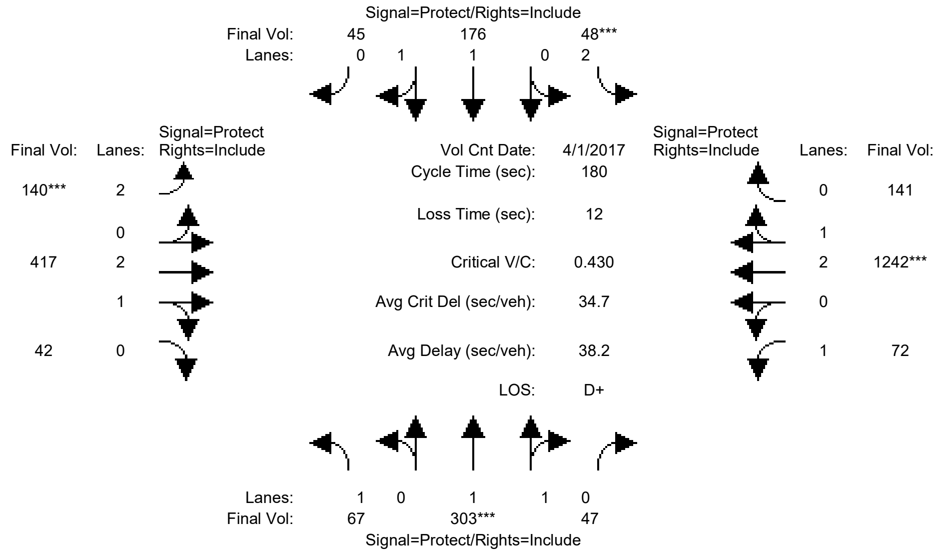
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #50: Sunnyvale Avenue / El Camino Real



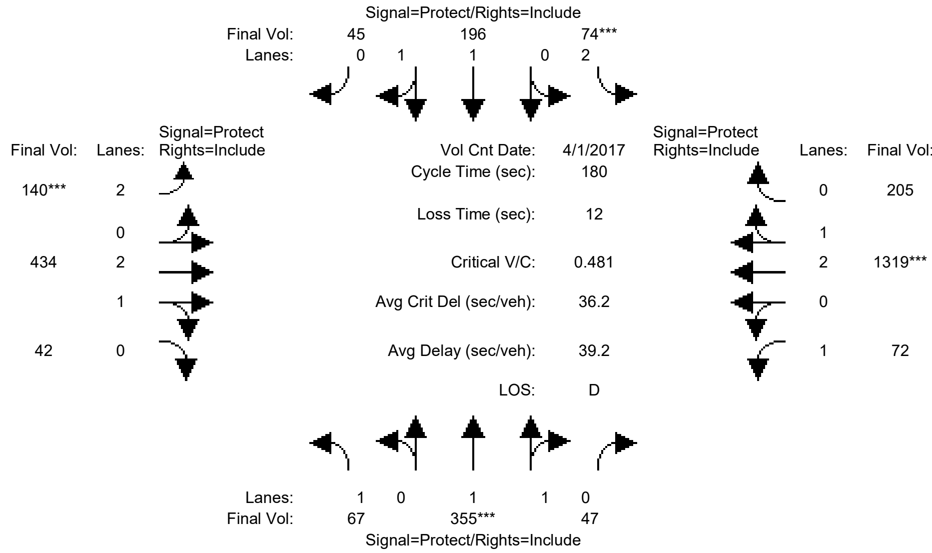
Street Name:	Sunnyvale Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	67	303	47	48	176	45	140	417	42	72	1242	141
Growth 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
Initial Bse:	67	303	47	48	176	45	140	417	42	72	1242	141
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	303	47	48	176	45	140	417	42	72	1242	141
User 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
PHF 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
PHF Volume:	67	303	47	48	176	45	140	417	42	72	1242	141
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	303	47	48	176	45	140	417	42	72	1242	141
PCE 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
MLF 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
FinalVolume:	67	303	47	48	176	45	140	417	42	72	1242	141
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.98	0.95	0.83	0.99	0.95	0.92	0.99	0.95
Lanes:	1.00	1.72	0.28	2.00	1.58	0.42	2.00	2.72	0.28	1.00	2.68	0.32
Final Sat.:	1750	3203	497	3150	2946	753	3150	5087	512	1750	5028	571
Capacity Analysis Module:												
Vol/Sat:	0.04	0.09	0.09	0.02	0.06	0.06	0.04	0.08	0.08	0.04	0.25	0.25
Crit Moves:		****		****			****				****	
Green Time:	18.3	39.5	39.5	7.0	28.1	28.1	18.5	80.9	80.9	40.6	103	103.0
Volume/Cap:	0.38	0.43	0.43	0.39	0.38	0.38	0.43	0.18	0.18	0.18	0.43	0.43
Delay/Veh:	76.8	61.0	61.0	86.5	68.6	68.6	76.7	29.7	29.7	56.5	22.0	22.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	76.8	61.0	61.0	86.5	68.6	68.6	76.7	29.7	29.7	56.5	22.0	22.0
LOS by Move:	E-	E	E	F	E	E	E-	C	C	E+	C+	C+
HCM2kAvgQ:	4	8	8	2	5	5	4	5	5	3	14	14

Note: Queue reported is the number of cars per lane.

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #50: Sunnyvale Avenue / El Camino Real



Street Name:	Sunnyvale Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	67	303	47	48	176	45	140	417	42	72	1242	141
Growth 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
Initial Bse:	67	303	47	48	176	45	140	417	42	72	1242	141
Added Vol:	0	52	0	26	20	0	0	17	0	0	77	64
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	355	47	74	196	45	140	434	42	72	1319	205
User 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
PHF 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
PHF Volume:	67	355	47	74	196	45	140	434	42	72	1319	205
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	355	47	74	196	45	140	434	42	72	1319	205
PCE 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
MLF 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
FinalVolume:	67	355	47	74	196	45	140	434	42	72	1319	205
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.98	0.95	0.83	0.99	0.95	0.92	0.99	0.95
Lanes:	1.00	1.76	0.24	2.00	1.62	0.38	2.00	2.73	0.27	1.00	2.58	0.42
Final Sat.:	1750	3267	433	3150	3009	691	3150	5105	494	1750	4846	753
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.11	0.02	0.07	0.07	0.04	0.09	0.09	0.04	0.27	0.27
Crit Moves:		****		****			****				****	
Green Time:	18.5	40.7	40.7	8.8	31.0	31.0	16.6	79.9	79.9	38.7	102	101.9
Volume/Cap:	0.37	0.48	0.48	0.48	0.38	0.38	0.48	0.19	0.19	0.19	0.48	0.48
Delay/Veh:	76.6	60.9	60.9	85.7	66.4	66.4	78.8	30.5	30.5	58.1	23.4	23.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	76.6	60.9	60.9	85.7	66.4	66.4	78.8	30.5	30.5	58.1	23.4	23.4
LOS by Move:	E-	E	E	F	E	E	E-	C	C	E+	C	C
HCM2kAvgQ:	4	9	9	2	6	6	4	5	5	3	16	16

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #51: Mathilda Avenue / Talisman Drive

Signal=Protect/Rights=Include
Final Vol: 5 452 35***
Lanes: 0 1 2 0 1

Signal=Protect Rights=Include (Eastbound)
Final Vol: 19, 5, 27***
Lanes: 1, 0, 1, 0, 1

Vol Cnt Date: 12/1/2016
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.528
Avg Crit Del (sec/veh): 20.9
Avg Delay (sec/veh): 22.5
LOS: C+

Signal=Protect Rights=Include (Westbound)
Lanes: 0, 1, 0, 0, 2
Final Vol: 24, 2, 257***

Lanes: 1 0 3 0 1
Final Vol: 26 2117*** 0
Signal=Protect/Rights=Ignore

Street Name:	Mathilda Avenue						Talisman Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	26	2117	496	35	452	5	19	5	27	257	2	24
Growth 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
Initial Bse:	26	2117	496	35	452	5	19	5	27	257	2	24
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	2117	496	35	452	5	19	5	27	257	2	24
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	26	2117	0	35	452	5	19	5	27	257	2	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	2117	0	35	452	5	19	5	27	257	2	24
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	2117	0	35	452	5	19	5	27	257	2	24
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92	0.83	0.95	0.95
Lanes:	1.00	3.00	1.00	1.00	2.97	0.03	1.00	1.00	1.00	2.00	0.08	0.92
Final Sat.:	1750	5700	1750	1750	5539	61	1750	1900	1750	3150	138	1662
Capacity Analysis Module:												
Vol/Sat:	0.01	0.37	0.00	0.02	0.08	0.08	0.01	0.00	0.02	0.08	0.01	0.01
Crit Moves:		****		****					****	****		
Green Time:	39.9	107	0.0	7.0	74.5	74.5	13.8	10.0	10.0	23.6	19.8	19.8
Volume/Cap:	0.06	0.55	0.00	0.46	0.18	0.18	0.13	0.04	0.25	0.55	0.12	0.12
Delay/Veh:	45.8	13.9	0.0	78.9	24.9	24.9	67.9	70.6	72.6	64.8	62.6	62.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.8	13.9	0.0	78.9	24.9	24.9	67.9	70.6	72.6	64.8	62.6	62.6
LOS by Move:	D	B	A	E-	C	C	E	E	E	E	E	E
HCM2kAvgQ:	1	17	0	2	4	4	1	0	2	7	1	1

Note: Queue reported is the number of cars per lane.

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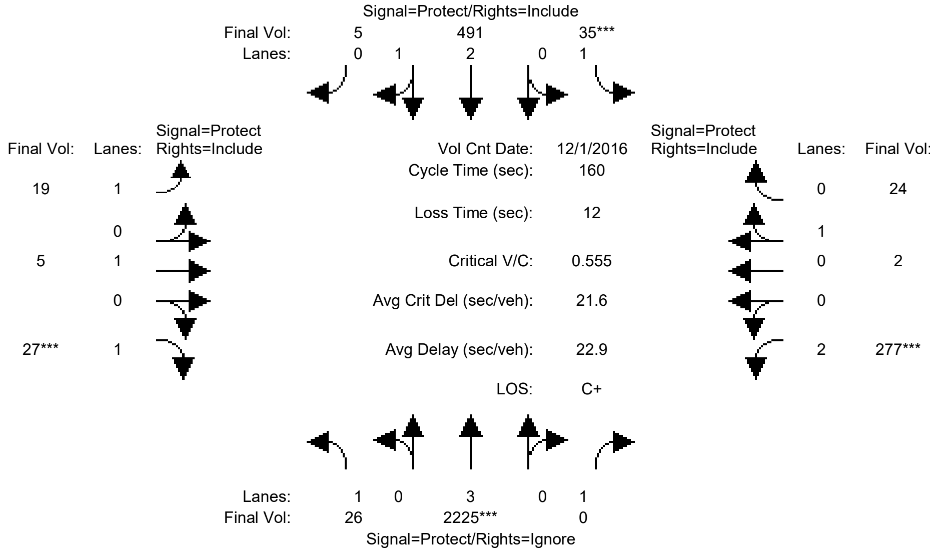
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #51: Mathilda Avenue / Talisman Drive



Street Name:	Mathilda Avenue						Talisman Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	26	2117	496	35	452	5	19	5	27	257	2	24
Growth 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
Initial Bse:	26	2117	496	35	452	5	19	5	27	257	2	24
Added Vol:	0	108	52	0	39	0	0	0	0	20	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	2225	548	35	491	5	19	5	27	277	2	24
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	26	2225	0	35	491	5	19	5	27	277	2	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	2225	0	35	491	5	19	5	27	277	2	24
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	2225	0	35	491	5	19	5	27	277	2	24
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92	0.83	0.95	0.95
Lanes:	1.00	3.00	1.00	1.00	2.97	0.03	1.00	1.00	1.00	2.00	0.08	0.92
Final Sat.:	1750	5700	1750	1750	5543	56	1750	1900	1750	3150	138	1662
Capacity Analysis Module:												
Vol/Sat:	0.01	0.39	0.00	0.02	0.09	0.09	0.01	0.00	0.02	0.09	0.01	0.01
Crit Moves:		****		****					****	****		
Green Time:	37.7	107	0.0	7.0	76.3	76.3	14.0	10.0	10.0	24.1	20.1	20.1
Volume/Cap:	0.06	0.58	0.00	0.46	0.19	0.19	0.12	0.04	0.25	0.58	0.12	0.12
Delay/Veh:	47.5	14.7	0.0	78.9	24.1	24.1	67.7	70.6	72.6	65.2	62.3	62.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.5	14.7	0.0	78.9	24.1	24.1	67.7	70.6	72.6	65.2	62.3	62.3
LOS by Move:	D	B	A	E-	C	C	E	E	E	E	E	E
HCM2kAvgQ:	1	19	0	2	4	4	1	0	2	7	1	1

Note: Queue reported is the number of cars per lane.

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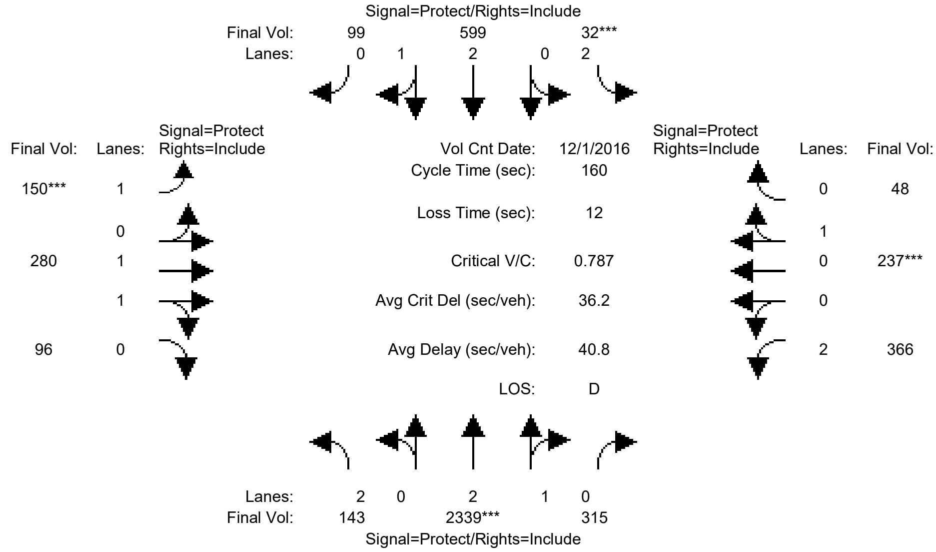
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #52: Sunnyvale-Saratoga Road / Remington Drive (CMP)



Street Name:	Sunnyvale-Saratoga Road						Remington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	143	2339	315	32	599	99	150	280	96	366	237	48
Growth 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
Initial Bse:	143	2339	315	32	599	99	150	280	96	366	237	48
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	143	2339	315	32	599	99	150	280	96	366	237	48
User 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
PHF 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
PHF Volume:	143	2339	315	32	599	99	150	280	96	366	237	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	2339	315	32	599	99	150	280	96	366	237	48
PCE 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
MLF 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
FinalVolume:	143	2339	315	32	599	99	150	280	96	366	237	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.83	0.95	0.95
Lanes:	2.00	2.63	0.37	2.00	2.56	0.44	1.00	1.48	0.52	2.00	0.83	0.17
Final Sat.:	3150	4934	665	3150	4805	794	1750	2755	944	3150	1497	303
Capacity Analysis Module:												
Vol/Sat:	0.05	0.47	0.47	0.01	0.12	0.12	0.09	0.10	0.10	0.12	0.16	0.16
Crit Moves:		****		****			****				****	
Green Time:	26.7	93.1	93.1	7.0	73.4	73.4	16.8	22.4	22.4	25.6	31.1	31.1
Volume/Cap:	0.27	0.81	0.81	0.23	0.27	0.27	0.81	0.73	0.73	0.73	0.81	0.81
Delay/Veh:	58.4	28.3	28.3	74.8	26.9	26.9	93.7	71.1	71.1	69.2	75.4	75.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.4	28.3	28.3	74.8	26.9	26.9	93.7	71.1	71.1	69.2	75.4	75.4
LOS by Move:	E+	C	C	E	C	C	F	E	E	E	E-	E-
HCM2kAvgQ:	3	34	34	1	7	7	8	9	9	10	14	14

Note: Queue reported is the number of cars per lane.

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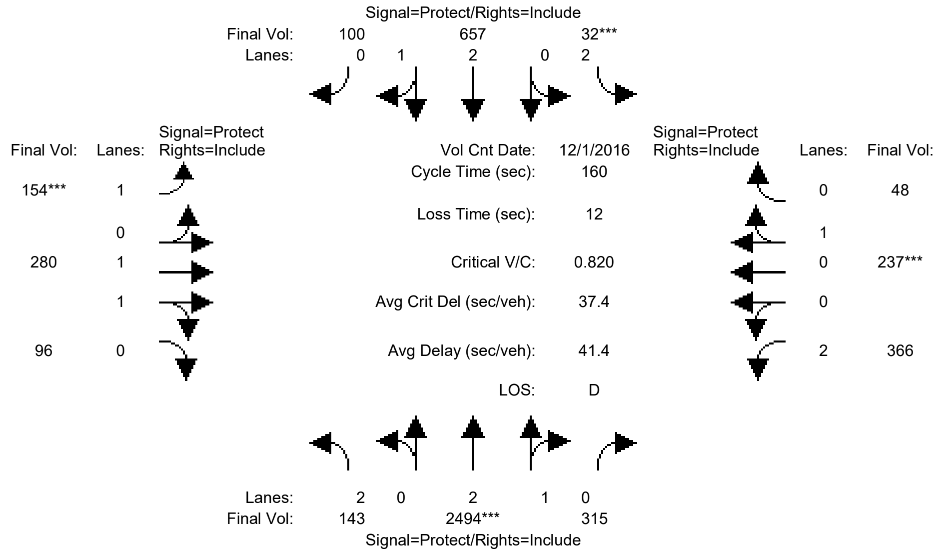
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #52: Sunnyvale-Saratoga Road / Remington Drive (CMP)



Street Name:	Sunnyvale-Saratoga Road						Remington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	143	2339	315	32	599	99	150	280	96	366	237	48
Growth 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
Initial Bse:	143	2339	315	32	599	99	150	280	96	366	237	48
Added Vol:	0	155	0	0	58	1	4	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	143	2494	315	32	657	100	154	280	96	366	237	48
User 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
PHF 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
PHF Volume:	143	2494	315	32	657	100	154	280	96	366	237	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	2494	315	32	657	100	154	280	96	366	237	48
PCE 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
MLF 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
FinalVolume:	143	2494	315	32	657	100	154	280	96	366	237	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.83	0.95	0.95
Lanes:	2.00	2.65	0.35	2.00	2.59	0.41	1.00	1.48	0.52	2.00	0.83	0.17
Final Sat.:	3150	4971	628	3150	4859	740	1750	2755	944	3150	1497	303
Capacity Analysis Module:												
Vol/Sat:	0.05	0.50	0.50	0.01	0.14	0.14	0.09	0.10	0.10	0.12	0.16	0.16
Crit Moves:		****		****			****				****	
Green Time:	25.5	94.6	94.6	7.0	76.0	76.0	16.6	21.7	21.7	24.8	29.8	29.8
Volume/Cap:	0.28	0.85	0.85	0.23	0.28	0.28	0.85	0.75	0.75	0.75	0.85	0.85
Delay/Veh:	59.5	29.1	29.1	74.8	25.5	25.5	99.9	72.8	72.8	71.1	80.9	80.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	59.5	29.1	29.1	74.8	25.5	25.5	99.9	72.8	72.8	71.1	80.9	80.9
LOS by Move:	E+	C	C	E	C	C	F	E	E	E	F	F
HCM2kAvgQ:	3	37	37	1	7	7	8	9	9	10	15	15

Note: Queue reported is the number of cars per lane.

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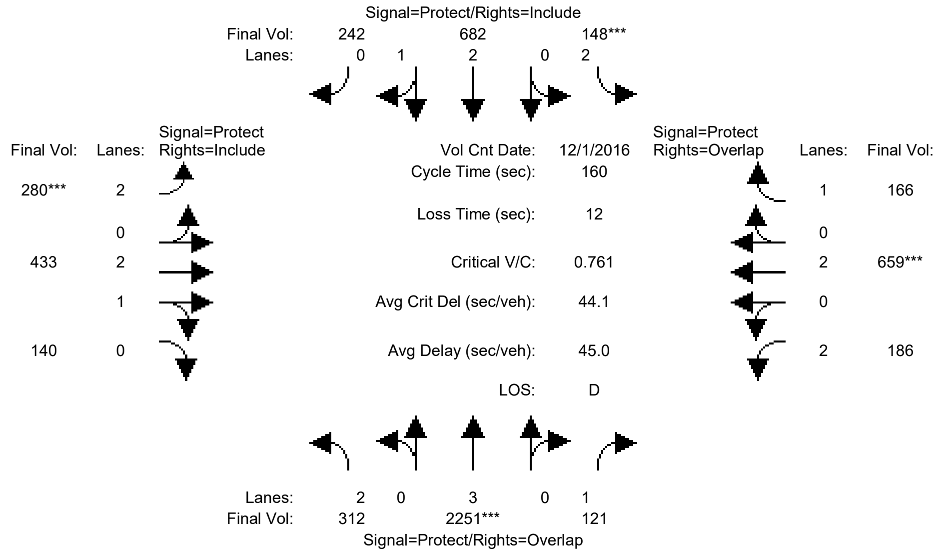
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #53: Sunnyvale-Saratoga Road / Fremont Avenue (CMP)



Street Name:	Sunnyvale-Saratoga Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	312	2251	121	148	682	242	280	433	140	186	659	166
Growth 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
Initial Bse:	312	2251	121	148	682	242	280	433	140	186	659	166
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	312	2251	121	148	682	242	280	433	140	186	659	166
User 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
PHF 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
PHF Volume:	312	2251	121	148	682	242	280	433	140	186	659	166
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	312	2251	121	148	682	242	280	433	140	186	659	166
PCE 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
MLF 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
FinalVolume:	312	2251	121	148	682	242	280	433	140	186	659	166
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	0.99	0.95	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	2.19	0.81	2.00	2.24	0.76	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	4131	1466	3150	4230	1368	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.39	0.07	0.05	0.17	0.17	0.09	0.10	0.10	0.06	0.17	0.09
Crit Moves:		****		****			****				****	
Green Time:	34.8	83.0	103.2	9.9	58.0	58.0	18.7	35.0	35.0	20.2	36.4	46.3
Volume/Cap:	0.46	0.76	0.11	0.76	0.46	0.46	0.76	0.47	0.47	0.47	0.76	0.33
Delay/Veh:	54.8	31.8	10.9	90.0	39.1	39.1	77.5	54.7	54.7	65.8	61.7	45.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	54.8	31.8	10.9	90.0	39.1	39.1	77.5	54.7	54.7	65.8	61.7	45.0
LOS by Move:	D-	C	B+	F	D	D	E-	D-	D-	E	E	D
HCM2kAvgQ:	8	28	2	5	11	11	8	8	8	5	15	7

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
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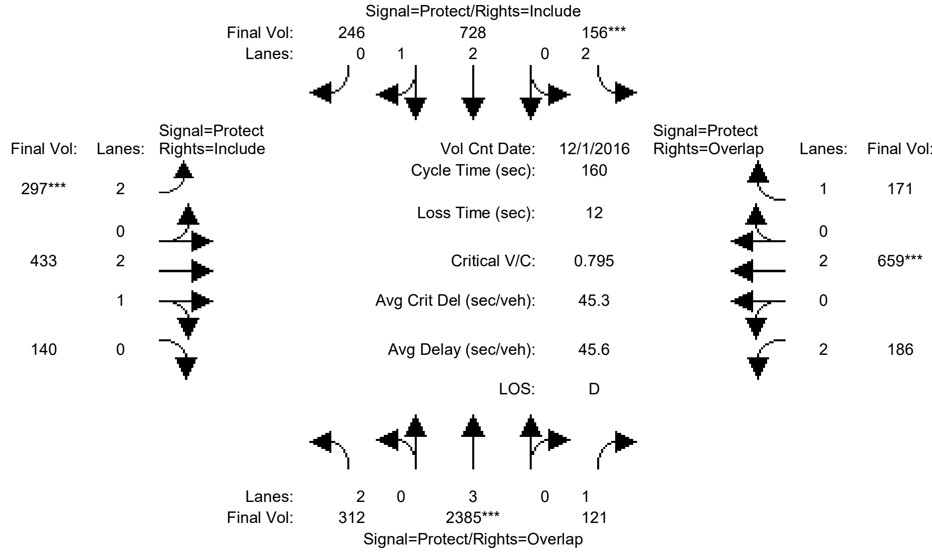
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #53: Sunnyvale-Saratoga Road / Fremont Avenue (CMP)



Street Name:	Sunnyvale-Saratoga Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	312	2251	121	148	682	242	280	433	140	186	659	166
Growth 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
Initial Bse:	312	2251	121	148	682	242	280	433	140	186	659	166
Added Vol:	0	134	0	8	46	4	17	0	0	0	0	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	312	2385	121	156	728	246	297	433	140	186	659	171
User 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
PHF 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
PHF Volume:	312	2385	121	156	728	246	297	433	140	186	659	171
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	312	2385	121	156	728	246	297	433	140	186	659	171
PCE 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
MLF 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
FinalVolume:	312	2385	121	156	728	246	297	433	140	186	659	171
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	0.99	0.95	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	2.21	0.79	2.00	2.24	0.76	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	4184	1414	3150	4230	1368	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.42	0.07	0.05	0.17	0.17	0.09	0.10	0.10	0.06	0.17	0.10
Crit Moves:		****		****			****				****	
Green Time:	34.1	84.2	103.9	10.0	60.0	60.0	19.0	34.2	34.2	19.7	34.9	44.9
Volume/Cap:	0.46	0.80	0.11	0.80	0.46	0.46	0.80	0.48	0.48	0.48	0.80	0.35
Delay/Veh:	55.4	32.4	10.6	93.8	38.0	38.0	79.9	55.4	55.4	66.3	64.5	46.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.4	32.4	10.6	93.8	38.0	38.0	79.9	55.4	55.4	66.3	64.5	46.4
LOS by Move:	E+	C-	B+	F	D+	D+	E-	E+	E+	E	E	D
HCM2kAvgQ:	8	31	2	5	12	12	9	8	8	5	16	7

Note: Queue reported is the number of cars per lane.

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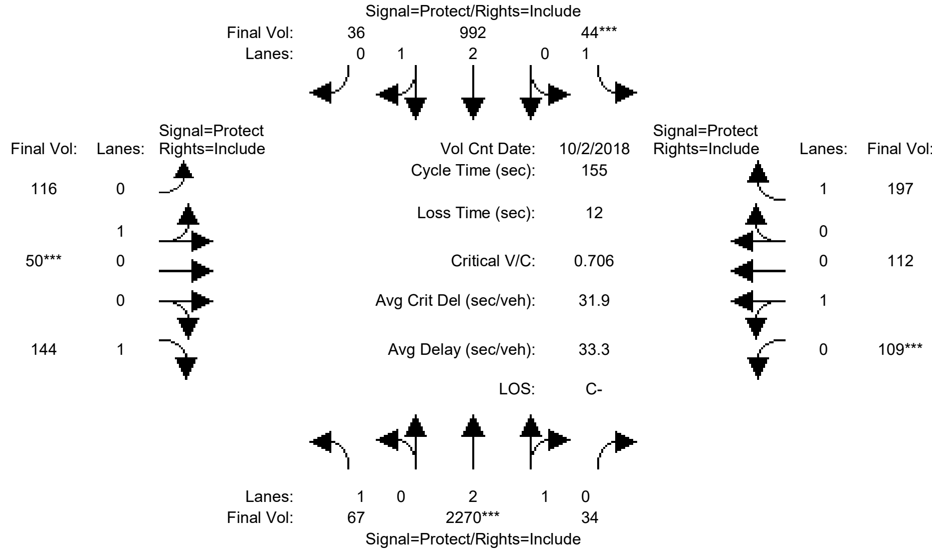
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #54: Sunnyvale-Saratoga Road / Alberta Avenue - Harwick Way



Street Name:	Sunnyvale-Saratoga Road						Alberta Avenue - Harwick Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	67	2270	34	44	992	36	116	50	144	109	112	197
Growth 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
Initial Bse:	67	2270	34	44	992	36	116	50	144	109	112	197
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	2270	34	44	992	36	116	50	144	109	112	197
User 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
PHF 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
PHF Volume:	67	2270	34	44	992	36	116	50	144	109	112	197
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	2270	34	44	992	36	116	50	144	109	112	197
PCE 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
MLF 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
FinalVolume:	67	2270	34	44	992	36	116	50	144	109	112	197
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.95	0.05	1.00	2.89	0.11	0.70	0.30	1.00	0.49	0.51	1.00
Final Sat.:	1750	5517	83	1750	5404	196	1258	542	1750	888	912	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.41	0.41	0.03	0.18	0.18	0.09	0.09	0.08	0.12	0.12	0.11
Crit Moves:		****		****				****		****		
Green Time:	19.0	89.3	89.3	7.0	77.3	77.3	20.0	20.0	20.0	26.7	26.7	26.7
Volume/Cap:	0.31	0.71	0.71	0.56	0.37	0.37	0.71	0.71	0.64	0.71	0.71	0.65
Delay/Veh:	62.9	24.4	24.4	81.0	23.9	23.9	74.8	74.8	70.0	68.2	68.2	65.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	62.9	24.4	24.4	81.0	23.9	23.9	74.8	74.8	70.0	68.2	68.2	65.0
LOS by Move:	E	C	C	F	C	C	E	E	E	E	E	E
HCM2kAvgQ:	3	27	27	2	10	10	9	9	8	12	12	10

Note: Queue reported is the number of cars per lane.

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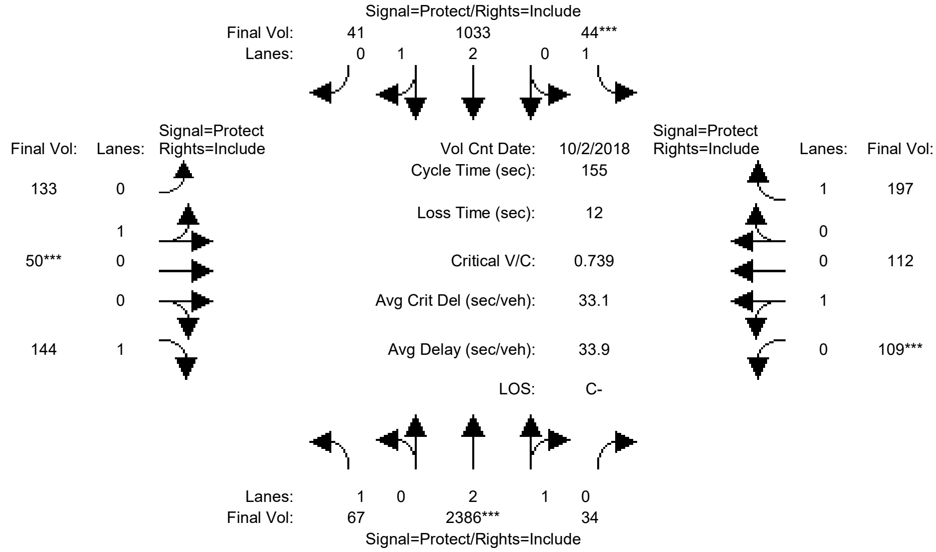
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #54: Sunnyvale-Saratoga Road / Alberta Avenue - Harwick Way



Street Name:	Sunnyvale-Saratoga Road						Alberta Avenue - Harwick Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	67	2270	34	44	992	36	116	50	144	109	112	197
Growth 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
Initial Bse:	67	2270	34	44	992	36	116	50	144	109	112	197
Added Vol:	0	116	0	0	41	5	17	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	2386	34	44	1033	41	133	50	144	109	112	197
User 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
PHF 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
PHF Volume:	67	2386	34	44	1033	41	133	50	144	109	112	197
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	2386	34	44	1033	41	133	50	144	109	112	197
PCE 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
MLF 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
FinalVolume:	67	2386	34	44	1033	41	133	50	144	109	112	197
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.96	0.04	1.00	2.88	0.12	0.73	0.27	1.00	0.49	0.51	1.00
Final Sat.:	1750	5521	79	1750	5386	214	1308	492	1750	888	912	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.43	0.43	0.03	0.19	0.19	0.10	0.10	0.08	0.12	0.12	0.11
Crit Moves:		****		****				****		****		
Green Time:	18.4	89.5	89.5	7.0	78.1	78.1	21.1	21.1	21.1	25.4	25.4	25.4
Volume/Cap:	0.32	0.75	0.75	0.56	0.38	0.38	0.75	0.75	0.61	0.75	0.75	0.69
Delay/Veh:	63.5	25.4	25.4	81.0	23.7	23.7	76.4	76.4	67.5	71.8	71.8	67.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	63.5	25.4	25.4	81.0	23.7	23.7	76.4	76.4	67.5	71.8	71.8	67.8
LOS by Move:	E	C	C	F	C	C	E-	E-	E	E	E	E
HCM2kAvgQ:	3	29	29	2	10	10	10	10	8	12	12	11

Note: Queue reported is the number of cars per lane.

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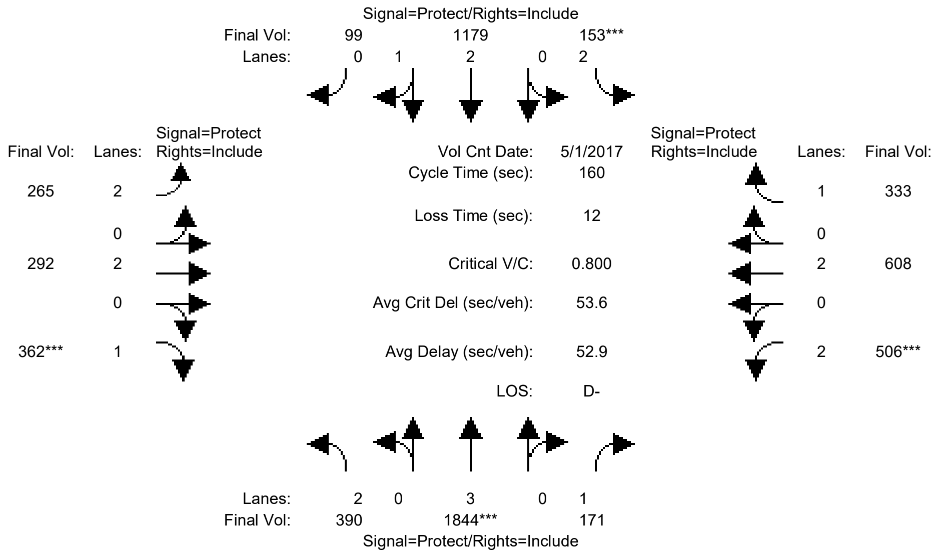
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #55: De Anza Boulevard / Homestead Road (CMP)



Street Name:	De Anza Boulevard						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	390	1844	171	153	1179	99	265	292	362	506	608	333
Growth 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
Initial Bse:	390	1844	171	153	1179	99	265	292	362	506	608	333
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	390	1844	171	153	1179	99	265	292	362	506	608	333
User 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
PHF 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
PHF Volume:	390	1844	171	153	1179	99	265	292	362	506	608	333
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	390	1844	171	153	1179	99	265	292	362	506	608	333
PCE 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
MLF 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
FinalVolume:	390	1844	171	153	1179	99	265	292	362	506	608	333
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	2.76	0.24	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5166	434	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.32	0.10	0.05	0.23	0.23	0.08	0.08	0.21	0.16	0.16	0.19
Crit Moves:		****		****					****	****		
Green Time:	26.2	64.7	64.7	9.7	48.3	48.3	22.5	41.4	41.4	32.1	51.0	51.0
Volume/Cap:	0.76	0.80	0.24	0.80	0.76	0.76	0.60	0.30	0.80	0.80	0.50	0.60
Delay/Veh:	70.2	44.0	31.6	94.9	52.6	52.6	66.7	47.8	65.1	68.0	44.5	47.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	70.2	44.0	31.6	94.9	52.6	52.6	66.7	47.8	65.1	68.0	44.5	47.6
LOS by Move:	E	D	C	F	D-	D-	E	D	E	E	D	D
HCM2kAvgQ:	11	26	6	5	19	19	7	5	18	15	12	15

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #55: De Anza Boulevard / Homestead Road (CMP)

Signal=Protect/Rights=Include
Final Vol: 101 1213 158***
Lanes: 0 1 2 0 2

Signal=Protect
Rights=Include

Final Vol: Lanes:
273 2
0
292 2
0
362*** 1

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.819
Avg Crit Del (sec/veh): 54.1
Avg Delay (sec/veh): 53.2
LOS: D-

Signal=Protect
Rights=Include

Lanes: Final Vol:
1 346
0
2 608
0
2 506***

Lanes: 2 0 3 0 1
Final Vol: 390 1939*** 171
Signal=Protect/Rights=Include

Street Name:	De Anza Boulevard						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	390	1844	171	153	1179	99	265	292	362	506	608	333
Growth 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
Initial Bse:	390	1844	171	153	1179	99	265	292	362	506	608	333
Added Vol:	0	95	0	5	34	2	8	0	0	0	0	13
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	390	1939	171	158	1213	101	273	292	362	506	608	346
User 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
PHF 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
PHF Volume:	390	1939	171	158	1213	101	273	292	362	506	608	346
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	390	1939	171	158	1213	101	273	292	362	506	608	346
PCE 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
MLF 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
FinalVolume:	390	1939	171	158	1213	101	273	292	362	506	608	346
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	2.76	0.24	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5169	430	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.34	0.10	0.05	0.23	0.23	0.09	0.08	0.21	0.16	0.16	0.20
Crit Moves:		****		****					****	****		
Green Time:	26.3	66.4	66.4	9.8	49.9	49.9	21.9	40.4	40.4	31.4	49.9	49.9
Volume/Cap:	0.75	0.82	0.24	0.82	0.75	0.75	0.63	0.30	0.82	0.82	0.51	0.63
Delay/Veh:	69.9	43.8	30.5	97.6	51.4	51.4	68.4	48.6	67.9	70.1	45.5	49.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	69.9	43.8	30.5	97.6	51.4	51.4	68.4	48.6	67.9	70.1	45.5	49.7
LOS by Move:	E	D	C	F	D-	D-	E	D	E	E	D	D
HCM2kAvgQ:	11	28	6	5	20	20	8	6	19	15	12	16

Note: Queue reported is the number of cars per lane.

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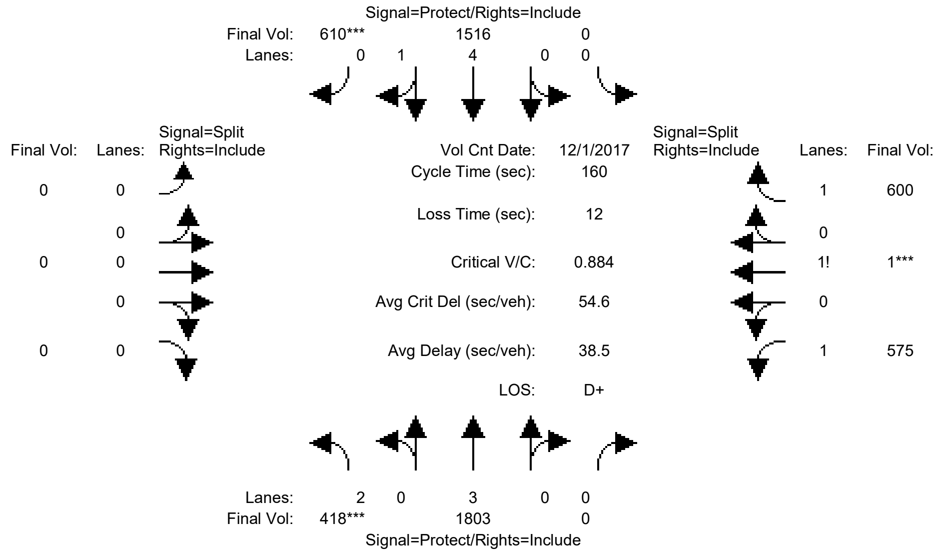
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #56: De Anza Boulevard / I-280 NB Ramps (CMP)



Street Name:	De Anza Boulevard						I-280 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	4.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	418	1803	0	0	1516	610	0	0	0	575	1	600
Growth 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
Initial Bse:	418	1803	0	0	1516	610	0	0	0	575	1	600
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	418	1803	0	0	1516	610	0	0	0	575	1	600
User 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
PHF 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
PHF Volume:	418	1803	0	0	1516	610	0	0	0	575	1	600
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	418	1803	0	0	1516	610	0	0	0	575	1	600
PCE 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
MLF 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
FinalVolume:	418	1803	0	0	1516	610	0	0	0	575	1	600
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.92	0.92
Lanes:	2.00	3.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00	1.48	0.01	1.51
Final Sat.:	3150	5700	0	0	7600	1750	0	0	0	2605	3	2642
Capacity Analysis Module:												
Vol/Sat:	0.13	0.32	0.00	0.00	0.20	0.35	0.00	0.00	0.00	0.22	0.34	0.23
Crit Moves:	****					****					****	
Green Time:	24.0	87.1	0.0	0.0	63.1	63.1	0.0	0.0	0.0	60.9	60.9	60.9
Volume/Cap:	0.88	0.58	0.00	0.00	0.51	0.88	0.00	0.00	0.00	0.58	0.88	0.60
Delay/Veh:	84.3	24.6	0.0	0.0	36.8	49.3	0.0	0.0	0.0	39.8	53.6	40.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	84.3	24.6	0.0	0.0	36.8	49.3	0.0	0.0	0.0	39.8	53.6	40.2
LOS by Move:	F	C	A	A	D+	D	A	A	A	D	D-	D
HCM2kAvgQ:	13	19	0	0	13	31	0	0	0	16	32	17

Note: Queue reported is the number of cars per lane.

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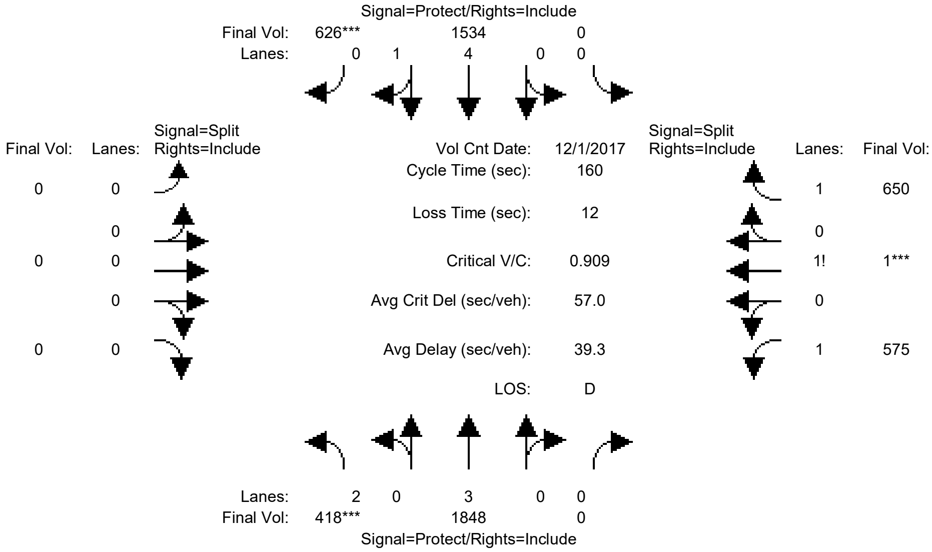
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #56: De Anza Boulevard / I-280 NB Ramps (CMP)



Street Name:	De Anza Boulevard						I-280 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	4.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	418	1803	0	0	1516	610	0	0	0	575	1	600
Growth 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
Initial Bse:	418	1803	0	0	1516	610	0	0	0	575	1	600
Added Vol:	0	45	0	0	18	16	0	0	0	0	0	50
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	418	1848	0	0	1534	626	0	0	0	575	1	650
User 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
PHF 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
PHF Volume:	418	1848	0	0	1534	626	0	0	0	575	1	650
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	418	1848	0	0	1534	626	0	0	0	575	1	650
PCE 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
MLF 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
FinalVolume:	418	1848	0	0	1534	626	0	0	0	575	1	650
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.92	0.92
Lanes:	2.00	3.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00	1.46	0.01	1.53
Final Sat.:	3150	5700	0	0	7600	1750	0	0	0	2570	3	2677
Capacity Analysis Module:												
Vol/Sat:	0.13	0.32	0.00	0.00	0.20	0.36	0.00	0.00	0.00	0.22	0.35	0.24
Crit Moves:	****					****					****	
Green Time:	23.4	86.3	0.0	0.0	63.0	63.0	0.0	0.0	0.0	61.7	61.7	61.7
Volume/Cap:	0.91	0.60	0.00	0.00	0.51	0.91	0.00	0.00	0.00	0.58	0.91	0.63
Delay/Veh:	89.1	25.4	0.0	0.0	37.0	51.5	0.0	0.0	0.0	39.3	55.8	40.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	89.1	25.4	0.0	0.0	37.0	51.5	0.0	0.0	0.0	39.3	55.8	40.6
LOS by Move:	F	C	A	A	D+	D-	A	A	A	D	E+	D
HCM2kAvgQ:	13	20	0	0	14	33	0	0	0	16	34	18

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #57: De Anza Boulevard / I-280 SB Ramps (CMP)

Signal=Protect/Rights=Include

Final Vol:	0		1492		594***
Lanes:	0	0	3	0	2

Final Vol:	Lanes:	Signal=Split Rights=Include			Signal=Split Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	12/1/2017			
636	1		Cycle Time (sec):	160		0	0
	0		Loss Time (sec):	12		0	
2***	1!		Critical V/C:	0.895		0	0
	0		Avg Crit Del (sec/veh):	59.2		0	
782	1		Avg Delay (sec/veh):	46.1		0	0
			LOS:	D			

Lanes:	0	0	5	0	1
Final Vol:	0		1571		407***

Signal=Protect/Rights=Include

Street Name:	De Anza Boulevard						I-280 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	10	10	10	0	0	0
Y+R:	0.0	4.0	4.0	4.0	4.0	0.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	1571	407	594	1492	0	636	2	782	0	0	0
Growth 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
Initial Bse:	0	1571	407	594	1492	0	636	2	782	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1571	407	594	1492	0	636	2	782	0	0	0
User 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
PHF 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
PHF Volume:	0	1571	407	594	1492	0	636	2	782	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1571	407	594	1492	0	636	2	782	0	0	0
PCE 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
MLF 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
FinalVolume:	0	1571	407	594	1492	0	636	2	782	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92
Lanes:	0.00	5.00	1.00	2.00	3.00	0.00	1.44	0.01	1.55	0.00	0.00	0.00
Final Sat.:	0	9500	1750	3150	5700	0	2533	5	2712	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.23	0.19	0.26	0.00	0.25	0.41	0.29	0.00	0.00	0.00
Crit Moves:			****	****				****				
Green Time:	0.0	41.6	41.6	33.7	75.3	0.0	72.7	72.7	72.7	0.0	0.0	0.0
Volume/Cap:	0.00	0.64	0.89	0.89	0.56	0.00	0.55	0.89	0.63	0.00	0.00	0.00
Delay/Veh:	0.0	53.0	76.8	76.0	30.6	0.0	32.1	47.1	34.1	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	53.0	76.8	76.0	30.6	0.0	32.1	47.1	34.1	0.0	0.0	0.0
LOS by Move:	A	D-	E-	E-	C	A	C-	D	C-	A	A	A
HCM2kAvgQ:	0	14	24	18	17	0	17	37	20	0	0	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #57: De Anza Boulevard / I-280 SB Ramps (CMP)

Signal=Protect/Rights=Include
Final Vol: 0 1497 607***
Lanes: 0 0 3 0 2

Signal=Split Rights=Include (Eastbound)
Final Vol: 664 / 2*** / 782
Lanes: 1 / 0 / 1! / 0 / 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.908
Avg Crit Del (sec/veh): 60.7
Avg Delay (sec/veh): 46.7
LOS: D

Signal=Split Rights=Include (Westbound)
Lanes: 0 / 0 / 0 / 0 / 0
Final Vol: 0 / 0 / 0

Lanes: 0 0 5 0 1
Final Vol: 0 1588 407***
Signal=Protect/Rights=Include

Street Name:	De Anza Boulevard						I-280 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	10	10	10	0	0	0
Y+R:	0.0	4.0	4.0	4.0	4.0	0.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	1571	407	594	1492	0	636	2	782	0	0	0
Growth 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
Initial Bse:	0	1571	407	594	1492	0	636	2	782	0	0	0
Added Vol:	0	17	0	13	5	0	28	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1588	407	607	1497	0	664	2	782	0	0	0
User 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
PHF 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
PHF Volume:	0	1588	407	607	1497	0	664	2	782	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1588	407	607	1497	0	664	2	782	0	0	0
PCE 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
MLF 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
FinalVolume:	0	1588	407	607	1497	0	664	2	782	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92
Lanes:	0.00	5.00	1.00	2.00	3.00	0.00	1.45	0.01	1.54	0.00	0.00	0.00
Final Sat.:	0	9500	1750	3150	5700	0	2551	5	2694	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.23	0.19	0.26	0.00	0.26	0.41	0.29	0.00	0.00	0.00
Crit Moves:			****	****				****				
Green Time:	0.0	41.0	41.0	34.0	75.0	0.0	73.0	73.0	73.0	0.0	0.0	0.0
Volume/Cap:	0.00	0.65	0.91	0.91	0.56	0.00	0.57	0.91	0.64	0.00	0.00	0.00
Delay/Veh:	0.0	53.8	79.7	77.7	30.9	0.0	32.3	48.3	33.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	53.8	79.7	77.7	30.9	0.0	32.3	48.3	33.9	0.0	0.0	0.0
LOS by Move:	A	D-	E-	E-	C	A	C-	D	C-	A	A	A
HCM2kAvgQ:	0	14	24	19	17	0	17	39	20	0	0	0

Note: Queue reported is the number of cars per lane.

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #58: Fair Oaks Avenue / US 101 NB Ramps

Signal=Protect/Rights=Ignore
Final Vol: 0 729*** 0
Lanes: 1 0 2 0 0

Signal=Split, Rights=Include (Eastbound) — Final Vol: 0, 0, 0; Lanes: 0, 0, 0, 0, 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 60
Loss Time (sec): 9
Critical V/C: 0.700
Avg Crit Del (sec/veh): 21.8
Avg Delay (sec/veh): 16.4
LOS: B

Signal=Split, Rights=Include (Westbound) — Lanes: 1, 0, 1!, 0, 1; Final Vol: 269, 0, 256***

Lanes: 1 0 2 0 0
Final Vol: 533*** 785 0
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						US 101 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	0.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	533	785	0	0	729	494	0	0	0	256	0	269
Growth 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
Initial Bse:	533	785	0	0	729	494	0	0	0	256	0	269
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	533	785	0	0	729	494	0	0	0	256	0	269
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	533	785	0	0	729	0	0	0	0	256	0	269
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	533	785	0	0	729	0	0	0	0	256	0	269
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	533	785	0	0	729	0	0	0	0	256	0	269
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.49	0.00	1.51
Final Sat.:	1750	3800	0	0	3800	1750	0	0	0	2603	0	2647
Capacity Analysis Module:												
Vol/Sat:	0.30	0.21	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.10	0.00	0.10
Crit Moves:	****				****					****		
Green Time:	25.2	41.0	0.0	0.0	15.8	0.0	0.0	0.0	0.0	10.0	0.0	10.0
Volume/Cap:	0.73	0.30	0.00	0.00	0.73	0.00	0.00	0.00	0.00	0.59	0.00	0.61
Delay/Veh:	18.2	3.9	0.0	0.0	22.8	0.0	0.0	0.0	0.0	24.2	0.0	24.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.2	3.9	0.0	0.0	22.8	0.0	0.0	0.0	0.0	24.2	0.0	24.5
LOS by Move:	B-	A	A	A	C+	A	A	A	A	C	A	C
HCM2kAvgQ:	9	3	0	0	6	0	0	0	0	4	0	4

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #58: Fair Oaks Avenue / US 101 NB Ramps

Signal=Protect/Rights=Ignore
Final Vol: 0 745*** 0
Lanes: 1 0 2 0 0

Signal=Split
Rights=Include

Final Vol:	Lanes:
0	0
	0
0	0
	0
0	0

Vol Cnt Date:	4/1/2017
Cycle Time (sec):	60
Loss Time (sec):	9
Critical V/C:	0.714
Avg Crit Del (sec/veh):	22.2
Avg Delay (sec/veh):	16.6
LOS:	B

Signal=Split
Rights=Include

Lanes:	Final Vol:
1	269
0	
1!	0
0	
1	281***

Lanes: 1 0 2 0 0
Final Vol: 533*** 791 0
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						US 101 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	0.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	533	785	0	0	729	494	0	0	0	256	0	269
Growth 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
Initial Bse:	533	785	0	0	729	494	0	0	0	256	0	269
Added Vol:	0	6	0	0	16	0	0	0	0	25	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	533	791	0	0	745	494	0	0	0	281	0	269
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	533	791	0	0	745	0	0	0	0	281	0	269
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	533	791	0	0	745	0	0	0	0	281	0	269
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	533	791	0	0	745	0	0	0	0	281	0	269
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.51	0.00	1.49
Final Sat.:	1750	3800	0	0	3800	1750	0	0	0	2644	0	2606
Capacity Analysis Module:												
Vol/Sat:	0.30	0.21	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.11	0.00	0.10
Crit Moves:	****				****					****		
Green Time:	24.9	41.0	0.0	0.0	16.1	0.0	0.0	0.0	0.0	10.0	0.0	10.0
Volume/Cap:	0.73	0.30	0.00	0.00	0.73	0.00	0.00	0.00	0.00	0.64	0.00	0.62
Delay/Veh:	18.6	3.9	0.0	0.0	22.8	0.0	0.0	0.0	0.0	24.9	0.0	24.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.6	3.9	0.0	0.0	22.8	0.0	0.0	0.0	0.0	24.9	0.0	24.6
LOS by Move:	B-	A	A	A	C+	A	A	A	A	C	A	C
HCM2kAvgQ:	9	3	0	0	7	0	0	0	0	5	0	5

Note: Queue reported is the number of cars per lane.

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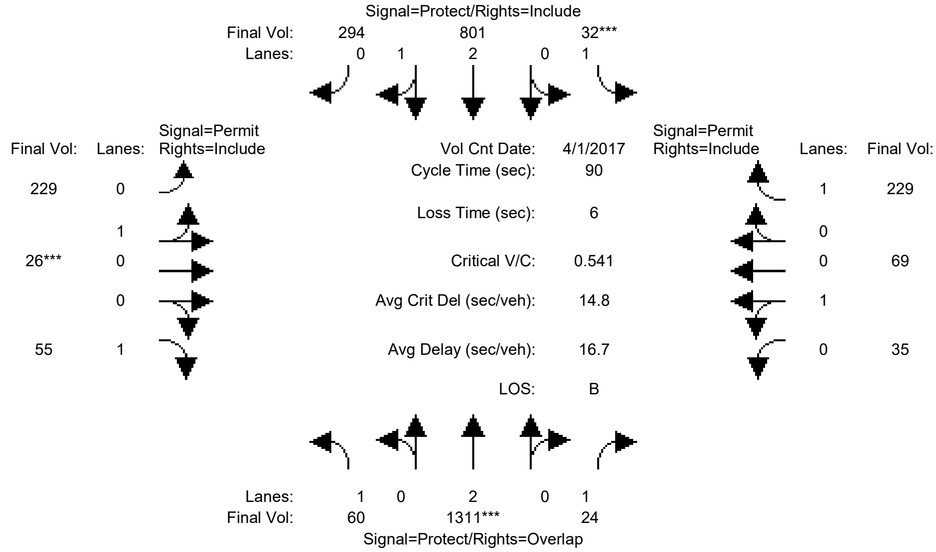
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #59: Fair Oaks Avenue / Ahwanee Avenue



Street Name:	Fair Oaks Avenue						Ahwanee Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	60	1311	24	32	801	294	229	26	55	35	69	229
Growth 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
Initial Bse:	60	1311	24	32	801	294	229	26	55	35	69	229
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	60	1311	24	32	801	294	229	26	55	35	69	229
User 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
PHF 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
PHF Volume:	60	1311	24	32	801	294	229	26	55	35	69	229
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1311	24	32	801	294	229	26	55	35	69	229
PCE 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
MLF 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
FinalVolume:	60	1311	24	32	801	294	229	26	55	35	69	229
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.17	0.83	0.90	0.10	1.00	0.34	0.66	1.00
Final Sat.:	1750	3800	1750	1750	4094	1503	1616	184	1750	606	1194	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.34	0.01	0.02	0.20	0.20	0.14	0.14	0.03	0.06	0.06	0.13
Crit Moves:		****		****				****				
Green Time:	17.5	54.6	54.6	7.0	44.1	44.1	22.4	22.4	22.4	22.4	22.4	22.4
Volume/Cap:	0.18	0.57	0.02	0.24	0.40	0.40	0.57	0.57	0.13	0.23	0.23	0.53
Delay/Veh:	30.5	11.0	7.1	39.9	14.7	14.7	31.3	31.3	26.3	27.2	27.2	30.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.5	11.0	7.1	39.9	14.7	14.7	31.3	31.3	26.3	27.2	27.2	30.4
LOS by Move:	C	B+	A	D	B	B	C	C	C	C	C	C
HCM2kAvgQ:	1	11	0	1	6	6	7	7	1	2	2	6

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #59: Fair Oaks Avenue / Ahwanee Avenue

Signal=Protect/Rights=Include
Final Vol: 294 842 32***
Lanes: 0 1 2 0 1

Signal=Permit Rights=Include (West approach)
Final Vol: 229 / 26*** / 56
Lanes: 0 1 0 0 1

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 90
Loss Time (sec): 6
Critical V/C: 0.545
Avg Crit Del (sec/veh): 14.8
Avg Delay (sec/veh): 16.6
LOS: B

Signal=Permit Rights=Include (East approach)
Lanes: 1 0 0 1 0
Final Vol: 229 / 69 / 36

Lanes: 1 0 2 0 1
Final Vol: 60 1325*** 24
Signal=Protect/Rights=Overlap

Street Name:	Fair Oaks Avenue						Ahwanee Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	60	1311	24	32	801	294	229	26	55	35	69	229
Growth 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
Initial Bse:	60	1311	24	32	801	294	229	26	55	35	69	229
Added Vol:	0	14	0	0	41	0	0	0	1	1	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	60	1325	24	32	842	294	229	26	56	36	69	229
User 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
PHF 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
PHF Volume:	60	1325	24	32	842	294	229	26	56	36	69	229
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	1325	24	32	842	294	229	26	56	36	69	229
PCE 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
MLF 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
FinalVolume:	60	1325	24	32	842	294	229	26	56	36	69	229
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.99	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.20	0.80	0.90	0.10	1.00	0.34	0.66	1.00
Final Sat.:	1750	3800	1750	1750	4149	1449	1616	184	1750	617	1183	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.35	0.01	0.02	0.20	0.20	0.14	0.14	0.03	0.06	0.06	0.13
Crit Moves:		****		****				****				
Green Time:	17.1	54.8	54.8	7.0	44.6	44.6	22.2	22.2	22.2	22.2	22.2	22.2
Volume/Cap:	0.18	0.57	0.02	0.24	0.41	0.41	0.57	0.57	0.13	0.24	0.24	0.53
Delay/Veh:	30.8	10.9	7.0	39.9	14.4	14.4	31.5	31.5	26.5	27.4	27.4	30.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.8	10.9	7.0	39.9	14.4	14.4	31.5	31.5	26.5	27.4	27.4	30.6
LOS by Move:	C	B+	A	D	B	B	C	C	C	C	C	C
HCM2kAvgQ:	1	11	0	1	6	6	7	7	1	3	3	6

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #60: Fair Oaks Avenue / Duane Avenue

Signal=Protect/Rights=Include
Final Vol: 46 642 113***
Lanes: 0 1 2 0 1

Final Vol: Lanes: Signal=Protect Rights=Include
120 1
0
117*** 0
1
20 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 90
Loss Time (sec): 12
Critical V/C: 0.659
Avg Crit Del (sec/veh): 25.8
Avg Delay (sec/veh): 27.0
LOS: C

Signal=Protect Rights=Include Lanes: Final Vol:
1 210
0
1 121
0
1 202***

Lanes: 1 0 1 1 0
Final Vol: 8 965*** 201
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						Duane Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	8	965	201	113	642	46	120	117	20	202	121	210
Growth 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
Initial Bse:	8	965	201	113	642	46	120	117	20	202	121	210
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	965	201	113	642	46	120	117	20	202	121	210
User 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
PHF 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
PHF Volume:	8	965	201	113	642	46	120	117	20	202	121	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	965	201	113	642	46	120	117	20	202	121	210
PCE 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
MLF 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
FinalVolume:	8	965	201	113	642	46	120	117	20	202	121	210
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	1.65	0.35	1.00	2.79	0.21	1.00	0.85	0.15	1.00	1.00	1.00
Final Sat.:	1750	3062	638	1750	5225	374	1750	1537	263	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.32	0.06	0.12	0.12	0.07	0.08	0.08	0.12	0.06	0.12
Crit Moves:		****		****				****		****		
Green Time:	20.1	43.0	43.0	8.8	31.8	31.8	10.3	10.4	10.4	15.8	15.9	15.9
Volume/Cap:	0.02	0.66	0.66	0.66	0.35	0.35	0.60	0.66	0.66	0.66	0.36	0.68
Delay/Veh:	27.3	18.8	18.8	48.2	21.6	21.6	42.9	45.7	45.7	39.8	33.3	40.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.3	18.8	18.8	48.2	21.6	21.6	42.9	45.7	45.7	39.8	33.3	40.8
LOS by Move:	C	B-	B-	D	C+	C+	D	D	D	D	C-	D
HCM2kAvgQ:	0	13	13	3	5	5	4	5	5	6	3	6

Note: Queue reported is the number of cars per lane.

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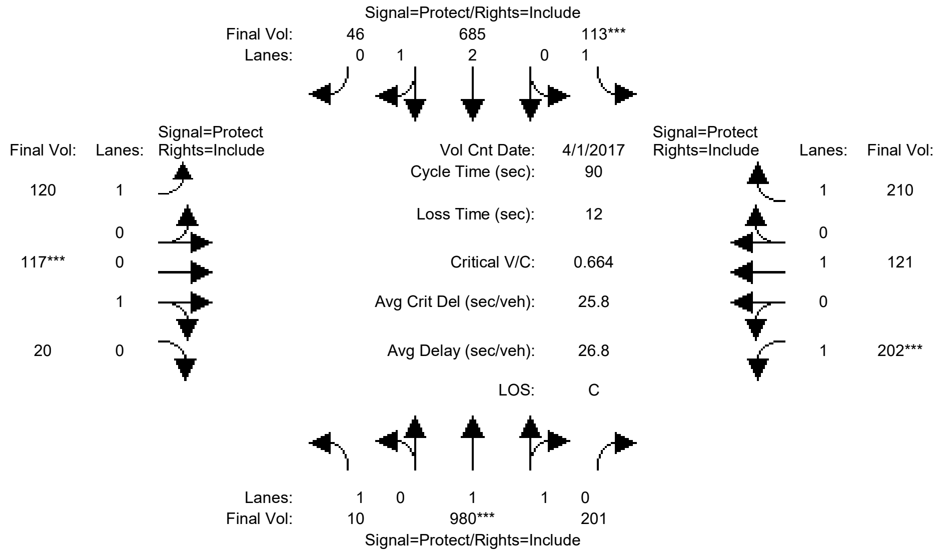
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #60: Fair Oaks Avenue / Duane Avenue



Street Name:	Fair Oaks Avenue						Duane Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	8	965	201	113	642	46	120	117	20	202	121	210
Growth 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
Initial Bse:	8	965	201	113	642	46	120	117	20	202	121	210
Added Vol:	2	15	0	0	43	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	980	201	113	685	46	120	117	20	202	121	210
User 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
PHF 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
PHF Volume:	10	980	201	113	685	46	120	117	20	202	121	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	980	201	113	685	46	120	117	20	202	121	210
PCE 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
MLF 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
FinalVolume:	10	980	201	113	685	46	120	117	20	202	121	210
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	1.65	0.35	1.00	2.80	0.20	1.00	0.85	0.15	1.00	1.00	1.00
Final Sat.:	1750	3070	630	1750	5247	352	1750	1537	263	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.32	0.32	0.06	0.13	0.13	0.07	0.08	0.08	0.12	0.06	0.12
Crit Moves:		****		****				****		****		
Green Time:	19.4	43.3	43.3	8.8	32.6	32.6	10.2	10.3	10.3	15.6	15.8	15.8
Volume/Cap:	0.03	0.66	0.66	0.66	0.36	0.36	0.60	0.66	0.66	0.66	0.36	0.69
Delay/Veh:	27.9	18.8	18.8	48.7	21.2	21.2	43.2	46.1	46.1	40.2	33.4	41.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.9	18.8	18.8	48.7	21.2	21.2	43.2	46.1	46.1	40.2	33.4	41.1
LOS by Move:	C	B-	B-	D	C+	C+	D	D	D	D	C-	D
HCM2kAvgQ:	0	13	13	3	5	5	4	5	5	6	3	6

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #61: Fair Oaks Avenue / Wolfe Road

Signal=Permit/Rights=Overlap
Final Vol: 622 311 0
Lanes: 2 0 2 0 0

Westbound approach (left side): Signal=Split, Rights=Overlap
Final Vol: 757*** Lanes: 2
Lanes: 0
Final Vol: 0 Lanes: 0
Lanes: 0
Final Vol: 7 Lanes: 1

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 60
Loss Time (sec): 6
Critical V/C: 0.408
Avg Crit Del (sec/veh): 10.6
Avg Delay (sec/veh): 8.4
LOS: A

Signal=Split
Rights=Include
Lanes: Final Vol:
0 0
0
0 0
0
0 0

Lanes: 0 0 2 0 0
Final Vol: 0 483*** 0
Signal=Permit/Rights=Include

Street Name:	Fair Oaks Avenue						Wolfe Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	0	0	10	10	10	0	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	0	483	0	0	311	622	757	0	7	0	0	0
Growth 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
Initial Bse:	0	483	0	0	311	622	757	0	7	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	483	0	0	311	622	757	0	7	0	0	0
User 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
PHF 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
PHF Volume:	0	483	0	0	311	622	757	0	7	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	483	0	0	311	622	757	0	7	0	0	0
PCE 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
MLF 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
FinalVolume:	0	483	0	0	311	622	757	0	7	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.83	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3800	0	0	3800	3150	3150	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.00	0.00	0.08	0.20	0.24	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green Time:	0.0	18.7	0.0	0.0	18.7	54.0	35.3	0.0	35.3	0.0	0.0	0.0
Volume/Cap:	0.00	0.41	0.00	0.00	0.26	0.22	0.41	0.00	0.01	0.00	0.00	0.00
Delay/Veh:	0.0	16.5	0.0	0.0	15.6	0.4	6.8	0.0	5.1	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	16.5	0.0	0.0	15.6	0.4	6.8	0.0	5.1	0.0	0.0	0.0
LOS by Move:	A	B	A	A	B	A	A	A	A	A	A	A
HCM2kAvgQ:	0	3	0	0	2	1	5	0	0	0	0	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #61: Fair Oaks Avenue / Wolfe Road

Signal=Permit/Rights=Overlap
Final Vol: 665 311 0
Lanes: 2 0 2 0 0

Westbound side: Signal=Split, Rights=Overlap
Final Vol: 774***, Lanes: 2
Lanes: 0
Final Vol: 0, Lanes: 0
Lanes: 0
Final Vol: 7, Lanes: 1

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 60
Loss Time (sec): 6
Critical V/C: 0.414
Avg Crit Del (sec/veh): 10.6
Avg Delay (sec/veh): 8.3
LOS: A

Signal=Split, Rights=Include
Lanes: 0, Final Vol: 0
Lanes: 0
Lanes: 0, Final Vol: 0
Lanes: 0
Lanes: 0, Final Vol: 0

Lanes: 0 0 2 0 0
Final Vol: 0 483*** 0
Signal=Permit/Rights=Include

Street Name:	Fair Oaks Avenue						Wolfe Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	0	0	10	10	10	0	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	0	483	0	0	311	622	757	0	7	0	0	0
Growth 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
Initial Bse:	0	483	0	0	311	622	757	0	7	0	0	0
Added Vol:	0	0	0	0	0	43	17	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	483	0	0	311	665	774	0	7	0	0	0
User 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
PHF 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
PHF Volume:	0	483	0	0	311	665	774	0	7	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	483	0	0	311	665	774	0	7	0	0	0
PCE 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
MLF 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
FinalVolume:	0	483	0	0	311	665	774	0	7	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.83	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3800	0	0	3800	3150	3150	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.00	0.00	0.08	0.21	0.25	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green Time:	0.0	18.4	0.0	0.0	18.4	54.0	35.6	0.0	35.6	0.0	0.0	0.0
Volume/Cap:	0.00	0.41	0.00	0.00	0.27	0.23	0.41	0.00	0.01	0.00	0.00	0.00
Delay/Veh:	0.0	16.8	0.0	0.0	15.8	0.4	6.7	0.0	5.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	16.8	0.0	0.0	15.8	0.4	6.7	0.0	5.0	0.0	0.0	0.0
LOS by Move:	A	B	A	A	B	A	A	A	A	A	A	A
HCM2kAvgQ:	0	3	0	0	2	1	5	0	0	0	0	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #62: Fair Oaks Avenue / Maude Avenue

Signal=Protect/Rights=Include
Final Vol: 93 537*** 0
Lanes: 0 1 1 0 1

Signal=Protect Rights=Include (West)
Final Vol: Lanes:
86*** 1
0
86 1
0
108 1

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 100
Loss Time (sec): 12
Critical V/C: 0.423
Avg Crit Del (sec/veh): 27.7
Avg Delay (sec/veh): 22.9
LOS: C+

Signal=Protect Rights=Include (East)
Lanes: Final Vol:
0 2
1
0 147***
0
1 11

Lanes: 1 0 1 1 0
Final Vol: 122*** 631 14
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	122	631	14	0	537	93	86	86	108	11	147	2
Growth 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
Initial Bse:	122	631	14	0	537	93	86	86	108	11	147	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	122	631	14	0	537	93	86	86	108	11	147	2
User 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
PHF 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
PHF Volume:	122	631	14	0	537	93	86	86	108	11	147	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	631	14	0	537	93	86	86	108	11	147	2
PCE 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
MLF 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
FinalVolume:	122	631	14	0	537	93	86	86	108	11	147	2
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	1.00	1.96	0.04	1.00	1.70	0.30	1.00	1.00	1.00	1.00	0.99	0.01
Final Sat.:	1750	3620	80	1750	3153	546	1750	1900	1750	1750	1776	24
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.17	0.00	0.17	0.17	0.05	0.05	0.06	0.01	0.08	0.08
Crit Moves:	****				****		****				****	
Green Time:	16.5	56.8	56.8	0.0	40.3	40.3	11.6	18.4	18.4	12.9	19.6	19.6
Volume/Cap:	0.42	0.31	0.31	0.00	0.42	0.42	0.42	0.25	0.34	0.05	0.42	0.42
Delay/Veh:	38.5	11.4	11.4	0.0	21.7	21.7	42.5	35.3	36.1	38.3	36.1	36.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.5	11.4	11.4	0.0	21.7	21.7	42.5	35.3	36.1	38.3	36.1	36.1
LOS by Move:	D+	B+	B+	A	C+	C+	D	D+	D+	D+	D+	D+
HCM2kAvgQ:	4	5	5	0	7	7	3	2	3	0	5	5

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #62: Fair Oaks Avenue / Maude Avenue

Signal=Protect/Rights=Include
Final Vol: 98 575*** 0
Lanes: 0 1 1 0 1

Signal=Protect
Rights=Include
Final Vol: Lanes:
88*** 1
0
86 1
0
108 1

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 100
Loss Time (sec): 12
Critical V/C: 0.437
Avg Crit Del (sec/veh): 27.3
Avg Delay (sec/veh): 22.6
LOS: C+

Signal=Protect
Rights=Include
Lanes: Final Vol:
0 2
1
0 147***
0
1 11

Lanes: 1 0 1 1 0
Final Vol: 122*** 646 14
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	122	631	14	0	537	93	86	86	108	11	147	2
Growth 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
Initial Bse:	122	631	14	0	537	93	86	86	108	11	147	2
Added Vol:	0	15	0	0	43	0	2	0	0	0	0	0
PasserByVol:	0	0	0	0	-5	5	0	0	0	0	0	0
Initial Fut:	122	646	14	0	575	98	88	86	108	11	147	2
User 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
PHF 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
PHF Volume:	122	646	14	0	575	98	88	86	108	11	147	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	646	14	0	575	98	88	86	108	11	147	2
PCE 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
MLF 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
FinalVolume:	122	646	14	0	575	98	88	86	108	11	147	2
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	1.00	1.96	0.04	1.00	1.70	0.30	1.00	1.00	1.00	1.00	0.99	0.01
Final Sat.:	1750	3621	78	1750	3161	539	1750	1900	1750	1750	1776	24
Capacity Analysis Module:												
Vol/Sat:	0.07	0.18	0.18	0.00	0.18	0.18	0.05	0.05	0.06	0.01	0.08	0.08
Crit Moves:	****				****		****				****	
Green Time:	15.9	57.6	57.6	0.0	41.6	41.6	11.5	17.9	17.9	12.5	18.9	18.9
Volume/Cap:	0.44	0.31	0.31	0.00	0.44	0.44	0.44	0.25	0.34	0.05	0.44	0.44
Delay/Veh:	39.1	11.0	11.0	0.0	21.0	21.0	42.8	35.7	36.6	38.6	36.7	36.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.1	11.0	11.0	0.0	21.0	21.0	42.8	35.7	36.6	38.6	36.7	36.7
LOS by Move:	D	B+	B+	A	C+	C+	D	D+	D+	D+	D+	D+
HCM2kAvgQ:	4	5	5	0	7	7	3	2	3	0	5	5

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #63: Fair Oaks Avenue / Arques Avenue

Signal=Protect/Rights=Include
Final Vol: 113 520*** 21
Lanes: 0 1 1 0 1

Signal=Protect Rights=Include (West approach)
Signal=Protect Rights=Include (East approach)

Final Vol:	Lanes:				Lanes:	Final Vol:
54***	1	Vol Cnt Date:	12/1/2017		0	39
		Cycle Time (sec):	130			
	0	Loss Time (sec):	12		1	
83	0	Critical V/C:	0.522		0	210***
	1	Avg Crit Del (sec/veh):	39.8		0	
49	0	Avg Delay (sec/veh):	36.3		2	192
		LOS:	D+			

Lanes: 1 0 2 0 1
Final Vol: 234*** 595 149
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	234	595	149	21	520	113	54	83	49	192	210	39
Growth 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
Initial Bse:	234	595	149	21	520	113	54	83	49	192	210	39
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	234	595	149	21	520	113	54	83	49	192	210	39
User 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
PHF 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
PHF Volume:	234	595	149	21	520	113	54	83	49	192	210	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	234	595	149	21	520	113	54	83	49	192	210	39
PCE 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
MLF 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
FinalVolume:	234	595	149	21	520	113	54	83	49	192	210	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	1.63	0.37	1.00	0.63	0.37	2.00	0.84	0.16
Final Sat.:	1750	3800	1750	1750	3039	660	1750	1132	668	3150	1518	282
Capacity Analysis Module:												
Vol/Sat:	0.13	0.16	0.09	0.01	0.17	0.17	0.03	0.07	0.07	0.06	0.14	0.14
Crit Moves:	****				****		****				****	
Green Time:	33.3	56.5	56.5	19.4	42.6	42.6	7.7	23.5	23.5	18.6	34.4	34.4
Volume/Cap:	0.52	0.36	0.20	0.08	0.52	0.52	0.52	0.41	0.41	0.43	0.52	0.52
Delay/Veh:	42.6	24.8	22.9	47.7	35.9	35.9	64.1	47.9	47.9	51.5	41.8	41.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.6	24.8	22.9	47.7	35.9	35.9	64.1	47.9	47.9	51.5	41.8	41.8
LOS by Move:	D	C	C+	D	D+	D+	E	D	D	D-	D	D
HCM2kAvgQ:	8	8	4	1	10	10	3	5	5	4	9	9

Note: Queue reported is the number of cars per lane.

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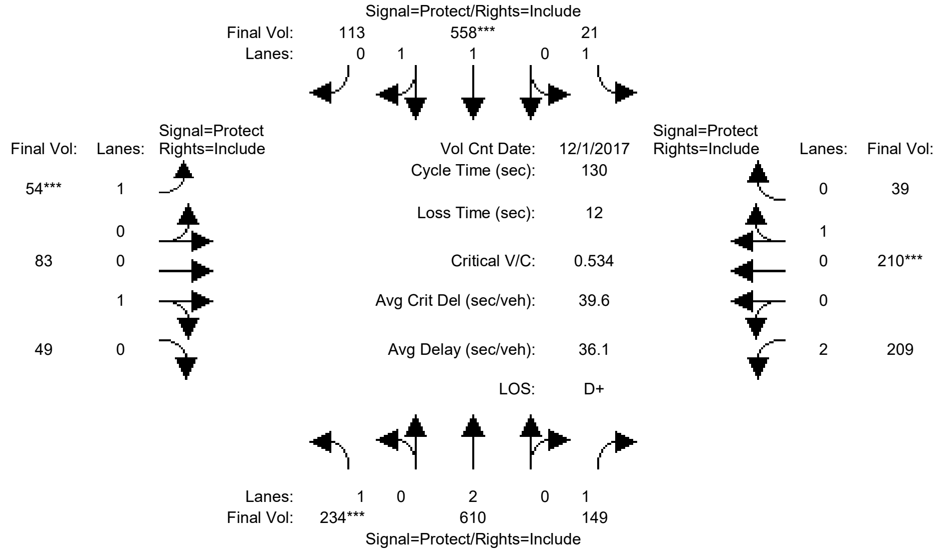
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #63: Fair Oaks Avenue / Arques Avenue



Street Name:	Fair Oaks Avenue						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	234	595	149	21	520	113	54	83	49	192	210	39
Growth 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
Initial Bse:	234	595	149	21	520	113	54	83	49	192	210	39
Added Vol:	0	15	0	0	43	0	0	0	0	17	0	0
PasserByVol:	0	0	0	0	-5	0	0	0	0	0	0	0
Initial Fut:	234	610	149	21	558	113	54	83	49	209	210	39
User 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
PHF 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
PHF Volume:	234	610	149	21	558	113	54	83	49	209	210	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	234	610	149	21	558	113	54	83	49	209	210	39
PCE 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
MLF 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
FinalVolume:	234	610	149	21	558	113	54	83	49	209	210	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	1.65	0.35	1.00	0.63	0.37	2.00	0.84	0.16
Final Sat.:	1750	3800	1750	1750	3076	623	1750	1132	668	3150	1518	282
Capacity Analysis Module:												
Vol/Sat:	0.13	0.16	0.09	0.01	0.18	0.18	0.03	0.07	0.07	0.07	0.14	0.14
Crit Moves:	****				****		****				****	
Green Time:	32.6	57.5	57.5	19.3	44.2	44.2	7.5	22.1	22.1	19.1	33.7	33.7
Volume/Cap:	0.53	0.36	0.19	0.08	0.53	0.53	0.53	0.43	0.43	0.45	0.53	0.53
Delay/Veh:	43.4	24.2	22.2	47.9	35.0	35.0	65.0	49.3	49.3	51.4	42.6	42.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.4	24.2	22.2	47.9	35.0	35.0	65.0	49.3	49.3	51.4	42.6	42.6
LOS by Move:	D	C	C+	D	D+	D+	E	D	D	D-	D	D
HCM2kAvgQ:	8	8	4	1	11	11	3	5	5	4	9	9

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing AM

Intersection #64: Central Expressway WB Off-Ramp / Arques Avenue

Signal=Stop/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Final Vol:	Lanes:	Signal=Uncontrol Rights=Include			Signal=Uncontrol Rights=Include	Lanes:	Final Vol:
0	0		Vol Cnt Date:	10/3/2018		0	0
			Cycle Time (sec):	100			
	0		Loss Time (sec):	0		0	
328	2		Critical V/C:	0.174		2	236
	0		Avg Crit Del (sec/veh):	1.9		0	
0	0		Avg Delay (sec/veh):	1.9		0	0
			LOS:	B			

Lanes: 1 0 0 0 1
Final Vol: 95 0 7
Signal=Stop/Rights=Include

```
Street Name:    Central Expressway WB Ramp            Arques Avenue
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 3 Oct 2018 <<
Base Vol:      95    0     7     0    0     0     0  328     0     0  236     0
Growth 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
Initial Bse:   95    0     7     0    0     0     0  328     0     0  236     0
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   95    0     7     0    0     0     0  328     0     0  236     0
User 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
PHF 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
PHF Volume:    95    0     7     0    0     0     0  328     0     0  236     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   95    0     7     0    0     0     0  328     0     0  236     0
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:  6.8 xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:  3.5 xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol:  446 xxxx   164  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.:  546 xxxx   858  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:    546 xxxx   858  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  0.17 xxxx  0.01  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2WayQ95thQ:   0.6 xxxx   0.0  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del: 13.0 xxxx   9.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    B    *     A     *    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      12.7            xxxxxx           xxxxxx           xxxxxx
ApproachLOS:         B               *                *                *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```


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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        1  0  0  0  1   0  0  0  0  0   0  0  2  0  0   0  0  2  0  0
Initial Vol:   95    0     7     0    0     0     0  328     0     0  236     0
ApproachDel:      12.7            xxxxxx           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.4]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=102]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=666]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
```

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

```
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        1  0  0  0  1   0  0  0  0  0   0  0  2  0  0   0  0  2  0  0
Initial Vol:   95    0     7     0    0     0     0  328     0     0  236     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            564
Minor Approach Volume:          102
Minor Approach Volume Threshold: 620
--------------------------------------------------------------------------------
```

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PP AM

Intersection #64: Central Expressway WB Off-Ramp / Arques Avenue

Signal=Stop/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Final Vol: Lanes: Signal=Uncontrol Rights=Include

0 0
0
328 2
0
0 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 100
Loss Time (sec): 0
Critical V/C: 0.205
Avg Crit Del (sec/veh): 2.3
Avg Delay (sec/veh): 2.3
LOS: B

Signal=Uncontrol Rights=Include Lanes: Final Vol:

0 0
0
2 236
0
0 0

Lanes: 1 0 0 0 1
Final Vol: 112 0 7
Signal=Stop/Rights=Include

```
Street Name:    Central Expressway WB Ramp             Arques Avenue
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 3 Oct 2018 <<
Base Vol:      95    0     7     0    0     0     0  328     0     0  236     0
Growth 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
Initial Bse:   95    0     7     0    0     0     0  328     0     0  236     0
Added Vol:     17    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  112    0     7     0    0     0     0  328     0     0  236     0
User 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
PHF 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
PHF Volume:   112    0     7     0    0     0     0  328     0     0  236     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:  112    0     7     0    0     0     0  328     0     0  236     0
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:  6.8 xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:  3.5 xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol:  446 xxxx   164  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.:  546 xxxx   858  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:    546 xxxx   858  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  0.21 xxxx  0.01  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2Way95thQ:    0.8 xxxx   0.0  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del: 13.3 xxxx   9.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    B    *     A     *    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      13.0            xxxxxx            xxxxxx            xxxxxx
ApproachLOS:         B                 *                 *                 *
Note: Queue reported is the number of cars per lane.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        1  0  0  0  1    0  0  0  0  0    0  0  2  0  0    0  0  2  0  0
Initial Vol:  112    0     7     0     0     0     0  328     0     0  236     0
ApproachDel:      13.0           xxxxxx           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.4]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=119]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=683]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

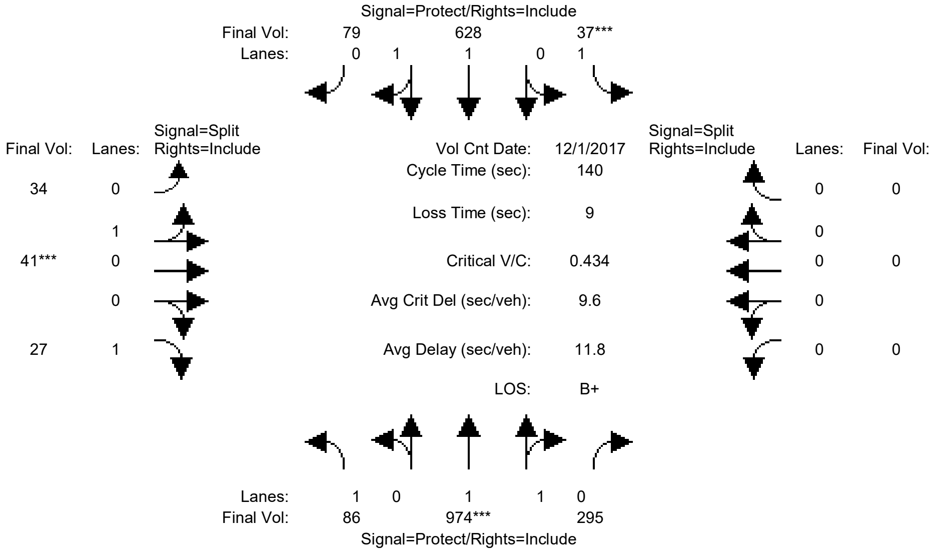
The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        1  0  0  0  1    0  0  0  0  0    0  0  2  0  0    0  0  2  0  0
Initial Vol:  112    0     7     0     0     0     0  328     0     0  236     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             564
Minor Approach Volume:           119
Minor Approach Volume Threshold: 620
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #65: Fair Oaks Avenue / California Avenue



Street Name:	Fair Oaks Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	86	974	295	37	628	79	34	41	27	0	0	0
Growth 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
Initial Bse:	86	974	295	37	628	79	34	41	27	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	86	974	295	37	628	79	34	41	27	0	0	0
User 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
PHF 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
PHF Volume:	86	974	295	37	628	79	34	41	27	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	86	974	295	37	628	79	34	41	27	0	0	0
PCE 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
MLF 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
FinalVolume:	86	974	295	37	628	79	34	41	27	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.92	1.00	0.92
Lanes:	1.00	1.52	0.48	1.00	1.77	0.23	0.45	0.55	1.00	0.00	0.00	0.00
Final Sat.:	1750	2839	860	1750	3286	413	816	984	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.34	0.34	0.02	0.19	0.19	0.04	0.04	0.02	0.00	0.00	0.00
Crit Moves:		****		****				****				
Green Time:	24.4	111	110.6	7.0	93.2	93.2	13.4	13.4	13.4	0.0	0.0	0.0
Volume/Cap:	0.28	0.43	0.43	0.42	0.29	0.29	0.43	0.43	0.16	0.00	0.00	0.00
Delay/Veh:	50.7	4.8	4.8	67.8	9.7	9.7	61.5	61.5	58.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.7	4.8	4.8	67.8	9.7	9.7	61.5	61.5	58.6	0.0	0.0	0.0
LOS by Move:	D	A	A	E	A	A	E	E	E+	A	A	A
HCM2kAvgQ:	4	9	9	2	6	6	3	3	1	0	0	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #65: Fair Oaks Avenue / California Avenue

Signal=Protect/Rights=Include
Final Vol: 79 683 37***
Lanes: 0 1 1 0 1

Westbound side: Signal=Split, Rights=Include; Lanes: 0, 0, 0, 0, 0; Final Vol: 0, 0, 0

Eastbound side: Signal=Split, Rights=Include; Final Vol: 34, 41***, 27; Lanes: 0, 1, 0, 0, 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 140
Loss Time (sec): 9
Critical V/C: 0.440
Avg Crit Del (sec/veh): 9.5
Avg Delay (sec/veh): 11.6
LOS: B+

Lanes: 1 0 1 1 0
Final Vol: 86 989*** 300
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	86	974	295	37	628	79	34	41	27	0	0	0
Growth 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
Initial Bse:	86	974	295	37	628	79	34	41	27	0	0	0
Added Vol:	0	15	5	0	60	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	-5	0	0	0	0	0	0	0
Initial Fut:	86	989	300	37	683	79	34	41	27	0	0	0
User 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
PHF 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
PHF Volume:	86	989	300	37	683	79	34	41	27	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	86	989	300	37	683	79	34	41	27	0	0	0
PCE 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
MLF 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
FinalVolume:	86	989	300	37	683	79	34	41	27	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.92	1.00	0.92
Lanes:	1.00	1.52	0.48	1.00	1.79	0.21	0.45	0.55	1.00	0.00	0.00	0.00
Final Sat.:	1750	2838	861	1750	3316	384	816	984	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.35	0.35	0.02	0.21	0.21	0.04	0.04	0.02	0.00	0.00	0.00
Crit Moves:		****		****				****				
Green Time:	23.0	111	110.8	7.0	94.8	94.8	13.2	13.2	13.2	0.0	0.0	0.0
Volume/Cap:	0.30	0.44	0.44	0.42	0.30	0.30	0.44	0.44	0.16	0.00	0.00	0.00
Delay/Veh:	52.0	4.8	4.8	67.8	9.3	9.3	61.7	61.7	58.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.0	4.8	4.8	67.8	9.3	9.3	61.7	61.7	58.7	0.0	0.0	0.0
LOS by Move:	D-	A	A	E	A	A	E	E	E+	A	A	A
HCM2kAvgQ:	4	9	9	2	7	7	3	3	1	0	0	0

Note: Queue reported is the number of cars per lane.

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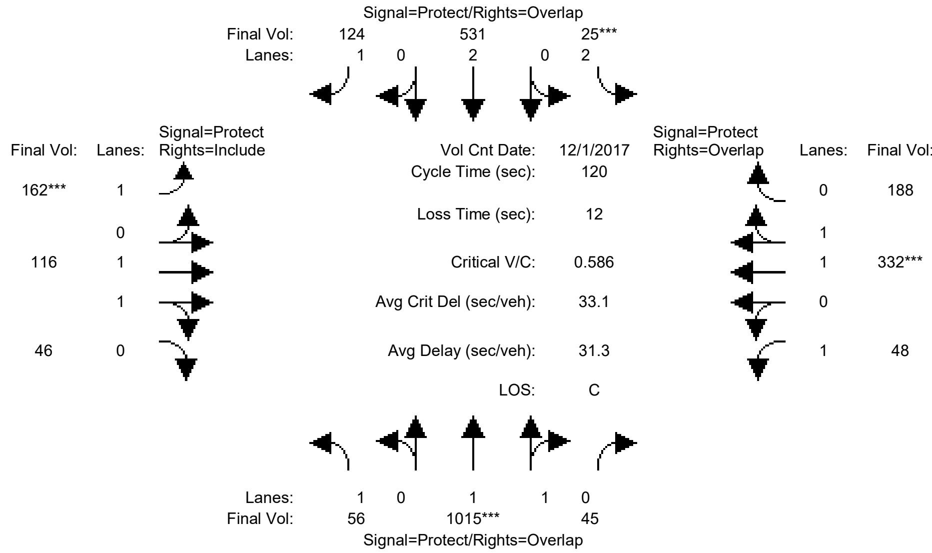
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #66: Fair Oaks Avenue / Evelyn Avenue



Street Name:	Fair Oaks Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	56	1015	45	25	531	124	162	116	46	48	332	188
Growth 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
Initial Bse:	56	1015	45	25	531	124	162	116	46	48	332	188
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	1015	45	25	531	124	162	116	46	48	332	188
User 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
PHF 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
PHF Volume:	56	1015	45	25	531	124	162	116	46	48	332	188
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	1015	45	25	531	124	162	116	46	48	332	188
PCE 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
MLF 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
FinalVolume:	56	1015	45	25	531	124	162	116	46	48	332	188
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.83	1.00	0.92	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	1.00	1.91	0.09	2.00	2.00	1.00	1.00	1.42	0.58	1.00	1.26	0.74
Final Sat.:	1750	3543	157	3150	3800	1750	1750	2649	1050	1750	2361	1337
Capacity Analysis Module:												
Vol/Sat:	0.03	0.29	0.29	0.01	0.14	0.07	0.09	0.04	0.04	0.03	0.14	0.14
Crit Moves:		****		****			****				****	
Green Time:	18.5	55.7	74.3	7.0	44.2	62.2	18.0	26.7	26.7	18.7	27.3	34.3
Volume/Cap:	0.21	0.62	0.46	0.14	0.38	0.14	0.62	0.20	0.20	0.18	0.62	0.49
Delay/Veh:	44.8	24.8	12.3	54.0	28.0	15.0	52.2	38.1	38.1	44.3	43.0	35.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.8	24.8	12.3	54.0	28.0	15.0	52.2	38.1	38.1	44.3	43.0	35.9
LOS by Move:	D	C	B	D-	C	B	D-	D+	D+	D	D	D+
HCM2kAvgQ:	2	15	10	1	7	2	6	2	2	2	10	8

Note: Queue reported is the number of cars per lane.

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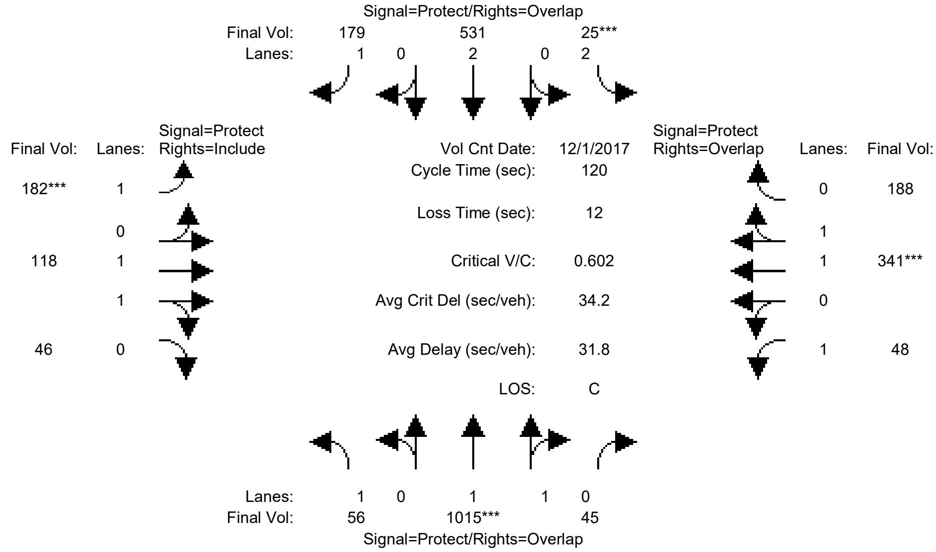
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #66: Fair Oaks Avenue / Evelyn Avenue



Street Name:	Fair Oaks Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	56	1015	45	25	531	124	162	116	46	48	332	188
Growth 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
Initial Bse:	56	1015	45	25	531	124	162	116	46	48	332	188
Added Vol:	0	0	0	0	0	60	20	2	0	0	9	0
PasserByVol:	0	0	0	0	0	-5	0	0	0	0	0	0
Initial Fut:	56	1015	45	25	531	179	182	118	46	48	341	188
User 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
PHF 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
PHF Volume:	56	1015	45	25	531	179	182	118	46	48	341	188
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	1015	45	25	531	179	182	118	46	48	341	188
PCE 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
MLF 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
FinalVolume:	56	1015	45	25	531	179	182	118	46	48	341	188
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.83	1.00	0.92	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	1.00	1.91	0.09	2.00	2.00	1.00	1.00	1.42	0.58	1.00	1.27	0.73
Final Sat.:	1750	3543	157	3150	3800	1750	1750	2661	1038	1750	2384	1314
Capacity Analysis Module:												
Vol/Sat:	0.03	0.29	0.29	0.01	0.14	0.10	0.10	0.04	0.04	0.03	0.14	0.14
Crit Moves:		****		****			****				****	
Green Time:	18.0	54.2	73.5	7.0	43.2	62.9	19.7	27.5	27.5	19.3	27.1	34.1
Volume/Cap:	0.21	0.63	0.47	0.14	0.39	0.20	0.63	0.19	0.19	0.17	0.63	0.50
Delay/Veh:	45.2	26.1	12.8	54.0	28.8	15.2	51.4	37.4	37.4	43.8	43.6	36.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.2	26.1	12.8	54.0	28.8	15.2	51.4	37.4	37.4	43.8	43.6	36.3
LOS by Move:	D	C	B	D-	C	B	D-	D+	D+	D	D	D+
HCM2kAvgQ:	2	15	11	1	7	4	7	2	2	2	10	9

Note: Queue reported is the number of cars per lane.

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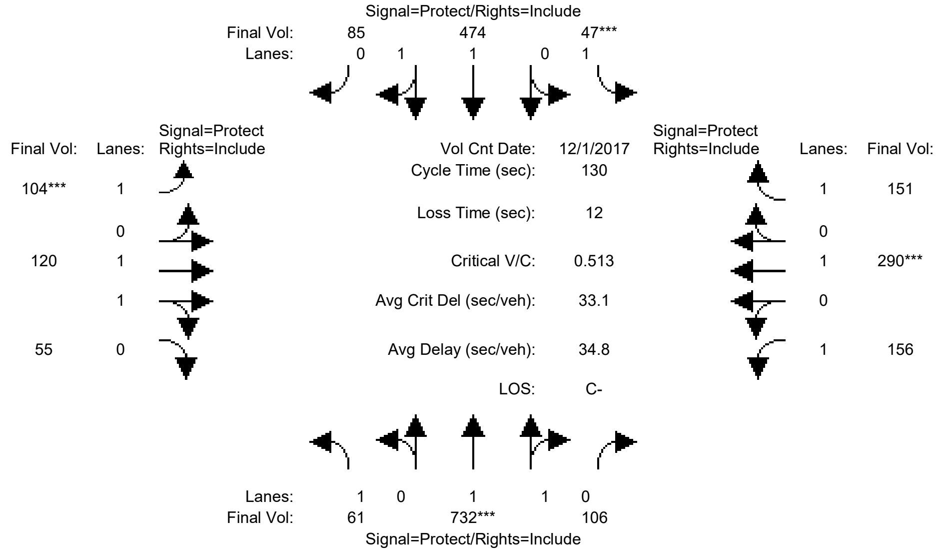
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #67: Fair Oaks Avenue / Old San Francisco Road



Street Name:	Fair Oaks Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	61	732	106	47	474	85	104	120	55	156	290	151
Growth 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
Initial Bse:	61	732	106	47	474	85	104	120	55	156	290	151
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	732	106	47	474	85	104	120	55	156	290	151
User 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
PHF 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
PHF Volume:	61	732	106	47	474	85	104	120	55	156	290	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	732	106	47	474	85	104	120	55	156	290	151
PCE 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
MLF 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
FinalVolume:	61	732	106	47	474	85	104	120	55	156	290	151
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.99	0.95	0.92	1.00	0.92
Lanes:	1.00	1.74	0.26	1.00	1.69	0.31	1.00	1.35	0.65	1.00	1.00	1.00
Final Sat.:	1750	3232	468	1750	3137	563	1750	2536	1162	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.23	0.23	0.03	0.15	0.15	0.06	0.05	0.05	0.09	0.15	0.09
Crit Moves:		****		****			****				****	
Green Time:	16.9	57.3	57.3	7.0	47.4	47.4	15.0	24.9	24.9	28.8	38.6	38.6
Volume/Cap:	0.27	0.51	0.51	0.50	0.41	0.41	0.51	0.25	0.25	0.40	0.51	0.29
Delay/Veh:	51.6	26.5	26.5	63.9	31.1	31.1	56.3	44.8	44.8	43.9	38.7	35.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.6	26.5	26.5	63.9	31.1	31.1	56.3	44.8	44.8	43.9	38.7	35.5
LOS by Move:	D-	C	C	E	C	C	E+	D	D	D	D+	D+
HCM2kAvgQ:	3	12	12	2	8	8	4	3	3	6	9	5

Note: Queue reported is the number of cars per lane.

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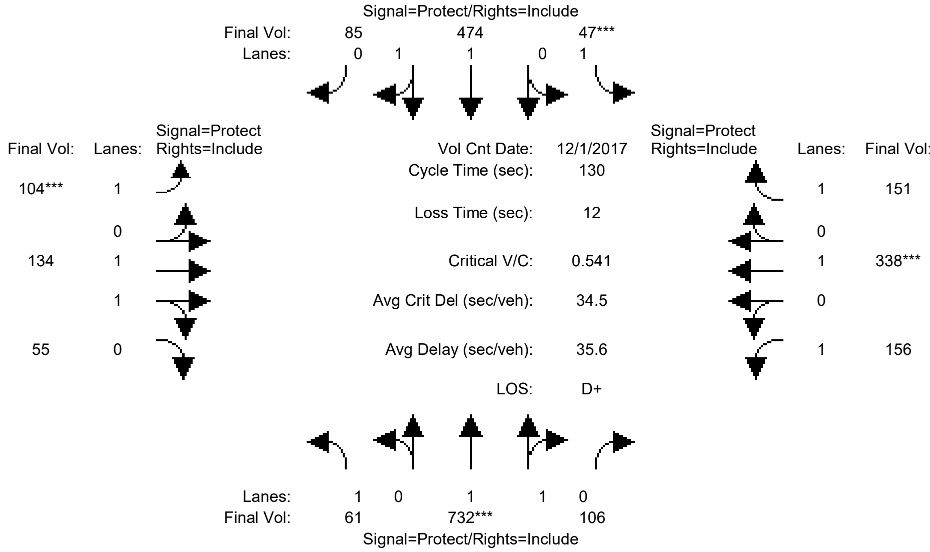
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #67: Fair Oaks Avenue / Old San Francisco Road



Street Name:	Fair Oaks Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	61	732	106	47	474	85	104	120	55	156	290	151
Growth 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
Initial Bse:	61	732	106	47	474	85	104	120	55	156	290	151
Added Vol:	0	0	0	0	0	0	0	14	0	0	48	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	732	106	47	474	85	104	134	55	156	338	151
User 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
PHF 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
PHF Volume:	61	732	106	47	474	85	104	134	55	156	338	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	732	106	47	474	85	104	134	55	156	338	151
PCE 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
MLF 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
FinalVolume:	61	732	106	47	474	85	104	134	55	156	338	151
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.74	0.26	1.00	1.69	0.31	1.00	1.40	0.60	1.00	1.00	1.00
Final Sat.:	1750	3232	468	1750	3137	563	1750	2622	1076	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.23	0.23	0.03	0.15	0.15	0.06	0.05	0.05	0.09	0.18	0.09
Crit Moves:		****		****			****				****	
Green Time:	16.1	54.2	54.2	7.0	45.1	45.1	14.2	26.3	26.3	30.5	42.6	42.6
Volume/Cap:	0.28	0.54	0.54	0.50	0.44	0.44	0.54	0.25	0.25	0.38	0.54	0.26
Delay/Veh:	52.4	29.0	29.0	63.9	32.9	32.9	58.0	43.8	43.8	42.4	36.8	32.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.4	29.0	29.0	63.9	32.9	32.9	58.0	43.8	43.8	42.4	36.8	32.4
LOS by Move:	D-	C	C	E	C-	C-	E+	D	D	D	D+	C-
HCM2kAvgQ:	3	13	13	2	8	8	4	3	3	5	11	5

Note: Queue reported is the number of cars per lane.

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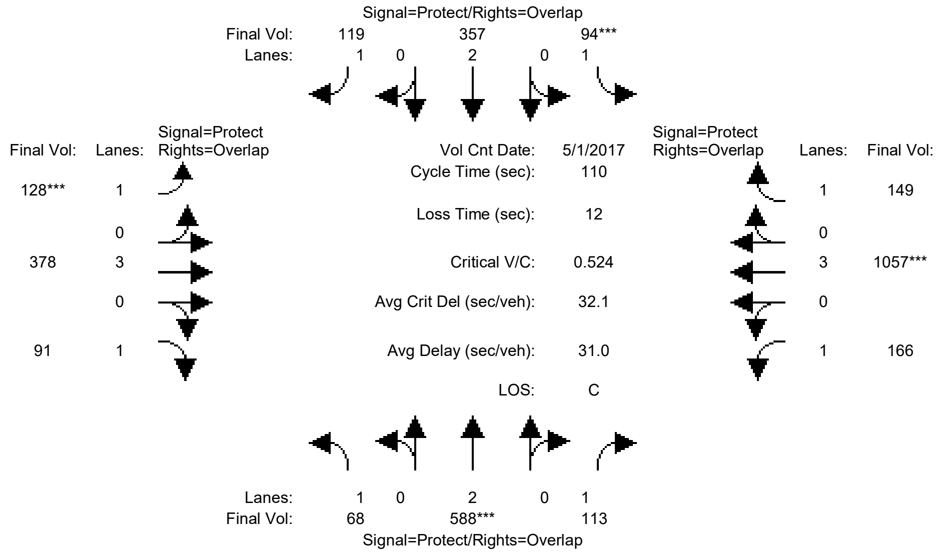
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #68: Fair Oaks Avenue / El Camino Real (CMP)



Street Name:	Fair Oaks Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	68	588	113	94	357	119	128	378	91	166	1057	149
Growth 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
Initial Bse:	68	588	113	94	357	119	128	378	91	166	1057	149
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	68	588	113	94	357	119	128	378	91	166	1057	149
User 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
PHF 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
PHF Volume:	68	588	113	94	357	119	128	378	91	166	1057	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	68	588	113	94	357	119	128	378	91	166	1057	149
PCE 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
MLF 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
FinalVolume:	68	588	113	94	357	119	128	378	91	166	1057	149
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.15	0.06	0.05	0.09	0.07	0.07	0.07	0.05	0.09	0.19	0.09
Crit Moves:		****		****			****				****	
Green Time:	17.7	32.5	60.2	11.3	26.1	41.4	15.3	26.6	44.2	27.7	38.9	50.2
Volume/Cap:	0.24	0.52	0.12	0.52	0.40	0.18	0.52	0.27	0.13	0.38	0.52	0.19
Delay/Veh:	40.8	32.8	12.1	49.6	35.6	23.1	46.0	34.0	20.8	34.6	28.5	17.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.8	32.8	12.1	49.6	35.6	23.1	46.0	34.0	20.8	34.6	28.5	17.9
LOS by Move:	D	C-	B	D	D+	C	D	C-	C+	C-	C	B
HCM2kAvgQ:	2	8	2	4	5	3	4	3	2	5	10	3

Note: Queue reported is the number of cars per lane.

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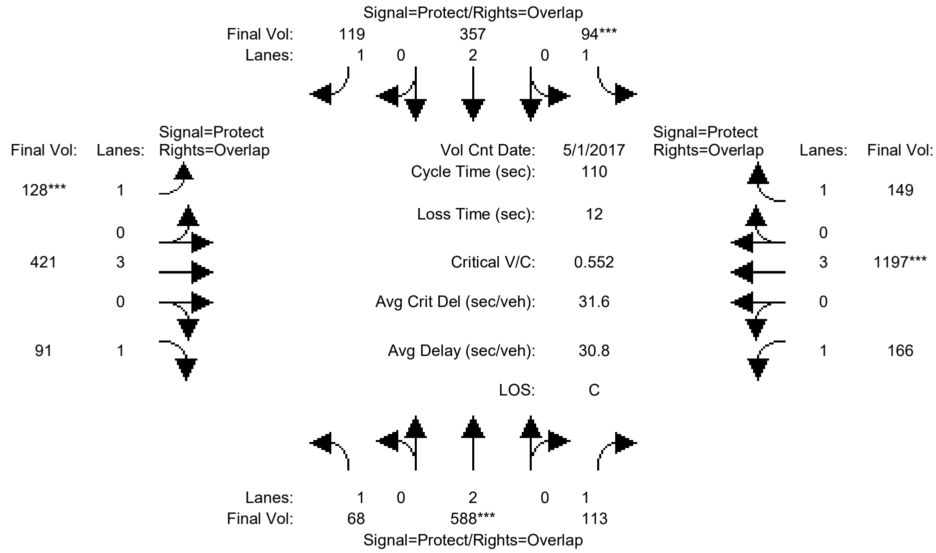
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #68: Fair Oaks Avenue / El Camino Real (CMP)



Street Name:	Fair Oaks Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	68	588	113	94	357	119	128	378	91	166	1057	149
Growth 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
Initial Bse:	68	588	113	94	357	119	128	378	91	166	1057	149
Added Vol:	0	0	0	0	0	0	0	43	0	0	140	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	68	588	113	94	357	119	128	421	91	166	1197	149
User 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
PHF 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
PHF Volume:	68	588	113	94	357	119	128	421	91	166	1197	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	68	588	113	94	357	119	128	421	91	166	1197	149
PCE 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
MLF 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
FinalVolume:	68	588	113	94	357	119	128	421	91	166	1197	149
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.15	0.06	0.05	0.09	0.07	0.07	0.07	0.05	0.09	0.21	0.09
Crit Moves:		****		****			****				****	
Green Time:	16.8	30.8	59.7	10.7	24.8	39.4	14.6	27.6	44.4	28.8	41.9	52.6
Volume/Cap:	0.25	0.55	0.12	0.55	0.42	0.19	0.55	0.29	0.13	0.36	0.55	0.18
Delay/Veh:	41.6	34.3	12.4	51.2	36.8	24.5	47.5	33.4	20.7	33.6	27.0	16.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.6	34.3	12.4	51.2	36.8	24.5	47.5	33.4	20.7	33.6	27.0	16.5
LOS by Move:	D	C-	B	D-	D+	C	D	C-	C+	C-	C	B
HCM2kAvgQ:	2	8	2	4	5	3	4	4	2	5	11	3

Note: Queue reported is the number of cars per lane.

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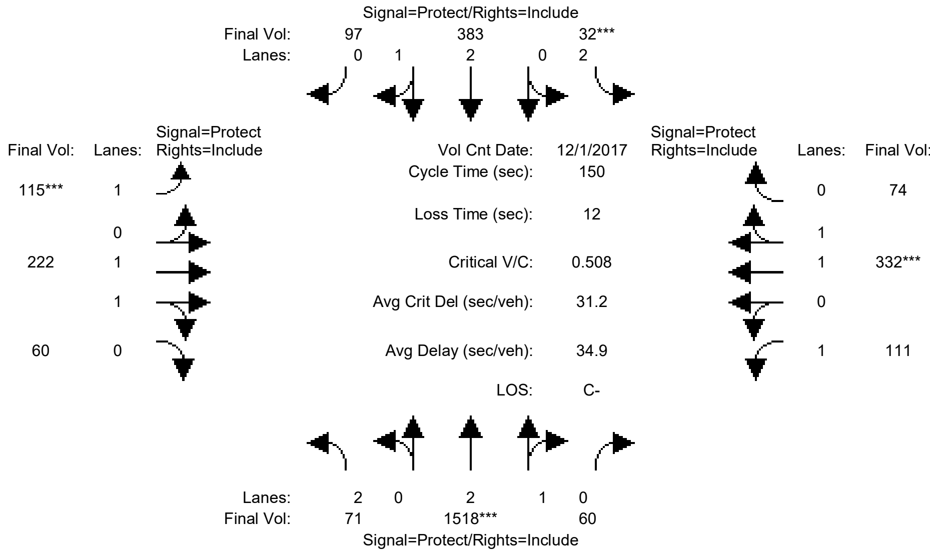
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #69: Wolfe Road / Old San Francisco Road



Street Name:	Wolfe Road						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	71	1518	60	32	383	97	115	222	60	111	332	74
Growth 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
Initial Bse:	71	1518	60	32	383	97	115	222	60	111	332	74
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	71	1518	60	32	383	97	115	222	60	111	332	74
User 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
PHF 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
PHF Volume:	71	1518	60	32	383	97	115	222	60	111	332	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	1518	60	32	383	97	115	222	60	111	332	74
PCE 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
MLF 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
FinalVolume:	71	1518	60	32	383	97	115	222	60	111	332	74
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	2.00	2.88	0.12	2.00	2.37	0.63	1.00	1.56	0.44	1.00	1.63	0.37
Final Sat.:	3150	5387	213	3150	4467	1131	1750	2912	787	1750	3025	674
Capacity Analysis Module:												
Vol/Sat:	0.02	0.28	0.28	0.01	0.09	0.09	0.07	0.08	0.08	0.06	0.11	0.11
Crit Moves:		****		****			****				****	
Green Time:	30.9	80.7	80.7	7.0	56.8	56.8	18.8	27.4	27.4	22.8	31.4	31.4
Volume/Cap:	0.11	0.52	0.52	0.22	0.23	0.23	0.52	0.42	0.42	0.42	0.52	0.52
Delay/Veh:	48.4	22.4	22.4	69.6	31.7	31.7	63.7	54.6	54.6	58.6	53.3	53.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.4	22.4	22.4	69.6	31.7	31.7	63.7	54.6	54.6	58.6	53.3	53.3
LOS by Move:	D	C+	C+	E	C	C	E	D-	D-	E+	D-	D-
HCM2kAvgQ:	2	15	15	1	5	5	5	6	6	5	9	9

Note: Queue reported is the number of cars per lane.

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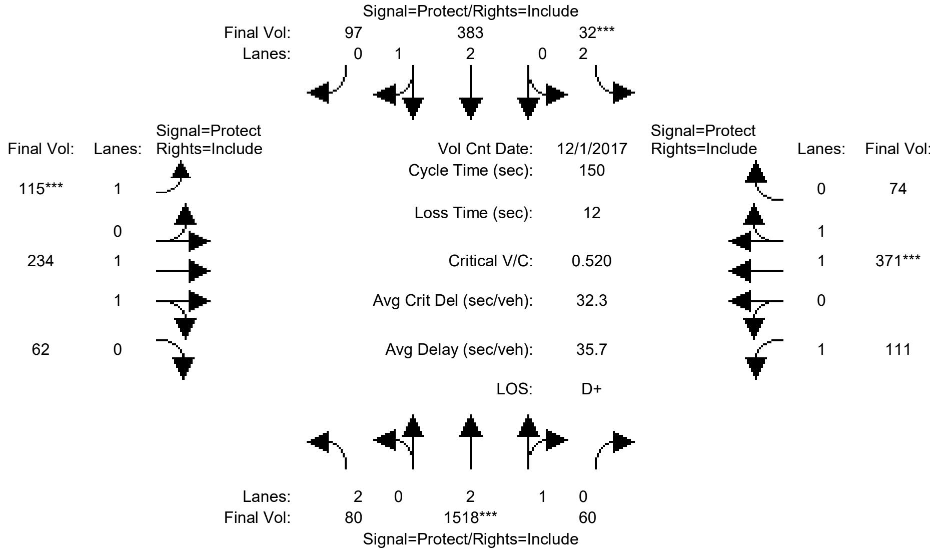
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #69: Wolfe Road / Old San Francisco Road



Street Name:	Wolfe Road						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	71	1518	60	32	383	97	115	222	60	111	332	74
Growth 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
Initial Bse:	71	1518	60	32	383	97	115	222	60	111	332	74
Added Vol:	9	0	0	0	0	0	0	12	2	0	39	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	1518	60	32	383	97	115	234	62	111	371	74
User 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
PHF 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
PHF Volume:	80	1518	60	32	383	97	115	234	62	111	371	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	1518	60	32	383	97	115	234	62	111	371	74
PCE 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
MLF 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
FinalVolume:	80	1518	60	32	383	97	115	234	62	111	371	74
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	2.00	2.88	0.12	2.00	2.37	0.63	1.00	1.57	0.43	1.00	1.66	0.34
Final Sat.:	3150	5387	213	3150	4467	1131	1750	2924	775	1750	3084	615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.28	0.28	0.01	0.09	0.09	0.07	0.08	0.08	0.06	0.12	0.12
Crit Moves:		****		****			****				****	
Green Time:	30.3	78.9	78.9	7.0	55.6	55.6	18.4	29.1	29.1	23.0	33.7	33.7
Volume/Cap:	0.13	0.54	0.54	0.22	0.23	0.23	0.54	0.41	0.41	0.41	0.54	0.54
Delay/Veh:	49.1	23.6	23.6	69.6	32.5	32.5	64.4	53.4	53.4	58.4	52.0	52.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.1	23.6	23.6	69.6	32.5	32.5	64.4	53.4	53.4	58.4	52.0	52.0
LOS by Move:	D	C	C	E	C-	C-	E	D-	D-	E+	D-	D-
HCM2kAvgQ:	2	16	16	1	5	5	5	6	6	5	9	9

Note: Queue reported is the number of cars per lane.

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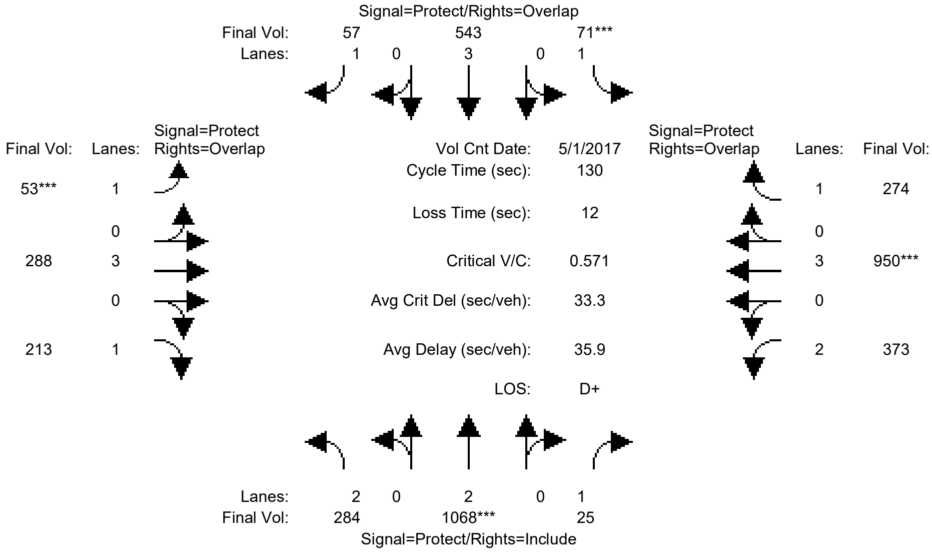
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #70: Wolfe Road / El Camino Real (CMP)



Street Name:	Wolfe Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	284	1068	25	71	543	57	53	288	213	373	950	274
Growth 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
Initial Bse:	284	1068	25	71	543	57	53	288	213	373	950	274
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	284	1068	25	71	543	57	53	288	213	373	950	274
User 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
PHF 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
PHF Volume:	284	1068	25	71	543	57	53	288	213	373	950	274
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	284	1068	25	71	543	57	53	288	213	373	950	274
PCE 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
MLF 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
FinalVolume:	284	1068	25	71	543	57	53	288	213	373	950	274
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	3800	1750	1750	5700	1750	1750	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.09	0.28	0.01	0.04	0.10	0.03	0.03	0.05	0.12	0.12	0.17	0.16
Crit Moves:		****		****			****				****	
Green Time:	35.6	63.9	63.9	9.2	37.6	44.6	7.0	17.7	53.2	27.2	37.9	47.1
Volume/Cap:	0.33	0.57	0.03	0.57	0.33	0.10	0.56	0.37	0.30	0.57	0.57	0.43
Delay/Veh:	37.9	23.8	17.1	64.8	36.4	29.1	67.6	51.4	26.0	47.2	39.6	31.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.9	23.8	17.1	64.8	36.4	29.1	67.6	51.4	26.0	47.2	39.6	31.8
LOS by Move:	D+	C	B	E	D+	C	E	D-	C	D	D	C
HCM2kAvgQ:	5	15	1	3	5	2	3	4	6	9	11	9

Note: Queue reported is the number of cars per lane.

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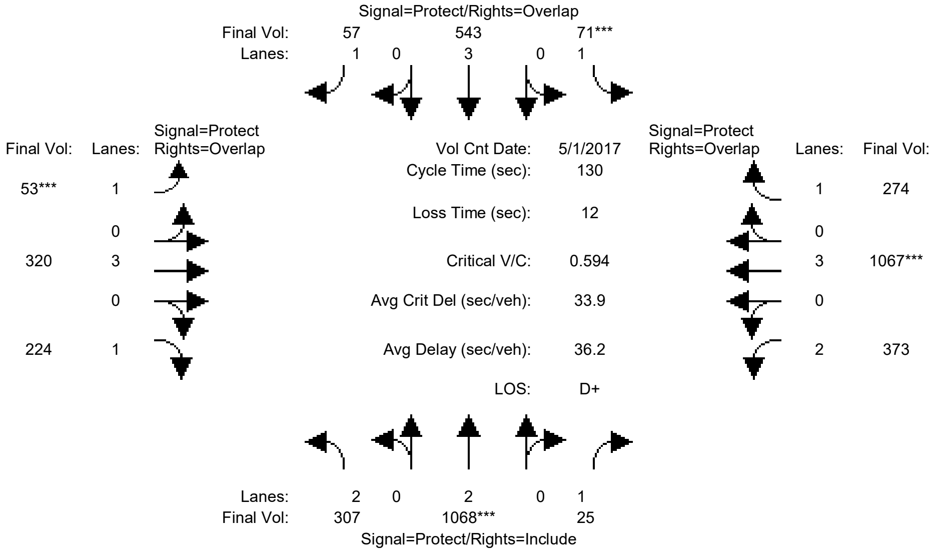
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #70: Wolfe Road / El Camino Real (CMP)



Street Name:	Wolfe Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	284	1068	25	71	543	57	53	288	213	373	950	274
Growth 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
Initial Bse:	284	1068	25	71	543	57	53	288	213	373	950	274
Added Vol:	23	0	0	0	0	0	0	32	11	0	117	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	307	1068	25	71	543	57	53	320	224	373	1067	274
User 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
PHF 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
PHF Volume:	307	1068	25	71	543	57	53	320	224	373	1067	274
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	307	1068	25	71	543	57	53	320	224	373	1067	274
PCE 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
MLF 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
FinalVolume:	307	1068	25	71	543	57	53	320	224	373	1067	274
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	3800	1750	1750	5700	1750	1750	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.28	0.01	0.04	0.10	0.03	0.03	0.06	0.13	0.12	0.19	0.16
Crit Moves:		****		****			****				****	
Green Time:	35.5	61.3	61.3	8.9	34.7	41.7	7.0	18.8	54.3	29.0	40.8	49.7
Volume/Cap:	0.36	0.60	0.03	0.60	0.36	0.10	0.56	0.39	0.31	0.53	0.60	0.41
Delay/Veh:	38.3	25.8	18.4	66.8	38.8	31.1	67.6	50.7	25.5	45.3	38.2	29.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.3	25.8	18.4	66.8	38.8	31.1	67.6	50.7	25.5	45.3	38.2	29.8
LOS by Move:	D+	C	B-	E	D+	C	E	D	C	D	D+	C
HCM2kAvgQ:	6	15	1	3	6	2	3	4	6	8	12	9

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
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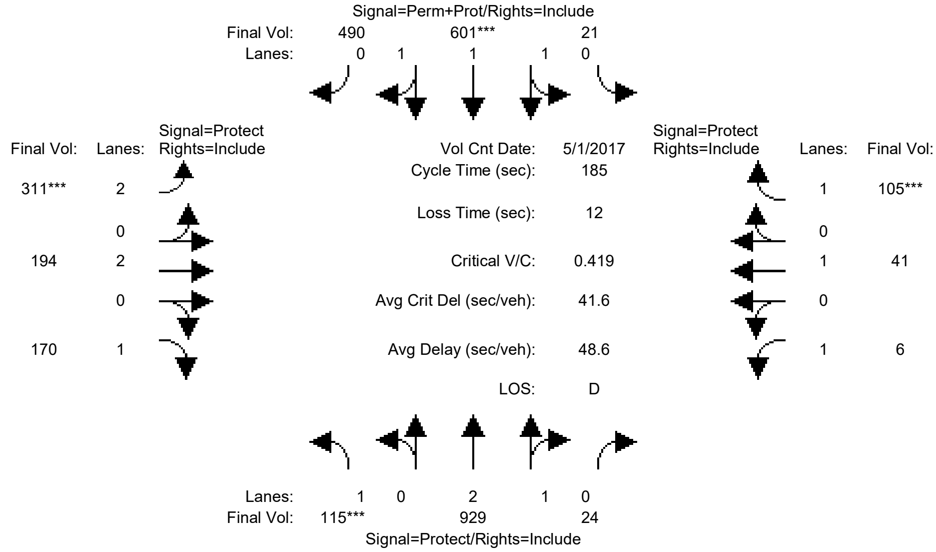
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #71: Wolfe Road / Fremont Avenue



Street Name:	Wolfe Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	115	929	24	21	601	490	311	194	170	6	41	105
Growth 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
Initial Bse:	115	929	24	21	601	490	311	194	170	6	41	105
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	115	929	24	21	601	490	311	194	170	6	41	105
User 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
PHF 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
PHF Volume:	115	929	24	21	601	490	311	194	170	6	41	105
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	115	929	24	21	601	490	311	194	170	6	41	105
PCE 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
MLF 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
FinalVolume:	115	929	24	21	601	490	311	194	170	6	41	105
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.95	0.98	0.95	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.92	0.08	0.07	1.93	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	5459	141	126	3593	1800	3150	3800	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.17	0.00	0.17	0.27	0.10	0.05	0.10	0.00	0.02	0.06
Crit Moves:	****				****		****					****
Green Time:	22.9	59.3	59.3	61.3	94.8	94.8	34.4	39.8	39.8	15.5	20.9	20.9
Volume/Cap:	0.53	0.53	0.53	0.50	0.33	0.53	0.53	0.24	0.45	0.04	0.19	0.53
Delay/Veh:	78.6	51.7	51.7	49.8	26.5	30.5	68.9	60.2	63.9	78.0	74.8	80.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	78.6	51.7	51.7	49.8	26.5	30.5	68.9	60.2	63.9	78.0	74.8	80.1
LOS by Move:	E-	D-	D-	D	C	C	E	E	E	E-	E	F
HCM2kAvgQ:	7	14	14	14	10	19	9	4	9	0	2	7

Note: Queue reported is the number of cars per lane.

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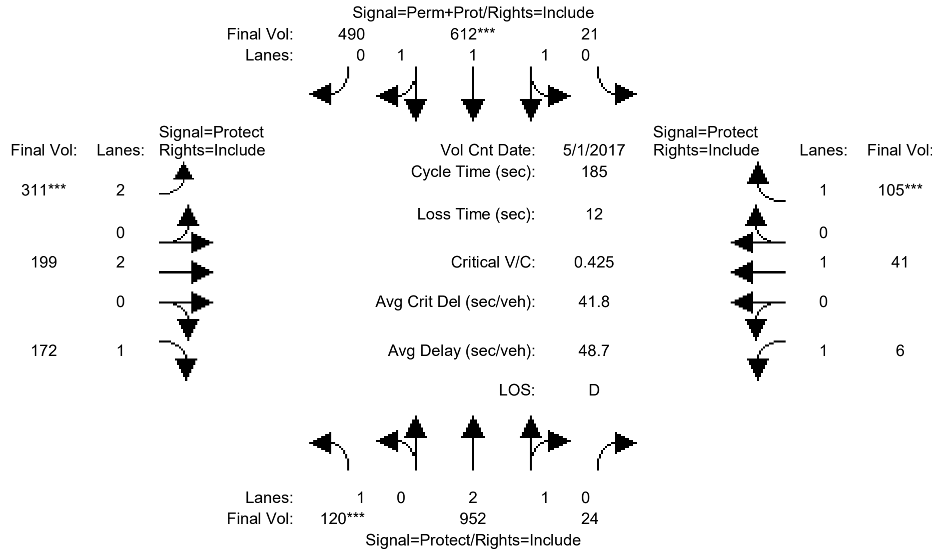
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #71: Wolfe Road / Fremont Avenue



Street Name:	Wolfe Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	115	929	24	21	601	490	311	194	170	6	41	105
Growth 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
Initial Bse:	115	929	24	21	601	490	311	194	170	6	41	105
Added Vol:	5	23	0	0	11	0	0	5	2	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	120	952	24	21	612	490	311	199	172	6	41	105
User 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
PHF 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
PHF Volume:	120	952	24	21	612	490	311	199	172	6	41	105
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	952	24	21	612	490	311	199	172	6	41	105
PCE 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
MLF 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
FinalVolume:	120	952	24	21	612	490	311	199	172	6	41	105
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.95	0.98	0.95	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.92	0.08	0.07	1.93	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	5462	138	123	3595	1800	3150	3800	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.17	0.00	0.17	0.27	0.10	0.05	0.10	0.00	0.02	0.06
Crit Moves:	****				****		****					****
Green Time:	23.8	59.9	59.9	61.5	94.6	94.6	33.9	39.4	39.4	15.2	20.6	20.6
Volume/Cap:	0.53	0.54	0.54	0.51	0.33	0.53	0.54	0.25	0.46	0.04	0.19	0.54
Delay/Veh:	77.8	51.5	51.5	49.9	26.7	30.6	69.4	60.6	64.5	78.3	75.1	80.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	77.8	51.5	51.5	49.9	26.7	30.6	69.4	60.6	64.5	78.3	75.1	80.7
LOS by Move:	E-	D-	D-	D	C	C	E	E	E	E-	E-	F
HCM2kAvgQ:	7	15	15	14	10	19	9	4	9	0	2	7

Note: Queue reported is the number of cars per lane.

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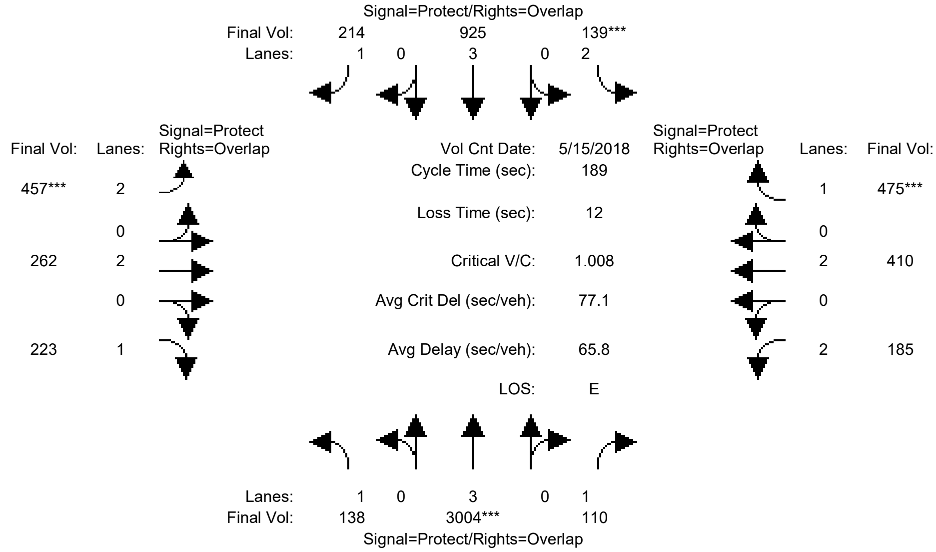
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #72: Lawrence Expressway / Monroe Street (CMP)



Street Name:	Lawrence Expressway						Monroe Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	17	96	96	13	91	91	23	42	42	15	33	33
Y+R:	6.0	6.2	6.2	6.1	6.2	6.2	5.7	5.6	5.6	5.6	5.7	5.7
Volume Module: >> Count Date: 15 May 2018 <<												
Base Vol:	138	3803	110	139	1156	214	457	262	223	185	410	475
Growth 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
Initial Bse:	138	3803	110	139	1156	214	457	262	223	185	410	475
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	138	3803	110	139	1156	214	457	262	223	185	410	475
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	138	3004	110	139	925	214	457	262	223	185	410	475
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	3004	110	139	925	214	457	262	223	185	410	475
PCE 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
MLF 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
FinalVolume:	138	3004	110	139	925	214	457	262	223	185	410	475
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1750	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.53	0.06	0.04	0.16	0.12	0.15	0.07	0.13	0.06	0.11	0.27
Crit Moves:		****		****			****					****
Green Time:	17.6	98.8	116.0	13.0	94.2	121.4	27.2	48.0	65.6	17.2	38.0	51.0
Volume/Cap:	0.85	1.01	0.10	0.64	0.33	0.19	1.01	0.27	0.37	0.65	0.54	1.01
Delay/Veh:	116.0	63.6	15.1	92.1	28.4	13.9	125.2	56.6	46.5	88.1	68.4	111.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	116.0	63.6	15.1	92.1	28.4	13.9	125.2	56.6	46.5	88.1	68.4	111.9
LOS by Move:	F	E	B	F	C	B	F	E+	D	F	E	F
HCM2kAvgQ:	9	64	3	6	10	5	20	6	10	7	11	35

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #72: Lawrence Expressway / Monroe Street (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 224 925 139***
Lanes: 1 0 3 0 2

Final Vol:	Lanes:	Signal=Protect Rights=Overlap			Signal=Protect Rights=Overlap	Lanes:	Final Vol:
			Vol Cnt Date:	5/15/2018			
			Cycle Time (sec):	189			
460***	2					1	475***
			Loss Time (sec):	12			
	0					0	
266	2		Critical V/C:	1.009		2	420
	0		Avg Crit Del (sec/veh):	77.4		0	
226	1		Avg Delay (sec/veh):	66.6		2	185
			LOS:	E			

Lanes: 1 0 3 0 1
Final Vol: 152 3004*** 110
Signal=Protect/Rights=Overlap

Street Name:	Lawrence Expressway						Monroe Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	17	96	96	13	91	91	23	42	42	15	33	33
Y+R:	6.0	6.2	6.2	6.1	6.2	6.2	5.7	5.6	5.6	5.6	5.7	5.7
Volume Module: >> Count Date: 15 May 2018 <<												
Base Vol:	138	3803	110	139	1156	214	457	262	223	185	410	475
Growth 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
Initial Bse:	138	3803	110	139	1156	214	457	262	223	185	410	475
Added Vol:	14	0	0	0	0	10	3	4	3	0	10	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	152	3803	110	139	1156	224	460	266	226	185	420	475
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	152	3004	110	139	925	224	460	266	226	185	420	475
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	3004	110	139	925	224	460	266	226	185	420	475
PCE 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
MLF 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
FinalVolume:	152	3004	110	139	925	224	460	266	226	185	420	475
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1750	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.09	0.53	0.06	0.04	0.16	0.13	0.15	0.07	0.13	0.06	0.11	0.27
Crit Moves:		****		****			****					****
Green Time:	17.6	98.7	115.9	13.0	94.1	121.5	27.3	48.1	65.7	17.2	37.9	50.9
Volume/Cap:	0.93	1.01	0.10	0.64	0.33	0.20	1.01	0.27	0.37	0.65	0.55	1.01
Delay/Veh:	136.3	63.9	15.1	92.1	28.5	13.9	125.3	56.6	46.6	88.0	68.7	112.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	136.3	63.9	15.1	92.1	28.5	13.9	125.3	56.6	46.6	88.0	68.7	112.2
LOS by Move:	F	E	B	F	C	B	F	E+	D	F	E	F
HCM2kAvgQ:	10	64	3	6	10	5	21	6	10	7	11	35

Note: Queue reported is the number of cars per lane.

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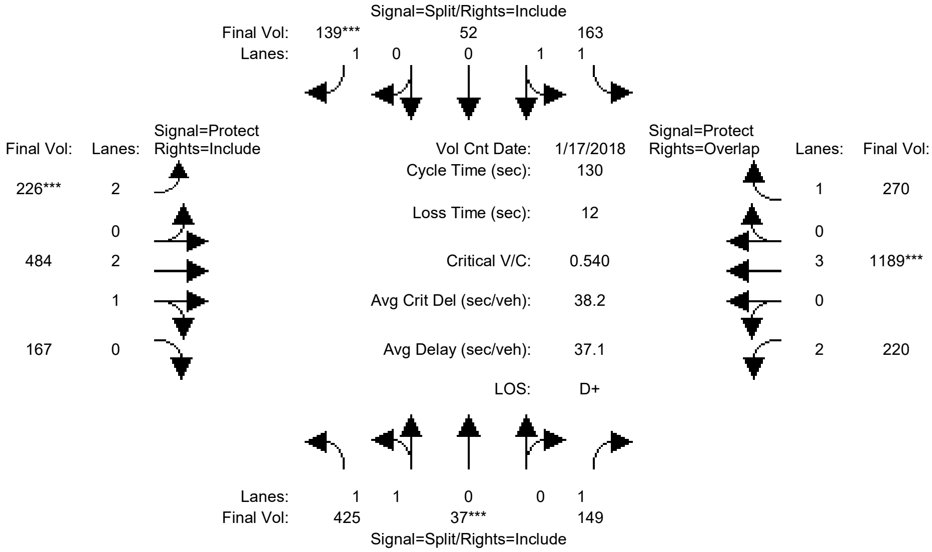
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #73: Lawrence Expressway / El Camino Real (CMP)



Street Name:	Lawrence Expressway						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 17 Jan 2018 <<												
Base Vol:	425	37	149	163	52	139	226	484	167	220	1189	270
Growth 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
Initial Bse:	425	37	149	163	52	139	226	484	167	220	1189	270
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	425	37	149	163	52	139	226	484	167	220	1189	270
User 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
PHF 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
PHF Volume:	425	37	149	163	52	139	226	484	167	220	1189	270
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	425	37	149	163	52	139	226	484	167	220	1189	270
PCE 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
MLF 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
FinalVolume:	425	37	149	163	52	139	226	484	167	220	1189	270
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.95	0.92	0.93	0.95	0.92	0.83	0.99	0.95	0.83	1.00	0.92
Lanes:	1.84	0.16	1.00	1.52	0.48	1.00	2.00	2.20	0.80	2.00	3.00	1.00
Final Sat.:	3266	284	1750	2691	859	1750	3150	4162	1436	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.09	0.06	0.06	0.08	0.07	0.12	0.12	0.07	0.21	0.15
Crit Moves:		****				****	****				****	
Green Time:	31.3	31.3	31.3	19.1	19.1	19.1	17.3	42.2	42.2	25.3	50.2	69.4
Volume/Cap:	0.54	0.54	0.35	0.41	0.41	0.54	0.54	0.36	0.36	0.36	0.54	0.29
Delay/Veh:	43.7	43.7	41.4	50.9	50.9	53.7	54.1	33.7	33.7	45.7	31.2	16.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.7	43.7	41.4	50.9	50.9	53.7	54.1	33.7	33.7	45.7	31.2	16.9
LOS by Move:	D	D	D	D	D	D-	D-	C-	C-	D	C	B
HCM2kAvgQ:	8	8	5	4	4	5	6	7	7	4	12	6

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
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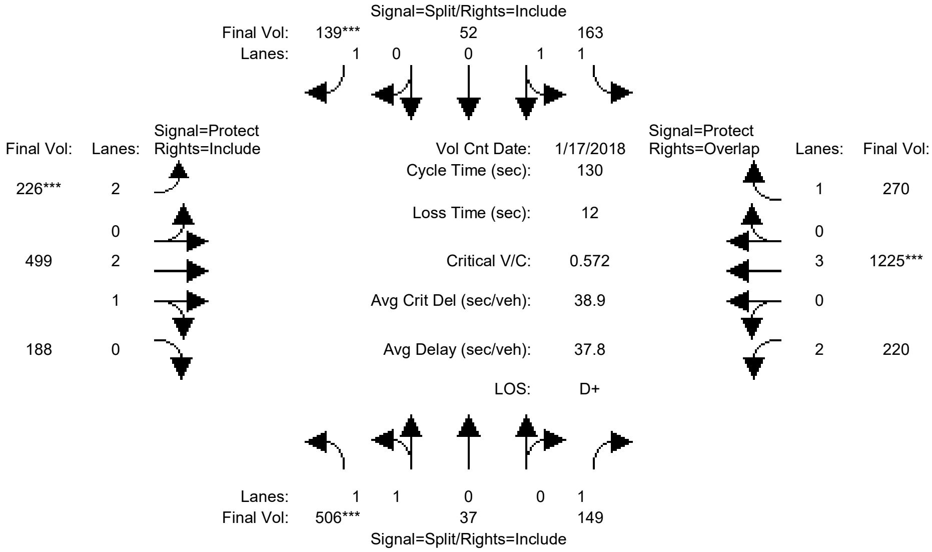
Existing PP AM

Intersection #73: Lawrence Expressway / El Camino Real (CMP)



Street Name:	Lawrence Expressway						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 17 Jan 2018 <<												
Base Vol:	425	37	149	163	52	139	226	484	167	220	1189	270
Growth 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
Initial Bse:	425	37	149	163	52	139	226	484	167	220	1189	270
Added Vol:	81	0	0	0	0	0	0	15	21	0	36	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	506	37	149	163	52	139	226	499	188	220	1225	270
User 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
PHF 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
PHF Volume:	506	37	149	163	52	139	226	499	188	220	1225	270
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	506	37	149	163	52	139	226	499	188	220	1225	270
PCE 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
MLF 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
FinalVolume:	506	37	149	163	52	139	226	499	188	220	1225	270
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.95	0.92	0.93	0.95	0.92	0.83	1.00	0.95	0.83	1.00	0.92
Lanes:	1.87	0.13	1.00	1.52	0.48	1.00	2.00	2.15	0.85	2.00	3.00	1.00
Final Sat.:	3308	242	1750	2691	859	1750	3150	4066	1532	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.09	0.06	0.06	0.08	0.07	0.12	0.12	0.07	0.21	0.15
Crit Moves:	****					****	****				****	
Green Time:	34.8	34.8	34.8	18.1	18.1	18.1	16.3	41.5	41.5	23.6	48.9	66.9
Volume/Cap:	0.57	0.57	0.32	0.44	0.44	0.57	0.57	0.38	0.38	0.38	0.57	0.30
Delay/Veh:	42.0	42.0	38.5	51.9	51.9	55.6	55.6	34.4	34.4	47.2	32.6	18.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.0	42.0	38.5	51.9	51.9	55.6	55.6	34.4	34.4	47.2	32.6	18.3
LOS by Move:	D	D	D+	D-	D-	E+	E+	C-	C-	D	C-	B-
HCM2kAvgQ:	9	9	5	4	4	6	6	7	7	4	13	6

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
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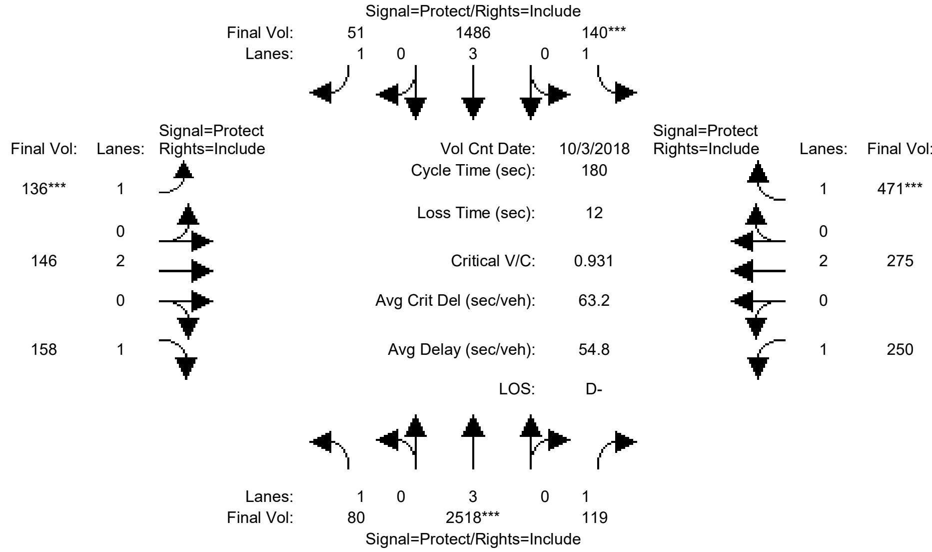
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #74: Lawrence Expressway / Benton Street



Street Name:	Lawrence Expressway						Benton Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	80	3187	119	140	1858	51	136	146	158	250	275	471
Growth 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
Initial Bse:	80	3187	119	140	1858	51	136	146	158	250	275	471
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	3187	119	140	1858	51	136	146	158	250	275	471
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	80	2518	119	140	1486	51	136	146	158	250	275	471
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	2518	119	140	1486	51	136	146	158	250	275	471
PCE 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
MLF 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
FinalVolume:	80	2518	119	140	1486	51	136	146	158	250	275	471
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.44	0.07	0.08	0.26	0.03	0.08	0.04	0.09	0.14	0.07	0.27
Crit Moves:		****		****			****					****
Green Time:	15.1	85.4	85.4	15.5	85.9	85.9	15.0	26.0	26.0	41.1	52.1	52.1
Volume/Cap:	0.55	0.93	0.14	0.93	0.55	0.06	0.93	0.27	0.63	0.63	0.25	0.93
Delay/Veh:	83.5	51.0	26.7	134.7	33.5	25.4	135.8	68.8	77.3	65.6	49.1	86.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	83.5	51.0	26.7	134.7	33.5	25.4	135.8	68.8	77.3	65.6	49.1	86.2
LOS by Move:	F	D-	C	F	C-	C	F	E	E-	E	D	F
HCM2kAvgQ:	4	44	4	9	19	2	11	4	10	14	6	31

Note: Queue reported is the number of cars per lane.

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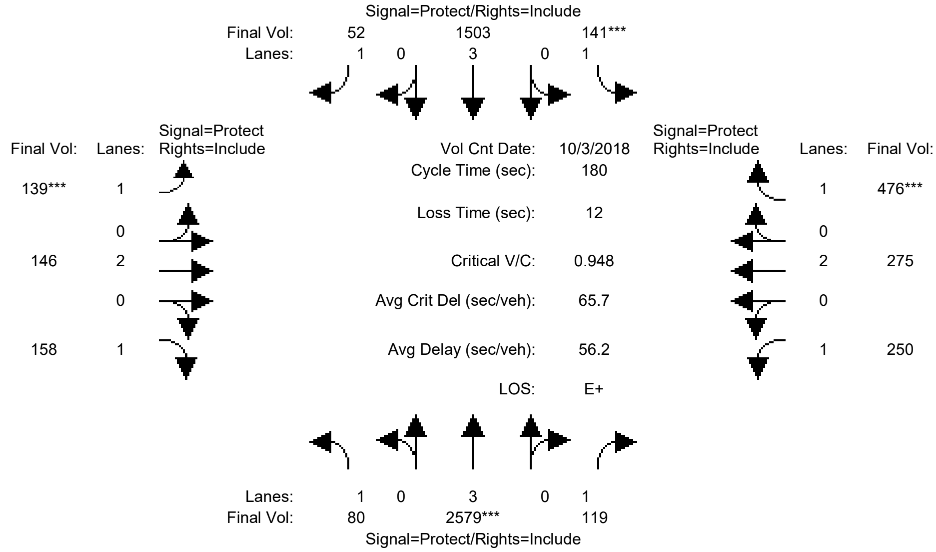
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #74: Lawrence Expressway / Benton Street



Street Name:	Lawrence Expressway						Benton Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	80	3187	119	140	1858	51	136	146	158	250	275	471
Growth 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
Initial Bse:	80	3187	119	140	1858	51	136	146	158	250	275	471
Added Vol:	0	78	0	1	21	1	3	0	0	0	0	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	3265	119	141	1879	52	139	146	158	250	275	476
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	80	2579	119	141	1503	52	139	146	158	250	275	476
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	2579	119	141	1503	52	139	146	158	250	275	476
PCE 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
MLF 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
FinalVolume:	80	2579	119	141	1503	52	139	146	158	250	275	476
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.45	0.07	0.08	0.26	0.03	0.08	0.04	0.09	0.14	0.07	0.27
Crit Moves:		****		****			****					****
Green Time:	15.0	85.9	85.9	15.3	86.3	86.3	15.1	25.8	25.8	40.9	51.7	51.7
Volume/Cap:	0.55	0.95	0.14	0.95	0.55	0.06	0.95	0.27	0.63	0.63	0.25	0.95
Delay/Veh:	83.7	53.0	26.4	139.9	33.4	25.2	140.5	68.9	77.6	65.9	49.4	90.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	83.7	53.0	26.4	139.9	33.4	25.2	140.5	68.9	77.6	65.9	49.4	90.3
LOS by Move:	F	D-	C	F	C-	C	F	E	E-	E	D	F
HCM2kAvgQ:	4	46	4	10	19	2	11	4	10	14	6	32

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #75: Lawrence Expressway / Lochinvar Avenue

Signal=Protect/Rights=Include
Final Vol: 26 1738 70***
Lanes: 1 0 3 0 1

Final Vol: Lanes: Signal=Protect Rights=Include
102 0
1
36*** 0
0
60 1

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 180
Loss Time (sec): 12
Critical V/C: 0.792
Avg Crit Del (sec/veh): 40.7
Avg Delay (sec/veh): 35.6
LOS: D+

Signal=Protect Rights=Include Lanes: Final Vol:
0 169
0
1! 35
0
0 87***

Lanes: 1 0 3 0 1
Final Vol: 29 2602*** 106
Signal=Protect/Rights=Include

Street Name:	Lawrence Expressway						Lochinvar Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	29	3294	106	70	2172	26	102	36	60	87	35	169
Growth 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
Initial Bse:	29	3294	106	70	2172	26	102	36	60	87	35	169
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	3294	106	70	2172	26	102	36	60	87	35	169
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	29	2602	106	70	1738	26	102	36	60	87	35	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	2602	106	70	1738	26	102	36	60	87	35	169
PCE 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
MLF 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
FinalVolume:	29	2602	106	70	1738	26	102	36	60	87	35	169
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.74	0.26	1.00	0.30	0.12	0.58
Final Sat.:	1750	5700	1750	1750	5700	1750	1330	470	1750	523	210	1016
Capacity Analysis Module:												
Vol/Sat:	0.02	0.46	0.06	0.04	0.30	0.01	0.08	0.08	0.03	0.17	0.17	0.17
Crit Moves:		****		****				****		****		
Green Time:	12.8	104	103.7	9.1	100	100.0	17.4	17.4	17.4	37.8	37.8	37.8
Volume/Cap:	0.23	0.79	0.11	0.79	0.55	0.03	0.79	0.79	0.35	0.79	0.79	0.79
Delay/Veh:	80.0	31.1	17.3	121.7	25.8	18.0	101.0	101	77.3	78.6	78.6	78.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	80.0	31.1	17.3	121.7	25.8	18.0	101.0	101	77.3	78.6	78.6	78.6
LOS by Move:	E-	C	B	F	C	B-	F	F	E-	E-	E-	E-
HCM2kAvgQ:	2	35	3	4	20	1	10	10	4	18	18	18

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #75: Lawrence Expressway / Lochinvar Avenue

Signal=Protect/Rights=Include
Final Vol: 27 1752 71***
Lanes: 1 0 3 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	10/3/2018			
105	0		Cycle Time (sec):	180		0	174
	1		Loss Time (sec):	12		0	
36***	0		Critical V/C:	0.808		1!	35
	0		Avg Crit Del (sec/veh):	41.6		0	
60	1		Avg Delay (sec/veh):	36.2		0	87***
			LOS:	D+			

Lanes: 1 0 3 0 1
Final Vol: 29 2658*** 106
Signal=Protect/Rights=Include

Street Name:	Lawrence Expressway						Lochinvar Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	29	3294	106	70	2172	26	102	36	60	87	35	169
Growth 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
Initial Bse:	29	3294	106	70	2172	26	102	36	60	87	35	169
Added Vol:	0	70	0	1	18	1	3	0	0	0	0	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	3364	106	71	2190	27	105	36	60	87	35	174
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	29	2658	106	71	1752	27	105	36	60	87	35	174
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	2658	106	71	1752	27	105	36	60	87	35	174
PCE 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
MLF 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
FinalVolume:	29	2658	106	71	1752	27	105	36	60	87	35	174
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.74	0.26	1.00	0.29	0.12	0.59
Final Sat.:	1750	5700	1750	1750	5700	1750	1340	460	1750	514	207	1029
Capacity Analysis Module:												
Vol/Sat:	0.02	0.47	0.06	0.04	0.31	0.02	0.08	0.08	0.03	0.17	0.17	0.17
Crit Moves:		****		****				****		****		
Green Time:	12.7	104	103.8	9.0	100	100.2	17.4	17.4	17.4	37.7	37.7	37.7
Volume/Cap:	0.24	0.81	0.10	0.81	0.55	0.03	0.81	0.81	0.35	0.81	0.81	0.81
Delay/Veh:	80.1	31.8	17.2	125.3	25.7	18.0	103.3	103	77.3	80.3	80.3	80.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	80.1	31.8	17.2	125.3	25.7	18.0	103.3	103	77.3	80.3	80.3	80.3
LOS by Move:	F	C	B	F	C	B	F	F	E-	F	F	F
HCM2kAvgQ:	2	37	3	4	20	1	10	10	4	18	18	18

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #76: Lawrence Expressway / Homestead Road (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 637 1222 153***
Lanes: 1 0 3 0 2

Final Vol: Lanes: Signal=Protect Rights=Overlap
207*** 2
0
309 2
0
94 1

Vol Cnt Date: 1/11/2018
Cycle Time (sec): 181
Loss Time (sec): 12
Critical V/C: 0.795
Avg Crit Del (sec/veh): 70.6
Avg Delay (sec/veh): 59.3
LOS: E+

Signal=Protect Rights=Overlap Lanes: Final Vol:
1 241
0
2 866***
0
2 340

Lanes: 2 0 3 0 1
Final Vol: 217 2285*** 175
Signal=Protect/Rights=Overlap

Street Name:	Lawrence Expressway						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	16	86	86	23	93	93	24	44	44	18	35	35
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 11 Jan 2018 <<												
Base Vol:	217	2892	175	153	1528	637	207	309	94	340	866	241
Growth 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
Initial Bse:	217	2892	175	153	1528	637	207	309	94	340	866	241
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	217	2892	175	153	1528	637	207	309	94	340	866	241
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	217	2285	175	153	1222	637	207	309	94	340	866	241
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	2285	175	153	1222	637	207	309	94	340	866	241
PCE 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
MLF 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
FinalVolume:	217	2285	175	153	1222	637	207	309	94	340	866	241
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.40	0.10	0.05	0.21	0.36	0.07	0.08	0.05	0.11	0.23	0.14
Crit Moves:		****		****			****				****	
Green Time:	15.8	85.1	104.1	22.7	92.0	115.7	23.7	42.3	58.1	19.0	37.6	60.3
Volume/Cap:	0.79	0.85	0.17	0.39	0.42	0.57	0.50	0.35	0.17	1.03	1.10	0.41
Delay/Veh:	95.9	45.8	18.5	74.1	28.3	19.4	74.9	58.7	44.7	138.8	135	47.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	95.9	45.8	18.5	74.1	28.3	19.4	74.9	58.7	44.7	138.8	135	47.6
LOS by Move:	F	D	B-	E	C	B-	E	E+	D	F	F	D
HCM2kAvgQ:	7	37	5	5	14	21	6	7	4	16	32	11

Note: Queue reported is the number of cars per lane.

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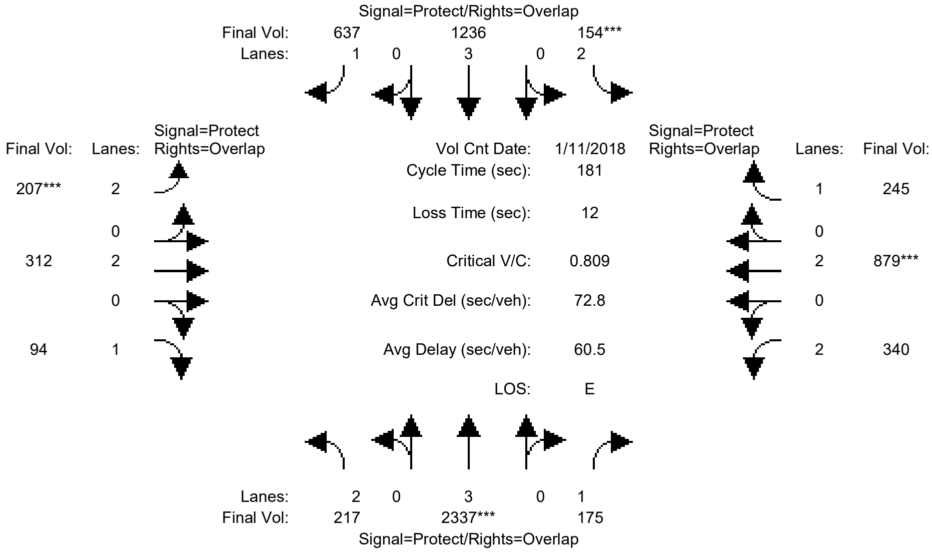
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #76: Lawrence Expressway / Homestead Road (CMP)



Street Name:	Lawrence Expressway						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	16	86	86	23	93	93	24	44	44	18	35	35
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 11 Jan 2018 <<												
Base Vol:	217	2892	175	153	1528	637	207	309	94	340	866	241
Growth 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
Initial Bse:	217	2892	175	153	1528	637	207	309	94	340	866	241
Added Vol:	0	66	0	1	17	0	0	3	0	0	13	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	217	2958	175	154	1545	637	207	312	94	340	879	245
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	217	2337	175	154	1236	637	207	312	94	340	879	245
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	2337	175	154	1236	637	207	312	94	340	879	245
PCE 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
MLF 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
FinalVolume:	217	2337	175	154	1236	637	207	312	94	340	879	245
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.41	0.10	0.05	0.22	0.36	0.07	0.08	0.05	0.11	0.23	0.14
Crit Moves:		****		****			****				****	
Green Time:	15.8	85.1	104.1	22.7	92.0	115.7	23.7	42.3	58.1	19.0	37.6	60.3
Volume/Cap:	0.79	0.87	0.17	0.39	0.43	0.57	0.50	0.35	0.17	1.03	1.11	0.42
Delay/Veh:	95.9	47.0	18.5	74.2	28.4	19.4	74.9	58.8	44.7	138.8	141	47.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	95.9	47.0	18.5	74.2	28.4	19.4	74.9	58.8	44.7	138.8	141	47.8
LOS by Move:	F	D	B-	E	C	B-	E	E+	D	F	F	D
HCM2kAvgQ:	7	39	5	5	14	21	6	7	4	16	33	11

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #77: Lawrence Expressway / Lehigh Drive

Signal=Protect/Rights=Include
Final Vol: 300 1245 7***
Lanes: 1 0 3 0 1

Signal=Protect Rights=Include (Eastbound)
Final Vol: 108, Lanes: 1
Lanes: 1
Final Vol: 0, Lanes: 0
Lanes: 0
Final Vol: 158***, Lanes: 1

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 181
Loss Time (sec): 12
Critical V/C: 0.662
Avg Crit Del (sec/veh): 21.7
Avg Delay (sec/veh): 29.2
LOS: C

Signal=Protect Rights=Include (Westbound)
Lanes: 1, Final Vol: 54
Lanes: 0
Lanes: 0, Final Vol: 12
Lanes: 0
Lanes: 1, Final Vol: 53***

Lanes: 2 0 3 0 1
Final Vol: 464 2797*** 10
Signal=Protect/Rights=Include

Street Name:	Lawrence Expressway						Lehigh Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	464	3541	10	7	1556	300	108	0	158	53	12	54
Growth 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
Initial Bse:	464	3541	10	7	1556	300	108	0	158	53	12	54
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	464	3541	10	7	1556	300	108	0	158	53	12	54
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	464	2797	10	7	1245	300	108	0	158	53	12	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	464	2797	10	7	1245	300	108	0	158	53	12	54
PCE 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
MLF 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
FinalVolume:	464	2797	10	7	1245	300	108	0	158	53	12	54
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.93	1.00	0.92	0.95	0.95	0.95
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	2.00	0.00	1.00	0.89	0.20	0.91
Final Sat.:	3150	5700	1750	1750	5700	1750	3550	0	1750	1603	363	1634
Capacity Analysis Module:												
Vol/Sat:	0.15	0.49	0.01	0.00	0.22	0.17	0.03	0.00	0.09	0.03	0.03	0.03
Crit Moves:		****		****					****	****		
Green Time:	55.0	129	129.5	7.0	81.5	81.5	13.4	0.0	23.8	8.7	19.1	19.1
Volume/Cap:	0.49	0.69	0.01	0.10	0.49	0.38	0.41	0.00	0.69	0.69	0.31	0.31
Delay/Veh:	51.8	14.9	7.4	84.6	35.1	33.3	81.1	0.0	83.4	95.7	75.3	75.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.8	14.9	7.4	84.6	35.1	33.3	81.1	0.0	83.4	95.7	75.3	75.3
LOS by Move:	D-	B	A	F	D+	C-	F	A	F	F	E-	E-
HCM2kAvgQ:	12	28	0	0	15	11	3	0	10	5	3	3

Note: Queue reported is the number of cars per lane.

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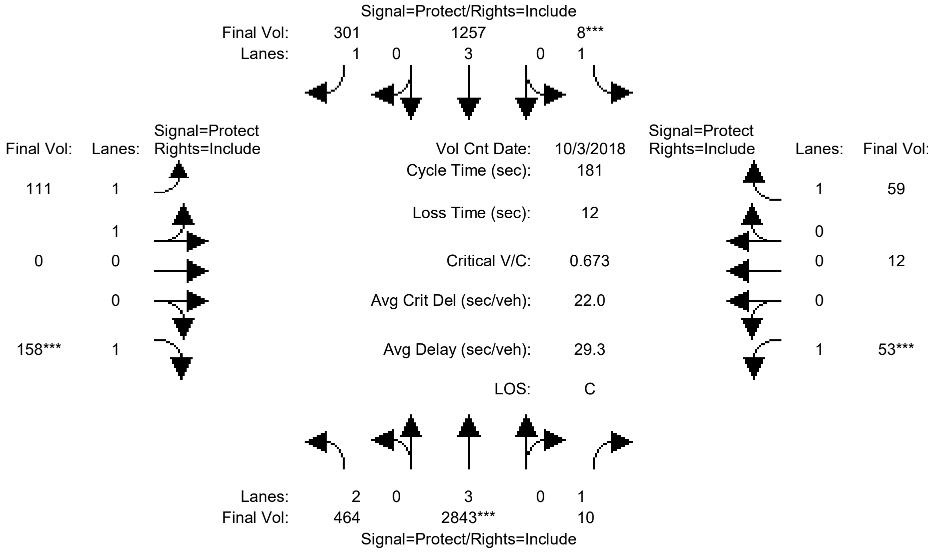
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #77: Lawrence Expressway / Lehigh Drive



Street Name:	Lawrence Expressway						Lehigh Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	464	3541	10	7	1556	300	108	0	158	53	12	54
Growth 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
Initial Bse:	464	3541	10	7	1556	300	108	0	158	53	12	54
Added Vol:	0	58	0	1	15	1	3	0	0	0	0	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	464	3599	10	8	1571	301	111	0	158	53	12	59
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	464	2843	10	8	1257	301	111	0	158	53	12	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	464	2843	10	8	1257	301	111	0	158	53	12	59
PCE 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
MLF 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
FinalVolume:	464	2843	10	8	1257	301	111	0	158	53	12	59
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.93	1.00	0.92	0.95	0.95	0.95
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	2.00	0.00	1.00	0.85	0.19	0.96
Final Sat.:	3150	5700	1750	1750	5700	1750	3550	0	1750	1539	348	1713
Capacity Analysis Module:												
Vol/Sat:	0.15	0.50	0.01	0.00	0.22	0.17	0.03	0.00	0.09	0.03	0.03	0.03
Crit Moves:		****		****					****	****		
Green Time:	54.7	130	129.6	7.0	81.9	81.9	13.3	0.0	23.5	8.9	19.1	19.1
Volume/Cap:	0.49	0.70	0.01	0.12	0.49	0.38	0.42	0.00	0.70	0.70	0.33	0.33
Delay/Veh:	52.1	15.1	7.3	84.8	35.0	33.1	81.3	0.0	84.5	96.1	75.5	75.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.1	15.1	7.3	84.8	35.0	33.1	81.3	0.0	84.5	96.1	75.5	75.5
LOS by Move:	D-	B	A	F	C-	C-	F	A	F	F	E-	E-
HCM2kAvgQ:	12	29	0	0	16	11	4	0	10	5	4	4

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #78: Lawrence Expressway / Pruneridge Avenue

Signal=Protect/Rights=Overlap
Final Vol: 89 1200 105***
Lanes: 1 0 3 0 2

Signal=Protect Rights=Overlap (Eastbound)
Final Vol: / Lanes:
128 2
0
118*** 2
0
135 1

Vol Cnt Date: 1/11/2018
Cycle Time (sec): 166
Loss Time (sec): 12
Critical V/C: 0.645
Avg Crit Del (sec/veh): 36.3
Avg Delay (sec/veh): 38.5
LOS: D+

Signal=Protect Rights=Overlap (Westbound)
Lanes: / Final Vol:
1 355
0
2 475
0
2 344***

Lanes: 2 0 3 0 1
Final Vol: 212 2420*** 157
Signal=Protect/Rights=Overlap

Street Name:	Lawrence Expressway						Pruneridge Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	16	89	89	13	87	87	14	22	22	25	34	34
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 11 Jan 2018 <<												
Base Vol:	212	3063	157	105	1500	89	128	118	135	344	475	355
Growth 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
Initial Bse:	212	3063	157	105	1500	89	128	118	135	344	475	355
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	212	3063	157	105	1500	89	128	118	135	344	475	355
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	212	2420	157	105	1200	89	128	118	135	344	475	355
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	212	2420	157	105	1200	89	128	118	135	344	475	355
PCE 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
MLF 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
FinalVolume:	212	2420	157	105	1200	89	128	118	135	344	475	355
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.42	0.09	0.03	0.21	0.05	0.04	0.03	0.08	0.11	0.13	0.20
Crit Moves:		****		****				****		****		
Green Time:	16.6	94.0	119.0	13.0	90.4	104.1	13.7	22.0	38.6	25.0	33.3	46.3
Volume/Cap:	0.67	0.75	0.13	0.43	0.39	0.08	0.49	0.23	0.33	0.73	0.62	0.73
Delay/Veh:	77.6	28.1	7.4	74.1	21.9	12.2	74.3	64.7	53.4	72.7	62.2	59.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	77.6	28.1	7.4	74.1	21.9	12.2	74.3	64.7	53.4	72.7	62.2	59.6
LOS by Move:	E-	C	A	E	C+	B	E	E	D-	E	E	E+
HCM2kAvgQ:	7	31	3	3	11	2	4	3	6	11	12	18

Note: Queue reported is the number of cars per lane.

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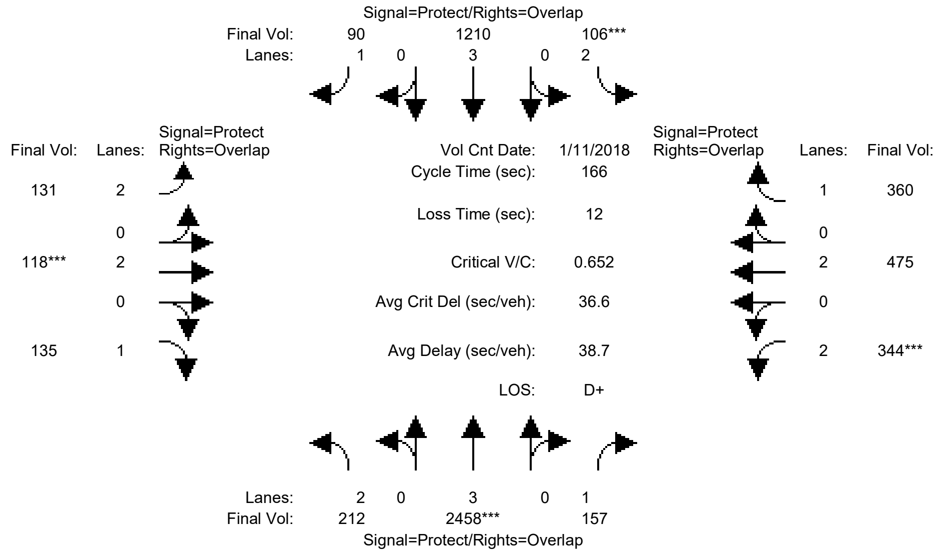
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #78: Lawrence Expressway / Pruneridge Avenue



Street Name:	Lawrence Expressway						Pruneridge Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	16	89	89	13	87	87	14	22	22	25	34	34
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 11 Jan 2018 <<												
Base Vol:	212	3063	157	105	1500	89	128	118	135	344	475	355
Growth 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
Initial Bse:	212	3063	157	105	1500	89	128	118	135	344	475	355
Added Vol:	0	49	0	1	13	1	3	0	0	0	0	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	212	3112	157	106	1513	90	131	118	135	344	475	360
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	212	2458	157	106	1210	90	131	118	135	344	475	360
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	212	2458	157	106	1210	90	131	118	135	344	475	360
PCE 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
MLF 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
FinalVolume:	212	2458	157	106	1210	90	131	118	135	344	475	360
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.43	0.09	0.03	0.21	0.05	0.04	0.03	0.08	0.11	0.13	0.21
Crit Moves:		****		****				****		****		
Green Time:	16.6	94.0	119.0	13.0	90.4	104.1	13.7	22.0	38.6	25.0	33.3	46.3
Volume/Cap:	0.67	0.76	0.13	0.43	0.39	0.08	0.50	0.23	0.33	0.73	0.62	0.74
Delay/Veh:	77.6	28.6	7.4	74.2	22.0	12.2	74.5	64.7	53.4	72.7	62.2	60.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	77.6	28.6	7.4	74.2	22.0	12.2	74.5	64.7	53.4	72.7	62.2	60.2
LOS by Move:	E-	C	A	E	C+	B	E	E	D-	E	E	E
HCM2kAvgQ:	7	32	3	3	11	2	4	3	6	11	12	19

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #79: Calabazas Boulevard / El Camino Real

Signal=Protect/Rights=Include
Final Vol: 103 58 73***
Lanes: 0 1 0 0 1

Signal=Protect
Rights=Include

Final Vol:	Lanes:
41***	1
	0
615	3
	0
5	1

Vol Cnt Date:	10/2/2018
Cycle Time (sec):	120
Loss Time (sec):	12
Critical V/C:	0.491
Avg Crit Del (sec/veh):	20.9
Avg Delay (sec/veh):	23.6
LOS:	C

Signal=Protect
Rights=Include

Lanes:	Final Vol:
0	90
1	
2	1487***
0	
1	54

Lanes: 1 0 0 1 0
Final Vol: 14 76*** 95
Signal=Protect/Rights=Include

Street Name:	Calabazas Boulevard						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	14	76	95	73	58	103	41	615	5	54	1487	90
Growth 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
Initial Bse:	14	76	95	73	58	103	41	615	5	54	1487	90
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	76	95	73	58	103	41	615	5	54	1487	90
User 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
PHF 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
PHF Volume:	14	76	95	73	58	103	41	615	5	54	1487	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	76	95	73	58	103	41	615	5	54	1487	90
PCE 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
MLF 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
FinalVolume:	14	76	95	73	58	103	41	615	5	54	1487	90
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	1.00	0.44	0.56	1.00	0.36	0.64	1.00	3.00	1.00	1.00	2.82	0.18
Final Sat.:	1750	800	1000	1750	648	1152	1750	5700	1750	1750	5280	320
Capacity Analysis Module:												
Vol/Sat:	0.01	0.10	0.10	0.04	0.09	0.09	0.02	0.11	0.00	0.03	0.28	0.28
Crit Moves:		****		****			****				****	
Green Time:	13.0	22.9	22.9	10.1	20.0	20.0	7.0	48.7	48.7	26.3	68.0	68.0
Volume/Cap:	0.07	0.50	0.50	0.50	0.54	0.54	0.40	0.27	0.01	0.14	0.50	0.50
Delay/Veh:	48.2	44.5	44.5	55.2	47.7	47.7	57.1	23.8	21.3	37.9	15.8	15.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.2	44.5	44.5	55.2	47.7	47.7	57.1	23.8	21.3	37.9	15.8	15.8
LOS by Move:	D	D	D	E+	D	D	E+	C	C+	D+	B	B
HCM2kAvgQ:	1	6	6	3	6	6	2	5	0	2	12	12

Note: Queue reported is the number of cars per lane.

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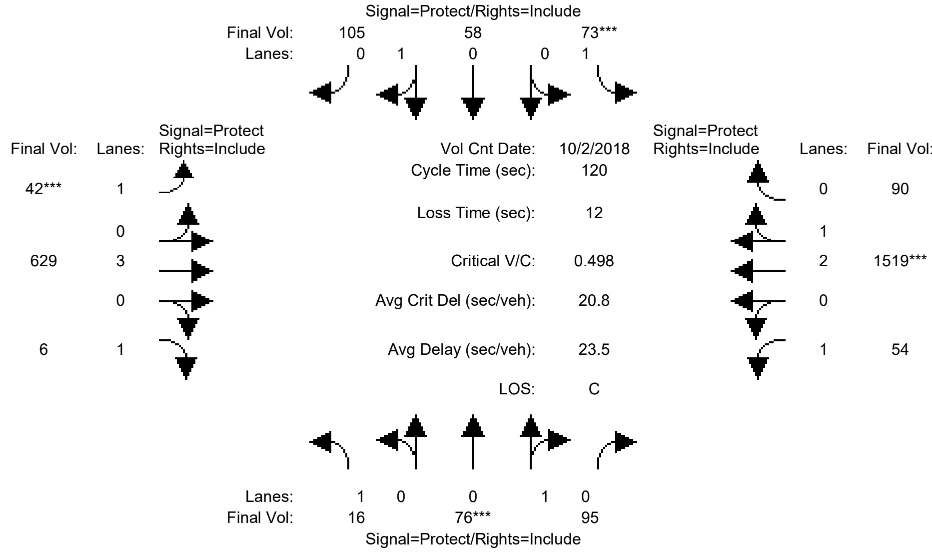
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #79: Calabazas Boulevard / El Camino Real



Street Name:	Calabazas Boulevard						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	14	76	95	73	58	103	41	615	5	54	1487	90
Growth 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
Initial Bse:	14	76	95	73	58	103	41	615	5	54	1487	90
Added Vol:	2	0	0	0	0	2	1	14	1	0	32	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	76	95	73	58	105	42	629	6	54	1519	90
User 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
PHF 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
PHF Volume:	16	76	95	73	58	105	42	629	6	54	1519	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	76	95	73	58	105	42	629	6	54	1519	90
PCE 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
MLF 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
FinalVolume:	16	76	95	73	58	105	42	629	6	54	1519	90
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	1.00	0.44	0.56	1.00	0.36	0.64	1.00	3.00	1.00	1.00	2.83	0.17
Final Sat.:	1750	800	1000	1750	640	1160	1750	5700	1750	1750	5286	313
Capacity Analysis Module:												
Vol/Sat:	0.01	0.10	0.10	0.04	0.09	0.09	0.02	0.11	0.00	0.03	0.29	0.29
Crit Moves:		****		****			****				****	
Green Time:	12.8	22.6	22.6	9.9	19.8	19.8	7.0	49.4	49.4	26.1	68.4	68.4
Volume/Cap:	0.09	0.50	0.50	0.50	0.55	0.55	0.41	0.27	0.01	0.14	0.50	0.50
Delay/Veh:	48.6	44.9	44.9	55.5	48.2	48.2	57.2	23.4	20.9	38.1	15.7	15.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.6	44.9	44.9	55.5	48.2	48.2	57.2	23.4	20.9	38.1	15.7	15.7
LOS by Move:	D	D	D	E+	D	D	E+	C	C+	D+	B	B
HCM2kAvgQ:	1	6	6	3	6	6	2	5	0	2	12	12

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #1: Ellis Street / Middlefield Road

Signal=Split/Rights=Include
Final Vol: 350*** 0 416
Lanes: 1 0 0 0 2

Final Vol: Lanes: Signal=Protect Rights=Include
110*** 1
0
497 2
0
0 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 65
Loss Time (sec): 9
Critical V/C: 0.526
Avg Crit Del (sec/veh): 17.8
Avg Delay (sec/veh): 15.3
LOS: B

Signal=Protect Rights=Include Lanes: Final Vol:
0 119
1
1 585***
0
0 0

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Ellis Street						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	416	0	350	110	497	0	0	585	119
Growth 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
Initial Bse:	0	0	0	416	0	350	110	497	0	0	585	119
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	416	0	350	110	497	0	0	585	119
User 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
PHF 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
PHF Volume:	0	0	0	416	0	350	110	497	0	0	585	119
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	416	0	350	110	497	0	0	585	119
PCE 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
MLF 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
FinalVolume:	0	0	0	416	0	350	110	497	0	0	585	119
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	1.65	0.35
Final Sat.:	0	0	0	3150	0	1750	1750	3800	0	0	3074	625
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.20	0.06	0.13	0.00	0.00	0.19	0.19
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	24.7	0.0	24.7	7.8	31.3	0.0	0.0	23.5	23.5
Volume/Cap:	0.00	0.00	0.00	0.35	0.00	0.53	0.53	0.27	0.00	0.00	0.53	0.53
Delay/Veh:	0.0	0.0	0.0	14.6	0.0	16.4	29.4	10.1	0.0	0.0	16.7	16.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	14.6	0.0	16.4	29.4	10.1	0.0	0.0	16.7	16.7
LOS by Move:	A	A	A	B	A	B	C	B+	A	A	B	B
HCM2kAvgQ:	0	0	0	4	0	6	2	3	0	0	6	6

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #1: Ellis Street / Middlefield Road

Signal=Split/Rights=Include
Final Vol: 350*** 0 419
Lanes: 1 0 0 0 2

Signal=Protect Rights=Include (West approach)
Final Vol: 110***, Lanes: 1
Lanes: 0
Final Vol: 510, Lanes: 2
Lanes: 0
Final Vol: 0, Lanes: 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 65
Loss Time (sec): 9
Critical V/C: 0.536
Avg Crit Del (sec/veh): 17.8
Avg Delay (sec/veh): 15.3
LOS: B

Signal=Protect Rights=Include (East approach)
Lanes: 0, Final Vol: 124
Lanes: 1
Lanes: 1, Final Vol: 611***
Lanes: 0
Lanes: 0, Final Vol: 0

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Ellis Street						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	416	0	350	110	497	0	0	585	119
Growth 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
Initial Bse:	0	0	0	416	0	350	110	497	0	0	585	119
Added Vol:	0	0	0	3	0	0	0	13	0	0	26	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	419	0	350	110	510	0	0	611	124
User 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
PHF 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
PHF Volume:	0	0	0	419	0	350	110	510	0	0	611	124
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	419	0	350	110	510	0	0	611	124
PCE 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
MLF 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
FinalVolume:	0	0	0	419	0	350	110	510	0	0	611	124
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	1.65	0.35
Final Sat.:	0	0	0	3150	0	1750	1750	3800	0	0	3075	624
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.20	0.06	0.13	0.00	0.00	0.20	0.20
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	24.3	0.0	24.3	7.6	31.7	0.0	0.0	24.1	24.1
Volume/Cap:	0.00	0.00	0.00	0.36	0.00	0.54	0.54	0.27	0.00	0.00	0.54	0.54
Delay/Veh:	0.0	0.0	0.0	14.9	0.0	16.8	29.8	9.9	0.0	0.0	16.5	16.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	14.9	0.0	16.8	29.8	9.9	0.0	0.0	16.5	16.5
LOS by Move:	A	A	A	B	A	B	C	A	A	A	B	B
HCM2kAvgQ:	0	0	0	4	0	6	2	3	0	0	6	6

Note: Queue reported is the number of cars per lane.

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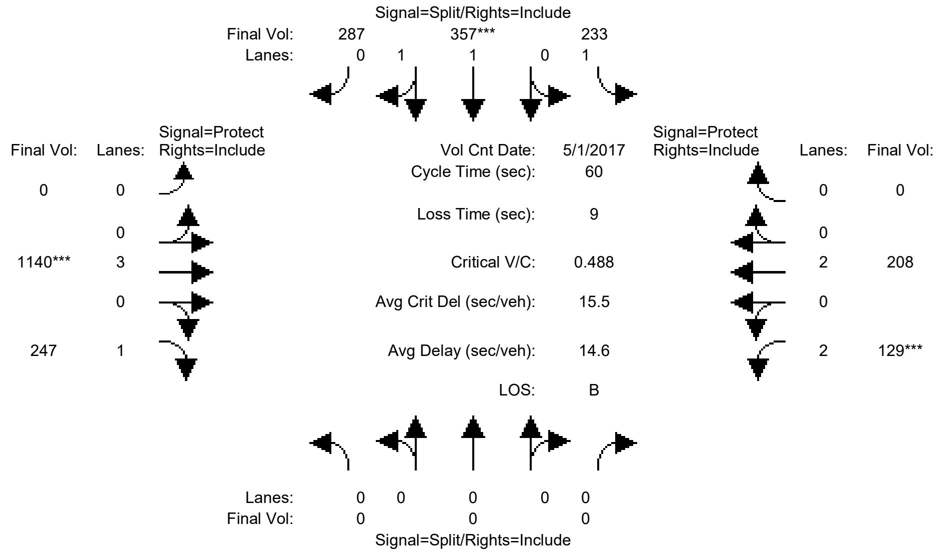
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #2: SR 237 WB / Middlefield Road



Street Name:	SR 237 WB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	10	10	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	0	0	0	233	357	287	0	1140	247	129	208	0
Growth 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
Initial Bse:	0	0	0	233	357	287	0	1140	247	129	208	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	233	357	287	0	1140	247	129	208	0
User 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
PHF 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
PHF Volume:	0	0	0	233	357	287	0	1140	247	129	208	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	233	357	287	0	1140	247	129	208	0
PCE 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
MLF 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
FinalVolume:	0	0	0	233	357	287	0	1140	247	129	208	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.99	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	1.08	0.92	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1750	2050	1648	0	5700	1750	3150	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.17	0.17	0.00	0.20	0.14	0.04	0.05	0.00
Crit Moves:					****			****		****		
Green Time:	0.0	0.0	0.0	20.5	20.5	20.5	0.0	23.5	23.5	7.0	30.5	0.0
Volume/Cap:	0.00	0.00	0.00	0.39	0.51	0.51	0.00	0.51	0.36	0.35	0.11	0.00
Delay/Veh:	0.0	0.0	0.0	15.4	16.1	16.1	0.0	14.1	13.2	25.0	7.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	15.4	16.1	16.1	0.0	14.1	13.2	25.0	7.7	0.0
LOS by Move:	A	A	A	B	B	B	A	B	B	C	A	A
HCM2kAvgQ:	0	0	0	4	5	5	0	5	3	1	1	0

Note: Queue reported is the number of cars per lane.

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #2: SR 237 WB / Middlefield Road

Signal=Split/Rights=Include
Final Vol: 287 357*** 241
Lanes: 0 1 1 0 1

Signal=Protect Rights=Include (westbound/left side)
Final Vol: 0, 1155***, 247
Lanes: 0, 0, 3, 0, 1

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 60
Loss Time (sec): 9
Critical V/C: 0.494
Avg Crit Del (sec/veh): 15.5
Avg Delay (sec/veh): 14.6
LOS: B

Signal=Protect Rights=Include
Lanes: 0, 0, 2, 0, 2
Final Vol: 0, 239, 136***

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	SR 237 WB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	10	10	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	0	0	0	233	357	287	0	1140	247	129	208	0
Growth 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
Initial Bse:	0	0	0	233	357	287	0	1140	247	129	208	0
Added Vol:	0	0	0	8	0	0	0	15	0	7	31	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	241	357	287	0	1155	247	136	239	0
User 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
PHF 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
PHF Volume:	0	0	0	241	357	287	0	1155	247	136	239	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	241	357	287	0	1155	247	136	239	0
PCE 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
MLF 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
FinalVolume:	0	0	0	241	357	287	0	1155	247	136	239	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.99	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	1.08	0.92	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1750	2050	1648	0	5700	1750	3150	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.14	0.17	0.17	0.00	0.20	0.14	0.04	0.06	0.00
Crit Moves:					****			****		****		
Green Time:	0.0	0.0	0.0	20.3	20.3	20.3	0.0	23.7	23.7	7.0	30.7	0.0
Volume/Cap:	0.00	0.00	0.00	0.41	0.51	0.51	0.00	0.51	0.36	0.37	0.12	0.00
Delay/Veh:	0.0	0.0	0.0	15.7	16.2	16.2	0.0	14.0	13.1	25.1	7.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	15.7	16.2	16.2	0.0	14.0	13.1	25.1	7.7	0.0
LOS by Move:	A	A	A	B	B	B	A	B	B	C	A	A
HCM2kAvgQ:	0	0	0	4	5	5	0	5	3	1	1	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #3: SR 237 EB / Middlefield Road

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Protect Rights=Include (westbound side)
Final Vol: 459*** / 854 / 0
Lanes: 2 / 0 / 2 / 0 / 0

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 100
Loss Time (sec): 9
Critical V/C: 0.423
Avg Crit Del (sec/veh): 28.1
Avg Delay (sec/veh): 20.3
LOS: C+

Signal=Protect Rights=Include
Lanes: 1 / 0 / 4 / 0 / 0
Final Vol: 223*** / 266 / 0

Lanes: 2 0 1 1 0
Final Vol: 81 271 141***
Signal=Split/Rights=Include

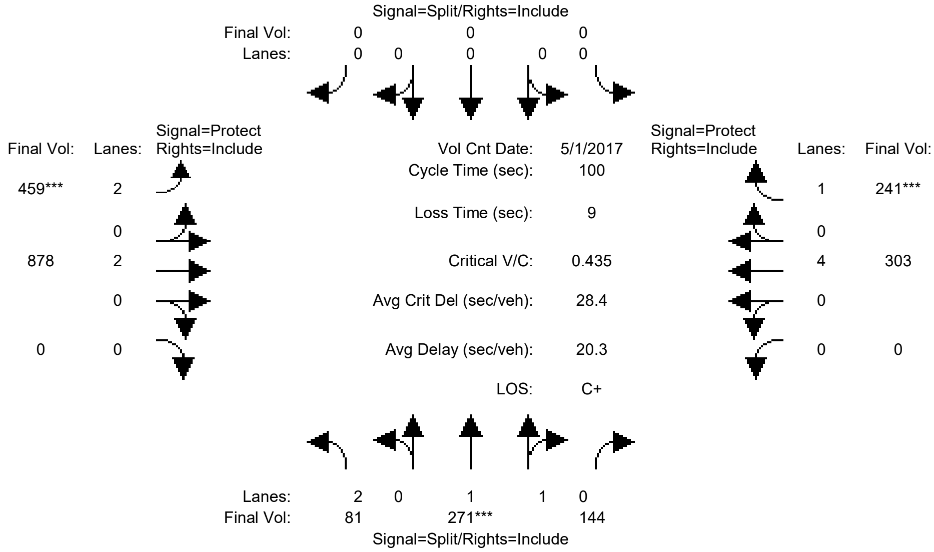
Street Name:	SR 237 EB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	81	271	141	0	0	0	459	854	0	0	266	223
Growth 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
Initial Bse:	81	271	141	0	0	0	459	854	0	0	266	223
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	81	271	141	0	0	0	459	854	0	0	266	223
User 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
PHF 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
PHF Volume:	81	271	141	0	0	0	459	854	0	0	266	223
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	271	141	0	0	0	459	854	0	0	266	223
PCE 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
MLF 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
FinalVolume:	81	271	141	0	0	0	459	854	0	0	266	223
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	1.30	0.70	0.00	0.00	0.00	2.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	3150	2433	1266	0	0	0	3150	3800	0	0	7600	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.11	0.11	0.00	0.00	0.00	0.15	0.22	0.00	0.00	0.04	0.13
Crit Moves:			****				****					****
Green Time:	26.4	26.4	26.4	0.0	0.0	0.0	34.5	64.6	0.0	0.0	30.2	30.2
Volume/Cap:	0.10	0.42	0.42	0.00	0.00	0.00	0.42	0.35	0.00	0.00	0.12	0.42
Delay/Veh:	27.9	30.8	30.8	0.0	0.0	0.0	25.4	8.2	0.0	0.0	25.3	28.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.9	30.8	30.8	0.0	0.0	0.0	25.4	8.2	0.0	0.0	25.3	28.5
LOS by Move:	C	C	C	A	A	A	C	A	A	A	C	C
HCM2kAvgQ:	1	6	6	0	0	0	6	6	0	0	1	6

Note: Queue reported is the number of cars per lane.

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #3: SR 237 EB / Middlefield Road



Street Name:	SR 237 EB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	81	271	141	0	0	0	459	854	0	0	266	223
Growth 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
Initial Bse:	81	271	141	0	0	0	459	854	0	0	266	223
Added Vol:	0	0	3	0	0	0	0	24	0	0	37	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	81	271	144	0	0	0	459	878	0	0	303	241
User 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
PHF 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
PHF Volume:	81	271	144	0	0	0	459	878	0	0	303	241
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	271	144	0	0	0	459	878	0	0	303	241
PCE 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
MLF 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
FinalVolume:	81	271	144	0	0	0	459	878	0	0	303	241
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	1.29	0.71	0.00	0.00	0.00	2.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	3150	2415	1283	0	0	0	3150	3800	0	0	7600	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.11	0.11	0.00	0.00	0.00	0.15	0.23	0.00	0.00	0.04	0.14
Crit Moves:		****					****					****
Green Time:	25.8	25.8	25.8	0.0	0.0	0.0	33.5	65.2	0.0	0.0	31.7	31.7
Volume/Cap:	0.10	0.43	0.43	0.00	0.00	0.00	0.43	0.35	0.00	0.00	0.13	0.43
Delay/Veh:	28.3	31.3	31.3	0.0	0.0	0.0	26.2	8.0	0.0	0.0	24.3	27.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.3	31.3	31.3	0.0	0.0	0.0	26.2	8.0	0.0	0.0	24.3	27.6
LOS by Move:	C	C	C	A	A	A	C	A	A	A	C	C
HCM2kAvgQ:	1	6	6	0	0	0	6	6	0	0	2	7

Note: Queue reported is the number of cars per lane.

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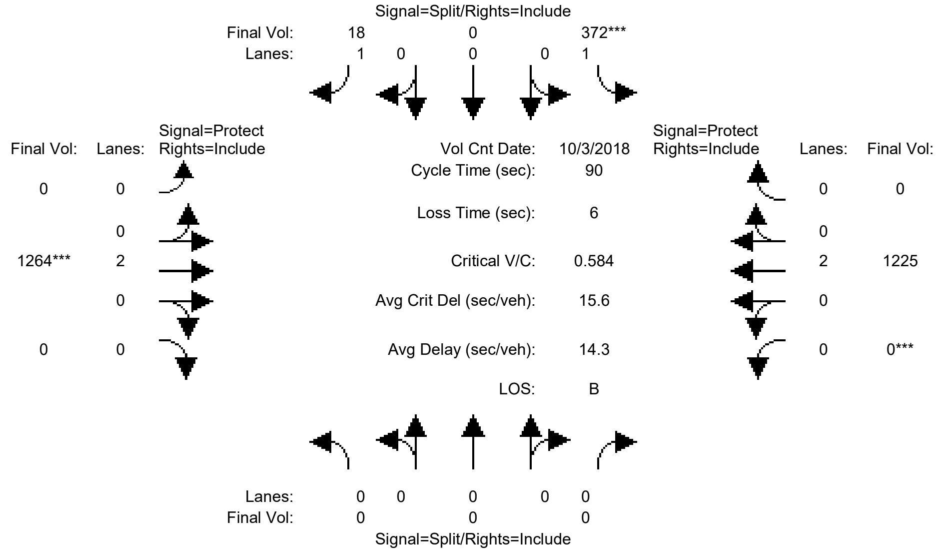
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #4: SR-85 SB Off-Ramp / Central Expressway



Street Name:	SR-85 SB Off-Ramp						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	0	0	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	372	0	18	0	1264	0	0	1225	0
Growth 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
Initial Bse:	0	0	0	372	0	18	0	1264	0	0	1225	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	372	0	18	0	1264	0	0	1225	0
User 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
PHF 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
PHF Volume:	0	0	0	372	0	18	0	1264	0	0	1225	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	372	0	18	0	1264	0	0	1225	0
PCE 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
MLF 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
FinalVolume:	0	0	0	372	0	18	0	1264	0	0	1225	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	1750	0	1750	0	3800	0	0	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.00	0.01	0.00	0.33	0.00	0.00	0.32	0.00
Crit Moves:				****				****		****		
Green Time:	0.0	0.0	0.0	32.8	0.0	32.8	0.0	51.2	0.0	0.0	51.2	0.0
Volume/Cap:	0.00	0.00	0.00	0.58	0.00	0.03	0.00	0.58	0.00	0.00	0.57	0.00
Delay/Veh:	0.0	0.0	0.0	24.5	0.0	18.4	0.0	12.9	0.0	0.0	12.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	24.5	0.0	18.4	0.0	12.9	0.0	0.0	12.7	0.0
LOS by Move:	A	A	A	C	A	B-	A	B	A	A	B	A
HCM2kAvgQ:	0	0	0	9	0	0	0	11	0	0	11	0

Note: Queue reported is the number of cars per lane.

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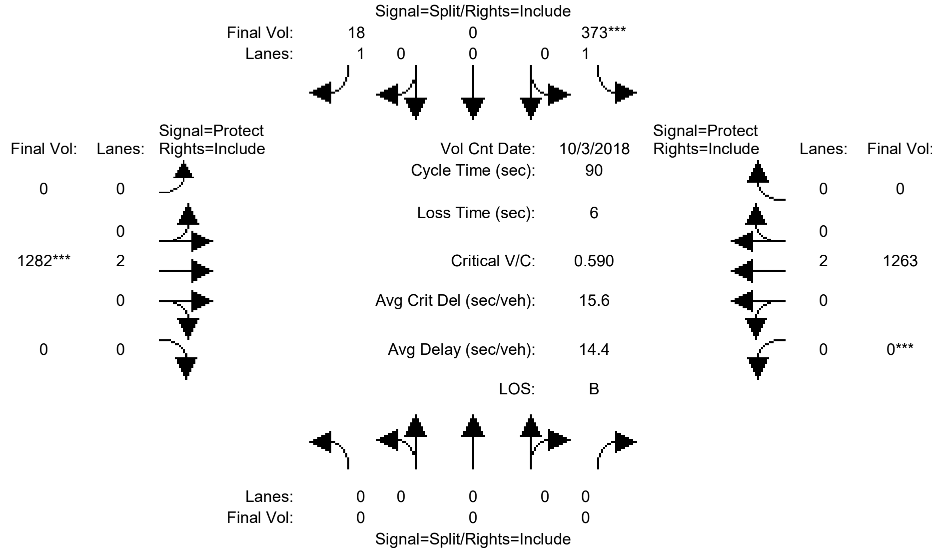
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #4: SR-85 SB Off-Ramp / Central Expressway



Street Name:	SR-85 SB Off-Ramp						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	0	0	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	372	0	18	0	1264	0	0	1225	0
Growth 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
Initial Bse:	0	0	0	372	0	18	0	1264	0	0	1225	0
Added Vol:	0	0	0	1	0	0	0	18	0	0	38	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	373	0	18	0	1282	0	0	1263	0
User 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
PHF 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
PHF Volume:	0	0	0	373	0	18	0	1282	0	0	1263	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	373	0	18	0	1282	0	0	1263	0
PCE 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
MLF 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
FinalVolume:	0	0	0	373	0	18	0	1282	0	0	1263	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	1750	0	1750	0	3800	0	0	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.00	0.01	0.00	0.34	0.00	0.00	0.33	0.00
Crit Moves:				****				****		****		
Green Time:	0.0	0.0	0.0	32.5	0.0	32.5	0.0	51.5	0.0	0.0	51.5	0.0
Volume/Cap:	0.00	0.00	0.00	0.59	0.00	0.03	0.00	0.59	0.00	0.00	0.58	0.00
Delay/Veh:	0.0	0.0	0.0	24.8	0.0	18.6	0.0	12.9	0.0	0.0	12.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	24.8	0.0	18.6	0.0	12.9	0.0	0.0	12.7	0.0
LOS by Move:	A	A	A	C	A	B-	A	B	A	A	B	A
HCM2kAvgQ:	0	0	0	9	0	0	0	11	0	0	11	0

Note: Queue reported is the number of cars per lane.

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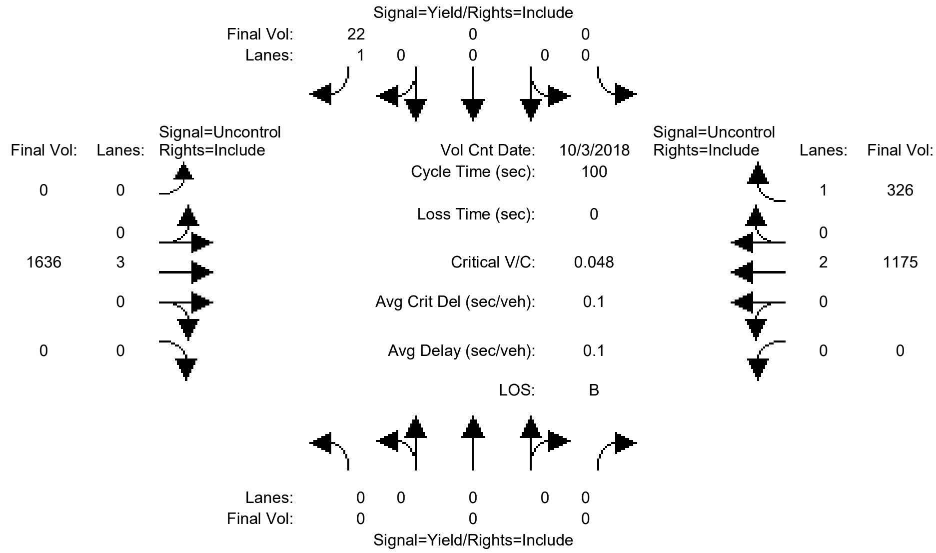
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PM

Intersection #5: SR-85 NB On-Ramp - Easy Street / Central Expressway




```
Street Name:  SR-85 NB On-Ramp - Easy Street          Central Expressway
Approach:       North Bound       South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 3 Oct 2018 <<
Base Vol:       0    0     0     0    0    22     0 1636     0     0 1175   326
Growth 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
Initial Bse:    0    0     0     0    0    22     0 1636     0     0 1175   326
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     0    0    22     0 1636     0     0 1175   326
User 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
PHF 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
PHF Volume:     0    0     0     0    0    22     0 1636     0     0 1175   326
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0     0    0    22     0 1636     0     0 1175   326
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx   588  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx   458  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx   458  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  0.05  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx  13.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     B     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:    xxxxxx              13.3            xxxxxx            xxxxxx
ApproachLOS:         *                 B                 *                 *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
******************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0   0  0  0  0  1   0  0  3  0  0   0  0  2  0  1
Initial Vol:    0    0     0    0    0    22    0 1636     0    0 1175   326
ApproachDel:    xxxxxx              13.3           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Yield Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Controller not stop sign.
Signal Warrant Rule #2: [approach volume=22]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=3159]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

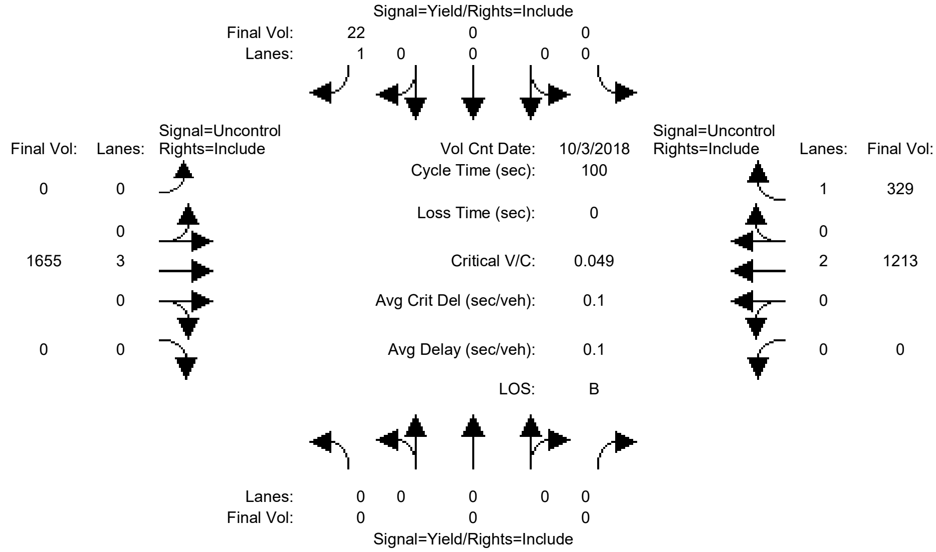
The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0   0  0  0  0  1   0  0  3  0  0   0  0  2  0  1
Initial Vol:    0    0     0    0    0    22    0 1636     0    0 1175   326
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            3137
Minor Approach Volume:          22
Minor Approach Volume Threshold: -109 [less than minimum of 100]
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PP PM

Intersection #5: SR-85 NB On-Ramp - Easy Street / Central Expressway




```
Street Name:  SR-85 NB On-Ramp - Easy Street          Central Expressway
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date:  3 Oct 2018 <<
Base Vol:       0    0     0     0    0    22     0 1636     0     0 1175   326
Growth 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
Initial Bse:    0    0     0     0    0    22     0 1636     0     0 1175   326
Added Vol:      0    0     0     0    0     0     0   19     0     0   38     3
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     0    0    22     0 1655     0     0 1213   329
User 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
PHF 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
PHF Volume:     0    0     0     0    0    22     0 1655     0     0 1213   329
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0     0    0    22     0 1655     0     0 1213   329
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx   607  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx   445  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx   445  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  0.05  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx  13.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     B     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:     xxxxxx             13.5            xxxxxx            xxxxxx
ApproachLOS:        *                 B                *                 *
Note: Queue reported is the number of cars per lane.
                     Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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```
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:      Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:       0  0  0  0  0   0  0  0  0  1   0  0  3  0  0   0  0  2  0  1
Initial Vol:   0    0    0     0    0    22    0 1655    0     0 1213   329
ApproachDel:   xxxxxx             13.5           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Yield Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Controller not stop sign.
Signal Warrant Rule #2: [approach volume=22]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=3219]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

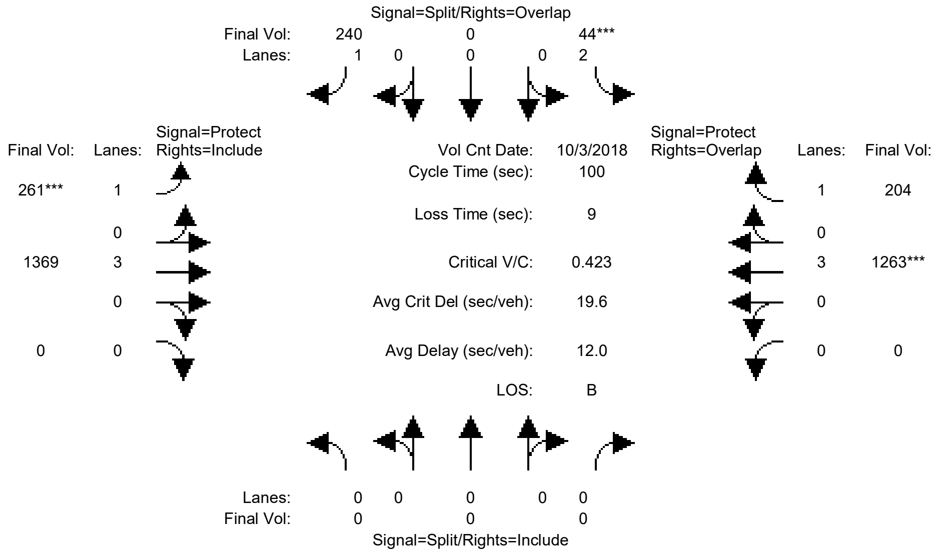
The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:      Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:       0  0  0  0  0   0  0  0  0  1   0  0  3  0  0   0  0  2  0  1
Initial Vol:   0    0    0     0    0    22    0 1655    0     0 1213   329
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             3197
Minor Approach Volume:           22
Minor Approach Volume Threshold: -116 [less than minimum of 100]
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #6: Whisman Station Drive / Central Expressway (CMP)



Street Name:	Whisman Station Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	44	0	240	261	1369	0	0	1263	204
Growth 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
Initial Bse:	0	0	0	44	0	240	261	1369	0	0	1263	204
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	44	0	240	261	1369	0	0	1263	204
User 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
PHF 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
PHF Volume:	0	0	0	44	0	240	261	1369	0	0	1263	204
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	44	0	240	261	1369	0	0	1263	204
PCE 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
MLF 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
FinalVolume:	0	0	0	44	0	240	261	1369	0	0	1263	204
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3150	0	1750	1750	5700	0	0	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.01	0.00	0.14	0.15	0.24	0.00	0.00	0.22	0.12
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	42.6	32.6	81.0	0.0	0.0	48.4	58.4
Volume/Cap:	0.00	0.00	0.00	0.14	0.00	0.32	0.46	0.30	0.00	0.00	0.46	0.20
Delay/Veh:	0.0	0.0	0.0	41.3	0.0	19.4	27.3	2.4	0.0	0.0	17.2	9.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	41.3	0.0	19.4	27.3	2.4	0.0	0.0	17.2	9.9
LOS by Move:	A	A	A	D	A	B-	C	A	A	A	B	A
HCM2kAvgQ:	0	0	0	1	0	5	7	3	0	0	8	3

Note: Queue reported is the number of cars per lane.

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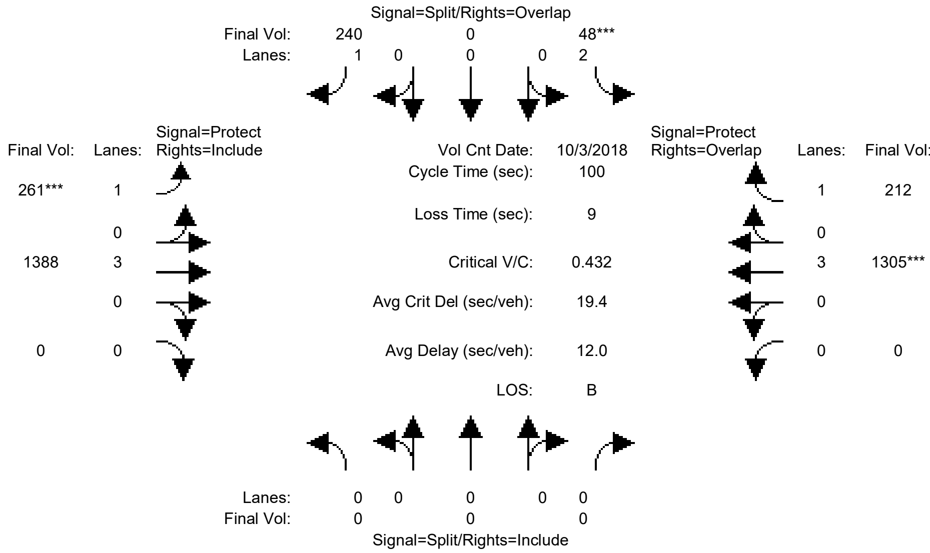
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #6: Whisman Station Drive / Central Expressway (CMP)



Street Name:	Whisman Station Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	44	0	240	261	1369	0	0	1263	204
Growth 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
Initial Bse:	0	0	0	44	0	240	261	1369	0	0	1263	204
Added Vol:	0	0	0	4	0	0	0	19	0	0	42	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	48	0	240	261	1388	0	0	1305	212
User 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
PHF 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
PHF Volume:	0	0	0	48	0	240	261	1388	0	0	1305	212
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	48	0	240	261	1388	0	0	1305	212
PCE 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
MLF 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
FinalVolume:	0	0	0	48	0	240	261	1388	0	0	1305	212
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3150	0	1750	1750	5700	0	0	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.14	0.15	0.24	0.00	0.00	0.23	0.12
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	42.0	32.0	81.0	0.0	0.0	49.0	59.0
Volume/Cap:	0.00	0.00	0.00	0.15	0.00	0.33	0.47	0.30	0.00	0.00	0.47	0.21
Delay/Veh:	0.0	0.0	0.0	41.4	0.0	19.8	27.8	2.4	0.0	0.0	17.0	9.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	41.4	0.0	19.8	27.8	2.4	0.0	0.0	17.0	9.6
LOS by Move:	A	A	A	D	A	B-	C	A	A	A	B	A
HCM2kAvgQ:	0	0	0	1	0	5	7	4	0	0	8	3

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #7: Ferguson Drive / Central Expressway (CMP)

Signal=Split/Rights=Overlap
Final Vol: 80 0 69***
Lanes: 1 0 0 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Overlap	Lanes:	Final Vol:
			Vol Cnt Date:	10/3/2018			
123***	1		Cycle Time (sec):	90		1	69
	0		Loss Time (sec):	9		0	
1147	3		Critical V/C:	0.539		2	1426***
	0		Avg Crit Del (sec/veh):	12.1		0	
0	0		Avg Delay (sec/veh):	8.5		0	0
			LOS:	A			

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Ferguson Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	69	0	80	123	1147	0	0	1426	69
Growth 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
Initial Bse:	0	0	0	69	0	80	123	1147	0	0	1426	69
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	69	0	80	123	1147	0	0	1426	69
User 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
PHF 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
PHF Volume:	0	0	0	69	0	80	123	1147	0	0	1426	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	69	0	80	123	1147	0	0	1426	69
PCE 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
MLF 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
FinalVolume:	0	0	0	69	0	80	123	1147	0	0	1426	69
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	5700	0	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.05	0.07	0.20	0.00	0.00	0.38	0.04
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	21.2	11.2	71.0	0.0	0.0	59.8	69.8
Volume/Cap:	0.00	0.00	0.00	0.35	0.00	0.19	0.56	0.26	0.00	0.00	0.56	0.05
Delay/Veh:	0.0	0.0	0.0	38.1	0.0	27.8	40.5	2.5	0.0	0.0	8.4	2.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	38.1	0.0	27.8	40.5	2.5	0.0	0.0	8.4	2.4
LOS by Move:	A	A	A	D+	A	C	D	A	A	A	A	A
HCM2kAvgQ:	0	0	0	2	0	2	3	3	0	0	10	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #7: Ferguson Drive / Central Expressway (CMP)

Signal=Split/Rights=Overlap
Final Vol: 80 0 73***
Lanes: 1 0 0 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Overlap	Lanes:	Final Vol:
			Vol Cnt Date:	10/3/2018			
123***	1		Cycle Time (sec):	90		1	77
	0		Loss Time (sec):	9		0	
1170	3		Critical V/C:	0.556		2	1475***
	0		Avg Crit Del (sec/veh):	12.2		0	
0	0		Avg Delay (sec/veh):	8.6		0	0
			LOS:	A			

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Ferguson Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	69	0	80	123	1147	0	0	1426	69
Growth 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
Initial Bse:	0	0	0	69	0	80	123	1147	0	0	1426	69
Added Vol:	0	0	0	4	0	0	0	23	0	0	49	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	73	0	80	123	1170	0	0	1475	77
User 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
PHF 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
PHF Volume:	0	0	0	73	0	80	123	1170	0	0	1475	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	73	0	80	123	1170	0	0	1475	77
PCE 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
MLF 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
FinalVolume:	0	0	0	73	0	80	123	1170	0	0	1475	77
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	5700	0	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.05	0.07	0.21	0.00	0.00	0.39	0.04
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	20.9	10.9	71.0	0.0	0.0	60.1	70.1
Volume/Cap:	0.00	0.00	0.00	0.38	0.00	0.20	0.58	0.26	0.00	0.00	0.58	0.06
Delay/Veh:	0.0	0.0	0.0	38.3	0.0	28.0	41.4	2.6	0.0	0.0	8.5	2.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	38.3	0.0	28.0	41.4	2.6	0.0	0.0	8.5	2.3
LOS by Move:	A	A	A	D+	A	C	D	A	A	A	A	A
HCM2kAvgQ:	0	0	0	2	0	2	4	3	0	0	11	1

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #8: Bernardo Avenue / Central Expressway

Signal=Split/Rights=Overlap
Final Vol: 106 0 72***
Lanes: 1 0 0 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Overlap	Lanes:	Final Vol:
			Vol Cnt Date:	10/3/2018			
38***	1		Cycle Time (sec):	90		1	16
	0		Loss Time (sec):	9		0	
1305	2		Critical V/C:	0.450		2	1299***
	0		Avg Crit Del (sec/veh):	8.4		0	
0	0		Avg Delay (sec/veh):	7.0		1	5
			LOS:	A			

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Bernardo Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	72	0	106	38	1305	0	5	1299	16
Growth 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
Initial Bse:	0	0	0	72	0	106	38	1305	0	5	1299	16
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	72	0	106	38	1305	0	5	1299	16
User 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
PHF 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
PHF Volume:	0	0	0	72	0	106	38	1305	0	5	1299	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	72	0	106	38	1305	0	5	1299	16
PCE 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
MLF 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
FinalVolume:	0	0	0	72	0	106	38	1305	0	5	1299	16
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	3800	0	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.06	0.02	0.34	0.00	0.00	0.34	0.01
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	17.0	7.0	70.4	0.0	0.6	64.0	74.0
Volume/Cap:	0.00	0.00	0.00	0.37	0.00	0.32	0.28	0.44	0.00	0.44	0.48	0.01
Delay/Veh:	0.0	0.0	0.0	38.3	0.0	32.1	40.2	3.3	0.0	69.3	5.8	1.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	38.3	0.0	32.1	40.2	3.3	0.0	69.3	5.8	1.4
LOS by Move:	A	A	A	D+	A	C-	D	A	A	E	A	A
HCM2kAvgQ:	0	0	0	2	0	3	1	6	0	0	8	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #8: Bernardo Avenue / Central Expressway

Signal=Split/Rights=Overlap
Final Vol: 106 0 76***
Lanes: 1 0 0 0 1

Signal=Protect Rights=Include (Eastbound)
Final Vol: 38*** / Lanes: 1
Lanes: 0
Final Vol: 1332 / Lanes: 2
Lanes: 0
Final Vol: 0 / Lanes: 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 90
Loss Time (sec): 9
Critical V/C: 0.469
Avg Crit Del (sec/veh): 8.6
Avg Delay (sec/veh): 7.1
LOS: A

Signal=Protect Rights=Overlap (Westbound)
Lanes: 1 / Final Vol: 24
Lanes: 0
Lanes: 2 / Final Vol: 1356***
Lanes: 0
Lanes: 1 / Final Vol: 5

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Bernardo Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	72	0	106	38	1305	0	5	1299	16
Growth 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
Initial Bse:	0	0	0	72	0	106	38	1305	0	5	1299	16
Added Vol:	0	0	0	4	0	0	0	27	0	0	57	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	76	0	106	38	1332	0	5	1356	24
User 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
PHF 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
PHF Volume:	0	0	0	76	0	106	38	1332	0	5	1356	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	76	0	106	38	1332	0	5	1356	24
PCE 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
MLF 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
FinalVolume:	0	0	0	76	0	106	38	1332	0	5	1356	24
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	3800	0	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.06	0.02	0.35	0.00	0.00	0.36	0.01
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	17.0	7.0	70.4	0.0	0.6	64.0	74.0
Volume/Cap:	0.00	0.00	0.00	0.39	0.00	0.32	0.28	0.45	0.00	0.45	0.50	0.02
Delay/Veh:	0.0	0.0	0.0	38.5	0.0	32.1	40.2	3.4	0.0	70.6	6.0	1.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	38.5	0.0	32.1	40.2	3.4	0.0	70.6	6.0	1.4
LOS by Move:	A	A	A	D+	A	C-	D	A	A	E	A	A
HCM2kAvgQ:	0	0	0	3	0	3	1	6	0	0	8	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #9: Moorpark Way / Evelyn Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	10/3/2018			
0	0		Cycle Time (sec):	85		0	0
	0		Loss Time (sec):	9		0	
1372***	1		Critical V/C:	0.704		2	304
	1		Avg Crit Del (sec/veh):	18.9		0	
154	0		Avg Delay (sec/veh):	17.0		1	114***
			LOS:	B			

Lanes: 0 0 1! 0 0
Final Vol: 16*** 0 250
Signal=Split/Rights=Include

```
Street Name:            Moorpark Way                    Evelyn Avenue
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Min. Green:    10    0    10     0    0     0     0   10    10     7   10     0
Y+R:          4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 3 Oct 2018 <<
Base Vol:      16    0   250     0    0     0     0 1372   154   114  304     0
Growth 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
Initial Bse:   16    0   250     0    0     0     0 1372   154   114  304     0
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   16    0   250     0    0     0     0 1372   154   114  304     0
User 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
PHF 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
PHF Volume:    16    0   250     0    0     0     0 1372   154   114  304     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   16    0   250     0    0     0     0 1372   154   114  304     0
PCE 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
MLF 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
FinalVolume:   16    0   250     0    0     0     0 1372   154   114  304     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.92 0.92  0.92  0.92 1.00  0.92  0.92 0.98  0.95  0.92 1.00  0.92
Lanes:       0.06 0.00  0.94  0.00 0.00  0.00  0.00 1.79  0.21  1.00 2.00  0.00
Final Sat.:   105    0  1645     0    0     0     0 3326   373  1750 3800     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.15 0.00  0.15  0.00 0.00  0.00  0.00 0.41  0.41  0.07 0.08  0.00
Crit Moves:  ****                                    ****        ****
Green Time:  18.3  0.0  18.3   0.0  0.0   0.0   0.0 49.8  49.8   7.9 57.7   0.0
Volume/Cap:  0.70 0.00  0.70  0.00 0.00  0.00  0.00 0.70  0.70  0.70 0.12  0.00
Delay/Veh:   36.7  0.0  36.7   0.0  0.0   0.0   0.0 13.5  13.5  50.6  4.8   0.0
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  36.7  0.0  36.7   0.0  0.0   0.0   0.0 13.5  13.5  50.6  4.8   0.0
LOS by Move:   D+    A    D+     A    A     A     A    B     B     D    A     A
HCM2kAvgQ:      8    0     8     0    0     0     0   15    15     3    1     0
Note: Queue reported is the number of cars per lane.
```

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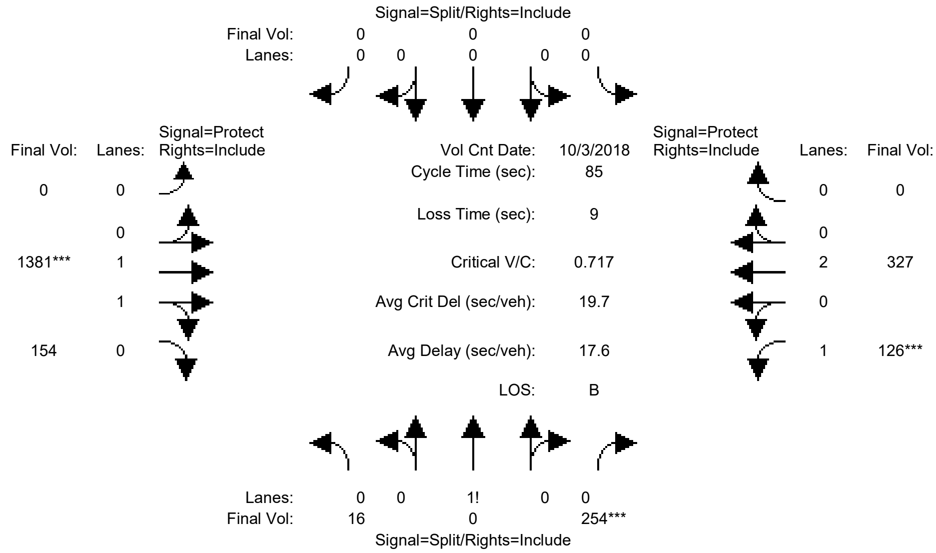
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #9: Moorpark Way / Evelyn Avenue



Street Name:	Moorpark Way						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	16	0	250	0	0	0	0	1372	154	114	304	0
Growth 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
Initial Bse:	16	0	250	0	0	0	0	1372	154	114	304	0
Added Vol:	0	0	4	0	0	0	0	9	0	12	23	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	0	254	0	0	0	0	1381	154	126	327	0
User 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
PHF 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
PHF Volume:	16	0	254	0	0	0	0	1381	154	126	327	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	0	254	0	0	0	0	1381	154	126	327	0
PCE 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
MLF 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
FinalVolume:	16	0	254	0	0	0	0	1381	154	126	327	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	0.06	0.00	0.94	0.00	0.00	0.00	0.00	1.79	0.21	1.00	2.00	0.00
Final Sat.:	104	0	1646	0	0	0	0	3329	371	1750	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.15	0.00	0.15	0.00	0.00	0.00	0.00	0.41	0.41	0.07	0.09	0.00
Crit Moves:			****					****		****		
Green Time:	18.3	0.0	18.3	0.0	0.0	0.0	0.0	49.2	49.2	8.5	57.7	0.0
Volume/Cap:	0.72	0.00	0.72	0.00	0.00	0.00	0.00	0.72	0.72	0.72	0.13	0.00
Delay/Veh:	37.5	0.0	37.5	0.0	0.0	0.0	0.0	14.1	14.1	50.3	4.8	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.5	0.0	37.5	0.0	0.0	0.0	0.0	14.1	14.1	50.3	4.8	0.0
LOS by Move:	D+	A	D+	A	A	A	A	B	B	D	A	A
HCM2kAvgQ:	9	0	9	0	0	0	0	16	16	4	1	0

Note: Queue reported is the number of cars per lane.

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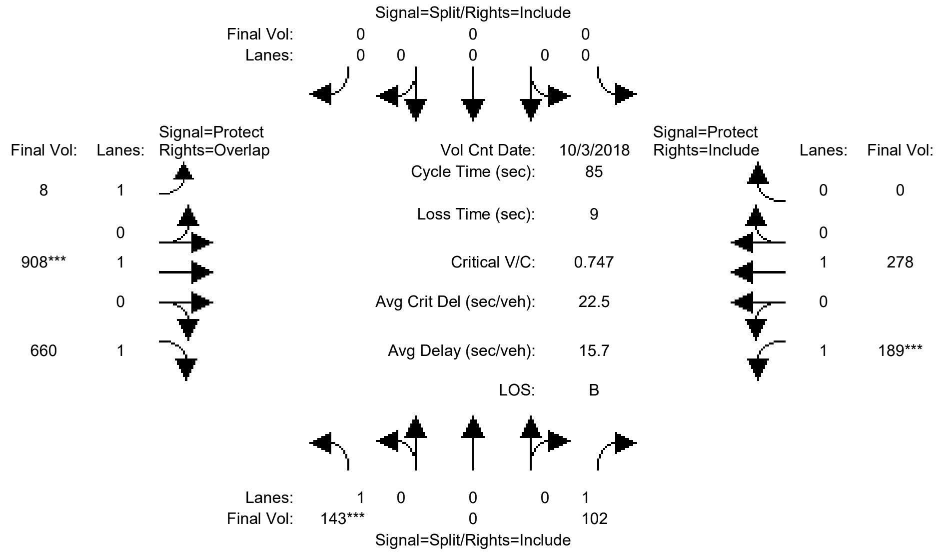
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #10: Bernardo Avenue / Evelyn Avenue



Street Name:	Bernardo Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	143	0	102	0	0	0	8	908	660	189	278	0
Growth 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
Initial Bse:	143	0	102	0	0	0	8	908	660	189	278	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	143	0	102	0	0	0	8	908	660	189	278	0
User 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
PHF 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
PHF Volume:	143	0	102	0	0	0	8	908	660	189	278	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	0	102	0	0	0	8	908	660	189	278	0
PCE 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
MLF 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
FinalVolume:	143	0	102	0	0	0	8	908	660	189	278	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	1750	1900	1750	1750	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.06	0.00	0.00	0.00	0.00	0.48	0.38	0.11	0.15	0.00
Crit Moves:	****							****		****		
Green Time:	10.0	0.0	10.0	0.0	0.0	0.0	2.0	53.8	63.8	12.2	64.0	0.0
Volume/Cap:	0.69	0.00	0.50	0.00	0.00	0.00	0.19	0.75	0.50	0.75	0.19	0.00
Delay/Veh:	45.9	0.0	37.0	0.0	0.0	0.0	43.0	13.7	4.5	47.2	3.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.9	0.0	37.0	0.0	0.0	0.0	43.0	13.7	4.5	47.2	3.1	0.0
LOS by Move:	D	A	D+	A	A	A	D	B	A	D	A	A
HCM2kAvgQ:	5	0	3	0	0	0	0	16	7	5	2	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
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Existing PP PM

Intersection #10: Bernardo Avenue / Evelyn Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Protect Rights=Overlap
Final Vol: Lanes:
8 1
0
921*** 1
0
660 1

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 85
Loss Time (sec): 9
Critical V/C: 0.762
Avg Crit Del (sec/veh): 23.5
Avg Delay (sec/veh): 16.2
LOS: B

Signal=Protect Rights=Include
Lanes: Final Vol:
0 0
0
1 313
0
1 201***

Lanes: 1 0 0 0 1
Final Vol: 143*** 0 106
Signal=Split/Rights=Include

Street Name:	Bernardo Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	143	0	102	0	0	0	8	908	660	189	278	0
Growth 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
Initial Bse:	143	0	102	0	0	0	8	908	660	189	278	0
Added Vol:	0	0	4	0	0	0	0	13	0	12	35	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	143	0	106	0	0	0	8	921	660	201	313	0
User 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
PHF 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
PHF Volume:	143	0	106	0	0	0	8	921	660	201	313	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	0	106	0	0	0	8	921	660	201	313	0
PCE 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
MLF 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
FinalVolume:	143	0	106	0	0	0	8	921	660	201	313	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	1750	1900	1750	1750	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.06	0.00	0.00	0.00	0.00	0.48	0.38	0.11	0.16	0.00
Crit Moves:	****							****		****		
Green Time:	10.0	0.0	10.0	0.0	0.0	0.0	1.8	53.4	63.4	12.6	64.2	0.0
Volume/Cap:	0.69	0.00	0.51	0.00	0.00	0.00	0.22	0.77	0.51	0.77	0.22	0.00
Delay/Veh:	45.9	0.0	37.5	0.0	0.0	0.0	43.9	14.6	4.7	48.1	3.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.9	0.0	37.5	0.0	0.0	0.0	43.9	14.6	4.7	48.1	3.1	0.0
LOS by Move:	D	A	D+	A	A	A	D	B	A	D	A	A
HCM2kAvgQ:	5	0	4	0	0	0	0	17	7	6	2	0

Note: Queue reported is the number of cars per lane.

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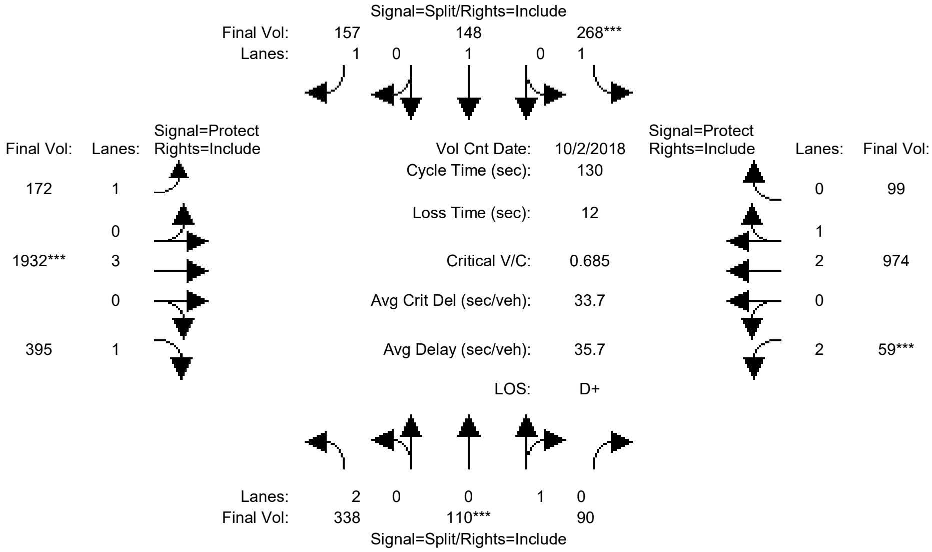
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #11: Sylvan Avenue / El Camino Real



Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	338	110	90	268	148	157	172	1932	395	59	974	99
Growth 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
Initial Bse:	338	110	90	268	148	157	172	1932	395	59	974	99
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	338	110	90	268	148	157	172	1932	395	59	974	99
User 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
PHF 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
PHF Volume:	338	110	90	268	148	157	172	1932	395	59	974	99
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	338	110	90	268	148	157	172	1932	395	59	974	99
PCE 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
MLF 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
FinalVolume:	338	110	90	268	148	157	172	1932	395	59	974	99
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.95	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.99	0.95
Lanes:	2.00	0.55	0.45	1.00	1.00	1.00	1.00	3.00	1.00	2.00	2.71	0.29
Final Sat.:	3150	990	810	1750	1900	1750	1750	5700	1750	3150	5083	517
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.15	0.08	0.09	0.10	0.34	0.23	0.02	0.19	0.19
Crit Moves:		****		****				****		****		
Green Time:	20.4	20.4	20.4	28.2	28.2	28.2	23.5	62.4	62.4	7.0	45.9	45.9
Volume/Cap:	0.68	0.71	0.71	0.71	0.36	0.41	0.54	0.71	0.47	0.35	0.54	0.54
Delay/Veh:	55.6	59.9	59.9	53.1	43.8	44.5	50.3	27.5	23.1	60.5	34.0	34.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.6	59.9	59.9	53.1	43.8	44.5	50.3	27.5	23.1	60.5	34.0	34.0
LOS by Move:	E+	E+	E+	D-	D	D	D	C	C	E	C-	C-
HCM2kAvgQ:	9	9	9	12	5	6	7	21	11	1	11	11

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #11: Sylvan Avenue / El Camino Real

Signal=Split/Rights=Include
Final Vol: 157 148 270***
Lanes: 1 0 1 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	10/2/2018			
172	1		Cycle Time (sec):	130		0	102
	0		Loss Time (sec):	12		1	
1954***	3		Critical V/C:	0.692		2	1019
	0		Avg Crit Del (sec/veh):	33.9		0	
395	1		Avg Delay (sec/veh):	35.8		2	62***
			LOS:	D+			

Lanes: 2 0 0 1 0
Final Vol: 338 110 91***
Signal=Split/Rights=Include

Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	338	110	90	268	148	157	172	1932	395	59	974	99
Growth 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
Initial Bse:	338	110	90	268	148	157	172	1932	395	59	974	99
Added Vol:	0	0	1	2	0	0	0	22	0	3	45	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	338	110	91	270	148	157	172	1954	395	62	1019	102
User 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
PHF 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
PHF Volume:	338	110	91	270	148	157	172	1954	395	62	1019	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	338	110	91	270	148	157	172	1954	395	62	1019	102
PCE 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
MLF 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
FinalVolume:	338	110	91	270	148	157	172	1954	395	62	1019	102
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.95	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.99	0.95
Lanes:	2.00	0.55	0.45	1.00	1.00	1.00	1.00	3.00	1.00	2.00	2.72	0.28
Final Sat.:	3150	985	815	1750	1900	1750	1750	5700	1750	3150	5090	509
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.15	0.08	0.09	0.10	0.34	0.23	0.02	0.20	0.20
Crit Moves:			****	****				****		****		
Green Time:	20.4	20.4	20.4	28.1	28.1	28.1	22.9	62.5	62.5	7.0	46.6	46.6
Volume/Cap:	0.69	0.71	0.71	0.71	0.36	0.41	0.56	0.71	0.47	0.37	0.56	0.56
Delay/Veh:	55.8	60.4	60.4	53.5	43.8	44.6	51.2	27.6	23.0	60.7	33.8	33.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.8	60.4	60.4	53.5	43.8	44.6	51.2	27.6	23.0	60.7	33.8	33.8
LOS by Move:	E+	E	E	D-	D	D	D-	C	C	E	C-	C-
HCM2kAvgQ:	9	9	9	12	5	6	7	21	11	1	12	12

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #12: Bernardo Avenue / El Camino Real

Signal=Protect/Rights=Include
Final Vol: 224 319*** 100
Lanes: 0 1 1 0 1

Signal=Protect
Rights=Include

Final Vol:	Lanes:		
353	1		
	0		
1467***	2		
	1		
203	0		

Vol Cnt Date:	10/2/2018
Cycle Time (sec):	130
Loss Time (sec):	12
Critical V/C:	0.654
Avg Crit Del (sec/veh):	36.5
Avg Delay (sec/veh):	38.9
LOS:	D+

Signal=Protect
Rights=Include

Lanes:	Final Vol:
0	115
1	
2	782
0	
1	175***

Lanes: 2 0 1 0 1
Final Vol: 153*** 177 85
Signal=Protect/Rights=Include

```
Street Name:          Bernardo Avenue                      El Camino Real
Approach:       North Bound       South Bound        East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Min. Green:     7   10     10     7   10     10     7   10     10     7   10     10
Y+R:          4.0  4.0    4.0   4.0  4.0    4.0   4.0  4.0    4.0   4.0  4.0    4.0
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 2 Oct 2018 <<
Base Vol:     153  177     85   100  319    224   353 1467    203   175  782    115
Growth 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
Initial Bse:  153  177     85   100  319    224   353 1467    203   175  782    115
Added Vol:      0    0      0     0    0      0     0    0      0     0    0      0
PasserByVol:    0    0      0     0    0      0     0    0      0     0    0      0
Initial Fut:  153  177     85   100  319    224   353 1467    203   175  782    115
User 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
PHF 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
PHF Volume:   153  177     85   100  319    224   353 1467    203   175  782    115
Reduct Vol:     0    0      0     0    0      0     0    0      0     0    0      0
Reduced Vol:  153  177     85   100  319    224   353 1467    203   175  782    115
PCE 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
MLF 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
FinalVolume:  153  177     85   100  319    224   353 1467    203   175  782    115
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:    1900 1900   1900  1900 1900   1900  1900 1900   1900  1900 1900   1900
Adjustment:  0.83 1.00   0.92  0.92 0.99   0.95  0.92 0.99   0.95  0.92 0.99   0.95
Lanes:       2.00 1.00   1.00  1.00 1.15   0.85  1.00 2.62   0.38  1.00 2.60   0.40
Final Sat.:  3150 1900   1750  1750 2173   1526  1750 4918    681  1750 4881    718
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.09   0.05  0.06 0.15   0.15  0.20 0.30   0.30  0.10 0.16   0.16
Crit Moves:  ****                    ****                 ****         ****
Green Time:   9.7 24.1   24.1  14.8 29.2   29.2  44.1 59.3   59.3  19.9 35.0   35.0
Volume/Cap:  0.65 0.50   0.26  0.50 0.65   0.65  0.59 0.65   0.65  0.65 0.59   0.59
Delay/Veh:   65.1 48.7   45.8  56.2 47.7   47.7  37.2 28.0   28.0  57.5 41.9   41.9
User DelAdj: 1.00 1.00   1.00  1.00 1.00   1.00  1.00 1.00   1.00  1.00 1.00   1.00
AdjDel/Veh:  65.1 48.7   45.8  56.2 47.7   47.7  37.2 28.0   28.0  57.5 41.9   41.9
LOS by Move:    E    D      D    E+    D      D    D+    C      C    E+    D      D
HCM2kAvgQ:      5    7      3     5   11     11    12   17     17     7   10     10
Note: Queue reported is the number of cars per lane.
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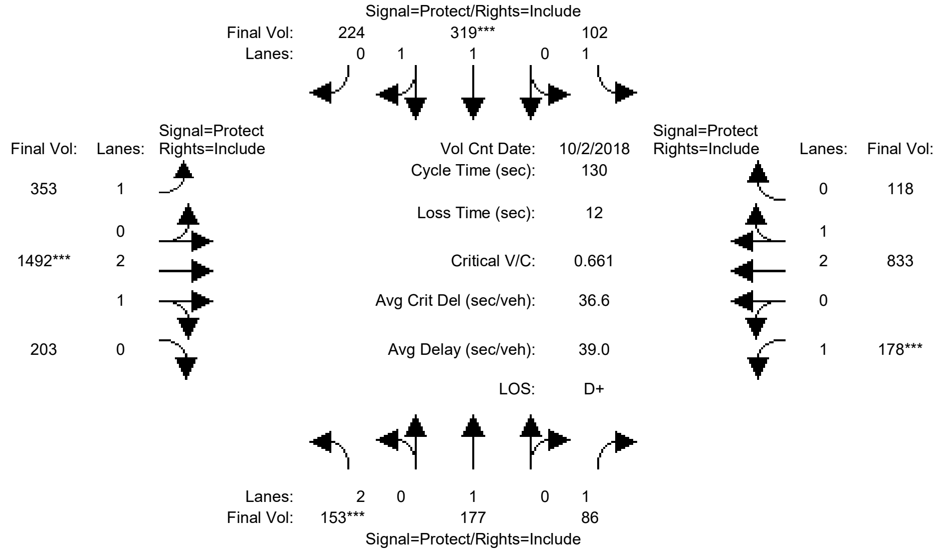
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #12: Bernardo Avenue / El Camino Real



Street Name:	Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	153	177	85	100	319	224	353	1467	203	175	782	115
Growth 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
Initial Bse:	153	177	85	100	319	224	353	1467	203	175	782	115
Added Vol:	0	0	1	2	0	0	0	25	0	3	51	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	153	177	86	102	319	224	353	1492	203	178	833	118
User 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
PHF 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
PHF Volume:	153	177	86	102	319	224	353	1492	203	178	833	118
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	177	86	102	319	224	353	1492	203	178	833	118
PCE 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
MLF 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
FinalVolume:	153	177	86	102	319	224	353	1492	203	178	833	118
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	2.00	1.00	1.00	1.00	1.15	0.85	1.00	2.63	0.37	1.00	2.61	0.39
Final Sat.:	3150	1900	1750	1750	2173	1526	1750	4928	671	1750	4904	695
Capacity Analysis Module:												
Vol/Sat:	0.05	0.09	0.05	0.06	0.15	0.15	0.20	0.30	0.30	0.10	0.17	0.17
Crit Moves:	****				****			****		****		
Green Time:	9.6	23.6	23.6	14.8	28.9	28.9	43.2	59.6	59.6	20.0	36.4	36.4
Volume/Cap:	0.66	0.51	0.27	0.51	0.66	0.66	0.61	0.66	0.66	0.66	0.61	0.61
Delay/Veh:	65.6	49.3	46.2	56.5	48.1	48.1	38.2	28.0	28.0	57.8	41.3	41.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	65.6	49.3	46.2	56.5	48.1	48.1	38.2	28.0	28.0	57.8	41.3	41.3
LOS by Move:	E	D	D	E+	D	D	D+	C	C	E+	D	D
HCM2kAvgQ:	5	7	3	5	11	11	12	17	17	7	11	11

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #13: Mary Avenue / Central Expressway (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 210 772 377***
Lanes: 1 0 3 0 2

Signal=Protect Rights=Overlap (West approach)
Final Vol: 39 / Lanes: 2
Lanes: 0
Final Vol: 1527 / Lanes: 3
Lanes: 0
Final Vol: 621*** / Lanes: 1

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 180
Loss Time (sec): 12
Critical V/C: 0.807
Avg Crit Del (sec/veh): 59.9
Avg Delay (sec/veh): 52.8
LOS: D-

Signal=Protect Rights=Overlap (East approach)
Lanes: 1 / Final Vol: 18
Lanes: 0
Lanes: 3 / Final Vol: 1251
Lanes: 0
Lanes: 2 / Final Vol: 686***

Lanes: 2 0 3 0 1
Final Vol: 212 115 605***
Signal=Protect/Rights=Overlap

Street Name:	Mary Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	212	115	605	377	772	210	39	1527	621	686	1251	18
Growth 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
Initial Bse:	212	115	605	377	772	210	39	1527	621	686	1251	18
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	212	115	605	377	772	210	39	1527	621	686	1251	18
User 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
PHF 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
PHF Volume:	212	115	605	377	772	210	39	1527	621	686	1251	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	212	115	605	377	772	210	39	1527	621	686	1251	18
PCE 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
MLF 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
FinalVolume:	212	115	605	377	772	210	39	1527	621	686	1251	18
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.02	0.35	0.12	0.14	0.12	0.01	0.27	0.35	0.22	0.22	0.01
Crit Moves:			****	****					****	****		
Green Time:	18.3	28.5	77.1	26.7	36.9	53.9	17.0	64.2	82.5	48.6	95.8	122.5
Volume/Cap:	0.66	0.13	0.81	0.81	0.66	0.40	0.13	0.75	0.77	0.81	0.41	0.02
Delay/Veh:	82.9	65.1	51.4	84.1	67.2	50.7	75.0	52.5	45.7	67.0	25.3	9.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	82.9	65.1	51.4	84.1	67.2	50.7	75.0	52.5	45.7	67.0	25.3	9.3
LOS by Move:	F	E	D-	F	E	D	E	D-	D	E	C	A
HCM2kAvgQ:	7	2	32	14	14	10	1	24	31	23	13	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #13: Mary Avenue / Central Expressway (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 210 772 377***
Lanes: 1 0 3 0 2

Final Vol:	Lanes:	Signal=Protect Rights=Overlap			Signal=Protect Rights=Overlap	Lanes:	Final Vol:
39	2		Vol Cnt Date:	5/1/2017		1	18
			Cycle Time (sec):	180			
	0		Loss Time (sec):	12		0	
1572	3		Critical V/C:	0.805		3	1345
	0		Avg Crit Del (sec/veh):	59.5		0	
633***	1		Avg Delay (sec/veh):	52.9		2	686***
			LOS:	D-			

Lanes: 2 0 3 0 1
Final Vol: 238 115 605***
Signal=Protect/Rights=Overlap

Street Name:	Mary Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	212	115	605	377	772	210	39	1527	621	686	1251	18
Growth 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
Initial Bse:	212	115	605	377	772	210	39	1527	621	686	1251	18
Added Vol:	26	0	0	0	0	0	0	45	12	0	94	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	238	115	605	377	772	210	39	1572	633	686	1345	18
User 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
PHF 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
PHF Volume:	238	115	605	377	772	210	39	1572	633	686	1345	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	238	115	605	377	772	210	39	1572	633	686	1345	18
PCE 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
MLF 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
FinalVolume:	238	115	605	377	772	210	39	1572	633	686	1345	18
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.02	0.35	0.12	0.14	0.12	0.01	0.28	0.36	0.22	0.24	0.01
Crit Moves:			****	****					****	****		
Green Time:	19.8	28.6	77.3	26.8	35.5	51.5	15.9	64.0	83.8	48.7	96.7	123.5
Volume/Cap:	0.69	0.13	0.81	0.81	0.69	0.42	0.14	0.78	0.78	0.81	0.44	0.01
Delay/Veh:	82.7	65.0	51.2	83.9	68.8	52.7	75.9	53.6	45.0	66.9	25.3	9.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	82.7	65.0	51.2	83.9	68.8	52.7	75.9	53.6	45.0	66.9	25.3	9.0
LOS by Move:	F	E	D-	F	E	D-	E-	D-	D	E	C	A
HCM2kAvgQ:	8	2	32	14	14	10	1	26	32	23	14	0

Note: Queue reported is the number of cars per lane.

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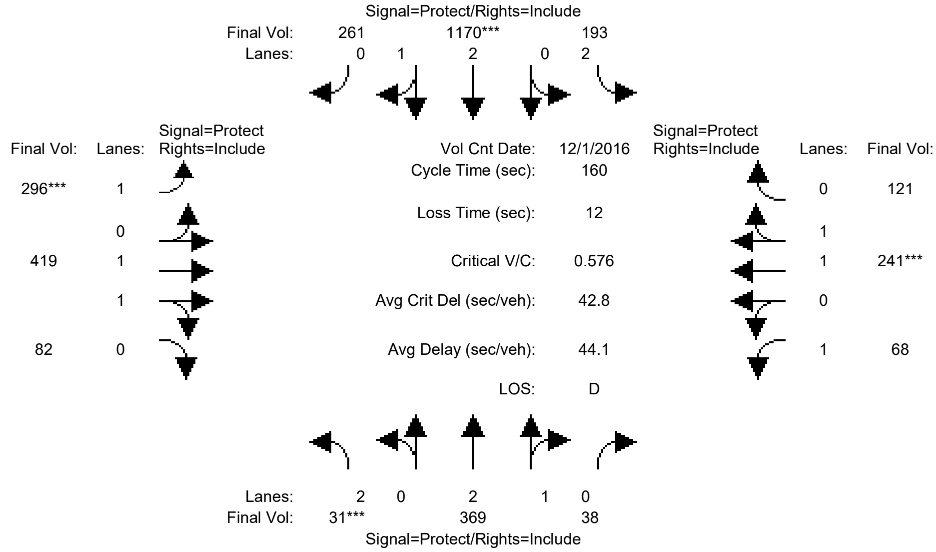
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #14: Mary Avenue / Evelyn Avenue



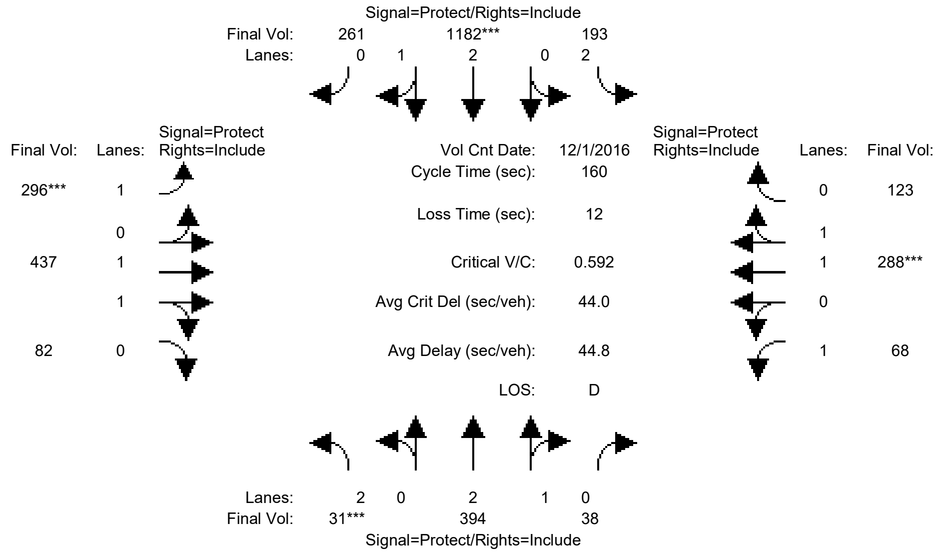
Street Name:	Mary Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	31	369	38	193	1170	261	296	419	82	68	241	121
Growth 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
Initial Bse:	31	369	38	193	1170	261	296	419	82	68	241	121
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	369	38	193	1170	261	296	419	82	68	241	121
User 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
PHF 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
PHF Volume:	31	369	38	193	1170	261	296	419	82	68	241	121
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	369	38	193	1170	261	296	419	82	68	241	121
PCE 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
MLF 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
FinalVolume:	31	369	38	193	1170	261	296	419	82	68	241	121
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	2.00	2.71	0.29	2.00	2.43	0.57	1.00	1.66	0.34	1.00	1.31	0.69
Final Sat.:	3150	5076	523	3150	4577	1021	1750	3094	606	1750	2462	1236
Capacity Analysis Module:												
Vol/Sat:	0.01	0.07	0.07	0.06	0.26	0.26	0.17	0.14	0.14	0.04	0.10	0.10
Crit Moves:	****				****		****				****	
Green Time:	7.0	41.2	41.2	34.7	69.0	69.0	45.6	54.4	54.4	17.6	26.4	26.4
Volume/Cap:	0.22	0.28	0.28	0.28	0.59	0.59	0.59	0.40	0.40	0.35	0.59	0.59
Delay/Veh:	74.7	47.7	47.7	52.5	35.2	35.2	51.1	40.5	40.5	67.1	63.4	63.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	74.7	47.7	47.7	52.5	35.2	35.2	51.1	40.5	40.5	67.1	63.4	63.4
LOS by Move:	E	D	D	D-	D+	D+	D-	D	D	E	E	E
HCM2kAvgQ:	1	5	5	4	17	17	13	9	9	4	9	9

Note: Queue reported is the number of cars per lane.

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #14: Mary Avenue / Evelyn Avenue



Street Name:	Mary Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	31	369	38	193	1170	261	296	419	82	68	241	121
Growth 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
Initial Bse:	31	369	38	193	1170	261	296	419	82	68	241	121
Added Vol:	0	25	0	0	12	0	0	18	0	0	47	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	394	38	193	1182	261	296	437	82	68	288	123
User 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
PHF 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
PHF Volume:	31	394	38	193	1182	261	296	437	82	68	288	123
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	394	38	193	1182	261	296	437	82	68	288	123
PCE 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
MLF 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
FinalVolume:	31	394	38	193	1182	261	296	437	82	68	288	123
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	2.00	2.73	0.27	2.00	2.44	0.56	1.00	1.68	0.32	1.00	1.39	0.61
Final Sat.:	3150	5107	493	3150	4586	1013	1750	3115	585	1750	2592	1107
Capacity Analysis Module:												
Vol/Sat:	0.01	0.08	0.08	0.06	0.26	0.26	0.17	0.14	0.14	0.04	0.11	0.11
Crit Moves:	****				****		****				****	
Green Time:	7.0	41.6	41.6	33.0	67.6	67.6	44.3	56.0	56.0	17.5	29.1	29.1
Volume/Cap:	0.22	0.30	0.30	0.30	0.61	0.61	0.61	0.40	0.40	0.36	0.61	0.61
Delay/Veh:	74.7	47.6	47.6	54.0	36.5	36.5	52.6	39.5	39.5	67.2	61.9	61.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	74.7	47.6	47.6	54.0	36.5	36.5	52.6	39.5	39.5	67.2	61.9	61.9
LOS by Move:	E	D	D	D-	D+	D+	D-	D	D	E	E	E
HCM2kAvgQ:	1	5	5	5	18	18	13	9	9	4	10	10

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #15: Mary Avenue / Washington Avenue

Signal=Protect/Rights=Include
Final Vol: 54 1084*** 59
Lanes: 0 1 1 0 1

Westbound approach (left side): Signal=Permit, Rights=Include
Final Vol: 34, 95, 35
Lanes: 0, 1, 0, 0, 1

Vol Cnt Date: 11/1/2017
Cycle Time (sec): 100
Loss Time (sec): 12
Critical V/C: 0.474
Avg Crit Del (sec/veh): 14.0
Avg Delay (sec/veh): 17.5
LOS: B

Eastbound approach (right side): Signal=Permit, Rights=Include
Lanes: 1, 0, 0, 1, 0
Final Vol: 24, 73***, 71

Lanes: 1 0 1 1 0
Final Vol: 52*** 316 68
Signal=Protect/Rights=Include

Street Name:	Mary Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Nov 2017 <<												
Base Vol:	52	316	68	59	1084	54	34	95	35	71	73	24
Growth 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
Initial Bse:	52	316	68	59	1084	54	34	95	35	71	73	24
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	52	316	68	59	1084	54	34	95	35	71	73	24
User 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
PHF 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
PHF Volume:	52	316	68	59	1084	54	34	95	35	71	73	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	316	68	59	1084	54	34	95	35	71	73	24
PCE 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
MLF 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
FinalVolume:	52	316	68	59	1084	54	34	95	35	71	73	24
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.97	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	1.64	0.36	1.00	1.90	0.10	0.26	0.74	1.00	0.49	0.51	1.00
Final Sat.:	1750	3044	655	1750	3524	176	474	1326	1750	887	912	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.10	0.03	0.31	0.31	0.07	0.07	0.02	0.08	0.08	0.01
Crit Moves:	****				****						****	
Green Time:	7.0	42.6	42.6	28.7	64.3	64.3	16.7	16.7	16.7	16.7	16.7	16.7
Volume/Cap:	0.42	0.24	0.24	0.12	0.48	0.48	0.43	0.43	0.12	0.48	0.48	0.08
Delay/Veh:	46.9	18.5	18.5	26.4	9.4	9.4	38.3	38.3	35.6	38.9	38.9	35.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.9	18.5	18.5	26.4	9.4	9.4	38.3	38.3	35.6	38.9	38.9	35.3
LOS by Move:	D	B-	B-	C	A	A	D+	D+	D+	D+	D+	D+
HCM2kAvgQ:	2	4	4	1	9	9	4	4	1	4	4	1

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #15: Mary Avenue / Washington Avenue

Signal=Protect/Rights=Include
Final Vol: 54 1084*** 71
Lanes: 0 1 1 0 1

Signal=Permit Rights=Include (West)
Final Vol: 34, 100, 35
Lanes: 0, 1, 0, 0, 1

Vol Cnt Date: 11/1/2017
Cycle Time (sec): 100
Loss Time (sec): 12
Critical V/C: 0.481
Avg Crit Del (sec/veh): 14.6
Avg Delay (sec/veh): 18.2
LOS: B-

Signal=Permit Rights=Include (East)
Lanes: 1, 0, 0, 1, 0
Final Vol: 49, 84***, 71

Lanes: 1 0 1 1 0
Final Vol: 52*** 316 68
Signal=Protect/Rights=Include

Street Name:	Mary Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Nov 2017 <<												
Base Vol:	52	316	68	59	1084	54	34	95	35	71	73	24
Growth 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
Initial Bse:	52	316	68	59	1084	54	34	95	35	71	73	24
Added Vol:	0	0	0	12	0	0	0	5	0	0	11	25
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	52	316	68	71	1084	54	34	100	35	71	84	49
User 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
PHF 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
PHF Volume:	52	316	68	71	1084	54	34	100	35	71	84	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	316	68	71	1084	54	34	100	35	71	84	49
PCE 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
MLF 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
FinalVolume:	52	316	68	71	1084	54	34	100	35	71	84	49
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.97	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	1.64	0.36	1.00	1.90	0.10	0.25	0.75	1.00	0.46	0.54	1.00
Final Sat.:	1750	3044	655	1750	3524	176	457	1343	1750	825	975	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.10	0.04	0.31	0.31	0.07	0.07	0.02	0.09	0.09	0.03
Crit Moves:	****				****						****	
Green Time:	7.0	42.0	42.0	28.3	63.3	63.3	17.7	17.7	17.7	17.7	17.7	17.7
Volume/Cap:	0.42	0.25	0.25	0.14	0.49	0.49	0.42	0.42	0.11	0.49	0.49	0.16
Delay/Veh:	46.9	18.9	18.9	26.9	9.9	9.9	37.5	37.5	34.7	38.2	38.2	35.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.9	18.9	18.9	26.9	9.9	9.9	37.5	37.5	34.7	38.2	38.2	35.1
LOS by Move:	D	B-	B-	C	A	A	D+	D+	C-	D+	D+	D+
HCM2kAvgQ:	2	4	4	2	9	9	4	4	1	4	4	1

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #16: Mary Avenue / El Camino Real (CMP)

Signal=Protect/Rights=Include
Final Vol: 180 699*** 184
Lanes: 0 1 1 0 1

Signal=Protect
Rights=Overlap

Final Vol:	Lanes:
201	1
	0
1381***	3
	0
190	1

Vol Cnt Date:	12/1/2016
Cycle Time (sec):	160
Loss Time (sec):	12
Critical V/C:	0.686
Avg Crit Del (sec/veh):	49.0
Avg Delay (sec/veh):	48.4
LOS:	D

Signal=Protect
Rights=Overlap

Lanes:	Final Vol:
1	121
0	
3	944
0	
1	170***

Lanes: 1 0 1 1 0
Final Vol: 101*** 219 87
Signal=Protect/Rights=Include

Street Name:	Mary Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	101	219	87	184	699	180	201	1381	190	170	944	121
Growth 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
Initial Bse:	101	219	87	184	699	180	201	1381	190	170	944	121
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	101	219	87	184	699	180	201	1381	190	170	944	121
User 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
PHF 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
PHF Volume:	101	219	87	184	699	180	201	1381	190	170	944	121
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	101	219	87	184	699	180	201	1381	190	170	944	121
PCE 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
MLF 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
FinalVolume:	101	219	87	184	699	180	201	1381	190	170	944	121
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.42	0.58	1.00	1.58	0.42	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	2647	1052	1750	2942	758	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.08	0.08	0.11	0.24	0.24	0.11	0.24	0.11	0.10	0.17	0.07
Crit Moves:	****				****			****		****		
Green Time:	13.5	30.3	30.3	38.5	55.4	55.4	32.4	56.5	69.9	22.7	46.7	85.3
Volume/Cap:	0.69	0.44	0.44	0.44	0.69	0.69	0.57	0.69	0.25	0.69	0.57	0.13
Delay/Veh:	83.9	57.7	57.7	52.2	46.4	46.4	59.6	45.2	28.6	73.1	48.5	18.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	83.9	57.7	57.7	52.2	46.4	46.4	59.6	45.2	28.6	73.1	48.5	18.8
LOS by Move:	F	E+	E+	D-	D	D	E+	D	C	E	D	B-
HCM2kAvgQ:	6	7	7	8	19	19	9	19	6	9	13	3

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #16: Mary Avenue / El Camino Real (CMP)

Signal=Protect/Rights=Include
Final Vol: 180 699*** 184
Lanes: 0 1 1 0 1

Westbound side: Signal=Protect, Rights=Overlap
Eastbound side: Signal=Protect, Rights=Overlap

Final Vol:	Lanes:			Lanes:	Final Vol:
201	1	Vol Cnt Date: 12/1/2016	Cycle Time (sec): 160	1	121
	0	Loss Time (sec): 12		0	
1408***	3	Critical V/C: 0.693		3	1001
	0	Avg Crit Del (sec/veh): 49.2		0	
190	1	Avg Delay (sec/veh): 48.5		1	173***
		LOS: D			

Lanes: 1 0 1 1 0
Final Vol: 101*** 219 88
Signal=Protect/Rights=Include

Street Name:	Mary Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	101	219	87	184	699	180	201	1381	190	170	944	121
Growth 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
Initial Bse:	101	219	87	184	699	180	201	1381	190	170	944	121
Added Vol:	0	0	1	0	0	0	0	27	0	3	57	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	101	219	88	184	699	180	201	1408	190	173	1001	121
User 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
PHF 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
PHF Volume:	101	219	88	184	699	180	201	1408	190	173	1001	121
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	101	219	88	184	699	180	201	1408	190	173	1001	121
PCE 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
MLF 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
FinalVolume:	101	219	88	184	699	180	201	1408	190	173	1001	121
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.41	0.59	1.00	1.58	0.42	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	2639	1060	1750	2942	758	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.08	0.08	0.11	0.24	0.24	0.11	0.25	0.11	0.10	0.18	0.07
Crit Moves:	****				****			****		****		
Green Time:	13.3	30.1	30.1	38.1	54.8	54.8	31.6	57.0	70.3	22.8	48.3	86.4
Volume/Cap:	0.69	0.44	0.44	0.44	0.69	0.69	0.58	0.69	0.25	0.69	0.58	0.13
Delay/Veh:	84.8	58.0	58.0	52.6	47.0	47.0	60.8	45.1	28.4	73.4	47.8	18.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	84.8	58.0	58.0	52.6	47.0	47.0	60.8	45.1	28.4	73.4	47.8	18.3
LOS by Move:	F	E+	E+	D-	D	D	E	D	C	E	D	B-
HCM2kAvgQ:	6	7	7	8	19	19	9	19	6	9	13	3

Note: Queue reported is the number of cars per lane.

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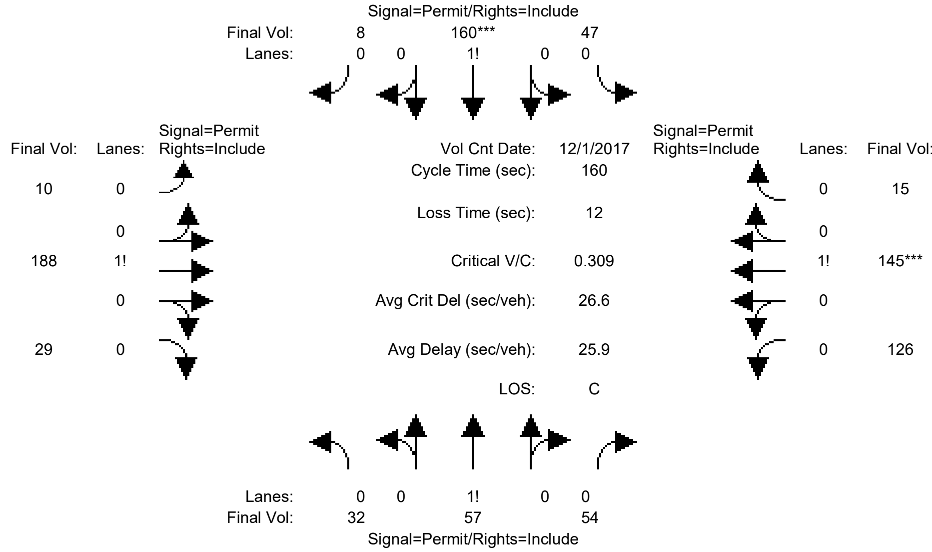
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #17: Pastoria Avenue / Washington Avenue

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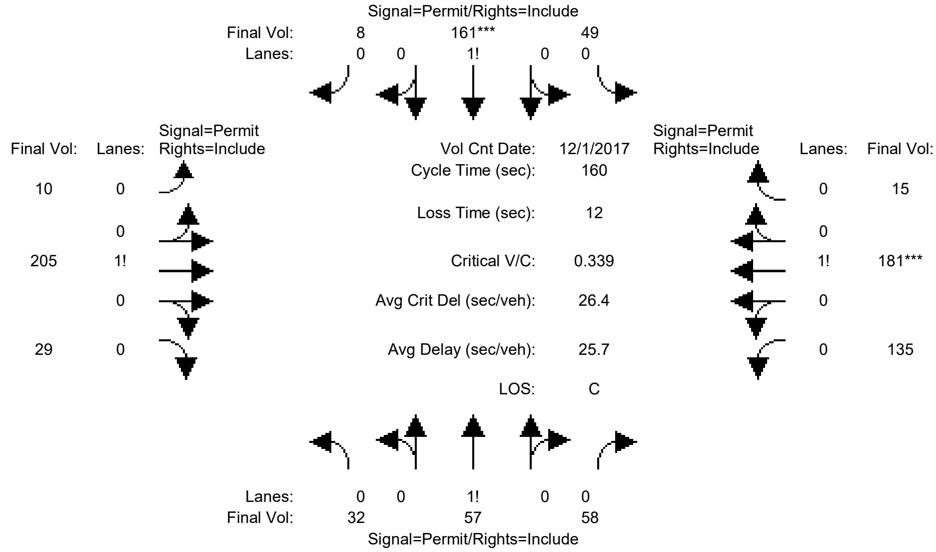
Street Name:          Pastoria Avenue                 Washington Avenue
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Min. Green:    10    10    10    10    10    10    10    10    10    10    10    10
Y+R:          4.0   4.0   4.0   4.0   4.0   4.0   4.0   4.0   4.0   4.0   4.0   4.0
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 1 Dec 2017 <<
Base Vol:      32    57    54    47   160     8    10   188    29   126   145    15
Growth 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
Initial Bse:   32    57    54    47   160     8    10   188    29   126   145    15
Added Vol:      0     0     0     0     0     0     0     0     0     0     0     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:   32    57    54    47   160     8    10   188    29   126   145    15
User 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
PHF 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
PHF Volume:    32    57    54    47   160     8    10   188    29   126   145    15
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   32    57    54    47   160     8    10   188    29   126   145    15
PCE 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
MLF 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
FinalVolume:   32    57    54    47   160     8    10   188    29   126   145    15
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:    1900  1900  1900  1900  1900  1900  1900  1900  1900  1900  1900  1900
Adjustment:  0.92  0.92  0.92  0.92  0.92  0.92  0.92  0.92  0.92  0.92  0.92  0.92
Lanes:       0.22  0.40  0.38  0.22  0.74  0.04  0.04  0.83  0.13  0.44  0.51  0.05
Final Sat.:   392   698   661   383  1302    65    77  1449   224   771   887    92
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:     0.08  0.08  0.08  0.12  0.12  0.12  0.13  0.13  0.13  0.16  0.16  0.16
Crit Moves:                         ****                                ****
Green Time:  63.5  63.5  63.5  63.5  63.5  63.5  84.5  84.5  84.5  84.5  84.5  84.5
Volume/Cap:  0.21  0.21  0.21  0.31  0.31  0.31  0.25  0.25  0.25  0.31  0.31  0.31
Delay/Veh:   31.8  31.8  31.8  33.4  33.4  33.4  20.6  20.6  20.6  21.5  21.5  21.5
User DelAdj: 1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
AdjDel/Veh:  31.8  31.8  31.8  33.4  33.4  33.4  20.6  20.6  20.6  21.5  21.5  21.5
LOS by Move:    C     C     C    C-    C-    C-    C+    C+    C+    C+    C+    C+
HCM2kAvgQ:      5     5     5     8     8     8     6     6     6     8     8     8
Note: Queue reported is the number of cars per lane.
```

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #17: Pastoria Avenue / Washington Avenue



Street Name:	Pastoria Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	32	57	54	47	160	8	10	188	29	126	145	15
Growth 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
Initial Bse:	32	57	54	47	160	8	10	188	29	126	145	15
Added Vol:	0	0	4	2	1	0	0	17	0	9	36	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	57	58	49	161	8	10	205	29	135	181	15
User 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
PHF 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
PHF Volume:	32	57	58	49	161	8	10	205	29	135	181	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	57	58	49	161	8	10	205	29	135	181	15
PCE 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
MLF 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
FinalVolume:	32	57	58	49	161	8	10	205	29	135	181	15
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.22	0.39	0.39	0.22	0.74	0.04	0.04	0.84	0.12	0.41	0.55	0.04
Final Sat.:	381	679	690	393	1292	64	72	1470	208	714	957	79
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.08	0.12	0.12	0.12	0.14	0.14	0.14	0.19	0.19	0.19
Crit Moves:					****						****	
Green Time:	58.8	58.8	58.8	58.8	58.8	58.8	89.2	89.2	89.2	89.2	89.2	89.2
Volume/Cap:	0.23	0.23	0.23	0.34	0.34	0.34	0.25	0.25	0.25	0.34	0.34	0.34
Delay/Veh:	35.1	35.1	35.1	36.9	36.9	36.9	18.3	18.3	18.3	19.5	19.5	19.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.1	35.1	35.1	36.9	36.9	36.9	18.3	18.3	18.3	19.5	19.5	19.5
LOS by Move:	D+	D+	D+	D+	D+	D+	B-	B-	B-	B-	B-	B-
HCM2kAvgQ:	5	5	5	8	8	8	6	6	6	9	9	9

Note: Queue reported is the number of cars per lane.

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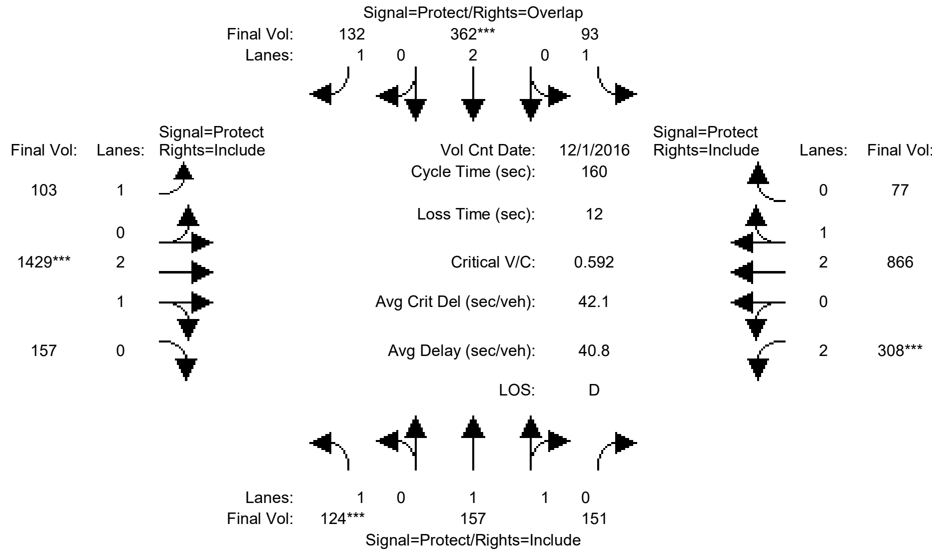
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #18: El Camino Real / Hollenbeck Avenue-Pastoria Avenue



Street Name:	Hollenbeck Avenue-Pastoria Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	124	157	151	93	362	132	103	1429	157	308	866	77
Growth 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
Initial Bse:	124	157	151	93	362	132	103	1429	157	308	866	77
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	124	157	151	93	362	132	103	1429	157	308	866	77
User 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
PHF 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
PHF Volume:	124	157	151	93	362	132	103	1429	157	308	866	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	157	151	93	362	132	103	1429	157	308	866	77
PCE 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
MLF 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
FinalVolume:	124	157	151	93	362	132	103	1429	157	308	866	77
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.95	0.92	1.00	0.92	0.92	0.99	0.95	0.83	0.99	0.95
Lanes:	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.69	0.31	2.00	2.75	0.25
Final Sat.:	1750	1898	1800	1750	3800	1750	1750	5045	554	3150	5142	457
Capacity Analysis Module:												
Vol/Sat:	0.07	0.08	0.08	0.05	0.10	0.08	0.06	0.28	0.28	0.10	0.17	0.17
Crit Moves:	****				****			****		****		
Green Time:	19.2	27.5	27.5	17.4	25.8	52.5	26.7	76.6	76.6	26.4	76.4	76.4
Volume/Cap:	0.59	0.48	0.49	0.49	0.59	0.23	0.35	0.59	0.59	0.59	0.35	0.35
Delay/Veh:	71.2	60.4	60.5	69.1	63.8	39.3	59.7	30.7	30.7	63.6	26.4	26.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	71.2	60.4	60.5	69.1	63.8	39.3	59.7	30.7	30.7	63.6	26.4	26.4
LOS by Move:	E	E	E	E	E	D	E+	C	C	E	C	C
HCM2kAvgQ:	6	7	7	5	8	5	5	18	18	8	9	9

Note: Queue reported is the number of cars per lane.

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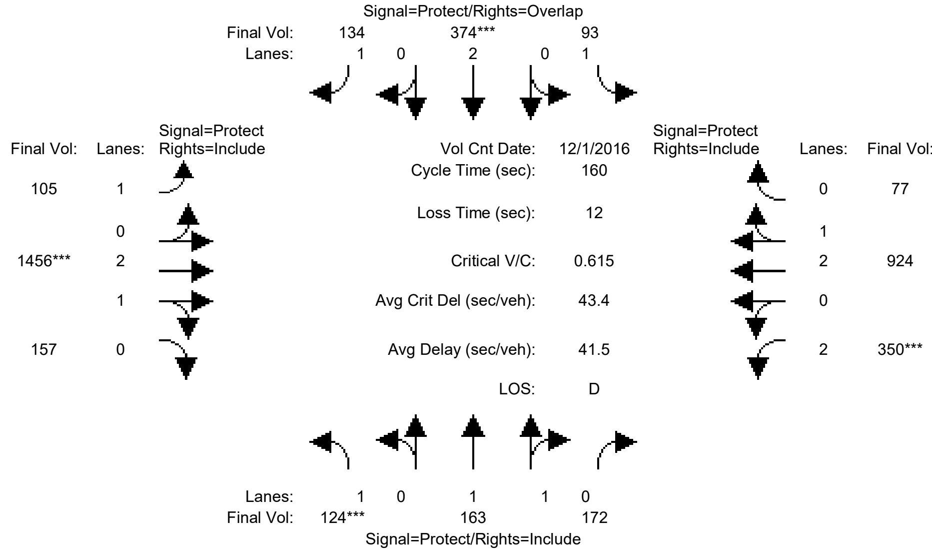
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #18: El Camino Real / Hollenbeck Avenue-Pastoria Avenue



Street Name:	Hollenbeck Avenue-Pastoria Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	124	157	151	93	362	132	103	1429	157	308	866	77
Growth 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
Initial Bse:	124	157	151	93	362	132	103	1429	157	308	866	77
Added Vol:	0	6	21	0	12	2	2	27	0	42	58	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	124	163	172	93	374	134	105	1456	157	350	924	77
User 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
PHF 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
PHF Volume:	124	163	172	93	374	134	105	1456	157	350	924	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	163	172	93	374	134	105	1456	157	350	924	77
PCE 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
MLF 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
FinalVolume:	124	163	172	93	374	134	105	1456	157	350	924	77
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.83	0.99	0.95
Lanes:	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.70	0.30	2.00	2.76	0.24
Final Sat.:	1750	1900	1750	1750	3800	1750	1750	5054	545	3150	5169	431
Capacity Analysis Module:												
Vol/Sat:	0.07	0.09	0.10	0.05	0.10	0.08	0.06	0.29	0.29	0.11	0.18	0.18
Crit Moves:	****				****			****		****		
Green Time:	18.4	28.6	28.6	15.5	25.6	51.7	26.1	75.0	75.0	28.9	77.8	77.8
Volume/Cap:	0.61	0.48	0.55	0.55	0.61	0.24	0.37	0.61	0.61	0.61	0.37	0.37
Delay/Veh:	72.9	59.5	60.9	72.8	64.5	39.9	60.4	32.2	32.2	62.4	25.8	25.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	72.9	59.5	60.9	72.8	64.5	39.9	60.4	32.2	32.2	62.4	25.8	25.8
LOS by Move:	E	E+	E	E	E	D	E	C-	C-	E	C	C
HCM2kAvgQ:	6	7	8	5	8	5	5	19	19	9	10	10

Note: Queue reported is the number of cars per lane.

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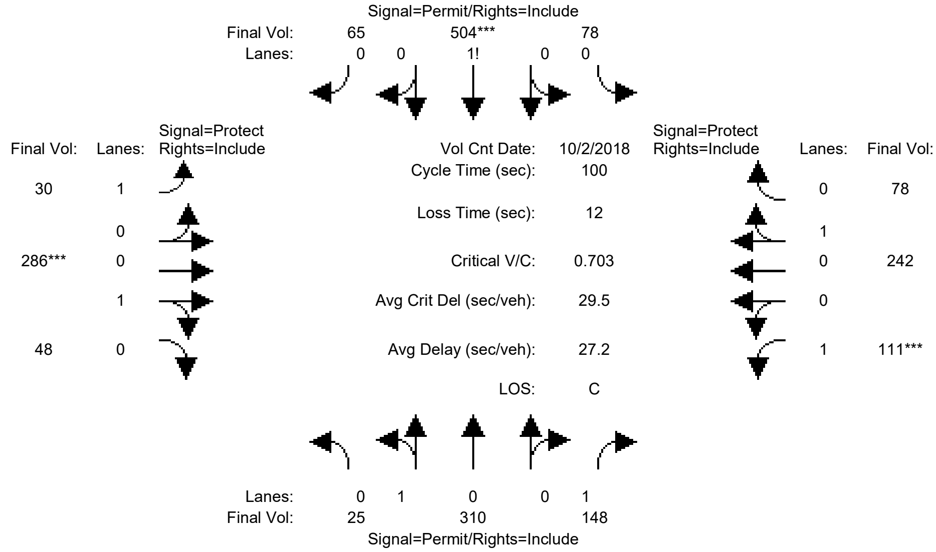
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #19: Hollenbeck Avenue / Remington Avenue



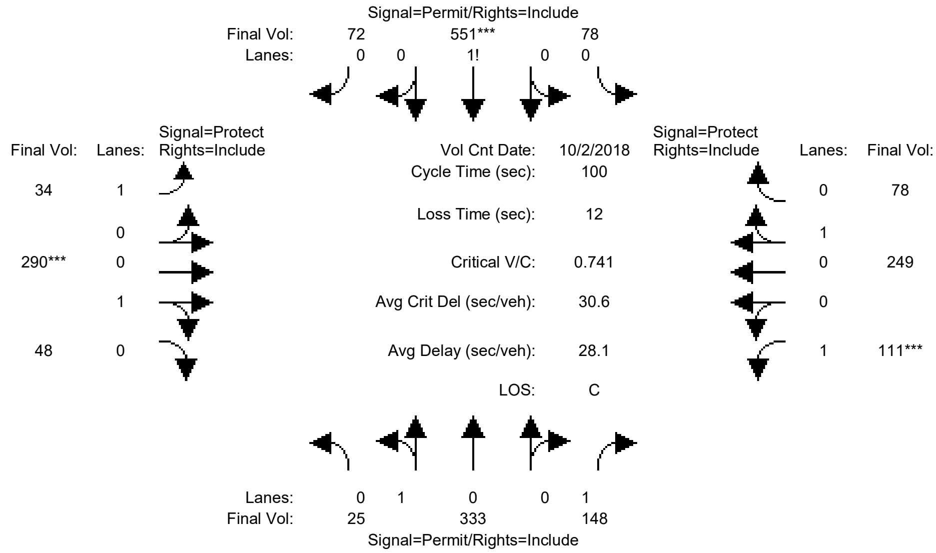
Street Name:	Hollenbeck Avenue						Remington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	25	310	148	78	504	65	30	286	48	111	242	78
Growth 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
Initial Bse:	25	310	148	78	504	65	30	286	48	111	242	78
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	310	148	78	504	65	30	286	48	111	242	78
User 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
PHF 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
PHF Volume:	25	310	148	78	504	65	30	286	48	111	242	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	310	148	78	504	65	30	286	48	111	242	78
PCE 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
MLF 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
FinalVolume:	25	310	148	78	504	65	30	286	48	111	242	78
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.07	0.93	1.00	0.12	0.78	0.10	1.00	0.86	0.14	1.00	0.76	0.24
Final Sat.:	134	1666	1750	211	1363	176	1750	1541	259	1750	1361	439
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.08	0.37	0.37	0.37	0.02	0.19	0.19	0.06	0.18	0.18
Crit Moves:					****			****		****		
Green Time:	52.6	52.6	52.6	52.6	52.6	52.6	10.0	26.4	26.4	9.0	25.4	25.4
Volume/Cap:	0.35	0.35	0.16	0.70	0.70	0.70	0.17	0.70	0.70	0.70	0.70	0.70
Delay/Veh:	14.0	14.0	12.4	20.3	20.3	20.3	41.7	38.0	38.0	57.5	38.6	38.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.0	14.0	12.4	20.3	20.3	20.3	41.7	38.0	38.0	57.5	38.6	38.6
LOS by Move:	B	B	B	C+	C+	C+	D	D+	D+	E+	D+	D+
HCM2kAvgQ:	6	6	2	16	16	16	1	11	11	4	9	9

Note: Queue reported is the number of cars per lane.

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #19: Hollenbeck Avenue / Remington Avenue



Street Name:	Hollenbeck Avenue						Remington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	25	310	148	78	504	65	30	286	48	111	242	78
Growth 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
Initial Bse:	25	310	148	78	504	65	30	286	48	111	242	78
Added Vol:	0	23	0	0	47	7	4	4	0	0	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	333	148	78	551	72	34	290	48	111	249	78
User 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
PHF 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
PHF Volume:	25	333	148	78	551	72	34	290	48	111	249	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	333	148	78	551	72	34	290	48	111	249	78
PCE 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
MLF 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
FinalVolume:	25	333	148	78	551	72	34	290	48	111	249	78
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.07	0.93	1.00	0.11	0.79	0.10	1.00	0.86	0.14	1.00	0.76	0.24
Final Sat.:	126	1674	1750	195	1376	180	1750	1544	256	1750	1371	429
Capacity Analysis Module:												
Vol/Sat:	0.20	0.20	0.08	0.40	0.40	0.40	0.02	0.19	0.19	0.06	0.18	0.18
Crit Moves:					****			****		****		
Green Time:	54.1	54.1	54.1	54.1	54.1	54.1	9.4	25.4	25.4	8.6	24.5	24.5
Volume/Cap:	0.37	0.37	0.16	0.74	0.74	0.74	0.21	0.74	0.74	0.74	0.74	0.74
Delay/Veh:	13.4	13.4	11.6	20.7	20.7	20.7	42.4	40.7	40.7	62.4	41.5	41.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.4	13.4	11.6	20.7	20.7	20.7	42.4	40.7	40.7	62.4	41.5	41.5
LOS by Move:	B	B	B+	C+	C+	C+	D	D	D	E	D	D
HCM2kAvgQ:	6	6	2	18	18	18	1	12	12	4	10	10

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #20: Hollenbeck Avenue / Fremont Avenue

Signal=Protect/Rights=Overlap
Final Vol: 121 388*** 143
Lanes: 1 0 1 0 1

Westbound approach (left side): Signal=Protect, Rights=Include
Final Vol: 191 / Lanes: 1
Lanes: 0
Final Vol: 1038*** / Lanes: 2
Lanes: 1
Final Vol: 174 / Lanes: 0

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.643
Avg Crit Del (sec/veh): 50.1
Avg Delay (sec/veh): 48.3
LOS: D

Signal=Protect, Rights=Include
Lanes: 0 / Final Vol: 152
Lanes: 1
Lanes: 2 / Final Vol: 474
Lanes: 0
Lanes: 1 / Final Vol: 215***

Lanes: 1 0 1 0 1
Final Vol: 89*** 240 180
Signal=Protect/Rights=Overlap

Street Name:	Hollenbeck Avenue						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	89	240	180	143	388	121	191	1038	174	215	474	152
Growth 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
Initial Bse:	89	240	180	143	388	121	191	1038	174	215	474	152
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	89	240	180	143	388	121	191	1038	174	215	474	152
User 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
PHF 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
PHF Volume:	89	240	180	143	388	121	191	1038	174	215	474	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	89	240	180	143	388	121	191	1038	174	215	474	152
PCE 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
MLF 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
FinalVolume:	89	240	180	143	388	121	191	1038	174	215	474	152
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.55	0.45	1.00	2.24	0.76
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	4795	804	1750	4238	1359
Capacity Analysis Module:												
Vol/Sat:	0.05	0.13	0.10	0.08	0.20	0.07	0.11	0.22	0.22	0.12	0.11	0.11
Crit Moves:	****				****			****		****		
Green Time:	12.7	38.6	69.2	24.9	50.8	92.6	41.7	53.9	53.9	30.6	42.8	42.8
Volume/Cap:	0.64	0.52	0.24	0.52	0.64	0.12	0.42	0.64	0.64	0.64	0.42	0.42
Delay/Veh:	81.3	53.9	28.9	63.9	49.2	15.3	49.7	45.7	45.7	63.9	48.6	48.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	81.3	53.9	28.9	63.9	49.2	15.3	49.7	45.7	45.7	63.9	48.6	48.6
LOS by Move:	F	D-	C	E	D	B	D	D	D	E	D	D
HCM2kAvgQ:	5	10	6	7	16	3	8	17	17	10	8	8

Note: Queue reported is the number of cars per lane.

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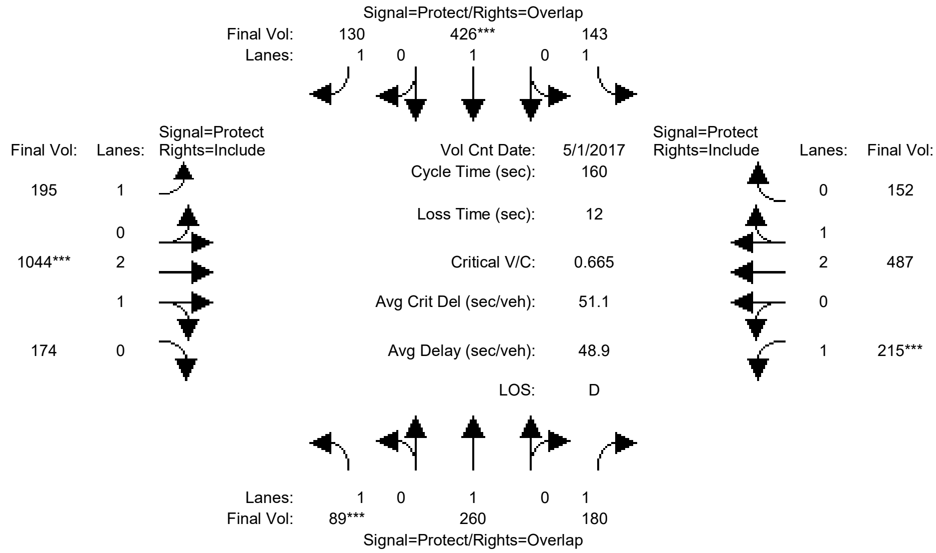
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #20: Hollenbeck Avenue / Fremont Avenue



Street Name:	Hollenbeck Avenue						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	89	240	180	143	388	121	191	1038	174	215	474	152
Growth 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
Initial Bse:	89	240	180	143	388	121	191	1038	174	215	474	152
Added Vol:	0	20	0	0	38	9	4	6	0	0	13	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	89	260	180	143	426	130	195	1044	174	215	487	152
User 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
PHF 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
PHF Volume:	89	260	180	143	426	130	195	1044	174	215	487	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	89	260	180	143	426	130	195	1044	174	215	487	152
PCE 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
MLF 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
FinalVolume:	89	260	180	143	426	130	195	1044	174	215	487	152
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.56	0.44	1.00	2.26	0.74
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	4799	800	1750	4266	1332
Capacity Analysis Module:												
Vol/Sat:	0.05	0.14	0.10	0.08	0.22	0.07	0.11	0.22	0.22	0.12	0.11	0.11
Crit Moves:	****				****			****		****		
Green Time:	12.2	41.4	71.0	24.7	53.9	94.3	40.4	52.3	52.3	29.5	41.4	41.4
Volume/Cap:	0.67	0.53	0.23	0.53	0.67	0.13	0.44	0.67	0.67	0.67	0.44	0.44
Delay/Veh:	83.9	52.0	27.8	64.2	48.0	14.6	51.0	47.3	47.3	65.8	49.8	49.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	83.9	52.0	27.8	64.2	48.0	14.6	51.0	47.3	47.3	65.8	49.8	49.8
LOS by Move:	F	D-	C	E	D	B	D	D	D	E	D	D
HCM2kAvgQ:	5	11	6	7	17	3	9	18	18	10	8	8

Note: Queue reported is the number of cars per lane.

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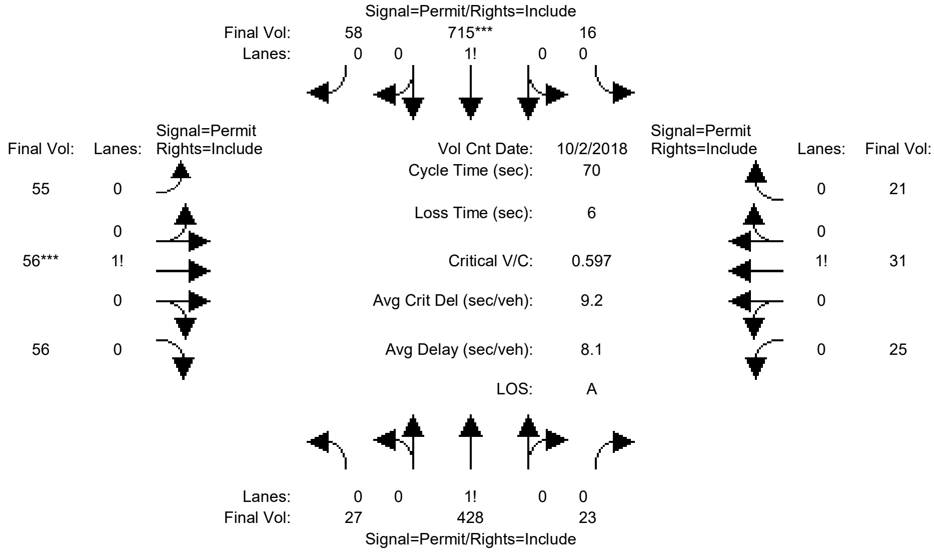
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #21: Hollenbeck Avenue / Cascade Drive



Street Name:	Hollenbeck Avenue						Cascade Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	27	428	23	16	715	58	55	56	56	25	31	21
Growth 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
Initial Bse:	27	428	23	16	715	58	55	56	56	25	31	21
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	428	23	16	715	58	55	56	56	25	31	21
User 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
PHF 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
PHF Volume:	27	428	23	16	715	58	55	56	56	25	31	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	428	23	16	715	58	55	56	56	25	31	21
PCE 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
MLF 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
FinalVolume:	27	428	23	16	715	58	55	56	56	25	31	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.06	0.89	0.05	0.02	0.91	0.07	0.33	0.33	0.34	0.32	0.41	0.27
Final Sat.:	99	1567	84	35	1586	129	576	587	587	568	705	477
Capacity Analysis Module:												
Vol/Sat:	0.27	0.27	0.27	0.45	0.45	0.45	0.10	0.10	0.10	0.04	0.04	0.04
Crit Moves:					****			****				
Green Time:	52.8	52.8	52.8	52.8	52.8	52.8	11.2	11.2	11.2	11.2	11.2	11.2
Volume/Cap:	0.36	0.36	0.36	0.60	0.60	0.60	0.60	0.60	0.60	0.28	0.28	0.28
Delay/Veh:	3.1	3.1	3.1	4.6	4.6	4.6	30.8	30.8	30.8	26.4	26.4	26.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	3.1	3.1	3.1	4.6	4.6	4.6	30.8	30.8	30.8	26.4	26.4	26.4
LOS by Move:	A	A	A	A	A	A	C	C	C	C	C	C
HCM2kAvgQ:	4	4	4	8	8	8	5	5	5	2	2	2

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #21: Hollenbeck Avenue / Cascade Drive

Signal=Permit/Rights=Include

Final Vol: 64 738*** 25
Lanes: 0 0 1! 0 0

Final Vol:	Lanes:	Signal=Permit Rights=Include			Signal=Permit Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	10/2/2018			
59	0		Cycle Time (sec):	70		0	25
	0		Loss Time (sec):	6		0	
56***	1!		Critical V/C:	0.624		1!	31
	0		Avg Crit Del (sec/veh):	9.5		0	
56	0		Avg Delay (sec/veh):	8.4		0	25
			LOS:	A			

Lanes: 0 0 1! 0 0
Final Vol: 27 440 23
Signal=Permit/Rights=Include

Street Name:	Hollenbeck Avenue						Cascade Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	27	428	23	16	715	58	55	56	56	25	31	21
Growth 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
Initial Bse:	27	428	23	16	715	58	55	56	56	25	31	21
Added Vol:	0	12	0	9	23	6	4	0	0	0	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	440	23	25	738	64	59	56	56	25	31	25
User 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
PHF 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
PHF Volume:	27	440	23	25	738	64	59	56	56	25	31	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	440	23	25	738	64	59	56	56	25	31	25
PCE 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
MLF 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
FinalVolume:	27	440	23	25	738	64	59	56	56	25	31	25
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.05	0.90	0.05	0.03	0.89	0.08	0.34	0.33	0.33	0.31	0.38	0.31
Final Sat.:	96	1571	82	53	1562	135	604	573	573	540	670	540
Capacity Analysis Module:												
Vol/Sat:	0.28	0.28	0.28	0.47	0.47	0.47	0.10	0.10	0.10	0.05	0.05	0.05
Crit Moves:					****			****				
Green Time:	53.0	53.0	53.0	53.0	53.0	53.0	11.0	11.0	11.0	11.0	11.0	11.0
Volume/Cap:	0.37	0.37	0.37	0.62	0.62	0.62	0.62	0.62	0.62	0.30	0.30	0.30
Delay/Veh:	3.0	3.0	3.0	4.8	4.8	4.8	32.0	32.0	32.0	26.7	26.7	26.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	3.0	3.0	3.0	4.8	4.8	4.8	32.0	32.0	32.0	26.7	26.7	26.7
LOS by Move:	A	A	A	A	A	A	C-	C-	C-	C	C	C
HCM2kAvgQ:	4	4	4	9	9	9	5	5	5	2	2	2

Note: Queue reported is the number of cars per lane.

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	583	14	41	74	484	0	0	1428	456
Future Volume (vph)	0	0	0	583	14	41	74	484	0	0	1428	456
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				7.0	7.0	7.0	6.3	6.0			6.3	
Lane Util. Factor				0.95	0.95	1.00	1.00	0.86			0.86	
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.96	
Flt Protected				0.95	0.95	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1681	1689	1583	1770	6408			6175	
Flt Permitted				0.95	0.95	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1681	1689	1583	1770	6408			6175	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	0	583	14	41	74	484	0	0	1428	456
RTOR Reduction (vph)	0	0	0	0	0	31	0	0	0	0	39	0
Lane Group Flow (vph)	0	0	0	297	300	10	74	484	0	0	1845	0
Confl. Peds. (#/hr)									9			
Turn Type				Split	NA	Perm	Prot	NA			NA	
Protected Phases				8	8		5	2			6	
Permitted Phases						8						
Actuated Green, G (s)				38.0	38.0	38.0	13.7	99.0			78.7	
Effective Green, g (s)				38.0	38.0	38.0	13.7	99.0			78.7	
Actuated g/C Ratio				0.25	0.25	0.25	0.09	0.66			0.52	
Clearance Time (s)				7.0	7.0	7.0	6.3	6.0			6.3	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				425	427	401	161	4229			3239	
v/s Ratio Prot				0.18	c0.18		c0.04	0.08			c0.30	
v/s Ratio Perm						0.01						
v/c Ratio				0.70	0.70	0.03	0.46	0.11			0.57	
Uniform Delay, d1				50.8	50.9	42.1	64.6	9.4			24.2	
Progression Factor				1.00	1.00	1.00	1.26	0.62			0.95	
Incremental Delay, d2				9.2	9.3	0.1	9.1	0.1			0.5	
Delay (s)				60.0	60.2	42.2	90.8	5.8			23.3	
Level of Service				E	E	D	F	A			C	
Approach Delay (s)		0.0			58.9			17.1			23.3	
Approach LOS		A			E			B			C	

Intersection Summary			
HCM 2000 Control Delay	29.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	104.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	10	153	0	0	0	0	474	617	335	2075	0
Future Volume (vph)	111	10	153	0	0	0	0	474	617	335	2075	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0						6.2	6.2	6.4	5.9	
Lane Util. Factor	0.91	0.91						0.81	1.00	1.00	0.91	
Frt	1.00	0.87						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3221	1467						7544	1583	1770	5085	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3221	1467						7544	1583	1770	5085	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	111	10	153	0	0	0	0	474	617	335	2075	0
RTOR Reduction (vph)	0	14	0	0	0	0	0	0	371	0	0	0
Lane Group Flow (vph)	100	160	0	0	0	0	0	474	246	335	2075	0
Turn Type	Split	NA						NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases									2			
Actuated Green, G (s)	33.6	33.6						54.8	54.8	42.0	103.5	
Effective Green, g (s)	33.6	33.6						54.8	54.8	42.0	103.5	
Actuated g/C Ratio	0.22	0.22						0.37	0.37	0.28	0.69	
Clearance Time (s)	7.0	7.0						6.2	6.2	6.4	5.9	
Vehicle Extension (s)	3.0	3.0						3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	721	328						2756	578	495	3508	
v/s Ratio Prot	0.03	c0.11						0.06		c0.19	c0.41	
v/s Ratio Perm									0.16			
v/c Ratio	0.14	0.49						0.17	0.43	0.68	0.59	
Uniform Delay, d1	46.6	50.7						32.2	35.8	48.0	12.2	
Progression Factor	1.00	1.00						1.16	7.17	0.73	0.88	
Incremental Delay, d2	0.4	5.1						0.0	0.5	6.9	0.7	
Delay (s)	47.0	55.8						37.6	256.9	42.1	11.4	
Level of Service	D	E						D	F	D	B	
Approach Delay (s)		52.6			0.0			161.6			15.7	
Approach LOS		D			A			F			B	

Intersection Summary			
HCM 2000 Control Delay	60.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	104.2%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	48	147	92	7	59	53	927	391	213	1978	65
Future Volume (vph)	70	48	147	92	7	59	53	927	391	213	1978	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.81		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	1.00	1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1554	1759	1863	1583	1770	7134		1770	5061	
Flt Permitted	0.75	1.00	1.00	0.73	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1403	1863	1554	1343	1863	1583	1770	7134		1770	5061	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	70	48	147	92	7	59	53	927	391	213	1978	65
RTOR Reduction (vph)	0	0	96	0	0	44	0	51	0	0	2	0
Lane Group Flow (vph)	70	48	51	92	7	15	53	1267	0	213	2041	0
Confl. Peds. (#/hr)			5	5					5			
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Actuated Green, G (s)	37.0	37.0	37.0	37.0	37.0	37.0	8.0	72.6		20.0	84.4	
Effective Green, g (s)	37.0	37.0	37.0	37.0	37.0	37.0	8.0	72.6		20.0	84.4	
Actuated g/C Ratio	0.25	0.25	0.25	0.25	0.25	0.25	0.05	0.48		0.13	0.56	
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	346	459	383	331	459	390	94	3452		236	2847	
v/s Ratio Prot		0.03			0.00		0.03	c0.18		c0.12	c0.40	
v/s Ratio Perm	0.05		0.03	c0.07		0.01						
v/c Ratio	0.20	0.10	0.13	0.28	0.02	0.04	0.56	0.37		0.90	0.72	
Uniform Delay, d1	44.8	43.7	44.0	45.7	42.7	43.0	69.3	24.3		64.0	24.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99		0.88	0.61	
Incremental Delay, d2	1.3	0.5	0.7	2.1	0.1	0.2	22.2	0.3		29.2	1.3	
Delay (s)	46.1	44.1	44.7	47.8	42.8	43.1	91.4	24.2		85.5	16.0	
Level of Service	D	D	D	D	D	D	F	C		F	B	
Approach Delay (s)		45.0			45.8			26.8			22.6	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	26.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	90.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	602	14	41	77	489	0	0	1435	456
Future Volume (vph)	0	0	0	602	14	41	77	489	0	0	1435	456
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				7.0	7.0	7.0	6.3	6.0			6.3	
Lane Util. Factor				0.95	0.95	1.00	1.00	0.86			0.86	
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	1.00	0.85	1.00	1.00			0.96	
Flt Protected				0.95	0.95	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1681	1689	1583	1770	6408			6176	
Flt Permitted				0.95	0.95	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1681	1689	1583	1770	6408			6176	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	0	602	14	41	77	489	0	0	1435	456
RTOR Reduction (vph)	0	0	0	0	0	31	0	0	0	0	38	0
Lane Group Flow (vph)	0	0	0	307	309	10	77	489	0	0	1853	0
Confl. Peds. (#/hr)									9			
Turn Type				Split	NA	Perm	Prot	NA			NA	
Protected Phases				8	8		5	2			6	
Permitted Phases						8						
Actuated Green, G (s)				38.0	38.0	38.0	13.7	99.0			78.7	
Effective Green, g (s)				38.0	38.0	38.0	13.7	99.0			78.7	
Actuated g/C Ratio				0.25	0.25	0.25	0.09	0.66			0.52	
Clearance Time (s)				7.0	7.0	7.0	6.3	6.0			6.3	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				425	427	401	161	4229			3240	
v/s Ratio Prot				0.18	c0.18		c0.04	0.08			c0.30	
v/s Ratio Perm						0.01						
v/c Ratio				0.72	0.72	0.03	0.48	0.12			0.57	
Uniform Delay, d1				51.2	51.2	42.1	64.8	9.4			24.2	
Progression Factor				1.00	1.00	1.00	1.26	0.60			0.95	
Incremental Delay, d2				10.2	10.2	0.1	9.8	0.1			0.5	
Delay (s)				61.4	61.4	42.2	91.6	5.7			23.4	
Level of Service				E	E	D	F	A			C	
Approach Delay (s)		0.0			60.2			17.4			23.4	
Approach LOS		A			E			B			C	

Intersection Summary			
HCM 2000 Control Delay	30.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	107.3%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	10	154	0	0	0	0	482	658	335	2101	0
Future Volume (vph)	111	10	154	0	0	0	0	482	658	335	2101	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0						6.2	6.2	6.4	5.9	
Lane Util. Factor	0.91	0.91						0.81	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00						1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.87						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3221	1467						7544	1560	1770	5085	
Flt Permitted	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3221	1467						7544	1560	1770	5085	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	111	10	154	0	0	0	0	482	658	335	2101	0
RTOR Reduction (vph)	0	13	0	0	0	0	0	0	371	0	0	0
Lane Group Flow (vph)	100	162	0	0	0	0	0	482	287	335	2101	0
Confl. Bikes (#/hr)									5			
Turn Type	Split	NA						NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases									2			
Actuated Green, G (s)	33.6	33.6						54.8	54.8	42.0	103.5	
Effective Green, g (s)	33.6	33.6						54.8	54.8	42.0	103.5	
Actuated g/C Ratio	0.22	0.22						0.37	0.37	0.28	0.69	
Clearance Time (s)	7.0	7.0						6.2	6.2	6.4	5.9	
Vehicle Extension (s)	3.0	3.0						3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	721	328						2756	569	495	3508	
v/s Ratio Prot	0.03	c0.11						0.06		c0.19	c0.41	
v/s Ratio Perm									0.18			
v/c Ratio	0.14	0.49						0.17	0.50	0.68	0.60	
Uniform Delay, d1	46.6	50.8						32.3	37.0	48.0	12.3	
Progression Factor	1.00	1.00						1.16	5.57	0.74	0.90	
Incremental Delay, d2	0.4	5.2						0.0	0.7	6.9	0.7	
Delay (s)	47.0	56.0						37.4	206.9	42.3	11.8	
Level of Service	D	E						D	F	D	B	
Approach Delay (s)		52.7			0.0			135.2			16.0	
Approach LOS		D			A			F			B	

Intersection Summary			
HCM 2000 Control Delay	53.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	107.3%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	48	147	94	7	59	53	977	392	213	2005	65
Future Volume (vph)	70	48	147	94	7	59	53	977	392	213	2005	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.81		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	1.00	1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1554	1759	1863	1583	1770	7148		1770	5061	
Flt Permitted	0.75	1.00	1.00	0.73	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1403	1863	1554	1343	1863	1583	1770	7148		1770	5061	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	70	48	147	94	7	59	53	977	392	213	2005	65
RTOR Reduction (vph)	0	0	96	0	0	44	0	49	0	0	2	0
Lane Group Flow (vph)	70	48	51	94	7	15	53	1320	0	213	2068	0
Confl. Peds. (#/hr)			5	5					5			
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Actuated Green, G (s)	37.0	37.0	37.0	37.0	37.0	37.0	8.0	72.6		20.0	84.4	
Effective Green, g (s)	37.0	37.0	37.0	37.0	37.0	37.0	8.0	72.6		20.0	84.4	
Actuated g/C Ratio	0.25	0.25	0.25	0.25	0.25	0.25	0.05	0.48		0.13	0.56	
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	346	459	383	331	459	390	94	3459		236	2847	
v/s Ratio Prot		0.03			0.00		0.03	c0.18		c0.12	c0.41	
v/s Ratio Perm	0.05		0.03	c0.07		0.01						
v/c Ratio	0.20	0.10	0.13	0.28	0.02	0.04	0.56	0.38		0.90	0.73	
Uniform Delay, d1	44.8	43.7	44.0	45.8	42.7	43.0	69.3	24.5		64.0	24.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98		0.88	0.61	
Incremental Delay, d2	1.3	0.5	0.7	2.1	0.1	0.2	22.2	0.3		29.1	1.4	
Delay (s)	46.1	44.1	44.7	47.9	42.8	43.1	91.3	24.2		85.2	16.3	
Level of Service	D	D	D	D	D	D	F	C		F	B	
Approach Delay (s)		45.0			45.9			26.7			22.7	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	26.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	90.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

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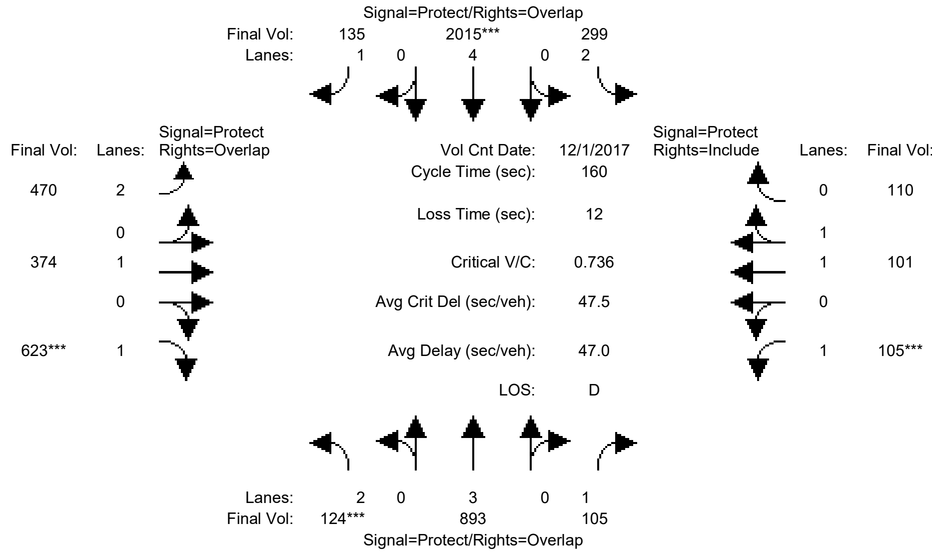
Intersection #25: Mathilda Avenue / Maude Avenue (CMP)



Street Name:	Mathilda Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	124	893	105	299	2015	135	470	374	623	105	101	110
Growth 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
Initial Bse:	124	893	105	299	2015	135	470	374	623	105	101	110
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	124	893	105	299	2015	135	470	374	623	105	101	110
User 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
PHF 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
PHF Volume:	124	893	105	299	2015	135	470	374	623	105	101	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	893	105	299	2015	135	470	374	623	105	101	110
PCE 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
MLF 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
FinalVolume:	124	893	105	299	2015	135	470	374	623	105	101	110
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	4.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	3150	5700	1750	3150	7600	1750	3150	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.16	0.06	0.09	0.27	0.08	0.15	0.20	0.36	0.06	0.05	0.06
Crit Moves:	****				****				****	****		
Green Time:	8.6	41.2	54.2	25.0	57.6	114.5	56.9	67.8	76.4	13.0	24.0	24.0
Volume/Cap:	0.74	0.61	0.18	0.61	0.74	0.11	0.42	0.46	0.75	0.74	0.35	0.42
Delay/Veh:	90.2	53.0	37.3	65.2	45.7	7.0	39.3	33.5	37.6	89.9	61.4	62.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	90.2	53.0	37.3	65.2	45.7	7.0	39.3	33.5	37.6	89.9	61.4	62.3
LOS by Move:	F	D-	D+	E	D	A	D	C-	D+	F	E	E
HCM2kAvgQ:	4	13	4	8	20	2	10	13	27	6	4	5

Note: Queue reported is the number of cars per lane.

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Intersection #25: Mathilda Avenue / Maude Avenue (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 135 2089*** 301
Lanes: 1 0 4 0 2

Final Vol:	Lanes:	Signal=Protect Rights=Overlap			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	12/1/2017			
470	2		Cycle Time (sec):	160		0	119
	0		Loss Time (sec):	12		1	
374	1		Critical V/C:	0.747		1	101
	0		Avg Crit Del (sec/veh):	47.5		0	
623***	1		Avg Delay (sec/veh):	47.4		1	105***
			LOS:	D			

Lanes: 2 0 3 0 1
Final Vol: 124*** 1028 105
Signal=Protect/Rights=Overlap

Street Name:	Mathilda Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	124	893	105	299	2015	135	470	374	623	105	101	110
Growth 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
Initial Bse:	124	893	105	299	2015	135	470	374	623	105	101	110
Added Vol:	0	135	0	0	76	0	0	0	0	0	0	9
PasserByVol:	0	0	0	2	-2	0	0	0	0	0	0	0
Initial Fut:	124	1028	105	301	2089	135	470	374	623	105	101	119
User 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
PHF 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
PHF Volume:	124	1028	105	301	2089	135	470	374	623	105	101	119
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	1028	105	301	2089	135	470	374	623	105	101	119
PCE 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
MLF 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
FinalVolume:	124	1028	105	301	2089	135	470	374	623	105	101	119
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	4.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	3150	5700	1750	3150	7600	1750	3150	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.18	0.06	0.10	0.27	0.08	0.15	0.20	0.36	0.06	0.05	0.07
Crit Moves:	****				****				****	****		
Green Time:	8.4	44.0	56.9	23.3	58.9	113.7	54.8	66.9	75.3	12.9	25.0	25.0
Volume/Cap:	0.75	0.66	0.17	0.66	0.75	0.11	0.44	0.47	0.76	0.75	0.34	0.44
Delay/Veh:	91.6	52.3	35.5	68.0	45.2	7.3	40.9	34.2	38.8	91.5	60.5	61.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	91.6	52.3	35.5	68.0	45.2	7.3	40.9	34.2	38.8	91.5	60.5	61.7
LOS by Move:	F	D-	D+	E	D	A	D	C-	D+	F	E	E
HCM2kAvgQ:	4	15	4	8	21	2	10	13	28	6	4	6

Note: Queue reported is the number of cars per lane.

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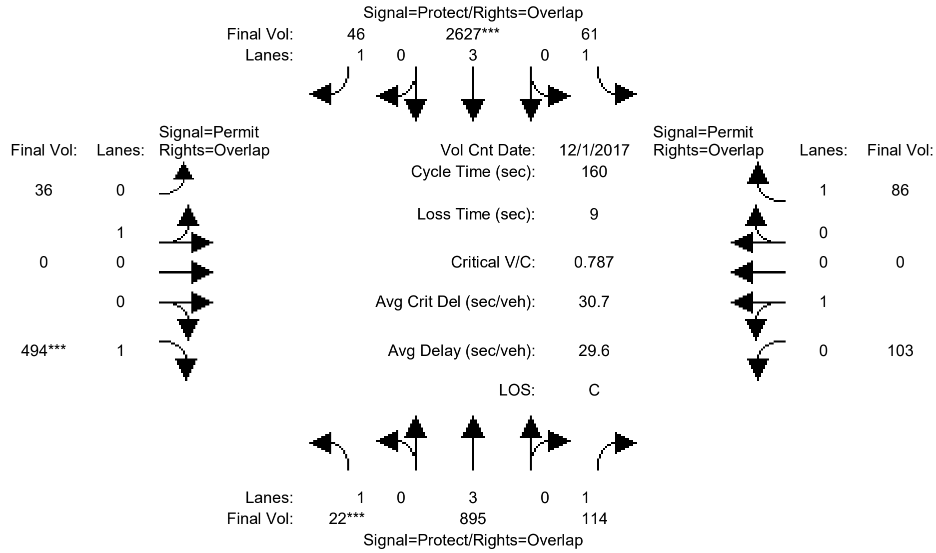
Existing PM

Intersection #26: Mathilda Avenue / Indio Avenue



Street Name:	Mathilda Avenue						Indio Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	22	895	114	61	2627	46	36	0	494	103	0	86
Growth 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
Initial Bse:	22	895	114	61	2627	46	36	0	494	103	0	86
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	22	895	114	61	2627	46	36	0	494	103	0	86
User 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
PHF 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
PHF Volume:	22	895	114	61	2627	46	36	0	494	103	0	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	895	114	61	2627	46	36	0	494	103	0	86
PCE 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
MLF 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
FinalVolume:	22	895	114	61	2627	46	36	0	494	103	0	86
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1800	0	1750	1800	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.16	0.07	0.03	0.46	0.03	0.02	0.00	0.28	0.06	0.00	0.05
Crit Moves:	****				****				****			
Green Time:	7.0	79.7	79.7	22.2	94.9	94.9	49.1	0.0	56.1	49.1	0.0	71.3
Volume/Cap:	0.29	0.32	0.13	0.25	0.78	0.04	0.07	0.00	0.80	0.19	0.00	0.11
Delay/Veh:	76.2	24.0	21.6	62.0	25.8	13.6	39.3	0.0	54.7	40.9	0.0	25.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	76.2	24.0	21.6	62.0	25.8	13.6	39.3	0.0	54.7	40.9	0.0	25.9
LOS by Move:	E-	C	C+	E	C	B	D	A	D-	D	A	C
HCM2kAvgQ:	1	8	3	3	31	1	1	0	25	4	0	3

Note: Queue reported is the number of cars per lane.

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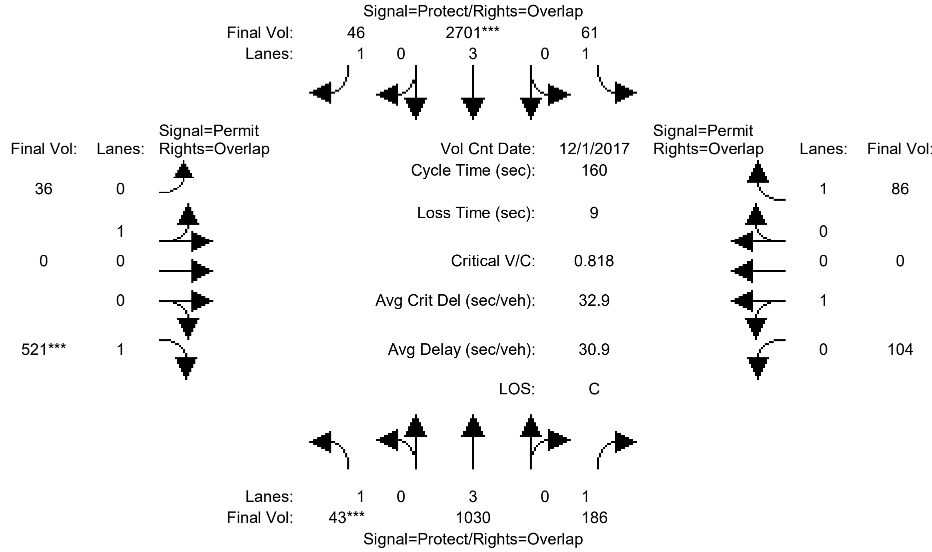
Intersection #26: Mathilda Avenue / Indio Avenue



Street Name:	Mathilda Avenue						Indio Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	22	895	114	61	2627	46	36	0	494	103	0	86
Growth 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
Initial Bse:	22	895	114	61	2627	46	36	0	494	103	0	86
Added Vol:	21	135	72	0	76	0	0	0	27	1	0	0
PasserByVol:	0	0	0	0	-2	0	0	0	0	0	0	0
Initial Fut:	43	1030	186	61	2701	46	36	0	521	104	0	86
User 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
PHF 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
PHF Volume:	43	1030	186	61	2701	46	36	0	521	104	0	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	1030	186	61	2701	46	36	0	521	104	0	86
PCE 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
MLF 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
FinalVolume:	43	1030	186	61	2701	46	36	0	521	104	0	86
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1800	0	1750	1800	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.18	0.11	0.03	0.47	0.03	0.02	0.00	0.30	0.06	0.00	0.05
Crit Moves:	****				****				****			
Green Time:	7.0	81.1	81.1	19.6	93.8	93.8	50.2	0.0	57.2	50.2	0.0	69.9
Volume/Cap:	0.56	0.36	0.21	0.28	0.81	0.04	0.06	0.00	0.83	0.18	0.00	0.11
Delay/Veh:	84.2	23.8	21.9	64.5	27.6	14.1	38.5	0.0	56.3	40.1	0.0	26.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	84.2	23.8	21.9	64.5	27.6	14.1	38.5	0.0	56.3	40.1	0.0	26.8
LOS by Move:	F	C	C+	E	C	B	D+	A	E+	D	A	C
HCM2kAvgQ:	2	10	5	3	34	1	1	0	27	4	0	3

Note: Queue reported is the number of cars per lane.

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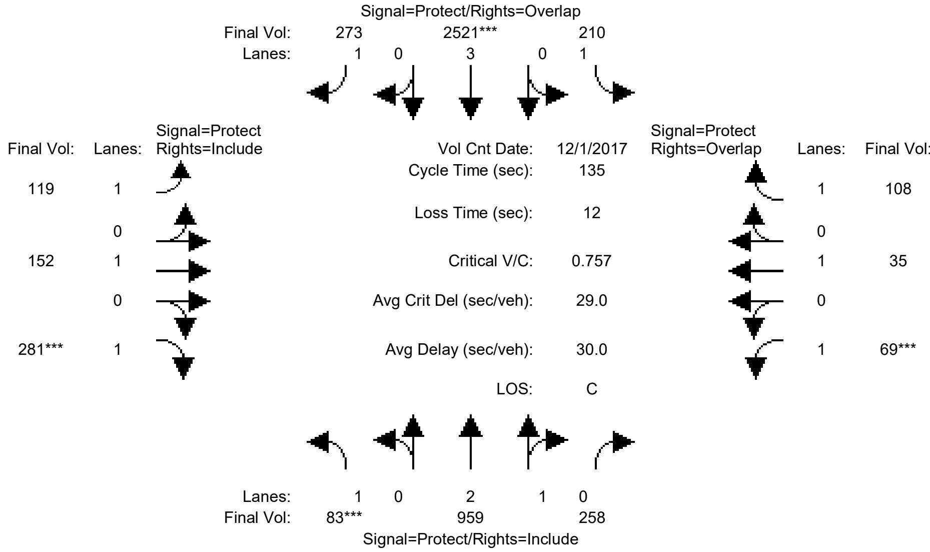
Existing PM

Intersection #27: Mathilda Avenue / California Avenue



Street Name:	Mathilda Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	83	959	258	210	2521	273	119	152	281	69	35	108
Growth 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
Initial Bse:	83	959	258	210	2521	273	119	152	281	69	35	108
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	83	959	258	210	2521	273	119	152	281	69	35	108
User 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
PHF 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
PHF Volume:	83	959	258	210	2521	273	119	152	281	69	35	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	959	258	210	2521	273	119	152	281	69	35	108
PCE 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
MLF 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
FinalVolume:	83	959	258	210	2521	273	119	152	281	69	35	108
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.34	0.66	1.00	3.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	4411	1187	1750	5700	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.22	0.12	0.44	0.16	0.07	0.08	0.16	0.04	0.02	0.06
Crit Moves:	****				****				****	****		
Green Time:	8.5	56.3	56.3	31.1	78.9	95.9	17.1	28.6	28.6	7.0	18.6	49.7
Volume/Cap:	0.76	0.52	0.52	0.52	0.76	0.22	0.54	0.38	0.76	0.76	0.13	0.17
Delay/Veh:	87.9	29.5	29.5	46.7	22.0	6.8	57.9	46.1	58.6	93.1	51.4	28.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	87.9	29.5	29.5	46.7	22.0	6.8	57.9	46.1	58.6	93.1	51.4	28.9
LOS by Move:	F	C	C	D	C+	A	E+	D	E+	F	D-	C
HCM2kAvgQ:	5	13	13	8	25	4	6	5	13	3	1	3

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
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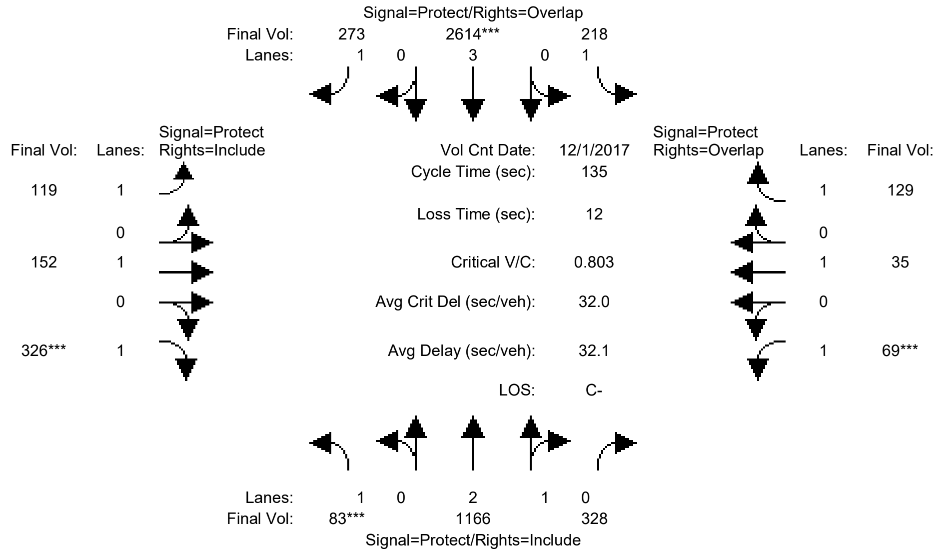
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #27: Mathilda Avenue / California Avenue



Street Name:	Mathilda Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	83	959	258	210	2521	273	119	152	281	69	35	108
Growth 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
Initial Bse:	83	959	258	210	2521	273	119	152	281	69	35	108
Added Vol:	0	207	70	10	93	0	0	0	45	0	0	21
PasserByVol:	0	0	0	-2	0	0	0	0	0	0	0	0
Initial Fut:	83	1166	328	218	2614	273	119	152	326	69	35	129
User 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
PHF 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
PHF Volume:	83	1166	328	218	2614	273	119	152	326	69	35	129
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	1166	328	218	2614	273	119	152	326	69	35	129
PCE 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
MLF 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
FinalVolume:	83	1166	328	218	2614	273	119	152	326	69	35	129
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.32	0.68	1.00	3.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	4369	1229	1750	5700	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.27	0.27	0.12	0.46	0.16	0.07	0.08	0.19	0.04	0.02	0.07
Crit Moves:	****				****				****	****		
Green Time:	7.9	57.8	57.8	27.0	76.8	95.1	18.3	31.2	31.2	7.0	19.9	46.9
Volume/Cap:	0.81	0.62	0.62	0.62	0.81	0.22	0.50	0.35	0.81	0.76	0.12	0.21
Delay/Veh:	98.3	30.6	30.6	52.8	24.7	7.1	55.8	43.8	60.3	93.8	50.2	31.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	98.3	30.6	30.6	52.8	24.7	7.1	55.8	43.8	60.3	93.8	50.2	31.2
LOS by Move:	F	C	C	D-	C	A	E+	D	E	F	D	C
HCM2kAvgQ:	6	16	16	8	28	4	5	5	16	3	1	4

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
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Intersection #28: Mathilda Avenue Off-Ramp / Evelyn Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Permit Rights=Include (East Bound) — Final Vol: 0, 450***, 0; Lanes: 0, 0, 1, 0, 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 95
Loss Time (sec): 6
Critical V/C: 0.310
Avg Crit Del (sec/veh): 9.2
Avg Delay (sec/veh): 10.1
LOS: B+

Signal=Permit Rights=Include (West Bound) — Lanes: 0, 0, 1, 0, 0; Final Vol: 0, 338, 0

Lanes: 1 0 0 0 1
Final Vol: 93*** 0 109
Signal=Split/Rights=Overlap

Street Name:	Mathilda Avenue Off-Ramp						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	93	0	109	0	0	0	0	450	0	0	338	0
Growth 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
Initial Bse:	93	0	109	0	0	0	0	450	0	0	338	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	93	0	109	0	0	0	0	450	0	0	338	0
User 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
PHF 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
PHF Volume:	93	0	109	0	0	0	0	450	0	0	338	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	93	0	109	0	0	0	0	450	0	0	338	0
PCE 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
MLF 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
FinalVolume:	93	0	109	0	0	0	0	450	0	0	338	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	0	1900	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.06	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.18	0.00
Crit Moves:	****							****				
Green Time:	18.5	0.0	18.5	0.0	0.0	0.0	0.0	70.5	0.0	0.0	70.5	0.0
Volume/Cap:	0.27	0.00	0.32	0.00	0.00	0.00	0.00	0.32	0.00	0.00	0.24	0.00
Delay/Veh:	32.9	0.0	33.4	0.0	0.0	0.0	0.0	4.3	0.0	0.0	3.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.9	0.0	33.4	0.0	0.0	0.0	0.0	4.3	0.0	0.0	3.9	0.0
LOS by Move:	C-	A	C-	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	3	0	3	0	0	0	0	4	0	0	3	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
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Existing PP PM

Intersection #28: Mathilda Avenue Off-Ramp / Evelyn Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Permit Rights=Include (East Bound)
Final Vol: 0, 465***, 0
Lanes: 0, 0, 1, 0, 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 95
Loss Time (sec): 6
Critical V/C: 0.318
Avg Crit Del (sec/veh): 9.1
Avg Delay (sec/veh): 9.8
LOS: A

Signal=Permit Rights=Include (West Bound)
Lanes: 0, 0, 1, 0, 0
Final Vol: 0, 386, 0

Lanes: 1 0 0 0 1
Final Vol: 93*** 0 112
Signal=Split/Rights=Overlap

Street Name:	Mathilda Avenue Off-Ramp						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	93	0	109	0	0	0	0	450	0	0	338	0
Growth 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
Initial Bse:	93	0	109	0	0	0	0	450	0	0	338	0
Added Vol:	0	0	3	0	0	0	0	15	0	0	48	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	93	0	112	0	0	0	0	465	0	0	386	0
User 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
PHF 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
PHF Volume:	93	0	112	0	0	0	0	465	0	0	386	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	93	0	112	0	0	0	0	465	0	0	386	0
PCE 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
MLF 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
FinalVolume:	93	0	112	0	0	0	0	465	0	0	386	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	0	1900	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.06	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.20	0.00
Crit Moves:	****							****				
Green Time:	18.4	0.0	18.4	0.0	0.0	0.0	0.0	70.6	0.0	0.0	70.6	0.0
Volume/Cap:	0.27	0.00	0.33	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.27	0.00
Delay/Veh:	33.0	0.0	33.5	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.0	0.0	33.5	0.0	0.0	0.0	0.0	4.3	0.0	0.0	4.1	0.0
LOS by Move:	C-	A	C-	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	3	0	3	0	0	0	0	5	0	0	4	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
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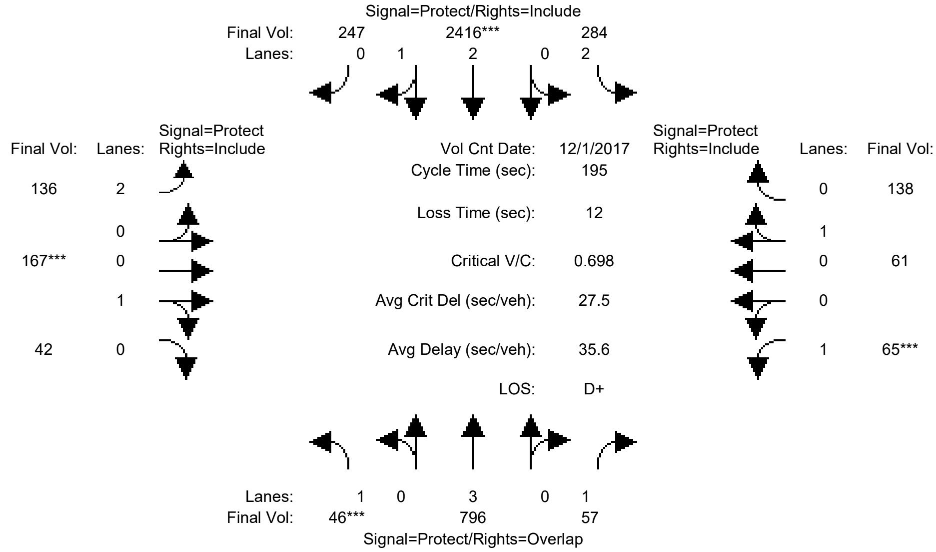
Existing PM

Intersection #29: Mathilda Avenue / Washington Avenue



Street Name:	Mathilda Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	46	796	57	284	2416	247	136	167	42	65	61	138
Growth 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
Initial Bse:	46	796	57	284	2416	247	136	167	42	65	61	138
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	46	796	57	284	2416	247	136	167	42	65	61	138
User 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
PHF 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
PHF Volume:	46	796	57	284	2416	247	136	167	42	65	61	138
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	46	796	57	284	2416	247	136	167	42	65	61	138
PCE 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
MLF 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
FinalVolume:	46	796	57	284	2416	247	136	167	42	65	61	138
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.99	0.95	0.83	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	3.00	1.00	2.00	2.71	0.29	2.00	0.80	0.20	1.00	0.31	0.69
Final Sat.:	1750	5700	1750	3150	5080	519	3150	1438	362	1750	552	1248
Capacity Analysis Module:												
Vol/Sat:	0.03	0.14	0.03	0.09	0.48	0.48	0.04	0.12	0.12	0.04	0.11	0.11
Crit Moves:	****				****			****		****		
Green Time:	7.3	85.2	95.6	55.0	133	132.8	12.0	32.4	32.4	10.4	30.8	30.8
Volume/Cap:	0.70	0.32	0.07	0.32	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Delay/Veh:	120.8	36.0	26.2	55.4	19.5	19.5	100.6	83.8	83.8	111.6	85.3	85.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	120.8	36.0	26.2	55.4	19.5	19.5	100.6	83.8	83.8	111.6	85.3	85.3
LOS by Move:	F	D+	C	E+	B-	B-	F	F	F	F	F	F
HCM2kAvgQ:	4	10	2	8	32	32	5	12	12	4	12	12

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
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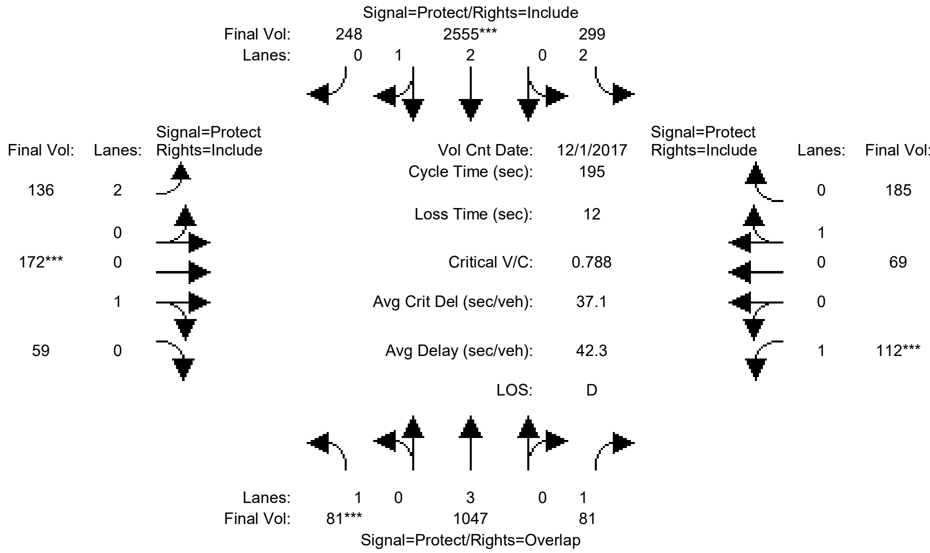
Intersection #29: Mathilda Avenue / Washington Avenue



Street Name:	Mathilda Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	46	796	57	284	2416	247	136	167	42	65	61	138
Growth 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
Initial Bse:	46	796	57	284	2416	247	136	167	42	65	61	138
Added Vol:	35	251	24	15	139	1	0	5	17	47	8	47
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	81	1047	81	299	2555	248	136	172	59	112	69	185
User 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
PHF 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
PHF Volume:	81	1047	81	299	2555	248	136	172	59	112	69	185
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	1047	81	299	2555	248	136	172	59	112	69	185
PCE 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
MLF 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
FinalVolume:	81	1047	81	299	2555	248	136	172	59	112	69	185
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.99	0.95	0.83	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	3.00	1.00	2.00	2.72	0.28	2.00	0.74	0.26	1.00	0.27	0.73
Final Sat.:	1750	5700	1750	3150	5104	495	3150	1340	460	1750	489	1311
Capacity Analysis Module:												
Vol/Sat:	0.05	0.18	0.05	0.09	0.50	0.50	0.04	0.13	0.13	0.06	0.14	0.14
Crit Moves:	****				****			****		****		
Green Time:	11.5	89.3	105.1	46.1	124	123.9	11.2	31.8	31.8	15.8	36.5	36.5
Volume/Cap:	0.79	0.40	0.09	0.40	0.79	0.79	0.75	0.79	0.79	0.79	0.75	0.75
Delay/Veh:	122.8	35.2	21.8	63.1	27.2	27.2	107.1	91.6	91.6	112.7	84.4	84.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	122.8	35.2	21.8	63.1	27.2	27.2	107.1	91.6	91.6	112.7	84.4	84.4
LOS by Move:	F	D+	C+	E	C	C	F	F	F	F	F	F
HCM2kAvgQ:	7	13	2	9	41	41	5	14	14	8	15	15

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
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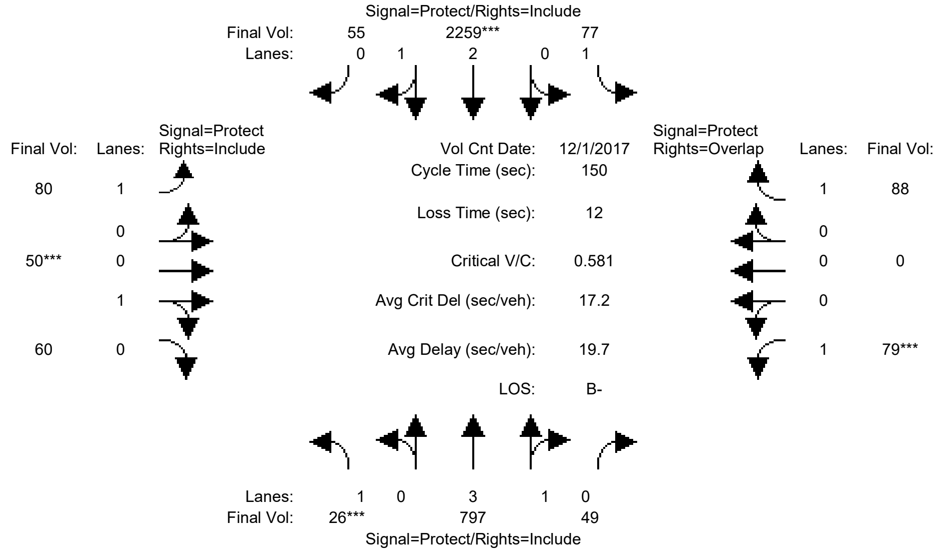
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #30: Mathilda Avenue / McKinley Avenue



Street Name:	Mathilda Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	26	797	49	77	2259	55	80	50	60	79	0	88
Growth 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
Initial Bse:	26	797	49	77	2259	55	80	50	60	79	0	88
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	797	49	77	2259	55	80	50	60	79	0	88
User 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
PHF 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
PHF Volume:	26	797	49	77	2259	55	80	50	60	79	0	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	797	49	77	2259	55	80	50	60	79	0	88
PCE 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
MLF 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
FinalVolume:	26	797	49	77	2259	55	80	50	60	79	0	88
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	3.76	0.24	1.00	2.93	0.07	1.00	0.45	0.55	1.00	0.00	1.00
Final Sat.:	1750	7065	434	1750	5467	133	1750	818	982	1750	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.11	0.11	0.04	0.41	0.41	0.05	0.06	0.06	0.05	0.00	0.05
Crit Moves:	****				****			****		****		
Green Time:	7.0	78.7	78.7	32.5	104	104.2	23.6	15.4	15.4	11.4	0.0	43.9
Volume/Cap:	0.32	0.22	0.22	0.20	0.59	0.59	0.29	0.59	0.59	0.59	0.00	0.17
Delay/Veh:	71.4	19.1	19.1	48.4	12.2	12.2	56.4	69.5	69.5	74.2	0.0	39.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	71.4	19.1	19.1	48.4	12.2	12.2	56.4	69.5	69.5	74.2	0.0	39.7
LOS by Move:	E	B-	B-	D	B	B	E+	E	E	E	A	D
HCM2kAvgQ:	2	5	5	3	18	18	4	6	6	4	0	3

Note: Queue reported is the number of cars per lane.

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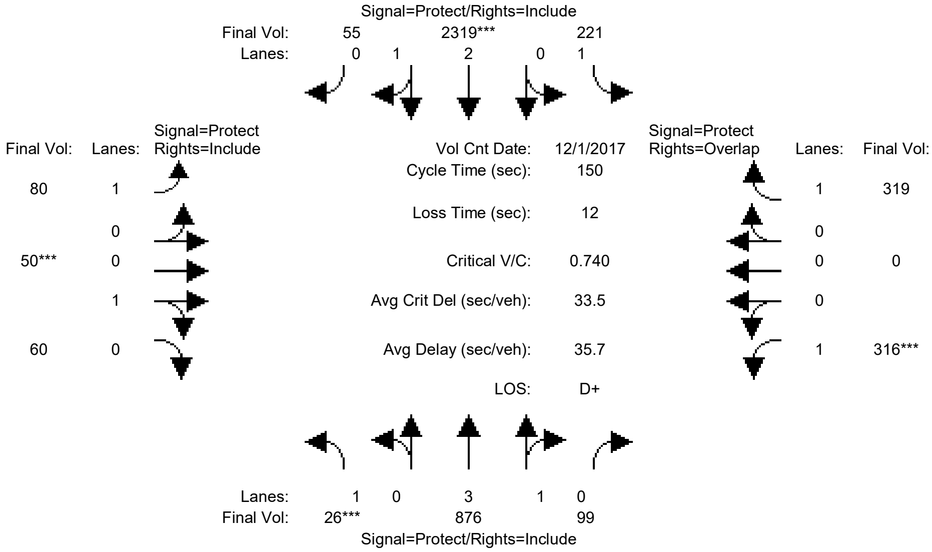
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #30: Mathilda Avenue / McKinley Avenue



Street Name:	Mathilda Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	26	797	49	77	2259	55	80	50	60	79	0	88
Growth 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
Initial Bse:	26	797	49	77	2259	55	80	50	60	79	0	88
Added Vol:	0	79	50	144	60	0	0	0	0	237	0	231
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	876	99	221	2319	55	80	50	60	316	0	319
User 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
PHF 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
PHF Volume:	26	876	99	221	2319	55	80	50	60	316	0	319
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	876	99	221	2319	55	80	50	60	316	0	319
PCE 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
MLF 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
FinalVolume:	26	876	99	221	2319	55	80	50	60	316	0	319
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	3.58	0.42	1.00	2.93	0.07	1.00	0.45	0.55	1.00	0.00	1.00
Final Sat.:	1750	6737	761	1750	5470	130	1750	818	982	1750	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.13	0.13	0.13	0.42	0.42	0.05	0.06	0.06	0.18	0.00	0.18
Crit Moves:	****				****			****		****		
Green Time:	7.0	45.9	45.9	44.6	83.4	83.4	21.6	12.0	12.0	35.5	0.0	70.5
Volume/Cap:	0.32	0.43	0.43	0.43	0.76	0.76	0.32	0.76	0.76	0.76	0.00	0.39
Delay/Veh:	71.4	41.7	41.7	43.0	26.8	26.8	58.3	88.5	88.5	61.4	0.0	26.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	71.4	41.7	41.7	43.0	26.8	26.8	58.3	88.5	88.5	61.4	0.0	26.1
LOS by Move:	E	D	D	D	C	C	E+	F	F	E	A	C
HCM2kAvgQ:	2	9	9	9	29	29	4	7	7	15	0	10

Note: Queue reported is the number of cars per lane.

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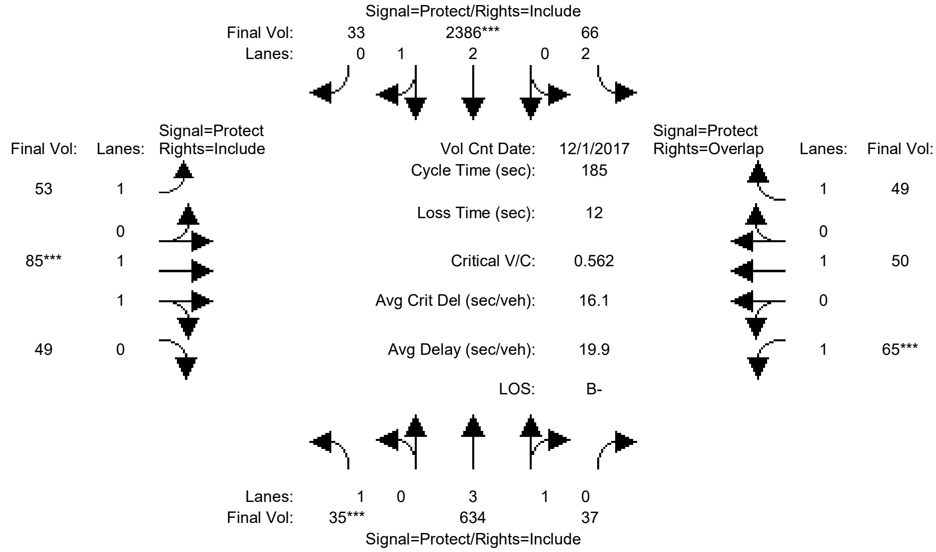
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #31: Mathilda Avenue / Iowa Avenue



Street Name:	Mathilda Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	35	634	37	66	2386	33	53	85	49	65	50	49
Growth 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
Initial Bse:	35	634	37	66	2386	33	53	85	49	65	50	49
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	35	634	37	66	2386	33	53	85	49	65	50	49
User 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
PHF 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
PHF Volume:	35	634	37	66	2386	33	53	85	49	65	50	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	634	37	66	2386	33	53	85	49	65	50	49
PCE 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
MLF 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
FinalVolume:	35	634	37	66	2386	33	53	85	49	65	50	49
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.83	0.98	0.95	0.92	0.99	0.95	0.92	1.00	0.92
Lanes:	1.00	3.77	0.23	2.00	2.96	0.04	1.00	1.25	0.75	1.00	1.00	1.00
Final Sat.:	1750	7086	414	3150	5524	76	1750	2346	1352	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.09	0.09	0.02	0.43	0.43	0.03	0.04	0.04	0.04	0.03	0.03
Crit Moves:	****				****			****		****		
Green Time:	7.0	105	104.6	44.3	142	141.9	9.9	11.9	11.9	12.2	14.2	58.4
Volume/Cap:	0.53	0.16	0.16	0.09	0.56	0.56	0.56	0.56	0.56	0.56	0.34	0.09
Delay/Veh:	95.2	19.2	19.2	54.7	9.0	9.0	93.2	87.1	87.1	90.1	82.4	44.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	95.2	19.2	19.2	54.7	9.0	9.0	93.2	87.1	87.1	90.1	82.4	44.6
LOS by Move:	F	B-	B-	D-	A	A	F	F	F	F	F	D
HCM2kAvgQ:	2	4	4	2	19	19	3	4	4	4	3	2

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
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Existing PP PM

Intersection #31: Mathilda Avenue / Iowa Avenue

Signal=Protect/Rights=Include
Final Vol: 42 2670*** 70
Lanes: 0 1 2 0 2

Signal=Protect Rights=Include (East Bound) — Final Vol: 56, 90***, 49; Lanes: 1, 0, 1, 1, 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 185
Loss Time (sec): 12
Critical V/C: 0.653
Avg Crit Del (sec/veh): 20.6
Avg Delay (sec/veh): 23.0
LOS: C

Signal=Protect Rights=Overlap (West Bound) — Lanes: 1, 0, 1, 0, 1; Final Vol: 55, 54, 120***

Lanes: 1 0 3 1 0
Final Vol: 35*** 695 99
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	35	634	37	66	2386	33	53	85	49	65	50	49
Growth 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
Initial Bse:	35	634	37	66	2386	33	53	85	49	65	50	49
Added Vol:	0	61	62	4	284	9	3	5	0	55	4	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	35	695	99	70	2670	42	56	90	49	120	54	55
User 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
PHF 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
PHF Volume:	35	695	99	70	2670	42	56	90	49	120	54	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	695	99	70	2670	42	56	90	49	120	54	55
PCE 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
MLF 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
FinalVolume:	35	695	99	70	2670	42	56	90	49	120	54	55
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.83	0.98	0.95	0.92	0.99	0.95	0.92	1.00	0.92
Lanes:	1.00	3.48	0.52	2.00	2.95	0.05	1.00	1.28	0.72	1.00	1.00	1.00
Final Sat.:	1750	6563	935	3150	5513	87	1750	2395	1304	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.11	0.11	0.02	0.48	0.48	0.03	0.04	0.04	0.07	0.03	0.03
Crit Moves:	****				****			****		****		
Green Time:	7.0	105	105.5	37.7	136	136.2	12.3	10.6	10.6	19.3	17.6	55.2
Volume/Cap:	0.53	0.19	0.19	0.11	0.66	0.66	0.48	0.66	0.66	0.66	0.30	0.11
Delay/Veh:	95.2	19.1	19.1	60.1	12.9	12.9	86.4	92.8	92.8	88.2	78.9	47.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	95.2	19.1	19.1	60.1	12.9	12.9	86.4	92.8	92.8	88.2	78.9	47.1
LOS by Move:	F	B-	B-	E	B	B	F	F	F	F	E-	D
HCM2kAvgQ:	2	5	5	2	26	26	3	4	4	7	3	2

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #32: Mathilda Avenue / Olive Avenue

Signal=Protect/Rights=Overlap
Final Vol: 107 2358*** 60
Lanes: 1 0 3 0 1

Signal=Permit
Rights=Overlap

Final Vol:	Lanes:
104	0
	1
117***	0
	0
110	1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 9
Critical V/C: 0.596
Avg Crit Del (sec/veh): 18.3
Avg Delay (sec/veh): 20.7
LOS: C+

Signal=Permit
Rights=Overlap

Lanes:	Final Vol:
1	52
0	
0	70
1	
0	39

Lanes: 1 0 2 1 0
Final Vol: 46*** 676 37
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	46	676	37	60	2358	107	104	117	110	39	70	52
Growth 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
Initial Bse:	46	676	37	60	2358	107	104	117	110	39	70	52
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	46	676	37	60	2358	107	104	117	110	39	70	52
User 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
PHF 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
PHF Volume:	46	676	37	60	2358	107	104	117	110	39	70	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	46	676	37	60	2358	107	104	117	110	39	70	52
PCE 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
MLF 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
FinalVolume:	46	676	37	60	2358	107	104	117	110	39	70	52
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.84	0.16	1.00	3.00	1.00	0.47	0.53	1.00	0.36	0.64	1.00
Final Sat.:	1750	5309	291	1750	5700	1750	847	953	1750	644	1156	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.13	0.13	0.03	0.41	0.06	0.12	0.12	0.06	0.06	0.06	0.03
Crit Moves:	****				****			****				
Green Time:	7.1	87.9	87.9	30.2	111	111.0	32.9	32.9	40.0	32.9	32.9	63.1
Volume/Cap:	0.60	0.23	0.23	0.18	0.60	0.09	0.60	0.60	0.25	0.29	0.29	0.08
Delay/Veh:	87.2	18.7	18.7	54.8	13.0	8.0	60.2	60.2	48.3	54.1	54.1	30.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	87.2	18.7	18.7	54.8	13.0	8.0	60.2	60.2	48.3	54.1	54.1	30.3
LOS by Move:	F	B-	B-	D-	B	A	E	E	D	D-	D-	C
HCM2kAvgQ:	3	6	6	3	20	2	11	11	5	5	5	2

Note: Queue reported is the number of cars per lane.

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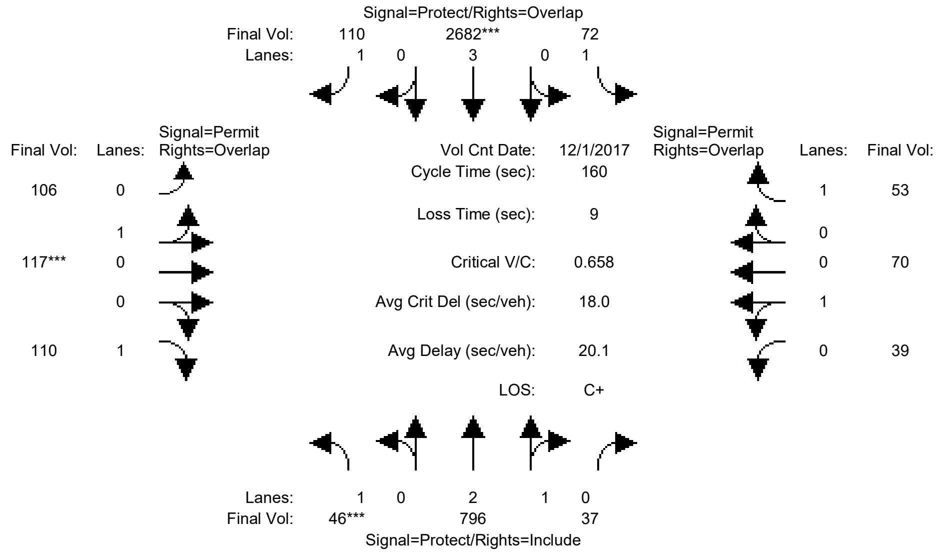
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #32: Mathilda Avenue / Olive Avenue



Street Name:	Mathilda Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	46	676	37	60	2358	107	104	117	110	39	70	52
Growth 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
Initial Bse:	46	676	37	60	2358	107	104	117	110	39	70	52
Added Vol:	0	120	0	12	324	3	2	0	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	46	796	37	72	2682	110	106	117	110	39	70	53
User 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
PHF 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
PHF Volume:	46	796	37	72	2682	110	106	117	110	39	70	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	46	796	37	72	2682	110	106	117	110	39	70	53
PCE 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
MLF 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
FinalVolume:	46	796	37	72	2682	110	106	117	110	39	70	53
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.86	0.14	1.00	3.00	1.00	0.48	0.52	1.00	0.36	0.64	1.00
Final Sat.:	1750	5351	249	1750	5700	1750	856	944	1750	644	1156	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.15	0.04	0.47	0.06	0.12	0.12	0.06	0.06	0.06	0.03
Crit Moves:	****				****			****				
Green Time:	7.0	93.5	93.5	27.5	114	114.0	30.0	30.0	37.0	30.0	30.0	57.5
Volume/Cap:	0.60	0.25	0.25	0.24	0.66	0.09	0.66	0.66	0.27	0.32	0.32	0.08
Delay/Veh:	87.7	16.3	16.3	57.6	12.9	7.1	65.1	65.1	50.8	56.8	56.8	33.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	87.7	16.3	16.3	57.6	12.9	7.1	65.1	65.1	50.8	56.8	56.8	33.9
LOS by Move:	F	B	B	E+	B	A	E	E	D	E+	E+	C-
HCM2kAvgQ:	3	6	6	3	23	2	11	11	5	5	5	2

Note: Queue reported is the number of cars per lane.

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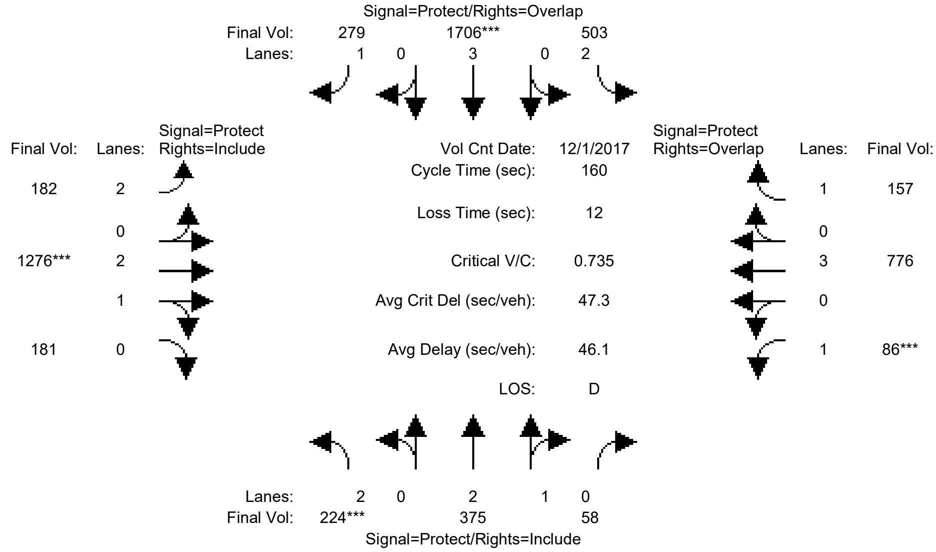
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #33: Mathilda Avenue / El Camino Real (CMP)



Street Name:	Mathilda Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	224	375	58	503	1706	279	182	1276	181	86	776	157
Growth 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
Initial Bse:	224	375	58	503	1706	279	182	1276	181	86	776	157
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	224	375	58	503	1706	279	182	1276	181	86	776	157
User 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
PHF 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
PHF Volume:	224	375	58	503	1706	279	182	1276	181	86	776	157
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	224	375	58	503	1706	279	182	1276	181	86	776	157
PCE 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
MLF 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
FinalVolume:	224	375	58	503	1706	279	182	1276	181	86	776	157
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	1.00	0.92	0.83	0.99	0.95	0.92	1.00	0.92
Lanes:	2.00	2.58	0.42	2.00	3.00	1.00	2.00	2.61	0.39	1.00	3.00	1.00
Final Sat.:	3150	4849	750	3150	5700	1750	3150	4903	696	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.08	0.08	0.16	0.30	0.16	0.06	0.26	0.26	0.05	0.14	0.09
Crit Moves:	****				****			****		****		
Green Time:	15.5	26.3	26.3	54.3	65.2	85.2	20.1	56.7	56.7	10.7	47.3	101.6
Volume/Cap:	0.73	0.47	0.47	0.47	0.73	0.30	0.46	0.73	0.73	0.73	0.46	0.14
Delay/Veh:	79.2	60.9	60.9	41.9	41.4	21.0	65.8	46.6	46.6	94.6	46.2	11.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	79.2	60.9	60.9	41.9	41.4	21.0	65.8	46.6	46.6	94.6	46.2	11.8
LOS by Move:	E-	E	E	D	D	C+	E	D	D	F	D	B+
HCM2kAvgQ:	7	6	6	11	24	8	5	21	21	5	10	3

Note: Queue reported is the number of cars per lane.

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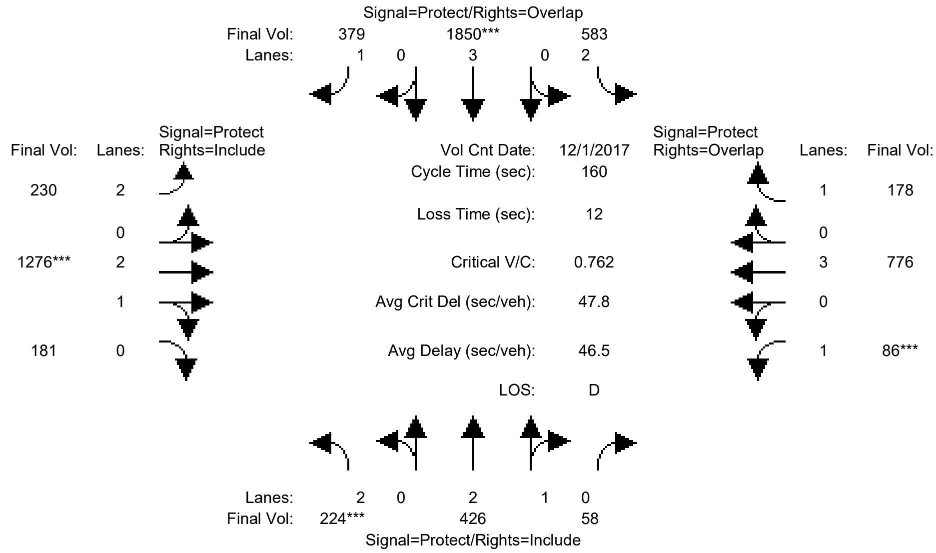
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #33: Mathilda Avenue / El Camino Real (CMP)



Street Name:	Mathilda Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	224	375	58	503	1706	279	182	1276	181	86	776	157
Growth 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
Initial Bse:	224	375	58	503	1706	279	182	1276	181	86	776	157
Added Vol:	0	51	0	80	144	100	48	0	0	0	0	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	224	426	58	583	1850	379	230	1276	181	86	776	178
User 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
PHF 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
PHF Volume:	224	426	58	583	1850	379	230	1276	181	86	776	178
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	224	426	58	583	1850	379	230	1276	181	86	776	178
PCE 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
MLF 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
FinalVolume:	224	426	58	583	1850	379	230	1276	181	86	776	178
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	1.00	0.92	0.83	0.99	0.95	0.92	1.00	0.92
Lanes:	2.00	2.63	0.37	2.00	3.00	1.00	2.00	2.61	0.39	1.00	3.00	1.00
Final Sat.:	3150	4928	671	3150	5700	1750	3150	4903	696	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.09	0.09	0.19	0.32	0.22	0.07	0.26	0.26	0.05	0.14	0.10
Crit Moves:	****				****			****		****		
Green Time:	14.9	26.4	26.4	56.6	68.1	90.8	22.7	54.6	54.6	10.3	42.3	98.9
Volume/Cap:	0.76	0.52	0.52	0.52	0.76	0.38	0.52	0.76	0.76	0.76	0.52	0.16
Delay/Veh:	82.0	61.6	61.6	41.4	40.5	19.3	64.6	48.8	48.8	99.5	50.4	13.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	82.0	61.6	61.6	41.4	40.5	19.3	64.6	48.8	48.8	99.5	50.4	13.1
LOS by Move:	F	E	E	D	D	B-	E	D	D	F	D	B
HCM2kAvgQ:	7	7	7	13	26	11	6	21	21	5	10	4

Note: Queue reported is the number of cars per lane.

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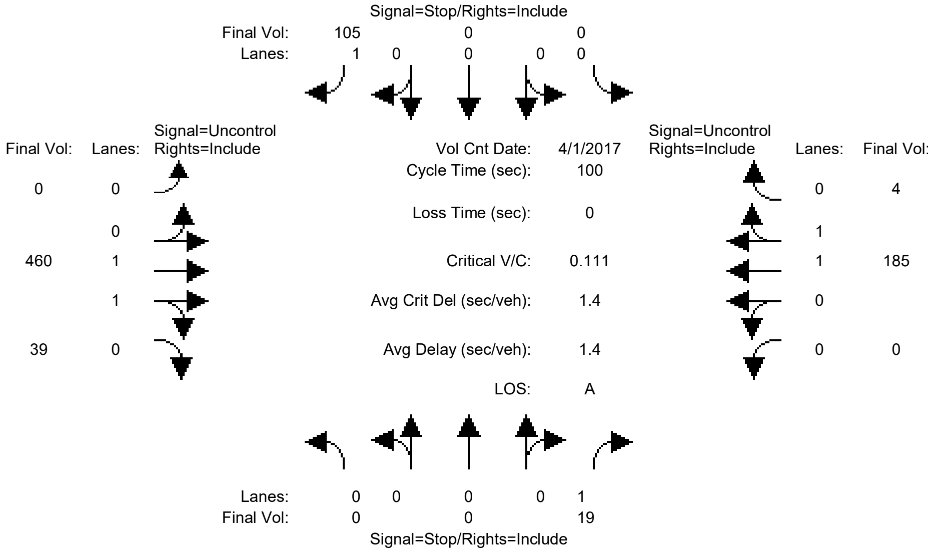
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PM

Intersection #34: Aries Way / Washington Avenue




```
Street Name:             Aries Way                      Washington Avenue
Approach:       North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 1 Apr 2017 <<
Base Vol:       0    0    19     0    0   105     0  460    39     0  185     4
Growth 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
Initial Bse:    0    0    19     0    0   105     0  460    39     0  185     4
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0    19     0    0   105     0  460    39     0  185     4
User 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
PHF 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
PHF Volume:     0    0    19     0    0   105     0  460    39     0  185     4
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0    19     0    0   105     0  460    39     0  185     4
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx   6.9 xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx   3.3 xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx   250  xxxx xxxx    95  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx   757  xxxx xxxx   950  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx   757  xxxx xxxx   950  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  0.03  xxxx xxxx  0.11  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx   0.1  xxxx xxxx   0.4  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx   9.9 xxxxx xxxx   9.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     A     *    *     A     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:        9.9              9.3            xxxxxx            xxxxxx
ApproachLOS:         A                A                *                 *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #34 Aries Way / Washington Avenue
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  1    0  0  1  1  0    0  0  1  1  0
Initial Vol:    0    0    19     0    0   105     0  460    39     0  185     4
ApproachDel:       9.9              9.3             xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=19]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=812]
   SUCCEED - Total volume greater than or equal to 800 for intersection
             with four or more approaches.
--------------------------------------------------------------------------------
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=105]
   SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=812]
   SUCCEED - Total volume greater than or equal to 800 for intersection
             with four or more approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

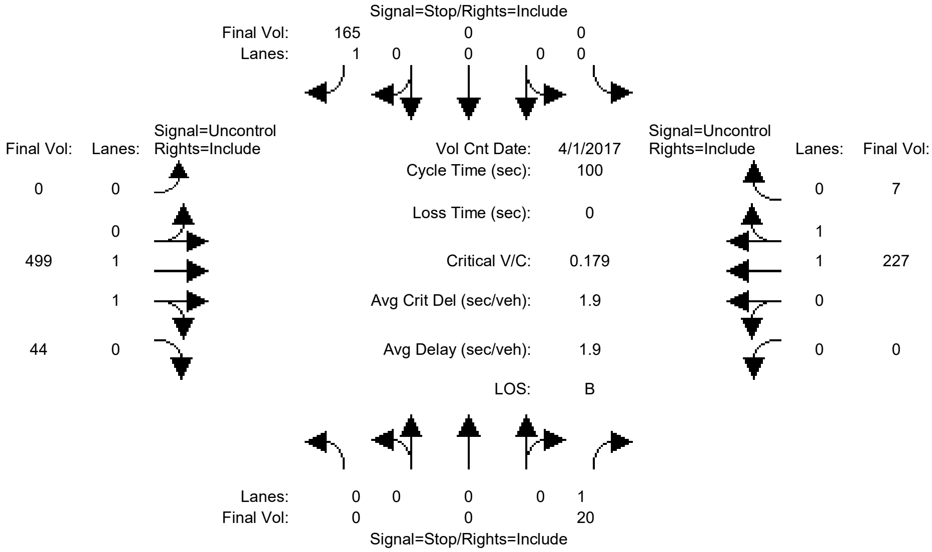
The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #34 Aries Way / Washington Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  1    0  0  1  1  0    0  0  1  1  0
Initial Vol:    0    0    19     0    0   105     0  460    39     0  185     4
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             688
Minor Approach Volume:           105
Minor Approach Volume Threshold: 414
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PP PM

Intersection #34: Aries Way / Washington Avenue




```
Street Name:              Aries Way                    Washington Avenue
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 1 Apr 2017 <<
Base Vol:       0    0    19     0    0   105     0  460    39     0  185     4
Growth 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
Initial Bse:    0    0    19     0    0   105     0  460    39     0  185     4
Added Vol:      0    0     1     0    0    60     0   39     5     0   42     3
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0    20     0    0   165     0  499    44     0  227     7
User 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
PHF 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
PHF Volume:     0    0    20     0    0   165     0  499    44     0  227     7
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0    20     0    0   165     0  499    44     0  227     7
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx   6.9 xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx   3.3 xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx   272  xxxx xxxx   117  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx   732  xxxx xxxx   919  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx   732  xxxx xxxx   919  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  0.03  xxxx xxxx  0.18  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx   0.1  xxxx xxxx   0.7  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx  10.1 xxxxx xxxx   9.8 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     B     *    *     A     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      10.1              9.8            xxxxxx           xxxxxx
ApproachLOS:         B                A                 *                *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
*****************************************************************************
Intersection #34 Aries Way / Washington Avenue
*****************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  1    0  0  1  1  0    0  0  1  1  0
Initial Vol:    0     0    20     0     0   165     0  499    44     0  227     7
ApproachDel:       10.1              9.8            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=20]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=962]
   SUCCEED - Total volume greater than or equal to 800 for intersection
             with four or more approaches.
--------------------------------------------------------------------------------
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.4]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=165]
   SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=962]
   SUCCEED - Total volume greater than or equal to 800 for intersection
             with four or more approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #34 Aries Way / Washington Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  1    0  0  1  1  0    0  0  1  1  0
Initial Vol:    0     0    20     0     0   165     0  499    44     0  227     7
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            777
Minor Approach Volume:          165
Minor Approach Volume Threshold: 372
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #35: Taaffe Street / Washington Avenue

Signal=Permit/Rights=Include
Final Vol: 40 31*** 13
Lanes: 0 0 1! 0 0

Signal=Protect Rights=Overlap (Eastbound) — Final Vol: 76, 291***, 98; Lanes: 1, 0, 1, 0, 1

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 60
Loss Time (sec): 9
Critical V/C: 0.253
Avg Crit Del (sec/veh): 11.2
Avg Delay (sec/veh): 12.3
LOS: B

Signal=Protect Rights=Include (Westbound) — Lanes: 0, 1, 0, 0, 1; Final Vol: 17, 108, 25***

Lanes: 0 0 1! 0 0
Final Vol: 39 16 22
Signal=Permit/Rights=Include

Street Name:	Taaffe Street						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	39	16	22	13	31	40	76	291	98	25	108	17
Growth 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
Initial Bse:	39	16	22	13	31	40	76	291	98	25	108	17
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	16	22	13	31	40	76	291	98	25	108	17
User 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
PHF 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
PHF Volume:	39	16	22	13	31	40	76	291	98	25	108	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	16	22	13	31	40	76	291	98	25	108	17
PCE 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
MLF 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
FinalVolume:	39	16	22	13	31	40	76	291	98	25	108	17
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	0.51	0.21	0.28	0.15	0.37	0.48	1.00	1.00	1.00	1.00	0.86	0.14
Final Sat.:	886	364	500	271	646	833	1750	1900	1750	1750	1555	245
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.05	0.05	0.05	0.04	0.15	0.06	0.01	0.07	0.07
Crit Moves:					****			****		****		
Green Time:	10.5	10.5	10.5	10.5	10.5	10.5	16.7	33.5	33.5	7.0	23.8	23.8
Volume/Cap:	0.25	0.25	0.25	0.27	0.27	0.27	0.16	0.27	0.10	0.12	0.17	0.17
Delay/Veh:	21.8	21.8	21.8	21.9	21.9	21.9	16.5	7.1	6.2	24.0	11.8	11.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.8	21.8	21.8	21.9	21.9	21.9	16.5	7.1	6.2	24.0	11.8	11.8
LOS by Move:	C+	C+	C+	C+	C+	C+	B	A	A	C	B+	B+
HCM2kAvgQ:	2	2	2	2	2	2	1	3	1	1	2	2

Note: Queue reported is the number of cars per lane.

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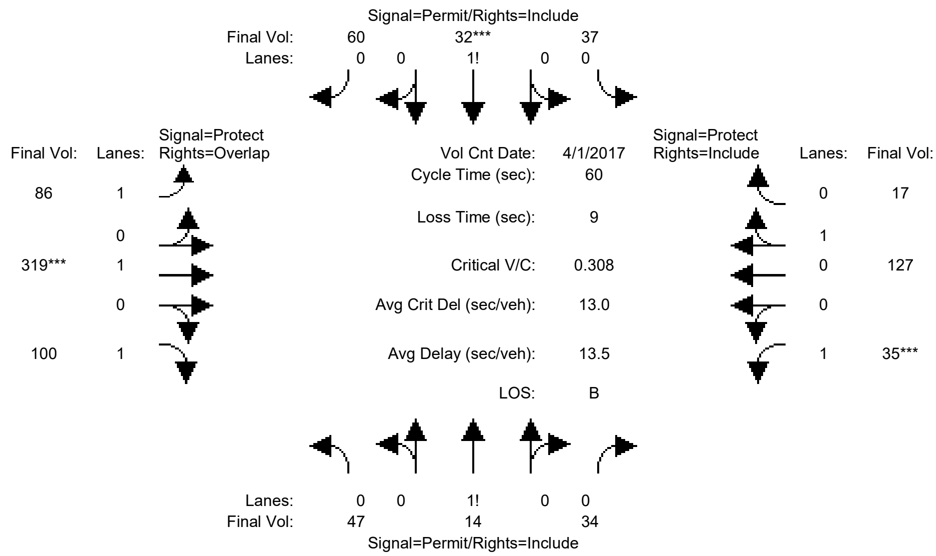
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #35: Taaffe Street / Washington Avenue



Street Name:	Taaffe Street						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	39	16	22	13	31	40	76	291	98	25	108	17
Growth 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
Initial Bse:	39	16	22	13	31	40	76	291	98	25	108	17
Added Vol:	8	-2	12	24	1	20	10	28	2	10	19	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	47	14	34	37	32	60	86	319	100	35	127	17
User 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
PHF 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
PHF Volume:	47	14	34	37	32	60	86	319	100	35	127	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	14	34	37	32	60	86	319	100	35	127	17
PCE 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
MLF 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
FinalVolume:	47	14	34	37	32	60	86	319	100	35	127	17
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	0.49	0.15	0.36	0.29	0.25	0.46	1.00	1.00	1.00	1.00	0.88	0.12
Final Sat.:	866	258	626	502	434	814	1750	1900	1750	1750	1587	212
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.05	0.07	0.07	0.07	0.05	0.17	0.06	0.02	0.08	0.08
Crit Moves:					****			****		****		
Green Time:	13.4	13.4	13.4	13.4	13.4	13.4	15.5	30.6	30.6	7.0	22.1	22.1
Volume/Cap:	0.24	0.24	0.24	0.33	0.33	0.33	0.19	0.33	0.11	0.17	0.22	0.22
Delay/Veh:	19.4	19.4	19.4	20.0	20.0	20.0	17.6	8.9	7.7	24.3	13.2	13.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.4	19.4	19.4	20.0	20.0	20.0	17.6	8.9	7.7	24.3	13.2	13.2
LOS by Move:	B-	B-	B-	C+	C+	C+	B	A	A	C	B	B
HCM2kAvgQ:	2	2	2	2	2	2	1	3	1	1	2	2

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #36: Iowa Avenue / Taaffe Street

Signal=Permit/Rights=Include
Final Vol: 109 34*** 51
Lanes: 0 0 1! 0 0

Signal=Protect Rights=Include (East Bound)
Final Vol: 52 / 143*** / 15
Lanes: 1 0 0 1 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 100
Loss Time (sec): 12
Critical V/C: 0.243
Avg Crit Del (sec/veh): 21.4
Avg Delay (sec/veh): 23.6
LOS: C

Signal=Protect Rights=Include (West Bound)
Lanes: 0 1 0 0 1
Final Vol: 21 / 62 / 27***

Lanes: 0 0 1! 0 0
Final Vol: 8 17 11
Signal=Permit/Rights=Include

Street Name:	Taaffe Street						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	8	17	11	51	34	109	52	143	15	27	62	21
Growth 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
Initial Bse:	8	17	11	51	34	109	52	143	15	27	62	21
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	17	11	51	34	109	52	143	15	27	62	21
User 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
PHF 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
PHF Volume:	8	17	11	51	34	109	52	143	15	27	62	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	17	11	51	34	109	52	143	15	27	62	21
PCE 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
MLF 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
FinalVolume:	8	17	11	51	34	109	52	143	15	27	62	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.22	0.47	0.31	0.26	0.18	0.56	1.00	0.91	0.09	1.00	0.75	0.25
Final Sat.:	389	826	535	460	307	983	1750	1629	171	1750	1345	455
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.11	0.11	0.11	0.03	0.09	0.09	0.02	0.05	0.05
Crit Moves:					****			****		****		
Green Time:	45.2	45.2	45.2	45.2	45.2	45.2	17.6	35.8	35.8	7.0	25.2	25.2
Volume/Cap:	0.05	0.05	0.05	0.25	0.25	0.25	0.17	0.25	0.25	0.22	0.18	0.18
Delay/Veh:	15.4	15.4	15.4	17.0	17.0	17.0	35.2	22.8	22.8	44.8	29.5	29.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.4	15.4	15.4	17.0	17.0	17.0	35.2	22.8	22.8	44.8	29.5	29.5
LOS by Move:	B	B	B	B	B	B	D+	C+	C+	D	C	C
HCM2kAvgQ:	1	1	1	4	4	4	1	3	3	1	2	2

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #36: Iowa Avenue / Taaffe Street

Signal=Permit/Rights=Include
Final Vol: 134 34*** 74
Lanes: 0 0 1! 0 0

Westbound (left side): Signal=Protect Rights=Include
Final Vol: 86, Lanes: 1
Lanes: 0
Final Vol: 180***, Lanes: 0
Lanes: 1
Final Vol: 15, Lanes: 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 100
Loss Time (sec): 12
Critical V/C: 0.298
Avg Crit Del (sec/veh): 21.6
Avg Delay (sec/veh): 24.8
LOS: C

Signal=Protect Rights=Include
Lanes: 0, Final Vol: 36
Lanes: 1
Lanes: 0, Final Vol: 102
Lanes: 0
Lanes: 1, Final Vol: 27***

Lanes: 0 0 1! 0 0
Final Vol: 8 17 11
Signal=Permit/Rights=Include

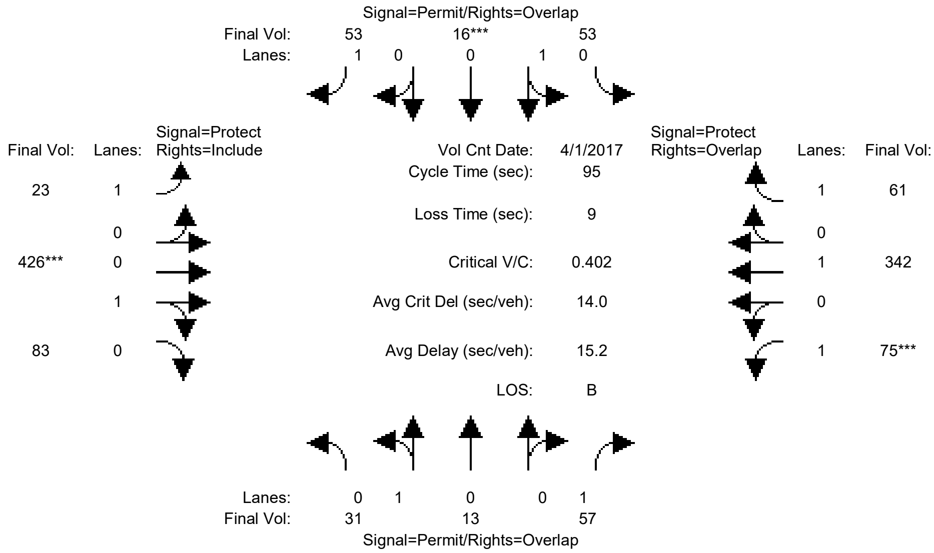
Street Name:	Taaffe Street						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	8	17	11	51	34	109	52	143	15	27	62	21
Growth 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
Initial Bse:	8	17	11	51	34	109	52	143	15	27	62	21
Added Vol:	0	0	0	23	0	25	34	37	0	0	40	15
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	17	11	74	34	134	86	180	15	27	102	36
User 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
PHF 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
PHF Volume:	8	17	11	74	34	134	86	180	15	27	102	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	17	11	74	34	134	86	180	15	27	102	36
PCE 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
MLF 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
FinalVolume:	8	17	11	74	34	134	86	180	15	27	102	36
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.22	0.47	0.31	0.31	0.14	0.55	1.00	0.92	0.08	1.00	0.74	0.26
Final Sat.:	389	826	535	535	246	969	1750	1662	138	1750	1330	470
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.14	0.14	0.14	0.05	0.11	0.11	0.02	0.08	0.08
Crit Moves:					****			****		****		
Green Time:	45.4	45.4	45.4	45.4	45.4	45.4	17.5	35.6	35.6	7.0	25.0	25.0
Volume/Cap:	0.05	0.05	0.05	0.30	0.30	0.30	0.28	0.30	0.30	0.22	0.31	0.31
Delay/Veh:	15.2	15.2	15.2	17.5	17.5	17.5	36.3	23.5	23.5	44.8	30.8	30.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.2	15.2	15.2	17.5	17.5	17.5	36.3	23.5	23.5	44.8	30.8	30.8
LOS by Move:	B	B	B	B	B	B	D+	C	C	D	C	C
HCM2kAvgQ:	1	1	1	5	5	5	2	4	4	1	3	3

Note: Queue reported is the number of cars per lane.

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #37: Frances Street / Evelyn Avenue



Street Name:	Frances Street						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	31	13	57	53	16	53	23	426	83	75	342	61
Growth 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
Initial Bse:	31	13	57	53	16	53	23	426	83	75	342	61
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	13	57	53	16	53	23	426	83	75	342	61
User 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
PHF 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
PHF Volume:	31	13	57	53	16	53	23	426	83	75	342	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	13	57	53	16	53	23	426	83	75	342	61
PCE 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
MLF 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
FinalVolume:	31	13	57	53	16	53	23	426	83	75	342	61
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	0.70	0.30	1.00	0.77	0.23	1.00	1.00	0.84	0.16	1.00	1.00	1.00
Final Sat.:	1268	532	1750	1383	417	1750	1750	1506	294	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.03	0.04	0.04	0.03	0.01	0.28	0.28	0.04	0.18	0.03
Crit Moves:					****			****		****		
Green Time:	10.0	10.0	20.0	10.0	10.0	32.1	22.1	66.0	66.0	10.0	53.9	53.9
Volume/Cap:	0.23	0.23	0.15	0.36	0.36	0.09	0.06	0.41	0.41	0.41	0.32	0.06
Delay/Veh:	39.6	39.6	30.8	40.7	40.7	21.6	28.4	6.4	6.4	41.2	11.0	9.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.6	39.6	30.8	40.7	40.7	21.6	28.4	6.4	6.4	41.2	11.0	9.2
LOS by Move:	D	D	C	D	D	C+	C	A	A	D	B+	A
HCM2kAvgQ:	1	1	2	2	2	1	1	7	7	3	5	1

Note: Queue reported is the number of cars per lane.

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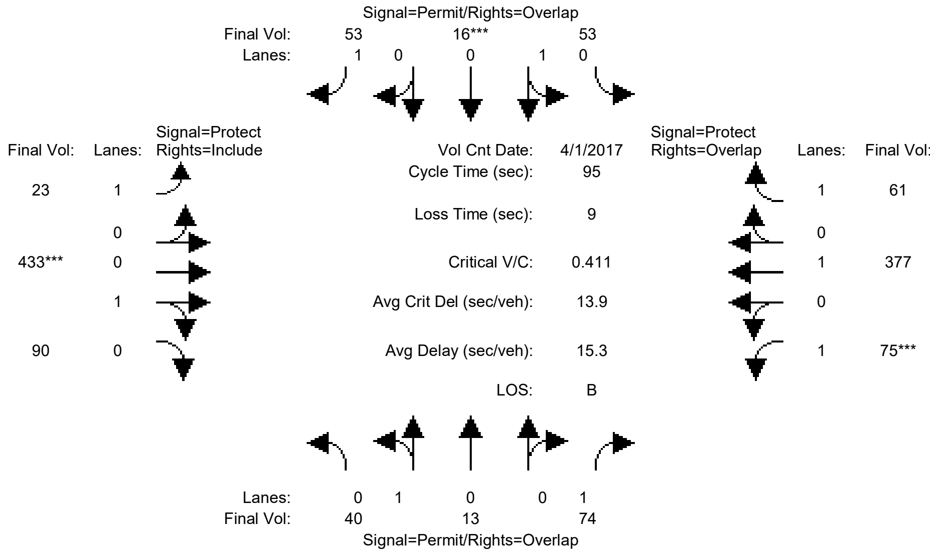
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #37: Frances Street / Evelyn Avenue



Street Name:	Frances Street						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	31	13	57	53	16	53	23	426	83	75	342	61
Growth 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
Initial Bse:	31	13	57	53	16	53	23	426	83	75	342	61
Added Vol:	9	0	17	0	0	0	0	7	7	0	35	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	40	13	74	53	16	53	23	433	90	75	377	61
User 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
PHF 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
PHF Volume:	40	13	74	53	16	53	23	433	90	75	377	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	13	74	53	16	53	23	433	90	75	377	61
PCE 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
MLF 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
FinalVolume:	40	13	74	53	16	53	23	433	90	75	377	61
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	0.75	0.25	1.00	0.77	0.23	1.00	1.00	0.83	0.17	1.00	1.00	1.00
Final Sat.:	1358	442	1750	1383	417	1750	1750	1490	310	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.04	0.04	0.04	0.03	0.01	0.29	0.29	0.04	0.20	0.03
Crit Moves:					****			****		****		
Green Time:	10.0	10.0	19.8	10.0	10.0	30.6	20.6	66.2	66.2	9.8	55.4	55.4
Volume/Cap:	0.28	0.28	0.20	0.36	0.36	0.09	0.06	0.42	0.42	0.42	0.34	0.06
Delay/Veh:	40.0	40.0	31.4	40.7	40.7	22.6	29.6	6.4	6.4	41.5	10.5	8.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.0	40.0	31.4	40.7	40.7	22.6	29.6	6.4	6.4	41.5	10.5	8.6
LOS by Move:	D	D	C	D	D	C+	C	A	A	D	B+	A
HCM2kAvgQ:	2	2	2	2	2	1	1	7	7	3	6	1

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PM

Intersection #38: Washington Avenue / Frances Street

Signal=Stop/Rights=Include
Final Vol: 77 0 119
Lanes: 0 0 1! 0 0

Signal=Uncontrol Rights=Include (westbound approach, left side)
Final Vol: 83, 276, 0
Lanes: 1, 0, 1, 0, 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 80
Loss Time (sec): 9
Critical V/C: 0.249
Avg Crit Del (sec/veh): 4.8
Avg Delay (sec/veh): 4.8
LOS: B

Signal=Uncontrol Rights=Include
Lanes: 1, 0, 1, 0, 0
Final Vol: 47, 108, 0

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Stop/Rights=Include

Street Name:	Frances Street						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	0	0	119	0	77	83	276	0	0	108	47
Growth 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
Initial Bse:	0	0	0	119	0	77	83	276	0	0	108	47
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	119	0	77	83	276	0	0	108	47
User 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
PHF 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
PHF Volume:	0	0	0	119	0	77	83	276	0	0	108	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	119	0	77	83	276	0	0	108	47
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	550	550	108	155	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	500	446	951	1438	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	477	420	951	1438	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.25	0.00	0.08	0.06	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	594	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	14.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:		xxxxxx			14.0			xxxxxx			xxxxxx	
ApproachLOS:		*			B			*			*	

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #38 Washington Avenue / Frances Street

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0   0  0  1! 0  0   1  0  1  0  0   0  0  1  0  1
Initial Vol:    0    0     0   119    0    77   83  276     0     0  108    47
ApproachDel:    xxxxxx             14.0            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.8]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=196]
   SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=710]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #38 Washington Avenue / Frances Street
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0   0  0  1! 0  0   1  0  1  0  0   0  0  1  0  1
Initial Vol:    0    0     0   119    0    77   83  276     0     0  108    47
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            514
Minor Approach Volume:          196
Minor Approach Volume Threshold: 514
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PP PM

Intersection #38: Washington Avenue / Frances Street

Signal=Stop/Rights=Include
Final Vol: 82 0 122
Lanes: 0 0 1! 0 0

Westbound (left side): Signal=Uncontrol, Rights=Include

Final Vol:	Lanes:
106	1
	0
317	1
	0
0	0

Vol Cnt Date:	12/1/2017
Cycle Time (sec):	80
Loss Time (sec):	9
Critical V/C:	0.300
Avg Crit Del (sec/veh):	5.1
Avg Delay (sec/veh):	5.1
LOS:	C

Signal=Uncontrol, Rights=Include

Lanes:	Final Vol:
1	48
0	
1	131
0	
0	0

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Stop/Rights=Include

Street Name:	Frances Street						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	0	0	119	0	77	83	276	0	0	108	47
Growth 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
Initial Bse:	0	0	0	119	0	77	83	276	0	0	108	47
Added Vol:	0	0	0	3	0	5	23	41	0	0	23	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	122	0	82	106	317	0	0	131	48
User 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
PHF 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
PHF Volume:	0	0	0	122	0	82	106	317	0	0	131	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	122	0	82	106	317	0	0	131	48
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	660	660	131	179	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	431	386	924	1409	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	406	357	924	1409	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.30	0.00	0.09	0.08	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	524	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	16.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	*	*	*	*	*	*
ApproachDel:		xxxxxx			16.2			xxxxxx			xxxxxx	
ApproachLOS:		*			C			*			*	

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #38 Washington Avenue / Frances Street

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  1  0  1
Initial Vol:    0    0     0   122    0    82   106  317     0     0  131    48
ApproachDel:    xxxxxx              16.2           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.9]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=204]
   SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=806]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

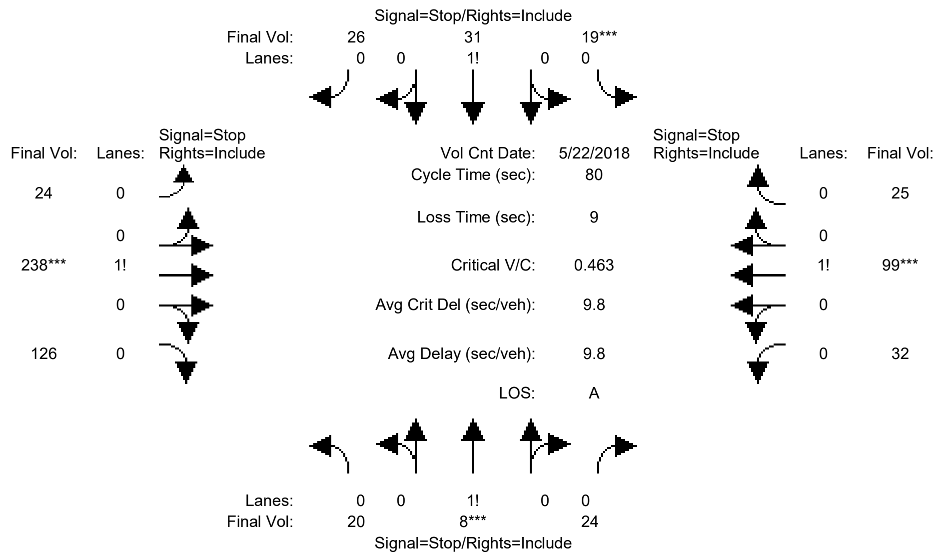
The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #38 Washington Avenue / Frances Street
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  1  0  1
Initial Vol:    0    0     0   122    0    82   106  317     0     0  131    48
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            602
Minor Approach Volume:          204
Minor Approach Volume Threshold: 460
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing PM

Intersection #39: Murphy Avenue / Washington Avenue



Street Name:	Murphy Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 22 May 2018 <<												
Base Vol:	20	8	24	19	31	26	24	238	126	32	99	25
Growth 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
Initial Bse:	20	8	24	19	31	26	24	238	126	32	99	25
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	8	24	19	31	26	24	238	126	32	99	25
User 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
PHF 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
PHF Volume:	20	8	24	19	31	26	24	238	126	32	99	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	8	24	19	31	26	24	238	126	32	99	25
PCE 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
MLF 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
FinalVolume:	20	8	24	19	31	26	24	238	126	32	99	25
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.38	0.15	0.47	0.25	0.41	0.34	0.06	0.62	0.32	0.21	0.63	0.16
Final Sat.:	253	101	304	165	269	226	52	514	272	156	484	122
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.08	0.12	0.12	0.12	0.46	0.46	0.46	0.20	0.20	0.20
Crit Moves:		****		****				****			****	
Delay/Veh:	8.3	8.3	8.3	8.5	8.5	8.5	10.6	10.6	10.6	8.7	8.7	8.7
Delay 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
AdjDel/Veh:	8.3	8.3	8.3	8.5	8.5	8.5	10.6	10.6	10.6	8.7	8.7	8.7
LOS by Move:	A	A	A	A	A	A	B	B	B	A	A	A
ApproachDel:		8.3			8.5			10.6			8.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.3			8.5			10.6			8.7	
LOS by Appr:		A			A			B			A	
AllWayAvgQ:	0.1	0.1	0.1	0.1	0.1	0.1	0.8	0.8	0.8	0.2	0.2	0.2

Note: Queue reported is the number of cars per lane.

Peak Hour Volume Signal Warrant Report [Urban]

****
Intersection #39 Murphy Avenue / Washington Avenue
****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0
Initial Vol:	20 8 24	19 31 26	24 238 126	32 99 25

Major Street Volume: 544
Minor Approach Volume: 76
Minor Approach Volume Threshold: 382

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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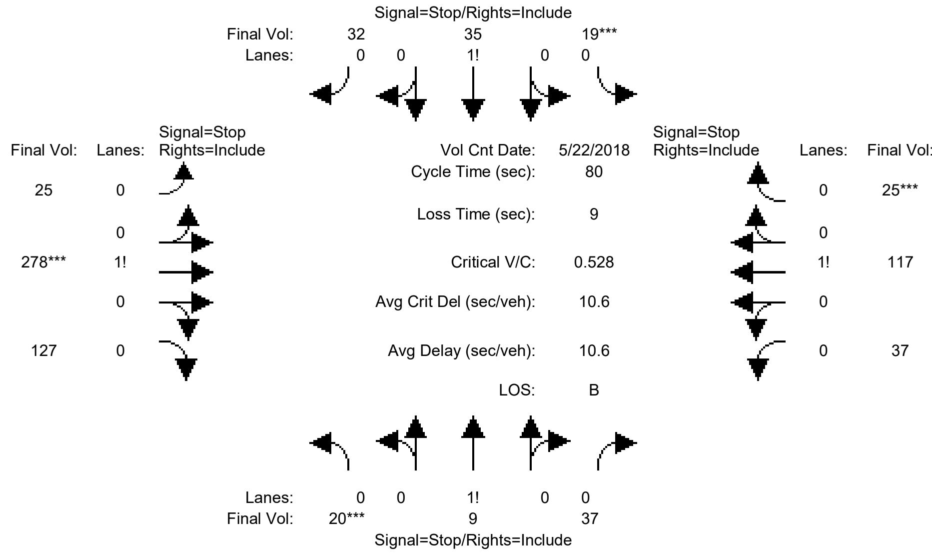
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Existing PP PM

Intersection #39: Murphy Avenue / Washington Avenue



Street Name:	Murphy Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 22 May 2018 <<												
Base Vol:	20	8	24	19	31	26	24	238	126	32	99	25
Growth 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
Initial Bse:	20	8	24	19	31	26	24	238	126	32	99	25
Added Vol:	0	1	13	0	4	6	1	40	1	5	18	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	9	37	19	35	32	25	278	127	37	117	25
User 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
PHF 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
PHF Volume:	20	9	37	19	35	32	25	278	127	37	117	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	9	37	19	35	32	25	278	127	37	117	25
PCE 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
MLF 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
FinalVolume:	20	9	37	19	35	32	25	278	127	37	117	25
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.30	0.14	0.56	0.22	0.41	0.37	0.06	0.65	0.29	0.21	0.65	0.14
Final Sat.:	193	87	357	140	258	236	47	527	241	152	481	103
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.10	0.14	0.14	0.14	0.53	0.53	0.53	0.24	0.24	0.24
Crit Moves:	****			****				****				****
Delay/Veh:	8.6	8.6	8.6	8.8	8.8	8.8	11.9	11.9	11.9	9.1	9.1	9.1
Delay 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
AdjDel/Veh:	8.6	8.6	8.6	8.8	8.8	8.8	11.9	11.9	11.9	9.1	9.1	9.1
LOS by Move:	A	A	A	A	A	A	B	B	B	A	A	A
ApproachDel:		8.6			8.8			11.9			9.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.6			8.8			11.9			9.1	
LOS by Appr:		A			A			B			A	
AllWayAvgQ:	0.1	0.1	0.1	0.1	0.1	0.1	1.0	1.0	1.0	0.3	0.3	0.3

Note: Queue reported is the number of cars per lane.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #39 Murphy Avenue / Washington Avenue

****

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Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0	0 0 1! 0 0
Initial Vol:	20 9 37	19 35 32	25 278 127	37 117 25

Major Street Volume: 609
Minor Approach Volume: 86
Minor Approach Volume Threshold: 352

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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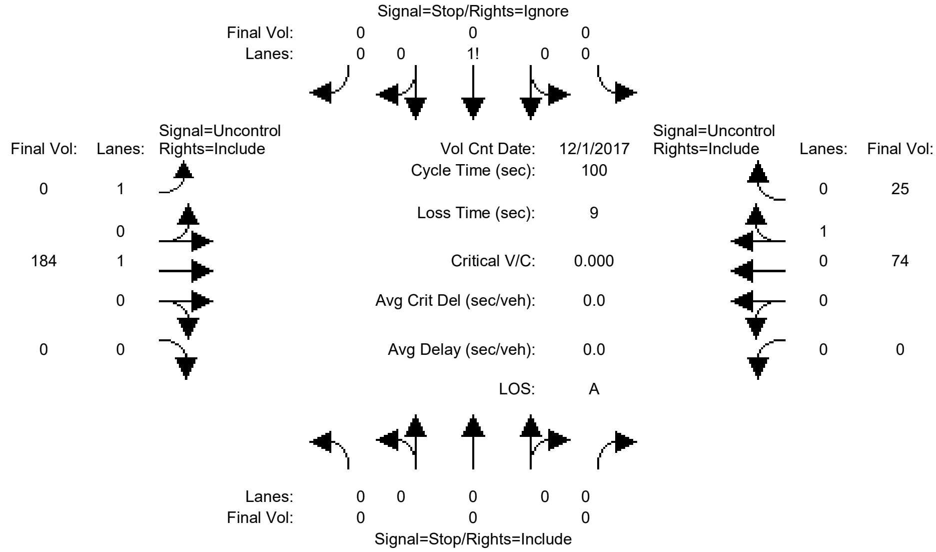
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PM

Intersection #40: Iowa Avenue / Murphy Avenue




```
Street Name:          Murphy Avenue                     Iowa Avenue
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date:  1 Dec 2017 <<
Base Vol:       0    0    0     0    0    0     0  184    0     0   74   25
Growth 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
Initial Bse:    0    0    0     0    0    0     0  184    0     0   74   25
Added Vol:      0    0    0     0    0    0     0    0    0     0    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:    0    0    0     0    0    0     0  184    0     0   74   25
User Adj:    1.00 1.00 1.00  1.00 1.00 0.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 0.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     0    0    0     0    0    0     0  184    0     0   74   25
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
FinalVolume:    0    0    0     0    0    0     0  184    0     0   74   25
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5  6.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0  3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   271  271   87  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   723  639  978  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   723  639  978  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.00 0.00 0.00  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *    *     *    *    *     *    *    *     *    *    *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx    0 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *    *     *    *    *     *    *    *     *    *    *
ApproachDel:     xxxxxx            xxxxxx            xxxxxx            xxxxxx
ApproachLOS:          *                 *                 *                 *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #40 Iowa Avenue / Murphy Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0    0     0     0    0     0     0  184     0     0   74    25
ApproachDel:    xxxxxx           xxxxxx           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

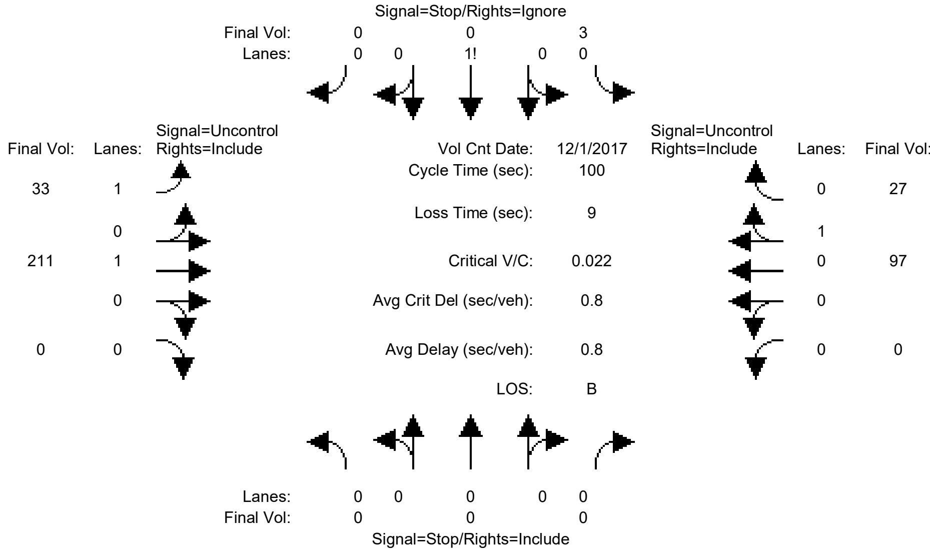
The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #40 Iowa Avenue / Murphy Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0    0     0     0    0     0     0  184     0     0   74    25
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             283
Minor Approach Volume:           0
Minor Approach Volume Threshold: 720
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PP PM

Intersection #40: Iowa Avenue / Murphy Avenue




```
Street Name:          Murphy Avenue                        Iowa Avenue
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 1 Dec 2017 <<
Base Vol:        0    0     0     0    0     0     0  184     0     0   74    25
Growth 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
Initial Bse:     0    0     0     0    0     0     0  184     0     0   74    25
Added Vol:       0    0     0     3    0    32    33   27     0     0   23     2
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:     0    0     0     3    0    32    33  211     0     0   97    27
User Adj:     1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0    0     0     3    0     0    33  211     0     0   97    27
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:     0    0     0     3    0     0    33  211     0     0   97    27
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   388  388   111   124 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   620  550   948  1475 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   609  538   948  1475 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.00 0.00  0.00  0.02 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.1 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.5 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  609 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.0 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 10.9 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    B     *     *    *     *     *    *     *
ApproachDel:    xxxxxx            10.9            xxxxxx            xxxxxx
ApproachLOS:         *               B                 *                 *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
*********************************************************************************
Intersection #40 Iowa Avenue / Murphy Avenue
*********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 1! 0 0	1 0 1 0 0	0 0 0 1 0
Initial Vol:	0 0 0	3 0 32	33 211 0	0 97 27
ApproachDel:	xxxxxx	10.9	xxxxxx	xxxxxx

Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=35]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=403]
FAIL - Total volume less than 650 for intersection
with less than four approaches.

SIGNAL WARRANT DISCLAIMER
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Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #40 Iowa Avenue / Murphy Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 1! 0 0	1 0 1 0 0	0 0 0 1 0
Initial Vol:	0 0 0	3 0 32	33 211 0	0 97 27

Major Street Volume: 368
Minor Approach Volume: 35
Minor Approach Volume Threshold: 629

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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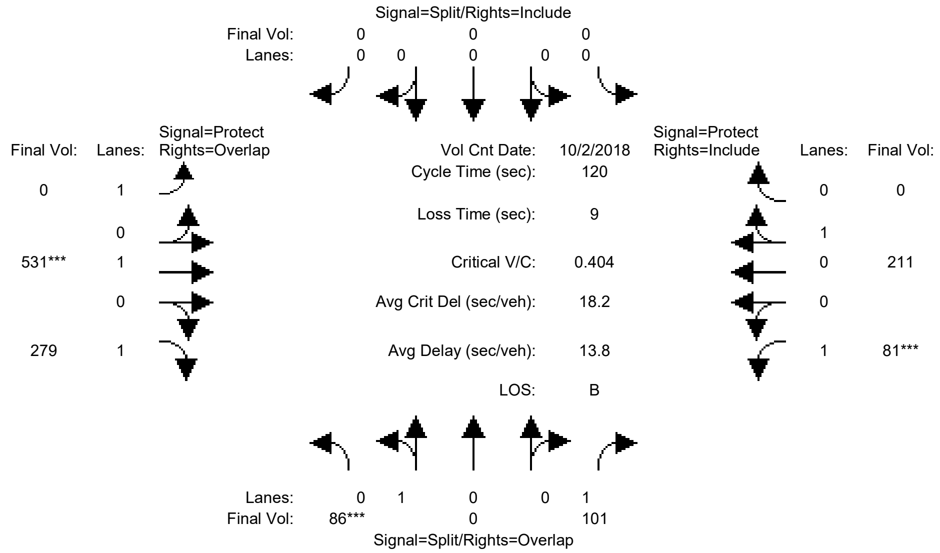
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #41: Sunnyvale Avenue / Maude Avenue



Street Name:	Sunnyvale Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	86	0	101	0	0	0	0	531	279	81	211	0
Growth 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
Initial Bse:	86	0	101	0	0	0	0	531	279	81	211	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	86	0	101	0	0	0	0	531	279	81	211	0
User 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
PHF 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
PHF Volume:	86	0	101	0	0	0	0	531	279	81	211	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	86	0	101	0	0	0	0	531	279	81	211	0
PCE 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
MLF 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
FinalVolume:	86	0	101	0	0	0	0	531	279	81	211	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1800	0	1750	0	0	0	1750	1900	1750	1750	1800	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.06	0.00	0.00	0.00	0.00	0.28	0.16	0.05	0.12	0.00
Crit Moves:	****							****		****		
Green Time:	14.2	0.0	28.0	0.0	0.0	0.0	0.0	83.0	97.2	13.8	96.8	0.0
Volume/Cap:	0.40	0.00	0.25	0.00	0.00	0.00	0.00	0.40	0.20	0.40	0.15	0.00
Delay/Veh:	50.2	0.0	37.8	0.0	0.0	0.0	0.0	8.1	2.6	50.6	2.6	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.2	0.0	37.8	0.0	0.0	0.0	0.0	8.1	2.6	50.6	2.6	0.0
LOS by Move:	D	A	D+	A	A	A	A	A	A	D	A	A
HCM2kAvgQ:	3	0	3	0	0	0	0	8	3	3	2	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #41: Sunnyvale Avenue / Maude Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Final Vol:	Lanes:	Signal=Protect Rights=Overlap			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	10/2/2018			
0	1		Cycle Time (sec):	120		0	0
	0		Loss Time (sec):	9		1	
531***	1		Critical V/C:	0.410		0	211
	0		Avg Crit Del (sec/veh):	19.0		0	
281	1		Avg Delay (sec/veh):	14.4		1	82***
			LOS:	B			

Lanes: 0 1 0 0 1
Final Vol: 95*** 0 112
Signal=Split/Rights=Overlap

Street Name:	Sunnyvale Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	86	0	101	0	0	0	0	531	279	81	211	0
Growth 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
Initial Bse:	86	0	101	0	0	0	0	531	279	81	211	0
Added Vol:	9	0	11	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	2	1	0	0
Initial Fut:	95	0	112	0	0	0	0	531	281	82	211	0
User 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
PHF 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
PHF Volume:	95	0	112	0	0	0	0	531	281	82	211	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	0	112	0	0	0	0	531	281	82	211	0
PCE 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
MLF 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
FinalVolume:	95	0	112	0	0	0	0	531	281	82	211	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1800	0	1750	0	0	0	1750	1900	1750	1750	1800	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.06	0.00	0.00	0.00	0.00	0.28	0.16	0.05	0.12	0.00
Crit Moves:	****							****		****		
Green Time:	15.5	0.0	29.2	0.0	0.0	0.0	0.0	81.8	97.3	13.7	95.5	0.0
Volume/Cap:	0.41	0.00	0.26	0.00	0.00	0.00	0.00	0.41	0.20	0.41	0.15	0.00
Delay/Veh:	49.3	0.0	37.1	0.0	0.0	0.0	0.0	8.6	2.6	50.7	2.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.3	0.0	37.1	0.0	0.0	0.0	0.0	8.6	2.6	50.7	2.9	0.0
LOS by Move:	D	A	D+	A	A	A	A	A	A	D	A	A
HCM2kAvgQ:	3	0	3	0	0	0	0	8	3	3	2	0

Note: Queue reported is the number of cars per lane.

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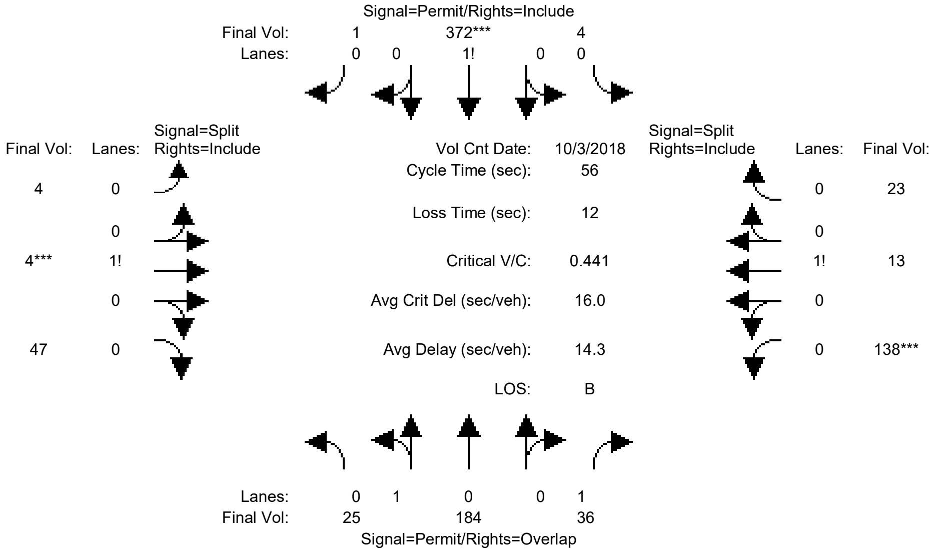
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #42: Sunnyvale Road / Arques Avenue



Street Name:	Sunnyvale Raod						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module: >> Count Date: 3 Oct 2018 <<

Base Vol:	25	184	36	4	372	1	4	4	47	138	13	23
Growth 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
Initial Bse:	25	184	36	4	372	1	4	4	47	138	13	23
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	184	36	4	372	1	4	4	47	138	13	23
User 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
PHF 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
PHF Volume:	25	184	36	4	372	1	4	4	47	138	13	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	184	36	4	372	1	4	4	47	138	13	23
PCE 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
MLF 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
FinalVolume:	25	184	36	4	372	1	4	4	47	138	13	23

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.12	0.88	1.00	0.01	0.98	0.01	0.07	0.07	0.86	0.80	0.07	0.13
Final Sat.:	215	1585	1750	19	1727	5	127	127	1495	1388	131	231

Capacity Analysis Module:

Vol/Sat:	0.12	0.12	0.02	0.22	0.22	0.22	0.03	0.03	0.03	0.10	0.10	0.10
Crit Moves:					****			****		****		
Green Time:	23.3	23.3	34.0	23.3	23.3	23.3	10.0	10.0	10.0	10.7	10.7	10.7
Volume/Cap:	0.28	0.28	0.03	0.52	0.52	0.52	0.18	0.18	0.18	0.52	0.52	0.52
Delay/Veh:	11.0	11.0	4.4	12.9	12.9	12.9	19.8	19.8	19.8	21.7	21.7	21.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.0	11.0	4.4	12.9	12.9	12.9	19.8	19.8	19.8	21.7	21.7	21.7
LOS by Move:	B+	B+	A	B	B	B	B-	B-	B-	C+	C+	C+
HCM2kAvgQ:	2	2	0	5	5	5	1	1	1	3	3	3

Note: Queue reported is the number of cars per lane.

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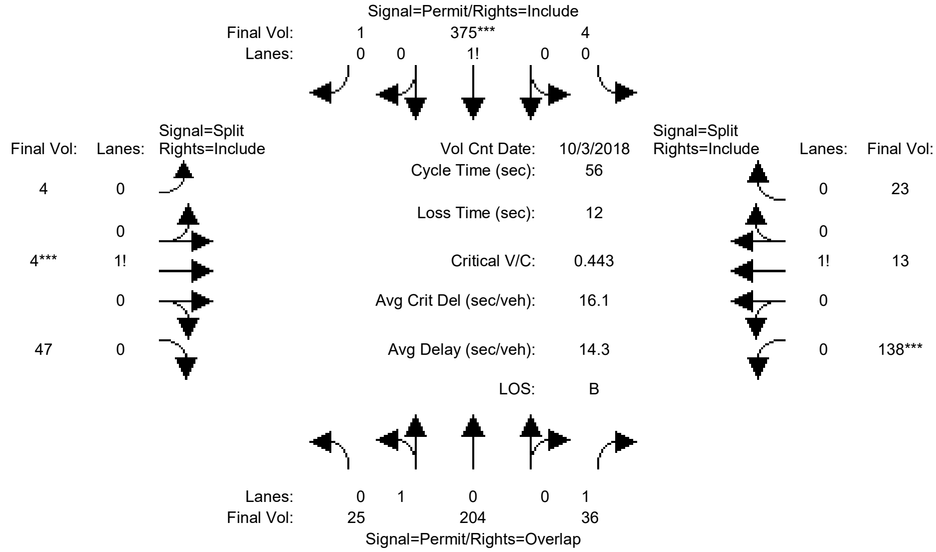
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #42: Sunnyvale Road / Arques Avenue



Street Name:	Sunnyvale Raod						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	25	184	36	4	372	1	4	4	47	138	13	23
Growth 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
Initial Bse:	25	184	36	4	372	1	4	4	47	138	13	23
Added Vol:	0	20	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	3	0	0	0	0	0	0	0
Initial Fut:	25	204	36	4	375	1	4	4	47	138	13	23
User 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
PHF 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
PHF Volume:	25	204	36	4	375	1	4	4	47	138	13	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	204	36	4	375	1	4	4	47	138	13	23
PCE 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
MLF 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
FinalVolume:	25	204	36	4	375	1	4	4	47	138	13	23
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.11	0.89	1.00	0.01	0.98	0.01	0.07	0.07	0.86	0.80	0.07	0.13
Final Sat.:	197	1603	1750	18	1727	5	127	127	1495	1388	131	231
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.02	0.22	0.22	0.22	0.03	0.03	0.03	0.10	0.10	0.10
Crit Moves:					****			****		****		
Green Time:	23.3	23.3	34.0	23.3	23.3	23.3	10.0	10.0	10.0	10.7	10.7	10.7
Volume/Cap:	0.31	0.31	0.03	0.52	0.52	0.52	0.18	0.18	0.18	0.52	0.52	0.52
Delay/Veh:	11.2	11.2	4.4	12.9	12.9	12.9	19.8	19.8	19.8	21.8	21.8	21.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.2	11.2	4.4	12.9	12.9	12.9	19.8	19.8	19.8	21.8	21.8	21.8
LOS by Move:	B+	B+	A	B	B	B	B-	B-	B-	C+	C+	C+
HCM2kAvgQ:	3	3	0	5	5	5	1	1	1	3	3	3

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #43: Sunnyvale Avenue / California Avenue

Signal=Permit/Rights=Include
Final Vol: 94 342*** 38
Lanes: 0 1 0 0 1

Signal=Permit
Rights=Include
Final Vol: Lanes:
67 1
0
176*** 0
1
95 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 85
Loss Time (sec): 6
Critical V/C: 0.423
Avg Crit Del (sec/veh): 14.6
Avg Delay (sec/veh): 14.0
LOS: B

Signal=Permit
Rights=Include
Lanes: Final Vol:
0 22
1
0 106
0
1 51

Lanes: 1 0 0 1 0
Final Vol: 38 174 45
Signal=Permit/Rights=Include

Street Name:	Sunnyvale Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	38	174	45	38	342	94	67	176	95	51	106	22
Growth 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
Initial Bse:	38	174	45	38	342	94	67	176	95	51	106	22
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	174	45	38	342	94	67	176	95	51	106	22
User 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
PHF 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
PHF Volume:	38	174	45	38	342	94	67	176	95	51	106	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	174	45	38	342	94	67	176	95	51	106	22
PCE 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
MLF 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
FinalVolume:	38	174	45	38	342	94	67	176	95	51	106	22
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.79	0.21	1.00	0.78	0.22	1.00	0.65	0.35	1.00	0.83	0.17
Final Sat.:	1750	1430	370	1750	1412	388	1750	1169	631	1750	1491	309
Capacity Analysis Module:												
Vol/Sat:	0.02	0.12	0.12	0.02	0.24	0.24	0.04	0.15	0.15	0.03	0.07	0.07
Crit Moves:					****			****				
Green Time:	48.7	48.7	48.7	48.7	48.7	48.7	30.3	30.3	30.3	30.3	30.3	30.3
Volume/Cap:	0.04	0.21	0.21	0.04	0.42	0.42	0.11	0.42	0.42	0.08	0.20	0.20
Delay/Veh:	7.9	8.9	8.9	7.9	10.5	10.5	18.4	21.2	21.2	18.2	19.1	19.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.9	8.9	8.9	7.9	10.5	10.5	18.4	21.2	21.2	18.2	19.1	19.1
LOS by Move:	A	A	A	A	B+	B+	B-	C+	C+	B-	B-	B-
HCM2kAvgQ:	0	3	3	0	7	7	1	5	5	1	2	2

Note: Queue reported is the number of cars per lane.

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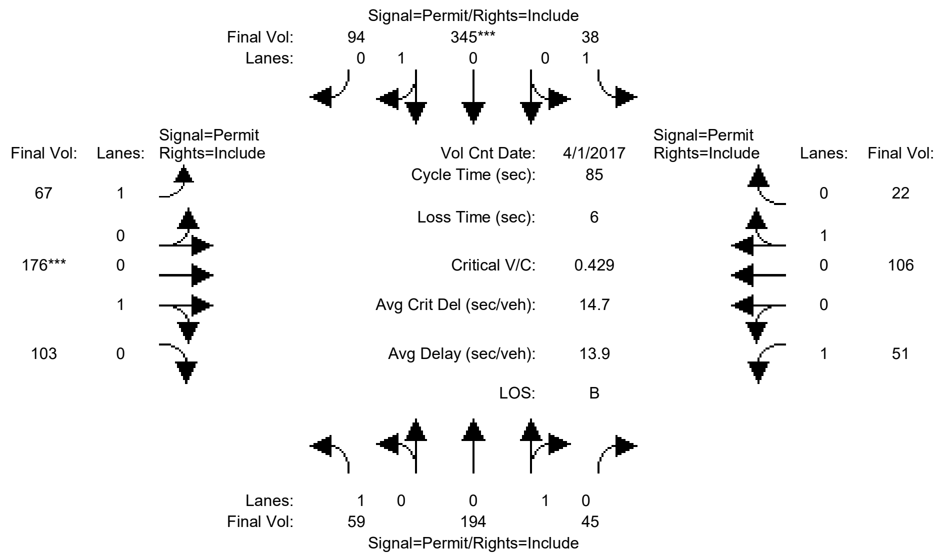
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #43: Sunnyvale Avenue / California Avenue



Street Name:	Sunnyvale Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module: >> Count Date: 1 Apr 2017 <<

Base Vol:	38	174	45	38	342	94	67	176	95	51	106	22
Growth 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
Initial Bse:	38	174	45	38	342	94	67	176	95	51	106	22
Added Vol:	21	20	0	0	0	0	0	0	10	0	0	0
PasserByVol:	0	0	0	0	3	0	0	0	-2	0	0	0
Initial Fut:	59	194	45	38	345	94	67	176	103	51	106	22
User 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
PHF 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
PHF Volume:	59	194	45	38	345	94	67	176	103	51	106	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	194	45	38	345	94	67	176	103	51	106	22
PCE 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
MLF 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
FinalVolume:	59	194	45	38	345	94	67	176	103	51	106	22

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.81	0.19	1.00	0.79	0.21	1.00	0.63	0.37	1.00	0.83	0.17
Final Sat.:	1750	1461	339	1750	1415	385	1750	1135	665	1750	1491	309

Capacity Analysis Module:

Vol/Sat:	0.03	0.13	0.13	0.02	0.24	0.24	0.04	0.16	0.16	0.03	0.07	0.07
Crit Moves:					****			****				
Green Time:	48.3	48.3	48.3	48.3	48.3	48.3	30.7	30.7	30.7	30.7	30.7	30.7
Volume/Cap:	0.06	0.23	0.23	0.04	0.43	0.43	0.11	0.43	0.43	0.08	0.20	0.20
Delay/Veh:	8.2	9.3	9.3	8.1	10.8	10.8	18.1	21.0	21.0	17.9	18.8	18.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.2	9.3	9.3	8.1	10.8	10.8	18.1	21.0	21.0	17.9	18.8	18.8
LOS by Move:	A	A	A	A	B+	B+	B-	C+	C+	B	B-	B-
HCM2kAvgQ:	1	3	3	0	7	7	1	6	6	1	2	2

Note: Queue reported is the number of cars per lane.

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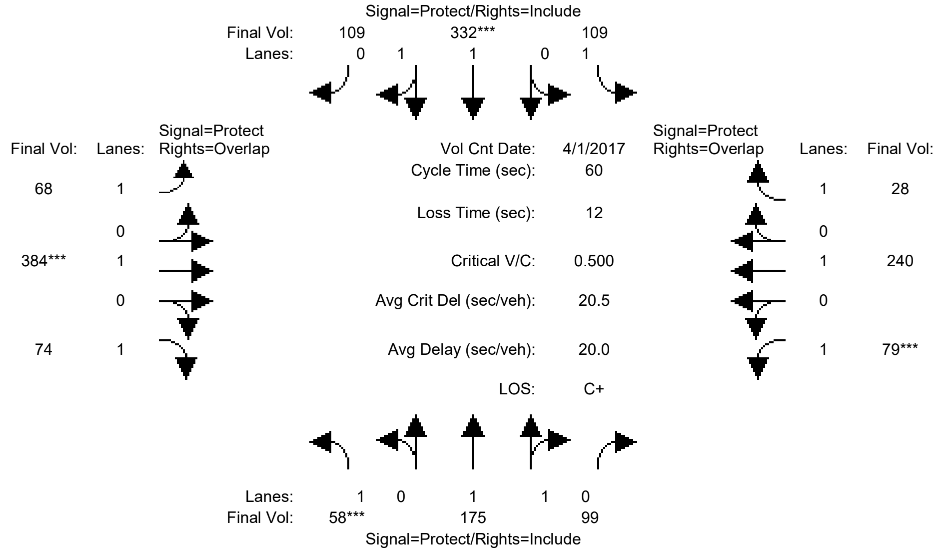
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #44: Sunnyvale Avenue / Evelyn Avenue



Street Name:	Sunnyvale Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	58	175	99	109	332	109	68	384	74	79	240	28
Growth 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
Initial Bse:	58	175	99	109	332	109	68	384	74	79	240	28
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	175	99	109	332	109	68	384	74	79	240	28
User 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
PHF 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
PHF Volume:	58	175	99	109	332	109	68	384	74	79	240	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	175	99	109	332	109	68	384	74	79	240	28
PCE 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
MLF 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
FinalVolume:	58	175	99	109	332	109	68	384	74	79	240	28
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.26	0.74	1.00	1.49	0.51	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	2362	1336	1750	2785	914	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.07	0.07	0.06	0.12	0.12	0.04	0.20	0.04	0.05	0.13	0.02
Crit Moves:	****				****			****		****		
Green Time:	7.0	11.5	11.5	8.1	12.6	12.6	11.7	21.4	28.4	7.0	16.7	24.8
Volume/Cap:	0.28	0.39	0.39	0.46	0.57	0.57	0.20	0.57	0.09	0.39	0.45	0.04
Delay/Veh:	25.0	21.5	21.5	25.4	22.2	22.2	20.5	16.7	8.7	25.7	18.5	10.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.0	21.5	21.5	25.4	22.2	22.2	20.5	16.7	8.7	25.7	18.5	10.5
LOS by Move:	C	C+	C+	C	C+	C+	C+	B	A	C	B-	B+
HCM2kAvgQ:	1	2	2	2	4	4	1	6	1	1	4	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #44: Sunnyvale Avenue / Evelyn Avenue

Signal=Protect/Rights=Include
Final Vol: 109 342 109***
Lanes: 0 1 1 0 1

Signal=Protect Rights=Overlap (West approach)
Final Vol: Lanes:
87 1
0
390*** 1
0
83 1

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 60
Loss Time (sec): 12
Critical V/C: 0.539
Avg Crit Del (sec/veh): 21.0
Avg Delay (sec/veh): 21.2
LOS: C+

Signal=Protect Rights=Overlap (East approach)
Lanes: Final Vol:
1 28
0
1 241
0
1 111***

Lanes: 1 0 1 1 0
Final Vol: 60 197*** 173
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	58	175	99	109	332	109	68	384	74	79	240	28
Growth 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
Initial Bse:	58	175	99	109	332	109	68	384	74	79	240	28
Added Vol:	2	22	74	0	9	0	19	6	9	33	1	0
PasserByVol:	0	0	0	0	1	0	0	0	0	-1	0	0
Initial Fut:	60	197	173	109	342	109	87	390	83	111	241	28
User 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
PHF 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
PHF Volume:	60	197	173	109	342	109	87	390	83	111	241	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	197	173	109	342	109	87	390	83	111	241	28
PCE 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
MLF 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
FinalVolume:	60	197	173	109	342	109	87	390	83	111	241	28
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.04	0.96	1.00	1.50	0.50	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	1969	1729	1750	2805	894	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.10	0.06	0.12	0.12	0.05	0.21	0.05	0.06	0.13	0.02
Crit Moves:		****		****				****		****		
Green Time:	7.5	11.1	11.1	7.0	10.7	10.7	12.3	22.8	30.3	7.1	17.6	24.6
Volume/Cap:	0.28	0.54	0.54	0.53	0.69	0.69	0.24	0.54	0.09	0.54	0.43	0.04
Delay/Veh:	24.5	23.0	23.0	27.7	26.1	26.1	20.3	15.3	7.8	27.8	17.7	10.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.5	23.0	23.0	27.7	26.1	26.1	20.3	15.3	7.8	27.8	17.7	10.7
LOS by Move:	C	C+	C+	C	C	C	C+	B	A	C	B	B+
HCM2kAvgQ:	1	3	3	2	4	4	2	6	1	2	4	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #45: Sunnyvale Avenue / Washington Avenue

Signal=Protect/Rights=Include
Final Vol: 57 360*** 20
Lanes: 0 1 0 0 1

Signal=Permit
Final Vol: Lanes: Rights=Include

65 1
0
119*** 0
1
89 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 75
Loss Time (sec): 9
Critical V/C: 0.428
Avg Crit Del (sec/veh): 16.8
Avg Delay (sec/veh): 17.5
LOS: B

Signal=Permit
Rights=Include Lanes: Final Vol:
0 29
1
0 20
0
1 21

Lanes: 1 0 0 1 0
Final Vol: 52*** 261 31
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	52	261	31	20	360	57	65	119	89	21	20	29
Growth 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
Initial Bse:	52	261	31	20	360	57	65	119	89	21	20	29
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	52	261	31	20	360	57	65	119	89	21	20	29
User 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
PHF 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
PHF Volume:	52	261	31	20	360	57	65	119	89	21	20	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	261	31	20	360	57	65	119	89	21	20	29
PCE 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
MLF 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
FinalVolume:	52	261	31	20	360	57	65	119	89	21	20	29
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.89	0.11	1.00	0.86	0.14	1.00	0.57	0.43	1.00	0.41	0.59
Final Sat.:	1750	1609	191	1750	1554	246	1750	1030	770	1750	735	1065
Capacity Analysis Module:												
Vol/Sat:	0.03	0.16	0.16	0.01	0.23	0.23	0.04	0.12	0.12	0.01	0.03	0.03
Crit Moves:	****				****			****				
Green Time:	7.0	29.4	29.4	16.9	39.4	39.4	19.6	19.6	19.6	19.6	19.6	19.6
Volume/Cap:	0.32	0.41	0.41	0.05	0.44	0.44	0.14	0.44	0.44	0.05	0.10	0.10
Delay/Veh:	32.9	16.9	16.9	22.8	11.3	11.3	21.4	23.8	23.8	20.7	21.1	21.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.9	16.9	16.9	22.8	11.3	11.3	21.4	23.8	23.8	20.7	21.1	21.1
LOS by Move:	C-	B	B	C+	B+	B+	C+	C	C	C+	C+	C+
HCM2kAvgQ:	2	5	5	0	6	6	1	5	5	0	1	1

Note: Queue reported is the number of cars per lane.

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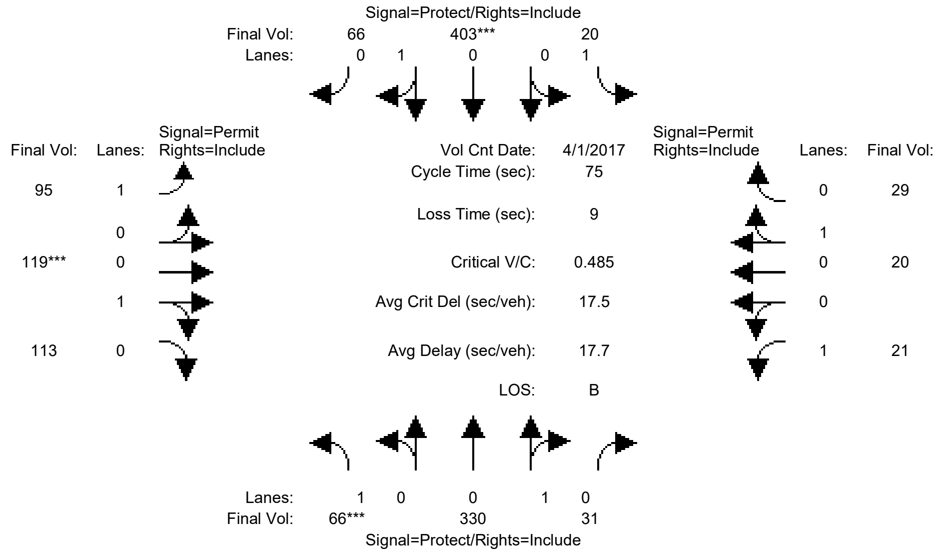
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #45: Sunnyvale Avenue / Washington Avenue



Street Name:	Sunnyvale Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	52	261	31	20	360	57	65	119	89	21	20	29
Growth 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
Initial Bse:	52	261	31	20	360	57	65	119	89	21	20	29
Added Vol:	14	69	0	0	43	9	30	0	24	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	66	330	31	20	403	66	95	119	113	21	20	29
User 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
PHF 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
PHF Volume:	66	330	31	20	403	66	95	119	113	21	20	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	330	31	20	403	66	95	119	113	21	20	29
PCE 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
MLF 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
FinalVolume:	66	330	31	20	403	66	95	119	113	21	20	29
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.91	0.09	1.00	0.86	0.14	1.00	0.51	0.49	1.00	0.41	0.59
Final Sat.:	1750	1645	155	1750	1547	253	1750	923	877	1750	735	1065
Capacity Analysis Module:												
Vol/Sat:	0.04	0.20	0.20	0.01	0.26	0.26	0.05	0.13	0.13	0.01	0.03	0.03
Crit Moves:	****				****			****				
Green Time:	7.0	31.7	31.7	14.8	39.5	39.5	19.5	19.5	19.5	19.5	19.5	19.5
Volume/Cap:	0.40	0.47	0.47	0.06	0.50	0.50	0.21	0.50	0.50	0.05	0.10	0.10
Delay/Veh:	33.7	16.1	16.1	24.5	11.8	11.8	21.9	24.4	24.4	20.8	21.2	21.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.7	16.1	16.1	24.5	11.8	11.8	21.9	24.4	24.4	20.8	21.2	21.2
LOS by Move:	C-	B	B	C	B+	B+	C+	C	C	C+	C+	C+
HCM2kAvgQ:	2	7	7	0	7	7	2	5	5	0	1	1

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #46: Sunnyvale Avenue / McKinley Avenue

Signal=Protect/Rights=Include
Final Vol: 46 426*** 10
Lanes: 0 1 0 0 1

Signal=Permit Rights=Include (Eastbound)
Final Vol: 39, 51***, 73
Lanes: 0, 0, 1!, 0, 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 160
Loss Time (sec): 9
Critical V/C: 0.401
Avg Crit Del (sec/veh): 26.5
Avg Delay (sec/veh): 25.5
LOS: C

Signal=Permit Rights=Overlap (Westbound)
Lanes: 1, 0, 0, 1, 0
Final Vol: 18, 33, 26

Lanes: 1 0 0 1 0
Final Vol: 41*** 317 20
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	41	317	20	10	426	46	39	51	73	26	33	18
Growth 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
Initial Bse:	41	317	20	10	426	46	39	51	73	26	33	18
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	317	20	10	426	46	39	51	73	26	33	18
User 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
PHF 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
PHF Volume:	41	317	20	10	426	46	39	51	73	26	33	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	317	20	10	426	46	39	51	73	26	33	18
PCE 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
MLF 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
FinalVolume:	41	317	20	10	426	46	39	51	73	26	33	18
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	1.00	0.94	0.06	1.00	0.90	0.10	0.24	0.31	0.45	0.44	0.56	1.00
Final Sat.:	1750	1693	107	1750	1625	175	419	548	784	793	1007	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.19	0.19	0.01	0.26	0.26	0.09	0.09	0.09	0.03	0.03	0.01
Crit Moves:	****				****			****				
Green Time:	9.3	92.3	92.3	21.6	105	104.5	37.1	37.1	37.1	37.1	37.1	58.7
Volume/Cap:	0.40	0.32	0.32	0.04	0.40	0.40	0.40	0.40	0.40	0.14	0.14	0.03
Delay/Veh:	75.2	17.8	17.8	60.3	13.3	13.3	52.7	52.7	52.7	48.9	48.9	32.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	75.2	17.8	17.8	60.3	13.3	13.3	52.7	52.7	52.7	48.9	48.9	32.4
LOS by Move:	E-	B	B	E	B	B	D-	D-	D-	D	D	C-
HCM2kAvgQ:	3	9	9	0	11	11	7	7	7	2	2	1

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #46: Sunnyvale Avenue / McKinley Avenue

Signal=Protect/Rights=Include
Final Vol: 63 482*** 10
Lanes: 0 1 0 0 1

Signal=Permit
Rights=Include

Final Vol:	Lanes:
89	0
	0
51***	1!
	0
157	0

Vol Cnt Date:	4/1/2017
Cycle Time (sec):	160
Loss Time (sec):	9
Critical V/C:	0.545
Avg Crit Del (sec/veh):	35.2
Avg Delay (sec/veh):	32.2
LOS:	C-

Signal=Permit
Rights=Overlap

Lanes:	Final Vol:
1	18
0	
0	33
1	
0	26

Lanes: 1 0 0 1 0
Final Vol: 74*** 358 20
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	41	317	20	10	426	46	39	51	73	26	33	18
Growth 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
Initial Bse:	41	317	20	10	426	46	39	51	73	26	33	18
Added Vol:	33	41	0	0	56	17	50	0	84	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	74	358	20	10	482	63	89	51	157	26	33	18
User 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
PHF 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
PHF Volume:	74	358	20	10	482	63	89	51	157	26	33	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	358	20	10	482	63	89	51	157	26	33	18
PCE 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
MLF 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
FinalVolume:	74	358	20	10	482	63	89	51	157	26	33	18
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	1.00	0.95	0.05	1.00	0.88	0.12	0.30	0.17	0.53	0.44	0.56	1.00
Final Sat.:	1750	1705	95	1750	1592	208	524	301	925	793	1007	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.21	0.21	0.01	0.30	0.30	0.17	0.17	0.17	0.03	0.03	0.01
Crit Moves:	****				****			****				
Green Time:	12.4	83.8	83.8	17.5	88.8	88.8	49.8	49.8	49.8	49.8	49.8	67.2
Volume/Cap:	0.55	0.40	0.40	0.05	0.55	0.55	0.55	0.55	0.55	0.11	0.11	0.02
Delay/Veh:	75.6	23.3	23.3	64.0	23.3	23.3	46.9	46.9	46.9	39.3	39.3	27.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	75.6	23.3	23.3	64.0	23.3	23.3	46.9	46.9	46.9	39.3	39.3	27.2
LOS by Move:	E-	C	C	E	C	C	D	D	D	D	D	C
HCM2kAvgQ:	5	11	11	0	17	17	12	12	12	2	2	1

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #47: Sunnyvale Avenue / Iowa Avenue

Signal=Protect/Rights=Overlap
Final Vol: 40 477*** 3
Lanes: 0 1 0 0 1

Westbound (left side): Signal=Split, Rights=Include
Final Vol: 70, 10***, 142
Lanes: 1, 0, 0, 1, 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 120
Loss Time (sec): 9
Critical V/C: 0.446
Avg Crit Del (sec/veh): 21.8
Avg Delay (sec/veh): 20.8
LOS: C+

Signal=Split, Rights=Include
Lanes: 0, 0, 0, 0, 0
Final Vol: 0, 0, 0

Lanes: 1 0 0 1 0
Final Vol: 71*** 309 6
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	71	309	6	3	477	40	70	10	142	0	0	0
Growth 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
Initial Bse:	71	309	6	3	477	40	70	10	142	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	71	309	6	3	477	40	70	10	142	0	0	0
User 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
PHF 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
PHF Volume:	71	309	6	3	477	40	70	10	142	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	309	6	3	477	40	70	10	142	0	0	0
PCE 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
MLF 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
FinalVolume:	71	309	6	3	477	40	70	10	142	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	0.98	0.02	1.00	0.92	0.08	1.00	0.07	0.93	0.00	0.00	0.00
Final Sat.:	1750	1766	34	1750	1661	139	1750	118	1682	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.18	0.18	0.00	0.29	0.29	0.04	0.08	0.08	0.00	0.00	0.00
Crit Moves:	****				****			****				
Green Time:	10.9	66.2	66.2	22.1	77.3	100.1	22.7	22.7	22.7	0.0	0.0	0.0
Volume/Cap:	0.45	0.32	0.32	0.01	0.45	0.34	0.21	0.45	0.45	0.00	0.00	0.00
Delay/Veh:	53.7	14.8	14.8	40.0	10.9	2.5	41.4	44.0	44.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.7	14.8	14.8	40.0	10.9	2.5	41.4	44.0	44.0	0.0	0.0	0.0
LOS by Move:	D-	B	B	D	B+	A	D	D	D	A	A	A
HCM2kAvgQ:	3	6	6	0	10	5	2	5	5	0	0	0

Note: Queue reported is the number of cars per lane.

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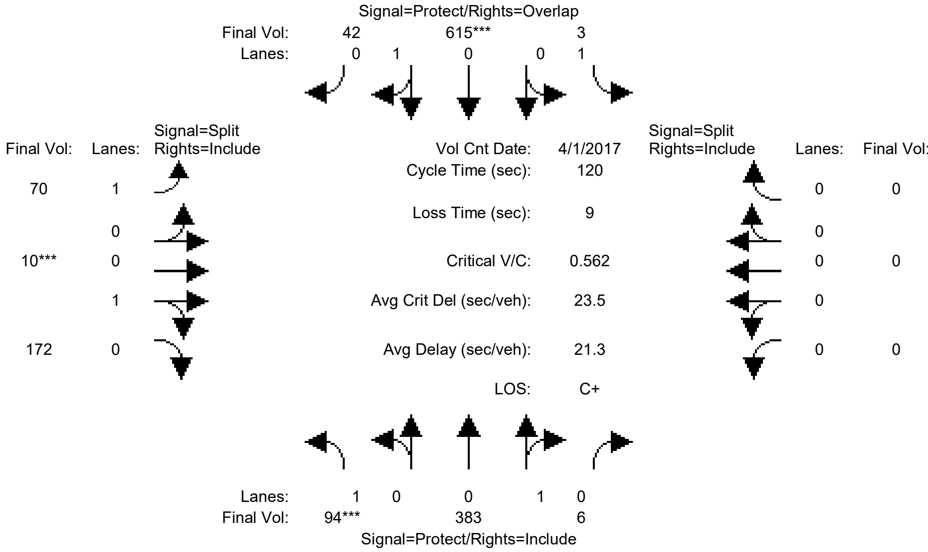
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #47: Sunnyvale Avenue / Iowa Avenue



Street Name:	Sunnyvale Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	71	309	6	3	477	40	70	10	142	0	0	0
Growth 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
Initial Bse:	71	309	6	3	477	40	70	10	142	0	0	0
Added Vol:	23	74	0	0	138	2	0	0	30	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	94	383	6	3	615	42	70	10	172	0	0	0
User 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
PHF 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
PHF Volume:	94	383	6	3	615	42	70	10	172	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	94	383	6	3	615	42	70	10	172	0	0	0
PCE 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
MLF 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
FinalVolume:	94	383	6	3	615	42	70	10	172	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	0.98	0.02	1.00	0.94	0.06	1.00	0.05	0.95	0.00	0.00	0.00
Final Sat.:	1750	1772	28	1750	1685	115	1750	99	1701	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.22	0.00	0.37	0.37	0.04	0.10	0.10	0.00	0.00	0.00
Crit Moves:	****				****			****				
Green Time:	11.5	70.4	70.4	19.0	77.9	99.5	21.6	21.6	21.6	0.0	0.0	0.0
Volume/Cap:	0.56	0.37	0.37	0.01	0.56	0.44	0.22	0.56	0.56	0.00	0.00	0.00
Delay/Veh:	56.2	13.3	13.3	42.6	12.2	3.0	42.4	47.1	47.1	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.2	13.3	13.3	42.6	12.2	3.0	42.4	47.1	47.1	0.0	0.0	0.0
LOS by Move:	E+	B	B	D	B	A	D	D	D	A	A	A
HCM2kAvgQ:	4	8	8	0	14	7	2	6	6	0	0	0

Note: Queue reported is the number of cars per lane.

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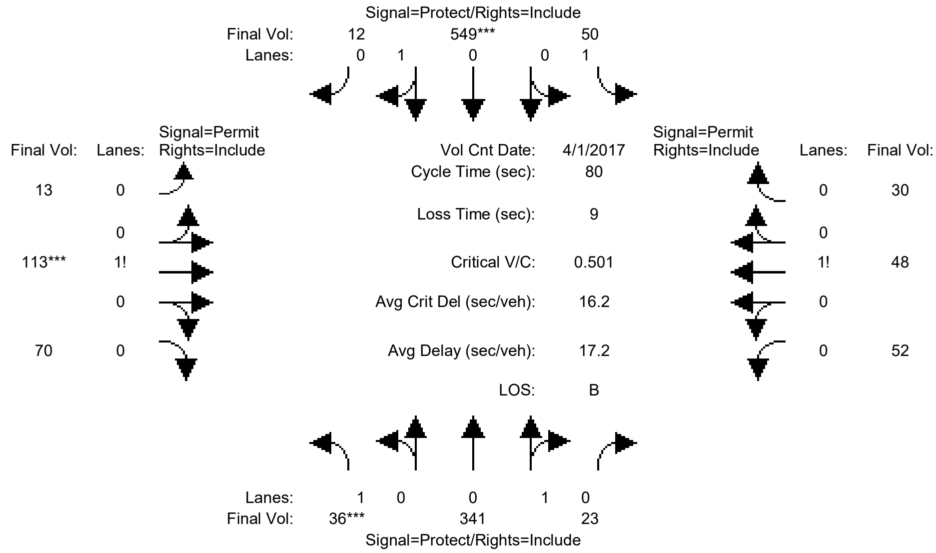
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #48: Sunnyvale Avenue / Olive Avenue



Street Name:	Sunnyvale Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	36	341	23	50	549	12	13	113	70	52	48	30
Growth 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
Initial Bse:	36	341	23	50	549	12	13	113	70	52	48	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	341	23	50	549	12	13	113	70	52	48	30
User 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
PHF 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
PHF Volume:	36	341	23	50	549	12	13	113	70	52	48	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	341	23	50	549	12	13	113	70	52	48	30
PCE 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
MLF 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
FinalVolume:	36	341	23	50	549	12	13	113	70	52	48	30
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	1.00	0.94	0.06	1.00	0.98	0.02	0.06	0.58	0.36	0.40	0.37	0.23
Final Sat.:	1750	1686	114	1750	1761	39	116	1009	625	700	646	404
Capacity Analysis Module:												
Vol/Sat:	0.02	0.20	0.20	0.03	0.31	0.31	0.11	0.11	0.11	0.07	0.07	0.07
Crit Moves:	****				****			****				
Green Time:	7.0	37.7	37.7	16.3	47.1	47.1	16.9	16.9	16.9	16.9	16.9	16.9
Volume/Cap:	0.24	0.43	0.43	0.14	0.53	0.53	0.53	0.53	0.53	0.35	0.35	0.35
Delay/Veh:	34.8	14.3	14.3	26.3	10.3	10.3	29.5	29.5	29.5	27.4	27.4	27.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.8	14.3	14.3	26.3	10.3	10.3	29.5	29.5	29.5	27.4	27.4	27.4
LOS by Move:	C-	B	B	C	B+	B+	C	C	C	C	C	C
HCM2kAvgQ:	1	6	6	1	9	9	5	5	5	3	3	3

Note: Queue reported is the number of cars per lane.

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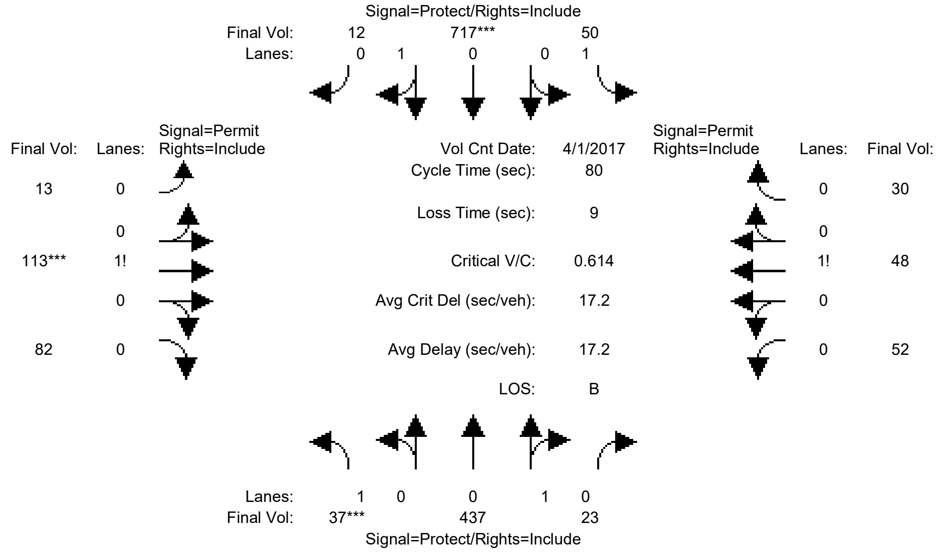
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #48: Sunnyvale Avenue / Olive Avenue



Street Name:	Sunnyvale Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	36	341	23	50	549	12	13	113	70	52	48	30
Growth 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
Initial Bse:	36	341	23	50	549	12	13	113	70	52	48	30
Added Vol:	1	96	0	0	168	0	0	0	12	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	37	437	23	50	717	12	13	113	82	52	48	30
User 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
PHF 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
PHF Volume:	37	437	23	50	717	12	13	113	82	52	48	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	437	23	50	717	12	13	113	82	52	48	30
PCE 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
MLF 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
FinalVolume:	37	437	23	50	717	12	13	113	82	52	48	30
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	1.00	0.95	0.05	1.00	0.98	0.02	0.06	0.55	0.39	0.40	0.37	0.23
Final Sat.:	1750	1710	90	1750	1770	30	109	951	690	700	646	404
Capacity Analysis Module:												
Vol/Sat:	0.02	0.26	0.26	0.03	0.41	0.41	0.12	0.12	0.12	0.07	0.07	0.07
Crit Moves:	****				****			****				
Green Time:	7.0	42.1	42.1	14.4	49.5	49.5	14.5	14.5	14.5	14.5	14.5	14.5
Volume/Cap:	0.24	0.49	0.49	0.16	0.65	0.65	0.65	0.65	0.65	0.41	0.41	0.41
Delay/Veh:	34.8	12.5	12.5	27.9	11.2	11.2	35.3	35.3	35.3	29.8	29.8	29.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.8	12.5	12.5	27.9	11.2	11.2	35.3	35.3	35.3	29.8	29.8	29.8
LOS by Move:	C-	B	B	C	B+	B+	D+	D+	D+	C	C	C
HCM2kAvgQ:	1	7	7	1	12	12	5	5	5	3	3	3

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #49: Sunnyvale Avenue / Old San Francisco Road

Signal=Protect/Rights=Include
Final Vol: 47 532 127***
Lanes: 1 0 2 0 1

Signal=Protect
Rights=Include

Final Vol:	Lanes:
0***	0
	0
0	0
	0
44	1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 100
Loss Time (sec): 6
Critical V/C: 0.308
Avg Crit Del (sec/veh): 20.1
Avg Delay (sec/veh): 14.0
LOS: B

Signal=Protect
Rights=Include

Lanes:	Final Vol:
1	109***
0	
0	0
0	
0	0

Lanes: 0 0 1 1 0
Final Vol: 0 359*** 213
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	10	0	0	10	0	0	10
Y+R:	0.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	359	213	127	532	47	0	0	44	0	0	109
Growth 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
Initial Bse:	0	359	213	127	532	47	0	0	44	0	0	109
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	359	213	127	532	47	0	0	44	0	0	109
User 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
PHF 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
PHF Volume:	0	359	213	127	532	47	0	0	44	0	0	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	359	213	127	532	47	0	0	44	0	0	109
PCE 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
MLF 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
FinalVolume:	0	359	213	127	532	47	0	0	44	0	0	109
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	1.23	0.77	1.00	2.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Final Sat.:	0	2321	1377	1750	3800	1750	0	0	1750	0	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.15	0.07	0.14	0.03	0.00	0.00	0.03	0.00	0.00	0.06
Crit Moves:		****		****			****					****
Green Time:	0.0	50.2	50.2	23.6	73.8	73.8	0.0	0.0	20.2	0.0	0.0	20.2
Volume/Cap:	0.00	0.31	0.31	0.31	0.19	0.04	0.00	0.00	0.12	0.00	0.00	0.31
Delay/Veh:	0.0	14.8	14.8	31.9	4.0	3.5	0.0	0.0	32.8	0.0	0.0	34.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	14.8	14.8	31.9	4.0	3.5	0.0	0.0	32.8	0.0	0.0	34.4
LOS by Move:	A	B	B	C	A	A	A	A	C-	A	A	C-
HCM2kAvgQ:	0	5	5	3	2	0	0	0	1	0	0	3

Note: Queue reported is the number of cars per lane.

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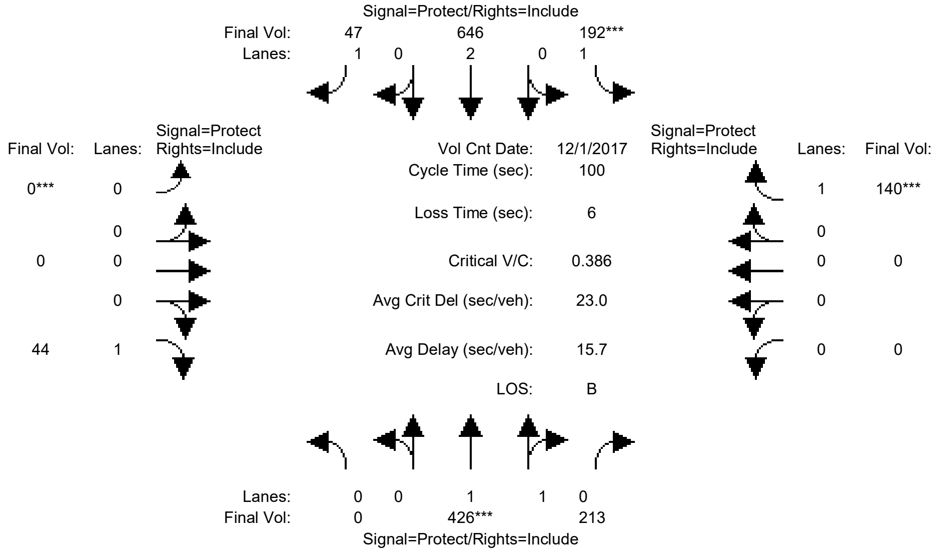
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #49: Sunnyvale Avenue / Old San Francisco Road



Street Name:	Sunnyvale Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	10	0	0	10	0	0	10
Y+R:	0.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	359	213	127	532	47	0	0	44	0	0	109
Growth 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
Initial Bse:	0	359	213	127	532	47	0	0	44	0	0	109
Added Vol:	0	67	0	65	114	0	0	0	0	0	0	31
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	426	213	192	646	47	0	0	44	0	0	140
User 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
PHF 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
PHF Volume:	0	426	213	192	646	47	0	0	44	0	0	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	426	213	192	646	47	0	0	44	0	0	140
PCE 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
MLF 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
FinalVolume:	0	426	213	192	646	47	0	0	44	0	0	140
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	1.32	0.68	1.00	2.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Final Sat.:	0	2466	1233	1750	3800	1750	0	0	1750	0	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.17	0.11	0.17	0.03	0.00	0.00	0.03	0.00	0.00	0.08
Crit Moves:		****		****			****					****
Green Time:	0.0	44.8	44.8	28.5	73.3	73.3	0.0	0.0	20.7	0.0	0.0	20.7
Volume/Cap:	0.00	0.39	0.39	0.39	0.23	0.04	0.00	0.00	0.12	0.00	0.00	0.39
Delay/Veh:	0.0	18.6	18.6	29.2	4.4	3.7	0.0	0.0	32.4	0.0	0.0	34.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	18.6	18.6	29.2	4.4	3.7	0.0	0.0	32.4	0.0	0.0	34.8
LOS by Move:	A	B-	B-	C	A	A	A	A	C-	A	A	C-
HCM2kAvgQ:	0	6	6	5	3	0	0	0	1	0	0	4

Note: Queue reported is the number of cars per lane.

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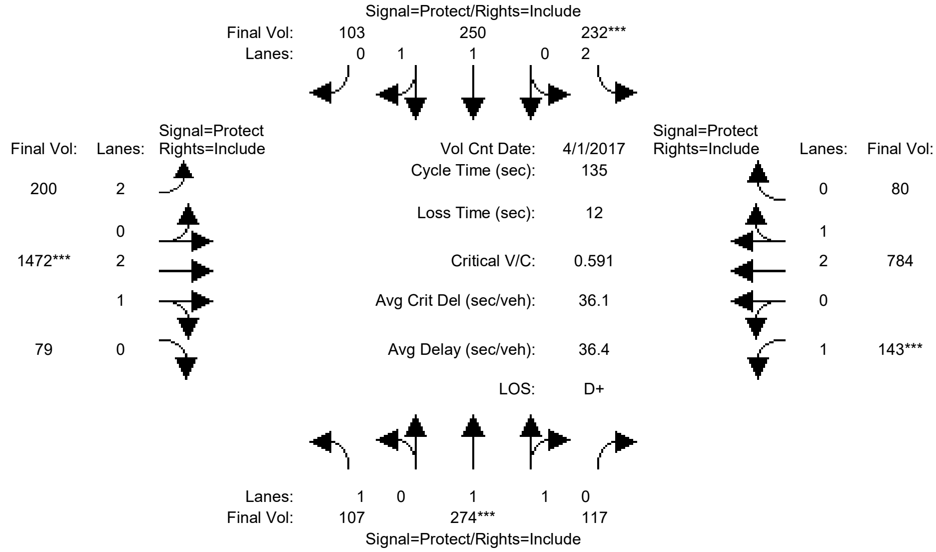
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #50: Sunnyvale Avenue / El Camino Real



Street Name:	Sunnyvale Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	107	274	117	232	250	103	200	1472	79	143	784	80
Growth 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
Initial Bse:	107	274	117	232	250	103	200	1472	79	143	784	80
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	107	274	117	232	250	103	200	1472	79	143	784	80
User 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
PHF 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
PHF Volume:	107	274	117	232	250	103	200	1472	79	143	784	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	274	117	232	250	103	200	1472	79	143	784	80
PCE 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
MLF 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
FinalVolume:	107	274	117	232	250	103	200	1472	79	143	784	80
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.98	0.95	0.83	0.98	0.95	0.92	0.99	0.95
Lanes:	1.00	1.39	0.61	2.00	1.40	0.60	2.00	2.84	0.16	1.00	2.71	0.29
Final Sat.:	1750	2592	1107	3150	2620	1079	3150	5314	285	1750	5081	518
Capacity Analysis Module:												
Vol/Sat:	0.06	0.11	0.11	0.07	0.10	0.10	0.06	0.28	0.28	0.08	0.15	0.15
Crit Moves:		****		****				****		****		
Green Time:	16.0	24.2	24.2	16.8	25.0	25.0	23.9	63.3	63.3	18.7	58.1	58.1
Volume/Cap:	0.52	0.59	0.59	0.59	0.52	0.52	0.36	0.59	0.59	0.59	0.36	0.36
Delay/Veh:	58.1	52.3	52.3	58.2	50.2	50.2	49.2	26.7	26.7	58.4	26.0	26.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.1	52.3	52.3	58.2	50.2	50.2	49.2	26.7	26.7	58.4	26.0	26.0
LOS by Move:	E+	D-	D-	E+	D	D	D	C	C	E+	C	C
HCM2kAvgQ:	4	8	8	5	7	7	4	15	15	6	8	8

Note: Queue reported is the number of cars per lane.

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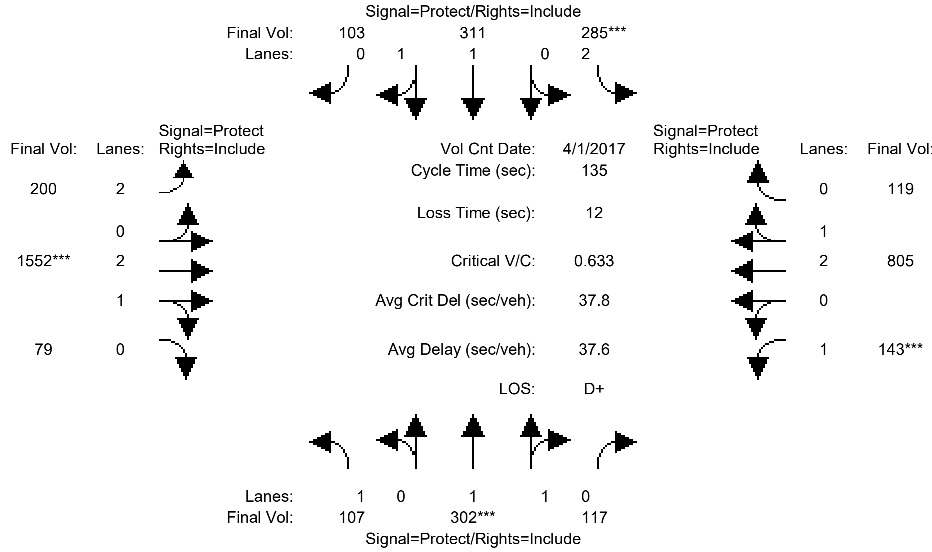
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #50: Sunnyvale Avenue / El Camino Real



Street Name:	Sunnyvale Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	107	274	117	232	250	103	200	1472	79	143	784	80
Growth 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
Initial Bse:	107	274	117	232	250	103	200	1472	79	143	784	80
Added Vol:	0	28	0	53	61	0	0	80	0	0	21	39
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	107	302	117	285	311	103	200	1552	79	143	805	119
User 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
PHF 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
PHF Volume:	107	302	117	285	311	103	200	1552	79	143	805	119
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	302	117	285	311	103	200	1552	79	143	805	119
PCE 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
MLF 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
FinalVolume:	107	302	117	285	311	103	200	1552	79	143	805	119
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.98	0.95	0.83	0.98	0.95	0.92	0.99	0.95
Lanes:	1.00	1.43	0.57	2.00	1.49	0.51	2.00	2.85	0.15	1.00	2.60	0.40
Final Sat.:	1750	2666	1033	3150	2779	920	3150	5328	271	1750	4878	721
Capacity Analysis Module:												
Vol/Sat:	0.06	0.11	0.11	0.09	0.11	0.11	0.06	0.29	0.29	0.08	0.17	0.17
Crit Moves:		****		****				****		****		
Green Time:	15.4	24.2	24.2	19.3	28.1	28.1	22.1	62.1	62.1	17.4	57.4	57.4
Volume/Cap:	0.54	0.63	0.63	0.63	0.54	0.54	0.39	0.63	0.63	0.63	0.39	0.39
Delay/Veh:	59.4	53.3	53.3	57.4	48.4	48.4	50.9	28.3	28.3	61.5	26.8	26.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	59.4	53.3	53.3	57.4	48.4	48.4	50.9	28.3	28.3	61.5	26.8	26.8
LOS by Move:	E+	D-	D-	E+	D	D	D	C	C	E	C	C
HCM2kAvgQ:	4	8	8	7	8	8	4	17	17	6	9	9

Note: Queue reported is the number of cars per lane.

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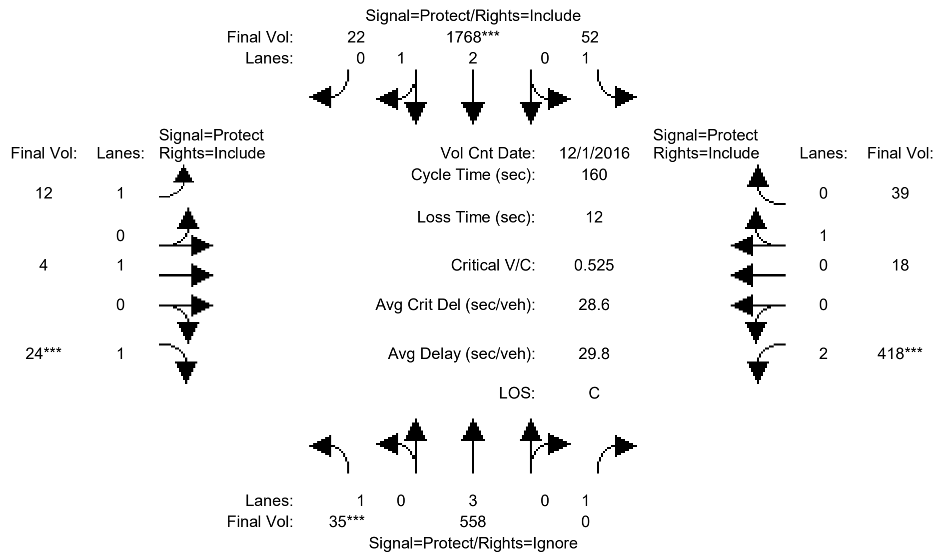
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #51: Mathilda Avenue / Talisman Drive



Street Name:	Mathilda Avenue						Talisman Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	35	558	531	52	1768	22	12	4	24	418	18	39
Growth 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
Initial Bse:	35	558	531	52	1768	22	12	4	24	418	18	39
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	35	558	531	52	1768	22	12	4	24	418	18	39
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	558	0	52	1768	22	12	4	24	418	18	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	558	0	52	1768	22	12	4	24	418	18	39
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	558	0	52	1768	22	12	4	24	418	18	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92	0.83	0.95	0.95
Lanes:	1.00	3.00	1.00	1.00	2.96	0.04	1.00	1.00	1.00	2.00	0.32	0.68
Final Sat.:	1750	5700	1750	1750	5531	69	1750	1900	1750	3150	568	1232
Capacity Analysis Module:												
Vol/Sat:	0.02	0.10	0.00	0.03	0.32	0.32	0.01	0.00	0.01	0.13	0.03	0.03
Crit Moves:	****				****				****	****		
Green Time:	7.0	68.8	0.0	30.8	92.6	92.6	19.9	10.0	10.0	38.4	28.5	28.5
Volume/Cap:	0.46	0.23	0.00	0.15	0.55	0.55	0.06	0.03	0.22	0.55	0.18	0.18
Delay/Veh:	78.9	28.9	0.0	54.0	21.1	21.1	61.8	70.6	72.3	54.1	56.1	56.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	78.9	28.9	0.0	54.0	21.1	21.1	61.8	70.6	72.3	54.1	56.1	56.1
LOS by Move:	E-	C	A	D-	C+	C+	E	E	E	D-	E+	E+
HCM2kAvgQ:	2	5	0	2	17	17	1	0	1	11	2	2

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #51: Mathilda Avenue / Talisman Drive

Signal=Protect/Rights=Include
Final Vol: 22 1912*** 52
Lanes: 0 1 2 0 1

Final Vol: Lanes: Signal=Protect Rights=Include
12 1
0
4 1
0
24*** 1

Vol Cnt Date: 12/1/2016
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.574
Avg Crit Del (sec/veh): 30.4
Avg Delay (sec/veh): 31.1
LOS: C

Signal=Protect Rights=Include Lanes: Final Vol:
0 39
1
0 18
0
2 479***

Lanes: 1 0 3 0 1
Final Vol: 35*** 609 0
Signal=Protect/Rights=Ignore

Street Name:	Mathilda Avenue						Talisman Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	35	558	531	52	1768	22	12	4	24	418	18	39
Growth 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
Initial Bse:	35	558	531	52	1768	22	12	4	24	418	18	39
Added Vol:	0	51	28	0	144	0	0	0	0	61	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	35	609	559	52	1912	22	12	4	24	479	18	39
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	609	0	52	1912	22	12	4	24	479	18	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	609	0	52	1912	22	12	4	24	479	18	39
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	609	0	52	1912	22	12	4	24	479	18	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92	0.83	0.95	0.95
Lanes:	1.00	3.00	1.00	1.00	2.96	0.04	1.00	1.00	1.00	2.00	0.32	0.68
Final Sat.:	1750	5700	1750	1750	5536	64	1750	1900	1750	3150	568	1232
Capacity Analysis Module:												
Vol/Sat:	0.02	0.11	0.00	0.03	0.35	0.35	0.01	0.00	0.01	0.15	0.03	0.03
Crit Moves:	****				****				****	****		
Green Time:	7.0	69.5	0.0	28.5	91.0	91.0	20.6	10.0	10.0	40.0	29.4	29.4
Volume/Cap:	0.46	0.25	0.00	0.17	0.61	0.61	0.05	0.03	0.22	0.61	0.17	0.17
Delay/Veh:	78.9	28.7	0.0	56.0	23.1	23.1	61.2	70.6	72.3	54.4	55.3	55.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	78.9	28.7	0.0	56.0	23.1	23.1	61.2	70.6	72.3	54.4	55.3	55.3
LOS by Move:	E-	C	A	E+	C	C	E	E	E	D-	E+	E+
HCM2kAvgQ:	2	6	0	2	20	20	1	0	1	12	2	2

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #52: Sunnyvale-Saratoga Road / Remington Drive (CMP)

Signal=Protect/Rights=Include
Final Vol: 173 1957*** 116
Lanes: 0 1 2 0 2

Signal=Protect
Rights=Include

Final Vol: Lanes:
117 1
0
370*** 1
1
169 0

Vol Cnt Date: 12/1/2016
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.754
Avg Crit Del (sec/veh): 45.7
Avg Delay (sec/veh): 43.7
LOS: D

Signal=Protect
Rights=Include

Lanes: Final Vol:
0 57
1
0 261
0
2 368***

Lanes: 2 0 2 1 0
Final Vol: 173*** 862 299
Signal=Protect/Rights=Include

Street Name:	Sunnyvale-Saratoga Road						Remington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	173	862	299	116	1957	173	117	370	169	368	261	57
Growth 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
Initial Bse:	173	862	299	116	1957	173	117	370	169	368	261	57
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	173	862	299	116	1957	173	117	370	169	368	261	57
User 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
PHF 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
PHF Volume:	173	862	299	116	1957	173	117	370	169	368	261	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	173	862	299	116	1957	173	117	370	169	368	261	57
PCE 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
MLF 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
FinalVolume:	173	862	299	116	1957	173	117	370	169	368	261	57
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.99	0.95	0.83	0.95	0.95
Lanes:	2.00	2.20	0.80	2.00	2.75	0.25	1.00	1.36	0.64	2.00	0.82	0.18
Final Sat.:	3150	4156	1442	3150	5145	455	1750	2539	1160	3150	1477	323
Capacity Analysis Module:												
Vol/Sat:	0.05	0.21	0.21	0.04	0.38	0.38	0.07	0.15	0.15	0.12	0.18	0.18
Crit Moves:	****				****			****		****		
Green Time:	11.6	76.2	76.2	16.1	80.7	80.7	15.3	30.9	30.9	24.8	40.4	40.4
Volume/Cap:	0.75	0.44	0.44	0.37	0.75	0.75	0.70	0.75	0.75	0.75	0.70	0.70
Delay/Veh:	86.0	27.8	27.8	67.9	32.9	32.9	82.5	65.5	65.5	71.3	59.1	59.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	86.0	27.8	27.8	67.9	32.9	32.9	82.5	65.5	65.5	71.3	59.1	59.1
LOS by Move:	F	C	C	E	C-	C-	F	E	E	E	E+	E+
HCM2kAvgQ:	5	12	12	3	28	28	6	13	13	11	15	15

Note: Queue reported is the number of cars per lane.

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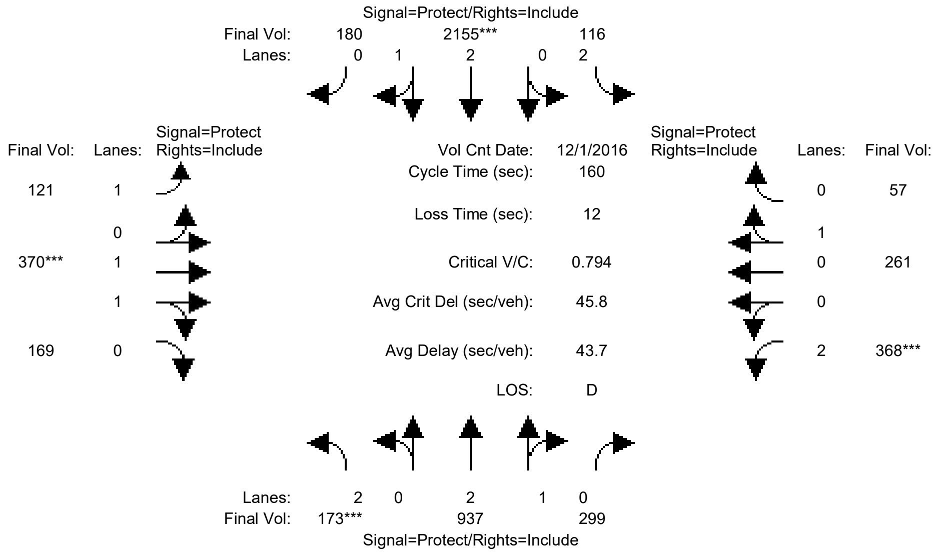
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #52: Sunnyvale-Saratoga Road / Remington Drive (CMP)



Street Name:	Sunnyvale-Saratoga Road						Remington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	173	862	299	116	1957	173	117	370	169	368	261	57
Growth 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
Initial Bse:	173	862	299	116	1957	173	117	370	169	368	261	57
Added Vol:	0	75	0	0	198	7	4	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	173	937	299	116	2155	180	121	370	169	368	261	57
User 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
PHF 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
PHF Volume:	173	937	299	116	2155	180	121	370	169	368	261	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	173	937	299	116	2155	180	121	370	169	368	261	57
PCE 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
MLF 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
FinalVolume:	173	937	299	116	2155	180	121	370	169	368	261	57
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.99	0.95	0.83	0.95	0.95
Lanes:	2.00	2.25	0.75	2.00	2.76	0.24	1.00	1.36	0.64	2.00	0.82	0.18
Final Sat.:	3150	4244	1354	3150	5168	432	1750	2539	1160	3150	1477	323
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.22	0.04	0.42	0.42	0.07	0.15	0.15	0.12	0.18	0.18
Crit Moves:	****				****			****		****		
Green Time:	11.1	79.4	79.4	15.7	84.0	84.0	14.9	29.4	29.4	23.5	38.0	38.0
Volume/Cap:	0.79	0.45	0.45	0.37	0.79	0.79	0.74	0.79	0.79	0.79	0.74	0.74
Delay/Veh:	91.3	26.2	26.2	68.3	32.5	32.5	87.5	68.8	68.8	75.0	63.4	63.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	91.3	26.2	26.2	68.3	32.5	32.5	87.5	68.8	68.8	75.0	63.4	63.4
LOS by Move:	F	C	C	E	C-	C-	F	E	E	E-	E	E
HCM2kAvgQ:	5	13	13	3	31	31	6	13	13	11	15	15

Note: Queue reported is the number of cars per lane.

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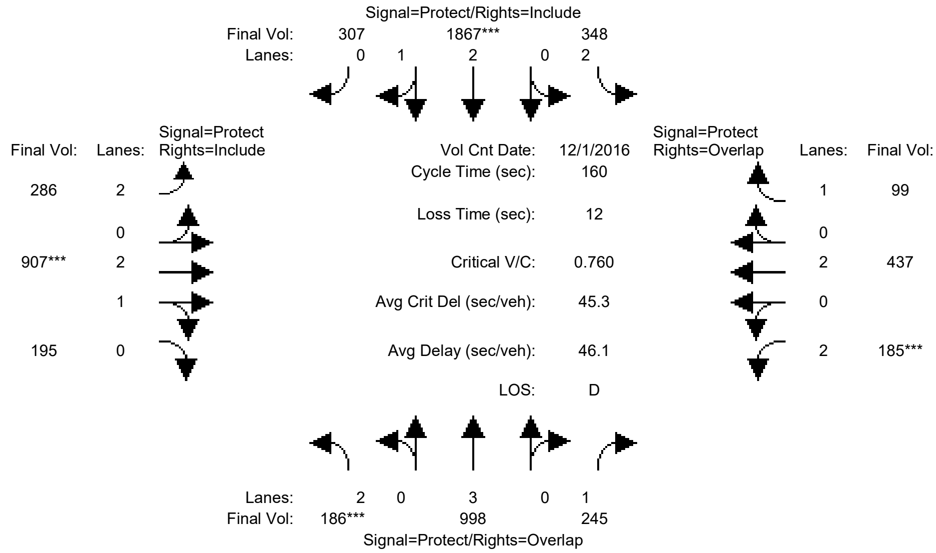
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #53: Sunnyvale-Saratoga Road / Fremont Avenue (CMP)



Street Name:	Sunnyvale-Saratoga Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	186	998	245	348	1867	307	286	907	195	185	437	99
Growth 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
Initial Bse:	186	998	245	348	1867	307	286	907	195	185	437	99
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	186	998	245	348	1867	307	286	907	195	185	437	99
User 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
PHF 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
PHF Volume:	186	998	245	348	1867	307	286	907	195	185	437	99
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	186	998	245	348	1867	307	286	907	195	185	437	99
PCE 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
MLF 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
FinalVolume:	186	998	245	348	1867	307	286	907	195	185	437	99
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	0.99	0.95	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	2.56	0.44	2.00	2.45	0.55	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	4808	791	3150	4608	991	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.18	0.14	0.11	0.39	0.39	0.09	0.20	0.20	0.06	0.12	0.06
Crit Moves:	****				****			****		****		
Green Time:	12.4	57.8	70.1	36.4	81.8	81.8	23.7	41.4	41.4	12.4	30.1	66.5
Volume/Cap:	0.76	0.49	0.32	0.49	0.76	0.76	0.61	0.76	0.76	0.76	0.61	0.14
Delay/Veh:	85.3	39.8	29.6	54.2	32.5	32.5	66.2	57.1	57.1	85.4	61.2	29.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	85.3	39.8	29.6	54.2	32.5	32.5	66.2	57.1	57.1	85.4	61.2	29.0
LOS by Move:	F	D	C	D-	C-	C-	E	E+	E+	F	E	C
HCM2kAvgQ:	6	12	8	8	28	28	8	17	17	6	10	3

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #53: Sunnyvale-Saratoga Road / Fremont Avenue (CMP)

Signal=Protect/Rights=Include
Final Vol: 329 2018*** 374
Lanes: 0 1 2 0 2

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Overlap	Lanes:	Final Vol:
296	2		Vol Cnt Date:	12/1/2016		1	102
			Cycle Time (sec):	160			
	0		Loss Time (sec):	12		0	
907***	2		Critical V/C:	0.793		2	437
	1		Avg Crit Del (sec/veh):	45.6		0	
195	0		Avg Delay (sec/veh):	46.5		2	185***
			LOS:	D			

Lanes: 2 0 3 0 1
Final Vol: 186*** 1061 245
Signal=Protect/Rights=Overlap

Street Name:	Sunnyvale-Saratoga Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	186	998	245	348	1867	307	286	907	195	185	437	99
Growth 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
Initial Bse:	186	998	245	348	1867	307	286	907	195	185	437	99
Added Vol:	0	63	0	26	151	22	10	0	0	0	0	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	186	1061	245	374	2018	329	296	907	195	185	437	102
User 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
PHF 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
PHF Volume:	186	1061	245	374	2018	329	296	907	195	185	437	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	186	1061	245	374	2018	329	296	907	195	185	437	102
PCE 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
MLF 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
FinalVolume:	186	1061	245	374	2018	329	296	907	195	185	437	102
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	0.99	0.95	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	2.56	0.44	2.00	2.45	0.55	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	4814	785	3150	4608	991	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.19	0.14	0.12	0.42	0.42	0.09	0.20	0.20	0.06	0.12	0.06
Crit Moves:	****				****			****		****		
Green Time:	11.9	58.9	70.7	37.6	84.5	84.5	23.2	39.7	39.7	11.8	28.4	65.9
Volume/Cap:	0.79	0.51	0.32	0.51	0.79	0.79	0.65	0.79	0.79	0.79	0.65	0.14
Delay/Veh:	89.6	39.5	29.2	53.7	32.2	32.2	67.8	59.5	59.5	89.7	63.4	29.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	89.6	39.5	29.2	53.7	32.2	32.2	67.8	59.5	59.5	89.7	63.4	29.5
LOS by Move:	F	D	C	D-	C-	C-	E	E+	E+	F	E	C
HCM2kAvgQ:	6	13	8	9	31	31	8	17	17	6	10	3

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #54: Sunnyvale-Saratoga Road / Alberta Avenue - Harwick Way

Signal=Protect/Rights=Include
Final Vol: 172 1963*** 140
Lanes: 0 1 2 0 1

Signal=Protect
Rights=Include
Final Vol: Lanes:
59*** 0
1
63 0
0
64 1

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.632
Avg Crit Del (sec/veh): 28.6
Avg Delay (sec/veh): 27.8
LOS: C

Signal=Protect
Rights=Include
Lanes: Final Vol:
1 15
0
0 60***
1
0 42

Lanes: 1 0 2 1 0
Final Vol: 138*** 1377 96
Signal=Protect/Rights=Include

Street Name:	Sunnyvale-Saratoga Road						Alberta Avenue - Harwick Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	138	1377	96	140	1963	172	59	63	64	42	60	15
Growth 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
Initial Bse:	138	1377	96	140	1963	172	59	63	64	42	60	15
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	138	1377	96	140	1963	172	59	63	64	42	60	15
User 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
PHF 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
PHF Volume:	138	1377	96	140	1963	172	59	63	64	42	60	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	1377	96	140	1963	172	59	63	64	42	60	15
PCE 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
MLF 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
FinalVolume:	138	1377	96	140	1963	172	59	63	64	42	60	15
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.80	0.20	1.00	2.75	0.25	0.48	0.52	1.00	0.41	0.59	1.00
Final Sat.:	1750	5235	365	1750	5148	451	870	930	1750	741	1059	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.26	0.26	0.08	0.38	0.38	0.07	0.07	0.04	0.06	0.06	0.01
Crit Moves:	****				****		****				****	
Green Time:	20.0	89.3	89.3	27.2	96.5	96.5	17.2	17.2	17.2	14.3	14.3	14.3
Volume/Cap:	0.63	0.47	0.47	0.47	0.63	0.63	0.63	0.63	0.34	0.63	0.63	0.10
Delay/Veh:	72.4	21.3	21.3	61.1	20.7	20.7	75.0	75.0	67.3	78.2	78.2	67.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	72.4	21.3	21.3	61.1	20.7	20.7	75.0	75.0	67.3	78.2	78.2	67.1
LOS by Move:	E	C+	C+	E	C+	C+	E-	E-	E	E-	E-	E
HCM2kAvgQ:	7	14	14	6	22	22	7	7	3	6	6	1

Note: Queue reported is the number of cars per lane.

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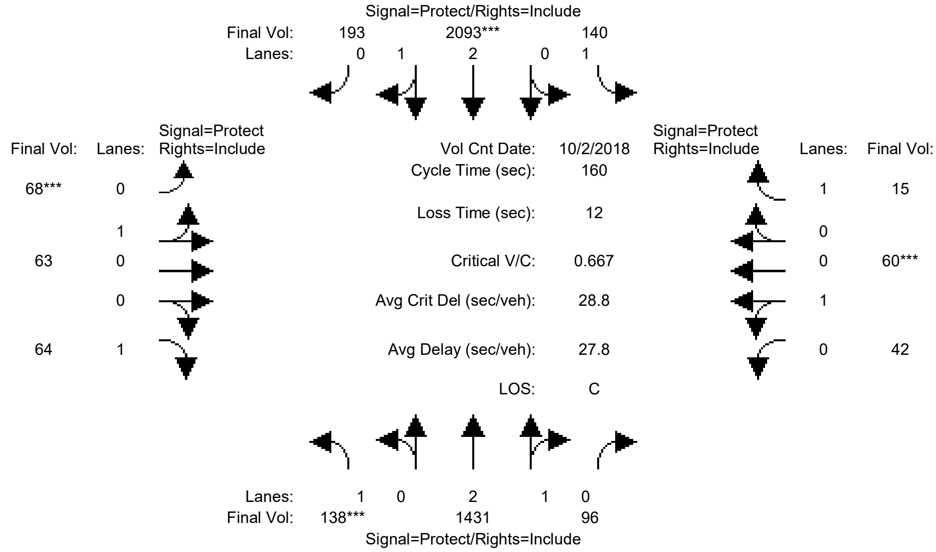
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #54: Sunnyvale-Saratoga Road / Alberta Avenue - Harwick Way



Street Name:	Sunnyvale-Saratoga Road						Alberta Avenue - Harwick Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	138	1377	96	140	1963	172	59	63	64	42	60	15
Growth 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
Initial Bse:	138	1377	96	140	1963	172	59	63	64	42	60	15
Added Vol:	0	54	0	0	130	21	9	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	138	1431	96	140	2093	193	68	63	64	42	60	15
User 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
PHF 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
PHF Volume:	138	1431	96	140	2093	193	68	63	64	42	60	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	1431	96	140	2093	193	68	63	64	42	60	15
PCE 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
MLF 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
FinalVolume:	138	1431	96	140	2093	193	68	63	64	42	60	15
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.80	0.20	1.00	2.74	0.26	0.52	0.48	1.00	0.41	0.59	1.00
Final Sat.:	1750	5247	352	1750	5127	473	934	866	1750	741	1059	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.27	0.27	0.08	0.41	0.41	0.07	0.07	0.04	0.06	0.06	0.01
Crit Moves:	****				****		****				****	
Green Time:	18.9	90.4	90.4	26.5	98.0	98.0	17.5	17.5	17.5	13.6	13.6	13.6
Volume/Cap:	0.67	0.48	0.48	0.48	0.67	0.67	0.67	0.67	0.33	0.67	0.67	0.10
Delay/Veh:	75.5	20.9	20.9	61.8	20.8	20.8	76.9	76.9	66.9	81.7	81.7	67.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	75.5	20.9	20.9	61.8	20.8	20.8	76.9	76.9	66.9	81.7	81.7	67.9
LOS by Move:	E-	C+	C+	E	C+	C+	E-	E-	E	F	F	E
HCM2kAvgQ:	7	14	14	6	24	24	8	8	3	6	6	1

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #55: De Anza Boulevard / Homestead Road (CMP)

Signal=Protect/Rights=Include
Final Vol: 149 1485*** 334
Lanes: 0 1 2 0 2

Signal=Protect Rights=Include (West approach)
Final Vol: / Lanes:
215 2
0
827*** 2
0
328 1

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.822
Avg Crit Del (sec/veh): 58.9
Avg Delay (sec/veh): 53.9
LOS: D-

Signal=Protect Rights=Include (East approach)
Lanes: / Final Vol:
1 162
0
2 465
0
2 286***

Lanes: 2 0 3 0 1
Final Vol: 505*** 1200 577
Signal=Protect/Rights=Include

Street Name:	De Anza Boulevard						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	505	1200	577	334	1485	149	215	827	328	286	465	162
Growth 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
Initial Bse:	505	1200	577	334	1485	149	215	827	328	286	465	162
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	505	1200	577	334	1485	149	215	827	328	286	465	162
User 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
PHF 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
PHF Volume:	505	1200	577	334	1485	149	215	827	328	286	465	162
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	505	1200	577	334	1485	149	215	827	328	286	465	162
PCE 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
MLF 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
FinalVolume:	505	1200	577	334	1485	149	215	827	328	286	465	162
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	2.72	0.28	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5089	511	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.16	0.21	0.33	0.11	0.29	0.29	0.07	0.22	0.19	0.09	0.12	0.09
Crit Moves:	****				****			****		****		
Green Time:	31.2	66.6	66.6	21.4	56.8	56.8	21.5	42.3	42.3	17.7	38.5	38.5
Volume/Cap:	0.82	0.51	0.79	0.79	0.82	0.82	0.51	0.82	0.71	0.82	0.51	0.38
Delay/Veh:	70.5	34.7	46.6	77.0	49.9	49.9	65.4	60.8	58.2	84.1	53.0	51.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	70.5	34.7	46.6	77.0	49.9	49.9	65.4	60.8	58.2	84.1	53.0	51.4
LOS by Move:	E	C-	D	E-	D	D	E	E	E+	F	D-	D-
HCM2kAvgQ:	15	14	27	10	25	25	6	20	16	9	10	7

Note: Queue reported is the number of cars per lane.

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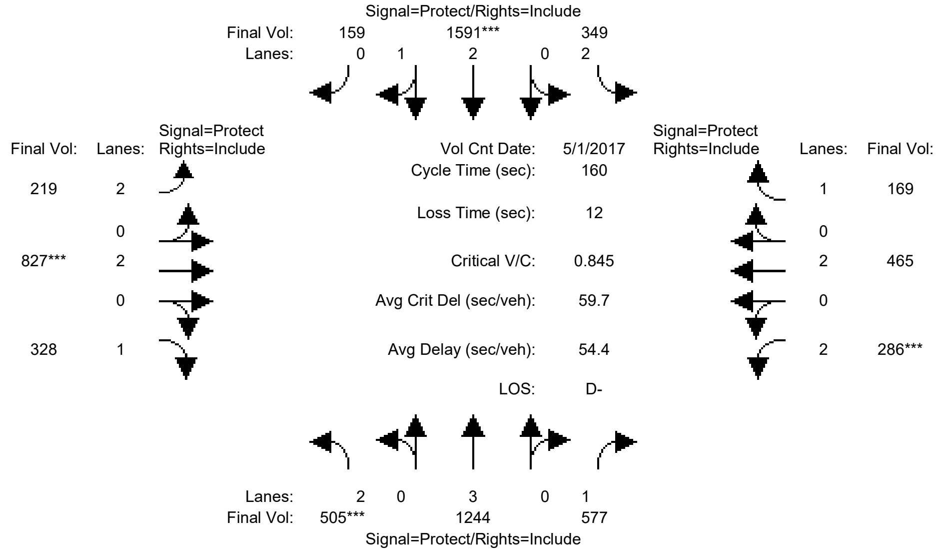
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #55: De Anza Boulevard / Homestead Road (CMP)



Street Name:	De Anza Boulevard						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	505	1200	577	334	1485	149	215	827	328	286	465	162
Growth 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
Initial Bse:	505	1200	577	334	1485	149	215	827	328	286	465	162
Added Vol:	0	44	0	15	106	10	4	0	0	0	0	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	505	1244	577	349	1591	159	219	827	328	286	465	169
User 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
PHF 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
PHF Volume:	505	1244	577	349	1591	159	219	827	328	286	465	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	505	1244	577	349	1591	159	219	827	328	286	465	169
PCE 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
MLF 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
FinalVolume:	505	1244	577	349	1591	159	219	827	328	286	465	169
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	2.72	0.28	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5091	509	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.16	0.22	0.33	0.11	0.31	0.31	0.07	0.22	0.19	0.09	0.12	0.10
Crit Moves:	****				****			****		****		
Green Time:	30.4	67.0	67.0	22.5	59.2	59.2	21.2	41.2	41.2	17.2	37.3	37.3
Volume/Cap:	0.84	0.52	0.79	0.79	0.84	0.84	0.53	0.84	0.73	0.84	0.53	0.41
Delay/Veh:	73.2	34.7	45.9	75.5	49.6	49.6	66.0	63.2	60.1	87.5	54.2	52.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	73.2	34.7	45.9	75.5	49.6	49.6	66.0	63.2	60.1	87.5	54.2	52.8
LOS by Move:	E	C-	D	E-	D	D	E	E	E	F	D-	D-
HCM2kAvgQ:	15	14	27	10	27	27	6	20	16	9	10	7

Note: Queue reported is the number of cars per lane.

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #56: De Anza Boulevard / I-280 NB Ramps (CMP)

Signal=Protect/Rights=Include
Final Vol: 334 1845*** 0
Lanes: 0 1 4 0 0

Final Vol:	Lanes:	Signal=Split Rights=Include			Signal=Split Rights=Include	Lanes:	Final Vol:
0	0					1	692***
			Vol Cnt Date:	12/1/2017			
			Cycle Time (sec):	160			
	0		Loss Time (sec):	12		0	
0	0		Critical V/C:	0.792		1!	0
	0		Avg Crit Del (sec/veh):	53.4		0	
0	0		Avg Delay (sec/veh):	43.5		1	625
			LOS:	D			

Lanes: 2 0 3 0 0
Final Vol: 762*** 1616 0
Signal=Protect/Rights=Include

Street Name:	De Anza Boulevard						I-280 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	4.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	762	1616	0	0	1845	334	0	0	0	625	0	692
Growth 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
Initial Bse:	762	1616	0	0	1845	334	0	0	0	625	0	692
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	762	1616	0	0	1845	334	0	0	0	625	0	692
User 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
PHF 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
PHF Volume:	762	1616	0	0	1845	334	0	0	0	625	0	692
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	762	1616	0	0	1845	334	0	0	0	625	0	692
PCE 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
MLF 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
FinalVolume:	762	1616	0	0	1845	334	0	0	0	625	0	692
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	3.00	0.00	0.00	4.20	0.80	0.00	0.00	0.00	1.47	0.00	1.53
Final Sat.:	3150	5700	0	0	7956	1440	0	0	0	2580	0	2670
Capacity Analysis Module:												
Vol/Sat:	0.24	0.28	0.00	0.00	0.23	0.23	0.00	0.00	0.00	0.24	0.00	0.26
Crit Moves:	****				****							****
Green Time:	48.8	95.7	0.0	0.0	46.8	46.8	0.0	0.0	0.0	52.3	0.0	52.3
Volume/Cap:	0.79	0.47	0.00	0.00	0.79	0.79	0.00	0.00	0.00	0.74	0.00	0.79
Delay/Veh:	55.5	18.2	0.0	0.0	53.8	53.8	0.0	0.0	0.0	49.5	0.0	51.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.5	18.2	0.0	0.0	53.8	53.8	0.0	0.0	0.0	49.5	0.0	51.6
LOS by Move:	E+	B-	A	A	D-	D-	A	A	A	D	A	D-
HCM2kAvgQ:	21	14	0	0	20	20	0	0	0	21	0	23

Note: Queue reported is the number of cars per lane.

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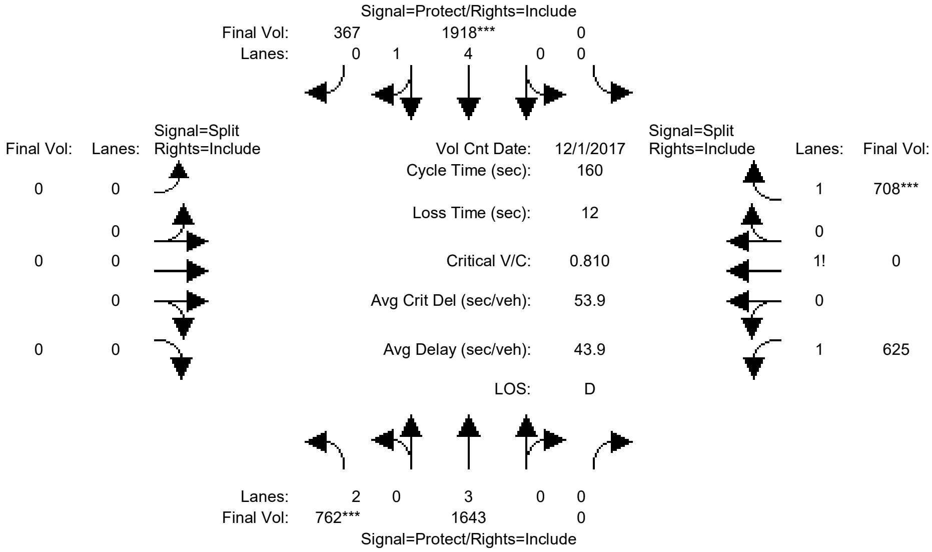
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #56: De Anza Boulevard / I-280 NB Ramps (CMP)



Street Name:	De Anza Boulevard						I-280 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	4.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	762	1616	0	0	1845	334	0	0	0	625	0	692
Growth 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
Initial Bse:	762	1616	0	0	1845	334	0	0	0	625	0	692
Added Vol:	0	27	0	0	73	33	0	0	0	0	0	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	762	1643	0	0	1918	367	0	0	0	625	0	708
User 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
PHF 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
PHF Volume:	762	1643	0	0	1918	367	0	0	0	625	0	708
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	762	1643	0	0	1918	367	0	0	0	625	0	708
PCE 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
MLF 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
FinalVolume:	762	1643	0	0	1918	367	0	0	0	625	0	708
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	3.00	0.00	0.00	4.16	0.84	0.00	0.00	0.00	1.47	0.00	1.53
Final Sat.:	3150	5700	0	0	7887	1509	0	0	0	2571	0	2679
Capacity Analysis Module:												
Vol/Sat:	0.24	0.29	0.00	0.00	0.24	0.24	0.00	0.00	0.00	0.24	0.00	0.26
Crit Moves:	****				****							****
Green Time:	47.8	95.8	0.0	0.0	48.0	48.0	0.0	0.0	0.0	52.2	0.0	52.2
Volume/Cap:	0.81	0.48	0.00	0.00	0.81	0.81	0.00	0.00	0.00	0.75	0.00	0.81
Delay/Veh:	57.3	18.2	0.0	0.0	53.6	53.6	0.0	0.0	0.0	49.7	0.0	52.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.3	18.2	0.0	0.0	53.6	53.6	0.0	0.0	0.0	49.7	0.0	52.5
LOS by Move:	E+	B-	A	A	D-	D-	A	A	A	D	A	D-
HCM2kAvgQ:	21	15	0	0	21	21	0	0	0	21	0	24

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
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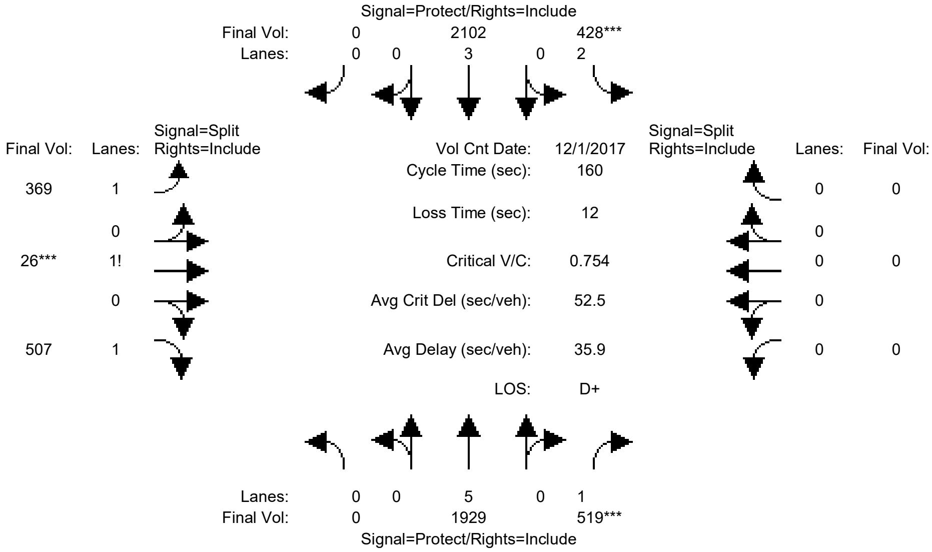
Existing PM

Intersection #57: De Anza Boulevard / I-280 SB Ramps (CMP)



Street Name:	De Anza Boulevard						I-280 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	10	10	10	0	0	0
Y+R:	0.0	4.0	4.0	4.0	4.0	0.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	1929	519	428	2102	0	369	26	507	0	0	0
Growth 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
Initial Bse:	0	1929	519	428	2102	0	369	26	507	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1929	519	428	2102	0	369	26	507	0	0	0
User 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
PHF 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
PHF Volume:	0	1929	519	428	2102	0	369	26	507	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1929	519	428	2102	0	369	26	507	0	0	0
PCE 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
MLF 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
FinalVolume:	0	1929	519	428	2102	0	369	26	507	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92
Lanes:	0.00	5.00	1.00	2.00	3.00	0.00	1.40	0.05	1.55	0.00	0.00	0.00
Final Sat.:	0	9500	1750	3150	5700	0	2446	98	2706	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.30	0.14	0.37	0.00	0.15	0.27	0.19	0.00	0.00	0.00
Crit Moves:			****	****				****				
Green Time:	0.0	62.9	62.9	28.8	91.7	0.0	56.3	56.3	56.3	0.0	0.0	0.0
Volume/Cap:	0.00	0.52	0.75	0.75	0.64	0.00	0.43	0.75	0.53	0.00	0.00	0.00
Delay/Veh:	0.0	37.1	46.6	67.9	23.5	0.0	39.8	48.5	41.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	37.1	46.6	67.9	23.5	0.0	39.8	48.5	41.7	0.0	0.0	0.0
LOS by Move:	A	D+	D	E	C	A	D	D	D	A	A	A
HCM2kAvgQ:	0	14	24	12	22	0	10	22	14	0	0	0

Note: Queue reported is the number of cars per lane.

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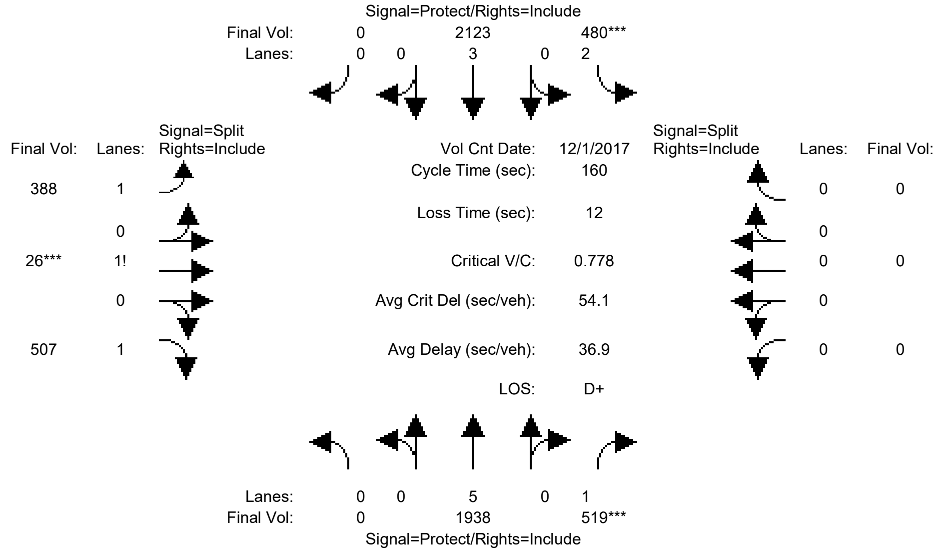
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #57: De Anza Boulevard / I-280 SB Ramps (CMP)



Street Name:	De Anza Boulevard						I-280 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	10	10	10	0	0	0
Y+R:	0.0	4.0	4.0	4.0	4.0	0.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	1929	519	428	2102	0	369	26	507	0	0	0
Growth 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
Initial Bse:	0	1929	519	428	2102	0	369	26	507	0	0	0
Added Vol:	0	9	0	52	21	0	19	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1938	519	480	2123	0	388	26	507	0	0	0
User 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
PHF 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
PHF Volume:	0	1938	519	480	2123	0	388	26	507	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1938	519	480	2123	0	388	26	507	0	0	0
PCE 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
MLF 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
FinalVolume:	0	1938	519	480	2123	0	388	26	507	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92
Lanes:	0.00	5.00	1.00	2.00	3.00	0.00	1.41	0.05	1.54	0.00	0.00	0.00
Final Sat.:	0	9500	1750	3150	5700	0	2467	96	2687	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.30	0.15	0.37	0.00	0.16	0.27	0.19	0.00	0.00	0.00
Crit Moves:			****	****				****				
Green Time:	0.0	61.0	61.0	31.3	92.3	0.0	55.7	55.7	55.7	0.0	0.0	0.0
Volume/Cap:	0.00	0.54	0.78	0.78	0.65	0.00	0.45	0.78	0.54	0.00	0.00	0.00
Delay/Veh:	0.0	38.6	49.3	67.3	23.2	0.0	40.5	50.0	42.3	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	38.6	49.3	67.3	23.2	0.0	40.5	50.0	42.3	0.0	0.0	0.0
LOS by Move:	A	D+	D	E	C	A	D	D	D	A	A	A
HCM2kAvgQ:	0	15	25	13	22	0	11	23	14	0	0	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #58: Fair Oaks Avenue / US 101 NB Ramps

Signal=Protect/Rights=Ignore
Final Vol: 0 1219*** 0
Lanes: 1 0 2 0 0

Westbound side (left of diagram): Signal=Split, Rights=Include
Final Vol: | Lanes:
0 | 0
 | 0
0 | 0
 | 0
0 | 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 60
Loss Time (sec): 9
Critical V/C: 0.875
Avg Crit Del (sec/veh): 27.7
Avg Delay (sec/veh): 20.1
LOS: C+

Signal=Split
Rights=Include
Lanes: | Final Vol:
1 | 299
0 |
1! | 1***
0 |
1 | 712

Lanes: 1 0 2 0 0
Final Vol: 238*** 992 0
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						US 101 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	0.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	238	992	0	0	1219	161	0	0	0	712	1	299
Growth 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
Initial Bse:	238	992	0	0	1219	161	0	0	0	712	1	299
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	238	992	0	0	1219	161	0	0	0	712	1	299
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	238	992	0	0	1219	0	0	0	0	712	1	299
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	238	992	0	0	1219	0	0	0	0	712	1	299
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	238	992	0	0	1219	0	0	0	0	712	1	299
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.93	0.95	0.92
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.70	0.01	1.29
Final Sat.:	1750	3800	0	0	3800	1750	0	0	0	3017	3	2272
Capacity Analysis Module:												
Vol/Sat:	0.14	0.26	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.24	0.29	0.13
Crit Moves:	****				****						****	
Green Time:	9.3	31.3	0.0	0.0	22.0	0.0	0.0	0.0	0.0	19.7	19.7	19.7
Volume/Cap:	0.87	0.50	0.00	0.00	0.87	0.00	0.00	0.00	0.00	0.72	0.87	0.40
Delay/Veh:	50.2	9.5	0.0	0.0	24.2	0.0	0.0	0.0	0.0	19.6	26.6	15.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.2	9.5	0.0	0.0	24.2	0.0	0.0	0.0	0.0	19.6	26.6	15.7
LOS by Move:	D	A	A	A	C	A	A	A	A	B-	C	B
HCM2kAvgQ:	6	6	0	0	12	0	0	0	0	9	13	4

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

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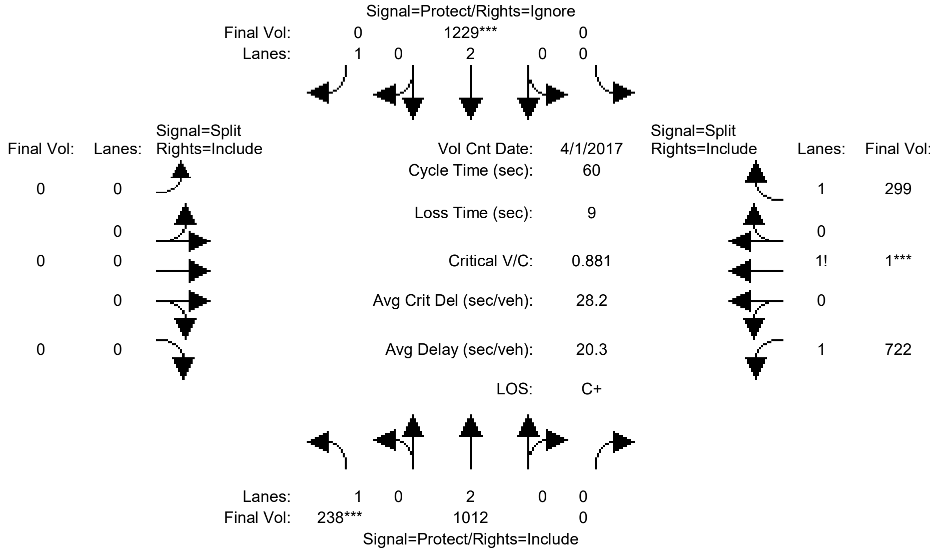
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #58: Fair Oaks Avenue / US 101 NB Ramps



Street Name:	Fair Oaks Avenue						US 101 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	0.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	238	992	0	0	1219	161	0	0	0	712	1	299
Growth 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
Initial Bse:	238	992	0	0	1219	161	0	0	0	712	1	299
Added Vol:	0	20	0	0	10	0	0	0	0	10	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	238	1012	0	0	1229	161	0	0	0	722	1	299
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	238	1012	0	0	1229	0	0	0	0	722	1	299
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	238	1012	0	0	1229	0	0	0	0	722	1	299
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	238	1012	0	0	1229	0	0	0	0	722	1	299
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.93	0.95	0.92
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.70	0.01	1.29
Final Sat.:	1750	3800	0	0	3800	1750	0	0	0	3023	3	2267
Capacity Analysis Module:												
Vol/Sat:	0.14	0.27	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.24	0.29	0.13
Crit Moves:	****				****						****	
Green Time:	9.3	31.3	0.0	0.0	22.0	0.0	0.0	0.0	0.0	19.7	19.7	19.7
Volume/Cap:	0.88	0.51	0.00	0.00	0.88	0.00	0.00	0.00	0.00	0.73	0.88	0.40
Delay/Veh:	51.5	9.6	0.0	0.0	24.6	0.0	0.0	0.0	0.0	19.7	27.1	15.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.5	9.6	0.0	0.0	24.6	0.0	0.0	0.0	0.0	19.7	27.1	15.7
LOS by Move:	D-	A	A	A	C	A	A	A	A	B-	C	B
HCM2kAvgQ:	6	6	0	0	12	0	0	0	0	9	14	4

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #59: Fair Oaks Avenue / Ahwanee Avenue

Signal=Protect/Rights=Include
Final Vol: 244 2359*** 78
Lanes: 0 1 2 0 1

Final Vol:	Lanes:	Signal=Permit Rights=Include			Signal=Permit Rights=Include	Lanes:	Final Vol:
103	0		Vol Cnt Date:	4/1/2017		1	47
	1		Cycle Time (sec):	90		0	
44***	0		Loss Time (sec):	6		0	26
	0		Critical V/C:	0.619		1	
87	1		Avg Crit Del (sec/veh):	9.2		0	25
			Avg Delay (sec/veh):	10.9			
			LOS:	B+			

Lanes: 1 0 2 0 1
Final Vol: 54*** 862 38
Signal=Protect/Rights=Overlap

Street Name:	Fair Oaks Avenue						Ahwanee Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	54	862	38	78	2359	244	103	44	87	25	26	47
Growth 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
Initial Bse:	54	862	38	78	2359	244	103	44	87	25	26	47
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	54	862	38	78	2359	244	103	44	87	25	26	47
User 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
PHF 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
PHF Volume:	54	862	38	78	2359	244	103	44	87	25	26	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	862	38	78	2359	244	103	44	87	25	26	47
PCE 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
MLF 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
FinalVolume:	54	862	38	78	2359	244	103	44	87	25	26	47
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.99	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.71	0.29	0.70	0.30	1.00	0.49	0.51	1.00
Final Sat.:	1750	3800	1750	1750	5074	525	1261	539	1750	882	918	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.23	0.02	0.04	0.46	0.46	0.08	0.08	0.05	0.03	0.03	0.03
Crit Moves:	****				****			****				
Green Time:	7.0	54.0	54.0	18.5	65.5	65.5	11.5	11.5	11.5	11.5	11.5	11.5
Volume/Cap:	0.40	0.38	0.04	0.22	0.64	0.64	0.64	0.64	0.39	0.22	0.22	0.21
Delay/Veh:	41.4	9.4	7.4	30.0	6.6	6.6	43.2	43.2	37.1	35.7	35.7	35.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.4	9.4	7.4	30.0	6.6	6.6	43.2	43.2	37.1	35.7	35.7	35.6
LOS by Move:	D	A	A	C	A	A	D	D	D+	D+	D+	D+
HCM2kAvgQ:	1	6	0	2	12	12	5	5	3	1	1	1

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #59: Fair Oaks Avenue / Ahwanee Avenue

Signal=Protect/Rights=Include
Final Vol: 244 2379*** 78
Lanes: 0 1 2 0 1

Signal=Permit
Rights=Include

Final Vol:	Lanes:				Lanes:	Final Vol:
103	0	Vol Cnt Date:	4/1/2017		1	47
		Cycle Time (sec):	90			
	1	Loss Time (sec):	6		0	
44***	0	Critical V/C:	0.623		0	26
	0	Avg Crit Del (sec/veh):	9.2		1	
88	1	Avg Delay (sec/veh):	10.8		0	26
		LOS:	B+			

Signal=Permit
Rights=Include

Lanes: 1 0 2 0 1
Final Vol: 55*** 909 39
Signal=Protect/Rights=Overlap

Street Name:	Fair Oaks Avenue						Ahwanee Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	54	862	38	78	2359	244	103	44	87	25	26	47
Growth 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
Initial Bse:	54	862	38	78	2359	244	103	44	87	25	26	47
Added Vol:	1	47	1	0	20	0	0	0	1	1	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	55	909	39	78	2379	244	103	44	88	26	26	47
User 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
PHF 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
PHF Volume:	55	909	39	78	2379	244	103	44	88	26	26	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	909	39	78	2379	244	103	44	88	26	26	47
PCE 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
MLF 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
FinalVolume:	55	909	39	78	2379	244	103	44	88	26	26	47
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.99	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.71	0.29	0.70	0.30	1.00	0.50	0.50	1.00
Final Sat.:	1750	3800	1750	1750	5078	521	1261	539	1750	900	900	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.24	0.02	0.04	0.47	0.47	0.08	0.08	0.05	0.03	0.03	0.03
Crit Moves:	****				****			****				
Green Time:	7.0	54.8	54.8	17.8	65.6	65.6	11.4	11.4	11.4	11.4	11.4	11.4
Volume/Cap:	0.40	0.39	0.04	0.23	0.64	0.64	0.64	0.64	0.40	0.23	0.23	0.21
Delay/Veh:	41.5	9.2	7.1	30.6	6.6	6.6	43.5	43.5	37.3	35.8	35.8	35.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.5	9.2	7.1	30.6	6.6	6.6	43.5	43.5	37.3	35.8	35.8	35.7
LOS by Move:	D	A	A	C	A	A	D	D	D+	D+	D+	D+
HCM2kAvgQ:	2	6	0	2	12	12	5	5	3	2	2	1

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #60: Fair Oaks Avenue / Duane Avenue

Signal=Protect/Rights=Include

Final Vol: 111 1884*** 215
Lanes: 0 1 2 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	4/1/2017			
56	1		Cycle Time (sec):	90		1	130
	0		Loss Time (sec):	12		0	
94***	0		Critical V/C:	0.654		1	117
	1		Avg Crit Del (sec/veh):	23.0		0	
23	0		Avg Delay (sec/veh):	25.1		1	243***
			LOS:	C			

Lanes: 1 0 1 1 0
Final Vol: 11*** 726 212
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						Duane Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	11	726	212	215	1884	111	56	94	23	243	117	130
Growth 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
Initial Bse:	11	726	212	215	1884	111	56	94	23	243	117	130
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	726	212	215	1884	111	56	94	23	243	117	130
User 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
PHF 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
PHF Volume:	11	726	212	215	1884	111	56	94	23	243	117	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	726	212	215	1884	111	56	94	23	243	117	130
PCE 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
MLF 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
FinalVolume:	11	726	212	215	1884	111	56	94	23	243	117	130
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	1.54	0.46	1.00	2.83	0.17	1.00	0.80	0.20	1.00	1.00	1.00
Final Sat.:	1750	2863	836	1750	5288	312	1750	1446	354	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.25	0.25	0.12	0.36	0.36	0.03	0.07	0.07	0.14	0.06	0.07
Crit Moves:	****				****			****		****		
Green Time:	7.0	34.3	34.3	16.6	43.9	43.9	11.2	10.0	10.0	17.1	15.9	15.9
Volume/Cap:	0.08	0.67	0.67	0.67	0.73	0.73	0.26	0.59	0.59	0.73	0.35	0.42
Delay/Veh:	38.8	24.3	24.3	39.3	19.4	19.4	36.3	42.4	42.4	42.3	33.1	33.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.8	24.3	24.3	39.3	19.4	19.4	36.3	42.4	42.4	42.3	33.1	33.8
LOS by Move:	D+	C	C	D	B-	B-	D+	D	D	D	C-	C-
HCM2kAvgQ:	0	11	11	6	15	15	2	4	4	7	3	3

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #60: Fair Oaks Avenue / Duane Avenue

Signal=Protect/Rights=Include
Final Vol: 111 1906*** 215
Lanes: 0 1 2 0 1

Westbound (left side) — Signal=Protect, Rights=Include
Final Vol: / Lanes:
56 / 1
0
94*** / 0
1
23 / 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 90
Loss Time (sec): 12
Critical V/C: 0.665
Avg Crit Del (sec/veh): 23.1
Avg Delay (sec/veh): 25.3
LOS: C

Signal=Protect
Rights=Include
Lanes: / Final Vol:
1 / 130
0
1 / 117
0
1 / 243***

Lanes: 1 0 1 1 0
Final Vol: 22*** 776 212
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						Duane Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	11	726	212	215	1884	111	56	94	23	243	117	130
Growth 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
Initial Bse:	11	726	212	215	1884	111	56	94	23	243	117	130
Added Vol:	11	50	0	0	22	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	22	776	212	215	1906	111	56	94	23	243	117	130
User 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
PHF 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
PHF Volume:	22	776	212	215	1906	111	56	94	23	243	117	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	776	212	215	1906	111	56	94	23	243	117	130
PCE 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
MLF 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
FinalVolume:	22	776	212	215	1906	111	56	94	23	243	117	130
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	1.56	0.44	1.00	2.83	0.17	1.00	0.80	0.20	1.00	1.00	1.00
Final Sat.:	1750	2905	794	1750	5291	308	1750	1446	354	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.27	0.27	0.12	0.36	0.36	0.03	0.07	0.07	0.14	0.06	0.07
Crit Moves:	****				****			****		****		
Green Time:	7.0	35.0	35.0	16.1	44.0	44.0	11.1	10.0	10.0	17.0	15.9	15.9
Volume/Cap:	0.16	0.69	0.69	0.69	0.74	0.74	0.26	0.59	0.59	0.74	0.35	0.42
Delay/Veh:	39.3	24.4	24.4	40.9	19.4	19.4	36.4	42.4	42.4	42.8	33.2	33.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.3	24.4	24.4	40.9	19.4	19.4	36.4	42.4	42.4	42.8	33.2	33.9
LOS by Move:	D	C	C	D	B-	B-	D+	D	D	D	C-	C-
HCM2kAvgQ:	1	12	12	6	15	15	2	4	4	7	3	3

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #61: Fair Oaks Avenue / Wolfe Road

Signal=Permit/Rights=Overlap
Final Vol: 1096 1056*** 0
Lanes: 2 0 2 0 0

Signal=Split
Rights=Overlap
Final Vol: Lanes:
615*** 2
0
0 0
0
9 1

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 70
Loss Time (sec): 6
Critical V/C: 0.517
Avg Crit Del (sec/veh): 13.1
Avg Delay (sec/veh): 8.1
LOS: A

Signal=Split
Rights=Include
Lanes: Final Vol:
0 0
0
0 0
0
0 0

Lanes: 0 0 2 0 0
Final Vol: 0 399 0
Signal=Permit/Rights=Include

Street Name:	Fair Oaks Avenue						Wolfe Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	0	0	10	10	10	0	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	0	399	0	0	1056	1096	615	0	9	0	0	0
Growth 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
Initial Bse:	0	399	0	0	1056	1096	615	0	9	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	399	0	0	1056	1096	615	0	9	0	0	0
User 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
PHF 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
PHF Volume:	0	399	0	0	1056	1096	615	0	9	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	399	0	0	1056	1096	615	0	9	0	0	0
PCE 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
MLF 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
FinalVolume:	0	399	0	0	1056	1096	615	0	9	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.83	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3800	0	0	3800	3150	3150	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.00	0.00	0.28	0.35	0.20	0.00	0.01	0.00	0.00	0.00
Crit Moves:					****		****					
Green Time:	0.0	37.6	0.0	0.0	37.6	64.0	26.4	0.0	26.4	0.0	0.0	0.0
Volume/Cap:	0.00	0.20	0.00	0.00	0.52	0.38	0.52	0.00	0.01	0.00	0.00	0.00
Delay/Veh:	0.0	8.4	0.0	0.0	10.6	0.5	17.3	0.0	13.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	8.4	0.0	0.0	10.6	0.5	17.3	0.0	13.7	0.0	0.0	0.0
LOS by Move:	A	A	A	A	B+	A	B	A	B	A	A	A
HCM2kAvgQ:	0	2	0	0	7	2	6	0	0	0	0	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #61: Fair Oaks Avenue / Wolfe Road

Signal=Permit/Rights=Overlap
Final Vol: 1118 1056*** 0
Lanes: 2 0 2 0 0

Signal=Split
Rights=Overlap

Final Vol:	Lanes:
676***	2
	0
0	0
	0
9	1

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 70
Loss Time (sec): 6
Critical V/C: 0.539
Avg Crit Del (sec/veh): 13.6
Avg Delay (sec/veh): 8.6
LOS: A

Signal=Split
Rights=Include

Lanes:	Final Vol:
0	0
0	
0	0
0	
0	0

Lanes: 0 0 2 0 0
Final Vol: 0 399 0
Signal=Permit/Rights=Include

Street Name:	Fair Oaks Avenue						Wolfe Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	0	0	10	10	10	0	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	0	399	0	0	1056	1096	615	0	9	0	0	0
Growth 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
Initial Bse:	0	399	0	0	1056	1096	615	0	9	0	0	0
Added Vol:	0	0	0	0	0	22	61	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	399	0	0	1056	1118	676	0	9	0	0	0
User 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
PHF 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
PHF Volume:	0	399	0	0	1056	1118	676	0	9	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	399	0	0	1056	1118	676	0	9	0	0	0
PCE 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
MLF 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
FinalVolume:	0	399	0	0	1056	1118	676	0	9	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.83	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3800	0	0	3800	3150	3150	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.00	0.00	0.28	0.35	0.21	0.00	0.01	0.00	0.00	0.00
Crit Moves:					****		****					
Green Time:	0.0	36.1	0.0	0.0	36.1	64.0	27.9	0.0	27.9	0.0	0.0	0.0
Volume/Cap:	0.00	0.20	0.00	0.00	0.54	0.39	0.54	0.00	0.01	0.00	0.00	0.00
Delay/Veh:	0.0	9.2	0.0	0.0	11.7	0.5	16.6	0.0	12.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	9.2	0.0	0.0	11.7	0.5	16.6	0.0	12.7	0.0	0.0	0.0
LOS by Move:	A	A	A	A	B+	A	B	A	B	A	A	A
HCM2kAvgQ:	0	2	0	0	7	2	6	0	0	0	0	0

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #62: Fair Oaks Avenue / Maude Avenue

Signal=Protect/Rights=Include
Final Vol: 87 1041*** 6
Lanes: 0 1 1 0 1

Final Vol: Lanes: Signal=Protect Rights=Include
101*** 1
0
173 1
0
128 1

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 100
Loss Time (sec): 12
Critical V/C: 0.533
Avg Crit Del (sec/veh): 20.0
Avg Delay (sec/veh): 23.7
LOS: C

Signal=Protect Rights=Include Lanes: Final Vol:
0 13
1
0 94***
0
1 30

Lanes: 1 0 1 1 0
Final Vol: 82*** 500 14
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	82	500	14	6	1041	87	101	173	128	30	94	13
Growth 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
Initial Bse:	82	500	14	6	1041	87	101	173	128	30	94	13
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	82	500	14	6	1041	87	101	173	128	30	94	13
User 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
PHF 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
PHF Volume:	82	500	14	6	1041	87	101	173	128	30	94	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	500	14	6	1041	87	101	173	128	30	94	13
PCE 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
MLF 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
FinalVolume:	82	500	14	6	1041	87	101	173	128	30	94	13
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	1.00	1.94	0.06	1.00	1.84	0.16	1.00	1.00	1.00	1.00	0.88	0.12
Final Sat.:	1750	3599	101	1750	3414	285	1750	1900	1750	1750	1581	219
Capacity Analysis Module:												
Vol/Sat:	0.05	0.14	0.14	0.00	0.30	0.30	0.06	0.09	0.07	0.02	0.06	0.06
Crit Moves:	****				****		****				****	
Green Time:	8.8	43.9	43.9	22.1	57.2	57.2	10.8	12.9	12.9	9.1	11.2	11.2
Volume/Cap:	0.53	0.32	0.32	0.02	0.53	0.53	0.53	0.70	0.57	0.19	0.53	0.53
Delay/Veh:	47.2	18.4	18.4	30.4	13.4	13.4	45.1	50.6	44.2	42.7	44.7	44.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.2	18.4	18.4	30.4	13.4	13.4	45.1	50.6	44.2	42.7	44.7	44.7
LOS by Move:	D	B-	B-	C	B	B	D	D	D	D	D	D
HCM2kAvgQ:	3	5	5	0	11	11	3	5	4	1	4	4

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #62: Fair Oaks Avenue / Maude Avenue

Signal=Protect/Rights=Include
Final Vol: 88 1062*** 6
Lanes: 0 1 1 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	4/1/2017			
			Cycle Time (sec):	100			
112***	1					0	13
	0		Loss Time (sec):	12		1	
173	1		Critical V/C:	0.547		0	94***
	0		Avg Crit Del (sec/veh):	20.5		0	
128	1		Avg Delay (sec/veh):	23.5		1	30
			LOS:	C			

Lanes: 1 0 1 1 0
Final Vol: 82*** 550 14
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	82	500	14	6	1041	87	101	173	128	30	94	13
Growth 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
Initial Bse:	82	500	14	6	1041	87	101	173	128	30	94	13
Added Vol:	0	50	0	0	22	0	11	0	0	0	0	0
PasserByVol:	0	0	0	0	-1	1	0	0	0	0	0	0
Initial Fut:	82	550	14	6	1062	88	112	173	128	30	94	13
User 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
PHF 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
PHF Volume:	82	550	14	6	1062	88	112	173	128	30	94	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	550	14	6	1062	88	112	173	128	30	94	13
PCE 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
MLF 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
FinalVolume:	82	550	14	6	1062	88	112	173	128	30	94	13
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	1.00	1.95	0.05	1.00	1.84	0.16	1.00	1.00	1.00	1.00	0.88	0.12
Final Sat.:	1750	3608	92	1750	3417	283	1750	1900	1750	1750	1581	219
Capacity Analysis Module:												
Vol/Sat:	0.05	0.15	0.15	0.00	0.31	0.31	0.06	0.09	0.07	0.02	0.06	0.06
Crit Moves:	****				****		****				****	
Green Time:	8.6	44.8	44.8	20.6	56.9	56.9	11.7	13.3	13.3	9.3	10.9	10.9
Volume/Cap:	0.55	0.34	0.34	0.02	0.55	0.55	0.55	0.69	0.55	0.18	0.55	0.55
Delay/Veh:	48.0	18.1	18.1	31.7	13.8	13.8	44.7	49.0	43.4	42.4	45.4	45.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.0	18.1	18.1	31.7	13.8	13.8	44.7	49.0	43.4	42.4	45.4	45.4
LOS by Move:	D	B-	B-	C	B	B	D	D	D	D	D	D
HCM2kAvgQ:	3	6	6	0	11	11	4	5	4	1	4	4

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #63: Fair Oaks Avenue / Arques Avenue

Signal=Protect/Rights=Include
Final Vol: 87 947*** 56
Lanes: 0 1 1 0 1

Signal=Protect
Rights=Include
Final Vol: Lanes:
95 1
0
168*** 0
1
139 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 120
Loss Time (sec): 12
Critical V/C: 0.738
Avg Crit Del (sec/veh): 42.9
Avg Delay (sec/veh): 39.5
LOS: D

Signal=Protect
Rights=Include
Lanes: Final Vol:
0 41
1
0 191
0
2 416***

Lanes: 1 0 2 0 1
Final Vol: 143*** 544 173
Signal=Protect/Rights=Include

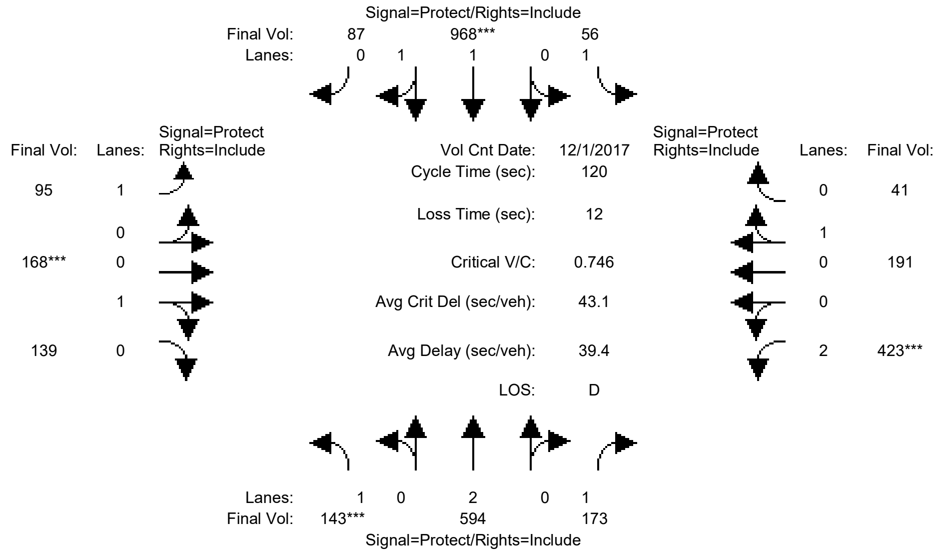
Street Name:	Fair Oaks Avenue						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	143	544	173	56	947	87	95	168	139	416	191	41
Growth 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
Initial Bse:	143	544	173	56	947	87	95	168	139	416	191	41
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	143	544	173	56	947	87	95	168	139	416	191	41
User 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
PHF 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
PHF Volume:	143	544	173	56	947	87	95	168	139	416	191	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	544	173	56	947	87	95	168	139	416	191	41
PCE 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
MLF 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
FinalVolume:	143	544	173	56	947	87	95	168	139	416	191	41
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	1.83	0.17	1.00	0.55	0.45	2.00	0.82	0.18
Final Sat.:	1750	3800	1750	1750	3388	311	1750	985	815	3150	1482	318
Capacity Analysis Module:												
Vol/Sat:	0.08	0.14	0.10	0.03	0.28	0.28	0.05	0.17	0.17	0.13	0.13	0.13
Crit Moves:	****				****			****		****		
Green Time:	13.3	41.8	41.8	17.0	45.5	45.5	15.3	27.7	27.7	21.5	33.9	33.9
Volume/Cap:	0.74	0.41	0.28	0.23	0.74	0.74	0.42	0.74	0.74	0.74	0.46	0.46
Delay/Veh:	65.5	30.0	28.6	46.1	34.2	34.2	49.6	49.6	49.6	51.7	36.1	36.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	65.5	30.0	28.6	46.1	34.2	34.2	49.6	49.6	49.6	51.7	36.1	36.1
LOS by Move:	E	C	C	D	C-	C-	D	D	D	D-	D+	D+
HCM2kAvgQ:	6	7	5	2	17	17	4	12	12	9	7	7

Note: Queue reported is the number of cars per lane.

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #63: Fair Oaks Avenue / Arques Avenue



Street Name:	Fair Oaks Avenue						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	143	544	173	56	947	87	95	168	139	416	191	41
Growth 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
Initial Bse:	143	544	173	56	947	87	95	168	139	416	191	41
Added Vol:	0	50	0	0	22	0	0	0	0	7	0	0
PasserByVol:	0	0	0	0	-1	0	0	0	0	0	0	0
Initial Fut:	143	594	173	56	968	87	95	168	139	423	191	41
User 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
PHF 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
PHF Volume:	143	594	173	56	968	87	95	168	139	423	191	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	594	173	56	968	87	95	168	139	423	191	41
PCE 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
MLF 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
FinalVolume:	143	594	173	56	968	87	95	168	139	423	191	41
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	1.83	0.17	1.00	0.55	0.45	2.00	0.82	0.18
Final Sat.:	1750	3800	1750	1750	3395	305	1750	985	815	3150	1482	318
Capacity Analysis Module:												
Vol/Sat:	0.08	0.16	0.10	0.03	0.29	0.29	0.05	0.17	0.17	0.13	0.13	0.13
Crit Moves:	****				****			****		****		
Green Time:	13.1	43.0	43.0	16.0	45.8	45.8	15.3	27.4	27.4	21.6	33.7	33.7
Volume/Cap:	0.75	0.44	0.28	0.24	0.75	0.75	0.43	0.75	0.75	0.75	0.46	0.46
Delay/Veh:	66.6	29.5	27.7	47.1	34.3	34.3	49.6	50.4	50.4	52.0	36.2	36.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	66.6	29.5	27.7	47.1	34.3	34.3	49.6	50.4	50.4	52.0	36.2	36.2
LOS by Move:	E	C	C	D	C-	C-	D	D	D	D-	D+	D+
HCM2kAvgQ:	6	8	5	2	17	17	4	13	13	9	7	7

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PM

Intersection #64: Central Expressway WB Off-Ramp / Arques Avenue

Signal=Stop/Rights=Include

Final Vol:	0		0		0
Lanes:	0	0	0	0	0

Final Vol:	Lanes:	Signal=Uncontrol Rights=Include			Signal=Uncontrol Rights=Include	Lanes:	Final Vol:
0	0		Vol Cnt Date:	10/3/2018		0	0
			Cycle Time (sec):	100			
	0		Loss Time (sec):	0		0	
326	2		Critical V/C:	0.565		2	456
	0		Avg Crit Del (sec/veh):	5.7		0	
0	0		Avg Delay (sec/veh):	5.7		0	0
			LOS:	C			

Lanes:	1	0	0	0	1
Final Vol:	264		0		30

Signal=Stop/Rights=Include

```
Street Name:    Central Expressway WB Ramp             Arques Avenue
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 3 Oct 2018 <<
Base Vol:      264    0    30     0    0     0     0  326     0     0  456     0
Growth 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
Initial Bse:   264    0    30     0    0     0     0  326     0     0  456     0
Added Vol:       0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   264    0    30     0    0     0     0  326     0     0  456     0
User 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
PHF 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
PHF Volume:    264    0    30     0    0     0     0  326     0     0  456     0
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   264    0    30     0    0     0     0  326     0     0  456     0
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:   6.8 xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:   3.5 xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol:   554 xxxx   163  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.:   467 xxxx   859  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:     467 xxxx   859  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:   0.57 xxxx  0.03  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2Way95thQ:     3.4 xxxx   0.1  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:  22.3 xxxx   9.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:     C    *     A     *    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:        20.9             xxxxxx           xxxxxx           xxxxxx
ApproachLOS:          C                 *                *                *
Note: Queue reported is the number of cars per lane.
                     Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        1  0  0  0  1    0  0  0  0  0    0  0  2  0  0    0  0  2  0  0
Initial Vol:  264    0    30     0    0     0     0  326     0     0  456     0
ApproachDel:      20.9           xxxxxx           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=1.7]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=294]
   SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1076]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
```

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

```
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        1  0  0  0  1    0  0  0  0  0    0  0  2  0  0    0  0  2  0  0
Initial Vol:  264    0    30     0    0     0     0  326     0     0  456     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             782
Minor Approach Volume:           294
Minor Approach Volume Threshold: 480
--------------------------------------------------------------------------------
```

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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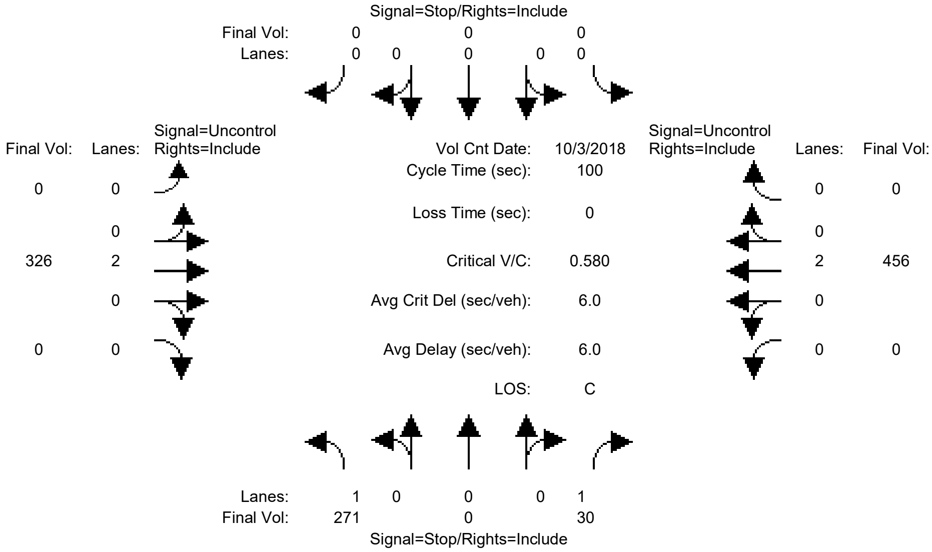
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PP PM

Intersection #64: Central Expressway WB Off-Ramp / Arques Avenue



Street Name:	Central Expressway WB Ramp						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	264	0	30	0	0	0	0	326	0	0	456	0
Growth 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
Initial Bse:	264	0	30	0	0	0	0	326	0	0	456	0
Added Vol:	7	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	271	0	30	0	0	0	0	326	0	0	456	0
User 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
PHF 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
PHF Volume:	271	0	30	0	0	0	0	326	0	0	456	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	271	0	30	0	0	0	0	326	0	0	456	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	554	xxxx	163	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	467	xxxx	859	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	467	xxxx	859	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.58	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	3.6	xxxx	0.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	22.8	xxxx	9.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	C	*	A	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		21.5			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		C			*			*			*	

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        1  0  0  0  1    0  0  0  0  0    0  0  2  0  0    0  0  2  0  0
Initial Vol:  271    0    30     0    0     0     0  326     0     0  456     0
ApproachDel:      21.5            xxxxxx           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=1.8]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=301]
   SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1083]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        1  0  0  0  1    0  0  0  0  0    0  0  2  0  0    0  0  2  0  0
Initial Vol:  271    0    30     0    0     0     0  326     0     0  456     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             782
Minor Approach Volume:           301
Minor Approach Volume Threshold: 480
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #65: Fair Oaks Avenue / California Avenue

Signal=Protect/Rights=Include
Final Vol: 111 1429*** 27
Lanes: 0 1 1 0 1

Signal=Split
Rights=Include

Final Vol: Lanes:
79 0
1
62 0
0
174*** 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 130
Loss Time (sec): 9
Critical V/C: 0.583
Avg Crit Del (sec/veh): 15.6
Avg Delay (sec/veh): 16.7
LOS: B

Signal=Split
Rights=Include

Lanes: Final Vol:
0 0
0
0 0
0
0 0

Lanes: 1 0 1 1 0
Final Vol: 48*** 774 77
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	48	774	77	27	1429	111	79	62	174	0	0	0
Growth 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
Initial Bse:	48	774	77	27	1429	111	79	62	174	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	48	774	77	27	1429	111	79	62	174	0	0	0
User 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
PHF 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
PHF Volume:	48	774	77	27	1429	111	79	62	174	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	774	77	27	1429	111	79	62	174	0	0	0
PCE 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
MLF 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
FinalVolume:	48	774	77	27	1429	111	79	62	174	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.92	1.00	0.92
Lanes:	1.00	1.81	0.19	1.00	1.85	0.15	0.56	0.44	1.00	0.00	0.00	0.00
Final Sat.:	1750	3365	335	1750	3433	267	1009	791	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.23	0.23	0.02	0.42	0.42	0.08	0.08	0.10	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green Time:	7.0	80.2	80.2	18.8	92.0	92.0	22.0	22.0	22.0	0.0	0.0	0.0
Volume/Cap:	0.51	0.37	0.37	0.11	0.59	0.59	0.46	0.46	0.59	0.00	0.00	0.00
Delay/Veh:	64.4	12.5	12.5	48.5	9.9	9.9	49.8	49.8	52.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	64.4	12.5	12.5	48.5	9.9	9.9	49.8	49.8	52.9	0.0	0.0	0.0
LOS by Move:	E	B	B	D	A	A	D	D	D-	A	A	A
HCM2kAvgQ:	3	8	8	1	15	15	5	5	7	0	0	0

Note: Queue reported is the number of cars per lane.

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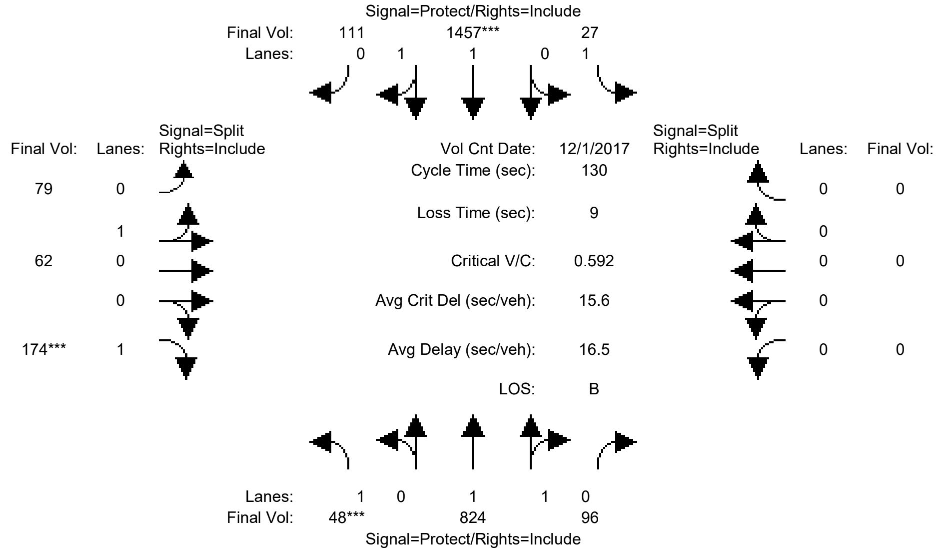
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #65: Fair Oaks Avenue / California Avenue



Street Name:	Fair Oaks Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	48	774	77	27	1429	111	79	62	174	0	0	0
Growth 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
Initial Bse:	48	774	77	27	1429	111	79	62	174	0	0	0
Added Vol:	0	50	19	0	29	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	-1	0	0	0	0	0	0	0
Initial Fut:	48	824	96	27	1457	111	79	62	174	0	0	0
User 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
PHF 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
PHF Volume:	48	824	96	27	1457	111	79	62	174	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	824	96	27	1457	111	79	62	174	0	0	0
PCE 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
MLF 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
FinalVolume:	48	824	96	27	1457	111	79	62	174	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.92	1.00	0.92
Lanes:	1.00	1.79	0.21	1.00	1.85	0.15	0.56	0.44	1.00	0.00	0.00	0.00
Final Sat.:	1750	3314	386	1750	3438	262	1009	791	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.25	0.25	0.02	0.42	0.42	0.08	0.08	0.10	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green Time:	7.0	81.7	81.7	17.7	92.3	92.3	21.7	21.7	21.7	0.0	0.0	0.0
Volume/Cap:	0.51	0.40	0.40	0.11	0.60	0.60	0.47	0.47	0.60	0.00	0.00	0.00
Delay/Veh:	64.4	12.1	12.1	49.5	9.8	9.8	50.1	50.1	53.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	64.4	12.1	12.1	49.5	9.8	9.8	50.1	50.1	53.5	0.0	0.0	0.0
LOS by Move:	E	B	B	D	A	A	D	D	D-	A	A	A
HCM2kAvgQ:	3	9	9	1	15	15	5	5	7	0	0	0

Note: Queue reported is the number of cars per lane.

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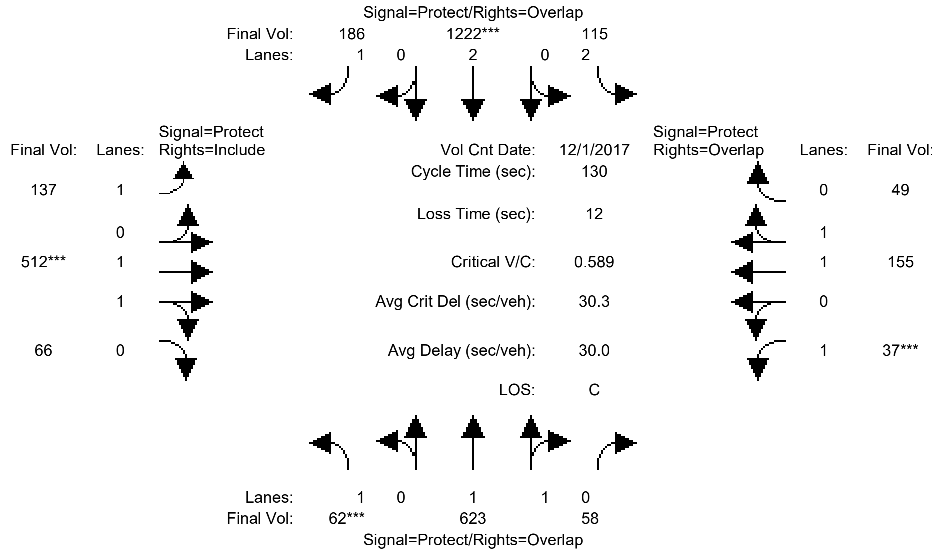
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #66: Fair Oaks Avenue / Evelyn Avenue



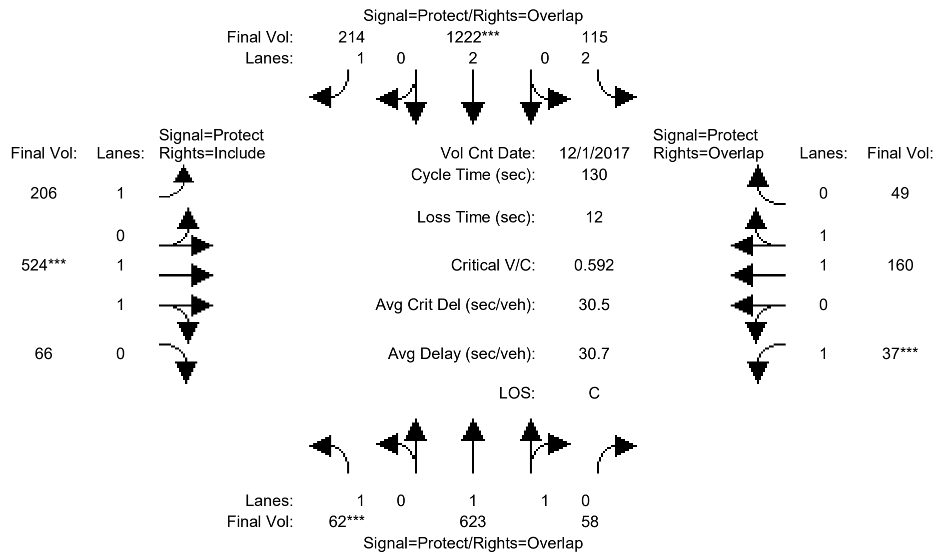
Street Name:	Fair Oaks Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	62	623	58	115	1222	186	137	512	66	37	155	49
Growth 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
Initial Bse:	62	623	58	115	1222	186	137	512	66	37	155	49
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	62	623	58	115	1222	186	137	512	66	37	155	49
User 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
PHF 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
PHF Volume:	62	623	58	115	1222	186	137	512	66	37	155	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	623	58	115	1222	186	137	512	66	37	155	49
PCE 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
MLF 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
FinalVolume:	62	623	58	115	1222	186	137	512	66	37	155	49
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	1.00	0.92	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.82	0.18	2.00	2.00	1.00	1.00	1.77	0.23	1.00	1.51	0.49
Final Sat.:	1750	3385	315	3150	3800	1750	1750	3277	422	1750	2811	889
Capacity Analysis Module:												
Vol/Sat:	0.04	0.18	0.18	0.04	0.32	0.11	0.08	0.16	0.16	0.02	0.06	0.06
Crit Moves:	****				****			****		****		
Green Time:	7.7	59.7	66.7	17.5	69.5	90.1	20.6	33.8	33.8	7.0	20.2	37.7
Volume/Cap:	0.60	0.40	0.36	0.27	0.60	0.15	0.49	0.60	0.60	0.39	0.35	0.19
Delay/Veh:	69.2	23.4	19.0	50.9	21.2	6.9	51.4	43.3	43.3	62.1	49.4	34.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	69.2	23.4	19.0	50.9	21.2	6.9	51.4	43.3	43.3	62.1	49.4	34.8
LOS by Move:	E	C	B-	D	C+	A	D-	D	D	E	D	C-
HCM2kAvgQ:	3	9	8	3	17	3	5	10	10	2	4	3

Note: Queue reported is the number of cars per lane.

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #66: Fair Oaks Avenue / Evelyn Avenue



Street Name:	Fair Oaks Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	62	623	58	115	1222	186	137	512	66	37	155	49
Growth 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
Initial Bse:	62	623	58	115	1222	186	137	512	66	37	155	49
Added Vol:	0	0	0	0	0	29	69	12	0	0	5	0
PasserByVol:	0	0	0	0	0	-1	0	0	0	0	0	0
Initial Fut:	62	623	58	115	1222	214	206	524	66	37	160	49
User 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
PHF 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
PHF Volume:	62	623	58	115	1222	214	206	524	66	37	160	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	623	58	115	1222	214	206	524	66	37	160	49
PCE 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
MLF 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
FinalVolume:	62	623	58	115	1222	214	206	524	66	37	160	49
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	1.00	0.92	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.82	0.18	2.00	2.00	1.00	1.00	1.77	0.23	1.00	1.52	0.48
Final Sat.:	1750	3385	315	3150	3800	1750	1750	3286	414	1750	2832	867
Capacity Analysis Module:												
Vol/Sat:	0.04	0.18	0.18	0.04	0.32	0.12	0.12	0.16	0.16	0.02	0.06	0.06
Crit Moves:	****				****			****		****		
Green Time:	7.6	59.4	66.4	17.4	69.1	94.1	25.0	34.3	34.3	7.0	16.3	33.7
Volume/Cap:	0.60	0.40	0.36	0.27	0.60	0.17	0.61	0.60	0.60	0.39	0.45	0.22
Delay/Veh:	69.6	23.7	19.2	51.0	21.5	5.7	51.4	43.0	43.0	62.1	53.4	37.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	69.6	23.7	19.2	51.0	21.5	5.7	51.4	43.0	43.0	62.1	53.4	37.9
LOS by Move:	E	C	B-	D	C+	A	D-	D	D	E	D-	D+
HCM2kAvgQ:	3	9	8	3	17	3	8	10	10	2	4	3

Note: Queue reported is the number of cars per lane.

Cityline Sunnyvale TIA
SJ17-1787
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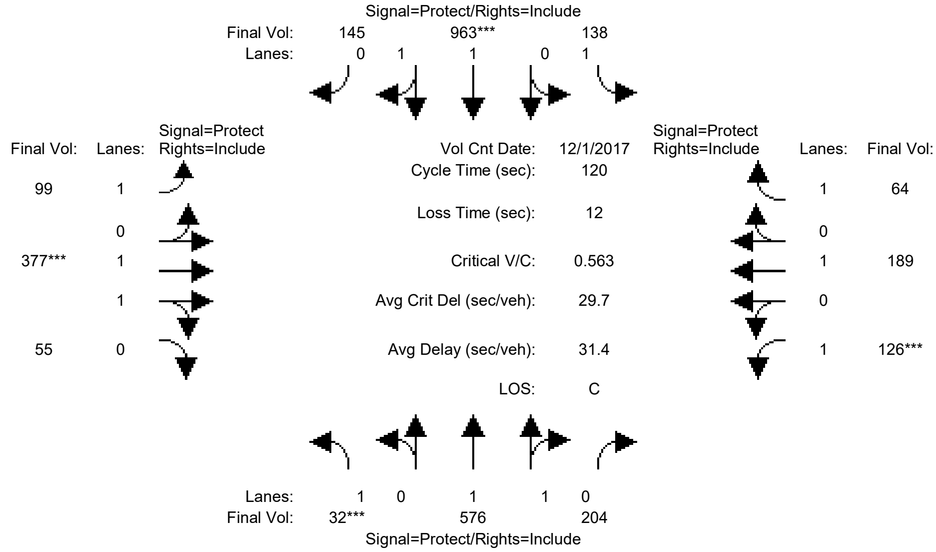
Existing PM

Intersection #67: Fair Oaks Avenue / Old San Francisco Road



Street Name:	Fair Oaks Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	32	576	204	138	963	145	99	377	55	126	189	64
Growth 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
Initial Bse:	32	576	204	138	963	145	99	377	55	126	189	64
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	576	204	138	963	145	99	377	55	126	189	64
User 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
PHF 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
PHF Volume:	32	576	204	138	963	145	99	377	55	126	189	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	576	204	138	963	145	99	377	55	126	189	64
PCE 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
MLF 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
FinalVolume:	32	576	204	138	963	145	99	377	55	126	189	64
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.46	0.54	1.00	1.73	0.27	1.00	1.74	0.26	1.00	1.00	1.00
Final Sat.:	1750	2732	967	1750	3215	484	1750	3229	471	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.21	0.21	0.08	0.30	0.30	0.06	0.12	0.12	0.07	0.10	0.04
Crit Moves:	****				****			****		****		
Green Time:	7.0	50.2	50.2	18.8	62.0	62.0	14.4	24.2	24.2	14.9	24.6	24.6
Volume/Cap:	0.31	0.50	0.50	0.50	0.58	0.58	0.47	0.58	0.58	0.58	0.48	0.18
Delay/Veh:	56.0	26.0	26.0	47.9	20.5	20.5	50.9	44.5	44.5	53.5	43.1	39.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.0	26.0	26.0	47.9	20.5	20.5	50.9	44.5	44.5	53.5	43.1	39.6
LOS by Move:	E+	C	C	D	C+	C+	D	D	D	D-	D	D
HCM2kAvgQ:	2	11	11	5	14	14	4	7	7	5	6	2

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

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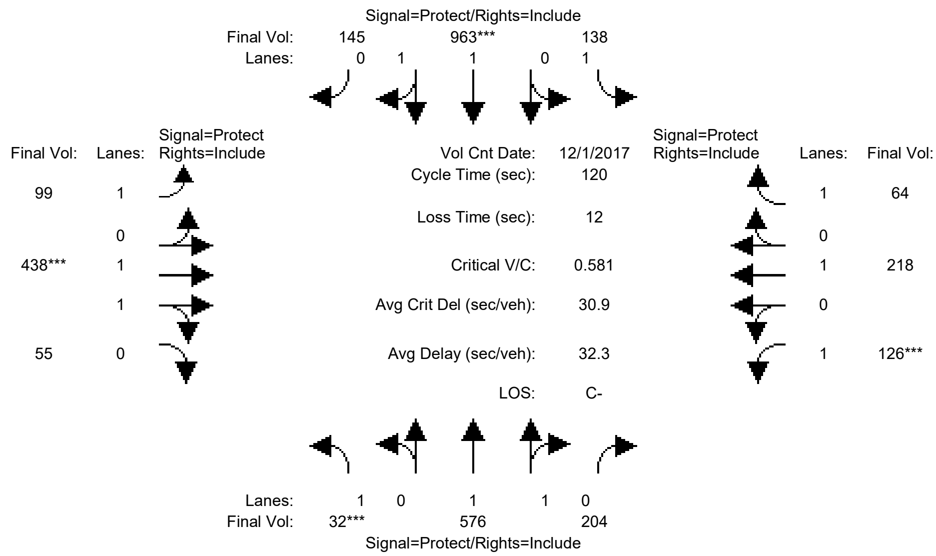
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #67: Fair Oaks Avenue / Old San Francisco Road



Street Name:	Fair Oaks Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	32	576	204	138	963	145	99	377	55	126	189	64
Growth 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
Initial Bse:	32	576	204	138	963	145	99	377	55	126	189	64
Added Vol:	0	0	0	0	0	0	0	61	0	0	29	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	576	204	138	963	145	99	438	55	126	218	64
User 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
PHF 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
PHF Volume:	32	576	204	138	963	145	99	438	55	126	218	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	576	204	138	963	145	99	438	55	126	218	64
PCE 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
MLF 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
FinalVolume:	32	576	204	138	963	145	99	438	55	126	218	64
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.46	0.54	1.00	1.73	0.27	1.00	1.77	0.23	1.00	1.00	1.00
Final Sat.:	1750	2732	967	1750	3215	484	1750	3287	413	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.21	0.21	0.08	0.30	0.30	0.06	0.13	0.13	0.07	0.11	0.04
Crit Moves:	****				****			****		****		
Green Time:	7.0	48.7	48.7	18.2	59.9	59.9	13.8	26.7	26.7	14.4	27.2	27.2
Volume/Cap:	0.31	0.52	0.52	0.52	0.60	0.60	0.49	0.60	0.60	0.60	0.51	0.16
Delay/Veh:	56.0	27.2	27.2	48.7	22.0	22.0	51.6	43.1	43.1	54.8	41.5	37.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.0	27.2	27.2	48.7	22.0	22.0	51.6	43.1	43.1	54.8	41.5	37.4
LOS by Move:	E+	C	C	D	C+	C+	D-	D	D	D-	D	D+
HCM2kAvgQ:	2	11	11	5	14	14	4	8	8	5	7	2

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

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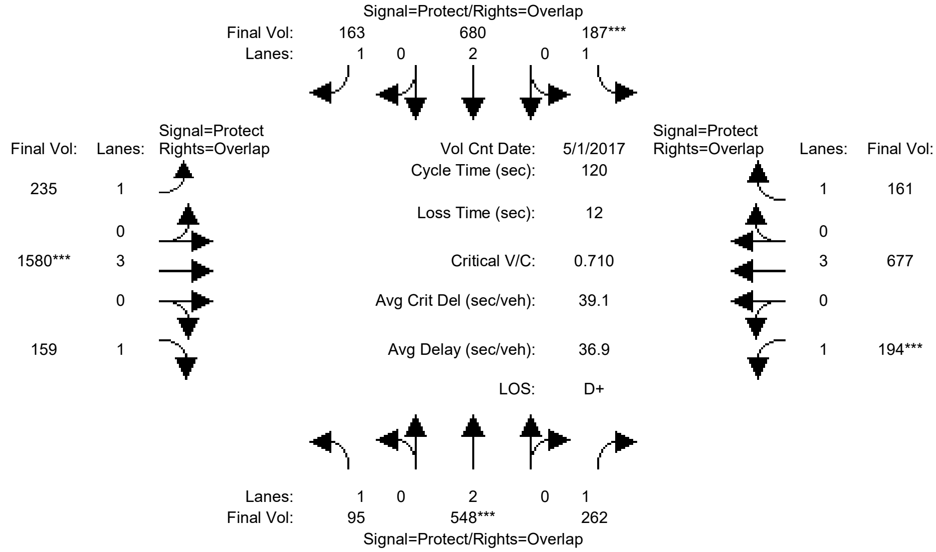
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #68: Fair Oaks Avenue / El Camino Real (CMP)



Street Name:	Fair Oaks Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	95	548	262	187	680	163	235	1580	159	194	677	161
Growth 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
Initial Bse:	95	548	262	187	680	163	235	1580	159	194	677	161
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95	548	262	187	680	163	235	1580	159	194	677	161
User 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
PHF 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
PHF Volume:	95	548	262	187	680	163	235	1580	159	194	677	161
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	548	262	187	680	163	235	1580	159	194	677	161
PCE 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
MLF 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
FinalVolume:	95	548	262	187	680	163	235	1580	159	194	677	161
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.14	0.15	0.11	0.18	0.09	0.13	0.28	0.09	0.11	0.12	0.09
Crit Moves:		****		****				****		****		
Green Time:	10.4	24.4	43.1	18.1	32.0	66.8	34.8	46.8	57.3	18.7	30.8	48.8
Volume/Cap:	0.62	0.71	0.42	0.71	0.67	0.17	0.46	0.71	0.19	0.71	0.46	0.23
Delay/Veh:	60.8	47.6	29.4	57.2	41.1	13.1	35.6	31.9	18.1	56.5	37.9	23.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	60.8	47.6	29.4	57.2	41.1	13.1	35.6	31.9	18.1	56.5	37.9	23.4
LOS by Move:	E	D	C	E+	D	B	D+	C	B-	E+	D+	C
HCM2kAvgQ:	4	9	8	8	12	3	7	16	3	9	7	4

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
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Existing Plus Project PM

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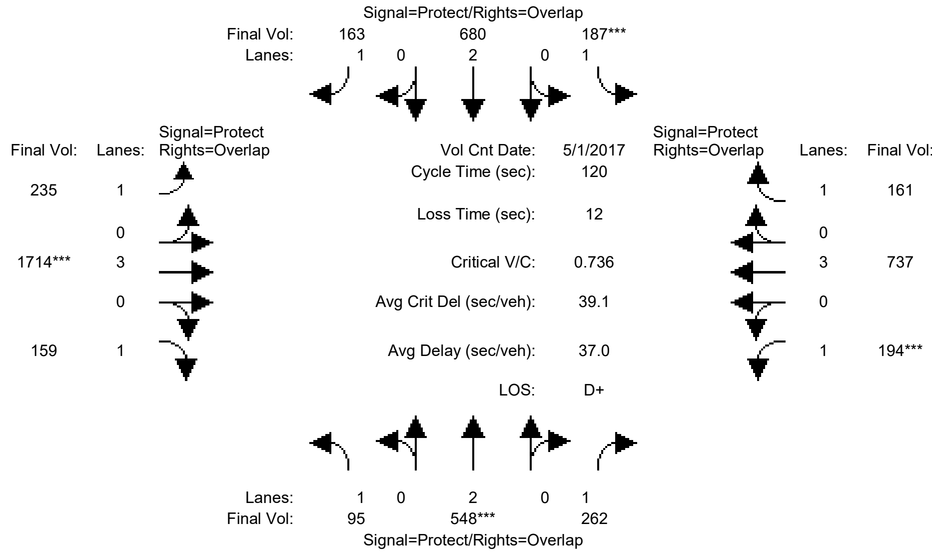
Existing PP PM

Intersection #68: Fair Oaks Avenue / El Camino Real (CMP)



Street Name:	Fair Oaks Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	95	548	262	187	680	163	235	1580	159	194	677	161
Growth 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
Initial Bse:	95	548	262	187	680	163	235	1580	159	194	677	161
Added Vol:	0	0	0	0	0	0	0	134	0	0	60	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95	548	262	187	680	163	235	1714	159	194	737	161
User 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
PHF 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
PHF Volume:	95	548	262	187	680	163	235	1714	159	194	737	161
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	548	262	187	680	163	235	1714	159	194	737	161
PCE 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
MLF 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
FinalVolume:	95	548	262	187	680	163	235	1714	159	194	737	161
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.14	0.15	0.11	0.18	0.09	0.13	0.30	0.09	0.11	0.13	0.09
Crit Moves:		****		****				****		****		
Green Time:	10.1	23.5	41.6	17.4	30.9	65.0	34.2	49.0	59.1	18.1	32.9	50.3
Volume/Cap:	0.65	0.74	0.43	0.74	0.70	0.17	0.47	0.74	0.18	0.74	0.47	0.22
Delay/Veh:	62.9	49.2	30.6	59.8	42.5	14.0	36.2	31.3	17.1	59.1	36.5	22.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	62.9	49.2	30.6	59.8	42.5	14.0	36.2	31.3	17.1	59.1	36.5	22.4
LOS by Move:	E	D	C	E+	D	B	D+	C	B	E+	D+	C+
HCM2kAvgQ:	4	10	8	9	12	3	7	17	3	9	8	4

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #69: Wolfe Road / Old San Francisco Road

Signal=Protect/Rights=Include
Final Vol: 191 1786*** 203
Lanes: 0 1 2 0 2

Final Vol: Lanes: Signal=Protect Rights=Include
83 1
0
507*** 1
1
75 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.630
Avg Crit Del (sec/veh): 34.5
Avg Delay (sec/veh): 37.7
LOS: D+

Signal=Protect Rights=Include Lanes: Final Vol:
0 30
1
1 222
0
1 85***

Lanes: 2 0 2 1 0
Final Vol: 75*** 417 140
Signal=Protect/Rights=Include

Street Name:	Wolfe Road						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	75	417	140	203	1786	191	83	507	75	85	222	30
Growth 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
Initial Bse:	75	417	140	203	1786	191	83	507	75	85	222	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	75	417	140	203	1786	191	83	507	75	85	222	30
User 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
PHF 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
PHF Volume:	75	417	140	203	1786	191	83	507	75	85	222	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	417	140	203	1786	191	83	507	75	85	222	30
PCE 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
MLF 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
FinalVolume:	75	417	140	203	1786	191	83	507	75	85	222	30
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	2.00	2.22	0.78	2.00	2.70	0.30	1.00	1.74	0.26	1.00	1.76	0.24
Final Sat.:	3150	4191	1407	3150	5058	541	1750	3223	477	1750	3259	440
Capacity Analysis Module:												
Vol/Sat:	0.02	0.10	0.10	0.06	0.35	0.35	0.05	0.16	0.16	0.05	0.07	0.07
Crit Moves:	****				****			****		****		
Green Time:	7.0	58.3	58.3	37.8	89.1	89.1	21.3	39.7	39.7	12.3	30.6	30.6
Volume/Cap:	0.54	0.27	0.27	0.27	0.63	0.63	0.36	0.63	0.63	0.63	0.36	0.36
Delay/Veh:	79.4	36.0	36.0	50.1	24.7	24.7	64.0	55.2	55.2	81.3	56.4	56.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	79.4	36.0	36.0	50.1	24.7	24.7	64.0	55.2	55.2	81.3	56.4	56.4
LOS by Move:	E-	D+	D+	D	C	C	E	E+	E+	F	E+	E+
HCM2kAvgQ:	2	6	6	5	22	22	4	13	13	5	6	6

Note: Queue reported is the number of cars per lane.

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #69: Wolfe Road / Old San Francisco Road

Signal=Protect/Rights=Include
Final Vol: 191 1786*** 203
Lanes: 0 1 2 0 2

Final Vol: Lanes: Signal=Protect Rights=Include
83 1
0
557*** 1
1
86 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.650
Avg Crit Del (sec/veh): 36.2
Avg Delay (sec/veh): 39.0
LOS: D+

Signal=Protect Rights=Include Lanes: Final Vol:
0 30
1
1 246
0
1 85***

Lanes: 2 0 2 1 0
Final Vol: 80*** 417 140
Signal=Protect/Rights=Include

Street Name:	Wolfe Road						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	75	417	140	203	1786	191	83	507	75	85	222	30
Growth 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
Initial Bse:	75	417	140	203	1786	191	83	507	75	85	222	30
Added Vol:	5	0	0	0	0	0	0	50	11	0	24	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	417	140	203	1786	191	83	557	86	85	246	30
User 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
PHF 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
PHF Volume:	80	417	140	203	1786	191	83	557	86	85	246	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	417	140	203	1786	191	83	557	86	85	246	30
PCE 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
MLF 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
FinalVolume:	80	417	140	203	1786	191	83	557	86	85	246	30
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	2.00	2.22	0.78	2.00	2.70	0.30	1.00	1.73	0.27	1.00	1.78	0.22
Final Sat.:	3150	4191	1407	3150	5058	541	1750	3205	495	1750	3298	402
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.10	0.06	0.35	0.35	0.05	0.17	0.17	0.05	0.07	0.07
Crit Moves:	****				****			****		****		
Green Time:	7.0	56.8	56.8	36.8	86.5	86.5	21.2	42.6	42.6	11.9	33.3	33.3
Volume/Cap:	0.58	0.28	0.28	0.28	0.65	0.65	0.36	0.65	0.65	0.65	0.36	0.36
Delay/Veh:	81.2	37.1	37.1	50.9	26.6	26.6	64.2	53.7	53.7	83.3	54.5	54.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	81.2	37.1	37.1	50.9	26.6	26.6	64.2	53.7	53.7	83.3	54.5	54.5
LOS by Move:	F	D+	D+	D	C	C	E	D-	D-	F	D-	D-
HCM2kAvgQ:	2	6	6	5	23	23	4	14	14	6	6	6

Note: Queue reported is the number of cars per lane.

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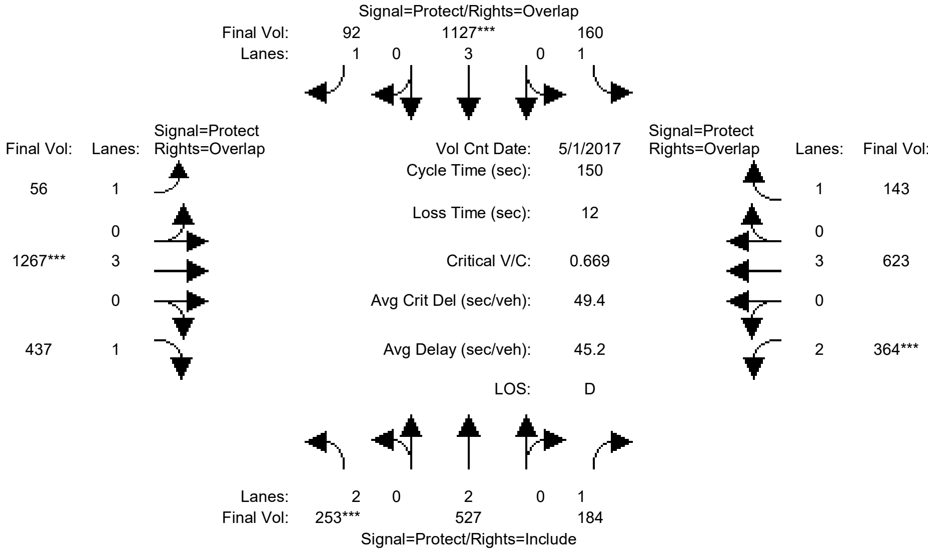
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #70: Wolfe Road / El Camino Real (CMP)



Street Name:	Wolfe Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	253	527	184	160	1127	92	56	1267	437	364	623	143
Growth 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
Initial Bse:	253	527	184	160	1127	92	56	1267	437	364	623	143
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	253	527	184	160	1127	92	56	1267	437	364	623	143
User 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
PHF 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
PHF Volume:	253	527	184	160	1127	92	56	1267	437	364	623	143
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	253	527	184	160	1127	92	56	1267	437	364	623	143
PCE 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
MLF 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
FinalVolume:	253	527	184	160	1127	92	56	1267	437	364	623	143
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	3800	1750	1750	5700	1750	1750	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.14	0.11	0.09	0.20	0.05	0.03	0.22	0.25	0.12	0.11	0.08
Crit Moves:	****				****			****		****		
Green Time:	18.0	37.5	37.5	24.8	44.3	67.0	22.7	49.8	67.8	25.9	53.0	77.8
Volume/Cap:	0.67	0.55	0.42	0.55	0.67	0.12	0.21	0.67	0.55	0.67	0.31	0.16
Delay/Veh:	67.7	49.7	47.8	59.9	47.5	24.3	56.2	44.0	30.9	61.3	35.3	19.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	67.7	49.7	47.8	59.9	47.5	24.3	56.2	44.0	30.9	61.3	35.3	19.0
LOS by Move:	E	D	D	E+	D	C	E+	D	C	E	D+	B-
HCM2kAvgQ:	6	10	7	7	15	3	2	17	16	10	7	4

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #70: Wolfe Road / El Camino Real (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 92 1127*** 160
Lanes: 1 0 3 0 1

Westbound approach (left): Signal=Protect, Rights=Overlap
Final Vol: 56, 1374***, 464
Lanes: 1, 0, 3, 0, 1

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 150
Loss Time (sec): 12
Critical V/C: 0.695
Avg Crit Del (sec/veh): 49.8
Avg Delay (sec/veh): 45.3
LOS: D

Signal=Protect
Rights=Overlap
Lanes: 1, 0, 3, 0, 2
Final Vol: 143, 669, 364***

Lanes: 2 0 2 0 1
Final Vol: 267*** 527 184
Signal=Protect/Rights=Include

Street Name:	Wolfe Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	253	527	184	160	1127	92	56	1267	437	364	623	143
Growth 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
Initial Bse:	253	527	184	160	1127	92	56	1267	437	364	623	143
Added Vol:	14	0	0	0	0	0	0	107	27	0	46	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	267	527	184	160	1127	92	56	1374	464	364	669	143
User 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
PHF 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
PHF Volume:	267	527	184	160	1127	92	56	1374	464	364	669	143
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	267	527	184	160	1127	92	56	1374	464	364	669	143
PCE 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
MLF 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
FinalVolume:	267	527	184	160	1127	92	56	1374	464	364	669	143
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	3800	1750	1750	5700	1750	1750	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.14	0.11	0.09	0.20	0.05	0.03	0.24	0.27	0.12	0.12	0.08
Crit Moves:	****				****			****		****		
Green Time:	18.3	36.8	36.8	24.2	42.7	64.6	21.9	52.1	70.4	25.0	55.1	79.3
Volume/Cap:	0.69	0.57	0.43	0.57	0.69	0.12	0.22	0.69	0.57	0.69	0.32	0.15
Delay/Veh:	68.6	50.4	48.5	60.7	49.2	25.7	56.9	43.2	29.7	63.0	34.1	18.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	68.6	50.4	48.5	60.7	49.2	25.7	56.9	43.2	29.7	63.0	34.1	18.2
LOS by Move:	E	D	D	E	D	C	E+	D	C	E	C-	B-
HCM2kAvgQ:	7	10	7	7	15	3	3	19	16	11	7	4

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #71: Wolfe Road / Fremont Avenue

Signal=Perm+Prot/Rights=Include
Final Vol: 499 1375*** 62
Lanes: 0 1 1 1 0

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	5/1/2017			
348	2		Cycle Time (sec):	170		1	32
	0		Loss Time (sec):	12		0	
407	2		Critical V/C:	0.741		1	21
	0		Avg Crit Del (sec/veh):	41.7		0	
379***	1		Avg Delay (sec/veh):	49.8		1	8***
			LOS:	D			

Lanes: 1 0 2 1 0
Final Vol: 138*** 581 52
Signal=Protect/Rights=Include

Street Name:	Wolfe Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	138	581	52	62	1375	499	348	407	379	8	21	32
Growth 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
Initial Bse:	138	581	52	62	1375	499	348	407	379	8	21	32
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	138	581	52	62	1375	499	348	407	379	8	21	32
User 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
PHF 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
PHF Volume:	138	581	52	62	1375	499	348	407	379	8	21	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	581	52	62	1375	499	348	407	379	8	21	32
PCE 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
MLF 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
FinalVolume:	138	581	52	62	1375	499	348	407	379	8	21	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.95	0.97	0.95	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.74	0.26	0.10	2.11	0.79	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	5139	460	176	3906	1417	3150	3800	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.11	0.11	0.00	0.35	0.35	0.11	0.11	0.22	0.00	0.01	0.02
Crit Moves:	****				****				****	****		
Green Time:	18.9	25.0	25.0	81.0	84.2	84.2	35.9	48.0	48.0	7.0	19.1	19.1
Volume/Cap:	0.71	0.77	0.77	0.74	0.71	0.71	0.52	0.38	0.77	0.11	0.10	0.16
Delay/Veh:	84.6	74.1	74.1	37.1	34.3	34.3	60.2	49.3	63.0	79.2	67.9	68.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	84.6	74.1	74.1	37.1	34.3	34.3	60.2	49.3	63.0	79.2	67.9	68.6
LOS by Move:	F	E	E	D+	C-	C-	E	D	E	E-	E	E
HCM2kAvgQ:	8	11	11	27	26	26	9	8	19	1	1	2

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #71: Wolfe Road / Fremont Avenue

Signal=Perm+Prot/Rights=Include
Final Vol: 499 1402*** 62
Lanes: 0 1 1 1 0

Signal=Protect Rights=Include (Eastbound)
Final Vol: 348, Lanes: 2
Lanes: 0
Final Vol: 427, Lanes: 2
Lanes: 0
Final Vol: 385***, Lanes: 1

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 170
Loss Time (sec): 12
Critical V/C: 0.752
Avg Crit Del (sec/veh): 42.3
Avg Delay (sec/veh): 50.3
LOS: D

Signal=Protect Rights=Include (Westbound)
Lanes: 1, Final Vol: 32
Lanes: 0
Lanes: 1, Final Vol: 21
Lanes: 0
Lanes: 1, Final Vol: 8***

Lanes: 1 0 2 1 0
Final Vol: 141*** 595 52
Signal=Protect/Rights=Include

Street Name:	Wolfe Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	138	581	52	62	1375	499	348	407	379	8	21	32
Growth 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
Initial Bse:	138	581	52	62	1375	499	348	407	379	8	21	32
Added Vol:	3	14	0	0	27	0	0	20	6	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	141	595	52	62	1402	499	348	427	385	8	21	32
User 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
PHF 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
PHF Volume:	141	595	52	62	1402	499	348	427	385	8	21	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	595	52	62	1402	499	348	427	385	8	21	32
PCE 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
MLF 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
FinalVolume:	141	595	52	62	1402	499	348	427	385	8	21	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.95	0.97	0.95	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.75	0.25	0.09	2.13	0.78	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	5149	450	174	3928	1398	3150	3800	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.12	0.12	0.00	0.36	0.36	0.11	0.11	0.22	0.00	0.01	0.02
Crit Moves:	****				****				****	****		
Green Time:	19.0	25.2	25.2	80.8	84.1	84.1	35.9	48.0	48.0	7.0	19.1	19.1
Volume/Cap:	0.72	0.78	0.78	0.75	0.72	0.72	0.52	0.40	0.78	0.11	0.10	0.16
Delay/Veh:	85.4	74.5	74.5	37.6	34.8	34.8	60.2	49.6	63.9	79.2	67.9	68.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	85.4	74.5	74.5	37.6	34.8	34.8	60.2	49.6	63.9	79.2	67.9	68.6
LOS by Move:	F	E	E	D+	C-	C-	E	D	E	E-	E	E
HCM2kAvgQ:	8	11	11	28	27	27	9	8	19	1	1	2

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
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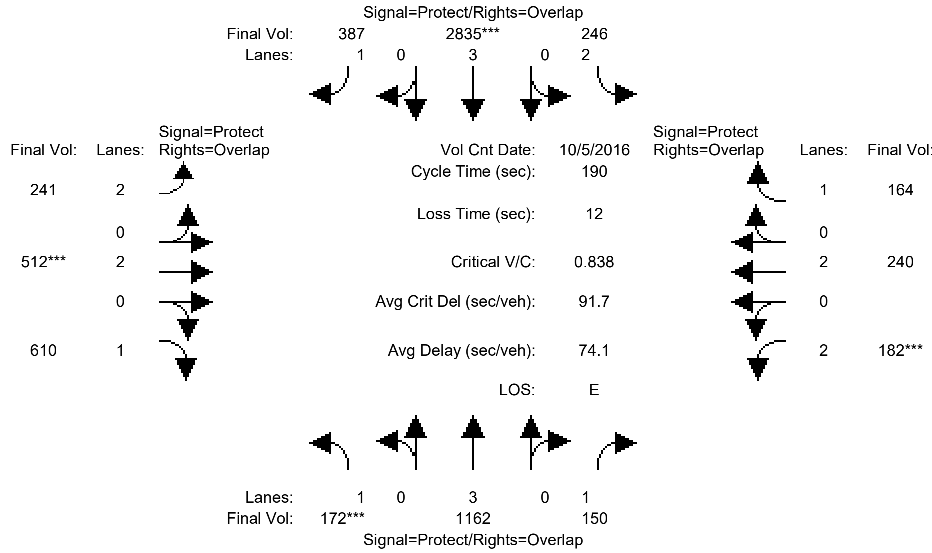
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #72: Lawrence Expressway / Monroe Street (CMP)



Street Name:	Lawrence Expressway						Monroe Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	27	97	97	25	96	96	23	44	44	23	44	44
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 5 Oct 2016 <<												
Base Vol:	172	1453	150	246	3589	387	241	512	610	182	240	164
Growth 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
Initial Bse:	172	1453	150	246	3589	387	241	512	610	182	240	164
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	172	1453	150	246	3589	387	241	512	610	182	240	164
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	172	1162	150	246	2835	387	241	512	610	182	240	164
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	1162	150	246	2835	387	241	512	610	182	240	164
PCE 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
MLF 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
FinalVolume:	172	1162	150	246	2835	387	241	512	610	182	240	164
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1750	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.20	0.09	0.08	0.50	0.22	0.08	0.13	0.35	0.06	0.06	0.09
Crit Moves:	****				****			****		****		
Green Time:	25.4	92.0	113.6	23.7	90.3	111.9	21.6	41.4	66.8	21.6	41.4	65.1
Volume/Cap:	0.74	0.42	0.14	0.63	1.05	0.38	0.67	0.62	0.99	0.51	0.29	0.27
Delay/Veh:	95.6	26.8	10.4	87.1	95.2	30.3	90.8	72.8	99.3	85.4	66.2	48.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	95.6	26.8	10.4	87.1	95.2	30.3	90.8	72.8	99.3	85.4	66.2	48.4
LOS by Move:	F	C	B+	F	F	C	F	E	F	F	E	D
HCM2kAvgQ:	11	11	2	10	67	17	10	14	46	7	6	8

Note: Queue reported is the number of cars per lane.

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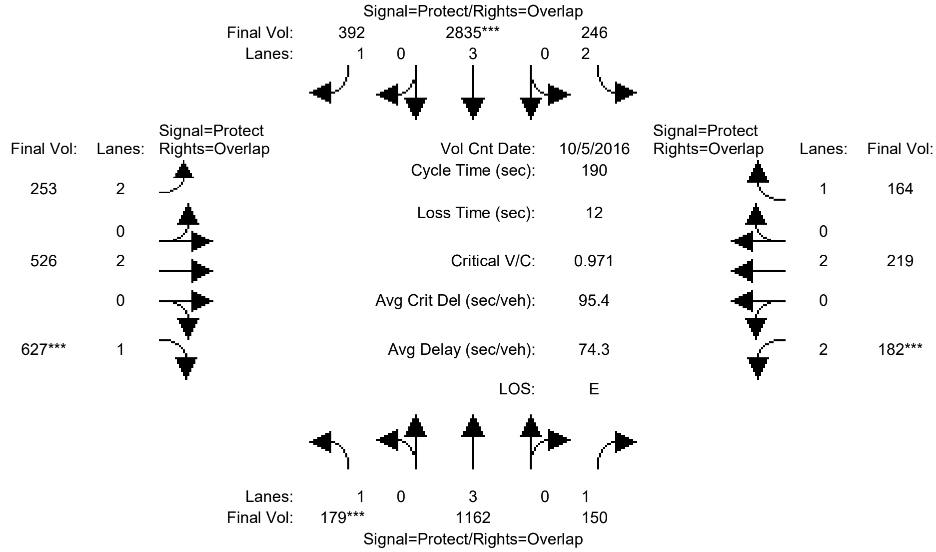
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #72: Lawrence Expressway / Monroe Street (CMP)



Street Name:	Lawrence Expressway						Monroe Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	27	97	97	25	96	96	23	44	44	23	44	44
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 5 Oct 2016 <<												
Base Vol:	172	1453	150	246	3589	387	241	512	610	182	210	164
Growth 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
Initial Bse:	172	1453	150	246	3589	387	241	512	610	182	210	164
Added Vol:	7	0	0	0	0	5	12	14	17	0	9	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	179	1453	150	246	3589	392	253	526	627	182	219	164
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	179	1162	150	246	2835	392	253	526	627	182	219	164
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	179	1162	150	246	2835	392	253	526	627	182	219	164
PCE 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
MLF 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
FinalVolume:	179	1162	150	246	2835	392	253	526	627	182	219	164
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1750	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.20	0.09	0.08	0.50	0.22	0.08	0.14	0.36	0.06	0.06	0.09
Crit Moves:	****				****				****	****		
Green Time:	25.4	92.3	114.0	23.8	90.7	112.2	21.5	41.4	66.8	21.6	41.1	64.9
Volume/Cap:	0.77	0.42	0.14	0.62	1.04	0.38	0.71	0.64	1.02	0.51	0.27	0.27
Delay/Veh:	98.4	26.5	10.2	86.9	93.4	30.3	92.9	73.4	106.7	85.4	66.0	48.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	98.4	26.5	10.2	86.9	93.4	30.3	92.9	73.4	106.7	85.4	66.0	48.6
LOS by Move:	F	C	B+	F	F	C	F	E	F	F	E	D
HCM2kAvgQ:	11	11	2	10	67	18	10	15	48	7	5	8

Note: Queue reported is the number of cars per lane.

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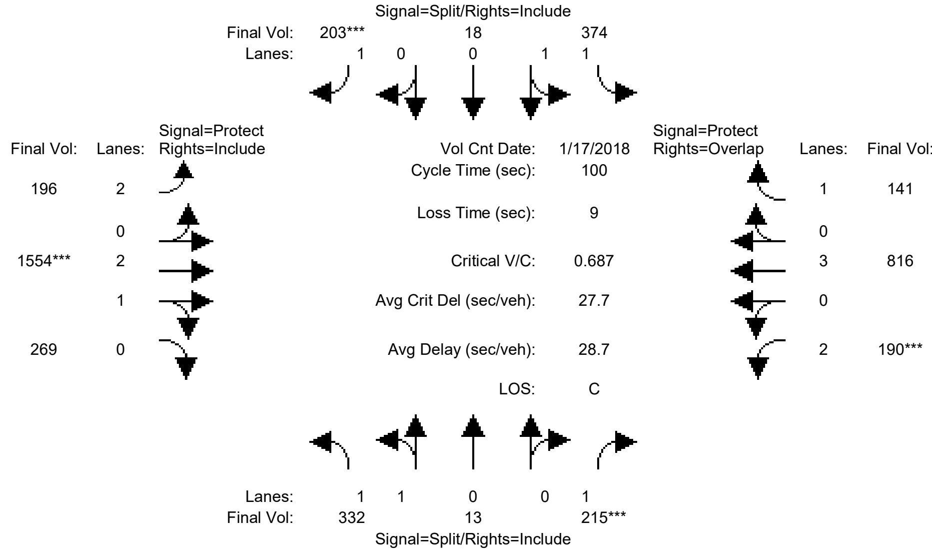
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #73: Lawrence Expressway / El Camino Real (CMP)



Street Name:	Lawrence Expressway						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 17 Jan 2018 <<												
Base Vol:	332	13	215	374	18	203	196	1554	269	190	816	141
Growth 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
Initial Bse:	332	13	215	374	18	203	196	1554	269	190	816	141
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	332	13	215	374	18	203	196	1554	269	190	816	141
User 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
PHF 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
PHF Volume:	332	13	215	374	18	203	196	1554	269	190	816	141
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	332	13	215	374	18	203	196	1554	269	190	816	141
PCE 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
MLF 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
FinalVolume:	332	13	215	374	18	203	196	1554	269	190	816	141
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.95	0.92	0.93	0.95	0.92	0.83	0.99	0.95	0.83	1.00	0.92
Lanes:	1.93	0.07	1.00	1.91	0.09	1.00	2.00	2.54	0.46	2.00	3.00	1.00
Final Sat.:	3416	134	1750	3387	163	1750	3150	4773	826	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.12	0.11	0.11	0.12	0.06	0.33	0.33	0.06	0.14	0.08
Crit Moves:			****			****		****		****		
Green Time:	17.9	17.9	17.9	16.9	16.9	16.9	18.5	47.4	47.4	8.8	37.8	54.6
Volume/Cap:	0.54	0.54	0.69	0.65	0.65	0.69	0.34	0.69	0.69	0.69	0.38	0.15
Delay/Veh:	38.3	38.3	44.7	41.4	41.4	45.7	35.8	21.3	21.3	51.3	22.7	11.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.3	38.3	44.7	41.4	41.4	45.7	35.8	21.3	21.3	51.3	22.7	11.3
LOS by Move:	D+	D+	D	D	D	D	D+	C+	C+	D-	C+	B+
HCM2kAvgQ:	5	5	7	6	6	6	3	15	15	4	6	2

Note: Queue reported is the number of cars per lane.

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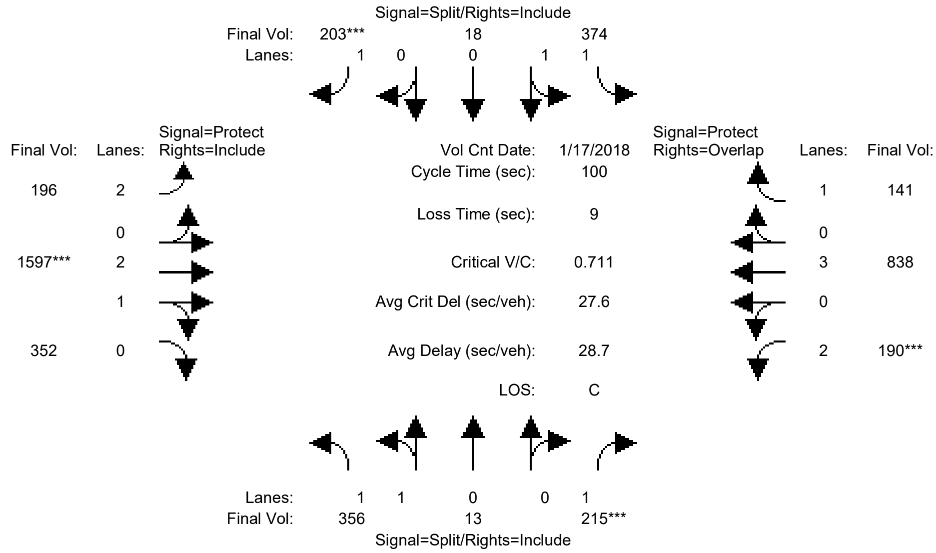
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #73: Lawrence Expressway / El Camino Real (CMP)



Street Name:	Lawrence Expressway						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 17 Jan 2018 <<												
Base Vol:	332	13	215	374	18	203	196	1554	269	190	816	141
Growth 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
Initial Bse:	332	13	215	374	18	203	196	1554	269	190	816	141
Added Vol:	24	0	0	0	0	0	0	43	83	0	22	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	356	13	215	374	18	203	196	1597	352	190	838	141
User 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
PHF 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
PHF Volume:	356	13	215	374	18	203	196	1597	352	190	838	141
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	356	13	215	374	18	203	196	1597	352	190	838	141
PCE 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
MLF 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
FinalVolume:	356	13	215	374	18	203	196	1597	352	190	838	141
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.95	0.92	0.93	0.95	0.92	0.83	0.99	0.95	0.83	1.00	0.92
Lanes:	1.93	0.07	1.00	1.91	0.09	1.00	2.00	2.44	0.56	2.00	3.00	1.00
Final Sat.:	3425	125	1750	3387	163	1750	3150	4587	1011	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.12	0.11	0.11	0.12	0.06	0.35	0.35	0.06	0.15	0.08
Crit Moves:			****			****		****		****		
Green Time:	17.3	17.3	17.3	16.3	16.3	16.3	18.5	48.9	48.9	8.5	38.9	55.2
Volume/Cap:	0.60	0.60	0.71	0.68	0.68	0.71	0.34	0.71	0.71	0.71	0.38	0.15
Delay/Veh:	39.9	39.9	46.7	42.6	42.6	47.7	35.7	20.9	20.9	53.2	22.0	11.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.9	39.9	46.7	42.6	42.6	47.7	35.7	20.9	20.9	53.2	22.0	11.0
LOS by Move:	D	D	D	D	D	D	D+	C+	C+	D-	C+	B+
HCM2kAvgQ:	5	5	7	6	6	6	3	17	17	4	6	2

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #74: Lawrence Expressway / Benton Street

Signal=Protect/Rights=Include
Final Vol: 99 2627*** 398
Lanes: 1 0 3 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
72	1		Vol Cnt Date:	10/3/2018		1	182
			Cycle Time (sec):	190			
	0		Loss Time (sec):	12		0	
199***	2		Critical V/C:	0.709		2	146
	0		Avg Crit Del (sec/veh):	33.0		0	
88	1		Avg Delay (sec/veh):	43.2		1	151***
			LOS:	D			

Lanes: 1 0 3 0 1
Final Vol: 113*** 1300 292
Signal=Protect/Rights=Include

Street Name:	Lawrence Expressway						Benton Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	113	1625	292	398	3325	99	72	199	88	151	146	182
Growth 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
Initial Bse:	113	1625	292	398	3325	99	72	199	88	151	146	182
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	113	1625	292	398	3325	99	72	199	88	151	146	182
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	113	1300	292	398	2627	99	72	199	88	151	146	182
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	113	1300	292	398	2627	99	72	199	88	151	146	182
PCE 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
MLF 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
FinalVolume:	113	1300	292	398	2627	99	72	199	88	151	146	182
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.17	0.23	0.46	0.06	0.04	0.05	0.05	0.09	0.04	0.10
Crit Moves:	****				****			****		****		
Green Time:	17.3	70.5	70.5	70.3	124	123.5	10.5	14.0	14.0	23.1	26.6	26.6
Volume/Cap:	0.71	0.61	0.45	0.61	0.71	0.09	0.74	0.71	0.68	0.71	0.27	0.74
Delay/Veh:	97.6	49.2	45.6	50.6	22.2	12.4	114.5	94.1	99.6	90.7	73.3	89.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	97.6	49.2	45.6	50.6	22.2	12.4	114.5	94.1	99.6	90.7	73.3	89.9
LOS by Move:	F	D	D	D	C+	B	F	F	F	F	E	F
HCM2kAvgQ:	7	20	13	20	32	2	6	7	7	10	4	12

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #74: Lawrence Expressway / Benton Street

Signal=Protect/Rights=Include
Final Vol: 102 2690*** 403
Lanes: 1 0 3 0 1

Signal=Protect Rights=Include (East Bound)
Final Vol: 73*** / Lanes: 1
Lanes: 0
Final Vol: 199 / Lanes: 2
Lanes: 0
Final Vol: 88 / Lanes: 1

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 190
Loss Time (sec): 12
Critical V/C: 0.729
Avg Crit Del (sec/veh): 32.0
Avg Delay (sec/veh): 43.4
LOS: D

Signal=Protect Rights=Include (West Bound)
Lanes: 1 / Final Vol: 184***
Lanes: 0
Lanes: 2 / Final Vol: 146
Lanes: 0
Lanes: 1 / Final Vol: 151

Lanes: 1 0 3 0 1
Final Vol: 113*** 1318 292
Signal=Protect/Rights=Include

Street Name:	Lawrence Expressway						Benton Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	113	1625	292	398	3325	99	72	199	88	151	146	182
Growth 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
Initial Bse:	113	1625	292	398	3325	99	72	199	88	151	146	182
Added Vol:	0	23	0	5	80	3	1	0	0	0	0	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	113	1648	292	403	3405	102	73	199	88	151	146	184
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	113	1318	292	403	2690	102	73	199	88	151	146	184
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	113	1318	292	403	2690	102	73	199	88	151	146	184
PCE 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
MLF 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
FinalVolume:	113	1318	292	403	2690	102	73	199	88	151	146	184
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.17	0.23	0.47	0.06	0.04	0.05	0.05	0.09	0.04	0.11
Crit Moves:	****				****		****					****
Green Time:	16.8	70.0	70.0	69.7	123	122.9	10.9	14.5	14.5	23.8	27.4	27.4
Volume/Cap:	0.73	0.63	0.45	0.63	0.73	0.09	0.73	0.69	0.66	0.69	0.27	0.73
Delay/Veh:	100.5	49.9	46.0	51.4	23.2	12.6	111.7	92.3	96.9	88.6	72.6	88.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	100.5	49.9	46.0	51.4	23.2	12.6	111.7	92.3	96.9	88.6	72.6	88.1
LOS by Move:	F	D	D	D-	C	B	F	F	F	F	E	F
HCM2kAvgQ:	7	20	13	20	34	2	6	7	6	10	4	12

Note: Queue reported is the number of cars per lane.

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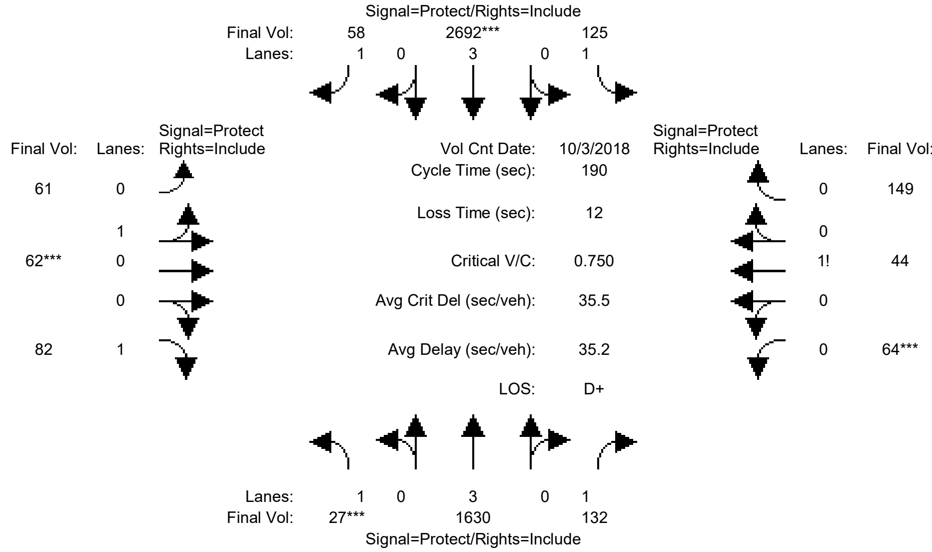
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #75: Lawrence Expressway / Lochinvar Avenue



Street Name:	Lawrence Expressway						Lochinvar Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	27	2037	132	125	3408	58	61	62	82	64	44	149
Growth 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
Initial Bse:	27	2037	132	125	3408	58	61	62	82	64	44	149
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	2037	132	125	3408	58	61	62	82	64	44	149
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	27	1630	132	125	2692	58	61	62	82	64	44	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	1630	132	125	2692	58	61	62	82	64	44	149
PCE 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
MLF 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
FinalVolume:	27	1630	132	125	2692	58	61	62	82	64	44	149
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.50	0.50	1.00	0.25	0.17	0.58
Final Sat.:	1750	5700	1750	1750	5700	1750	893	907	1750	436	300	1015
Capacity Analysis Module:												
Vol/Sat:	0.02	0.29	0.08	0.07	0.47	0.03	0.07	0.07	0.05	0.15	0.15	0.15
Crit Moves:	****				****			****		****		
Green Time:	7.0	99.6	99.6	24.9	117	117.5	17.0	17.0	17.0	36.5	36.5	36.5
Volume/Cap:	0.42	0.55	0.14	0.55	0.76	0.05	0.76	0.76	0.52	0.76	0.76	0.76
Delay/Veh:	93.9	30.3	23.3	80.0	27.3	14.3	103.8	104	85.9	82.6	82.6	82.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	93.9	30.3	23.3	80.0	27.3	14.3	103.8	104	85.9	82.6	82.6	82.6
LOS by Move:	F	C	C	E-	C	B	F	F	F	F	F	F
HCM2kAvgQ:	2	20	4	7	37	1	9	9	5	17	17	17

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #75: Lawrence Expressway / Lochinvar Avenue

Signal=Protect/Rights=Include
Final Vol: 61 2748*** 130
Lanes: 1 0 3 0 1

Signal=Protect
Rights=Include

Final Vol:	Lanes:			Lanes:	Final Vol:
62	0			0	151
	1	Vol Cnt Date:	10/3/2018	0	
62***	0	Cycle Time (sec):	190	1!	44
	0	Loss Time (sec):	12	0	
82	1	Critical V/C:	0.763	0	64***
		Avg Crit Del (sec/veh):	35.8		
		Avg Delay (sec/veh):	35.5		
		LOS:	D+		

Signal=Protect
Rights=Include

Lanes: 1 0 3 0 1
Final Vol: 27*** 1646 132
Signal=Protect/Rights=Include

Street Name:	Lawrence Expressway						Lochinvar Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	27	2037	132	125	3408	58	61	62	82	64	44	149
Growth 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
Initial Bse:	27	2037	132	125	3408	58	61	62	82	64	44	149
Added Vol:	0	21	0	5	71	3	1	0	0	0	0	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	2058	132	130	3479	61	62	62	82	64	44	151
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	27	1646	132	130	2748	61	62	62	82	64	44	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	1646	132	130	2748	61	62	62	82	64	44	151
PCE 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
MLF 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
FinalVolume:	27	1646	132	130	2748	61	62	62	82	64	44	151
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.50	0.50	1.00	0.25	0.17	0.58
Final Sat.:	1750	5700	1750	1750	5700	1750	900	900	1750	432	297	1020
Capacity Analysis Module:												
Vol/Sat:	0.02	0.29	0.08	0.07	0.48	0.03	0.07	0.07	0.05	0.15	0.15	0.15
Crit Moves:	****				****			****		****		
Green Time:	7.0	99.4	99.4	25.6	118	117.9	16.9	16.9	16.9	36.2	36.2	36.2
Volume/Cap:	0.42	0.55	0.14	0.55	0.78	0.06	0.78	0.78	0.53	0.78	0.78	0.78
Delay/Veh:	93.9	30.6	23.4	79.7	27.5	14.2	105.7	106	86.2	84.0	84.0	84.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	93.9	30.6	23.4	79.7	27.5	14.2	105.7	106	86.2	84.0	84.0	84.0
LOS by Move:	F	C	C	E-	C	B	F	F	F	F	F	F
HCM2kAvgQ:	2	20	4	7	38	1	9	9	6	17	17	17

Note: Queue reported is the number of cars per lane.

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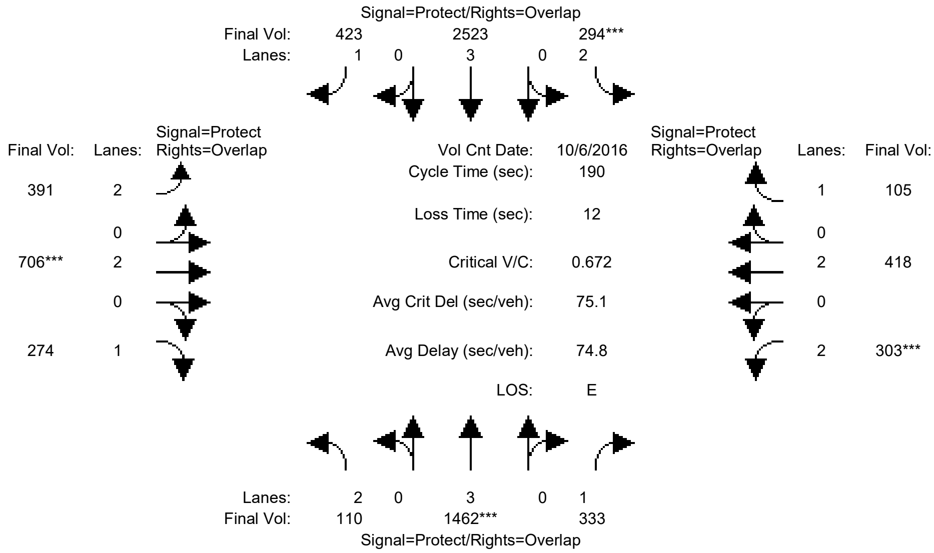
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #76: Lawrence Expressway / Homestead Road (CMP)



Street Name:	Lawrence Expressway						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	18	86	86	30	97	97	27	46	46	27	46	46
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 6 Oct 2016 <<												
Base Vol:	110	1828	333	294	3194	423	391	706	274	303	418	105
Growth 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
Initial Bse:	110	1828	333	294	3194	423	391	706	274	303	418	105
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	110	1828	333	294	3194	423	391	706	274	303	418	105
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	110	1462	333	294	2523	423	391	706	274	303	418	105
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1462	333	294	2523	423	391	706	274	303	418	105
PCE 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
MLF 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
FinalVolume:	110	1462	333	294	2523	423	391	706	274	303	418	105
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.26	0.19	0.09	0.44	0.24	0.12	0.19	0.16	0.10	0.11	0.06
Crit Moves:		****		****				****		****		
Green Time:	17.2	81.3	106.8	28.4	92.5	118.0	25.5	43.5	60.6	25.5	43.5	71.8
Volume/Cap:	0.39	0.60	0.34	0.63	0.91	0.39	0.92	0.81	0.49	0.72	0.48	0.16
Delay/Veh:	92.8	66.7	44.4	92.3	82.5	40.1	111.9	79.2	55.9	89.1	67.6	41.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	92.8	66.7	44.4	92.3	82.5	40.1	111.9	79.2	55.9	89.1	67.6	41.5
LOS by Move:	F	E	D	F	F	D	F	E-	E+	F	E	D
HCM2kAvgQ:	4	27	18	10	50	23	16	21	14	12	11	4

Note: Queue reported is the number of cars per lane.

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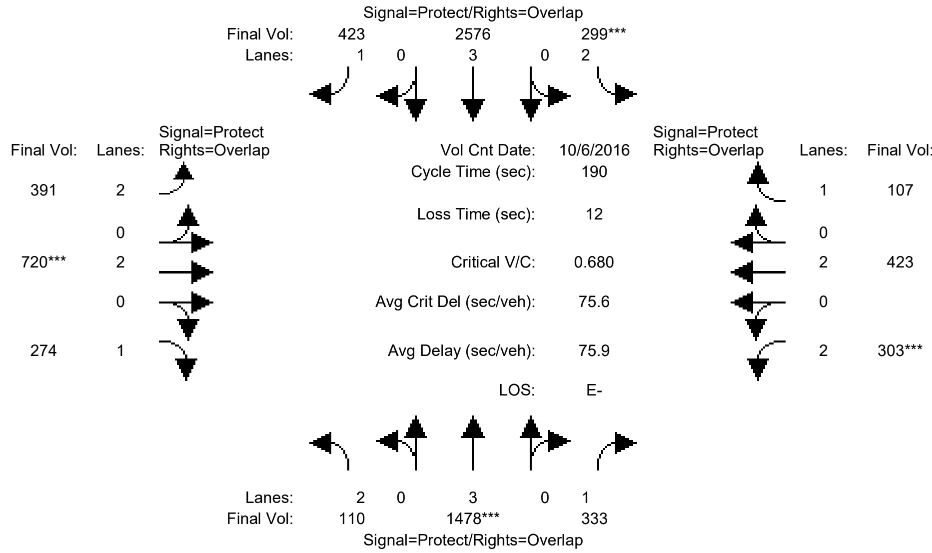
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #76: Lawrence Expressway / Homestead Road (CMP)



Street Name:	Lawrence Expressway						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	18	86	86	30	97	97	27	46	46	27	46	46
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 6 Oct 2016 <<												
Base Vol:	110	1828	333	294	3194	423	391	706	274	303	418	105
Growth 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
Initial Bse:	110	1828	333	294	3194	423	391	706	274	303	418	105
Added Vol:	0	19	0	5	67	0	0	14	0	0	5	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	110	1847	333	299	3261	423	391	720	274	303	423	107
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	110	1478	333	299	2576	423	391	720	274	303	423	107
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1478	333	299	2576	423	391	720	274	303	423	107
PCE 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
MLF 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
FinalVolume:	110	1478	333	299	2576	423	391	720	274	303	423	107
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.26	0.19	0.09	0.45	0.24	0.12	0.19	0.16	0.10	0.11	0.06
Crit Moves:		****		****				****		****		
Green Time:	17.2	81.3	106.8	28.4	92.5	118.0	25.5	43.5	60.6	25.5	43.5	71.8
Volume/Cap:	0.39	0.61	0.34	0.64	0.93	0.39	0.92	0.83	0.49	0.72	0.49	0.16
Delay/Veh:	92.8	67.0	44.4	92.6	85.1	40.1	111.9	80.4	55.9	89.1	67.7	41.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	92.8	67.0	44.4	92.6	85.1	40.1	111.9	80.4	55.9	89.1	67.7	41.5
LOS by Move:	F	E	D	F	F	D	F	F	E+	F	E	D
HCM2kAvgQ:	4	27	18	10	52	23	16	22	14	12	11	4

Note: Queue reported is the number of cars per lane.

Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #77: Lawrence Expressway / Lehigh Drive

Signal=Protect/Rights=Include
Final Vol: 96 2737*** 28
Lanes: 1 0 3 0 1

Signal=Protect
Rights=Include
Final Vol: Lanes:
210 1
1
0 0
0
547*** 1

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 190
Loss Time (sec): 12
Critical V/C: 0.898
Avg Crit Del (sec/veh): 57.7
Avg Delay (sec/veh): 50.0
LOS: D

Signal=Protect
Rights=Include
Lanes: Final Vol:
1 21
0
0 0
0
1 10***

Lanes: 2 0 3 0 1
Final Vol: 135*** 1463 27
Signal=Protect/Rights=Include

Street Name:	Lawrence Expressway						Lehigh Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	135	1829	27	28	3464	96	210	0	547	10	0	21
Growth 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
Initial Bse:	135	1829	27	28	3464	96	210	0	547	10	0	21
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	135	1829	27	28	3464	96	210	0	547	10	0	21
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	135	1463	27	28	2737	96	210	0	547	10	0	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	135	1463	27	28	2737	96	210	0	547	10	0	21
PCE 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
MLF 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
FinalVolume:	135	1463	27	28	2737	96	210	0	547	10	0	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.93	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	2.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	3150	5700	1750	1750	5700	1750	3550	0	1750	1750	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.26	0.02	0.02	0.48	0.05	0.06	0.00	0.31	0.01	0.00	0.01
Crit Moves:	****				****				****	****		
Green Time:	8.8	93.6	93.6	13.4	98.3	98.3	59.0	0.0	64.0	7.0	0.0	7.0
Volume/Cap:	0.93	0.52	0.03	0.23	0.93	0.11	0.19	0.00	0.93	0.16	0.00	0.33
Delay/Veh:	143.7	33.1	24.9	84.3	48.5	23.5	48.1	0.0	82.0	89.8	0.0	92.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	143.7	33.1	24.9	84.3	48.5	23.5	48.1	0.0	82.0	89.8	0.0	92.1
LOS by Move:	F	C-	C	F	D	C	D	A	F	F	A	F
HCM2kAvgQ:	5	18	1	2	48	3	5	0	36	1	0	2

Note: Queue reported is the number of cars per lane.

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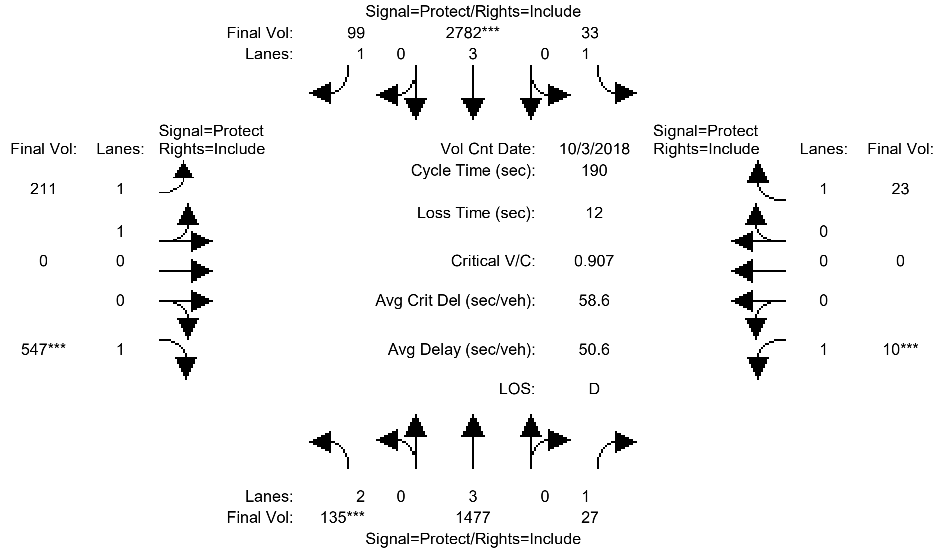
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #77: Lawrence Expressway / Lehigh Drive



Street Name:	Lawrence Expressway						Lehigh Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	135	1829	27	28	3464	96	210	0	547	10	0	21
Growth 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
Initial Bse:	135	1829	27	28	3464	96	210	0	547	10	0	21
Added Vol:	0	17	0	5	58	3	1	0	0	0	0	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	135	1846	27	33	3522	99	211	0	547	10	0	23
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	135	1477	27	33	2782	99	211	0	547	10	0	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	135	1477	27	33	2782	99	211	0	547	10	0	23
PCE 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
MLF 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
FinalVolume:	135	1477	27	33	2782	99	211	0	547	10	0	23
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.93	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	3.00	1.00	1.00	3.00	1.00	2.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	3150	5700	1750	1750	5700	1750	3550	0	1750	1750	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.26	0.02	0.02	0.49	0.06	0.06	0.00	0.31	0.01	0.00	0.01
Crit Moves:	****				****				****	****		
Green Time:	8.7	94.2	94.2	13.4	99.0	99.0	57.6	0.0	63.4	7.0	0.0	7.0
Volume/Cap:	0.94	0.52	0.03	0.27	0.94	0.11	0.20	0.00	0.94	0.16	0.00	0.36
Delay/Veh:	146.6	32.7	24.5	84.8	49.2	23.2	49.1	0.0	84.3	89.8	0.0	92.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	146.6	32.7	24.5	84.8	49.2	23.2	49.1	0.0	84.3	89.8	0.0	92.7
LOS by Move:	F	C-	C	F	D	C	D	A	F	F	A	F
HCM2kAvgQ:	5	19	1	2	49	3	5	0	37	1	0	2

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #78: Lawrence Expressway / Pruneridge Avenue

Signal=Protect/Rights=Overlap
Final Vol: 117 2475 487***
Lanes: 1 0 3 0 2

Signal=Protect
Rights=Overlap

Final Vol: Lanes:
201 2
0
289*** 2
0
246 1

Vol Cnt Date: 1/11/2018
Cycle Time (sec): 190
Loss Time (sec): 12
Critical V/C: 0.607
Avg Crit Del (sec/veh): 56.3
Avg Delay (sec/veh): 46.6
LOS: D

Signal=Protect
Rights=Overlap

Lanes: Final Vol:
1 187
0
2 137
0
2 310***

Lanes: 2 0 3 0 1
Final Vol: 111 1367*** 259
Signal=Protect/Rights=Overlap

Street Name:	Lawrence Expressway						Pruneridge Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	18	84	84	40	106	106	16	29	29	21	34	34
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 11 Jan 2018 <<												
Base Vol:	111	1709	259	487	3133	117	201	289	246	310	137	187
Growth 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
Initial Bse:	111	1709	259	487	3133	117	201	289	246	310	137	187
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	111	1709	259	487	3133	117	201	289	246	310	137	187
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	111	1367	259	487	2475	117	201	289	246	310	137	187
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	1367	259	487	2475	117	201	289	246	310	137	187
PCE 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
MLF 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
FinalVolume:	111	1367	259	487	2475	117	201	289	246	310	137	187
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.24	0.15	0.15	0.43	0.07	0.06	0.08	0.14	0.10	0.04	0.11
Crit Moves:		****		****				****		****		
Green Time:	18.0	84.0	109.0	40.0	106	123.3	17.3	29.0	47.0	25.0	36.7	76.7
Volume/Cap:	0.37	0.54	0.26	0.73	0.78	0.10	0.70	0.50	0.57	0.75	0.19	0.26
Delay/Veh:	81.5	39.1	20.4	74.3	34.1	12.6	91.4	74.5	64.4	86.8	64.3	38.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	81.5	39.1	20.4	74.3	34.1	12.6	91.4	74.5	64.4	86.8	64.3	38.0
LOS by Move:	F	D	C+	E	C-	B	F	E	E	F	E	D+
HCM2kAvgQ:	4	19	8	15	35	3	8	8	14	12	3	8

Note: Queue reported is the number of cars per lane.

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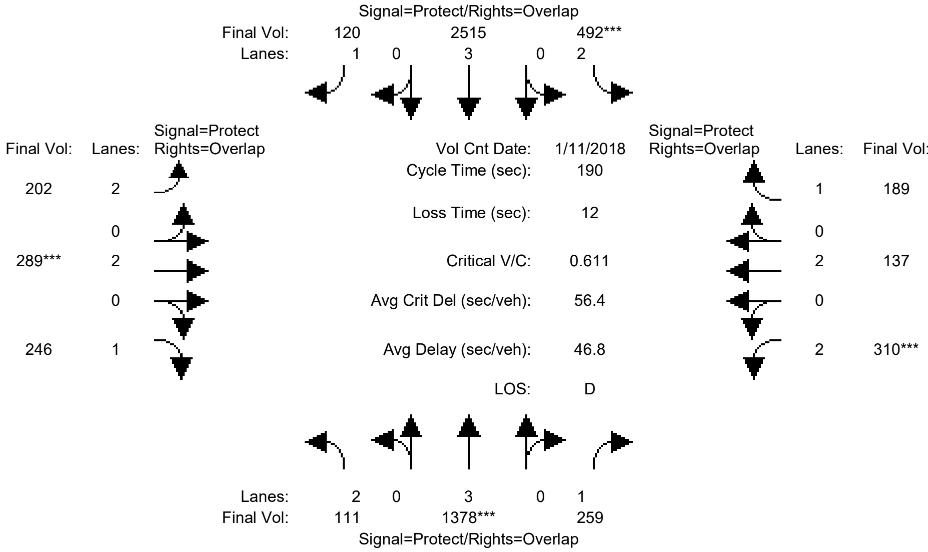
Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #78: Lawrence Expressway / Pruneridge Avenue



Street Name:	Lawrence Expressway						Pruneridge Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	18	84	84	40	106	106	16	29	29	21	34	34
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 11 Jan 2018 <<												
Base Vol:	111	1709	259	487	3133	117	201	289	246	310	137	187
Growth 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
Initial Bse:	111	1709	259	487	3133	117	201	289	246	310	137	187
Added Vol:	0	14	0	5	50	3	1	0	0	0	0	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	111	1723	259	492	3183	120	202	289	246	310	137	189
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	111	1378	259	492	2515	120	202	289	246	310	137	189
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	1378	259	492	2515	120	202	289	246	310	137	189
PCE 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
MLF 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
FinalVolume:	111	1378	259	492	2515	120	202	289	246	310	137	189
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.24	0.15	0.16	0.44	0.07	0.06	0.08	0.14	0.10	0.04	0.11
Crit Moves:		****		****				****		****		
Green Time:	18.0	84.0	109.0	40.0	106	123.3	17.3	29.0	47.0	25.0	36.7	76.7
Volume/Cap:	0.37	0.55	0.26	0.74	0.79	0.11	0.71	0.50	0.57	0.75	0.19	0.27
Delay/Veh:	81.5	39.3	20.4	74.7	34.6	12.6	91.7	74.5	64.4	86.8	64.3	38.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	81.5	39.3	20.4	74.7	34.6	12.6	91.7	74.5	64.4	86.8	64.3	38.1
LOS by Move:	F	D	C+	E	C-	B	F	E	E	F	E	D+
HCM2kAvgQ:	4	19	8	15	36	3	8	8	14	12	3	8

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #79: Calabazas Boulevard / El Camino Real

Signal=Protect/Rights=Include
Final Vol: 94 120*** 102
Lanes: 0 1 0 0 1

Signal=Protect
Rights=Include
Final Vol: Lanes:
88 1
0
1481*** 3
0
31 1

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 130
Loss Time (sec): 12
Critical V/C: 0.506
Avg Crit Del (sec/veh): 27.7
Avg Delay (sec/veh): 27.8
LOS: C

Signal=Protect
Rights=Include
Lanes: Final Vol:
0 111
1
2 945
0
1 121***

Lanes: 1 0 0 1 0
Final Vol: 20*** 56 67
Signal=Protect/Rights=Include

Street Name:	Calabazas Boulevard						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	20	56	67	102	120	94	88	1481	31	121	945	111
Growth 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
Initial Bse:	20	56	67	102	120	94	88	1481	31	121	945	111
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	56	67	102	120	94	88	1481	31	121	945	111
User 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
PHF 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
PHF Volume:	20	56	67	102	120	94	88	1481	31	121	945	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	56	67	102	120	94	88	1481	31	121	945	111
PCE 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
MLF 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
FinalVolume:	20	56	67	102	120	94	88	1481	31	121	945	111
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92	0.92	0.99	0.95
Lanes:	1.00	0.46	0.54	1.00	0.56	0.44	1.00	3.00	1.00	1.00	2.67	0.33
Final Sat.:	1750	820	980	1750	1009	791	1750	5700	1750	1750	5011	589
Capacity Analysis Module:												
Vol/Sat:	0.01	0.07	0.07	0.06	0.12	0.12	0.05	0.26	0.02	0.07	0.19	0.19
Crit Moves:	****				****			****		****		
Green Time:	7.0	20.7	20.7	15.7	29.5	29.5	18.1	64.4	64.4	17.1	63.4	63.4
Volume/Cap:	0.21	0.43	0.43	0.48	0.52	0.52	0.36	0.52	0.04	0.52	0.39	0.39
Delay/Veh:	60.0	50.3	50.3	55.1	45.4	45.4	51.6	22.5	16.9	54.8	21.1	21.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	60.0	50.3	50.3	55.1	45.4	45.4	51.6	22.5	16.9	54.8	21.1	21.1
LOS by Move:	E+	D	D	E+	D	D	D-	C+	B	D-	C+	C+
HCM2kAvgQ:	1	5	5	5	8	8	3	13	1	5	9	9

Note: Queue reported is the number of cars per lane.

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Cityline Sunnyvale TIA
SJ17-1787
Existing Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #79: Calabazas Boulevard / El Camino Real

Signal=Protect/Rights=Include

Final Vol: 95 120*** 102

Lanes: 0 1 0 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	10/2/2018			
91	1		Cycle Time (sec):	130		0	111
	0		Loss Time (sec):	12		1	
1519***	3		Critical V/C:	0.515		2	964
	0		Avg Crit Del (sec/veh):	27.6		0	
34	1		Avg Delay (sec/veh):	27.7		1	121***
			LOS:	C			

Lanes: 1 0 0 1 0

Final Vol: 21*** 56 67

Signal=Protect/Rights=Include

Street Name:	Calabazas Boulevard						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	20	56	67	102	120	94	88	1481	31	121	945	111
Growth 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
Initial Bse:	20	56	67	102	120	94	88	1481	31	121	945	111
Added Vol:	1	0	0	0	0	1	3	38	3	0	19	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	21	56	67	102	120	95	91	1519	34	121	964	111
User 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
PHF 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
PHF Volume:	21	56	67	102	120	95	91	1519	34	121	964	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	56	67	102	120	95	91	1519	34	121	964	111
PCE 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
MLF 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
FinalVolume:	21	56	67	102	120	95	91	1519	34	121	964	111
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92	0.92	0.99	0.95
Lanes:	1.00	0.46	0.54	1.00	0.56	0.44	1.00	3.00	1.00	1.00	2.68	0.32
Final Sat.:	1750	820	980	1750	1005	795	1750	5700	1750	1750	5021	578
Capacity Analysis Module:												
Vol/Sat:	0.01	0.07	0.07	0.06	0.12	0.12	0.05	0.27	0.02	0.07	0.19	0.19
Crit Moves:	****				****			****		****		
Green Time:	7.0	20.6	20.6	15.6	29.1	29.1	17.9	65.0	65.0	16.9	63.9	63.9
Volume/Cap:	0.22	0.43	0.43	0.49	0.53	0.53	0.38	0.53	0.04	0.53	0.39	0.39
Delay/Veh:	60.1	50.5	50.5	55.2	45.8	45.8	51.9	22.3	16.6	55.3	20.9	20.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	60.1	50.5	50.5	55.2	45.8	45.8	51.9	22.3	16.6	55.3	20.9	20.9
LOS by Move:	E	D	D	E+	D	D	D-	C+	B	E+	C+	C+
HCM2kAvgQ:	1	5	5	5	8	8	3	13	1	5	9	9

Note: Queue reported is the number of cars per lane.

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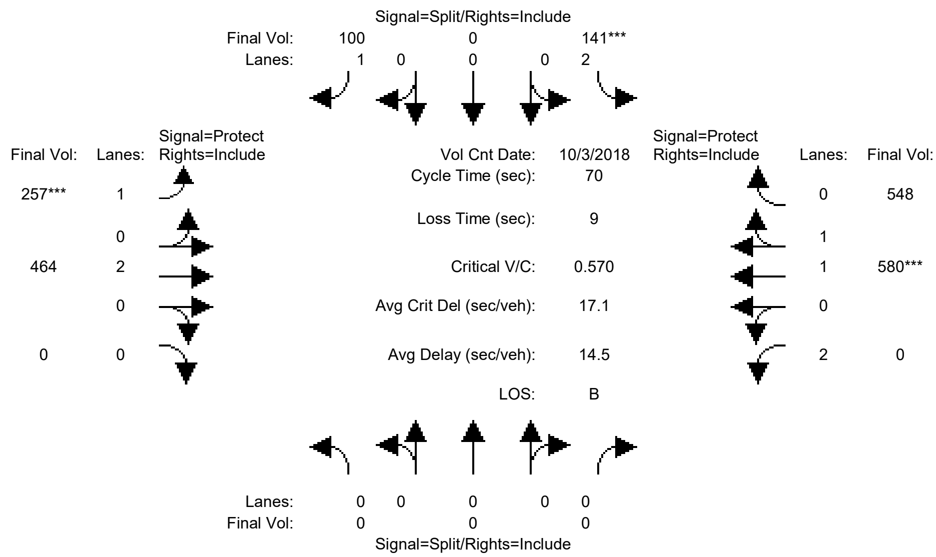
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #1: Ellis Street / Middlefield Road



Street Name:	Ellis Street						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	130	0	100	257	391	0	0	555	544
Growth 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
Initial Bse:	0	0	0	130	0	100	257	391	0	0	555	544
Added Vol:	0	0	0	11	0	0	0	73	0	0	25	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	141	0	100	257	464	0	0	580	548
User 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
PHF 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
PHF Volume:	0	0	0	141	0	100	257	464	0	0	580	548
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	141	0	100	257	464	0	0	580	548
PCE 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
MLF 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
FinalVolume:	0	0	0	141	0	100	257	464	0	0	580	548
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.95
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	2.00	1.00	1.00
Final Sat.:	0	0	0	3150	0	1750	1750	3800	0	3150	1901	1796
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.06	0.15	0.12	0.00	0.00	0.31	0.31
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	10.0	16.6	51.0	0.0	0.0	34.4	34.4
Volume/Cap:	0.00	0.00	0.00	0.31	0.00	0.40	0.62	0.17	0.00	0.00	0.62	0.62
Delay/Veh:	0.0	0.0	0.0	27.3	0.0	28.3	26.8	3.0	0.0	0.0	13.7	13.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	27.3	0.0	28.3	26.8	3.0	0.0	0.0	13.7	13.7
LOS by Move:	A	A	A	C	A	C	C	A	A	A	B	B
HCM2kAvgQ:	0	0	0	2	0	3	5	2	0	0	9	9

Note: Queue reported is the number of cars per lane.

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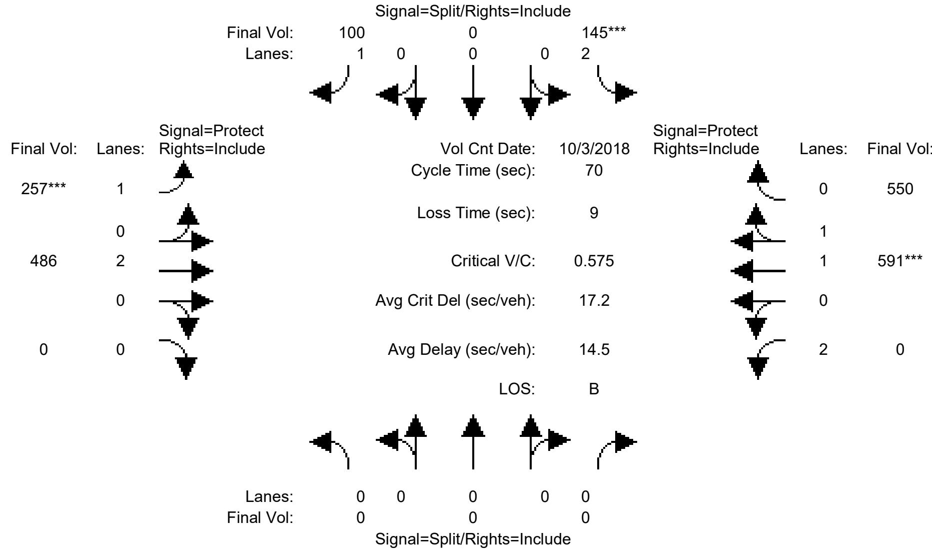
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #1: Ellis Street / Middlefield Road



Street Name:	Ellis Street						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	130	0	100	257	391	0	0	555	544
Growth 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
Initial Bse:	0	0	0	130	0	100	257	391	0	0	555	544
Added Vol:	0	0	0	15	0	0	0	95	0	0	36	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	145	0	100	257	486	0	0	591	550
User 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
PHF 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
PHF Volume:	0	0	0	145	0	100	257	486	0	0	591	550
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	145	0	100	257	486	0	0	591	550
PCE 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
MLF 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
FinalVolume:	0	0	0	145	0	100	257	486	0	0	591	550
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.95
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	2.00	1.01	0.99
Final Sat.:	0	0	0	3150	0	1750	1750	3800	0	3150	1915	1782
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.05	0.00	0.06	0.15	0.13	0.00	0.00	0.31	0.31
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	10.0	16.4	51.0	0.0	0.0	34.6	34.6
Volume/Cap:	0.00	0.00	0.00	0.32	0.00	0.40	0.63	0.18	0.00	0.00	0.63	0.63
Delay/Veh:	0.0	0.0	0.0	27.4	0.0	28.3	27.0	3.0	0.0	0.0	13.7	13.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	27.4	0.0	28.3	27.0	3.0	0.0	0.0	13.7	13.7
LOS by Move:	A	A	A	C	A	C	C	A	A	A	B	B
HCM2kAvgQ:	0	0	0	2	0	3	5	2	0	0	9	9

Note: Queue reported is the number of cars per lane.

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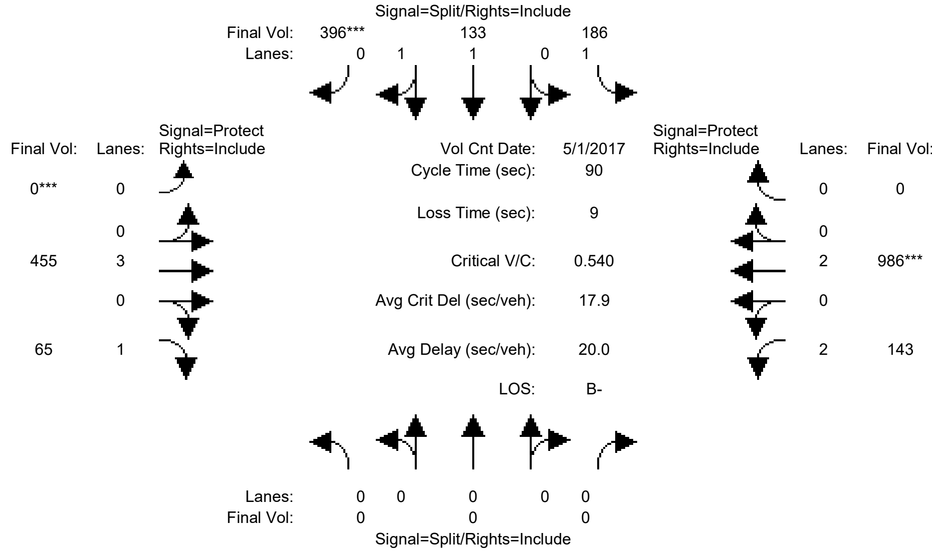
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #2: SR 237 WB / Middlefield Road



Street Name:	SR 237 WB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	10	10	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	0	0	0	148	133	389	0	371	65	137	964	0
Growth 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
Initial Bse:	0	0	0	148	133	389	0	371	65	137	964	0
Added Vol:	0	0	0	38	0	7	0	84	0	6	22	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	186	133	396	0	455	65	143	986	0
User 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
PHF 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
PHF Volume:	0	0	0	186	133	396	0	455	65	143	986	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	186	133	396	0	455	65	143	986	0
PCE 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
MLF 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
FinalVolume:	0	0	0	186	133	396	0	455	65	143	986	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1750	1900	1750	0	5700	1750	3150	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.11	0.07	0.23	0.00	0.08	0.04	0.05	0.26	0.00
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	37.7	37.7	37.7	0.0	25.5	25.5	17.8	43.3	0.0
Volume/Cap:	0.00	0.00	0.00	0.25	0.17	0.54	0.00	0.28	0.13	0.23	0.54	0.00
Delay/Veh:	0.0	0.0	0.0	17.2	16.3	20.2	0.0	25.3	24.2	30.5	16.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	17.2	16.3	20.2	0.0	25.3	24.2	30.5	16.7	0.0
LOS by Move:	A	A	A	B	B	C+	A	C	C	C	B	A
HCM2kAvgQ:	0	0	0	4	2	9	0	3	1	2	9	0

Note: Queue reported is the number of cars per lane.

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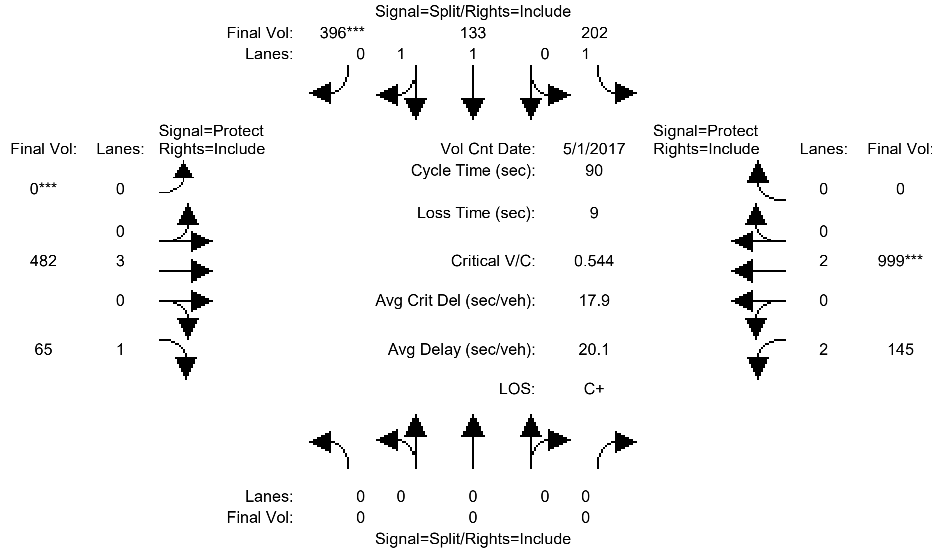
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #2: SR 237 WB / Middlefield Road



Street Name:	SR 237 WB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	10	10	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	0	0	0	148	133	389	0	371	65	137	964	0
Growth 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
Initial Bse:	0	0	0	148	133	389	0	371	65	137	964	0
Added Vol:	0	0	0	54	0	7	0	111	0	8	35	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	202	133	396	0	482	65	145	999	0
User 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
PHF 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
PHF Volume:	0	0	0	202	133	396	0	482	65	145	999	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	202	133	396	0	482	65	145	999	0
PCE 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
MLF 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
FinalVolume:	0	0	0	202	133	396	0	482	65	145	999	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1750	1900	1750	0	5700	1750	3150	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.07	0.23	0.00	0.08	0.04	0.05	0.26	0.00
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	37.5	37.5	37.5	0.0	25.6	25.6	17.9	43.5	0.0
Volume/Cap:	0.00	0.00	0.00	0.28	0.17	0.54	0.00	0.30	0.13	0.23	0.54	0.00
Delay/Veh:	0.0	0.0	0.0	17.5	16.5	20.5	0.0	25.3	24.0	30.4	16.6	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	17.5	16.5	20.5	0.0	25.3	24.0	30.4	16.6	0.0
LOS by Move:	A	A	A	B	B	C+	A	C	C	C	B	A
HCM2kAvgQ:	0	0	0	4	2	9	0	3	1	2	9	0

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #3: SR 237 EB / Middlefield Road

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Protect Rights=Include (Eastbound)
Final Vol: 267*** Lanes: 2 (L); Lanes: 0; Final Vol: 378 Lanes: 2 (T); Lanes: 0; Final Vol: 0 Lanes: 0 (R)

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 95
Loss Time (sec): 9
Critical V/C: 0.366
Avg Crit Del (sec/veh): 25.7
Avg Delay (sec/veh): 22.9
LOS: C+

Signal=Protect Rights=Include (Westbound)
Lanes: 1 Final Vol: 134 (R); Lanes: 0; Lanes: 4 Final Vol: 814*** (T); Lanes: 0; Lanes: 0 Final Vol: 0 (L)

Lanes: 2 0 1 1 0
Final Vol: 318 284*** 232
Signal=Split/Rights=Include

Street Name:	SR 237 EB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	318	284	216	0	0	0	226	297	0	0	786	110
Growth 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
Initial Bse:	318	284	216	0	0	0	226	297	0	0	786	110
Added Vol:	0	0	16	0	0	0	41	81	0	0	28	24
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	318	284	232	0	0	0	267	378	0	0	814	134
User 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
PHF 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
PHF Volume:	318	284	232	0	0	0	267	378	0	0	814	134
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	318	284	232	0	0	0	267	378	0	0	814	134
PCE 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
MLF 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
FinalVolume:	318	284	232	0	0	0	267	378	0	0	814	134
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.95	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	1.08	0.92	0.00	0.00	0.00	2.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	3150	2035	1663	0	0	0	3150	3800	0	0	7600	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.14	0.14	0.00	0.00	0.00	0.08	0.10	0.00	0.00	0.11	0.08
Crit Moves:		****					****				****	
Green Time:	36.2	36.2	36.2	0.0	0.0	0.0	22.0	49.8	0.0	0.0	27.8	27.8
Volume/Cap:	0.26	0.37	0.37	0.00	0.00	0.00	0.37	0.19	0.00	0.00	0.37	0.26
Delay/Veh:	20.4	21.3	21.3	0.0	0.0	0.0	31.0	12.0	0.0	0.0	26.7	26.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.4	21.3	21.3	0.0	0.0	0.0	31.0	12.0	0.0	0.0	26.7	26.0
LOS by Move:	C+	C+	C+	A	A	A	C	B+	A	A	C	C
HCM2kAvgQ:	4	6	6	0	0	0	4	3	0	0	5	3

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #3: SR 237 EB / Middlefield Road

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Protect Rights=Include (West approach)
Final Vol: 267*** Lanes: 2
Lanes: 0
Final Vol: 420 Lanes: 2
Lanes: 0
Final Vol: 0 Lanes: 0

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 95
Loss Time (sec): 9
Critical V/C: 0.370
Avg Crit Del (sec/veh): 25.7
Avg Delay (sec/veh): 22.7
LOS: C+

Signal=Protect Rights=Include (East approach)
Lanes: 1 Final Vol: 140
Lanes: 0
Lanes: 4 Final Vol: 829***
Lanes: 0
Lanes: 0 Final Vol: 0

Lanes: 2 0 1 1 0
Final Vol: 318 284 238***
Signal=Split/Rights=Include

Street Name:	SR 237 EB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	318	284	216	0	0	0	226	297	0	0	786	110
Growth 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
Initial Bse:	318	284	216	0	0	0	226	297	0	0	786	110
Added Vol:	0	0	22	0	0	0	41	123	0	0	43	30
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	318	284	238	0	0	0	267	420	0	0	829	140
User 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
PHF 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
PHF Volume:	318	284	238	0	0	0	267	420	0	0	829	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	318	284	238	0	0	0	267	420	0	0	829	140
PCE 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
MLF 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
FinalVolume:	318	284	238	0	0	0	267	420	0	0	829	140
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.95	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	1.06	0.94	0.00	0.00	0.00	2.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	3150	2012	1686	0	0	0	3150	3800	0	0	7600	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.14	0.14	0.00	0.00	0.00	0.08	0.11	0.00	0.00	0.11	0.08
Crit Moves:			****				****				****	
Green Time:	36.2	36.2	36.2	0.0	0.0	0.0	21.8	49.8	0.0	0.0	28.0	28.0
Volume/Cap:	0.26	0.37	0.37	0.00	0.00	0.00	0.37	0.21	0.00	0.00	0.37	0.27
Delay/Veh:	20.3	21.3	21.3	0.0	0.0	0.0	31.2	12.2	0.0	0.0	26.6	26.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.3	21.3	21.3	0.0	0.0	0.0	31.2	12.2	0.0	0.0	26.6	26.0
LOS by Move:	C+	C+	C+	A	A	A	C	B	A	A	C	C
HCM2kAvgQ:	4	6	6	0	0	0	4	3	0	0	5	3

Note: Queue reported is the number of cars per lane.

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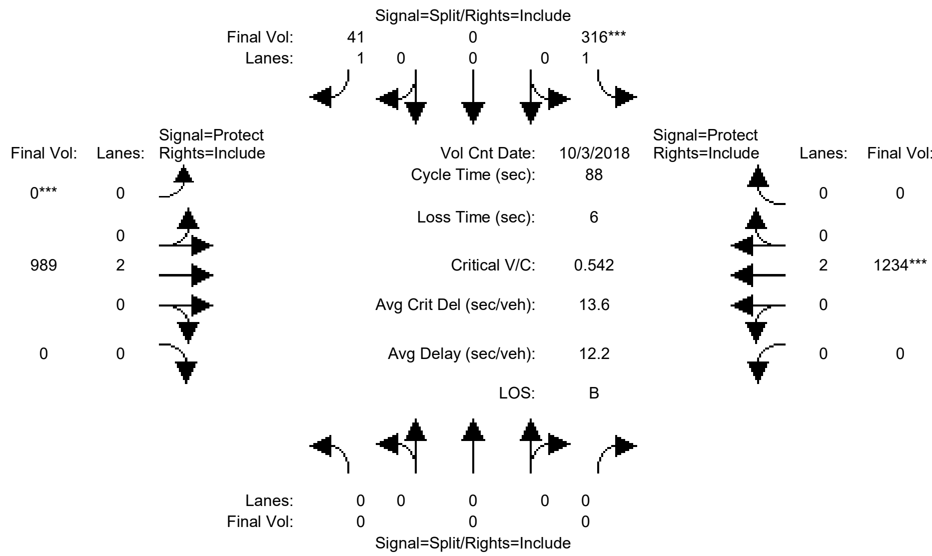
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #4: SR-85 SB Off-Ramp / Central Expressway



Street Name:	SR-85 SB Off-Ramp						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	0	0	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	294	0	41	0	900	0	0	1157	0
Growth 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
Initial Bse:	0	0	0	294	0	41	0	900	0	0	1157	0
Added Vol:	0	0	0	22	0	0	0	89	0	0	77	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	316	0	41	0	989	0	0	1234	0
User 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
PHF 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
PHF Volume:	0	0	0	316	0	41	0	989	0	0	1234	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	316	0	41	0	989	0	0	1234	0
PCE 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
MLF 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
FinalVolume:	0	0	0	316	0	41	0	989	0	0	1234	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	1750	0	1750	0	3800	0	0	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.18	0.00	0.02	0.00	0.26	0.00	0.00	0.32	0.00
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	29.3	0.0	29.3	0.0	52.7	0.0	0.0	52.7	0.0
Volume/Cap:	0.00	0.00	0.00	0.54	0.00	0.07	0.00	0.43	0.00	0.00	0.54	0.00
Delay/Veh:	0.0	0.0	0.0	24.9	0.0	20.1	0.0	9.7	0.0	0.0	10.8	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	24.9	0.0	20.1	0.0	9.7	0.0	0.0	10.8	0.0
LOS by Move:	A	A	A	C	A	C+	A	A	A	A	B+	A
HCM2kAvgQ:	0	0	0	7	0	1	0	7	0	0	10	0

Note: Queue reported is the number of cars per lane.

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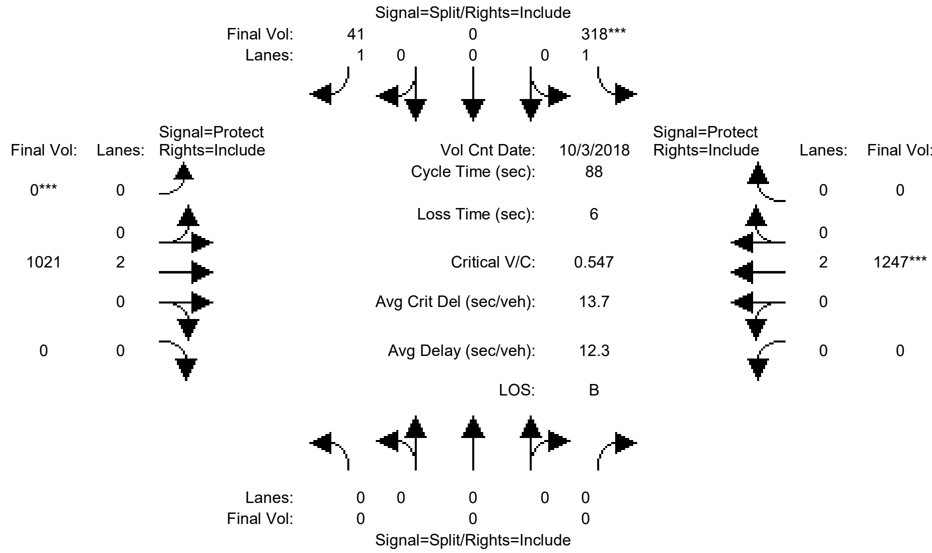
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #4: SR-85 SB Off-Ramp / Central Expressway



Street Name:	SR-85 SB Off-Ramp						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	0	0	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	294	0	41	0	900	0	0	1157	0
Growth 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
Initial Bse:	0	0	0	294	0	41	0	900	0	0	1157	0
Added Vol:	0	0	0	24	0	0	0	121	0	0	90	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	318	0	41	0	1021	0	0	1247	0
User 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
PHF 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
PHF Volume:	0	0	0	318	0	41	0	1021	0	0	1247	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	318	0	41	0	1021	0	0	1247	0
PCE 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
MLF 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
FinalVolume:	0	0	0	318	0	41	0	1021	0	0	1247	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	1750	0	1750	0	3800	0	0	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.18	0.00	0.02	0.00	0.27	0.00	0.00	0.33	0.00
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	29.2	0.0	29.2	0.0	52.8	0.0	0.0	52.8	0.0
Volume/Cap:	0.00	0.00	0.00	0.55	0.00	0.07	0.00	0.45	0.00	0.00	0.55	0.00
Delay/Veh:	0.0	0.0	0.0	25.1	0.0	20.2	0.0	9.8	0.0	0.0	10.8	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	25.1	0.0	20.2	0.0	9.8	0.0	0.0	10.8	0.0
LOS by Move:	A	A	A	C	A	C+	A	A	A	A	B+	A
HCM2kAvgQ:	0	0	0	8	0	1	0	7	0	0	10	0

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Background Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background AM

Intersection #5: SR-85 NB On-Ramp - Easy Street / Central Expressway

```
                         Signal=Yield/Rights=Include
          Final Vol:    24          0           0
              Lanes:     1    0     0      0    0

                   Signal=Uncontrol                                  Signal=Uncontrol
Final Vol:  Lanes: Rights=Include     Vol Cnt Date:    10/3/2018    Rights=Include     Lanes:   Final Vol:
                                      Cycle Time (sec):   100
    0         0                                                                          1        614
                                      Loss Time (sec):     0
              0                                                                          0
 1281         3                       Critical V/C:      0.054                           2       1224
              0                       Avg Crit Del (sec/veh): 0.1                        0
    0         0                       Avg Delay (sec/veh):    0.1                        0          0
                                      LOS:                 B

              Lanes:     0    0     0      0    0
          Final Vol:     0          0           0
                         Signal=Yield/Rights=Include
```

```
Street Name:  SR-85 NB On-Ramp - Easy Street          Central Expressway
Approach:       North Bound       South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date:  3 Oct 2018 <<
Base Vol:        0    0     0     0    0    24     0 1171     0     0 1147   606
Growth 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
Initial Bse:     0    0     0     0    0    24     0 1171     0     0 1147   606
Added Vol:       0    0     0     0    0     0     0  110     0     0   77     8
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:     0    0     0     0    0    24     0 1281     0     0 1224   614
User 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
PHF 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
PHF Volume:      0    0     0     0    0    24     0 1281     0     0 1224   614
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:     0    0     0     0    0    24     0 1281     0     0 1224   614
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx   612  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx   441  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx   441  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  0.05  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx  13.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     B     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:     xxxxxx             13.6            xxxxxx            xxxxxx
ApproachLOS:          *                B                 *                 *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
******************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    0  0  3  0  0    0  0  2  0  1
Initial Vol:    0    0    0      0    0    24     0 1281    0      0 1224   614
ApproachDel:    xxxxxx              13.6           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Yield Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Controller not stop sign.
Signal Warrant Rule #2: [approach volume=24]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=3143]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

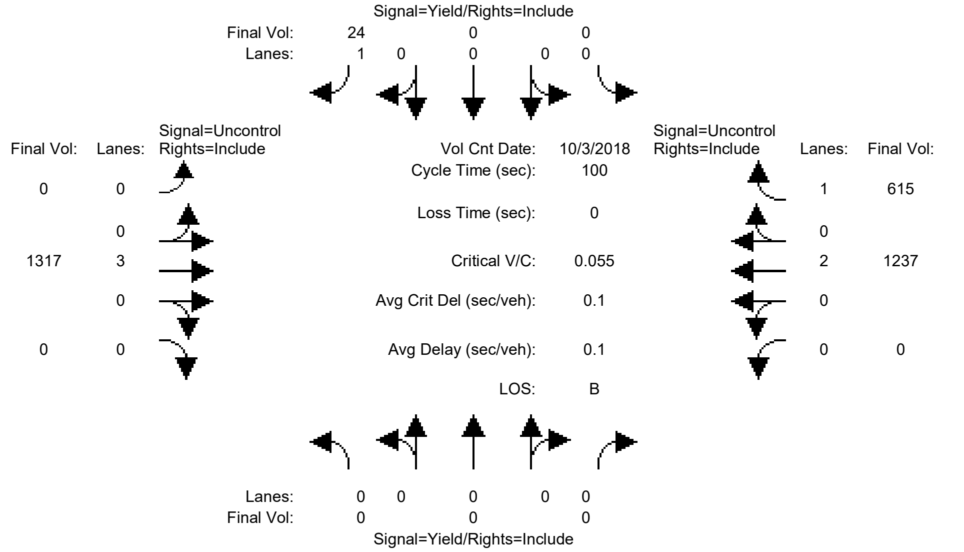
The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    0  0  3  0  0    0  0  2  0  1
Initial Vol:    0    0    0      0    0    24     0 1281    0      0 1224   614
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            3119
Minor Approach Volume:          24
Minor Approach Volume Threshold: -107 [less than minimum of 100]
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background AM Plus Project

Intersection #5: SR-85 NB On-Ramp - Easy Street / Central Expressway




```
Street Name:  SR-85 NB On-Ramp - Easy Street        Central Expressway
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 3 Oct 2018 <<
Base Vol:       0    0     0     0    0    24     0 1171     0     0 1147   606
Growth 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
Initial Bse:    0    0     0     0    0    24     0 1171     0     0 1147   606
Added Vol:      0    0     0     0    0     0     0  146     0     0   90     9
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     0    0    24     0 1317     0     0 1237   615
User 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
PHF 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
PHF Volume:     0    0     0     0    0    24     0 1317     0     0 1237   615
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0     0    0    24     0 1317     0     0 1237   615
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx   619  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx   437  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx   437  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  0.05  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx  13.7 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     B     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:    xxxxxx             13.7            xxxxxx            xxxxxx
ApproachLOS:         *                B                 *                 *
Note: Queue reported is the number of cars per lane.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    0  0  3  0  0    0  0  2  0  1
Initial Vol:    0    0     0     0    0    24     0 1317     0     0 1237   615
ApproachDel:    xxxxxx              13.7            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Yield Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Controller not stop sign.
Signal Warrant Rule #2: [approach volume=24]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=3193]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

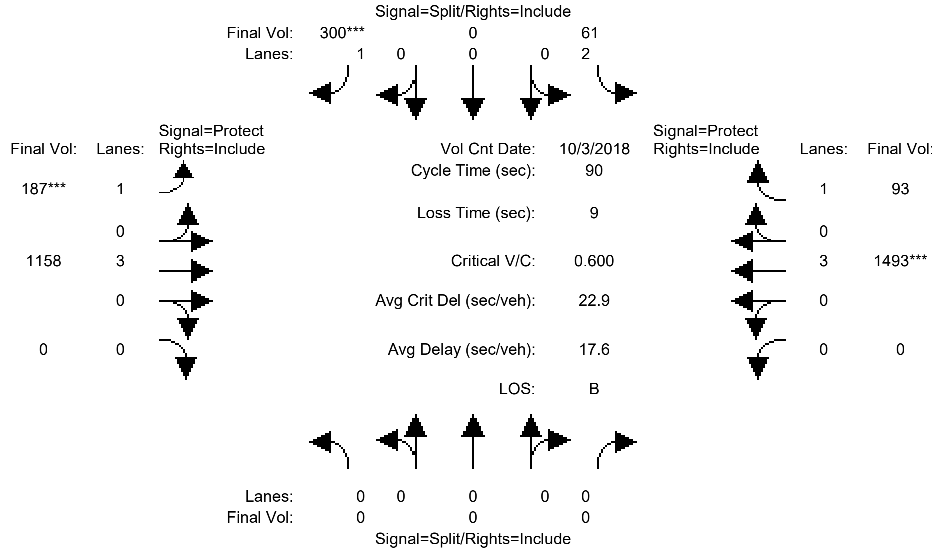
The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    0  0  3  0  0    0  0  2  0  1
Initial Vol:    0    0     0     0    0    24     0 1317     0     0 1237   615
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             3169
Minor Approach Volume:           24
Minor Approach Volume Threshold: -113 [less than minimum of 100]
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #6: Whisman Station Drive / Central Expressway (CMP)



Street Name:	Whisman Station Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	44	0	300	187	1048	0	0	1408	88
Growth 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
Initial Bse:	0	0	0	44	0	300	187	1048	0	0	1408	88
Added Vol:	0	0	0	17	0	0	0	110	0	0	85	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	61	0	300	187	1158	0	0	1493	93
User 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
PHF 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
PHF Volume:	0	0	0	61	0	300	187	1158	0	0	1493	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	61	0	300	187	1158	0	0	1493	93
PCE 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
MLF 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
FinalVolume:	0	0	0	61	0	300	187	1158	0	0	1493	93
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3150	0	1750	1750	5700	0	0	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.17	0.11	0.20	0.00	0.00	0.26	0.05
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	25.7	0.0	25.7	16.0	55.3	0.0	0.0	39.3	39.3
Volume/Cap:	0.00	0.00	0.00	0.07	0.00	0.60	0.60	0.33	0.00	0.00	0.60	0.12
Delay/Veh:	0.0	0.0	0.0	23.5	0.0	29.8	37.3	8.5	0.0	0.0	19.8	15.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	23.5	0.0	29.8	37.3	8.5	0.0	0.0	19.8	15.2
LOS by Move:	A	A	A	C	A	C	D+	A	A	A	B-	B
HCM2kAvgQ:	0	0	0	1	0	8	5	5	0	0	10	2

Note: Queue reported is the number of cars per lane.

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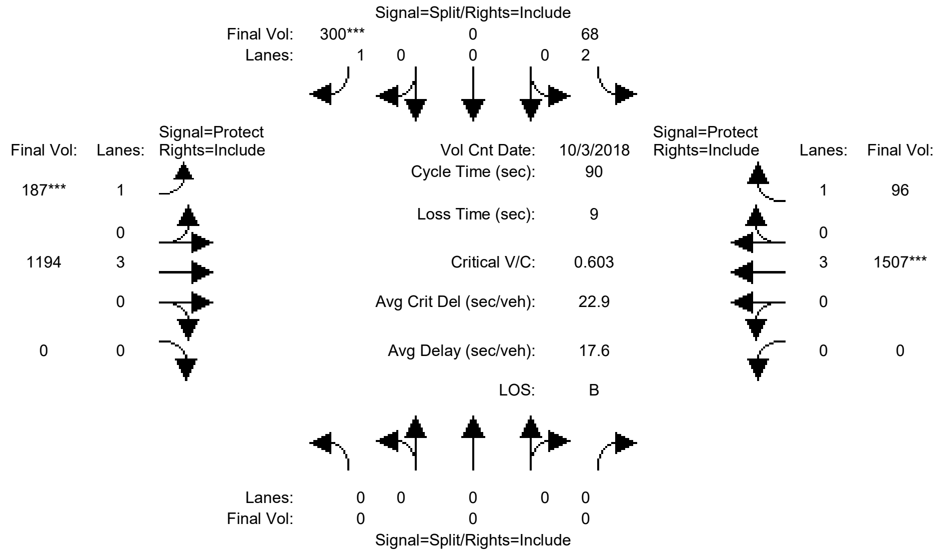
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #6: Whisman Station Drive / Central Expressway (CMP)



Street Name:	Whisman Station Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	44	0	300	187	1048	0	0	1408	88
Growth 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
Initial Bse:	0	0	0	44	0	300	187	1048	0	0	1408	88
Added Vol:	0	0	0	24	0	0	0	146	0	0	99	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	68	0	300	187	1194	0	0	1507	96
User 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
PHF 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
PHF Volume:	0	0	0	68	0	300	187	1194	0	0	1507	96
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	68	0	300	187	1194	0	0	1507	96
PCE 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
MLF 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
FinalVolume:	0	0	0	68	0	300	187	1194	0	0	1507	96
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3150	0	1750	1750	5700	0	0	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.17	0.11	0.21	0.00	0.00	0.26	0.05
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	25.6	0.0	25.6	15.9	55.4	0.0	0.0	39.5	39.5
Volume/Cap:	0.00	0.00	0.00	0.08	0.00	0.60	0.60	0.34	0.00	0.00	0.60	0.13
Delay/Veh:	0.0	0.0	0.0	23.6	0.0	29.9	37.4	8.5	0.0	0.0	19.7	15.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	23.6	0.0	29.9	37.4	8.5	0.0	0.0	19.7	15.1
LOS by Move:	A	A	A	C	A	C	D+	A	A	A	B-	B
HCM2kAvgQ:	0	0	0	1	0	8	5	5	0	0	10	2

Note: Queue reported is the number of cars per lane.

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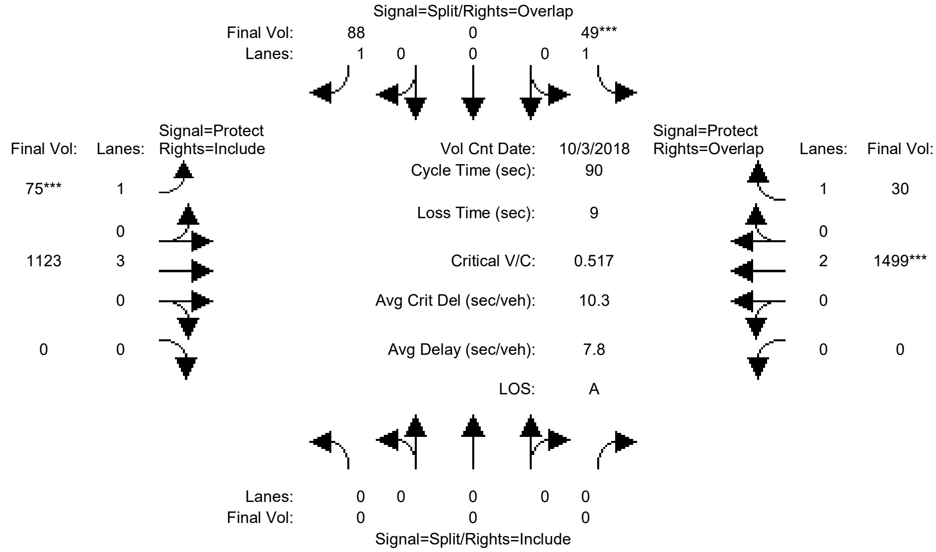
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #7: Ferguson Drive / Central Expressway (CMP)



Street Name:	Ferguson Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	10	10	0	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	32	0	88	75	996	0	0	1409	25
Growth 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
Initial Bse:	0	0	0	32	0	88	75	996	0	0	1409	25
Added Vol:	0	0	0	17	0	0	0	127	0	0	90	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	49	0	88	75	1123	0	0	1499	30
User 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
PHF 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
PHF Volume:	0	0	0	49	0	88	75	1123	0	0	1499	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	49	0	88	75	1123	0	0	1499	30
PCE 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
MLF 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
FinalVolume:	0	0	0	49	0	88	75	1123	0	0	1499	30
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	5700	0	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.05	0.04	0.20	0.00	0.00	0.39	0.02
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	20.0	10.0	71.0	0.0	0.0	61.0	71.0
Volume/Cap:	0.00	0.00	0.00	0.25	0.00	0.23	0.39	0.25	0.00	0.00	0.58	0.02
Delay/Veh:	0.0	0.0	0.0	37.3	0.0	29.0	38.4	2.5	0.0	0.0	8.1	2.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	37.3	0.0	29.0	38.4	2.5	0.0	0.0	8.1	2.0
LOS by Move:	A	A	A	D+	A	C	D+	A	A	A	A	A
HCM2kAvgQ:	0	0	0	2	0	2	2	3	0	0	11	0

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #7: Ferguson Drive / Central Expressway (CMP)

Signal=Split/Rights=Overlap
Final Vol: 88 0 56***
Lanes: 1 0 0 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Overlap	Lanes:	Final Vol:
			Vol Cnt Date:	10/3/2018			
			Cycle Time (sec):	90			
75***	1					1	33
			Loss Time (sec):	9			
	0					0	
1165	3		Critical V/C:	0.526		2	1516***
	0		Avg Crit Del (sec/veh):	10.5		0	
0	0		Avg Delay (sec/veh):	7.8		0	0
			LOS:	A			

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Ferguson Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	10	10	0	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	32	0	88	75	996	0	0	1409	25
Growth 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
Initial Bse:	0	0	0	32	0	88	75	996	0	0	1409	25
Added Vol:	0	0	0	24	0	0	0	169	0	0	107	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	56	0	88	75	1165	0	0	1516	33
User 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
PHF 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
PHF Volume:	0	0	0	56	0	88	75	1165	0	0	1516	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	56	0	88	75	1165	0	0	1516	33
PCE 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
MLF 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
FinalVolume:	0	0	0	56	0	88	75	1165	0	0	1516	33
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	5700	0	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.05	0.04	0.20	0.00	0.00	0.40	0.02
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	20.0	10.0	71.0	0.0	0.0	61.0	71.0
Volume/Cap:	0.00	0.00	0.00	0.29	0.00	0.23	0.39	0.26	0.00	0.00	0.59	0.02
Delay/Veh:	0.0	0.0	0.0	37.6	0.0	29.0	38.4	2.6	0.0	0.0	8.1	2.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	37.6	0.0	29.0	38.4	2.6	0.0	0.0	8.1	2.1
LOS by Move:	A	A	A	D+	A	C	D+	A	A	A	A	A
HCM2kAvgQ:	0	0	0	2	0	2	2	3	0	0	11	0

Note: Queue reported is the number of cars per lane.

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Intersection #8: Bernardo Avenue / Central Expressway

Southbound (north leg): Signal=Split/Rights=Overlap
Final Vol: 14 0 22***
Lanes: 1 0 0 0 1

Eastbound (west leg): Signal=Protect, Rights=Include

Final Vol:	Lanes:
106***	1
	0
1077	2
	0
0	0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 90
Loss Time (sec): 9
Critical V/C: 0.538
Avg Crit Del (sec/veh): 10.8
Avg Delay (sec/veh): 10.0
LOS: A

Westbound (east leg): Signal=Protect, Rights=Overlap

Lanes:	Final Vol:
1	115
0	
2	1561***
0	
1	2

Northbound (south leg):
Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Bernardo Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	10	10	0	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	5	0	14	106	933	0	2	1465	110
Growth 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
Initial Bse:	0	0	0	5	0	14	106	933	0	2	1465	110
Added Vol:	0	0	0	17	0	0	0	144	0	0	96	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	22	0	14	106	1077	0	2	1561	115
User 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
PHF 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
PHF Volume:	0	0	0	22	0	14	106	1077	0	2	1561	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	22	0	14	106	1077	0	2	1561	115
PCE 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
MLF 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
FinalVolume:	0	0	0	22	0	14	106	1077	0	2	1561	115
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	3800	0	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.01	0.00	0.01	0.06	0.28	0.00	0.00	0.41	0.07
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	20.0	10.0	55.7	0.0	15.3	61.0	71.0
Volume/Cap:	0.00	0.00	0.00	0.11	0.00	0.04	0.55	0.46	0.00	0.01	0.61	0.08
Delay/Veh:	0.0	0.0	0.0	36.3	0.0	27.5	41.0	9.3	0.0	31.1	8.3	2.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	36.3	0.0	27.5	41.0	9.3	0.0	31.1	8.3	2.2
LOS by Move:	A	A	A	D+	A	C	D	A	A	C	A	A
HCM2kAvgQ:	0	0	0	1	0	0	3	8	0	0	11	1

Note: Queue reported is the number of cars per lane.

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Intersection #8: Bernardo Avenue / Central Expressway

Signal=Split/Rights=Overlap
Final Vol: 14 0 29***
Lanes: 1 0 0 0 1

Signal=Protect Rights=Include (Eastbound)
Final Vol: 106*** / Lanes: 1
Lanes: 0
Final Vol: 1126 / Lanes: 2
Lanes: 0
Final Vol: 0 / Lanes: 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 90
Loss Time (sec): 9
Critical V/C: 0.548
Avg Crit Del (sec/veh): 10.9
Avg Delay (sec/veh): 10.0
LOS: B+

Signal=Protect Rights=Overlap (Westbound)
Lanes: 1 / Final Vol: 118
Lanes: 0
Lanes: 2 / Final Vol: 1580***
Lanes: 0
Lanes: 1 / Final Vol: 2

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Bernardo Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	10	10	0	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	5	0	14	106	933	0	2	1465	110
Growth 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
Initial Bse:	0	0	0	5	0	14	106	933	0	2	1465	110
Added Vol:	0	0	0	24	0	0	0	193	0	0	115	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	29	0	14	106	1126	0	2	1580	118
User 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
PHF 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
PHF Volume:	0	0	0	29	0	14	106	1126	0	2	1580	118
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	29	0	14	106	1126	0	2	1580	118
PCE 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
MLF 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
FinalVolume:	0	0	0	29	0	14	106	1126	0	2	1580	118
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	3800	0	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.01	0.06	0.30	0.00	0.00	0.42	0.07
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	20.0	10.0	56.2	0.0	14.8	61.0	71.0
Volume/Cap:	0.00	0.00	0.00	0.15	0.00	0.04	0.55	0.47	0.00	0.01	0.61	0.09
Delay/Veh:	0.0	0.0	0.0	36.5	0.0	27.5	41.0	9.1	0.0	31.5	8.4	2.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	36.5	0.0	27.5	41.0	9.1	0.0	31.5	8.4	2.2
LOS by Move:	A	A	A	D+	A	C	D	A	A	C	A	A
HCM2kAvgQ:	0	0	0	1	0	0	3	8	0	0	11	1

Note: Queue reported is the number of cars per lane.

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Intersection #9: Moorpark Way / Evelyn Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Protect Rights=Include (westbound side)
Final Vol: / Lanes:
0 0
0
291*** 1
1
140 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 85
Loss Time (sec): 9
Critical V/C: 0.458
Avg Crit Del (sec/veh): 23.7
Avg Delay (sec/veh): 14.5
LOS: B

Signal=Protect Rights=Include
Lanes: / Final Vol:
0 0
0
2 891
0
1 363***

Lanes: 0 0 1! 0 0
Final Vol: 36*** 0 113
Signal=Split/Rights=Include

Street Name:	Moorpark Way						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	36	0	85	0	0	0	0	258	140	355	832	0
Growth 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
Initial Bse:	36	0	85	0	0	0	0	258	140	355	832	0
Added Vol:	0	0	28	0	0	0	0	33	0	8	59	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	0	113	0	0	0	0	291	140	363	891	0
User 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
PHF 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
PHF Volume:	36	0	113	0	0	0	0	291	140	363	891	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	0	113	0	0	0	0	291	140	363	891	0
PCE 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
MLF 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
FinalVolume:	36	0	113	0	0	0	0	291	140	363	891	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.92	1.00	0.92
Lanes:	0.24	0.00	0.76	0.00	0.00	0.00	0.00	1.33	0.67	1.00	2.00	0.00
Final Sat.:	423	0	1327	0	0	0	0	2497	1201	1750	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.12	0.12	0.21	0.23	0.00
Crit Moves:	****							****		****		
Green Time:	15.8	0.0	15.8	0.0	0.0	0.0	0.0	21.6	21.6	38.5	60.2	0.0
Volume/Cap:	0.46	0.00	0.46	0.00	0.00	0.00	0.00	0.46	0.46	0.46	0.33	0.00
Delay/Veh:	31.8	0.0	31.8	0.0	0.0	0.0	0.0	27.1	27.1	16.4	4.8	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.8	0.0	31.8	0.0	0.0	0.0	0.0	27.1	27.1	16.4	4.8	0.0
LOS by Move:	C	A	C	A	A	A	A	C	C	B	A	A
HCM2kAvgQ:	4	0	4	0	0	0	0	5	5	7	4	0

Note: Queue reported is the number of cars per lane.

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Intersection #9: Moorpark Way / Evelyn Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Protect Rights=Include (West approach)
Final Vol: Lanes:
0 0
0
312*** 1
1
140 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 85
Loss Time (sec): 9
Critical V/C: 0.472
Avg Crit Del (sec/veh): 24.0
Avg Delay (sec/veh): 14.9
LOS: B

Signal=Protect Rights=Include (East approach)
Lanes: Final Vol:
0 0
0
2 897
0
1 366***

Lanes: 0 0 1! 0 0
Final Vol: 36*** 0 123
Signal=Split/Rights=Include

Street Name:	Moorpark Way						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	36	0	85	0	0	0	0	258	140	355	832	0
Growth 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
Initial Bse:	36	0	85	0	0	0	0	258	140	355	832	0
Added Vol:	0	0	38	0	0	0	0	54	0	11	65	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	0	123	0	0	0	0	312	140	366	897	0
User 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
PHF 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
PHF Volume:	36	0	123	0	0	0	0	312	140	366	897	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	0	123	0	0	0	0	312	140	366	897	0
PCE 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
MLF 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
FinalVolume:	36	0	123	0	0	0	0	312	140	366	897	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.92	1.00	0.92
Lanes:	0.23	0.00	0.77	0.00	0.00	0.00	0.00	1.36	0.64	1.00	2.00	0.00
Final Sat.:	396	0	1354	0	0	0	0	2553	1146	1750	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.12	0.12	0.21	0.24	0.00
Crit Moves:	****							****		****		
Green Time:	16.4	0.0	16.4	0.0	0.0	0.0	0.0	22.0	22.0	37.6	59.6	0.0
Volume/Cap:	0.47	0.00	0.47	0.00	0.00	0.00	0.00	0.47	0.47	0.47	0.34	0.00
Delay/Veh:	31.5	0.0	31.5	0.0	0.0	0.0	0.0	27.0	27.0	17.1	5.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.5	0.0	31.5	0.0	0.0	0.0	0.0	27.0	27.0	17.1	5.0	0.0
LOS by Move:	C	A	C	A	A	A	A	C	C	B	A	A
HCM2kAvgQ:	4	0	4	0	0	0	0	6	6	7	4	0

Note: Queue reported is the number of cars per lane.

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Intersection #10: Bernardo Avenue / Evelyn Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Final Vol:	Lanes:	Signal=Protect Rights=Overlap			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	10/3/2018			
3***	1		Cycle Time (sec):	85		0	0
	0		Loss Time (sec):	9		0	
304	1		Critical V/C:	0.784		1	681***
	0		Avg Crit Del (sec/veh):	33.1		0	
107	1		Avg Delay (sec/veh):	28.9		1	68
			LOS:	C			

Lanes: 1 0 0 0 1
Final Vol: 596*** 0 192
Signal=Split/Rights=Include

Street Name:	Bernardo Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	7	10	10	10	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	596	0	164	0	0	0	3	243	107	60	614	0
Growth 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
Initial Bse:	596	0	164	0	0	0	3	243	107	60	614	0
Added Vol:	0	0	28	0	0	0	0	61	0	8	67	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	596	0	192	0	0	0	3	304	107	68	681	0
User 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
PHF 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
PHF Volume:	596	0	192	0	0	0	3	304	107	68	681	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	596	0	192	0	0	0	3	304	107	68	681	0
PCE 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
MLF 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
FinalVolume:	596	0	192	0	0	0	3	304	107	68	681	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	1750	1900	1750	1750	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.34	0.00	0.11	0.00	0.00	0.00	0.00	0.16	0.06	0.04	0.36	0.00
Crit Moves:	****						****				****	
Green Time:	33.6	0.0	33.6	0.0	0.0	0.0	7.0	24.4	58.0	18.0	35.4	0.0
Volume/Cap:	0.86	0.00	0.28	0.00	0.00	0.00	0.02	0.56	0.09	0.18	0.86	0.00
Delay/Veh:	34.3	0.0	17.7	0.0	0.0	0.0	35.9	27.0	4.6	27.7	32.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.3	0.0	17.7	0.0	0.0	0.0	35.9	27.0	4.6	27.7	32.1	0.0
LOS by Move:	C-	A	B	A	A	A	D+	C	A	C	C-	A
HCM2kAvgQ:	19	0	4	0	0	0	0	7	1	1	17	0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
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Intersection #10: Bernardo Avenue / Evelyn Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Protect
Rights=Overlap

Final Vol:	Lanes:			
3***	1			
	0			
335	1			
	0			
107	1			

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 85
Loss Time (sec): 9
Critical V/C: 0.789
Avg Crit Del (sec/veh): 33.7
Avg Delay (sec/veh): 29.2
LOS: C

Signal=Protect
Rights=Include

Lanes:	Final Vol:
0	0
0	
1	690***
0	
1	71

Lanes: 1 0 0 0 1
Final Vol: 596*** 0 202
Signal=Split/Rights=Include

Street Name:	Bernardo Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	7	10	10	10	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	596	0	164	0	0	0	3	243	107	60	614	0
Growth 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
Initial Bse:	596	0	164	0	0	0	3	243	107	60	614	0
Added Vol:	0	0	38	0	0	0	0	92	0	11	76	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	596	0	202	0	0	0	3	335	107	71	690	0
User 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
PHF 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
PHF Volume:	596	0	202	0	0	0	3	335	107	71	690	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	596	0	202	0	0	0	3	335	107	71	690	0
PCE 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
MLF 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
FinalVolume:	596	0	202	0	0	0	3	335	107	71	690	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	1750	1900	1750	1750	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.34	0.00	0.12	0.00	0.00	0.00	0.00	0.18	0.06	0.04	0.36	0.00
Crit Moves:	****						****				****	
Green Time:	33.4	0.0	33.4	0.0	0.0	0.0	7.0	25.6	58.9	17.1	35.6	0.0
Volume/Cap:	0.87	0.00	0.29	0.00	0.00	0.00	0.02	0.59	0.09	0.20	0.87	0.00
Delay/Veh:	35.1	0.0	18.0	0.0	0.0	0.0	35.9	26.8	4.3	28.6	32.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.1	0.0	18.0	0.0	0.0	0.0	35.9	26.8	4.3	28.6	32.5	0.0
LOS by Move:	D+	A	B	A	A	A	D+	C	A	C	C-	A
HCM2kAvgQ:	19	0	4	0	0	0	0	7	1	2	17	0

Note: Queue reported is the number of cars per lane.

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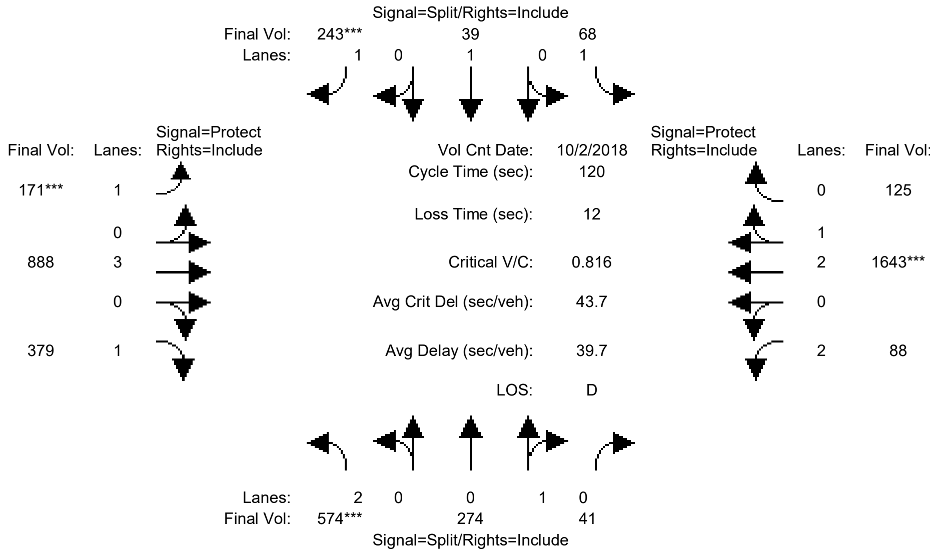
Background AM

Intersection #11: Sylvan Avenue / El Camino Real



Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	574	274	35	58	39	243	171	680	379	86	1516	122
Growth 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
Initial Bse:	574	274	35	58	39	243	171	680	379	86	1516	122
Added Vol:	0	0	6	10	0	0	0	208	0	2	127	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	574	274	41	68	39	243	171	888	379	88	1643	125
User 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
PHF 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
PHF Volume:	574	274	41	68	39	243	171	888	379	88	1643	125
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	574	274	41	68	39	243	171	888	379	88	1643	125
PCE 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
MLF 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
FinalVolume:	574	274	41	68	39	243	171	888	379	88	1643	125
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.95	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.99	0.95
Lanes:	2.00	0.87	0.13	1.00	1.00	1.00	1.00	3.00	1.00	2.00	2.78	0.22
Final Sat.:	3150	1566	234	1750	1900	1750	1750	5700	1750	3150	5204	396
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.18	0.04	0.02	0.14	0.10	0.16	0.22	0.03	0.32	0.32
Crit Moves:	****					****	****				****	
Green Time:	26.8	26.8	26.8	20.4	20.4	20.4	14.4	47.9	47.9	12.9	46.4	46.4
Volume/Cap:	0.82	0.78	0.78	0.23	0.12	0.82	0.82	0.39	0.54	0.26	0.82	0.82
Delay/Veh:	51.6	53.6	53.6	43.4	42.4	63.9	72.9	25.8	28.5	49.6	35.5	35.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.6	53.6	53.6	43.4	42.4	63.9	72.9	25.8	28.5	49.6	35.5	35.5
LOS by Move:	D-	D-	D-	D	D	E	E	C	C	D	D+	D+
HCM2kAvgQ:	14	13	13	2	1	12	9	8	12	2	19	19

Note: Queue reported is the number of cars per lane.

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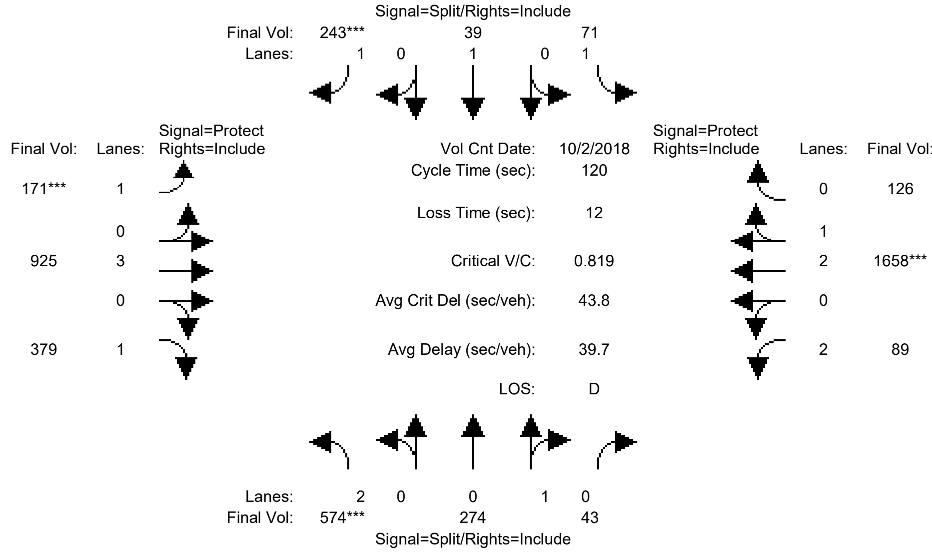
Background AM Plus Project

Intersection #11: Sylvan Avenue / El Camino Real



Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	574	274	35	58	39	243	171	680	379	86	1516	122
Growth 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
Initial Bse:	574	274	35	58	39	243	171	680	379	86	1516	122
Added Vol:	0	0	8	13	0	0	0	245	0	3	142	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	574	274	43	71	39	243	171	925	379	89	1658	126
User 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
PHF 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
PHF Volume:	574	274	43	71	39	243	171	925	379	89	1658	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	574	274	43	71	39	243	171	925	379	89	1658	126
PCE 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
MLF 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
FinalVolume:	574	274	43	71	39	243	171	925	379	89	1658	126
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.95	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.99	0.95
Lanes:	2.00	0.86	0.14	1.00	1.00	1.00	1.00	3.00	1.00	2.00	2.78	0.22
Final Sat.:	3150	1556	244	1750	1900	1750	1750	5700	1750	3150	5204	395
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.18	0.04	0.02	0.14	0.10	0.16	0.22	0.03	0.32	0.32
Crit Moves:	****					****	****				****	
Green Time:	26.7	26.7	26.7	20.3	20.3	20.3	14.3	48.0	48.0	12.9	46.7	46.7
Volume/Cap:	0.82	0.79	0.79	0.24	0.12	0.82	0.82	0.41	0.54	0.26	0.82	0.82
Delay/Veh:	51.9	54.3	54.3	43.6	42.4	64.4	73.5	25.9	28.4	49.6	35.5	35.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.9	54.3	54.3	43.6	42.4	64.4	73.5	25.9	28.4	49.6	35.5	35.5
LOS by Move:	D-	D-	D-	D	D	E	E	C	C	D	D+	D+
HCM2kAvgQ:	14	14	14	3	1	12	9	8	12	2	20	20

Note: Queue reported is the number of cars per lane.

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Intersection #12: Bernardo Avenue / El Camino Real

Signal=Protect/Rights=Include
Final Vol: 425*** 154 90
Lanes: 0 1 1 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	10/2/2018			
149***	1		Cycle Time (sec):	120		0	111
	0		Loss Time (sec):	12		1	
725	2		Critical V/C:	0.774		2	1428***
	1		Avg Crit Del (sec/veh):	42.4		0	
48	0		Avg Delay (sec/veh):	39.4		1	98
			LOS:	D			

Lanes: 2 0 1 0 1
Final Vol: 294*** 214 92
Signal=Protect/Rights=Include

Street Name:	Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	294	214	86	80	154	425	149	501	48	96	1296	108
Growth 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
Initial Bse:	294	214	86	80	154	425	149	501	48	96	1296	108
Added Vol:	0	0	6	10	0	0	0	224	0	2	132	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	294	214	92	90	154	425	149	725	48	98	1428	111
User 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
PHF 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
PHF Volume:	294	214	92	90	154	425	149	725	48	98	1428	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	294	214	92	90	154	425	149	725	48	98	1428	111
PCE 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
MLF 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
FinalVolume:	294	214	92	90	154	425	149	725	48	98	1428	111
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.81	0.19	1.00	2.78	0.22
Final Sat.:	3150	1900	1750	1750	1900	1750	1750	5252	348	1750	5196	404
Capacity Analysis Module:												
Vol/Sat:	0.09	0.11	0.05	0.05	0.08	0.24	0.09	0.14	0.14	0.06	0.27	0.27
Crit Moves:	****					****	****				****	
Green Time:	14.5	34.4	34.4	17.8	37.7	37.7	13.2	39.3	39.3	16.6	42.6	42.6
Volume/Cap:	0.77	0.39	0.18	0.35	0.26	0.77	0.77	0.42	0.42	0.41	0.77	0.77
Delay/Veh:	60.7	34.9	32.4	46.7	30.8	42.3	69.5	31.7	31.7	48.3	36.3	36.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	60.7	34.9	32.4	46.7	30.8	42.3	69.5	31.7	31.7	48.3	36.3	36.3
LOS by Move:	E	C-	C-	D	C	D	E	C	C	D	D+	D+
HCM2kAvgQ:	8	6	3	3	4	17	6	7	7	3	17	17

Note: Queue reported is the number of cars per lane.

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Intersection #12: Bernardo Avenue / El Camino Real

Signal=Protect/Rights=Include
Final Vol: 425*** 154 93
Lanes: 0 1 1 0 1

Signal=Protect Rights=Include (West approach)
Final Vol: 149*** Lanes: 1
Lanes: 0
Final Vol: 767 Lanes: 2
Lanes: 1
Final Vol: 48 Lanes: 0

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 120
Loss Time (sec): 12
Critical V/C: 0.777
Avg Crit Del (sec/veh): 42.5
Avg Delay (sec/veh): 39.3
LOS: D

Signal=Protect Rights=Include (East approach)
Lanes: 0 Final Vol: 112
Lanes: 1
Lanes: 2 Final Vol: 1445***
Lanes: 0
Lanes: 1 Final Vol: 99

Lanes: 2 0 1 0 1
Final Vol: 294*** 214 94
Signal=Protect/Rights=Include

Street Name:	Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	294	214	86	80	154	425	149	501	48	96	1296	108
Growth 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
Initial Bse:	294	214	86	80	154	425	149	501	48	96	1296	108
Added Vol:	0	0	8	13	0	0	0	266	0	3	149	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	294	214	94	93	154	425	149	767	48	99	1445	112
User 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
PHF 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
PHF Volume:	294	214	94	93	154	425	149	767	48	99	1445	112
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	294	214	94	93	154	425	149	767	48	99	1445	112
PCE 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
MLF 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
FinalVolume:	294	214	94	93	154	425	149	767	48	99	1445	112
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.82	0.18	1.00	2.78	0.22
Final Sat.:	3150	1900	1750	1750	1900	1750	1750	5270	330	1750	5197	403
Capacity Analysis Module:												
Vol/Sat:	0.09	0.11	0.05	0.05	0.08	0.24	0.09	0.15	0.15	0.06	0.28	0.28
Crit Moves:	****					****	****				****	
Green Time:	14.4	34.2	34.2	17.7	37.5	37.5	13.1	40.0	40.0	16.0	42.9	42.9
Volume/Cap:	0.78	0.40	0.19	0.36	0.26	0.78	0.78	0.44	0.44	0.42	0.78	0.78
Delay/Veh:	61.0	35.0	32.6	46.9	30.9	42.6	70.0	31.3	31.3	49.0	36.3	36.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	61.0	35.0	32.6	46.9	30.9	42.6	70.0	31.3	31.3	49.0	36.3	36.3
LOS by Move:	E	D+	C-	D	C	D	E	C	C	D	D+	D+
HCM2kAvgQ:	8	6	3	4	4	17	6	8	8	3	17	17

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #13: Mary Avenue / Central Expressway (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 131 138 74***
Lanes: 1 0 3 0 2

Final Vol:	Lanes:	Signal=Protect Rights=Overlap			Signal=Protect Rights=Overlap	Lanes:	Final Vol:
			Vol Cnt Date:	5/1/2017			
			Cycle Time (sec):	180			
181***	2					1	359
			Loss Time (sec):	12			
	0					0	
910	3		Critical V/C:	0.842		3	2033***
	0		Avg Crit Del (sec/veh):	50.6		0	
157	1		Avg Delay (sec/veh):	48.2		2	250
			LOS:	D			

Lanes: 2 0 3 0 1
Final Vol: 579 656 748***
Signal=Protect/Rights=Overlap

Street Name:	Mary Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	569	504	535	55	117	120	106	748	153	175	1918	231
Growth 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
Initial Bse:	569	504	535	55	117	120	106	748	153	175	1918	231
Added Vol:	10	152	213	19	21	11	75	162	4	75	115	128
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	579	656	748	74	138	131	181	910	157	250	2033	359
User 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
PHF 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
PHF Volume:	579	656	748	74	138	131	181	910	157	250	2033	359
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	579	656	748	74	138	131	181	910	157	250	2033	359
PCE 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
MLF 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
FinalVolume:	579	656	748	74	138	131	181	910	157	250	2033	359
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.18	0.12	0.43	0.02	0.02	0.07	0.06	0.16	0.09	0.08	0.36	0.21
Crit Moves:			****	****			****				****	
Green Time:	61.8	73.5	102.6	7.0	18.7	30.8	12.1	58.4	120.3	29.0	75.3	82.3
Volume/Cap:	0.54	0.28	0.75	0.60	0.23	0.44	0.85	0.49	0.13	0.49	0.85	0.45
Delay/Veh:	48.0	35.7	32.3	93.4	74.3	67.8	109.7	49.1	10.9	69.5	50.5	33.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.0	35.7	32.3	93.4	74.3	67.8	109.7	49.1	10.9	69.5	50.5	33.7
LOS by Move:	D	D+	C-	F	E	E	F	D	B+	E	D	C-
HCM2kAvgQ:	15	8	33	3	2	7	6	13	3	8	35	14

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #13: Mary Avenue / Central Expressway (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 131 138 74***
Lanes: 1 0 3 0 2

Signal=Protect Rights=Overlap
Final Vol: Lanes:
181*** 2
0
990 3
0
180 1

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 180
Loss Time (sec): 12
Critical V/C: 0.848
Avg Crit Del (sec/veh): 51.1
Avg Delay (sec/veh): 48.4
LOS: D

Signal=Protect Rights=Overlap
Lanes: Final Vol:
1 359
0
3 2067***
0
2 250

Lanes: 2 0 3 0 1
Final Vol: 588 656 748***
Signal=Protect/Rights=Overlap

Street Name:	Mary Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	569	504	535	55	117	120	106	748	153	175	1918	231
Growth 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
Initial Bse:	569	504	535	55	117	120	106	748	153	175	1918	231
Added Vol:	19	152	213	19	21	11	75	242	27	75	149	128
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	588	656	748	74	138	131	181	990	180	250	2067	359
User 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
PHF 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
PHF Volume:	588	656	748	74	138	131	181	990	180	250	2067	359
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	588	656	748	74	138	131	181	990	180	250	2067	359
PCE 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
MLF 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
FinalVolume:	588	656	748	74	138	131	181	990	180	250	2067	359
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.19	0.12	0.43	0.02	0.02	0.07	0.06	0.17	0.10	0.08	0.36	0.21
Crit Moves:			****	****			****				****	
Green Time:	61.6	73.0	100.6	7.0	18.3	30.4	12.0	60.4	122.0	27.6	76.0	83.0
Volume/Cap:	0.55	0.28	0.77	0.60	0.24	0.44	0.86	0.52	0.15	0.52	0.86	0.44
Delay/Veh:	48.5	36.0	34.3	93.4	74.6	68.3	111.1	48.3	10.5	71.0	50.5	33.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.5	36.0	34.3	93.4	74.6	68.3	111.1	48.3	10.5	71.0	50.5	33.3
LOS by Move:	D	D+	C-	F	E	E	F	D	B+	E	D	C-
HCM2kAvgQ:	15	8	34	3	2	7	6	14	4	8	36	14

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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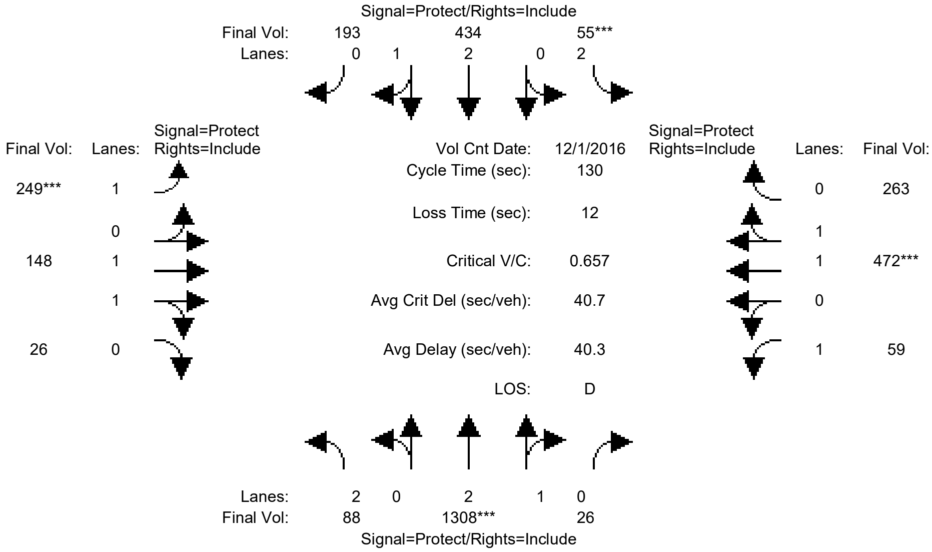
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #14: Mary Avenue / Evelyn Avenue



Street Name:	Mary Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	88	1028	28	56	347	179	156	153	26	56	412	260
Growth 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
Initial Bse:	88	1028	28	56	347	179	156	153	26	56	412	260
Added Vol:	0	280	-2	-1	87	14	93	-5	0	3	60	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	88	1308	26	55	434	193	249	148	26	59	472	263
User 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
PHF 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
PHF Volume:	88	1308	26	55	434	193	249	148	26	59	472	263
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	1308	26	55	434	193	249	148	26	59	472	263
PCE 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
MLF 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
FinalVolume:	88	1308	26	55	434	193	249	148	26	59	472	263
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	1.00	0.95	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	2.00	2.94	0.06	2.00	2.04	0.96	1.00	1.69	0.31	1.00	1.26	0.74
Final Sat.:	3150	5491	109	3150	3874	1723	1750	3147	553	1750	2375	1323
Capacity Analysis Module:												
Vol/Sat:	0.03	0.24	0.24	0.02	0.11	0.11	0.14	0.05	0.05	0.03	0.20	0.20
Crit Moves:		****		****			****				****	
Green Time:	17.1	45.7	45.7	7.0	35.6	35.6	27.3	38.4	38.4	26.9	38.1	38.1
Volume/Cap:	0.21	0.68	0.68	0.32	0.41	0.41	0.68	0.16	0.16	0.16	0.68	0.68
Delay/Veh:	50.7	36.9	36.9	60.3	38.8	38.8	52.4	33.9	33.9	42.5	42.3	42.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.7	36.9	36.9	60.3	38.8	38.8	52.4	33.9	33.9	42.5	42.3	42.3
LOS by Move:	D	D+	D+	E	D+	D+	D-	C-	C-	D	D	D
HCM2kAvgQ:	2	15	15	1	7	7	10	2	2	2	14	14

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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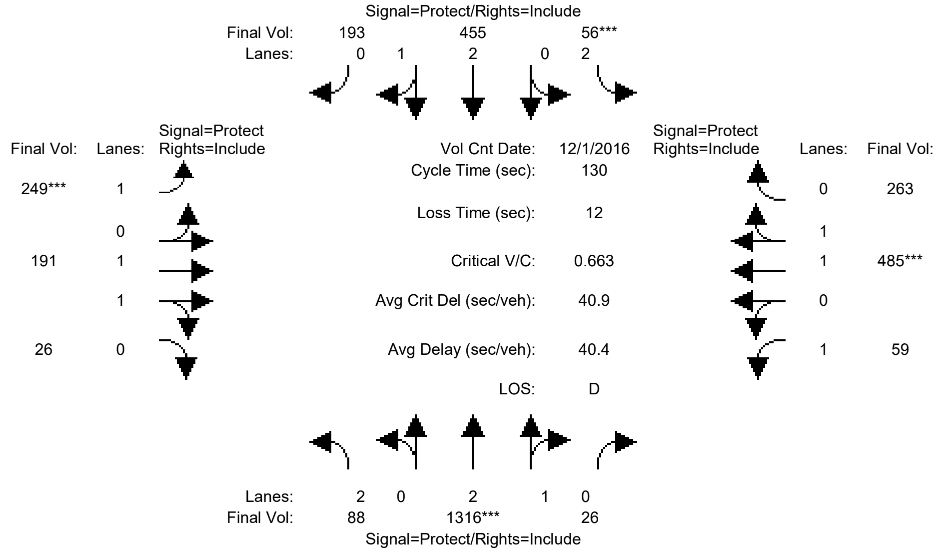
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #14: Mary Avenue / Evelyn Avenue



Street Name:	Mary Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	88	1028	28	56	347	179	156	153	26	56	412	260
Growth 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
Initial Bse:	88	1028	28	56	347	179	156	153	26	56	412	260
Added Vol:	0	288	-2	0	108	14	93	38	0	3	73	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	88	1316	26	56	455	193	249	191	26	59	485	263
User 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
PHF 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
PHF Volume:	88	1316	26	56	455	193	249	191	26	59	485	263
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	1316	26	56	455	193	249	191	26	59	485	263
PCE 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
MLF 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
FinalVolume:	88	1316	26	56	455	193	249	191	26	59	485	263
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	1.00	0.95	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	2.00	2.94	0.06	2.00	2.07	0.93	1.00	1.75	0.25	1.00	1.28	0.72
Final Sat.:	3150	5491	108	3150	3930	1667	1750	3256	443	1750	2398	1300
Capacity Analysis Module:												
Vol/Sat:	0.03	0.24	0.24	0.02	0.12	0.12	0.14	0.06	0.06	0.03	0.20	0.20
Crit Moves:		****		****			****				****	
Green Time:	16.7	45.5	45.5	7.0	35.9	35.9	27.0	38.5	38.5	27.0	38.4	38.4
Volume/Cap:	0.22	0.68	0.68	0.33	0.42	0.42	0.68	0.20	0.20	0.16	0.68	0.68
Delay/Veh:	51.1	37.1	37.1	60.4	38.7	38.7	52.9	34.3	34.3	42.5	42.2	42.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.1	37.1	37.1	60.4	38.7	38.7	52.9	34.3	34.3	42.5	42.2	42.2
LOS by Move:	D-	D+	D+	E	D+	D+	D-	C-	C-	D	D	D
HCM2kAvgQ:	2	15	15	1	7	7	10	3	3	2	14	14

Note: Queue reported is the number of cars per lane.

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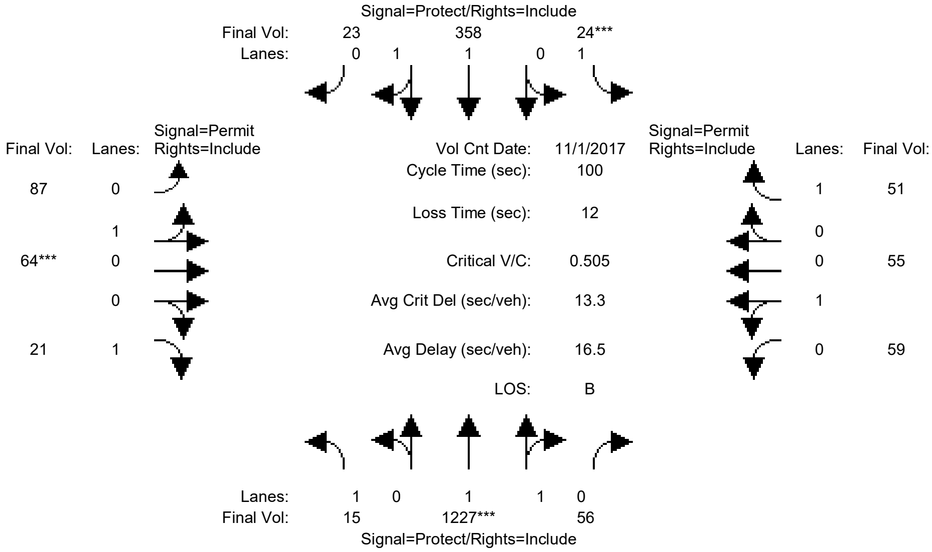
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #15: Mary Avenue / Washington Avenue



Street Name:	Mary Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Nov 2017 <<												
Base Vol:	15	968	53	19	277	20	75	41	21	59	47	44
Growth 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
Initial Bse:	15	968	53	19	277	20	75	41	21	59	47	44
Added Vol:	0	259	3	5	81	3	12	23	0	0	8	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	1227	56	24	358	23	87	64	21	59	55	51
User 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
PHF 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
PHF Volume:	15	1227	56	24	358	23	87	64	21	59	55	51
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	1227	56	24	358	23	87	64	21	59	55	51
PCE 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
MLF 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
FinalVolume:	15	1227	56	24	358	23	87	64	21	59	55	51
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	1.91	0.09	1.00	1.88	0.12	0.58	0.42	1.00	0.52	0.48	1.00
Final Sat.:	1750	3538	161	1750	3476	223	1037	763	1750	932	868	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.35	0.35	0.01	0.10	0.10	0.08	0.08	0.01	0.06	0.06	0.03
Crit Moves:		****		****				****				
Green Time:	29.2	65.2	65.2	7.0	43.0	43.0	15.8	15.8	15.8	15.8	15.8	15.8
Volume/Cap:	0.03	0.53	0.53	0.20	0.24	0.24	0.53	0.53	0.08	0.40	0.40	0.18
Delay/Veh:	25.3	9.5	9.5	44.6	18.2	18.2	40.6	40.6	36.0	38.8	38.8	36.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.3	9.5	9.5	44.6	18.2	18.2	40.6	40.6	36.0	38.8	38.8	36.9
LOS by Move:	C	A	A	D	B-	B-	D	D	D+	D+	D+	D+
HCM2kAvgQ:	0	11	11	1	4	4	5	5	1	3	3	1

Note: Queue reported is the number of cars per lane.

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Background Plus Project AM

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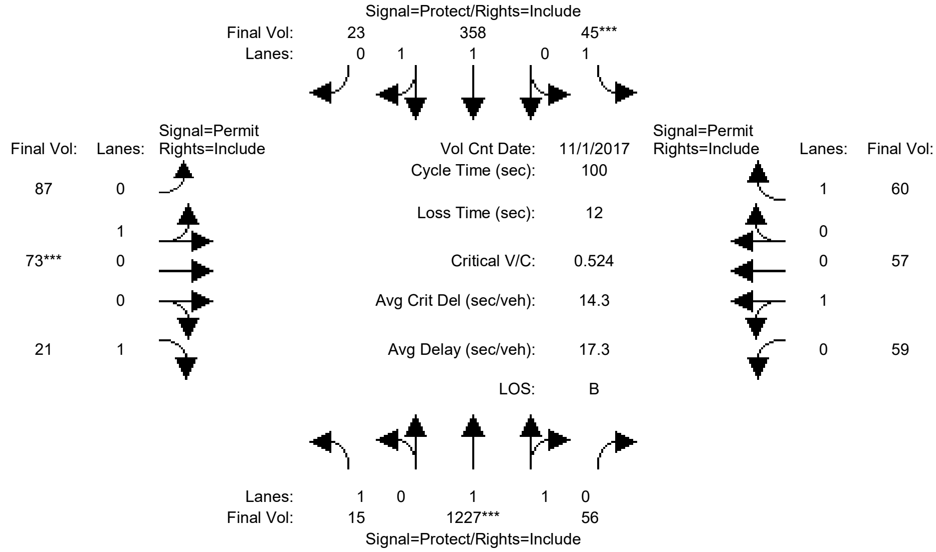
Background AM Plus Project

Intersection #15: Mary Avenue / Washington Avenue



Street Name:	Mary Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Nov 2017 <<												
Base Vol:	15	968	53	19	277	20	75	41	21	59	47	44
Growth 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
Initial Bse:	15	968	53	19	277	20	75	41	21	59	47	44
Added Vol:	0	259	3	26	81	3	12	32	0	0	10	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	1227	56	45	358	23	87	73	21	59	57	60
User 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
PHF 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
PHF Volume:	15	1227	56	45	358	23	87	73	21	59	57	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	1227	56	45	358	23	87	73	21	59	57	60
PCE 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
MLF 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
FinalVolume:	15	1227	56	45	358	23	87	73	21	59	57	60
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	1.91	0.09	1.00	1.88	0.12	0.54	0.46	1.00	0.51	0.49	1.00
Final Sat.:	1750	3538	161	1750	3476	223	979	821	1750	916	884	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.35	0.35	0.03	0.10	0.10	0.09	0.09	0.01	0.06	0.06	0.03
Crit Moves:		****		****				****				
Green Time:	28.9	64.5	64.5	7.0	42.5	42.5	16.5	16.5	16.5	16.5	16.5	16.5
Volume/Cap:	0.03	0.54	0.54	0.37	0.24	0.24	0.54	0.54	0.07	0.39	0.39	0.21
Delay/Veh:	25.5	9.9	9.9	46.3	18.5	18.5	40.2	40.2	35.4	38.1	38.1	36.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.5	9.9	9.9	46.3	18.5	18.5	40.2	40.2	35.4	38.1	38.1	36.4
LOS by Move:	C	A	A	D	B-	B-	D	D	D+	D+	D+	D+
HCM2kAvgQ:	0	11	11	1	4	4	5	5	1	3	3	2

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Intersection #16: Mary Avenue / El Camino Real (CMP)

Signal=Protect/Rights=Include
Final Vol: 226 263 118***
Lanes: 0 1 1 0 1

Signal=Protect Rights=Overlap (Eastbound) — Final Vol: / Lanes:
292*** 1
0
556 3
0
68 1

Vol Cnt Date: 12/1/2016
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.711
Avg Crit Del (sec/veh): 54.3
Avg Delay (sec/veh): 50.8
LOS: D

Signal=Protect Rights=Overlap (Westbound) — Lanes: / Final Vol:
1 339
0
3 1257***
0
1 97

Lanes: 1 0 1 1 0
Final Vol: 168 668*** 82
Signal=Protect/Rights=Include

Street Name:	Mary Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	168	668	76	102	263	164	145	464	68	95	1183	236
Growth 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
Initial Bse:	168	668	76	102	263	164	145	464	68	95	1183	236
Added Vol:	0	0	6	16	0	62	147	92	0	2	74	103
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	168	668	82	118	263	226	292	556	68	97	1257	339
User 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
PHF 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
PHF Volume:	168	668	82	118	263	226	292	556	68	97	1257	339
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	168	668	82	118	263	226	292	556	68	97	1257	339
PCE 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
MLF 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
FinalVolume:	168	668	82	118	263	226	292	556	68	97	1257	339
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.78	0.22	1.00	1.05	0.95	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	3295	404	1750	1989	1709	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.20	0.20	0.07	0.13	0.13	0.17	0.10	0.04	0.06	0.22	0.19
Crit Moves:		****		****			****				****	
Green Time:	25.6	45.6	45.6	15.2	35.2	35.2	37.6	55.6	81.2	31.6	49.6	64.8
Volume/Cap:	0.60	0.71	0.71	0.71	0.60	0.60	0.71	0.28	0.08	0.28	0.71	0.48
Delay/Veh:	66.1	53.6	53.6	83.7	57.3	57.3	62.0	37.8	20.2	55.0	50.2	35.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	66.1	53.6	53.6	83.7	57.3	57.3	62.0	37.8	20.2	55.0	50.2	35.6
LOS by Move:	E	D-	D-	F	E+	E+	E	D+	C+	D-	D	D+
HCM2kAvgQ:	9	18	18	6	11	11	14	6	2	4	18	13

Note: Queue reported is the number of cars per lane.

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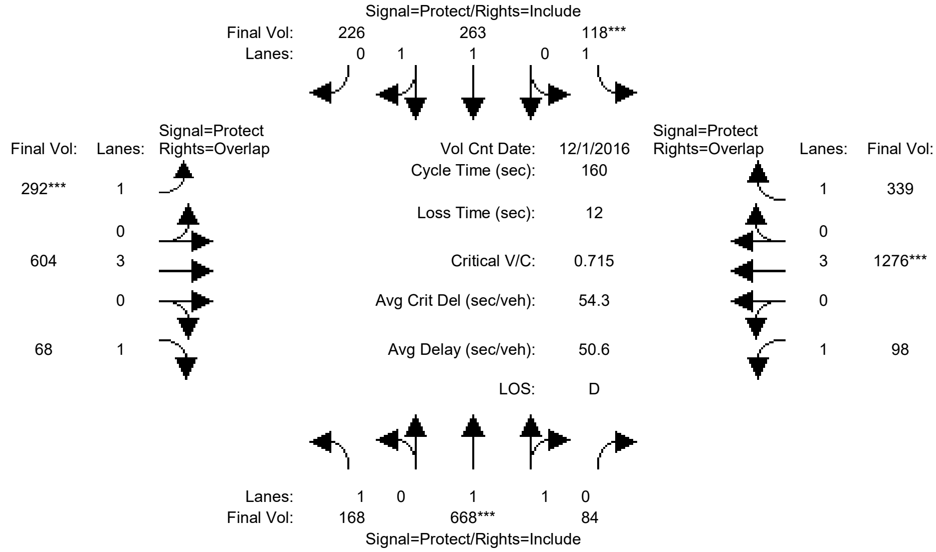
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #16: Mary Avenue / El Camino Real (CMP)



Street Name:	Mary Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	168	668	76	102	263	164	145	464	68	95	1183	236
Growth 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
Initial Bse:	168	668	76	102	263	164	145	464	68	95	1183	236
Added Vol:	0	0	8	16	0	62	147	140	0	3	93	103
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	168	668	84	118	263	226	292	604	68	98	1276	339
User 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
PHF 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
PHF Volume:	168	668	84	118	263	226	292	604	68	98	1276	339
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	168	668	84	118	263	226	292	604	68	98	1276	339
PCE 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
MLF 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
FinalVolume:	168	668	84	118	263	226	292	604	68	98	1276	339
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.77	0.23	1.00	1.05	0.95	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	3286	413	1750	1989	1709	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.20	0.20	0.07	0.13	0.13	0.17	0.11	0.04	0.06	0.22	0.19
Crit Moves:		****		****			****				****	
Green Time:	25.5	45.5	45.5	15.1	35.1	35.1	37.3	57.2	82.7	30.2	50.1	65.2
Volume/Cap:	0.60	0.72	0.72	0.72	0.60	0.60	0.72	0.30	0.08	0.30	0.72	0.48
Delay/Veh:	66.3	53.8	53.8	84.2	57.5	57.5	62.4	37.0	19.5	56.3	50.0	35.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	66.3	53.8	53.8	84.2	57.5	57.5	62.4	37.0	19.5	56.3	50.0	35.3
LOS by Move:	E	D-	D-	F	E+	E+	E	D+	B-	E+	D	D+
HCM2kAvgQ:	9	18	18	6	11	11	14	7	2	4	18	13

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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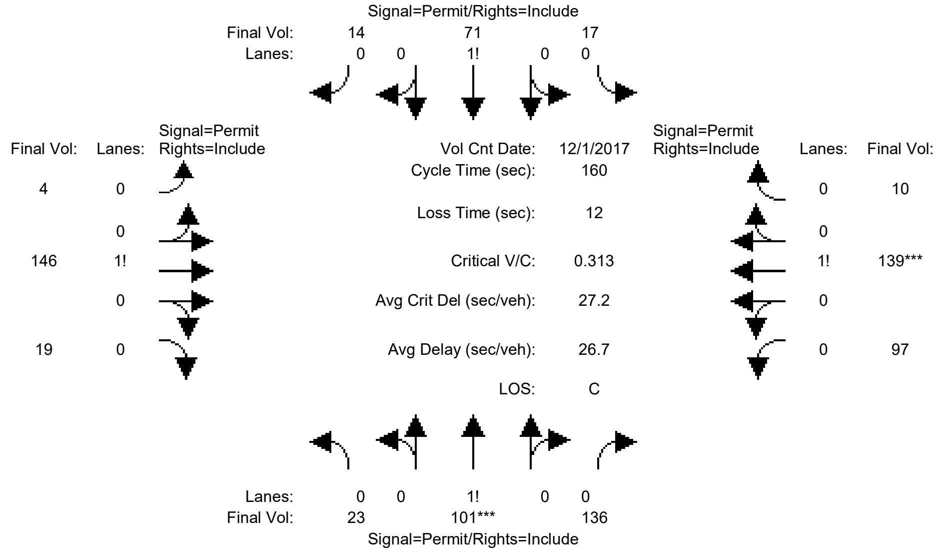
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #17: Pastoria Avenue / Washington Avenue



Street Name:	Pastoria Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	23	101	95	15	67	14	4	114	19	89	124	10
Growth 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
Initial Bse:	23	101	95	15	67	14	4	114	19	89	124	10
Added Vol:	0	0	41	2	4	0	0	32	0	8	15	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	101	136	17	71	14	4	146	19	97	139	10
User 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
PHF 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
PHF Volume:	23	101	136	17	71	14	4	146	19	97	139	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	101	136	17	71	14	4	146	19	97	139	10
PCE 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
MLF 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
FinalVolume:	23	101	136	17	71	14	4	146	19	97	139	10
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.09	0.39	0.52	0.17	0.69	0.14	0.02	0.87	0.11	0.39	0.57	0.04
Final Sat.:	155	680	915	292	1218	240	41	1512	197	690	989	71
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.15	0.06	0.06	0.06	0.10	0.10	0.10	0.14	0.14	0.14
Crit Moves:		****									****	
Green Time:	76.0	76.0	76.0	76.0	76.0	76.0	72.0	72.0	72.0	72.0	72.0	72.0
Volume/Cap:	0.31	0.31	0.31	0.12	0.12	0.12	0.21	0.21	0.21	0.31	0.31	0.31
Delay/Veh:	26.1	26.1	26.1	23.5	23.5	23.5	27.0	27.0	27.0	28.4	28.4	28.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.1	26.1	26.1	23.5	23.5	23.5	27.0	27.0	27.0	28.4	28.4	28.4
LOS by Move:	C	C	C	C	C	C	C	C	C	C	C	C
HCM2kAvgQ:	8	8	8	3	3	3	5	5	5	8	8	8

Note: Queue reported is the number of cars per lane.

Cityline TIA
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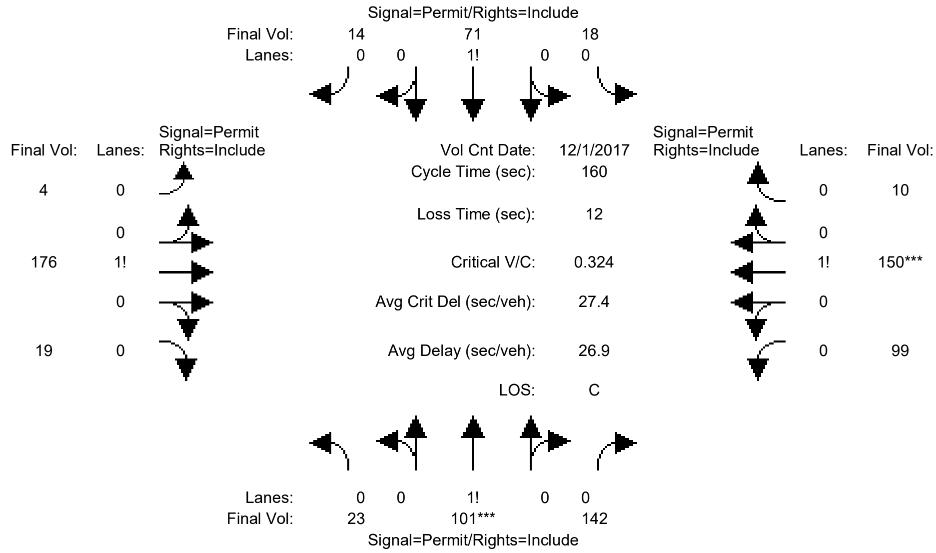
Intersection #17: Pastoria Avenue / Washington Avenue



Street Name:	Pastoria Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	23	101	95	15	67	14	4	114	19	89	124	10
Growth 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
Initial Bse:	23	101	95	15	67	14	4	114	19	89	124	10
Added Vol:	0	0	47	3	4	0	0	62	0	10	26	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	101	142	18	71	14	4	176	19	99	150	10
User 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
PHF 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
PHF Volume:	23	101	142	18	71	14	4	176	19	99	150	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	101	142	18	71	14	4	176	19	99	150	10
PCE 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
MLF 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
FinalVolume:	23	101	142	18	71	14	4	176	19	99	150	10
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.09	0.38	0.53	0.17	0.69	0.14	0.02	0.88	0.10	0.38	0.58	0.04
Final Sat.:	151	664	934	306	1206	238	35	1548	167	669	1014	68
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.15	0.06	0.06	0.06	0.11	0.11	0.11	0.15	0.15	0.15
Crit Moves:		****									****	
Green Time:	75.0	75.0	75.0	75.0	75.0	75.0	73.0	73.0	73.0	73.0	73.0	73.0
Volume/Cap:	0.32	0.32	0.32	0.13	0.13	0.13	0.25	0.25	0.25	0.32	0.32	0.32
Delay/Veh:	26.9	26.9	26.9	24.1	24.1	24.1	26.8	26.8	26.8	28.0	28.0	28.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.9	26.9	26.9	24.1	24.1	24.1	26.8	26.8	26.8	28.0	28.0	28.0
LOS by Move:	C	C	C	C	C	C	C	C	C	C	C	C
HCM2kAvgQ:	8	8	8	3	3	3	6	6	6	8	8	8

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Background AM

Intersection #18: El Camino Real / Hollenbeck Avenue-Pastoria Avenue

Signal=Protect/Rights=Overlap
Final Vol: 84 210 54***
Lanes: 1 0 2 0 1

Westbound approach (left side): Signal=Protect Rights=Include
Final Vol: / Lanes:
58*** 1
0
640 2
1
67 0

Vol Cnt Date: 12/1/2016
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.553
Avg Crit Del (sec/veh): 36.8
Avg Delay (sec/veh): 40.2
LOS: D

Signal=Protect Rights=Include
Lanes: / Final Vol:
0 64
1
2 1407***
0
2 154

Lanes: 1 0 1 1 0
Final Vol: 201 368*** 317
Signal=Protect/Rights=Include

Street Name:	Hollenbeck Avenue-Pastoria Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	154	306	267	54	194	81	52	540	59	133	1278	64
Growth 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
Initial Bse:	154	306	267	54	194	81	52	540	59	133	1278	64
Added Vol:	47	62	50	0	16	3	6	100	8	21	129	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	201	368	317	54	210	84	58	640	67	154	1407	64
User 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
PHF 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
PHF Volume:	201	368	317	54	210	84	58	640	67	154	1407	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	201	368	317	54	210	84	58	640	67	154	1407	64
PCE 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
MLF 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
FinalVolume:	201	368	317	54	210	84	58	640	67	154	1407	64
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.95	0.92	1.00	0.92	0.92	0.99	0.95	0.83	0.98	0.95
Lanes:	1.00	1.05	0.95	1.00	2.00	1.00	1.00	2.71	0.29	2.00	2.86	0.14
Final Sat.:	1750	1986	1711	1750	3800	1750	1750	5069	531	3150	5356	244
Capacity Analysis Module:												
Vol/Sat:	0.11	0.19	0.19	0.03	0.06	0.05	0.03	0.13	0.13	0.05	0.26	0.26
Crit Moves:		****		****			****				****	
Green Time:	40.5	53.6	53.6	8.9	22.0	31.6	9.6	61.7	61.7	23.9	75.9	75.9
Volume/Cap:	0.45	0.55	0.55	0.55	0.40	0.24	0.55	0.33	0.33	0.33	0.55	0.55
Delay/Veh:	51.2	44.0	44.0	80.4	63.5	54.5	79.4	34.7	34.7	61.3	30.2	30.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.2	44.0	44.0	80.4	63.5	54.5	79.4	34.7	34.7	61.3	30.2	30.2
LOS by Move:	D-	D	D	F	E	D-	E-	C-	C-	E	C	C
HCM2kAvgQ:	8	13	13	3	5	4	3	8	8	4	16	16

Note: Queue reported is the number of cars per lane.

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Intersection #18: El Camino Real / Hollenbeck Avenue-Pastoria Avenue

Signal=Protect/Rights=Overlap
Final Vol: 85 213 54***
Lanes: 1 0 2 0 1

Signal=Protect Rights=Include (West approach)
Final Vol: 59*** / 689 / 67
Lanes: 1 / 0 / 2 / 1 / 0

Vol Cnt Date: 12/1/2016
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.569
Avg Crit Del (sec/veh): 37.5
Avg Delay (sec/veh): 40.7
LOS: D

Signal=Protect Rights=Include (East approach)
Lanes: 0 / 1 / 2 / 0 / 2
Final Vol: 64 / 1425*** / 163

Lanes: 1 0 1 1 0
Final Vol: 201 377*** 348
Signal=Protect/Rights=Include

Street Name:	Hollenbeck Avenue-Pastoria Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	154	306	267	54	194	81	52	540	59	133	1278	64
Growth 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
Initial Bse:	154	306	267	54	194	81	52	540	59	133	1278	64
Added Vol:	47	71	81	0	19	4	7	149	8	30	147	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	201	377	348	54	213	85	59	689	67	163	1425	64
User 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
PHF 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
PHF Volume:	201	377	348	54	213	85	59	689	67	163	1425	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	201	377	348	54	213	85	59	689	67	163	1425	64
PCE 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
MLF 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
FinalVolume:	201	377	348	54	213	85	59	689	67	163	1425	64
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.95	0.92	1.00	0.92	0.92	0.99	0.95	0.83	0.98	0.95
Lanes:	1.00	1.01	0.99	1.00	2.00	1.00	1.00	2.72	0.28	2.00	2.87	0.13
Final Sat.:	1750	1923	1775	1750	3800	1750	1750	5103	496	3150	5359	241
Capacity Analysis Module:												
Vol/Sat:	0.11	0.20	0.20	0.03	0.06	0.05	0.03	0.14	0.14	0.05	0.27	0.27
Crit Moves:		****		****			****				****	
Green Time:	41.3	55.1	55.1	8.7	22.5	32.0	9.5	60.9	60.9	23.3	74.7	74.7
Volume/Cap:	0.44	0.57	0.57	0.57	0.40	0.24	0.57	0.35	0.35	0.35	0.57	0.57
Delay/Veh:	50.4	43.4	43.4	81.8	63.1	54.2	80.6	35.6	35.6	62.0	31.2	31.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.4	43.4	43.4	81.8	63.1	54.2	80.6	35.6	35.6	62.0	31.2	31.2
LOS by Move:	D	D	D	F	E	D-	F	D+	D+	E	C	C
HCM2kAvgQ:	8	14	14	3	5	4	3	9	9	4	17	17

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Background AM

Intersection #19: Hollenbeck Avenue / Remington Avenue

Signal=Permit/Rights=Include
Final Vol: 59 375 54
Lanes: 0 0 1! 0 0

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	10/2/2018			
75***	1		Cycle Time (sec):	90		0	81
	0		Loss Time (sec):	12		1	
265	0		Critical V/C:	0.759		0	308***
	1		Avg Crit Del (sec/veh):	28.7		0	
39	0		Avg Delay (sec/veh):	26.3		1	82
			LOS:	C			

Lanes: 0 1 0 0 1
Final Vol: 45 673*** 105
Signal=Permit/Rights=Include

Street Name:	Hollenbeck Avenue						Remington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	45	539	99	54	336	52	49	253	39	81	302	81
Growth 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
Initial Bse:	45	539	99	54	336	52	49	253	39	81	302	81
Added Vol:	0	134	6	0	39	7	26	12	0	1	6	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	673	105	54	375	59	75	265	39	82	308	81
User 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
PHF 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
PHF Volume:	45	673	105	54	375	59	75	265	39	82	308	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	673	105	54	375	59	75	265	39	82	308	81
PCE 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
MLF 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
FinalVolume:	45	673	105	54	375	59	75	265	39	82	308	81
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.06	0.94	1.00	0.11	0.77	0.12	1.00	0.87	0.13	1.00	0.79	0.21
Final Sat.:	113	1687	1750	194	1345	212	1750	1569	231	1750	1425	375
Capacity Analysis Module:												
Vol/Sat:	0.40	0.40	0.06	0.28	0.28	0.28	0.04	0.17	0.17	0.05	0.22	0.22
Crit Moves:		****					****				****	
Green Time:	46.1	46.1	46.1	46.1	46.1	46.1	7.0	21.9	21.9	10.1	24.9	24.9
Volume/Cap:	0.78	0.78	0.12	0.54	0.54	0.54	0.55	0.69	0.69	0.42	0.78	0.78
Delay/Veh:	22.2	22.2	11.5	15.6	15.6	15.6	44.8	35.8	35.8	38.7	37.7	37.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	22.2	22.2	11.5	15.6	15.6	15.6	44.8	35.8	35.8	38.7	37.7	37.7
LOS by Move:	C+	C+	B+	B	B	B	D	D+	D+	D+	D+	D+
HCM2kAvgQ:	17	17	2	10	10	10	3	9	9	2	10	10

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Intersection #19: Hollenbeck Avenue / Remington Avenue

Signal=Permit/Rights=Include
Final Vol: 60 385 54
Lanes: 0 0 1! 0 0

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	10/2/2018			
80***	1		Cycle Time (sec):	90		0	81
	0		Loss Time (sec):	12		1	
270	0		Critical V/C:	0.785		0	309***
	1		Avg Crit Del (sec/veh):	30.0		0	
39	0		Avg Delay (sec/veh):	27.2		1	82
			LOS:	C			

Lanes: 0 1 0 0 1
Final Vol: 45 708*** 105
Signal=Permit/Rights=Include

Street Name:	Hollenbeck Avenue						Remington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	45	539	99	54	336	52	49	253	39	81	302	81
Growth 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
Initial Bse:	45	539	99	54	336	52	49	253	39	81	302	81
Added Vol:	0	169	6	0	49	8	31	17	0	1	7	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	708	105	54	385	60	80	270	39	82	309	81
User 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
PHF 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
PHF Volume:	45	708	105	54	385	60	80	270	39	82	309	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	708	105	54	385	60	80	270	39	82	309	81
PCE 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
MLF 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
FinalVolume:	45	708	105	54	385	60	80	270	39	82	309	81
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.06	0.94	1.00	0.11	0.77	0.12	1.00	0.87	0.13	1.00	0.79	0.21
Final Sat.:	108	1692	1750	189	1350	210	1750	1573	227	1750	1426	374
Capacity Analysis Module:												
Vol/Sat:	0.42	0.42	0.06	0.29	0.29	0.29	0.05	0.17	0.17	0.05	0.22	0.22
Crit Moves:		****					****				****	
Green Time:	46.8	46.8	46.8	46.8	46.8	46.8	7.0	21.5	21.5	9.7	24.2	24.2
Volume/Cap:	0.80	0.80	0.12	0.55	0.55	0.55	0.59	0.72	0.72	0.43	0.80	0.80
Delay/Veh:	23.0	23.0	11.1	15.2	15.2	15.2	46.7	37.3	37.3	39.1	40.2	40.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.0	23.0	11.1	15.2	15.2	15.2	46.7	37.3	37.3	39.1	40.2	40.2
LOS by Move:	C	C	B+	B	B	B	D	D+	D+	D	D	D
HCM2kAvgQ:	18	18	2	10	10	10	3	10	10	2	10	10

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Background AM

Intersection #20: Hollenbeck Avenue / Fremont Avenue

Signal=Protect/Rights=Overlap
Final Vol: 156 204 90***
Lanes: 1 0 1 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	5/1/2017			
149***	1		Cycle Time (sec):	160		0	129
	0		Loss Time (sec):	12		1	
490	2		Critical V/C:	0.573		2	766***
	1		Avg Crit Del (sec/veh):	49.5		0	
75	0		Avg Delay (sec/veh):	47.3		1	134
			LOS:	D			

Lanes: 1 0 1 0 1
Final Vol: 204 444*** 215
Signal=Protect/Rights=Overlap

Street Name:	Hollenbeck Avenue						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	204	354	215	90	176	145	100	470	75	134	756	128
Growth 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
Initial Bse:	204	354	215	90	176	145	100	470	75	134	756	128
Added Vol:	0	90	0	0	28	11	49	20	0	0	10	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	204	444	215	90	204	156	149	490	75	134	766	129
User 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
PHF 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
PHF Volume:	204	444	215	90	204	156	149	490	75	134	766	129
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	204	444	215	90	204	156	149	490	75	134	766	129
PCE 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
MLF 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
FinalVolume:	204	444	215	90	204	156	149	490	75	134	766	129
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.59	0.41	1.00	2.55	0.45
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	4856	743	1750	4792	807
Capacity Analysis Module:												
Vol/Sat:	0.12	0.23	0.12	0.05	0.11	0.09	0.09	0.10	0.10	0.08	0.16	0.16
Crit Moves:		****		****			****				****	
Green Time:	41.4	65.2	94.8	14.4	38.2	61.9	23.8	38.9	38.9	29.5	44.6	44.6
Volume/Cap:	0.45	0.57	0.21	0.57	0.45	0.23	0.57	0.42	0.42	0.42	0.57	0.57
Delay/Veh:	50.4	37.7	15.3	74.9	52.7	33.2	66.5	51.2	51.2	58.5	50.0	50.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.4	37.7	15.3	74.9	52.7	33.2	66.5	51.2	51.2	58.5	50.0	50.0
LOS by Move:	D	D+	B	E	D-	C-	E	D-	D-	E+	D	D
HCM2kAvgQ:	9	16	5	5	8	5	8	8	8	6	12	12

Note: Queue reported is the number of cars per lane.

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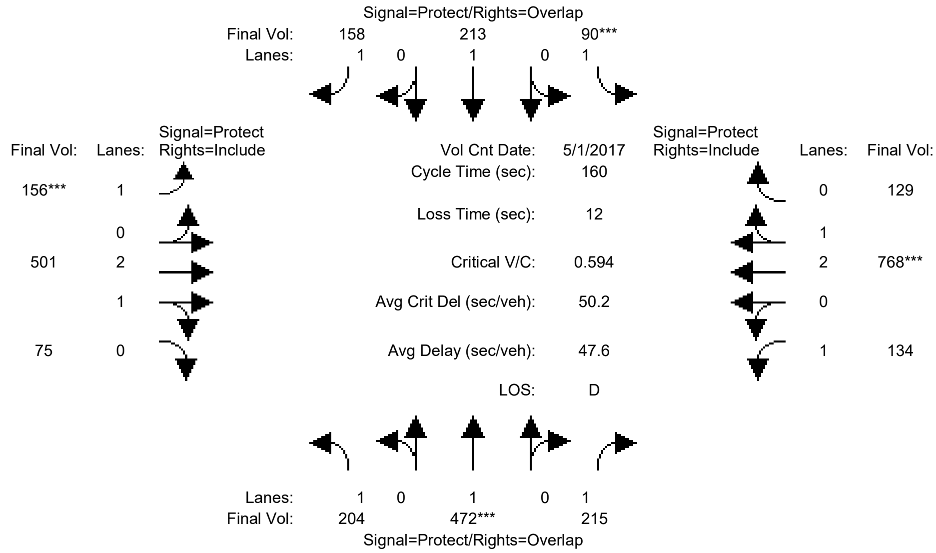
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #20: Hollenbeck Avenue / Fremont Avenue



Street Name:	Hollenbeck Avenue						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	204	354	215	90	176	145	100	470	75	134	756	128
Growth 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
Initial Bse:	204	354	215	90	176	145	100	470	75	134	756	128
Added Vol:	0	118	0	0	37	13	56	31	0	0	12	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	204	472	215	90	213	158	156	501	75	134	768	129
User 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
PHF 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
PHF Volume:	204	472	215	90	213	158	156	501	75	134	768	129
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	204	472	215	90	213	158	156	501	75	134	768	129
PCE 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
MLF 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
FinalVolume:	204	472	215	90	213	158	156	501	75	134	768	129
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.59	0.41	1.00	2.55	0.45
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	4870	729	1750	4794	805
Capacity Analysis Module:												
Vol/Sat:	0.12	0.25	0.12	0.05	0.11	0.09	0.09	0.10	0.10	0.08	0.16	0.16
Crit Moves:		****		****			****				****	
Green Time:	41.2	66.9	95.6	13.9	39.6	63.6	24.0	38.5	38.5	28.7	43.2	43.2
Volume/Cap:	0.45	0.59	0.21	0.59	0.45	0.23	0.59	0.43	0.43	0.43	0.59	0.59
Delay/Veh:	50.7	37.2	14.9	76.6	51.7	32.1	67.1	51.6	51.6	59.3	51.4	51.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.7	37.2	14.9	76.6	51.7	32.1	67.1	51.6	51.6	59.3	51.4	51.4
LOS by Move:	D	D+	B	E-	D-	C-	E	D-	D-	E+	D-	D-
HCM2kAvgQ:	9	17	5	5	8	5	8	8	8	6	12	12

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #21: Hollenbeck Avenue / Cascade Drive

Signal=Permit/Rights=Include
Final Vol: 57 377 13
Lanes: 0 0 1! 0 0

Signal=Permit
Rights=Include

Final Vol: Lanes:
85 0
0
57 1!
0
43 0

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 60
Loss Time (sec): 6
Critical V/C: 0.626
Avg Crit Del (sec/veh): 10.0
Avg Delay (sec/veh): 9.8
LOS: A

Signal=Permit
Rights=Include

Lanes: Final Vol:
0 64
0
1! 117***
0
0 31

Lanes: 0 0 1! 0 0
Final Vol: 53 693*** 28
Signal=Permit/Rights=Include

Street Name:	Hollenbeck Avenue						Cascade Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	53	642	28	6	360	52	71	57	43	31	117	39
Growth 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
Initial Bse:	53	642	28	6	360	52	71	57	43	31	117	39
Added Vol:	0	51	0	7	17	5	14	0	0	0	0	25
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	53	693	28	13	377	57	85	57	43	31	117	64
User 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
PHF 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
PHF Volume:	53	693	28	13	377	57	85	57	43	31	117	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	693	28	13	377	57	85	57	43	31	117	64
PCE 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
MLF 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
FinalVolume:	53	693	28	13	377	57	85	57	43	31	117	64
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.07	0.89	0.04	0.03	0.84	0.13	0.46	0.31	0.23	0.15	0.55	0.30
Final Sat.:	120	1567	63	51	1476	223	804	539	407	256	966	528
Capacity Analysis Module:												
Vol/Sat:	0.44	0.44	0.44	0.26	0.26	0.26	0.11	0.11	0.11	0.12	0.12	0.12
Crit Moves:		****									****	
Green Time:	42.4	42.4	42.4	42.4	42.4	42.4	11.6	11.6	11.6	11.6	11.6	11.6
Volume/Cap:	0.63	0.63	0.63	0.36	0.36	0.36	0.55	0.55	0.55	0.63	0.63	0.63
Delay/Veh:	5.7	5.7	5.7	3.7	3.7	3.7	23.7	23.7	23.7	25.9	25.9	25.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.7	5.7	5.7	3.7	3.7	3.7	23.7	23.7	23.7	25.9	25.9	25.9
LOS by Move:	A	A	A	A	A	A	C	C	C	C	C	C
HCM2kAvgQ:	8	8	8	4	4	4	4	4	4	5	5	5

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #21: Hollenbeck Avenue / Cascade Drive

Signal=Permit/Rights=Include
Final Vol: 58 382 14
Lanes: 0 0 1! 0 0

Final Vol: Lanes: Signal=Permit Rights=Include
89 0
0
57 1!
0
43 0

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 60
Loss Time (sec): 6
Critical V/C: 0.642
Avg Crit Del (sec/veh): 10.4
Avg Delay (sec/veh): 10.1
LOS: B+

Signal=Permit Rights=Include Lanes: Final Vol:
0 71
0
1! 117***
0
0 31

Lanes: 0 0 1! 0 0
Final Vol: 53 711*** 28
Signal=Permit/Rights=Include

Street Name:	Hollenbeck Avenue						Cascade Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	53	642	28	6	360	52	71	57	43	31	117	39
Growth 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
Initial Bse:	53	642	28	6	360	52	71	57	43	31	117	39
Added Vol:	0	69	0	8	22	6	18	0	0	0	0	32
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	53	711	28	14	382	58	89	57	43	31	117	71
User 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
PHF 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
PHF Volume:	53	711	28	14	382	58	89	57	43	31	117	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	711	28	14	382	58	89	57	43	31	117	71
PCE 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
MLF 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
FinalVolume:	53	711	28	14	382	58	89	57	43	31	117	71
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.07	0.90	0.03	0.03	0.84	0.13	0.47	0.30	0.23	0.14	0.54	0.32
Final Sat.:	117	1571	62	54	1472	224	824	528	398	248	935	567
Capacity Analysis Module:												
Vol/Sat:	0.45	0.45	0.45	0.26	0.26	0.26	0.11	0.11	0.11	0.13	0.13	0.13
Crit Moves:		****									****	
Green Time:	42.3	42.3	42.3	42.3	42.3	42.3	11.7	11.7	11.7	11.7	11.7	11.7
Volume/Cap:	0.64	0.64	0.64	0.37	0.37	0.37	0.55	0.55	0.55	0.64	0.64	0.64
Delay/Veh:	5.9	5.9	5.9	3.7	3.7	3.7	23.8	23.8	23.8	26.3	26.3	26.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.9	5.9	5.9	3.7	3.7	3.7	23.8	23.8	23.8	26.3	26.3	26.3
LOS by Move:	A	A	A	A	A	A	C	C	C	C	C	C
HCM2kAvgQ:	9	9	9	4	4	4	4	4	4	5	5	5

Note: Queue reported is the number of cars per lane.

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	40	0	70	681	200	268	123	951	2854	0	0	476
Future Volume (vph)	40	0	70	681	200	268	123	951	2854	0	0	476
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0	7.0	7.0			7.0	6.9			6.9
Lane Util. Factor		0.95	0.95	0.91	0.91			0.97	0.91			0.91
Frt		0.95	0.85	1.00	0.95			1.00	1.00			0.97
Flt Protected		0.97	1.00	0.95	0.98			0.95	1.00			1.00
Satd. Flow (prot)		1631	1504	1610	3150			3433	5085			4923
Flt Permitted		0.97	1.00	0.95	0.98			0.95	1.00			1.00
Satd. Flow (perm)		1631	1504	1610	3150			3433	5085			4923
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	40	0	70	681	200	268	123	951	2854	0	0	476
RTOR Reduction (vph)	0	51	46	0	46	0	0	0	0	0	0	36
Lane Group Flow (vph)	0	7	6	388	715	0	0	1074	2854	0	0	569
Turn Type	Split	NA	Perm	Split	NA		Prot	Prot	NA			NA
Protected Phases	4	4		8	8		5	5	2			6
Permitted Phases			4									
Actuated Green, G (s)		16.0	16.0	35.0	35.0			39.8	68.1			21.3
Effective Green, g (s)		16.0	16.0	35.0	35.0			39.8	68.1			21.3
Actuated g/C Ratio		0.11	0.11	0.25	0.25			0.28	0.49			0.15
Clearance Time (s)		7.0	7.0	7.0	7.0			7.0	6.9			6.9
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)		186	171	402	787			975	2473			748
v/s Ratio Prot		c0.00		c0.24	0.23			0.31	c0.56			0.12
v/s Ratio Perm			0.00									
v/c Ratio		0.04	0.03	0.97	0.91			1.10	1.15			0.76
Uniform Delay, d1		55.1	55.1	51.9	51.0			50.1	36.0			56.9
Progression Factor		1.00	1.00	1.00	1.00			0.90	0.85			1.00
Incremental Delay, d2		0.4	0.4	37.0	16.3			59.4	73.9			4.6
Delay (s)		55.5	55.5	88.9	67.3			104.7	104.4			61.5
Level of Service		E	E	F	E			F	F			E
Approach Delay (s)		55.5			74.6				104.4			61.5
Approach LOS		E			E				F			E

Intersection Summary			
HCM 2000 Control Delay	93.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	27.9
Intersection Capacity Utilization	98.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	129
Future Volume (vph)	129
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	1.00
Adj. Flow (vph)	129
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	863	0	44	0	0	0	0	3056	863	81	1216	0
Future Volume (vph)	863	0	44	0	0	0	0	3056	863	81	1216	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0					6.2	6.2	6.4	5.9	
Lane Util. Factor	0.95	0.95	1.00					0.81	0.88	1.00	0.91	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1681	1583					7544	2787	1770	5085	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1681	1583					7544	2787	1770	5085	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	863	0	44	0	0	0	0	3056	863	81	1216	0
RTOR Reduction (vph)	0	0	30	0	0	0	0	0	323	0	0	0
Lane Group Flow (vph)	431	432	14	0	0	0	0	3056	540	81	1216	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	43.0	43.0	43.0					66.8	66.8	10.6	84.1	
Effective Green, g (s)	43.0	43.0	43.0					66.8	66.8	10.6	84.1	
Actuated g/C Ratio	0.31	0.31	0.31					0.48	0.48	0.08	0.60	
Clearance Time (s)	7.0	7.0	7.0					6.2	6.2	6.4	5.9	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	516	516	486					3599	1329	134	3054	
v/s Ratio Prot	0.26	c0.26						c0.41		c0.05	0.24	
v/s Ratio Perm			0.01						0.19			
v/c Ratio	0.84	0.84	0.03					0.85	0.41	0.60	0.40	
Uniform Delay, d1	45.2	45.2	33.9					32.2	23.7	62.7	14.7	
Progression Factor	1.00	1.00	1.00					0.14	0.02	1.29	1.71	
Incremental Delay, d2	14.8	14.9	0.1					0.7	0.2	7.0	0.4	
Delay (s)	60.0	60.1	34.0					5.3	0.7	87.8	25.5	
Level of Service	E	E	C					A	A	F	C	
Approach Delay (s)		58.8			0.0			4.3			29.4	
Approach LOS		E			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	17.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	91.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	8	37	227	52	189	108	3680	95	34	1136	92
Future Volume (vph)	36	8	37	227	52	189	108	3680	95	34	1136	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.81		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1556	1761	1863	1583	1770	7509		1770	5028	
Flt Permitted	0.72	1.00	1.00	0.75	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1347	1863	1556	1395	1863	1583	1770	7509		1770	5028	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	36	8	37	227	52	189	108	3680	95	34	1136	92
RTOR Reduction (vph)	0	0	26	0	0	107	0	3	0	0	6	0
Lane Group Flow (vph)	36	8	11	227	52	82	108	3772	0	34	1222	0
Confl. Peds. (#/hr)			5	5					5			
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Actuated Green, G (s)	41.0	41.0	41.0	41.0	41.0	41.0	11.9	68.6		10.0	66.5	
Effective Green, g (s)	41.0	41.0	41.0	41.0	41.0	41.0	11.9	68.6		10.0	66.5	
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29	0.29	0.09	0.49		0.07	0.48	
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	394	545	455	408	545	463	150	3679		126	2388	
v/s Ratio Prot		0.00			0.03		0.06	c0.50		0.02	c0.24	
v/s Ratio Perm	0.03		0.01	c0.16		0.05						
v/c Ratio	0.09	0.01	0.02	0.56	0.10	0.18	0.72	1.03		0.27	0.51	
Uniform Delay, d1	36.0	35.2	35.2	41.8	36.0	36.9	62.4	35.7		61.5	25.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86		0.90	0.64	
Incremental Delay, d2	0.5	0.0	0.1	1.6	0.1	0.2	14.3	21.1		4.9	0.2	
Delay (s)	36.4	35.2	35.3	43.5	36.1	37.1	76.4	51.7		60.1	16.4	
Level of Service	D	D	D	D	D	D	E	D		E	B	
Approach Delay (s)		35.8			40.1			52.4			17.6	
Approach LOS		D			D			D			B	

Intersection Summary			
HCM 2000 Control Delay	43.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	98.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	40	0	70	718	200	268	124	953	2858	0	0	478
Future Volume (vph)	40	0	70	718	200	268	124	953	2858	0	0	478
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0	7.0	7.0			7.0	6.9			6.9
Lane Util. Factor		0.95	0.95	0.91	0.91			0.97	0.91			0.91
Frt		0.95	0.85	1.00	0.95			1.00	1.00			0.97
Flt Protected		0.97	1.00	0.95	0.98			0.95	1.00			1.00
Satd. Flow (prot)		1631	1504	1610	3153			3433	5085			4923
Flt Permitted		0.97	1.00	0.95	0.98			0.95	1.00			1.00
Satd. Flow (perm)		1631	1504	1610	3153			3433	5085			4923
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	40	0	70	718	200	268	124	953	2858	0	0	478
RTOR Reduction (vph)	0	51	46	0	42	0	0	0	0	0	0	36
Lane Group Flow (vph)	0	7	6	402	742	0	0	1077	2858	0	0	571
Turn Type	Split	NA	Perm	Split	NA		Prot	Prot	NA			NA
Protected Phases	4	4		8	8		5	5	2			6
Permitted Phases			4									
Actuated Green, G (s)		16.0	16.0	35.0	35.0			39.8	68.1			21.3
Effective Green, g (s)		16.0	16.0	35.0	35.0			39.8	68.1			21.3
Actuated g/C Ratio		0.11	0.11	0.25	0.25			0.28	0.49			0.15
Clearance Time (s)		7.0	7.0	7.0	7.0			7.0	6.9			6.9
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)		186	171	402	788			975	2473			748
v/s Ratio Prot		c0.00		c0.25	0.24			0.31	c0.56			0.12
v/s Ratio Perm			0.00									
v/c Ratio		0.04	0.03	1.00	0.94			1.10	1.16			0.76
Uniform Delay, d1		55.1	55.1	52.5	51.5			50.1	36.0			56.9
Progression Factor		1.00	1.00	1.00	1.00			0.90	0.85			1.00
Incremental Delay, d2		0.4	0.4	44.9	20.6			60.6	74.6			4.7
Delay (s)		55.5	55.5	97.4	72.1			105.9	105.1			61.6
Level of Service		E	E	F	E			F	F			E
Approach Delay (s)		55.5			80.7				105.3			61.6
Approach LOS		E			F				F			E

Intersection Summary			
HCM 2000 Control Delay	94.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	27.9
Intersection Capacity Utilization	99.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	129
Future Volume (vph)	129
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	1.00
Adj. Flow (vph)	129
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	863	0	44	0	0	0	0	3063	877	81	1254	0
Future Volume (vph)	863	0	44	0	0	0	0	3063	877	81	1254	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0					6.2	6.2	6.4	5.9	
Lane Util. Factor	0.95	0.95	1.00					0.81	0.88	1.00	0.91	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1681	1583					7544	2787	1770	5085	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1681	1583					7544	2787	1770	5085	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	863	0	44	0	0	0	0	3063	877	81	1254	0
RTOR Reduction (vph)	0	0	30	0	0	0	0	0	328	0	0	0
Lane Group Flow (vph)	431	432	14	0	0	0	0	3063	549	81	1254	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	43.0	43.0	43.0					66.8	66.8	10.6	84.1	
Effective Green, g (s)	43.0	43.0	43.0					66.8	66.8	10.6	84.1	
Actuated g/C Ratio	0.31	0.31	0.31					0.48	0.48	0.08	0.60	
Clearance Time (s)	7.0	7.0	7.0					6.2	6.2	6.4	5.9	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	516	516	486					3599	1329	134	3054	
v/s Ratio Prot	0.26	c0.26						c0.41		c0.05	0.25	
v/s Ratio Perm			0.01						0.20			
v/c Ratio	0.84	0.84	0.03					0.85	0.41	0.60	0.41	
Uniform Delay, d1	45.2	45.2	33.9					32.2	23.8	62.7	14.8	
Progression Factor	1.00	1.00	1.00					0.14	0.02	1.28	1.69	
Incremental Delay, d2	14.8	14.9	0.1					0.7	0.2	7.0	0.4	
Delay (s)	60.0	60.1	34.0					5.4	0.8	86.9	25.4	
Level of Service	E	E	C					A	A	F	C	
Approach Delay (s)		58.8			0.0			4.3			29.2	
Approach LOS		E			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	17.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	8	37	227	52	189	108	3701	97	34	1177	92
Future Volume (vph)	36	8	37	227	52	189	108	3701	97	34	1177	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.81		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1556	1761	1863	1583	1770	7509		1770	5030	
Flt Permitted	0.72	1.00	1.00	0.75	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1347	1863	1556	1395	1863	1583	1770	7509		1770	5030	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	36	8	37	227	52	189	108	3701	97	34	1177	92
RTOR Reduction (vph)	0	0	26	0	0	107	0	3	0	0	6	0
Lane Group Flow (vph)	36	8	11	227	52	82	108	3795	0	34	1263	0
Confl. Peds. (#/hr)			5	5					5			
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Actuated Green, G (s)	41.0	41.0	41.0	41.0	41.0	41.0	11.9	68.6		10.0	66.5	
Effective Green, g (s)	41.0	41.0	41.0	41.0	41.0	41.0	11.9	68.6		10.0	66.5	
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29	0.29	0.09	0.49		0.07	0.48	
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	394	545	455	408	545	463	150	3679		126	2389	
v/s Ratio Prot		0.00			0.03		0.06	c0.51		0.02	c0.25	
v/s Ratio Perm	0.03		0.01	c0.16		0.05						
v/c Ratio	0.09	0.01	0.02	0.56	0.10	0.18	0.72	1.03		0.27	0.53	
Uniform Delay, d1	36.0	35.2	35.2	41.8	36.0	36.9	62.4	35.7		61.5	25.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86		0.88	0.63	
Incremental Delay, d2	0.5	0.0	0.1	1.6	0.1	0.2	14.4	23.1		4.9	0.2	
Delay (s)	36.4	35.2	35.3	43.5	36.1	37.1	76.5	53.8		59.2	16.5	
Level of Service	D	D	D	D	D	D	E	D		E	B	
Approach Delay (s)		35.8			40.1			54.4			17.6	
Approach LOS		D			D			D			B	

Intersection Summary			
HCM 2000 Control Delay	44.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	98.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #25: Mathilda Avenue / Maude Avenue (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 579 1201 162***
Lanes: 1 0 4 0 2

Signal=Protect Rights=Overlap (East Bound): Final Vol / Lanes: 126*** 2; 0; 103 1; 0; 106 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 1.007
Avg Crit Del (sec/veh): 63.7
Avg Delay (sec/veh): 57.7
LOS: E+

Signal=Protect Rights=Include (West Bound): Lanes / Final Vol: 0 377; 1; 1 461***; 0; 1 159

Lanes: 2 0 3 0 1
Final Vol: 792 3495*** 56
Signal=Protect/Rights=Overlap

Street Name:	Mathilda Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	599	2285	56	132	845	403	103	90	77	159	390	278
Growth 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
Initial Bse:	599	2285	56	132	845	403	103	90	77	159	390	278
Added Vol:	193	1210	0	30	356	176	23	13	29	0	71	99
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	792	3495	56	162	1201	579	126	103	106	159	461	377
User 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
PHF 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
PHF Volume:	792	3495	56	162	1201	579	126	103	106	159	461	377
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	792	3495	56	162	1201	579	126	103	106	159	461	377
PCE 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
MLF 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
FinalVolume:	792	3495	56	162	1201	579	126	103	106	159	461	377
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.95
Lanes:	2.00	3.00	1.00	2.00	4.00	1.00	2.00	1.00	1.00	1.00	1.08	0.92
Final Sat.:	3150	5700	1750	3150	7600	1750	3150	1900	1750	1750	2034	1664
Capacity Analysis Module:												
Vol/Sat:	0.25	0.61	0.03	0.05	0.16	0.33	0.04	0.05	0.06	0.09	0.23	0.23
Crit Moves:		****		****			****				****	
Green Time:	48.8	97.0	122.4	8.1	56.4	63.4	7.0	17.5	66.2	25.4	35.9	35.9
Volume/Cap:	0.83	1.01	0.04	1.01	0.45	0.84	0.91	0.50	0.15	0.57	1.01	1.01
Delay/Veh:	57.6	49.6	4.6	150.0	40.0	52.2	127.7	69.0	29.4	65.2	96.2	96.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.6	49.6	4.6	150.0	40.0	52.2	127.7	69.0	29.4	65.2	96.2	96.2
LOS by Move:	E+	D	A	F	D	D-	F	E	C	E	F	F
HCM2kAvgQ:	20	56	1	6	11	28	6	5	3	8	25	25

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #25: Mathilda Avenue / Maude Avenue (CMP)

Southbound: Signal=Protect/Rights=Overlap
Final Vol: 579 1327 168***
Lanes: 1 0 4 0 2

Eastbound: Signal=Protect Rights=Overlap
Final Vol:	Lanes:
126***	2
	0
103	1
	0
106	1

Vol Cnt Date:	12/1/2017
Cycle Time (sec):	160
Loss Time (sec):	12
Critical V/C:	1.019
Avg Crit Del (sec/veh):	67.2
Avg Delay (sec/veh):	59.6
LOS:	E+

Westbound: Signal=Protect Rights=Include
Lanes:	Final Vol:
0	378
1	
1	461***
0	
1	159

Northbound:
Lanes: 2 0 3 0 1
Final Vol: 792 3548*** 56
Signal=Protect/Rights=Overlap

Street Name:	Mathilda Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	599	2285	56	132	845	403	103	90	77	159	390	278
Growth 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
Initial Bse:	599	2285	56	132	845	403	103	90	77	159	390	278
Added Vol:	193	1263	0	30	488	176	23	13	29	0	71	100
PasserByVol:	0	0	0	6	-6	0	0	0	0	0	0	0
Initial Fut:	792	3548	56	168	1327	579	126	103	106	159	461	378
User 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
PHF 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
PHF Volume:	792	3548	56	168	1327	579	126	103	106	159	461	378
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	792	3548	56	168	1327	579	126	103	106	159	461	378
PCE 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
MLF 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
FinalVolume:	792	3548	56	168	1327	579	126	103	106	159	461	378
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.95
Lanes:	2.00	3.00	1.00	2.00	4.00	1.00	2.00	1.00	1.00	1.00	1.07	0.93
Final Sat.:	3150	5700	1750	3150	7600	1750	3150	1900	1750	1750	2032	1666
Capacity Analysis Module:												
Vol/Sat:	0.25	0.62	0.03	0.05	0.17	0.33	0.04	0.05	0.06	0.09	0.23	0.23
Crit Moves:		****		****			****				****	
Green Time:	48.9	97.2	122.4	8.3	56.6	63.6	7.0	17.3	66.2	25.1	35.4	35.4
Volume/Cap:	0.82	1.02	0.04	1.02	0.49	0.83	0.91	0.50	0.15	0.58	1.02	1.02
Delay/Veh:	57.2	53.3	4.6	152.6	40.6	51.8	127.7	69.2	29.3	65.6	100	100.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.2	53.3	4.6	152.6	40.6	51.8	127.7	69.2	29.3	65.6	100	100.0
LOS by Move:	E+	D-	A	F	D	D-	F	E	C	E	F	F
HCM2kAvgQ:	20	58	1	6	12	28	6	5	3	8	25	25

Note: Queue reported is the number of cars per lane.

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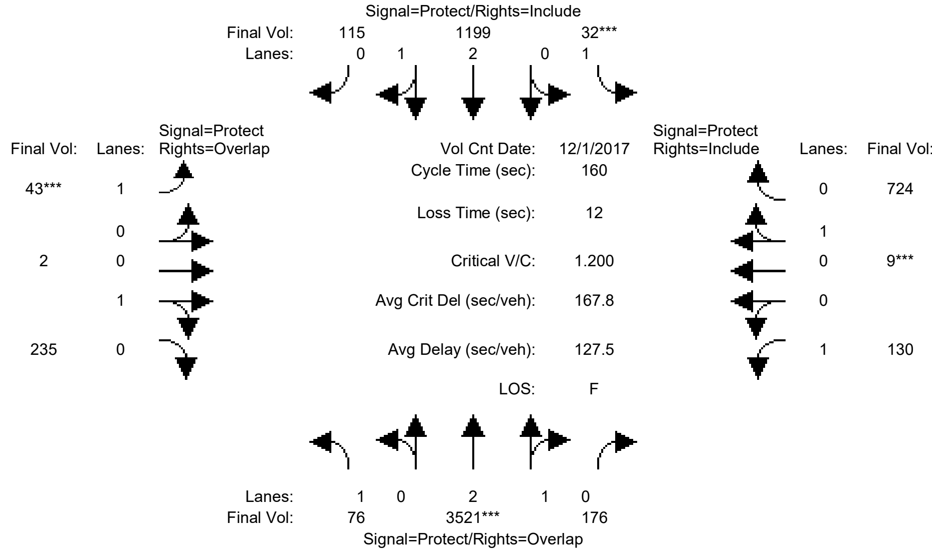
Background AM

Intersection #26: Mathilda Avenue / Indio Avenue



Street Name:	Mathilda Avenue						Indio Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	62	2348	151	28	866	68	20	2	218	114	9	517
Growth 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
Initial Bse:	62	2348	151	28	866	68	20	2	218	114	9	517
Added Vol:	14	1173	25	4	333	47	23	0	17	16	0	207
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	76	3521	176	32	1199	115	43	2	235	130	9	724
User 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
PHF 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
PHF Volume:	76	3521	176	32	1199	115	43	2	235	130	9	724
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	76	3521	176	32	1199	115	43	2	235	130	9	724
PCE 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
MLF 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
FinalVolume:	76	3521	176	32	1199	115	43	2	235	130	9	724
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	2.85	0.15	1.00	2.73	0.27	1.00	0.01	0.99	1.00	0.01	0.99
Final Sat.:	1750	5333	267	1750	5109	490	1750	15	1785	1750	22	1778
Capacity Analysis Module:												
Vol/Sat:	0.04	0.66	0.66	0.02	0.23	0.23	0.02	0.13	0.13	0.07	0.41	0.41
Crit Moves:		****		****			****				****	
Green Time:	14.1	82.9	103.8	7.0	75.8	75.8	7.0	37.2	51.3	21.0	51.1	51.1
Volume/Cap:	0.49	1.27	1.02	0.42	0.50	0.50	0.56	0.57	0.41	0.57	1.27	1.27
Delay/Veh:	72.0	165	47.5	78.2	29.1	29.1	84.2	56.1	43.0	68.6	191	191.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	72.0	165	47.5	78.2	29.1	29.1	84.2	56.1	43.0	68.6	191	191.1
LOS by Move:	E	F	D	E-	C	C	F	E+	D	E	F	F
HCM2kAvgQ:	4	90	61	2	14	14	3	11	9	7	59	59

Note: Queue reported is the number of cars per lane.

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Intersection #26: Mathilda Avenue / Indio Avenue

Signal=Protect/Rights=Include
Final Vol: 115 1325 32***
Lanes: 0 1 2 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Overlap			Signal=Protect Rights=Include	Lanes:	Final Vol:
43***	1		Vol Cnt Date:	12/1/2017		0	724
			Cycle Time (sec):	160			
	0		Loss Time (sec):	12		1	
2	0		Critical V/C:	1.216		0	9***
	1		Avg Crit Del (sec/veh):	174.9		0	
294	0		Avg Delay (sec/veh):	130.3		1	133
			LOS:	F			

Lanes: 1 0 2 1 0
Final Vol: 83 3574*** 203
Signal=Protect/Rights=Overlap

Street Name:	Mathilda Avenue						Indio Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	62	2348	151	28	866	68	20	2	218	114	9	517
Growth 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
Initial Bse:	62	2348	151	28	866	68	20	2	218	114	9	517
Added Vol:	21	1226	52	4	465	47	23	0	76	19	0	207
PasserByVol:	0	0	0	0	-6	0	0	0	0	0	0	0
Initial Fut:	83	3574	203	32	1325	115	43	2	294	133	9	724
User 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
PHF 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
PHF Volume:	83	3574	203	32	1325	115	43	2	294	133	9	724
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	3574	203	32	1325	115	43	2	294	133	9	724
PCE 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
MLF 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
FinalVolume:	83	3574	203	32	1325	115	43	2	294	133	9	724
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	2.83	0.17	1.00	2.75	0.25	1.00	0.01	0.99	1.00	0.01	0.99
Final Sat.:	1750	5299	301	1750	5152	447	1750	12	1788	1750	22	1778
Capacity Analysis Module:												
Vol/Sat:	0.05	0.67	0.67	0.02	0.26	0.26	0.02	0.16	0.16	0.08	0.41	0.41
Crit Moves:		****		****			****				****	
Green Time:	14.1	83.6	101.7	7.0	76.5	76.5	7.0	39.3	53.4	18.2	50.4	50.4
Volume/Cap:	0.54	1.29	1.06	0.42	0.54	0.54	0.56	0.67	0.49	0.67	1.29	1.29
Delay/Veh:	73.6	172	63.6	78.2	29.6	29.6	84.2	58.5	43.1	76.6	199	198.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	73.6	172	63.6	78.2	29.6	29.6	84.2	58.5	43.1	76.6	199	198.8
LOS by Move:	E	F	E	E-	C	C	F	E+	D	E-	F	F
HCM2kAvgQ:	4	94	68	2	16	16	3	14	12	8	60	60

Note: Queue reported is the number of cars per lane.

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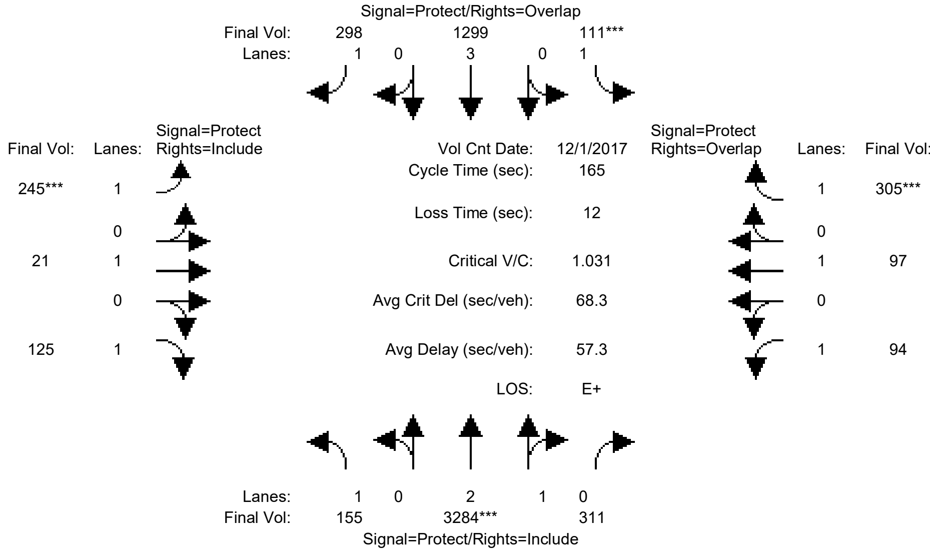
Intersection #27: Mathilda Avenue / California Avenue



Street Name:	Mathilda Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	129	2376	296	60	1041	241	57	14	87	94	95	189
Growth 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
Initial Bse:	129	2376	296	60	1041	241	57	14	87	94	95	189
Added Vol:	26	908	15	51	258	57	188	7	38	0	2	116
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	155	3284	311	111	1299	298	245	21	125	94	97	305
User 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
PHF 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
PHF Volume:	155	3284	311	111	1299	298	245	21	125	94	97	305
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	155	3284	311	111	1299	298	245	21	125	94	97	305
PCE 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
MLF 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
FinalVolume:	155	3284	311	111	1299	298	245	21	125	94	97	305
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.73	0.27	1.00	3.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	5115	484	1750	5700	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.09	0.64	0.64	0.06	0.23	0.17	0.14	0.01	0.07	0.05	0.05	0.17
Crit Moves:		****		****			****					****
Green Time:	31.6	103	102.7	10.1	81.3	103.7	22.4	22.9	22.9	17.2	17.7	27.9
Volume/Cap:	0.46	1.03	1.03	1.03	0.46	0.27	1.03	0.08	0.51	0.51	0.47	1.03
Delay/Veh:	60.2	55.2	55.2	172.9	27.6	13.9	138.1	62.0	67.8	72.4	71.0	129.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	60.2	55.2	55.2	172.9	27.6	13.9	138.1	62.0	67.8	72.4	71.0	129.2
LOS by Move:	E	E+	E+	F	C	B	F	E	E	E	E	F
HCM2kAvgQ:	8	71	71	8	14	7	18	1	7	5	5	20

Note: Queue reported is the number of cars per lane.

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Intersection #27: Mathilda Avenue / California Avenue

Signal=Protect/Rights=Overlap
Final Vol: 298 1475 124***
Lanes: 1 0 3 0 1

Signal=Protect Rights=Include (East Bound) — Final Vol: 245*** / 21 / 205; Lanes: 1, 0, 1, 0, 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 165
Loss Time (sec): 12
Critical V/C: 1.055
Avg Crit Del (sec/veh): 76.2
Avg Delay (sec/veh): 62.2
LOS: E

Signal=Protect Rights=Overlap (West Bound) — Lanes: 1, 0, 1, 0, 1; Final Vol: 313*** / 97 / 94

Lanes: 1 0 2 1 0
Final Vol: 155 3363*** 328
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	129	2376	296	60	1041	241	57	14	87	94	95	189
Growth 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
Initial Bse:	129	2376	296	60	1041	241	57	14	87	94	95	189
Added Vol:	26	987	32	70	434	57	188	7	118	0	2	124
PasserByVol:	0	0	0	-6	0	0	0	0	0	0	0	0
Initial Fut:	155	3363	328	124	1475	298	245	21	205	94	97	313
User 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
PHF 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
PHF Volume:	155	3363	328	124	1475	298	245	21	205	94	97	313
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	155	3363	328	124	1475	298	245	21	205	94	97	313
PCE 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
MLF 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
FinalVolume:	155	3363	328	124	1475	298	245	21	205	94	97	313
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.72	0.28	1.00	3.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	5102	498	1750	5700	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.09	0.66	0.66	0.07	0.26	0.17	0.14	0.01	0.12	0.05	0.05	0.18
Crit Moves:		****		****			****					****
Green Time:	29.1	103	103.1	11.1	85.1	107.0	21.9	26.6	26.6	12.2	16.9	28.0
Volume/Cap:	0.50	1.05	1.05	1.05	0.50	0.26	1.05	0.07	0.73	0.73	0.50	1.05
Delay/Veh:	62.7	63.2	63.2	175.4	26.2	12.4	145.8	58.8	74.9	93.3	72.1	135.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	62.7	63.2	63.2	175.4	26.2	12.4	145.8	58.8	74.9	93.3	72.1	135.9
LOS by Move:	E	E	E	F	C	B	F	E+	E	F	E	F
HCM2kAvgQ:	8	75	75	9	16	7	19	1	12	5	5	21

Note: Queue reported is the number of cars per lane.

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Intersection #28: Mathilda Avenue Off-Ramp / Evelyn Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Final Vol:	Lanes:	Signal=Permit Rights=Include			Signal=Permit Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	4/1/2017			
0	0		Cycle Time (sec):	65		0	0
	0		Loss Time (sec):	6		0	
234	1		Critical V/C:	0.418		1	621***
	0		Avg Crit Del (sec/veh):	6.0		0	
0	0		Avg Delay (sec/veh):	6.8		0	0
			LOS:	A			

Lanes: 1 0 0 0 1
Final Vol: 92*** 0 87
Signal=Split/Rights=Overlap

Street Name:	Mathilda Avenue Off-Ramp						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	61	0	87	0	0	0	0	245	0	0	584	0
Growth 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
Initial Bse:	61	0	87	0	0	0	0	245	0	0	584	0
Added Vol:	31	0	0	0	0	0	0	-11	0	0	37	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	92	0	87	0	0	0	0	234	0	0	621	0
User 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
PHF 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
PHF Volume:	92	0	87	0	0	0	0	234	0	0	621	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	0	87	0	0	0	0	234	0	0	621	0
PCE 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
MLF 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
FinalVolume:	92	0	87	0	0	0	0	234	0	0	621	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	0	1900	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.33	0.00
Crit Moves:	****										****	
Green Time:	10.0	0.0	10.0	0.0	0.0	0.0	0.0	49.0	0.0	0.0	49.0	0.0
Volume/Cap:	0.34	0.00	0.32	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.43	0.00
Delay/Veh:	25.3	0.0	25.2	0.0	0.0	0.0	0.0	2.3	0.0	0.0	3.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.3	0.0	25.2	0.0	0.0	0.0	0.0	2.3	0.0	0.0	3.1	0.0
LOS by Move:	C	A	C	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	2	0	2	0	0	0	0	1	0	0	5	0

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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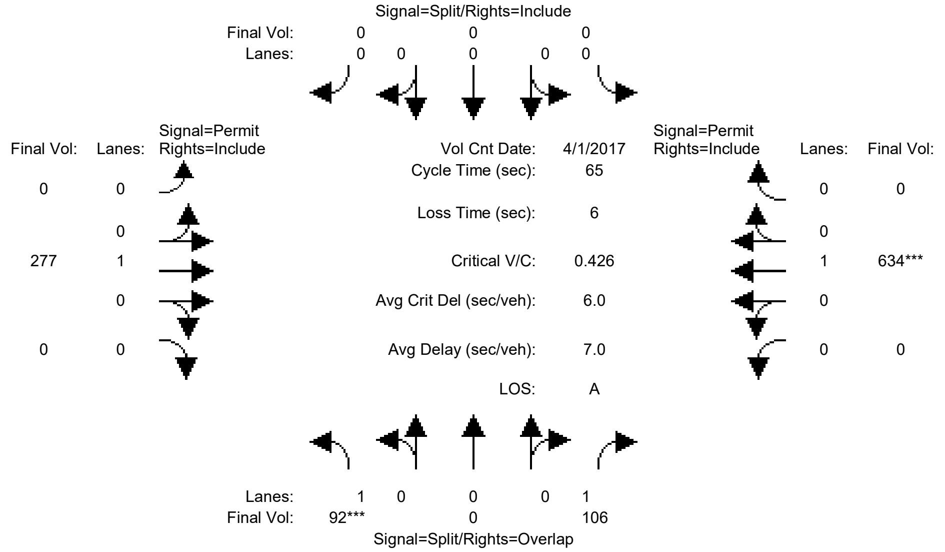
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #28: Mathilda Avenue Off-Ramp / Evelyn Avenue



Street Name:	Mathilda Avenue Off-Ramp						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	61	0	87	0	0	0	0	245	0	0	584	0
Growth 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
Initial Bse:	61	0	87	0	0	0	0	245	0	0	584	0
Added Vol:	31	0	19	0	0	0	0	32	0	0	50	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	92	0	106	0	0	0	0	277	0	0	634	0
User 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
PHF 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
PHF Volume:	92	0	106	0	0	0	0	277	0	0	634	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	0	106	0	0	0	0	277	0	0	634	0
PCE 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
MLF 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
FinalVolume:	92	0	106	0	0	0	0	277	0	0	634	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	0	1900	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.06	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.33	0.00
Crit Moves:	****										****	
Green Time:	10.0	0.0	10.0	0.0	0.0	0.0	0.0	49.0	0.0	0.0	49.0	0.0
Volume/Cap:	0.34	0.00	0.39	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.44	0.00
Delay/Veh:	25.3	0.0	25.7	0.0	0.0	0.0	0.0	2.4	0.0	0.0	3.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.3	0.0	25.7	0.0	0.0	0.0	0.0	2.4	0.0	0.0	3.2	0.0
LOS by Move:	C	A	C	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	2	0	3	0	0	0	0	2	0	0	5	0

Note: Queue reported is the number of cars per lane.

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Background AM

Intersection #29: Mathilda Avenue / Washington Avenue

Signal=Protect/Rights=Include
Final Vol: 172 910 215***
Lanes: 0 1 2 0 2

Final Vol: Lanes: Signal=Protect Rights=Include
253*** 2
0
62 0
1
31 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 170
Loss Time (sec): 12
Critical V/C: 0.985
Avg Crit Del (sec/veh): 61.8
Avg Delay (sec/veh): 53.4
LOS: D-

Signal=Protect Rights=Include Lanes: Final Vol:
0 262
1
0 70***
0
2 47

Lanes: 1 0 2 1 0
Final Vol: 32 3189*** 73
Signal=Protect/Rights=Overlap

Street Name:	Mathilda Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	22	2392	68	179	689	162	194	56	21	43	65	162
Growth 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
Initial Bse:	22	2392	68	179	689	162	194	56	21	43	65	162
Added Vol:	10	797	5	36	221	10	59	6	10	4	5	100
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	3189	73	215	910	172	253	62	31	47	70	262
User 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
PHF 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
PHF Volume:	32	3189	73	215	910	172	253	62	31	47	70	262
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	3189	73	215	910	172	253	62	31	47	70	262
PCE 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
MLF 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
FinalVolume:	32	3189	73	215	910	172	253	62	31	47	70	262
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.99	0.95	0.83	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	2.93	0.07	2.00	2.51	0.49	2.00	0.67	0.33	2.00	0.21	0.79
Final Sat.:	1750	5475	125	3150	4709	890	3150	1200	600	3150	380	1420
Capacity Analysis Module:												
Vol/Sat:	0.02	0.58	0.58	0.07	0.19	0.19	0.08	0.05	0.05	0.01	0.18	0.18
Crit Moves:		****		****			****				****	
Green Time:	19.7	101	119.3	11.8	92.6	92.6	13.9	26.9	26.9	18.8	31.8	31.8
Volume/Cap:	0.16	0.99	0.83	0.99	0.35	0.35	0.99	0.33	0.33	0.13	0.99	0.99
Delay/Veh:	68.0	46.3	19.7	135.5	21.9	21.9	129.8	64.2	64.2	68.4	114	113.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	68.0	46.3	19.7	135.5	21.9	21.9	129.8	64.2	64.2	68.4	114	113.7
LOS by Move:	E	D	B-	F	C+	C+	F	E	E	E	F	F
HCM2kAvgQ:	2	62	42	10	10	10	10	4	4	1	21	21

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #29: Mathilda Avenue / Washington Avenue

Signal=Protect/Rights=Include
Final Vol: 172 1135 251***
Lanes: 0 1 2 0 2

Signal=Protect Rights=Include (Eastbound)
Final Vol: 253*** / 68 / 61
Lanes: 2 / 0 / 0 / 1 / 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 170
Loss Time (sec): 12
Critical V/C: 1.030
Avg Crit Del (sec/veh): 74.1
Avg Delay (sec/veh): 61.1
LOS: E

Signal=Protect Rights=Include (Westbound)
Lanes: 0 / 1 / 0 / 0 / 2
Final Vol: 267 / 70*** / 54

Lanes: 1 0 2 1 0
Final Vol: 44 3296*** 119
Signal=Protect/Rights=Overlap

Street Name:	Mathilda Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	22	2392	68	179	689	162	194	56	21	43	65	162
Growth 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
Initial Bse:	22	2392	68	179	689	162	194	56	21	43	65	162
Added Vol:	22	904	51	72	446	10	59	12	40	11	5	105
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	44	3296	119	251	1135	172	253	68	61	54	70	267
User 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
PHF 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
PHF Volume:	44	3296	119	251	1135	172	253	68	61	54	70	267
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	3296	119	251	1135	172	253	68	61	54	70	267
PCE 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
MLF 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
FinalVolume:	44	3296	119	251	1135	172	253	68	61	54	70	267
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.99	0.95	0.83	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	2.89	0.11	2.00	2.59	0.41	2.00	0.53	0.47	2.00	0.21	0.79
Final Sat.:	1750	5405	195	3150	4862	737	3150	949	851	3150	374	1426
Capacity Analysis Module:												
Vol/Sat:	0.03	0.61	0.61	0.08	0.23	0.23	0.08	0.07	0.07	0.02	0.19	0.19
Crit Moves:		****		****			****				****	
Green Time:	17.1	101	116.8	13.2	96.8	96.8	13.3	28.1	28.1	16.1	30.9	30.9
Volume/Cap:	0.25	1.03	0.89	1.03	0.41	0.41	1.03	0.43	0.43	0.18	1.03	1.03
Delay/Veh:	71.3	58.6	24.2	144.0	20.7	20.7	143.7	64.9	64.9	71.2	127	127.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	71.3	58.6	24.2	144.0	20.7	20.7	143.7	64.9	64.9	71.2	127	127.2
LOS by Move:	E	E+	C	F	C+	C+	F	E	E	E	F	F
HCM2kAvgQ:	2	69	50	12	12	12	10	6	6	1	22	22

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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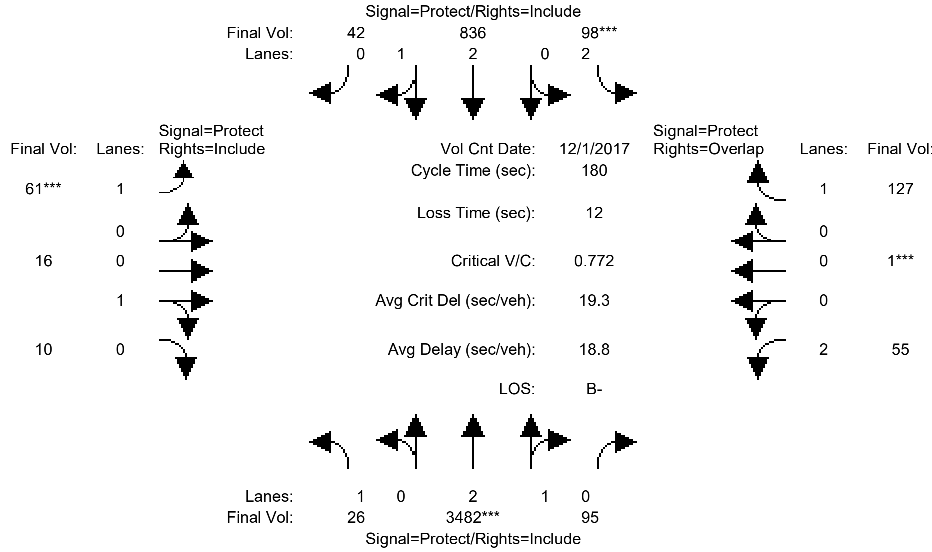
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #30: Mathilda Avenue / McKinley Avenue



Street Name:	Mathilda Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	26	2693	75	41	657	42	61	16	10	31	1	104
Growth 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
Initial Bse:	26	2693	75	41	657	42	61	16	10	31	1	104
Added Vol:	0	789	20	57	179	0	0	0	0	24	0	23
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	3482	95	98	836	42	61	16	10	55	1	127
User 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
PHF 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
PHF Volume:	26	3482	95	98	836	42	61	16	10	55	1	127
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	3482	95	98	836	42	61	16	10	55	1	127
PCE 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
MLF 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
FinalVolume:	26	3482	95	98	836	42	61	16	10	55	1	127
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.98	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	2.92	0.08	2.00	2.85	0.15	1.00	0.62	0.38	1.97	0.03	1.00
Final Sat.:	1750	5451	149	3150	5332	268	1750	1108	692	3442	63	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.64	0.64	0.03	0.16	0.16	0.03	0.01	0.01	0.02	0.02	0.07
Crit Moves:		****		****			****				****	
Green Time:	29.8	143	143.2	7.0	120	120.3	7.8	10.5	10.5	7.3	10.0	17.0
Volume/Cap:	0.09	0.80	0.80	0.80	0.23	0.23	0.80	0.25	0.25	0.39	0.29	0.77
Delay/Veh:	63.7	11.5	11.5	115.8	11.8	11.8	129.5	82.2	82.2	84.7	81.8	93.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	63.7	11.5	11.5	115.8	11.8	11.8	129.5	82.2	82.2	84.7	81.8	93.6
LOS by Move:	E	B+	B+	F	B+	B+	F	F	F	F	F	F
HCM2kAvgQ:	1	38	38	5	6	6	5	2	2	2	2	8

Note: Queue reported is the number of cars per lane.

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Intersection #30: Mathilda Avenue / McKinley Avenue

Signal=Protect/Rights=Include
Final Vol: 42 845 351***
Lanes: 0 1 2 0 2

Westbound (left side): Signal=Protect, Rights=Include
Final Vol: | Lanes:
61*** | 1
 | 0
16 | 0
 | 1
10 | 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 180
Loss Time (sec): 12
Critical V/C: 0.920
Avg Crit Del (sec/veh): 40.3
Avg Delay (sec/veh): 35.9
LOS: D+

Signal=Protect
Rights=Overlap
Lanes: | Final Vol:
1 | 228
0 |
0 | 1***
0 |
2 | 97

Lanes: 1 0 2 1 0
Final Vol: 26 3546*** 288
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	26	2693	75	41	657	42	61	16	10	31	1	104
Growth 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
Initial Bse:	26	2693	75	41	657	42	61	16	10	31	1	104
Added Vol:	0	853	213	310	188	0	0	0	0	66	0	124
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	3546	288	351	845	42	61	16	10	97	1	228
User 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
PHF 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
PHF Volume:	26	3546	288	351	845	42	61	16	10	97	1	228
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	3546	288	351	845	42	61	16	10	97	1	228
PCE 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
MLF 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
FinalVolume:	26	3546	288	351	845	42	61	16	10	97	1	228
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.83	0.98	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	2.77	0.23	2.00	2.85	0.15	1.00	0.62	0.38	1.98	0.02	1.00
Final Sat.:	1750	5179	421	3150	5334	265	1750	1108	692	3467	36	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.68	0.68	0.11	0.16	0.16	0.03	0.01	0.01	0.03	0.03	0.13
Crit Moves:		****		****			****				****	
Green Time:	29.8	130	129.9	21.1	121	121.2	7.0	10.0	10.0	7.0	10.0	31.1
Volume/Cap:	0.09	0.95	0.95	0.95	0.24	0.24	0.90	0.26	0.26	0.72	0.50	0.75
Delay/Veh:	63.8	28.2	28.2	112.6	11.4	11.4	160.0	82.8	82.8	91.1	83.2	78.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	63.8	28.2	28.2	112.6	11.4	11.4	160.0	82.8	82.8	91.1	83.2	78.1
LOS by Move:	E	C	C	F	B+	B+	F	F	F	F	F	E-
HCM2kAvgQ:	1	67	67	15	6	6	6	2	2	3	3	13

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #31: Mathilda Avenue / Iowa Avenue

Signal=Protect/Rights=Include
Final Vol: 53 857 27***
Lanes: 0 1 2 0 2

Signal=Protect Rights=Include (East Bound)
Final Vol: / Lanes:
81*** 1
0
38 1
1
29 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 155
Loss Time (sec): 12
Critical V/C: 0.729
Avg Crit Del (sec/veh): 15.8
Avg Delay (sec/veh): 17.2
LOS: B

Signal=Protect Rights=Overlap (West Bound)
Lanes: / Final Vol:
1 53
0
1 28***
0
2 60

Lanes: 1 0 3 0 1
Final Vol: 22 3436*** 97
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	22	2706	49	26	663	46	49	37	29	18	25	44
Growth 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
Initial Bse:	22	2706	49	26	663	46	49	37	29	18	25	44
Added Vol:	0	730	48	1	194	7	32	1	0	42	3	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	22	3436	97	27	857	53	81	38	29	60	28	53
User 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
PHF 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
PHF Volume:	22	3436	97	27	857	53	81	38	29	60	28	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	3436	97	27	857	53	81	38	29	60	28	53
PCE 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
MLF 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
FinalVolume:	22	3436	97	27	857	53	81	38	29	60	28	53
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	0.99	0.95	0.83	1.00	0.92
Lanes:	1.00	3.00	1.00	2.00	2.82	0.18	1.00	1.11	0.89	2.00	1.00	1.00
Final Sat.:	1750	5700	1750	3150	5273	326	1750	2097	1601	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.60	0.06	0.01	0.16	0.16	0.05	0.02	0.02	0.02	0.01	0.03
Crit Moves:		****		****			****				****	
Green Time:	27.0	117	117.0	7.0	97.0	97.0	9.0	11.2	11.2	7.8	10.0	17.0
Volume/Cap:	0.07	0.80	0.07	0.19	0.26	0.26	0.80	0.25	0.25	0.38	0.23	0.28
Delay/Veh:	53.7	12.8	5.0	71.9	13.0	13.0	106.6	68.5	68.5	72.7	69.8	64.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.7	12.8	5.0	71.9	13.0	13.0	106.6	68.5	68.5	72.7	69.8	64.1
LOS by Move:	D-	B	A	E	B	B	F	E	E	E	E	E
HCM2kAvgQ:	1	33	1	1	6	6	5	1	1	2	1	2

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #31: Mathilda Avenue / Iowa Avenue

Signal=Protect/Rights=Include
Final Vol: 55 907 28***
Lanes: 0 1 2 0 2

Signal=Protect
Rights=Include

Final Vol: Lanes:
85*** 1
0
43 1
1
29 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 155
Loss Time (sec): 12
Critical V/C: 0.781
Avg Crit Del (sec/veh): 18.1
Avg Delay (sec/veh): 19.5
LOS: B-

Signal=Protect
Rights=Overlap

Lanes: Final Vol:
1 83
0
1 31***
0
2 94

Lanes: 1 0 3 0 1
Final Vol: 22 3686*** 115
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	22	2706	49	26	663	46	49	37	29	18	25	44
Growth 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
Initial Bse:	22	2706	49	26	663	46	49	37	29	18	25	44
Added Vol:	0	980	66	2	244	9	36	6	0	76	6	39
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	22	3686	115	28	907	55	85	43	29	94	31	83
User 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
PHF 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
PHF Volume:	22	3686	115	28	907	55	85	43	29	94	31	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	3686	115	28	907	55	85	43	29	94	31	83
PCE 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
MLF 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
FinalVolume:	22	3686	115	28	907	55	85	43	29	94	31	83
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	0.99	0.95	0.83	1.00	0.92
Lanes:	1.00	3.00	1.00	2.00	2.82	0.18	1.00	1.17	0.83	2.00	1.00	1.00
Final Sat.:	1750	5700	1750	3150	5279	320	1750	2209	1490	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.65	0.07	0.01	0.17	0.17	0.05	0.02	0.02	0.03	0.02	0.05
Crit Moves:		****		****			****				****	
Green Time:	25.9	117	117.2	7.0	98.3	98.3	8.8	11.1	11.1	7.7	10.0	17.0
Volume/Cap:	0.08	0.86	0.09	0.20	0.27	0.27	0.86	0.27	0.27	0.60	0.25	0.43
Delay/Veh:	54.6	14.9	5.0	72.0	12.5	12.5	120.0	68.7	68.7	78.3	70.0	66.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	54.6	14.9	5.0	72.0	12.5	12.5	120.0	68.7	68.7	78.3	70.0	66.1
LOS by Move:	D-	B	A	E	B	B	F	E	E	E-	E	E
HCM2kAvgQ:	1	39	1	1	7	7	5	2	2	3	1	4

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #32: Mathilda Avenue / Olive Avenue

Signal=Protect/Rights=Overlap
Final Vol: 90 815 39***
Lanes: 1 0 3 0 1

Signal=Permit
Rights=Overlap

Final Vol:	Lanes:			
99	0		Vol Cnt Date:	12/1/2017
	1		Cycle Time (sec):	135
45***	0		Loss Time (sec):	9
	0		Critical V/C:	0.753
23	1		Avg Crit Del (sec/veh):	12.6
			Avg Delay (sec/veh):	15.1
			LOS:	B

Signal=Permit
Rights=Overlap

Lanes:	Final Vol:
1	108
0	
0	97
1	
0	16

Lanes: 1 0 2 1 0
Final Vol: 63 3326*** 35
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	63	2599	35	32	590	86	80	46	23	16	96	75
Growth 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
Initial Bse:	63	2599	35	32	590	86	80	46	23	16	96	75
Added Vol:	0	727	0	7	225	4	19	-1	0	0	1	33
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	63	3326	35	39	815	90	99	45	23	16	97	108
User 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
PHF 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
PHF Volume:	63	3326	35	39	815	90	99	45	23	16	97	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	3326	35	39	815	90	99	45	23	16	97	108
PCE 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
MLF 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
FinalVolume:	63	3326	35	39	815	90	99	45	23	16	97	108
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.97	0.03	1.00	3.00	1.00	0.69	0.31	1.00	0.14	0.86	1.00
Final Sat.:	1750	5542	58	1750	5700	1750	1237	562	1750	255	1545	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.60	0.60	0.02	0.14	0.05	0.08	0.08	0.01	0.06	0.06	0.06
Crit Moves:		****		****				****				
Green Time:	29.8	105	105.0	7.0	82.2	82.2	14.0	14.0	43.8	14.0	14.0	21.0
Volume/Cap:	0.16	0.77	0.77	0.43	0.23	0.08	0.77	0.77	0.04	0.61	0.61	0.40
Delay/Veh:	42.7	9.2	9.2	65.3	12.1	10.9	76.7	76.7	31.2	63.4	63.4	52.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.7	9.2	9.2	65.3	12.1	10.9	76.7	76.7	31.2	63.4	63.4	52.3
LOS by Move:	D	A	A	E	B	B+	E-	E-	C	E	E	D-
HCM2kAvgQ:	2	27	27	2	5	2	8	8	1	5	5	4

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #32: Mathilda Avenue / Olive Avenue

Signal=Protect/Rights=Overlap
Final Vol: 91 895 41***
Lanes: 1 0 3 0 1

Signal=Permit
Rights=Overlap

Final Vol: Lanes:
101 0
1
45*** 0
0
23 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 135
Loss Time (sec): 9
Critical V/C: 0.805
Avg Crit Del (sec/veh): 13.9
Avg Delay (sec/veh): 15.8
LOS: B

Signal=Permit
Rights=Overlap

Lanes: Final Vol:
1 111
0
0 97
1
0 16

Lanes: 1 0 2 1 0
Final Vol: 63 3589*** 35
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	63	2599	35	32	590	86	80	46	23	16	96	75
Growth 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
Initial Bse:	63	2599	35	32	590	86	80	46	23	16	96	75
Added Vol:	0	990	0	9	305	5	21	-1	0	0	1	36
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	63	3589	35	41	895	91	101	45	23	16	97	111
User 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
PHF 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
PHF Volume:	63	3589	35	41	895	91	101	45	23	16	97	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	3589	35	41	895	91	101	45	23	16	97	111
PCE 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
MLF 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
FinalVolume:	63	3589	35	41	895	91	101	45	23	16	97	111
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.97	0.03	1.00	3.00	1.00	0.69	0.31	1.00	0.14	0.86	1.00
Final Sat.:	1750	5546	54	1750	5700	1750	1245	555	1750	255	1545	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.65	0.65	0.02	0.16	0.05	0.08	0.08	0.01	0.06	0.06	0.06
Crit Moves:		****		****				****				
Green Time:	28.0	106	105.7	7.0	84.8	84.8	13.3	13.3	41.2	13.3	13.3	20.3
Volume/Cap:	0.17	0.83	0.83	0.45	0.25	0.08	0.83	0.83	0.04	0.64	0.64	0.42
Delay/Veh:	44.2	10.4	10.4	65.7	11.1	9.9	85.9	85.9	33.0	66.2	66.2	53.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.2	10.4	10.4	65.7	11.1	9.9	85.9	85.9	33.0	66.2	66.2	53.2
LOS by Move:	D	B+	B+	E	B+	A	F	F	C-	E	E	D-
HCM2kAvgQ:	2	33	33	2	5	2	8	8	1	5	5	4

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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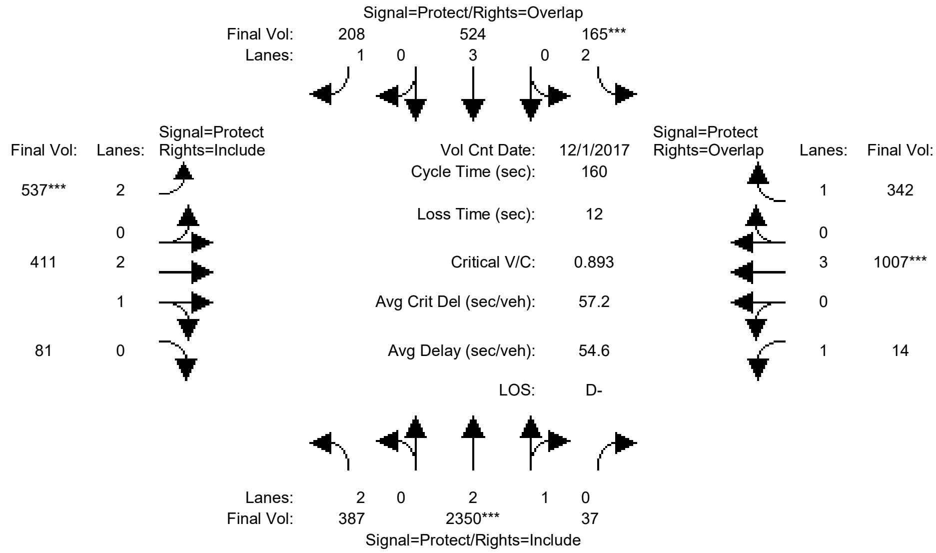
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #33: Mathilda Avenue / El Camino Real (CMP)



Street Name:	Mathilda Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	338	1825	37	150	384	138	383	422	74	14	976	294
Growth 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
Initial Bse:	338	1825	37	150	384	138	383	422	74	14	976	294
Added Vol:	49	525	0	15	140	70	154	-11	7	0	31	48
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	387	2350	37	165	524	208	537	411	81	14	1007	342
User 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
PHF 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
PHF Volume:	387	2350	37	165	524	208	537	411	81	14	1007	342
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	387	2350	37	165	524	208	537	411	81	14	1007	342
PCE 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
MLF 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
FinalVolume:	387	2350	37	165	524	208	537	411	81	14	1007	342
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	1.00	0.92	0.83	0.99	0.95	0.92	1.00	0.92
Lanes:	2.00	2.95	0.05	2.00	3.00	1.00	2.00	2.49	0.51	1.00	3.00	1.00
Final Sat.:	3150	5513	87	3150	5700	1750	3150	4677	922	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.43	0.43	0.05	0.09	0.12	0.17	0.09	0.09	0.01	0.18	0.20
Crit Moves:		****		****			****				****	
Green Time:	49.1	76.4	76.4	9.4	36.7	67.3	30.6	41.5	41.5	20.7	31.7	41.1
Volume/Cap:	0.40	0.89	0.89	0.89	0.40	0.28	0.89	0.34	0.34	0.06	0.89	0.76
Delay/Veh:	44.1	42.3	42.3	112.5	52.5	30.7	78.7	48.2	48.2	61.3	71.7	62.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.1	42.3	42.3	112.5	52.5	30.7	78.7	48.2	48.2	61.3	71.7	62.5
LOS by Move:	D	D	D	F	D-	C	E-	D	D	E	E	E
HCM2kAvgQ:	9	37	37	7	7	7	17	6	6	1	17	17

Note: Queue reported is the number of cars per lane.

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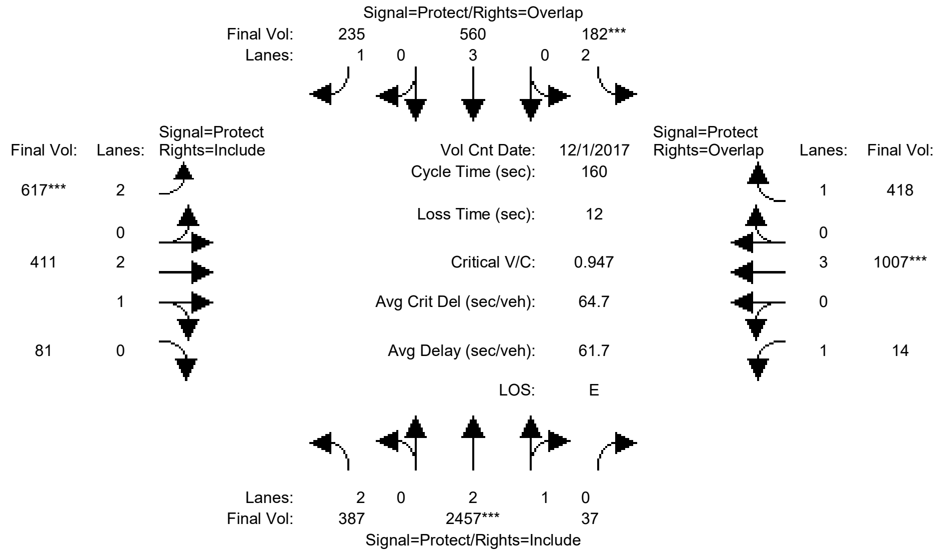
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #33: Mathilda Avenue / El Camino Real (CMP)



Street Name:	Mathilda Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	338	1825	37	150	384	138	383	422	74	14	976	294
Growth 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
Initial Bse:	338	1825	37	150	384	138	383	422	74	14	976	294
Added Vol:	49	632	0	32	176	97	234	-11	7	0	31	124
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	387	2457	37	182	560	235	617	411	81	14	1007	418
User 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
PHF 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
PHF Volume:	387	2457	37	182	560	235	617	411	81	14	1007	418
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	387	2457	37	182	560	235	617	411	81	14	1007	418
PCE 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
MLF 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
FinalVolume:	387	2457	37	182	560	235	617	411	81	14	1007	418
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	1.00	0.92	0.83	0.99	0.95	0.92	1.00	0.92
Lanes:	2.00	2.95	0.05	2.00	3.00	1.00	2.00	2.49	0.51	1.00	3.00	1.00
Final Sat.:	3150	5517	83	3150	5700	1750	3150	4677	922	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.45	0.45	0.06	0.10	0.13	0.20	0.09	0.09	0.01	0.18	0.24
Crit Moves:		****		****			****				****	
Green Time:	47.3	75.3	75.3	9.8	37.8	70.9	33.1	42.0	42.0	20.9	29.9	39.6
Volume/Cap:	0.42	0.95	0.95	0.95	0.42	0.30	0.95	0.33	0.33	0.06	0.95	0.96
Delay/Veh:	45.6	48.7	48.7	124.4	52.0	28.9	85.5	47.8	47.8	61.0	80.6	93.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.6	48.7	48.7	124.4	52.0	28.9	85.5	47.8	47.8	61.0	80.6	93.5
LOS by Move:	D	D	D	F	D-	C	F	D	D	E	F	F
HCM2kAvgQ:	9	41	41	8	8	8	20	6	6	1	18	24

Note: Queue reported is the number of cars per lane.

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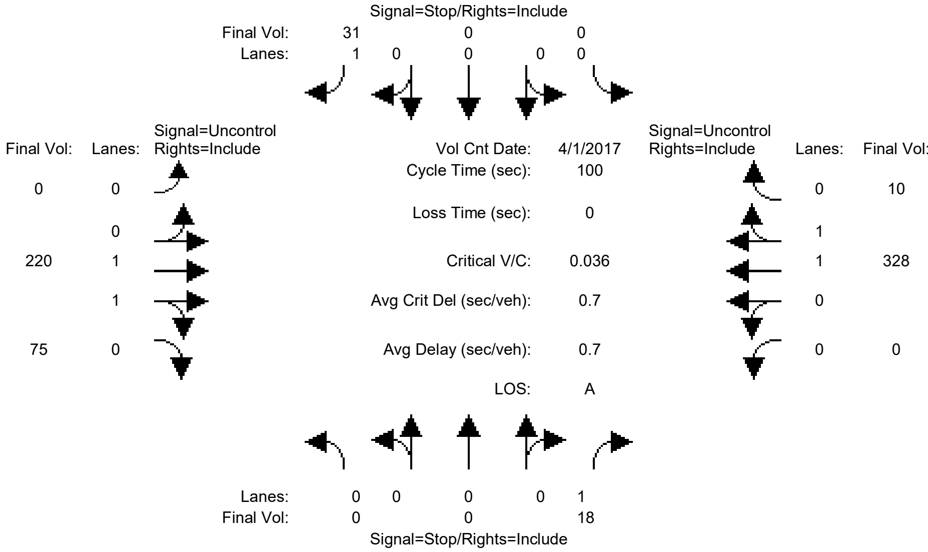
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background AM

Intersection #34: Aries Way / Washington Avenue




```
Street Name:               Aries Way                       Washington Avenue
Approach:       North Bound       South Bound       East Bound        West Bound
Movement:     L  -  T  -  R     L  -  T  -  R     L  -  T  -  R     L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 1 Apr 2017 <<
Base Vol:       0     0     7     0     0    31     0   203    44     0   219    10
Growth 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
Initial Bse:    0     0     7     0     0    31     0   203    44     0   219    10
Added Vol:      0     0    11     0     0     0     0    17    31     0   109     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:    0     0    18     0     0    31     0   220    75     0   328    10
User 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
PHF 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
PHF Volume:     0     0    18     0     0    31     0   220    75     0   328    10
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
FinalVolume:    0     0    18     0     0    31     0   220    75     0   328    10
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx   6.9 xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx   3.3 xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx   148  xxxx xxxx   169  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx   879  xxxx xxxx   852  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx   879  xxxx xxxx   852  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  0.02  xxxx xxxx  0.04  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx   0.1  xxxx xxxx   0.1  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx   9.2 xxxxx xxxx   9.4 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     A     *    *     A     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:        9.2               9.4            xxxxxx            xxxxxx
ApproachLOS:          A                 A                 *                 *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #34 Aries Way / Washington Avenue
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  1    0  0  1  1  0    0  0  1  1  0
Initial Vol:    0    0    18     0    0    31     0  220    75     0  328    10
ApproachDel:        9.2              9.4            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=18]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=682]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=31]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=682]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #34 Aries Way / Washington Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  1    0  0  1  1  0    0  0  1  1  0
Initial Vol:    0    0    18     0    0    31     0  220    75     0  328    10
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            633
Minor Approach Volume:          31
Minor Approach Volume Threshold: 442
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

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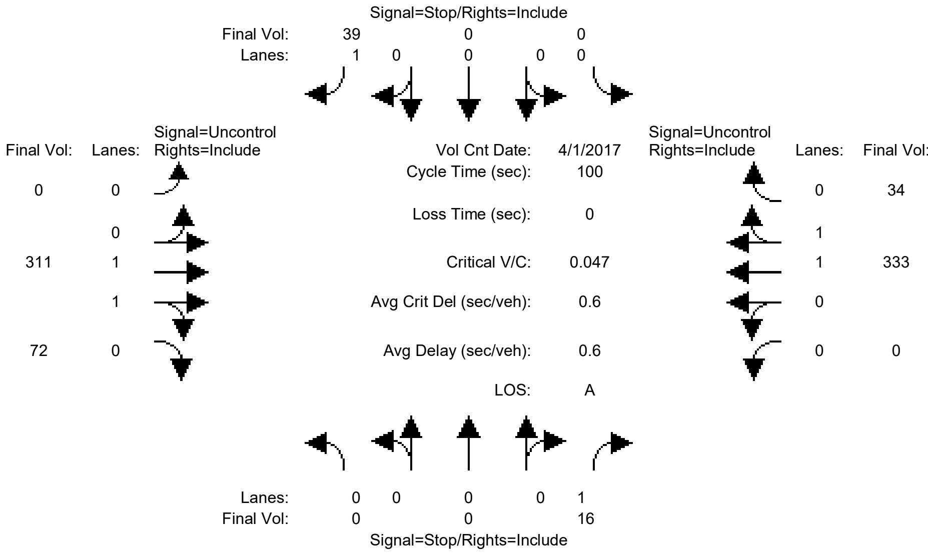
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background AM Plus Project

Intersection #34: Aries Way / Washington Avenue



Street Name:	Aries Way						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	0	0	7	0	0	31	0	203	44	0	219	10
Growth 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
Initial Bse:	0	0	7	0	0	31	0	203	44	0	219	10
Added Vol:	0	0	9	0	0	8	0	108	28	0	114	24
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	16	0	0	39	0	311	72	0	333	34
User 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
PHF 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
PHF Volume:	0	0	16	0	0	39	0	311	72	0	333	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	16	0	0	39	0	311	72	0	333	34
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	192	xxxx	xxxx	184	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	824	xxxx	xxxx	834	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	824	xxxx	xxxx	834	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.02	xxxx	xxxx	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.1	xxxx	xxxx	0.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	9.5	xxxxx	xxxx	9.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	A	*	*	A	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		9.5			9.5			xxxxxx			xxxxxx	
ApproachLOS:		A			A			*			*	

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #34 Aries Way / Washington Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  1    0  0  1  1  0    0  0  1  1  0
Initial Vol:    0    0    16     0    0    39     0  311    72     0  333    34
ApproachDel:       9.5              9.5            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=16]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=805]
   SUCCEED - Total volume greater than or equal to 800 for intersection
             with four or more approaches.
--------------------------------------------------------------------------------
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=39]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=805]
   SUCCEED - Total volume greater than or equal to 800 for intersection
             with four or more approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #34 Aries Way / Washington Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  1    0  0  1  1  0    0  0  1  1  0
Initial Vol:    0    0    16     0    0    39     0  311    72     0  333    34
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            750
Minor Approach Volume:          39
Minor Approach Volume Threshold: 384
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
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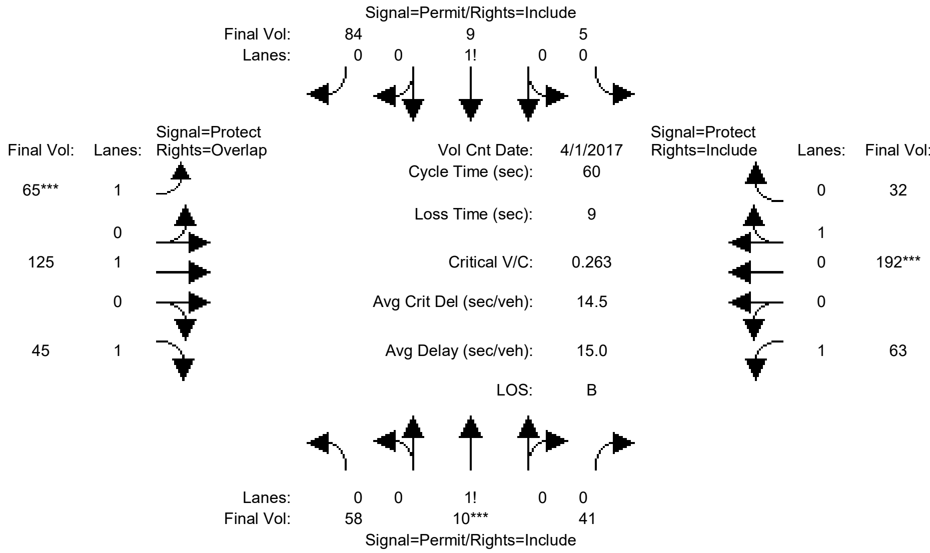
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #35: Taaffe Street / Washington Avenue



Street Name:	Taaffe Street						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	13	10	12	5	9	84	64	103	40	20	128	32
Growth 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
Initial Bse:	13	10	12	5	9	84	64	103	40	20	128	32
Added Vol:	45	0	29	0	0	0	1	22	5	43	64	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	10	41	5	9	84	65	125	45	63	192	32
User 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
PHF 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
PHF Volume:	58	10	41	5	9	84	65	125	45	63	192	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	10	41	5	9	84	65	125	45	63	192	32
PCE 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
MLF 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
FinalVolume:	58	10	41	5	9	84	65	125	45	63	192	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	0.53	0.09	0.38	0.05	0.09	0.86	1.00	1.00	1.00	1.00	0.86	0.14
Final Sat.:	931	161	658	89	161	1500	1750	1900	1750	1750	1543	257
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.06	0.06	0.06	0.06	0.04	0.07	0.03	0.04	0.12	0.12
Crit Moves:		****					****				****	
Green Time:	14.2	14.2	14.2	14.2	14.2	14.2	8.5	21.7	21.7	15.2	28.3	28.3
Volume/Cap:	0.26	0.26	0.26	0.24	0.24	0.24	0.26	0.18	0.07	0.14	0.26	0.26
Delay/Veh:	19.0	19.0	19.0	18.8	18.8	18.8	23.6	13.2	12.6	17.5	9.7	9.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.0	19.0	19.0	18.8	18.8	18.8	23.6	13.2	12.6	17.5	9.7	9.7
LOS by Move:	B-	B-	B-	B-	B-	B-	C	B	B	B	A	A
HCM2kAvgQ:	2	2	2	2	2	2	1	2	1	1	3	3

Note: Queue reported is the number of cars per lane.

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Intersection #35: Taaffe Street / Washington Avenue

Signal=Permit/Rights=Include
Final Vol: 87 8 8
Lanes: 0 0 1! 0 0

Signal=Protect
Rights=Overlap

Final Vol:	Lanes:
144***	1
	0
136	1
	0
45	1

Vol Cnt Date:	4/1/2017
Cycle Time (sec):	60
Loss Time (sec):	9
Critical V/C:	0.343
Avg Crit Del (sec/veh):	16.4
Avg Delay (sec/veh):	16.2
LOS:	B

Signal=Protect
Rights=Include

Lanes:	Final Vol:
0	38
1	
0	216***
0	
1	93

Lanes: 0 0 1! 0 0
Final Vol: 59 16*** 45
Signal=Permit/Rights=Include

Street Name:	Taaffe Street						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	13	10	12	5	9	84	64	103	40	20	128	32
Growth 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
Initial Bse:	13	10	12	5	9	84	64	103	40	20	128	32
Added Vol:	46	6	33	3	-1	3	80	33	5	73	88	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	59	16	45	8	8	87	144	136	45	93	216	38
User 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
PHF 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
PHF Volume:	59	16	45	8	8	87	144	136	45	93	216	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	16	45	8	8	87	144	136	45	93	216	38
PCE 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
MLF 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
FinalVolume:	59	16	45	8	8	87	144	136	45	93	216	38
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	0.49	0.13	0.38	0.08	0.08	0.84	1.00	1.00	1.00	1.00	0.85	0.15
Final Sat.:	860	233	656	136	136	1478	1750	1900	1750	1750	1531	269
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.06	0.06	0.06	0.08	0.07	0.03	0.05	0.14	0.14
Crit Moves:		****					****				****	
Green Time:	12.0	12.0	12.0	12.0	12.0	12.0	14.4	23.0	23.0	16.1	24.6	24.6
Volume/Cap:	0.34	0.34	0.34	0.29	0.29	0.29	0.34	0.19	0.07	0.20	0.34	0.34
Delay/Veh:	21.2	21.2	21.2	20.9	20.9	20.9	19.4	12.4	11.8	17.2	12.4	12.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.2	21.2	21.2	20.9	20.9	20.9	19.4	12.4	11.8	17.2	12.4	12.4
LOS by Move:	C+	C+	C+	C+	C+	C+	B-	B	B+	B	B	B
HCM2kAvgQ:	2	2	2	2	2	2	2	2	1	2	4	4

Note: Queue reported is the number of cars per lane.

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Intersection #36: Iowa Avenue / Taaffe Street

Signal=Permit/Rights=Include
Final Vol: 87 5*** 42
Lanes: 0 0 1! 0 0

Signal=Protect Rights=Include (West approach)
Final Vol: 89*** Lanes: 1
Lanes: 0
Final Vol: 41 Lanes: 0
Lanes: 1
Final Vol: 12 Lanes: 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 100
Loss Time (sec): 12
Critical V/C: 0.202
Avg Crit Del (sec/veh): 26.1
Avg Delay (sec/veh): 25.6
LOS: C

Signal=Protect Rights=Include (East approach)
Lanes: 0 Final Vol: 36
Lanes: 1
Lanes: 0 Final Vol: 55***
Lanes: 0
Lanes: 1 Final Vol: 7

Lanes: 0 0 1! 0 0
Final Vol: 9 17 8
Signal=Permit/Rights=Include

Street Name:	Taaffe Street						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	9	17	8	13	5	41	40	40	12	7	46	11
Growth 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
Initial Bse:	9	17	8	13	5	41	40	40	12	7	46	11
Added Vol:	0	0	0	29	0	46	49	1	0	0	9	25
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	17	8	42	5	87	89	41	12	7	55	36
User 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
PHF 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
PHF Volume:	9	17	8	42	5	87	89	41	12	7	55	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	17	8	42	5	87	89	41	12	7	55	36
PCE 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
MLF 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
FinalVolume:	9	17	8	42	5	87	89	41	12	7	55	36
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.26	0.50	0.24	0.31	0.04	0.65	1.00	0.77	0.23	1.00	0.60	0.40
Final Sat.:	463	875	412	549	65	1136	1750	1392	408	1750	1088	712
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.08	0.08	0.08	0.05	0.03	0.03	0.00	0.05	0.05
Crit Moves:					****		****				****	
Green Time:	37.9	37.9	37.9	37.9	37.9	37.9	25.1	29.5	29.5	20.6	25.0	25.0
Volume/Cap:	0.05	0.05	0.05	0.20	0.20	0.20	0.20	0.10	0.10	0.02	0.20	0.20
Delay/Veh:	19.7	19.7	19.7	21.1	21.1	21.1	29.7	25.7	25.7	31.6	29.8	29.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.7	19.7	19.7	21.1	21.1	21.1	29.7	25.7	25.7	31.6	29.8	29.8
LOS by Move:	B-	B-	B-	C+	C+	C+	C	C	C	C	C	C
HCM2kAvgQ:	1	1	1	3	3	3	2	1	1	0	2	2

Note: Queue reported is the number of cars per lane.

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Intersection #36: Iowa Avenue / Taaffe Street

Signal=Permit/Rights=Include
Final Vol: 114 5*** 52
Lanes: 0 0 1! 0 0

Signal=Protect Rights=Include (East Bound)
Final Vol: 102*** Lanes: 1
Lanes: 0
Final Vol: 53 Lanes: 0
Lanes: 1
Final Vol: 12 Lanes: 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 100
Loss Time (sec): 12
Critical V/C: 0.275
Avg Crit Del (sec/veh): 26.7
Avg Delay (sec/veh): 26.2
LOS: C

Signal=Protect Rights=Include (West Bound)
Lanes: 0 Final Vol: 61
Lanes: 1
Lanes: 0 Final Vol: 94***
Lanes: 0
Lanes: 1 Final Vol: 7

Lanes: 0 0 1! 0 0
Final Vol: 9 17 8
Signal=Permit/Rights=Include

Street Name:	Taaffe Street						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	9	17	8	13	5	41	40	40	12	7	46	11
Growth 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
Initial Bse:	9	17	8	13	5	41	40	40	12	7	46	11
Added Vol:	0	0	0	39	0	73	62	13	0	0	48	50
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	17	8	52	5	114	102	53	12	7	94	61
User 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
PHF 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
PHF Volume:	9	17	8	52	5	114	102	53	12	7	94	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	17	8	52	5	114	102	53	12	7	94	61
PCE 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
MLF 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
FinalVolume:	9	17	8	52	5	114	102	53	12	7	94	61
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.26	0.50	0.24	0.30	0.03	0.67	1.00	0.82	0.18	1.00	0.61	0.39
Final Sat.:	463	875	412	532	51	1167	1750	1468	332	1750	1092	708
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.10	0.10	0.10	0.06	0.04	0.04	0.00	0.09	0.09
Crit Moves:					****		****				****	
Green Time:	35.5	35.5	35.5	35.5	35.5	35.5	21.2	30.9	30.9	21.6	31.3	31.3
Volume/Cap:	0.05	0.05	0.05	0.28	0.28	0.28	0.28	0.12	0.12	0.02	0.28	0.28
Delay/Veh:	21.2	21.2	21.2	23.3	23.3	23.3	33.4	24.9	24.9	30.9	26.1	26.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.2	21.2	21.2	23.3	23.3	23.3	33.4	24.9	24.9	30.9	26.1	26.1
LOS by Move:	C+	C+	C+	C	C	C	C-	C	C	C	C	C
HCM2kAvgQ:	1	1	1	4	4	4	3	1	1	0	4	4

Note: Queue reported is the number of cars per lane.

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Intersection #37: Frances Street / Evelyn Avenue

Signal=Permit/Rights=Overlap
Final Vol: 66 9 61
Lanes: 1 0 0 1 0

Signal=Protect Rights=Include (Eastbound) — Final Vol / Lanes: 34*** 1; 0; 189 0; 1; 57 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 120
Loss Time (sec): 9
Critical V/C: 0.352
Avg Crit Del (sec/veh): 15.3
Avg Delay (sec/veh): 19.0
LOS: B-

Signal=Protect Rights=Overlap (Westbound) — Lanes / Final Vol: 1 82; 0; 1 484***; 0; 1 62

Lanes: 0 1 0 0 1
Final Vol: 82 10*** 39
Signal=Permit/Rights=Overlap

Street Name:	Frances Street						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	81	10	32	61	9	66	34	205	55	57	454	82
Growth 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
Initial Bse:	81	10	32	61	9	66	34	205	55	57	454	82
Added Vol:	1	0	7	0	0	0	0	-16	2	5	30	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	82	10	39	61	9	66	34	189	57	62	484	82
User 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
PHF 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
PHF Volume:	82	10	39	61	9	66	34	189	57	62	484	82
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	10	39	61	9	66	34	189	57	62	484	82
PCE 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
MLF 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
FinalVolume:	82	10	39	61	9	66	34	189	57	62	484	82
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	0.89	0.11	1.00	0.87	0.13	1.00	1.00	0.77	0.23	1.00	1.00	1.00
Final Sat.:	1604	196	1750	1569	231	1750	1750	1383	417	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.02	0.04	0.04	0.04	0.02	0.14	0.14	0.04	0.25	0.05
Crit Moves:		****					****				****	
Green Time:	17.4	17.4	45.4	17.4	17.4	24.4	7.0	65.6	65.6	28.0	86.6	86.6
Volume/Cap:	0.35	0.35	0.06	0.27	0.27	0.19	0.33	0.25	0.25	0.15	0.35	0.06
Delay/Veh:	47.1	47.1	23.8	46.2	46.2	39.8	56.2	14.4	14.4	36.7	6.4	4.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.1	47.1	23.8	46.2	46.2	39.8	56.2	14.4	14.4	36.7	6.4	4.9
LOS by Move:	D	D	C	D	D	D	E+	B	B	D+	A	A
HCM2kAvgQ:	3	3	1	3	3	2	1	5	5	2	7	1

Note: Queue reported is the number of cars per lane.

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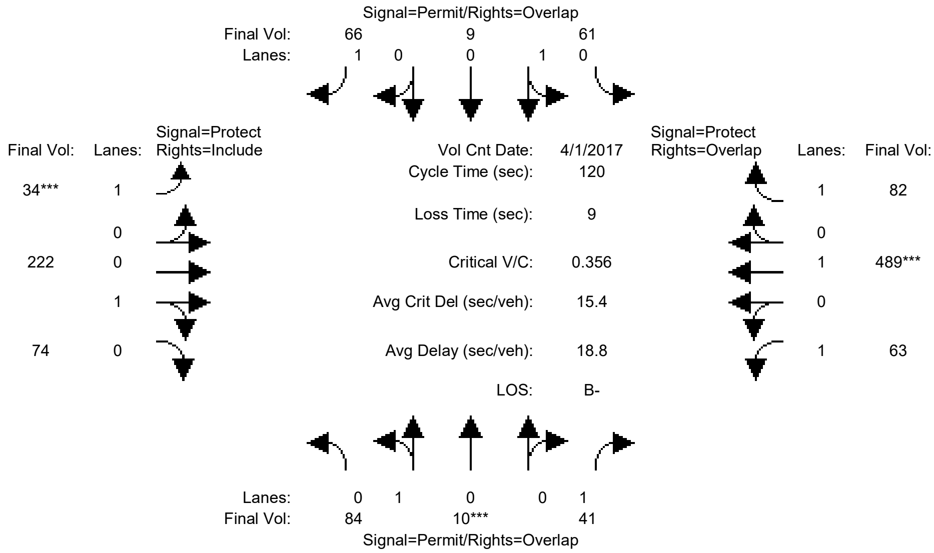
Intersection #37: Frances Street / Evelyn Avenue



Street Name:	Frances Street						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	81	10	32	61	9	66	34	205	55	57	454	82
Growth 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
Initial Bse:	81	10	32	61	9	66	34	205	55	57	454	82
Added Vol:	3	0	9	0	0	0	0	17	19	6	35	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	84	10	41	61	9	66	34	222	74	63	489	82
User 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
PHF 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
PHF Volume:	84	10	41	61	9	66	34	222	74	63	489	82
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	10	41	61	9	66	34	222	74	63	489	82
PCE 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
MLF 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
FinalVolume:	84	10	41	61	9	66	34	222	74	63	489	82
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	0.89	0.11	1.00	0.87	0.13	1.00	1.00	0.75	0.25	1.00	1.00	1.00
Final Sat.:	1609	191	1750	1569	231	1750	1750	1350	450	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.02	0.04	0.04	0.04	0.02	0.16	0.16	0.04	0.26	0.05
Crit Moves:		****					****				****	
Green Time:	17.5	17.5	42.0	17.5	17.5	24.5	7.0	69.0	69.0	24.5	86.5	86.5
Volume/Cap:	0.36	0.36	0.07	0.27	0.27	0.18	0.33	0.29	0.29	0.18	0.36	0.07
Delay/Veh:	47.0	47.0	26.0	46.1	46.1	39.7	56.2	13.1	13.1	39.7	6.5	4.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.0	47.0	26.0	46.1	46.1	39.7	56.2	13.1	13.1	39.7	6.5	4.9
LOS by Move:	D	D	C	D	D	D	E+	B	B	D	A	A
HCM2kAvgQ:	4	4	1	3	3	2	1	6	6	2	7	1

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background AM

Intersection #38: Washington Avenue / Frances Street

Signal=Stop/Rights=Include
Final Vol: 70 0 22
Lanes: 0 0 1! 0 0

Final Vol: Lanes: Signal=Uncontrol Rights=Include
71 1
0
117 1
0
0 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 80
Loss Time (sec): 9
Critical V/C: 0.086
Avg Crit Del (sec/veh): 2.8
Avg Delay (sec/veh): 2.8
LOS: B

Signal=Uncontrol Rights=Include Lanes: Final Vol:
1 45
0
1 227
0
0 0

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Stop/Rights=Include

```
Street Name:          Frances Street                 Washington Avenue
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 1 Dec 2017 <<
Base Vol:        0    0     0    22    0    63    64   74     0     0  127    45
Growth 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
Initial Bse:     0    0     0    22    0    63    64   74     0     0  127    45
Added Vol:       0    0     0     0    0     7     7   43     0     0  100     0
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:     0    0     0    22    0    70    71  117     0     0  227    45
User 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
PHF 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
PHF Volume:      0    0     0    22    0    70    71  117     0     0  227    45
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:     0    0     0    22    0    70    71  117     0     0  227    45
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   486  486   227   272 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   544  484   817  1303 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   521  458   817  1303 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.04 0.00  0.09  0.05 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.2 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.9 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  720 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.4 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 10.7 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    B     *     *    *     *     *    *     *
ApproachDel:    xxxxxx             10.7             xxxxxx           xxxxxx
ApproachLOS:        *                B                *                *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #38 Washington Avenue / Frances Street
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  1  0  1
Initial Vol:    0    0     0    22    0    70    71  117     0     0  227    45
ApproachDel:    xxxxxx             10.7            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=92]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=552]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #38 Washington Avenue / Frances Street
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  1  0  1
Initial Vol:    0    0     0    22    0    70    71  117     0     0  227    45
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            460
Minor Approach Volume:          92
Minor Approach Volume Threshold: 552
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background AM Plus Project

Intersection #38: Washington Avenue / Frances Street

Signal=Stop/Rights=Include
Final Vol: 86 0 23
Lanes: 0 0 1! 0 0

Final Vol:	Lanes:	Signal=Uncontrol Rights=Include			Signal=Uncontrol Rights=Include	Lanes:	Final Vol:
76	1		Vol Cnt Date:	12/1/2017		1	46
			Cycle Time (sec):	80			
	0		Loss Time (sec):	9		0	
132	1		Critical V/C:	0.111		1	271
	0		Avg Crit Del (sec/veh):	2.9		0	
0	0		Avg Delay (sec/veh):	2.9		0	0
			LOS:	B			

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Stop/Rights=Include

```
Street Name:          Frances Street                 Washington Avenue
Approach:       North Bound       South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 1 Dec 2017 <<
Base Vol:       0     0     0    22     0    63    64    74     0     0   127    45
Growth 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
Initial Bse:    0     0     0    22     0    63    64    74     0     0   127    45
Added Vol:      0     0     0     1     0    23    12    58     0     0   144     1
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:    0     0     0    23     0    86    76   132     0     0   271    46
User 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
PHF 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
PHF Volume:     0     0     0    23     0    86    76   132     0     0   271    46
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
FinalVolume:    0     0     0    23     0    86    76   132     0     0   271    46
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   555  555   271   317 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   496  443   773  1255 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   473  416   773  1255 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.05 0.00  0.11  0.06 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.2 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   8.1 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  682 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.6 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 11.3 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    B     *     *    *     *     *    *     *
ApproachDel:    xxxxxx            11.3             xxxxxx            xxxxxx
ApproachLOS:       *                B                 *                 *
Note: Queue reported is the number of cars per lane.
                     Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #38 Washington Avenue / Frances Street
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  1  0  1
Initial Vol:    0    0     0    23    0    86    76  132     0     0  271    46
ApproachDel:    xxxxxx              11.3            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=109]
   SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=634]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #38 Washington Avenue / Frances Street
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  1  0  1
Initial Vol:    0    0     0    23    0    86    76  132     0     0  271    46
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            525
Minor Approach Volume:          109
Minor Approach Volume Threshold: 507
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

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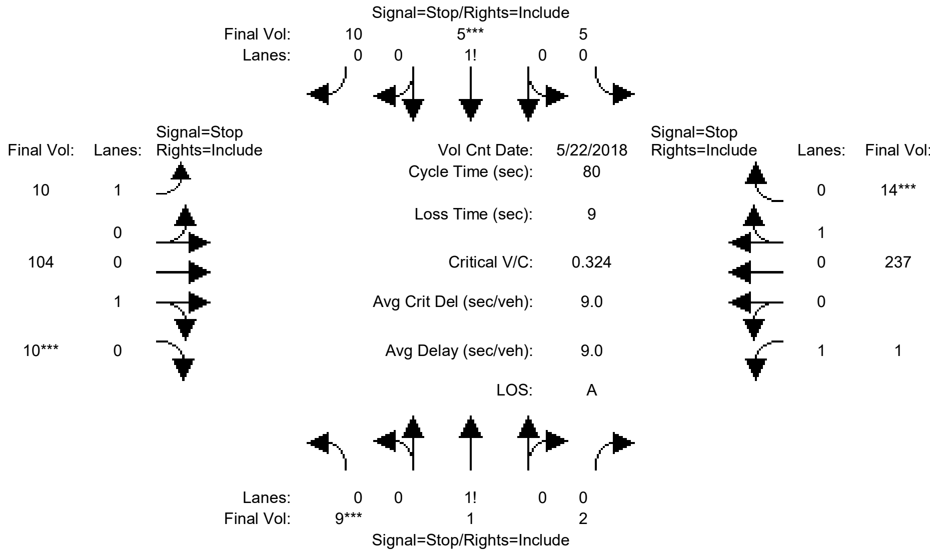
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Background AM

Intersection #39: Murphy Avenue / Washington Avenue



Street Name:	Murphy Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 22 May 2018 <<												
Base Vol:	9	1	2	5	4	10	10	61	10	1	137	14
Growth 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
Initial Bse:	9	1	2	5	4	10	10	61	10	1	137	14
Added Vol:	0	0	0	0	1	0	0	43	0	0	100	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	1	2	5	5	10	10	104	10	1	237	14
User 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
PHF 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
PHF Volume:	9	1	2	5	5	10	10	104	10	1	237	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	1	2	5	5	10	10	104	10	1	237	14
PCE 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
MLF 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
FinalVolume:	9	1	2	5	5	10	10	104	10	1	237	14
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.75	0.08	0.17	0.25	0.25	0.50	1.00	0.91	0.09	1.00	0.94	0.06
Final Sat.:	520	58	116	185	185	369	680	694	67	693	731	43
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.03	0.03	0.03	0.01	0.15	0.15	0.00	0.32	0.32
Crit Moves:	****				****				****			****
Delay/Veh:	7.9	7.9	7.9	7.6	7.6	7.6	8.0	8.2	8.2	7.9	9.5	9.5
Delay 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
AdjDel/Veh:	7.9	7.9	7.9	7.6	7.6	7.6	8.0	8.2	8.2	7.9	9.5	9.5
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:		7.9			7.6			8.2			9.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.9			7.6			8.2			9.5	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.5	0.5

Note: Queue reported is the number of cars per lane.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #39 Murphy Avenue / Washington Avenue

****

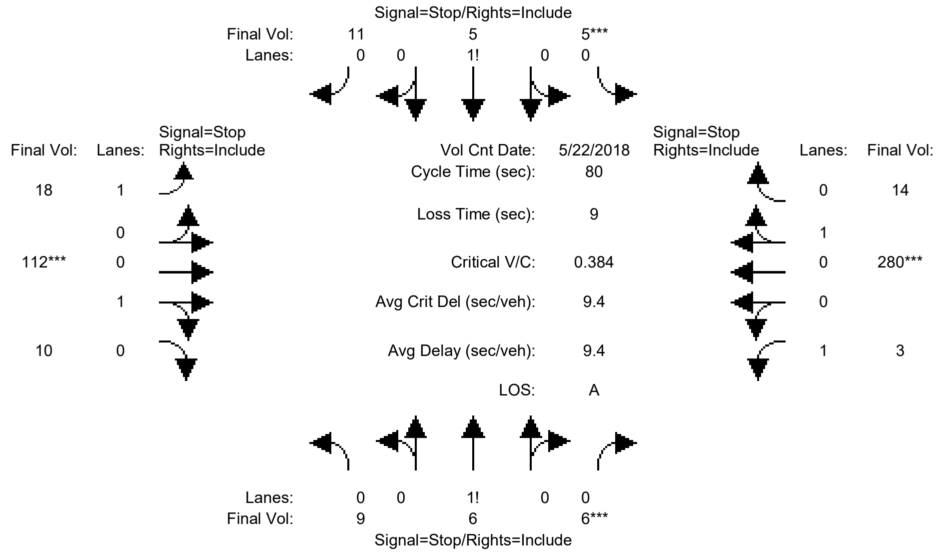
```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign        Stop Sign        Stop Sign
Lanes:        0  0  1! 0  0    0  0  1! 0  0    1  0  0  1  0    1  0  0  1  0
Initial Vol:    9    1     2     5    5    10    10  104    10     1  237    14
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            376
Minor Approach Volume:          20
Minor Approach Volume Threshold: 622
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Background AM Plus Project

Intersection #39: Murphy Avenue / Washington Avenue



Street Name:	Murphy Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 22 May 2018 <<												
Base Vol:	9	1	2	5	4	10	10	61	10	1	137	14
Growth 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
Initial Bse:	9	1	2	5	4	10	10	61	10	1	137	14
Added Vol:	0	5	4	0	1	1	8	51	0	2	143	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	6	6	5	5	11	18	112	10	3	280	14
User 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
PHF 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
PHF Volume:	9	6	6	5	5	11	18	112	10	3	280	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	6	6	5	5	11	18	112	10	3	280	14
PCE 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
MLF 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
FinalVolume:	9	6	6	5	5	11	18	112	10	3	280	14
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.43	0.28	0.29	0.24	0.24	0.52	1.00	0.92	0.08	1.00	0.95	0.05
Final Sat.:	294	196	196	169	169	372	671	688	61	687	729	36
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.16	0.16	0.00	0.38	0.38
Crit Moves:			****	****				****			****	
Delay/Veh:	8.0	8.0	8.0	7.8	7.8	7.8	8.1	8.4	8.4	7.9	10.2	10.2
Delay 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
AdjDel/Veh:	8.0	8.0	8.0	7.8	7.8	7.8	8.1	8.4	8.4	7.9	10.2	10.2
LOS by Move:	A	A	A	A	A	A	A	A	A	A	B	B
ApproachDel:		8.0			7.8			8.3			10.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.0			7.8			8.3			10.2	
LOS by Appr:		A			A			A			B	
AllWayAvgQ:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.6	0.6

Note: Queue reported is the number of cars per lane.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #39 Murphy Avenue / Washington Avenue

****

```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign        Stop Sign        Stop Sign
Lanes:        0  0  1! 0  0    0  0  1! 0  0    1  0  0  1  0    1  0  0  1  0
Initial Vol:    9    6     6     5    5    11    18  112    10     3  280    14
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             437
Minor Approach Volume:           21
Minor Approach Volume Threshold: 570
--------------------------------------------------------------------------------
```

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background AM

Intersection #40: Iowa Avenue / Murphy Avenue

Signal=Stop/Rights=Ignore
Final Vol: 0 0 0
Lanes: 0 0 1! 0 0

Signal=Uncontrol Rights=Include (West)
Final Vol: 1, 66, 0
Lanes: 1, 0, 1, 0, 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 100
Loss Time (sec): 9
Critical V/C: 0.001
Avg Crit Del (sec/veh): 0.0
Avg Delay (sec/veh): 0.0
LOS: A

Signal=Uncontrol Rights=Include (East)
Lanes: 0, 1, 0, 0, 0
Final Vol: 62, 85, 0

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Stop/Rights=Include

Street Name:	Murphy Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	0	0	0	0	5	1	36	0	0	51	62
Growth 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
Initial Bse:	0	0	0	0	0	5	1	36	0	0	51	62
Added Vol:	0	0	0	0	0	0	0	30	0	0	34	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	5	1	66	0	0	85	62
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	1	66	0	0	85	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	0	1	66	0	0	85	62
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	116	147	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	942	1447	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	942	1447	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		xxxxxx			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		*			*			*			*	

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #40 Iowa Avenue / Murphy Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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```
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:       0  0  0  0  0   0  0  0  0  1   1  0  1  0  0   0  0  0  1  0
Initial Vol:   0    0     0    0    0     5    1   66     0    0   85    62
ApproachDel:   xxxxxx           xxxxxx           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=OVERFLOW]
   SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=5]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=219]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #40 Iowa Avenue / Murphy Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:       0  0  0  0  0   0  0  0  0  1   1  0  1  0  0   0  0  0  1  0
Initial Vol:   0    0     0    0    0     5    1   66     0    0   85    62
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            214
Minor Approach Volume:          5
Minor Approach Volume Threshold: 816
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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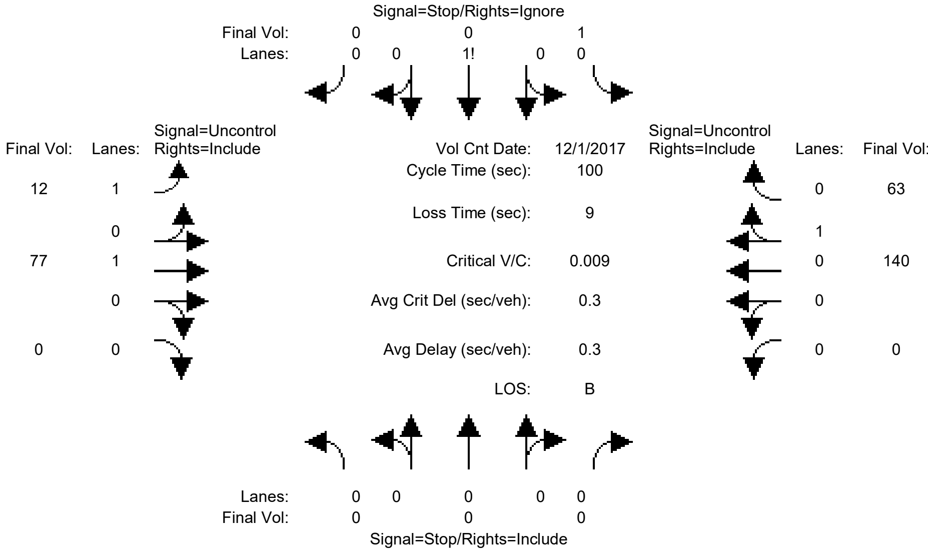
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background AM Plus Project

Intersection #40: Iowa Avenue / Murphy Avenue




```
Street Name:          Murphy Avenue                      Iowa Avenue
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 1 Dec 2017 <<
Base Vol:       0    0     0     0    0     5     1   36     0     0   51    62
Growth 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
Initial Bse:    0    0     0     0    0     5     1   36     0     0   51    62
Added Vol:      0    0     0     1    0     8    11   41     0     0   89     1
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     1    0    13    12   77     0     0  140    63
User Adj:    1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0     1    0     0    12   77     0     0  140    63
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0     1    0     0    12   77     0     0  140    63
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   273  273   172   203 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   721  638   877  1381 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   716  632   877  1381 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.00 0.00  0.00  0.01 xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.0 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.6 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  716 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.0 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 10.0 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    B     *     *    *     *     *    *     *
ApproachDel:    xxxxxx              10.0             xxxxxx            xxxxxx
ApproachLOS:        *                 B                 *                 *
Note: Queue reported is the number of cars per lane.
                     Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #40 Iowa Avenue / Murphy Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0     0     0     1     0    13    12   77     0     0  140    63
ApproachDel:    xxxxxx              10.0            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=14]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=306]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #40 Iowa Avenue / Murphy Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0     0     0     1     0    13    12   77     0     0  140    63
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             292
Minor Approach Volume:           14
Minor Approach Volume Threshold: 709
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #41: Sunnyvale Avenue / Maude Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Protect Rights=Overlap
Final Vol: Lanes:
5*** 1
0
240 1
0
94 1

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 100
Loss Time (sec): 9
Critical V/C: 0.452
Avg Crit Del (sec/veh): 14.7
Avg Delay (sec/veh): 15.1
LOS: B

Signal=Protect Rights=Include
Lanes: Final Vol:
0 2
1
0 584***
0
1 50

Lanes: 0 1 0 0 1
Final Vol: 145*** 4 91
Signal=Split/Rights=Overlap

Street Name:	Sunnyvale Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	144	0	90	0	0	0	0	203	94	49	416	0
Growth 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
Initial Bse:	144	0	90	0	0	0	0	203	94	49	416	0
Added Vol:	1	4	1	0	0	0	5	37	0	1	168	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	145	4	91	0	0	0	5	240	94	50	584	2
User 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
PHF 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
PHF Volume:	145	4	91	0	0	0	5	240	94	50	584	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	145	4	91	0	0	0	5	240	94	50	584	2
PCE 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
MLF 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
FinalVolume:	145	4	91	0	0	0	5	240	94	50	584	2
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	0.97	0.03	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.99	0.01
Final Sat.:	1752	48	1750	0	0	0	1750	1900	1750	1750	1794	6
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.05	0.00	0.00	0.00	0.00	0.13	0.05	0.03	0.33	0.33
Crit Moves:	****						****				****	
Green Time:	17.0	17.0	43.4	0.0	0.0	0.0	7.0	47.6	64.6	26.4	67.0	67.0
Volume/Cap:	0.49	0.49	0.12	0.00	0.00	0.00	0.04	0.27	0.08	0.11	0.49	0.49
Delay/Veh:	38.7	38.7	17.0	0.0	0.0	0.0	43.5	15.9	6.6	28.0	8.4	8.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.7	38.7	17.0	0.0	0.0	0.0	43.5	15.9	6.6	28.0	8.4	8.4
LOS by Move:	D+	D+	B	A	A	A	D	B	A	C	A	A
HCM2kAvgQ:	4	4	2	0	0	0	0	4	1	1	9	9

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #41: Sunnyvale Avenue / Maude Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Protect Rights=Overlap

Final Vol:	Lanes:
5***	1
	0
240	1
	0
100	1

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 100
Loss Time (sec): 9
Critical V/C: 0.453
Avg Crit Del (sec/veh): 14.9
Avg Delay (sec/veh): 15.1
LOS: B

Signal=Protect Rights=Include

Lanes:	Final Vol:
0	2
1	
0	584***
0	
1	55

Lanes: 0 1 0 0 1
Final Vol: 147*** 4 92
Signal=Split/Rights=Overlap

Street Name:	Sunnyvale Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	144	0	90	0	0	0	0	203	94	49	416	0
Growth 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
Initial Bse:	144	0	90	0	0	0	0	203	94	49	416	0
Added Vol:	3	4	2	0	0	0	5	37	0	1	168	2
PasserByVol:	0	0	0	0	0	0	0	0	6	5	0	0
Initial Fut:	147	4	92	0	0	0	5	240	100	55	584	2
User 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
PHF 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
PHF Volume:	147	4	92	0	0	0	5	240	100	55	584	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	147	4	92	0	0	0	5	240	100	55	584	2
PCE 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
MLF 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
FinalVolume:	147	4	92	0	0	0	5	240	100	55	584	2
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	0.97	0.03	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.99	0.01
Final Sat.:	1752	48	1750	0	0	0	1750	1900	1750	1750	1794	6
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.05	0.00	0.00	0.00	0.00	0.13	0.06	0.03	0.33	0.33
Crit Moves:	****						****				****	
Green Time:	17.2	17.2	43.5	0.0	0.0	0.0	7.0	47.5	64.7	26.3	66.8	66.8
Volume/Cap:	0.49	0.49	0.12	0.00	0.00	0.00	0.04	0.27	0.09	0.12	0.49	0.49
Delay/Veh:	38.6	38.6	16.9	0.0	0.0	0.0	43.5	15.9	6.6	28.1	8.5	8.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.6	38.6	16.9	0.0	0.0	0.0	43.5	15.9	6.6	28.1	8.5	8.5
LOS by Move:	D+	D+	B	A	A	A	D	B	A	C	A	A
HCM2kAvgQ:	4	4	2	0	0	0	0	4	1	1	9	9

Note: Queue reported is the number of cars per lane.

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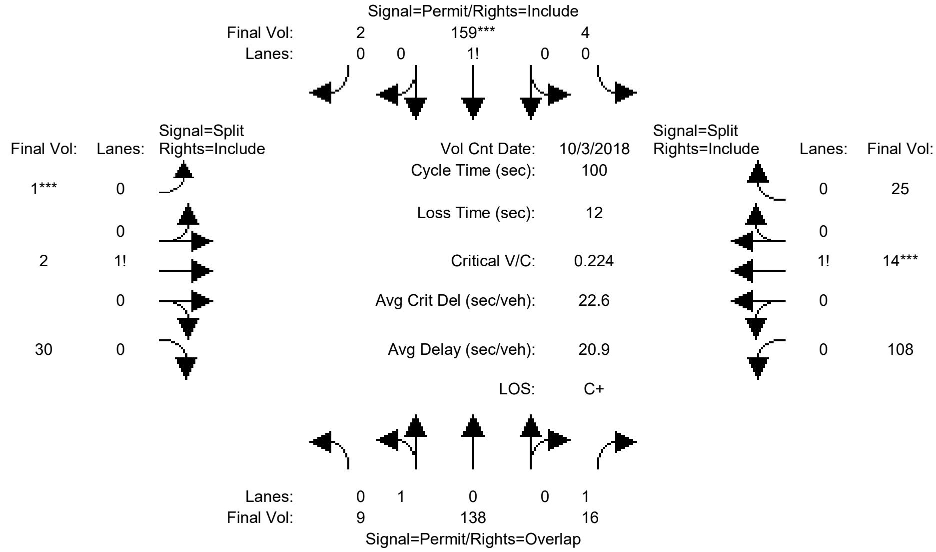
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #42: Sunnyvale Road / Arques Avenue



Street Name:	Sunnyvale Raod						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	9	133	16	4	158	2	1	2	30	108	14	25
Growth 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
Initial Bse:	9	133	16	4	158	2	1	2	30	108	14	25
Added Vol:	0	5	0	0	1	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	138	16	4	159	2	1	2	30	108	14	25
User 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
PHF 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
PHF Volume:	9	138	16	4	159	2	1	2	30	108	14	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	138	16	4	159	2	1	2	30	108	14	25
PCE 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
MLF 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
FinalVolume:	9	138	16	4	159	2	1	2	30	108	14	25
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.06	0.94	1.00	0.02	0.97	0.01	0.03	0.06	0.91	0.73	0.10	0.17
Final Sat.:	110	1690	1750	42	1686	21	53	106	1591	1286	167	298
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.01	0.09	0.09	0.09	0.02	0.02	0.02	0.08	0.08	0.08
Crit Moves:					****		****				****	
Green Time:	41.2	41.2	78.0	41.2	41.2	41.2	10.0	10.0	10.0	36.8	36.8	36.8
Volume/Cap:	0.20	0.20	0.01	0.23	0.23	0.23	0.19	0.19	0.19	0.23	0.23	0.23
Delay/Veh:	18.9	18.9	2.4	19.2	19.2	19.2	41.8	41.8	41.8	22.0	22.0	22.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.9	18.9	2.4	19.2	19.2	19.2	41.8	41.8	41.8	22.0	22.0	22.0
LOS by Move:	B-	B-	A	B-	B-	B-	D	D	D	C+	C+	C+
HCM2kAvgQ:	3	3	0	3	3	3	1	1	1	3	3	3

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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2000 HCM Operations (Future Volume Alternative)
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Intersection #42: Sunnyvale Road / Arques Avenue

Signal=Permit/Rights=Include
Final Vol: 2 170*** 4
Lanes: 0 0 1! 0 0

Final Vol:	Lanes:	Signal=Split Rights=Include			Signal=Split Rights=Include	Lanes:	Final Vol:
1***	0		Vol Cnt Date:	10/3/2018		0	25
			Cycle Time (sec):	100			
	0		Loss Time (sec):	12		0	
2	1!		Critical V/C:	0.231		1!	14***
	0		Avg Crit Del (sec/veh):	22.5		0	
30	0		Avg Delay (sec/veh):	20.6		0	108
			LOS:	C+			

Lanes: 0 1 0 0 1
Final Vol: 9 142 16
Signal=Permit/Rights=Overlap

Street Name:	Sunnyvale Raod						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	9	133	16	4	158	2	1	2	30	108	14	25
Growth 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
Initial Bse:	9	133	16	4	158	2	1	2	30	108	14	25
Added Vol:	0	9	0	0	1	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	11	0	0	0	0	0	0	0
Initial Fut:	9	142	16	4	170	2	1	2	30	108	14	25
User 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
PHF 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
PHF Volume:	9	142	16	4	170	2	1	2	30	108	14	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	142	16	4	170	2	1	2	30	108	14	25
PCE 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
MLF 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
FinalVolume:	9	142	16	4	170	2	1	2	30	108	14	25
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.06	0.94	1.00	0.02	0.97	0.01	0.03	0.06	0.91	0.73	0.10	0.17
Final Sat.:	107	1693	1750	40	1690	20	53	106	1591	1286	167	298
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.01	0.10	0.10	0.10	0.02	0.02	0.02	0.08	0.08	0.08
Crit Moves:					****		****				****	
Green Time:	42.5	42.5	78.0	42.5	42.5	42.5	10.0	10.0	10.0	35.5	35.5	35.5
Volume/Cap:	0.20	0.20	0.01	0.24	0.24	0.24	0.19	0.19	0.19	0.24	0.24	0.24
Delay/Veh:	18.2	18.2	2.4	18.5	18.5	18.5	41.8	41.8	41.8	22.9	22.9	22.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.2	18.2	2.4	18.5	18.5	18.5	41.8	41.8	41.8	22.9	22.9	22.9
LOS by Move:	B-	B-	A	B-	B-	B-	D	D	D	C+	C+	C+
HCM2kAvgQ:	3	3	0	4	4	4	1	1	1	3	3	3

Note: Queue reported is the number of cars per lane.

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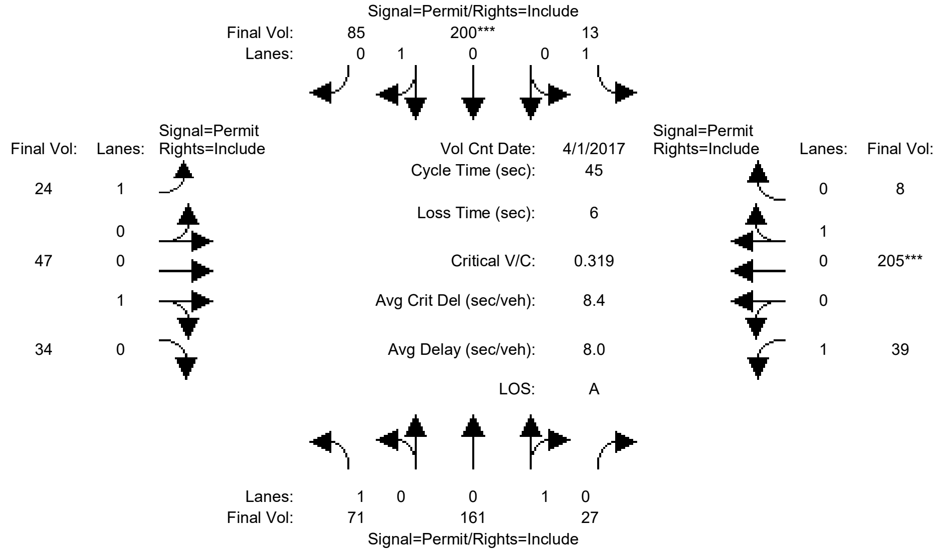
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #43: Sunnyvale Avenue / California Avenue



Street Name:	Sunnyvale Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	65	157	27	14	198	85	24	41	30	39	178	6
Growth 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
Initial Bse:	65	157	27	14	198	85	24	41	30	39	178	6
Added Vol:	6	4	0	-1	2	0	0	6	4	0	27	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	71	161	27	13	200	85	24	47	34	39	205	8
User 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
PHF 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
PHF Volume:	71	161	27	13	200	85	24	47	34	39	205	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	161	27	13	200	85	24	47	34	39	205	8
PCE 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
MLF 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
FinalVolume:	71	161	27	13	200	85	24	47	34	39	205	8
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.86	0.14	1.00	0.70	0.30	1.00	0.58	0.42	1.00	0.96	0.04
Final Sat.:	1750	1541	259	1750	1263	537	1750	1044	756	1750	1732	68
Capacity Analysis Module:												
Vol/Sat:	0.04	0.10	0.10	0.01	0.16	0.16	0.01	0.05	0.05	0.02	0.12	0.12
Crit Moves:					****						****	
Green Time:	22.3	22.3	22.3	22.3	22.3	22.3	16.7	16.7	16.7	16.7	16.7	16.7
Volume/Cap:	0.08	0.21	0.21	0.01	0.32	0.32	0.04	0.12	0.12	0.06	0.32	0.32
Delay/Veh:	6.0	6.5	6.5	5.8	7.0	7.0	9.1	9.4	9.4	9.2	10.4	10.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.0	6.5	6.5	5.8	7.0	7.0	9.1	9.4	9.4	9.2	10.4	10.4
LOS by Move:	A	A	A	A	A	A	A	A	A	A	B+	B+
HCM2kAvgQ:	1	2	2	0	2	2	0	1	1	0	2	2

Note: Queue reported is the number of cars per lane.

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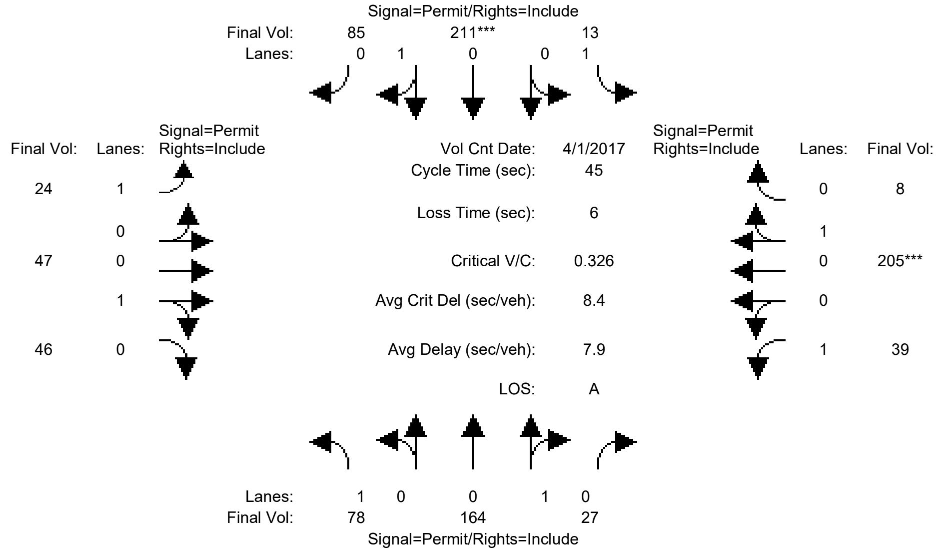
Intersection #43: Sunnyvale Avenue / California Avenue



Street Name:	Sunnyvale Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	65	157	27	14	198	85	24	41	30	39	178	6
Growth 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
Initial Bse:	65	157	27	14	198	85	24	41	30	39	178	6
Added Vol:	13	7	0	-1	2	0	0	6	22	0	27	2
PasserByVol:	0	0	0	0	11	0	0	0	-6	0	0	0
Initial Fut:	78	164	27	13	211	85	24	47	46	39	205	8
User 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
PHF 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
PHF Volume:	78	164	27	13	211	85	24	47	46	39	205	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	164	27	13	211	85	24	47	46	39	205	8
PCE 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
MLF 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
FinalVolume:	78	164	27	13	211	85	24	47	46	39	205	8
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.86	0.14	1.00	0.71	0.29	1.00	0.51	0.49	1.00	0.96	0.04
Final Sat.:	1750	1546	254	1750	1283	517	1750	910	890	1750	1732	68
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.11	0.01	0.16	0.16	0.01	0.05	0.05	0.02	0.12	0.12
Crit Moves:					****						****	
Green Time:	22.7	22.7	22.7	22.7	22.7	22.7	16.3	16.3	16.3	16.3	16.3	16.3
Volume/Cap:	0.09	0.21	0.21	0.01	0.33	0.33	0.04	0.14	0.14	0.06	0.33	0.33
Delay/Veh:	5.8	6.3	6.3	5.6	6.8	6.8	9.3	9.7	9.7	9.4	10.7	10.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.8	6.3	6.3	5.6	6.8	6.8	9.3	9.7	9.7	9.4	10.7	10.7
LOS by Move:	A	A	A	A	A	A	A	A	A	A	B+	B+
HCM2kAvgQ:	1	2	2	0	3	3	0	1	1	0	2	2

Note: Queue reported is the number of cars per lane.

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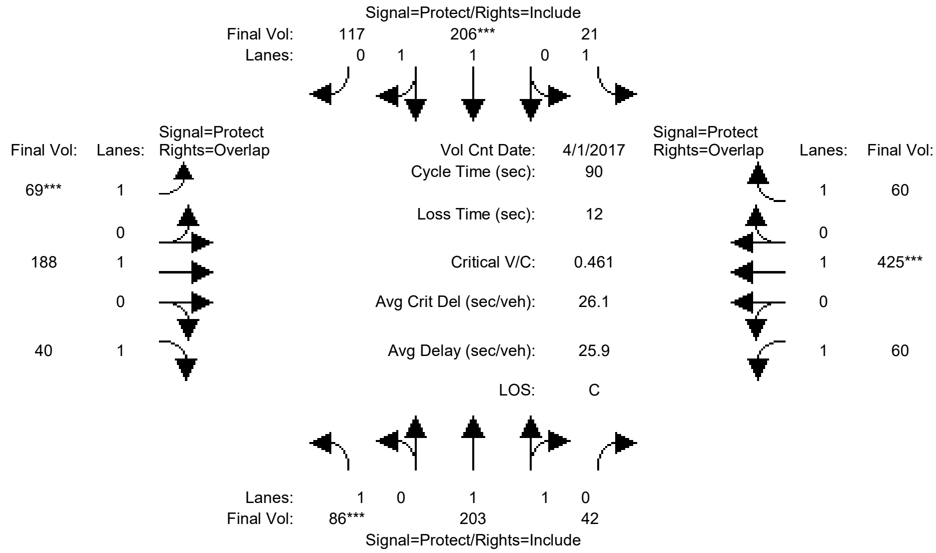
Intersection #44: Sunnyvale Avenue / Evelyn Avenue



Street Name:	Sunnyvale Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	86	197	25	21	200	117	65	201	40	42	391	60
Growth 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
Initial Bse:	86	197	25	21	200	117	65	201	40	42	391	60
Added Vol:	0	6	17	0	6	0	4	-13	0	18	34	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	86	203	42	21	206	117	69	188	40	60	425	60
User 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
PHF 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
PHF Volume:	86	203	42	21	206	117	69	188	40	60	425	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	86	203	42	21	206	117	69	188	40	60	425	60
PCE 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
MLF 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
FinalVolume:	86	203	42	21	206	117	69	188	40	60	425	60
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.65	0.35	1.00	1.26	0.74	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3065	634	1750	2359	1340	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.07	0.07	0.01	0.09	0.09	0.04	0.10	0.02	0.03	0.22	0.03
Crit Moves:	****				****		****				****	
Green Time:	9.6	15.7	15.7	11.0	17.0	17.0	7.7	30.2	39.8	21.1	43.7	54.6
Volume/Cap:	0.46	0.38	0.38	0.10	0.46	0.46	0.46	0.29	0.05	0.15	0.46	0.06
Delay/Veh:	39.6	33.2	33.2	35.3	32.9	32.9	41.4	22.3	14.4	27.4	15.7	7.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.6	33.2	33.2	35.3	32.9	32.9	41.4	22.3	14.4	27.4	15.7	7.2
LOS by Move:	D	C-	C-	D+	C-	C-	D	C+	B	C	B	A
HCM2kAvgQ:	2	3	3	1	4	4	3	4	1	1	7	1

Note: Queue reported is the number of cars per lane.

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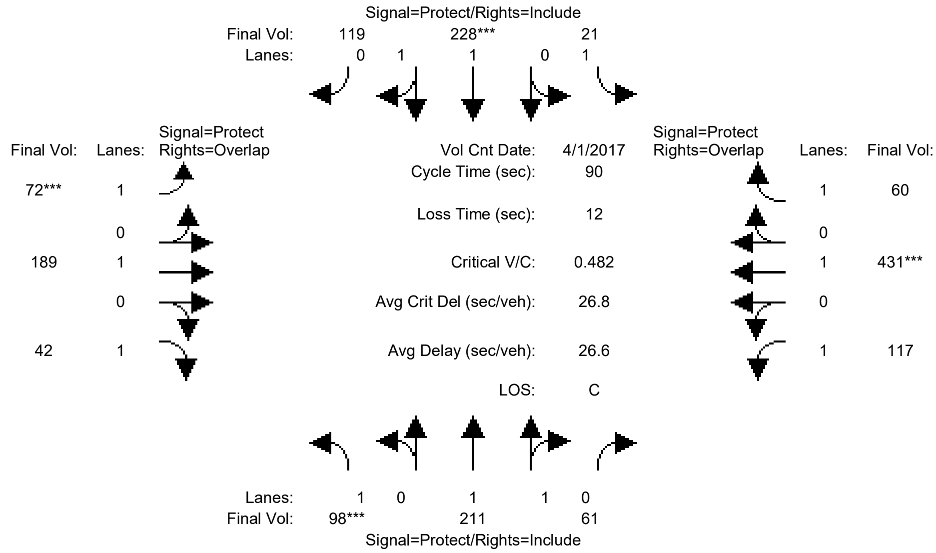

Street Name:	Sunnyvale Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	86	197	25	21	200	117	65	201	40	42	391	60
Growth 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
Initial Bse:	86	197	25	21	200	117	65	201	40	42	391	60
Added Vol:	12	14	36	0	23	2	7	-12	2	80	40	0
PasserByVol:	0	0	0	0	5	0	0	0	0	-5	0	0
Initial Fut:	98	211	61	21	228	119	72	189	42	117	431	60
User 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
PHF 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
PHF Volume:	98	211	61	21	228	119	72	189	42	117	431	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	98	211	61	21	228	119	72	189	42	117	431	60
PCE 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
MLF 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
FinalVolume:	98	211	61	21	228	119	72	189	42	117	431	60
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.54	0.46	1.00	1.30	0.70	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	2870	830	1750	2430	1268	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.07	0.07	0.01	0.09	0.09	0.04	0.10	0.02	0.07	0.23	0.03
Crit Moves:	****				****		****				****	
Green Time:	10.5	16.5	16.5	11.5	17.5	17.5	7.7	29.4	39.9	20.6	42.3	53.9
Volume/Cap:	0.48	0.40	0.40	0.09	0.48	0.48	0.48	0.30	0.05	0.29	0.48	0.06
Delay/Veh:	39.0	32.8	32.8	34.8	32.7	32.7	41.7	22.9	14.3	29.1	16.7	7.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.0	32.8	32.8	34.8	32.7	32.7	41.7	22.9	14.3	29.1	16.7	7.5
LOS by Move:	D	C-	C-	C-	C-	C-	D	C+	B	C	B	A
HCM2kAvgQ:	3	3	3	1	4	4	3	4	1	3	8	1

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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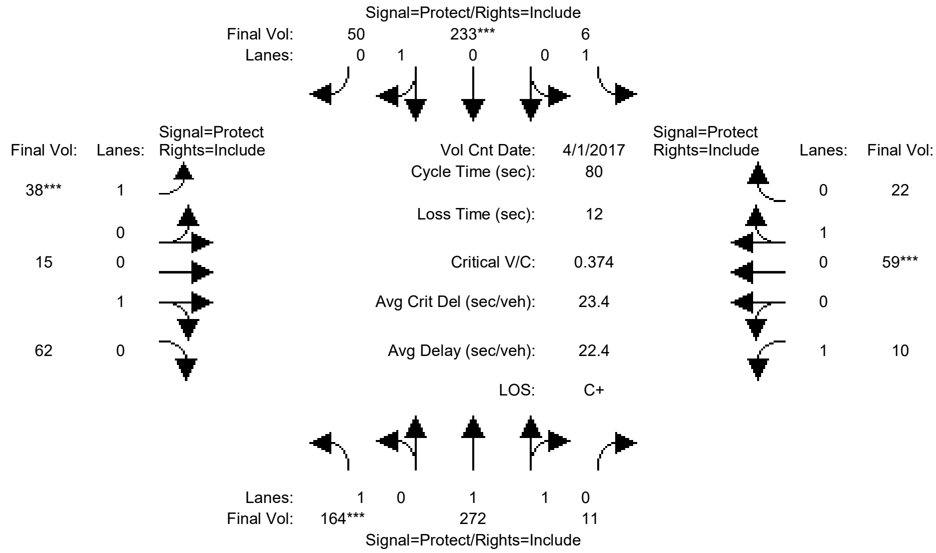
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #45: Sunnyvale Avenue / Washington Avenue



Street Name:	Sunnyvale Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	76	262	11	6	222	37	25	15	32	10	59	22
Growth 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
Initial Bse:	76	262	11	6	222	37	25	15	32	10	59	22
Added Vol:	88	10	0	0	11	13	13	0	30	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	164	272	11	6	233	50	38	15	62	10	59	22
User 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
PHF 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
PHF Volume:	164	272	11	6	233	50	38	15	62	10	59	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	164	272	11	6	233	50	38	15	62	10	59	22
PCE 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
MLF 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
FinalVolume:	164	272	11	6	233	50	38	15	62	10	59	22
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	1.92	0.08	1.00	0.82	0.18	1.00	0.19	0.81	1.00	0.73	0.27
Final Sat.:	1750	3556	144	1750	1482	318	1750	351	1449	1750	1311	489
Capacity Analysis Module:												
Vol/Sat:	0.09	0.08	0.08	0.00	0.16	0.16	0.02	0.04	0.04	0.01	0.05	0.05
Crit Moves:	****				****		****				****	
Green Time:	19.0	30.0	30.0	21.0	32.0	32.0	7.0	10.0	10.0	7.0	10.0	10.0
Volume/Cap:	0.39	0.20	0.20	0.01	0.39	0.39	0.25	0.34	0.34	0.07	0.36	0.36
Delay/Veh:	26.2	17.0	17.0	21.8	17.5	17.5	34.9	32.9	32.9	33.7	33.1	33.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.2	17.0	17.0	21.8	17.5	17.5	34.9	32.9	32.9	33.7	33.1	33.1
LOS by Move:	C	B	B	C+	B	B	C-	C-	C-	C-	C-	C-
HCM2kAvgQ:	4	2	2	0	5	5	1	2	2	0	2	2

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Background Plus Project AM

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Background AM Plus Project

Intersection #45: Sunnyvale Avenue / Washington Avenue

Signal=Protect/Rights=Include
Final Vol: 79 285*** 6
Lanes: 0 1 0 0 1

Signal=Protect
Rights=Include
Final Vol: Lanes:
45*** 1
0
15 0
1
66 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 80
Loss Time (sec): 12
Critical V/C: 0.443
Avg Crit Del (sec/veh): 23.4
Avg Delay (sec/veh): 22.4
LOS: C+

Signal=Protect
Rights=Include
Lanes: Final Vol:
0 22
1
0 59***
0
1 10

Lanes: 1 0 1 1 0
Final Vol: 182*** 304 11
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	76	262	11	6	222	37	25	15	32	10	59	22
Growth 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
Initial Bse:	76	262	11	6	222	37	25	15	32	10	59	22
Added Vol:	106	42	0	0	63	42	20	0	34	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	182	304	11	6	285	79	45	15	66	10	59	22
User 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
PHF 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
PHF Volume:	182	304	11	6	285	79	45	15	66	10	59	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	182	304	11	6	285	79	45	15	66	10	59	22
PCE 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
MLF 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
FinalVolume:	182	304	11	6	285	79	45	15	66	10	59	22
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	1.93	0.07	1.00	0.78	0.22	1.00	0.19	0.81	1.00	0.73	0.27
Final Sat.:	1750	3571	129	1750	1409	391	1750	333	1467	1750	1311	489
Capacity Analysis Module:												
Vol/Sat:	0.10	0.09	0.09	0.00	0.20	0.20	0.03	0.05	0.05	0.01	0.05	0.05
Crit Moves:	****				****		****				****	
Green Time:	17.3	30.0	30.0	21.0	33.7	33.7	7.0	10.0	10.0	7.0	10.0	10.0
Volume/Cap:	0.48	0.23	0.23	0.01	0.48	0.48	0.29	0.36	0.36	0.07	0.36	0.36
Delay/Veh:	28.4	17.2	17.2	21.8	17.3	17.3	35.3	33.1	33.1	33.7	33.1	33.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.4	17.2	17.2	21.8	17.3	17.3	35.3	33.1	33.1	33.7	33.1	33.1
LOS by Move:	C	B	B	C+	B	B	D+	C-	C-	C-	C-	C-
HCM2kAvgQ:	5	3	3	0	7	7	1	2	2	0	2	2

Note: Queue reported is the number of cars per lane.

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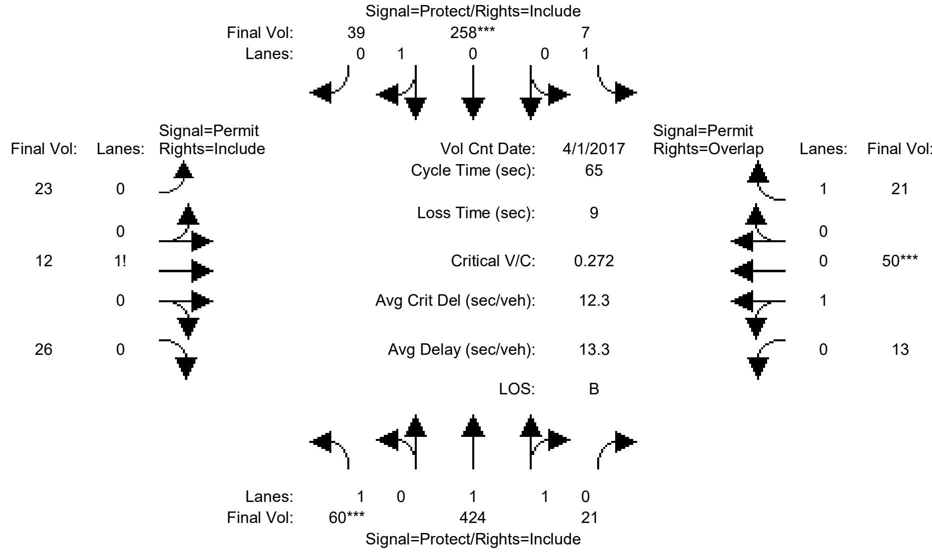
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #46: Sunnyvale Avenue / McKinley Avenue



Street Name:	Sunnyvale Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	37	335	21	7	226	29	14	12	10	13	50	21
Growth 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
Initial Bse:	37	335	21	7	226	29	14	12	10	13	50	21
Added Vol:	23	89	0	0	32	10	9	0	16	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	60	424	21	7	258	39	23	12	26	13	50	21
User 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
PHF 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
PHF Volume:	60	424	21	7	258	39	23	12	26	13	50	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	424	21	7	258	39	23	12	26	13	50	21
PCE 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
MLF 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
FinalVolume:	60	424	21	7	258	39	23	12	26	13	50	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	1.00	1.90	0.10	1.00	0.87	0.13	0.38	0.20	0.42	0.21	0.79	1.00
Final Sat.:	1750	3525	175	1750	1564	236	660	344	746	371	1429	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.12	0.00	0.17	0.17	0.03	0.03	0.03	0.04	0.04	0.01
Crit Moves:	****				****						****	
Green Time:	7.9	27.1	27.1	18.9	38.1	38.1	10.0	10.0	10.0	10.0	10.0	28.9
Volume/Cap:	0.28	0.29	0.29	0.01	0.28	0.28	0.23	0.23	0.23	0.23	0.23	0.03
Delay/Veh:	26.7	12.7	12.7	16.4	6.8	6.8	24.5	24.5	24.5	24.5	24.5	10.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.7	12.7	12.7	16.4	6.8	6.8	24.5	24.5	24.5	24.5	24.5	10.1
LOS by Move:	C	B	B	B	A	A	C	C	C	C	C	B+
HCM2kAvgQ:	1	3	3	0	3	3	1	1	1	1	1	0

Note: Queue reported is the number of cars per lane.

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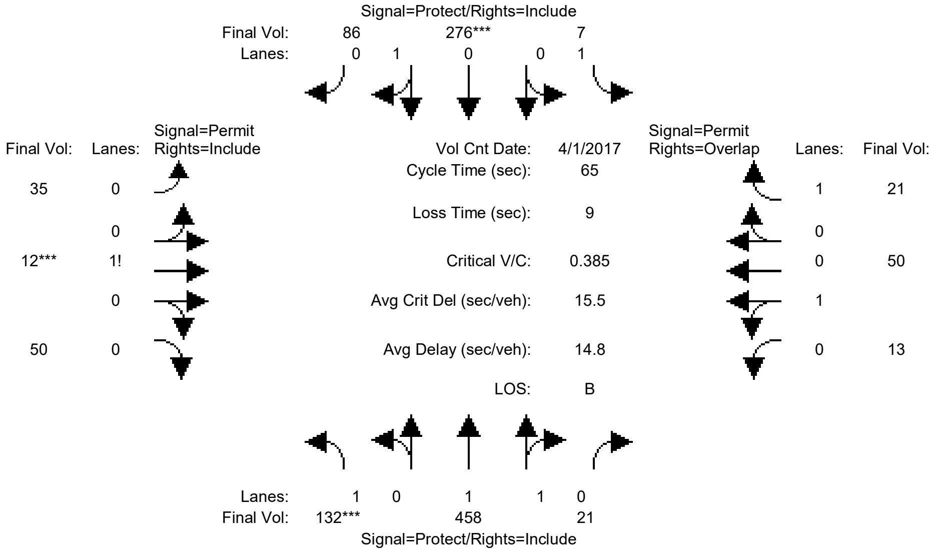
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #46: Sunnyvale Avenue / McKinley Avenue



Street Name:	Sunnyvale Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	37	335	21	7	226	29	14	12	10	13	50	21
Growth 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
Initial Bse:	37	335	21	7	226	29	14	12	10	13	50	21
Added Vol:	95	123	0	0	50	57	21	0	40	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	132	458	21	7	276	86	35	12	50	13	50	21
User 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
PHF 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
PHF Volume:	132	458	21	7	276	86	35	12	50	13	50	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	458	21	7	276	86	35	12	50	13	50	21
PCE 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
MLF 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
FinalVolume:	132	458	21	7	276	86	35	12	50	13	50	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	1.00	1.91	0.09	1.00	0.76	0.24	0.36	0.12	0.52	0.21	0.79	1.00
Final Sat.:	1750	3538	162	1750	1372	428	631	216	902	371	1429	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.13	0.13	0.00	0.20	0.20	0.06	0.06	0.06	0.04	0.04	0.01
Crit Moves:	****				****			****				
Green Time:	12.5	27.1	27.1	18.9	33.5	33.5	10.0	10.0	10.0	10.0	10.0	28.9
Volume/Cap:	0.39	0.31	0.31	0.01	0.39	0.39	0.36	0.36	0.36	0.23	0.23	0.03
Delay/Veh:	23.6	12.8	12.8	16.4	9.9	9.9	25.5	25.5	25.5	24.5	24.5	10.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.6	12.8	12.8	16.4	9.9	9.9	25.5	25.5	25.5	24.5	24.5	10.1
LOS by Move:	C	B	B	B	A	A	C	C	C	C	C	B+
HCM2kAvgQ:	3	3	3	0	5	5	2	2	2	1	1	0

Note: Queue reported is the number of cars per lane.

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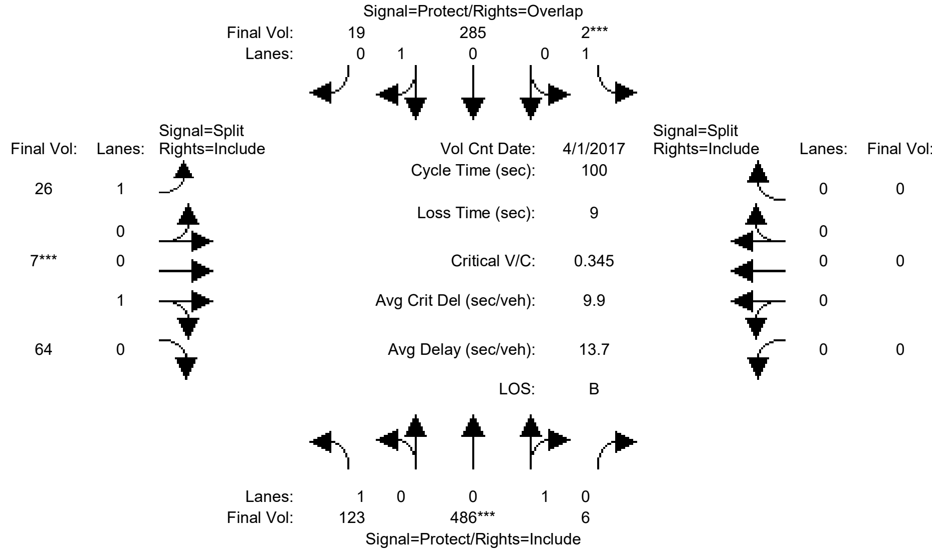
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #47: Sunnyvale Avenue / Iowa Avenue



Street Name:	Sunnyvale Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	89	374	6	2	237	19	26	7	34	0	0	0
Growth 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
Initial Bse:	89	374	6	2	237	19	26	7	34	0	0	0
Added Vol:	34	112	0	0	48	0	0	0	30	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	123	486	6	2	285	19	26	7	64	0	0	0
User 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
PHF 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
PHF Volume:	123	486	6	2	285	19	26	7	64	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	486	6	2	285	19	26	7	64	0	0	0
PCE 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
MLF 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
FinalVolume:	123	486	6	2	285	19	26	7	64	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	0.99	0.01	1.00	0.94	0.06	1.00	0.10	0.90	0.00	0.00	0.00
Final Sat.:	1750	1778	22	1750	1687	112	1750	177	1623	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.27	0.27	0.00	0.17	0.17	0.01	0.04	0.04	0.00	0.00	0.00
Crit Moves:		****		****				****				
Green Time:	23.6	73.4	73.4	7.0	56.8	67.4	10.6	10.6	10.6	0.0	0.0	0.0
Volume/Cap:	0.30	0.37	0.37	0.02	0.30	0.25	0.14	0.37	0.37	0.00	0.00	0.00
Delay/Veh:	31.8	5.0	5.0	43.3	11.4	6.5	40.9	42.8	42.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.8	5.0	5.0	43.3	11.4	6.5	40.9	42.8	42.8	0.0	0.0	0.0
LOS by Move:	C	A	A	D	B+	A	D	D	D	A	A	A
HCM2kAvgQ:	3	6	6	0	5	4	1	2	2	0	0	0

Note: Queue reported is the number of cars per lane.

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2000 HCM Operations (Future Volume Alternative)
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Intersection #47: Sunnyvale Avenue / Iowa Avenue

Signal=Protect/Rights=Overlap
Final Vol: 19 327 2***
Lanes: 0 1 0 0 1

Final Vol:	Lanes:	Signal=Split Rights=Include			Signal=Split Rights=Include	Lanes:	Final Vol:
26	1		Vol Cnt Date:	4/1/2017		0	0
			Cycle Time (sec):	100			
	0		Loss Time (sec):	9		0	
7***	0		Critical V/C:	0.416		0	0
	1		Avg Crit Del (sec/veh):	10.2		0	
76	0		Avg Delay (sec/veh):	14.6		0	0
			LOS:	B			

Lanes: 1 0 0 1 0
Final Vol: 179 591*** 6
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	89	374	6	2	237	19	26	7	34	0	0	0
Growth 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
Initial Bse:	89	374	6	2	237	19	26	7	34	0	0	0
Added Vol:	90	217	0	0	90	0	0	0	42	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	179	591	6	2	327	19	26	7	76	0	0	0
User 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
PHF 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
PHF Volume:	179	591	6	2	327	19	26	7	76	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	179	591	6	2	327	19	26	7	76	0	0	0
PCE 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
MLF 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
FinalVolume:	179	591	6	2	327	19	26	7	76	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	0.99	0.01	1.00	0.95	0.05	1.00	0.08	0.92	0.00	0.00	0.00
Final Sat.:	1750	1782	18	1750	1701	99	1750	152	1648	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.33	0.33	0.00	0.19	0.19	0.01	0.05	0.05	0.00	0.00	0.00
Crit Moves:		****		****				****				
Green Time:	28.0	73.7	73.7	7.0	52.7	63.0	10.3	10.3	10.3	0.0	0.0	0.0
Volume/Cap:	0.36	0.45	0.45	0.02	0.36	0.31	0.14	0.45	0.45	0.00	0.00	0.00
Delay/Veh:	29.3	5.4	5.4	43.3	14.1	8.6	41.3	44.0	44.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.3	5.4	5.4	43.3	14.1	8.6	41.3	44.0	44.0	0.0	0.0	0.0
LOS by Move:	C	A	A	D	B	A	D	D	D	A	A	A
HCM2kAvgQ:	4	7	7	0	7	5	1	3	3	0	0	0

Note: Queue reported is the number of cars per lane.

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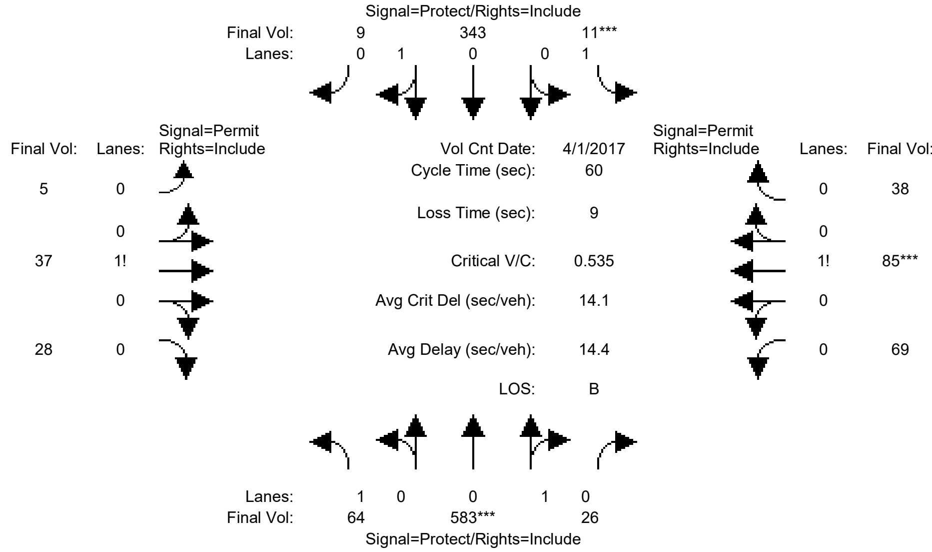
Intersection #48: Sunnyvale Avenue / Olive Avenue



Street Name:	Sunnyvale Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	30	437	26	11	264	9	5	37	21	69	85	38
Growth 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
Initial Bse:	30	437	26	11	264	9	5	37	21	69	85	38
Added Vol:	34	146	0	0	79	0	0	0	7	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	64	583	26	11	343	9	5	37	28	69	85	38
User 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
PHF 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
PHF Volume:	64	583	26	11	343	9	5	37	28	69	85	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	583	26	11	343	9	5	37	28	69	85	38
PCE 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
MLF 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
FinalVolume:	64	583	26	11	343	9	5	37	28	69	85	38
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	1.00	0.96	0.04	1.00	0.97	0.03	0.07	0.53	0.40	0.36	0.44	0.20
Final Sat.:	1750	1723	77	1750	1754	46	125	925	700	629	775	346
Capacity Analysis Module:												
Vol/Sat:	0.04	0.34	0.34	0.01	0.20	0.20	0.04	0.04	0.04	0.11	0.11	0.11
Crit Moves:		****		****							****	
Green Time:	15.0	33.2	33.2	7.0	25.2	25.2	10.8	10.8	10.8	10.8	10.8	10.8
Volume/Cap:	0.15	0.61	0.61	0.05	0.47	0.47	0.22	0.22	0.22	0.61	0.61	0.61
Delay/Veh:	17.6	10.1	10.1	23.7	13.0	13.0	21.4	21.4	21.4	26.2	26.2	26.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.6	10.1	10.1	23.7	13.0	13.0	21.4	21.4	21.4	26.2	26.2	26.2
LOS by Move:	B	B+	B+	C	B	B	C+	C+	C+	C	C	C
HCM2kAvgQ:	1	8	8	0	5	5	1	1	1	5	5	5

Note: Queue reported is the number of cars per lane.

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Intersection #48: Sunnyvale Avenue / Olive Avenue

Signal=Protect/Rights=Include
Final Vol: 9 396 11***
Lanes: 0 1 0 0 1

Signal=Permit
Rights=Include

Final Vol:	Lanes:			
5	0			
	0			
37	1!			
	0			
30	0			

Vol Cnt Date:	4/1/2017
Cycle Time (sec):	60
Loss Time (sec):	9
Critical V/C:	0.640
Avg Crit Del (sec/veh):	16.3
Avg Delay (sec/veh):	15.6
LOS:	B

Signal=Permit
Rights=Include

Lanes:	Final Vol:
0	38
0	
1!	85***
0	
0	69

Lanes: 1 0 0 1 0
Final Vol: 67 744*** 26
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	30	437	26	11	264	9	5	37	21	69	85	38
Growth 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
Initial Bse:	30	437	26	11	264	9	5	37	21	69	85	38
Added Vol:	37	307	0	0	132	0	0	0	9	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	744	26	11	396	9	5	37	30	69	85	38
User 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
PHF 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
PHF Volume:	67	744	26	11	396	9	5	37	30	69	85	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	744	26	11	396	9	5	37	30	69	85	38
PCE 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
MLF 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
FinalVolume:	67	744	26	11	396	9	5	37	30	69	85	38
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	1.00	0.97	0.03	1.00	0.98	0.02	0.07	0.51	0.42	0.36	0.44	0.20
Final Sat.:	1750	1739	61	1750	1760	40	122	899	729	629	775	346
Capacity Analysis Module:												
Vol/Sat:	0.04	0.43	0.43	0.01	0.23	0.23	0.04	0.04	0.04	0.11	0.11	0.11
Crit Moves:		****		****							****	
Green Time:	14.0	34.0	34.0	7.0	27.0	27.0	10.0	10.0	10.0	10.0	10.0	10.0
Volume/Cap:	0.16	0.75	0.75	0.05	0.50	0.50	0.25	0.25	0.25	0.66	0.66	0.66
Delay/Veh:	18.5	13.1	13.1	23.7	12.2	12.2	22.2	22.2	22.2	28.8	28.8	28.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.5	13.1	13.1	23.7	12.2	12.2	22.2	22.2	22.2	28.8	28.8	28.8
LOS by Move:	B-	B	B	C	B	B	C+	C+	C+	C	C	C
HCM2kAvgQ:	1	12	12	0	6	6	1	1	1	5	5	5

Note: Queue reported is the number of cars per lane.

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Background AM

Intersection #49: Sunnyvale Avenue / Old San Francisco Road

Signal=Protect/Rights=Include
Final Vol: 11 342 80***
Lanes: 1 0 2 0 1

Signal=Protect
Rights=Include
Final Vol: Lanes:
0*** 0
0
0 0
0
7 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 100
Loss Time (sec): 6
Critical V/C: 0.401
Avg Crit Del (sec/veh): 22.3
Avg Delay (sec/veh): 19.5
LOS: B-

Signal=Protect
Rights=Include
Lanes: Final Vol:
1 280***
0
0 0
0
0 0

Lanes: 0 0 1 1 0
Final Vol: 0 429*** 203
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	10	0	0	10	0	0	10
Y+R:	0.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	390	204	37	299	11	0	0	7	0	0	139
Growth 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
Initial Bse:	0	390	204	37	299	11	0	0	7	0	0	139
Added Vol:	0	39	-1	43	43	0	0	0	0	0	0	141
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	429	203	80	342	11	0	0	7	0	0	280
User 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
PHF 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
PHF Volume:	0	429	203	80	342	11	0	0	7	0	0	280
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	429	203	80	342	11	0	0	7	0	0	280
PCE 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
MLF 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
FinalVolume:	0	429	203	80	342	11	0	0	7	0	0	280
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	1.34	0.66	1.00	2.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Final Sat.:	0	2511	1188	1750	3800	1750	0	0	1750	0	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.17	0.05	0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.16
Crit Moves:		****		****			****					****
Green Time:	0.0	42.7	42.7	11.4	54.1	54.1	0.0	0.0	39.9	0.0	0.0	39.9
Volume/Cap:	0.00	0.40	0.40	0.40	0.17	0.01	0.00	0.00	0.01	0.00	0.00	0.40
Delay/Veh:	0.0	20.0	20.0	42.4	11.6	10.6	0.0	0.0	18.1	0.0	0.0	21.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	20.0	20.0	42.4	11.6	10.6	0.0	0.0	18.1	0.0	0.0	21.9
LOS by Move:	A	C+	C+	D	B+	B+	A	A	B-	A	A	C+
HCM2kAvgQ:	0	7	7	2	3	0	0	0	0	0	0	6

Note: Queue reported is the number of cars per lane.

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Intersection #49: Sunnyvale Avenue / Old San Francisco Road

Signal=Protect/Rights=Include
Final Vol: 11 383 94***
Lanes: 1 0 2 0 1

Signal=Protect Rights=Include (westbound side); Final Vol: / Lanes:
0*** 0
0
0 0
0
7 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 100
Loss Time (sec): 6
Critical V/C: 0.472
Avg Crit Del (sec/veh): 23.1
Avg Delay (sec/veh): 20.3
LOS: C+

Signal=Protect Rights=Include; Lanes: Final Vol:
1 330***
0
0 0
0
0 0

Lanes: 0 0 1 1 0
Final Vol: 0 543*** 203
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	10	0	0	10	0	0	10
Y+R:	0.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	390	204	37	299	11	0	0	7	0	0	139
Growth 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
Initial Bse:	0	390	204	37	299	11	0	0	7	0	0	139
Added Vol:	0	153	-1	57	84	0	0	0	0	0	0	191
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	543	203	94	383	11	0	0	7	0	0	330
User 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
PHF 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
PHF Volume:	0	543	203	94	383	11	0	0	7	0	0	330
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	543	203	94	383	11	0	0	7	0	0	330
PCE 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
MLF 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
FinalVolume:	0	543	203	94	383	11	0	0	7	0	0	330
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	1.44	0.56	1.00	2.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Final Sat.:	0	2692	1007	1750	3800	1750	0	0	1750	0	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.05	0.10	0.01	0.00	0.00	0.00	0.00	0.00	0.19
Crit Moves:		****		****			****					****
Green Time:	0.0	42.7	42.7	11.4	54.1	54.1	0.0	0.0	39.9	0.0	0.0	39.9
Volume/Cap:	0.00	0.47	0.47	0.47	0.19	0.01	0.00	0.00	0.01	0.00	0.00	0.47
Delay/Veh:	0.0	20.8	20.8	43.3	11.8	10.6	0.0	0.0	18.1	0.0	0.0	22.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	20.8	20.8	43.3	11.8	10.6	0.0	0.0	18.1	0.0	0.0	22.7
LOS by Move:	A	C+	C+	D	B+	B+	A	A	B-	A	A	C+
HCM2kAvgQ:	0	8	8	3	3	0	0	0	0	0	0	8

Note: Queue reported is the number of cars per lane.

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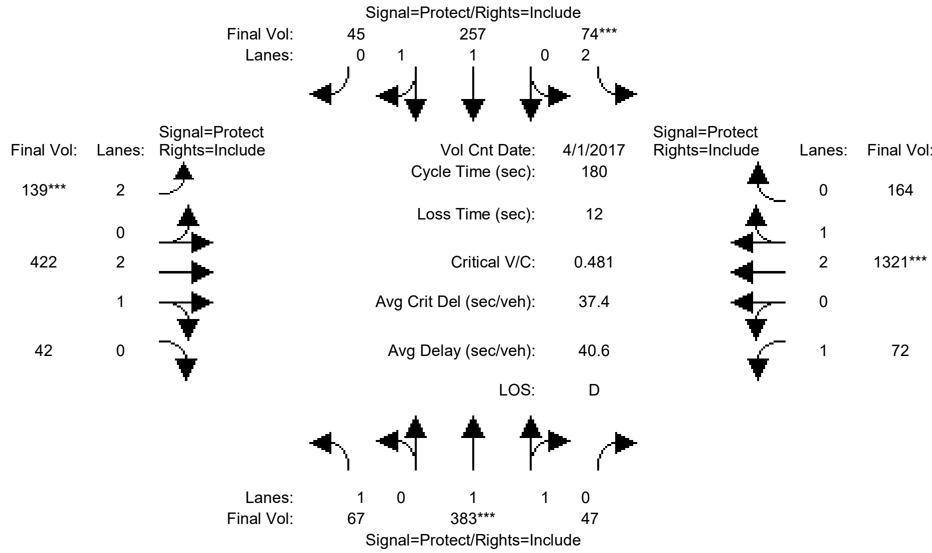
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #50: Sunnyvale Avenue / El Camino Real



Street Name:	Sunnyvale Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	67	367	47	48	240	45	140	417	42	72	1242	141
Growth 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
Initial Bse:	67	367	47	48	240	45	140	417	42	72	1242	141
Added Vol:	0	16	0	26	17	0	-1	5	0	0	79	23
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	383	47	74	257	45	139	422	42	72	1321	164
User 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
PHF 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
PHF Volume:	67	383	47	74	257	45	139	422	42	72	1321	164
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	383	47	74	257	45	139	422	42	72	1321	164
PCE 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
MLF 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
FinalVolume:	67	383	47	74	257	45	139	422	42	72	1321	164
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.98	0.95	0.83	0.99	0.95	0.92	0.99	0.95
Lanes:	1.00	1.78	0.22	2.00	1.69	0.31	2.00	2.72	0.28	1.00	2.66	0.34
Final Sat.:	1750	3295	404	3150	3148	551	3150	5092	507	1750	4981	618
Capacity Analysis Module:												
Vol/Sat:	0.04	0.12	0.12	0.02	0.08	0.08	0.04	0.08	0.08	0.04	0.27	0.27
Crit Moves:		****		****			****				****	
Green Time:	16.9	43.5	43.5	8.8	35.4	35.4	16.5	77.3	77.3	38.4	99.2	99.2
Volume/Cap:	0.41	0.48	0.48	0.48	0.42	0.42	0.48	0.19	0.19	0.19	0.48	0.48
Delay/Veh:	78.5	59.0	59.0	85.7	63.6	63.6	78.9	32.0	32.0	58.3	24.8	24.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	78.5	59.0	59.0	85.7	63.6	63.6	78.9	32.0	32.0	58.3	24.8	24.8
LOS by Move:	E-	E+	E+	F	E	E	E-	C	C	E+	C	C
HCM2kAvgQ:	4	10	10	2	7	7	4	5	5	3	16	16

Note: Queue reported is the number of cars per lane.

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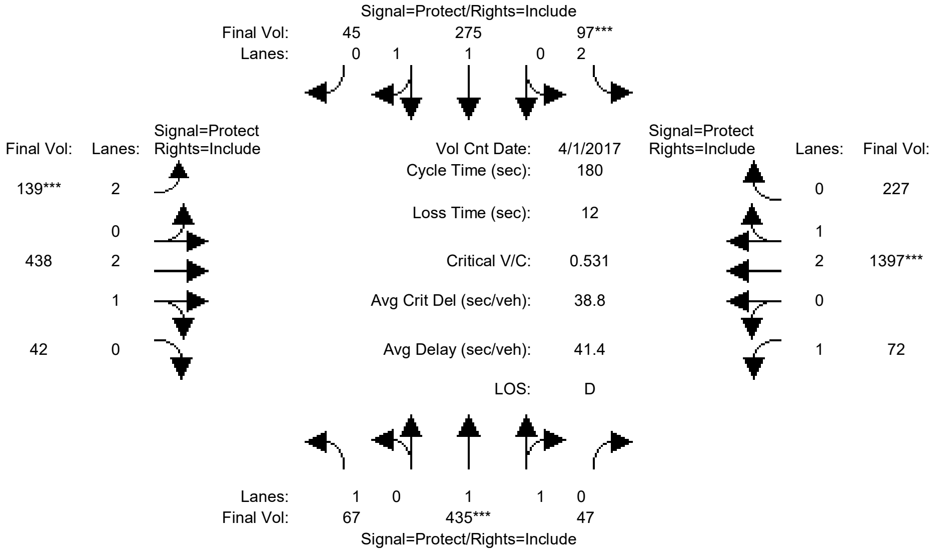
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #50: Sunnyvale Avenue / El Camino Real



Street Name:	Sunnyvale Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	67	367	47	48	240	45	140	417	42	72	1242	141
Growth 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
Initial Bse:	67	367	47	48	240	45	140	417	42	72	1242	141
Added Vol:	0	68	0	49	35	0	-1	21	0	0	155	86
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	435	47	97	275	45	139	438	42	72	1397	227
User 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
PHF 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
PHF Volume:	67	435	47	97	275	45	139	438	42	72	1397	227
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	435	47	97	275	45	139	438	42	72	1397	227
PCE 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
MLF 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
FinalVolume:	67	435	47	97	275	45	139	438	42	72	1397	227
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.98	0.95	0.83	0.99	0.95	0.92	0.99	0.95
Lanes:	1.00	1.80	0.20	2.00	1.71	0.29	2.00	2.73	0.27	1.00	2.57	0.43
Final Sat.:	1750	3339	361	3150	3179	520	3150	5109	490	1750	4816	783
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.13	0.03	0.09	0.09	0.04	0.09	0.09	0.04	0.29	0.29
Crit Moves:		****		****			****				****	
Green Time:	16.9	44.2	44.2	10.4	37.7	37.7	15.0	76.6	76.6	36.8	98.4	98.4
Volume/Cap:	0.41	0.53	0.53	0.53	0.41	0.41	0.53	0.20	0.20	0.20	0.53	0.53
Delay/Veh:	78.4	59.5	59.5	85.3	61.9	61.9	81.2	32.5	32.5	59.7	26.2	26.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	78.4	59.5	59.5	85.3	61.9	61.9	81.2	32.5	32.5	59.7	26.2	26.2
LOS by Move:	E-	E+	E+	F	E	E	F	C-	C-	E+	C	C
HCM2kAvgQ:	4	11	11	3	8	8	4	5	5	3	19	19

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #51: Mathilda Avenue / Talisman Drive

Signal=Protect/Rights=Include
Final Vol: 15 650 45***
Lanes: 0 1 2 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
19	1		Vol Cnt Date:	12/1/2016		0	24
			Cycle Time (sec):	160			
	0		Loss Time (sec):	12		1	
5	1		Critical V/C:	0.669		0	2
	0		Avg Crit Del (sec/veh):	21.7		0	
27***	1		Avg Delay (sec/veh):	22.1		2	274***
			LOS:	C+			

Lanes: 1 0 3 0 1
Final Vol: 26 2797*** 0
Signal=Protect/Rights=Ignore

Street Name:	Mathilda Avenue						Talisman Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	26	2223	566	45	503	15	19	5	27	257	2	24
Growth 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
Initial Bse:	26	2223	566	45	503	15	19	5	27	257	2	24
Added Vol:	0	574	16	0	147	0	0	0	0	17	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	2797	582	45	650	15	19	5	27	274	2	24
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	26	2797	0	45	650	15	19	5	27	274	2	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	2797	0	45	650	15	19	5	27	274	2	24
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	2797	0	45	650	15	19	5	27	274	2	24
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92	0.83	0.95	0.95
Lanes:	1.00	3.00	1.00	1.00	2.93	0.07	1.00	1.00	1.00	2.00	0.08	0.92
Final Sat.:	1750	5700	1750	1750	5474	126	1750	1900	1750	3150	138	1662
Capacity Analysis Module:												
Vol/Sat:	0.01	0.49	0.00	0.03	0.12	0.12	0.01	0.00	0.02	0.09	0.01	0.01
Crit Moves:		****		****					****	****		
Green Time:	31.8	111	0.0	7.0	86.4	86.4	12.2	10.0	10.0	19.7	17.5	17.5
Volume/Cap:	0.07	0.71	0.00	0.59	0.22	0.22	0.14	0.04	0.25	0.71	0.13	0.13
Delay/Veh:	52.2	15.2	0.0	86.5	19.2	19.2	69.5	70.6	72.6	73.2	64.7	64.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.2	15.2	0.0	86.5	19.2	19.2	69.5	70.6	72.6	73.2	64.7	64.7
LOS by Move:	D-	B	A	F	B-	B-	E	E	E	E	E	E
HCM2kAvgQ:	1	25	0	2	5	5	1	0	2	8	1	1

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #51: Mathilda Avenue / Talisman Drive

Signal=Protect/Rights=Include
Final Vol: 15 687 45***
Lanes: 0 1 2 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	12/1/2016			
19	1		Cycle Time (sec):	160		0	24
	0		Loss Time (sec):	12		1	
5	1		Critical V/C:	0.695		0	2
	0		Avg Crit Del (sec/veh):	22.8		0	
27***	1		Avg Delay (sec/veh):	22.8		2	292***
			LOS:	C+			

Lanes: 1 0 3 0 1
Final Vol: 26 2904*** 0
Signal=Protect/Rights=Ignore

Street Name:	Mathilda Avenue						Talisman Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	26	2223	566	45	503	15	19	5	27	257	2	24
Growth 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
Initial Bse:	26	2223	566	45	503	15	19	5	27	257	2	24
Added Vol:	0	681	68	0	184	0	0	0	0	35	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	2904	634	45	687	15	19	5	27	292	2	24
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	26	2904	0	45	687	15	19	5	27	292	2	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	2904	0	45	687	15	19	5	27	292	2	24
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	2904	0	45	687	15	19	5	27	292	2	24
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92	0.83	0.95	0.95
Lanes:	1.00	3.00	1.00	1.00	2.93	0.07	1.00	1.00	1.00	2.00	0.08	0.92
Final Sat.:	1750	5700	1750	1750	5480	120	1750	1900	1750	3150	138	1662
Capacity Analysis Module:												
Vol/Sat:	0.01	0.51	0.00	0.03	0.13	0.13	0.01	0.00	0.02	0.09	0.01	0.01
Crit Moves:		****		****					****	****		
Green Time:	30.5	111	0.0	7.0	87.3	87.3	12.4	10.0	10.0	20.2	17.7	17.7
Volume/Cap:	0.08	0.74	0.00	0.59	0.23	0.23	0.14	0.04	0.25	0.74	0.13	0.13
Delay/Veh:	53.3	16.1	0.0	86.5	18.9	18.9	69.3	70.6	72.6	74.4	64.5	64.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.3	16.1	0.0	86.5	18.9	18.9	69.3	70.6	72.6	74.4	64.5	64.5
LOS by Move:	D-	B	A	F	B-	B-	E	E	E	E	E	E
HCM2kAvgQ:	1	27	0	2	6	6	1	0	2	8	1	1

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #52: Sunnyvale-Saratoga Road / Remington Drive (CMP)

Signal=Protect/Rights=Include
Final Vol: 117 819 44***
Lanes: 0 1 2 0 2

Signal=Protect Rights=Include (West approach)
Final Vol: 169*** / 279 / 96
Lanes: 1 / 0 / 1 / 1 / 0

Vol Cnt Date: 12/1/2016
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.922
Avg Crit Del (sec/veh): 42.0
Avg Delay (sec/veh): 47.6
LOS: D

Signal=Protect Rights=Include (East approach)
Lanes: 1 / 0 / 1 / 0 / 2
Final Vol: 48 / 238*** / 378

Lanes: 2 0 2 1 0
Final Vol: 202 3087*** 366
Signal=Protect/Rights=Include

Street Name:	Sunnyvale-Saratoga Road						Remington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	202	2515	374	44	660	111	150	280	96	366	237	48
Growth 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
Initial Bse:	202	2515	374	44	660	111	150	280	96	366	237	48
Added Vol:	0	572	-8	0	159	6	19	-1	0	12	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	202	3087	366	44	819	117	169	279	96	378	238	48
User 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
PHF 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
PHF Volume:	202	3087	366	44	819	117	169	279	96	378	238	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	202	3087	366	44	819	117	169	279	96	378	238	48
PCE 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
MLF 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
FinalVolume:	202	3087	366	44	819	117	169	279	96	378	238	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.83	1.00	0.92
Lanes:	2.00	2.67	0.33	2.00	2.61	0.39	1.00	1.47	0.53	2.00	1.00	1.00
Final Sat.:	3150	5006	593	3150	4899	700	1750	2752	947	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.62	0.62	0.01	0.17	0.17	0.10	0.10	0.10	0.12	0.13	0.03
Crit Moves:		****		****			****				****	
Green Time:	30.7	104	103.7	7.0	80.0	80.0	16.2	17.1	17.1	20.2	21.1	21.1
Volume/Cap:	0.33	0.95	0.95	0.32	0.33	0.33	0.95	0.95	0.95	0.95	0.95	0.21
Delay/Veh:	56.2	32.7	32.7	75.5	24.1	24.1	124.8	103	103.5	101.7	112	62.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.2	32.7	32.7	75.5	24.1	24.1	124.8	103	103.5	101.7	112	62.5
LOS by Move:	E+	C-	C-	E-	C	C	F	F	F	F	F	E
HCM2kAvgQ:	5	51	51	1	9	9	10	10	10	12	13	2

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Background Plus Project AM

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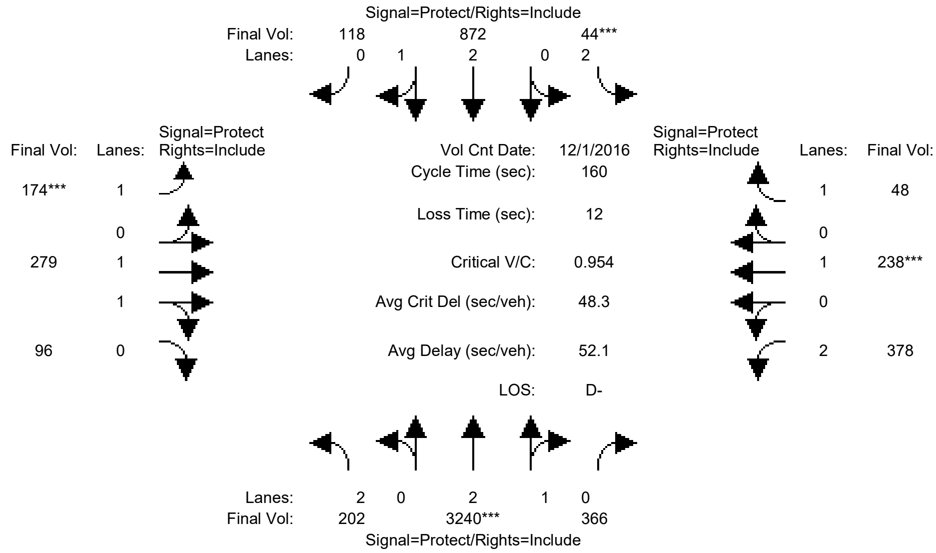
Background AM Plus Project

Intersection #52: Sunnyvale-Saratoga Road / Remington Drive (CMP)



Street Name:	Sunnyvale-Saratoga Road						Remington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	202	2515	374	44	660	111	150	280	96	366	237	48
Growth 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
Initial Bse:	202	2515	374	44	660	111	150	280	96	366	237	48
Added Vol:	0	725	-8	0	212	7	24	-1	0	12	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	202	3240	366	44	872	118	174	279	96	378	238	48
User 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
PHF 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
PHF Volume:	202	3240	366	44	872	118	174	279	96	378	238	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	202	3240	366	44	872	118	174	279	96	378	238	48
PCE 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
MLF 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
FinalVolume:	202	3240	366	44	872	118	174	279	96	378	238	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.83	1.00	0.92
Lanes:	2.00	2.68	0.32	2.00	2.63	0.37	1.00	1.47	0.53	2.00	1.00	1.00
Final Sat.:	3150	5031	568	3150	4932	667	1750	2752	947	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.64	0.64	0.01	0.18	0.18	0.10	0.10	0.10	0.12	0.13	0.03
Crit Moves:		****		****			****				****	
Green Time:	29.7	105	104.5	7.0	81.8	81.8	16.1	16.7	16.7	19.8	20.3	20.3
Volume/Cap:	0.35	0.99	0.99	0.32	0.35	0.35	0.99	0.97	0.97	0.97	0.99	0.22
Delay/Veh:	57.1	38.8	38.8	75.5	23.3	23.3	135.2	109	109.5	107.7	123	63.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.1	38.8	38.8	75.5	23.3	23.3	135.2	109	109.5	107.7	123	63.2
LOS by Move:	E+	D+	D+	E-	C	C	F	F	F	F	F	E
HCM2kAvgQ:	5	57	57	1	9	9	11	11	11	13	13	2

Note: Queue reported is the number of cars per lane.

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Background Plus Project AM

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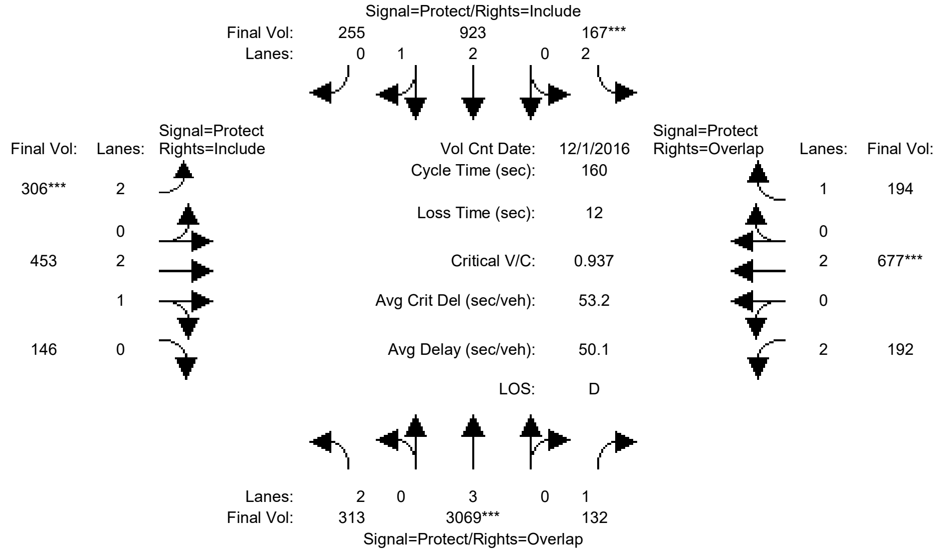
Background AM

Intersection #53: Sunnyvale-Saratoga Road / Fremont Avenue (CMP)



Street Name:	Sunnyvale-Saratoga Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	313	2545	132	158	774	242	280	454	146	192	676	180
Growth 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
Initial Bse:	313	2545	132	158	774	242	280	454	146	192	676	180
Added Vol:	0	524	0	9	149	13	26	-1	0	0	1	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	313	3069	132	167	923	255	306	453	146	192	677	194
User 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
PHF 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
PHF Volume:	313	3069	132	167	923	255	306	453	146	192	677	194
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	313	3069	132	167	923	255	306	453	146	192	677	194
PCE 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
MLF 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
FinalVolume:	313	3069	132	167	923	255	306	453	146	192	677	194
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	0.99	0.95	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	2.33	0.67	2.00	2.24	0.76	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	4386	1212	3150	4233	1364	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.54	0.08	0.05	0.21	0.21	0.10	0.11	0.11	0.06	0.18	0.11
Crit Moves:		****		****			****				****	
Green Time:	32.4	91.9	109.0	9.1	68.6	68.6	16.6	29.9	29.9	17.1	30.4	39.5
Volume/Cap:	0.49	0.94	0.11	0.94	0.49	0.49	0.94	0.57	0.57	0.57	0.94	0.45
Delay/Veh:	57.1	37.4	8.8	124.5	33.2	33.2	104.9	60.0	60.0	70.4	83.5	51.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.1	37.4	8.8	124.5	33.2	33.2	104.9	60.0	60.0	70.4	83.5	51.8
LOS by Move:	E+	D+	A	F	C-	C-	F	E+	E+	E	F	D-
HCM2kAvgQ:	8	45	2	6	14	14	10	9	9	5	18	8

Note: Queue reported is the number of cars per lane.

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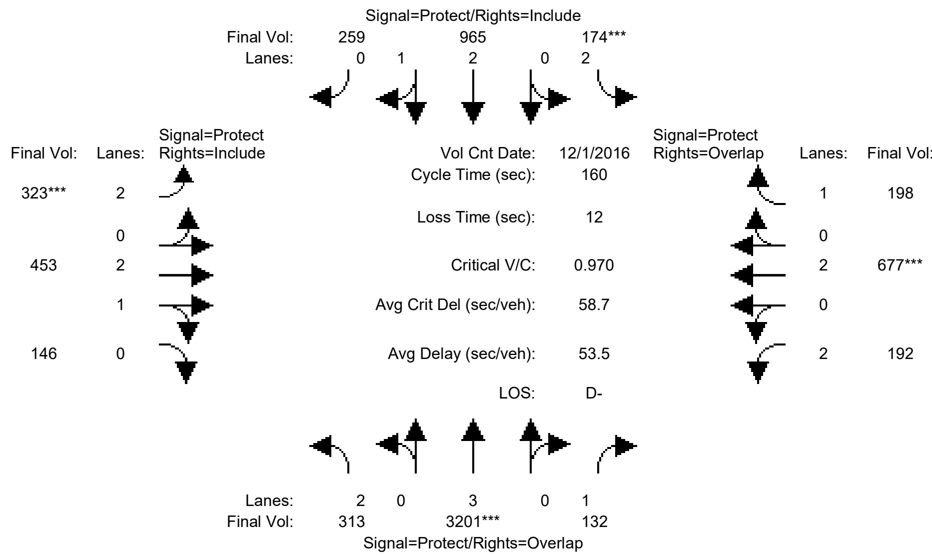
Intersection #53: Sunnyvale-Saratoga Road / Fremont Avenue (CMP)



Street Name:	Sunnyvale-Saratoga Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	313	2545	132	158	774	242	280	454	146	192	676	180
Growth 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
Initial Bse:	313	2545	132	158	774	242	280	454	146	192	676	180
Added Vol:	0	656	0	16	191	17	43	-1	0	0	1	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	313	3201	132	174	965	259	323	453	146	192	677	198
User 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
PHF 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
PHF Volume:	313	3201	132	174	965	259	323	453	146	192	677	198
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	313	3201	132	174	965	259	323	453	146	192	677	198
PCE 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
MLF 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
FinalVolume:	313	3201	132	174	965	259	323	453	146	192	677	198
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	0.99	0.95	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	2.34	0.66	2.00	2.24	0.76	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	4413	1185	3150	4233	1364	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.56	0.08	0.06	0.22	0.22	0.10	0.11	0.11	0.06	0.18	0.11
Crit Moves:		****		****			****				****	
Green Time:	31.8	92.6	109.4	9.1	69.9	69.9	16.9	29.5	29.5	16.8	29.4	38.5
Volume/Cap:	0.50	0.97	0.11	0.97	0.50	0.50	0.97	0.58	0.58	0.58	0.97	0.47
Delay/Veh:	57.7	42.2	8.7	133.6	32.6	32.6	112.5	60.4	60.4	70.8	91.6	52.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.7	42.2	8.7	133.6	32.6	32.6	112.5	60.4	60.4	70.8	91.6	52.9
LOS by Move:	E+	D	A	F	C-	C-	F	E	E	E	F	D-
HCM2kAvgQ:	8	50	2	6	14	14	11	9	9	5	19	9

Note: Queue reported is the number of cars per lane.

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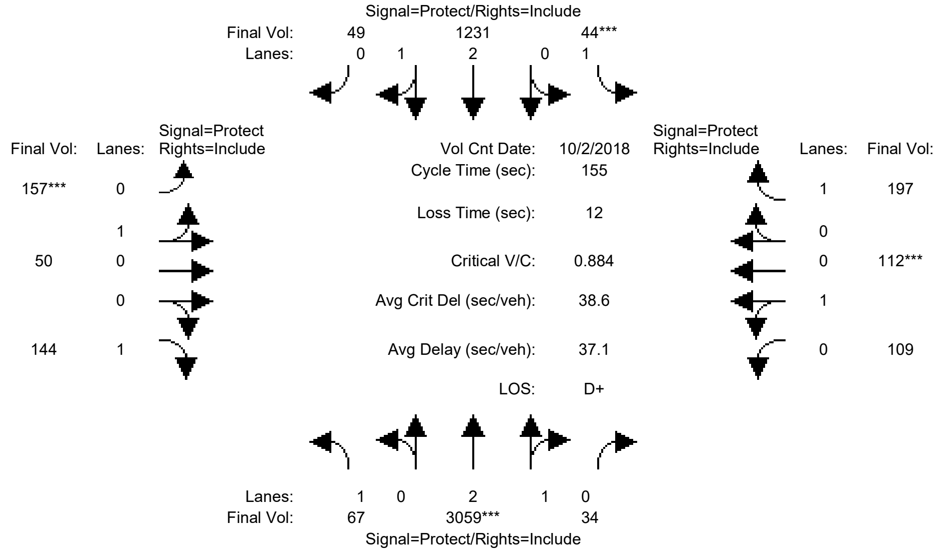
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #54: Sunnyvale-Saratoga Road / Alberta Avenue - Harwick Way



Street Name:	Sunnyvale-Saratoga Road						Alberta Avenue - Harwick Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	67	2576	34	44	1095	36	116	50	144	109	112	197
Growth 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
Initial Bse:	67	2576	34	44	1095	36	116	50	144	109	112	197
Added Vol:	0	483	0	0	136	13	41	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	3059	34	44	1231	49	157	50	144	109	112	197
User 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
PHF 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
PHF Volume:	67	3059	34	44	1231	49	157	50	144	109	112	197
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	3059	34	44	1231	49	157	50	144	109	112	197
PCE 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
MLF 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
FinalVolume:	67	3059	34	44	1231	49	157	50	144	109	112	197
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.97	0.03	1.00	2.88	0.12	0.76	0.24	1.00	0.49	0.51	1.00
Final Sat.:	1750	5538	62	1750	5385	214	1365	435	1750	888	912	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.55	0.55	0.03	0.23	0.23	0.12	0.12	0.08	0.12	0.12	0.11
Crit Moves:		****		****			****				****	
Green Time:	16.8	95.1	95.1	7.0	85.2	85.2	19.8	19.8	19.8	21.1	21.1	21.1
Volume/Cap:	0.35	0.90	0.90	0.56	0.42	0.42	0.90	0.90	0.64	0.90	0.90	0.83
Delay/Veh:	65.2	29.6	29.6	81.0	20.4	20.4	100.5	101	70.6	98.3	98.3	85.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	65.2	29.6	29.6	81.0	20.4	20.4	100.5	101	70.6	98.3	98.3	85.6
LOS by Move:	E	C	C	F	C+	C+	F	F	E	F	F	F
HCM2kAvgQ:	3	43	43	2	12	12	13	13	8	14	14	12

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Background AM Plus Project

Intersection #54: Sunnyvale-Saratoga Road / Alberta Avenue - Harwick Way

Signal=Protect/Rights=Include
Final Vol: 53 1269 44***
Lanes: 0 1 2 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
174***	0		Vol Cnt Date:	10/2/2018		1	197
			Cycle Time (sec):	155			
	1		Loss Time (sec):	12		0	
50	0		Critical V/C:	0.916		0	112***
	0		Avg Crit Del (sec/veh):	42.4		1	
144	1		Avg Delay (sec/veh):	39.8		0	109
			LOS:	D			

Lanes: 1 0 2 1 0
Final Vol: 67 3174*** 34
Signal=Protect/Rights=Include

Street Name:	Sunnyvale-Saratoga Road						Alberta Avenue - Harwick Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	67	2576	34	44	1095	36	116	50	144	109	112	197
Growth 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
Initial Bse:	67	2576	34	44	1095	36	116	50	144	109	112	197
Added Vol:	0	598	0	0	174	17	58	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	3174	34	44	1269	53	174	50	144	109	112	197
User 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
PHF 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
PHF Volume:	67	3174	34	44	1269	53	174	50	144	109	112	197
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	3174	34	44	1269	53	174	50	144	109	112	197
PCE 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
MLF 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
FinalVolume:	67	3174	34	44	1269	53	174	50	144	109	112	197
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.97	0.03	1.00	2.88	0.12	0.78	0.22	1.00	0.49	0.51	1.00
Final Sat.:	1750	5541	59	1750	5375	224	1398	402	1750	888	912	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.57	0.57	0.03	0.24	0.24	0.12	0.12	0.08	0.12	0.12	0.11
Crit Moves:		****		****			****				****	
Green Time:	16.4	95.0	95.0	7.0	85.6	85.6	20.6	20.6	20.6	20.4	20.4	20.4
Volume/Cap:	0.36	0.93	0.93	0.56	0.43	0.43	0.93	0.93	0.62	0.93	0.93	0.86
Delay/Veh:	65.7	32.8	32.8	81.0	20.4	20.4	107.0	107	68.4	107.5	107	91.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	65.7	32.8	32.8	81.0	20.4	20.4	107.0	107	68.4	107.5	107	91.7
LOS by Move:	E	C-	C-	F	C+	C+	F	F	E	F	F	F
HCM2kAvgQ:	3	46	46	2	12	12	15	15	8	14	14	12

Note: Queue reported is the number of cars per lane.

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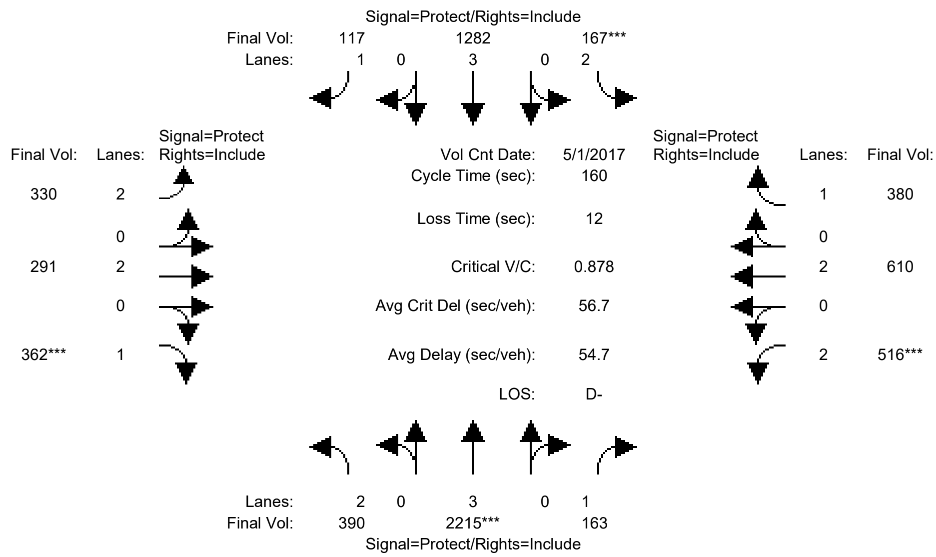
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #55: De Anza Boulevard / Homestead Road (CMP)



Street Name:	De Anza Boulevard						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	390	1844	171	153	1179	99	265	292	362	506	608	333
Growth 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
Initial Bse:	390	1844	171	153	1179	99	265	292	362	506	608	333
Added Vol:	0	371	-8	14	103	18	65	-1	0	10	2	47
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	390	2215	163	167	1282	117	330	291	362	516	610	380
User 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
PHF 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
PHF Volume:	390	2215	163	167	1282	117	330	291	362	516	610	380
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	390	2215	163	167	1282	117	330	291	362	516	610	380
PCE 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
MLF 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
FinalVolume:	390	2215	163	167	1282	117	330	291	362	516	610	380
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.39	0.09	0.05	0.22	0.07	0.10	0.08	0.21	0.16	0.16	0.22
Crit Moves:		****		****					****	****		
Green Time:	28.6	70.8	70.8	9.7	51.9	51.9	22.0	37.7	37.7	29.8	45.6	45.6
Volume/Cap:	0.69	0.88	0.21	0.88	0.69	0.21	0.76	0.33	0.88	0.88	0.56	0.76
Delay/Veh:	65.3	44.5	27.6	108.5	48.3	39.3	74.3	50.8	77.8	77.4	49.4	59.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	65.3	44.5	27.6	108.5	48.3	39.3	74.3	50.8	77.8	77.4	49.4	59.1
LOS by Move:	E	D	C	F	D	D	E	D	E-	E-	D	E+
HCM2kAvgQ:	10	33	5	6	18	4	10	6	20	16	12	19

Note: Queue reported is the number of cars per lane.

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Intersection #55: De Anza Boulevard / Homestead Road (CMP)

Signal=Protect/Rights=Include
Final Vol: 119 1314 172***
Lanes: 1 0 3 0 2

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
339	2		Vol Cnt Date:	5/1/2017		1	393
	0		Cycle Time (sec):	160		0	
291	2		Loss Time (sec):	12		2	610
	0		Critical V/C:	0.897		0	
362***	1		Avg Crit Del (sec/veh):	58.0		2	516***
			Avg Delay (sec/veh):	55.7			
			LOS:	E+			

Lanes: 2 0 3 0 1
Final Vol: 390 2308*** 163
Signal=Protect/Rights=Include

Street Name:	De Anza Boulevard						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	390	1844	171	153	1179	99	265	292	362	506	608	333
Growth 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
Initial Bse:	390	1844	171	153	1179	99	265	292	362	506	608	333
Added Vol:	0	464	-8	19	135	20	74	-1	0	10	2	60
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	390	2308	163	172	1314	119	339	291	362	516	610	393
User 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
PHF 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
PHF Volume:	390	2308	163	172	1314	119	339	291	362	516	610	393
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	390	2308	163	172	1314	119	339	291	362	516	610	393
PCE 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
MLF 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
FinalVolume:	390	2308	163	172	1314	119	339	291	362	516	610	393
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.40	0.09	0.05	0.23	0.07	0.11	0.08	0.21	0.16	0.16	0.22
Crit Moves:		****		****					****	****		
Green Time:	28.6	72.2	72.2	9.7	53.3	53.3	21.4	36.9	36.9	29.2	44.7	44.7
Volume/Cap:	0.69	0.90	0.21	0.90	0.69	0.20	0.80	0.33	0.90	0.90	0.57	0.80
Delay/Veh:	65.2	45.1	26.7	112.4	47.4	38.4	78.0	51.5	81.8	80.7	50.3	63.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	65.2	45.1	26.7	112.4	47.4	38.4	78.0	51.5	81.8	80.7	50.3	63.0
LOS by Move:	E	D	C	F	D	D+	E-	D-	F	F	D	E
HCM2kAvgQ:	10	35	5	6	18	4	10	6	20	16	13	20

Note: Queue reported is the number of cars per lane.

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Intersection #56: De Anza Boulevard / I-280 NB Ramps (CMP)

Signal=Protect/Rights=Include
Final Vol: 652*** 1681 0
Lanes: 0 1 4 0 0

Signal=Split Rights=Include (East approach)
Final Vol: 0, 0, 0
Lanes: 0, 0, 0, 0, 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 1.001
Avg Crit Del (sec/veh): 74.1
Avg Delay (sec/veh): 45.3
LOS: D

Signal=Split Rights=Include (West approach)
Lanes: 1, 0, 1!, 0, 1
Final Vol: 870, 1***, 577

Lanes: 2 0 3 0 0
Final Vol: 438*** 2201 0
Signal=Protect/Rights=Include

Street Name:	De Anza Boulevard						I-280 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	4.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	438	2027	0	0	1607	613	0	0	0	577	1	681
Growth 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
Initial Bse:	438	2027	0	0	1607	613	0	0	0	577	1	681
Added Vol:	0	174	0	0	74	39	0	0	0	0	0	189
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	438	2201	0	0	1681	652	0	0	0	577	1	870
User 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
PHF 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
PHF Volume:	438	2201	0	0	1681	652	0	0	0	577	1	870
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	438	2201	0	0	1681	652	0	0	0	577	1	870
PCE 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
MLF 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
FinalVolume:	438	2201	0	0	1681	652	0	0	0	577	1	870
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.92	0.92
Lanes:	2.00	3.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00	1.39	0.01	1.60
Final Sat.:	3150	5700	0	0	7600	1750	0	0	0	2447	2	2801
Capacity Analysis Module:												
Vol/Sat:	0.14	0.39	0.00	0.00	0.22	0.37	0.00	0.00	0.00	0.24	0.41	0.31
Crit Moves:	****					****					****	
Green Time:	22.2	81.8	0.0	0.0	59.6	59.6	0.0	0.0	0.0	66.2	66.2	66.2
Volume/Cap:	1.00	0.76	0.00	0.00	0.59	1.00	0.00	0.00	0.00	0.57	1.00	0.75
Delay/Veh:	112.1	32.3	0.0	0.0	40.7	69.0	0.0	0.0	0.0	36.3	70.7	41.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	112.1	32.3	0.0	0.0	40.7	69.0	0.0	0.0	0.0	36.3	70.7	41.6
LOS by Move:	F	C-	A	A	D	E	A	A	A	D+	E	D
HCM2kAvgQ:	14	27	0	0	16	38	0	0	0	17	45	25

Note: Queue reported is the number of cars per lane.

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2000 HCM Operations (Future Volume Alternative)
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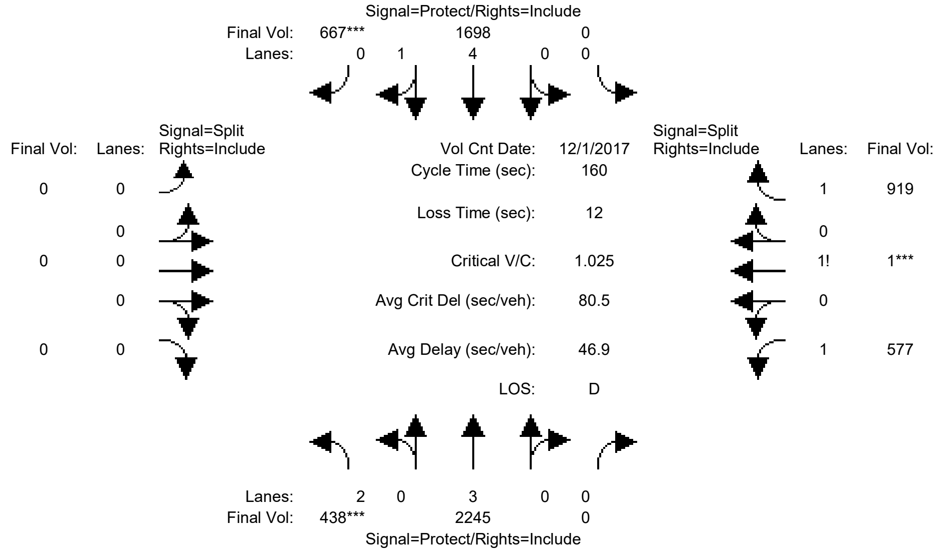
Intersection #56: De Anza Boulevard / I-280 NB Ramps (CMP)



Street Name:	De Anza Boulevard						I-280 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	4.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	438	2027	0	0	1607	613	0	0	0	577	1	681
Growth 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
Initial Bse:	438	2027	0	0	1607	613	0	0	0	577	1	681
Added Vol:	0	218	0	0	91	54	0	0	0	0	0	238
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	438	2245	0	0	1698	667	0	0	0	577	1	919
User 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
PHF 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
PHF Volume:	438	2245	0	0	1698	667	0	0	0	577	1	919
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	438	2245	0	0	1698	667	0	0	0	577	1	919
PCE 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
MLF 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
FinalVolume:	438	2245	0	0	1698	667	0	0	0	577	1	919
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.92	0.92
Lanes:	2.00	3.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00	1.38	0.01	1.61
Final Sat.:	3150	5700	0	0	7600	1750	0	0	0	2424	2	2824
Capacity Analysis Module:												
Vol/Sat:	0.14	0.39	0.00	0.00	0.22	0.38	0.00	0.00	0.00	0.24	0.43	0.33
Crit Moves:	****					****					****	
Green Time:	21.7	81.2	0.0	0.0	59.5	59.5	0.0	0.0	0.0	66.8	66.8	66.8
Volume/Cap:	1.03	0.78	0.00	0.00	0.60	1.03	0.00	0.00	0.00	0.57	1.03	0.78
Delay/Veh:	119.2	33.4	0.0	0.0	40.9	75.7	0.0	0.0	0.0	35.9	76.7	42.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	119.2	33.4	0.0	0.0	40.9	75.7	0.0	0.0	0.0	35.9	76.7	42.4
LOS by Move:	F	C-	A	A	D	E-	A	A	A	D+	E-	D
HCM2kAvgQ:	15	28	0	0	16	39	0	0	0	17	48	27

Note: Queue reported is the number of cars per lane.

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Intersection #57: De Anza Boulevard / I-280 SB Ramps (CMP)

Signal=Protect/Rights=Include
Final Vol: 0 1573 680***
Lanes: 0 0 3 0 2

Final Vol: Lanes: Signal=Split Rights=Include
745 1
0
2*** 1!
0
810 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.969
Avg Crit Del (sec/veh): 71.4
Avg Delay (sec/veh): 51.5
LOS: D-

Signal=Split Rights=Include Lanes: Final Vol:
0 0
0
0 0
0
0 0

Lanes: 0 0 5 0 1
Final Vol: 0 1880 411***
Signal=Protect/Rights=Include

Street Name:	De Anza Boulevard						I-280 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	10	10	10	0	0	0
Y+R:	0.0	4.0	4.0	4.0	4.0	0.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	1812	411	627	1552	0	639	2	810	0	0	0
Growth 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
Initial Bse:	0	1812	411	627	1552	0	639	2	810	0	0	0
Added Vol:	0	68	0	53	21	0	106	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1880	411	680	1573	0	745	2	810	0	0	0
User 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
PHF 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
PHF Volume:	0	1880	411	680	1573	0	745	2	810	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1880	411	680	1573	0	745	2	810	0	0	0
PCE 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
MLF 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
FinalVolume:	0	1880	411	680	1573	0	745	2	810	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92
Lanes:	0.00	5.00	1.00	2.00	3.00	0.00	1.47	0.01	1.52	0.00	0.00	0.00
Final Sat.:	0	9500	1750	3150	5700	0	2586	4	2659	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.23	0.22	0.28	0.00	0.29	0.45	0.30	0.00	0.00	0.00
Crit Moves:			****	****				****				
Green Time:	0.0	38.8	38.8	35.7	74.4	0.0	73.6	73.6	73.6	0.0	0.0	0.0
Volume/Cap:	0.00	0.82	0.97	0.97	0.59	0.00	0.63	0.97	0.66	0.00	0.00	0.00
Delay/Veh:	0.0	59.6	95.5	87.9	32.0	0.0	33.3	57.7	34.3	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	59.6	95.5	87.9	32.0	0.0	33.3	57.7	34.3	0.0	0.0	0.0
LOS by Move:	A	E+	F	F	C	A	C-	E+	C-	A	A	A
HCM2kAvgQ:	0	19	26	22	18	0	20	45	22	0	0	0

Note: Queue reported is the number of cars per lane.

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Background Plus Project AM

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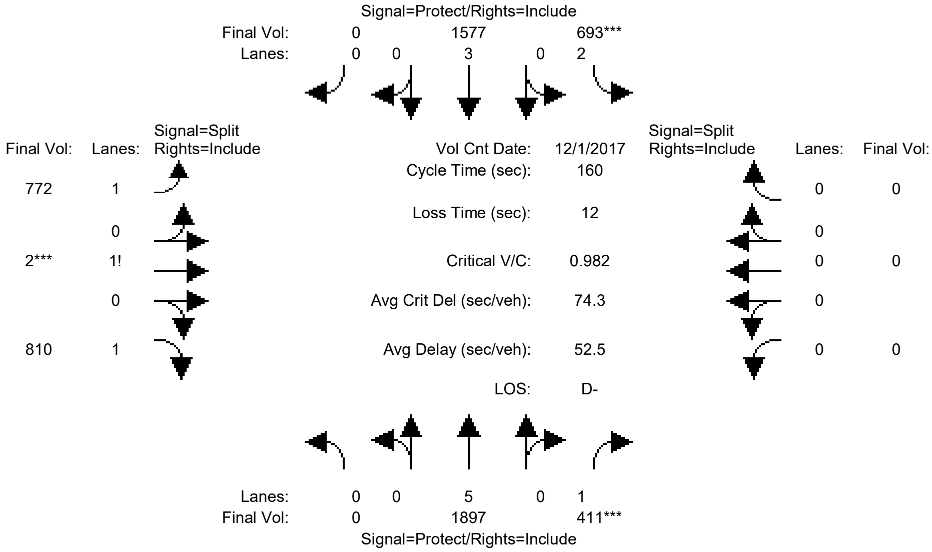
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #57: De Anza Boulevard / I-280 SB Ramps (CMP)



Street Name:	De Anza Boulevard						I-280 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	10	10	10	0	0	0
Y+R:	0.0	4.0	4.0	4.0	4.0	0.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	1812	411	627	1552	0	639	2	810	0	0	0
Growth 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
Initial Bse:	0	1812	411	627	1552	0	639	2	810	0	0	0
Added Vol:	0	85	0	66	25	0	133	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1897	411	693	1577	0	772	2	810	0	0	0
User 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
PHF 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
PHF Volume:	0	1897	411	693	1577	0	772	2	810	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1897	411	693	1577	0	772	2	810	0	0	0
PCE 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
MLF 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
FinalVolume:	0	1897	411	693	1577	0	772	2	810	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92
Lanes:	0.00	5.00	1.00	2.00	3.00	0.00	1.48	0.01	1.51	0.00	0.00	0.00
Final Sat.:	0	9500	1750	3150	5700	0	2602	4	2644	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.23	0.22	0.28	0.00	0.30	0.45	0.31	0.00	0.00	0.00
Crit Moves:			****	****				****				
Green Time:	0.0	38.3	38.3	35.9	74.1	0.0	73.9	73.9	73.9	0.0	0.0	0.0
Volume/Cap:	0.00	0.83	0.98	0.98	0.60	0.00	0.64	0.98	0.66	0.00	0.00	0.00
Delay/Veh:	0.0	60.7	99.5	90.9	32.2	0.0	33.6	60.5	34.1	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	60.7	99.5	90.9	32.2	0.0	33.6	60.5	34.1	0.0	0.0	0.0
LOS by Move:	A	E	F	F	C-	A	C-	E	C-	A	A	A
HCM2kAvgQ:	0	20	27	23	18	0	21	47	22	0	0	0

Note: Queue reported is the number of cars per lane.

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Intersection #58: Fair Oaks Avenue / US 101 NB Ramps

Signal=Protect/Rights=Ignore
Final Vol: 0 836*** 0
Lanes: 1 0 2 0 0

Final Vol:	Lanes:	Signal=Split Rights=Include			Signal=Split Rights=Include	Lanes:	Final Vol:
0	0		Vol Cnt Date:	4/1/2017		1	269
			Cycle Time (sec):	60			
	0		Loss Time (sec):	9		0	
0	0		Critical V/C:	0.770		1!	0
	0		Avg Crit Del (sec/veh):	24.3		0	
0	0		Avg Delay (sec/veh):	18.7		1	257***
			LOS:	B-			

Lanes: 1 0 2 0 0
Final Vol: 588*** 740 0
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						US 101 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	0.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	533	785	0	0	729	494	0	0	0	256	0	269
Growth 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
Initial Bse:	533	785	0	0	729	494	0	0	0	256	0	269
Added Vol:	55	-45	0	0	107	61	0	0	0	1	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	588	740	0	0	836	555	0	0	0	257	0	269
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	588	740	0	0	836	0	0	0	0	257	0	269
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	588	740	0	0	836	0	0	0	0	257	0	269
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	588	740	0	0	836	0	0	0	0	257	0	269
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.49	0.00	1.51
Final Sat.:	1750	3800	0	0	3800	1750	0	0	0	2605	0	2645
Capacity Analysis Module:												
Vol/Sat:	0.34	0.19	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.10	0.00	0.10
Crit Moves:	****				****					****		
Green Time:	24.8	41.0	0.0	0.0	16.2	0.0	0.0	0.0	0.0	10.0	0.0	10.0
Volume/Cap:	0.81	0.28	0.00	0.00	0.81	0.00	0.00	0.00	0.00	0.59	0.00	0.61
Delay/Veh:	22.6	3.8	0.0	0.0	25.5	0.0	0.0	0.0	0.0	24.2	0.0	24.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	22.6	3.8	0.0	0.0	25.5	0.0	0.0	0.0	0.0	24.2	0.0	24.5
LOS by Move:	C+	A	A	A	C	A	A	A	A	C	A	C
HCM2kAvgQ:	11	3	0	0	8	0	0	0	0	4	0	4

Note: Queue reported is the number of cars per lane.

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Intersection #58: Fair Oaks Avenue / US 101 NB Ramps

Signal=Protect/Rights=Ignore
Final Vol: 0 851*** 0
Lanes: 1 0 2 0 0

Signal=Split
Rights=Include

Final Vol:	Lanes:
0	0
	0
0	0
	0
0	0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 60
Loss Time (sec): 9
Critical V/C: 0.784
Avg Crit Del (sec/veh): 24.7
Avg Delay (sec/veh): 19.0
LOS: B-

Signal=Split
Rights=Include

Lanes:	Final Vol:
1	269
0	
1!	0
0	
1	282***

Lanes: 1 0 2 0 0
Final Vol: 588*** 746 0
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						US 101 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	0.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	533	785	0	0	729	494	0	0	0	256	0	269
Growth 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
Initial Bse:	533	785	0	0	729	494	0	0	0	256	0	269
Added Vol:	55	-39	0	0	122	61	0	0	0	26	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	588	746	0	0	851	555	0	0	0	282	0	269
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	588	746	0	0	851	0	0	0	0	282	0	269
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	588	746	0	0	851	0	0	0	0	282	0	269
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	588	746	0	0	851	0	0	0	0	282	0	269
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.51	0.00	1.49
Final Sat.:	1750	3800	0	0	3800	1750	0	0	0	2646	0	2604
Capacity Analysis Module:												
Vol/Sat:	0.34	0.20	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.11	0.00	0.10
Crit Moves:	****				****					****		
Green Time:	24.6	41.0	0.0	0.0	16.4	0.0	0.0	0.0	0.0	10.0	0.0	10.0
Volume/Cap:	0.82	0.29	0.00	0.00	0.82	0.00	0.00	0.00	0.00	0.64	0.00	0.62
Delay/Veh:	23.1	3.8	0.0	0.0	25.7	0.0	0.0	0.0	0.0	24.9	0.0	24.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.1	3.8	0.0	0.0	25.7	0.0	0.0	0.0	0.0	24.9	0.0	24.6
LOS by Move:	C	A	A	A	C	A	A	A	A	C	A	C
HCM2kAvgQ:	11	3	0	0	8	0	0	0	0	5	0	5

Note: Queue reported is the number of cars per lane.

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Intersection #59: Fair Oaks Avenue / Ahwanee Avenue

Signal=Protect/Rights=Include
Final Vol: 294 919 32***
Lanes: 0 1 2 0 1

Final Vol:	Lanes:	Signal=Permit Rights=Include			Signal=Permit Rights=Include	Lanes:	Final Vol:
229	0		Vol Cnt Date:	4/1/2017		1	229
			Cycle Time (sec):	90			
	1		Loss Time (sec):	6		0	
26***	0		Critical V/C:	0.546		0	69
	0		Avg Crit Del (sec/veh):	14.8		1	
57	1		Avg Delay (sec/veh):	16.5		0	37
			LOS:	B			

Lanes: 1 0 2 0 1
Final Vol: 61 1327*** 25
Signal=Protect/Rights=Overlap

Street Name:	Fair Oaks Avenue						Ahwanee Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	60	1311	24	32	801	294	229	26	55	35	69	229
Growth 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
Initial Bse:	60	1311	24	32	801	294	229	26	55	35	69	229
Added Vol:	1	16	1	0	118	0	0	0	2	2	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	1327	25	32	919	294	229	26	57	37	69	229
User 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
PHF 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
PHF Volume:	61	1327	25	32	919	294	229	26	57	37	69	229
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	1327	25	32	919	294	229	26	57	37	69	229
PCE 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
MLF 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
FinalVolume:	61	1327	25	32	919	294	229	26	57	37	69	229
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.99	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.25	0.75	0.90	0.10	1.00	0.35	0.65	1.00
Final Sat.:	1750	3800	1750	1750	4241	1357	1616	184	1750	628	1172	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.35	0.01	0.02	0.22	0.22	0.14	0.14	0.03	0.06	0.06	0.13
Crit Moves:		****		****				****				
Green Time:	16.3	54.8	54.8	7.0	45.5	45.5	22.2	22.2	22.2	22.2	22.2	22.2
Volume/Cap:	0.19	0.57	0.02	0.24	0.43	0.43	0.57	0.57	0.13	0.24	0.24	0.53
Delay/Veh:	31.5	10.9	7.0	39.9	14.2	14.2	31.6	31.6	26.5	27.4	27.4	30.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.5	10.9	7.0	39.9	14.2	14.2	31.6	31.6	26.5	27.4	27.4	30.6
LOS by Move:	C	B+	A	D	B	B	C	C	C	C	C	C
HCM2kAvgQ:	1	10	0	1	7	7	7	7	1	3	3	6

Note: Queue reported is the number of cars per lane.

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Intersection #59: Fair Oaks Avenue / Ahwanee Avenue

Signal=Protect/Rights=Include
Final Vol: 294 959 32***
Lanes: 0 1 2 0 1

Final Vol:	Lanes:	Signal=Permit Rights=Include			Signal=Permit Rights=Include	Lanes:	Final Vol:
229	0		Vol Cnt Date:	4/1/2017		1	229
			Cycle Time (sec):	90			
	1		Loss Time (sec):	6		0	
26***	0		Critical V/C:	0.549		0	69
	0		Avg Crit Del (sec/veh):	14.8		1	
58	1		Avg Delay (sec/veh):	16.4		0	38
			LOS:	B			

Lanes: 1 0 2 0 1
Final Vol: 61 1340*** 25
Signal=Protect/Rights=Overlap

Street Name:	Fair Oaks Avenue						Ahwanee Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	60	1311	24	32	801	294	229	26	55	35	69	229
Growth 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
Initial Bse:	60	1311	24	32	801	294	229	26	55	35	69	229
Added Vol:	1	29	1	0	158	0	0	0	3	3	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	1340	25	32	959	294	229	26	58	38	69	229
User 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
PHF 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
PHF Volume:	61	1340	25	32	959	294	229	26	58	38	69	229
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	1340	25	32	959	294	229	26	58	38	69	229
PCE 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
MLF 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
FinalVolume:	61	1340	25	32	959	294	229	26	58	38	69	229
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.99	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.27	0.73	0.90	0.10	1.00	0.36	0.64	1.00
Final Sat.:	1750	3800	1750	1750	4284	1313	1616	184	1750	639	1161	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.35	0.01	0.02	0.22	0.22	0.14	0.14	0.03	0.06	0.06	0.13
Crit Moves:		****		****				****				
Green Time:	16.0	54.9	54.9	7.0	46.0	46.0	22.1	22.1	22.1	22.1	22.1	22.1
Volume/Cap:	0.20	0.58	0.02	0.24	0.44	0.44	0.58	0.58	0.14	0.24	0.24	0.53
Delay/Veh:	31.9	10.9	6.9	39.9	14.0	14.0	31.8	31.8	26.7	27.5	27.5	30.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.9	10.9	6.9	39.9	14.0	14.0	31.8	31.8	26.7	27.5	27.5	30.8
LOS by Move:	C	B+	A	D	B	B	C	C	C	C	C	C
HCM2kAvgQ:	1	11	0	1	7	7	7	7	1	3	3	6

Note: Queue reported is the number of cars per lane.

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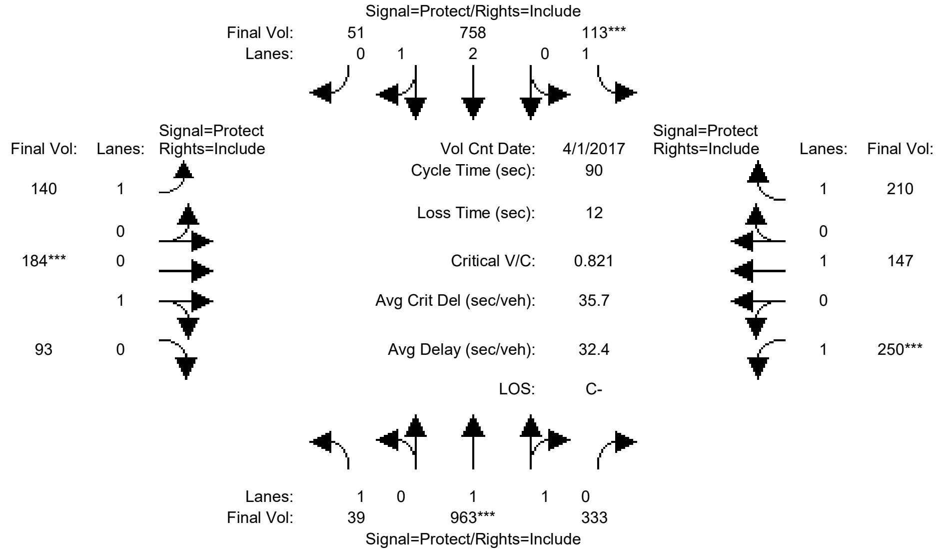
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #60: Fair Oaks Avenue / Duane Avenue



Street Name:	Fair Oaks Avenue						Duane Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	8	965	201	113	642	46	120	117	20	202	121	210
Growth 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
Initial Bse:	8	965	201	113	642	46	120	117	20	202	121	210
Added Vol:	31	-2	132	0	116	5	20	67	73	48	26	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	963	333	113	758	51	140	184	93	250	147	210
User 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
PHF 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
PHF Volume:	39	963	333	113	758	51	140	184	93	250	147	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	963	333	113	758	51	140	184	93	250	147	210
PCE 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
MLF 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
FinalVolume:	39	963	333	113	758	51	140	184	93	250	147	210
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	1.47	0.53	1.00	2.80	0.20	1.00	0.66	0.34	1.00	1.00	1.00
Final Sat.:	1750	2749	950	1750	5247	353	1750	1196	604	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.35	0.35	0.06	0.14	0.14	0.08	0.15	0.15	0.14	0.08	0.12
Crit Moves:		****		****				****		****		
Green Time:	15.9	38.4	38.4	7.1	29.6	29.6	13.0	16.9	16.9	15.7	19.5	19.5
Volume/Cap:	0.13	0.82	0.82	0.82	0.44	0.44	0.55	0.82	0.82	0.82	0.36	0.55
Delay/Veh:	31.4	26.3	26.3	71.8	23.9	23.9	38.5	49.9	49.9	52.0	30.4	33.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.4	26.3	26.3	71.8	23.9	23.9	38.5	49.9	49.9	52.0	30.4	33.1
LOS by Move:	C	C	C	E	C	C	D+	D	D	D-	C	C-
HCM2kAvgQ:	1	17	17	4	6	6	5	10	10	8	3	6

Note: Queue reported is the number of cars per lane.

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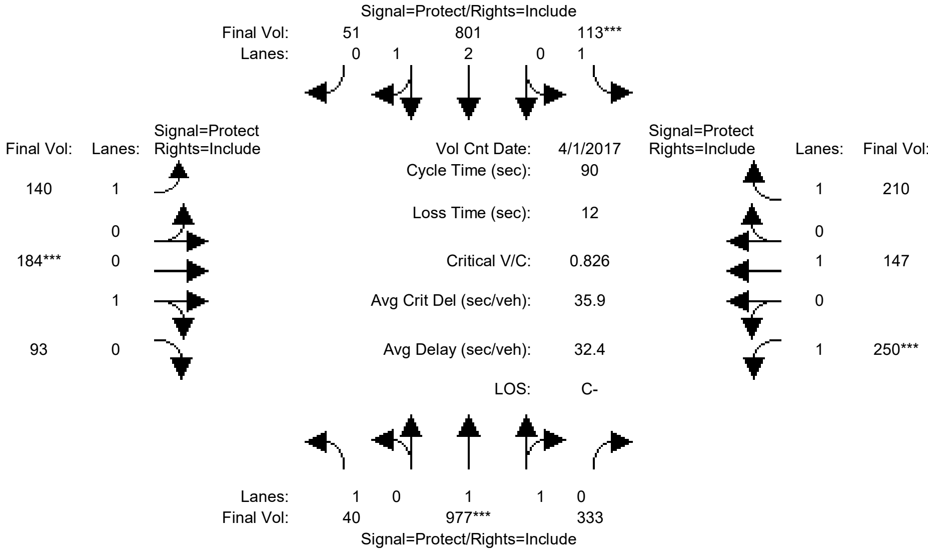
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #60: Fair Oaks Avenue / Duane Avenue



Street Name:	Fair Oaks Avenue						Duane Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	8	965	201	113	642	46	120	117	20	202	121	210
Growth 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
Initial Bse:	8	965	201	113	642	46	120	117	20	202	121	210
Added Vol:	32	12	132	0	159	5	20	67	73	48	26	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	40	977	333	113	801	51	140	184	93	250	147	210
User 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
PHF 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
PHF Volume:	40	977	333	113	801	51	140	184	93	250	147	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	977	333	113	801	51	140	184	93	250	147	210
PCE 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
MLF 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
FinalVolume:	40	977	333	113	801	51	140	184	93	250	147	210
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	1.48	0.52	1.00	2.81	0.19	1.00	0.66	0.34	1.00	1.00	1.00
Final Sat.:	1750	2759	940	1750	5264	335	1750	1196	604	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.35	0.35	0.06	0.15	0.15	0.08	0.15	0.15	0.14	0.08	0.12
Crit Moves:		****		****				****		****		
Green Time:	15.4	38.6	38.6	7.0	30.2	30.2	12.9	16.8	16.8	15.6	19.4	19.4
Volume/Cap:	0.13	0.83	0.83	0.83	0.45	0.45	0.56	0.83	0.83	0.83	0.36	0.56
Delay/Veh:	31.8	26.4	26.4	72.8	23.6	23.6	38.6	50.5	50.5	52.6	30.5	33.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.8	26.4	26.4	72.8	23.6	23.6	38.6	50.5	50.5	52.6	30.5	33.3
LOS by Move:	C	C	C	E	C	C	D+	D	D	D-	C	C-
HCM2kAvgQ:	1	17	17	4	6	6	5	10	10	8	3	6

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #61: Fair Oaks Avenue / Wolfe Road

Signal=Permit/Rights=Overlap
Final Vol: 748 423 0
Lanes: 2 0 2 0 0

Westbound side: Signal=Split, Rights=Overlap
Final Vol: 807*** Lanes: 2
Lanes: 0
Final Vol: 0 Lanes: 0
Lanes: 0
Final Vol: 7 Lanes: 1

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 60
Loss Time (sec): 6
Critical V/C: 0.459
Avg Crit Del (sec/veh): 11.3
Avg Delay (sec/veh): 8.7
LOS: A

Signal=Split
Rights=Include
Lanes: 0 Final Vol: 0
Lanes: 0
Lanes: 0 Final Vol: 0
Lanes: 0
Lanes: 0 Final Vol: 0

Lanes: 0 0 2 0 0
Final Vol: 0 595*** 0
Signal=Permit/Rights=Include

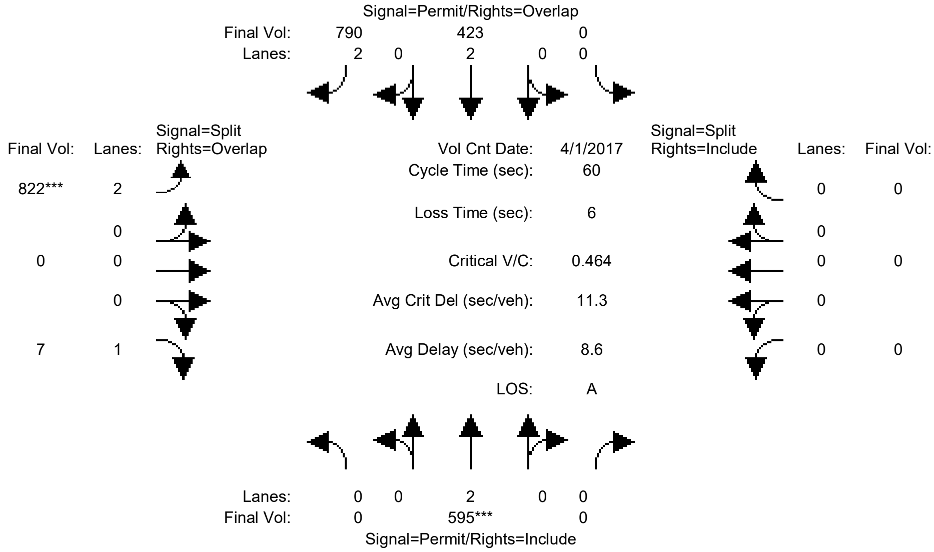
Street Name:	Fair Oaks Avenue						Wolfe Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	0	0	10	10	10	0	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	0	483	0	0	311	622	757	0	7	0	0	0
Growth 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
Initial Bse:	0	483	0	0	311	622	757	0	7	0	0	0
Added Vol:	0	112	0	0	112	126	50	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	595	0	0	423	748	807	0	7	0	0	0
User 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
PHF 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
PHF Volume:	0	595	0	0	423	748	807	0	7	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	595	0	0	423	748	807	0	7	0	0	0
PCE 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
MLF 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
FinalVolume:	0	595	0	0	423	748	807	0	7	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.83	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3800	0	0	3800	3150	3150	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.16	0.00	0.00	0.11	0.24	0.26	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green Time:	0.0	20.5	0.0	0.0	20.5	54.0	33.5	0.0	33.5	0.0	0.0	0.0
Volume/Cap:	0.00	0.46	0.00	0.00	0.33	0.26	0.46	0.00	0.01	0.00	0.00	0.00
Delay/Veh:	0.0	15.7	0.0	0.0	14.8	0.4	8.0	0.0	5.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	15.7	0.0	0.0	14.8	0.4	8.0	0.0	5.9	0.0	0.0	0.0
LOS by Move:	A	B	A	A	B	A	A	A	A	A	A	A
HCM2kAvgQ:	0	4	0	0	3	1	5	0	0	0	0	0

Note: Queue reported is the number of cars per lane.

Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #61: Fair Oaks Avenue / Wolfe Road



Street Name:	Fair Oaks Avenue						Wolfe Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	0	0	10	10	10	0	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	0	483	0	0	311	622	757	0	7	0	0	0
Growth 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
Initial Bse:	0	483	0	0	311	622	757	0	7	0	0	0
Added Vol:	0	112	0	0	112	168	65	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	595	0	0	423	790	822	0	7	0	0	0
User 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
PHF 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
PHF Volume:	0	595	0	0	423	790	822	0	7	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	595	0	0	423	790	822	0	7	0	0	0
PCE 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
MLF 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
FinalVolume:	0	595	0	0	423	790	822	0	7	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.83	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3800	0	0	3800	3150	3150	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.16	0.00	0.00	0.11	0.25	0.26	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green Time:	0.0	20.3	0.0	0.0	20.3	54.0	33.7	0.0	33.7	0.0	0.0	0.0
Volume/Cap:	0.00	0.46	0.00	0.00	0.33	0.28	0.46	0.00	0.01	0.00	0.00	0.00
Delay/Veh:	0.0	15.9	0.0	0.0	15.0	0.5	8.0	0.0	5.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	15.9	0.0	0.0	15.0	0.5	8.0	0.0	5.8	0.0	0.0	0.0
LOS by Move:	A	B	A	A	B	A	A	A	A	A	A	A
HCM2kAvgQ:	0	4	0	0	3	1	5	0	0	0	0	0

Note: Queue reported is the number of cars per lane.

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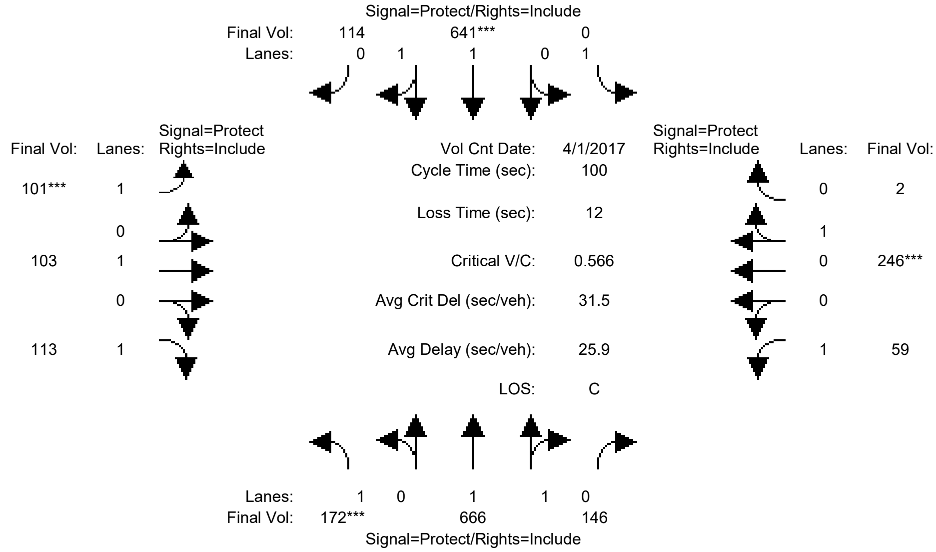
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #62: Fair Oaks Avenue / Maude Avenue



Street Name:	Fair Oaks Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	122	631	14	0	537	93	86	86	108	11	147	2
Growth 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
Initial Bse:	122	631	14	0	537	93	86	86	108	11	147	2
Added Vol:	50	35	132	0	104	21	15	17	5	48	99	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	172	666	146	0	641	114	101	103	113	59	246	2
User 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
PHF 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
PHF Volume:	172	666	146	0	641	114	101	103	113	59	246	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	666	146	0	641	114	101	103	113	59	246	2
PCE 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
MLF 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
FinalVolume:	172	666	146	0	641	114	101	103	113	59	246	2
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	1.00	1.63	0.37	1.00	1.69	0.31	1.00	1.00	1.00	1.00	0.99	0.01
Final Sat.:	1750	3034	665	1750	3141	559	1750	1900	1750	1750	1785	15
Capacity Analysis Module:												
Vol/Sat:	0.10	0.22	0.22	0.00	0.20	0.20	0.06	0.05	0.06	0.03	0.14	0.14
Crit Moves:	****				****		****				****	
Green Time:	17.4	53.4	53.4	0.0	36.1	36.1	10.2	20.3	20.3	14.2	24.4	24.4
Volume/Cap:	0.57	0.41	0.41	0.00	0.57	0.57	0.57	0.27	0.32	0.24	0.57	0.57
Delay/Veh:	40.3	14.0	14.0	0.0	26.2	26.2	47.0	33.9	34.4	38.6	34.9	34.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.3	14.0	14.0	0.0	26.2	26.2	47.0	33.9	34.4	38.6	34.9	34.9
LOS by Move:	D	B	B	A	C	C	D	C-	C-	D+	C-	C-
HCM2kAvgQ:	5	7	7	0	9	9	3	3	3	2	8	8

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Background Plus Project AM

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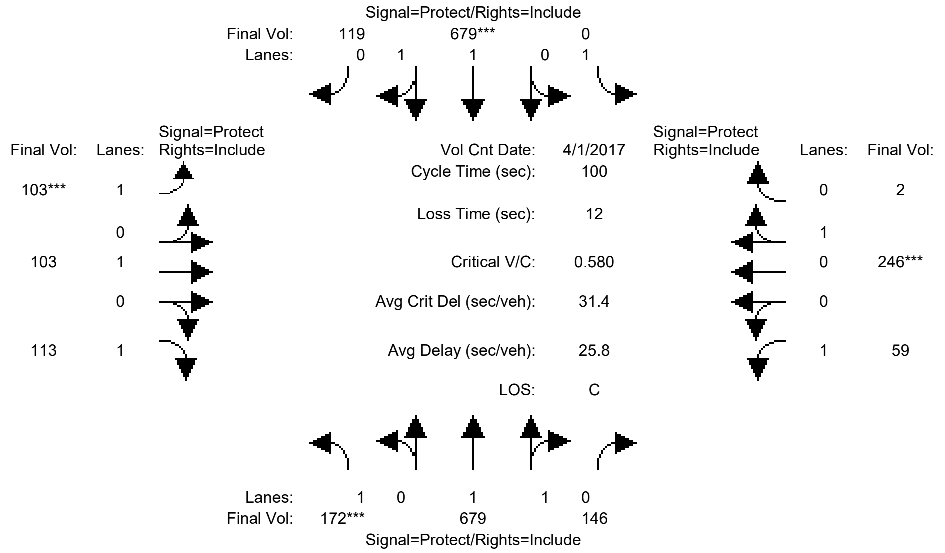
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #62: Fair Oaks Avenue / Maude Avenue



Street Name:	Fair Oaks Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	122	631	14	0	537	93	86	86	108	11	147	2
Growth 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
Initial Bse:	122	631	14	0	537	93	86	86	108	11	147	2
Added Vol:	50	48	132	0	147	21	17	17	5	48	99	0
PasserByVol:	0	0	0	0	-5	5	0	0	0	0	0	0
Initial Fut:	172	679	146	0	679	119	103	103	113	59	246	2
User 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
PHF 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
PHF Volume:	172	679	146	0	679	119	103	103	113	59	246	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	679	146	0	679	119	103	103	113	59	246	2
PCE 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
MLF 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
FinalVolume:	172	679	146	0	679	119	103	103	113	59	246	2
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	1.00	1.64	0.36	1.00	1.69	0.31	1.00	1.00	1.00	1.00	0.99	0.01
Final Sat.:	1750	3045	655	1750	3148	552	1750	1900	1750	1750	1785	15
Capacity Analysis Module:												
Vol/Sat:	0.10	0.22	0.22	0.00	0.22	0.22	0.06	0.05	0.06	0.03	0.14	0.14
Crit Moves:	****				****		****				****	
Green Time:	16.9	54.1	54.1	0.0	37.2	37.2	10.1	19.9	19.9	14.0	23.7	23.7
Volume/Cap:	0.58	0.41	0.41	0.00	0.58	0.58	0.58	0.27	0.32	0.24	0.58	0.58
Delay/Veh:	41.1	13.7	13.7	0.0	25.8	25.8	47.7	34.3	34.8	38.8	35.7	35.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.1	13.7	13.7	0.0	25.8	25.8	47.7	34.3	34.8	38.8	35.7	35.7
LOS by Move:	D	B	B	A	C	C	D	C-	C-	D+	D+	D+
HCM2kAvgQ:	5	7	7	0	10	10	3	3	3	2	8	8

Note: Queue reported is the number of cars per lane.

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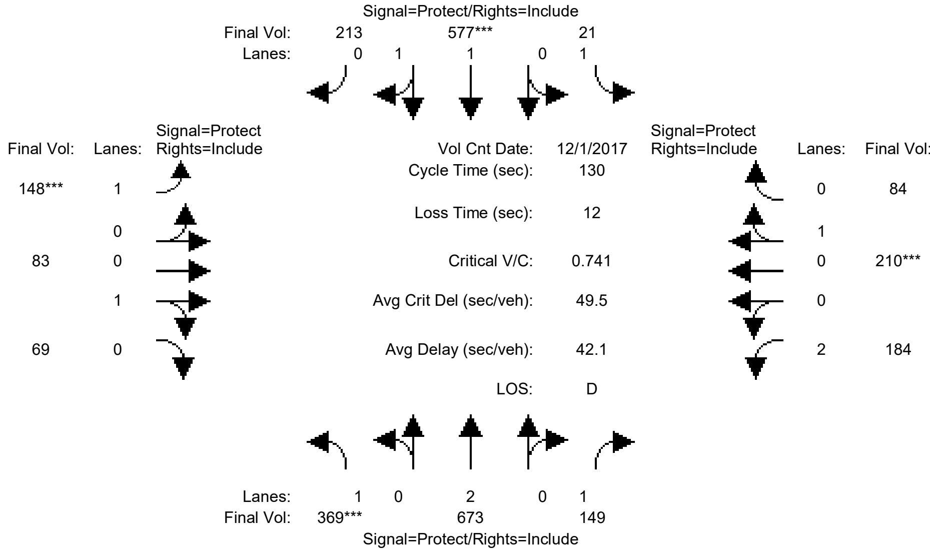
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #63: Fair Oaks Avenue / Arques Avenue



Street Name:	Fair Oaks Avenue						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	234	595	149	21	520	113	54	83	49	192	210	39
Growth 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
Initial Bse:	234	595	149	21	520	113	54	83	49	192	210	39
Added Vol:	135	78	0	0	57	100	94	0	20	-8	0	45
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	369	673	149	21	577	213	148	83	69	184	210	84
User 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
PHF 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
PHF Volume:	369	673	149	21	577	213	148	83	69	184	210	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	369	673	149	21	577	213	148	83	69	184	210	84
PCE 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
MLF 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
FinalVolume:	369	673	149	21	577	213	148	83	69	184	210	84
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	1.45	0.55	1.00	0.55	0.45	2.00	0.71	0.29
Final Sat.:	1750	3800	1750	1750	2702	997	1750	983	817	3150	1286	514
Capacity Analysis Module:												
Vol/Sat:	0.21	0.18	0.09	0.01	0.21	0.21	0.08	0.08	0.08	0.06	0.16	0.16
Crit Moves:	****				****		****				****	
Green Time:	37.0	57.1	57.1	17.4	37.5	37.5	14.8	25.7	25.7	17.8	28.7	28.7
Volume/Cap:	0.74	0.40	0.19	0.09	0.74	0.74	0.74	0.43	0.43	0.43	0.74	0.74
Delay/Veh:	48.0	25.0	22.5	49.6	44.7	44.7	69.5	46.5	46.5	52.1	54.5	54.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.0	25.0	22.5	49.6	44.7	44.7	69.5	46.5	46.5	52.1	54.5	54.5
LOS by Move:	D	C	C+	D	D	D	E	D	D	D-	D-	D-
HCM2kAvgQ:	14	9	4	1	15	15	8	6	6	4	12	12

Note: Queue reported is the number of cars per lane.

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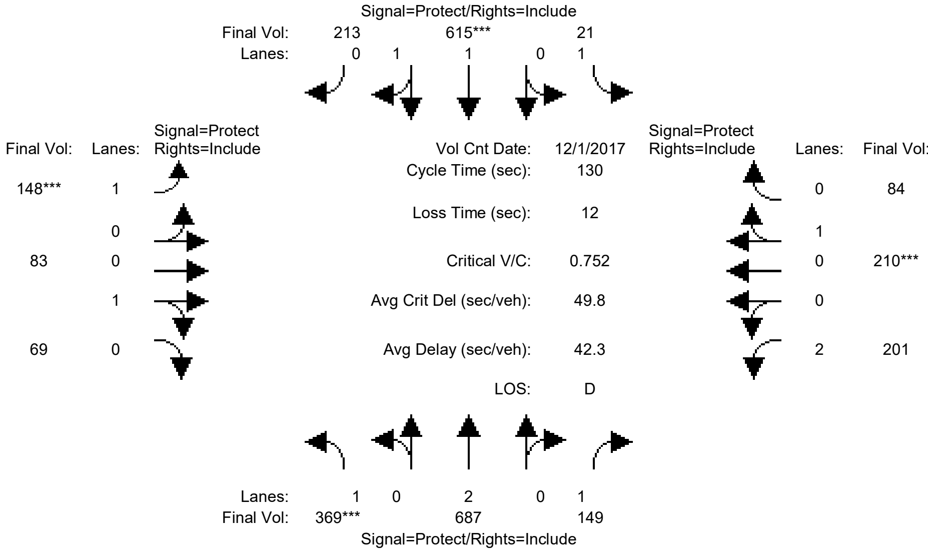
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #63: Fair Oaks Avenue / Arques Avenue



Street Name:	Fair Oaks Avenue						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	234	595	149	21	520	113	54	83	49	192	210	39
Growth 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
Initial Bse:	234	595	149	21	520	113	54	83	49	192	210	39
Added Vol:	135	92	0	0	100	100	94	0	20	9	0	45
PasserByVol:	0	0	0	0	-5	0	0	0	0	0	0	0
Initial Fut:	369	687	149	21	615	213	148	83	69	201	210	84
User 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
PHF 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
PHF Volume:	369	687	149	21	615	213	148	83	69	201	210	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	369	687	149	21	615	213	148	83	69	201	210	84
PCE 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
MLF 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
FinalVolume:	369	687	149	21	615	213	148	83	69	201	210	84
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	1.47	0.53	1.00	0.55	0.45	2.00	0.71	0.29
Final Sat.:	1750	3800	1750	1750	2747	952	1750	983	817	3150	1286	514
Capacity Analysis Module:												
Vol/Sat:	0.21	0.18	0.09	0.01	0.22	0.22	0.08	0.08	0.08	0.06	0.16	0.16
Crit Moves:	****				****		****				****	
Green Time:	36.5	57.9	57.9	17.2	38.7	38.7	14.6	24.4	24.4	18.4	28.2	28.2
Volume/Cap:	0.75	0.41	0.19	0.09	0.75	0.75	0.75	0.45	0.45	0.45	0.75	0.75
Delay/Veh:	49.1	24.6	22.0	49.7	44.3	44.3	70.9	47.8	47.8	51.8	55.6	55.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.1	24.6	22.0	49.7	44.3	44.3	70.9	47.8	47.8	51.8	55.6	55.6
LOS by Move:	D	C	C+	D	D	D	E	D	D	D-	E+	E+
HCM2kAvgQ:	15	9	4	1	15	15	8	6	6	4	12	12

Note: Queue reported is the number of cars per lane.

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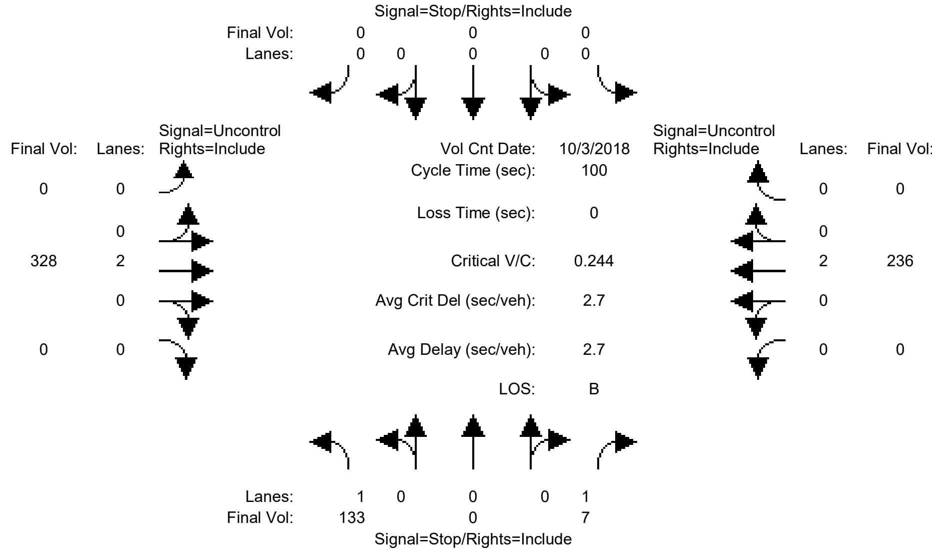
Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background AM

Intersection #64: Central Expressway WB Off-Ramp / Arques Avenue




```
Street Name:    Central Expressway WB Ramp             Arques Avenue
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 3 Oct 2018 <<
Base Vol:      95    0     7     0    0     0     0  328     0     0  236     0
Growth 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
Initial Bse:   95    0     7     0    0     0     0  328     0     0  236     0
Added Vol:     38    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  133    0     7     0    0     0     0  328     0     0  236     0
User 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
PHF 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
PHF Volume:   133    0     7     0    0     0     0  328     0     0  236     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:  133    0     7     0    0     0     0  328     0     0  236     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  6.8 xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:  3.5 xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  446 xxxx   164  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.:  546 xxxx   858  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:    546 xxxx   858  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  0.24 xxxx  0.01  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2WayQ95thQ:   0.9 xxxx   0.0  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del: 13.7 xxxx   9.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    B    *     A     *    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      13.5            xxxxxx            xxxxxx            xxxxxx
ApproachLOS:        B                *                 *                 *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Lanes:        1  0  0  0  1   0  0  0  0  0   0  0  2  0  0   0  0  2  0  0
Initial Vol:  133    0     7    0     0     0    0  328     0    0  236     0
ApproachDel:      13.5           xxxxxx           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.5]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=140]
   FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=704]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Lanes:        1  0  0  0  1   0  0  0  0  0   0  0  2  0  0   0  0  2  0  0
Initial Vol:  133    0     7    0     0     0    0  328     0    0  236     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            564
Minor Approach Volume:          140
Minor Approach Volume Threshold: 620
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background AM Plus Project

Intersection #64: Central Expressway WB Off-Ramp / Arques Avenue

Signal=Stop/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Uncontrol Rights=Include
Final Vol: 0 / 328 / 0
Lanes: 0 / 0 / 2 / 0 / 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 100
Loss Time (sec): 0
Critical V/C: 0.275
Avg Crit Del (sec/veh): 3.0
Avg Delay (sec/veh): 3.0
LOS: B

Signal=Uncontrol Rights=Include
Lanes: 0 / 0 / 2 / 0 / 0
Final Vol: 0 / 236 / 0

Lanes: 1 0 0 0 1
Final Vol: 150 0 7
Signal=Stop/Rights=Include

```
Street Name:    Central Expressway WB Ramp            Arques Avenue
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 3 Oct 2018 <<
Base Vol:      95    0     7     0    0     0     0  328     0     0  236     0
Growth 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
Initial Bse:   95    0     7     0    0     0     0  328     0     0  236     0
Added Vol:     55    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  150    0     7     0    0     0     0  328     0     0  236     0
User 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
PHF 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
PHF Volume:   150    0     7     0    0     0     0  328     0     0  236     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:  150    0     7     0    0     0     0  328     0     0  236     0
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:  6.8 xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:  3.5 xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol:  446 xxxx   164  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.:  546 xxxx   858  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:    546 xxxx   858  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  0.27 xxxx  0.01  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2Way95thQ:    1.1 xxxx   0.0  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del: 14.1 xxxx   9.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    B    *     A     *    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:       13.9            xxxxxx           xxxxxx           xxxxxx
ApproachLOS:          B                 *                *                *
Note: Queue reported is the number of cars per lane.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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```
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:       1  0  0  0  1   0  0  0  0  0   0  0  2  0  0   0  0  2  0  0
Initial Vol: 150    0     7    0    0     0    0  328     0    0  236     0
ApproachDel:     13.9          xxxxxx           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.6]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=157]
   SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=721]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
```

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

```
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:       1  0  0  0  1   0  0  0  0  0   0  0  2  0  0   0  0  2  0  0
Initial Vol: 150    0     7    0    0     0    0  328     0    0  236     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            564
Minor Approach Volume:          157
Minor Approach Volume Threshold: 620
--------------------------------------------------------------------------------
```

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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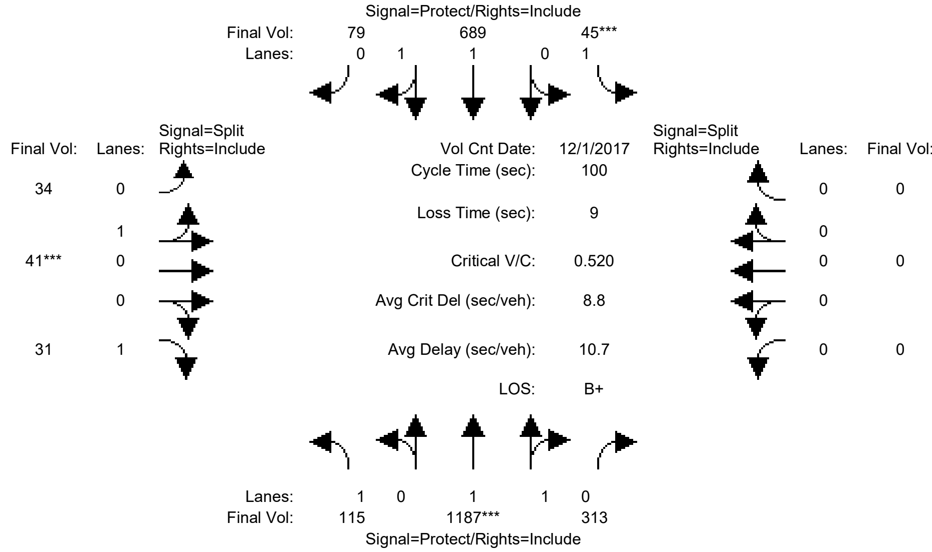
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #65: Fair Oaks Avenue / California Avenue



Street Name:	Fair Oaks Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	86	974	295	37	628	79	34	41	27	0	0	0
Growth 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
Initial Bse:	86	974	295	37	628	79	34	41	27	0	0	0
Added Vol:	29	213	18	8	61	0	0	0	4	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	115	1187	313	45	689	79	34	41	31	0	0	0
User 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
PHF 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
PHF Volume:	115	1187	313	45	689	79	34	41	31	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	115	1187	313	45	689	79	34	41	31	0	0	0
PCE 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
MLF 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
FinalVolume:	115	1187	313	45	689	79	34	41	31	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.92	1.00	0.92
Lanes:	1.00	1.57	0.43	1.00	1.79	0.21	0.45	0.55	1.00	0.00	0.00	0.00
Final Sat.:	1750	2927	772	1750	3319	381	816	984	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.41	0.41	0.03	0.21	0.21	0.04	0.04	0.02	0.00	0.00	0.00
Crit Moves:		****		****				****				
Green Time:	20.4	74.0	74.0	7.0	60.6	60.6	10.0	10.0	10.0	0.0	0.0	0.0
Volume/Cap:	0.32	0.55	0.55	0.37	0.34	0.34	0.42	0.42	0.18	0.00	0.00	0.00
Delay/Veh:	34.4	5.9	5.9	46.3	9.9	9.9	43.8	43.8	41.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.4	5.9	5.9	46.3	9.9	9.9	43.8	43.8	41.7	0.0	0.0	0.0
LOS by Move:	C-	A	A	D	A	A	D	D	D	A	A	A
HCM2kAvgQ:	3	11	11	1	6	6	2	2	1	0	0	0

Note: Queue reported is the number of cars per lane.

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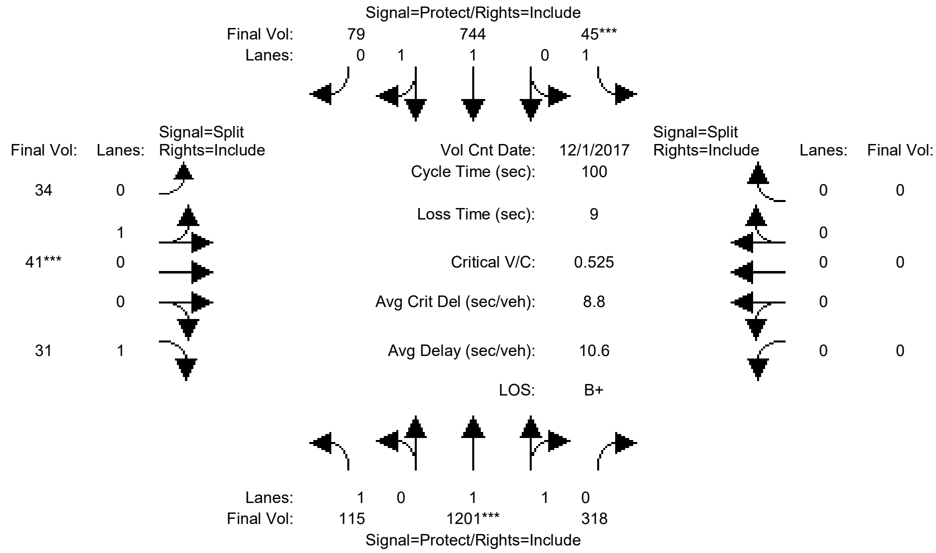
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #65: Fair Oaks Avenue / California Avenue



Street Name:	Fair Oaks Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	86	974	295	37	628	79	34	41	27	0	0	0
Growth 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
Initial Bse:	86	974	295	37	628	79	34	41	27	0	0	0
Added Vol:	29	227	23	8	121	0	0	0	4	0	0	0
PasserByVol:	0	0	0	0	-5	0	0	0	0	0	0	0
Initial Fut:	115	1201	318	45	744	79	34	41	31	0	0	0
User 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
PHF 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
PHF Volume:	115	1201	318	45	744	79	34	41	31	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	115	1201	318	45	744	79	34	41	31	0	0	0
PCE 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
MLF 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
FinalVolume:	115	1201	318	45	744	79	34	41	31	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.92	1.00	0.92
Lanes:	1.00	1.57	0.43	1.00	1.80	0.20	0.45	0.55	1.00	0.00	0.00	0.00
Final Sat.:	1750	2925	774	1750	3345	355	816	984	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.41	0.41	0.03	0.22	0.22	0.04	0.04	0.02	0.00	0.00	0.00
Crit Moves:		****		****				****				
Green Time:	19.4	74.0	74.0	7.0	61.6	61.6	10.0	10.0	10.0	0.0	0.0	0.0
Volume/Cap:	0.34	0.55	0.55	0.37	0.36	0.36	0.42	0.42	0.18	0.00	0.00	0.00
Delay/Veh:	35.4	6.0	6.0	46.3	9.6	9.6	43.8	43.8	41.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.4	6.0	6.0	46.3	9.6	9.6	43.8	43.8	41.7	0.0	0.0	0.0
LOS by Move:	D+	A	A	D	A	A	D	D	D	A	A	A
HCM2kAvgQ:	3	11	11	1	6	6	2	2	1	0	0	0

Note: Queue reported is the number of cars per lane.

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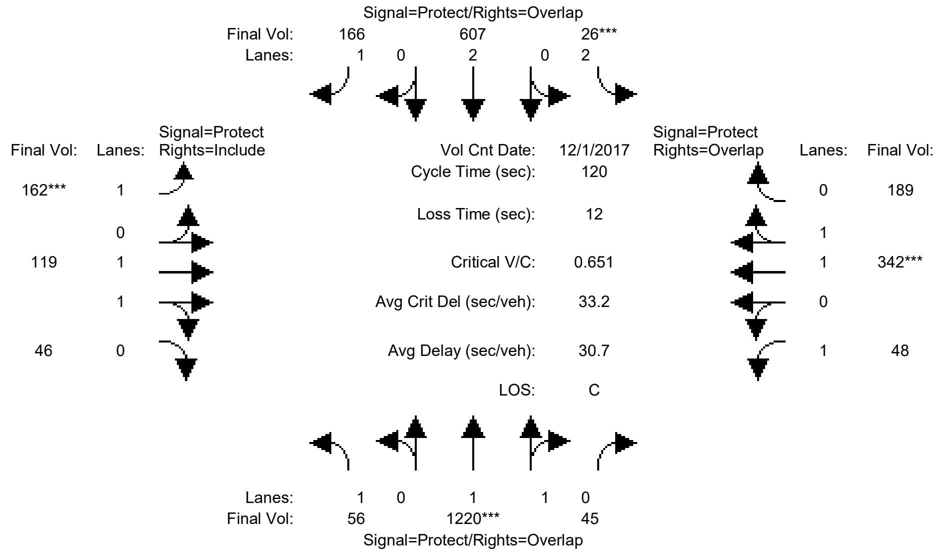
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #66: Fair Oaks Avenue / Evelyn Avenue



Street Name:	Fair Oaks Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	56	1015	45	25	531	124	162	116	46	48	332	188
Growth 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
Initial Bse:	56	1015	45	25	531	124	162	116	46	48	332	188
Added Vol:	0	205	0	1	76	42	0	3	0	0	10	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	1220	45	26	607	166	162	119	46	48	342	189
User 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
PHF 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
PHF Volume:	56	1220	45	26	607	166	162	119	46	48	342	189
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	1220	45	26	607	166	162	119	46	48	342	189
PCE 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
MLF 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
FinalVolume:	56	1220	45	26	607	166	162	119	46	48	342	189
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.83	1.00	0.92	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	1.00	1.93	0.07	2.00	2.00	1.00	1.00	1.43	0.57	1.00	1.27	0.73
Final Sat.:	1750	3568	132	3150	3800	1750	1750	2668	1031	1750	2382	1316
Capacity Analysis Module:												
Vol/Sat:	0.03	0.34	0.34	0.01	0.16	0.09	0.09	0.04	0.04	0.03	0.14	0.14
Crit Moves:		****		****			****				****	
Green Time:	17.9	59.7	76.7	7.0	48.9	65.1	16.2	24.3	24.3	17.0	25.1	32.1
Volume/Cap:	0.22	0.69	0.53	0.14	0.39	0.17	0.69	0.22	0.22	0.19	0.69	0.54
Delay/Veh:	45.3	24.1	12.1	54.0	25.2	14.0	57.7	40.1	40.1	45.8	46.4	38.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.3	24.1	12.1	54.0	25.2	14.0	57.7	40.1	40.1	45.8	46.4	38.2
LOS by Move:	D	C	B	D-	C	B	E+	D	D	D	D	D+
HCM2kAvgQ:	2	18	13	1	8	3	6	2	2	2	10	9

Note: Queue reported is the number of cars per lane.

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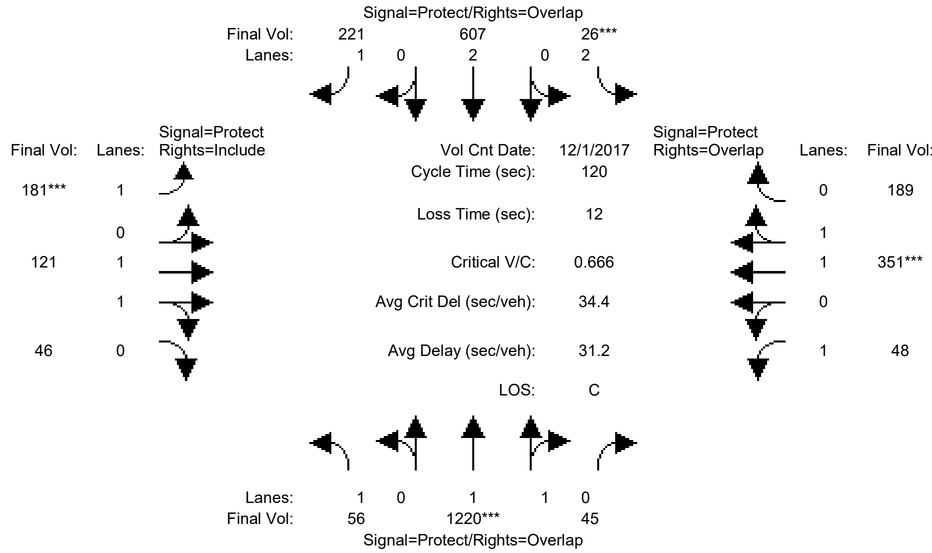
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #66: Fair Oaks Avenue / Evelyn Avenue



Street Name:	Fair Oaks Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	56	1015	45	25	531	124	162	116	46	48	332	188
Growth 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
Initial Bse:	56	1015	45	25	531	124	162	116	46	48	332	188
Added Vol:	0	205	0	1	76	102	19	5	0	0	19	1
PasserByVol:	0	0	0	0	0	-5	0	0	0	0	0	0
Initial Fut:	56	1220	45	26	607	221	181	121	46	48	351	189
User 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
PHF 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
PHF Volume:	56	1220	45	26	607	221	181	121	46	48	351	189
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	1220	45	26	607	221	181	121	46	48	351	189
PCE 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
MLF 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
FinalVolume:	56	1220	45	26	607	221	181	121	46	48	351	189
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.83	1.00	0.92	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	1.00	1.93	0.07	2.00	2.00	1.00	1.00	1.43	0.57	1.00	1.28	0.72
Final Sat.:	1750	3568	132	3150	3800	1750	1750	2680	1019	1750	2404	1294
Capacity Analysis Module:												
Vol/Sat:	0.03	0.34	0.34	0.01	0.16	0.13	0.10	0.05	0.05	0.03	0.15	0.15
Crit Moves:		****		****			****				****	
Green Time:	17.5	58.4	75.9	7.0	47.9	65.6	17.7	25.1	25.1	17.5	24.9	31.9
Volume/Cap:	0.22	0.70	0.54	0.14	0.40	0.23	0.70	0.22	0.22	0.19	0.70	0.55
Delay/Veh:	45.7	25.3	12.5	54.0	25.9	14.3	57.1	39.5	39.5	45.3	47.0	38.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.7	25.3	12.5	54.0	25.9	14.3	57.1	39.5	39.5	45.3	47.0	38.5
LOS by Move:	D	C	B	D-	C	B	E+	D	D	D	D	D+
HCM2kAvgQ:	2	18	13	1	8	4	7	2	2	2	11	9

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #67: Fair Oaks Avenue / Old San Francisco Road

Signal=Protect/Rights=Include
Final Vol: 85 540 57***
Lanes: 0 1 1 0 1

Final Vol: Lanes: Signal=Protect Rights=Include
104*** 1
0
157 1
1
57 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 130
Loss Time (sec): 12
Critical V/C: 0.641
Avg Crit Del (sec/veh): 36.7
Avg Delay (sec/veh): 36.7
LOS: D+

Signal=Protect Rights=Include Lanes: Final Vol:
1 201
0
1 421***
0
1 163

Lanes: 1 0 1 1 0
Final Vol: 61 887*** 104
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	61	732	106	47	474	85	104	120	55	156	290	151
Growth 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
Initial Bse:	61	732	106	47	474	85	104	120	55	156	290	151
Added Vol:	0	155	-2	10	66	0	0	37	2	7	131	50
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	887	104	57	540	85	104	157	57	163	421	201
User 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
PHF 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
PHF Volume:	61	887	104	57	540	85	104	157	57	163	421	201
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	887	104	57	540	85	104	157	57	163	421	201
PCE 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
MLF 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
FinalVolume:	61	887	104	57	540	85	104	157	57	163	421	201
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.78	0.22	1.00	1.72	0.28	1.00	1.45	0.55	1.00	1.00	1.00
Final Sat.:	1750	3311	388	1750	3196	503	1750	2714	985	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.27	0.27	0.03	0.17	0.17	0.06	0.06	0.06	0.09	0.22	0.11
Crit Moves:		****		****			****				****	
Green Time:	14.8	54.2	54.2	7.0	46.4	46.4	12.0	25.7	25.7	31.1	44.8	44.8
Volume/Cap:	0.31	0.64	0.64	0.60	0.47	0.47	0.64	0.29	0.29	0.39	0.64	0.33
Delay/Veh:	53.8	31.1	31.1	70.8	32.6	32.6	65.4	44.6	44.6	42.1	38.0	31.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.8	31.1	31.1	70.8	32.6	32.6	65.4	44.6	44.6	42.1	38.0	31.9
LOS by Move:	D-	C	C	E	C-	C-	E	D	D	D	D+	C
HCM2kAvgQ:	3	16	16	2	10	10	4	4	4	6	14	6

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
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Intersection #67: Fair Oaks Avenue / Old San Francisco Road

Signal=Protect/Rights=Include
Final Vol: 85 540 57***
Lanes: 0 1 1 0 1

Westbound (left side): Signal=Protect Rights=Include

Final Vol:	Lanes:
104***	1
	0
170	1
	1
57	0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 130
Loss Time (sec): 12
Critical V/C: 0.668
Avg Crit Del (sec/veh): 38.0
Avg Delay (sec/veh): 37.5
LOS: D+

Signal=Protect Rights=Include

Lanes:	Final Vol:
1	201
0	
1	468***
0	
1	163

Lanes: 1 0 1 1 0
Final Vol: 61 887*** 104
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	61	732	106	47	474	85	104	120	55	156	290	151
Growth 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
Initial Bse:	61	732	106	47	474	85	104	120	55	156	290	151
Added Vol:	0	155	-2	10	66	0	0	50	2	7	178	50
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	887	104	57	540	85	104	170	57	163	468	201
User 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
PHF 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
PHF Volume:	61	887	104	57	540	85	104	170	57	163	468	201
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	887	104	57	540	85	104	170	57	163	468	201
PCE 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
MLF 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
FinalVolume:	61	887	104	57	540	85	104	170	57	163	468	201
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.78	0.22	1.00	1.72	0.28	1.00	1.48	0.52	1.00	1.00	1.00
Final Sat.:	1750	3311	388	1750	3196	503	1750	2770	929	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.27	0.27	0.03	0.17	0.17	0.06	0.06	0.06	0.09	0.25	0.11
Crit Moves:		****		****			****				****	
Green Time:	14.2	51.8	51.8	7.0	44.6	44.6	11.5	26.8	26.8	32.4	47.7	47.7
Volume/Cap:	0.32	0.67	0.67	0.60	0.49	0.49	0.67	0.30	0.30	0.37	0.67	0.31
Delay/Veh:	54.4	33.3	33.3	70.8	34.0	34.0	68.4	43.9	43.9	40.9	37.2	29.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	54.4	33.3	33.3	70.8	34.0	34.0	68.4	43.9	43.9	40.9	37.2	29.7
LOS by Move:	D-	C-	C-	E	C-	C-	E	D	D	D	D+	C
HCM2kAvgQ:	3	17	17	2	10	10	5	4	4	6	15	6

Note: Queue reported is the number of cars per lane.

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Intersection #68: Fair Oaks Avenue / El Camino Real (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 124 370 146***
Lanes: 1 0 2 0 1

Signal=Protect Rights=Overlap (West approach)
Final Vol: 124*** Lanes: 1
Lanes: 0
Final Vol: 412 Lanes: 3
Lanes: 0
Final Vol: 91 Lanes: 1

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 110
Loss Time (sec): 12
Critical V/C: 0.571
Avg Crit Del (sec/veh): 33.6
Avg Delay (sec/veh): 31.3
LOS: C

Signal=Protect Rights=Overlap (East approach)
Lanes: 1 Final Vol: 317
Lanes: 0
Lanes: 3 Final Vol: 1154***
Lanes: 0
Lanes: 1 Final Vol: 166

Lanes: 1 0 2 0 1
Final Vol: 68 579*** 113
Signal=Protect/Rights=Overlap

Street Name:	Fair Oaks Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	68	588	113	94	357	119	128	378	91	166	1057	149
Growth 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
Initial Bse:	68	588	113	94	357	119	128	378	91	166	1057	149
Added Vol:	0	-9	0	52	13	5	-4	34	0	0	97	168
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	68	579	113	146	370	124	124	412	91	166	1154	317
User 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
PHF 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
PHF Volume:	68	579	113	146	370	124	124	412	91	166	1154	317
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	68	579	113	146	370	124	124	412	91	166	1154	317
PCE 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
MLF 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
FinalVolume:	68	579	113	146	370	124	124	412	91	166	1154	317
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.15	0.06	0.08	0.10	0.07	0.07	0.07	0.05	0.09	0.20	0.18
Crit Moves:		****		****			****				****	
Green Time:	17.9	29.3	56.2	16.1	27.4	41.1	13.6	25.7	43.7	26.9	39.0	55.0
Volume/Cap:	0.24	0.57	0.13	0.57	0.39	0.19	0.57	0.31	0.13	0.39	0.57	0.36
Delay/Veh:	40.5	35.7	14.1	46.9	34.6	23.4	49.1	34.9	21.2	35.3	29.2	17.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.5	35.7	14.1	46.9	34.6	23.4	49.1	34.9	21.2	35.3	29.2	17.0
LOS by Move:	D	D+	B	D	C-	C	D	C-	C+	D+	C	B
HCM2kAvgQ:	2	8	2	6	5	3	4	4	2	5	11	7

Note: Queue reported is the number of cars per lane.

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Intersection #68: Fair Oaks Avenue / El Camino Real (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 124 370 146***
Lanes: 1 0 2 0 1

Signal=Protect
Rights=Overlap
Final Vol: Lanes:
124*** 1
0
452 3
0
91 1

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 110
Loss Time (sec): 12
Critical V/C: 0.599
Avg Crit Del (sec/veh): 33.1
Avg Delay (sec/veh): 31.2
LOS: C

Signal=Protect
Rights=Overlap
Lanes: Final Vol:
1 317
0
3 1293***
0
1 166

Lanes: 1 0 2 0 1
Final Vol: 68 579*** 113
Signal=Protect/Rights=Overlap

Street Name:	Fair Oaks Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	68	588	113	94	357	119	128	378	91	166	1057	149
Growth 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
Initial Bse:	68	588	113	94	357	119	128	378	91	166	1057	149
Added Vol:	0	-9	0	52	13	5	-4	74	0	0	236	168
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	68	579	113	146	370	124	124	452	91	166	1293	317
User 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
PHF 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
PHF Volume:	68	579	113	146	370	124	124	452	91	166	1293	317
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	68	579	113	146	370	124	124	452	91	166	1293	317
PCE 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
MLF 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
FinalVolume:	68	579	113	146	370	124	124	452	91	166	1293	317
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.15	0.06	0.08	0.10	0.07	0.07	0.08	0.05	0.09	0.23	0.18
Crit Moves:		****		****			****				****	
Green Time:	17.1	28.0	55.9	15.3	26.2	39.2	13.0	26.8	43.9	27.9	41.7	57.0
Volume/Cap:	0.25	0.60	0.13	0.60	0.41	0.20	0.60	0.33	0.13	0.37	0.60	0.35
Delay/Veh:	41.3	37.1	14.3	48.5	35.7	24.7	50.8	34.3	21.0	34.4	27.9	15.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.3	37.1	14.3	48.5	35.7	24.7	50.8	34.3	21.0	34.4	27.9	15.8
LOS by Move:	D	D+	B	D	D+	C	D	C-	C+	C-	C	B
HCM2kAvgQ:	2	8	2	6	5	3	4	4	2	5	12	7

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #69: Wolfe Road / Old San Francisco Road

Signal=Protect/Rights=Include

Final Vol: 97 444 36***
Lanes: 0 1 2 0 2

Signal=Protect
Rights=Include

Final Vol: Lanes:
115*** 1
0
258 1
1
68 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 150
Loss Time (sec): 12
Critical V/C: 0.596
Avg Crit Del (sec/veh): 35.0
Avg Delay (sec/veh): 37.4
LOS: D+

Signal=Protect
Rights=Include

Lanes: Final Vol:
0 95
1
1 495***
0
1 114

Lanes: 2 0 2 1 0
Final Vol: 96 1685*** 61
Signal=Protect/Rights=Include

Street Name:	Wolfe Road						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	71	1518	60	32	383	97	115	222	60	111	332	74
Growth 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
Initial Bse:	71	1518	60	32	383	97	115	222	60	111	332	74
Added Vol:	25	167	1	4	61	0	0	36	8	3	163	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	96	1685	61	36	444	97	115	258	68	114	495	95
User 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
PHF 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
PHF Volume:	96	1685	61	36	444	97	115	258	68	114	495	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	1685	61	36	444	97	115	258	68	114	495	95
PCE 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
MLF 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
FinalVolume:	96	1685	61	36	444	97	115	258	68	114	495	95
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	2.00	2.89	0.11	2.00	2.44	0.56	1.00	1.57	0.43	1.00	1.67	0.33
Final Sat.:	3150	5404	196	3150	4595	1004	1750	2928	772	1750	3104	596
Capacity Analysis Module:												
Vol/Sat:	0.03	0.31	0.31	0.01	0.10	0.10	0.07	0.09	0.09	0.07	0.16	0.16
Crit Moves:		****		****			****				****	
Green Time:	27.0	76.1	76.1	7.0	56.0	56.0	16.0	31.6	31.6	23.3	38.9	38.9
Volume/Cap:	0.17	0.61	0.61	0.24	0.26	0.26	0.61	0.42	0.42	0.42	0.61	0.61
Delay/Veh:	52.1	26.9	26.9	69.8	32.7	32.7	70.0	51.6	51.6	58.2	50.1	50.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.1	26.9	26.9	69.8	32.7	32.7	70.0	51.6	51.6	58.2	50.1	50.1
LOS by Move:	D-	C	C	E	C-	C-	E	D-	D-	E+	D	D
HCM2kAvgQ:	2	19	19	1	6	6	6	6	6	5	13	13

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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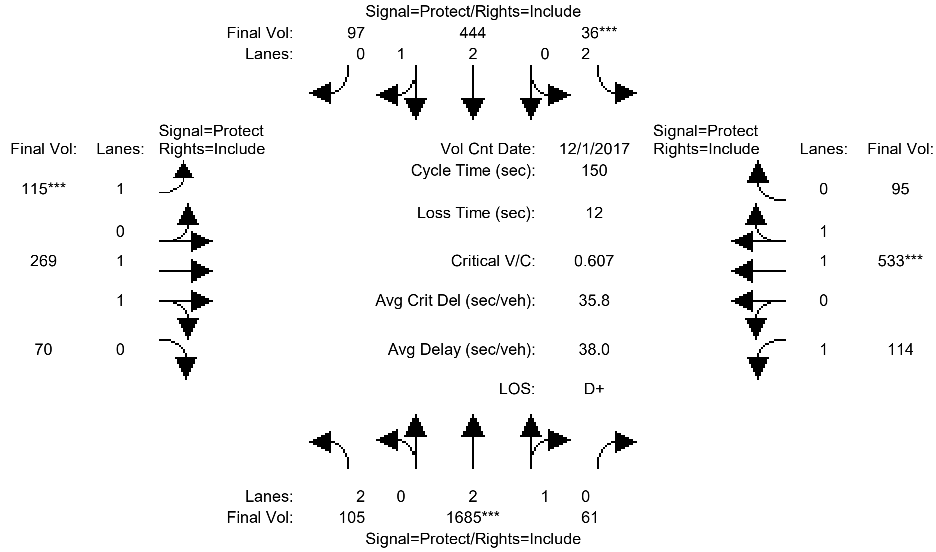
Intersection #69: Wolfe Road / Old San Francisco Road



Street Name:	Wolfe Road						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	71	1518	60	32	383	97	115	222	60	111	332	74
Growth 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
Initial Bse:	71	1518	60	32	383	97	115	222	60	111	332	74
Added Vol:	34	167	1	4	61	0	0	47	10	3	201	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	105	1685	61	36	444	97	115	269	70	114	533	95
User 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
PHF 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
PHF Volume:	105	1685	61	36	444	97	115	269	70	114	533	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	105	1685	61	36	444	97	115	269	70	114	533	95
PCE 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
MLF 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
FinalVolume:	105	1685	61	36	444	97	115	269	70	114	533	95
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	2.00	2.89	0.11	2.00	2.44	0.56	1.00	1.58	0.42	1.00	1.69	0.31
Final Sat.:	3150	5404	196	3150	4595	1004	1750	2935	764	1750	3140	560
Capacity Analysis Module:												
Vol/Sat:	0.03	0.31	0.31	0.01	0.10	0.10	0.07	0.09	0.09	0.07	0.17	0.17
Crit Moves:		****		****			****				****	
Green Time:	26.6	74.6	74.6	7.0	55.1	55.1	15.7	32.9	32.9	23.4	40.6	40.6
Volume/Cap:	0.19	0.63	0.63	0.24	0.26	0.26	0.63	0.42	0.42	0.42	0.63	0.63
Delay/Veh:	52.7	28.0	28.0	69.8	33.3	33.3	71.0	50.6	50.6	58.2	49.3	49.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.7	28.0	28.0	69.8	33.3	33.3	71.0	50.6	50.6	58.2	49.3	49.3
LOS by Move:	D-	C	C	E	C-	C-	E	D	D	E+	D	D
HCM2kAvgQ:	2	19	19	1	6	6	6	7	7	5	13	13

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #70: Wolfe Road / El Camino Real (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 72 583 103***
Lanes: 1 0 3 0 1

Signal=Protect
Rights=Overlap
Final Vol: Lanes:
44*** 1
0
389 3
0
244 1

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 130
Loss Time (sec): 12
Critical V/C: 0.661
Avg Crit Del (sec/veh): 36.4
Avg Delay (sec/veh): 37.7
LOS: D+

Signal=Protect
Rights=Overlap
Lanes: Final Vol:
1 385
0
3 1190***
0
2 430

Lanes: 2 0 2 0 1
Final Vol: 357 1169*** 106
Signal=Protect/Rights=Include

Street Name:	Wolfe Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	302	1120	104	73	568	57	53	314	224	426	996	279
Growth 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
Initial Bse:	302	1120	104	73	568	57	53	314	224	426	996	279
Added Vol:	55	49	2	30	15	15	-9	75	20	4	194	106
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	357	1169	106	103	583	72	44	389	244	430	1190	385
User 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
PHF 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
PHF Volume:	357	1169	106	103	583	72	44	389	244	430	1190	385
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	357	1169	106	103	583	72	44	389	244	430	1190	385
PCE 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
MLF 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
FinalVolume:	357	1169	106	103	583	72	44	389	244	430	1190	385
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	3800	1750	1750	5700	1750	1750	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.11	0.31	0.06	0.06	0.10	0.04	0.03	0.07	0.14	0.14	0.21	0.22
Crit Moves:		****		****			****				****	
Green Time:	37.2	59.4	59.4	11.4	33.5	40.5	7.0	17.0	54.2	30.2	40.3	51.6
Volume/Cap:	0.40	0.67	0.13	0.67	0.40	0.13	0.47	0.52	0.33	0.59	0.67	0.55
Delay/Veh:	37.7	28.8	20.5	68.8	40.0	32.2	63.3	53.3	25.9	45.6	40.2	31.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.7	28.8	20.5	68.8	40.0	32.2	63.3	53.3	25.9	45.6	40.2	31.3
LOS by Move:	D+	C	C+	E	D	C-	E	D-	C	D	D	C
HCM2kAvgQ:	7	18	2	4	6	2	2	5	7	10	14	13

Note: Queue reported is the number of cars per lane.

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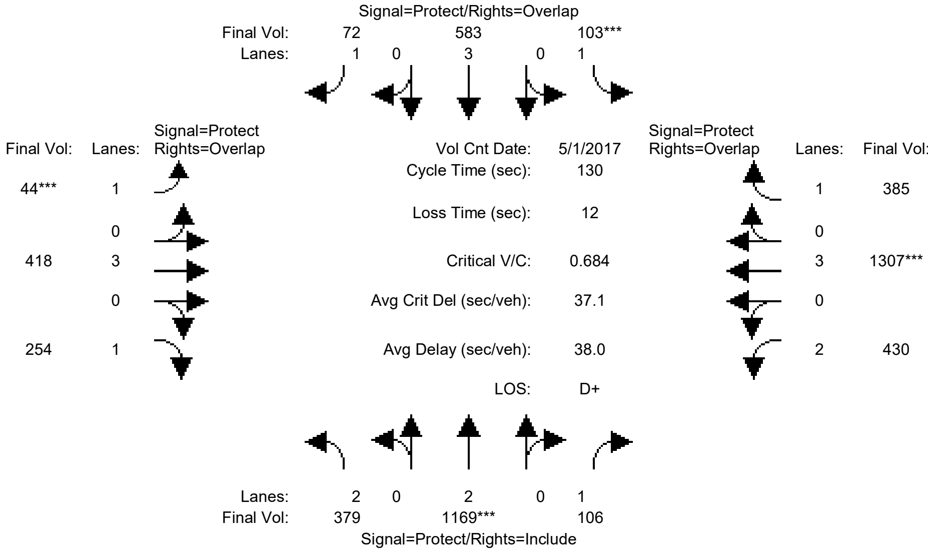
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #70: Wolfe Road / El Camino Real (CMP)



Street Name:	Wolfe Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	302	1120	104	73	568	57	53	314	224	426	996	279
Growth 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
Initial Bse:	302	1120	104	73	568	57	53	314	224	426	996	279
Added Vol:	77	49	2	30	15	15	-9	104	30	4	311	106
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	379	1169	106	103	583	72	44	418	254	430	1307	385
User 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
PHF 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
PHF Volume:	379	1169	106	103	583	72	44	418	254	430	1307	385
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	379	1169	106	103	583	72	44	418	254	430	1307	385
PCE 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
MLF 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
FinalVolume:	379	1169	106	103	583	72	44	418	254	430	1307	385
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	3800	1750	1750	5700	1750	1750	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.31	0.06	0.06	0.10	0.04	0.03	0.07	0.15	0.14	0.23	0.22
Crit Moves:		****		****			****				****	
Green Time:	36.9	57.3	57.3	11.0	31.4	38.4	7.0	17.9	54.8	31.8	42.7	53.7
Volume/Cap:	0.42	0.70	0.14	0.70	0.42	0.14	0.47	0.53	0.34	0.56	0.70	0.53
Delay/Veh:	38.2	30.7	21.7	71.6	41.9	33.8	63.3	52.8	25.7	43.9	39.2	29.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.2	30.7	21.7	71.6	41.9	33.8	63.3	52.8	25.7	43.9	39.2	29.5
LOS by Move:	D+	C	C+	E	D	C-	E	D-	C	D	D	C
HCM2kAvgQ:	7	18	3	5	6	2	2	6	7	9	16	12

Note: Queue reported is the number of cars per lane.

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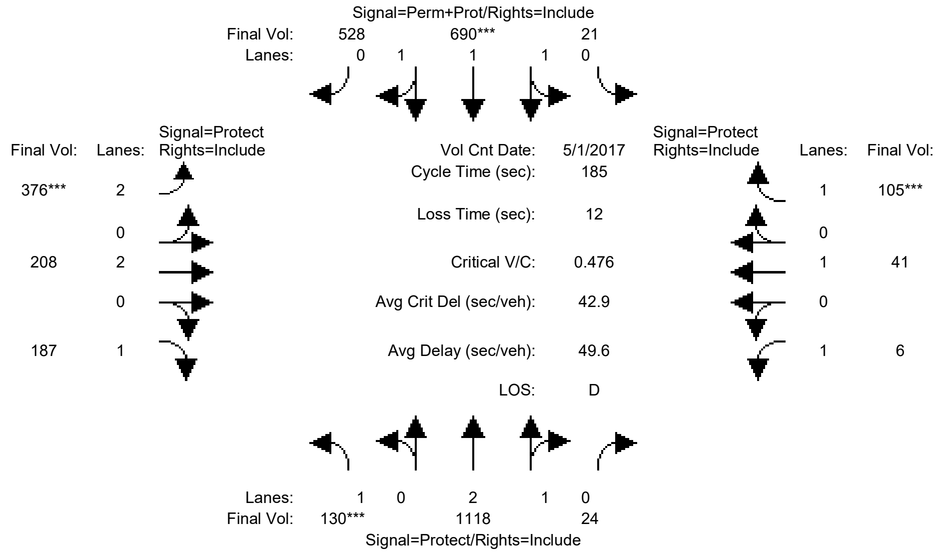
Background AM

Intersection #71: Wolfe Road / Fremont Avenue



Street Name:	Wolfe Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	128	1023	24	21	660	520	365	194	185	6	41	105
Growth 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
Initial Bse:	128	1023	24	21	660	520	365	194	185	6	41	105
Added Vol:	2	95	0	0	30	8	11	14	2	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	130	1118	24	21	690	528	376	208	187	6	41	105
User 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
PHF 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
PHF Volume:	130	1118	24	21	690	528	376	208	187	6	41	105
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1118	24	21	690	528	376	208	187	6	41	105
PCE 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
MLF 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
FinalVolume:	130	1118	24	21	690	528	376	208	187	6	41	105
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.95	0.98	0.95	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.93	0.07	0.06	1.94	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	5482	118	110	3606	1800	3150	3800	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.20	0.20	0.00	0.19	0.29	0.12	0.05	0.11	0.00	0.02	0.06
Crit Moves:	****				****		****					****
Green Time:	24.0	61.4	61.4	60.6	95.0	95.0	35.9	39.9	39.9	14.1	18.1	18.1
Volume/Cap:	0.57	0.61	0.61	0.58	0.37	0.57	0.61	0.25	0.50	0.04	0.22	0.61
Delay/Veh:	79.1	52.5	52.5	52.1	27.2	31.4	70.1	60.4	64.8	79.3	77.6	86.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	79.1	52.5	52.5	52.1	27.2	31.4	70.1	60.4	64.8	79.3	77.6	86.7
LOS by Move:	E-	D-	D-	D-	C	C	E	E	E	E-	E-	F
HCM2kAvgQ:	7	18	18	17	12	21	11	5	10	0	2	7

Note: Queue reported is the number of cars per lane.

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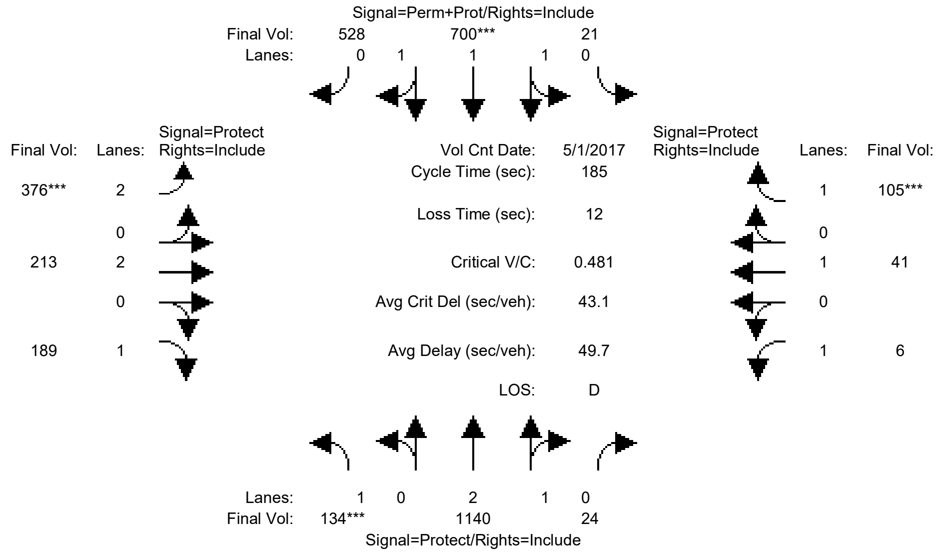
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #71: Wolfe Road / Fremont Avenue



Street Name:	Wolfe Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	128	1023	24	21	660	520	365	194	185	6	41	105
Growth 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
Initial Bse:	128	1023	24	21	660	520	365	194	185	6	41	105
Added Vol:	6	117	0	0	40	8	11	19	4	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	134	1140	24	21	700	528	376	213	189	6	41	105
User 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
PHF 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
PHF Volume:	134	1140	24	21	700	528	376	213	189	6	41	105
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	134	1140	24	21	700	528	376	213	189	6	41	105
PCE 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
MLF 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
FinalVolume:	134	1140	24	21	700	528	376	213	189	6	41	105
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.95	0.98	0.95	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.94	0.06	0.06	1.94	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	5484	115	108	3607	1800	3150	3800	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.21	0.21	0.00	0.19	0.29	0.12	0.06	0.11	0.00	0.02	0.06
Crit Moves:	****				****		****					****
Green Time:	24.8	61.9	61.9	60.8	94.9	94.9	35.5	39.5	39.5	13.9	17.9	17.9
Volume/Cap:	0.57	0.62	0.62	0.59	0.38	0.57	0.62	0.26	0.51	0.05	0.22	0.62
Delay/Veh:	78.5	52.4	52.4	52.2	27.3	31.4	70.6	60.8	65.2	79.6	77.8	87.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	78.5	52.4	52.4	52.2	27.3	31.4	70.6	60.8	65.2	79.6	77.8	87.3
LOS by Move:	E-	D-	D-	D-	C	C	E	E	E	E-	E-	F
HCM2kAvgQ:	8	18	18	17	12	21	11	5	10	0	2	7

Note: Queue reported is the number of cars per lane.

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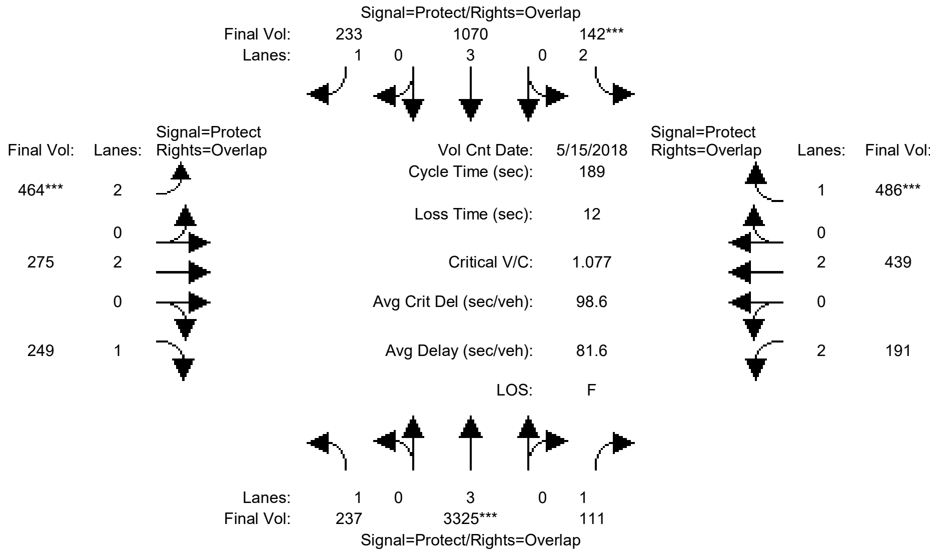
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #72: Lawrence Expressway / Monroe Street (CMP)



Street Name:	Lawrence Expressway						Monroe Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	17	96	96	13	91	91	23	42	42	15	33	33
Y+R:	6.0	6.2	6.2	6.1	6.2	6.2	5.7	5.6	5.6	5.6	5.7	5.7
Volume Module: >> Count Date: 15 May 2018 <<												
Base Vol:	141	3930	111	139	1229	214	457	262	229	191	410	475
Growth 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
Initial Bse:	141	3930	111	139	1229	214	457	262	229	191	410	475
Added Vol:	96	279	0	3	108	19	7	13	20	0	29	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	237	4209	111	142	1337	233	464	275	249	191	439	486
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	237	3325	111	142	1070	233	464	275	249	191	439	486
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	237	3325	111	142	1070	233	464	275	249	191	439	486
PCE 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
MLF 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
FinalVolume:	237	3325	111	142	1070	233	464	275	249	191	439	486
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1750	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.14	0.58	0.06	0.05	0.19	0.13	0.15	0.07	0.14	0.06	0.12	0.28
Crit Moves:		****		****			****					****
Green Time:	23.8	102	118.2	13.0	91.0	116.7	25.7	45.8	69.6	16.4	36.5	49.5
Volume/Cap:	1.07	1.08	0.10	0.66	0.39	0.22	1.08	0.30	0.39	0.70	0.60	1.06
Delay/Veh:	164.4	87.4	14.2	92.9	31.4	16.0	149.2	58.7	44.3	91.8	71.0	128.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	164.4	87.4	14.2	92.9	31.4	16.0	149.2	58.7	44.3	91.8	71.0	128.9
LOS by Move:	F	F	B	F	C	B	F	E+	D	F	E	F
HCM2kAvgQ:	18	75	3	6	13	6	22	6	11	8	12	38

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #72: Lawrence Expressway / Monroe Street (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 243 1070 142***
Lanes: 1 0 3 0 2

Westbound: Signal=Protect, Rights=Overlap — Final Vol: 467*** Lanes: 2; Lanes: 0; Final Vol: 278 Lanes: 2; Lanes: 0; Final Vol: 252 Lanes: 1

Vol Cnt Date: 5/15/2018
Cycle Time (sec): 189
Loss Time (sec): 12
Critical V/C: 1.078
Avg Crit Del (sec/veh): 99.1
Avg Delay (sec/veh): 82.7
LOS: F

Signal=Protect, Rights=Overlap — Lanes: 1 Final Vol: 486***; Lanes: 0; Lanes: 2 Final Vol: 449; Lanes: 0; Lanes: 2 Final Vol: 191

Lanes: 1 0 3 0 1
Final Vol: 251 3325*** 111
Signal=Protect/Rights=Overlap

Street Name:	Lawrence Expressway						Monroe Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	17	96	96	13	91	91	23	42	42	15	33	33
Y+R:	6.0	6.2	6.2	6.1	6.2	6.2	5.7	5.6	5.6	5.6	5.7	5.7
Volume Module: >> Count Date: 15 May 2018 <<												
Base Vol:	141	3930	111	139	1229	214	457	262	229	191	410	475
Growth 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
Initial Bse:	141	3930	111	139	1229	214	457	262	229	191	410	475
Added Vol:	110	279	0	3	108	29	10	16	23	0	39	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	251	4209	111	142	1337	243	467	278	252	191	449	486
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	251	3325	111	142	1070	243	467	278	252	191	449	486
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	251	3325	111	142	1070	243	467	278	252	191	449	486
PCE 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
MLF 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
FinalVolume:	251	3325	111	142	1070	243	467	278	252	191	449	486
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1750	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.14	0.58	0.06	0.05	0.19	0.14	0.15	0.07	0.14	0.06	0.12	0.28
Crit Moves:		****		****			****					****
Green Time:	23.7	102	118.1	13.0	91.0	116.9	25.9	45.9	69.6	16.4	36.4	49.4
Volume/Cap:	1.14	1.08	0.10	0.66	0.39	0.22	1.08	0.30	0.39	0.70	0.61	1.06
Delay/Veh:	187.3	87.9	14.2	92.9	31.4	16.1	149.4	58.6	44.4	91.7	71.4	129.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	187.3	87.9	14.2	92.9	31.4	16.1	149.4	58.6	44.4	91.7	71.4	129.2
LOS by Move:	F	F	B	F	C	B	F	E+	D	F	E	F
HCM2kAvgQ:	20	74	3	6	13	6	22	6	11	8	12	38

Note: Queue reported is the number of cars per lane.

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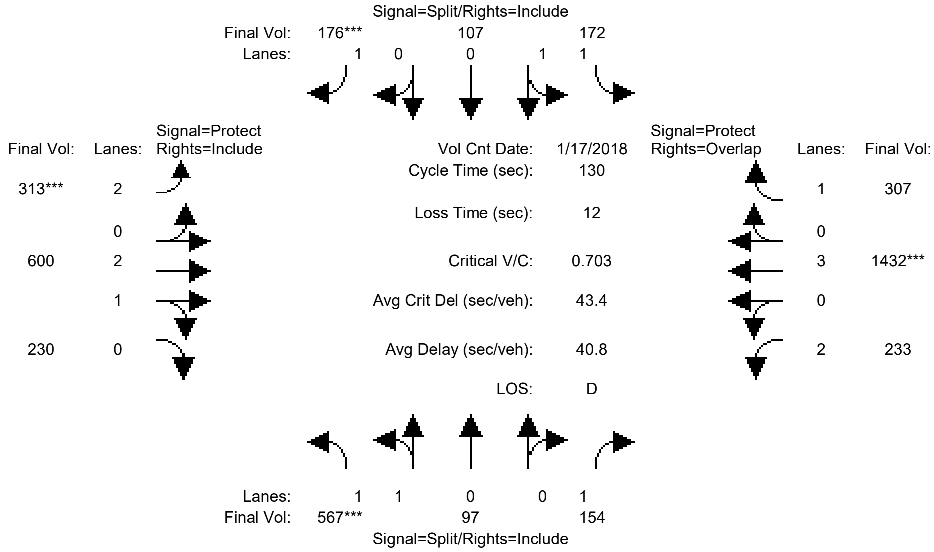
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #73: Lawrence Expressway / El Camino Real (CMP)



Street Name:	Lawrence Expressway						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 17 Jan 2018 <<												
Base Vol:	479	89	154	163	106	174	307	517	192	233	1218	270
Growth 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
Initial Bse:	479	89	154	163	106	174	307	517	192	233	1218	270
Added Vol:	88	8	0	9	1	2	6	83	38	0	214	37
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	567	97	154	172	107	176	313	600	230	233	1432	307
User 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
PHF 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
PHF Volume:	567	97	154	172	107	176	313	600	230	233	1432	307
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	567	97	154	172	107	176	313	600	230	233	1432	307
PCE 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
MLF 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
FinalVolume:	567	97	154	172	107	176	313	600	230	233	1432	307
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.95	0.92	0.93	0.95	0.92	0.83	1.00	0.95	0.83	1.00	0.92
Lanes:	1.71	0.29	1.00	1.24	0.76	1.00	2.00	2.14	0.86	2.00	3.00	1.00
Final Sat.:	3031	519	1750	2188	1361	1750	3150	4046	1551	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.09	0.08	0.08	0.10	0.10	0.15	0.15	0.07	0.25	0.18
Crit Moves:	****					****	****				****	
Green Time:	34.6	34.6	34.6	18.6	18.6	18.6	18.4	43.2	43.2	21.6	46.4	65.0
Volume/Cap:	0.70	0.70	0.33	0.55	0.55	0.70	0.70	0.45	0.45	0.45	0.70	0.35
Delay/Veh:	45.5	45.5	38.8	53.1	53.1	61.8	58.2	34.2	34.2	49.4	37.0	19.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.5	45.5	38.8	53.1	53.1	61.8	58.2	34.2	34.2	49.4	37.0	19.9
LOS by Move:	D	D	D+	D-	D-	E	E+	C-	C-	D	D+	B-
HCM2kAvgQ:	12	12	5	5	5	7	8	9	9	5	16	8

Note: Queue reported is the number of cars per lane.

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Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #73: Lawrence Expressway / El Camino Real (CMP)

Signal=Split/Rights=Include
Final Vol: 176*** 107 172
Lanes: 1 0 0 1 1

Signal=Protect
Rights=Include

Final Vol:	Lanes:
313***	2
	0
614	2
	1
250	0

Vol Cnt Date:	1/17/2018
Cycle Time (sec):	130
Loss Time (sec):	12
Critical V/C:	0.735
Avg Crit Del (sec/veh):	44.5
Avg Delay (sec/veh):	41.7
LOS:	D

Signal=Protect
Rights=Overlap

Lanes:	Final Vol:
1	307
0	
3	1468***
0	
2	233

Lanes: 1 1 0 0 1
Final Vol: 648 97*** 154
Signal=Split/Rights=Include

Street Name:	Lawrence Expressway						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 17 Jan 2018 <<												
Base Vol:	479	89	154	163	106	174	307	517	192	233	1218	270
Growth 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
Initial Bse:	479	89	154	163	106	174	307	517	192	233	1218	270
Added Vol:	169	8	0	9	1	2	6	97	58	0	250	37
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	648	97	154	172	107	176	313	614	250	233	1468	307
User 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
PHF 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
PHF Volume:	648	97	154	172	107	176	313	614	250	233	1468	307
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	648	97	154	172	107	176	313	614	250	233	1468	307
PCE 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
MLF 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
FinalVolume:	648	97	154	172	107	176	313	614	250	233	1468	307
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.95	0.92	0.93	0.95	0.92	0.83	1.00	0.95	0.83	1.00	0.92
Lanes:	1.74	0.26	1.00	1.24	0.76	1.00	2.00	2.10	0.90	2.00	3.00	1.00
Final Sat.:	3088	462	1750	2188	1361	1750	3150	3978	1620	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.21	0.21	0.09	0.08	0.08	0.10	0.10	0.15	0.15	0.07	0.26	0.18
Crit Moves:		****				****	****				****	
Green Time:	37.1	37.1	37.1	17.8	17.8	17.8	17.6	42.7	42.7	20.4	45.5	63.3
Volume/Cap:	0.74	0.74	0.31	0.57	0.57	0.74	0.74	0.47	0.47	0.47	0.74	0.36
Delay/Veh:	44.8	44.8	36.7	54.2	54.2	65.1	60.5	34.9	34.9	50.6	38.4	21.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.8	44.8	36.7	54.2	54.2	65.1	60.5	34.9	34.9	50.6	38.4	21.0
LOS by Move:	D	D	D+	D-	D-	E	E	C-	C-	D	D+	C+
HCM2kAvgQ:	13	13	5	6	6	8	9	9	9	5	17	8

Note: Queue reported is the number of cars per lane.

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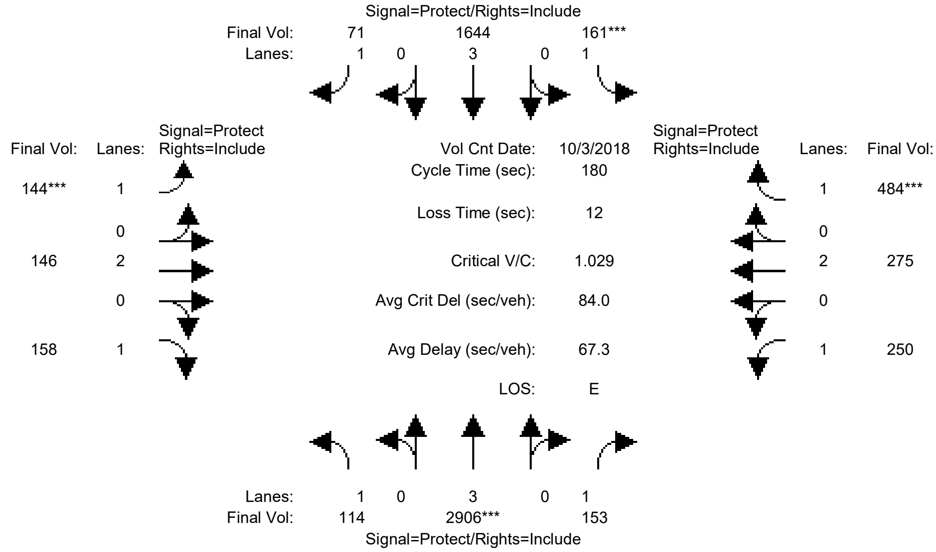
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #74: Lawrence Expressway / Benton Street



Street Name:	Lawrence Expressway						Benton Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	114	3288	153	158	1913	69	136	146	158	250	275	471
Growth 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
Initial Bse:	114	3288	153	158	1913	69	136	146	158	250	275	471
Added Vol:	0	390	0	3	142	2	8	0	0	0	0	13
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	114	3678	153	161	2055	71	144	146	158	250	275	484
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	114	2906	153	161	1644	71	144	146	158	250	275	484
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	114	2906	153	161	1644	71	144	146	158	250	275	484
PCE 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
MLF 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
FinalVolume:	114	2906	153	161	1644	71	144	146	158	250	275	484
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.51	0.09	0.09	0.29	0.04	0.08	0.04	0.09	0.14	0.07	0.28
Crit Moves:		****		****			****					****
Green Time:	19.4	89.2	89.2	16.1	85.9	85.9	14.4	24.3	24.3	38.5	48.4	48.4
Volume/Cap:	0.60	1.03	0.18	1.03	0.60	0.09	1.03	0.28	0.67	0.67	0.27	1.03
Delay/Veh:	82.1	70.4	25.2	161.8	35.0	25.7	166.9	70.3	81.2	69.5	52.0	115.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	82.1	70.4	25.2	161.8	35.0	25.7	166.9	70.3	81.2	69.5	52.0	115.0
LOS by Move:	F	E	C	F	C-	C	F	E	F	E	D-	F
HCM2kAvgQ:	6	57	5	12	21	2	13	4	10	14	6	35

Note: Queue reported is the number of cars per lane.

Cityline TIA
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #74: Lawrence Expressway / Benton Street

Signal=Protect/Rights=Include
Final Vol: 72 1660 163***
Lanes: 1 0 3 0 1

Final Vol: Lanes: Signal=Protect Rights=Include
147*** 1
0
146 2
0
158 1

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 180
Loss Time (sec): 12
Critical V/C: 1.047
Avg Crit Del (sec/veh): 89.5
Avg Delay (sec/veh): 70.5
LOS: E

Signal=Protect Rights=Include Lanes: Final Vol:
1 489***
0
2 275
0
1 250

Lanes: 1 0 3 0 1
Final Vol: 114 2967*** 153
Signal=Protect/Rights=Include

Street Name:	Lawrence Expressway						Benton Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	114	3288	153	158	1913	69	136	146	158	250	275	471
Growth 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
Initial Bse:	114	3288	153	158	1913	69	136	146	158	250	275	471
Added Vol:	0	468	0	5	162	3	11	0	0	0	0	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	114	3756	153	163	2075	72	147	146	158	250	275	489
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	114	2967	153	163	1660	72	147	146	158	250	275	489
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	114	2967	153	163	1660	72	147	146	158	250	275	489
PCE 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
MLF 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
FinalVolume:	114	2967	153	163	1660	72	147	146	158	250	275	489
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.52	0.09	0.09	0.29	0.04	0.08	0.04	0.09	0.14	0.07	0.28
Crit Moves:		****		****			****					****
Green Time:	19.3	89.5	89.5	16.0	86.2	86.2	14.4	24.2	24.2	38.3	48.0	48.0
Volume/Cap:	0.61	1.05	0.18	1.05	0.61	0.09	1.05	0.29	0.67	0.67	0.27	1.05
Delay/Veh:	82.4	76.1	25.0	167.1	34.9	25.5	171.8	70.4	81.5	69.8	52.3	120.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	82.4	76.1	25.0	167.1	34.9	25.5	171.8	70.4	81.5	69.8	52.3	120.4
LOS by Move:	F	E-	C	F	C-	C	F	E	F	E	D-	F
HCM2kAvgQ:	6	59	5	12	22	2	13	4	10	14	6	36

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #75: Lawrence Expressway / Lochinvar Avenue

Signal=Protect/Rights=Include
Final Vol: 39 1874 84***
Lanes: 1 0 3 0 1

Signal=Protect
Rights=Include

Final Vol:	Lanes:
110	0
	1
36***	0
	0
60	1

Vol Cnt Date:	10/3/2018
Cycle Time (sec):	180
Loss Time (sec):	12
Critical V/C:	0.893
Avg Crit Del (sec/veh):	46.3
Avg Delay (sec/veh):	39.5
LOS:	D

Signal=Protect
Rights=Include

Lanes:	Final Vol:
0	182
0	
1!	35
0	
0	87***

Lanes: 1 0 3 0 1
Final Vol: 85 3027*** 162
Signal=Protect/Rights=Include

Street Name:	Lawrence Expressway						Lochinvar Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	85	3463	162	81	2205	37	102	36	60	87	35	169
Growth 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
Initial Bse:	85	3463	162	81	2205	37	102	36	60	87	35	169
Added Vol:	0	369	0	3	137	2	8	0	0	0	0	13
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	85	3832	162	84	2342	39	110	36	60	87	35	182
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	85	3027	162	84	1874	39	110	36	60	87	35	182
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	3027	162	84	1874	39	110	36	60	87	35	182
PCE 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
MLF 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
FinalVolume:	85	3027	162	84	1874	39	110	36	60	87	35	182
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.75	0.25	1.00	0.29	0.11	0.60
Final Sat.:	1750	5700	1750	1750	5700	1750	1356	444	1750	501	201	1048
Capacity Analysis Module:												
Vol/Sat:	0.05	0.53	0.09	0.05	0.33	0.02	0.08	0.08	0.03	0.17	0.17	0.17
Crit Moves:		****		****				****		****		
Green Time:	15.0	107	107.0	9.7	102	101.6	16.3	16.3	16.3	35.0	35.0	35.0
Volume/Cap:	0.58	0.89	0.16	0.89	0.58	0.04	0.89	0.89	0.38	0.89	0.89	0.89
Delay/Veh:	85.3	35.0	16.4	144.1	25.7	17.5	122.2	122	78.5	95.1	95.1	95.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	85.3	35.0	16.4	144.1	25.7	17.5	122.2	122	78.5	95.1	95.1	95.1
LOS by Move:	F	D+	B	F	C	B	F	F	E-	F	F	F
HCM2kAvgQ:	4	44	4	6	21	1	11	11	4	21	21	21

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #75: Lawrence Expressway / Lochinvar Avenue

Signal=Protect/Rights=Include
Final Vol: 40 1888 86***
Lanes: 1 0 3 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
113	0		Vol Cnt Date:	10/3/2018		0	187
			Cycle Time (sec):	180			
	1		Loss Time (sec):	12		0	
36***	0		Critical V/C:	0.910		1!	35
	0		Avg Crit Del (sec/veh):	48.0		0	
60	1		Avg Delay (sec/veh):	40.6		0	87***
			LOS:	D			

Lanes: 1 0 3 0 1
Final Vol: 85 3083*** 162
Signal=Protect/Rights=Include

Street Name:	Lawrence Expressway						Lochinvar Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	85	3463	162	81	2205	37	102	36	60	87	35	169
Growth 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
Initial Bse:	85	3463	162	81	2205	37	102	36	60	87	35	169
Added Vol:	0	439	0	5	155	3	11	0	0	0	0	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	85	3902	162	86	2360	40	113	36	60	87	35	187
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	85	3083	162	86	1888	40	113	36	60	87	35	187
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	3083	162	86	1888	40	113	36	60	87	35	187
PCE 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
MLF 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
FinalVolume:	85	3083	162	86	1888	40	113	36	60	87	35	187
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.76	0.24	1.00	0.28	0.11	0.61
Final Sat.:	1750	5700	1750	1750	5700	1750	1365	435	1750	493	198	1059
Capacity Analysis Module:												
Vol/Sat:	0.05	0.54	0.09	0.05	0.33	0.02	0.08	0.08	0.03	0.18	0.18	0.18
Crit Moves:		****		****				****		****		
Green Time:	14.9	107	107.0	9.7	102	101.8	16.4	16.4	16.4	34.9	34.9	34.9
Volume/Cap:	0.59	0.91	0.16	0.91	0.59	0.04	0.91	0.91	0.38	0.91	0.91	0.91
Delay/Veh:	85.6	36.4	16.4	148.6	25.7	17.4	126.1	126	78.5	98.4	98.4	98.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	85.6	36.4	16.4	148.6	25.7	17.4	126.1	126	78.5	98.4	98.4	98.4
LOS by Move:	F	D+	B	F	C	B	F	F	E-	F	F	F
HCM2kAvgQ:	4	46	4	6	22	1	11	11	4	21	21	21

Note: Queue reported is the number of cars per lane.

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Background AM

Intersection #76: Lawrence Expressway / Homestead Road (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 684 1426 176***
Lanes: 1 0 3 0 2

Signal=Protect Rights=Overlap (West approach)
Final Vol: / Lanes:
251*** 2
0
339 2
0
94 1

Vol Cnt Date: 1/11/2018
Cycle Time (sec): 181
Loss Time (sec): 12
Critical V/C: 0.936
Avg Crit Del (sec/veh): 99.7
Avg Delay (sec/veh): 75.3
LOS: E-

Signal=Protect Rights=Overlap (East approach)
Lanes: / Final Vol:
1 285
0
2 942***
0
2 348

Lanes: 2 0 3 0 1
Final Vol: 217 2797*** 179
Signal=Protect/Rights=Overlap

Street Name:	Lawrence Expressway						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	16	86	86	23	93	93	24	44	44	18	35	35
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 11 Jan 2018 <<												
Base Vol:	217	3174	179	171	1661	673	260	324	94	348	887	274
Growth 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
Initial Bse:	217	3174	179	171	1661	673	260	324	94	348	887	274
Added Vol:	0	367	0	5	121	11	-9	15	0	0	55	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	217	3541	179	176	1782	684	251	339	94	348	942	285
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	217	2797	179	176	1426	684	251	339	94	348	942	285
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	2797	179	176	1426	684	251	339	94	348	942	285
PCE 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
MLF 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
FinalVolume:	217	2797	179	176	1426	684	251	339	94	348	942	285
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.49	0.10	0.06	0.25	0.39	0.08	0.09	0.05	0.11	0.25	0.16
Crit Moves:		****		****			****				****	
Green Time:	15.8	85.1	104.4	22.7	92.0	115.7	23.7	42.0	57.8	19.3	37.6	60.3
Volume/Cap:	0.79	1.04	0.18	0.44	0.49	0.61	0.61	0.38	0.17	1.04	1.19	0.49
Delay/Veh:	95.9	78.8	18.4	74.9	29.6	20.5	77.7	59.5	44.9	140.4	172	49.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	95.9	78.8	18.4	74.9	29.6	20.5	77.7	59.5	44.9	140.4	172	49.2
LOS by Move:	F	E-	B-	E	C	C+	E-	E+	D	F	F	D
HCM2kAvgQ:	7	59	5	5	17	24	8	8	4	16	38	13

Note: Queue reported is the number of cars per lane.

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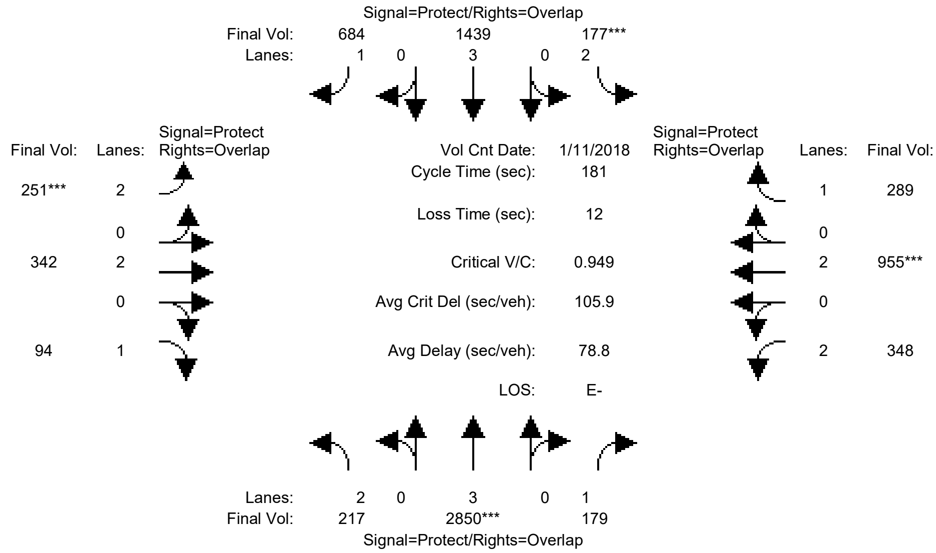
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #76: Lawrence Expressway / Homestead Road (CMP)



Street Name:	Lawrence Expressway						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	16	86	86	23	93	93	24	44	44	18	35	35
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 11 Jan 2018 <<												
Base Vol:	217	3174	179	171	1661	673	260	324	94	348	887	274
Growth 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
Initial Bse:	217	3174	179	171	1661	673	260	324	94	348	887	274
Added Vol:	0	433	0	6	138	11	-9	18	0	0	68	15
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	217	3607	179	177	1799	684	251	342	94	348	955	289
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	217	2850	179	177	1439	684	251	342	94	348	955	289
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	2850	179	177	1439	684	251	342	94	348	955	289
PCE 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
MLF 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
FinalVolume:	217	2850	179	177	1439	684	251	342	94	348	955	289
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.50	0.10	0.06	0.25	0.39	0.08	0.09	0.05	0.11	0.25	0.17
Crit Moves:		****		****			****				****	
Green Time:	15.8	85.1	104.4	22.7	92.0	115.7	23.7	42.0	57.8	19.3	37.6	60.3
Volume/Cap:	0.79	1.06	0.18	0.45	0.50	0.61	0.61	0.39	0.17	1.04	1.21	0.50
Delay/Veh:	95.9	85.8	18.4	74.9	29.7	20.5	77.7	59.6	44.9	140.4	179	49.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	95.9	85.8	18.4	74.9	29.7	20.5	77.7	59.6	44.9	140.4	179	49.4
LOS by Move:	F	F	B-	E	C	C+	E-	E+	D	F	F	D
HCM2kAvgQ:	7	62	5	5	17	24	8	8	4	16	39	14

Note: Queue reported is the number of cars per lane.

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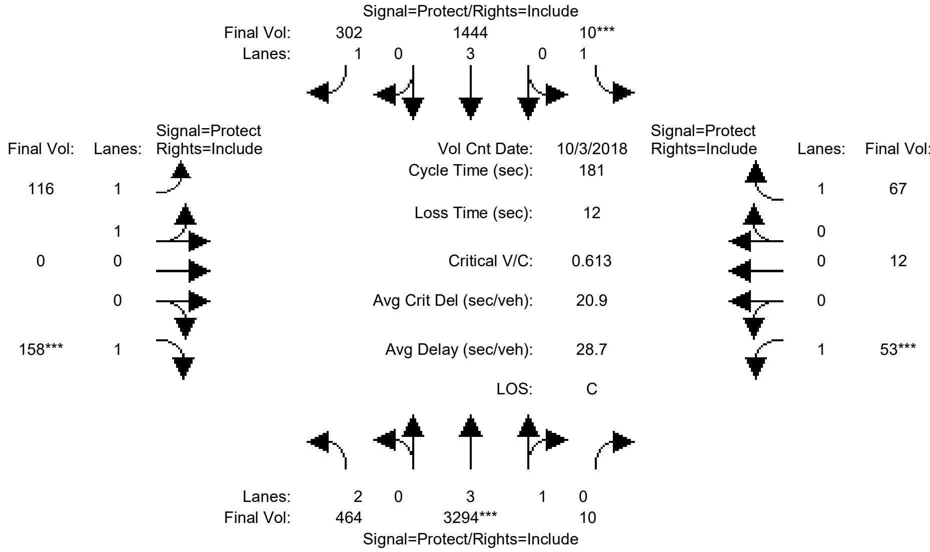
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #77: Lawrence Expressway / Lehigh Drive



Street Name:	Lawrence Expressway						Lehigh Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	464	3823	10	7	1689	300	108	0	158	53	12	54
Growth 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
Initial Bse:	464	3823	10	7	1689	300	108	0	158	53	12	54
Added Vol:	0	347	0	3	116	2	8	0	0	0	0	13
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	464	4170	10	10	1805	302	116	0	158	53	12	67
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	464	3294	10	10	1444	302	116	0	158	53	12	67
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	464	3294	10	10	1444	302	116	0	158	53	12	67
PCE 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
MLF 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
FinalVolume:	464	3294	10	10	1444	302	116	0	158	53	12	67
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.92	1.00	0.92	0.93	1.00	0.92	0.95	0.95	0.95
Lanes:	2.00	3.99	0.01	1.00	3.00	1.00	2.00	0.00	1.00	0.82	0.18	1.00
Final Sat.:	3150	7477	23	1750	5700	1750	3550	0	1750	1468	332	1800
Capacity Analysis Module:												
Vol/Sat:	0.15	0.44	0.44	0.01	0.25	0.17	0.03	0.00	0.09	0.04	0.04	0.04
Crit Moves:		****		****					****	****		
Green Time:	48.9	126	125.9	7.0	84.0	84.0	14.9	0.0	25.8	10.3	21.2	21.2
Volume/Cap:	0.55	0.63	0.63	0.15	0.55	0.37	0.40	0.00	0.63	0.63	0.31	0.32
Delay/Veh:	57.3	15.3	15.3	85.1	35.0	31.7	79.7	0.0	78.4	89.7	73.6	73.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.3	15.3	15.3	85.1	35.0	31.7	79.7	0.0	78.4	89.7	73.6	73.7
LOS by Move:	E+	B	B	F	D+	C	E-	A	E-	F	E	E
HCM2kAvgQ:	12	24	24	1	18	11	4	0	10	5	4	4

Note: Queue reported is the number of cars per lane.

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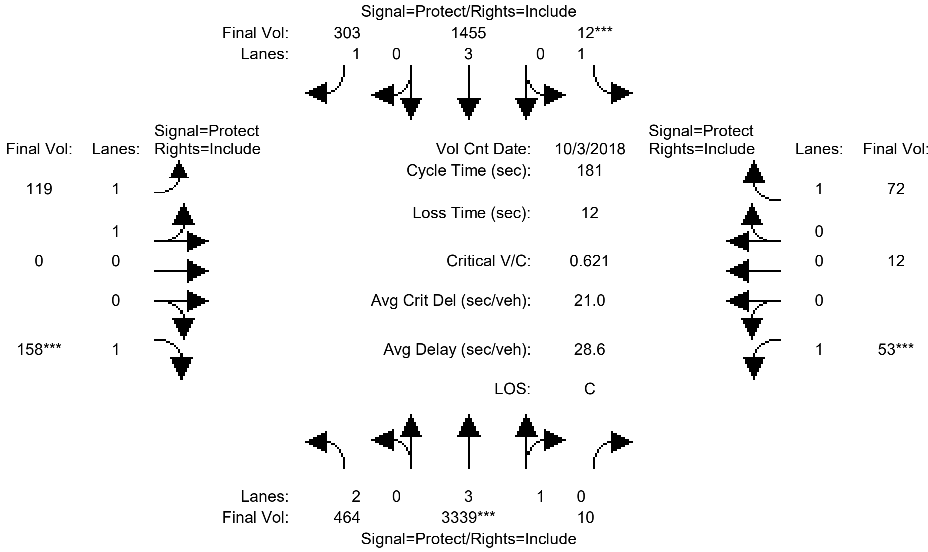
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #77: Lawrence Expressway / Lehigh Drive



Street Name:	Lawrence Expressway						Lehigh Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	464	3823	10	7	1689	300	108	0	158	53	12	54
Growth 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
Initial Bse:	464	3823	10	7	1689	300	108	0	158	53	12	54
Added Vol:	0	404	0	5	130	3	11	0	0	0	0	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	464	4227	10	12	1819	303	119	0	158	53	12	72
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	464	3339	10	12	1455	303	119	0	158	53	12	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	464	3339	10	12	1455	303	119	0	158	53	12	72
PCE 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
MLF 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
FinalVolume:	464	3339	10	12	1455	303	119	0	158	53	12	72
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.92	1.00	0.92	0.93	1.00	0.92	0.95	0.95	0.95
Lanes:	2.00	3.99	0.01	1.00	3.00	1.00	2.00	0.00	1.00	0.82	0.18	1.00
Final Sat.:	3150	7478	22	1750	5700	1750	3550	0	1750	1468	332	1800
Capacity Analysis Module:												
Vol/Sat:	0.15	0.45	0.45	0.01	0.26	0.17	0.03	0.00	0.09	0.04	0.04	0.04
Crit Moves:		****		****					****	****		
Green Time:	48.8	126	126.3	7.0	84.5	84.5	14.7	0.0	25.5	10.2	21.0	21.0
Volume/Cap:	0.55	0.64	0.64	0.18	0.55	0.37	0.41	0.00	0.64	0.64	0.31	0.34
Delay/Veh:	57.4	15.2	15.2	85.5	34.8	31.4	80.0	0.0	79.0	90.0	73.8	74.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.4	15.2	15.2	85.5	34.8	31.4	80.0	0.0	79.0	90.0	73.8	74.2
LOS by Move:	E+	B	B	F	C-	C	E-	A	E-	F	E	E
HCM2kAvgQ:	12	24	24	1	18	11	4	0	10	5	4	4

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #78: Lawrence Expressway / Pruneridge Avenue

Signal=Protect/Rights=Overlap
Final Vol: 104 1392 108***
Lanes: 1 0 3 0 2

Signal=Protect Rights=Overlap (West side)
Final Vol: / Lanes:
145 2
0
122*** 2
0
135 1

Signal=Protect Rights=Overlap (East side)
Lanes: / Final Vol:
1 368
0
2 481
0
2 345***

Vol Cnt Date: 1/11/2018
Cycle Time (sec): 166
Loss Time (sec): 12
Critical V/C: 0.737
Avg Crit Del (sec/veh): 41.5
Avg Delay (sec/veh): 41.1
LOS: D

Lanes: 2 0 3 0 1
Final Vol: 212 2897*** 157
Signal=Protect/Rights=Overlap

Street Name:	Lawrence Expressway						Pruneridge Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	16	89	89	13	87	87	14	22	22	25	34	34
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 11 Jan 2018 <<												
Base Vol:	212	3341	157	105	1629	102	137	122	135	345	481	355
Growth 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
Initial Bse:	212	3341	157	105	1629	102	137	122	135	345	481	355
Added Vol:	0	326	0	3	111	2	8	0	0	0	0	13
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	212	3667	157	108	1740	104	145	122	135	345	481	368
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	212	2897	157	108	1392	104	145	122	135	345	481	368
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	212	2897	157	108	1392	104	145	122	135	345	481	368
PCE 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
MLF 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
FinalVolume:	212	2897	157	108	1392	104	145	122	135	345	481	368
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.51	0.09	0.03	0.24	0.06	0.05	0.03	0.08	0.11	0.13	0.21
Crit Moves:		****		****				****		****		
Green Time:	16.6	94.0	119.0	13.0	90.4	104.1	13.7	22.0	38.6	25.0	33.3	46.3
Volume/Cap:	0.67	0.90	0.13	0.44	0.45	0.09	0.56	0.24	0.33	0.73	0.63	0.75
Delay/Veh:	77.6	35.5	7.4	74.3	22.9	12.3	75.9	64.8	53.4	72.8	62.5	61.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	77.6	35.5	7.4	74.3	22.9	12.3	75.9	64.8	53.4	72.8	62.5	61.2
LOS by Move:	E-	D+	A	E	C+	B	E-	E	D-	E	E	E
HCM2kAvgQ:	7	45	3	3	14	2	5	3	6	11	12	19

Note: Queue reported is the number of cars per lane.

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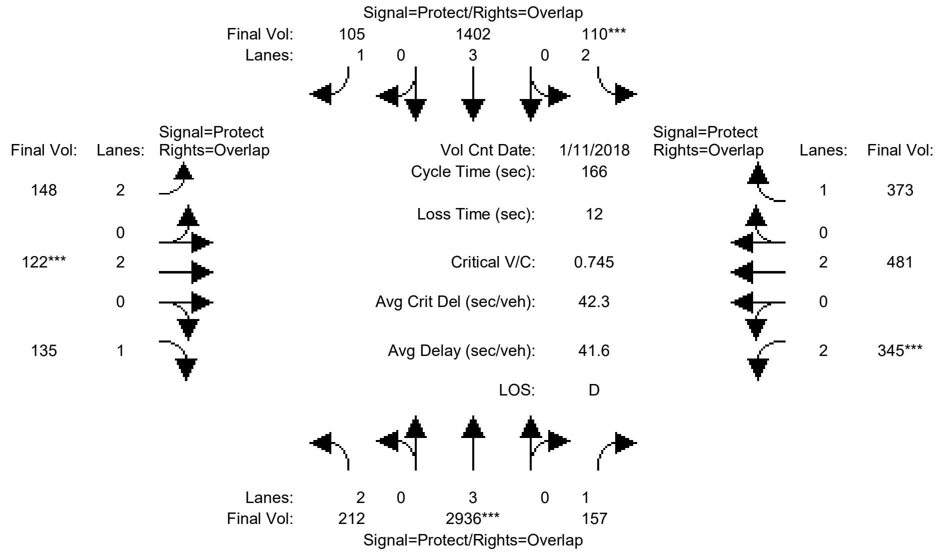
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #78: Lawrence Expressway / Pruneridge Avenue



Street Name:	Lawrence Expressway						Pruneridge Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	16	89	89	13	87	87	14	22	22	25	34	34
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 11 Jan 2018 <<												
Base Vol:	212	3341	157	105	1629	102	137	122	135	345	481	355
Growth 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
Initial Bse:	212	3341	157	105	1629	102	137	122	135	345	481	355
Added Vol:	0	375	0	5	123	3	11	0	0	0	0	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	212	3716	157	110	1752	105	148	122	135	345	481	373
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	212	2936	157	110	1402	105	148	122	135	345	481	373
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	212	2936	157	110	1402	105	148	122	135	345	481	373
PCE 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
MLF 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
FinalVolume:	212	2936	157	110	1402	105	148	122	135	345	481	373
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.52	0.09	0.03	0.25	0.06	0.05	0.03	0.08	0.11	0.13	0.21
Crit Moves:		****		****				****		****		
Green Time:	16.6	94.0	119.0	13.0	90.4	104.1	13.7	22.0	38.6	25.0	33.3	46.3
Volume/Cap:	0.67	0.91	0.13	0.45	0.45	0.10	0.57	0.24	0.33	0.73	0.63	0.76
Delay/Veh:	77.6	36.5	7.4	74.3	22.9	12.3	76.3	64.8	53.4	72.8	62.5	61.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	77.6	36.5	7.4	74.3	22.9	12.3	76.3	64.8	53.4	72.8	62.5	61.9
LOS by Move:	E-	D+	A	E	C+	B	E-	E	D-	E	E	E
HCM2kAvgQ:	7	47	3	3	14	2	5	3	6	11	12	20

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #79: Calabazas Boulevard / El Camino Real

Signal=Protect/Rights=Include
Final Vol: 109 58 73***
Lanes: 0 1 0 0 1

Signal=Protect
Rights=Include

Final Vol:	Lanes:				Lanes:	Final Vol:
43***	1		Vol Cnt Date:	10/2/2018	0	90
	0		Cycle Time (sec):	120	1	
703	3		Loss Time (sec):	12	2	1727***
	0		Critical V/C:	0.540	0	
7	1		Avg Crit Del (sec/veh):	20.0	1	54
			Avg Delay (sec/veh):	22.5		
			LOS:	C+		

Signal=Protect
Rights=Include

Lanes: 1 0 0 1 0
Final Vol: 20 76*** 95
Signal=Protect/Rights=Include

Street Name:	Calabazas Boulevard						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	14	76	95	73	58	103	41	615	5	54	1487	90
Growth 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
Initial Bse:	14	76	95	73	58	103	41	615	5	54	1487	90
Added Vol:	6	0	0	0	0	6	2	88	2	0	240	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	76	95	73	58	109	43	703	7	54	1727	90
User 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
PHF 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
PHF Volume:	20	76	95	73	58	109	43	703	7	54	1727	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	76	95	73	58	109	43	703	7	54	1727	90
PCE 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
MLF 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
FinalVolume:	20	76	95	73	58	109	43	703	7	54	1727	90
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	1.00	0.44	0.56	1.00	0.35	0.65	1.00	3.00	1.00	1.00	2.85	0.15
Final Sat.:	1750	800	1000	1750	625	1175	1750	5700	1750	1750	5322	277
Capacity Analysis Module:												
Vol/Sat:	0.01	0.10	0.10	0.04	0.09	0.09	0.02	0.12	0.00	0.03	0.32	0.32
Crit Moves:		****		****			****				****	
Green Time:	11.6	20.8	20.8	9.1	18.4	18.4	7.0	53.0	53.0	25.1	71.1	71.1
Volume/Cap:	0.12	0.55	0.55	0.55	0.61	0.61	0.42	0.28	0.01	0.15	0.55	0.55
Delay/Veh:	49.9	47.4	47.4	58.2	51.2	51.2	57.3	21.4	18.8	38.9	15.0	15.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.9	47.4	47.4	58.2	51.2	51.2	57.3	21.4	18.8	38.9	15.0	15.0
LOS by Move:	D	D	D	E+	D-	D-	E+	C+	B-	D+	B	B
HCM2kAvgQ:	1	7	7	4	7	7	2	5	0	2	13	13

Note: Queue reported is the number of cars per lane.

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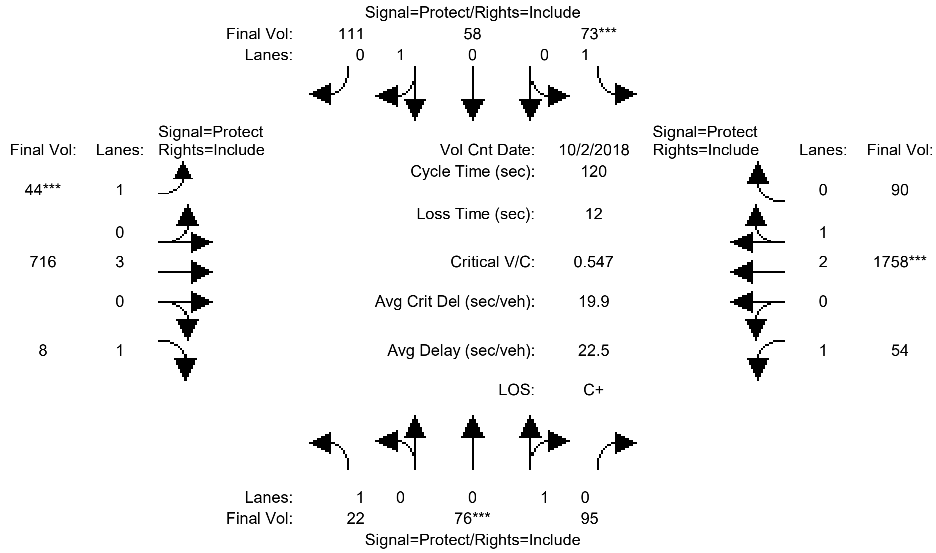
SJ17-1787
Background Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM Plus Project

Intersection #79: Calabazas Boulevard / El Camino Real



Street Name:	Calabazas Boulevard						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	14	76	95	73	58	103	41	615	5	54	1487	90
Growth 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
Initial Bse:	14	76	95	73	58	103	41	615	5	54	1487	90
Added Vol:	8	0	0	0	0	8	3	101	3	0	271	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	22	76	95	73	58	111	44	716	8	54	1758	90
User 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
PHF 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
PHF Volume:	22	76	95	73	58	111	44	716	8	54	1758	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	76	95	73	58	111	44	716	8	54	1758	90
PCE 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
MLF 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
FinalVolume:	22	76	95	73	58	111	44	716	8	54	1758	90
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	1.00	0.44	0.56	1.00	0.34	0.66	1.00	3.00	1.00	1.00	2.85	0.15
Final Sat.:	1750	800	1000	1750	618	1182	1750	5700	1750	1750	5327	273
Capacity Analysis Module:												
Vol/Sat:	0.01	0.10	0.10	0.04	0.09	0.09	0.03	0.13	0.00	0.03	0.33	0.33
Crit Moves:		****		****			****				****	
Green Time:	11.3	20.6	20.6	9.0	18.2	18.2	7.0	53.5	53.5	24.9	71.4	71.4
Volume/Cap:	0.13	0.55	0.55	0.55	0.62	0.62	0.43	0.28	0.01	0.15	0.55	0.55
Delay/Veh:	50.2	47.7	47.7	58.6	51.8	51.8	57.5	21.1	18.5	39.1	14.9	14.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.2	47.7	47.7	58.6	51.8	51.8	57.5	21.1	18.5	39.1	14.9	14.9
LOS by Move:	D	D	D	E+	D-	D-	E+	C+	B-	D	B	B
HCM2kAvgQ:	1	7	7	4	7	7	2	5	0	2	14	14

Note: Queue reported is the number of cars per lane.

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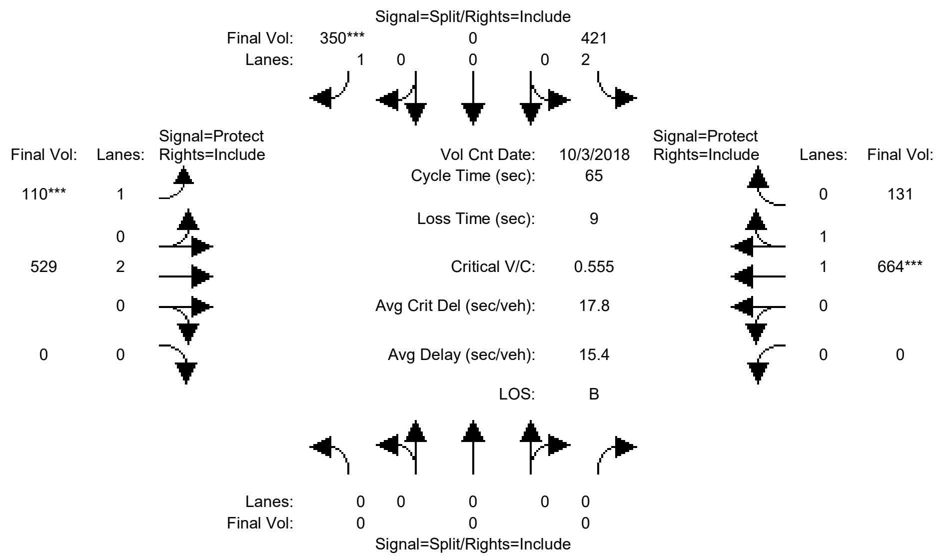
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #1: Ellis Street / Middlefield Road



Street Name:	Ellis Street						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	416	0	350	110	497	0	0	585	119
Growth 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
Initial Bse:	0	0	0	416	0	350	110	497	0	0	585	119
Added Vol:	0	0	0	5	0	0	0	32	0	0	79	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	421	0	350	110	529	0	0	664	131
User 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
PHF 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
PHF Volume:	0	0	0	421	0	350	110	529	0	0	664	131
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	421	0	350	110	529	0	0	664	131
PCE 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
MLF 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
FinalVolume:	0	0	0	421	0	350	110	529	0	0	664	131
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	1.66	0.34
Final Sat.:	0	0	0	3150	0	1750	1750	3800	0	0	3090	610
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.20	0.06	0.14	0.00	0.00	0.21	0.21
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	23.4	0.0	23.4	7.4	32.6	0.0	0.0	25.2	25.2
Volume/Cap:	0.00	0.00	0.00	0.37	0.00	0.55	0.55	0.28	0.00	0.00	0.55	0.55
Delay/Veh:	0.0	0.0	0.0	15.5	0.0	17.7	30.7	9.5	0.0	0.0	16.0	16.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	15.5	0.0	17.7	30.7	9.5	0.0	0.0	16.0	16.0
LOS by Move:	A	A	A	B	A	B	C	A	A	A	B	B
HCM2kAvgQ:	0	0	0	4	0	7	2	3	0	0	6	6

Note: Queue reported is the number of cars per lane.

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Intersection #1: Ellis Street / Middlefield Road

Signal=Split/Rights=Include
Final Vol: 350*** 0 423
Lanes: 1 0 0 0 2

Signal=Protect Rights=Include (East Bound)
Final Vol: 110***, 0, 541, 0, 0
Lanes: 1, 0, 2, 0, 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 65
Loss Time (sec): 9
Critical V/C: 0.564
Avg Crit Del (sec/veh): 17.7
Avg Delay (sec/veh): 15.4
LOS: B

Signal=Protect Rights=Include (West Bound)
Lanes: 0, 1, 1, 0, 0
Final Vol: 136, 689***, 0

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Ellis Street						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	416	0	350	110	497	0	0	585	119
Growth 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
Initial Bse:	0	0	0	416	0	350	110	497	0	0	585	119
Added Vol:	0	0	0	7	0	0	0	44	0	0	104	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	423	0	350	110	541	0	0	689	136
User 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
PHF 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
PHF Volume:	0	0	0	423	0	350	110	541	0	0	689	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	423	0	350	110	541	0	0	689	136
PCE 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
MLF 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
FinalVolume:	0	0	0	423	0	350	110	541	0	0	689	136
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	1.66	0.34
Final Sat.:	0	0	0	3150	0	1750	1750	3800	0	0	3090	610
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.20	0.06	0.14	0.00	0.00	0.22	0.22
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	23.1	0.0	23.1	7.2	32.9	0.0	0.0	25.7	25.7
Volume/Cap:	0.00	0.00	0.00	0.38	0.00	0.56	0.56	0.28	0.00	0.00	0.56	0.56
Delay/Veh:	0.0	0.0	0.0	15.9	0.0	18.1	31.2	9.3	0.0	0.0	15.8	15.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	15.9	0.0	18.1	31.2	9.3	0.0	0.0	15.8	15.8
LOS by Move:	A	A	A	B	A	B-	C	A	A	A	B	B
HCM2kAvgQ:	0	0	0	4	0	7	2	3	0	0	7	7

Note: Queue reported is the number of cars per lane.

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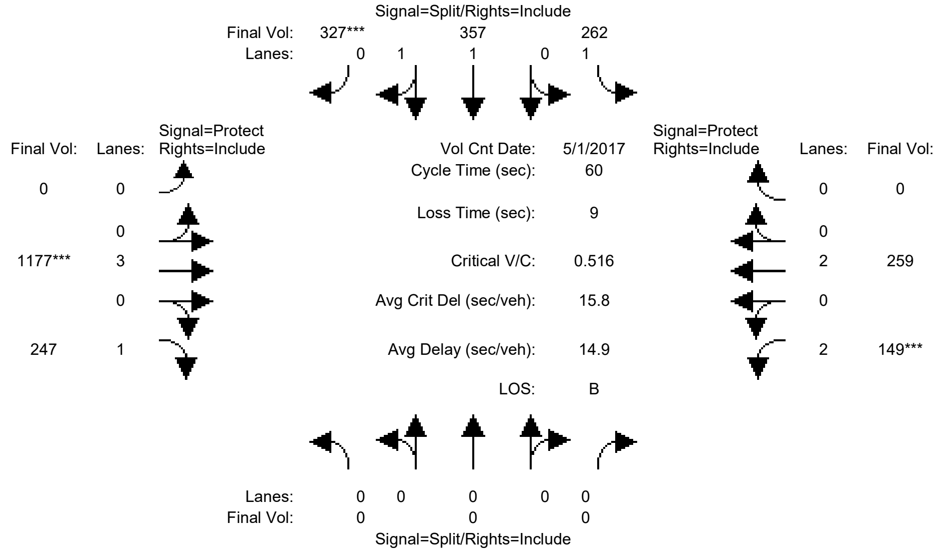
Intersection #2: SR 237 WB / Middlefield Road



Street Name:	SR 237 WB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	10	10	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	0	0	0	233	357	287	0	1140	247	129	208	0
Growth 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
Initial Bse:	0	0	0	233	357	287	0	1140	247	129	208	0
Added Vol:	0	0	0	29	0	40	0	37	0	20	51	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	262	357	327	0	1177	247	149	259	0
User 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
PHF 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
PHF Volume:	0	0	0	262	357	327	0	1177	247	149	259	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	262	357	327	0	1177	247	149	259	0
PCE 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
MLF 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
FinalVolume:	0	0	0	262	357	327	0	1177	247	149	259	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	1.02	0.98	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1750	1930	1768	0	5700	1750	3150	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.18	0.18	0.00	0.21	0.14	0.05	0.07	0.00
Crit Moves:						****		****		****		
Green Time:	0.0	0.0	0.0	20.8	20.8	20.8	0.0	23.2	23.2	7.0	30.2	0.0
Volume/Cap:	0.00	0.00	0.00	0.43	0.53	0.53	0.00	0.53	0.36	0.41	0.14	0.00
Delay/Veh:	0.0	0.0	0.0	15.6	16.2	16.2	0.0	14.5	13.5	25.3	8.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	15.6	16.2	16.2	0.0	14.5	13.5	25.3	8.0	0.0
LOS by Move:	A	A	A	B	B	B	A	B	B	C	A	A
HCM2kAvgQ:	0	0	0	4	6	6	0	6	3	2	1	0

Note: Queue reported is the number of cars per lane.

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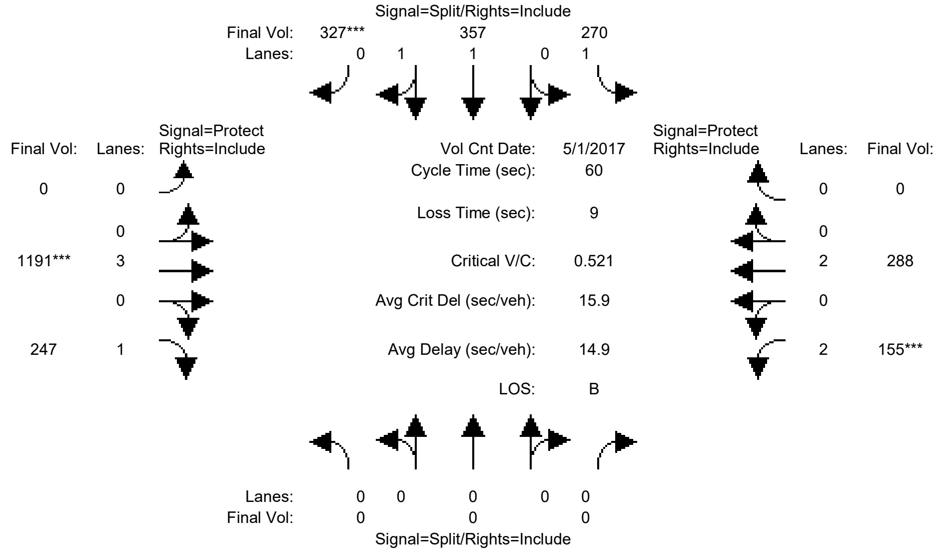
Intersection #2: SR 237 WB / Middlefield Road



Street Name:	SR 237 WB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	10	10	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	0	0	0	233	357	287	0	1140	247	129	208	0
Growth 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
Initial Bse:	0	0	0	233	357	287	0	1140	247	129	208	0
Added Vol:	0	0	0	37	0	40	0	51	0	26	80	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	270	357	327	0	1191	247	155	288	0
User 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
PHF 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
PHF Volume:	0	0	0	270	357	327	0	1191	247	155	288	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	270	357	327	0	1191	247	155	288	0
PCE 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
MLF 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
FinalVolume:	0	0	0	270	357	327	0	1191	247	155	288	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	1.02	0.98	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1750	1930	1768	0	5700	1750	3150	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.18	0.18	0.00	0.21	0.14	0.05	0.08	0.00
Crit Moves:						****		****		****		
Green Time:	0.0	0.0	0.0	20.7	20.7	20.7	0.0	23.3	23.3	7.0	30.3	0.0
Volume/Cap:	0.00	0.00	0.00	0.45	0.54	0.54	0.00	0.54	0.36	0.42	0.15	0.00
Delay/Veh:	0.0	0.0	0.0	15.8	16.3	16.3	0.0	14.4	13.4	25.4	8.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	15.8	16.3	16.3	0.0	14.4	13.4	25.4	8.0	0.0
LOS by Move:	A	A	A	B	B	B	A	B	B	C	A	A
HCM2kAvgQ:	0	0	0	5	6	6	0	6	3	2	1	0

Note: Queue reported is the number of cars per lane.

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Intersection #3: SR 237 EB / Middlefield Road

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Protect Rights=Include (West approach)
Final Vol: 468*** Lanes: 2
Lanes: 0
Final Vol: 912 Lanes: 2
Lanes: 0
Final Vol: 0 Lanes: 0

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 100
Loss Time (sec): 9
Critical V/C: 0.456
Avg Crit Del (sec/veh): 28.8
Avg Delay (sec/veh): 20.3
LOS: C+

Signal=Protect Rights=Include (East approach)
Lanes: 1 Final Vol: 266***
Lanes: 0
Lanes: 4 Final Vol: 337
Lanes: 0
Lanes: 0 Final Vol: 0

Lanes: 2 0 1 1 0
Final Vol: 81 271 151***
Signal=Split/Rights=Include

Street Name:	SR 237 EB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	81	271	141	0	0	0	459	854	0	0	266	223
Growth 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
Initial Bse:	81	271	141	0	0	0	459	854	0	0	266	223
Added Vol:	0	0	10	0	0	0	9	58	0	0	71	43
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	81	271	151	0	0	0	468	912	0	0	337	266
User 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
PHF 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
PHF Volume:	81	271	151	0	0	0	468	912	0	0	337	266
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	271	151	0	0	0	468	912	0	0	337	266
PCE 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
MLF 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
FinalVolume:	81	271	151	0	0	0	468	912	0	0	337	266
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	1.26	0.74	0.00	0.00	0.00	2.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	3150	2375	1323	0	0	0	3150	3800	0	0	7600	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.11	0.11	0.00	0.00	0.00	0.15	0.24	0.00	0.00	0.04	0.15
Crit Moves:			****				****					****
Green Time:	25.0	25.0	25.0	0.0	0.0	0.0	32.6	66.0	0.0	0.0	33.4	33.4
Volume/Cap:	0.10	0.46	0.46	0.00	0.00	0.00	0.46	0.36	0.00	0.00	0.13	0.46
Delay/Veh:	28.9	32.1	32.1	0.0	0.0	0.0	27.0	7.7	0.0	0.0	23.3	26.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.9	32.1	32.1	0.0	0.0	0.0	27.0	7.7	0.0	0.0	23.3	26.8
LOS by Move:	C	C-	C-	A	A	A	C	A	A	A	C	C
HCM2kAvgQ:	1	6	6	0	0	0	7	6	0	0	2	7

Note: Queue reported is the number of cars per lane.

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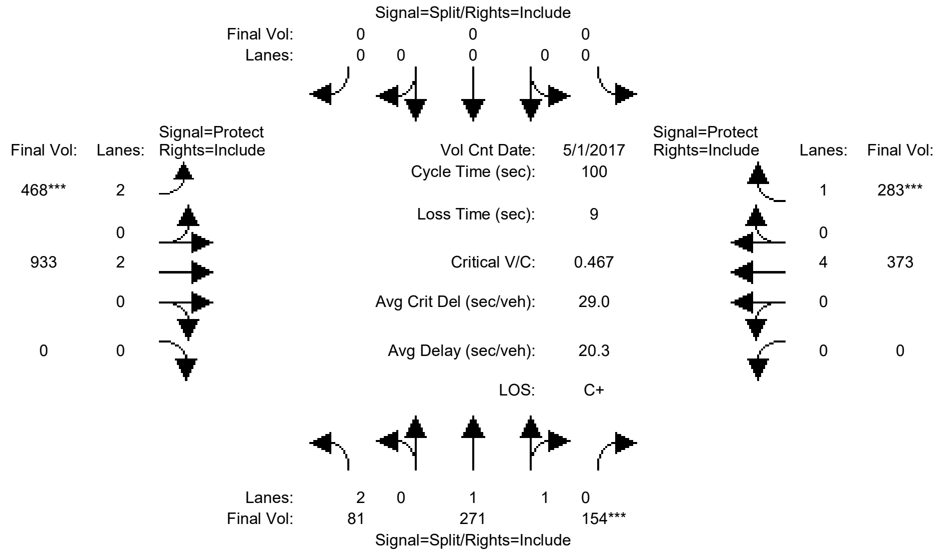
Intersection #3: SR 237 EB / Middlefield Road



Street Name:	SR 237 EB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	81	271	141	0	0	0	459	854	0	0	266	223
Growth 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
Initial Bse:	81	271	141	0	0	0	459	854	0	0	266	223
Added Vol:	0	0	13	0	0	0	9	79	0	0	107	60
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	81	271	154	0	0	0	468	933	0	0	373	283
User 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
PHF 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
PHF Volume:	81	271	154	0	0	0	468	933	0	0	373	283
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	271	154	0	0	0	468	933	0	0	373	283
PCE 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
MLF 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
FinalVolume:	81	271	154	0	0	0	468	933	0	0	373	283
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	1.26	0.74	0.00	0.00	0.00	2.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	3150	2358	1340	0	0	0	3150	3800	0	0	7600	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.11	0.11	0.00	0.00	0.00	0.15	0.25	0.00	0.00	0.05	0.16
Crit Moves:			****				****					****
Green Time:	24.6	24.6	24.6	0.0	0.0	0.0	31.8	66.4	0.0	0.0	34.6	34.6
Volume/Cap:	0.10	0.47	0.47	0.00	0.00	0.00	0.47	0.37	0.00	0.00	0.14	0.47
Delay/Veh:	29.2	32.5	32.5	0.0	0.0	0.0	27.7	7.6	0.0	0.0	22.5	26.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.2	32.5	32.5	0.0	0.0	0.0	27.7	7.6	0.0	0.0	22.5	26.1
LOS by Move:	C	C-	C-	A	A	A	C	A	A	A	C+	C
HCM2kAvgQ:	1	6	6	0	0	0	7	6	0	0	2	8

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #4: SR-85 SB Off-Ramp / Central Expressway

Signal=Split/Rights=Include

Final Vol: 18 0 382***
Lanes: 1 0 0 0 1

Signal=Protect Rights=Include (East Bound)

Final Vol:	Lanes:
0***	0
	0
1363	2
	0
0	0

Vol Cnt Date:	10/3/2018
Cycle Time (sec):	90
Loss Time (sec):	6
Critical V/C:	0.615
Avg Crit Del (sec/veh):	15.8
Avg Delay (sec/veh):	14.6
LOS:	B

Signal=Protect Rights=Include (West Bound)

Lanes:	Final Vol:
0	0
0	
2	1350***
0	
0	0

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	SR-85 SB Off-Ramp						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	0	0	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	372	0	18	0	1264	0	0	1225	0
Growth 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
Initial Bse:	0	0	0	372	0	18	0	1264	0	0	1225	0
Added Vol:	0	0	0	10	0	0	0	99	0	0	125	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	382	0	18	0	1363	0	0	1350	0
User 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
PHF 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
PHF Volume:	0	0	0	382	0	18	0	1363	0	0	1350	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	382	0	18	0	1363	0	0	1350	0
PCE 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
MLF 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
FinalVolume:	0	0	0	382	0	18	0	1363	0	0	1350	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	1750	0	1750	0	3800	0	0	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.22	0.00	0.01	0.00	0.36	0.00	0.00	0.36	0.00
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	32.0	0.0	32.0	0.0	52.0	0.0	0.0	52.0	0.0
Volume/Cap:	0.00	0.00	0.00	0.61	0.00	0.03	0.00	0.62	0.00	0.00	0.61	0.00
Delay/Veh:	0.0	0.0	0.0	25.8	0.0	18.9	0.0	13.0	0.0	0.0	12.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	25.8	0.0	18.9	0.0	13.0	0.0	0.0	12.9	0.0
LOS by Move:	A	A	A	C	A	B-	A	B	A	A	B	A
HCM2kAvgQ:	0	0	0	9	0	0	0	12	0	0	12	0

Note: Queue reported is the number of cars per lane.

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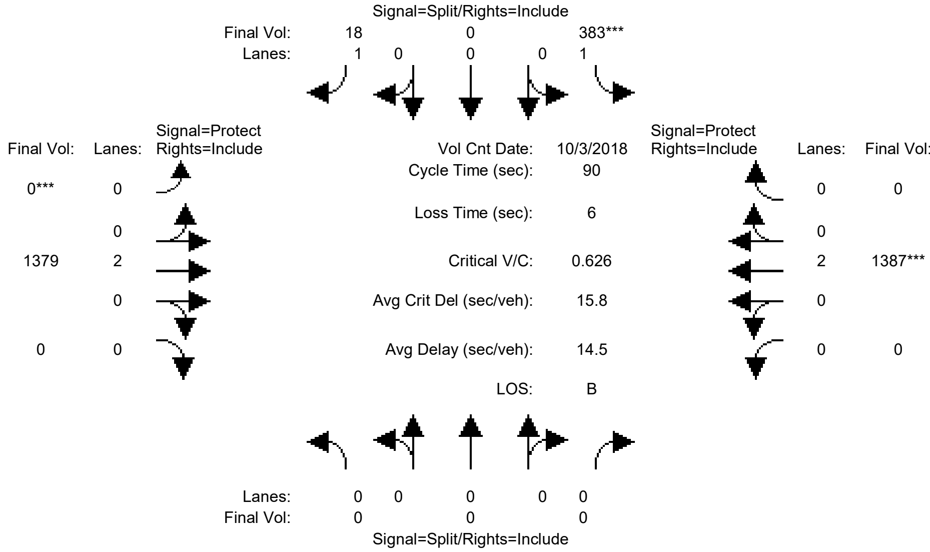
Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #4: SR-85 SB Off-Ramp / Central Expressway



Street Name:	SR-85 SB Off-Ramp						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	0	0	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	372	0	18	0	1264	0	0	1225	0
Growth 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
Initial Bse:	0	0	0	372	0	18	0	1264	0	0	1225	0
Added Vol:	0	0	0	11	0	0	0	115	0	0	162	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	383	0	18	0	1379	0	0	1387	0
User 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
PHF 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
PHF Volume:	0	0	0	383	0	18	0	1379	0	0	1387	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	383	0	18	0	1379	0	0	1387	0
PCE 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
MLF 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
FinalVolume:	0	0	0	383	0	18	0	1379	0	0	1387	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	1750	0	1750	0	3800	0	0	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.22	0.00	0.01	0.00	0.36	0.00	0.00	0.37	0.00
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	31.5	0.0	31.5	0.0	52.5	0.0	0.0	52.5	0.0
Volume/Cap:	0.00	0.00	0.00	0.63	0.00	0.03	0.00	0.62	0.00	0.00	0.63	0.00
Delay/Veh:	0.0	0.0	0.0	26.4	0.0	19.2	0.0	12.8	0.0	0.0	12.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	26.4	0.0	19.2	0.0	12.8	0.0	0.0	12.9	0.0
LOS by Move:	A	A	A	C	A	B-	A	B	A	A	B	A
HCM2kAvgQ:	0	0	0	10	0	0	0	12	0	0	12	0

Note: Queue reported is the number of cars per lane.

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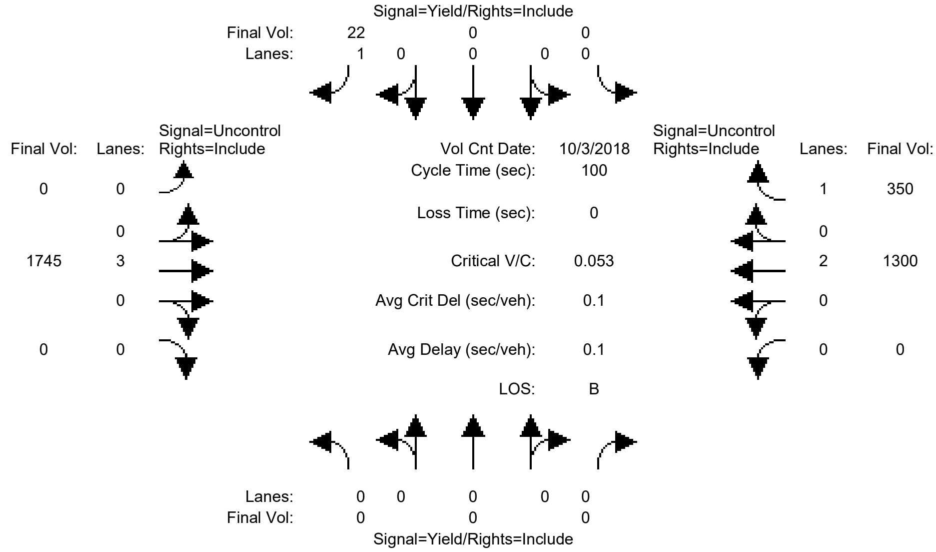
Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background PM

Intersection #5: SR-85 NB On-Ramp - Easy Street / Central Expressway




```
Street Name:  SR-85 NB On-Ramp - Easy Street          Central Expressway
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 3 Oct 2018 <<
Base Vol:       0    0     0     0    0    22     0 1636     0     0 1175   326
Growth 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
Initial Bse:    0    0     0     0    0    22     0 1636     0     0 1175   326
Added Vol:      0    0     0     0    0     0     0  109     0     0  125    24
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     0    0    22     0 1745     0     0 1300   350
User 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
PHF 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
PHF Volume:     0    0     0     0    0    22     0 1745     0     0 1300   350
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0     0    0    22     0 1745     0     0 1300   350
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx   650  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx   417  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx   417  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  0.05  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx  14.1 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     B     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:    xxxxxx            14.1            xxxxx            xxxxxx
ApproachLOS:         *               B                *                 *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0   0  0  0  0  1   0  0  3  0  0   0  0  2  0  1
Initial Vol:    0     0     0     0     0    22     0 1745     0     0 1300   350
ApproachDel:    xxxxxx             14.1           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Yield Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Controller not stop sign.
Signal Warrant Rule #2: [approach volume=22]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=3417]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0   0  0  0  0  1   0  0  3  0  0   0  0  2  0  1
Initial Vol:    0     0     0     0     0    22     0 1745     0     0 1300   350
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             3395
Minor Approach Volume:           22
Minor Approach Volume Threshold: -136 [less than minimum of 100]
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

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Cityline TIA
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Background Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background PM Plus Project

Intersection #5: SR-85 NB On-Ramp - Easy Street / Central Expressway

Signal=Yield/Rights=Include
Final Vol: 22 0 0
Lanes: 1 0 0 0 0

Final Vol:	Lanes:	Signal=Uncontrol Rights=Include			Signal=Uncontrol Rights=Include	Lanes:	Final Vol:
0	0		Vol Cnt Date:	10/3/2018		1	353
			Cycle Time (sec):	100			
	0		Loss Time (sec):	0		0	
1762	3		Critical V/C:	0.054		2	1337
	0		Avg Crit Del (sec/veh):	0.1		0	
0	0		Avg Delay (sec/veh):	0.1		0	0
			LOS:	B			

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Yield/Rights=Include

```
Street Name:  SR-85 NB On-Ramp - Easy Street         Central Expressway
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 3 Oct 2018 <<
Base Vol:        0    0     0     0    0    22     0 1636     0     0 1175   326
Growth 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
Initial Bse:     0    0     0     0    0    22     0 1636     0     0 1175   326
Added Vol:       0    0     0     0    0     0     0  126     0     0  162    27
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:     0    0     0     0    0    22     0 1762     0     0 1337   353
User 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
PHF 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
PHF Volume:      0    0     0     0    0    22     0 1762     0     0 1337   353
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:     0    0     0     0    0    22     0 1762     0     0 1337   353
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx   669  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx   405  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx   405  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  0.05  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx  14.4 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     B     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:    xxxxxx            14.4             xxxxxx            xxxxxx
ApproachLOS:         *               B                  *                 *
Note: Queue reported is the number of cars per lane.
                     Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```


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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0   0  0  0  0  1   0  0  3  0  0   0  0  2  0  1
Initial Vol:    0    0     0     0    0    22     0 1762     0     0 1337   353
ApproachDel:    xxxxxx             14.4            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Yield Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Controller not stop sign.
Signal Warrant Rule #2: [approach volume=22]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=3474]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0   0  0  0  0  1   0  0  3  0  0   0  0  2  0  1
Initial Vol:    0    0     0     0    0    22     0 1762     0     0 1337   353
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            3452
Minor Approach Volume:          22
Minor Approach Volume Threshold: -142 [less than minimum of 100]
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
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2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #6: Whisman Station Drive / Central Expressway (CMP)

Signal=Split/Rights=Overlap
Final Vol: 240 0 53***
Lanes: 1 0 0 0 2

Signal=Protect Rights=Include (East Bound)
Final Vol: 261*** 1478 0
Lanes: 1 0 3 0 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 100
Loss Time (sec): 9
Critical V/C: 0.454
Avg Crit Del (sec/veh): 19.1
Avg Delay (sec/veh): 11.9
LOS: B+

Signal=Protect Rights=Overlap (West Bound)
Lanes: 1 0 3 0 0
Final Vol: 224 1411*** 0

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Whisman Station Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	44	0	240	261	1369	0	0	1263	204
Growth 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
Initial Bse:	0	0	0	44	0	240	261	1369	0	0	1263	204
Added Vol:	0	0	0	9	0	0	0	109	0	0	148	20
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	53	0	240	261	1478	0	0	1411	224
User 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
PHF 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
PHF Volume:	0	0	0	53	0	240	261	1478	0	0	1411	224
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	53	0	240	261	1478	0	0	1411	224
PCE 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
MLF 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
FinalVolume:	0	0	0	53	0	240	261	1478	0	0	1411	224
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3150	0	1750	1750	5700	0	0	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.14	0.15	0.26	0.00	0.00	0.25	0.13
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	40.5	30.5	81.0	0.0	0.0	50.5	60.5
Volume/Cap:	0.00	0.00	0.00	0.17	0.00	0.34	0.49	0.32	0.00	0.00	0.49	0.21
Delay/Veh:	0.0	0.0	0.0	41.4	0.0	20.8	29.1	2.5	0.0	0.0	16.4	9.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	41.4	0.0	20.8	29.1	2.5	0.0	0.0	16.4	9.0
LOS by Move:	A	A	A	D	A	C+	C	A	A	A	B	A
HCM2kAvgQ:	0	0	0	1	0	6	7	4	0	0	9	3

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Background PM Plus Project

Intersection #6: Whisman Station Drive / Central Expressway (CMP)

Signal=Split/Rights=Overlap
Final Vol: 240 0 57***
Lanes: 1 0 0 0 2

Signal=Protect Rights=Include
Final Vol: Lanes:
261*** 1
0
1495 3
0
0 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 100
Loss Time (sec): 9
Critical V/C: 0.464
Avg Crit Del (sec/veh): 19.0
Avg Delay (sec/veh): 11.9
LOS: B+

Signal=Protect Rights=Overlap
Lanes: Final Vol:
1 232
0
3 1451***
0
0 0

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Whisman Station Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	44	0	240	261	1369	0	0	1263	204
Growth 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
Initial Bse:	0	0	0	44	0	240	261	1369	0	0	1263	204
Added Vol:	0	0	0	13	0	0	0	126	0	0	188	28
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	57	0	240	261	1495	0	0	1451	232
User 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
PHF 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
PHF Volume:	0	0	0	57	0	240	261	1495	0	0	1451	232
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	57	0	240	261	1495	0	0	1451	232
PCE 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
MLF 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
FinalVolume:	0	0	0	57	0	240	261	1495	0	0	1451	232
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3150	0	1750	1750	5700	0	0	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.14	0.15	0.26	0.00	0.00	0.25	0.13
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	39.9	29.9	81.0	0.0	0.0	51.1	61.1
Volume/Cap:	0.00	0.00	0.00	0.18	0.00	0.34	0.50	0.32	0.00	0.00	0.50	0.22
Delay/Veh:	0.0	0.0	0.0	41.5	0.0	21.2	29.6	2.5	0.0	0.0	16.2	8.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	41.5	0.0	21.2	29.6	2.5	0.0	0.0	16.2	8.8
LOS by Move:	A	A	A	D	A	C+	C	A	A	A	B	A
HCM2kAvgQ:	0	0	0	1	0	6	7	4	0	0	9	3

Note: Queue reported is the number of cars per lane.

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Intersection #7: Ferguson Drive / Central Expressway (CMP)

Signal=Split/Rights=Overlap
Final Vol: 80 0 78***
Lanes: 1 0 0 0 1

Signal=Protect Rights=Include (Eastbound)
Final Vol: 123***, 1265, 0
Lanes: 1, 0, 3, 0, 0

Signal=Protect Rights=Overlap (Westbound)
Lanes: 1, 0, 2, 0, 0
Final Vol: 89, 1594***, 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 90
Loss Time (sec): 9
Critical V/C: 0.594
Avg Crit Del (sec/veh): 12.4
Avg Delay (sec/veh): 8.7
LOS: A

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Ferguson Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	69	0	80	123	1147	0	0	1426	69
Growth 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
Initial Bse:	0	0	0	69	0	80	123	1147	0	0	1426	69
Added Vol:	0	0	0	9	0	0	0	118	0	0	168	20
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	78	0	80	123	1265	0	0	1594	89
User 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
PHF 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
PHF Volume:	0	0	0	78	0	80	123	1265	0	0	1594	89
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	78	0	80	123	1265	0	0	1594	89
PCE 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
MLF 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
FinalVolume:	0	0	0	78	0	80	123	1265	0	0	1594	89
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	5700	0	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.05	0.07	0.22	0.00	0.00	0.42	0.05
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	20.2	10.2	71.0	0.0	0.0	60.8	70.8
Volume/Cap:	0.00	0.00	0.00	0.40	0.00	0.20	0.62	0.28	0.00	0.00	0.62	0.06
Delay/Veh:	0.0	0.0	0.0	38.6	0.0	28.6	44.0	2.6	0.0	0.0	8.6	2.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	38.6	0.0	28.6	44.0	2.6	0.0	0.0	8.6	2.2
LOS by Move:	A	A	A	D+	A	C	D	A	A	A	A	A
HCM2kAvgQ:	0	0	0	3	0	2	4	3	0	0	12	1

Note: Queue reported is the number of cars per lane.

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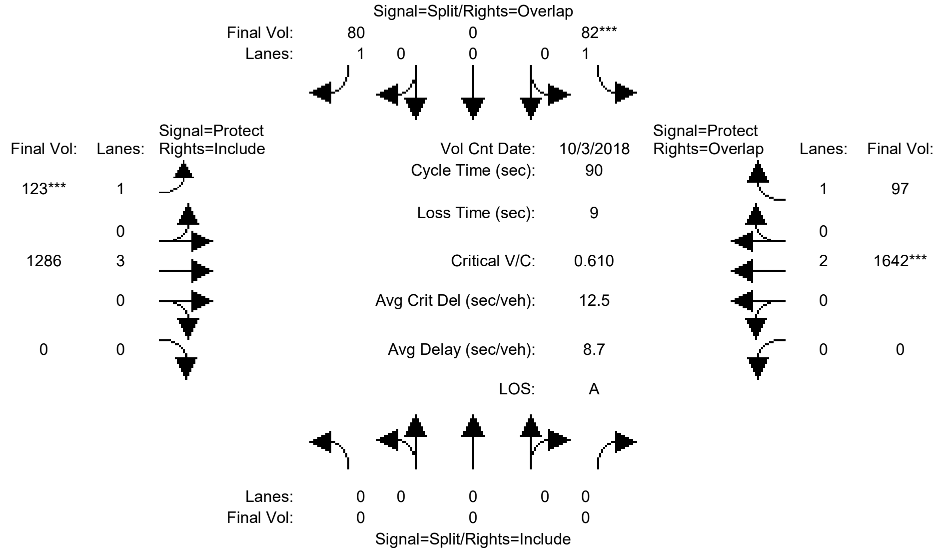
Intersection #7: Ferguson Drive / Central Expressway (CMP)



Street Name:	Ferguson Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	69	0	80	123	1147	0	0	1426	69
Growth 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
Initial Bse:	0	0	0	69	0	80	123	1147	0	0	1426	69
Added Vol:	0	0	0	13	0	0	0	139	0	0	216	28
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	82	0	80	123	1286	0	0	1642	97
User 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
PHF 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
PHF Volume:	0	0	0	82	0	80	123	1286	0	0	1642	97
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	82	0	80	123	1286	0	0	1642	97
PCE 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
MLF 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
FinalVolume:	0	0	0	82	0	80	123	1286	0	0	1642	97
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	5700	0	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.05	0.00	0.05	0.07	0.23	0.00	0.00	0.43	0.06
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	19.9	9.9	71.0	0.0	0.0	61.1	71.1
Volume/Cap:	0.00	0.00	0.00	0.42	0.00	0.21	0.64	0.29	0.00	0.00	0.64	0.07
Delay/Veh:	0.0	0.0	0.0	38.8	0.0	28.8	45.2	2.6	0.0	0.0	8.7	2.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	38.8	0.0	28.8	45.2	2.6	0.0	0.0	8.7	2.1
LOS by Move:	A	A	A	D+	A	C	D	A	A	A	A	A
HCM2kAvgQ:	0	0	0	3	0	2	4	3	0	0	13	1

Note: Queue reported is the number of cars per lane.

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Intersection #8: Bernardo Avenue / Central Expressway

Signal=Split/Rights=Overlap
Final Vol: 106 0 81***
Lanes: 1 0 0 0 1

Signal=Protect Rights=Include
Final Vol: Lanes:
38*** 1
0
1433 2
0
0 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 90
Loss Time (sec): 9
Critical V/C: 0.511
Avg Crit Del (sec/veh): 8.8
Avg Delay (sec/veh): 7.2
LOS: A

Signal=Protect Rights=Overlap
Lanes: Final Vol:
1 36
0
2 1488***
0
1 5

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Bernardo Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	72	0	106	38	1305	0	5	1299	16
Growth 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
Initial Bse:	0	0	0	72	0	106	38	1305	0	5	1299	16
Added Vol:	0	0	0	9	0	0	0	128	0	0	189	20
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	81	0	106	38	1433	0	5	1488	36
User 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
PHF 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
PHF Volume:	0	0	0	81	0	106	38	1433	0	5	1488	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	81	0	106	38	1433	0	5	1488	36
PCE 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
MLF 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
FinalVolume:	0	0	0	81	0	106	38	1433	0	5	1488	36
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	3800	0	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.05	0.00	0.06	0.02	0.38	0.00	0.00	0.39	0.02
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	17.0	7.0	70.5	0.0	0.5	64.0	74.0
Volume/Cap:	0.00	0.00	0.00	0.42	0.00	0.32	0.28	0.48	0.00	0.48	0.55	0.03
Delay/Veh:	0.0	0.0	0.0	38.7	0.0	32.1	40.2	3.5	0.0	75.9	6.4	1.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	38.7	0.0	32.1	40.2	3.5	0.0	75.9	6.4	1.5
LOS by Move:	A	A	A	D+	A	C-	D	A	A	E-	A	A
HCM2kAvgQ:	0	0	0	3	0	3	1	7	0	0	10	0

Note: Queue reported is the number of cars per lane.

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Intersection #8: Bernardo Avenue / Central Expressway

Signal=Split/Rights=Overlap
Final Vol: 106 0 85***
Lanes: 1 0 0 0 1

Signal=Protect Rights=Include (Eastbound)
Final Vol: 38*** / 1456 / 0
Lanes: 1 / 0 / 2 / 0 / 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 90
Loss Time (sec): 9
Critical V/C: 0.529
Avg Crit Del (sec/veh): 9.0
Avg Delay (sec/veh): 7.3
LOS: A

Signal=Protect Rights=Overlap (Westbound)
Lanes: 1 / 0 / 2 / 0 / 1
Final Vol: 44 / 1542*** / 5

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Bernardo Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	72	0	106	38	1305	0	5	1299	16
Growth 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
Initial Bse:	0	0	0	72	0	106	38	1305	0	5	1299	16
Added Vol:	0	0	0	13	0	0	0	151	0	0	243	28
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	85	0	106	38	1456	0	5	1542	44
User 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
PHF 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
PHF Volume:	0	0	0	85	0	106	38	1456	0	5	1542	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	85	0	106	38	1456	0	5	1542	44
PCE 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
MLF 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
FinalVolume:	0	0	0	85	0	106	38	1456	0	5	1542	44
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	3800	0	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.05	0.00	0.06	0.02	0.38	0.00	0.00	0.41	0.03
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	17.0	7.0	70.5	0.0	0.5	64.0	74.0
Volume/Cap:	0.00	0.00	0.00	0.44	0.00	0.32	0.28	0.49	0.00	0.49	0.57	0.03
Delay/Veh:	0.0	0.0	0.0	38.9	0.0	32.1	40.2	3.6	0.0	77.1	6.6	1.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	38.9	0.0	32.1	40.2	3.6	0.0	77.1	6.6	1.5
LOS by Move:	A	A	A	D+	A	C-	D	A	A	E-	A	A
HCM2kAvgQ:	0	0	0	3	0	3	1	7	0	0	10	0

Note: Queue reported is the number of cars per lane.

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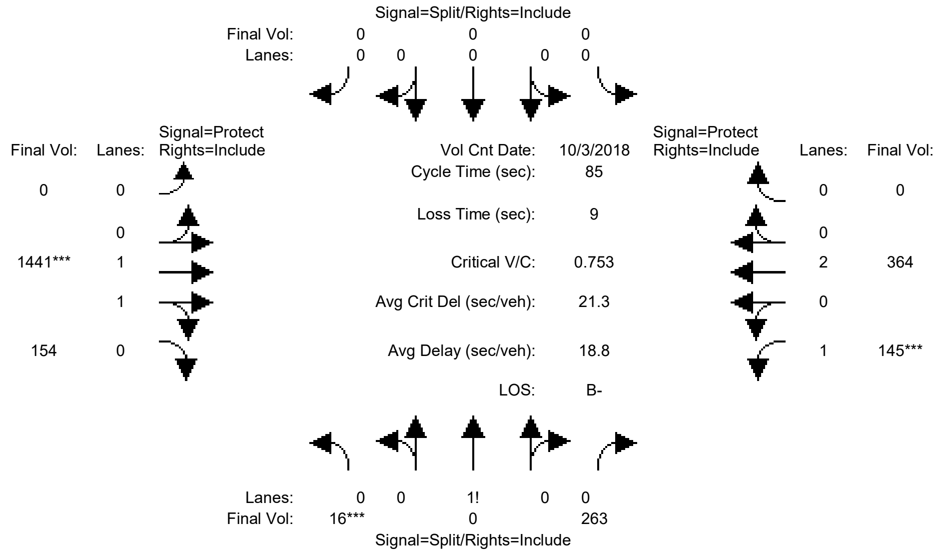
Intersection #9: Moorpark Way / Evelyn Avenue



Street Name:	Moorpark Way						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	16	0	250	0	0	0	0	1372	154	114	304	0
Growth 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
Initial Bse:	16	0	250	0	0	0	0	1372	154	114	304	0
Added Vol:	0	0	13	0	0	0	0	69	0	31	60	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	0	263	0	0	0	0	1441	154	145	364	0
User 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
PHF 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
PHF Volume:	16	0	263	0	0	0	0	1441	154	145	364	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	0	263	0	0	0	0	1441	154	145	364	0
PCE 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
MLF 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
FinalVolume:	16	0	263	0	0	0	0	1441	154	145	364	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	0.06	0.00	0.94	0.00	0.00	0.00	0.00	1.80	0.20	1.00	2.00	0.00
Final Sat.:	100	0	1650	0	0	0	0	3342	357	1750	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.16	0.00	0.16	0.00	0.00	0.00	0.00	0.43	0.43	0.08	0.10	0.00
Crit Moves:	****							****		****		
Green Time:	18.0	0.0	18.0	0.0	0.0	0.0	0.0	48.7	48.7	9.4	58.0	0.0
Volume/Cap:	0.75	0.00	0.75	0.00	0.00	0.00	0.00	0.75	0.75	0.75	0.14	0.00
Delay/Veh:	39.9	0.0	39.9	0.0	0.0	0.0	0.0	15.2	15.2	52.1	4.8	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.9	0.0	39.9	0.0	0.0	0.0	0.0	15.2	15.2	52.1	4.8	0.0
LOS by Move:	D	A	D	A	A	A	A	B	B	D-	A	A
HCM2kAvgQ:	9	0	9	0	0	0	0	17	17	4	2	0

Note: Queue reported is the number of cars per lane.

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Intersection #9: Moorpark Way / Evelyn Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
0	0		Vol Cnt Date:	10/3/2018		0	0
			Cycle Time (sec):	85			
	0		Loss Time (sec):	9		0	
1449***	1		Critical V/C:	0.766		2	386
	1		Avg Crit Del (sec/veh):	22.1		0	
154	0		Avg Delay (sec/veh):	19.4		1	157***
			LOS:	B-			

Lanes: 0 0 1! 0 0
Final Vol: 16 0 267***
Signal=Split/Rights=Include

Street Name:	Moorpark Way						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	16	0	250	0	0	0	0	1372	154	114	304	0
Growth 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
Initial Bse:	16	0	250	0	0	0	0	1372	154	114	304	0
Added Vol:	0	0	17	0	0	0	0	77	0	43	82	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	0	267	0	0	0	0	1449	154	157	386	0
User 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
PHF 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
PHF Volume:	16	0	267	0	0	0	0	1449	154	157	386	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	0	267	0	0	0	0	1449	154	157	386	0
PCE 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
MLF 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
FinalVolume:	16	0	267	0	0	0	0	1449	154	157	386	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	0.06	0.00	0.94	0.00	0.00	0.00	0.00	1.80	0.20	1.00	2.00	0.00
Final Sat.:	99	0	1651	0	0	0	0	3344	355	1750	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.16	0.00	0.16	0.00	0.00	0.00	0.00	0.43	0.43	0.09	0.10	0.00
Crit Moves:			****					****		****		
Green Time:	17.9	0.0	17.9	0.0	0.0	0.0	0.0	48.1	48.1	10.0	58.1	0.0
Volume/Cap:	0.77	0.00	0.77	0.00	0.00	0.00	0.00	0.77	0.77	0.77	0.15	0.00
Delay/Veh:	40.8	0.0	40.8	0.0	0.0	0.0	0.0	15.9	15.9	52.2	4.8	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.8	0.0	40.8	0.0	0.0	0.0	0.0	15.9	15.9	52.2	4.8	0.0
LOS by Move:	D	A	D	A	A	A	A	B	B	D-	A	A
HCM2kAvgQ:	9	0	9	0	0	0	0	18	18	5	2	0

Note: Queue reported is the number of cars per lane.

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Intersection #10: Bernardo Avenue / Evelyn Avenue

Signal=Split/Rights=Include

Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Protect
Rights=Overlap

Final Vol:	Lanes:
8	1
	0
990***	1
	0
660	1

Vol Cnt Date:	10/3/2018
Cycle Time (sec):	85
Loss Time (sec):	9
Critical V/C:	0.815
Avg Crit Del (sec/veh):	26.6
Avg Delay (sec/veh):	18.1
LOS:	B-

Signal=Protect
Rights=Include

Lanes:	Final Vol:
0	0
0	
1	369
0	
1	220***

Lanes: 1 0 0 0 1
Final Vol: 143*** 0 115
Signal=Split/Rights=Include

Street Name:	Bernardo Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	143	0	102	0	0	0	8	908	660	189	278	0
Growth 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
Initial Bse:	143	0	102	0	0	0	8	908	660	189	278	0
Added Vol:	0	0	13	0	0	0	0	82	0	31	91	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	143	0	115	0	0	0	8	990	660	220	369	0
User 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
PHF 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
PHF Volume:	143	0	115	0	0	0	8	990	660	220	369	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	0	115	0	0	0	8	990	660	220	369	0
PCE 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
MLF 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
FinalVolume:	143	0	115	0	0	0	8	990	660	220	369	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	1750	1900	1750	1750	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.07	0.00	0.00	0.00	0.00	0.52	0.38	0.13	0.19	0.00
Crit Moves:	****							****		****		
Green Time:	10.0	0.0	10.0	0.0	0.0	0.0	1.5	53.2	63.2	12.8	64.5	0.0
Volume/Cap:	0.69	0.00	0.56	0.00	0.00	0.00	0.26	0.83	0.51	0.83	0.26	0.00
Delay/Veh:	45.9	0.0	38.8	0.0	0.0	0.0	45.5	17.6	4.8	54.8	3.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.9	0.0	38.8	0.0	0.0	0.0	45.5	17.6	4.8	54.8	3.2	0.0
LOS by Move:	D	A	D+	A	A	A	D	B	A	D-	A	A
HCM2kAvgQ:	5	0	4	0	0	0	0	20	7	6	3	0

Note: Queue reported is the number of cars per lane.

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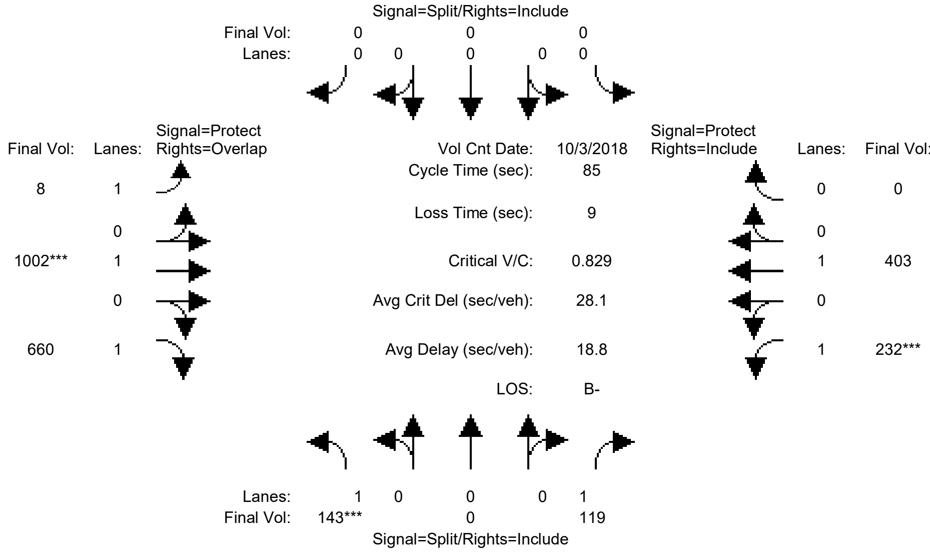
Intersection #10: Bernardo Avenue / Evelyn Avenue



Street Name:	Bernardo Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	143	0	102	0	0	0	8	908	660	189	278	0
Growth 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
Initial Bse:	143	0	102	0	0	0	8	908	660	189	278	0
Added Vol:	0	0	17	0	0	0	0	94	0	43	125	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	143	0	119	0	0	0	8	1002	660	232	403	0
User 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
PHF 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
PHF Volume:	143	0	119	0	0	0	8	1002	660	232	403	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	0	119	0	0	0	8	1002	660	232	403	0
PCE 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
MLF 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
FinalVolume:	143	0	119	0	0	0	8	1002	660	232	403	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	1750	1900	1750	1750	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.07	0.00	0.00	0.00	0.00	0.53	0.38	0.13	0.21	0.00
Crit Moves:	****							****		****		
Green Time:	10.0	0.0	10.0	0.0	0.0	0.0	1.4	52.7	62.7	13.3	64.6	0.0
Volume/Cap:	0.69	0.00	0.58	0.00	0.00	0.00	0.28	0.85	0.51	0.85	0.28	0.00
Delay/Veh:	45.9	0.0	39.5	0.0	0.0	0.0	46.6	19.0	5.0	56.4	3.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.9	0.0	39.5	0.0	0.0	0.0	46.6	19.0	5.0	56.4	3.2	0.0
LOS by Move:	D	A	D	A	A	A	D	B-	A	E+	A	A
HCM2kAvgQ:	5	0	4	0	0	0	0	21	8	7	3	0

Note: Queue reported is the number of cars per lane.

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Intersection #11: Sylvan Avenue / El Camino Real

Signal=Split/Rights=Include
Final Vol: 157 148 273***
Lanes: 1 0 1 0 1

Signal=Protect Rights=Include (Eastbound)
Final Vol: 172 / 2090*** / 395
Lanes: 1 / 0 / 3 / 0 / 1

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 130
Loss Time (sec): 12
Critical V/C: 0.723
Avg Crit Del (sec/veh): 34.1
Avg Delay (sec/veh): 35.6
LOS: D+

Signal=Protect Rights=Include (Westbound)
Lanes: 0 / 1 / 2 / 0 / 2
Final Vol: 111 / 1229 / 66***

Lanes: 2 0 0 1 0
Final Vol: 338 110*** 93
Signal=Split/Rights=Include

Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	338	110	90	268	148	157	172	1932	395	59	974	99
Growth 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
Initial Bse:	338	110	90	268	148	157	172	1932	395	59	974	99
Added Vol:	0	0	3	5	0	0	0	158	0	7	255	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	338	110	93	273	148	157	172	2090	395	66	1229	111
User 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
PHF 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
PHF Volume:	338	110	93	273	148	157	172	2090	395	66	1229	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	338	110	93	273	148	157	172	2090	395	66	1229	111
PCE 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
MLF 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
FinalVolume:	338	110	93	273	148	157	172	2090	395	66	1229	111
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.95	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.99	0.95
Lanes:	2.00	0.54	0.46	1.00	1.00	1.00	1.00	3.00	1.00	2.00	2.74	0.26
Final Sat.:	3150	975	825	1750	1900	1750	1750	5700	1750	3150	5136	464
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.16	0.08	0.09	0.10	0.37	0.23	0.02	0.24	0.24
Crit Moves:		****		****				****		****		
Green Time:	19.7	19.7	19.7	27.3	27.3	27.3	20.7	64.0	64.0	7.0	50.4	50.4
Volume/Cap:	0.71	0.74	0.74	0.74	0.37	0.43	0.62	0.74	0.46	0.39	0.62	0.62
Delay/Veh:	57.3	63.3	63.3	56.1	44.6	45.4	55.1	27.5	22.0	60.9	32.6	32.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.3	63.3	63.3	56.1	44.6	45.4	55.1	27.5	22.0	60.9	32.6	32.6
LOS by Move:	E+	E	E	E+	D	D	E+	C	C+	E	C-	C-
HCM2kAvgQ:	9	10	10	12	5	6	8	23	11	1	14	14

Note: Queue reported is the number of cars per lane.

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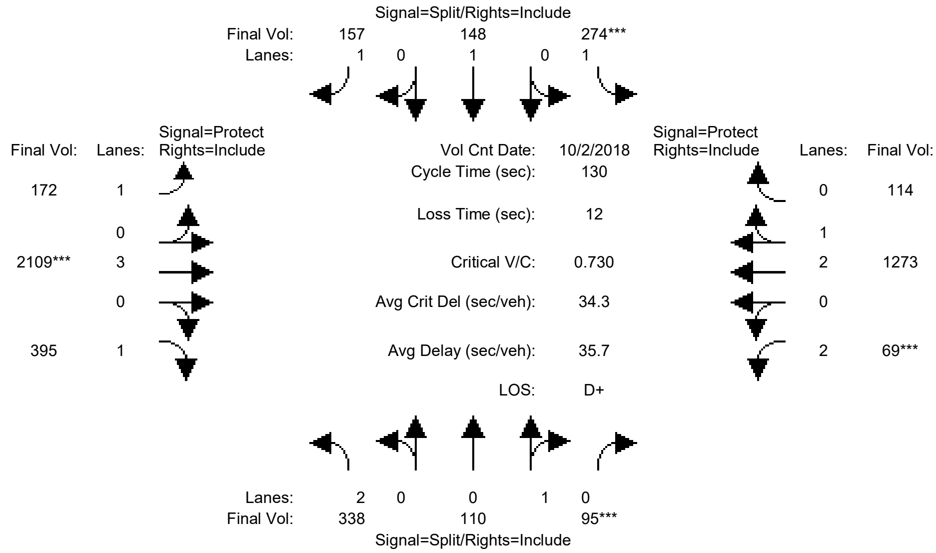
Background PM Plus Project

Intersection #11: Sylvan Avenue / El Camino Real



Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	338	110	90	268	148	157	172	1932	395	59	974	99
Growth 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
Initial Bse:	338	110	90	268	148	157	172	1932	395	59	974	99
Added Vol:	0	0	5	6	0	0	0	177	0	10	299	15
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	338	110	95	274	148	157	172	2109	395	69	1273	114
User 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
PHF 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
PHF Volume:	338	110	95	274	148	157	172	2109	395	69	1273	114
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	338	110	95	274	148	157	172	2109	395	69	1273	114
PCE 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
MLF 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
FinalVolume:	338	110	95	274	148	157	172	2109	395	69	1273	114
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.95	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.99	0.95
Lanes:	2.00	0.54	0.46	1.00	1.00	1.00	1.00	3.00	1.00	2.00	2.74	0.26
Final Sat.:	3150	966	834	1750	1900	1750	1750	5700	1750	3150	5139	460
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.16	0.08	0.09	0.10	0.37	0.23	0.02	0.25	0.25
Crit Moves:			****	****				****		****		
Green Time:	19.7	19.7	19.7	27.1	27.1	27.1	20.2	64.1	64.1	7.0	50.9	50.9
Volume/Cap:	0.71	0.75	0.75	0.75	0.37	0.43	0.63	0.75	0.46	0.41	0.63	0.63
Delay/Veh:	57.2	63.8	63.8	56.6	44.7	45.5	56.2	27.7	21.9	61.1	32.6	32.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.2	63.8	63.8	56.6	44.7	45.5	56.2	27.7	21.9	61.1	32.6	32.6
LOS by Move:	E+	E	E	E+	D	D	E+	C	C+	E	C-	C-
HCM2kAvgQ:	9	10	10	13	5	6	8	23	11	2	15	15

Note: Queue reported is the number of cars per lane.

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Background PM

Intersection #12: Bernardo Avenue / El Camino Real

Signal=Protect/Rights=Include
Final Vol: 224 319*** 105
Lanes: 0 1 1 0 1

Final Vol: Lanes: Signal=Protect Rights=Include

353 1
0
1633*** 2
1
203 0

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 130
Loss Time (sec): 12
Critical V/C: 0.691
Avg Crit Del (sec/veh): 36.4
Avg Delay (sec/veh): 38.8
LOS: D+

Signal=Protect Rights=Include Lanes: Final Vol:

0 127
1
2 1056
0
1 182***

Lanes: 2 0 1 0 1
Final Vol: 153*** 177 88
Signal=Protect/Rights=Include

Street Name:	Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	153	177	85	100	319	224	353	1467	203	175	782	115
Growth 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
Initial Bse:	153	177	85	100	319	224	353	1467	203	175	782	115
Added Vol:	0	0	3	5	0	0	0	166	0	7	274	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	153	177	88	105	319	224	353	1633	203	182	1056	127
User 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
PHF 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
PHF Volume:	153	177	88	105	319	224	353	1633	203	182	1056	127
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	177	88	105	319	224	353	1633	203	182	1056	127
PCE 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
MLF 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
FinalVolume:	153	177	88	105	319	224	353	1633	203	182	1056	127
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	2.00	1.00	1.00	1.00	1.15	0.85	1.00	2.66	0.34	1.00	2.67	0.33
Final Sat.:	3150	1900	1750	1750	2173	1526	1750	4980	619	1750	4998	601
Capacity Analysis Module:												
Vol/Sat:	0.05	0.09	0.05	0.06	0.15	0.15	0.20	0.33	0.33	0.10	0.21	0.21
Crit Moves:	****				****			****		****		
Green Time:	9.1	22.4	22.4	14.4	27.6	27.6	39.7	61.7	61.7	19.6	41.6	41.6
Volume/Cap:	0.69	0.54	0.29	0.54	0.69	0.69	0.66	0.69	0.69	0.69	0.66	0.66
Delay/Veh:	68.0	51.0	47.5	57.8	49.9	49.9	42.4	27.5	27.5	60.0	39.1	39.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	68.0	51.0	47.5	57.8	49.9	49.9	42.4	27.5	27.5	60.0	39.1	39.1
LOS by Move:	E	D	D	E+	D	D	D	C	C	E+	D	D
HCM2kAvgQ:	5	7	3	5	11	11	13	19	19	7	13	13

Note: Queue reported is the number of cars per lane.

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2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #12: Bernardo Avenue / El Camino Real

Signal=Protect/Rights=Include
Final Vol: 224 319*** 106
Lanes: 0 1 1 0 1

Westbound (left side): Final Vol: / Lanes: / Signal=Protect Rights=Include
353 1
0
1655*** 2
1
203 0

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 130
Loss Time (sec): 12
Critical V/C: 0.697
Avg Crit Del (sec/veh): 36.6
Avg Delay (sec/veh): 38.9
LOS: D+

Signal=Protect Rights=Include / Lanes: / Final Vol:
0 130
1
2 1105
0
1 185***

Lanes: 2 0 1 0 1
Final Vol: 153*** 177 90
Signal=Protect/Rights=Include

```
Street Name:         Bernardo Avenue                  El Camino Real
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Min. Green:    7   10    10     7   10    10     7   10    10     7   10    10
Y+R:         4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 2 Oct 2018 <<
Base Vol:    153  177    85   100  319   224   353 1467   203   175  782   115
Growth 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
Initial Bse: 153  177    85   100  319   224   353 1467   203   175  782   115
Added Vol:     0    0     5     6    0     0     0  188     0    10  323    15
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut: 153  177    90   106  319   224   353 1655   203   185 1105   130
User 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
PHF 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
PHF Volume:  153  177    90   106  319   224   353 1655   203   185 1105   130
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol: 153  177    90   106  319   224   353 1655   203   185 1105   130
PCE 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
MLF 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
FinalVolume: 153  177    90   106  319   224   353 1655   203   185 1105   130
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:   1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment: 0.83 1.00  0.92  0.92 0.99  0.95  0.92 0.99  0.95  0.92 0.99  0.95
Lanes:      2.00 1.00  1.00  1.00 1.15  0.85  1.00 2.66  0.34  1.00 2.67  0.33
Final Sat.: 3150 1900  1750  1750 2173  1526  1750 4987   612  1750 5010   589
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:    0.05 0.09  0.05  0.06 0.15  0.15  0.20 0.33  0.33  0.11 0.22  0.22
Crit Moves: ****                  ****              ****        ****
Green Time:  9.1 22.1  22.1  14.4 27.4  27.4  39.0 61.9  61.9  19.7 42.6  42.6
Volume/Cap: 0.70 0.55  0.30  0.55 0.70  0.70  0.67 0.70  0.70  0.70 0.67  0.67
Delay/Veh:  68.6 51.4  47.8  58.1 50.3  50.3  43.4 27.6  27.6  60.2 38.7  38.7
User DelAdj: 1.00 1.00 1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh: 68.6 51.4  47.8  58.1 50.3  50.3  43.4 27.6  27.6  60.2 38.7  38.7
LOS by Move:   E   D-     D    E+    D     D     D    C     C     E   D+    D+
HCM2kAvgQ:     5    7     4     5   11    11    13   19    19     7   14    14
Note: Queue reported is the number of cars per lane.
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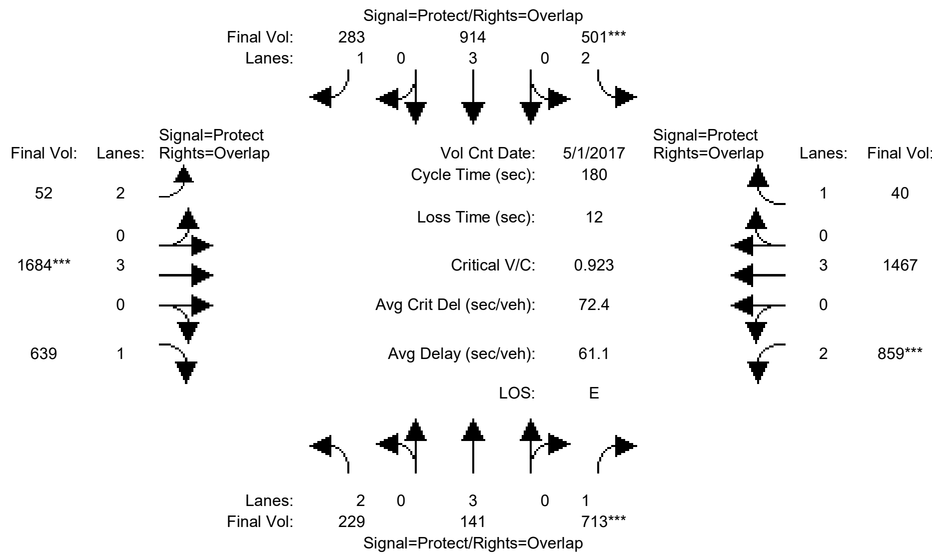
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #13: Mary Avenue / Central Expressway (CMP)



Street Name:	Mary Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	212	115	605	377	772	210	39	1527	621	686	1251	18
Growth 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
Initial Bse:	212	115	605	377	772	210	39	1527	621	686	1251	18
Added Vol:	17	26	108	124	142	73	13	157	18	173	216	22
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	229	141	713	501	914	283	52	1684	639	859	1467	40
User 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
PHF 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
PHF Volume:	229	141	713	501	914	283	52	1684	639	859	1467	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	229	141	713	501	914	283	52	1684	639	859	1467	40
PCE 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
MLF 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
FinalVolume:	229	141	713	501	914	283	52	1684	639	859	1467	40
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.02	0.41	0.16	0.16	0.16	0.02	0.30	0.37	0.27	0.26	0.02
Crit Moves:			****	****				****		****		
Green Time:	17.9	26.3	79.4	31.0	39.4	53.9	14.5	57.6	75.4	53.2	96.2	127.2
Volume/Cap:	0.73	0.17	0.92	0.92	0.73	0.54	0.20	0.92	0.87	0.92	0.48	0.03
Delay/Veh:	87.4	67.4	64.1	94.9	67.7	53.8	77.7	67.5	58.9	75.9	26.4	7.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	87.4	67.4	64.1	94.9	67.7	53.8	77.7	67.5	58.9	75.9	26.4	7.9
LOS by Move:	F	E	E	F	E	D-	E-	E	E+	E-	C	A
HCM2kAvgQ:	8	2	43	20	17	14	2	32	36	31	16	1

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #13: Mary Avenue / Central Expressway (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 283 914 501***
Lanes: 1 0 3 0 2

Final Vol:	Lanes:	Signal=Protect Rights=Overlap			Signal=Protect Rights=Overlap	Lanes:	Final Vol:
			Vol Cnt Date:	5/1/2017			
52	2		Cycle Time (sec):	180		1	40
	0		Loss Time (sec):	12		0	
1724***	3		Critical V/C:	0.931		3	1557
	0		Avg Crit Del (sec/veh):	73.5		0	
650	1		Avg Delay (sec/veh):	61.5		2	859***
			LOS:	E			

Lanes: 2 0 3 0 1
Final Vol: 254 141 713***
Signal=Protect/Rights=Overlap

Street Name:	Mary Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	212	115	605	377	772	210	39	1527	621	686	1251	18
Growth 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
Initial Bse:	212	115	605	377	772	210	39	1527	621	686	1251	18
Added Vol:	42	26	108	124	142	73	13	197	29	173	306	22
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	254	141	713	501	914	283	52	1724	650	859	1557	40
User 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
PHF 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
PHF Volume:	254	141	713	501	914	283	52	1724	650	859	1557	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	254	141	713	501	914	283	52	1724	650	859	1557	40
PCE 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
MLF 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
FinalVolume:	254	141	713	501	914	283	52	1724	650	859	1557	40
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.02	0.41	0.16	0.16	0.16	0.02	0.30	0.37	0.27	0.27	0.02
Crit Moves:			****	****				****		****		
Green Time:	19.0	26.0	78.8	30.8	37.8	51.7	13.9	58.5	77.5	52.7	97.3	128.1
Volume/Cap:	0.76	0.17	0.93	0.93	0.76	0.56	0.21	0.93	0.86	0.93	0.51	0.03
Delay/Veh:	88.4	67.6	65.9	96.6	69.9	56.1	78.4	67.8	56.5	77.5	26.2	7.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	88.4	67.6	65.9	96.6	69.9	56.1	78.4	67.8	56.5	77.5	26.2	7.7
LOS by Move:	F	E	E	F	E	E+	E-	E	E+	E-	C	A
HCM2kAvgQ:	8	2	43	20	17	14	2	33	36	31	17	1

Note: Queue reported is the number of cars per lane.

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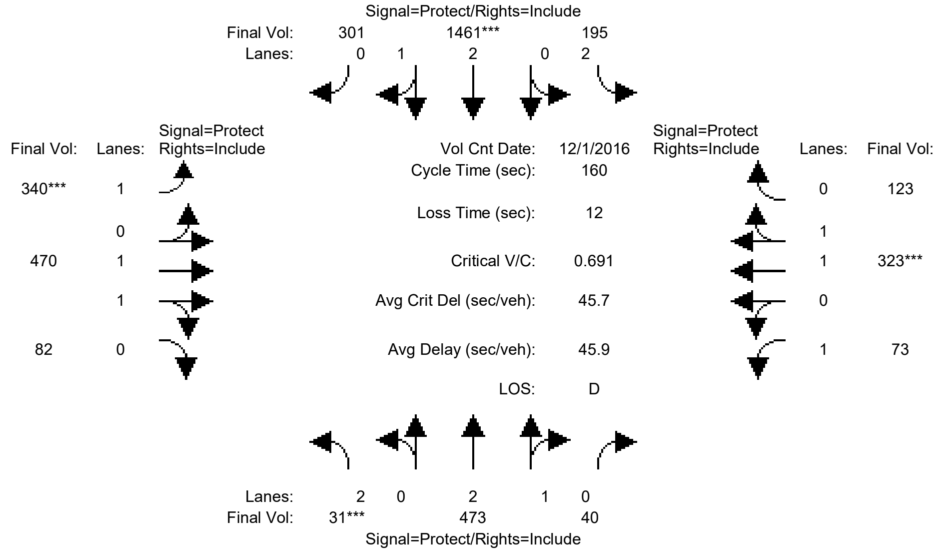
Background PM

Intersection #14: Mary Avenue / Evelyn Avenue



Street Name:	Mary Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	31	369	38	193	1170	261	296	419	82	68	241	121
Growth 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
Initial Bse:	31	369	38	193	1170	261	296	419	82	68	241	121
Added Vol:	0	104	2	2	291	40	44	51	0	5	82	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	473	40	195	1461	301	340	470	82	73	323	123
User 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
PHF 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
PHF Volume:	31	473	40	195	1461	301	340	470	82	73	323	123
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	473	40	195	1461	301	340	470	82	73	323	123
PCE 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
MLF 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
FinalVolume:	31	473	40	195	1461	301	340	470	82	73	323	123
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	2.00	2.76	0.24	2.00	2.47	0.53	1.00	1.69	0.31	1.00	1.43	0.57
Final Sat.:	3150	5163	437	3150	4642	956	1750	3150	550	1750	2679	1020
Capacity Analysis Module:												
Vol/Sat:	0.01	0.09	0.09	0.06	0.31	0.31	0.19	0.15	0.15	0.04	0.12	0.12
Crit Moves:	****				****		****				****	
Green Time:	7.0	46.2	46.2	31.2	70.5	70.5	43.5	54.5	54.5	16.0	27.0	27.0
Volume/Cap:	0.22	0.32	0.32	0.32	0.71	0.71	0.71	0.44	0.44	0.42	0.71	0.71
Delay/Veh:	74.7	44.6	44.6	55.5	37.6	37.6	57.7	41.1	41.1	69.2	66.8	66.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	74.7	44.6	44.6	55.5	37.6	37.6	57.7	41.1	41.1	69.2	66.8	66.8
LOS by Move:	E	D	D	E+	D+	D+	E+	D	D	E	E	E
HCM2kAvgQ:	1	6	6	5	23	23	16	10	10	4	12	12

Note: Queue reported is the number of cars per lane.

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Background PM Plus Project

Intersection #14: Mary Avenue / Evelyn Avenue

Signal=Protect/Rights=Include
Final Vol: 301 1471*** 195
Lanes: 0 1 2 0 2

Final Vol: | Lanes: | Signal=Protect Rights=Include
340*** 1
0
486 1
1
82 0

Vol Cnt Date: 12/1/2016
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.707
Avg Crit Del (sec/veh): 46.9
Avg Delay (sec/veh): 46.6
LOS: D

Signal=Protect Rights=Include | Lanes: | Final Vol:
0 124
1
1 369***
0
1 73

Lanes: 2 0 2 1 0
Final Vol: 31*** 497 40
Signal=Protect/Rights=Include

Street Name:	Mary Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	31	369	38	193	1170	261	296	419	82	68	241	121
Growth 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
Initial Bse:	31	369	38	193	1170	261	296	419	82	68	241	121
Added Vol:	0	128	2	2	301	40	44	67	0	5	128	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	497	40	195	1471	301	340	486	82	73	369	124
User 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
PHF 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
PHF Volume:	31	497	40	195	1471	301	340	486	82	73	369	124
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	497	40	195	1471	301	340	486	82	73	369	124
PCE 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
MLF 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
FinalVolume:	31	497	40	195	1471	301	340	486	82	73	369	124
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	2.00	2.77	0.23	2.00	2.47	0.53	1.00	1.70	0.30	1.00	1.48	0.52
Final Sat.:	3150	5182	417	3150	4648	951	1750	3165	534	1750	2769	930
Capacity Analysis Module:												
Vol/Sat:	0.01	0.10	0.10	0.06	0.32	0.32	0.19	0.15	0.15	0.04	0.13	0.13
Crit Moves:	****				****		****				****	
Green Time:	7.0	46.4	46.4	29.9	69.3	69.3	42.5	55.8	55.8	15.9	29.2	29.2
Volume/Cap:	0.22	0.33	0.33	0.33	0.73	0.73	0.73	0.44	0.44	0.42	0.73	0.73
Delay/Veh:	74.7	44.8	44.8	56.7	38.8	38.8	59.4	40.3	40.3	69.3	65.8	65.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	74.7	44.8	44.8	56.7	38.8	38.8	59.4	40.3	40.3	69.3	65.8	65.8
LOS by Move:	E	D	D	E+	D+	D+	E+	D	D	E	E	E
HCM2kAvgQ:	1	7	7	5	23	23	16	10	10	4	13	13

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
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Intersection #15: Mary Avenue / Washington Avenue

Signal=Protect/Rights=Include

Final Vol: 66 1351*** 75
Lanes: 0 1 1 0 1

Final Vol:	Lanes:	Signal=Permit Rights=Include			Signal=Permit Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	11/1/2017			
			Cycle Time (sec):	100			
38	0					1	39
			Loss Time (sec):	12			
	1					0	
115	0		Critical V/C:	0.583		0	107***
	0		Avg Crit Del (sec/veh):	15.3		1	
35	1		Avg Delay (sec/veh):	18.2		0	73
			LOS:	B-			

Lanes: 1 0 1 1 0
Final Vol: 52*** 404 69
Signal=Protect/Rights=Include

Street Name:	Mary Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Nov 2017 <<												
Base Vol:	52	316	68	59	1084	54	34	95	35	71	73	24
Growth 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
Initial Bse:	52	316	68	59	1084	54	34	95	35	71	73	24
Added Vol:	0	88	1	16	267	12	4	20	0	2	34	15
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	52	404	69	75	1351	66	38	115	35	73	107	39
User 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
PHF 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
PHF Volume:	52	404	69	75	1351	66	38	115	35	73	107	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	404	69	75	1351	66	38	115	35	73	107	39
PCE 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
MLF 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
FinalVolume:	52	404	69	75	1351	66	38	115	35	73	107	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.97	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	1.70	0.30	1.00	1.90	0.10	0.25	0.75	1.00	0.41	0.59	1.00
Final Sat.:	1750	3160	540	1750	3528	172	447	1353	1750	730	1070	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.13	0.13	0.04	0.38	0.38	0.09	0.09	0.02	0.10	0.10	0.02
Crit Moves:	****				****						****	
Green Time:	7.0	46.0	46.0	25.2	64.2	64.2	16.8	16.8	16.8	16.8	16.8	16.8
Volume/Cap:	0.42	0.28	0.28	0.17	0.60	0.60	0.51	0.51	0.12	0.60	0.60	0.13
Delay/Veh:	46.9	16.8	16.8	29.4	10.8	10.8	39.3	39.3	35.5	41.7	41.7	35.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.9	16.8	16.8	29.4	10.8	10.8	39.3	39.3	35.5	41.7	41.7	35.6
LOS by Move:	D	B	B	C	B+	B+	D	D	D+	D	D	D+
HCM2kAvgQ:	2	4	4	2	12	12	5	5	1	5	5	1

Note: Queue reported is the number of cars per lane.

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Background PM Plus Project

Intersection #15: Mary Avenue / Washington Avenue

Signal=Protect/Rights=Include
Final Vol: 66 1351*** 86
Lanes: 0 1 1 0 1

Signal=Permit
Rights=Include

Final Vol:	Lanes:
38	0
	1
119	0
	0
35	1

Vol Cnt Date:	11/1/2017
Cycle Time (sec):	100
Loss Time (sec):	12
Critical V/C:	0.589
Avg Crit Del (sec/veh):	15.8
Avg Delay (sec/veh):	18.8
LOS:	B-

Signal=Permit
Rights=Include

Lanes:	Final Vol:
1	63
0	
0	117***
1	
0	73

Lanes: 1 0 1 1 0
Final Vol: 52*** 404 69
Signal=Protect/Rights=Include

Street Name:	Mary Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Nov 2017 <<												
Base Vol:	52	316	68	59	1084	54	34	95	35	71	73	24
Growth 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
Initial Bse:	52	316	68	59	1084	54	34	95	35	71	73	24
Added Vol:	0	88	1	27	267	12	4	24	0	2	44	39
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	52	404	69	86	1351	66	38	119	35	73	117	63
User 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
PHF 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
PHF Volume:	52	404	69	86	1351	66	38	119	35	73	117	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	404	69	86	1351	66	38	119	35	73	117	63
PCE 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
MLF 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
FinalVolume:	52	404	69	86	1351	66	38	119	35	73	117	63
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.97	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	1.70	0.30	1.00	1.90	0.10	0.24	0.76	1.00	0.38	0.62	1.00
Final Sat.:	1750	3160	540	1750	3528	172	436	1364	1750	692	1108	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.13	0.13	0.05	0.38	0.38	0.09	0.09	0.02	0.11	0.11	0.04
Crit Moves:	****				****						****	
Green Time:	7.0	45.6	45.6	24.9	63.5	63.5	17.5	17.5	17.5	17.5	17.5	17.5
Volume/Cap:	0.42	0.28	0.28	0.20	0.60	0.60	0.50	0.50	0.11	0.60	0.60	0.21
Delay/Veh:	46.9	17.1	17.1	29.8	11.2	11.2	38.5	38.5	34.9	41.3	41.3	35.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.9	17.1	17.1	29.8	11.2	11.2	38.5	38.5	34.9	41.3	41.3	35.6
LOS by Move:	D	B	B	C	B+	B+	D+	D+	C-	D	D	D+
HCM2kAvgQ:	2	4	4	2	13	13	5	5	1	6	6	2

Note: Queue reported is the number of cars per lane.

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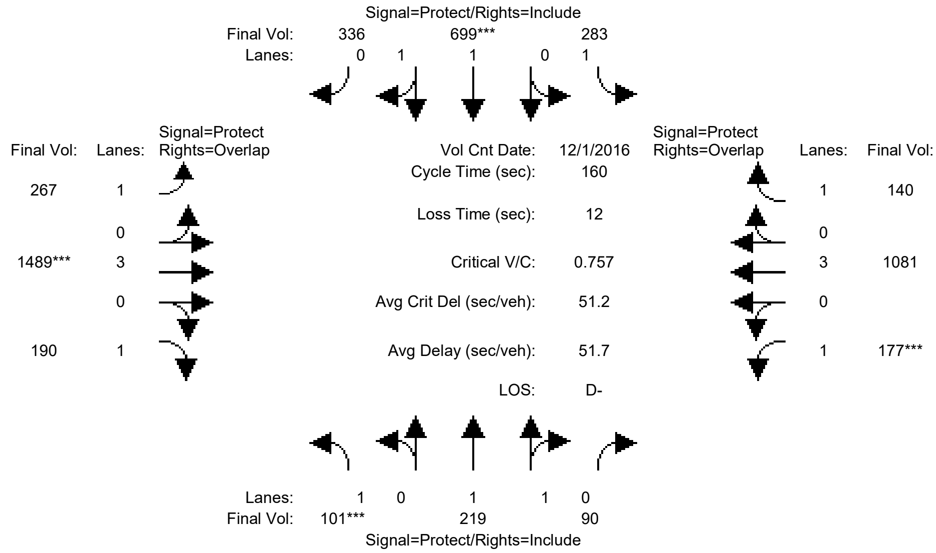
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #16: Mary Avenue / El Camino Real (CMP)



Street Name:	Mary Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	101	219	87	184	699	180	201	1381	190	170	944	121
Growth 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
Initial Bse:	101	219	87	184	699	180	201	1381	190	170	944	121
Added Vol:	0	0	3	99	0	156	66	108	0	7	137	19
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	101	219	90	283	699	336	267	1489	190	177	1081	140
User 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
PHF 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
PHF Volume:	101	219	90	283	699	336	267	1489	190	177	1081	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	101	219	90	283	699	336	267	1489	190	177	1081	140
PCE 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
MLF 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
FinalVolume:	101	219	90	283	699	336	267	1489	190	177	1081	140
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.40	0.60	1.00	1.33	0.67	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	2622	1077	1750	2498	1201	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.08	0.08	0.16	0.28	0.28	0.15	0.26	0.11	0.10	0.19	0.08
Crit Moves:	****				****			****		****		
Green Time:	12.2	24.3	24.3	47.1	59.2	59.2	34.2	55.2	67.4	21.4	42.5	89.5
Volume/Cap:	0.76	0.55	0.55	0.55	0.76	0.76	0.71	0.76	0.26	0.76	0.71	0.14
Delay/Veh:	94.1	63.9	63.9	48.8	46.6	46.6	64.8	48.2	30.2	80.0	54.9	16.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	94.1	63.9	63.9	48.8	46.6	46.6	64.8	48.2	30.2	80.0	54.9	16.9
LOS by Move:	F	E	E	D	D	D	E	D	C	F	D-	B
HCM2kAvgQ:	7	8	8	12	23	23	13	21	6	9	16	3

Note: Queue reported is the number of cars per lane.

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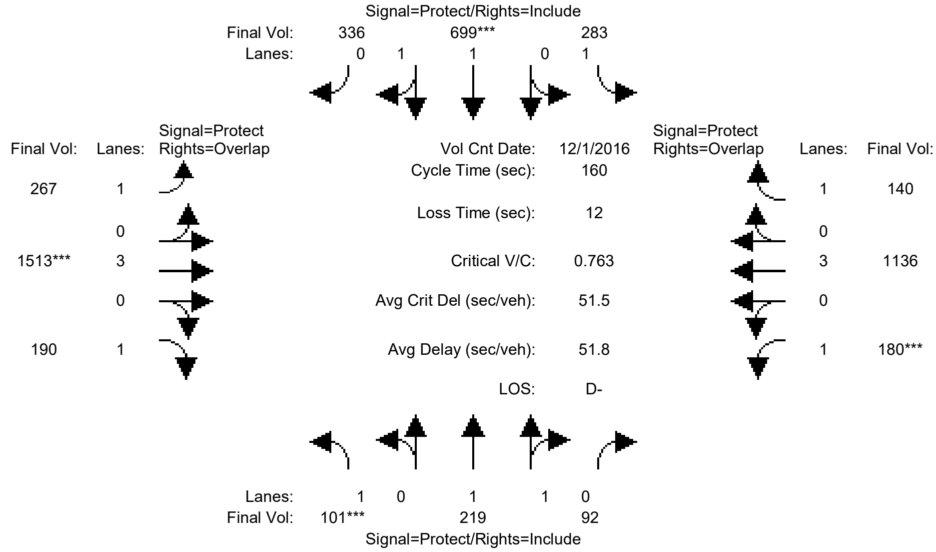
Intersection #16: Mary Avenue / El Camino Real (CMP)



Street Name:	Mary Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	101	219	87	184	699	180	201	1381	190	170	944	121
Growth 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
Initial Bse:	101	219	87	184	699	180	201	1381	190	170	944	121
Added Vol:	0	0	5	99	0	156	66	132	0	10	192	19
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	101	219	92	283	699	336	267	1513	190	180	1136	140
User 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
PHF 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
PHF Volume:	101	219	92	283	699	336	267	1513	190	180	1136	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	101	219	92	283	699	336	267	1513	190	180	1136	140
PCE 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
MLF 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
FinalVolume:	101	219	92	283	699	336	267	1513	190	180	1136	140
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.39	0.61	1.00	1.33	0.67	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	2605	1094	1750	2498	1201	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.08	0.08	0.16	0.28	0.28	0.15	0.27	0.11	0.10	0.20	0.08
Crit Moves:	****				****			****		****		
Green Time:	12.1	24.2	24.2	46.6	58.7	58.7	33.5	55.7	67.8	21.6	43.7	90.3
Volume/Cap:	0.76	0.56	0.56	0.56	0.76	0.76	0.73	0.76	0.26	0.76	0.73	0.14
Delay/Veh:	95.2	64.1	64.1	49.3	47.2	47.2	66.3	48.1	30.0	80.4	54.5	16.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	95.2	64.1	64.1	49.3	47.2	47.2	66.3	48.1	30.0	80.4	54.5	16.6
LOS by Move:	F	E	E	D	D	D	E	D	C	F	D-	B
HCM2kAvgQ:	7	8	8	12	23	23	13	21	6	9	17	3

Note: Queue reported is the number of cars per lane.

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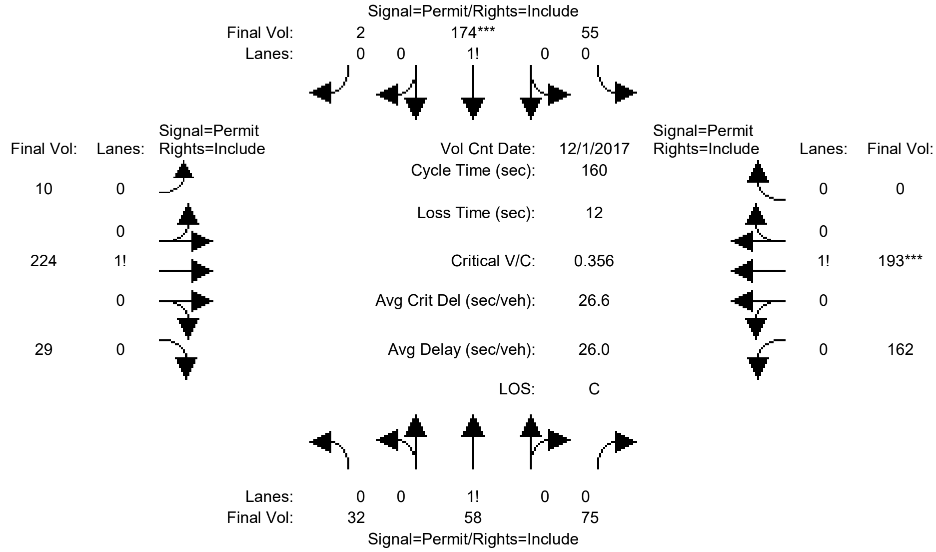
Intersection #17: Pastoria Avenue / Washington Avenue



Street Name:	Pastoria Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	32	57	54	47	160	0	10	188	29	126	145	0
Growth 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
Initial Bse:	32	57	54	47	160	0	10	188	29	126	145	0
Added Vol:	0	1	21	8	14	2	0	36	0	36	48	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	58	75	55	174	2	10	224	29	162	193	0
User 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
PHF 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
PHF Volume:	32	58	75	55	174	2	10	224	29	162	193	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	58	75	55	174	2	10	224	29	162	193	0
PCE 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
MLF 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
FinalVolume:	32	58	75	55	174	2	10	224	29	162	193	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	0.19	0.35	0.46	0.24	0.75	0.01	0.04	0.85	0.11	0.46	0.54	0.00
Final Sat.:	339	615	795	417	1318	15	67	1490	193	821	979	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.13	0.13	0.13	0.15	0.15	0.15	0.20	0.20	0.00
Crit Moves:					****						****	
Green Time:	59.3	59.3	59.3	59.3	59.3	59.3	88.7	88.7	88.7	88.7	88.7	0.0
Volume/Cap:	0.25	0.25	0.25	0.36	0.36	0.36	0.27	0.27	0.27	0.36	0.36	0.00
Delay/Veh:	35.2	35.2	35.2	36.8	36.8	36.8	18.9	18.9	18.9	20.0	20.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.2	35.2	35.2	36.8	36.8	36.8	18.9	18.9	18.9	20.0	20.0	0.0
LOS by Move:	D+	D+	D+	D+	D+	D+	B-	B-	B-	C+	C+	A
HCM2kAvgQ:	6	6	6	9	9	9	7	7	7	9	9	0

Note: Queue reported is the number of cars per lane.

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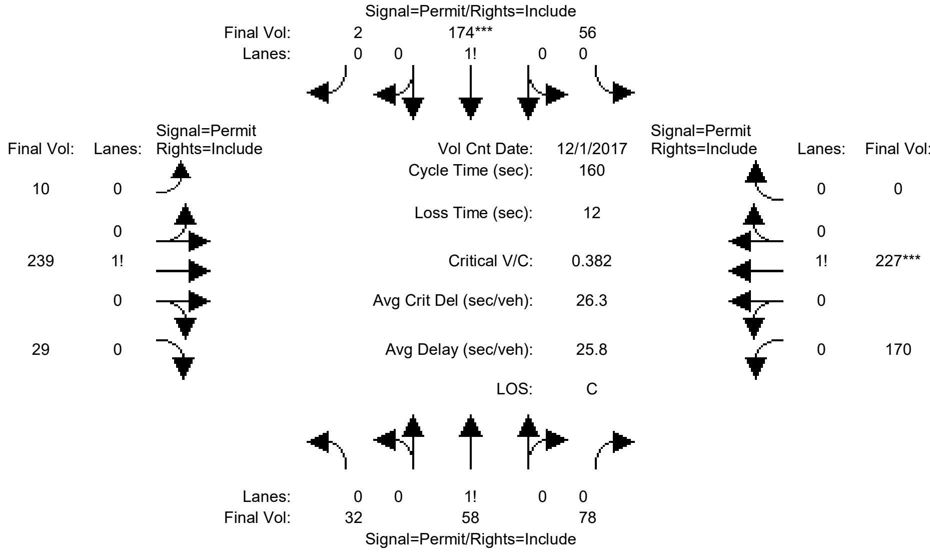
Intersection #17: Pastoria Avenue / Washington Avenue



Street Name:	Pastoria Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	32	57	54	47	160	0	10	188	29	126	145	0
Growth 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
Initial Bse:	32	57	54	47	160	0	10	188	29	126	145	0
Added Vol:	0	1	24	9	14	2	0	51	0	44	82	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	58	78	56	174	2	10	239	29	170	227	0
User 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
PHF 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
PHF Volume:	32	58	78	56	174	2	10	239	29	170	227	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	58	78	56	174	2	10	239	29	170	227	0
PCE 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
MLF 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
FinalVolume:	32	58	78	56	174	2	10	239	29	170	227	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	0.19	0.35	0.46	0.24	0.75	0.01	0.04	0.86	0.10	0.43	0.57	0.00
Final Sat.:	333	604	813	422	1313	15	63	1504	183	771	1029	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.10	0.13	0.13	0.13	0.16	0.16	0.16	0.22	0.22	0.00
Crit Moves:					****						****	
Green Time:	55.6	55.6	55.6	55.6	55.6	55.6	92.4	92.4	92.4	92.4	92.4	0.0
Volume/Cap:	0.28	0.28	0.28	0.38	0.38	0.38	0.27	0.27	0.27	0.38	0.38	0.00
Delay/Veh:	38.0	38.0	38.0	39.7	39.7	39.7	17.1	17.1	17.1	18.5	18.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.0	38.0	38.0	39.7	39.7	39.7	17.1	17.1	17.1	18.5	18.5	0.0
LOS by Move:	D+	D+	D+	D	D	D	B	B	B	B-	B-	A
HCM2kAvgQ:	6	6	6	9	9	9	7	7	7	10	10	0

Note: Queue reported is the number of cars per lane.

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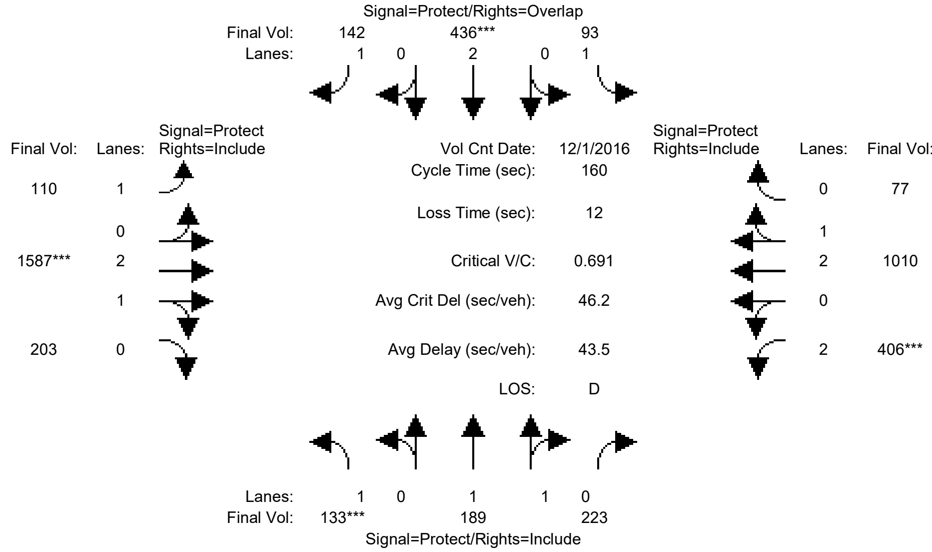
Intersection #18: El Camino Real / Hollenbeck Avenue-Pastoria Avenue



Street Name:	Hollenbeck Avenue-Pastoria Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	124	157	151	93	362	132	103	1429	157	308	866	77
Growth 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
Initial Bse:	124	157	151	93	362	132	103	1429	157	308	866	77
Added Vol:	9	32	72	0	74	10	7	158	46	98	144	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	133	189	223	93	436	142	110	1587	203	406	1010	77
User 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
PHF 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
PHF Volume:	133	189	223	93	436	142	110	1587	203	406	1010	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133	189	223	93	436	142	110	1587	203	406	1010	77
PCE 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
MLF 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
FinalVolume:	133	189	223	93	436	142	110	1587	203	406	1010	77
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.83	0.99	0.95
Lanes:	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.65	0.35	2.00	2.78	0.22
Final Sat.:	1750	1900	1750	1750	3800	1750	1750	4964	635	3150	5203	397
Capacity Analysis Module:												
Vol/Sat:	0.08	0.10	0.13	0.05	0.11	0.08	0.06	0.32	0.32	0.13	0.19	0.19
Crit Moves:	****				****			****		****		
Green Time:	17.6	31.2	31.2	13.0	26.6	52.0	25.4	74.0	74.0	29.8	78.4	78.4
Volume/Cap:	0.69	0.51	0.65	0.65	0.69	0.25	0.40	0.69	0.69	0.69	0.40	0.40
Delay/Veh:	78.8	58.2	61.9	81.8	66.1	39.9	61.3	34.8	34.8	64.3	25.9	25.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	78.8	58.2	61.9	81.8	66.1	39.9	61.3	34.8	34.8	64.3	25.9	25.9
LOS by Move:	E-	E+	E	F	E	D	E	C-	C-	E	C	C
HCM2kAvgQ:	7	8	11	5	10	5	5	22	22	11	11	11

Note: Queue reported is the number of cars per lane.

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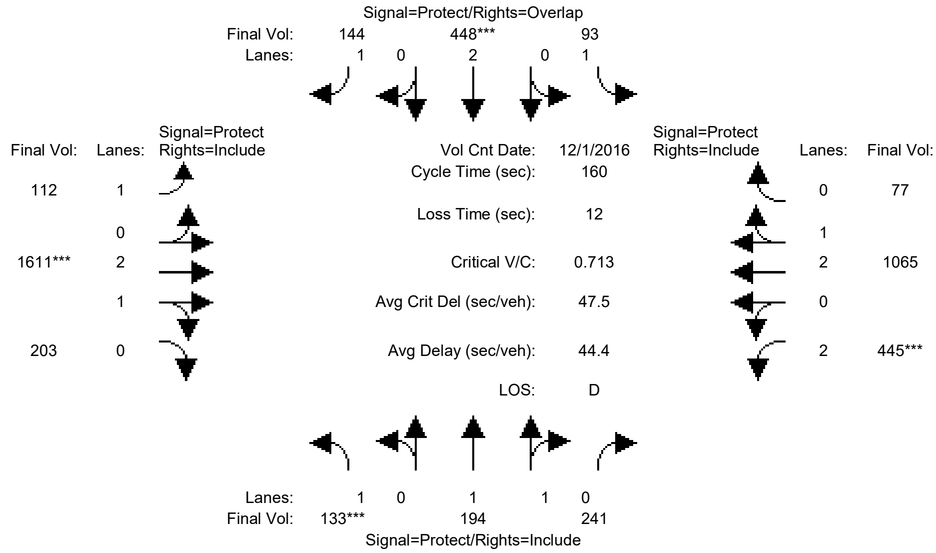
Intersection #18: El Camino Real / Hollenbeck Avenue-Pastoria Avenue



Street Name:	Hollenbeck Avenue-Pastoria Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	124	157	151	93	362	132	103	1429	157	308	866	77
Growth 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
Initial Bse:	124	157	151	93	362	132	103	1429	157	308	866	77
Added Vol:	9	37	90	0	86	12	9	182	46	137	199	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	133	194	241	93	448	144	112	1611	203	445	1065	77
User 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
PHF 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
PHF Volume:	133	194	241	93	448	144	112	1611	203	445	1065	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133	194	241	93	448	144	112	1611	203	445	1065	77
PCE 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
MLF 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
FinalVolume:	133	194	241	93	448	144	112	1611	203	445	1065	77
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.83	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.65	0.35	2.00	2.79	0.21
Final Sat.:	1750	1900	1750	1750	3800	1750	1750	4972	627	3150	5222	378
Capacity Analysis Module:												
Vol/Sat:	0.08	0.10	0.14	0.05	0.12	0.08	0.06	0.32	0.32	0.14	0.20	0.20
Crit Moves:	****				****			****		****		
Green Time:	17.1	31.4	31.4	12.1	26.5	51.4	25.0	72.7	72.7	31.7	79.5	79.5
Volume/Cap:	0.71	0.52	0.70	0.70	0.71	0.26	0.41	0.71	0.71	0.71	0.41	0.41
Delay/Veh:	81.3	58.1	63.5	87.7	67.0	40.4	61.9	36.2	36.2	63.8	25.5	25.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	81.3	58.1	63.5	87.7	67.0	40.4	61.9	36.2	36.2	63.8	25.5	25.5
LOS by Move:	F	E+	E	F	E	D	E	D+	D+	E	C	C
HCM2kAvgQ:	7	8	12	5	11	5	5	23	23	12	11	11

Note: Queue reported is the number of cars per lane.

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Intersection #19: Hollenbeck Avenue / Remington Avenue

Signal=Permit/Rights=Include
Final Vol: 101 686*** 78
Lanes: 0 0 1! 0 0

Signal=Protect Rights=Include (Westbound side) | Signal=Protect Rights=Include (Eastbound side)

Final Vol:	Lanes:			Lanes:	Final Vol:
48	1	Vol Cnt Date:	10/2/2018	0	78
	0	Cycle Time (sec):	100	1	
303***	0	Loss Time (sec):	12	0	265
	1	Critical V/C:	0.859	0	
48	0	Avg Crit Del (sec/veh):	37.9	1	116***
		Avg Delay (sec/veh):	33.8		
		LOS:	C-		

Lanes: 0 1 0 0 1
Final Vol: 25 405 149
Signal=Permit/Rights=Include

Street Name:	Hollenbeck Avenue						Remington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	25	310	148	78	504	65	30	286	48	111	242	78
Growth 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
Initial Bse:	25	310	148	78	504	65	30	286	48	111	242	78
Added Vol:	0	95	1	0	182	36	18	17	0	5	23	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	405	149	78	686	101	48	303	48	116	265	78
User 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
PHF 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
PHF Volume:	25	405	149	78	686	101	48	303	48	116	265	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	405	149	78	686	101	48	303	48	116	265	78
PCE 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
MLF 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
FinalVolume:	25	405	149	78	686	101	48	303	48	116	265	78
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.06	0.94	1.00	0.09	0.79	0.12	1.00	0.86	0.14	1.00	0.77	0.23
Final Sat.:	105	1695	1750	158	1388	204	1750	1554	246	1750	1391	409
Capacity Analysis Module:												
Vol/Sat:	0.24	0.24	0.09	0.49	0.49	0.49	0.03	0.20	0.20	0.07	0.19	0.19
Crit Moves:					****			****		****		
Green Time:	57.6	57.6	57.6	57.6	57.6	57.6	8.2	22.7	22.7	7.7	22.3	22.3
Volume/Cap:	0.41	0.41	0.15	0.86	0.86	0.86	0.34	0.86	0.86	0.86	0.86	0.86
Delay/Veh:	12.1	12.1	9.9	25.3	25.3	25.3	44.7	53.5	53.5	84.5	53.8	53.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.1	12.1	9.9	25.3	25.3	25.3	44.7	53.5	53.5	84.5	53.8	53.8
LOS by Move:	B	B	A	C	C	C	D	D-	D-	F	D-	D-
HCM2kAvgQ:	7	7	2	25	25	25	2	14	14	4	11	11

Note: Queue reported is the number of cars per lane.

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Intersection #19: Hollenbeck Avenue / Remington Avenue

Signal=Permit/Rights=Include
Final Vol: 107 731*** 78
Lanes: 0 0 1! 0 0

Signal=Protect Rights=Include (East Bound) — Signal=Protect Rights=Include (West Bound)

Final Vol:	Lanes:			Lanes:	Final Vol:
51	1			0	78
	0	Vol Cnt Date:	10/2/2018	1	
306***	0	Cycle Time (sec):	100	0	271
	1	Loss Time (sec):	12	0	
48	0	Critical V/C:	0.894	1	116***
		Avg Crit Del (sec/veh):	41.7		
		Avg Delay (sec/veh):	36.9		
		LOS:	D+		

Lanes: 0 1 0 0 1
Final Vol: 25 425 149
Signal=Permit/Rights=Include

Street Name:	Hollenbeck Avenue						Remington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	25	310	148	78	504	65	30	286	48	111	242	78
Growth 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
Initial Bse:	25	310	148	78	504	65	30	286	48	111	242	78
Added Vol:	0	115	1	0	227	42	21	20	0	5	29	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	425	149	78	731	107	51	306	48	116	271	78
User 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
PHF 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
PHF Volume:	25	425	149	78	731	107	51	306	48	116	271	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	425	149	78	731	107	51	306	48	116	271	78
PCE 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
MLF 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
FinalVolume:	25	425	149	78	731	107	51	306	48	116	271	78
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.06	0.94	1.00	0.08	0.80	0.12	1.00	0.86	0.14	1.00	0.78	0.22
Final Sat.:	100	1700	1750	149	1397	204	1750	1556	244	1750	1398	402
Capacity Analysis Module:												
Vol/Sat:	0.25	0.25	0.09	0.52	0.52	0.52	0.03	0.20	0.20	0.07	0.19	0.19
Crit Moves:					****			****		****		
Green Time:	58.6	58.6	58.6	58.6	58.6	58.6	7.8	22.0	22.0	7.4	21.6	21.6
Volume/Cap:	0.43	0.43	0.15	0.89	0.89	0.89	0.37	0.89	0.89	0.89	0.90	0.90
Delay/Veh:	11.7	11.7	9.4	28.1	28.1	28.1	45.5	59.6	59.6	94.1	60.7	60.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.7	11.7	9.4	28.1	28.1	28.1	45.5	59.6	59.6	94.1	60.7	60.7
LOS by Move:	B+	B+	A	C	C	C	D	E+	E+	F	E	E
HCM2kAvgQ:	8	8	2	27	27	27	2	15	15	4	11	11

Note: Queue reported is the number of cars per lane.

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Intersection #20: Hollenbeck Avenue / Fremont Avenue

Signal=Protect/Rights=Overlap
Final Vol: 177 519*** 144
Lanes: 1 0 1 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	5/1/2017			
212	1		Cycle Time (sec):	160		0	153
	0		Loss Time (sec):	12		1	
1062***	2		Critical V/C:	0.722		2	508
	1		Avg Crit Del (sec/veh):	53.6		0	
174	0		Avg Delay (sec/veh):	50.3		1	215***
			LOS:	D			

Lanes: 1 0 1 0 1
Final Vol: 89*** 314 180
Signal=Protect/Rights=Overlap

Street Name:	Hollenbeck Avenue						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	89	240	180	143	388	121	191	1038	174	215	474	152
Growth 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
Initial Bse:	89	240	180	143	388	121	191	1038	174	215	474	152
Added Vol:	0	74	0	1	131	56	21	24	0	0	34	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	89	314	180	144	519	177	212	1062	174	215	508	153
User 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
PHF 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
PHF Volume:	89	314	180	144	519	177	212	1062	174	215	508	153
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	89	314	180	144	519	177	212	1062	174	215	508	153
PCE 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
MLF 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
FinalVolume:	89	314	180	144	519	177	212	1062	174	215	508	153
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.56	0.44	1.00	2.28	0.72
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	4811	788	1750	4302	1296
Capacity Analysis Module:												
Vol/Sat:	0.05	0.17	0.10	0.08	0.27	0.10	0.12	0.22	0.22	0.12	0.12	0.12
Crit Moves:	****				****			****		****		
Green Time:	11.3	48.0	75.2	23.9	60.6	99.1	38.6	48.9	48.9	27.2	37.6	37.6
Volume/Cap:	0.72	0.55	0.22	0.55	0.72	0.16	0.50	0.72	0.72	0.72	0.50	0.50
Delay/Veh:	91.6	48.2	25.2	65.6	46.1	13.0	53.4	51.0	51.0	71.2	53.4	53.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	91.6	48.2	25.2	65.6	46.1	13.0	53.4	51.0	51.0	71.2	53.4	53.4
LOS by Move:	F	D	C	E	D	B	D-	D-	D-	E	D-	D-
HCM2kAvgQ:	5	12	5	7	21	4	10	19	19	10	9	9

Note: Queue reported is the number of cars per lane.

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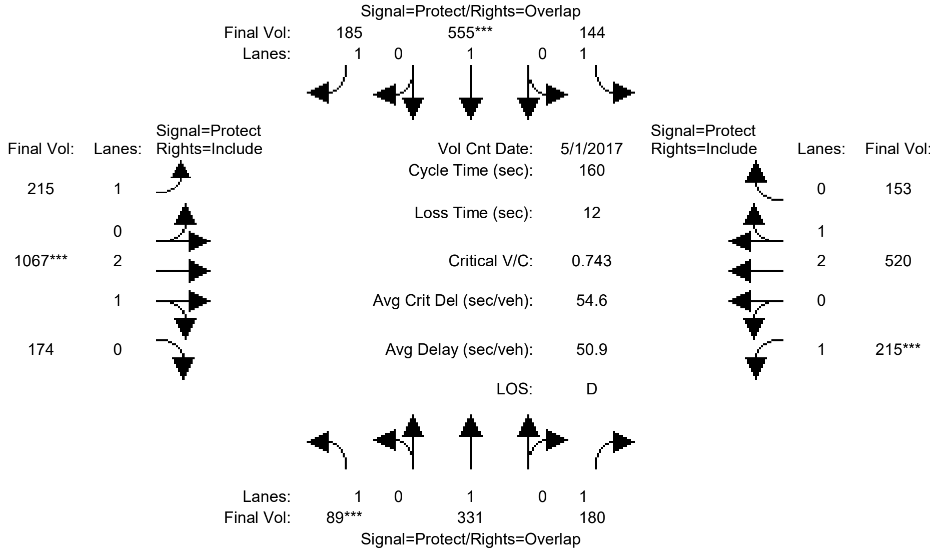
Intersection #20: Hollenbeck Avenue / Fremont Avenue



Street Name:	Hollenbeck Avenue						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	89	240	180	143	388	121	191	1038	174	215	474	152
Growth 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
Initial Bse:	89	240	180	143	388	121	191	1038	174	215	474	152
Added Vol:	0	91	0	1	167	64	24	29	0	0	46	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	89	331	180	144	555	185	215	1067	174	215	520	153
User 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
PHF 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
PHF Volume:	89	331	180	144	555	185	215	1067	174	215	520	153
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	89	331	180	144	555	185	215	1067	174	215	520	153
PCE 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
MLF 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
FinalVolume:	89	331	180	144	555	185	215	1067	174	215	520	153
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.56	0.44	1.00	2.29	0.71
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	4814	785	1750	4325	1273
Capacity Analysis Module:												
Vol/Sat:	0.05	0.17	0.10	0.08	0.29	0.11	0.12	0.22	0.22	0.12	0.12	0.12
Crit Moves:	****				****			****		****		
Green Time:	10.9	50.1	76.6	23.7	62.9	100.4	37.5	47.7	47.7	26.4	36.7	36.7
Volume/Cap:	0.74	0.56	0.21	0.56	0.74	0.17	0.52	0.74	0.74	0.74	0.52	0.52
Delay/Veh:	95.1	46.8	24.4	65.9	45.7	12.5	54.7	52.5	52.5	73.5	54.4	54.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	95.1	46.8	24.4	65.9	45.7	12.5	54.7	52.5	52.5	73.5	54.4	54.4
LOS by Move:	F	D	C	E	D	B	D-	D-	D-	E	D-	D-
HCM2kAvgQ:	5	13	5	7	22	4	10	19	19	10	9	9

Note: Queue reported is the number of cars per lane.

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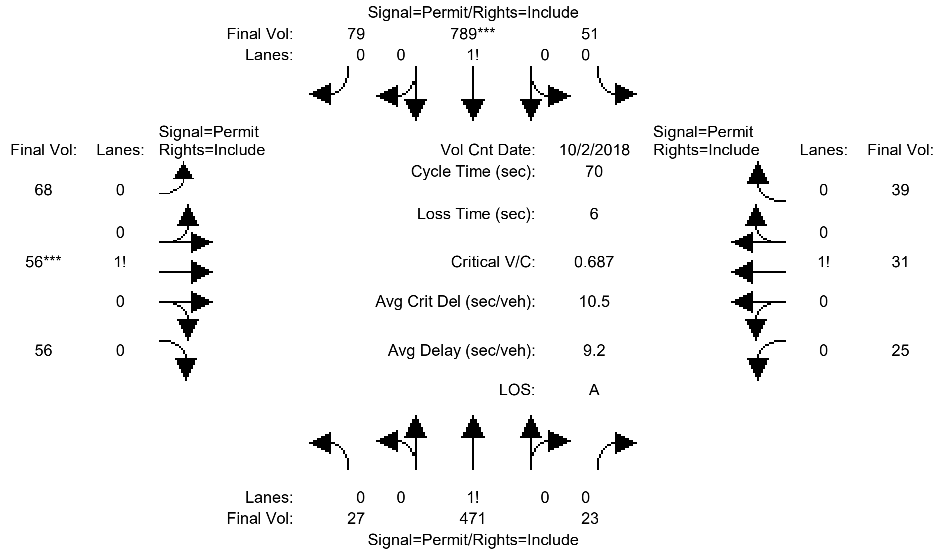
Intersection #21: Hollenbeck Avenue / Cascade Drive



Street Name:	Hollenbeck Avenue						Cascade Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	27	428	23	16	715	58	55	56	56	25	31	21
Growth 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
Initial Bse:	27	428	23	16	715	58	55	56	56	25	31	21
Added Vol:	0	43	0	35	74	21	13	0	0	0	0	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	471	23	51	789	79	68	56	56	25	31	39
User 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
PHF 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
PHF Volume:	27	471	23	51	789	79	68	56	56	25	31	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	471	23	51	789	79	68	56	56	25	31	39
PCE 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
MLF 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
FinalVolume:	27	471	23	51	789	79	68	56	56	25	31	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.05	0.91	0.04	0.05	0.86	0.09	0.38	0.31	0.31	0.26	0.33	0.41
Final Sat.:	91	1582	77	97	1502	150	661	544	544	461	571	718
Capacity Analysis Module:												
Vol/Sat:	0.30	0.30	0.30	0.53	0.53	0.53	0.10	0.10	0.10	0.05	0.05	0.05
Crit Moves:					****			****				
Green Time:	53.5	53.5	53.5	53.5	53.5	53.5	10.5	10.5	10.5	10.5	10.5	10.5
Volume/Cap:	0.39	0.39	0.39	0.69	0.69	0.69	0.69	0.69	0.69	0.36	0.36	0.36
Delay/Veh:	3.0	3.0	3.0	5.6	5.6	5.6	35.6	35.6	35.6	27.6	27.6	27.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	3.0	3.0	3.0	5.6	5.6	5.6	35.6	35.6	35.6	27.6	27.6	27.6
LOS by Move:	A	A	A	A	A	A	D+	D+	D+	C	C	C
HCM2kAvgQ:	4	4	4	11	11	11	5	5	5	2	2	2

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #21: Hollenbeck Avenue / Cascade Drive

Signal=Permit/Rights=Include
Final Vol: 85 811*** 59
Lanes: 0 0 1! 0 0

Signal=Permit Rights=Include (Eastbound)
Final Vol: Lanes:
72 0
0
56*** 1!
0
56 0

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 70
Loss Time (sec): 6
Critical V/C: 0.712
Avg Crit Del (sec/veh): 11.1
Avg Delay (sec/veh): 9.6
LOS: A

Signal=Permit Rights=Include (Westbound)
Lanes: Final Vol:
0 43
0
1! 31
0
0 25

Lanes: 0 0 1! 0 0
Final Vol: 27 481 23
Signal=Permit/Rights=Include

Street Name:	Hollenbeck Avenue						Cascade Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	27	428	23	16	715	58	55	56	56	25	31	21
Growth 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
Initial Bse:	27	428	23	16	715	58	55	56	56	25	31	21
Added Vol:	0	53	0	43	96	27	17	0	0	0	0	22
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	481	23	59	811	85	72	56	56	25	31	43
User 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
PHF 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
PHF Volume:	27	481	23	59	811	85	72	56	56	25	31	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	481	23	59	811	85	72	56	56	25	31	43
PCE 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
MLF 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
FinalVolume:	27	481	23	59	811	85	72	56	56	25	31	43
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.05	0.91	0.04	0.06	0.85	0.09	0.40	0.30	0.30	0.25	0.31	0.44
Final Sat.:	89	1585	76	108	1486	156	685	533	533	442	548	760
Capacity Analysis Module:												
Vol/Sat:	0.30	0.30	0.30	0.55	0.55	0.55	0.11	0.11	0.11	0.06	0.06	0.06
Crit Moves:					****			****				
Green Time:	53.7	53.7	53.7	53.7	53.7	53.7	10.3	10.3	10.3	10.3	10.3	10.3
Volume/Cap:	0.40	0.40	0.40	0.71	0.71	0.71	0.71	0.71	0.71	0.38	0.38	0.38
Delay/Veh:	2.9	2.9	2.9	6.0	6.0	6.0	37.4	37.4	37.4	27.9	27.9	27.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	2.9	2.9	2.9	6.0	6.0	6.0	37.4	37.4	37.4	27.9	27.9	27.9
LOS by Move:	A	A	A	A	A	A	D+	D+	D+	C	C	C
HCM2kAvgQ:	4	4	4	11	11	11	6	6	6	2	2	2

Note: Queue reported is the number of cars per lane.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	70	0	180	635	110	55	80	193	580	0	0	2686
Future Volume (vph)	70	0	180	635	110	55	80	193	580	0	0	2686
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0	7.0	7.0			7.0	6.9			6.9
Lane Util. Factor		0.95	0.95	0.91	0.91			0.97	0.91			0.91
Frt		0.93	0.85	1.00	0.98			1.00	1.00			0.97
Flt Protected		0.97	1.00	0.95	0.97			0.95	1.00			1.00
Satd. Flow (prot)		1605	1504	1610	3226			3433	5085			4950
Flt Permitted		0.97	1.00	0.95	0.97			0.95	1.00			1.00
Satd. Flow (perm)		1605	1504	1610	3226			3433	5085			4950
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	70	0	180	635	110	55	80	193	580	0	0	2686
RTOR Reduction (vph)	0	114	106	0	6	0	0	0	0	0	0	23
Lane Group Flow (vph)	0	15	15	317	477	0	0	273	580	0	0	3243
Turn Type	Split	NA	Perm	Split	NA		Prot	Prot	NA			NA
Protected Phases	4	4		8	8		5	5	2			6
Permitted Phases			4									
Actuated Green, G (s)		18.0	18.0	33.0	33.0			8.0	78.1			63.1
Effective Green, g (s)		18.0	18.0	33.0	33.0			8.0	78.1			63.1
Actuated g/C Ratio		0.12	0.12	0.22	0.22			0.05	0.52			0.42
Clearance Time (s)		7.0	7.0	7.0	7.0			7.0	6.9			6.9
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)		192	180	354	709			183	2647			2082
v/s Ratio Prot		0.01		c0.20	0.15			c0.08	0.11			c0.66
v/s Ratio Perm			c0.01									
v/c Ratio		0.08	0.08	0.90	0.67			1.49	0.22			1.56
Uniform Delay, d1		58.6	58.6	56.8	53.6			71.0	19.5			43.5
Progression Factor		1.00	1.00	1.00	1.00			0.96	0.69			1.00
Incremental Delay, d2		0.8	0.9	27.5	5.0			247.9	0.0			253.4
Delay (s)		59.5	59.5	84.3	58.6			316.0	13.6			296.9
Level of Service		E	E	F	E			F	B			F
Approach Delay (s)		59.5			68.8				110.4			296.9
Approach LOS		E			E				F			F

Intersection Summary			
HCM 2000 Control Delay	219.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	27.9
Intersection Capacity Utilization	121.0%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	580
Future Volume (vph)	580
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	1.00
Adj. Flow (vph)	580
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	137	10	157	0	0	0	0	743	714	407	3322	0
Future Volume (vph)	137	10	157	0	0	0	0	743	714	407	3322	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0					6.2	6.2	6.4	5.9	
Lane Util. Factor	0.95	0.95	1.00					0.81	0.88	1.00	0.91	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1696	1583					7544	2787	1770	5085	
Flt Permitted	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1696	1583					7544	2787	1770	5085	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	137	10	157	0	0	0	0	743	714	407	3322	0
RTOR Reduction (vph)	0	0	58	0	0	0	0	0	409	0	0	0
Lane Group Flow (vph)	73	74	99	0	0	0	0	743	305	407	3322	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	26.0	26.0	26.0					64.1	64.1	40.3	111.1	
Effective Green, g (s)	26.0	26.0	26.0					64.1	64.1	40.3	111.1	
Actuated g/C Ratio	0.17	0.17	0.17					0.43	0.43	0.27	0.74	
Clearance Time (s)	7.0	7.0	7.0					6.2	6.2	6.4	5.9	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	291	293	274					3223	1190	475	3766	
v/s Ratio Prot	0.04	0.04						0.10		0.23	c0.65	
v/s Ratio Perm			c0.06						0.11			
v/c Ratio	0.25	0.25	0.36					0.23	0.26	0.86	0.88	
Uniform Delay, d1	53.6	53.6	54.7					27.3	27.6	52.1	14.6	
Progression Factor	1.00	1.00	1.00					0.63	6.50	1.22	0.40	
Incremental Delay, d2	2.1	2.1	3.7					0.0	0.1	1.5	0.3	
Delay (s)	55.6	55.7	58.4					17.1	179.6	65.1	6.1	
Level of Service	E	E	E					B	F	E	A	
Approach Delay (s)		57.1			0.0			96.8			12.6	
Approach LOS		E			A			F			B	

Intersection Summary			
HCM 2000 Control Delay	37.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	84.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	48	147	94	7	59	53	1293	393	219	3235	71
Future Volume (vph)	70	48	147	94	7	59	53	1293	393	219	3235	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.81		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	1.00	1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1556	1761	1863	1583	1770	7221		1770	5069	
Flt Permitted	0.75	1.00	1.00	0.73	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1403	1863	1556	1345	1863	1583	1770	7221		1770	5069	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	70	48	147	94	7	59	53	1293	393	219	3235	71
RTOR Reduction (vph)	0	0	97	0	0	43	0	45	0	0	1	0
Lane Group Flow (vph)	70	48	50	94	7	16	53	1641	0	219	3305	0
Confl. Peds. (#/hr)			5	5					5			
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Actuated Green, G (s)	41.0	41.0	41.0	41.0	41.0	41.0	10.0	48.6		40.0	78.4	
Effective Green, g (s)	41.0	41.0	41.0	41.0	41.0	41.0	10.0	48.6		40.0	78.4	
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	0.27	0.07	0.32		0.27	0.52	
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	383	509	425	367	509	432	118	2339		472	2649	
v/s Ratio Prot		0.03			0.00		0.03	c0.23		0.12	c0.65	
v/s Ratio Perm	0.05		0.03	c0.07		0.01						
v/c Ratio	0.18	0.09	0.12	0.26	0.01	0.04	0.45	0.70		0.46	1.25	
Uniform Delay, d1	41.7	40.7	40.9	42.6	39.8	40.0	67.4	44.4		46.0	35.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.29	0.97		0.65	0.47	
Incremental Delay, d2	0.2	0.1	0.1	1.7	0.0	0.2	11.7	1.0		0.4	113.0	
Delay (s)	41.9	40.7	41.0	44.3	39.8	40.2	98.5	43.8		30.1	130.0	
Level of Service	D	D	D	D	D	D	F	D		C	F	
Approach Delay (s)		41.2			42.6			45.5			123.8	
Approach LOS		D			D			D			F	

Intersection Summary			
HCM 2000 Control Delay	93.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	99.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	70	0	180	652	110	55	83	194	584	0	0	2692
Future Volume (vph)	70	0	180	652	110	55	83	194	584	0	0	2692
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0	7.0	7.0			7.0	6.9			6.9
Lane Util. Factor		0.95	0.95	0.91	0.91			0.97	0.91			0.91
Frt		0.93	0.85	1.00	0.98			1.00	1.00			0.97
Flt Protected		0.97	1.00	0.95	0.97			0.95	1.00			1.00
Satd. Flow (prot)		1605	1504	1610	3226			3433	5085			4950
Flt Permitted		0.97	1.00	0.95	0.97			0.95	1.00			1.00
Satd. Flow (perm)		1605	1504	1610	3226			3433	5085			4950
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	70	0	180	652	110	55	83	194	584	0	0	2692
RTOR Reduction (vph)	0	114	106	0	6	0	0	0	0	0	0	23
Lane Group Flow (vph)	0	15	15	326	485	0	0	277	584	0	0	3249
Turn Type	Split	NA	Perm	Split	NA		Prot	Prot	NA			NA
Protected Phases	4	4		8	8		5	5	2			6
Permitted Phases			4									
Actuated Green, G (s)		18.0	18.0	33.0	33.0			8.0	78.1			63.1
Effective Green, g (s)		18.0	18.0	33.0	33.0			8.0	78.1			63.1
Actuated g/C Ratio		0.12	0.12	0.22	0.22			0.05	0.52			0.42
Clearance Time (s)		7.0	7.0	7.0	7.0			7.0	6.9			6.9
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)		192	180	354	709			183	2647			2082
v/s Ratio Prot		0.01		c0.20	0.15			c0.08	0.11			c0.66
v/s Ratio Perm			c0.01									
v/c Ratio		0.08	0.08	0.92	0.87dl			1.51	0.22			1.56
Uniform Delay, d1		58.6	58.6	57.2	53.7			71.0	19.5			43.5
Progression Factor		1.00	1.00	1.00	1.00			0.96	0.70			1.00
Incremental Delay, d2		0.8	0.9	31.4	5.3			257.2	0.0			254.7
Delay (s)		59.5	59.5	88.7	59.0			325.2	13.6			298.2
Level of Service		E	E	F	E			F	B			F
Approach Delay (s)		59.5			70.8				113.8			298.2
Approach LOS		E			E				F			F

Intersection Summary			
HCM 2000 Control Delay	220.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	27.9
Intersection Capacity Utilization	121.7%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	580
Future Volume (vph)	580
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	1.00
Adj. Flow (vph)	580
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	137	10	158	0	0	0	0	750	754	407	3345	0
Future Volume (vph)	137	10	158	0	0	0	0	750	754	407	3345	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0					6.2	6.2	6.4	5.9	
Lane Util. Factor	0.95	0.95	1.00					0.81	0.88	1.00	0.91	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1696	1583					7544	2787	1770	5085	
Flt Permitted	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1696	1583					7544	2787	1770	5085	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	137	10	158	0	0	0	0	750	754	407	3345	0
RTOR Reduction (vph)	0	0	58	0	0	0	0	0	432	0	0	0
Lane Group Flow (vph)	73	74	100	0	0	0	0	750	322	407	3345	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	26.0	26.0	26.0					64.1	64.1	40.3	111.1	
Effective Green, g (s)	26.0	26.0	26.0					64.1	64.1	40.3	111.1	
Actuated g/C Ratio	0.17	0.17	0.17					0.43	0.43	0.27	0.74	
Clearance Time (s)	7.0	7.0	7.0					6.2	6.2	6.4	5.9	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	291	293	274					3223	1190	475	3766	
v/s Ratio Prot	0.04	0.04						0.10		0.23	c0.66	
v/s Ratio Perm			c0.06						0.12			
v/c Ratio	0.25	0.25	0.37					0.23	0.27	0.86	0.89	
Uniform Delay, d1	53.6	53.6	54.7					27.3	27.8	52.1	14.7	
Progression Factor	1.00	1.00	1.00					0.62	6.91	1.20	0.29	
Incremental Delay, d2	2.1	2.1	3.7					0.0	0.1	4.0	0.9	
Delay (s)	55.6	55.7	58.5					17.0	192.4	66.7	5.2	
Level of Service	E	E	E					B	F	E	A	
Approach Delay (s)		57.1			0.0			104.9			11.9	
Approach LOS		E			A			F			B	

Intersection Summary			
HCM 2000 Control Delay	39.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	85.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	48	147	96	7	59	53	1340	394	219	3259	71
Future Volume (vph)	70	48	147	96	7	59	53	1340	394	219	3259	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.81		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	1.00	1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1556	1761	1863	1583	1770	7230		1770	5069	
Flt Permitted	0.75	1.00	1.00	0.73	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1403	1863	1556	1345	1863	1583	1770	7230		1770	5069	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	70	48	147	96	7	59	53	1340	394	219	3259	71
RTOR Reduction (vph)	0	0	97	0	0	43	0	43	0	0	1	0
Lane Group Flow (vph)	70	48	50	96	7	16	53	1691	0	219	3329	0
Confl. Peds. (#/hr)			5	5					5			
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Actuated Green, G (s)	41.0	41.0	41.0	41.0	41.0	41.0	10.0	50.0		38.6	78.4	
Effective Green, g (s)	41.0	41.0	41.0	41.0	41.0	41.0	10.0	50.0		38.6	78.4	
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	0.27	0.07	0.33		0.26	0.52	
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	383	509	425	367	509	432	118	2410		455	2649	
v/s Ratio Prot		0.03			0.00		0.03	c0.23		0.12	c0.66	
v/s Ratio Perm	0.05		0.03	c0.07		0.01						
v/c Ratio	0.18	0.09	0.12	0.26	0.01	0.04	0.45	0.70		0.48	1.26	
Uniform Delay, d1	41.7	40.7	40.9	42.7	39.8	40.0	67.4	43.5		47.2	35.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.28	0.97		0.64	0.46	
Incremental Delay, d2	0.2	0.1	0.1	1.7	0.0	0.2	11.7	0.9		0.4	117.0	
Delay (s)	41.9	40.7	41.0	44.4	39.8	40.2	98.1	43.1		30.7	133.4	
Level of Service	D	D	D	D	D	D	F	D		C	F	
Approach Delay (s)		41.2			42.7			44.7			127.1	
Approach LOS		D			D			D			F	

Intersection Summary			
HCM 2000 Control Delay	95.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	100.4%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Cityline TIA
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #25: Mathilda Avenue / Maude Avenue (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 173 3310*** 459
Lanes: 1 0 4 0 2

Signal=Protect Rights=Overlap (West approach)
Final Vol: / Lanes:
625 2
0
458 1
0
815*** 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 1.039
Avg Crit Del (sec/veh): 81.7
Avg Delay (sec/veh): 68.7
LOS: E

Signal=Protect Rights=Include (East approach)
Lanes: / Final Vol:
0 140
1
1 113
0
1 105***

Lanes: 2 0 3 0 1
Final Vol: 157*** 1329 105
Signal=Protect/Rights=Overlap

Street Name:	Mathilda Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	124	894	105	307	2053	143	470	374	623	105	101	110
Growth 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
Initial Bse:	124	894	105	307	2053	143	470	374	623	105	101	110
Added Vol:	33	435	0	152	1257	30	155	84	192	0	12	30
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	157	1329	105	459	3310	173	625	458	815	105	113	140
User 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
PHF 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
PHF Volume:	157	1329	105	459	3310	173	625	458	815	105	113	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	157	1329	105	459	3310	173	625	458	815	105	113	140
PCE 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
MLF 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
FinalVolume:	157	1329	105	459	3310	173	625	458	815	105	113	140
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	4.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	3150	5700	1750	3150	7600	1750	3150	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.23	0.06	0.15	0.44	0.10	0.20	0.24	0.47	0.06	0.06	0.08
Crit Moves:	****				****				****	****		
Green Time:	7.7	46.0	55.2	28.7	67.1	119.3	52.2	64.0	71.7	9.2	21.1	21.1
Volume/Cap:	1.04	0.81	0.17	0.81	1.04	0.13	0.61	0.60	1.04	1.04	0.45	0.61
Delay/Veh:	160.1	56.1	36.6	71.7	73.8	5.8	46.4	39.3	86.9	175.9	64.7	68.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	160.1	56.1	36.6	71.7	73.8	5.8	46.4	39.3	86.9	175.9	64.7	68.2
LOS by Move:	F	E+	D+	E	E	A	D	D	F	F	E	E
HCM2kAvgQ:	6	20	4	12	42	2	16	18	52	7	5	7

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #25: Mathilda Avenue / Maude Avenue (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 173 3375*** 461
Lanes: 1 0 4 0 2

Final Vol:	Lanes:	Signal=Protect Rights=Overlap			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	12/1/2017			
625	2		Cycle Time (sec):	160		0	149
	0		Loss Time (sec):	12		1	
458	1		Critical V/C:	1.048		1	113
	0		Avg Crit Del (sec/veh):	84.5		0	
815***	1		Avg Delay (sec/veh):	70.7		1	105***
			LOS:	E			

Lanes: 2 0 3 0 1
Final Vol: 157*** 1458 105
Signal=Protect/Rights=Overlap

Street Name:	Mathilda Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	124	894	105	307	2053	143	470	374	623	105	101	110
Growth 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
Initial Bse:	124	894	105	307	2053	143	470	374	623	105	101	110
Added Vol:	33	564	0	152	1324	30	155	84	192	0	12	39
PasserByVol:	0	0	0	2	-2	0	0	0	0	0	0	0
Initial Fut:	157	1458	105	461	3375	173	625	458	815	105	113	149
User 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
PHF 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
PHF Volume:	157	1458	105	461	3375	173	625	458	815	105	113	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	157	1458	105	461	3375	173	625	458	815	105	113	149
PCE 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
MLF 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
FinalVolume:	157	1458	105	461	3375	173	625	458	815	105	113	149
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	4.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	3150	5700	1750	3150	7600	1750	3150	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.26	0.06	0.15	0.44	0.10	0.20	0.24	0.47	0.06	0.06	0.09
Crit Moves:	****				****				****	****		
Green Time:	7.6	47.9	57.1	27.4	67.8	118.6	50.8	63.5	71.1	9.2	21.8	21.8
Volume/Cap:	1.05	0.85	0.17	0.85	1.05	0.13	0.62	0.61	1.05	1.05	0.44	0.62
Delay/Veh:	163.2	57.1	35.3	76.8	76.6	6.0	47.7	39.8	90.2	179.0	64.0	68.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	163.2	57.1	35.3	76.8	76.6	6.0	47.7	39.8	90.2	179.0	64.0	68.2
LOS by Move:	F	E+	D+	E-	E-	A	D	D	F	F	E	E
HCM2kAvgQ:	6	23	4	12	44	2	16	18	53	7	5	7

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #26: Mathilda Avenue / Indio Avenue

Signal=Protect/Rights=Include
Final Vol: 224 3928*** 94
Lanes: 0 1 2 0 1

Westbound (left side): Signal=Protect Rights=Overlap
Final Vol: / Lanes:
41 1
0
0 0
1
544*** 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 1.196
Avg Crit Del (sec/veh): 131.7
Avg Delay (sec/veh): 110.5
LOS: F

Signal=Protect Rights=Include
Lanes: / Final Vol:
0 139
1
0 0
0
1 109***

Lanes: 1 0 2 1 0
Final Vol: 47*** 1306 160
Signal=Protect/Rights=Overlap

Street Name:	Mathilda Avenue						Indio Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	23	897	115	70	2673	55	36	0	494	103	0	86
Growth 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
Initial Bse:	23	897	115	70	2673	55	36	0	494	103	0	86
Added Vol:	24	409	45	24	1255	169	5	0	50	6	0	53
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	47	1306	160	94	3928	224	41	0	544	109	0	139
User 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
PHF 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
PHF Volume:	47	1306	160	94	3928	224	41	0	544	109	0	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	1306	160	94	3928	224	41	0	544	109	0	139
PCE 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
MLF 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
FinalVolume:	47	1306	160	94	3928	224	41	0	544	109	0	139
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	1.00	0.95	0.92	1.00	0.95
Lanes:	1.00	2.66	0.34	1.00	2.83	0.17	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	1750	4988	611	1750	5297	302	1750	0	1800	1750	0	1800
Capacity Analysis Module:												
Vol/Sat:	0.03	0.26	0.26	0.05	0.74	0.74	0.02	0.00	0.30	0.06	0.00	0.08
Crit Moves:	****				****				****	****		
Green Time:	7.0	87.5	95.7	17.9	98.4	98.4	15.4	0.0	41.3	8.3	0.0	8.3
Volume/Cap:	0.61	0.48	0.44	0.48	1.21	1.21	0.24	0.00	1.17	1.21	0.00	1.49
Delay/Veh:	89.1	22.4	17.6	68.5	126	126.2	67.7	0.0	157.0	235.8	0.0	346.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	89.1	22.4	17.6	68.5	126	126.2	67.7	0.0	157.0	235.8	0.0	346.5
LOS by Move:	F	C+	B	E	F	F	E	A	F	F	A	F
HCM2kAvgQ:	2	14	12	4	93	93	2	0	41	11	0	15

Note: Queue reported is the number of cars per lane.

Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #26: Mathilda Avenue / Indio Avenue

Signal=Protect/Rights=Include
Final Vol: 224 3994*** 94
Lanes: 0 1 2 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Overlap			Signal=Protect Rights=Include	Lanes:	Final Vol:
41	1		Vol Cnt Date:	12/1/2017		0	139
			Cycle Time (sec):	160			
	0		Loss Time (sec):	12		1	
0	0		Critical V/C:	1.223		0	0
	1		Avg Crit Del (sec/veh):	144.5		0	
568***	0		Avg Delay (sec/veh):	117.9		1	109***
			LOS:	F			

Lanes: 1 0 2 1 0
Final Vol: 67*** 1436 230
Signal=Protect/Rights=Overlap

Street Name:	Mathilda Avenue						Indio Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	23	897	115	70	2673	55	36	0	494	103	0	86
Growth 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
Initial Bse:	23	897	115	70	2673	55	36	0	494	103	0	86
Added Vol:	44	539	115	24	1323	169	5	0	74	6	0	53
PasserByVol:	0	0	0	0	-2	0	0	0	0	0	0	0
Initial Fut:	67	1436	230	94	3994	224	41	0	568	109	0	139
User 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
PHF 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
PHF Volume:	67	1436	230	94	3994	224	41	0	568	109	0	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	1436	230	94	3994	224	41	0	568	109	0	139
PCE 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
MLF 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
FinalVolume:	67	1436	230	94	3994	224	41	0	568	109	0	139
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	1.00	0.95	0.92	1.00	0.95
Lanes:	1.00	2.57	0.43	1.00	2.83	0.17	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	1750	4826	773	1750	5302	297	1750	0	1800	1750	0	1800
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.30	0.05	0.75	0.75	0.02	0.00	0.32	0.06	0.00	0.08
Crit Moves:	****				****				****	****		
Green Time:	7.0	88.7	96.7	16.0	97.7	97.7	15.7	0.0	42.2	8.1	0.0	8.1
Volume/Cap:	0.88	0.54	0.49	0.54	1.23	1.23	0.24	0.00	1.20	1.23	0.00	1.53
Delay/Veh:	138.5	22.8	17.9	71.7	139	139.1	67.4	0.0	165.7	247.3	0.0	362.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	138.5	22.8	17.9	71.7	139	139.1	67.4	0.0	165.7	247.3	0.0	362.0
LOS by Move:	F	C+	B	E	F	F	E	A	F	F	A	F
HCM2kAvgQ:	3	16	14	4	98	98	2	0	43	11	0	15

Note: Queue reported is the number of cars per lane.

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Intersection #27: Mathilda Avenue / California Avenue

Signal=Protect/Rights=Overlap
Final Vol: 329 3606*** 458
Lanes: 1 0 3 0 1

Westbound side: Signal=Protect, Rights=Include
Final Vol: 209, Lanes: 1
Lanes: 0
Final Vol: 166, Lanes: 1
Lanes: 0
Final Vol: 381***, Lanes: 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 135
Loss Time (sec): 12
Critical V/C: 1.036
Avg Crit Del (sec/veh): 67.0
Avg Delay (sec/veh): 56.9
LOS: E+

Signal=Protect, Rights=Overlap
Lanes: 1, Final Vol: 144
Lanes: 0
Lanes: 1, Final Vol: 36
Lanes: 0
Lanes: 1, Final Vol: 69***

Lanes: 1 0 2 1 0
Final Vol: 94*** 1316 310
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	84	963	259	221	2576	284	119	152	281	69	35	108
Growth 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
Initial Bse:	84	963	259	221	2576	284	119	152	281	69	35	108
Added Vol:	10	353	51	237	1030	45	90	14	100	0	1	36
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	94	1316	310	458	3606	329	209	166	381	69	36	144
User 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
PHF 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
PHF Volume:	94	1316	310	458	3606	329	209	166	381	69	36	144
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	94	1316	310	458	3606	329	209	166	381	69	36	144
PCE 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
MLF 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
FinalVolume:	94	1316	310	458	3606	329	209	166	381	69	36	144
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.41	0.59	1.00	3.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	4531	1067	1750	5700	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.29	0.29	0.26	0.63	0.19	0.12	0.09	0.22	0.04	0.02	0.08
Crit Moves:	****				****				****	****		
Green Time:	7.0	46.3	46.3	41.8	81.1	102.6	21.5	27.9	27.9	7.0	13.4	55.1
Volume/Cap:	1.04	0.85	0.85	0.85	1.05	0.25	0.75	0.42	1.05	0.76	0.19	0.20
Delay/Veh:	168.6	44.7	44.7	55.4	58.7	4.9	64.8	47.3	115.5	93.8	56.4	25.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	168.6	44.7	44.7	55.4	58.7	4.9	64.8	47.3	115.5	93.8	56.4	25.9
LOS by Move:	F	D	D	E+	E+	A	E	D	F	F	E+	C
HCM2kAvgQ:	8	23	23	18	54	4	11	6	24	3	1	4

Note: Queue reported is the number of cars per lane.

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Intersection #27: Mathilda Avenue / California Avenue

Signal=Protect/Rights=Overlap
Final Vol: 329 3689*** 464
Lanes: 1 0 3 0 1

Signal=Protect Rights=Include (East Bound)
Final Vol: 209, 166, 422***
Lanes: 1, 0, 1, 0, 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 135
Loss Time (sec): 12
Critical V/C: 1.077
Avg Crit Del (sec/veh): 85.4
Avg Delay (sec/veh): 69.8
LOS: E

Signal=Protect Rights=Overlap (West Bound)
Lanes: 1, 0, 1, 0, 1
Final Vol: 164, 36, 69***

Lanes: 1 0 2 1 0
Final Vol: 94*** 1515 378
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	84	963	259	221	2576	284	119	152	281	69	35	108
Growth 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
Initial Bse:	84	963	259	221	2576	284	119	152	281	69	35	108
Added Vol:	10	552	119	245	1113	45	90	14	141	0	1	56
PasserByVol:	0	0	0	-2	0	0	0	0	0	0	0	0
Initial Fut:	94	1515	378	464	3689	329	209	166	422	69	36	164
User 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
PHF 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
PHF Volume:	94	1515	378	464	3689	329	209	166	422	69	36	164
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	94	1515	378	464	3689	329	209	166	422	69	36	164
PCE 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
MLF 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
FinalVolume:	94	1515	378	464	3689	329	209	166	422	69	36	164
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.38	0.62	1.00	3.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	4480	1118	1750	5700	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.34	0.34	0.27	0.65	0.19	0.12	0.09	0.24	0.04	0.02	0.09
Crit Moves:	****				****				****	****		
Green Time:	7.0	48.4	48.4	38.0	79.4	102.0	22.6	29.6	29.6	7.0	14.0	52.0
Volume/Cap:	1.04	0.94	0.94	0.94	1.10	0.25	0.71	0.40	1.10	0.76	0.18	0.24
Delay/Veh:	168.6	51.6	51.6	74.2	78.2	5.1	61.2	45.7	128.5	93.8	55.7	28.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	168.6	51.6	51.6	74.2	78.2	5.1	61.2	45.7	128.5	93.8	55.7	28.4
LOS by Move:	F	D-	D-	E	E-	A	E	D	F	F	E+	C
HCM2kAvgQ:	8	30	30	19	61	4	10	6	28	3	1	5

Note: Queue reported is the number of cars per lane.

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Intersection #28: Mathilda Avenue Off-Ramp / Evelyn Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Final Vol:	Lanes:	Signal=Permit Rights=Include			Signal=Permit Rights=Include	Lanes:	Final Vol:
0	0		Vol Cnt Date:	4/1/2017		0	0
			Cycle Time (sec):	95			
	0		Loss Time (sec):	6		0	
494***	1		Critical V/C:	0.383		1	359
	0		Avg Crit Del (sec/veh):	12.7		0	
0	0		Avg Delay (sec/veh):	12.2		0	0
			LOS:	B			

Lanes: 1 0 0 0 1
Final Vol: 173*** 0 111
Signal=Split/Rights=Overlap

Street Name:	Mathilda Avenue Off-Ramp						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	93	0	109	0	0	0	0	450	0	0	338	0
Growth 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
Initial Bse:	93	0	109	0	0	0	0	450	0	0	338	0
Added Vol:	80	0	2	0	0	0	0	44	0	0	21	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	173	0	111	0	0	0	0	494	0	0	359	0
User 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
PHF 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
PHF Volume:	173	0	111	0	0	0	0	494	0	0	359	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	173	0	111	0	0	0	0	494	0	0	359	0
PCE 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
MLF 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
FinalVolume:	173	0	111	0	0	0	0	494	0	0	359	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	0	1900	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.00	0.06	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.19	0.00
Crit Moves:	****							****				
Green Time:	24.5	0.0	24.5	0.0	0.0	0.0	0.0	64.5	0.0	0.0	64.5	0.0
Volume/Cap:	0.38	0.00	0.25	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.28	0.00
Delay/Veh:	29.6	0.0	28.2	0.0	0.0	0.0	0.0	6.8	0.0	0.0	6.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.6	0.0	28.2	0.0	0.0	0.0	0.0	6.8	0.0	0.0	6.2	0.0
LOS by Move:	C	A	C	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	5	0	3	0	0	0	0	6	0	0	4	0

Note: Queue reported is the number of cars per lane.

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Intersection #28: Mathilda Avenue Off-Ramp / Evelyn Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Permit
Rights=Include

Final Vol: Lanes:
0 0
0
509*** 1
0
0 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 95
Loss Time (sec): 6
Critical V/C: 0.391
Avg Crit Del (sec/veh): 12.6
Avg Delay (sec/veh): 11.9
LOS: B+

Signal=Permit
Rights=Include

Lanes: Final Vol:
0 0
0
1 406
0
0 0

Lanes: 1 0 0 0 1
Final Vol: 173*** 0 114
Signal=Split/Rights=Overlap

Street Name:	Mathilda Avenue Off-Ramp						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	93	0	109	0	0	0	0	450	0	0	338	0
Growth 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
Initial Bse:	93	0	109	0	0	0	0	450	0	0	338	0
Added Vol:	80	0	5	0	0	0	0	59	0	0	68	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	173	0	114	0	0	0	0	509	0	0	406	0
User 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
PHF 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
PHF Volume:	173	0	114	0	0	0	0	509	0	0	406	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	173	0	114	0	0	0	0	509	0	0	406	0
PCE 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
MLF 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
FinalVolume:	173	0	114	0	0	0	0	509	0	0	406	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	0	1900	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.00	0.07	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.21	0.00
Crit Moves:	****							****				
Green Time:	24.0	0.0	24.0	0.0	0.0	0.0	0.0	65.0	0.0	0.0	65.0	0.0
Volume/Cap:	0.39	0.00	0.26	0.00	0.00	0.00	0.00	0.39	0.00	0.00	0.31	0.00
Delay/Veh:	30.0	0.0	28.7	0.0	0.0	0.0	0.0	6.7	0.0	0.0	6.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.0	0.0	28.7	0.0	0.0	0.0	0.0	6.7	0.0	0.0	6.2	0.0
LOS by Move:	C	A	C	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	5	0	3	0	0	0	0	6	0	0	5	0

Note: Queue reported is the number of cars per lane.

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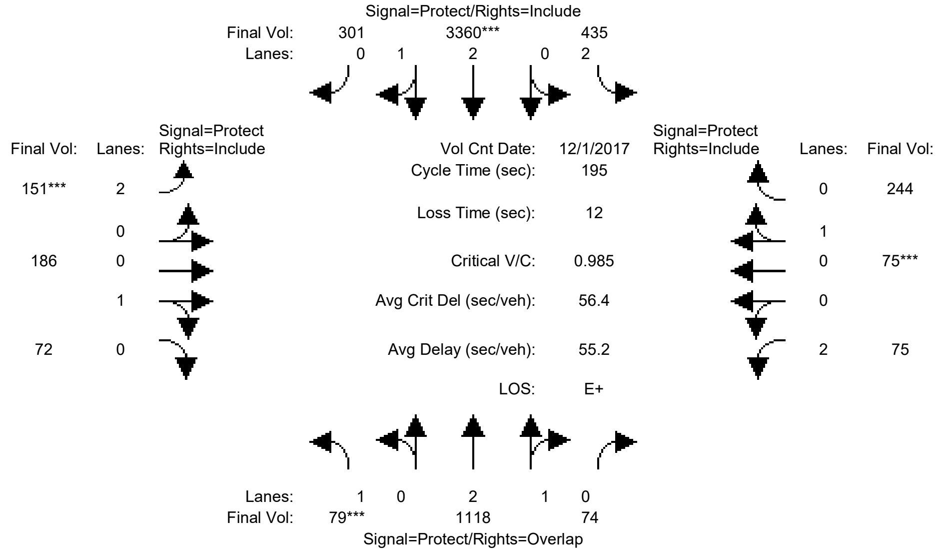
Intersection #29: Mathilda Avenue / Washington Avenue



Street Name:	Mathilda Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	48	802	59	297	2482	260	136	167	42	65	61	138
Growth 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
Initial Bse:	48	802	59	297	2482	260	136	167	42	65	61	138
Added Vol:	31	316	15	138	878	41	15	19	30	10	14	106
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	79	1118	74	435	3360	301	151	186	72	75	75	244
User 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
PHF 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
PHF Volume:	79	1118	74	435	3360	301	151	186	72	75	75	244
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	1118	74	435	3360	301	151	186	72	75	75	244
PCE 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
MLF 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
FinalVolume:	79	1118	74	435	3360	301	151	186	72	75	75	244
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.99	0.95	0.83	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	2.81	0.19	2.00	2.74	0.26	2.00	0.72	0.28	2.00	0.24	0.76
Final Sat.:	1750	5252	348	3150	5139	460	3150	1298	502	3150	423	1377
Capacity Analysis Module:												
Vol/Sat:	0.05	0.21	0.21	0.14	0.65	0.65	0.05	0.14	0.14	0.02	0.18	0.18
Crit Moves:	****				****		****				****	
Green Time:	8.9	84.0	92.9	54.5	129	129.5	9.5	35.7	35.7	8.9	35.1	35.1
Volume/Cap:	0.98	0.49	0.45	0.49	0.98	0.98	0.98	0.78	0.78	0.52	0.98	0.98
Delay/Veh:	188.1	40.3	34.1	59.2	43.2	43.2	160.6	87.6	87.6	94.3	125	125.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	188.1	40.3	34.1	59.2	43.2	43.2	160.6	87.6	87.6	94.3	125	125.4
LOS by Move:	F	D	C-	E+	D	D	F	F	F	F	F	F
HCM2kAvgQ:	8	17	15	13	77	77	7	16	16	3	23	23

Note: Queue reported is the number of cars per lane.

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Intersection #29: Mathilda Avenue / Washington Avenue

Signal=Protect/Rights=Include
Final Vol: 302 3498*** 436
Lanes: 0 1 2 0 2

Signal=Protect
Rights=Include
Final Vol: Lanes:
151*** 2
0
189 0
1
90 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 195
Loss Time (sec): 12
Critical V/C: 1.057
Avg Crit Del (sec/veh): 81.4
Avg Delay (sec/veh): 72.1
LOS: E

Signal=Protect
Rights=Include
Lanes: Final Vol:
0 280
1
0 81***
0
2 120

Lanes: 1 0 2 1 0
Final Vol: 114*** 1369 94
Signal=Protect/Rights=Overlap

Street Name:	Mathilda Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	48	802	59	297	2482	260	136	167	42	65	61	138
Growth 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
Initial Bse:	48	802	59	297	2482	260	136	167	42	65	61	138
Added Vol:	66	567	35	139	1016	42	15	22	48	55	20	142
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	114	1369	94	436	3498	302	151	189	90	120	81	280
User 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
PHF 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
PHF Volume:	114	1369	94	436	3498	302	151	189	90	120	81	280
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	114	1369	94	436	3498	302	151	189	90	120	81	280
PCE 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
MLF 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
FinalVolume:	114	1369	94	436	3498	302	151	189	90	120	81	280
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.99	0.95	0.83	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	2.80	0.20	2.00	2.75	0.25	2.00	0.68	0.32	2.00	0.22	0.78
Final Sat.:	1750	5240	360	3150	5154	445	3150	1219	581	3150	404	1396
Capacity Analysis Module:												
Vol/Sat:	0.07	0.26	0.26	0.14	0.68	0.68	0.05	0.16	0.16	0.04	0.20	0.20
Crit Moves:	****				****		****				****	
Green Time:	12.0	89.7	98.7	47.5	125	125.2	8.8	36.8	36.8	9.0	37.0	37.0
Volume/Cap:	1.06	0.57	0.52	0.57	1.06	1.06	1.06	0.82	0.82	0.82	1.06	1.06
Delay/Veh:	194.5	38.8	32.3	65.8	67.9	67.9	184.5	90.7	90.7	121.8	144	143.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	194.5	38.8	32.3	65.8	67.9	67.9	184.5	90.7	90.7	121.8	144	143.6
LOS by Move:	F	D+	C-	E	E	E	F	F	F	F	F	F
HCM2kAvgQ:	11	21	19	14	88	88	7	17	17	5	27	27

Note: Queue reported is the number of cars per lane.

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Intersection #30: Mathilda Avenue / McKinley Avenue

Signal=Protect/Rights=Include
Final Vol: 73 3092*** 256
Lanes: 0 1 2 0 2

Final Vol: Lanes: Signal=Protect Rights=Include
80 1
0
50*** 0
1
60 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 150
Loss Time (sec): 12
Critical V/C: 0.750
Avg Crit Del (sec/veh): 19.6
Avg Delay (sec/veh): 22.2
LOS: C+

Signal=Protect Rights=Overlap Lanes: Final Vol:
1 163
0
0 0
0
2 154***

Lanes: 1 0 2 1 0
Final Vol: 26*** 1093 119
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	26	807	56	77	2351	73	80	50	60	79	0	88
Growth 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
Initial Bse:	26	807	56	77	2351	73	80	50	60	79	0	88
Added Vol:	0	286	63	179	741	0	0	0	0	75	0	75
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	1093	119	256	3092	73	80	50	60	154	0	163
User 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
PHF 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
PHF Volume:	26	1093	119	256	3092	73	80	50	60	154	0	163
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	1093	119	256	3092	73	80	50	60	154	0	163
PCE 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
MLF 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
FinalVolume:	26	1093	119	256	3092	73	80	50	60	154	0	163
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.83	0.98	0.95	0.92	0.95	0.95	0.83	1.00	0.92
Lanes:	1.00	2.69	0.31	2.00	2.93	0.07	1.00	0.45	0.55	2.00	0.00	1.00
Final Sat.:	1750	5049	550	3150	5471	129	1750	818	982	3150	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.22	0.22	0.08	0.57	0.57	0.05	0.06	0.06	0.05	0.00	0.09
Crit Moves:	****				****			****		****		
Green Time:	7.0	84.8	84.8	31.8	110	109.7	17.0	11.9	11.9	9.5	0.0	41.3
Volume/Cap:	0.32	0.38	0.38	0.38	0.77	0.77	0.40	0.77	0.77	0.77	0.00	0.34
Delay/Veh:	71.4	18.2	18.2	51.0	13.4	13.4	63.1	90.4	90.4	86.2	0.0	43.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	71.4	18.2	18.2	51.0	13.4	13.4	63.1	90.4	90.4	86.2	0.0	43.8
LOS by Move:	E	B-	B-	D-	B	B	E	F	F	F	A	D
HCM2kAvgQ:	2	10	10	6	31	31	4	7	7	5	0	6

Note: Queue reported is the number of cars per lane.

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Intersection #30: Mathilda Avenue / McKinley Avenue

Signal=Protect/Rights=Include
Final Vol: 73 3150*** 399
Lanes: 0 1 2 0 2

Signal=Protect
Rights=Include

Final Vol:	Lanes:
80	1
	0
50***	0
	1
60	0

Vol Cnt Date:	12/1/2017
Cycle Time (sec):	150
Loss Time (sec):	12
Critical V/C:	0.842
Avg Crit Del (sec/veh):	31.6
Avg Delay (sec/veh):	33.2
LOS:	C-

Signal=Protect
Rights=Overlap

Lanes:	Final Vol:
1	394
0	
0	0
0	
2	388***

Lanes: 1 0 2 1 0
Final Vol: 26*** 1169 166
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	26	807	56	77	2351	73	80	50	60	79	0	88
Growth 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
Initial Bse:	26	807	56	77	2351	73	80	50	60	79	0	88
Added Vol:	0	362	110	322	799	0	0	0	0	309	0	306
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	1169	166	399	3150	73	80	50	60	388	0	394
User 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
PHF 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
PHF Volume:	26	1169	166	399	3150	73	80	50	60	388	0	394
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	1169	166	399	3150	73	80	50	60	388	0	394
PCE 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
MLF 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
FinalVolume:	26	1169	166	399	3150	73	80	50	60	388	0	394
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.83	0.98	0.95	0.92	0.95	0.95	0.83	1.00	0.92
Lanes:	1.00	2.61	0.39	2.00	2.93	0.07	1.00	0.45	0.55	2.00	0.00	1.00
Final Sat.:	1750	4903	696	3150	5473	127	1750	818	982	3150	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.24	0.24	0.13	0.58	0.58	0.05	0.06	0.06	0.12	0.00	0.23
Crit Moves:	****				****			****		****		
Green Time:	7.0	69.4	69.4	36.9	99.2	99.2	10.2	10.5	10.5	21.2	0.0	58.4
Volume/Cap:	0.32	0.52	0.52	0.52	0.87	0.87	0.67	0.87	0.87	0.87	0.00	0.58
Delay/Veh:	71.4	28.6	28.6	49.5	22.7	22.7	82.2	112	112.4	79.7	0.0	37.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	71.4	28.6	28.6	49.5	22.7	22.7	82.2	112	112.4	79.7	0.0	37.3
LOS by Move:	E	C	C	D	C+	C+	F	F	F	E-	A	D+
HCM2kAvgQ:	2	14	14	10	42	42	5	8	8	12	0	15

Note: Queue reported is the number of cars per lane.

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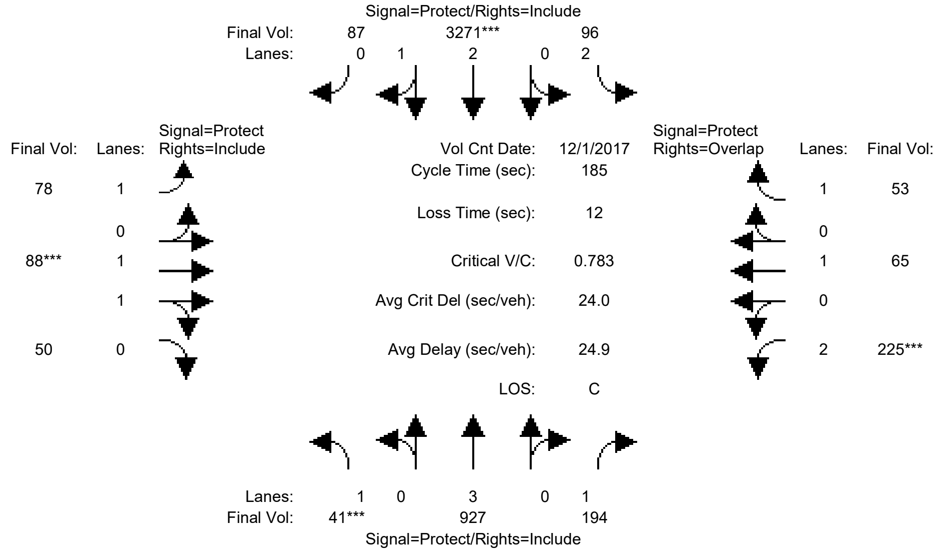
Intersection #31: Mathilda Avenue / Iowa Avenue



Street Name:	Mathilda Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	41	651	43	88	2495	55	53	85	49	65	50	49
Growth 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
Initial Bse:	41	651	43	88	2495	55	53	85	49	65	50	49
Added Vol:	0	276	151	8	776	32	25	3	1	160	15	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	927	194	96	3271	87	78	88	50	225	65	53
User 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
PHF 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
PHF Volume:	41	927	194	96	3271	87	78	88	50	225	65	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	927	194	96	3271	87	78	88	50	225	65	53
PCE 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
MLF 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
FinalVolume:	41	927	194	96	3271	87	78	88	50	225	65	53
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	0.99	0.95	0.83	1.00	0.92
Lanes:	1.00	3.00	1.00	2.00	2.92	0.08	1.00	1.26	0.74	2.00	1.00	1.00
Final Sat.:	1750	5700	1750	3150	5455	145	1750	2358	1340	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.16	0.11	0.03	0.60	0.60	0.04	0.04	0.04	0.07	0.03	0.03
Crit Moves:	****				****			****		****		
Green Time:	7.0	119	118.8	27.6	139	139.4	12.0	10.0	10.0	16.6	14.6	42.2
Volume/Cap:	0.62	0.25	0.17	0.20	0.80	0.80	0.69	0.69	0.69	0.80	0.43	0.13
Delay/Veh:	104.2	14.2	13.4	69.3	15.1	15.1	100.7	95.8	95.8	97.0	83.3	57.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	104.2	14.2	13.4	69.3	15.1	15.1	100.7	95.8	95.8	97.0	83.3	57.0
LOS by Move:	F	B	B	E	B	B	F	F	F	F	F	E+
HCM2kAvgQ:	3	7	5	3	40	40	5	4	4	8	3	2

Note: Queue reported is the number of cars per lane.

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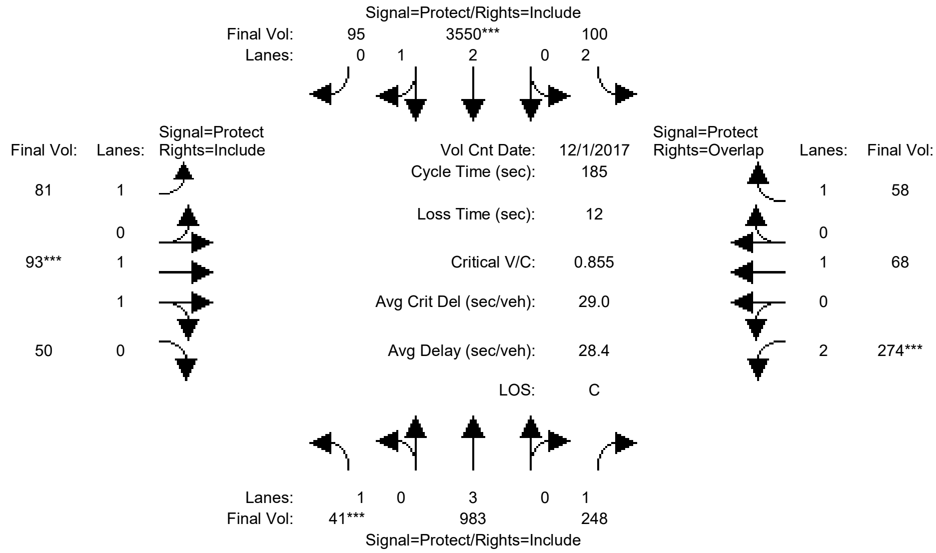
Intersection #31: Mathilda Avenue / Iowa Avenue



Street Name:	Mathilda Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	41	651	43	88	2495	55	53	85	49	65	50	49
Growth 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
Initial Bse:	41	651	43	88	2495	55	53	85	49	65	50	49
Added Vol:	0	332	205	12	1055	40	28	8	1	209	18	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	983	248	100	3550	95	81	93	50	274	68	58
User 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
PHF 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
PHF Volume:	41	983	248	100	3550	95	81	93	50	274	68	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	983	248	100	3550	95	81	93	50	274	68	58
PCE 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
MLF 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
FinalVolume:	41	983	248	100	3550	95	81	93	50	274	68	58
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	0.99	0.95	0.83	1.00	0.92
Lanes:	1.00	3.00	1.00	2.00	2.92	0.08	1.00	1.28	0.72	2.00	1.00	1.00
Final Sat.:	1750	5700	1750	3150	5454	146	1750	2405	1293	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.17	0.14	0.03	0.65	0.65	0.05	0.04	0.04	0.09	0.04	0.03
Crit Moves:	****				****			****		****		
Green Time:	7.0	119	118.6	26.0	138	137.6	13.1	10.0	10.0	18.4	15.3	41.3
Volume/Cap:	0.62	0.27	0.22	0.23	0.88	0.88	0.65	0.72	0.72	0.88	0.43	0.15
Delay/Veh:	104.2	14.4	14.0	70.8	19.7	19.7	95.6	97.7	97.7	105.1	82.6	57.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	104.2	14.4	14.0	70.8	19.7	19.7	95.6	97.7	97.7	105.1	82.6	57.9
LOS by Move:	F	B	B	E	B-	B-	F	F	F	F	F	E+
HCM2kAvgQ:	3	8	6	3	52	52	5	4	4	10	4	3

Note: Queue reported is the number of cars per lane.

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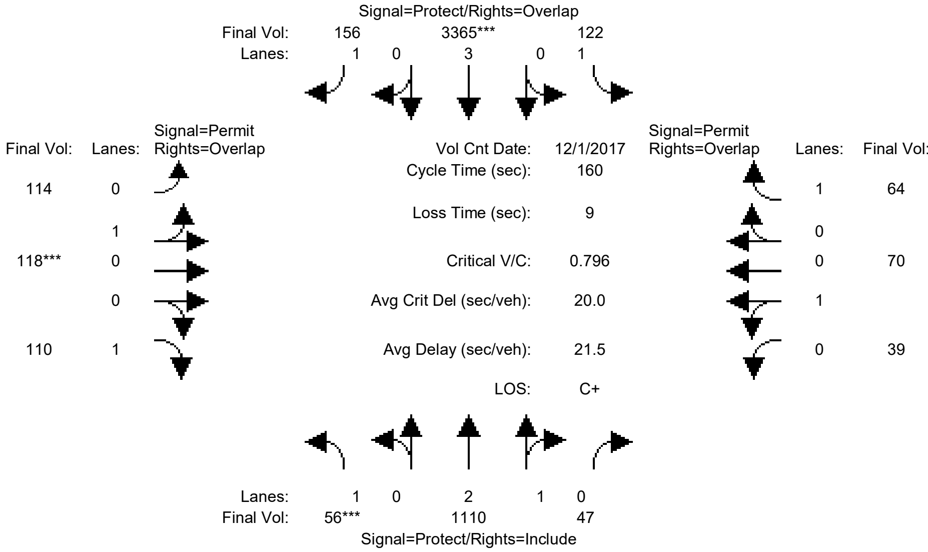
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #32: Mathilda Avenue / Olive Avenue



Street Name:	Mathilda Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	56	705	47	86	2488	133	104	117	110	39	70	52
Growth 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
Initial Bse:	56	705	47	86	2488	133	104	117	110	39	70	52
Added Vol:	0	405	0	36	877	23	10	1	0	0	0	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	1110	47	122	3365	156	114	118	110	39	70	64
User 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
PHF 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
PHF Volume:	56	1110	47	122	3365	156	114	118	110	39	70	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	1110	47	122	3365	156	114	118	110	39	70	64
PCE 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
MLF 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
FinalVolume:	56	1110	47	122	3365	156	114	118	110	39	70	64
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.87	0.13	1.00	3.00	1.00	0.49	0.51	1.00	0.36	0.64	1.00
Final Sat.:	1750	5372	227	1750	5700	1750	884	916	1750	644	1156	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.21	0.21	0.07	0.59	0.09	0.13	0.13	0.06	0.06	0.06	0.04
Crit Moves:	****				****			****				
Green Time:	7.0	93.6	93.6	31.6	118	118.2	25.8	25.8	32.8	25.8	25.8	57.4
Volume/Cap:	0.73	0.35	0.35	0.35	0.80	0.12	0.80	0.80	0.31	0.38	0.38	0.10
Delay/Veh:	105.5	17.4	17.4	56.0	14.5	6.0	79.0	79.0	54.4	60.7	60.7	34.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	105.5	17.4	17.4	56.0	14.5	6.0	79.0	79.0	54.4	60.7	60.7	34.2
LOS by Move:	F	B	B	E+	B	A	E-	E-	D-	E	E	C-
HCM2kAvgQ:	4	10	10	5	34	2	13	13	5	5	5	2

Note: Queue reported is the number of cars per lane.

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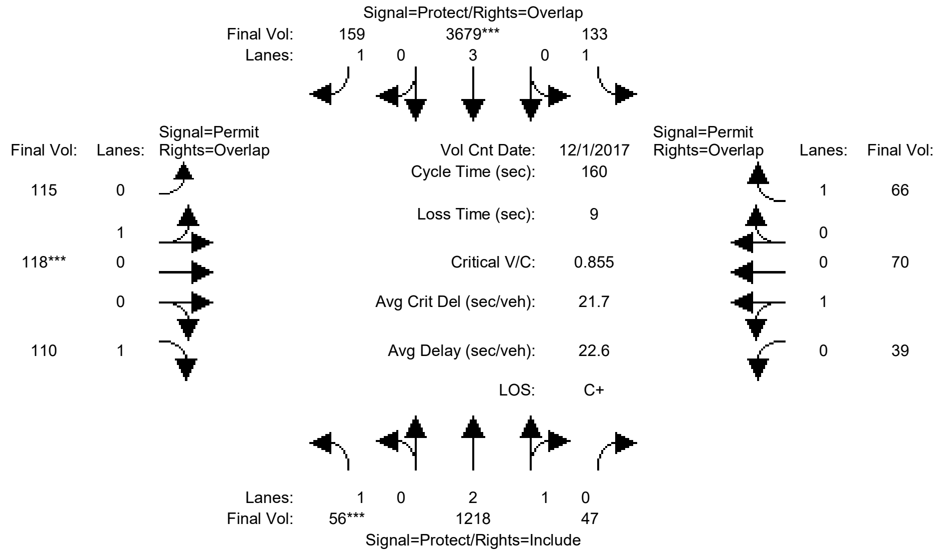
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #32: Mathilda Avenue / Olive Avenue



Street Name:	Mathilda Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	56	705	47	86	2488	133	104	117	110	39	70	52
Growth 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
Initial Bse:	56	705	47	86	2488	133	104	117	110	39	70	52
Added Vol:	0	513	0	47	1191	26	11	1	0	0	0	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	1218	47	133	3679	159	115	118	110	39	70	66
User 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
PHF 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
PHF Volume:	56	1218	47	133	3679	159	115	118	110	39	70	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	1218	47	133	3679	159	115	118	110	39	70	66
PCE 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
MLF 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
FinalVolume:	56	1218	47	133	3679	159	115	118	110	39	70	66
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.88	0.12	1.00	3.00	1.00	0.49	0.51	1.00	0.36	0.64	1.00
Final Sat.:	1750	5392	208	1750	5700	1750	888	912	1750	644	1156	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.23	0.23	0.08	0.65	0.09	0.13	0.13	0.06	0.06	0.06	0.04
Crit Moves:	****				****			****				
Green Time:	7.0	95.0	95.0	32.0	120	119.9	24.1	24.1	31.1	24.1	24.1	56.0
Volume/Cap:	0.73	0.38	0.38	0.38	0.86	0.12	0.86	0.86	0.32	0.40	0.40	0.11
Delay/Veh:	105.5	17.1	17.1	56.1	16.1	5.6	89.7	89.7	56.0	62.5	62.5	35.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	105.5	17.1	17.1	56.1	16.1	5.6	89.7	89.7	56.0	62.5	62.5	35.2
LOS by Move:	F	B	B	E+	B	A	F	F	E+	E	E	D+
HCM2kAvgQ:	4	11	11	6	41	2	14	14	5	5	5	2

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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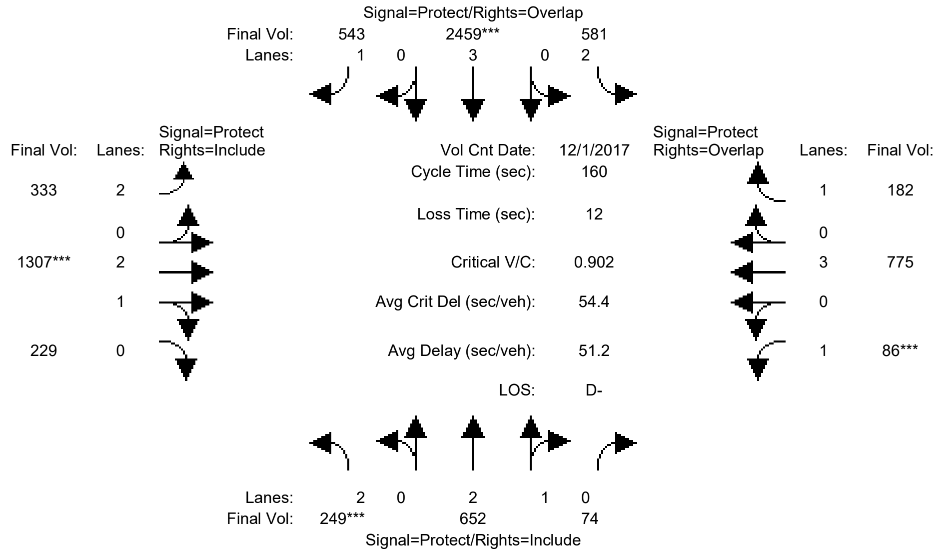
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #33: Mathilda Avenue / El Camino Real (CMP)



Street Name:	Mathilda Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	240	423	74	534	1861	310	182	1276	181	86	776	157
Growth 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
Initial Bse:	240	423	74	534	1861	310	182	1276	181	86	776	157
Added Vol:	9	229	0	47	598	233	151	31	48	0	-1	25
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	249	652	74	581	2459	543	333	1307	229	86	775	182
User 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
PHF 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
PHF Volume:	249	652	74	581	2459	543	333	1307	229	86	775	182
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	249	652	74	581	2459	543	333	1307	229	86	775	182
PCE 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
MLF 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
FinalVolume:	249	652	74	581	2459	543	333	1307	229	86	775	182
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	1.00	0.92	0.83	0.99	0.95	0.92	1.00	0.92
Lanes:	2.00	2.68	0.32	2.00	3.00	1.00	2.00	2.54	0.46	1.00	3.00	1.00
Final Sat.:	3150	5028	571	3150	5700	1750	3150	4764	835	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.13	0.13	0.18	0.43	0.31	0.11	0.27	0.27	0.05	0.14	0.10
Crit Moves:	****				****			****		****		
Green Time:	14.0	37.4	37.4	53.2	76.6	101.7	25.1	48.7	48.7	8.7	32.3	85.5
Volume/Cap:	0.90	0.55	0.55	0.55	0.90	0.49	0.67	0.90	0.90	0.90	0.67	0.19
Delay/Veh:	102.3	54.5	54.5	44.4	42.9	15.8	67.2	60.4	60.4	136.4	60.6	19.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	102.3	54.5	54.5	44.4	42.9	15.8	67.2	60.4	60.4	136.4	60.6	19.5
LOS by Move:	F	D-	D-	D	D	B	E	E	E	F	E	B-
HCM2kAvgQ:	8	10	10	14	39	15	9	25	25	5	12	5

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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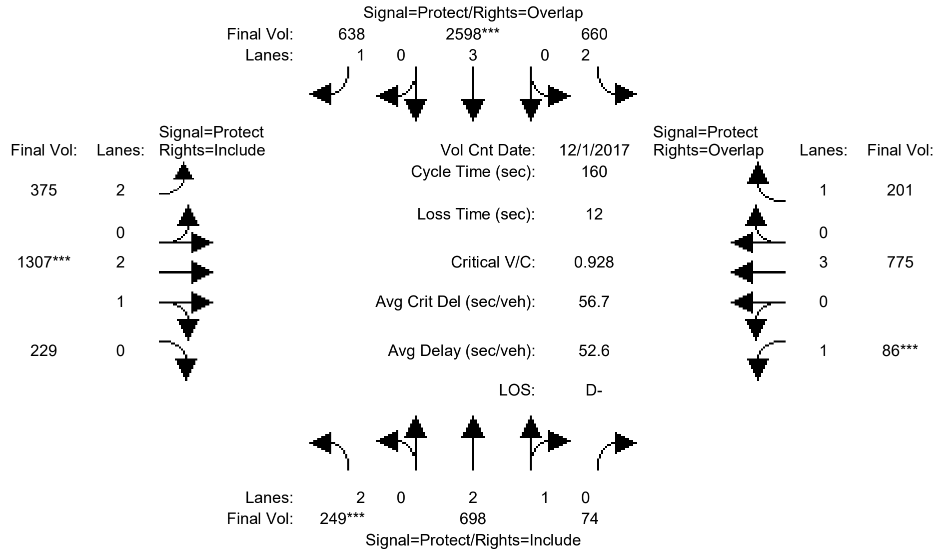
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #33: Mathilda Avenue / El Camino Real (CMP)



Street Name:	Mathilda Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	240	423	74	534	1861	310	182	1276	181	86	776	157
Growth 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
Initial Bse:	240	423	74	534	1861	310	182	1276	181	86	776	157
Added Vol:	9	275	0	126	737	328	193	31	48	0	-1	44
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	249	698	74	660	2598	638	375	1307	229	86	775	201
User 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
PHF 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
PHF Volume:	249	698	74	660	2598	638	375	1307	229	86	775	201
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	249	698	74	660	2598	638	375	1307	229	86	775	201
PCE 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
MLF 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
FinalVolume:	249	698	74	660	2598	638	375	1307	229	86	775	201
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	1.00	0.92	0.83	0.99	0.95	0.92	1.00	0.92
Lanes:	2.00	2.70	0.30	2.00	3.00	1.00	2.00	2.54	0.46	1.00	3.00	1.00
Final Sat.:	3150	5063	537	3150	5700	1750	3150	4764	835	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.14	0.14	0.21	0.46	0.36	0.12	0.27	0.27	0.05	0.14	0.11
Crit Moves:	****				****			****		****		
Green Time:	13.6	36.6	36.6	55.6	78.6	104.6	26.0	47.3	47.3	8.5	29.7	85.4
Volume/Cap:	0.93	0.60	0.60	0.60	0.93	0.56	0.73	0.93	0.93	0.93	0.73	0.22
Delay/Veh:	108.8	56.0	56.0	44.0	44.2	15.7	69.0	64.3	64.3	145.5	64.0	19.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	108.8	56.0	56.0	44.0	44.2	15.7	69.0	64.3	64.3	145.5	64.0	19.8
LOS by Move:	F	E+	E+	D	D	B	E	E	E	F	E	B-
HCM2kAvgQ:	8	11	11	16	43	18	10	26	26	5	12	5

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Background Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background PM

Intersection #34: Aries Way / Washington Avenue

Signal=Stop/Rights=Include
Final Vol: 106 0 0
Lanes: 1 0 0 0 0

Signal=Uncontrol
Rights=Include
Final Vol: Lanes:
0 0
0
536 1
1
136 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 100
Loss Time (sec): 0
Critical V/C: 0.123
Avg Crit Del (sec/veh): 1.4
Avg Delay (sec/veh): 1.4
LOS: B

Signal=Uncontrol
Rights=Include
Lanes: Final Vol:
0 4
1
1 314
0
0 0

Lanes: 0 0 0 0 1
Final Vol: 0 0 51
Signal=Stop/Rights=Include

```
Street Name:            Aries Way                    Washington Avenue
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 1 Apr 2017 <<
Base Vol:       0    0    19     0    0   105     0  460    39     0  185     4
Growth 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
Initial Bse:    0    0    19     0    0   105     0  460    39     0  185     4
Added Vol:      0    0    32     0    0     1     0   76    97     0  129     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0    51     0    0   106     0  536   136     0  314     4
User 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
PHF 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
PHF Volume:     0    0    51     0    0   106     0  536   136     0  314     4
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0    51     0    0   106     0  536   136     0  314     4
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx   6.9 xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx   3.3 xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx   336  xxxx xxxx   159  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx   666  xxxx xxxx   864  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx   666  xxxx xxxx   864  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  0.08  xxxx xxxx  0.12  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx   0.2  xxxx xxxx   0.4  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx  10.9 xxxxx xxxx   9.7 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     B     *    *     A     *    *     *     *    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      10.9              9.7             xxxxxx           xxxxxx
ApproachLOS:         B                A                  *                *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #34 Aries Way / Washington Avenue
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  1    0  0  1  1  0    0  0  1  1  0
Initial Vol:    0    0    51     0    0   106     0  536   136     0  314     4
ApproachDel:      10.9              9.7             xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=51]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=1147]
   SUCCEED - Total volume greater than or equal to 800 for intersection
             with four or more approaches.
--------------------------------------------------------------------------------
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=106]
   SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=1147]
   SUCCEED - Total volume greater than or equal to 800 for intersection
             with four or more approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #34 Aries Way / Washington Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  1    0  0  1  1  0    0  0  1  1  0
Initial Vol:    0    0    51     0    0   106     0  536   136     0  314     4
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            990
Minor Approach Volume:          106
Minor Approach Volume Threshold: 288
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background PM Plus Project

Intersection #34: Aries Way / Washington Avenue

```
                         Signal=Stop/Rights=Include
         Final Vol:   165          0          0
             Lanes:     1    0     0     0    0

                  Signal=Uncontrol                            Signal=Uncontrol
Final Vol:  Lanes: Rights=Include   Vol Cnt Date:  4/1/2017   Rights=Include   Lanes:  Final Vol:
    0         0                     Cycle Time (sec):  100                        0        7
              0                     Loss Time (sec):     0                        1
  573         1                     Critical V/C:    0.195                        1      342
              1                     Avg Crit Del (sec/veh): 1.8                   0
  122         0                     Avg Delay (sec/veh):    1.8                   0        0
                                    LOS:                    B

             Lanes:     0    0     0     0    1
         Final Vol:     0          0         47
                         Signal=Stop/Rights=Include
```

```
Street Name:              Aries Way                     Washington Avenue
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 1 Apr 2017 <<
Base Vol:        0     0    19     0     0   105     0   460    39     0   185     4
Growth 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
Initial Bse:     0     0    19     0     0   105     0   460    39     0   185     4
Added Vol:       0     0    28     0     0    60     0   113    83     0   157     3
PasserByVol:     0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:     0     0    47     0     0   165     0   573   122     0   342     7
User 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
PHF 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
PHF Volume:      0     0    47     0     0   165     0   573   122     0   342     7
Reduct Vol:      0     0     0     0     0     0     0     0     0     0     0     0
FinalVolume:     0     0    47     0     0   165     0   573   122     0   342     7
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx   6.9 xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx   3.3 xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx   348  xxxx xxxx   175  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx   654  xxxx xxxx   845  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx   654  xxxx xxxx   845  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  0.07  xxxx xxxx  0.20  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2WayQ95thQ:  xxxx xxxx   0.2  xxxx xxxx   0.7  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx  10.9 xxxxx xxxx  10.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *     *     B     *     *     B     *     *     *     *     *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *     *     *     *     *     *     *     *     *     *     *     *
ApproachDel:       10.9              10.3             xxxxxx            xxxxxx
ApproachLOS:          B                 B                  *                 *
Note: Queue reported is the number of cars per lane.
                     Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #34 Aries Way / Washington Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  1    0  0  1  1  0    0  0  1  1  0
Initial Vol:    0    0    47     0    0   165     0  573   122     0  342     7
ApproachDel:      10.9             10.3            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=47]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=1256]
   SUCCEED - Total volume greater than or equal to 800 for intersection
             with four or more approaches.
--------------------------------------------------------------------------------
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.5]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=165]
   SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=1256]
   SUCCEED - Total volume greater than or equal to 800 for intersection
             with four or more approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #34 Aries Way / Washington Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  1    0  0  1  1  0    0  0  1  1  0
Initial Vol:    0    0    47     0    0   165     0  573   122     0  342     7
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             1044
Minor Approach Volume:           165
Minor Approach Volume Threshold: 270
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #35: Taaffe Street / Washington Avenue

Signal=Permit/Rights=Include
Final Vol: 40 31 13
Lanes: 0 0 1! 0 0

Signal=Protect
Rights=Overlap

Final Vol:	Lanes:
76	1
	0
383***	1
	0
114	1

Vol Cnt Date:	4/1/2017
Cycle Time (sec):	60
Loss Time (sec):	9
Critical V/C:	0.562
Avg Crit Del (sec/veh):	18.7
Avg Delay (sec/veh):	17.7
LOS:	B

Signal=Protect
Rights=Include

Lanes:	Final Vol:
0	17
1	
0	121
0	
1	160***

Lanes: 0 0 1! 0 0
Final Vol: 154 16*** 153
Signal=Permit/Rights=Include

Street Name:	Taaffe Street						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	39	16	22	13	31	40	76	291	98	25	108	17
Growth 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
Initial Bse:	39	16	22	13	31	40	76	291	98	25	108	17
Added Vol:	115	0	131	0	0	0	0	92	16	135	13	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	154	16	153	13	31	40	76	383	114	160	121	17
User 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
PHF 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
PHF Volume:	154	16	153	13	31	40	76	383	114	160	121	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	154	16	153	13	31	40	76	383	114	160	121	17
PCE 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
MLF 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
FinalVolume:	154	16	153	13	31	40	76	383	114	160	121	17
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	0.48	0.05	0.47	0.15	0.37	0.48	1.00	1.00	1.00	1.00	0.88	0.12
Final Sat.:	834	87	829	271	646	833	1750	1900	1750	1750	1578	222
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.18	0.05	0.05	0.05	0.04	0.20	0.07	0.09	0.08	0.08
Crit Moves:		****						****		****		
Green Time:	19.7	19.7	19.7	19.7	19.7	19.7	12.9	21.5	21.5	9.8	18.4	18.4
Volume/Cap:	0.56	0.56	0.56	0.15	0.15	0.15	0.20	0.56	0.18	0.56	0.25	0.25
Delay/Veh:	17.9	17.9	17.9	14.3	14.3	14.3	19.6	16.5	13.3	25.7	15.9	15.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.9	17.9	17.9	14.3	14.3	14.3	19.6	16.5	13.3	25.7	15.9	15.9
LOS by Move:	B	B	B	B	B	B	B-	B	B	C	B	B
HCM2kAvgQ:	6	6	6	1	1	1	1	5	1	4	2	2

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #35: Taaffe Street / Washington Avenue

Signal=Permit/Rights=Include
Final Vol: 60 32 37
Lanes: 0 0 1! 0 0

Final Vol: Lanes: Signal=Protect Rights=Overlap
86 1
0
406*** 1
0
115 1

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 60
Loss Time (sec): 9
Critical V/C: 0.573
Avg Crit Del (sec/veh): 18.8
Avg Delay (sec/veh): 17.7
LOS: B

Signal=Protect Rights=Include Lanes: Final Vol:
0 17
1
0 140
0
1 159***

Lanes: 0 0 1! 0 0
Final Vol: 147 14*** 159
Signal=Permit/Rights=Include

Street Name:	Taaffe Street						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	39	16	22	13	31	40	76	291	98	25	108	17
Growth 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
Initial Bse:	39	16	22	13	31	40	76	291	98	25	108	17
Added Vol:	108	-2	137	24	1	20	10	115	17	134	32	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	147	14	159	37	32	60	86	406	115	159	140	17
User 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
PHF 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
PHF Volume:	147	14	159	37	32	60	86	406	115	159	140	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	147	14	159	37	32	60	86	406	115	159	140	17
PCE 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
MLF 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
FinalVolume:	147	14	159	37	32	60	86	406	115	159	140	17
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	0.46	0.04	0.50	0.29	0.25	0.46	1.00	1.00	1.00	1.00	0.89	0.11
Final Sat.:	804	77	870	502	434	814	1750	1900	1750	1750	1605	195
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.18	0.07	0.07	0.07	0.05	0.21	0.07	0.09	0.09	0.09
Crit Moves:		****						****		****		
Green Time:	19.1	19.1	19.1	19.1	19.1	19.1	13.1	22.4	22.4	9.5	18.7	18.7
Volume/Cap:	0.57	0.57	0.57	0.23	0.23	0.23	0.22	0.57	0.18	0.57	0.28	0.28
Delay/Veh:	18.5	18.5	18.5	15.2	15.2	15.2	19.6	16.2	12.8	26.3	15.8	15.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.5	18.5	18.5	15.2	15.2	15.2	19.6	16.2	12.8	26.3	15.8	15.8
LOS by Move:	B-	B-	B-	B	B	B	B-	B	B	C	B	B
HCM2kAvgQ:	6	6	6	2	2	2	1	6	1	4	2	2

Note: Queue reported is the number of cars per lane.

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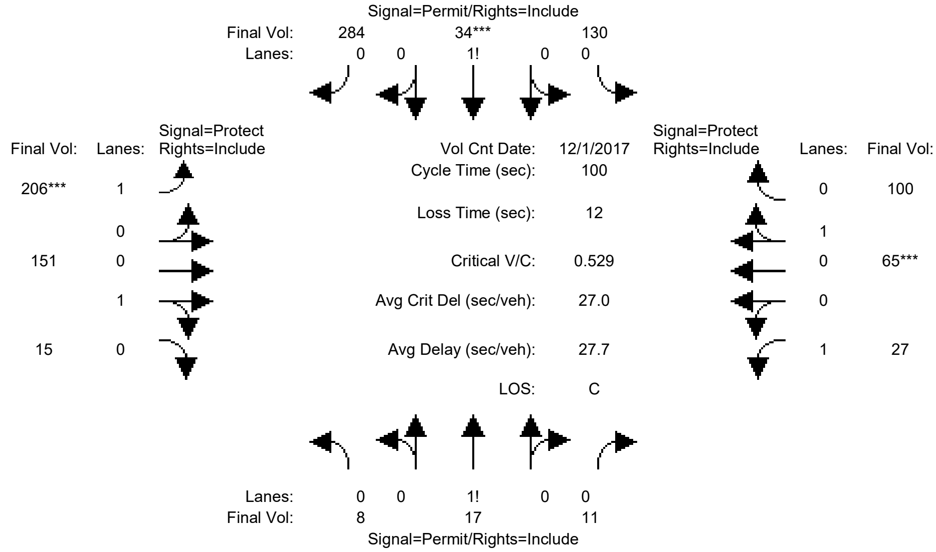
Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #36: Iowa Avenue / Taaffe Street



Street Name:	Taaffe Street						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	8	17	11	51	34	109	52	143	15	27	62	21
Growth 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
Initial Bse:	8	17	11	51	34	109	52	143	15	27	62	21
Added Vol:	0	0	0	79	0	175	154	8	0	0	3	79
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	17	11	130	34	284	206	151	15	27	65	100
User 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
PHF 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
PHF Volume:	8	17	11	130	34	284	206	151	15	27	65	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	17	11	130	34	284	206	151	15	27	65	100
PCE 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
MLF 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
FinalVolume:	8	17	11	130	34	284	206	151	15	27	65	100
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.22	0.47	0.31	0.29	0.08	0.63	1.00	0.91	0.09	1.00	0.39	0.61
Final Sat.:	389	826	535	508	133	1109	1750	1637	163	1750	709	1091
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.26	0.26	0.26	0.12	0.09	0.09	0.02	0.09	0.09
Crit Moves:					****		****				****	
Green Time:	48.4	48.4	48.4	48.4	48.4	48.4	22.3	23.3	23.3	16.3	17.3	17.3
Volume/Cap:	0.04	0.04	0.04	0.53	0.53	0.53	0.53	0.40	0.40	0.09	0.53	0.53
Delay/Veh:	13.6	13.6	13.6	18.5	18.5	18.5	35.6	33.0	33.0	35.7	39.3	39.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.6	13.6	13.6	18.5	18.5	18.5	35.6	33.0	33.0	35.7	39.3	39.3
LOS by Move:	B	B	B	B-	B-	B-	D+	C-	C-	D+	D	D
HCM2kAvgQ:	1	1	1	10	10	10	6	4	4	1	5	5

Note: Queue reported is the number of cars per lane.

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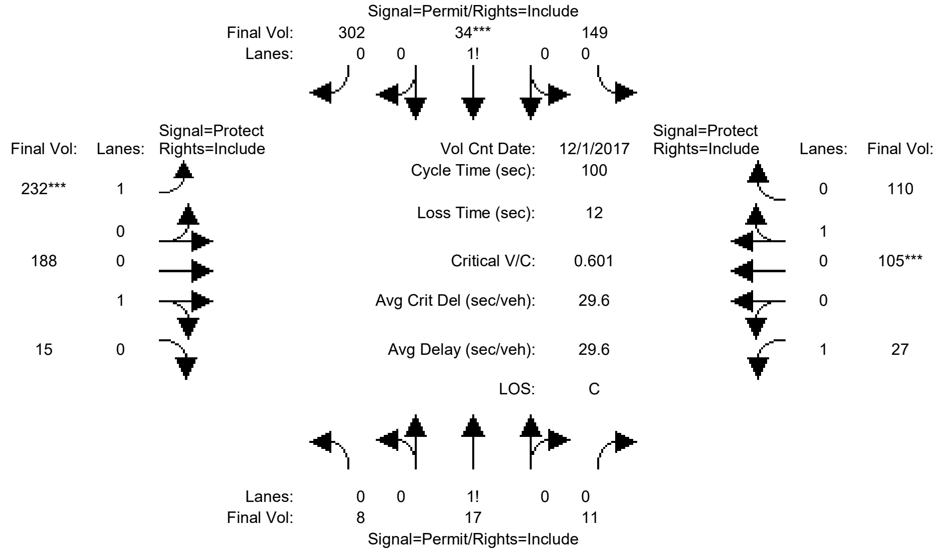
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #36: Iowa Avenue / Taaffe Street



Street Name:	Taaffe Street						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	8	17	11	51	34	109	52	143	15	27	62	21
Growth 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
Initial Bse:	8	17	11	51	34	109	52	143	15	27	62	21
Added Vol:	0	0	0	98	0	193	180	45	0	0	43	89
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	17	11	149	34	302	232	188	15	27	105	110
User 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
PHF 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
PHF Volume:	8	17	11	149	34	302	232	188	15	27	105	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	17	11	149	34	302	232	188	15	27	105	110
PCE 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
MLF 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
FinalVolume:	8	17	11	149	34	302	232	188	15	27	105	110
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.22	0.47	0.31	0.31	0.07	0.62	1.00	0.93	0.07	1.00	0.49	0.51
Final Sat.:	389	826	535	538	123	1090	1750	1667	133	1750	879	921
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.28	0.28	0.28	0.13	0.11	0.11	0.02	0.12	0.12
Crit Moves:					****		****				****	
Green Time:	46.1	46.1	46.1	46.1	46.1	46.1	22.0	25.9	25.9	16.1	19.9	19.9
Volume/Cap:	0.04	0.04	0.04	0.60	0.60	0.60	0.60	0.44	0.44	0.10	0.60	0.60
Delay/Veh:	14.9	14.9	14.9	21.4	21.4	21.4	37.7	31.6	31.6	35.9	39.3	39.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.9	14.9	14.9	21.4	21.4	21.4	37.7	31.6	31.6	35.9	39.3	39.3
LOS by Move:	B	B	B	C+	C+	C+	D+	C	C	D+	D	D
HCM2kAvgQ:	1	1	1	12	12	12	7	5	5	1	6	6

Note: Queue reported is the number of cars per lane.

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Background PM

Intersection #37: Frances Street / Evelyn Avenue

Signal=Permit/Rights=Overlap
Final Vol: 53 16*** 53
Lanes: 1 0 0 1 0

Signal=Protect Rights=Include
Final Vol: Lanes:
23 1
0
459*** 0
1
89 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 95
Loss Time (sec): 9
Critical V/C: 0.435
Avg Crit Del (sec/veh): 14.6
Avg Delay (sec/veh): 16.0
LOS: B

Signal=Protect Rights=Overlap
Lanes: Final Vol:
1 61
0
1 338
0
1 89***

Lanes: 0 1 0 0 1
Final Vol: 34 13 93
Signal=Permit/Rights=Overlap

Street Name:	Frances Street						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	31	13	57	53	16	53	23	426	83	75	342	61
Growth 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
Initial Bse:	31	13	57	53	16	53	23	426	83	75	342	61
Added Vol:	3	0	36	0	0	0	0	33	6	14	-4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	34	13	93	53	16	53	23	459	89	89	338	61
User 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
PHF 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
PHF Volume:	34	13	93	53	16	53	23	459	89	89	338	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	13	93	53	16	53	23	459	89	89	338	61
PCE 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
MLF 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
FinalVolume:	34	13	93	53	16	53	23	459	89	89	338	61
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	0.72	0.28	1.00	0.77	0.23	1.00	1.00	0.84	0.16	1.00	1.00	1.00
Final Sat.:	1302	498	1750	1383	417	1750	1750	1508	292	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.05	0.04	0.04	0.03	0.01	0.30	0.30	0.05	0.18	0.03
Crit Moves:					****			****		****		
Green Time:	10.0	10.0	20.9	10.0	10.0	32.3	22.3	65.1	65.1	10.9	53.7	53.7
Volume/Cap:	0.25	0.25	0.24	0.36	0.36	0.09	0.06	0.44	0.44	0.44	0.31	0.06
Delay/Veh:	39.7	39.7	30.9	40.7	40.7	21.4	28.3	7.0	7.0	40.8	11.1	9.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.7	39.7	30.9	40.7	40.7	21.4	28.3	7.0	7.0	40.8	11.1	9.3
LOS by Move:	D	D	C	D	D	C+	C	A	A	D	B+	A
HCM2kAvgQ:	2	2	3	2	2	1	1	8	8	3	5	1

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #37: Frances Street / Evelyn Avenue

Signal=Permit/Rights=Overlap
Final Vol: 53 16*** 53
Lanes: 1 0 0 1 0

Signal=Protect
Rights=Include

Signal=Protect
Rights=Overlap

Final Vol: Lanes:
23 1
0
466*** 0
1
96 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 95
Loss Time (sec): 9
Critical V/C: 0.443
Avg Crit Del (sec/veh): 14.4
Avg Delay (sec/veh): 16.0
LOS: B

Lanes: Final Vol:
1 61
0
1 373
0
1 89***

Lanes: 0 1 0 0 1
Final Vol: 42 13 109
Signal=Permit/Rights=Overlap

Street Name:	Frances Street						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	31	13	57	53	16	53	23	426	83	75	342	61
Growth 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
Initial Bse:	31	13	57	53	16	53	23	426	83	75	342	61
Added Vol:	11	0	52	0	0	0	0	40	13	14	31	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	13	109	53	16	53	23	466	96	89	373	61
User 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
PHF 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
PHF Volume:	42	13	109	53	16	53	23	466	96	89	373	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	42	13	109	53	16	53	23	466	96	89	373	61
PCE 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
MLF 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
FinalVolume:	42	13	109	53	16	53	23	466	96	89	373	61
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	0.76	0.24	1.00	0.77	0.23	1.00	1.00	0.83	0.17	1.00	1.00	1.00
Final Sat.:	1375	425	1750	1383	417	1750	1750	1493	307	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.06	0.04	0.04	0.03	0.01	0.31	0.31	0.05	0.20	0.03
Crit Moves:					****			****		****		
Green Time:	10.0	10.0	20.6	10.0	10.0	30.7	20.7	65.4	65.4	10.6	55.3	55.3
Volume/Cap:	0.29	0.29	0.29	0.36	0.36	0.09	0.06	0.45	0.45	0.45	0.34	0.06
Delay/Veh:	40.1	40.1	31.4	40.7	40.7	22.5	29.5	7.0	7.0	41.1	10.5	8.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.1	40.1	31.4	40.7	40.7	22.5	29.5	7.0	7.0	41.1	10.5	8.6
LOS by Move:	D	D	C	D	D	C+	C	A	A	D	B+	A
HCM2kAvgQ:	2	2	3	2	2	1	1	8	8	3	6	1

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Background Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background PM

Intersection #38: Washington Avenue / Frances Street

Signal=Stop/Rights=Include
Final Vol: 98 0 119
Lanes: 0 0 1! 0 0

Final Vol: Lanes: Signal=Uncontrol Rights=Include
122 1
0
460 1
0
0 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 80
Loss Time (sec): 9
Critical V/C: 0.435
Avg Crit Del (sec/veh): 6.0
Avg Delay (sec/veh): 6.0
LOS: D

Signal=Uncontrol Rights=Include Lanes: Final Vol:
1 47
0
1 236
0
0 0

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Stop/Rights=Include

```
Street Name:          Frances Street                 Washington Avenue
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 1 Dec 2017 <<
Base Vol:       0    0     0   119    0    77    83  276     0     0  108    47
Growth 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
Initial Bse:    0    0     0   119    0    77    83  276     0     0  108    47
Added Vol:      0    0     0     0    0    21    39  184     0     0  128     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0   119    0    98   122  460     0     0  236    47
User 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
PHF 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
PHF Volume:     0    0     0   119    0    98   122  460     0     0  236    47
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0   119    0    98   122  460     0     0  236    47
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   940  940   236   283 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   295  266   808  1291 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   274  241   808  1291 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.43 0.00  0.12  0.09 xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.3 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   8.1 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  390 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  3.3 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 25.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    D     *     *    *     *     *    *     *
ApproachDel:     xxxxxx            25.2             xxxxxx           xxxxxx
ApproachLOS:         *               D                *                *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
******************************************************************************
Intersection #38 Washington Avenue / Frances Street
******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  1  0  1
Initial Vol:    0    0     0   119    0    98   122  460     0     0  236    47
ApproachDel:    xxxxxx              25.2            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=1.5]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=217]
   SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1082]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #38 Washington Avenue / Frances Street
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  1  0  1
Initial Vol:    0    0     0   119    0    98   122  460     0     0  236    47
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            865
Minor Approach Volume:          217
Minor Approach Volume Threshold: 335
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

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2000 HCM Unsignalized (Future Volume Alternative)
Background PM Plus Project

Intersection #38: Washington Avenue / Frances Street

```
                         Signal=Stop/Rights=Include
              Final Vol:   101        0        122
                 Lanes:      0   0    1!   0    0

               Signal=Uncontrol                                Signal=Uncontrol
Final Vol:  Lanes:  Rights=Include    Vol Cnt Date:  12/1/2017  Rights=Include   Lanes:  Final Vol:
                                   Cycle Time (sec):     80
   143        1                                                                    1        48
                                    Loss Time (sec):      9
              0                                                                    0
   492        1                        Critical V/C:   0.510                       1       250
              0                   Avg Crit Del (sec/veh):  7.1                     0
     0        0                      Avg Delay (sec/veh):  7.1                     0         0
                                                    LOS:   D

                 Lanes:      0   0    0    0    0
              Final Vol:     0        0         0
                         Signal=Stop/Rights=Include
```

```
Street Name:           Frances Street                Washington Avenue
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 1 Dec 2017 <<
Base Vol:       0    0     0   119    0    77    83  276     0     0  108    47
Growth 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
Initial Bse:    0    0     0   119    0    77    83  276     0     0  108    47
Added Vol:      0    0     0     3    0    24    60  216     0     0  142     1
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0   122    0   101   143  492     0     0  250    48
User 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
PHF 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
PHF Volume:     0    0     0   122    0   101   143  492     0     0  250    48
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0   122    0   101   143  492     0     0  250    48
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  1028 1028   250   298 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   262  236   794  1275 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   239  209   794  1275 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.51 0.00  0.13  0.11 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.4 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   8.2 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  350 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  4.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 31.7 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    D     *     *    *     *     *    *     *
ApproachDel:    xxxxxx            31.7             xxxxxx            xxxxxx
ApproachLOS:         *               D                  *                 *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #38 Washington Avenue / Frances Street
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  1  0  1
Initial Vol:    0    0     0   122    0   101   143  492     0     0  250    48
ApproachDel:    xxxxxx              31.7           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=2.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=223]
   SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1156]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

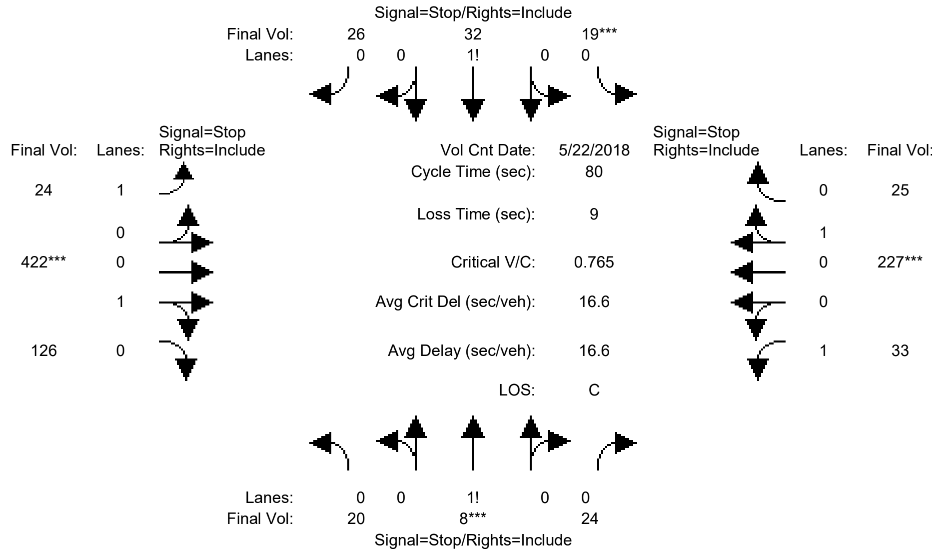
The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #38 Washington Avenue / Frances Street
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  1  0  1
Initial Vol:    0    0     0   122    0   101   143  492     0     0  250    48
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             933
Minor Approach Volume:           223
Minor Approach Volume Threshold: 309
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Background PM

Intersection #39: Murphy Avenue / Washington Avenue



Street Name:	Murphy Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 22 May 2018 <<												
Base Vol:	20	8	24	19	31	26	24	238	126	32	99	25
Growth 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
Initial Bse:	20	8	24	19	31	26	24	238	126	32	99	25
Added Vol:	0	0	0	0	1	0	0	184	0	1	128	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	8	24	19	32	26	24	422	126	33	227	25
User 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
PHF 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
PHF Volume:	20	8	24	19	32	26	24	422	126	33	227	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	8	24	19	32	26	24	422	126	33	227	25
PCE 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
MLF 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
FinalVolume:	20	8	24	19	32	26	24	422	126	33	227	25
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.38	0.15	0.47	0.25	0.41	0.34	1.00	0.77	0.23	1.00	0.90	0.10
Final Sat.:	213	85	256	138	233	189	628	552	165	595	597	66
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.14	0.14	0.14	0.04	0.76	0.76	0.06	0.38	0.38
Crit Moves:		****		****				****			****	
Delay/Veh:	9.3	9.3	9.3	9.6	9.6	9.6	8.6	21.6	21.6	8.9	11.1	11.1
Delay 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
AdjDel/Veh:	9.3	9.3	9.3	9.6	9.6	9.6	8.6	21.6	21.6	8.9	11.1	11.1
LOS by Move:	A	A	A	A	A	A	A	C	C	A	B	B
ApproachDel:		9.3			9.6			21.1			10.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		9.3			9.6			21.1			10.9	
LOS by Appr:		A			A			C			B	
AllWayAvgQ:	0.1	0.1	0.1	0.1	0.1	0.1	0.0	2.8	2.8	0.1	0.6	0.6

Note: Queue reported is the number of cars per lane.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #39 Murphy Avenue / Washington Avenue

****

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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign        Stop Sign        Stop Sign
Lanes:        0  0  1! 0  0    0  0  1! 0  0    1  0  0  1  0    1  0  0  1  0
Initial Vol:   20    8    24    19   32    26    24  422   126    33  227    25
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            857
Minor Approach Volume:          77
Minor Approach Volume Threshold: 338
--------------------------------------------------------------------------------
```

SIGNAL WARRANT DISCLAIMER
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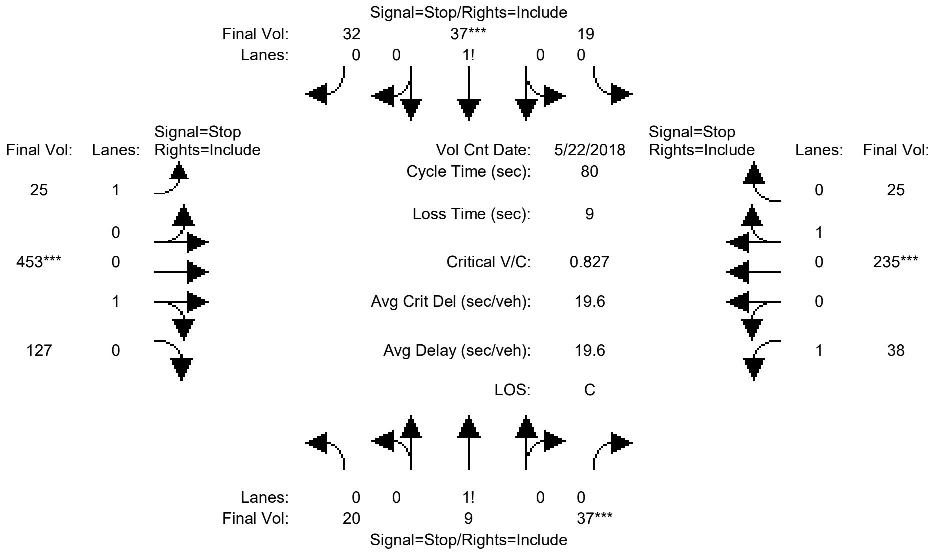
Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Background PM Plus Project

Intersection #39: Murphy Avenue / Washington Avenue



Street Name:	Murphy Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 22 May 2018 <<												
Base Vol:	20	8	24	19	31	26	24	238	126	32	99	25
Growth 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
Initial Bse:	20	8	24	19	31	26	24	238	126	32	99	25
Added Vol:	0	1	13	0	6	6	1	215	1	6	136	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	9	37	19	37	32	25	453	127	38	235	25
User 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
PHF 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
PHF Volume:	20	9	37	19	37	32	25	453	127	38	235	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	9	37	19	37	32	25	453	127	38	235	25
PCE 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
MLF 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
FinalVolume:	20	9	37	19	37	32	25	453	127	38	235	25
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.30	0.14	0.56	0.22	0.42	0.36	1.00	0.78	0.22	1.00	0.90	0.10
Final Sat.:	168	76	311	120	234	202	616	547	153	579	581	62
Capacity Analysis Module:												
Vol/Sat:	0.12	0.12	0.12	0.16	0.16	0.16	0.04	0.83	0.83	0.07	0.40	0.40
Crit Moves:			****		****			****			****	
Delay/Veh:	9.6	9.6	9.6	10.0	10.0	10.0	8.7	26.9	26.9	9.1	11.7	11.7
Delay 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
AdjDel/Veh:	9.6	9.6	9.6	10.0	10.0	10.0	8.7	26.9	26.9	9.1	11.7	11.7
LOS by Move:	A	A	A	A	A	A	A	D	D	A	B	B
ApproachDel:		9.6			10.0			26.2			11.3	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		9.6			10.0			26.2			11.3	
LOS by Appr:		A			A			D			B	
AllWayAvgQ:	0.1	0.1	0.1	0.2	0.2	0.2	0.0	3.7	3.7	0.1	0.6	0.6

Note: Queue reported is the number of cars per lane.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #39 Murphy Avenue / Washington Avenue

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Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	1	0	0	1	0	1	0	0	1	0
Initial Vol:	20		9		37	19		37		32	25		453		127	38		235		25

Major Street Volume: 903
Minor Approach Volume: 88
Minor Approach Volume Threshold: 320

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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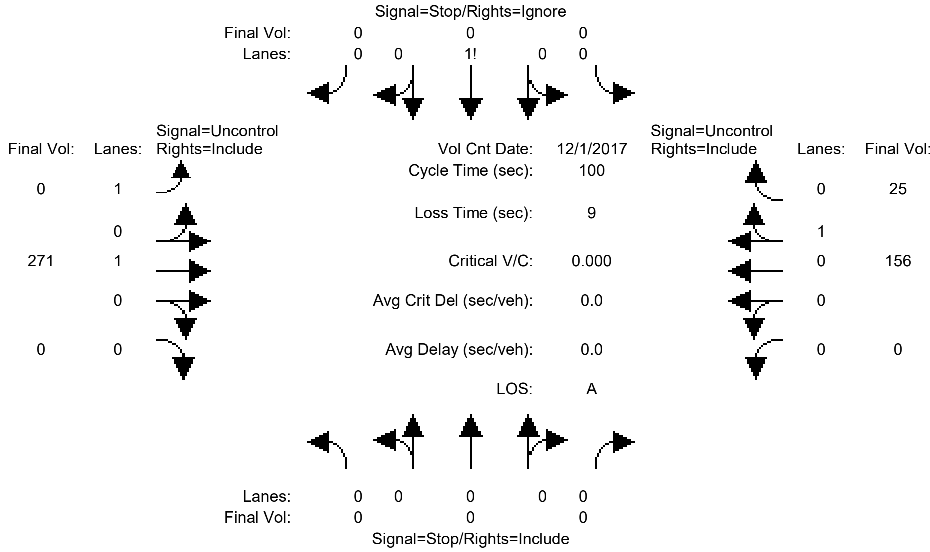
Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background PM

Intersection #40: Iowa Avenue / Murphy Avenue



Street Name:	Murphy Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	0	0	0	0	0	0	184	0	0	74	25
Growth 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
Initial Bse:	0	0	0	0	0	0	0	184	0	0	74	25
Added Vol:	0	0	0	0	0	0	0	87	0	0	82	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	0	0	271	0	0	156	25
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	271	0	0	156	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	0	0	271	0	0	156	25
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	440	440	169	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	579	514	881	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	579	514	881	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		xxxxxx			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		*			*			*			*	

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #40 Iowa Avenue / Murphy Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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```
------------|----------------||----------------||----------------||----------------|
Approach:      North Bound       South Bound        East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Stop Sign         Stop Sign        Uncontrolled      Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0     0     0     0     0     0     0  271     0     0  156    25
ApproachDel:    xxxxxx           xxxxxx           xxxxxx           xxxxxx
------------|----------------||----------------||----------------||----------------|
--------------------------------------------------------------------------------
```

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

```
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #40 Iowa Avenue / Murphy Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|----------------||----------------||----------------||----------------|
Approach:      North Bound       South Bound        East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Stop Sign         Stop Sign        Uncontrolled      Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0     0     0     0     0     0     0  271     0     0  156    25
------------|----------------||----------------||----------------||----------------|
Major Street Volume:            452
Minor Approach Volume:          0
Minor Approach Volume Threshold: 558
--------------------------------------------------------------------------------
```

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background PM Plus Project

Intersection #40: Iowa Avenue / Murphy Avenue

Signal=Stop/Rights=Ignore
Final Vol: 0 0 3
Lanes: 0 0 1! 0 0

Signal=Uncontrol
Rights=Include
Final Vol: Lanes:
33 1
0
295 1
0
0 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 100
Loss Time (sec): 9
Critical V/C: 0.024
Avg Crit Del (sec/veh): 0.5
Avg Delay (sec/veh): 0.5
LOS: B

Signal=Uncontrol
Rights=Include
Lanes: Final Vol:
0 27
1
0 174
0
0 0

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Stop/Rights=Include

Street Name:	Murphy Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	0	0	0	0	0	0	184	0	0	74	25
Growth 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
Initial Bse:	0	0	0	0	0	0	0	184	0	0	74	25
Added Vol:	0	0	0	3	0	32	33	111	0	0	100	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	3	0	32	33	295	0	0	174	27
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	3	0	0	33	295	0	0	174	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	3	0	0	33	295	0	0	174	27
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	549	549	188	201	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	501	446	860	1383	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	491	436	860	1383	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	0.00	0.00	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	491	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	12.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:		xxxxxx			12.4			xxxxxx			xxxxxx	
ApproachLOS:		*			B			*			*	

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #40 Iowa Avenue / Murphy Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0    0     0     3    0    32    33  295     0     0  174    27
ApproachDel:    xxxxxx              12.4           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=35]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=564]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #40 Iowa Avenue / Murphy Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0    0     0     3    0    32    33  295     0     0  174    27
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            529
Minor Approach Volume:          35
Minor Approach Volume Threshold: 504
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #41: Sunnyvale Avenue / Maude Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Final Vol:	Lanes:	Signal=Protect Rights=Overlap			Signal=Protect Rights=Include	Lanes:	Final Vol:
26	1		Vol Cnt Date:	10/2/2018		0	0
			Cycle Time (sec):	120			
	0		Loss Time (sec):	9		1	
741***	1		Critical V/C:	0.544		0	247
	0		Avg Crit Del (sec/veh):	18.2		0	
284	1		Avg Delay (sec/veh):	16.4		1	90***
			LOS:	B			

Lanes: 0 1 0 0 1
Final Vol: 97 15*** 110
Signal=Split/Rights=Overlap

Street Name:	Sunnyvale Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	91	0	106	0	0	0	0	531	284	86	211	0
Growth 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
Initial Bse:	91	0	106	0	0	0	0	531	284	86	211	0
Added Vol:	6	15	4	0	0	0	26	210	0	4	36	-1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	97	15	110	0	0	0	26	741	284	90	247	-1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	97	15	110	0	0	0	26	741	284	90	247	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	97	15	110	0	0	0	26	741	284	90	247	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	97	15	110	0	0	0	26	741	284	90	247	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.92
Lanes:	0.87	0.13	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1559	241	1750	0	0	0	1750	1900	1750	1750	1800	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.06	0.00	0.00	0.00	0.01	0.39	0.16	0.05	0.14	0.00
Crit Moves:		****						****		****		
Green Time:	13.7	13.7	25.0	0.0	0.0	0.0	29.0	86.0	99.7	11.3	68.3	0.0
Volume/Cap:	0.54	0.54	0.30	0.00	0.00	0.00	0.06	0.54	0.20	0.54	0.24	0.00
Delay/Veh:	53.2	53.2	40.6	0.0	0.0	0.0	35.1	8.4	2.1	55.6	13.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.2	53.2	40.6	0.0	0.0	0.0	35.1	8.4	2.1	55.6	13.0	0.0
LOS by Move:	D-	D-	D	A	A	A	D+	A	A	E+	B	A
HCM2kAvgQ:	4	4	4	0	0	0	1	12	2	3	5	0

Note: Queue reported is the number of cars per lane.

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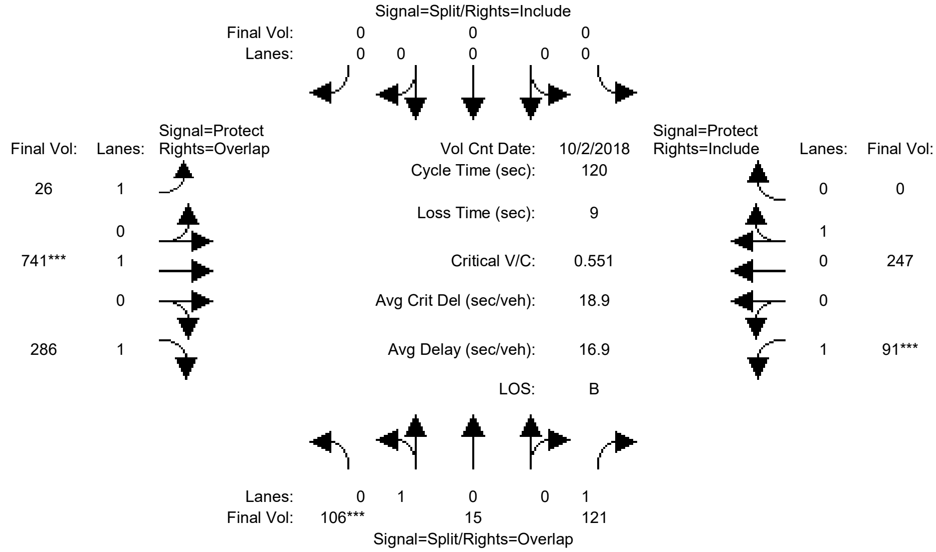
Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #41: Sunnyvale Avenue / Maude Avenue



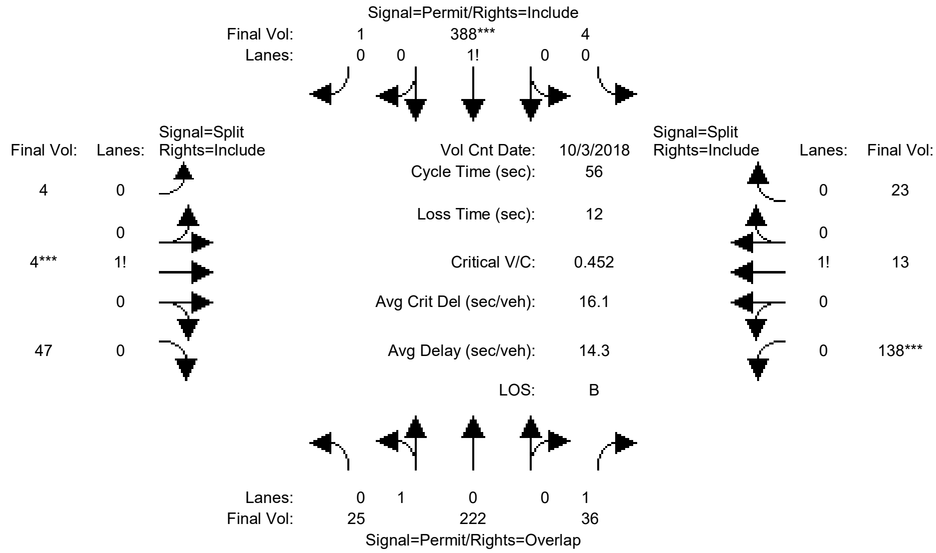
Street Name:	Sunnyvale Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	91	0	106	0	0	0	0	531	284	86	211	0
Growth 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
Initial Bse:	91	0	106	0	0	0	0	531	284	86	211	0
Added Vol:	15	15	15	0	0	0	26	210	0	4	36	-1
PasserByVol:	0	0	0	0	0	0	0	0	2	1	0	0
Initial Fut:	106	15	121	0	0	0	26	741	286	91	247	-1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	106	15	121	0	0	0	26	741	286	91	247	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	15	121	0	0	0	26	741	286	91	247	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	106	15	121	0	0	0	26	741	286	91	247	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.92
Lanes:	0.88	0.12	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1577	223	1750	0	0	0	1750	1900	1750	1750	1800	0
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.00	0.00	0.00	0.01	0.39	0.16	0.05	0.14	0.00
Crit Moves:	****							****		****		
Green Time:	14.7	14.7	26.0	0.0	0.0	0.0	28.7	85.0	99.7	11.3	67.6	0.0
Volume/Cap:	0.55	0.55	0.32	0.00	0.00	0.00	0.06	0.55	0.20	0.55	0.24	0.00
Delay/Veh:	52.5	52.5	40.1	0.0	0.0	0.0	35.3	8.9	2.1	55.8	13.4	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.5	52.5	40.1	0.0	0.0	0.0	35.3	8.9	2.1	55.8	13.4	0.0
LOS by Move:	D-	D-	D	A	A	A	D+	A	A	E+	B	A
HCM2kAvgQ:	4	4	4	0	0	0	1	13	2	3	5	0

Note: Queue reported is the number of cars per lane.

Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #42: Sunnyvale Road / Arques Avenue



Street Name:	Sunnyvale Raod						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	25	196	36	4	384	1	4	4	47	138	13	23
Growth 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
Initial Bse:	25	196	36	4	384	1	4	4	47	138	13	23
Added Vol:	0	26	0	0	4	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	222	36	4	388	1	4	4	47	138	13	23
User 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
PHF 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
PHF Volume:	25	222	36	4	388	1	4	4	47	138	13	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	222	36	4	388	1	4	4	47	138	13	23
PCE 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
MLF 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
FinalVolume:	25	222	36	4	388	1	4	4	47	138	13	23
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.10	0.90	1.00	0.01	0.98	0.01	0.07	0.07	0.86	0.80	0.07	0.13
Final Sat.:	182	1618	1750	18	1728	4	127	127	1495	1388	131	231
Capacity Analysis Module:												
Vol/Sat:	0.14	0.14	0.02	0.22	0.22	0.22	0.03	0.03	0.03	0.10	0.10	0.10
Crit Moves:					****			****		****		
Green Time:	23.6	23.6	34.0	23.6	23.6	23.6	10.0	10.0	10.0	10.4	10.4	10.4
Volume/Cap:	0.33	0.33	0.03	0.53	0.53	0.53	0.18	0.18	0.18	0.53	0.53	0.53
Delay/Veh:	11.1	11.1	4.4	12.9	12.9	12.9	19.8	19.8	19.8	22.3	22.3	22.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.1	11.1	4.4	12.9	12.9	12.9	19.8	19.8	19.8	22.3	22.3	22.3
LOS by Move:	B+	B+	A	B	B	B	B-	B-	B-	C+	C+	C+
HCM2kAvgQ:	3	3	0	5	5	5	1	1	1	3	3	3

Note: Queue reported is the number of cars per lane.

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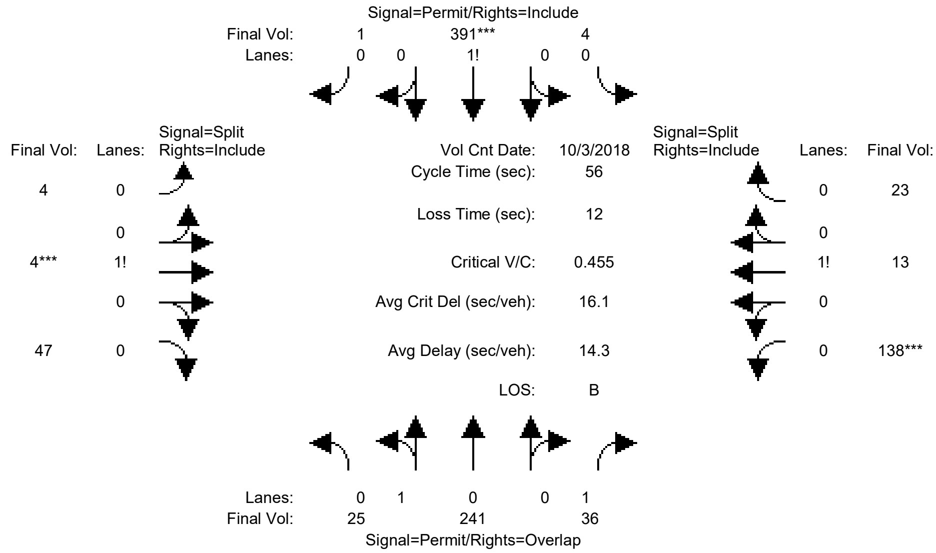
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #42: Sunnyvale Road / Arques Avenue



Street Name:	Sunnyvale Raod						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	25	196	36	4	384	1	4	4	47	138	13	23
Growth 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
Initial Bse:	25	196	36	4	384	1	4	4	47	138	13	23
Added Vol:	0	45	0	0	4	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	3	0	0	0	0	0	0	0
Initial Fut:	25	241	36	4	391	1	4	4	47	138	13	23
User 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
PHF 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
PHF Volume:	25	241	36	4	391	1	4	4	47	138	13	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	241	36	4	391	1	4	4	47	138	13	23
PCE 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
MLF 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
FinalVolume:	25	241	36	4	391	1	4	4	47	138	13	23
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.09	0.91	1.00	0.01	0.98	0.01	0.07	0.07	0.86	0.80	0.07	0.13
Final Sat.:	169	1631	1750	18	1728	4	127	127	1495	1388	131	231
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.02	0.23	0.23	0.23	0.03	0.03	0.03	0.10	0.10	0.10
Crit Moves:					****			****		****		
Green Time:	23.6	23.6	34.0	23.6	23.6	23.6	10.0	10.0	10.0	10.4	10.4	10.4
Volume/Cap:	0.35	0.35	0.03	0.54	0.54	0.54	0.18	0.18	0.18	0.54	0.54	0.54
Delay/Veh:	11.3	11.3	4.4	12.9	12.9	12.9	19.8	19.8	19.8	22.4	22.4	22.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.3	11.3	4.4	12.9	12.9	12.9	19.8	19.8	19.8	22.4	22.4	22.4
LOS by Move:	B+	B+	A	B	B	B	B-	B-	B-	C+	C+	C+
HCM2kAvgQ:	3	3	0	6	6	6	1	1	1	3	3	3

Note: Queue reported is the number of cars per lane.

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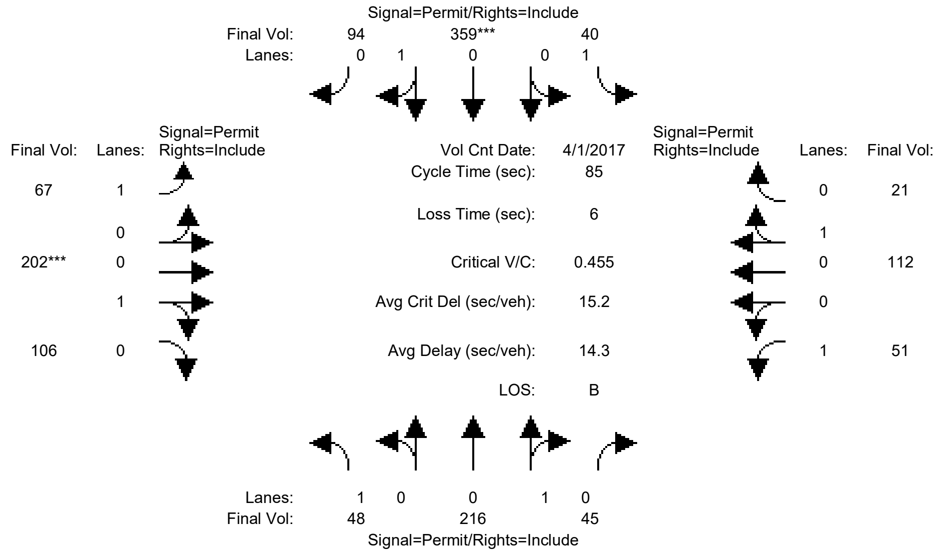
Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #43: Sunnyvale Avenue / California Avenue



Street Name:	Sunnyvale Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	38	189	45	38	357	94	67	176	95	51	106	22
Growth 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
Initial Bse:	38	189	45	38	357	94	67	176	95	51	106	22
Added Vol:	10	27	0	2	2	0	0	26	11	0	6	-1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	48	216	45	40	359	94	67	202	106	51	112	21
User 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
PHF 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
PHF Volume:	48	216	45	40	359	94	67	202	106	51	112	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	216	45	40	359	94	67	202	106	51	112	21
PCE 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
MLF 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
FinalVolume:	48	216	45	40	359	94	67	202	106	51	112	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.83	0.17	1.00	0.79	0.21	1.00	0.66	0.34	1.00	0.84	0.16
Final Sat.:	1750	1490	310	1750	1426	374	1750	1181	619	1750	1516	284
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.15	0.02	0.25	0.25	0.04	0.17	0.17	0.03	0.07	0.07
Crit Moves:					****			****				
Green Time:	47.0	47.0	47.0	47.0	47.0	47.0	32.0	32.0	32.0	32.0	32.0	32.0
Volume/Cap:	0.05	0.26	0.26	0.04	0.45	0.45	0.10	0.45	0.45	0.08	0.20	0.20
Delay/Veh:	8.7	10.1	10.1	8.7	11.7	11.7	17.3	20.4	20.4	17.1	18.0	18.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.7	10.1	10.1	8.7	11.7	11.7	17.3	20.4	20.4	17.1	18.0	18.0
LOS by Move:	A	B+	B+	A	B+	B+	B	C+	C+	B	B-	B-
HCM2kAvgQ:	1	4	4	0	7	7	1	6	6	1	2	2

Note: Queue reported is the number of cars per lane.

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Intersection #43: Sunnyvale Avenue / California Avenue

Signal=Permit/Rights=Include
Final Vol: 94 362*** 40
Lanes: 0 1 0 0 1

Signal=Permit
Rights=Include

Final Vol:	Lanes:
67	1
	0
202***	0
	1
113	0

Vol Cnt Date:	4/1/2017
Cycle Time (sec):	85
Loss Time (sec):	6
Critical V/C:	0.461
Avg Crit Del (sec/veh):	15.3
Avg Delay (sec/veh):	14.2
LOS:	B

Signal=Permit
Rights=Include

Lanes:	Final Vol:
0	21
1	
0	112
0	
1	51

Lanes: 1 0 0 1 0
Final Vol: 69 235 45
Signal=Permit/Rights=Include

Street Name:	Sunnyvale Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	38	189	45	38	357	94	67	176	95	51	106	22
Growth 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
Initial Bse:	38	189	45	38	357	94	67	176	95	51	106	22
Added Vol:	31	46	0	2	2	0	0	26	20	0	6	-1
PasserByVol:	0	0	0	0	3	0	0	0	-2	0	0	0
Initial Fut:	69	235	45	40	362	94	67	202	113	51	112	21
User 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
PHF 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
PHF Volume:	69	235	45	40	362	94	67	202	113	51	112	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	69	235	45	40	362	94	67	202	113	51	112	21
PCE 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
MLF 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
FinalVolume:	69	235	45	40	362	94	67	202	113	51	112	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.84	0.16	1.00	0.79	0.21	1.00	0.64	0.36	1.00	0.84	0.16
Final Sat.:	1750	1511	289	1750	1429	371	1750	1154	646	1750	1516	284
Capacity Analysis Module:												
Vol/Sat:	0.04	0.16	0.16	0.02	0.25	0.25	0.04	0.18	0.18	0.03	0.07	0.07
Crit Moves:					****			****				
Green Time:	46.7	46.7	46.7	46.7	46.7	46.7	32.3	32.3	32.3	32.3	32.3	32.3
Volume/Cap:	0.07	0.28	0.28	0.04	0.46	0.46	0.10	0.46	0.46	0.08	0.19	0.19
Delay/Veh:	9.0	10.4	10.4	8.8	11.9	11.9	17.1	20.3	20.3	16.9	17.8	17.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.0	10.4	10.4	8.8	11.9	11.9	17.1	20.3	20.3	16.9	17.8	17.8
LOS by Move:	A	B+	B+	A	B+	B+	B	C+	C+	B	B	B
HCM2kAvgQ:	1	4	4	0	7	7	1	6	6	1	2	2

Note: Queue reported is the number of cars per lane.

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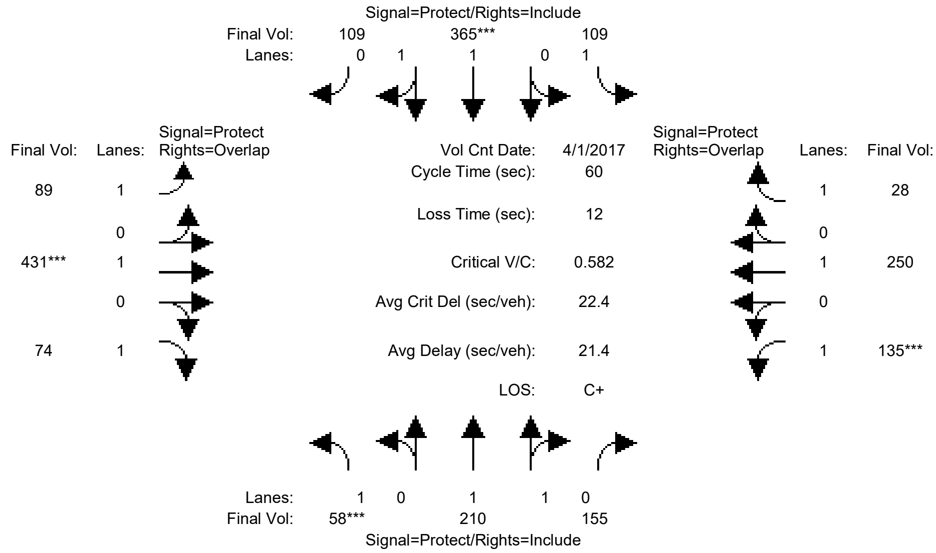
Background PM

Intersection #44: Sunnyvale Avenue / Evelyn Avenue



Street Name:	Sunnyvale Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	58	194	99	109	351	109	68	384	74	79	240	28
Growth 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
Initial Bse:	58	194	99	109	351	109	68	384	74	79	240	28
Added Vol:	0	16	56	0	14	0	21	47	0	56	10	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	210	155	109	365	109	89	431	74	135	250	28
User 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
PHF 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
PHF Volume:	58	210	155	109	365	109	89	431	74	135	250	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	210	155	109	365	109	89	431	74	135	250	28
PCE 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
MLF 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
FinalVolume:	58	210	155	109	365	109	89	431	74	135	250	28
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.13	0.87	1.00	1.53	0.47	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	2128	1570	1750	2849	851	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.10	0.06	0.13	0.13	0.05	0.23	0.04	0.08	0.13	0.02
Crit Moves:	****				****			****		****		
Green Time:	7.0	11.3	11.3	7.9	12.2	12.2	11.9	21.5	28.5	7.3	17.0	24.9
Volume/Cap:	0.28	0.53	0.53	0.47	0.63	0.63	0.26	0.63	0.09	0.63	0.47	0.04
Delay/Veh:	25.0	22.7	22.7	25.7	23.6	23.6	20.7	17.9	8.7	31.1	18.4	10.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.0	22.7	22.7	25.7	23.6	23.6	20.7	17.9	8.7	31.1	18.4	10.5
LOS by Move:	C	C+	C+	C	C	C	C+	B	A	C	B-	B+
HCM2kAvgQ:	1	3	3	2	4	4	2	8	1	3	4	0

Note: Queue reported is the number of cars per lane.

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Intersection #44: Sunnyvale Avenue / Evelyn Avenue

Signal=Protect/Rights=Include
Final Vol: 109 374 109***
Lanes: 0 1 1 0 1

Final Vol: Lanes: Signal=Protect Rights=Overlap
107 1
0
437*** 1
0
83 1

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 60
Loss Time (sec): 12
Critical V/C: 0.641
Avg Crit Del (sec/veh): 23.7
Avg Delay (sec/veh): 22.9
LOS: C+

Signal=Protect Rights=Overlap Lanes: Final Vol:
1 28
0
1 251
0
1 165***

Lanes: 1 0 1 1 0
Final Vol: 60 232 227***
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	58	194	99	109	351	109	68	384	74	79	240	28
Growth 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
Initial Bse:	58	194	99	109	351	109	68	384	74	79	240	28
Added Vol:	2	38	128	0	22	0	39	53	9	87	11	0
PasserByVol:	0	0	0	0	1	0	0	0	0	-1	0	0
Initial Fut:	60	232	227	109	374	109	107	437	83	165	251	28
User 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
PHF 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
PHF Volume:	60	232	227	109	374	109	107	437	83	165	251	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	232	227	109	374	109	107	437	83	165	251	28
PCE 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
MLF 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
FinalVolume:	60	232	227	109	374	109	107	437	83	165	251	28
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	1.54	0.46	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	1899	1800	1750	2864	835	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.13	0.06	0.13	0.13	0.06	0.23	0.05	0.09	0.13	0.02
Crit Moves:			****	****				****		****		
Green Time:	7.6	11.5	11.5	7.0	10.9	10.9	12.2	20.9	28.5	8.6	17.4	24.4
Volume/Cap:	0.27	0.64	0.66	0.53	0.72	0.72	0.30	0.66	0.10	0.66	0.46	0.04
Delay/Veh:	24.3	24.3	24.8	27.7	27.0	27.0	20.8	19.0	8.7	30.7	18.1	10.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.3	24.3	24.8	27.7	27.0	27.0	20.8	19.0	8.7	30.7	18.1	10.8
LOS by Move:	C	C	C	C	C	C	C+	B-	A	C	B-	B+
HCM2kAvgQ:	1	4	4	2	5	5	2	8	1	3	4	0

Note: Queue reported is the number of cars per lane.

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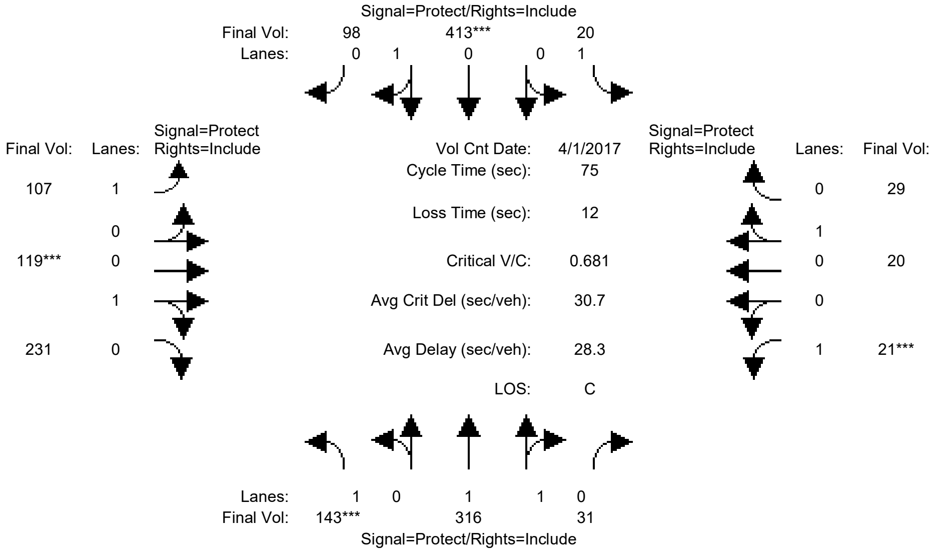
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #45: Sunnyvale Avenue / Washington Avenue



Street Name:	Sunnyvale Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	52	285	31	20	384	57	65	119	89	21	20	29
Growth 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
Initial Bse:	52	285	31	20	384	57	65	119	89	21	20	29
Added Vol:	91	31	0	0	29	41	42	0	142	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	143	316	31	20	413	98	107	119	231	21	20	29
User 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
PHF 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
PHF Volume:	143	316	31	20	413	98	107	119	231	21	20	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	316	31	20	413	98	107	119	231	21	20	29
PCE 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
MLF 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
FinalVolume:	143	316	31	20	413	98	107	119	231	21	20	29
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	1.82	0.18	1.00	0.81	0.19	1.00	0.34	0.66	1.00	0.41	0.59
Final Sat.:	1750	3369	331	1750	1455	345	1750	612	1188	1750	735	1065
Capacity Analysis Module:												
Vol/Sat:	0.08	0.09	0.09	0.01	0.28	0.28	0.06	0.19	0.19	0.01	0.03	0.03
Crit Moves:	****				****			****		****		
Green Time:	8.2	21.5	21.5	15.1	28.4	28.4	10.9	19.4	19.4	7.0	15.6	15.6
Volume/Cap:	0.75	0.33	0.33	0.06	0.75	0.75	0.42	0.75	0.75	0.13	0.13	0.13
Delay/Veh:	47.6	21.2	21.2	24.3	24.9	24.9	30.3	32.2	32.2	31.6	24.4	24.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.6	21.2	21.2	24.3	24.9	24.9	30.3	32.2	32.2	31.6	24.4	24.4
LOS by Move:	D	C+	C+	C	C	C	C	C-	C-	C	C	C
HCM2kAvgQ:	5	3	3	0	11	11	3	10	10	1	1	1

Note: Queue reported is the number of cars per lane.

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Intersection #45: Sunnyvale Avenue / Washington Avenue

Signal=Protect/Rights=Include
Final Vol: 103 456*** 20
Lanes: 0 1 0 0 1

Signal=Protect Rights=Include (West approach)
Final Vol: 133, Lanes: 1
Lanes: 0
Final Vol: 119***, Lanes: 0
Lanes: 1
Final Vol: 249, Lanes: 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 75
Loss Time (sec): 12
Critical V/C: 0.730
Avg Crit Del (sec/veh): 34.2
Avg Delay (sec/veh): 30.6
LOS: C

Signal=Protect Rights=Include (East approach)
Lanes: 0, Final Vol: 29
Lanes: 1
Lanes: 0, Final Vol: 20
Lanes: 0
Lanes: 1, Final Vol: 21***

Lanes: 1 0 1 1 0
Final Vol: 151*** 385 31
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	52	285	31	20	384	57	65	119	89	21	20	29
Growth 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
Initial Bse:	52	285	31	20	384	57	65	119	89	21	20	29
Added Vol:	99	100	0	0	72	46	68	0	160	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	151	385	31	20	456	103	133	119	249	21	20	29
User 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
PHF 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
PHF Volume:	151	385	31	20	456	103	133	119	249	21	20	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	385	31	20	456	103	133	119	249	21	20	29
PCE 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
MLF 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
FinalVolume:	151	385	31	20	456	103	133	119	249	21	20	29
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	1.85	0.15	1.00	0.82	0.18	1.00	0.32	0.68	1.00	0.41	0.59
Final Sat.:	1750	3424	276	1750	1468	332	1750	582	1218	1750	735	1065
Capacity Analysis Module:												
Vol/Sat:	0.09	0.11	0.11	0.01	0.31	0.31	0.08	0.20	0.20	0.01	0.03	0.03
Crit Moves:	****				****			****		****		
Green Time:	8.0	21.7	21.7	15.2	28.9	28.9	10.7	19.0	19.0	7.0	15.3	15.3
Volume/Cap:	0.81	0.39	0.39	0.06	0.81	0.81	0.53	0.81	0.81	0.13	0.13	0.13
Delay/Veh:	54.6	21.5	21.5	24.2	27.4	27.4	32.0	36.3	36.3	31.6	24.6	24.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	54.6	21.5	21.5	24.2	27.4	27.4	32.0	36.3	36.3	31.6	24.6	24.6
LOS by Move:	D-	C+	C+	C	C	C	C	D+	D+	C	C	C
HCM2kAvgQ:	6	4	4	0	12	12	4	11	11	1	1	1

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Intersection #46: Sunnyvale Avenue / McKinley Avenue

Signal=Protect/Rights=Include
Final Vol: 76 600*** 10
Lanes: 0 1 0 0 1

Final Vol:	Lanes:	Signal=Permit Rights=Include			Signal=Permit Rights=Overlap	Lanes:	Final Vol:
			Vol Cnt Date:	4/1/2017			
64	0		Cycle Time (sec):	160		1	18
	0		Loss Time (sec):	9		0	
51***	1!		Critical V/C:	0.601		0	33
	0		Avg Crit Del (sec/veh):	33.4		1	
130	0		Avg Delay (sec/veh):	30.2		0	26
			LOS:	C			

Lanes: 1 0 1 1 0
Final Vol: 90*** 444 20
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	41	347	20	10	456	46	39	51	73	26	33	18
Growth 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
Initial Bse:	41	347	20	10	456	46	39	51	73	26	33	18
Added Vol:	49	97	0	0	144	30	25	0	57	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	90	444	20	10	600	76	64	51	130	26	33	18
User 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
PHF 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
PHF Volume:	90	444	20	10	600	76	64	51	130	26	33	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	444	20	10	600	76	64	51	130	26	33	18
PCE 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
MLF 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
FinalVolume:	90	444	20	10	600	76	64	51	130	26	33	18
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	1.00	1.91	0.09	1.00	0.89	0.11	0.26	0.21	0.53	0.44	0.56	1.00
Final Sat.:	1750	3540	159	1750	1598	202	457	364	929	793	1007	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.13	0.13	0.01	0.38	0.38	0.14	0.14	0.14	0.03	0.03	0.01
Crit Moves:	****				****			****				
Green Time:	13.7	84.3	84.3	29.4	100	100.0	37.3	37.3	37.3	37.3	37.3	66.7
Volume/Cap:	0.60	0.24	0.24	0.03	0.60	0.60	0.60	0.60	0.60	0.14	0.14	0.02
Delay/Veh:	77.2	20.5	20.5	53.6	18.9	18.9	57.2	57.2	57.2	48.8	48.8	27.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	77.2	20.5	20.5	53.6	18.9	18.9	57.2	57.2	57.2	48.8	48.8	27.5
LOS by Move:	E-	C+	C+	D-	B-	B-	E+	E+	E+	D	D	C
HCM2kAvgQ:	5	6	6	0	21	21	11	11	11	2	2	1

Note: Queue reported is the number of cars per lane.

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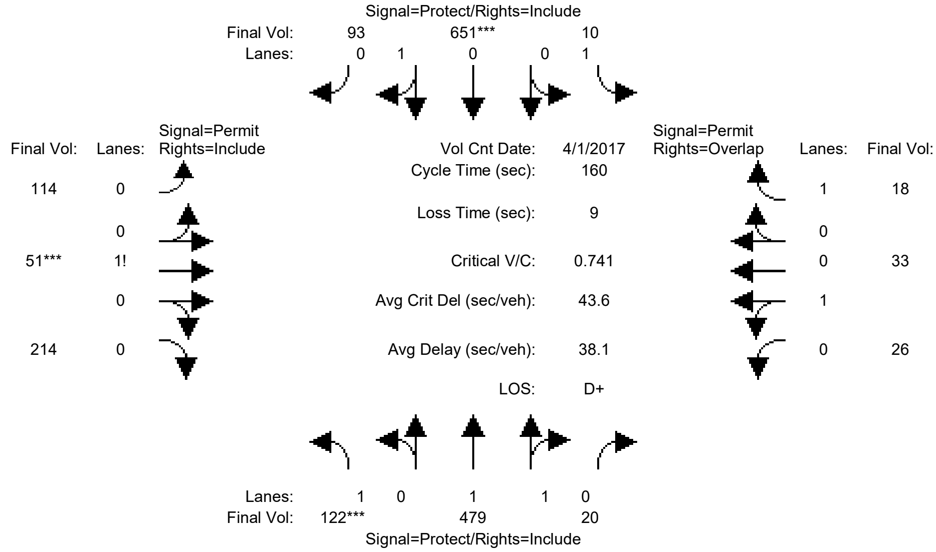
Intersection #46: Sunnyvale Avenue / McKinley Avenue



Street Name:	Sunnyvale Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	41	347	20	10	456	46	39	51	73	26	33	18
Growth 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
Initial Bse:	41	347	20	10	456	46	39	51	73	26	33	18
Added Vol:	81	132	0	0	195	47	75	0	141	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	122	479	20	10	651	93	114	51	214	26	33	18
User 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
PHF 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
PHF Volume:	122	479	20	10	651	93	114	51	214	26	33	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	479	20	10	651	93	114	51	214	26	33	18
PCE 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
MLF 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
FinalVolume:	122	479	20	10	651	93	114	51	214	26	33	18
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	1.00	1.92	0.08	1.00	0.88	0.12	0.30	0.13	0.57	0.44	0.56	1.00
Final Sat.:	1750	3552	148	1750	1575	225	526	235	988	793	1007	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.13	0.13	0.01	0.41	0.41	0.22	0.22	0.22	0.03	0.03	0.01
Crit Moves:	****				****			****				
Green Time:	15.0	78.7	78.7	25.5	89.2	89.2	46.7	46.7	46.7	46.7	46.7	72.3
Volume/Cap:	0.74	0.27	0.27	0.04	0.74	0.74	0.74	0.74	0.74	0.11	0.11	0.02
Delay/Veh:	87.0	23.9	23.9	56.9	29.7	29.7	56.9	56.9	56.9	41.5	41.5	24.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	87.0	23.9	23.9	56.9	29.7	29.7	56.9	56.9	56.9	41.5	41.5	24.3
LOS by Move:	F	C	C	E+	C	C	E+	E+	E+	D	D	C
HCM2kAvgQ:	8	7	7	0	29	29	17	17	17	2	2	1

Note: Queue reported is the number of cars per lane.

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Intersection #47: Sunnyvale Avenue / Iowa Avenue

Signal=Protect/Rights=Overlap
Final Vol: 40 716*** 3
Lanes: 0 1 0 0 1

Signal=Split
Rights=Include

Final Vol:	Lanes:
70	1
	0
10***	0
	1
229	0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 120
Loss Time (sec): 9
Critical V/C: 0.692
Avg Crit Del (sec/veh): 30.3
Avg Delay (sec/veh): 25.5
LOS: C

Signal=Split
Rights=Include

Lanes:	Final Vol:
0	0
0	
0	0
0	
0	0

Lanes: 1 0 0 1 0
Final Vol: 153*** 492 6
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	71	346	6	3	514	40	70	10	142	0	0	0
Growth 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
Initial Bse:	71	346	6	3	514	40	70	10	142	0	0	0
Added Vol:	82	146	0	0	202	0	0	0	87	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	153	492	6	3	716	40	70	10	229	0	0	0
User 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
PHF 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
PHF Volume:	153	492	6	3	716	40	70	10	229	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	492	6	3	716	40	70	10	229	0	0	0
PCE 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
MLF 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
FinalVolume:	153	492	6	3	716	40	70	10	229	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	0.99	0.01	1.00	0.95	0.05	1.00	0.04	0.96	0.00	0.00	0.00
Final Sat.:	1750	1778	22	1750	1705	95	1750	75	1725	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.28	0.28	0.00	0.42	0.42	0.04	0.13	0.13	0.00	0.00	0.00
Crit Moves:	****				****			****				
Green Time:	15.2	72.7	72.7	15.3	72.8	95.8	23.0	23.0	23.0	0.0	0.0	0.0
Volume/Cap:	0.69	0.46	0.46	0.01	0.69	0.53	0.21	0.69	0.69	0.00	0.00	0.00
Delay/Veh:	59.2	13.2	13.2	45.8	17.9	4.6	41.1	51.1	51.1	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	59.2	13.2	13.2	45.8	17.9	4.6	41.1	51.1	51.1	0.0	0.0	0.0
LOS by Move:	E+	B	B	D	B	A	D	D-	D-	A	A	A
HCM2kAvgQ:	6	10	10	0	20	10	2	9	9	0	0	0

Note: Queue reported is the number of cars per lane.

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Intersection #47: Sunnyvale Avenue / Iowa Avenue

Signal=Protect/Rights=Overlap
Final Vol: 42 847*** 3
Lanes: 0 1 0 0 1

Westbound side (left) — Signal=Split, Rights=Include

Final Vol:	Lanes:
70	1
	0
10***	0
	1
256	0

Vol Cnt Date:	4/1/2017
Cycle Time (sec):	120
Loss Time (sec):	9
Critical V/C:	0.799
Avg Crit Del (sec/veh):	35.4
Avg Delay (sec/veh):	28.8
LOS:	C

Signal=Split
Rights=Include

Lanes:	Final Vol:
0	0
0	
0	0
0	
0	0

Lanes: 1 0 0 1 0
Final Vol: 171*** 559 6
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	71	346	6	3	514	40	70	10	142	0	0	0
Growth 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
Initial Bse:	71	346	6	3	514	40	70	10	142	0	0	0
Added Vol:	100	213	0	0	333	2	0	0	114	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	171	559	6	3	847	42	70	10	256	0	0	0
User 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
PHF 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
PHF Volume:	171	559	6	3	847	42	70	10	256	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	171	559	6	3	847	42	70	10	256	0	0	0
PCE 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
MLF 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
FinalVolume:	171	559	6	3	847	42	70	10	256	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	0.99	0.01	1.00	0.95	0.05	1.00	0.04	0.96	0.00	0.00	0.00
Final Sat.:	1750	1781	19	1750	1715	85	1750	68	1732	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.31	0.31	0.00	0.49	0.49	0.04	0.15	0.15	0.00	0.00	0.00
Crit Moves:	****				****			****				
Green Time:	14.7	74.9	74.9	13.9	74.1	96.3	22.2	22.2	22.2	0.0	0.0	0.0
Volume/Cap:	0.80	0.50	0.50	0.01	0.80	0.62	0.22	0.80	0.80	0.00	0.00	0.00
Delay/Veh:	70.1	12.7	12.7	47.0	21.5	5.4	41.9	59.6	59.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	70.1	12.7	12.7	47.0	21.5	5.4	41.9	59.6	59.6	0.0	0.0	0.0
LOS by Move:	E	B	B	D	C+	A	D	E+	E+	A	A	A
HCM2kAvgQ:	7	12	12	0	27	14	2	10	10	0	0	0

Note: Queue reported is the number of cars per lane.

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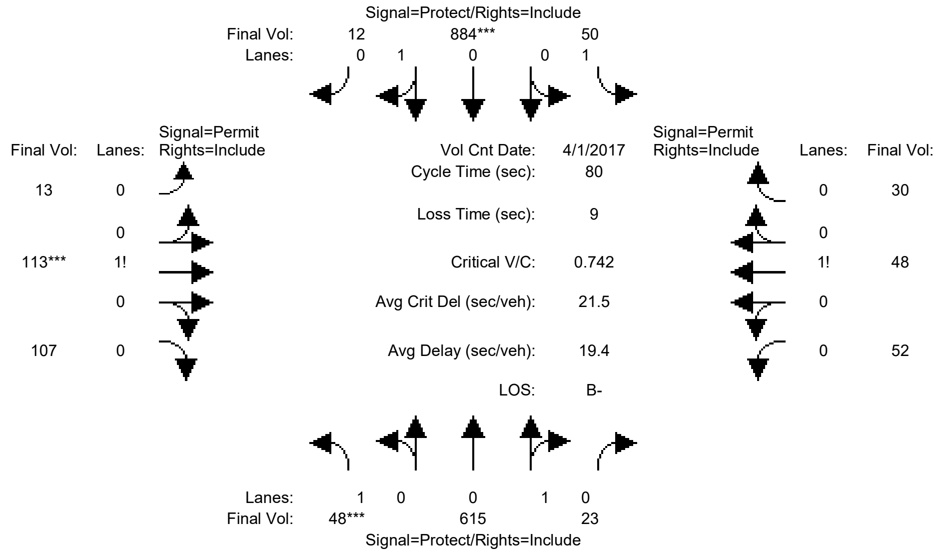
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #48: Sunnyvale Avenue / Olive Avenue



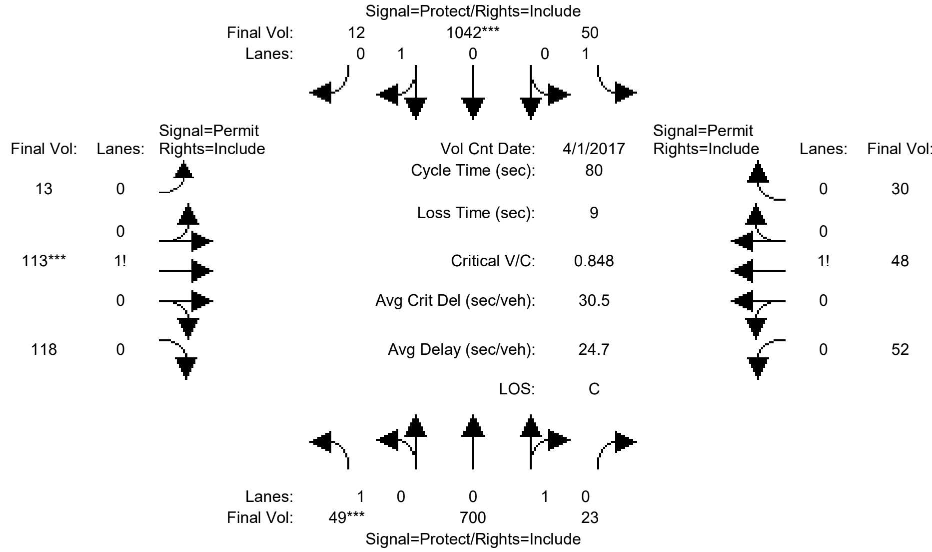
Street Name:	Sunnyvale Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	36	387	23	50	595	12	13	113	70	52	48	30
Growth 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
Initial Bse:	36	387	23	50	595	12	13	113	70	52	48	30
Added Vol:	12	228	0	0	289	0	0	0	37	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	48	615	23	50	884	12	13	113	107	52	48	30
User 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
PHF 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
PHF Volume:	48	615	23	50	884	12	13	113	107	52	48	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	615	23	50	884	12	13	113	107	52	48	30
PCE 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
MLF 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
FinalVolume:	48	615	23	50	884	12	13	113	107	52	48	30
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	1.00	0.96	0.04	1.00	0.99	0.01	0.06	0.48	0.46	0.40	0.37	0.23
Final Sat.:	1750	1735	65	1750	1776	24	98	849	804	700	646	404
Capacity Analysis Module:												
Vol/Sat:	0.03	0.35	0.35	0.03	0.50	0.50	0.13	0.13	0.13	0.07	0.07	0.07
Crit Moves:	****				****			****				
Green Time:	7.0	46.1	46.1	11.4	50.5	50.5	13.5	13.5	13.5	13.5	13.5	13.5
Volume/Cap:	0.31	0.61	0.61	0.20	0.79	0.79	0.79	0.79	0.79	0.44	0.44	0.44
Delay/Veh:	35.4	12.2	12.2	30.7	14.6	14.6	45.1	45.1	45.1	30.9	30.9	30.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.4	12.2	12.2	30.7	14.6	14.6	45.1	45.1	45.1	30.9	30.9	30.9
LOS by Move:	D+	B	B	C	B	B	D	D	D	C	C	C
HCM2kAvgQ:	1	11	11	1	17	17	6	6	6	4	4	4

Note: Queue reported is the number of cars per lane.

Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #48: Sunnyvale Avenue / Olive Avenue



Street Name:	Sunnyvale Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	36	387	23	50	595	12	13	113	70	52	48	30
Growth 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
Initial Bse:	36	387	23	50	595	12	13	113	70	52	48	30
Added Vol:	13	313	0	0	447	0	0	0	48	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	49	700	23	50	1042	12	13	113	118	52	48	30
User 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
PHF 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
PHF Volume:	49	700	23	50	1042	12	13	113	118	52	48	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	700	23	50	1042	12	13	113	118	52	48	30
PCE 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
MLF 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
FinalVolume:	49	700	23	50	1042	12	13	113	118	52	48	30
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	1.00	0.97	0.03	1.00	0.99	0.01	0.05	0.46	0.49	0.40	0.37	0.23
Final Sat.:	1750	1743	57	1750	1780	20	93	810	846	700	646	404
Capacity Analysis Module:												
Vol/Sat:	0.03	0.40	0.40	0.03	0.59	0.59	0.14	0.14	0.14	0.07	0.07	0.07
Crit Moves:	****				****			****				
Green Time:	7.0	48.2	48.2	10.5	51.7	51.7	12.3	12.3	12.3	12.3	12.3	12.3
Volume/Cap:	0.32	0.67	0.67	0.22	0.91	0.91	0.91	0.91	0.91	0.48	0.48	0.48
Delay/Veh:	35.5	12.2	12.2	31.6	22.3	22.3	64.7	64.7	64.7	32.3	32.3	32.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.5	12.2	12.2	31.6	22.3	22.3	64.7	64.7	64.7	32.3	32.3	32.3
LOS by Move:	D+	B	B	C	C+	C+	E	E	E	C-	C-	C-
HCM2kAvgQ:	1	12	12	1	24	24	7	7	7	4	4	4

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #49: Sunnyvale Avenue / Old San Francisco Road

Signal=Protect/Rights=Include
Final Vol: 47 710 333***
Lanes: 1 0 2 0 1

Signal=Protect
Rights=Include
Final Vol: Lanes:
0*** 0
0
0 0
0
44 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 100
Loss Time (sec): 6
Critical V/C: 0.558
Avg Crit Del (sec/veh): 28.1
Avg Delay (sec/veh): 20.0
LOS: B-

Signal=Protect
Rights=Include
Lanes: Final Vol:
1 229***
0
0 0
0
0 0

Lanes: 0 0 1 1 0
Final Vol: 0 537*** 214
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	10	0	0	10	0	0	10
Y+R:	0.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	417	213	127	590	47	0	0	44	0	0	109
Growth 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
Initial Bse:	0	417	213	127	590	47	0	0	44	0	0	109
Added Vol:	0	120	1	206	120	0	0	0	0	0	0	120
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	537	214	333	710	47	0	0	44	0	0	229
User 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
PHF 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
PHF Volume:	0	537	214	333	710	47	0	0	44	0	0	229
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	537	214	333	710	47	0	0	44	0	0	229
PCE 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
MLF 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
FinalVolume:	0	537	214	333	710	47	0	0	44	0	0	229
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	1.41	0.59	1.00	2.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Final Sat.:	0	2645	1054	1750	3800	1750	0	0	1750	0	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.19	0.19	0.03	0.00	0.00	0.03	0.00	0.00	0.13
Crit Moves:		****		****			****					****
Green Time:	0.0	36.4	36.4	34.1	70.5	70.5	0.0	0.0	23.5	0.0	0.0	23.5
Volume/Cap:	0.00	0.56	0.56	0.56	0.26	0.04	0.00	0.00	0.11	0.00	0.00	0.56
Delay/Veh:	0.0	25.9	25.9	28.0	5.4	4.5	0.0	0.0	30.2	0.0	0.0	35.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	25.9	25.9	28.0	5.4	4.5	0.0	0.0	30.2	0.0	0.0	35.4
LOS by Move:	A	C	C	C	A	A	A	A	C	A	A	D+
HCM2kAvgQ:	0	9	9	9	4	0	0	0	1	0	0	7

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #49: Sunnyvale Avenue / Old San Francisco Road

Signal=Protect/Rights=Include
Final Vol: 47 818 395***
Lanes: 1 0 2 0 1

Signal=Protect Rights=Include
Final Vol: Lanes:
0*** 0
0
0 0
0
44 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 100
Loss Time (sec): 6
Critical V/C: 0.629
Avg Crit Del (sec/veh): 29.9
Avg Delay (sec/veh): 21.0
LOS: C+

Signal=Protect Rights=Include
Lanes: Final Vol:
1 256***
0
0 0
0
0 0

Lanes: 0 0 1 1 0
Final Vol: 0 597*** 214
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	10	0	0	10	0	0	10
Y+R:	0.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	417	213	127	590	47	0	0	44	0	0	109
Growth 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
Initial Bse:	0	417	213	127	590	47	0	0	44	0	0	109
Added Vol:	0	180	1	268	228	0	0	0	0	0	0	147
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	597	214	395	818	47	0	0	44	0	0	256
User 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
PHF 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
PHF Volume:	0	597	214	395	818	47	0	0	44	0	0	256
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	597	214	395	818	47	0	0	44	0	0	256
PCE 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
MLF 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
FinalVolume:	0	597	214	395	818	47	0	0	44	0	0	256
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	1.46	0.54	1.00	2.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Final Sat.:	0	2723	976	1750	3800	1750	0	0	1750	0	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.23	0.22	0.03	0.00	0.00	0.03	0.00	0.00	0.15
Crit Moves:		****		****			****					****
Green Time:	0.0	34.9	34.9	35.9	70.7	70.7	0.0	0.0	23.3	0.0	0.0	23.3
Volume/Cap:	0.00	0.63	0.63	0.63	0.30	0.04	0.00	0.00	0.11	0.00	0.00	0.63
Delay/Veh:	0.0	28.2	28.2	28.6	5.5	4.4	0.0	0.0	30.3	0.0	0.0	37.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	28.2	28.2	28.6	5.5	4.4	0.0	0.0	30.3	0.0	0.0	37.6
LOS by Move:	A	C	C	C	A	A	A	A	C	A	A	D+
HCM2kAvgQ:	0	10	10	10	4	0	0	0	1	0	0	7

Note: Queue reported is the number of cars per lane.

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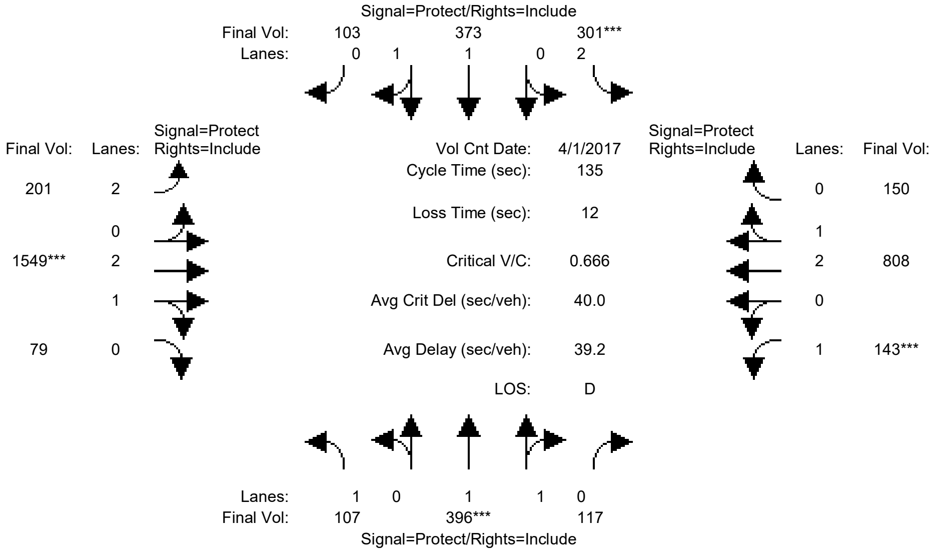
Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #50: Sunnyvale Avenue / El Camino Real



Street Name:	Sunnyvale Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	107	346	117	232	322	103	200	1472	79	143	784	80
Growth 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
Initial Bse:	107	346	117	232	322	103	200	1472	79	143	784	80
Added Vol:	0	50	0	69	51	0	1	77	0	0	24	70
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	107	396	117	301	373	103	201	1549	79	143	808	150
User 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
PHF 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
PHF Volume:	107	396	117	301	373	103	201	1549	79	143	808	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	396	117	301	373	103	201	1549	79	143	808	150
PCE 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
MLF 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
FinalVolume:	107	396	117	301	373	103	201	1549	79	143	808	150
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.98	0.95	0.83	0.98	0.95	0.92	0.99	0.95
Lanes:	1.00	1.53	0.47	2.00	1.56	0.44	2.00	2.85	0.15	1.00	2.51	0.49
Final Sat.:	1750	2856	844	3150	2899	800	3150	5328	272	1750	4722	877
Capacity Analysis Module:												
Vol/Sat:	0.06	0.14	0.14	0.10	0.13	0.13	0.06	0.29	0.29	0.08	0.17	0.17
Crit Moves:		****		****				****		****		
Green Time:	15.3	28.1	28.1	19.4	32.2	32.2	20.5	58.9	58.9	16.6	55.0	55.0
Volume/Cap:	0.54	0.67	0.67	0.67	0.54	0.54	0.42	0.67	0.67	0.67	0.42	0.42
Delay/Veh:	59.5	51.4	51.4	58.5	45.6	45.6	52.5	30.9	30.9	64.3	28.7	28.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	59.5	51.4	51.4	58.5	45.6	45.6	52.5	30.9	30.9	64.3	28.7	28.7
LOS by Move:	E+	D-	D-	E+	D	D	D-	C	C	E	C	C
HCM2kAvgQ:	4	10	10	7	9	9	4	17	17	6	9	9

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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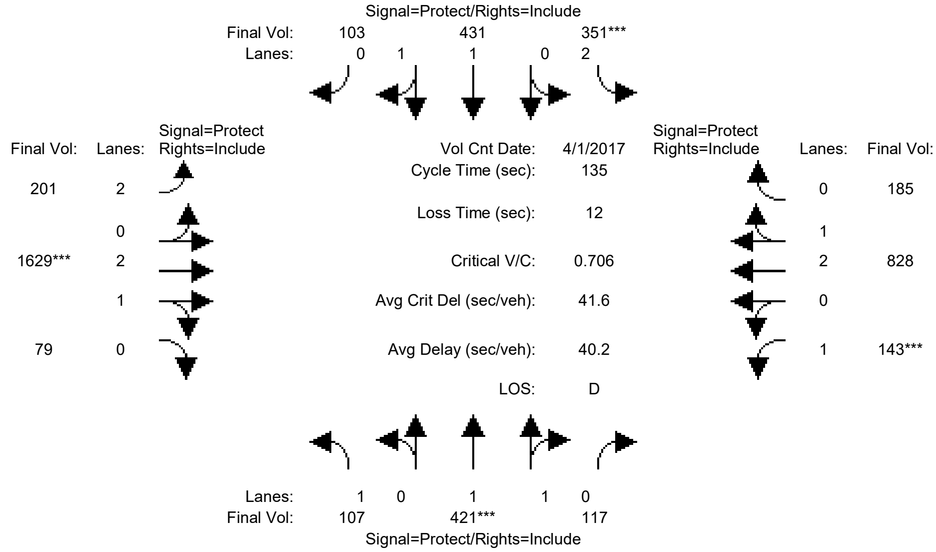
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #50: Sunnyvale Avenue / El Camino Real



Street Name:	Sunnyvale Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	107	346	117	232	322	103	200	1472	79	143	784	80
Growth 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
Initial Bse:	107	346	117	232	322	103	200	1472	79	143	784	80
Added Vol:	0	75	0	119	109	0	1	157	0	0	44	105
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	107	421	117	351	431	103	201	1629	79	143	828	185
User 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
PHF 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
PHF Volume:	107	421	117	351	431	103	201	1629	79	143	828	185
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	421	117	351	431	103	201	1629	79	143	828	185
PCE 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
MLF 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
FinalVolume:	107	421	117	351	431	103	201	1629	79	143	828	185
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.98	0.95	0.83	0.98	0.95	0.92	0.99	0.95
Lanes:	1.00	1.55	0.45	2.00	1.60	0.40	2.00	2.86	0.14	1.00	2.43	0.57
Final Sat.:	1750	2895	804	3150	2986	714	3150	5341	259	1750	4576	1022
Capacity Analysis Module:												
Vol/Sat:	0.06	0.15	0.15	0.11	0.14	0.14	0.06	0.31	0.31	0.08	0.18	0.18
Crit Moves:		****		****				****		****		
Green Time:	14.6	27.8	27.8	21.3	34.5	34.5	19.3	58.3	58.3	15.6	54.6	54.6
Volume/Cap:	0.57	0.71	0.71	0.71	0.57	0.57	0.45	0.71	0.71	0.71	0.45	0.45
Delay/Veh:	61.1	52.9	52.9	58.5	44.5	44.5	53.7	32.3	32.3	68.3	29.3	29.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	61.1	52.9	52.9	58.5	44.5	44.5	53.7	32.3	32.3	68.3	29.3	29.3
LOS by Move:	E	D-	D-	E+	D	D	D-	C-	C-	E	C	C
HCM2kAvgQ:	5	11	11	8	10	10	4	18	18	6	10	10

Note: Queue reported is the number of cars per lane.

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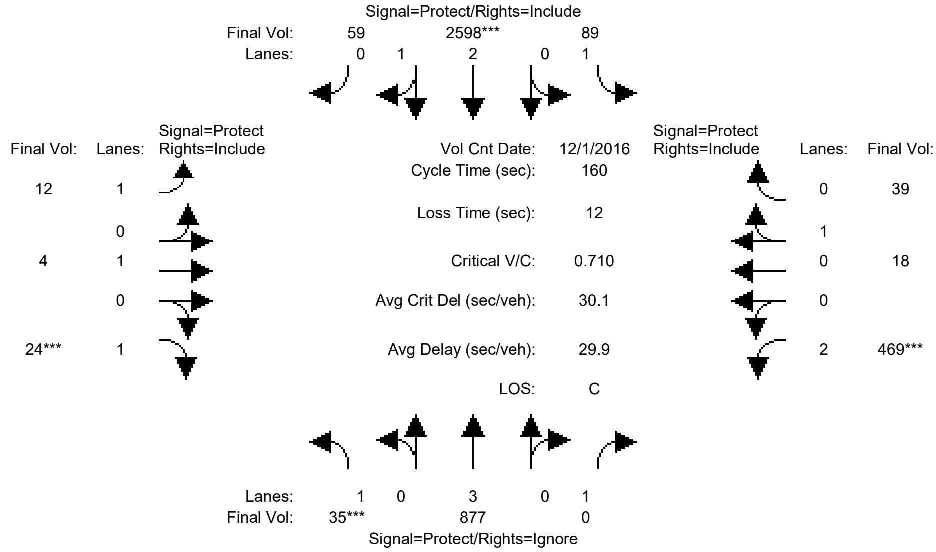
Background PM

Intersection #51: Mathilda Avenue / Talisman Drive



Street Name:	Mathilda Avenue						Talisman Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	35	638	584	89	1952	59	12	4	24	418	18	39
Growth 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
Initial Bse:	35	638	584	89	1952	59	12	4	24	418	18	39
Added Vol:	0	239	50	0	646	0	0	0	0	51	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	35	877	634	89	2598	59	12	4	24	469	18	39
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	877	0	89	2598	59	12	4	24	469	18	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	877	0	89	2598	59	12	4	24	469	18	39
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	877	0	89	2598	59	12	4	24	469	18	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92	0.83	0.95	0.95
Lanes:	1.00	3.00	1.00	1.00	2.93	0.07	1.00	1.00	1.00	2.00	0.32	0.68
Final Sat.:	1750	5700	1750	1750	5475	124	1750	1900	1750	3150	568	1232
Capacity Analysis Module:												
Vol/Sat:	0.02	0.15	0.00	0.05	0.47	0.47	0.01	0.00	0.01	0.15	0.03	0.03
Crit Moves:	****				****				****	****		
Green Time:	7.0	80.2	0.0	26.5	99.7	99.7	17.0	10.0	10.0	31.3	24.3	24.3
Volume/Cap:	0.46	0.31	0.00	0.31	0.76	0.76	0.06	0.03	0.22	0.76	0.21	0.21
Delay/Veh:	78.9	23.6	0.0	59.3	22.6	22.6	64.5	70.6	72.3	66.4	59.8	59.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	78.9	23.6	0.0	59.3	22.6	22.6	64.5	70.6	72.3	66.4	59.8	59.8
LOS by Move:	E-	C	A	E+	C+	C+	E	E	E	E	E+	E+
HCM2kAvgQ:	2	8	0	4	30	30	1	0	1	13	2	2

Note: Queue reported is the number of cars per lane.

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2000 HCM Operations (Future Volume Alternative)
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Intersection #51: Mathilda Avenue / Talisman Drive

Signal=Protect/Rights=Include
Final Vol: 59 2737*** 89
Lanes: 0 1 2 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	12/1/2016			
12	1		Cycle Time (sec):	160		0	39
	0		Loss Time (sec):	12		1	
4	1		Critical V/C:	0.757		0	18
	0		Avg Crit Del (sec/veh):	33.1		0	
24***	1		Avg Delay (sec/veh):	32.2		2	527***
			LOS:	C-			

Lanes: 1 0 3 0 1
Final Vol: 35*** 923 0
Signal=Protect/Rights=Ignore

Street Name:	Mathilda Avenue						Talisman Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	35	638	584	89	1952	59	12	4	24	418	18	39
Growth 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
Initial Bse:	35	638	584	89	1952	59	12	4	24	418	18	39
Added Vol:	0	285	75	0	785	0	0	0	0	109	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	35	923	659	89	2737	59	12	4	24	527	18	39
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	923	0	89	2737	59	12	4	24	527	18	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	923	0	89	2737	59	12	4	24	527	18	39
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	923	0	89	2737	59	12	4	24	527	18	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92	0.83	0.95	0.95
Lanes:	1.00	3.00	1.00	1.00	2.93	0.07	1.00	1.00	1.00	2.00	0.32	0.68
Final Sat.:	1750	5700	1750	1750	5482	118	1750	1900	1750	3150	568	1232
Capacity Analysis Module:												
Vol/Sat:	0.02	0.16	0.00	0.05	0.50	0.50	0.01	0.00	0.01	0.17	0.03	0.03
Crit Moves:	****				****				****	****		
Green Time:	7.0	80.0	0.0	25.1	98.1	98.1	17.7	10.0	10.0	32.9	25.2	25.2
Volume/Cap:	0.46	0.32	0.00	0.32	0.81	0.81	0.06	0.03	0.22	0.81	0.20	0.20
Delay/Veh:	78.9	23.9	0.0	60.6	25.5	25.5	63.9	70.6	72.3	68.5	59.0	59.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	78.9	23.9	0.0	60.6	25.5	25.5	63.9	70.6	72.3	68.5	59.0	59.0
LOS by Move:	E-	C	A	E	C	C	E	E	E	E	E+	E+
HCM2kAvgQ:	2	9	0	4	34	34	1	0	1	15	2	2

Note: Queue reported is the number of cars per lane.

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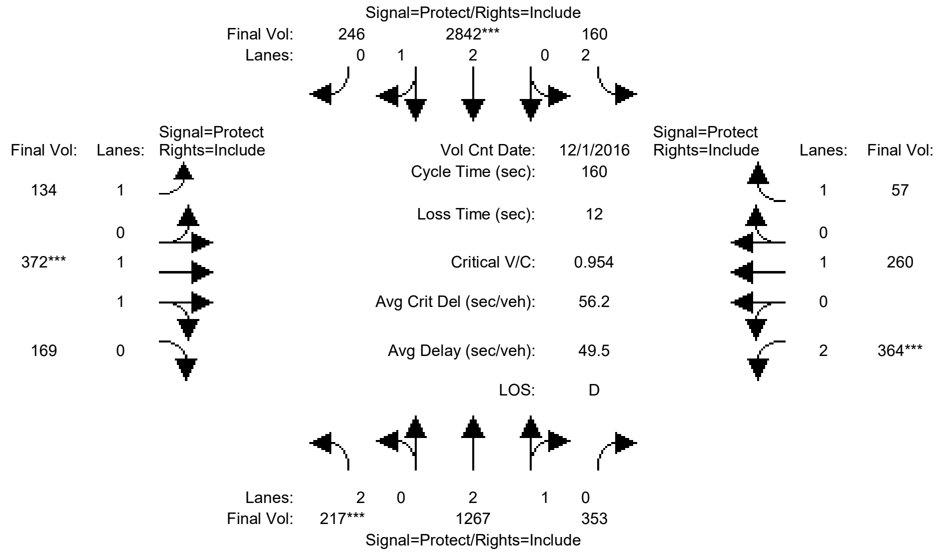
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #52: Sunnyvale-Saratoga Road / Remington Drive (CMP)



Street Name:	Sunnyvale-Saratoga Road						Remington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	217	995	343	160	2175	217	117	370	169	368	261	57
Growth 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
Initial Bse:	217	995	343	160	2175	217	117	370	169	368	261	57
Added Vol:	0	272	10	0	667	29	17	2	0	-4	-1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	217	1267	353	160	2842	246	134	372	169	364	260	57
User 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
PHF 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
PHF Volume:	217	1267	353	160	2842	246	134	372	169	364	260	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	1267	353	160	2842	246	134	372	169	364	260	57
PCE 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
MLF 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
FinalVolume:	217	1267	353	160	2842	246	134	372	169	364	260	57
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.99	0.95	0.83	1.00	0.92
Lanes:	2.00	2.32	0.68	2.00	2.75	0.25	1.00	1.36	0.64	2.00	1.00	1.00
Final Sat.:	3150	4378	1220	3150	5153	446	1750	2543	1155	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.29	0.29	0.05	0.55	0.55	0.08	0.15	0.15	0.12	0.14	0.03
Crit Moves:	****				****			****		****		
Green Time:	11.6	88.5	88.5	15.5	92.5	92.5	15.8	24.5	24.5	19.4	28.2	28.2
Volume/Cap:	0.95	0.52	0.52	0.52	0.95	0.95	0.78	0.95	0.95	0.95	0.78	0.19
Delay/Veh:	120.6	22.6	22.6	70.3	39.5	39.5	90.2	93.8	93.8	104.0	73.9	56.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	120.6	22.6	22.6	70.3	39.5	39.5	90.2	93.8	93.8	104.0	73.9	56.4
LOS by Move:	F	C+	C+	E	D	D	F	F	F	F	E	E+
HCM2kAvgQ:	7	16	16	4	50	50	7	14	14	12	12	2

Note: Queue reported is the number of cars per lane.

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Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
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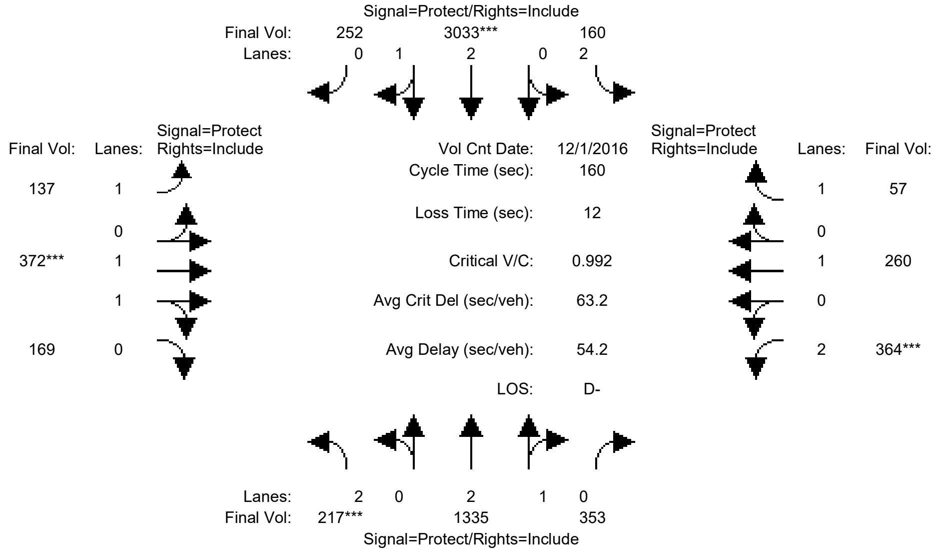
Intersection #52: Sunnyvale-Saratoga Road / Remington Drive (CMP)



Street Name:	Sunnyvale-Saratoga Road						Remington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	217	995	343	160	2175	217	117	370	169	368	261	57
Growth 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
Initial Bse:	217	995	343	160	2175	217	117	370	169	368	261	57
Added Vol:	0	340	10	0	858	35	20	2	0	-4	-1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	217	1335	353	160	3033	252	137	372	169	364	260	57
User 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
PHF 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
PHF Volume:	217	1335	353	160	3033	252	137	372	169	364	260	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	1335	353	160	3033	252	137	372	169	364	260	57
PCE 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
MLF 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
FinalVolume:	217	1335	353	160	3033	252	137	372	169	364	260	57
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.99	0.95	0.83	1.00	0.92
Lanes:	2.00	2.35	0.65	2.00	2.76	0.24	1.00	1.36	0.64	2.00	1.00	1.00
Final Sat.:	3150	4427	1171	3150	5170	430	1750	2543	1155	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.30	0.30	0.05	0.59	0.59	0.08	0.15	0.15	0.12	0.14	0.03
Crit Moves:	****				****			****		****		
Green Time:	11.1	90.5	90.5	15.2	94.6	94.6	15.4	23.6	23.6	18.6	26.9	26.9
Volume/Cap:	0.99	0.53	0.53	0.53	0.99	0.99	0.81	0.99	0.99	0.99	0.81	0.19
Delay/Veh:	132.8	21.8	21.8	70.8	46.0	46.0	96.3	104	104.4	115.3	79.0	57.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	132.8	21.8	21.8	70.8	46.0	46.0	96.3	104	104.4	115.3	79.0	57.6
LOS by Move:	F	C+	C+	E	D	D	F	F	F	F	E-	E+
HCM2kAvgQ:	8	17	17	4	57	57	7	14	14	13	13	2

Note: Queue reported is the number of cars per lane.

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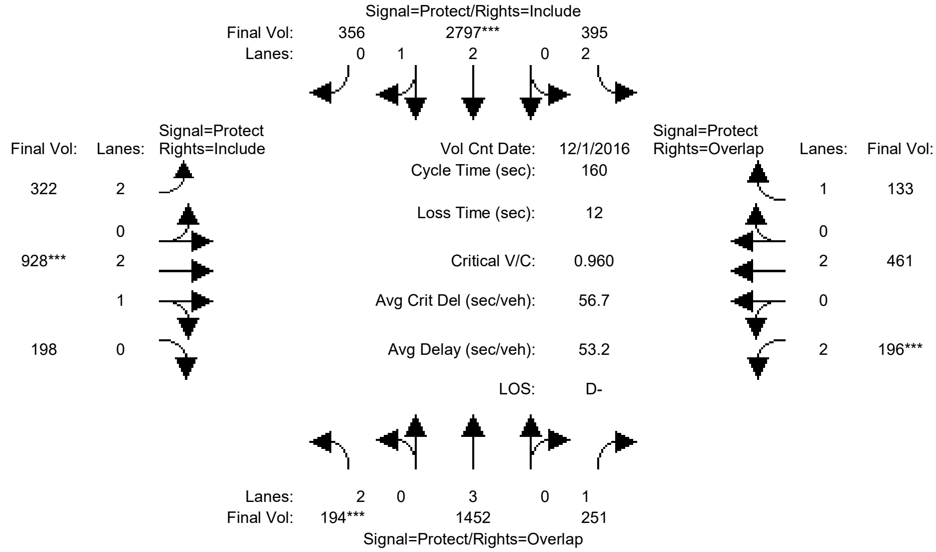
Intersection #53: Sunnyvale-Saratoga Road / Fremont Avenue (CMP)



Street Name:	Sunnyvale-Saratoga Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	194	1220	251	369	2209	307	286	925	198	196	460	119
Growth 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
Initial Bse:	194	1220	251	369	2209	307	286	925	198	196	460	119
Added Vol:	0	232	0	26	588	49	36	3	0	0	1	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	194	1452	251	395	2797	356	322	928	198	196	461	133
User 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
PHF 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
PHF Volume:	194	1452	251	395	2797	356	322	928	198	196	461	133
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	194	1452	251	395	2797	356	322	928	198	196	461	133
PCE 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
MLF 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
FinalVolume:	194	1452	251	395	2797	356	322	928	198	196	461	133
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	0.99	0.95	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	2.65	0.35	2.00	2.45	0.55	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	4967	632	3150	4614	984	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.25	0.14	0.13	0.56	0.56	0.10	0.20	0.20	0.06	0.12	0.08
Crit Moves:	****				****			****		****		
Green Time:	10.3	69.8	80.1	34.3	93.8	93.8	20.1	33.5	33.5	10.4	23.8	58.2
Volume/Cap:	0.96	0.58	0.29	0.58	0.96	0.96	0.81	0.96	0.96	0.96	0.81	0.21
Delay/Veh:	126.4	34.5	23.4	57.7	39.7	39.7	80.5	80.1	80.1	126.0	74.9	35.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	126.4	34.5	23.4	57.7	39.7	39.7	80.5	80.1	80.1	126.0	74.9	35.2
LOS by Move:	F	C-	C	E+	D	D	F	F	F	F	E	D+
HCM2kAvgQ:	7	17	7	10	48	48	9	20	20	7	12	5

Note: Queue reported is the number of cars per lane.

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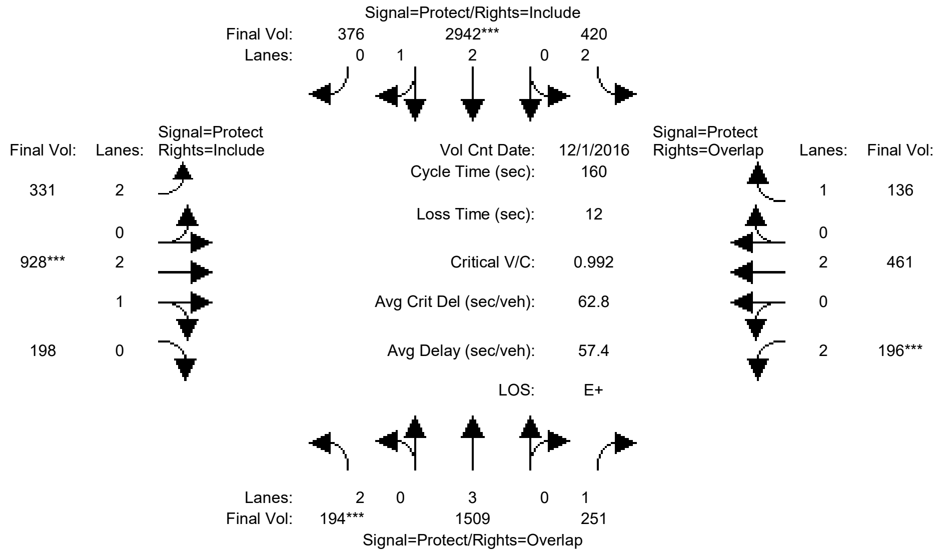
Intersection #53: Sunnyvale-Saratoga Road / Fremont Avenue (CMP)



Street Name:	Sunnyvale-Saratoga Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	194	1220	251	369	2209	307	286	925	198	196	460	119
Growth 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
Initial Bse:	194	1220	251	369	2209	307	286	925	198	196	460	119
Added Vol:	0	289	0	51	733	69	45	3	0	0	1	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	194	1509	251	420	2942	376	331	928	198	196	461	136
User 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
PHF 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
PHF Volume:	194	1509	251	420	2942	376	331	928	198	196	461	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	194	1509	251	420	2942	376	331	928	198	196	461	136
PCE 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
MLF 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
FinalVolume:	194	1509	251	420	2942	376	331	928	198	196	461	136
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	0.99	0.95	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	2.65	0.35	2.00	2.45	0.55	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	4965	634	3150	4614	984	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.26	0.14	0.13	0.59	0.59	0.11	0.20	0.20	0.06	0.12	0.08
Crit Moves:	****				****			****		****		
Green Time:	9.9	70.2	80.2	35.3	95.6	95.6	19.7	32.4	32.4	10.0	22.8	58.1
Volume/Cap:	0.99	0.60	0.29	0.60	0.99	0.99	0.85	0.99	0.99	0.99	0.85	0.21
Delay/Veh:	136.9	34.7	23.4	57.5	45.5	45.5	85.2	88.3	88.3	136.5	79.4	35.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	136.9	34.7	23.4	57.5	45.5	45.5	85.2	88.3	88.3	136.5	79.4	35.3
LOS by Move:	F	C-	C	E+	D	D	F	F	F	F	E-	D+
HCM2kAvgQ:	7	18	7	10	53	53	10	21	21	7	12	5

Note: Queue reported is the number of cars per lane.

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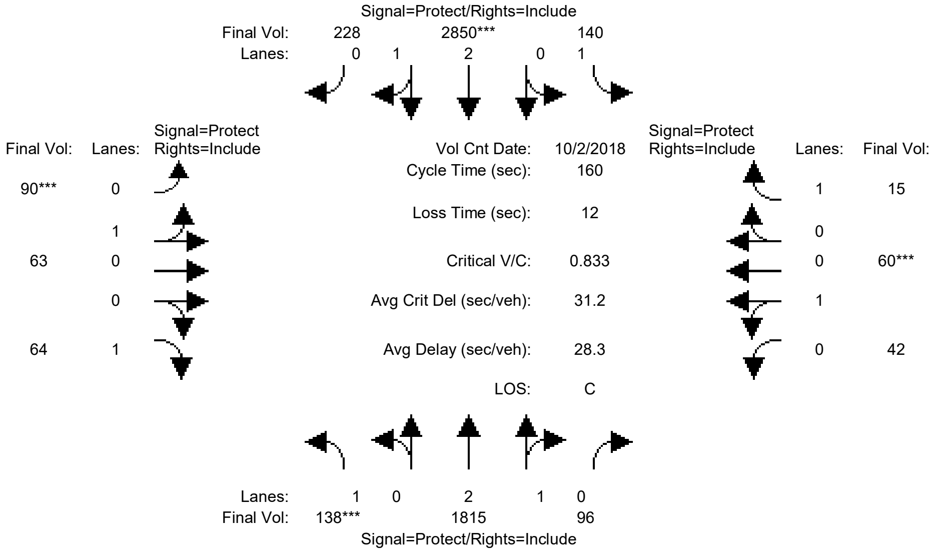
Background PM

Intersection #54: Sunnyvale-Saratoga Road / Alberta Avenue - Harwick Way



Street Name:	Sunnyvale-Saratoga Road						Alberta Avenue - Harwick Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	138	1613	96	140	2319	172	59	63	64	42	60	15
Growth 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
Initial Bse:	138	1613	96	140	2319	172	59	63	64	42	60	15
Added Vol:	0	202	0	0	531	56	31	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	138	1815	96	140	2850	228	90	63	64	42	60	15
User 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
PHF 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
PHF Volume:	138	1815	96	140	2850	228	90	63	64	42	60	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	1815	96	140	2850	228	90	63	64	42	60	15
PCE 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
MLF 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
FinalVolume:	138	1815	96	140	2850	228	90	63	64	42	60	15
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.84	0.16	1.00	2.77	0.23	0.59	0.41	1.00	0.41	0.59	1.00
Final Sat.:	1750	5318	281	1750	5185	415	1059	741	1750	741	1059	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.34	0.34	0.08	0.55	0.55	0.09	0.09	0.04	0.06	0.06	0.01
Crit Moves:	****				****		****				****	
Green Time:	15.2	97.8	97.8	22.9	106	105.6	16.3	16.3	16.3	10.9	10.9	10.9
Volume/Cap:	0.83	0.56	0.56	0.56	0.83	0.83	0.83	0.83	0.36	0.83	0.83	0.13
Delay/Veh:	99.8	18.5	18.5	66.6	22.3	22.3	96.9	96.9	68.2	109.8	110	70.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	99.8	18.5	18.5	66.6	22.3	22.3	96.9	96.9	68.2	109.8	110	70.6
LOS by Move:	F	B-	B-	E	C+	C+	F	F	E	F	F	E
HCM2kAvgQ:	7	17	17	6	36	36	10	10	3	7	7	1

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Intersection #54: Sunnyvale-Saratoga Road / Alberta Avenue - Harwick Way

Signal=Protect/Rights=Include

Final Vol: 248 2976*** 140
Lanes: 0 1 2 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	10/2/2018			
97***	0		Cycle Time (sec):	160		1	15
	1		Loss Time (sec):	12		0	
63	0		Critical V/C:	0.865		0	60***
	0		Avg Crit Del (sec/veh):	32.8		1	
64	1		Avg Delay (sec/veh):	29.3		0	42
			LOS:	C			

Lanes: 1 0 2 1 0
Final Vol: 138*** 1863 96
Signal=Protect/Rights=Include

Street Name:	Sunnyvale-Saratoga Road						Alberta Avenue - Harwick Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	138	1613	96	140	2319	172	59	63	64	42	60	15
Growth 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
Initial Bse:	138	1613	96	140	2319	172	59	63	64	42	60	15
Added Vol:	0	250	0	0	657	76	38	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	138	1863	96	140	2976	248	97	63	64	42	60	15
User 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
PHF 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
PHF Volume:	138	1863	96	140	2976	248	97	63	64	42	60	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	1863	96	140	2976	248	97	63	64	42	60	15
PCE 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
MLF 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
FinalVolume:	138	1863	96	140	2976	248	97	63	64	42	60	15
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.85	0.15	1.00	2.76	0.24	0.61	0.39	1.00	0.41	0.59	1.00
Final Sat.:	1750	5325	274	1750	5169	431	1091	709	1750	741	1059	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.35	0.35	0.08	0.58	0.58	0.09	0.09	0.04	0.06	0.06	0.01
Crit Moves:	****				****		****				****	
Green Time:	14.6	98.5	98.5	22.5	106	106.5	16.4	16.4	16.4	10.5	10.5	10.5
Volume/Cap:	0.87	0.57	0.57	0.57	0.87	0.87	0.87	0.87	0.36	0.87	0.87	0.13
Delay/Veh:	107.5	18.4	18.4	67.3	23.4	23.4	102.7	103	68.1	118.4	118	71.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	107.5	18.4	18.4	67.3	23.4	23.4	102.7	103	68.1	118.4	118	71.0
LOS by Move:	F	B-	B-	E	C	C	F	F	E	F	F	E
HCM2kAvgQ:	7	18	18	6	39	39	11	11	3	8	8	1

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #55: De Anza Boulevard / Homestead Road (CMP)

Signal=Protect/Rights=Include
Final Vol: 233 2198*** 434
Lanes: 1 0 3 0 2

Signal=Protect
Rights=Include

Final Vol:	Lanes:
252	2
	0
861***	2
	0
337	1

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.944
Avg Crit Del (sec/veh): 68.3
Avg Delay (sec/veh): 59.5
LOS: E+

Signal=Protect
Rights=Include

Lanes:	Final Vol:
1	221
0	
2	499
0	
2	304***

Lanes: 2 0 3 0 1
Final Vol: 517*** 1542 595
Signal=Protect/Rights=Include

Street Name:	De Anza Boulevard						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	517	1390	585	379	1792	163	226	859	337	307	500	197
Growth 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
Initial Bse:	517	1390	585	379	1792	163	226	859	337	307	500	197
Added Vol:	0	152	10	55	406	70	26	2	0	-3	-1	24
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	517	1542	595	434	2198	233	252	861	337	304	499	221
User 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
PHF 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
PHF Volume:	517	1542	595	434	2198	233	252	861	337	304	499	221
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	517	1542	595	434	2198	233	252	861	337	304	499	221
PCE 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
MLF 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
FinalVolume:	517	1542	595	434	2198	233	252	861	337	304	499	221
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.16	0.27	0.34	0.14	0.39	0.13	0.08	0.23	0.19	0.10	0.13	0.13
Crit Moves:	****				****			****		****		
Green Time:	27.8	66.3	66.3	26.9	65.4	65.4	20.7	38.4	38.4	16.4	34.0	34.0
Volume/Cap:	0.94	0.65	0.82	0.82	0.94	0.33	0.62	0.94	0.80	0.94	0.62	0.59
Delay/Veh:	90.4	38.2	48.9	74.1	54.3	32.5	68.7	77.4	67.8	106.8	58.5	59.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	90.4	38.2	48.9	74.1	54.3	32.5	68.7	77.4	67.8	106.8	58.5	59.3
LOS by Move:	F	D+	D	E	D-	C-	E	E-	E	F	E+	E+
HCM2kAvgQ:	17	20	28	12	35	8	7	23	17	10	11	10

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #55: De Anza Boulevard / Homestead Road (CMP)

Signal=Protect/Rights=Include
Final Vol: 243 2300*** 449
Lanes: 1 0 3 0 2

Signal=Protect Rights=Include (West approach)
Final Vol: 255, Lanes: 2
Lanes: 0
Final Vol: 861***, Lanes: 2
Lanes: 0
Final Vol: 337, Lanes: 1

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.963
Avg Crit Del (sec/veh): 71.2
Avg Delay (sec/veh): 61.1
LOS: E

Signal=Protect Rights=Include (East approach)
Lanes: 1, Final Vol: 227
Lanes: 0
Lanes: 2, Final Vol: 499
Lanes: 0
Lanes: 2, Final Vol: 304***

Lanes: 2 0 3 0 1
Final Vol: 517*** 1581 595
Signal=Protect/Rights=Include

Street Name:	De Anza Boulevard						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	517	1390	585	379	1792	163	226	859	337	307	500	197
Growth 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
Initial Bse:	517	1390	585	379	1792	163	226	859	337	307	500	197
Added Vol:	0	191	10	70	508	80	29	2	0	-3	-1	30
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	517	1581	595	449	2300	243	255	861	337	304	499	227
User 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
PHF 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
PHF Volume:	517	1581	595	449	2300	243	255	861	337	304	499	227
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	517	1581	595	449	2300	243	255	861	337	304	499	227
PCE 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
MLF 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
FinalVolume:	517	1581	595	449	2300	243	255	861	337	304	499	227
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.16	0.28	0.34	0.14	0.40	0.14	0.08	0.23	0.19	0.10	0.13	0.13
Crit Moves:	****				****			****		****		
Green Time:	27.3	66.5	66.5	27.9	67.0	67.0	20.5	37.6	37.6	16.0	33.2	33.2
Volume/Cap:	0.96	0.67	0.82	0.82	0.96	0.33	0.63	0.96	0.82	0.96	0.63	0.62
Delay/Veh:	95.4	38.6	48.7	73.1	56.3	31.6	69.5	82.0	70.1	112.3	59.5	61.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	95.4	38.6	48.7	73.1	56.3	31.6	69.5	82.0	70.1	112.3	59.5	61.1
LOS by Move:	F	D+	D	E	E+	C	E	F	E	F	E+	E
HCM2kAvgQ:	17	20	28	12	37	8	7	24	18	11	11	11

Note: Queue reported is the number of cars per lane.

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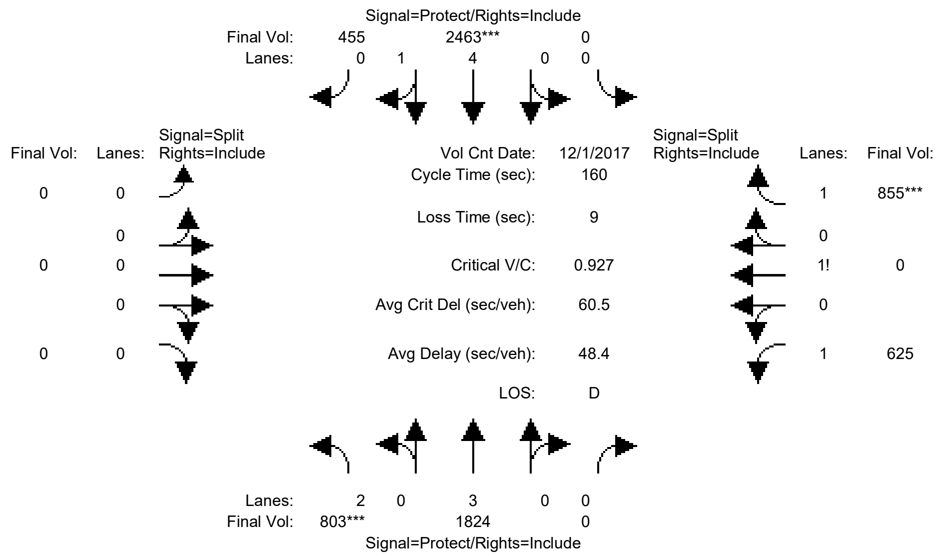
Intersection #56: De Anza Boulevard / I-280 NB Ramps (CMP)



Street Name:	De Anza Boulevard						I-280 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	4.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	803	1733	0	0	2179	336	0	0	0	625	0	785
Growth 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
Initial Bse:	803	1733	0	0	2179	336	0	0	0	625	0	785
Added Vol:	0	91	0	0	284	119	0	0	0	0	0	70
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	803	1824	0	0	2463	455	0	0	0	625	0	855
User 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
PHF 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
PHF Volume:	803	1824	0	0	2463	455	0	0	0	625	0	855
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	803	1824	0	0	2463	455	0	0	0	625	0	855
PCE 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
MLF 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
FinalVolume:	803	1824	0	0	2463	455	0	0	0	625	0	855
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	3.00	0.00	0.00	4.19	0.81	0.00	0.00	0.00	1.42	0.00	1.58
Final Sat.:	3150	5700	0	0	7932	1465	0	0	0	2489	0	2761
Capacity Analysis Module:												
Vol/Sat:	0.25	0.32	0.00	0.00	0.31	0.31	0.00	0.00	0.00	0.25	0.00	0.31
Crit Moves:	****				****							****
Green Time:	44.0	97.6	0.0	0.0	53.6	53.6	0.0	0.0	0.0	53.4	0.0	53.4
Volume/Cap:	0.93	0.52	0.00	0.00	0.93	0.93	0.00	0.00	0.00	0.75	0.00	0.93
Delay/Veh:	72.2	18.1	0.0	0.0	56.8	56.8	0.0	0.0	0.0	49.1	0.0	61.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	72.2	18.1	0.0	0.0	56.8	56.8	0.0	0.0	0.0	49.1	0.0	61.2
LOS by Move:	E	B-	A	A	E+	E+	A	A	A	D	A	E
HCM2kAvgQ:	24	16	0	0	27	27	0	0	0	22	0	31

Note: Queue reported is the number of cars per lane.

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Intersection #56: De Anza Boulevard / I-280 NB Ramps (CMP)

Signal=Protect/Rights=Include
Final Vol: 486 2534*** 0
Lanes: 0 1 4 0 0

Signal=Split Rights=Include (East) — Final Vol: 0 0 0 ; Lanes: 0 0 0 0 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 9
Critical V/C: 0.944
Avg Crit Del (sec/veh): 62.4
Avg Delay (sec/veh): 49.7
LOS: D

Signal=Split Rights=Include (West) — Lanes: 1 0 1! 0 1 ; Final Vol: 871*** 0 625

Lanes: 2 0 3 0 0
Final Vol: 803*** 1849 0
Signal=Protect/Rights=Include

```
Street Name:        De Anza Boulevard                  I-280 NB Ramps
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Min. Green:     7   10    10     0   10    10     0    0     0    10   10    10
Y+R:          4.0  4.0   4.0   0.0  4.0   4.0   0.0  0.0   0.0   4.0  4.0   4.0
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 1 Dec 2017 <<
Base Vol:     803 1733     0     0 2179   336     0    0     0   625    0   785
Growth 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
Initial Bse:  803 1733     0     0 2179   336     0    0     0   625    0   785
Added Vol:      0  116     0     0  355   150     0    0     0     0    0    86
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  803 1849     0     0 2534   486     0    0     0   625    0   871
User 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
PHF 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
PHF Volume:   803 1849     0     0 2534   486     0    0     0   625    0   871
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  803 1849     0     0 2534   486     0    0     0   625    0   871
PCE 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
MLF 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
FinalVolume:  803 1849     0     0 2534   486     0    0     0   625    0   871
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.83 1.00  0.92  0.92 1.00  0.95  0.92 1.00  0.92  0.92 1.00  0.92
Lanes:       2.00 3.00  0.00  0.00 4.16  0.84  0.00 0.00  0.00  1.42 0.00  1.58
Final Sat.:  3150 5700     0     0 7884  1512     0    0     0  2481    0  2769
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:     0.25 0.32  0.00  0.00 0.32  0.32  0.00 0.00  0.00  0.25 0.00  0.31
Crit Moves:  ****                  ****                                       ****
Green Time:  43.2 97.7   0.0   0.0 54.5  54.5   0.0  0.0   0.0  53.3  0.0  53.3
Volume/Cap:  0.94 0.53  0.00  0.00 0.94  0.94  0.00 0.00  0.00  0.76 0.00  0.94
Delay/Veh:   75.9 18.1   0.0   0.0 58.1  58.1   0.0  0.0   0.0  49.3  0.0  63.7
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  75.9 18.1   0.0   0.0 58.1  58.1   0.0  0.0   0.0  49.3  0.0  63.7
LOS by Move:   E-   B-     A     A   E+    E+     A    A     A     D    A     E
HCM2kAvgQ:     25   17     0     0   28    28     0    0     0    22    0    33
Note: Queue reported is the number of cars per lane.
```

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Intersection #57: De Anza Boulevard / I-280 SB Ramps (CMP)

Signal=Protect/Rights=Include
Final Vol: 0 2397 750***
Lanes: 0 0 3 0 2

Signal=Split Rights=Include (West side)
Final Vol: 424, Lanes: 1
Lanes: 0
Final Vol: 26***, Lanes: 1!
Lanes: 0
Final Vol: 528, Lanes: 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 9
Critical V/C: 0.870
Avg Crit Del (sec/veh): 61.4
Avg Delay (sec/veh): 40.2
LOS: D

Signal=Split Rights=Include (East side)
Lanes: 0, Final Vol: 0
Lanes: 0
Lanes: 0, Final Vol: 0
Lanes: 0
Lanes: 0, Final Vol: 0

Lanes: 0 0 5 0 1
Final Vol: 0 2123 519***
Signal=Protect/Rights=Include

Street Name:	De Anza Boulevard						I-280 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	10	10	10	0	0	0
Y+R:	0.0	4.0	4.0	4.0	4.0	0.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	2084	519	550	2313	0	372	26	528	0	0	0
Growth 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
Initial Bse:	0	2084	519	550	2313	0	372	26	528	0	0	0
Added Vol:	0	39	0	200	84	0	52	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2123	519	750	2397	0	424	26	528	0	0	0
User 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
PHF 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
PHF Volume:	0	2123	519	750	2397	0	424	26	528	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2123	519	750	2397	0	424	26	528	0	0	0
PCE 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
MLF 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
FinalVolume:	0	2123	519	750	2397	0	424	26	528	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92
Lanes:	0.00	5.00	1.00	2.00	3.00	0.00	1.42	0.05	1.53	0.00	0.00	0.00
Final Sat.:	0	9500	1750	3150	5700	0	2489	91	2670	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.30	0.24	0.42	0.00	0.17	0.29	0.20	0.00	0.00	0.00
Crit Moves:			****	****				****				
Green Time:	0.0	54.5	54.5	43.8	98.3	0.0	52.7	52.7	52.7	0.0	0.0	0.0
Volume/Cap:	0.00	0.66	0.87	0.87	0.68	0.00	0.52	0.87	0.60	0.00	0.00	0.00
Delay/Veh:	0.0	45.3	62.6	65.0	21.1	0.0	43.6	58.0	45.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	45.3	62.6	65.0	21.1	0.0	43.6	58.0	45.5	0.0	0.0	0.0
LOS by Move:	A	D	E	E	C+	A	D	E+	D	A	A	A
HCM2kAvgQ:	0	18	28	20	24	0	13	27	15	0	0	0

Note: Queue reported is the number of cars per lane.

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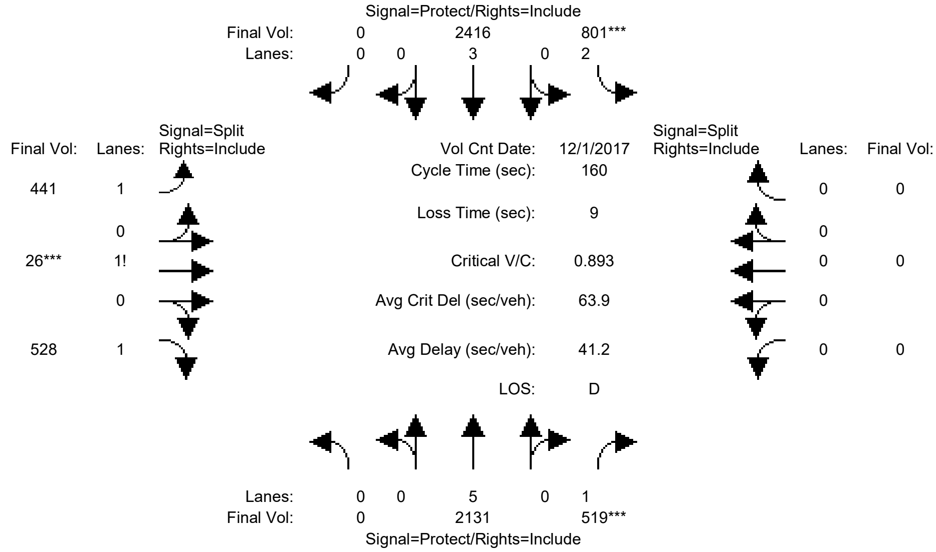
Intersection #57: De Anza Boulevard / I-280 SB Ramps (CMP)



Street Name:	De Anza Boulevard						I-280 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	10	10	10	0	0	0
Y+R:	0.0	4.0	4.0	4.0	4.0	0.0	4.0	4.0	4.0	0.0	0.0	0.0

Volume Module: >> Count Date: 1 Dec 2017 <<

Base Vol:	0	2084	519	550	2313	0	372	26	528	0	0	0
Growth 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
Initial Bse:	0	2084	519	550	2313	0	372	26	528	0	0	0
Added Vol:	0	47	0	251	103	0	69	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2131	519	801	2416	0	441	26	528	0	0	0
User 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
PHF 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
PHF Volume:	0	2131	519	801	2416	0	441	26	528	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2131	519	801	2416	0	441	26	528	0	0	0
PCE 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
MLF 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
FinalVolume:	0	2131	519	801	2416	0	441	26	528	0	0	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92
Lanes:	0.00	5.00	1.00	2.00	3.00	0.00	1.43	0.05	1.52	0.00	0.00	0.00
Final Sat.:	0	9500	1750	3150	5700	0	2506	89	2655	0	0	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.22	0.30	0.25	0.42	0.00	0.18	0.29	0.20	0.00	0.00	0.00
Crit Moves:			****	****				****				
Green Time:	0.0	53.1	53.1	45.6	98.7	0.0	52.3	52.3	52.3	0.0	0.0	0.0
Volume/Cap:	0.00	0.68	0.89	0.89	0.69	0.00	0.54	0.89	0.61	0.00	0.00	0.00
Delay/Veh:	0.0	46.6	66.8	66.1	20.9	0.0	44.3	60.5	45.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	46.6	66.8	66.1	20.9	0.0	44.3	60.5	45.9	0.0	0.0	0.0
LOS by Move:	A	D	E	E	C+	A	D	E	D	A	A	A
HCM2kAvgQ:	0	18	29	22	24	0	13	29	16	0	0	0

Note: Queue reported is the number of cars per lane.

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Intersection #58: Fair Oaks Avenue / US 101 NB Ramps

Signal=Protect/Rights=Ignore
Final Vol: 0 1239*** 0
Lanes: 1 0 2 0 0

Signal=Split
Rights=Include
Final Vol: Lanes:
0 0
0
0 0
0
0 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 60
Loss Time (sec): 9
Critical V/C: 0.928
Avg Crit Del (sec/veh): 34.3
Avg Delay (sec/veh): 22.9
LOS: C+

Signal=Split
Rights=Include
Lanes: Final Vol:
1 299
0
1! 1***
0
1 726

Lanes: 1 0 2 0 0
Final Vol: 301*** 1192 0
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						US 101 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	0.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	238	992	0	0	1219	161	0	0	0	712	1	299
Growth 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
Initial Bse:	238	992	0	0	1219	161	0	0	0	712	1	299
Added Vol:	63	200	0	0	20	3	0	0	0	14	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	301	1192	0	0	1239	164	0	0	0	726	1	299
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	301	1192	0	0	1239	0	0	0	0	726	1	299
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	301	1192	0	0	1239	0	0	0	0	726	1	299
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	301	1192	0	0	1239	0	0	0	0	726	1	299
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.93	0.95	0.92
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.70	0.01	1.29
Final Sat.:	1750	3800	0	0	3800	1750	0	0	0	3025	3	2265
Capacity Analysis Module:												
Vol/Sat:	0.17	0.31	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.24	0.29	0.13
Crit Moves:	****				****						****	
Green Time:	11.1	32.2	0.0	0.0	21.1	0.0	0.0	0.0	0.0	18.8	18.8	18.8
Volume/Cap:	0.93	0.58	0.00	0.00	0.93	0.00	0.00	0.00	0.00	0.77	0.93	0.42
Delay/Veh:	55.9	9.8	0.0	0.0	30.1	0.0	0.0	0.0	0.0	21.3	33.1	16.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.9	9.8	0.0	0.0	30.1	0.0	0.0	0.0	0.0	21.3	33.1	16.4
LOS by Move:	E+	A	A	A	C	A	A	A	A	C+	C-	B
HCM2kAvgQ:	7	7	0	0	13	0	0	0	0	10	15	4

Note: Queue reported is the number of cars per lane.

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Intersection #58: Fair Oaks Avenue / US 101 NB Ramps

Signal=Protect/Rights=Ignore
Final Vol: 0 1248*** 0
Lanes: 1 0 2 0 0

Final Vol:	Lanes:	Signal=Split Rights=Include			Signal=Split Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	4/1/2017			
0	0		Cycle Time (sec):	60		1	299
			Loss Time (sec):	9			
	0					0	
0	0		Critical V/C:	0.933		1!	1***
	0		Avg Crit Del (sec/veh):	35.1		0	
0	0		Avg Delay (sec/veh):	23.3		1	735
			LOS:	C			

Lanes: 1 0 2 0 0
Final Vol: 301*** 1211 0
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						US 101 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	0.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	238	992	0	0	1219	161	0	0	0	712	1	299
Growth 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
Initial Bse:	238	992	0	0	1219	161	0	0	0	712	1	299
Added Vol:	63	219	0	0	29	3	0	0	0	23	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	301	1211	0	0	1248	164	0	0	0	735	1	299
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	301	1211	0	0	1248	0	0	0	0	735	1	299
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	301	1211	0	0	1248	0	0	0	0	735	1	299
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	301	1211	0	0	1248	0	0	0	0	735	1	299
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.93	0.95	0.92
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.70	0.01	1.29
Final Sat.:	1750	3800	0	0	3800	1750	0	0	0	3029	3	2260
Capacity Analysis Module:												
Vol/Sat:	0.17	0.32	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.24	0.29	0.13
Crit Moves:	****				****						****	
Green Time:	11.1	32.2	0.0	0.0	21.1	0.0	0.0	0.0	0.0	18.8	18.8	18.8
Volume/Cap:	0.93	0.59	0.00	0.00	0.93	0.00	0.00	0.00	0.00	0.77	0.93	0.42
Delay/Veh:	57.3	10.0	0.0	0.0	30.8	0.0	0.0	0.0	0.0	21.5	33.9	16.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.3	10.0	0.0	0.0	30.8	0.0	0.0	0.0	0.0	21.5	33.9	16.4
LOS by Move:	E+	A	A	A	C	A	A	A	A	C+	C-	B
HCM2kAvgQ:	7	8	0	0	14	0	0	0	0	10	15	4

Note: Queue reported is the number of cars per lane.

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Intersection #59: Fair Oaks Avenue / Ahwanee Avenue

Signal=Protect/Rights=Include
Final Vol: 244 2445*** 78
Lanes: 0 1 2 0 1

Final Vol:	Lanes:	Signal=Permit Rights=Include			Signal=Permit Rights=Include	Lanes:	Final Vol:
103	0		Vol Cnt Date:	4/1/2017		1	47
			Cycle Time (sec):	90			
	1		Loss Time (sec):	6		0	
44***	0		Critical V/C:	0.637		0	26
	0		Avg Crit Del (sec/veh):	9.3		1	
89	1		Avg Delay (sec/veh):	10.7		0	27
			LOS:	B+			

Lanes: 1 0 2 0 1
Final Vol: 57*** 1079 41
Signal=Protect/Rights=Overlap

Street Name:	Fair Oaks Avenue						Ahwanee Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	54	862	38	78	2359	244	103	44	87	25	26	47
Growth 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
Initial Bse:	54	862	38	78	2359	244	103	44	87	25	26	47
Added Vol:	3	217	3	0	86	0	0	0	2	2	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	57	1079	41	78	2445	244	103	44	89	27	26	47
User 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
PHF 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
PHF Volume:	57	1079	41	78	2445	244	103	44	89	27	26	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	1079	41	78	2445	244	103	44	89	27	26	47
PCE 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
MLF 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
FinalVolume:	57	1079	41	78	2445	244	103	44	89	27	26	47
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.99	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.72	0.28	0.70	0.30	1.00	0.51	0.49	1.00
Final Sat.:	1750	3800	1750	1750	5091	508	1261	539	1750	917	883	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.28	0.02	0.04	0.48	0.48	0.08	0.08	0.05	0.03	0.03	0.03
Crit Moves:	****				****			****				
Green Time:	7.0	57.2	57.2	15.7	65.8	65.8	11.2	11.2	11.2	11.2	11.2	11.2
Volume/Cap:	0.42	0.45	0.04	0.26	0.66	0.66	0.66	0.66	0.41	0.24	0.24	0.22
Delay/Veh:	41.6	8.5	6.2	32.6	6.7	6.7	44.5	44.5	37.6	36.1	36.1	36.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.6	8.5	6.2	32.6	6.7	6.7	44.5	44.5	37.6	36.1	36.1	36.0
LOS by Move:	D	A	A	C-	A	A	D	D	D+	D+	D+	D+
HCM2kAvgQ:	2	7	0	2	12	12	5	5	3	2	2	1

Note: Queue reported is the number of cars per lane.

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Intersection #59: Fair Oaks Avenue / Ahwanee Avenue

Signal=Protect/Rights=Include
Final Vol: 244 2463*** 78
Lanes: 0 1 2 0 1

Westbound side — Signal=Permit, Rights=Include
Final Vol:	Lanes:
103	0
	1
44***	0
	0
90	1

Vol Cnt Date:	4/1/2017
Cycle Time (sec):	90
Loss Time (sec):	6
Critical V/C:	0.641
Avg Crit Del (sec/veh):	9.3
Avg Delay (sec/veh):	10.7
LOS:	B+

Signal=Permit, Rights=Include
Lanes:	Final Vol:
1	47
0	
0	26
1	
0	28

Lanes: 1 0 2 0 1
Final Vol: 58*** 1125 42
Signal=Protect/Rights=Overlap

Street Name:	Fair Oaks Avenue						Ahwanee Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	54	862	38	78	2359	244	103	44	87	25	26	47
Growth 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
Initial Bse:	54	862	38	78	2359	244	103	44	87	25	26	47
Added Vol:	4	263	4	0	104	0	0	0	3	3	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	1125	42	78	2463	244	103	44	90	28	26	47
User 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
PHF 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
PHF Volume:	58	1125	42	78	2463	244	103	44	90	28	26	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	1125	42	78	2463	244	103	44	90	28	26	47
PCE 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
MLF 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
FinalVolume:	58	1125	42	78	2463	244	103	44	90	28	26	47
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.99	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.72	0.28	0.70	0.30	1.00	0.52	0.48	1.00
Final Sat.:	1750	3800	1750	1750	5095	505	1261	539	1750	933	867	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.30	0.02	0.04	0.48	0.48	0.08	0.08	0.05	0.03	0.03	0.03
Crit Moves:	****				****			****				
Green Time:	7.0	57.7	57.7	15.2	65.9	65.9	11.1	11.1	11.1	11.1	11.1	11.1
Volume/Cap:	0.43	0.46	0.04	0.26	0.66	0.66	0.66	0.66	0.42	0.24	0.24	0.22
Delay/Veh:	41.7	8.4	5.9	33.0	6.7	6.7	44.8	44.8	37.7	36.2	36.2	36.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.7	8.4	5.9	33.0	6.7	6.7	44.8	44.8	37.7	36.2	36.2	36.0
LOS by Move:	D	A	A	C-	A	A	D	D	D+	D+	D+	D+
HCM2kAvgQ:	2	7	0	2	12	12	5	5	3	2	2	1

Note: Queue reported is the number of cars per lane.

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2000 HCM Operations (Future Volume Alternative)
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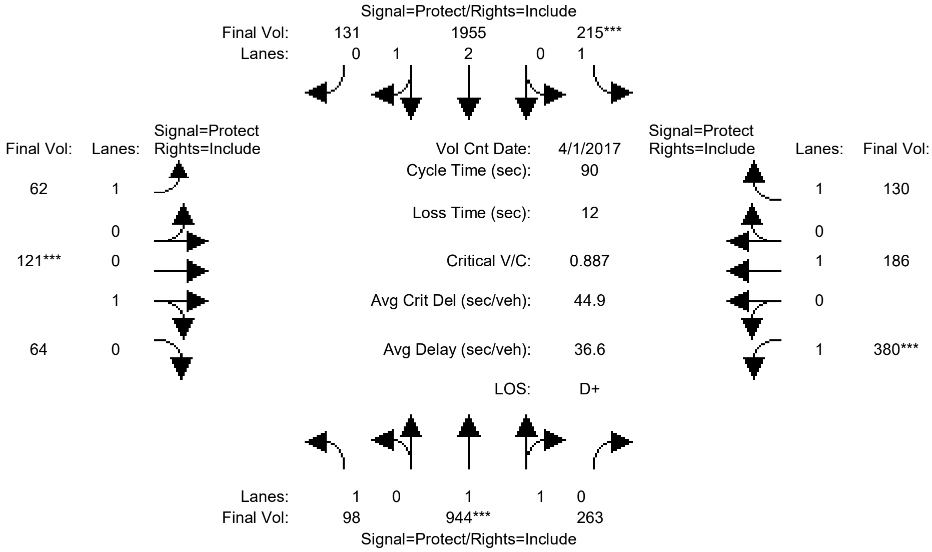
Intersection #60: Fair Oaks Avenue / Duane Avenue



Street Name:	Fair Oaks Avenue						Duane Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	11	726	212	215	1884	111	56	94	23	243	117	130
Growth 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
Initial Bse:	11	726	212	215	1884	111	56	94	23	243	117	130
Added Vol:	87	218	51	0	71	20	6	27	41	137	69	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	98	944	263	215	1955	131	62	121	64	380	186	130
User 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
PHF 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
PHF Volume:	98	944	263	215	1955	131	62	121	64	380	186	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	98	944	263	215	1955	131	62	121	64	380	186	130
PCE 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
MLF 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
FinalVolume:	98	944	263	215	1955	131	62	121	64	380	186	130
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	1.55	0.45	1.00	2.80	0.20	1.00	0.65	0.35	1.00	1.00	1.00
Final Sat.:	1750	2893	806	1750	5248	352	1750	1177	623	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.33	0.33	0.12	0.37	0.37	0.04	0.10	0.10	0.22	0.10	0.07
Crit Moves:		****		****				****		****		
Green Time:	7.9	33.1	33.1	12.5	37.7	37.7	13.4	10.4	10.4	22.0	19.1	19.1
Volume/Cap:	0.64	0.89	0.89	0.89	0.89	0.89	0.24	0.89	0.89	0.89	0.46	0.35
Delay/Veh:	48.5	34.2	34.2	68.2	28.9	28.9	34.3	72.8	72.8	52.4	31.8	30.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.5	34.2	34.2	68.2	28.9	28.9	34.3	72.8	72.8	52.4	31.8	30.8
LOS by Move:	D	C-	C-	E	C	C	C-	E	E	D-	C	C
HCM2kAvgQ:	3	18	18	7	19	19	2	8	8	12	4	3

Note: Queue reported is the number of cars per lane.

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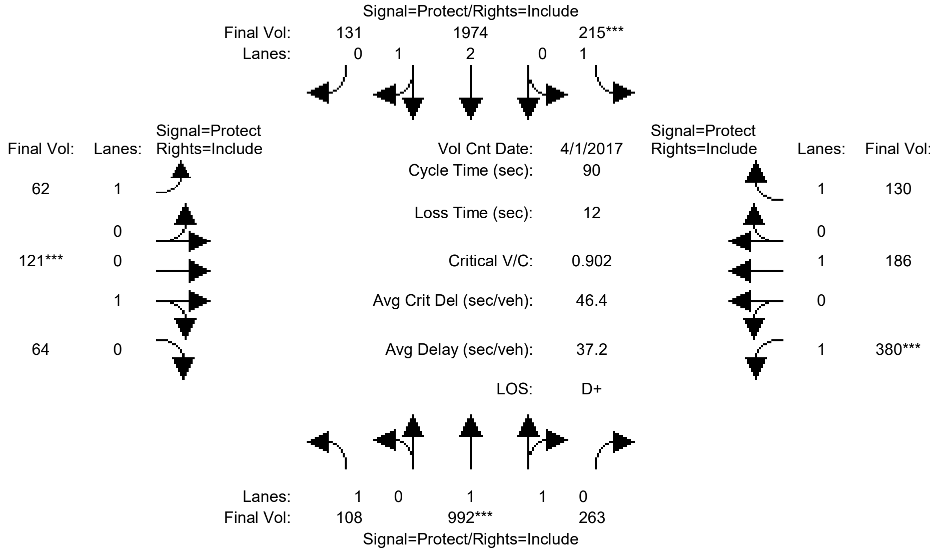
Intersection #60: Fair Oaks Avenue / Duane Avenue



Street Name:	Fair Oaks Avenue						Duane Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	11	726	212	215	1884	111	56	94	23	243	117	130
Growth 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
Initial Bse:	11	726	212	215	1884	111	56	94	23	243	117	130
Added Vol:	97	266	51	0	90	20	6	27	41	137	69	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	108	992	263	215	1974	131	62	121	64	380	186	130
User 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
PHF 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
PHF Volume:	108	992	263	215	1974	131	62	121	64	380	186	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	108	992	263	215	1974	131	62	121	64	380	186	130
PCE 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
MLF 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
FinalVolume:	108	992	263	215	1974	131	62	121	64	380	186	130
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	1.57	0.43	1.00	2.81	0.19	1.00	0.65	0.35	1.00	1.00	1.00
Final Sat.:	1750	2924	775	1750	5251	348	1750	1177	623	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.34	0.34	0.12	0.38	0.38	0.04	0.10	0.10	0.22	0.10	0.07
Crit Moves:		****		****				****		****		
Green Time:	7.9	33.8	33.8	12.3	38.2	38.2	13.1	10.3	10.3	21.7	18.8	18.8
Volume/Cap:	0.70	0.90	0.90	0.90	0.89	0.89	0.24	0.90	0.90	0.90	0.47	0.36
Delay/Veh:	53.6	35.0	35.0	71.7	28.3	28.3	34.5	76.5	76.5	55.3	32.1	31.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.6	35.0	35.0	71.7	28.3	28.3	34.5	76.5	76.5	55.3	32.1	31.0
LOS by Move:	D-	C-	C-	E	C	C	C-	E-	E-	E+	C-	C
HCM2kAvgQ:	3	19	19	7	19	19	2	9	9	13	4	3

Note: Queue reported is the number of cars per lane.

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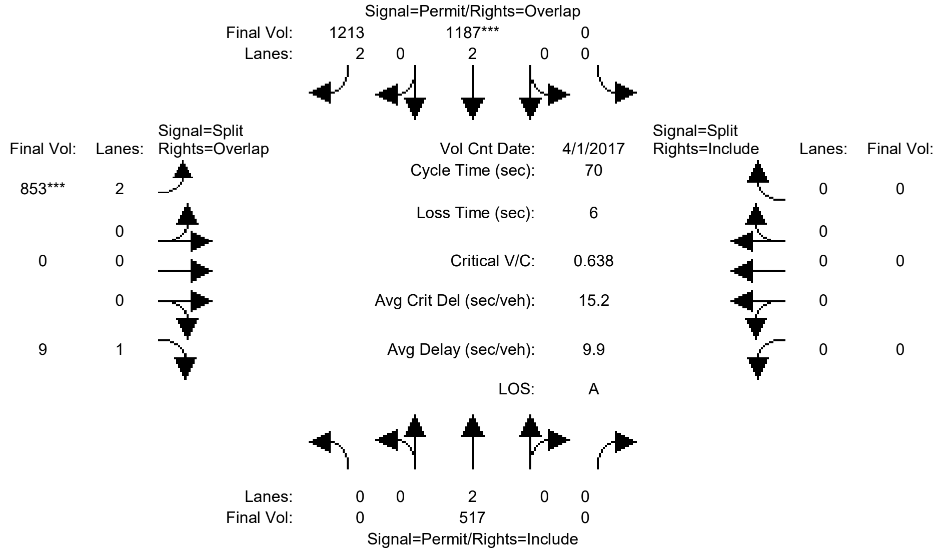
Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #61: Fair Oaks Avenue / Wolfe Road



Street Name:	Fair Oaks Avenue						Wolfe Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	0	0	10	10	10	0	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	0	399	0	0	1056	1096	615	0	9	0	0	0
Growth 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
Initial Bse:	0	399	0	0	1056	1096	615	0	9	0	0	0
Added Vol:	0	118	0	0	131	117	238	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	517	0	0	1187	1213	853	0	9	0	0	0
User 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
PHF 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
PHF Volume:	0	517	0	0	1187	1213	853	0	9	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	517	0	0	1187	1213	853	0	9	0	0	0
PCE 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
MLF 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
FinalVolume:	0	517	0	0	1187	1213	853	0	9	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.83	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3800	0	0	3800	3150	3150	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.00	0.00	0.31	0.39	0.27	0.00	0.01	0.00	0.00	0.00
Crit Moves:					****		****					
Green Time:	0.0	34.3	0.0	0.0	34.3	64.0	29.7	0.0	29.7	0.0	0.0	0.0
Volume/Cap:	0.00	0.28	0.00	0.00	0.64	0.42	0.64	0.00	0.01	0.00	0.00	0.00
Delay/Veh:	0.0	10.6	0.0	0.0	14.0	0.5	16.9	0.0	11.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	10.6	0.0	0.0	14.0	0.5	16.9	0.0	11.7	0.0	0.0	0.0
LOS by Move:	A	B+	A	A	B	A	B	A	B+	A	A	A
HCM2kAvgQ:	0	3	0	0	9	2	8	0	0	0	0	0

Note: Queue reported is the number of cars per lane.

Cityline TIA
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #61: Fair Oaks Avenue / Wolfe Road

Southbound: Signal=Permit/Rights=Overlap
Final Vol: 1233 1187*** 0
Lanes: 2 0 2 0 0

Eastbound: Signal=Split, Rights=Overlap
Final Vol: 912***, Lanes: 2
Lanes: 0
Final Vol: 0, Lanes: 0
Lanes: 0
Final Vol: 9, Lanes: 1

Westbound: Signal=Split, Rights=Include
Lanes: 0, Final Vol: 0
Lanes: 0
Lanes: 0, Final Vol: 0
Lanes: 0
Lanes: 0, Final Vol: 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 70
Loss Time (sec): 6
Critical V/C: 0.658
Avg Crit Del (sec/veh): 15.7
Avg Delay (sec/veh): 10.2
LOS: B+

Northbound:
Lanes: 0 0 2 0 0
Final Vol: 0 517 0
Signal=Permit/Rights=Include

Street Name:	Fair Oaks Avenue						Wolfe Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	0	0	10	10	10	0	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	0	399	0	0	1056	1096	615	0	9	0	0	0
Growth 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
Initial Bse:	0	399	0	0	1056	1096	615	0	9	0	0	0
Added Vol:	0	118	0	0	131	137	297	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	517	0	0	1187	1233	912	0	9	0	0	0
User 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
PHF 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
PHF Volume:	0	517	0	0	1187	1233	912	0	9	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	517	0	0	1187	1233	912	0	9	0	0	0
PCE 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
MLF 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
FinalVolume:	0	517	0	0	1187	1233	912	0	9	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.83	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3800	0	0	3800	3150	3150	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.00	0.00	0.31	0.39	0.29	0.00	0.01	0.00	0.00	0.00
Crit Moves:					****		****					
Green Time:	0.0	33.2	0.0	0.0	33.2	64.0	30.8	0.0	30.8	0.0	0.0	0.0
Volume/Cap:	0.00	0.29	0.00	0.00	0.66	0.43	0.66	0.00	0.01	0.00	0.00	0.00
Delay/Veh:	0.0	11.3	0.0	0.0	15.0	0.5	16.6	0.0	11.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	11.3	0.0	0.0	15.0	0.5	16.6	0.0	11.0	0.0	0.0	0.0
LOS by Move:	A	B+	A	A	B	A	B	A	B+	A	A	A
HCM2kAvgQ:	0	3	0	0	9	2	9	0	0	0	0	0

Note: Queue reported is the number of cars per lane.

Cityline TIA
SJ17-1787
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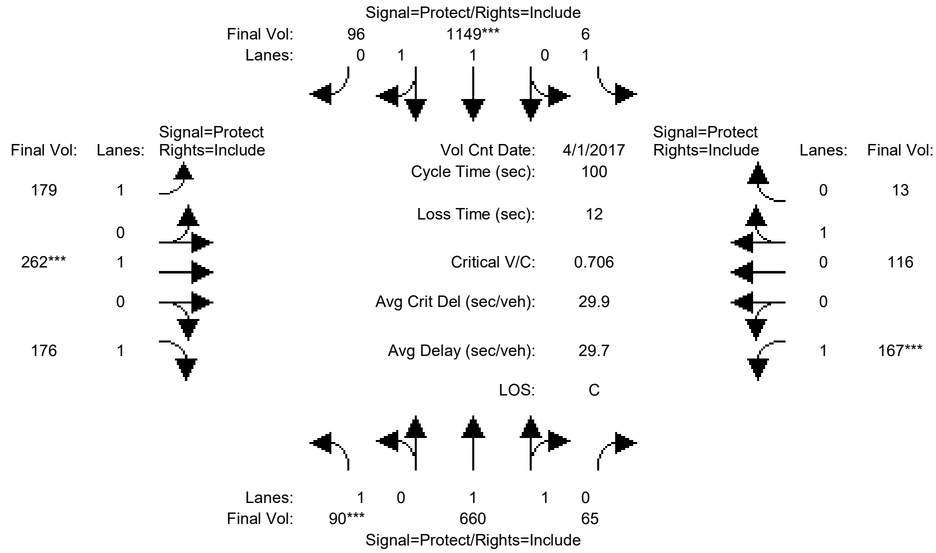
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #62: Fair Oaks Avenue / Maude Avenue



Street Name:	Fair Oaks Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	82	500	14	6	1041	87	101	173	128	30	94	13
Growth 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
Initial Bse:	82	500	14	6	1041	87	101	173	128	30	94	13
Added Vol:	8	160	51	0	108	9	78	89	48	137	22	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	90	660	65	6	1149	96	179	262	176	167	116	13
User 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
PHF 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
PHF Volume:	90	660	65	6	1149	96	179	262	176	167	116	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	660	65	6	1149	96	179	262	176	167	116	13
PCE 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
MLF 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
FinalVolume:	90	660	65	6	1149	96	179	262	176	167	116	13
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	1.00	1.82	0.18	1.00	1.84	0.16	1.00	1.00	1.00	1.00	0.90	0.10
Final Sat.:	1750	3368	332	1750	3414	285	1750	1900	1750	1750	1619	181
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.20	0.00	0.34	0.34	0.10	0.14	0.10	0.10	0.07	0.07
Crit Moves:	****				****			****		****		
Green Time:	7.3	40.5	40.5	14.5	47.7	47.7	16.7	19.5	19.5	13.5	16.3	16.3
Volume/Cap:	0.71	0.48	0.48	0.02	0.71	0.71	0.61	0.71	0.51	0.71	0.44	0.44
Delay/Veh:	61.8	22.3	22.3	36.7	22.0	22.0	42.4	43.7	37.3	50.7	38.7	38.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	61.8	22.3	22.3	36.7	22.0	22.0	42.4	43.7	37.3	50.7	38.7	38.7
LOS by Move:	E	C+	C+	D+	C+	C+	D	D	D+	D	D+	D+
HCM2kAvgQ:	3	8	8	0	15	15	5	8	5	7	4	4

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #62: Fair Oaks Avenue / Maude Avenue

Signal=Protect/Rights=Include
Final Vol: 97 1167*** 6
Lanes: 0 1 1 0 1

Signal=Protect
Rights=Include

Final Vol:	Lanes:
190	1
	0
262***	1
	0
176	1

Vol Cnt Date:	4/1/2017
Cycle Time (sec):	100
Loss Time (sec):	12
Critical V/C:	0.712
Avg Crit Del (sec/veh):	30.0
Avg Delay (sec/veh):	29.6
LOS:	C

Signal=Protect
Rights=Include

Lanes:	Final Vol:
0	13
1	
0	116
0	
1	167***

Lanes: 1 0 1 1 0
Final Vol: 90*** 708 65
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	82	500	14	6	1041	87	101	173	128	30	94	13
Growth 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
Initial Bse:	82	500	14	6	1041	87	101	173	128	30	94	13
Added Vol:	8	208	51	0	127	9	89	89	48	137	22	0
PasserByVol:	0	0	0	0	-1	1	0	0	0	0	0	0
Initial Fut:	90	708	65	6	1167	97	190	262	176	167	116	13
User 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
PHF 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
PHF Volume:	90	708	65	6	1167	97	190	262	176	167	116	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	708	65	6	1167	97	190	262	176	167	116	13
PCE 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
MLF 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
FinalVolume:	90	708	65	6	1167	97	190	262	176	167	116	13
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	1.00	1.83	0.17	1.00	1.84	0.16	1.00	1.00	1.00	1.00	0.90	0.10
Final Sat.:	1750	3389	311	1750	3416	284	1750	1900	1750	1750	1619	181
Capacity Analysis Module:												
Vol/Sat:	0.05	0.21	0.21	0.00	0.34	0.34	0.11	0.14	0.10	0.10	0.07	0.07
Crit Moves:	****				****			****		****		
Green Time:	7.2	41.4	41.4	13.9	48.0	48.0	17.1	19.4	19.4	13.4	15.7	15.7
Volume/Cap:	0.71	0.51	0.51	0.02	0.71	0.71	0.64	0.71	0.52	0.71	0.46	0.46
Delay/Veh:	62.6	22.0	22.0	37.3	21.9	21.9	43.1	44.1	37.6	51.3	39.4	39.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	62.6	22.0	22.0	37.3	21.9	21.9	43.1	44.1	37.6	51.3	39.4	39.4
LOS by Move:	E	C+	C+	D+	C+	C+	D	D	D+	D-	D	D
HCM2kAvgQ:	3	9	9	0	15	15	6	8	5	7	4	4

Note: Queue reported is the number of cars per lane.

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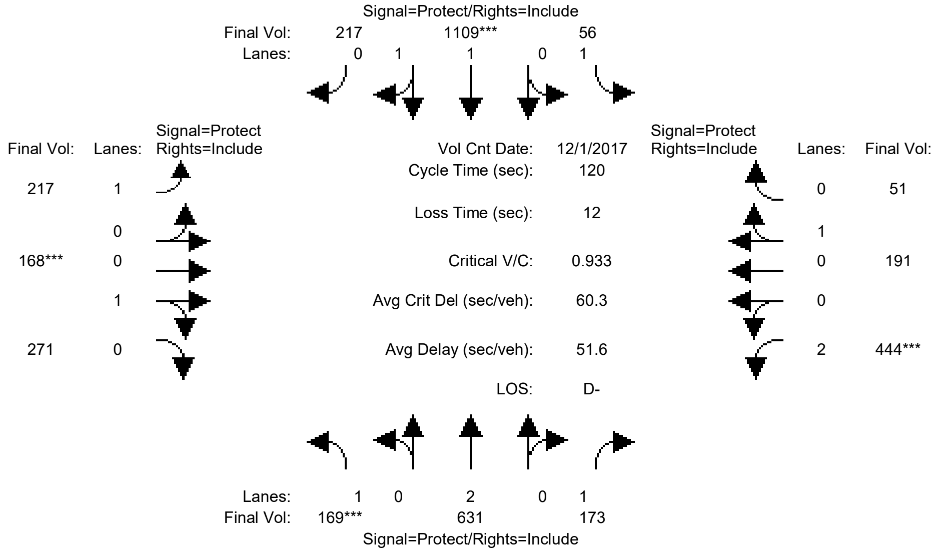
Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #63: Fair Oaks Avenue / Arques Avenue



Street Name:	Fair Oaks Avenue						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	143	544	173	56	947	87	95	168	139	416	191	41
Growth 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
Initial Bse:	143	544	173	56	947	87	95	168	139	416	191	41
Added Vol:	26	87	0	0	162	130	122	0	132	28	0	10
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	169	631	173	56	1109	217	217	168	271	444	191	51
User 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
PHF 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
PHF Volume:	169	631	173	56	1109	217	217	168	271	444	191	51
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	169	631	173	56	1109	217	217	168	271	444	191	51
PCE 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
MLF 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
FinalVolume:	169	631	173	56	1109	217	217	168	271	444	191	51
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	1.66	0.34	1.00	0.38	0.62	2.00	0.79	0.21
Final Sat.:	1750	3800	1750	1750	3094	605	1750	689	1111	3150	1421	379
Capacity Analysis Module:												
Vol/Sat:	0.10	0.17	0.10	0.03	0.36	0.36	0.12	0.24	0.24	0.14	0.13	0.13
Crit Moves:	****				****			****		****		
Green Time:	12.4	43.3	43.3	15.2	46.1	46.1	23.7	31.4	31.4	18.1	25.7	25.7
Volume/Cap:	0.93	0.46	0.27	0.25	0.93	0.93	0.63	0.93	0.93	0.93	0.63	0.63
Delay/Veh:	101.2	29.6	27.4	47.9	46.9	46.9	47.7	69.0	69.0	75.9	46.0	46.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	101.2	29.6	27.4	47.9	46.9	46.9	47.7	69.0	69.0	75.9	46.0	46.0
LOS by Move:	F	C	C	D	D	D	D	E	E	E-	D	D
HCM2kAvgQ:	8	9	5	2	26	26	9	21	21	11	8	8

Note: Queue reported is the number of cars per lane.

Cityline TIA
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Background Plus Project PM

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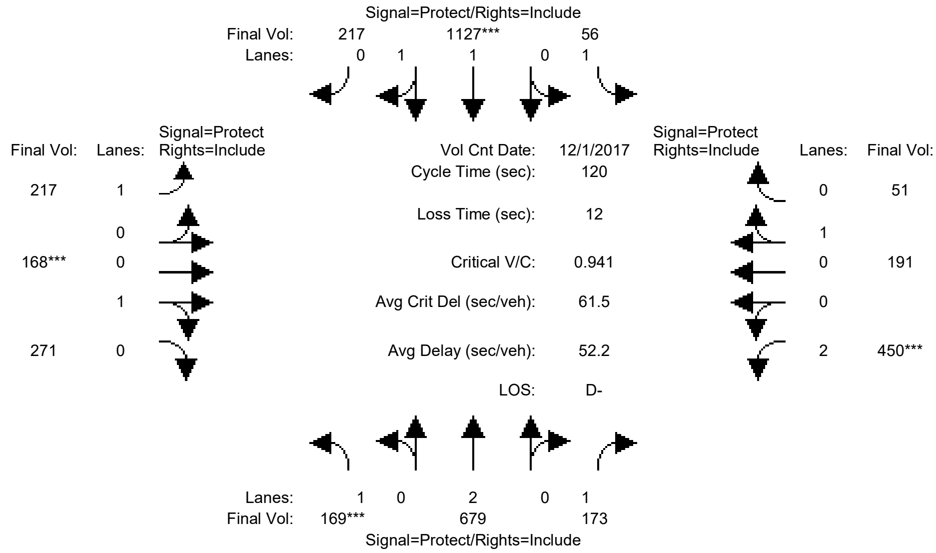
Background PM Plus Project

Intersection #63: Fair Oaks Avenue / Arques Avenue



Street Name:	Fair Oaks Avenue						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	143	544	173	56	947	87	95	168	139	416	191	41
Growth 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
Initial Bse:	143	544	173	56	947	87	95	168	139	416	191	41
Added Vol:	26	135	0	0	181	130	122	0	132	34	0	10
PasserByVol:	0	0	0	0	-1	0	0	0	0	0	0	0
Initial Fut:	169	679	173	56	1127	217	217	168	271	450	191	51
User 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
PHF 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
PHF Volume:	169	679	173	56	1127	217	217	168	271	450	191	51
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	169	679	173	56	1127	217	217	168	271	450	191	51
PCE 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
MLF 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
FinalVolume:	169	679	173	56	1127	217	217	168	271	450	191	51
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	1.67	0.33	1.00	0.38	0.62	2.00	0.79	0.21
Final Sat.:	1750	3800	1750	1750	3102	597	1750	689	1111	3150	1421	379
Capacity Analysis Module:												
Vol/Sat:	0.10	0.18	0.10	0.03	0.36	0.36	0.12	0.24	0.24	0.14	0.13	0.13
Crit Moves:	****				****			****		****		
Green Time:	12.3	44.2	44.2	14.4	46.3	46.3	23.7	31.1	31.1	18.2	25.7	25.7
Volume/Cap:	0.94	0.48	0.27	0.27	0.94	0.94	0.63	0.94	0.94	0.94	0.63	0.63
Delay/Veh:	103.5	29.4	26.8	48.6	47.9	47.9	47.8	70.9	70.9	77.3	46.1	46.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	103.5	29.4	26.8	48.6	47.9	47.9	47.8	70.9	70.9	77.3	46.1	46.1
LOS by Move:	F	C	C	D	D	D	D	E	E	E-	D	D
HCM2kAvgQ:	8	9	5	2	26	26	9	21	21	12	9	9

Note: Queue reported is the number of cars per lane.

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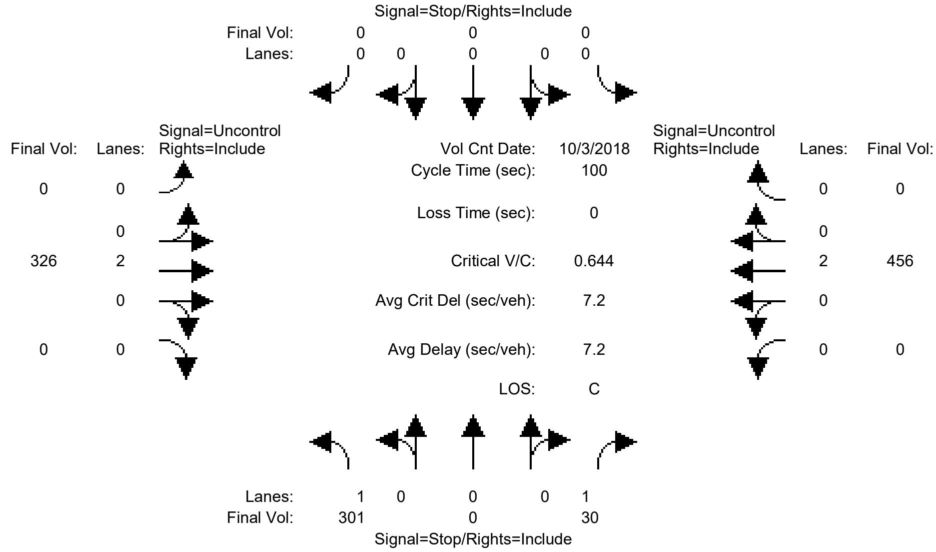
Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background PM

Intersection #64: Central Expressway WB Off-Ramp / Arques Avenue




```
Street Name:    Central Expressway WB Ramp             Arques Avenue
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 3 Oct 2018 <<
Base Vol:     264    0    30     0    0     0     0  326     0     0  456     0
Growth 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
Initial Bse:  264    0    30     0    0     0     0  326     0     0  456     0
Added Vol:     37    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  301    0    30     0    0     0     0  326     0     0  456     0
User 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
PHF 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
PHF Volume:   301    0    30     0    0     0     0  326     0     0  456     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:  301    0    30     0    0     0     0  326     0     0  456     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  6.8 xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:  3.5 xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  554 xxxx   163  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.:  467 xxxx   859  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:    467 xxxx   859  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  0.64 xxxx  0.03  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    4.5 xxxx   0.1  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del: 25.6 xxxx   9.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    D    *     A     *    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      24.1            xxxxxx           xxxxxx           xxxxxx
ApproachLOS:         C                *                *                *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        1  0  0  0  1   0  0  0  0  0   0  0  2  0  0   0  0  2  0  0
Initial Vol:  301    0    30    0    0     0     0  326     0     0  456     0
ApproachDel:      24.1          xxxxxx           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=2.2]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=331]
   SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1113]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        1  0  0  0  1   0  0  0  0  0   0  0  2  0  0   0  0  2  0  0
Initial Vol:  301    0    30    0    0     0     0  326     0     0  456     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             782
Minor Approach Volume:           331
Minor Approach Volume Threshold: 480
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background PM Plus Project

Intersection #64: Central Expressway WB Off-Ramp / Arques Avenue

Signal=Stop/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Uncontrol Rights=Include (West approach) — Final Vol: 0, 326, 0; Lanes: 0, 0, 2, 0, 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 100
Loss Time (sec): 0
Critical V/C: 0.659
Avg Crit Del (sec/veh): 7.5
Avg Delay (sec/veh): 7.5
LOS: C

Signal=Uncontrol Rights=Include (East approach) — Lanes: 0, 0, 2, 0, 0; Final Vol: 0, 456, 0

Lanes: 1 0 0 0 1
Final Vol: 308 0 30
Signal=Stop/Rights=Include

```
Street Name:    Central Expressway WB Ramp             Arques Avenue
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 3 Oct 2018 <<
Base Vol:      264    0    30     0    0     0     0  326     0     0  456     0
Growth 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
Initial Bse:   264    0    30     0    0     0     0  326     0     0  456     0
Added Vol:      44    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   308    0    30     0    0     0     0  326     0     0  456     0
User 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
PHF 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
PHF Volume:    308    0    30     0    0     0     0  326     0     0  456     0
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:   308    0    30     0    0     0     0  326     0     0  456     0
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:   6.8 xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:   3.5 xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol:   554 xxxx   163  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.:   467 xxxx   859  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:     467 xxxx   859  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:   0.66 xxxx  0.03  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2Way95thQ:     4.7 xxxx   0.1  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:  26.4 xxxx   9.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:     D    *     A     *    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:       24.9            xxxxxx            xxxxxx            xxxxxx
ApproachLOS:         C                 *                 *                 *
Note: Queue reported is the number of cars per lane.
                     Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        1  0  0  0  1    0  0  0  0  0    0  0  2  0  0    0  0  2  0  0
Initial Vol:  308    0    30     0    0     0     0  326     0     0  456     0
ApproachDel:      24.9            xxxxxx           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=2.3]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=338]
   SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1120]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
```

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

```
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        1  0  0  0  1    0  0  0  0  0    0  0  2  0  0    0  0  2  0  0
Initial Vol:  308    0    30     0    0     0     0  326     0     0  456     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            782
Minor Approach Volume:          338
Minor Approach Volume Threshold: 480
--------------------------------------------------------------------------------
```

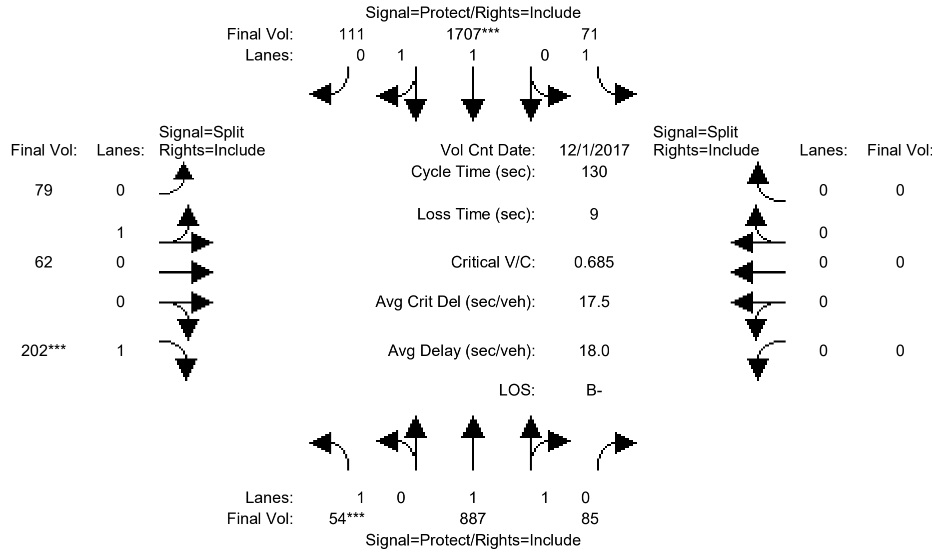
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #65: Fair Oaks Avenue / California Avenue



Street Name:	Fair Oaks Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	48	774	77	27	1429	111	79	62	174	0	0	0
Growth 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
Initial Bse:	48	774	77	27	1429	111	79	62	174	0	0	0
Added Vol:	6	113	8	44	278	0	0	0	28	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	54	887	85	71	1707	111	79	62	202	0	0	0
User 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
PHF 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
PHF Volume:	54	887	85	71	1707	111	79	62	202	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	887	85	71	1707	111	79	62	202	0	0	0
PCE 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
MLF 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
FinalVolume:	54	887	85	71	1707	111	79	62	202	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.92	1.00	0.92
Lanes:	1.00	1.82	0.18	1.00	1.87	0.13	0.56	0.44	1.00	0.00	0.00	0.00
Final Sat.:	1750	3376	324	1750	3474	226	1009	791	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.26	0.26	0.04	0.49	0.49	0.08	0.08	0.12	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green Time:	7.0	82.4	82.4	16.9	92.3	92.3	21.7	21.7	21.7	0.0	0.0	0.0
Volume/Cap:	0.57	0.41	0.41	0.31	0.69	0.69	0.47	0.47	0.69	0.00	0.00	0.00
Delay/Veh:	68.3	11.9	11.9	52.1	11.5	11.5	50.1	50.1	58.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	68.3	11.9	11.9	52.1	11.5	11.5	50.1	50.1	58.0	0.0	0.0	0.0
LOS by Move:	E	B+	B+	D-	B+	B+	D	D	E+	A	A	A
HCM2kAvgQ:	3	10	10	3	20	20	5	5	8	0	0	0

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #65: Fair Oaks Avenue / California Avenue

Signal=Protect/Rights=Include
Final Vol: 111 1731*** 71
Lanes: 0 1 1 0 1

Final Vol:	Lanes:	Signal=Split Rights=Include			Signal=Split Rights=Include	Lanes:	Final Vol:
79	0		Vol Cnt Date:	12/1/2017		0	0
			Cycle Time (sec):	130			
	1		Loss Time (sec):	9		0	
62	0		Critical V/C:	0.692		0	0
	0		Avg Crit Del (sec/veh):	17.6		0	
202***	1		Avg Delay (sec/veh):	17.9		0	0
			LOS:	B			

Lanes: 1 0 1 1 0
Final Vol: 54*** 935 103
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	48	774	77	27	1429	111	79	62	174	0	0	0
Growth 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
Initial Bse:	48	774	77	27	1429	111	79	62	174	0	0	0
Added Vol:	6	161	26	44	303	0	0	0	28	0	0	0
PasserByVol:	0	0	0	0	-1	0	0	0	0	0	0	0
Initial Fut:	54	935	103	71	1731	111	79	62	202	0	0	0
User 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
PHF 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
PHF Volume:	54	935	103	71	1731	111	79	62	202	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	935	103	71	1731	111	79	62	202	0	0	0
PCE 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
MLF 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
FinalVolume:	54	935	103	71	1731	111	79	62	202	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.92	1.00	0.92
Lanes:	1.00	1.80	0.20	1.00	1.88	0.12	0.56	0.44	1.00	0.00	0.00	0.00
Final Sat.:	1750	3333	367	1750	3477	223	1009	791	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.28	0.28	0.04	0.50	0.50	0.08	0.08	0.12	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green Time:	7.0	83.5	83.5	16.0	92.5	92.5	21.5	21.5	21.5	0.0	0.0	0.0
Volume/Cap:	0.57	0.44	0.44	0.33	0.70	0.70	0.47	0.47	0.70	0.00	0.00	0.00
Delay/Veh:	68.3	11.7	11.7	53.0	11.6	11.6	50.4	50.4	58.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	68.3	11.7	11.7	53.0	11.6	11.6	50.4	50.4	58.6	0.0	0.0	0.0
LOS by Move:	E	B+	B+	D-	B+	B+	D	D	E+	A	A	A
HCM2kAvgQ:	3	10	10	3	20	20	5	5	8	0	0	0

Note: Queue reported is the number of cars per lane.

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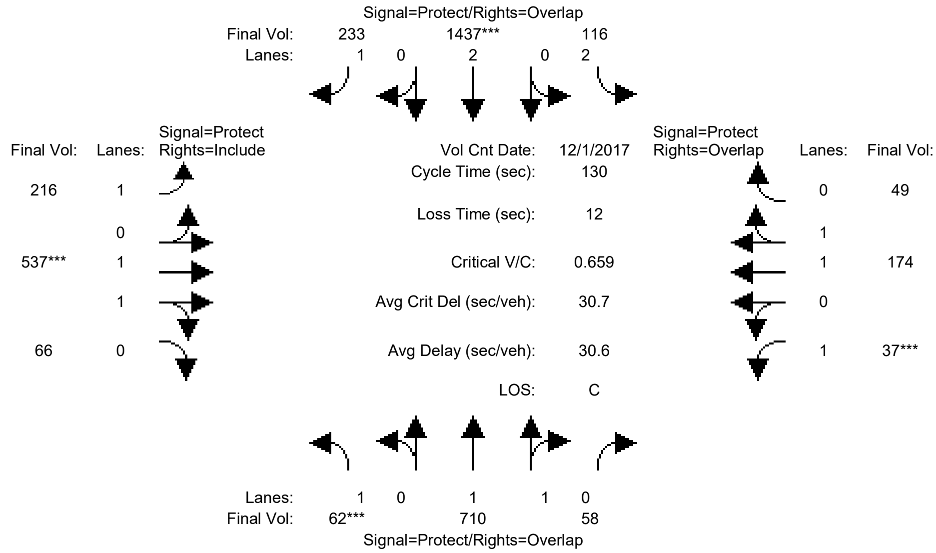
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #66: Fair Oaks Avenue / Evelyn Avenue



Street Name:	Fair Oaks Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	62	623	58	115	1222	186	137	512	66	37	155	49
Growth 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
Initial Bse:	62	623	58	115	1222	186	137	512	66	37	155	49
Added Vol:	0	87	0	1	215	47	79	25	0	0	19	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	62	710	58	116	1437	233	216	537	66	37	174	49
User 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
PHF 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
PHF Volume:	62	710	58	116	1437	233	216	537	66	37	174	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	710	58	116	1437	233	216	537	66	37	174	49
PCE 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
MLF 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
FinalVolume:	62	710	58	116	1437	233	216	537	66	37	174	49
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	1.00	0.92	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.84	0.16	2.00	2.00	1.00	1.00	1.78	0.22	1.00	1.55	0.45
Final Sat.:	1750	3420	279	3150	3800	1750	1750	3295	405	1750	2886	813
Capacity Analysis Module:												
Vol/Sat:	0.04	0.21	0.21	0.04	0.38	0.13	0.12	0.16	0.16	0.02	0.06	0.06
Crit Moves:	****				****			****		****		
Green Time:	7.0	63.3	70.3	16.4	72.7	96.3	23.6	31.3	31.3	7.0	14.7	31.1
Volume/Cap:	0.66	0.43	0.38	0.29	0.68	0.18	0.68	0.68	0.68	0.39	0.53	0.25
Delay/Veh:	76.1	21.8	17.4	51.9	21.2	5.1	55.5	46.8	46.8	62.1	55.7	40.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	76.1	21.8	17.4	51.9	21.2	5.1	55.5	46.8	46.8	62.1	55.7	40.2
LOS by Move:	E-	C+	B	D-	C+	A	E+	D	D	E	E+	D
HCM2kAvgQ:	3	10	9	3	20	3	9	11	11	2	5	4

Note: Queue reported is the number of cars per lane.

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2000 HCM Operations (Future Volume Alternative)
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Intersection #66: Fair Oaks Avenue / Evelyn Avenue

Signal=Protect/Rights=Overlap
Final Vol: 258 1437*** 116
Lanes: 1 0 2 0 2

Signal=Protect
Rights=Include

Final Vol:	Lanes:
282***	1
	0
547	1
	1
66	0

Vol Cnt Date:	12/1/2017
Cycle Time (sec):	130
Loss Time (sec):	12
Critical V/C:	0.701
Avg Crit Del (sec/veh):	33.7
Avg Delay (sec/veh):	32.3
LOS:	C-

Signal=Protect
Rights=Overlap

Lanes:	Final Vol:
0	49
1	
1	179***
0	
1	37

Lanes: 1 0 1 1 0
Final Vol: 62*** 710 58
Signal=Protect/Rights=Overlap

Street Name:	Fair Oaks Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	62	623	58	115	1222	186	137	512	66	37	155	49
Growth 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
Initial Bse:	62	623	58	115	1222	186	137	512	66	37	155	49
Added Vol:	0	87	0	1	215	73	145	35	0	0	24	0
PasserByVol:	0	0	0	0	0	-1	0	0	0	0	0	0
Initial Fut:	62	710	58	116	1437	258	282	547	66	37	179	49
User 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
PHF 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
PHF Volume:	62	710	58	116	1437	258	282	547	66	37	179	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	710	58	116	1437	258	282	547	66	37	179	49
PCE 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
MLF 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
FinalVolume:	62	710	58	116	1437	258	282	547	66	37	179	49
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	1.00	0.92	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.84	0.16	2.00	2.00	1.00	1.00	1.78	0.22	1.00	1.56	0.44
Final Sat.:	1750	3420	279	3150	3800	1750	1750	3301	398	1750	2904	795
Capacity Analysis Module:												
Vol/Sat:	0.04	0.21	0.21	0.04	0.38	0.15	0.16	0.17	0.17	0.02	0.06	0.06
Crit Moves:	****				****		****				****	
Green Time:	7.0	61.0	71.1	15.8	69.9	99.6	29.8	31.1	31.1	10.1	11.4	27.2
Volume/Cap:	0.66	0.44	0.38	0.30	0.70	0.19	0.70	0.69	0.69	0.27	0.70	0.29
Delay/Veh:	76.1	23.3	16.9	52.5	23.5	4.2	51.7	47.5	47.5	57.6	64.5	43.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	76.1	23.3	16.9	52.5	23.5	4.2	51.7	47.5	47.5	57.6	64.5	43.5
LOS by Move:	E-	C	B	D-	C	A	D-	D	D	E+	E	D
HCM2kAvgQ:	3	10	9	3	22	3	11	11	11	2	6	4

Note: Queue reported is the number of cars per lane.

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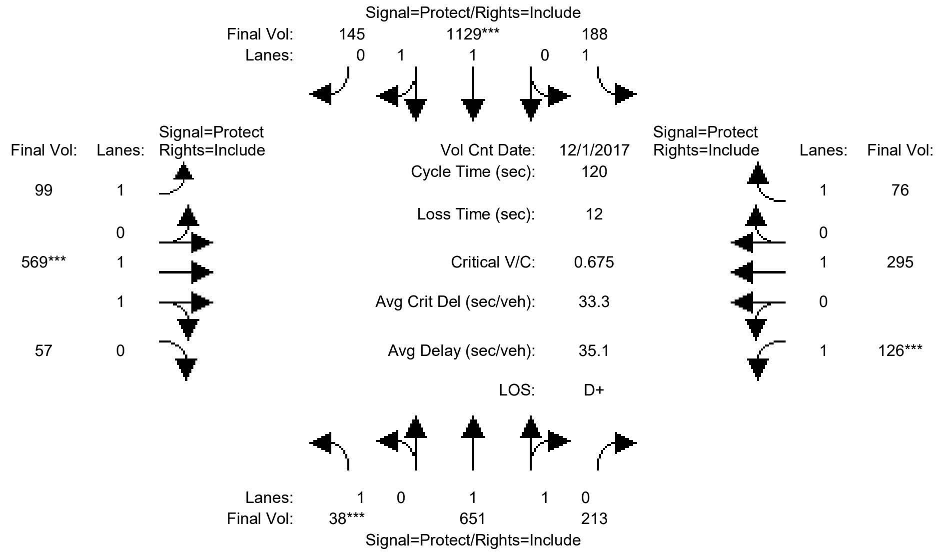
Cityline TIA
SJ17-1787
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #67: Fair Oaks Avenue / Old San Francisco Road



Street Name:	Fair Oaks Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	32	576	204	138	963	145	99	377	55	126	189	64
Growth 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
Initial Bse:	32	576	204	138	963	145	99	377	55	126	189	64
Added Vol:	6	75	9	50	166	0	0	192	2	0	106	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	651	213	188	1129	145	99	569	57	126	295	76
User 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
PHF 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
PHF Volume:	38	651	213	188	1129	145	99	569	57	126	295	76
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	651	213	188	1129	145	99	569	57	126	295	76
PCE 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
MLF 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
FinalVolume:	38	651	213	188	1129	145	99	569	57	126	295	76
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.49	0.51	1.00	1.77	0.23	1.00	1.81	0.19	1.00	1.00	1.00
Final Sat.:	1750	2787	912	1750	3279	421	1750	3363	337	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.23	0.23	0.11	0.34	0.34	0.06	0.17	0.17	0.07	0.16	0.04
Crit Moves:	****				****			****		****		
Green Time:	7.0	45.5	45.5	20.9	59.4	59.4	11.4	29.2	29.2	12.4	30.2	30.2
Volume/Cap:	0.37	0.62	0.62	0.62	0.70	0.70	0.60	0.70	0.70	0.70	0.62	0.17
Delay/Veh:	56.7	31.0	31.0	49.6	24.5	24.5	58.0	43.8	43.8	63.2	42.2	35.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.7	31.0	31.0	49.6	24.5	24.5	58.0	43.8	43.8	63.2	42.2	35.3
LOS by Move:	E+	C	C	D	C	C	E+	D	D	E	D	D+
HCM2kAvgQ:	2	14	14	7	18	18	4	11	11	5	9	2

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
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Intersection #67: Fair Oaks Avenue / Old San Francisco Road

Signal=Protect/Rights=Include
Final Vol: 145 1129*** 188
Lanes: 0 1 1 0 1

Signal=Protect Rights=Include (Westbound side) | Signal=Protect Rights=Include (Eastbound side)

Final Vol:	Lanes:			Lanes:	Final Vol:
99	1			1	76
	0			0	
626***	1			1	321
	1			0	
57	0			1	126***

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 120
Loss Time (sec): 12
Critical V/C: 0.692
Avg Crit Del (sec/veh): 34.3
Avg Delay (sec/veh): 35.9
LOS: D+

Lanes: 1 0 1 1 0
Final Vol: 38*** 651 213
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	32	576	204	138	963	145	99	377	55	126	189	64
Growth 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
Initial Bse:	32	576	204	138	963	145	99	377	55	126	189	64
Added Vol:	6	75	9	50	166	0	0	249	2	0	132	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	651	213	188	1129	145	99	626	57	126	321	76
User 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
PHF 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
PHF Volume:	38	651	213	188	1129	145	99	626	57	126	321	76
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	651	213	188	1129	145	99	626	57	126	321	76
PCE 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
MLF 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
FinalVolume:	38	651	213	188	1129	145	99	626	57	126	321	76
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.49	0.51	1.00	1.77	0.23	1.00	1.83	0.17	1.00	1.00	1.00
Final Sat.:	1750	2787	912	1750	3279	421	1750	3391	309	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.23	0.23	0.11	0.34	0.34	0.06	0.18	0.18	0.07	0.17	0.04
Crit Moves:	****				****			****		****		
Green Time:	7.0	44.4	44.4	20.4	57.9	57.9	11.1	31.0	31.0	12.1	32.1	32.1
Volume/Cap:	0.37	0.63	0.63	0.63	0.71	0.71	0.61	0.71	0.71	0.71	0.63	0.16
Delay/Veh:	56.7	32.0	32.0	50.6	25.9	25.9	59.2	43.0	43.0	65.2	41.4	33.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.7	32.0	32.0	50.6	25.9	25.9	59.2	43.0	43.0	65.2	41.4	33.9
LOS by Move:	E+	C	C	D	C	C	E+	D	D	E	D	C-
HCM2kAvgQ:	2	14	14	7	18	18	4	12	12	5	10	2

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #68: Fair Oaks Avenue / El Camino Real (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 161 675 361***
Lanes: 1 0 2 0 1

Signal=Protect Rights=Overlap (West side)
Final Vol: 240, Lanes: 1
Lanes: 0
Final Vol: 1722***, Lanes: 3
Lanes: 0
Final Vol: 159, Lanes: 1

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 120
Loss Time (sec): 12
Critical V/C: 0.852
Avg Crit Del (sec/veh): 48.2
Avg Delay (sec/veh): 41.6
LOS: D

Signal=Protect Rights=Overlap (East side)
Lanes: 1, Final Vol: 218
Lanes: 0
Lanes: 3, Final Vol: 773
Lanes: 0
Lanes: 1, Final Vol: 194***

Lanes: 1 0 2 0 1
Final Vol: 95 560*** 262
Signal=Protect/Rights=Overlap

Street Name:	Fair Oaks Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	95	548	262	187	680	163	235	1580	159	194	677	161
Growth 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
Initial Bse:	95	548	262	187	680	163	235	1580	159	194	677	161
Added Vol:	0	12	0	174	-5	-2	5	142	0	0	96	57
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95	560	262	361	675	161	240	1722	159	194	773	218
User 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
PHF 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
PHF Volume:	95	560	262	361	675	161	240	1722	159	194	773	218
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	560	262	361	675	161	240	1722	159	194	773	218
PCE 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
MLF 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
FinalVolume:	95	560	262	361	675	161	240	1722	159	194	773	218
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.15	0.15	0.21	0.18	0.09	0.14	0.30	0.09	0.11	0.14	0.12
Crit Moves:		****		****				****		****		
Green Time:	12.3	20.8	36.4	29.1	37.5	66.8	29.3	42.6	54.9	15.6	28.9	58.0
Volume/Cap:	0.53	0.85	0.49	0.85	0.57	0.17	0.56	0.85	0.20	0.85	0.56	0.26
Delay/Veh:	54.0	58.5	35.0	58.6	35.1	13.1	41.5	39.5	19.6	76.2	40.5	18.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	54.0	58.5	35.0	58.6	35.1	13.1	41.5	39.5	19.6	76.2	40.5	18.5
LOS by Move:	D-	E+	C-	E+	D+	B	D	D	B-	E-	D	B-
HCM2kAvgQ:	4	11	8	16	11	3	8	20	4	10	9	5

Note: Queue reported is the number of cars per lane.

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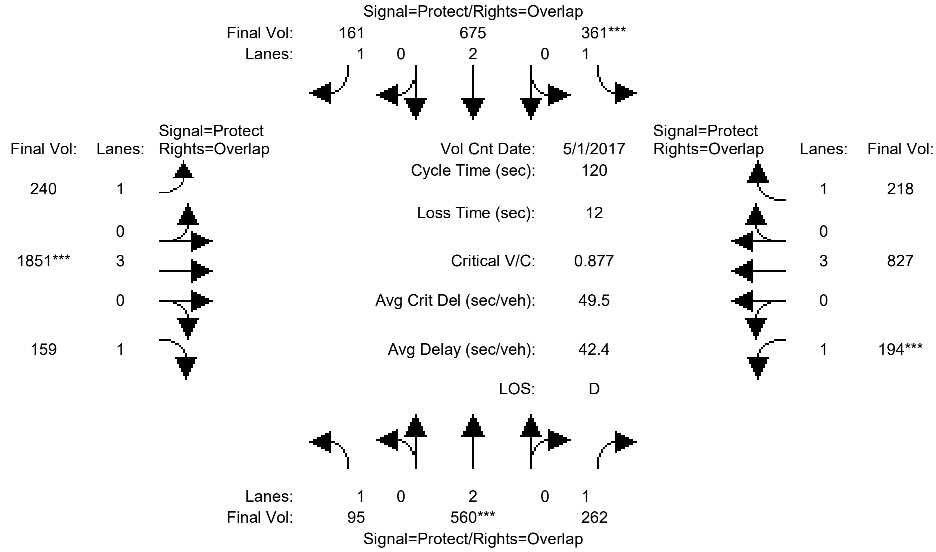
Intersection #68: Fair Oaks Avenue / El Camino Real (CMP)



Street Name:	Fair Oaks Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	95	548	262	187	680	163	235	1580	159	194	677	161
Growth 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
Initial Bse:	95	548	262	187	680	163	235	1580	159	194	677	161
Added Vol:	0	12	0	174	-5	-2	5	271	0	0	150	57
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95	560	262	361	675	161	240	1851	159	194	827	218
User 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
PHF 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
PHF Volume:	95	560	262	361	675	161	240	1851	159	194	827	218
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	560	262	361	675	161	240	1851	159	194	827	218
PCE 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
MLF 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
FinalVolume:	95	560	262	361	675	161	240	1851	159	194	827	218
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.15	0.15	0.21	0.18	0.09	0.14	0.32	0.09	0.11	0.15	0.12
Crit Moves:		****		****				****		****		
Green Time:	12.0	20.2	35.3	28.2	36.4	65.4	29.0	44.4	56.4	15.2	30.6	58.9
Volume/Cap:	0.54	0.88	0.51	0.88	0.59	0.17	0.57	0.88	0.19	0.88	0.57	0.25
Delay/Veh:	55.0	61.8	36.0	62.9	36.2	13.8	41.8	39.7	18.7	81.6	39.5	17.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.0	61.8	36.0	62.9	36.2	13.8	41.8	39.7	18.7	81.6	39.5	17.9
LOS by Move:	D-	E	D+	E	D+	B	D	D	B-	F	D	B
HCM2kAvgQ:	4	11	8	17	11	3	8	22	3	11	9	5

Note: Queue reported is the number of cars per lane.

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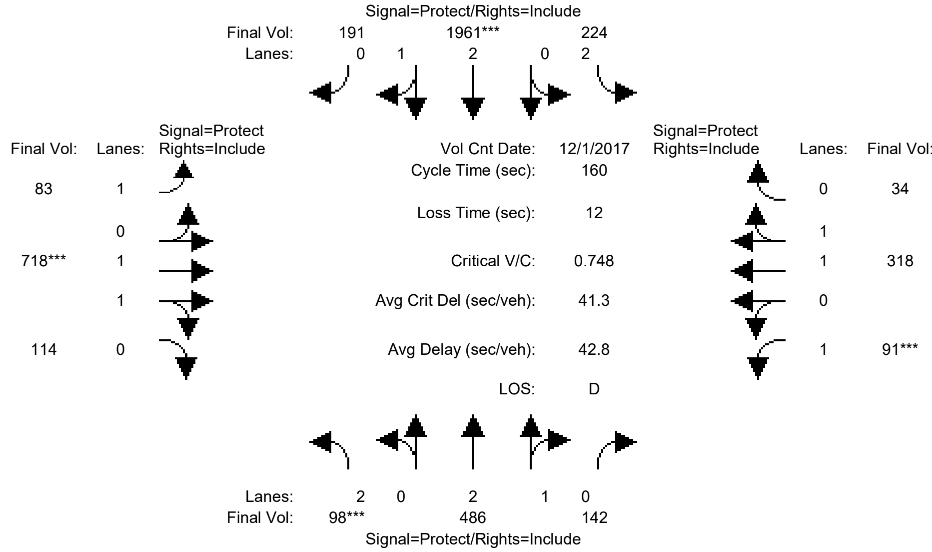
Intersection #69: Wolfe Road / Old San Francisco Road



Street Name:	Wolfe Road						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	75	417	140	203	1786	191	83	507	75	85	222	30
Growth 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
Initial Bse:	75	417	140	203	1786	191	83	507	75	85	222	30
Added Vol:	23	69	2	21	175	0	0	211	39	6	96	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	98	486	142	224	1961	191	83	718	114	91	318	34
User 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
PHF 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
PHF Volume:	98	486	142	224	1961	191	83	718	114	91	318	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	98	486	142	224	1961	191	83	718	114	91	318	34
PCE 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
MLF 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
FinalVolume:	98	486	142	224	1961	191	83	718	114	91	318	34
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	2.00	2.30	0.70	2.00	2.72	0.28	1.00	1.72	0.28	1.00	1.80	0.20
Final Sat.:	3150	4332	1266	3150	5102	497	1750	3193	507	1750	3342	357
Capacity Analysis Module:												
Vol/Sat:	0.03	0.11	0.11	0.07	0.38	0.38	0.05	0.22	0.22	0.05	0.10	0.10
Crit Moves:	****				****			****		****		
Green Time:	7.0	54.4	54.4	34.5	82.0	82.0	19.6	48.0	48.0	11.1	39.4	39.4
Volume/Cap:	0.71	0.33	0.33	0.33	0.75	0.75	0.39	0.75	0.75	0.75	0.39	0.39
Delay/Veh:	91.4	39.3	39.3	53.3	32.1	32.1	65.8	53.5	53.5	95.8	50.5	50.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	91.4	39.3	39.3	53.3	32.1	32.1	65.8	53.5	53.5	95.8	50.5	50.5
LOS by Move:	F	D	D	D-	C-	C-	E	D-	D-	F	D	D
HCM2kAvgQ:	3	7	7	5	28	28	4	18	18	6	7	7

Note: Queue reported is the number of cars per lane.

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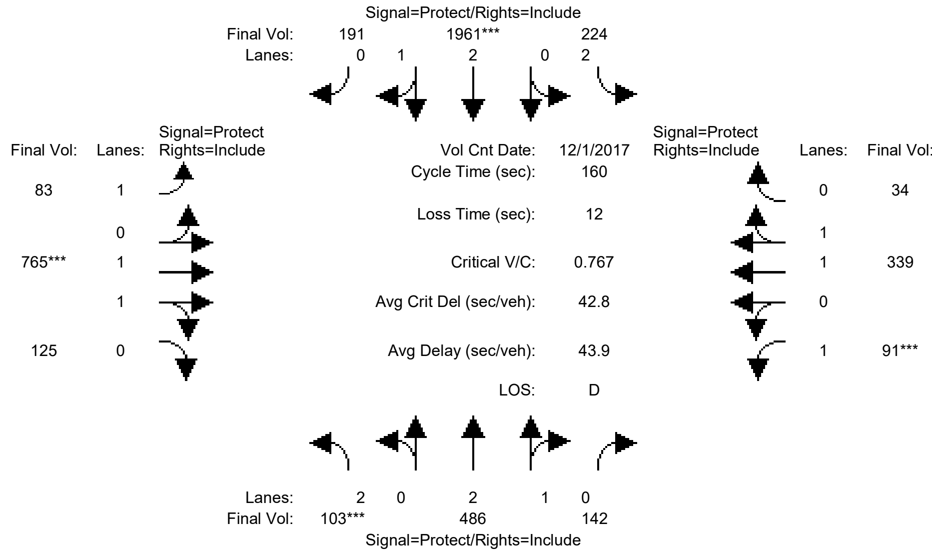
Intersection #69: Wolfe Road / Old San Francisco Road



Street Name:	Wolfe Road						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	75	417	140	203	1786	191	83	507	75	85	222	30
Growth 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
Initial Bse:	75	417	140	203	1786	191	83	507	75	85	222	30
Added Vol:	28	69	2	21	175	0	0	258	50	6	117	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	103	486	142	224	1961	191	83	765	125	91	339	34
User 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
PHF 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
PHF Volume:	103	486	142	224	1961	191	83	765	125	91	339	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	103	486	142	224	1961	191	83	765	125	91	339	34
PCE 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
MLF 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
FinalVolume:	103	486	142	224	1961	191	83	765	125	91	339	34
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	2.00	2.30	0.70	2.00	2.72	0.28	1.00	1.71	0.29	1.00	1.81	0.19
Final Sat.:	3150	4332	1266	3150	5102	497	1750	3180	520	1750	3362	337
Capacity Analysis Module:												
Vol/Sat:	0.03	0.11	0.11	0.07	0.38	0.38	0.05	0.24	0.24	0.05	0.10	0.10
Crit Moves:	****				****			****		****		
Green Time:	7.0	53.3	53.3	33.8	80.1	80.1	19.5	50.1	50.1	10.8	41.4	41.4
Volume/Cap:	0.75	0.34	0.34	0.34	0.77	0.77	0.39	0.77	0.77	0.77	0.39	0.39
Delay/Veh:	95.6	40.2	40.2	53.9	33.8	33.8	65.9	52.9	52.9	99.0	49.1	49.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	95.6	40.2	40.2	53.9	33.8	33.8	65.9	52.9	52.9	99.0	49.1	49.1
LOS by Move:	F	D	D	D-	C-	C-	E	D-	D-	F	D	D
HCM2kAvgQ:	3	7	7	5	28	28	4	20	20	6	8	8

Note: Queue reported is the number of cars per lane.

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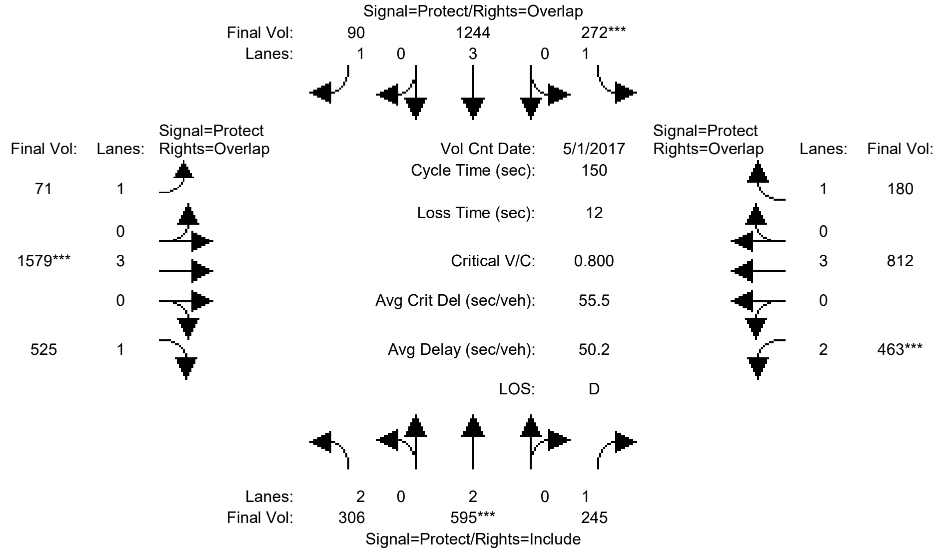
Intersection #70: Wolfe Road / El Camino Real (CMP)



Street Name:	Wolfe Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	271	576	244	165	1189	92	56	1348	456	449	692	147
Growth 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
Initial Bse:	271	576	244	165	1189	92	56	1348	456	449	692	147
Added Vol:	35	19	1	107	55	-2	15	231	69	14	120	33
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	306	595	245	272	1244	90	71	1579	525	463	812	180
User 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
PHF 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
PHF Volume:	306	595	245	272	1244	90	71	1579	525	463	812	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	306	595	245	272	1244	90	71	1579	525	463	812	180
PCE 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
MLF 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
FinalVolume:	306	595	245	272	1244	90	71	1579	525	463	812	180
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	3800	1750	1750	5700	1750	1750	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.16	0.14	0.16	0.22	0.05	0.04	0.28	0.30	0.15	0.14	0.10
Crit Moves:		****		****				****		****		
Green Time:	18.0	29.4	29.4	29.1	40.5	60.1	19.6	51.9	70.0	27.6	59.9	89.0
Volume/Cap:	0.81	0.80	0.72	0.80	0.81	0.13	0.31	0.80	0.64	0.80	0.36	0.17
Delay/Veh:	76.5	63.7	63.4	70.3	54.4	28.5	59.8	46.7	32.3	66.4	31.7	13.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	76.5	63.7	63.4	70.3	54.4	28.5	59.8	46.7	32.3	66.4	31.7	13.9
LOS by Move:	E-	E	E	E	D-	C	E+	D	C-	E	C	B
HCM2kAvgQ:	8	13	11	13	18	3	3	23	20	14	8	4

Note: Queue reported is the number of cars per lane.

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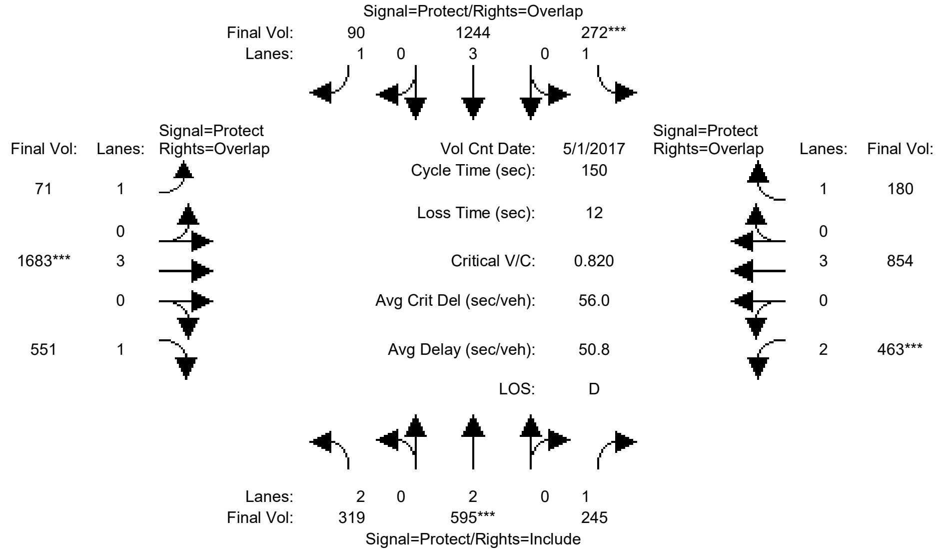
Intersection #70: Wolfe Road / El Camino Real (CMP)



Street Name:	Wolfe Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	271	576	244	165	1189	92	56	1348	456	449	692	147
Growth 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
Initial Bse:	271	576	244	165	1189	92	56	1348	456	449	692	147
Added Vol:	48	19	1	107	55	-2	15	335	95	14	162	33
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	319	595	245	272	1244	90	71	1683	551	463	854	180
User 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
PHF 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
PHF Volume:	319	595	245	272	1244	90	71	1683	551	463	854	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	319	595	245	272	1244	90	71	1683	551	463	854	180
PCE 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
MLF 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
FinalVolume:	319	595	245	272	1244	90	71	1683	551	463	854	180
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	3800	1750	1750	5700	1750	1750	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.16	0.14	0.16	0.22	0.05	0.04	0.30	0.31	0.15	0.15	0.10
Crit Moves:		****		****				****		****		
Green Time:	18.1	28.6	28.6	28.4	39.0	58.2	19.2	54.0	72.1	26.9	61.7	90.1
Volume/Cap:	0.84	0.82	0.73	0.82	0.84	0.13	0.32	0.82	0.65	0.82	0.36	0.17
Delay/Veh:	79.8	65.6	65.2	73.2	57.0	29.7	60.2	46.3	31.4	68.5	30.7	13.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	79.8	65.6	65.2	73.2	57.0	29.7	60.2	46.3	31.4	68.5	30.7	13.4
LOS by Move:	E-	E	E	E	E+	C	E	D	C	E	C	B
HCM2kAvgQ:	8	13	11	13	18	3	3	25	21	14	9	4

Note: Queue reported is the number of cars per lane.

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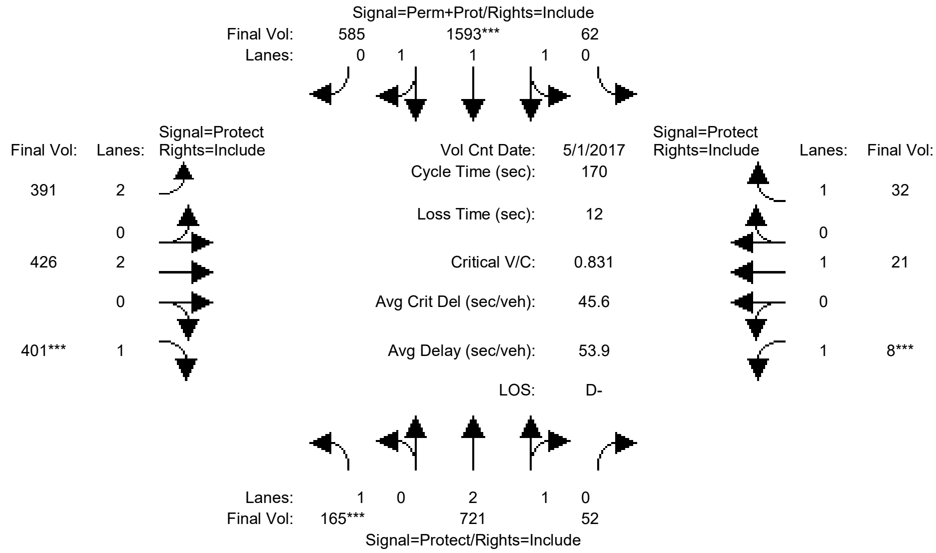
Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #71: Wolfe Road / Fremont Avenue



Street Name:	Wolfe Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	160	674	52	62	1485	555	382	407	397	8	21	32
Growth 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
Initial Bse:	160	674	52	62	1485	555	382	407	397	8	21	32
Added Vol:	5	47	0	0	108	30	9	19	4	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	165	721	52	62	1593	585	391	426	401	8	21	32
User 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
PHF 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
PHF Volume:	165	721	52	62	1593	585	391	426	401	8	21	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	165	721	52	62	1593	585	391	426	401	8	21	32
PCE 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
MLF 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
FinalVolume:	165	721	52	62	1593	585	391	426	401	8	21	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.95	0.97	0.95	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.79	0.21	0.08	2.12	0.80	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	5223	377	152	3911	1436	3150	3800	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.09	0.14	0.14	0.00	0.41	0.41	0.12	0.11	0.23	0.00	0.01	0.02
Crit Moves:	****				****				****	****		
Green Time:	20.0	26.9	26.9	82.4	86.3	86.3	35.1	44.7	44.7	7.0	16.6	16.6
Volume/Cap:	0.80	0.87	0.87	0.84	0.80	0.80	0.60	0.43	0.87	0.11	0.11	0.19
Delay/Veh:	92.9	79.3	79.3	40.6	36.5	36.5	62.7	52.3	76.4	79.2	70.2	71.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	92.9	79.3	79.3	40.6	36.5	36.5	62.7	52.3	76.4	79.2	70.2	71.0
LOS by Move:	F	E-	E-	D	D+	D+	E	D-	E-	E-	E	E
HCM2kAvgQ:	10	14	14	34	32	32	10	8	20	1	1	2

Note: Queue reported is the number of cars per lane.

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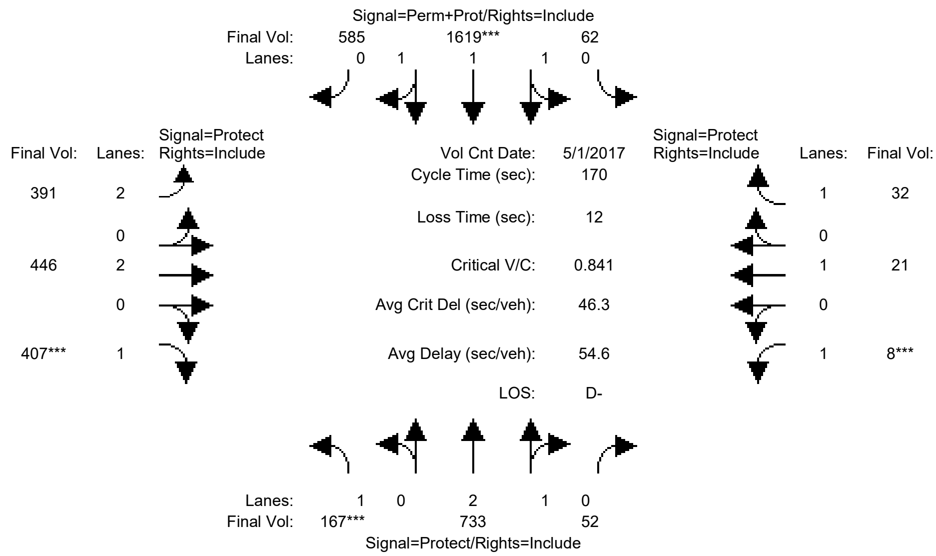
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #71: Wolfe Road / Fremont Avenue



Street Name:	Wolfe Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	160	674	52	62	1485	555	382	407	397	8	21	32
Growth 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
Initial Bse:	160	674	52	62	1485	555	382	407	397	8	21	32
Added Vol:	7	59	0	0	134	30	9	39	10	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	167	733	52	62	1619	585	391	446	407	8	21	32
User 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
PHF 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
PHF Volume:	167	733	52	62	1619	585	391	446	407	8	21	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	167	733	52	62	1619	585	391	446	407	8	21	32
PCE 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
MLF 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
FinalVolume:	167	733	52	62	1619	585	391	446	407	8	21	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.95	0.97	0.95	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.79	0.21	0.08	2.13	0.79	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	5229	371	150	3929	1420	3150	3800	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.14	0.14	0.00	0.41	0.41	0.12	0.12	0.23	0.00	0.01	0.02
Crit Moves:	****				****				****	****		
Green Time:	20.0	27.0	27.0	82.3	86.3	86.3	35.1	44.7	44.7	7.0	16.6	16.6
Volume/Cap:	0.81	0.88	0.88	0.85	0.81	0.81	0.60	0.45	0.88	0.11	0.11	0.19
Delay/Veh:	94.3	80.4	80.4	41.3	37.0	37.0	62.7	52.6	78.1	79.2	70.2	71.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	94.3	80.4	80.4	41.3	37.0	37.0	62.7	52.6	78.1	79.2	70.2	71.0
LOS by Move:	F	F	F	D	D+	D+	E	D-	E-	E-	E	E
HCM2kAvgQ:	10	15	15	35	33	33	10	9	21	1	1	2

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
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Intersection #72: Lawrence Expressway / Monroe Street (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 402 2823*** 257
Lanes: 1 0 3 0 2

Final Vol:	Lanes:	Signal=Protect Rights=Overlap			Signal=Protect Rights=Overlap	Lanes:	Final Vol:
			Vol Cnt Date:	10/5/2016			
267	2		Cycle Time (sec):	190		1	167
	0		Loss Time (sec):	12		0	
563	2		Critical V/C:	1.032		2	245
	0		Avg Crit Del (sec/veh):	108.0		0	
728***	1		Avg Delay (sec/veh):	80.7		2	188***
			LOS:	F			

Lanes: 1 0 3 0 1
Final Vol: 218*** 1346 154
Signal=Protect/Rights=Overlap

Street Name:	Lawrence Expressway						Monroe Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	27	97	97	25	96	96	23	44	44	23	44	44
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 5 Oct 2016 <<												
Base Vol:	178	1559	154	246	3276	387	241	512	616	188	210	164
Growth 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
Initial Bse:	178	1559	154	246	3276	387	241	512	616	188	210	164
Added Vol:	40	123	0	11	297	15	26	51	112	0	35	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	218	1682	154	257	3573	402	267	563	728	188	245	167
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	218	1346	154	257	2823	402	267	563	728	188	245	167
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	218	1346	154	257	2823	402	267	563	728	188	245	167
PCE 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
MLF 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
FinalVolume:	218	1346	154	257	2823	402	267	563	728	188	245	167
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1750	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.24	0.09	0.08	0.50	0.23	0.08	0.15	0.42	0.06	0.06	0.10
Crit Moves:	****				****				****	****		
Green Time:	25.4	92.0	113.6	23.7	90.3	111.9	21.6	41.4	66.8	21.6	41.4	65.1
Volume/Cap:	0.93	0.49	0.15	0.65	1.04	0.39	0.74	0.68	1.18	0.52	0.30	0.28
Delay/Veh:	127.1	27.9	10.4	88.2	93.6	30.7	94.9	74.9	163.9	85.8	66.3	48.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	127.1	27.9	10.4	88.2	93.6	30.7	94.9	74.9	163.9	85.8	66.3	48.5
LOS by Move:	F	C	B+	F	F	C	F	E	F	F	E	D
HCM2kAvgQ:	15	13	2	10	66	18	11	16	65	7	6	8

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #72: Lawrence Expressway / Monroe Street (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 406 3178*** 257
Lanes: 1 0 3 0 2

Signal=Protect Rights=Overlap
Final Vol: Lanes:
278 2
0
576 2
0
744*** 1

Vol Cnt Date: 10/5/2016
Cycle Time (sec): 190
Loss Time (sec): 12
Critical V/C: 1.108
Avg Crit Del (sec/veh): 147.9
Avg Delay (sec/veh): 104.3
LOS: F

Signal=Protect Rights=Overlap
Lanes: Final Vol:
1 167
0
2 253
0
2 188***

Lanes: 1 0 3 0 1
Final Vol: 224*** 1346 154
Signal=Protect/Rights=Overlap

Street Name:	Lawrence Expressway						Monroe Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	27	97	97	25	96	96	23	44	44	23	44	44
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 5 Oct 2016 <<												
Base Vol:	178	1559	154	246	3726	387	241	512	616	188	210	164
Growth 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
Initial Bse:	178	1559	154	246	3726	387	241	512	616	188	210	164
Added Vol:	46	123	0	11	297	19	37	64	128	0	43	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	224	1682	154	257	4023	406	278	576	744	188	253	167
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	224	1346	154	257	3178	406	278	576	744	188	253	167
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	224	1346	154	257	3178	406	278	576	744	188	253	167
PCE 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
MLF 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
FinalVolume:	224	1346	154	257	3178	406	278	576	744	188	253	167
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1750	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.13	0.24	0.09	0.08	0.56	0.23	0.09	0.15	0.43	0.06	0.07	0.10
Crit Moves:	****				****				****	****		
Green Time:	25.4	92.0	113.6	23.7	90.3	111.9	21.6	41.4	66.8	21.6	41.4	65.1
Volume/Cap:	0.96	0.49	0.15	0.65	1.17	0.39	0.78	0.70	1.21	0.52	0.31	0.28
Delay/Veh:	133.8	27.9	10.4	88.2	146	30.8	97.1	75.4	174.4	85.8	66.4	48.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	133.8	27.9	10.4	88.2	146	30.8	97.1	75.4	174.4	85.8	66.4	48.5
LOS by Move:	F	C	B+	F	F	C	F	E-	F	F	E	D
HCM2kAvgQ:	15	13	2	10	84	18	12	17	67	7	6	8

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #73: Lawrence Expressway / El Camino Real (CMP)

Signal=Split/Rights=Include
Final Vol: 281*** 103 411
Lanes: 1 0 0 1 1

Final Vol: | Lanes: | Signal=Protect Rights=Include
254 2
0
1854*** 2
1
441 0

Vol Cnt Date: 1/17/2018
Cycle Time (sec): 100
Loss Time (sec): 9
Critical V/C: 0.860
Avg Crit Del (sec/veh): 35.9
Avg Delay (sec/veh): 34.5
LOS: C-

Signal=Protect Rights=Overlap | Lanes: | Final Vol:
1 151
0
3 985
0
2 197***

Lanes: 1 1 0 0 1
Final Vol: 444*** 87 231
Signal=Split/Rights=Include

Street Name:	Lawrence Expressway						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 17 Jan 2018 <<												
Base Vol:	393	85	231	374	95	277	247	1606	335	197	869	141
Growth 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
Initial Bse:	393	85	231	374	95	277	247	1606	335	197	869	141
Added Vol:	51	2	0	37	8	4	7	248	106	0	116	10
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	444	87	231	411	103	281	254	1854	441	197	985	151
User 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
PHF 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
PHF Volume:	444	87	231	411	103	281	254	1854	441	197	985	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	444	87	231	411	103	281	254	1854	441	197	985	151
PCE 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
MLF 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
FinalVolume:	444	87	231	411	103	281	254	1854	441	197	985	151
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.95	0.92	0.93	0.95	0.92	0.83	0.99	0.95	0.83	1.00	0.92
Lanes:	1.68	0.32	1.00	1.60	0.40	1.00	2.00	2.40	0.60	2.00	3.00	1.00
Final Sat.:	2968	582	1750	2838	711	1750	3150	4523	1076	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.13	0.14	0.14	0.16	0.08	0.41	0.41	0.06	0.17	0.09
Crit Moves:	****					****		****		****		
Green Time:	17.4	17.4	17.4	18.7	18.7	18.7	17.5	47.7	47.7	7.3	37.5	56.1
Volume/Cap:	0.86	0.86	0.76	0.78	0.78	0.86	0.46	0.86	0.86	0.86	0.46	0.15
Delay/Veh:	51.8	51.8	49.9	44.4	44.4	59.4	37.6	26.3	26.3	72.3	23.8	10.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.8	51.8	49.9	44.4	44.4	59.4	37.6	26.3	26.3	72.3	23.8	10.6
LOS by Move:	D-	D-	D	D	D	E+	D+	C	C	E	C	B+
HCM2kAvgQ:	9	9	7	7	7	8	5	24	24	4	7	2

Note: Queue reported is the number of cars per lane.

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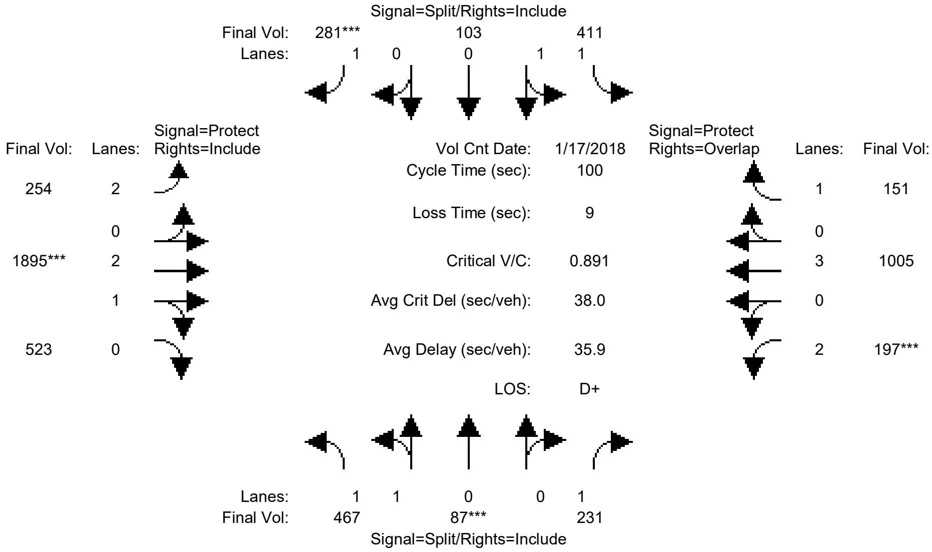
Intersection #73: Lawrence Expressway / El Camino Real (CMP)



Street Name:	Lawrence Expressway						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 17 Jan 2018 <<												
Base Vol:	393	85	231	374	95	277	247	1606	335	197	869	141
Growth 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
Initial Bse:	393	85	231	374	95	277	247	1606	335	197	869	141
Added Vol:	74	2	0	37	8	4	7	289	188	0	136	10
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	467	87	231	411	103	281	254	1895	523	197	1005	151
User 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
PHF 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
PHF Volume:	467	87	231	411	103	281	254	1895	523	197	1005	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	467	87	231	411	103	281	254	1895	523	197	1005	151
PCE 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
MLF 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
FinalVolume:	467	87	231	411	103	281	254	1895	523	197	1005	151
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.95	0.92	0.93	0.95	0.92	0.83	0.99	0.95	0.83	1.00	0.92
Lanes:	1.69	0.31	1.00	1.60	0.40	1.00	2.00	2.33	0.67	2.00	3.00	1.00
Final Sat.:	2992	557	1750	2838	711	1750	3150	4387	1211	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.16	0.16	0.13	0.14	0.14	0.16	0.08	0.43	0.43	0.06	0.18	0.09
Crit Moves:		****				****		****		****		
Green Time:	17.5	17.5	17.5	18.0	18.0	18.0	17.4	48.5	48.5	7.0	38.1	56.1
Volume/Cap:	0.89	0.89	0.75	0.80	0.80	0.89	0.46	0.89	0.89	0.89	0.46	0.15
Delay/Veh:	55.3	55.3	49.3	46.6	46.6	65.5	37.7	27.5	27.5	79.1	23.4	10.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.3	55.3	49.3	46.6	46.6	65.5	37.7	27.5	27.5	79.1	23.4	10.6
LOS by Move:	E+	E+	D	D	D	E	D+	C	C	E-	C	B+
HCM2kAvgQ:	10	10	7	7	7	9	5	26	26	4	7	2

Note: Queue reported is the number of cars per lane.

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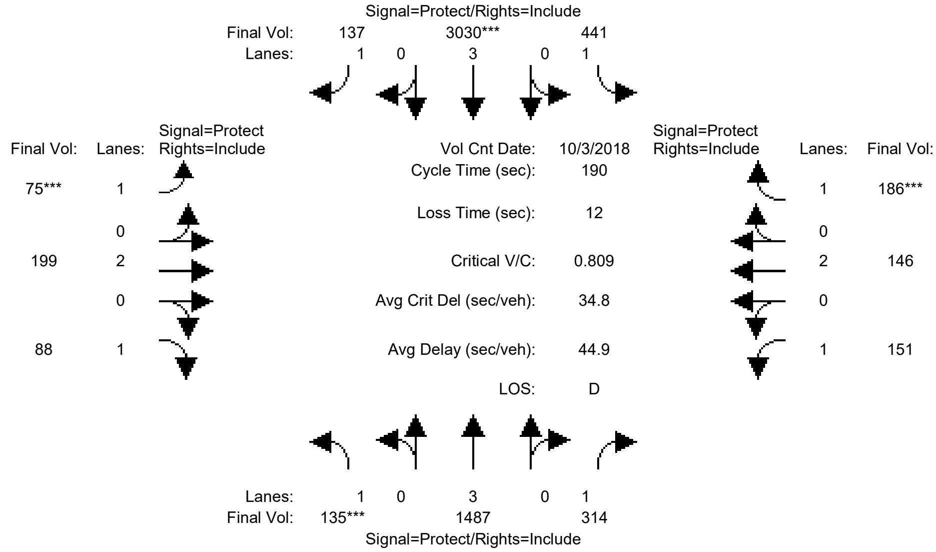
Background PM

Intersection #74: Lawrence Expressway / Benton Street



Street Name:	Lawrence Expressway						Benton Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	135	1690	314	428	3415	129	72	199	88	151	146	182
Growth 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
Initial Bse:	135	1690	314	428	3415	129	72	199	88	151	146	182
Added Vol:	0	169	0	13	420	8	3	0	0	0	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	135	1859	314	441	3835	137	75	199	88	151	146	186
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	135	1487	314	441	3030	137	75	199	88	151	146	186
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	135	1487	314	441	3030	137	75	199	88	151	146	186
PCE 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
MLF 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
FinalVolume:	135	1487	314	441	3030	137	75	199	88	151	146	186
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.26	0.18	0.25	0.53	0.08	0.04	0.05	0.05	0.09	0.04	0.11
Crit Moves:	****				****		****					****
Green Time:	18.1	72.7	72.7	70.2	125	124.8	10.1	13.3	13.3	21.8	25.0	25.0
Volume/Cap:	0.81	0.68	0.47	0.68	0.81	0.12	0.81	0.75	0.72	0.75	0.29	0.81
Delay/Veh:	108.9	49.9	44.6	53.4	25.2	12.2	128.2	98.0	105.2	96.4	74.9	99.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	108.9	49.9	44.6	53.4	25.2	12.2	128.2	98.0	105.2	96.4	74.9	99.1
LOS by Move:	F	D	D	D-	C	B	F	F	F	F	E	F
HCM2kAvgQ:	9	23	14	22	42	3	6	7	7	11	4	13

Note: Queue reported is the number of cars per lane.

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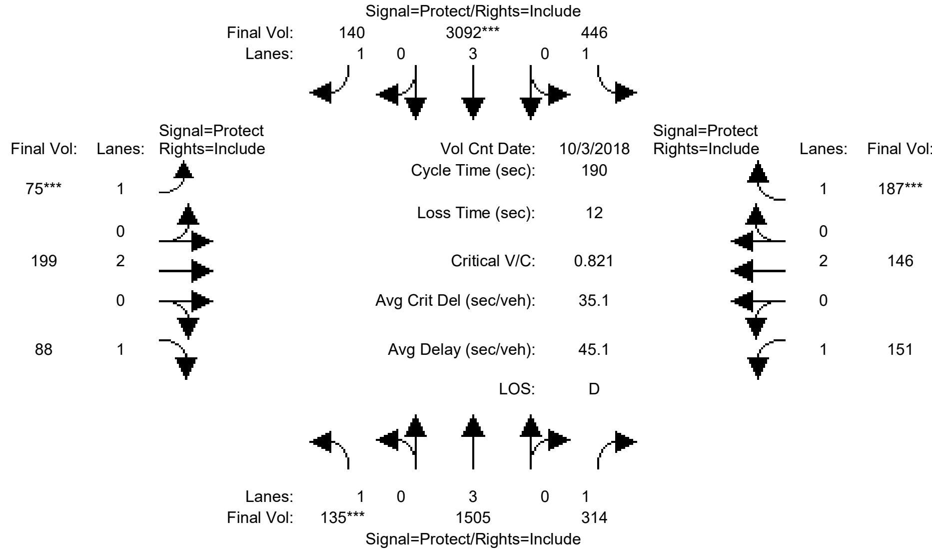
Background PM Plus Project

Intersection #74: Lawrence Expressway / Benton Street



Street Name:	Lawrence Expressway						Benton Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	135	1690	314	428	3415	129	72	199	88	151	146	182
Growth 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
Initial Bse:	135	1690	314	428	3415	129	72	199	88	151	146	182
Added Vol:	0	191	0	18	499	11	3	0	0	0	0	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	135	1881	314	446	3914	140	75	199	88	151	146	187
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	135	1505	314	446	3092	140	75	199	88	151	146	187
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	135	1505	314	446	3092	140	75	199	88	151	146	187
PCE 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
MLF 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
FinalVolume:	135	1505	314	446	3092	140	75	199	88	151	146	187
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.26	0.18	0.25	0.54	0.08	0.04	0.05	0.05	0.09	0.04	0.11
Crit Moves:	****				****		****					****
Green Time:	17.8	72.9	72.9	70.4	126	125.5	9.9	13.1	13.1	21.5	24.7	24.7
Volume/Cap:	0.82	0.69	0.47	0.69	0.82	0.12	0.82	0.76	0.73	0.76	0.30	0.82
Delay/Veh:	111.4	49.9	44.5	53.6	25.5	11.9	131.5	98.9	106.6	97.6	75.1	101.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	111.4	49.9	44.5	53.6	25.5	11.9	131.5	98.9	106.6	97.6	75.1	101.1
LOS by Move:	F	D	D	D-	C	B+	F	F	F	F	E-	F
HCM2kAvgQ:	9	24	14	23	43	3	7	7	7	11	4	13

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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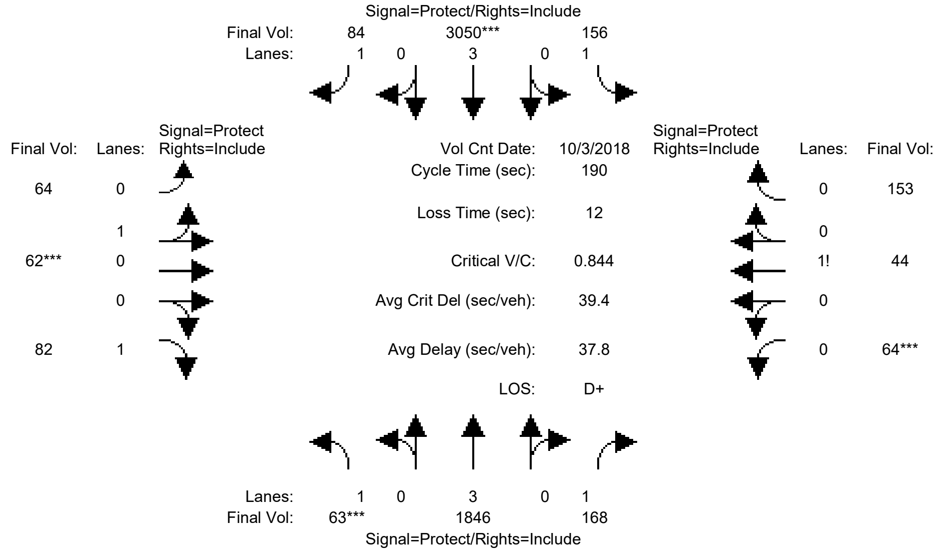
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #75: Lawrence Expressway / Lochinvar Avenue



Street Name:	Lawrence Expressway						Lochinvar Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	63	2146	168	143	3462	76	61	62	82	64	44	149
Growth 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
Initial Bse:	63	2146	168	143	3462	76	61	62	82	64	44	149
Added Vol:	0	162	0	13	399	8	3	0	0	0	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	63	2308	168	156	3861	84	64	62	82	64	44	153
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	63	1846	168	156	3050	84	64	62	82	64	44	153
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	1846	168	156	3050	84	64	62	82	64	44	153
PCE 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
MLF 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
FinalVolume:	63	1846	168	156	3050	84	64	62	82	64	44	153
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.51	0.49	1.00	0.24	0.17	0.59
Final Sat.:	1750	5700	1750	1750	5700	1750	914	886	1750	429	295	1026
Capacity Analysis Module:												
Vol/Sat:	0.04	0.32	0.10	0.09	0.54	0.05	0.07	0.07	0.05	0.15	0.15	0.15
Crit Moves:	****				****			****		****		
Green Time:	8.1	101	100.9	27.8	121	120.5	15.8	15.8	15.8	33.6	33.6	33.6
Volume/Cap:	0.84	0.61	0.18	0.61	0.84	0.08	0.84	0.84	0.56	0.84	0.84	0.84
Delay/Veh:	145.1	31.3	23.2	80.3	29.3	13.4	119.0	119	88.9	94.3	94.3	94.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	145.1	31.3	23.2	80.3	29.3	13.4	119.0	119	88.9	94.3	94.3	94.3
LOS by Move:	F	C	C	F	C	B	F	F	F	F	F	F
HCM2kAvgQ:	4	24	5	9	45	2	10	10	6	18	18	18

Note: Queue reported is the number of cars per lane.

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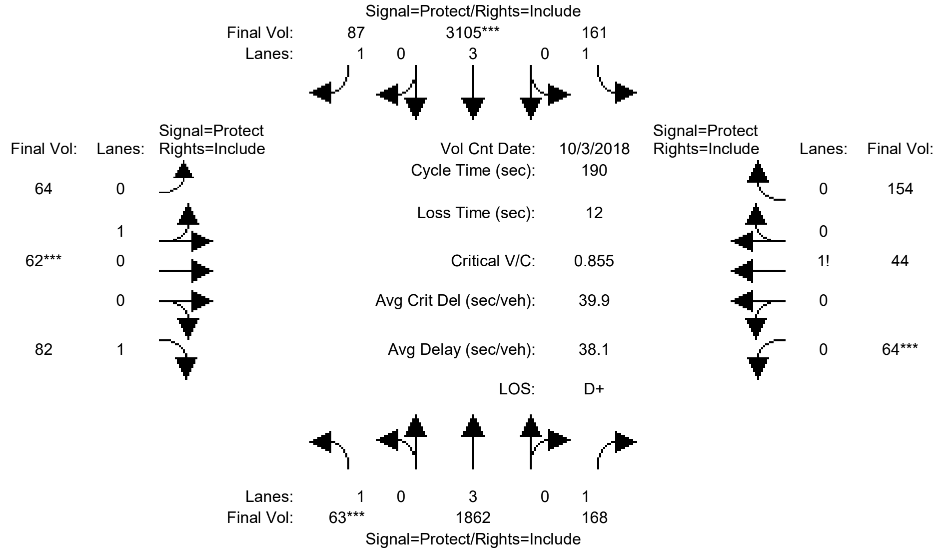
Background PM Plus Project

Intersection #75: Lawrence Expressway / Lochinvar Avenue



Street Name:	Lawrence Expressway						Lochinvar Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	63	2146	168	143	3462	76	61	62	82	64	44	149
Growth 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
Initial Bse:	63	2146	168	143	3462	76	61	62	82	64	44	149
Added Vol:	0	182	0	18	469	11	3	0	0	0	0	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	63	2328	168	161	3931	87	64	62	82	64	44	154
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	63	1862	168	161	3105	87	64	62	82	64	44	154
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	1862	168	161	3105	87	64	62	82	64	44	154
PCE 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
MLF 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
FinalVolume:	63	1862	168	161	3105	87	64	62	82	64	44	154
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.51	0.49	1.00	0.24	0.17	0.59
Final Sat.:	1750	5700	1750	1750	5700	1750	914	886	1750	427	294	1029
Capacity Analysis Module:												
Vol/Sat:	0.04	0.33	0.10	0.09	0.54	0.05	0.07	0.07	0.05	0.15	0.15	0.15
Crit Moves:	****				****			****		****		
Green Time:	8.0	101	100.8	28.4	121	121.1	15.6	15.6	15.6	33.3	33.3	33.3
Volume/Cap:	0.85	0.62	0.18	0.62	0.85	0.08	0.85	0.85	0.57	0.85	0.85	0.85
Delay/Veh:	148.6	31.5	23.3	80.1	29.6	13.2	121.7	122	89.5	96.2	96.2	96.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	148.6	31.5	23.3	80.1	29.6	13.2	121.7	122	89.5	96.2	96.2	96.2
LOS by Move:	F	C	C	F	C	B	F	F	F	F	F	F
HCM2kAvgQ:	4	24	5	9	46	2	10	10	6	18	18	18

Note: Queue reported is the number of cars per lane.

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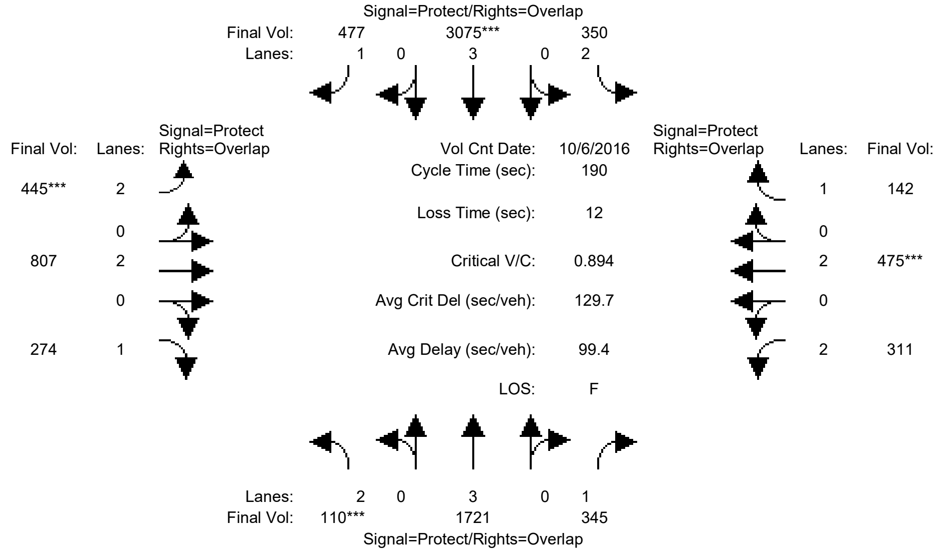
Background PM

Intersection #76: Lawrence Expressway / Homestead Road (CMP)



Street Name:	Lawrence Expressway						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	18	86	86	30	97	97	27	46	46	27	46	46
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 6 Oct 2016 <<												
Base Vol:	110	2009	345	336	3504	481	433	744	274	311	450	134
Growth 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
Initial Bse:	110	2009	345	336	3504	481	433	744	274	311	450	134
Added Vol:	0	142	0	14	389	-4	12	63	0	0	25	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	110	2151	345	350	3893	477	445	807	274	311	475	142
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	110	1721	345	350	3075	477	445	807	274	311	475	142
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1721	345	350	3075	477	445	807	274	311	475	142
PCE 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
MLF 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
FinalVolume:	110	1721	345	350	3075	477	445	807	274	311	475	142
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.30	0.20	0.11	0.54	0.27	0.14	0.21	0.16	0.10	0.13	0.08
Crit Moves:	****				****		****				****	
Green Time:	17.0	81.3	106.8	28.4	92.6	118.2	25.5	43.5	60.5	25.5	43.5	71.8
Volume/Cap:	0.39	0.71	0.35	0.74	1.11	0.44	1.05	0.93	0.49	0.73	0.55	0.21
Delay/Veh:	92.9	71.6	44.8	97.8	138	41.7	145.0	91.7	56.0	90.1	69.0	42.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	92.9	71.6	44.8	97.8	138	41.7	145.0	91.7	56.0	90.1	69.0	42.5
LOS by Move:	F	E	D	F	F	D	F	F	E+	F	E	D
HCM2kAvgQ:	4	33	19	12	73	26	20	26	14	12	13	6

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #76: Lawrence Expressway / Homestead Road (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 477 3128*** 355
Lanes: 1 0 3 0 2

Westbound: Signal=Protect, Rights=Overlap
Final Vol: / Lanes: 144 / 1; 480*** / 2; 311 / 2; lanes 0 and 0 between them

Eastbound: Signal=Protect, Rights=Overlap
Final Vol: / Lanes: 445*** / 2; 820 / 2; 274 / 1; lanes 0 and 0 between them

Vol Cnt Date: 10/6/2016
Cycle Time (sec): 190
Loss Time (sec): 12
Critical V/C: 0.905
Avg Crit Del (sec/veh): 135.6
Avg Delay (sec/veh): 102.8
LOS: F

Lanes: 2 0 3 0 1
Final Vol: 110*** 1735 345
Signal=Protect/Rights=Overlap

Street Name:	Lawrence Expressway						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	18	86	86	30	97	97	27	46	46	27	46	46
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 6 Oct 2016 <<												
Base Vol:	110	2009	345	336	3504	481	433	744	274	311	450	134
Growth 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
Initial Bse:	110	2009	345	336	3504	481	433	744	274	311	450	134
Added Vol:	0	160	0	19	455	-4	12	76	0	0	30	10
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	110	2169	345	355	3959	477	445	820	274	311	480	144
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	110	1735	345	355	3128	477	445	820	274	311	480	144
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1735	345	355	3128	477	445	820	274	311	480	144
PCE 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
MLF 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
FinalVolume:	110	1735	345	355	3128	477	445	820	274	311	480	144
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.30	0.20	0.11	0.55	0.27	0.14	0.22	0.16	0.10	0.13	0.08
Crit Moves:	****				****		****				****	
Green Time:	17.0	81.3	106.8	28.4	92.6	118.2	25.5	43.5	60.5	25.5	43.5	71.8
Volume/Cap:	0.39	0.71	0.35	0.76	1.13	0.44	1.05	0.94	0.49	0.73	0.55	0.22
Delay/Veh:	92.9	71.9	44.8	98.4	146	41.7	145.0	94.4	56.0	90.1	69.2	42.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	92.9	71.9	44.8	98.4	146	41.7	145.0	94.4	56.0	90.1	69.2	42.5
LOS by Move:	F	E	D	F	F	D	F	F	E+	F	E	D
HCM2kAvgQ:	4	33	19	12	76	26	20	27	14	12	13	6

Note: Queue reported is the number of cars per lane.

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Intersection #77: Lawrence Expressway / Lehigh Drive

Signal=Protect/Rights=Include
Final Vol: 104 3272*** 41
Lanes: 1 0 3 0 1

Westbound side: Final Vol: 213 / 0 / 547***; Lanes: 1 / 1 / 0 / 0 / 1; Signal=Protect Rights=Include

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 190
Loss Time (sec): 12
Critical V/C: 0.998
Avg Crit Del (sec/veh): 77.7
Avg Delay (sec/veh): 62.6
LOS: E

Signal=Protect Rights=Include; Lanes: 1 / 0 / 0 / 0 / 1; Final Vol: 25 / 0 / 10***

Lanes: 2 0 3 1 0
Final Vol: 135*** 1717 27
Signal=Protect/Rights=Include

Street Name:	Lawrence Expressway						Lehigh Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	135	2010	27	28	3774	96	210	0	547	10	0	21
Growth 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
Initial Bse:	135	2010	27	28	3774	96	210	0	547	10	0	21
Added Vol:	0	136	0	13	368	8	3	0	0	0	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	135	2146	27	41	4142	104	213	0	547	10	0	25
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	135	1717	27	41	3272	104	213	0	547	10	0	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	135	1717	27	41	3272	104	213	0	547	10	0	25
PCE 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
MLF 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
FinalVolume:	135	1717	27	41	3272	104	213	0	547	10	0	25
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.92	1.00	0.92	0.93	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	3.94	0.06	1.00	3.00	1.00	2.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	3150	7384	116	1750	5700	1750	3550	0	1750	1750	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.23	0.23	0.02	0.57	0.06	0.06	0.00	0.31	0.01	0.00	0.01
Crit Moves:	****				****				****	****		
Green Time:	7.9	98.0	98.0	15.5	106	105.6	34.4	0.0	57.5	7.0	0.0	7.0
Volume/Cap:	1.03	0.45	0.45	0.29	1.03	0.11	0.33	0.00	1.03	0.16	0.00	0.39
Delay/Veh:	178.8	29.1	29.1	83.1	67.4	20.0	68.1	0.0	114.0	89.8	0.0	93.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	178.8	29.1	29.1	83.1	67.4	20.0	68.1	0.0	114.0	89.8	0.0	93.2
LOS by Move:	F	C	C	F	E	B-	E	A	F	F	A	F
HCM2kAvgQ:	6	15	15	2	64	3	6	0	41	1	0	2

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Intersection #77: Lawrence Expressway / Lehigh Drive

Signal=Protect/Rights=Include
Final Vol: 107 3317*** 46
Lanes: 1 0 3 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
213	1		Vol Cnt Date:	10/3/2018		1	26
			Cycle Time (sec):	190			
	1		Loss Time (sec):	12		0	
0	0		Critical V/C:	1.007		0	0
	0		Avg Crit Del (sec/veh):	80.3		0	
547***	1		Avg Delay (sec/veh):	64.2		1	10***
			LOS:	E			

Lanes: 2 0 3 1 0
Final Vol: 135*** 1730 27
Signal=Protect/Rights=Include

Street Name:	Lawrence Expressway						Lehigh Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	135	2010	27	28	3774	96	210	0	547	10	0	21
Growth 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
Initial Bse:	135	2010	27	28	3774	96	210	0	547	10	0	21
Added Vol:	0	152	0	18	425	11	3	0	0	0	0	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	135	2162	27	46	4199	107	213	0	547	10	0	26
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	135	1730	27	46	3317	107	213	0	547	10	0	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	135	1730	27	46	3317	107	213	0	547	10	0	26
PCE 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
MLF 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
FinalVolume:	135	1730	27	46	3317	107	213	0	547	10	0	26
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.92	1.00	0.92	0.93	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	3.94	0.06	1.00	3.00	1.00	2.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	3150	7385	115	1750	5700	1750	3550	0	1750	1750	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.23	0.23	0.03	0.58	0.06	0.06	0.00	0.31	0.01	0.00	0.01
Crit Moves:	****				****				****	****		
Green Time:	7.8	98.5	98.5	15.5	106	106.2	34.1	0.0	57.0	7.0	0.0	7.0
Volume/Cap:	1.04	0.45	0.45	0.32	1.04	0.11	0.33	0.00	1.04	0.16	0.00	0.40
Delay/Veh:	181.7	28.9	28.9	83.6	70.0	19.8	68.4	0.0	117.0	89.8	0.0	93.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	181.7	28.9	28.9	83.6	70.0	19.8	68.4	0.0	117.0	89.8	0.0	93.5
LOS by Move:	F	C	C	F	E	B-	E	A	F	F	A	F
HCM2kAvgQ:	6	15	15	3	66	3	6	0	42	1	0	2

Note: Queue reported is the number of cars per lane.

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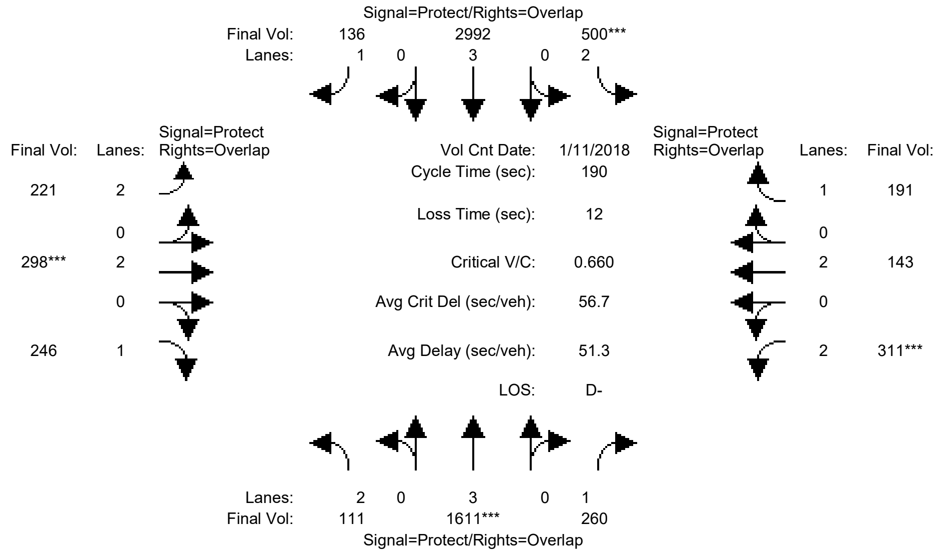
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #78: Lawrence Expressway / Pruneridge Avenue



Street Name:	Lawrence Expressway						Pruneridge Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	18	84	84	40	106	106	16	29	29	21	34	34
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 11 Jan 2018 <<												
Base Vol:	111	1885	260	487	3441	128	218	298	246	311	143	187
Growth 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
Initial Bse:	111	1885	260	487	3441	128	218	298	246	311	143	187
Added Vol:	0	129	0	13	346	8	3	0	0	0	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	111	2014	260	500	3787	136	221	298	246	311	143	191
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	111	1611	260	500	2992	136	221	298	246	311	143	191
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	1611	260	500	2992	136	221	298	246	311	143	191
PCE 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
MLF 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
FinalVolume:	111	1611	260	500	2992	136	221	298	246	311	143	191
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.28	0.15	0.16	0.52	0.08	0.07	0.08	0.14	0.10	0.04	0.11
Crit Moves:		****		****				****		****		
Green Time:	18.0	84.0	108.9	40.1	106	123.3	17.3	29.0	47.0	24.9	36.7	76.7
Volume/Cap:	0.37	0.64	0.26	0.75	0.94	0.12	0.77	0.51	0.57	0.75	0.19	0.27
Delay/Veh:	81.5	41.8	20.5	75.2	45.5	12.7	96.7	74.8	64.4	87.2	64.4	38.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	81.5	41.8	20.5	75.2	45.5	12.7	96.7	74.8	64.4	87.2	64.4	38.1
LOS by Move:	F	D	C+	E-	D	B	F	E	E	F	E	D+
HCM2kAvgQ:	4	24	8	15	50	3	9	8	14	12	3	8

Note: Queue reported is the number of cars per lane.

Cityline TIA
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Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #78: Lawrence Expressway / Pruneridge Avenue

Signal=Protect/Rights=Overlap
Final Vol: 139 3031 505***
Lanes: 1 0 3 0 2

Final Vol:	Lanes:	Signal=Protect Rights=Overlap			Signal=Protect Rights=Overlap	Lanes:	Final Vol:
			Vol Cnt Date:	1/11/2018			
221	2		Cycle Time (sec):	190		1	192
	0		Loss Time (sec):	12		0	
298***	2		Critical V/C:	0.664		2	143
	0		Avg Crit Del (sec/veh):	56.8		0	
246	1		Avg Delay (sec/veh):	52.0		2	311***
			LOS:	D-			

Lanes: 2 0 3 0 1
Final Vol: 111 1622*** 260
Signal=Protect/Rights=Overlap

Street Name:	Lawrence Expressway						Pruneridge Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	18	84	84	40	106	106	16	29	29	21	34	34
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 11 Jan 2018 <<												
Base Vol:	111	1885	260	487	3441	128	218	298	246	311	143	187
Growth 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
Initial Bse:	111	1885	260	487	3441	128	218	298	246	311	143	187
Added Vol:	0	143	0	18	396	11	3	0	0	0	0	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	111	2028	260	505	3837	139	221	298	246	311	143	192
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	111	1622	260	505	3031	139	221	298	246	311	143	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	1622	260	505	3031	139	221	298	246	311	143	192
PCE 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
MLF 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
FinalVolume:	111	1622	260	505	3031	139	221	298	246	311	143	192
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.28	0.15	0.16	0.53	0.08	0.07	0.08	0.14	0.10	0.04	0.11
Crit Moves:		****		****				****		****		
Green Time:	18.0	84.0	108.8	40.2	106	123.4	17.2	29.0	47.0	24.8	36.6	76.8
Volume/Cap:	0.37	0.64	0.26	0.76	0.95	0.12	0.77	0.51	0.57	0.76	0.20	0.27
Delay/Veh:	81.4	41.9	20.5	75.3	47.1	12.7	97.0	74.8	64.4	87.6	64.5	38.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	81.4	41.9	20.5	75.3	47.1	12.7	97.0	74.8	64.4	87.6	64.5	38.1
LOS by Move:	F	D	C+	E-	D	B	F	E	E	F	E	D+
HCM2kAvgQ:	4	24	8	15	52	3	9	8	14	12	3	8

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Background Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #79: Calabazas Boulevard / El Camino Real

Signal=Protect/Rights=Include
Final Vol: 97 120*** 102
Lanes: 0 1 0 0 1

Final Vol: Lanes: Signal=Protect Rights=Include
95 1
0
1751*** 3
0
38 1

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 130
Loss Time (sec): 12
Critical V/C: 0.562
Avg Crit Del (sec/veh): 26.6
Avg Delay (sec/veh): 26.6
LOS: C

Signal=Protect Rights=Include Lanes: Final Vol:
0 111
1
2 1065
0
1 121***

Lanes: 1 0 0 1 0
Final Vol: 23*** 56 67
Signal=Protect/Rights=Include

Street Name:	Calabazas Boulevard						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	20	56	67	102	120	94	88	1481	31	121	945	111
Growth 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
Initial Bse:	20	56	67	102	120	94	88	1481	31	121	945	111
Added Vol:	3	0	0	0	0	3	7	270	7	0	120	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	56	67	102	120	97	95	1751	38	121	1065	111
User 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
PHF 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
PHF Volume:	23	56	67	102	120	97	95	1751	38	121	1065	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	56	67	102	120	97	95	1751	38	121	1065	111
PCE 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
MLF 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
FinalVolume:	23	56	67	102	120	97	95	1751	38	121	1065	111
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92	0.92	0.99	0.95
Lanes:	1.00	0.46	0.54	1.00	0.55	0.45	1.00	3.00	1.00	1.00	2.71	0.29
Final Sat.:	1750	820	980	1750	995	805	1750	5700	1750	1750	5071	528
Capacity Analysis Module:												
Vol/Sat:	0.01	0.07	0.07	0.06	0.12	0.12	0.05	0.31	0.02	0.07	0.21	0.21
Crit Moves:	****				****			****		****		
Green Time:	7.0	19.3	19.3	14.6	26.9	26.9	17.3	68.6	68.6	15.4	66.8	66.8
Volume/Cap:	0.24	0.46	0.46	0.52	0.58	0.58	0.41	0.58	0.04	0.58	0.41	0.41
Delay/Veh:	60.3	51.8	51.8	56.8	48.8	48.8	52.9	21.2	14.8	58.4	19.5	19.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	60.3	51.8	51.8	56.8	48.8	48.8	52.9	21.2	14.8	58.4	19.5	19.5
LOS by Move:	E	D-	D-	E+	D	D	D-	C+	B	E+	B-	B-
HCM2kAvgQ:	1	5	5	5	9	9	4	15	1	5	9	9

Note: Queue reported is the number of cars per lane.

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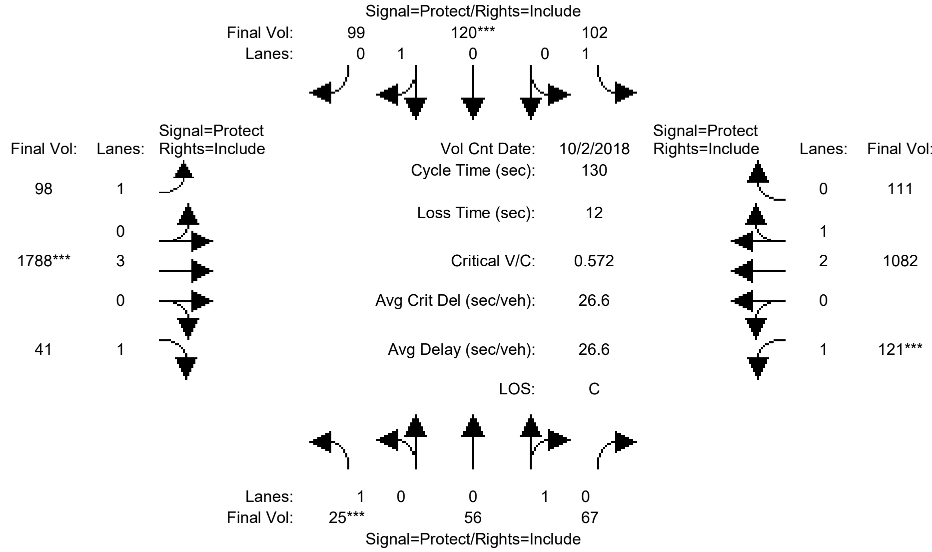
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM Plus Project

Intersection #79: Calabazas Boulevard / El Camino Real



Street Name:	Calabazas Boulevard						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	20	56	67	102	120	94	88	1481	31	121	945	111
Growth 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
Initial Bse:	20	56	67	102	120	94	88	1481	31	121	945	111
Added Vol:	5	0	0	0	0	5	10	307	10	0	137	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	56	67	102	120	99	98	1788	41	121	1082	111
User 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
PHF 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
PHF Volume:	25	56	67	102	120	99	98	1788	41	121	1082	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	56	67	102	120	99	98	1788	41	121	1082	111
PCE 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
MLF 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
FinalVolume:	25	56	67	102	120	99	98	1788	41	121	1082	111
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92	0.92	0.99	0.95
Lanes:	1.00	0.46	0.54	1.00	0.55	0.45	1.00	3.00	1.00	1.00	2.71	0.29
Final Sat.:	1750	820	980	1750	986	814	1750	5700	1750	1750	5078	521
Capacity Analysis Module:												
Vol/Sat:	0.01	0.07	0.07	0.06	0.12	0.12	0.06	0.31	0.02	0.07	0.21	0.21
Crit Moves:	****				****			****		****		
Green Time:	7.0	19.2	19.2	14.6	26.8	26.8	17.5	69.0	69.0	15.2	66.7	66.7
Volume/Cap:	0.27	0.46	0.46	0.52	0.59	0.59	0.42	0.59	0.04	0.59	0.42	0.42
Delay/Veh:	60.5	51.9	51.9	56.9	49.2	49.2	52.7	21.2	14.7	59.0	19.7	19.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	60.5	51.9	51.9	56.9	49.2	49.2	52.7	21.2	14.7	59.0	19.7	19.7
LOS by Move:	E	D-	D-	E+	D	D	D-	C+	B	E+	B-	B-
HCM2kAvgQ:	1	5	5	5	9	9	4	15	1	5	10	10

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #1: Ellis Street / Middlefield Road

Signal=Split/Rights=Include
Final Vol: 100 0 142***
Lanes: 1 0 0 0 2

Westbound side — Signal=Protect, Rights=Include
Eastbound side — Signal=Protect, Rights=Include

Final Vol:	Lanes:			Lanes:	Final Vol:
257***	1	Vol Cnt Date: 10/3/2018		0	548
		Cycle Time (sec): 70			
	0	Loss Time (sec): 9		1	
485	2	Critical V/C: 0.573		1	588***
	0	Avg Crit Del (sec/veh): 17.2		0	
0	0	Avg Delay (sec/veh): 14.4		2	0
		LOS: B			

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Ellis Street						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	130	0	100	257	391	0	0	555	544
Growth 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
Initial Bse:	0	0	0	130	0	100	257	391	0	0	555	544
Added Vol:	0	0	0	12	0	0	0	94	0	0	33	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	142	0	100	257	485	0	0	588	548
User 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
PHF 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
PHF Volume:	0	0	0	142	0	100	257	485	0	0	588	548
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	142	0	100	257	485	0	0	588	548
PCE 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
MLF 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
FinalVolume:	0	0	0	142	0	100	257	485	0	0	588	548
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.95
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	2.00	1.01	0.99
Final Sat.:	0	0	0	3150	0	1750	1750	3800	0	3150	1914	1784
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.05	0.00	0.06	0.15	0.13	0.00	0.00	0.31	0.31
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	10.0	16.5	51.0	0.0	0.0	34.5	34.5
Volume/Cap:	0.00	0.00	0.00	0.32	0.00	0.40	0.62	0.18	0.00	0.00	0.62	0.62
Delay/Veh:	0.0	0.0	0.0	27.3	0.0	28.3	26.9	3.0	0.0	0.0	13.7	13.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	27.3	0.0	28.3	26.9	3.0	0.0	0.0	13.7	13.7
LOS by Move:	A	A	A	C	A	C	C	A	A	A	B	B
HCM2kAvgQ:	0	0	0	2	0	3	5	2	0	0	9	9

Note: Queue reported is the number of cars per lane.

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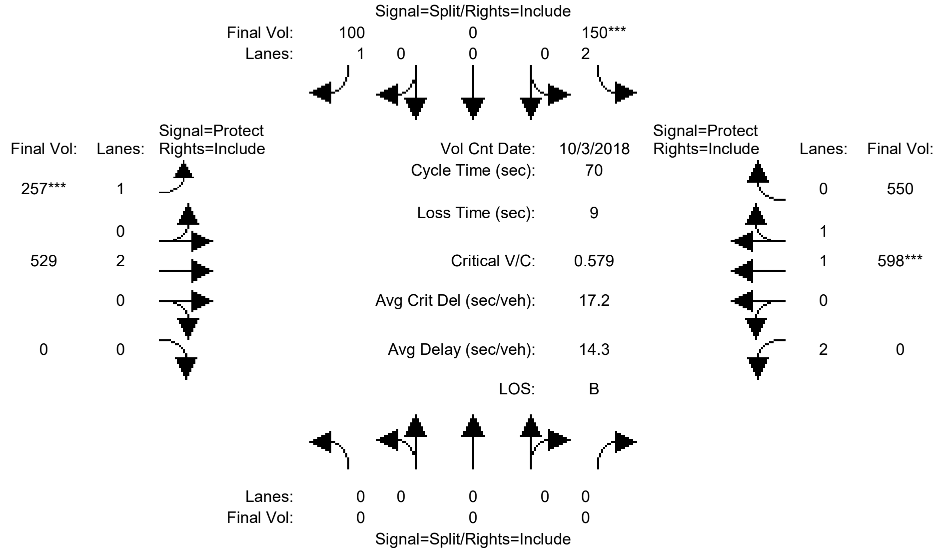
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #1: Ellis Street / Middlefield Road



Street Name:	Ellis Street						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	130	0	100	257	391	0	0	555	544
Growth 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
Initial Bse:	0	0	0	130	0	100	257	391	0	0	555	544
Added Vol:	0	0	0	20	0	0	0	138	0	0	43	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	150	0	100	257	529	0	0	598	550
User 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
PHF 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
PHF Volume:	0	0	0	150	0	100	257	529	0	0	598	550
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	150	0	100	257	529	0	0	598	550
PCE 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
MLF 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
FinalVolume:	0	0	0	150	0	100	257	529	0	0	598	550
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.95
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	2.00	1.02	0.98
Final Sat.:	0	0	0	3150	0	1750	1750	3800	0	3150	1926	1771
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.05	0.00	0.06	0.15	0.14	0.00	0.00	0.31	0.31
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	10.0	16.4	51.0	0.0	0.0	34.6	34.6
Volume/Cap:	0.00	0.00	0.00	0.33	0.00	0.40	0.63	0.19	0.00	0.00	0.63	0.63
Delay/Veh:	0.0	0.0	0.0	27.4	0.0	28.3	27.2	3.0	0.0	0.0	13.7	13.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	27.4	0.0	28.3	27.2	3.0	0.0	0.0	13.7	13.7
LOS by Move:	A	A	A	C	A	C	C	A	A	A	B	B
HCM2kAvgQ:	0	0	0	2	0	3	5	2	0	0	9	9

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #2: SR 237 WB / Middlefield Road

Signal=Split/Rights=Include
Final Vol: 397*** 133 190
Lanes: 0 1 1 0 1

Signal=Protect Rights=Include (West approach)
Final Vol: 0*** / Lanes: 0
Lanes: 0
Final Vol: 477 / Lanes: 3
Lanes: 0
Final Vol: 65 / Lanes: 1

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 90
Loss Time (sec): 9
Critical V/C: 0.542
Avg Crit Del (sec/veh): 18.0
Avg Delay (sec/veh): 20.1
LOS: C+

Signal=Protect Rights=Include (East approach)
Lanes: 0 / Final Vol: 0
Lanes: 0
Lanes: 2 / Final Vol: 992***
Lanes: 0
Lanes: 2 / Final Vol: 147

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	SR 237 WB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	10	10	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	0	0	0	148	133	389	0	371	65	137	964	0
Growth 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
Initial Bse:	0	0	0	148	133	389	0	371	65	137	964	0
Added Vol:	0	0	0	42	0	8	0	106	0	10	28	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	190	133	397	0	477	65	147	992	0
User 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
PHF 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
PHF Volume:	0	0	0	190	133	397	0	477	65	147	992	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	190	133	397	0	477	65	147	992	0
PCE 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
MLF 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
FinalVolume:	0	0	0	190	133	397	0	477	65	147	992	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1750	1900	1750	0	5700	1750	3150	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.11	0.07	0.23	0.00	0.08	0.04	0.05	0.26	0.00
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	37.7	37.7	37.7	0.0	25.5	25.5	17.8	43.3	0.0
Volume/Cap:	0.00	0.00	0.00	0.26	0.17	0.54	0.00	0.30	0.13	0.24	0.54	0.00
Delay/Veh:	0.0	0.0	0.0	17.3	16.4	20.3	0.0	25.3	24.1	30.5	16.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	17.3	16.4	20.3	0.0	25.3	24.1	30.5	16.7	0.0
LOS by Move:	A	A	A	B	B	C+	A	C	C	C	B	A
HCM2kAvgQ:	0	0	0	4	2	9	0	3	1	2	9	0

Note: Queue reported is the number of cars per lane.

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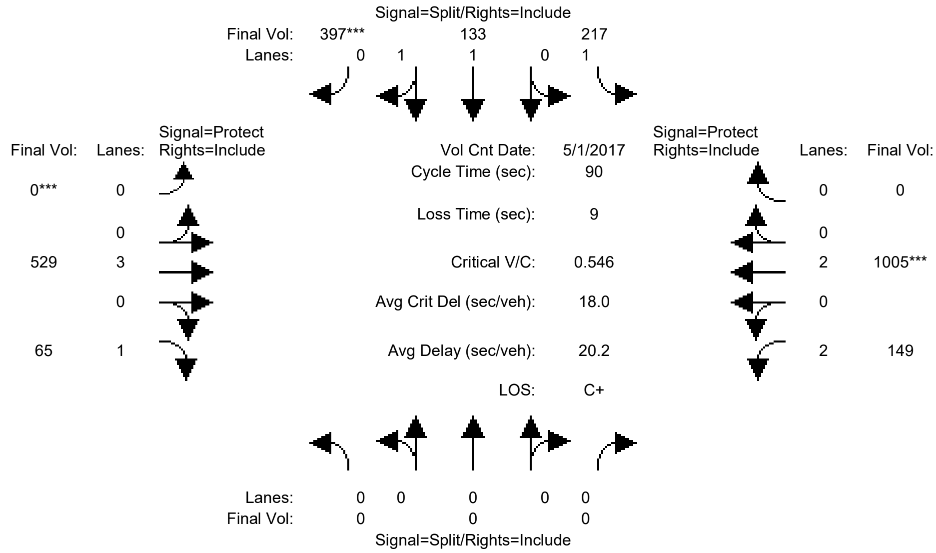
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #2: SR 237 WB / Middlefield Road



Street Name:	SR 237 WB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	10	10	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	0	0	0	148	133	389	0	371	65	137	964	0
Growth 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
Initial Bse:	0	0	0	148	133	389	0	371	65	137	964	0
Added Vol:	0	0	0	69	0	8	0	158	0	12	41	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	217	133	397	0	529	65	149	1005	0
User 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
PHF 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
PHF Volume:	0	0	0	217	133	397	0	529	65	149	1005	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	217	133	397	0	529	65	149	1005	0
PCE 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
MLF 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
FinalVolume:	0	0	0	217	133	397	0	529	65	149	1005	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1750	1900	1750	0	5700	1750	3150	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.07	0.23	0.00	0.09	0.04	0.05	0.26	0.00
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	37.4	37.4	37.4	0.0	25.6	25.6	18.0	43.6	0.0
Volume/Cap:	0.00	0.00	0.00	0.30	0.17	0.55	0.00	0.33	0.13	0.24	0.55	0.00
Delay/Veh:	0.0	0.0	0.0	17.8	16.6	20.5	0.0	25.5	24.0	30.5	16.6	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	17.8	16.6	20.5	0.0	25.5	24.0	30.5	16.6	0.0
LOS by Move:	A	A	A	B	B	C+	A	C	C	C	B	A
HCM2kAvgQ:	0	0	0	4	2	9	0	4	1	2	10	0

Note: Queue reported is the number of cars per lane.

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Intersection #3: SR 237 EB / Middlefield Road

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	5/1/2017			
270***	2		Cycle Time (sec):	95		1	135
			Loss Time (sec):	9			
	0					0	
400	2		Critical V/C:	0.372		4	824***
	0		Avg Crit Del (sec/veh):	25.7		0	
0	0		Avg Delay (sec/veh):	22.9		0	0
			LOS:	C+			

Lanes: 2 0 1 1 0
Final Vol: 318 284*** 243
Signal=Split/Rights=Include

Street Name:	SR 237 EB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	318	284	216	0	0	0	226	297	0	0	786	110
Growth 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
Initial Bse:	318	284	216	0	0	0	226	297	0	0	786	110
Added Vol:	0	0	27	0	0	0	44	103	0	0	38	25
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	318	284	243	0	0	0	270	400	0	0	824	135
User 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
PHF 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
PHF Volume:	318	284	243	0	0	0	270	400	0	0	824	135
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	318	284	243	0	0	0	270	400	0	0	824	135
PCE 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
MLF 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
FinalVolume:	318	284	243	0	0	0	270	400	0	0	824	135
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.95	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	1.05	0.95	0.00	0.00	0.00	2.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	3150	1993	1705	0	0	0	3150	3800	0	0	7600	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.14	0.14	0.00	0.00	0.00	0.09	0.11	0.00	0.00	0.11	0.08
Crit Moves:		****					****				****	
Green Time:	36.4	36.4	36.4	0.0	0.0	0.0	21.9	49.6	0.0	0.0	27.7	27.7
Volume/Cap:	0.26	0.37	0.37	0.00	0.00	0.00	0.37	0.20	0.00	0.00	0.37	0.26
Delay/Veh:	20.2	21.2	21.2	0.0	0.0	0.0	31.1	12.2	0.0	0.0	26.8	26.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.2	21.2	21.2	0.0	0.0	0.0	31.1	12.2	0.0	0.0	26.8	26.1
LOS by Move:	C+	C+	C+	A	A	A	C	B	A	A	C	C
HCM2kAvgQ:	4	6	6	0	0	0	4	3	0	0	5	3

Note: Queue reported is the number of cars per lane.

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Intersection #3: SR 237 EB / Middlefield Road

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Protect Rights=Include (West approach)
Final Vol: 270*** Lanes: 2
Lanes: 0
Final Vol: 480 Lanes: 2
Lanes: 0
Final Vol: 0 Lanes: 0

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 95
Loss Time (sec): 9
Critical V/C: 0.377
Avg Crit Del (sec/veh): 25.7
Avg Delay (sec/veh): 22.6
LOS: C+

Signal=Protect Rights=Include (East approach)
Lanes: 1 Final Vol: 142
Lanes: 0
Lanes: 4 Final Vol: 838***
Lanes: 0
Lanes: 0 Final Vol: 0

Lanes: 2 0 1 1 0
Final Vol: 318 284*** 252
Signal=Split/Rights=Include

Street Name:	SR 237 EB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	318	284	216	0	0	0	226	297	0	0	786	110
Growth 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
Initial Bse:	318	284	216	0	0	0	226	297	0	0	786	110
Added Vol:	0	0	36	0	0	0	44	183	0	0	52	32
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	318	284	252	0	0	0	270	480	0	0	838	142
User 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
PHF 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
PHF Volume:	318	284	252	0	0	0	270	480	0	0	838	142
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	318	284	252	0	0	0	270	480	0	0	838	142
PCE 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
MLF 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
FinalVolume:	318	284	252	0	0	0	270	480	0	0	838	142
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.95	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	1.03	0.97	0.00	0.00	0.00	2.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	3150	1959	1738	0	0	0	3150	3800	0	0	7600	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.14	0.14	0.00	0.00	0.00	0.09	0.13	0.00	0.00	0.11	0.08
Crit Moves:		****					****				****	
Green Time:	36.6	36.6	36.6	0.0	0.0	0.0	21.6	49.4	0.0	0.0	27.8	27.8
Volume/Cap:	0.26	0.38	0.38	0.00	0.00	0.00	0.38	0.24	0.00	0.00	0.38	0.28
Delay/Veh:	20.1	21.2	21.2	0.0	0.0	0.0	31.3	12.6	0.0	0.0	26.8	26.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.1	21.2	21.2	0.0	0.0	0.0	31.3	12.6	0.0	0.0	26.8	26.2
LOS by Move:	C+	C+	C+	A	A	A	C	B	A	A	C	C
HCM2kAvgQ:	4	6	6	0	0	0	4	4	0	0	5	4

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
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Intersection #4: SR-85 SB Off-Ramp / Central Expressway

Signal=Split/Rights=Include
Final Vol: 41 0 327***
Lanes: 1 0 0 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	10/3/2018			
0***	0		Cycle Time (sec):	88		0	0
			Loss Time (sec):	6			
	0					0	
1020	2		Critical V/C:	0.552		2	1246***
	0		Avg Crit Del (sec/veh):	14.0		0	
0	0		Avg Delay (sec/veh):	12.6		0	0
			LOS:	B			

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	SR-85 SB Off-Ramp						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	0	0	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	294	0	41	0	900	0	0	1157	0
Growth 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
Initial Bse:	0	0	0	294	0	41	0	900	0	0	1157	0
Added Vol:	0	0	0	33	0	0	0	120	0	0	89	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	327	0	41	0	1020	0	0	1246	0
User 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
PHF 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
PHF Volume:	0	0	0	327	0	41	0	1020	0	0	1246	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	327	0	41	0	1020	0	0	1246	0
PCE 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
MLF 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
FinalVolume:	0	0	0	327	0	41	0	1020	0	0	1246	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	1750	0	1750	0	3800	0	0	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.19	0.00	0.02	0.00	0.27	0.00	0.00	0.33	0.00
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	29.8	0.0	29.8	0.0	52.2	0.0	0.0	52.2	0.0
Volume/Cap:	0.00	0.00	0.00	0.55	0.00	0.07	0.00	0.45	0.00	0.00	0.55	0.00
Delay/Veh:	0.0	0.0	0.0	24.8	0.0	19.8	0.0	10.1	0.0	0.0	11.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	24.8	0.0	19.8	0.0	10.1	0.0	0.0	11.1	0.0
LOS by Move:	A	A	A	C	A	B-	A	B+	A	A	B+	A
HCM2kAvgQ:	0	0	0	8	0	1	0	8	0	0	10	0

Note: Queue reported is the number of cars per lane.

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Intersection #4: SR-85 SB Off-Ramp / Central Expressway

Signal=Split/Rights=Include
Final Vol: 41 0 332***
Lanes: 1 0 0 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
0***	0		Vol Cnt Date:	10/3/2018		0	0
			Cycle Time (sec):	88			
	0		Loss Time (sec):	6		0	
1075	2		Critical V/C:	0.559		2	1258***
	0		Avg Crit Del (sec/veh):	14.1		0	
0	0		Avg Delay (sec/veh):	12.7		0	0
			LOS:	B			

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	SR-85 SB Off-Ramp						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	0	0	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	294	0	41	0	900	0	0	1157	0
Growth 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
Initial Bse:	0	0	0	294	0	41	0	900	0	0	1157	0
Added Vol:	0	0	0	38	0	0	0	175	0	0	101	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	332	0	41	0	1075	0	0	1258	0
User 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
PHF 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
PHF Volume:	0	0	0	332	0	41	0	1075	0	0	1258	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	332	0	41	0	1075	0	0	1258	0
PCE 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
MLF 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
FinalVolume:	0	0	0	332	0	41	0	1075	0	0	1258	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	1750	0	1750	0	3800	0	0	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.19	0.00	0.02	0.00	0.28	0.00	0.00	0.33	0.00
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	29.9	0.0	29.9	0.0	52.1	0.0	0.0	52.1	0.0
Volume/Cap:	0.00	0.00	0.00	0.56	0.00	0.07	0.00	0.48	0.00	0.00	0.56	0.00
Delay/Veh:	0.0	0.0	0.0	24.9	0.0	19.7	0.0	10.4	0.0	0.0	11.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	24.9	0.0	19.7	0.0	10.4	0.0	0.0	11.2	0.0
LOS by Move:	A	A	A	C	A	B-	A	B+	A	A	B+	A
HCM2kAvgQ:	0	0	0	8	0	1	0	8	0	0	10	0

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative AM

Intersection #5: SR-85 NB On-Ramp - Easy Street / Central Expressway

Signal=Yield/Rights=Include

Southbound – Final Vol: 24, 0, 0; Lanes: 1 0 0 0 0

Eastbound – Signal=Uncontrol, Rights=Include
Final Vol: 0, 1325, 0; Lanes: 0, 0, 3, 0, 0

Westbound – Signal=Uncontrol, Rights=Include
Lanes: 1, 0, 2, 0, 0; Final Vol: 617, 1236, 0

Northbound – Signal=Yield/Rights=Include
Lanes: 0 0 0 0 0; Final Vol: 0, 0, 0

Vol Cnt Date:	10/3/2018
Cycle Time (sec):	100
Loss Time (sec):	0
Critical V/C:	0.055
Avg Crit Del (sec/veh):	0.1
Avg Delay (sec/veh):	0.1
LOS:	B

Street Name: SR-85 NB On-Ramp - Easy Street / Central Expressway

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	0	0	24	0	1171	0	0	1147	606
Growth 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
Initial Bse:	0	0	0	0	0	24	0	1171	0	0	1147	606
Added Vol:	0	0	0	0	0	0	0	154	0	0	89	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	24	0	1325	0	0	1236	617
User 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
PHF 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
PHF Volume:	0	0	0	0	0	24	0	1325	0	0	1236	617
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	24	0	1325	0	0	1236	617
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	618	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	437	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	437	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	13.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		xxxxxx			13.7			xxxxxx			xxxxxx	
ApproachLOS:		*			B			*			*	

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    0  0  3  0  0    0  0  2  0  1
Initial Vol:    0    0     0     0    0    24     0 1325     0     0 1236   617
ApproachDel:    xxxxxx             13.7            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Yield Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Controller not stop sign.
Signal Warrant Rule #2: [approach volume=24]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=3202]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

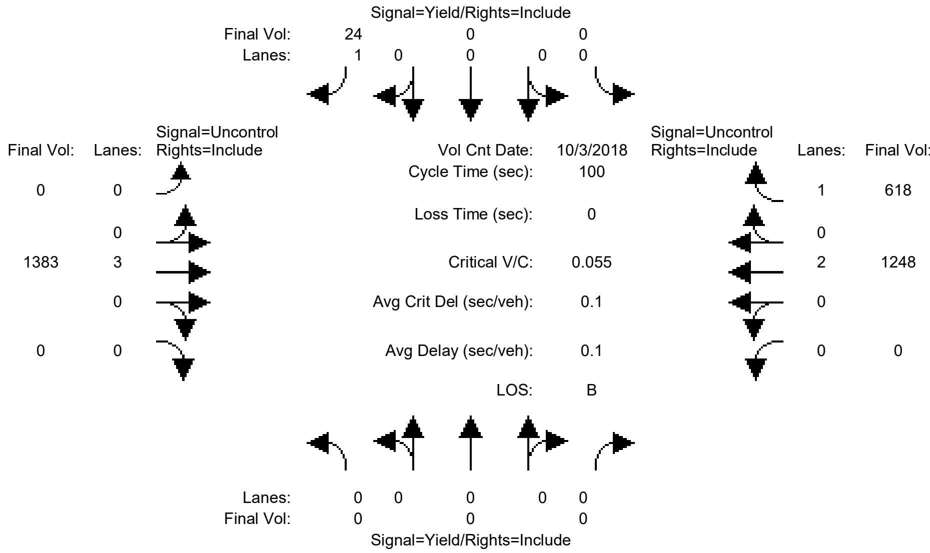
The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    0  0  3  0  0    0  0  2  0  1
Initial Vol:    0    0     0     0    0    24     0 1325     0     0 1236   617
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            3178
Minor Approach Volume:          24
Minor Approach Volume Threshold: -114 [less than minimum of 100]
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #5: SR-85 NB On-Ramp - Easy Street / Central Expressway




```
Street Name:  SR-85 NB On-Ramp - Easy Street         Central Expressway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 3 Oct 2018 <<
Base Vol:        0    0     0     0    0    24     0 1171     0     0 1147   606
Growth 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
Initial Bse:     0    0     0     0    0    24     0 1171     0     0 1147   606
Added Vol:       0    0     0     0    0     0     0  212     0     0  101    12
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:     0    0     0     0    0    24     0 1383     0     0 1248   618
User 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
PHF 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
PHF Volume:      0    0     0     0    0    24     0 1383     0     0 1248   618
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:     0    0     0     0    0    24     0 1383     0     0 1248   618
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx   624  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx   433  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx   433  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  0.06  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx  13.8 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     B     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:    xxxxxx             13.8             xxxxxx            xxxxxx
ApproachLOS:         *                B                  *                 *
Note: Queue reported is the number of cars per lane.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    0  0  3  0  0    0  0  2  0  1
Initial Vol:    0    0    0     0    0    24     0 1383    0      0 1248   618
ApproachDel:    xxxxxx              13.8            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Yield Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Controller not stop sign.
Signal Warrant Rule #2: [approach volume=24]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=3273]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    0  0  3  0  0    0  0  2  0  1
Initial Vol:    0    0    0     0    0    24     0 1383    0      0 1248   618
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            3249
Minor Approach Volume:          24
Minor Approach Volume Threshold: -121 [less than minimum of 100]
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
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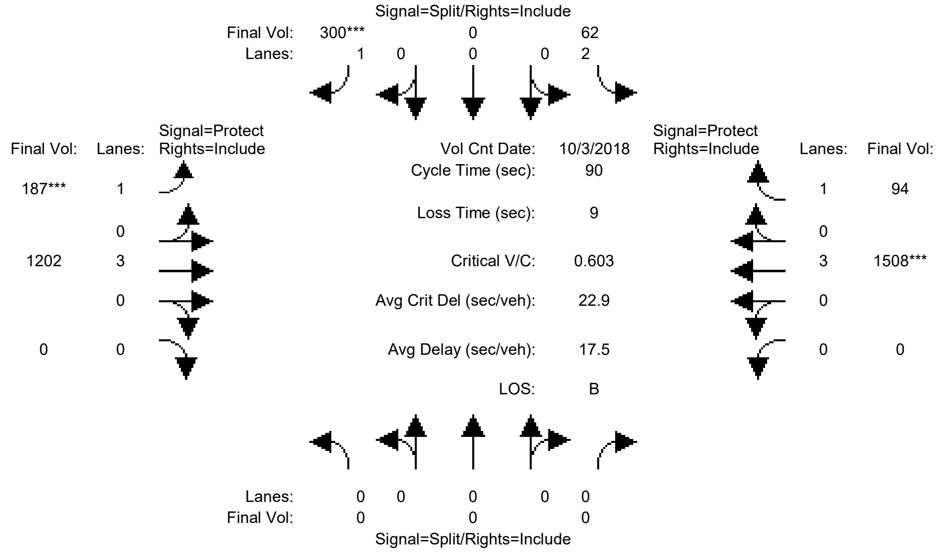
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #6: Whisman Station Drive / Central Expressway (CMP)



Street Name:	Whisman Station Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	44	0	300	187	1048	0	0	1408	88
Growth 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
Initial Bse:	0	0	0	44	0	300	187	1048	0	0	1408	88
Added Vol:	0	0	0	18	0	0	0	154	0	0	100	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	62	0	300	187	1202	0	0	1508	94
User 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
PHF 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
PHF Volume:	0	0	0	62	0	300	187	1202	0	0	1508	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	62	0	300	187	1202	0	0	1508	94
PCE 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
MLF 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
FinalVolume:	0	0	0	62	0	300	187	1202	0	0	1508	94
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3150	0	1750	1750	5700	0	0	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.17	0.11	0.21	0.00	0.00	0.26	0.05
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	25.6	0.0	25.6	15.9	55.4	0.0	0.0	39.5	39.5
Volume/Cap:	0.00	0.00	0.00	0.07	0.00	0.60	0.60	0.34	0.00	0.00	0.60	0.12
Delay/Veh:	0.0	0.0	0.0	23.6	0.0	29.9	37.4	8.5	0.0	0.0	19.7	15.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	23.6	0.0	29.9	37.4	8.5	0.0	0.0	19.7	15.1
LOS by Move:	A	A	A	C	A	C	D+	A	A	A	B-	B
HCM2kAvgQ:	0	0	0	1	0	8	5	5	0	0	10	2

Note: Queue reported is the number of cars per lane.

Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #6: Whisman Station Drive / Central Expressway (CMP)

Signal=Split/Rights=Include
Final Vol: 300*** 0 73
Lanes: 1 0 0 0 2

Signal=Protect Rights=Include (Eastbound)
Final Vol: 187*** / 1260 / 0
Lanes: 1 / 0 / 3 / 0 / 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 90
Loss Time (sec): 9
Critical V/C: 0.606
Avg Crit Del (sec/veh): 22.9
Avg Delay (sec/veh): 17.4
LOS: B

Signal=Protect Rights=Include (Westbound)
Lanes: 1 / 0 / 3 / 0 / 0
Final Vol: 96 / 1521*** / 0

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Whisman Station Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	44	0	300	187	1048	0	0	1408	88
Growth 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
Initial Bse:	0	0	0	44	0	300	187	1048	0	0	1408	88
Added Vol:	0	0	0	29	0	0	0	212	0	0	113	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	73	0	300	187	1260	0	0	1521	96
User 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
PHF 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
PHF Volume:	0	0	0	73	0	300	187	1260	0	0	1521	96
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	73	0	300	187	1260	0	0	1521	96
PCE 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
MLF 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
FinalVolume:	0	0	0	73	0	300	187	1260	0	0	1521	96
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3150	0	1750	1750	5700	0	0	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.17	0.11	0.22	0.00	0.00	0.27	0.05
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	25.5	0.0	25.5	15.9	55.5	0.0	0.0	39.6	39.6
Volume/Cap:	0.00	0.00	0.00	0.08	0.00	0.61	0.61	0.36	0.00	0.00	0.61	0.12
Delay/Veh:	0.0	0.0	0.0	23.7	0.0	30.1	37.6	8.5	0.0	0.0	19.6	15.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	23.7	0.0	30.1	37.6	8.5	0.0	0.0	19.6	15.0
LOS by Move:	A	A	A	C	A	C	D+	A	A	A	B-	B
HCM2kAvgQ:	0	0	0	1	0	9	5	6	0	0	10	2

Note: Queue reported is the number of cars per lane.

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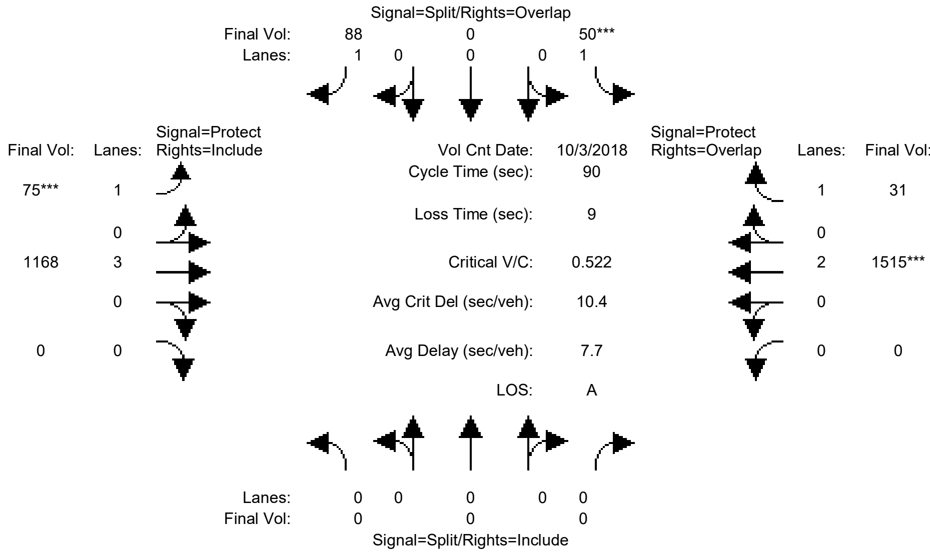
Intersection #7: Ferguson Drive / Central Expressway (CMP)



Street Name:	Ferguson Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	10	10	0	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	32	0	88	75	996	0	0	1409	25
Growth 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
Initial Bse:	0	0	0	32	0	88	75	996	0	0	1409	25
Added Vol:	0	0	0	18	0	0	0	172	0	0	106	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	50	0	88	75	1168	0	0	1515	31
User 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
PHF 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
PHF Volume:	0	0	0	50	0	88	75	1168	0	0	1515	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	50	0	88	75	1168	0	0	1515	31
PCE 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
MLF 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
FinalVolume:	0	0	0	50	0	88	75	1168	0	0	1515	31
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	5700	0	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.05	0.04	0.20	0.00	0.00	0.40	0.02
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	20.0	10.0	71.0	0.0	0.0	61.0	71.0
Volume/Cap:	0.00	0.00	0.00	0.26	0.00	0.23	0.39	0.26	0.00	0.00	0.59	0.02
Delay/Veh:	0.0	0.0	0.0	37.3	0.0	29.0	38.4	2.6	0.0	0.0	8.1	2.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	37.3	0.0	29.0	38.4	2.6	0.0	0.0	8.1	2.0
LOS by Move:	A	A	A	D+	A	C	D+	A	A	A	A	A
HCM2kAvgQ:	0	0	0	2	0	2	2	3	0	0	11	0

Note: Queue reported is the number of cars per lane.

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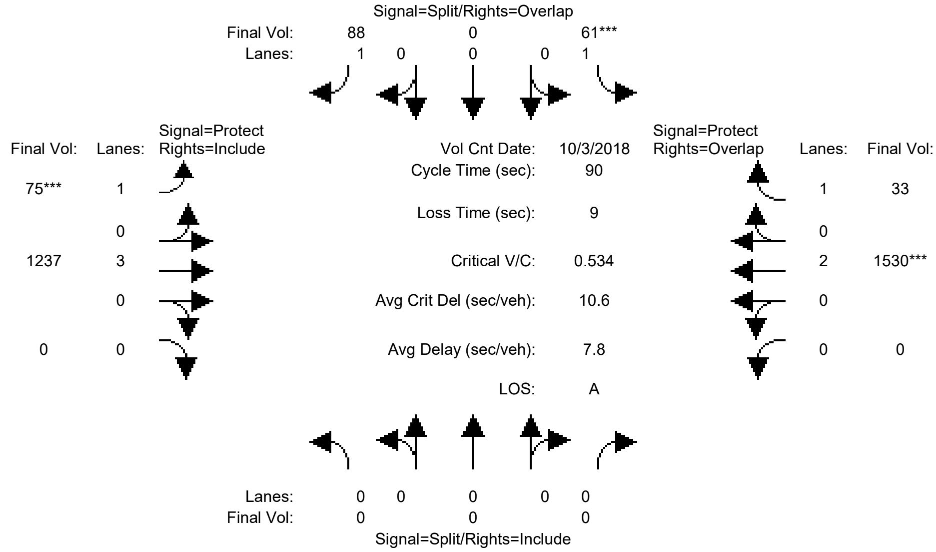
Intersection #7: Ferguson Drive / Central Expressway (CMP)



Street Name:	Ferguson Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	10	10	0	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	32	0	88	75	996	0	0	1409	25
Growth 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
Initial Bse:	0	0	0	32	0	88	75	996	0	0	1409	25
Added Vol:	0	0	0	29	0	0	0	241	0	0	121	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	61	0	88	75	1237	0	0	1530	33
User 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
PHF 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
PHF Volume:	0	0	0	61	0	88	75	1237	0	0	1530	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	61	0	88	75	1237	0	0	1530	33
PCE 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
MLF 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
FinalVolume:	0	0	0	61	0	88	75	1237	0	0	1530	33
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	5700	0	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.05	0.04	0.22	0.00	0.00	0.40	0.02
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	20.0	10.0	71.0	0.0	0.0	61.0	71.0
Volume/Cap:	0.00	0.00	0.00	0.31	0.00	0.23	0.39	0.28	0.00	0.00	0.59	0.02
Delay/Veh:	0.0	0.0	0.0	37.8	0.0	29.0	38.4	2.6	0.0	0.0	8.2	2.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	37.8	0.0	29.0	38.4	2.6	0.0	0.0	8.2	2.1
LOS by Move:	A	A	A	D+	A	C	D+	A	A	A	A	A
HCM2kAvgQ:	0	0	0	2	0	2	2	3	0	0	11	0

Note: Queue reported is the number of cars per lane.

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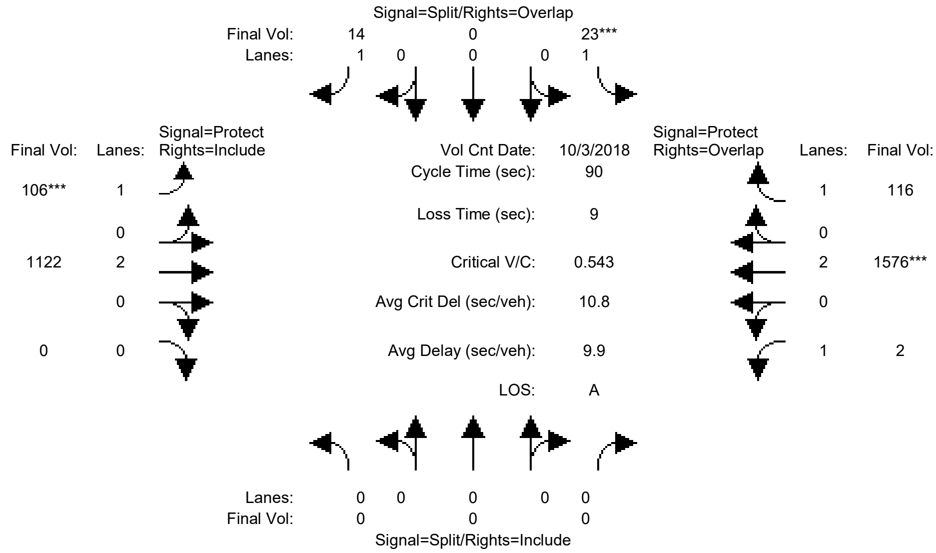
Intersection #8: Bernardo Avenue / Central Expressway



Street Name:	Bernardo Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	10	10	0	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	5	0	14	106	933	0	2	1465	110
Growth 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
Initial Bse:	0	0	0	5	0	14	106	933	0	2	1465	110
Added Vol:	0	0	0	18	0	0	0	189	0	0	111	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	23	0	14	106	1122	0	2	1576	116
User 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
PHF 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
PHF Volume:	0	0	0	23	0	14	106	1122	0	2	1576	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	23	0	14	106	1122	0	2	1576	116
PCE 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
MLF 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
FinalVolume:	0	0	0	23	0	14	106	1122	0	2	1576	116
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	3800	0	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.01	0.00	0.01	0.06	0.30	0.00	0.00	0.41	0.07
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	20.0	10.0	56.2	0.0	14.8	61.0	71.0
Volume/Cap:	0.00	0.00	0.00	0.12	0.00	0.04	0.55	0.47	0.00	0.01	0.61	0.08
Delay/Veh:	0.0	0.0	0.0	36.3	0.0	27.5	41.0	9.2	0.0	31.5	8.4	2.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	36.3	0.0	27.5	41.0	9.2	0.0	31.5	8.4	2.2
LOS by Move:	A	A	A	D+	A	C	D	A	A	C	A	A
HCM2kAvgQ:	0	0	0	1	0	0	3	8	0	0	11	1

Note: Queue reported is the number of cars per lane.

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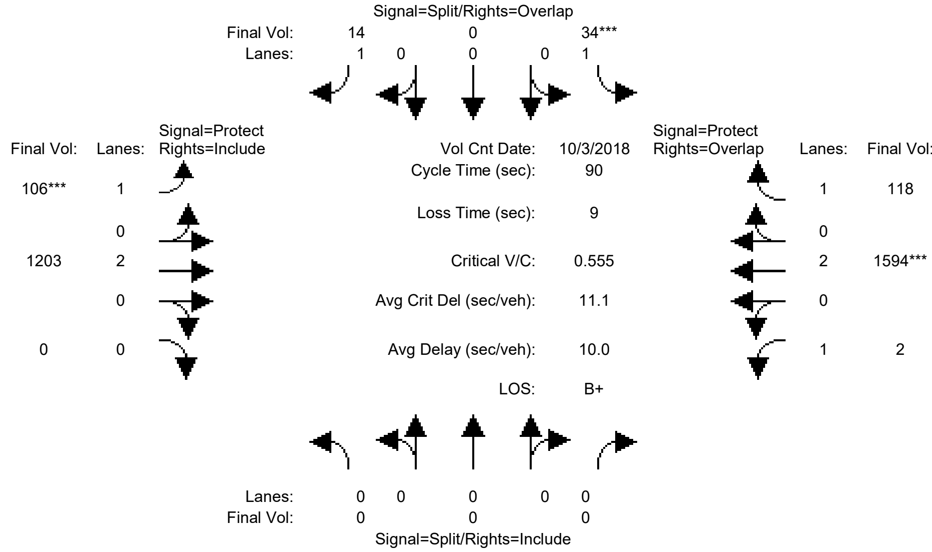
Intersection #8: Bernardo Avenue / Central Expressway



Street Name:	Bernardo Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	10	10	0	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	5	0	14	106	933	0	2	1465	110
Growth 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
Initial Bse:	0	0	0	5	0	14	106	933	0	2	1465	110
Added Vol:	0	0	0	29	0	0	0	270	0	0	129	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	34	0	14	106	1203	0	2	1594	118
User 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
PHF 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
PHF Volume:	0	0	0	34	0	14	106	1203	0	2	1594	118
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	34	0	14	106	1203	0	2	1594	118
PCE 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
MLF 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
FinalVolume:	0	0	0	34	0	14	106	1203	0	2	1594	118
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	3800	0	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.01	0.06	0.32	0.00	0.00	0.42	0.07
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	20.0	10.0	57.0	0.0	14.0	61.0	71.0
Volume/Cap:	0.00	0.00	0.00	0.17	0.00	0.04	0.55	0.50	0.00	0.01	0.62	0.09
Delay/Veh:	0.0	0.0	0.0	36.7	0.0	27.5	41.0	9.0	0.0	32.1	8.5	2.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	36.7	0.0	27.5	41.0	9.0	0.0	32.1	8.5	2.2
LOS by Move:	A	A	A	D+	A	C	D	A	A	C-	A	A
HCM2kAvgQ:	0	0	0	1	0	0	3	9	0	0	12	1

Note: Queue reported is the number of cars per lane.

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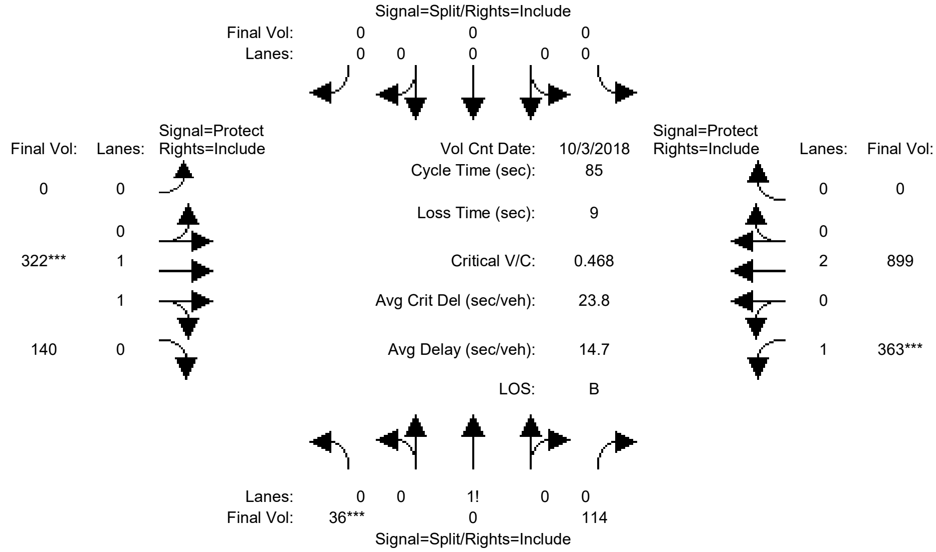
Intersection #9: Moorpark Way / Evelyn Avenue



Street Name:	Moorpark Way						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	36	0	85	0	0	0	0	258	140	355	832	0
Growth 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
Initial Bse:	36	0	85	0	0	0	0	258	140	355	832	0
Added Vol:	0	0	29	0	0	0	0	64	0	8	67	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	0	114	0	0	0	0	322	140	363	899	0
User 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
PHF 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
PHF Volume:	36	0	114	0	0	0	0	322	140	363	899	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	0	114	0	0	0	0	322	140	363	899	0
PCE 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
MLF 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
FinalVolume:	36	0	114	0	0	0	0	322	140	363	899	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.92	1.00	0.92
Lanes:	0.24	0.00	0.76	0.00	0.00	0.00	0.00	1.38	0.62	1.00	2.00	0.00
Final Sat.:	420	0	1330	0	0	0	0	2578	1121	1750	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.12	0.12	0.21	0.24	0.00
Crit Moves:	****							****		****		
Green Time:	15.6	0.0	15.6	0.0	0.0	0.0	0.0	22.7	22.7	37.7	60.4	0.0
Volume/Cap:	0.47	0.00	0.47	0.00	0.00	0.00	0.00	0.47	0.47	0.47	0.33	0.00
Delay/Veh:	32.1	0.0	32.1	0.0	0.0	0.0	0.0	26.4	26.4	17.0	4.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.1	0.0	32.1	0.0	0.0	0.0	0.0	26.4	26.4	17.0	4.7	0.0
LOS by Move:	C-	A	C-	A	A	A	A	C	C	B	A	A
HCM2kAvgQ:	4	0	4	0	0	0	0	6	6	7	4	0

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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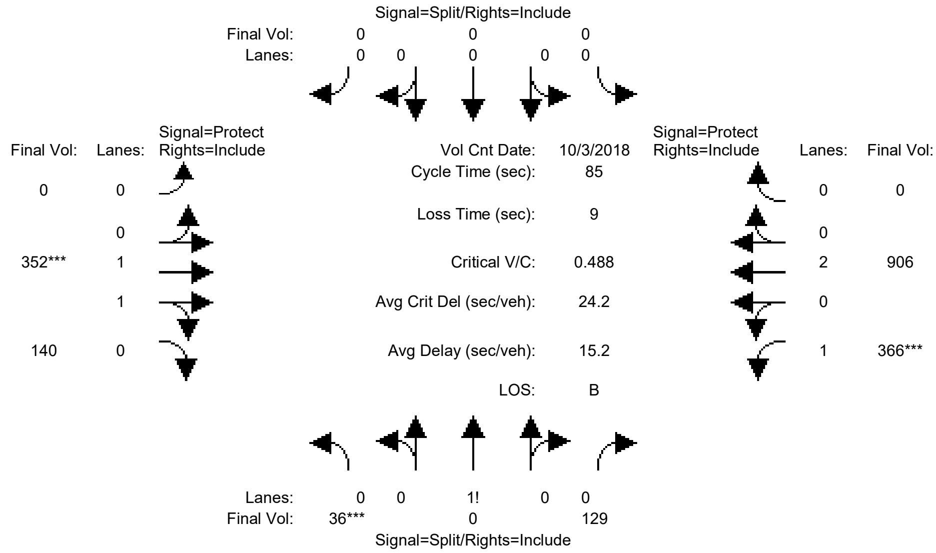
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #9: Moorpark Way / Evelyn Avenue



Street Name:	Moorpark Way						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	36	0	85	0	0	0	0	258	140	355	832	0
Growth 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
Initial Bse:	36	0	85	0	0	0	0	258	140	355	832	0
Added Vol:	0	0	44	0	0	0	0	94	0	11	74	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	0	129	0	0	0	0	352	140	366	906	0
User 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
PHF 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
PHF Volume:	36	0	129	0	0	0	0	352	140	366	906	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	0	129	0	0	0	0	352	140	366	906	0
PCE 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
MLF 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
FinalVolume:	36	0	129	0	0	0	0	352	140	366	906	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	0.22	0.00	0.78	0.00	0.00	0.00	0.00	1.42	0.58	1.00	2.00	0.00
Final Sat.:	382	0	1368	0	0	0	0	2646	1053	1750	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.13	0.13	0.21	0.24	0.00
Crit Moves:	****							****		****		
Green Time:	16.4	0.0	16.4	0.0	0.0	0.0	0.0	23.2	23.2	36.4	59.6	0.0
Volume/Cap:	0.49	0.00	0.49	0.00	0.00	0.00	0.00	0.49	0.49	0.49	0.34	0.00
Delay/Veh:	31.7	0.0	31.7	0.0	0.0	0.0	0.0	26.3	26.3	18.1	5.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.7	0.0	31.7	0.0	0.0	0.0	0.0	26.3	26.3	18.1	5.1	0.0
LOS by Move:	C	A	C	A	A	A	A	C	C	B-	A	A
HCM2kAvgQ:	5	0	5	0	0	0	0	6	6	7	4	0

Note: Queue reported is the number of cars per lane.

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Intersection #10: Bernardo Avenue / Evelyn Avenue

Signal=Split/Rights=Include

Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Final Vol:	Lanes:	Signal=Protect Rights=Overlap			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	10/3/2018			
3***	1		Cycle Time (sec):	85		0	0
	0		Loss Time (sec):	9		0	
336	1		Critical V/C:	0.789		1	690***
	0		Avg Crit Del (sec/veh):	33.7		0	
107	1		Avg Delay (sec/veh):	29.2		1	68
			LOS:	C			

Lanes: 1 0 0 0 1
Final Vol: 596*** 0 193
Signal=Split/Rights=Include

Street Name:	Bernardo Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	7	10	10	10	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	596	0	164	0	0	0	3	243	107	60	614	0
Growth 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
Initial Bse:	596	0	164	0	0	0	3	243	107	60	614	0
Added Vol:	0	0	29	0	0	0	0	93	0	8	76	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	596	0	193	0	0	0	3	336	107	68	690	0
User 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
PHF 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
PHF Volume:	596	0	193	0	0	0	3	336	107	68	690	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	596	0	193	0	0	0	3	336	107	68	690	0
PCE 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
MLF 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
FinalVolume:	596	0	193	0	0	0	3	336	107	68	690	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	1750	1900	1750	1750	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.34	0.00	0.11	0.00	0.00	0.00	0.00	0.18	0.06	0.04	0.36	0.00
Crit Moves:	****						****				****	
Green Time:	33.4	0.0	33.4	0.0	0.0	0.0	7.0	25.6	59.0	17.0	35.6	0.0
Volume/Cap:	0.87	0.00	0.28	0.00	0.00	0.00	0.02	0.59	0.09	0.19	0.87	0.00
Delay/Veh:	35.1	0.0	17.8	0.0	0.0	0.0	35.9	26.8	4.3	28.6	32.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.1	0.0	17.8	0.0	0.0	0.0	35.9	26.8	4.3	28.6	32.5	0.0
LOS by Move:	D+	A	B	A	A	A	D+	C	A	C	C-	A
HCM2kAvgQ:	19	0	4	0	0	0	0	7	1	1	17	0

Note: Queue reported is the number of cars per lane.

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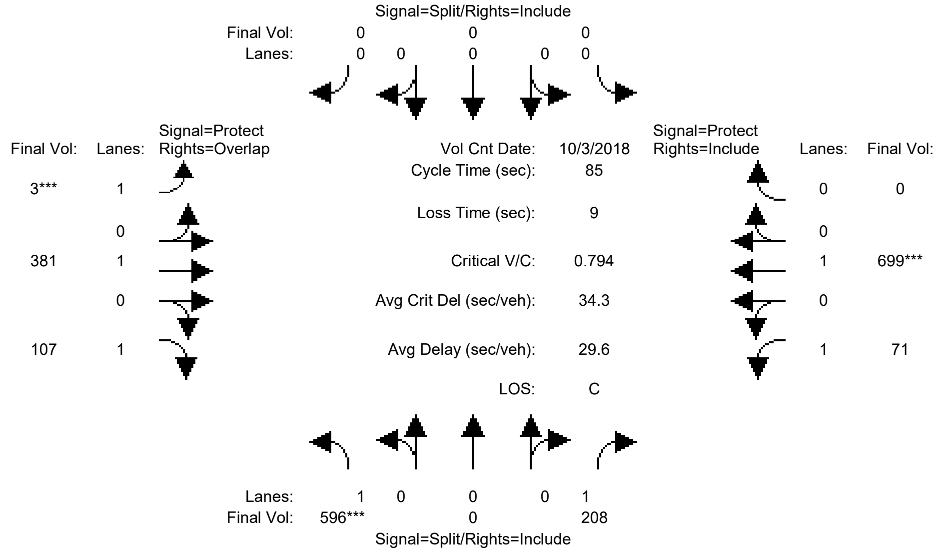
Cumulative AM Plus Project

Intersection #10: Bernardo Avenue / Evelyn Avenue



Street Name:	Bernardo Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	7	10	10	10	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	596	0	164	0	0	0	3	243	107	60	614	0
Growth 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
Initial Bse:	596	0	164	0	0	0	3	243	107	60	614	0
Added Vol:	0	0	44	0	0	0	0	138	0	11	85	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	596	0	208	0	0	0	3	381	107	71	699	0
User 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
PHF 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
PHF Volume:	596	0	208	0	0	0	3	381	107	71	699	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	596	0	208	0	0	0	3	381	107	71	699	0
PCE 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
MLF 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
FinalVolume:	596	0	208	0	0	0	3	381	107	71	699	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	1750	1900	1750	1750	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.34	0.00	0.12	0.00	0.00	0.00	0.00	0.20	0.06	0.04	0.37	0.00
Crit Moves:	****						****				****	
Green Time:	33.2	0.0	33.2	0.0	0.0	0.0	7.0	27.0	60.2	15.8	35.8	0.0
Volume/Cap:	0.87	0.00	0.30	0.00	0.00	0.00	0.02	0.63	0.09	0.22	0.87	0.00
Delay/Veh:	35.9	0.0	18.2	0.0	0.0	0.0	35.9	26.9	3.9	29.7	32.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.9	0.0	18.2	0.0	0.0	0.0	35.9	26.9	3.9	29.7	32.9	0.0
LOS by Move:	D+	A	B-	A	A	A	D+	C	A	C	C-	A
HCM2kAvgQ:	19	0	4	0	0	0	0	8	1	2	17	0

Note: Queue reported is the number of cars per lane.

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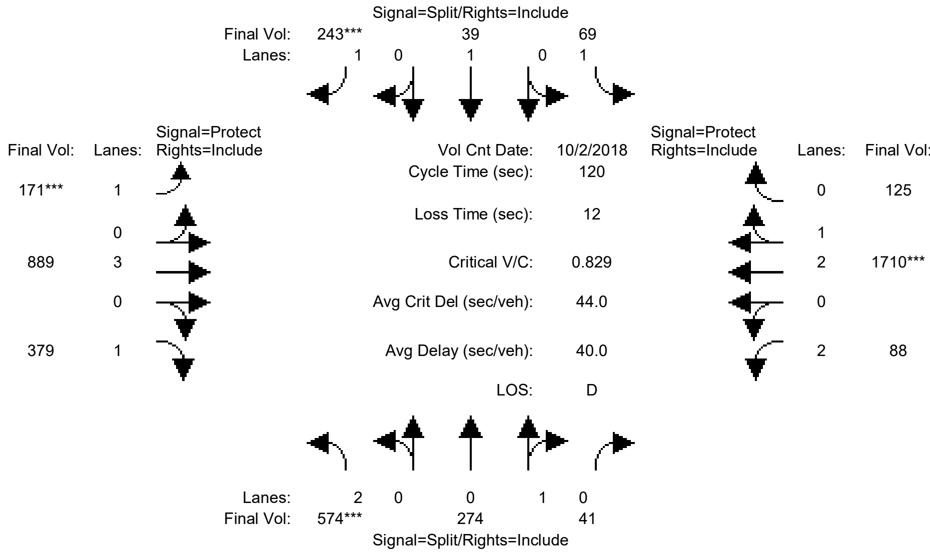
Intersection #11: Sylvan Avenue / El Camino Real



Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	574	274	35	58	39	243	171	680	379	86	1516	122
Growth 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
Initial Bse:	574	274	35	58	39	243	171	680	379	86	1516	122
Added Vol:	0	0	6	11	0	0	0	209	0	2	194	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	574	274	41	69	39	243	171	889	379	88	1710	125
User 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
PHF 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
PHF Volume:	574	274	41	69	39	243	171	889	379	88	1710	125
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	574	274	41	69	39	243	171	889	379	88	1710	125
PCE 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
MLF 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
FinalVolume:	574	274	41	69	39	243	171	889	379	88	1710	125
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.95	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.99	0.95
Lanes:	2.00	0.87	0.13	1.00	1.00	1.00	1.00	3.00	1.00	2.00	2.79	0.21
Final Sat.:	3150	1566	234	1750	1900	1750	1750	5700	1750	3150	5218	381
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.18	0.04	0.02	0.14	0.10	0.16	0.22	0.03	0.33	0.33
Crit Moves:	****					****	****				****	
Green Time:	26.4	26.4	26.4	20.1	20.1	20.1	14.1	48.5	48.5	13.1	47.4	47.4
Volume/Cap:	0.83	0.80	0.80	0.24	0.12	0.83	0.83	0.39	0.54	0.26	0.83	0.83
Delay/Veh:	53.0	55.1	55.1	43.7	42.6	66.0	75.4	25.4	28.0	49.4	35.4	35.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.0	55.1	55.1	43.7	42.6	66.0	75.4	25.4	28.0	49.4	35.4	35.4
LOS by Move:	D-	E+	E+	D	D	E	E-	C	C	D	D+	D+
HCM2kAvgQ:	15	14	14	2	1	12	9	8	12	2	20	20

Note: Queue reported is the number of cars per lane.

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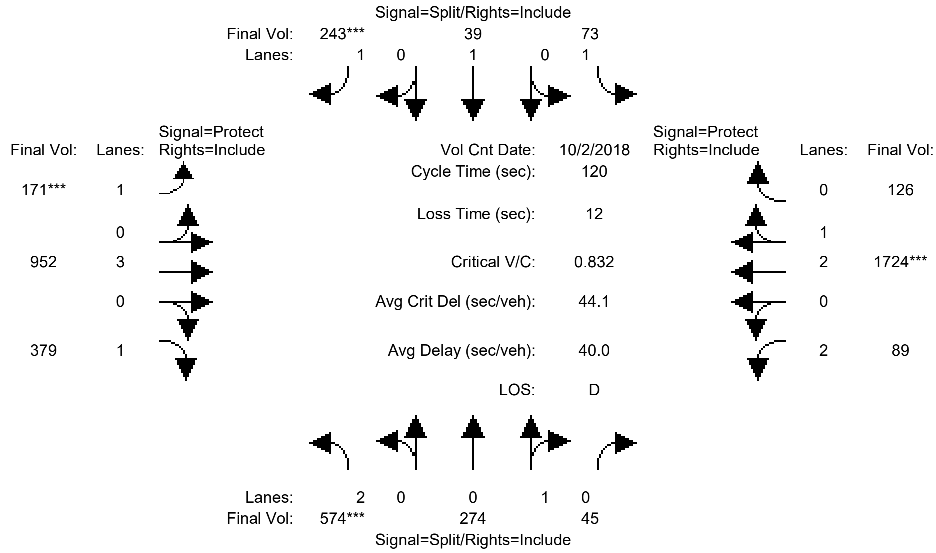
Intersection #11: Sylvan Avenue / El Camino Real



Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	574	274	35	58	39	243	171	680	379	86	1516	122
Growth 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
Initial Bse:	574	274	35	58	39	243	171	680	379	86	1516	122
Added Vol:	0	0	10	15	0	0	0	272	0	3	208	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	574	274	45	73	39	243	171	952	379	89	1724	126
User 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
PHF 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
PHF Volume:	574	274	45	73	39	243	171	952	379	89	1724	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	574	274	45	73	39	243	171	952	379	89	1724	126
PCE 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
MLF 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
FinalVolume:	574	274	45	73	39	243	171	952	379	89	1724	126
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.95	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.99	0.95
Lanes:	2.00	0.86	0.14	1.00	1.00	1.00	1.00	3.00	1.00	2.00	2.79	0.21
Final Sat.:	3150	1546	254	1750	1900	1750	1750	5700	1750	3150	5218	381
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.18	0.04	0.02	0.14	0.10	0.17	0.22	0.03	0.33	0.33
Crit Moves:	****					****	****				****	
Green Time:	26.3	26.3	26.3	20.0	20.0	20.0	14.1	48.6	48.6	13.1	47.6	47.6
Volume/Cap:	0.83	0.81	0.81	0.25	0.12	0.83	0.83	0.41	0.53	0.26	0.83	0.83
Delay/Veh:	53.3	56.4	56.4	43.9	42.7	66.5	75.9	25.6	27.9	49.4	35.4	35.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.3	56.4	56.4	43.9	42.7	66.5	75.9	25.6	27.9	49.4	35.4	35.4
LOS by Move:	D-	E+	E+	D	D	E	E-	C	C	D	D+	D+
HCM2kAvgQ:	15	14	14	3	1	12	9	8	12	2	20	20

Note: Queue reported is the number of cars per lane.

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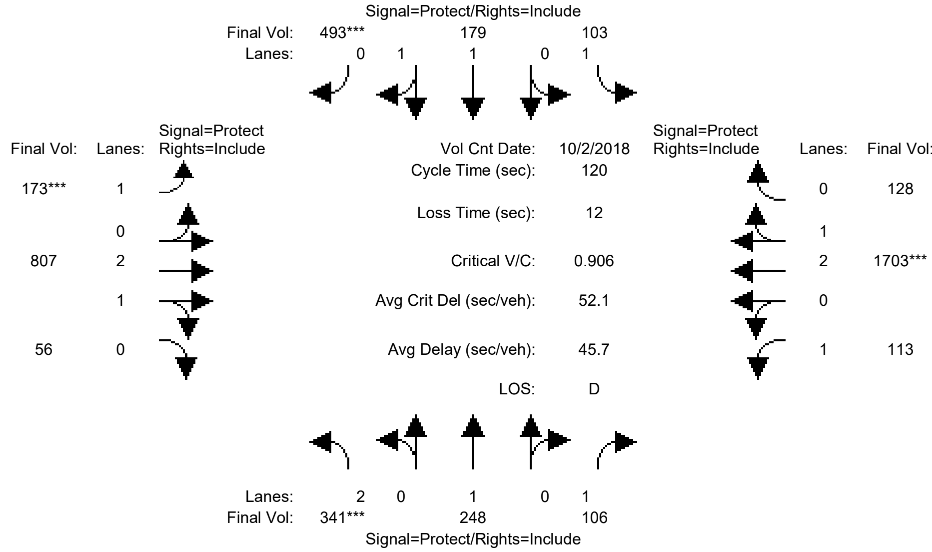
Cumulative AM

Intersection #12: Bernardo Avenue / El Camino Real



Street Name:	Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	341	248	100	93	179	493	173	581	56	111	1504	125
Growth 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
Initial Bse:	341	248	100	93	179	493	173	581	56	111	1504	125
Added Vol:	0	0	6	10	0	0	0	226	0	2	199	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	341	248	106	103	179	493	173	807	56	113	1703	128
User 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
PHF 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
PHF Volume:	341	248	106	103	179	493	173	807	56	113	1703	128
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	341	248	106	103	179	493	173	807	56	113	1703	128
PCE 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
MLF 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
FinalVolume:	341	248	106	103	179	493	173	807	56	113	1703	128
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.80	0.20	1.00	2.78	0.22
Final Sat.:	3150	1900	1750	1750	1900	1750	1750	5236	363	1750	5208	391
Capacity Analysis Module:												
Vol/Sat:	0.11	0.13	0.06	0.06	0.09	0.28	0.10	0.15	0.15	0.06	0.33	0.33
Crit Moves:	****					****	****				****	
Green Time:	14.3	35.6	35.6	16.0	37.3	37.3	13.1	39.7	39.7	16.6	43.3	43.3
Volume/Cap:	0.91	0.44	0.20	0.44	0.30	0.91	0.91	0.47	0.47	0.47	0.91	0.91
Delay/Veh:	77.0	34.7	31.8	49.2	31.5	54.5	92.8	31.9	31.9	49.0	42.8	42.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	77.0	34.7	31.8	49.2	31.5	54.5	92.8	31.9	31.9	49.0	42.8	42.8
LOS by Move:	E-	C-	C	D	C	D-	F	C	C	D	D	D
HCM2kAvgQ:	11	7	3	4	5	23	8	8	8	4	22	22

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #12: Bernardo Avenue / El Camino Real

Signal=Protect/Rights=Include
Final Vol: 493*** 179 108
Lanes: 0 1 1 0 1

Signal=Protect
Rights=Include
Final Vol: Lanes:
173*** 1
0
878 2
1
56 0

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 120
Loss Time (sec): 12
Critical V/C: 0.910
Avg Crit Del (sec/veh): 52.4
Avg Delay (sec/veh): 45.7
LOS: D

Signal=Protect
Rights=Include
Lanes: Final Vol:
0 129
1
2 1719***
0
1 114

Lanes: 2 0 1 0 1
Final Vol: 341*** 248 110
Signal=Protect/Rights=Include

Street Name:	Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	341	248	100	93	179	493	173	581	56	111	1504	125
Growth 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
Initial Bse:	341	248	100	93	179	493	173	581	56	111	1504	125
Added Vol:	0	0	10	15	0	0	0	297	0	3	215	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	341	248	110	108	179	493	173	878	56	114	1719	129
User 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
PHF 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
PHF Volume:	341	248	110	108	179	493	173	878	56	114	1719	129
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	341	248	110	108	179	493	173	878	56	114	1719	129
PCE 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
MLF 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
FinalVolume:	341	248	110	108	179	493	173	878	56	114	1719	129
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.81	0.19	1.00	2.78	0.22
Final Sat.:	3150	1900	1750	1750	1900	1750	1750	5264	336	1750	5209	391
Capacity Analysis Module:												
Vol/Sat:	0.11	0.13	0.06	0.06	0.09	0.28	0.10	0.17	0.17	0.07	0.33	0.33
Crit Moves:	****					****	****				****	
Green Time:	14.3	34.9	34.9	16.5	37.2	37.2	13.0	40.7	40.7	15.9	43.5	43.5
Volume/Cap:	0.91	0.45	0.22	0.45	0.30	0.91	0.91	0.49	0.49	0.49	0.91	0.91
Delay/Veh:	77.7	35.3	32.4	48.9	31.6	55.1	93.7	31.7	31.7	50.0	43.0	43.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	77.7	35.3	32.4	48.9	31.6	55.1	93.7	31.7	31.7	50.0	43.0	43.0
LOS by Move:	E-	D+	C-	D	C	E+	F	C	C	D	D	D
HCM2kAvgQ:	11	8	3	4	5	23	8	9	9	4	22	22

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #13: Mary Avenue / Central Expressway (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 132 141 76***
Lanes: 1 0 3 0 2

Final Vol:	Lanes:	Signal=Protect Rights=Overlap			Signal=Protect Rights=Overlap	Lanes:	Final Vol:
189***	2		Vol Cnt Date:	5/1/2017		1	372
			Cycle Time (sec):	180			
	0		Loss Time (sec):	12		0	
968	3		Critical V/C:	0.811		3	2053***
	0		Avg Crit Del (sec/veh):	47.5		0	
170	1		Avg Delay (sec/veh):	47.4		2	305
			LOS:	D			

Lanes: 2 0 3 0 1
Final Vol: 584 671 717***
Signal=Protect/Rights=Overlap

Street Name:	Mary Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	569	504	535	55	117	120	106	748	153	175	1918	231
Growth 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
Initial Bse:	569	504	535	55	117	120	106	748	153	175	1918	231
Added Vol:	15	167	182	21	24	12	83	220	17	130	135	141
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	584	671	717	76	141	132	189	968	170	305	2053	372
User 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
PHF 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
PHF Volume:	584	671	717	76	141	132	189	968	170	305	2053	372
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	584	671	717	76	141	132	189	968	170	305	2053	372
PCE 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
MLF 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
FinalVolume:	584	671	717	76	141	132	189	968	170	305	2053	372
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.19	0.12	0.41	0.02	0.02	0.08	0.06	0.17	0.10	0.10	0.36	0.21
Crit Moves:			****	****			****				****	
Green Time:	58.3	68.7	102.2	7.0	17.5	30.6	13.2	58.8	117.0	33.5	79.1	86.1
Volume/Cap:	0.57	0.31	0.72	0.62	0.26	0.44	0.82	0.52	0.15	0.52	0.82	0.44
Delay/Veh:	51.3	39.1	31.1	94.6	75.5	68.1	102.4	49.4	12.3	66.8	46.5	31.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.3	39.1	31.1	94.6	75.5	68.1	102.4	49.4	12.3	66.8	46.5	31.5
LOS by Move:	D-	D	C	F	E-	E	F	D	B	E	D	C
HCM2kAvgQ:	15	8	30	3	3	7	7	14	4	9	34	14

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #13: Mary Avenue / Central Expressway (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 132 141 76***
Lanes: 1 0 3 0 2

Signal=Protect Rights=Overlap (West side)
Final Vol: / Lanes:
189*** 2
0
1109 3
0
208 1

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 180
Loss Time (sec): 12
Critical V/C: 0.817
Avg Crit Del (sec/veh): 48.2
Avg Delay (sec/veh): 47.6
LOS: D

Signal=Protect Rights=Overlap (East side)
Lanes: / Final Vol:
1 372
0
3 2085***
0
2 305

Lanes: 2 0 3 0 1
Final Vol: 593 671 717***
Signal=Protect/Rights=Overlap

Street Name:	Mary Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module: >> Count Date: 1 May 2017 <<

Base Vol:	569	504	535	55	117	120	106	748	153	175	1918	231
Growth 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
Initial Bse:	569	504	535	55	117	120	106	748	153	175	1918	231
Added Vol:	24	167	182	21	24	12	83	361	55	130	167	141
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	593	671	717	76	141	132	189	1109	208	305	2085	372
User 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
PHF 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
PHF Volume:	593	671	717	76	141	132	189	1109	208	305	2085	372
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	593	671	717	76	141	132	189	1109	208	305	2085	372
PCE 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
MLF 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
FinalVolume:	593	671	717	76	141	132	189	1109	208	305	2085	372
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.19	0.12	0.41	0.02	0.02	0.08	0.06	0.19	0.12	0.10	0.37	0.21
Crit Moves:			****	****			****				****	
Green Time:	58.1	68.2	99.0	7.0	17.1	30.2	13.1	62.0	120.0	30.8	79.7	86.7
Volume/Cap:	0.58	0.31	0.74	0.62	0.26	0.45	0.83	0.57	0.18	0.57	0.83	0.44
Delay/Veh:	51.8	39.4	34.0	94.6	75.8	68.5	103.5	48.4	11.4	69.8	46.4	31.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.8	39.4	34.0	94.6	75.8	68.5	103.5	48.4	11.4	69.8	46.4	31.1
LOS by Move:	D-	D	C-	F	E-	E	F	D	B+	E	D	C
HCM2kAvgQ:	16	8	31	3	3	7	7	16	4	10	34	14

Note: Queue reported is the number of cars per lane.

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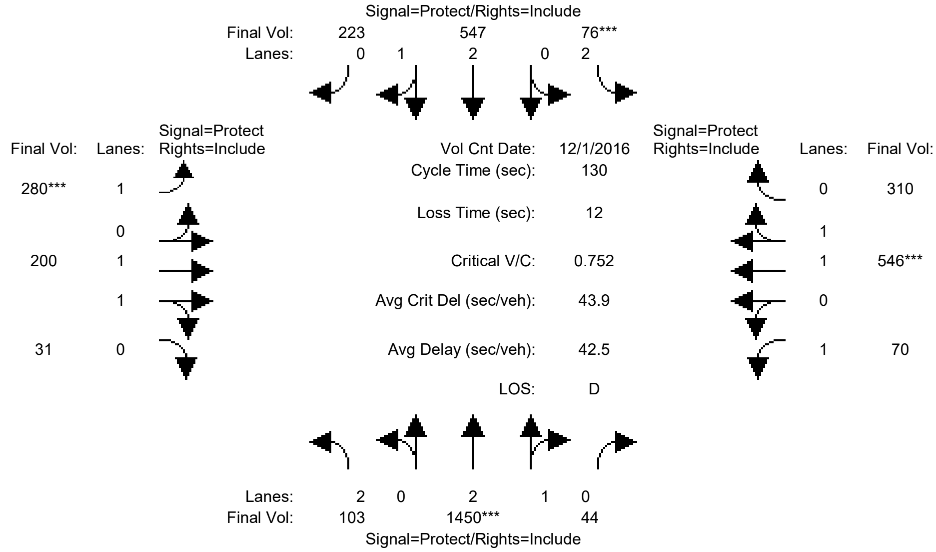
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #14: Mary Avenue / Evelyn Avenue



Street Name:	Mary Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	102	1193	32	65	403	208	181	178	30	65	478	302
Growth 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
Initial Bse:	102	1193	32	65	403	208	181	178	30	65	478	302
Added Vol:	1	257	12	11	144	15	99	22	1	5	68	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	103	1450	44	76	547	223	280	200	31	70	546	310
User 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
PHF 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
PHF Volume:	103	1450	44	76	547	223	280	200	31	70	546	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	103	1450	44	76	547	223	280	200	31	70	546	310
PCE 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
MLF 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
FinalVolume:	103	1450	44	76	547	223	280	200	31	70	546	310
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	1.00	0.95	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	2.00	2.91	0.09	2.00	2.10	0.90	1.00	1.72	0.28	1.00	1.26	0.74
Final Sat.:	3150	5435	165	3150	3976	1621	1750	3203	496	1750	2359	1339
Capacity Analysis Module:												
Vol/Sat:	0.03	0.27	0.27	0.02	0.14	0.14	0.16	0.06	0.06	0.04	0.23	0.23
Crit Moves:		****		****			****				****	
Green Time:	14.6	45.0	45.0	7.0	37.4	37.4	27.0	38.8	38.8	27.2	39.0	39.0
Volume/Cap:	0.29	0.77	0.77	0.45	0.48	0.48	0.77	0.21	0.21	0.19	0.77	0.77
Delay/Veh:	53.4	39.9	39.9	61.5	38.5	38.5	58.3	34.2	34.2	42.6	44.8	44.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.4	39.9	39.9	61.5	38.5	38.5	58.3	34.2	34.2	42.6	44.8	44.8
LOS by Move:	D-	D	D	E	D+	D+	E+	C-	C-	D	D	D
HCM2kAvgQ:	2	18	18	2	8	8	12	3	3	2	17	17

Note: Queue reported is the number of cars per lane.

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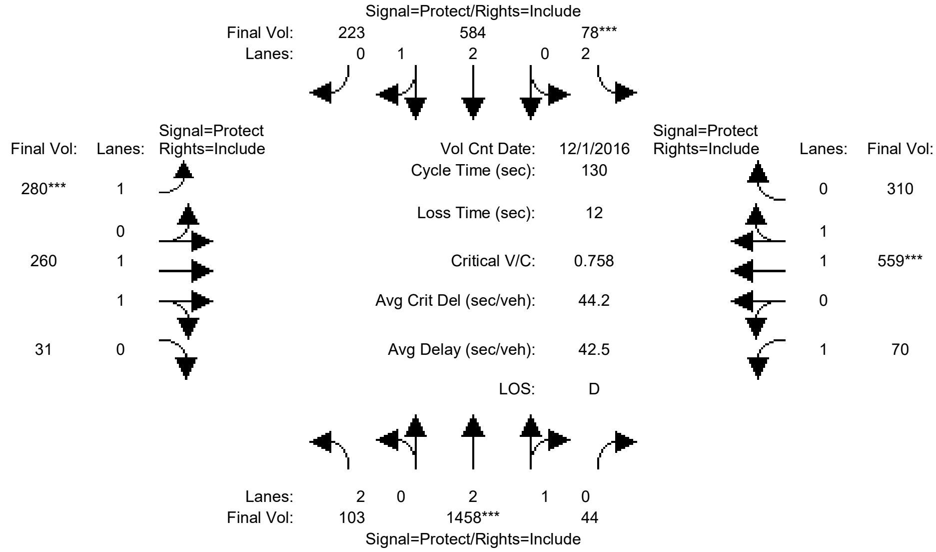
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #14: Mary Avenue / Evelyn Avenue



Street Name:	Mary Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	102	1193	32	65	403	208	181	178	30	65	478	302
Growth 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
Initial Bse:	102	1193	32	65	403	208	181	178	30	65	478	302
Added Vol:	1	265	12	13	181	15	99	82	1	5	81	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	103	1458	44	78	584	223	280	260	31	70	559	310
User 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
PHF 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
PHF Volume:	103	1458	44	78	584	223	280	260	31	70	559	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	103	1458	44	78	584	223	280	260	31	70	559	310
PCE 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
MLF 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
FinalVolume:	103	1458	44	78	584	223	280	260	31	70	559	310
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	1.00	0.95	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	2.00	2.91	0.09	2.00	2.14	0.86	1.00	1.78	0.22	1.00	1.27	0.73
Final Sat.:	3150	5436	164	3150	4051	1547	1750	3306	394	1750	2379	1319
Capacity Analysis Module:												
Vol/Sat:	0.03	0.27	0.27	0.02	0.14	0.14	0.16	0.08	0.08	0.04	0.23	0.23
Crit Moves:		****		****			****				****	
Green Time:	14.1	44.9	44.9	7.0	37.8	37.8	26.8	39.2	39.2	26.9	39.3	39.3
Volume/Cap:	0.30	0.78	0.78	0.46	0.50	0.50	0.78	0.26	0.26	0.19	0.78	0.78
Delay/Veh:	53.9	40.1	40.1	61.6	38.5	38.5	59.0	34.5	34.5	42.9	44.8	44.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.9	40.1	40.1	61.6	38.5	38.5	59.0	34.5	34.5	42.9	44.8	44.8
LOS by Move:	D-	D	D	E	D+	D+	E+	C-	C-	D	D	D
HCM2kAvgQ:	2	18	18	2	9	9	12	4	4	3	18	18

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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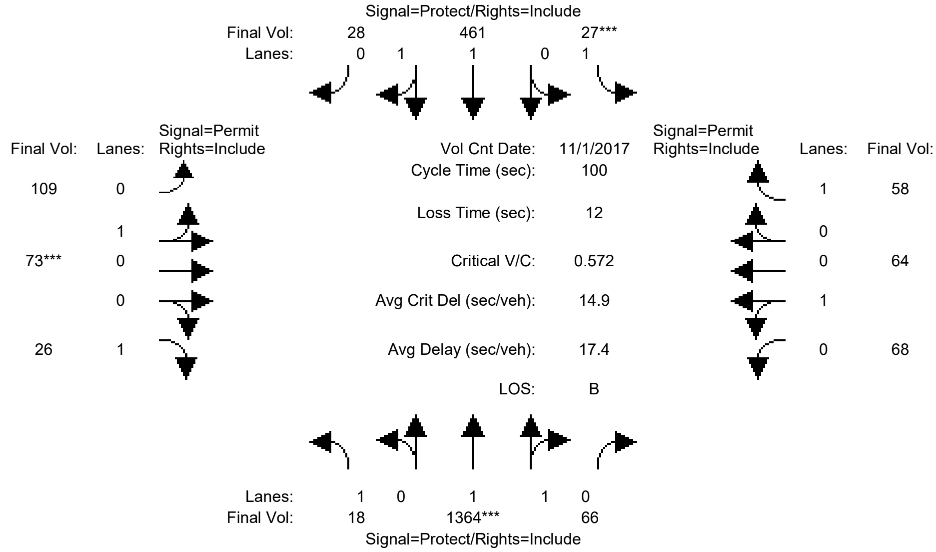
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #15: Mary Avenue / Washington Avenue



Street Name:	Mary Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Nov 2017 <<												
Base Vol:	17	1123	62	22	321	23	87	48	24	68	55	51
Growth 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
Initial Bse:	17	1123	62	22	321	23	87	48	24	68	55	51
Added Vol:	1	241	4	5	140	5	22	25	2	0	9	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18	1364	66	27	461	28	109	73	26	68	64	58
User 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
PHF 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
PHF Volume:	18	1364	66	27	461	28	109	73	26	68	64	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	1364	66	27	461	28	109	73	26	68	64	58
PCE 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
MLF 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
FinalVolume:	18	1364	66	27	461	28	109	73	26	68	64	58
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	1.91	0.09	1.00	1.88	0.12	0.60	0.40	1.00	0.52	0.48	1.00
Final Sat.:	1750	3529	171	1750	3488	212	1078	722	1750	927	873	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.39	0.39	0.02	0.13	0.13	0.10	0.10	0.01	0.07	0.07	0.03
Crit Moves:		****		****				****				
Green Time:	24.7	64.2	64.2	7.0	46.5	46.5	16.8	16.8	16.8	16.8	16.8	16.8
Volume/Cap:	0.04	0.60	0.60	0.22	0.28	0.28	0.60	0.60	0.09	0.44	0.44	0.20
Delay/Veh:	28.7	10.9	10.9	44.8	16.6	16.6	41.9	41.9	35.3	38.4	38.4	36.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.7	10.9	10.9	44.8	16.6	16.6	41.9	41.9	35.3	38.4	38.4	36.1
LOS by Move:	C	B+	B+	D	B	B	D	D	D+	D+	D+	D+
HCM2kAvgQ:	0	13	13	1	5	5	6	6	1	4	4	2

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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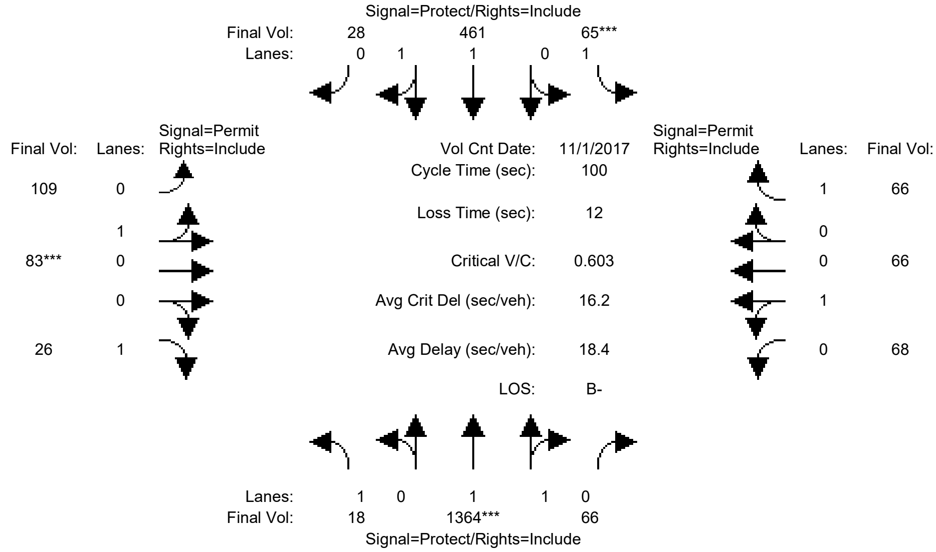
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #15: Mary Avenue / Washington Avenue



Street Name:	Mary Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Nov 2017 <<												
Base Vol:	17	1123	62	22	321	23	87	48	24	68	55	51
Growth 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
Initial Bse:	17	1123	62	22	321	23	87	48	24	68	55	51
Added Vol:	1	241	4	43	140	5	22	35	2	0	11	15
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18	1364	66	65	461	28	109	83	26	68	66	66
User 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
PHF 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
PHF Volume:	18	1364	66	65	461	28	109	83	26	68	66	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	1364	66	65	461	28	109	83	26	68	66	66
PCE 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
MLF 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
FinalVolume:	18	1364	66	65	461	28	109	83	26	68	66	66
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	1.91	0.09	1.00	1.88	0.12	0.57	0.43	1.00	0.51	0.49	1.00
Final Sat.:	1750	3529	171	1750	3488	212	1022	778	1750	913	887	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.39	0.39	0.04	0.13	0.13	0.11	0.11	0.01	0.07	0.07	0.04
Crit Moves:		****		****				****				
Green Time:	24.4	63.5	63.5	7.0	46.1	46.1	17.5	17.5	17.5	17.5	17.5	17.5
Volume/Cap:	0.04	0.61	0.61	0.53	0.29	0.29	0.61	0.61	0.08	0.42	0.42	0.22
Delay/Veh:	28.9	11.3	11.3	49.3	16.8	16.8	41.5	41.5	34.6	37.7	37.7	35.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.9	11.3	11.3	49.3	16.8	16.8	41.5	41.5	34.6	37.7	37.7	35.7
LOS by Move:	C	B+	B+	D	B	B	D	D	C-	D+	D+	D+
HCM2kAvgQ:	0	13	13	2	5	5	7	7	1	4	4	2

Note: Queue reported is the number of cars per lane.

Cityline TIA
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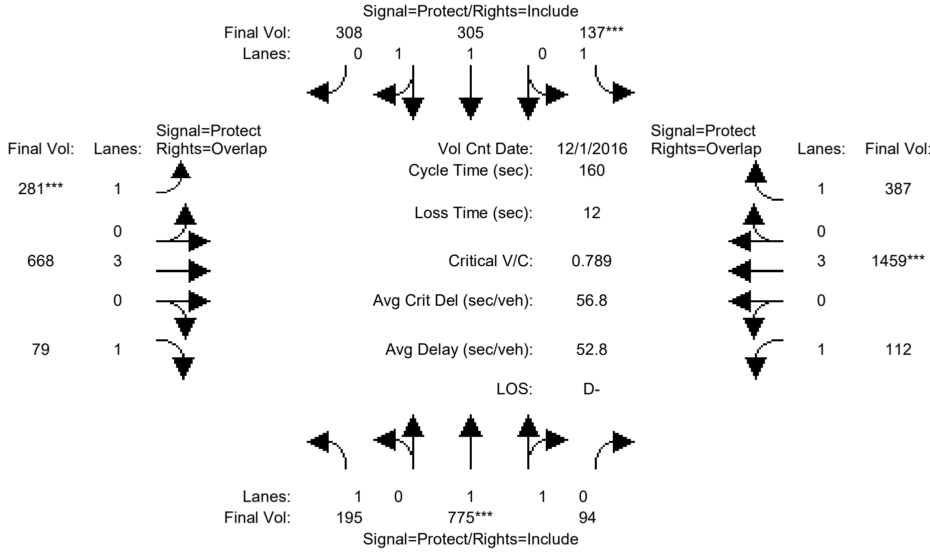
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #16: Mary Avenue / El Camino Real (CMP)



Street Name:	Mary Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	195	775	88	118	305	190	168	538	79	110	1373	274
Growth 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
Initial Bse:	195	775	88	118	305	190	168	538	79	110	1373	274
Added Vol:	0	0	6	19	0	118	113	130	0	2	86	113
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	195	775	94	137	305	308	281	668	79	112	1459	387
User 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
PHF 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
PHF Volume:	195	775	94	137	305	308	281	668	79	112	1459	387
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	195	775	94	137	305	308	281	668	79	112	1459	387
PCE 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
MLF 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
FinalVolume:	195	775	94	137	305	308	281	668	79	112	1459	387
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.78	0.22	1.00	1.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	3299	400	1750	1900	1750	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.11	0.23	0.23	0.08	0.16	0.18	0.16	0.12	0.05	0.06	0.26	0.22
Crit Moves:		****		****			****				****	
Green Time:	24.6	47.6	47.6	15.9	38.9	38.9	32.6	54.6	79.3	29.8	51.9	67.8
Volume/Cap:	0.72	0.79	0.79	0.79	0.66	0.72	0.79	0.34	0.09	0.34	0.79	0.52
Delay/Veh:	73.8	55.5	55.5	91.5	56.4	58.7	71.7	39.4	21.4	57.2	51.4	34.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	73.8	55.5	55.5	91.5	56.4	58.7	71.7	39.4	21.4	57.2	51.4	34.8
LOS by Move:	E	E+	E+	F	E+	E+	E	D	C+	E+	D-	C-
HCM2kAvgQ:	11	21	21	8	13	15	14	8	2	5	21	14

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
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Intersection #16: Mary Avenue / El Camino Real (CMP)

Signal=Protect/Rights=Include
Final Vol: 308 305 137***
Lanes: 0 1 1 0 1

Signal=Protect
Rights=Overlap

Final Vol: Lanes:
281*** 1
0
747 3
0
79 1

Vol Cnt Date: 12/1/2016
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.793
Avg Crit Del (sec/veh): 56.9
Avg Delay (sec/veh): 52.6
LOS: D-

Signal=Protect
Rights=Overlap

Lanes: Final Vol:
1 387
0
3 1477***
0
1 113

Lanes: 1 0 1 1 0
Final Vol: 195 775*** 98
Signal=Protect/Rights=Include

Street Name:	Mary Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	195	775	88	118	305	190	168	538	79	110	1373	274
Growth 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
Initial Bse:	195	775	88	118	305	190	168	538	79	110	1373	274
Added Vol:	0	0	10	19	0	118	113	209	0	3	104	113
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	195	775	98	137	305	308	281	747	79	113	1477	387
User 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
PHF 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
PHF Volume:	195	775	98	137	305	308	281	747	79	113	1477	387
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	195	775	98	137	305	308	281	747	79	113	1477	387
PCE 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
MLF 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
FinalVolume:	195	775	98	137	305	308	281	747	79	113	1477	387
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.77	0.23	1.00	1.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	3284	415	1750	1900	1750	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.11	0.24	0.24	0.08	0.16	0.18	0.16	0.13	0.05	0.06	0.26	0.22
Crit Moves:		****		****			****				****	
Green Time:	24.6	47.6	47.6	15.8	38.8	38.8	32.4	56.7	81.3	27.9	52.3	68.0
Volume/Cap:	0.73	0.79	0.79	0.79	0.66	0.73	0.79	0.37	0.09	0.37	0.79	0.52
Delay/Veh:	74.0	55.7	55.7	92.3	56.5	58.9	72.3	38.5	20.3	59.0	51.4	34.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	74.0	55.7	55.7	92.3	56.5	58.9	72.3	38.5	20.3	59.0	51.4	34.6
LOS by Move:	E	E+	E+	F	E+	E+	E	D+	C+	E+	D-	C-
HCM2kAvgQ:	11	21	21	8	13	15	14	9	2	5	22	14

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
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Cumulative AM

Intersection #17: Pastoria Avenue / Washington Avenue

Signal=Permit/Rights=Include
Final Vol: 16 84 19
Lanes: 0 0 1! 0 0

Signal=Permit Rights=Include (westbound approach, left)
Final Vol: 5, 165, 22
Lanes: 0, 0, 1!, 0, 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.361
Avg Crit Del (sec/veh): 28.0
Avg Delay (sec/veh): 27.3
LOS: C

Signal=Permit Rights=Include
Lanes: 0, 0, 1!, 0, 0
Final Vol: 12, 160***, 111

Lanes: 0 0 1! 0 0
Final Vol: 27 121*** 153
Signal=Permit/Rights=Include

Street Name:	Pastoria Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	27	117	110	17	78	16	5	132	22	103	144	12
Growth 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
Initial Bse:	27	117	110	17	78	16	5	132	22	103	144	12
Added Vol:	0	4	43	2	6	0	0	33	0	8	16	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	121	153	19	84	16	5	165	22	111	160	12
User 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
PHF 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
PHF Volume:	27	121	153	19	84	16	5	165	22	111	160	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	121	153	19	84	16	5	165	22	111	160	12
PCE 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
MLF 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
FinalVolume:	27	121	153	19	84	16	5	165	22	111	160	12
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.09	0.40	0.51	0.16	0.71	0.13	0.03	0.86	0.11	0.39	0.57	0.04
Final Sat.:	157	703	890	279	1235	235	46	1504	201	686	989	74
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.17	0.07	0.07	0.07	0.11	0.11	0.11	0.16	0.16	0.16
Crit Moves:		****									****	
Green Time:	76.3	76.3	76.3	76.3	76.3	76.3	71.7	71.7	71.7	71.7	71.7	71.7
Volume/Cap:	0.36	0.36	0.36	0.14	0.14	0.14	0.24	0.24	0.24	0.36	0.36	0.36
Delay/Veh:	26.7	26.7	26.7	23.6	23.6	23.6	27.5	27.5	27.5	29.3	29.3	29.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.7	26.7	26.7	23.6	23.6	23.6	27.5	27.5	27.5	29.3	29.3	29.3
LOS by Move:	C	C	C	C	C	C	C	C	C	C	C	C
HCM2kAvgQ:	10	10	10	3	3	3	6	6	6	9	9	9

Note: Queue reported is the number of cars per lane.

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Intersection #17: Pastoria Avenue / Washington Avenue

Signal=Permit/Rights=Include
Final Vol: 16 84 20
Lanes: 0 0 1! 0 0

Final Vol: | Lanes: | Signal=Permit Rights=Include

5 0
0
213 1!
0
22 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.373
Avg Crit Del (sec/veh): 28.2
Avg Delay (sec/veh): 27.6
LOS: C

Signal=Permit Rights=Include | Lanes: | Final Vol:

0 12
0
1! 170***
0
0 113

Lanes: 0 0 1! 0 0
Final Vol: 27 121*** 160
Signal=Permit/Rights=Include

Street Name:	Pastoria Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	27	117	110	17	78	16	5	132	22	103	144	12
Growth 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
Initial Bse:	27	117	110	17	78	16	5	132	22	103	144	12
Added Vol:	0	4	50	3	6	0	0	81	0	10	26	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	121	160	20	84	16	5	213	22	113	170	12
User 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
PHF 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
PHF Volume:	27	121	160	20	84	16	5	213	22	113	170	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	121	160	20	84	16	5	213	22	113	170	12
PCE 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
MLF 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
FinalVolume:	27	121	160	20	84	16	5	213	22	113	170	12
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.09	0.39	0.52	0.17	0.70	0.13	0.02	0.89	0.09	0.38	0.58	0.04
Final Sat.:	153	688	909	292	1225	233	36	1553	160	670	1008	71
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.18	0.07	0.07	0.07	0.14	0.14	0.14	0.17	0.17	0.17
Crit Moves:		****									****	
Green Time:	75.6	75.6	75.6	75.6	75.6	75.6	72.4	72.4	72.4	72.4	72.4	72.4
Volume/Cap:	0.37	0.37	0.37	0.15	0.15	0.15	0.30	0.30	0.30	0.37	0.37	0.37
Delay/Veh:	27.3	27.3	27.3	24.0	24.0	24.0	28.0	28.0	28.0	29.1	29.1	29.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.3	27.3	27.3	24.0	24.0	24.0	28.0	28.0	28.0	29.1	29.1	29.1
LOS by Move:	C	C	C	C	C	C	C	C	C	C	C	C
HCM2kAvgQ:	10	10	10	3	3	3	8	8	8	9	9	9

Note: Queue reported is the number of cars per lane.

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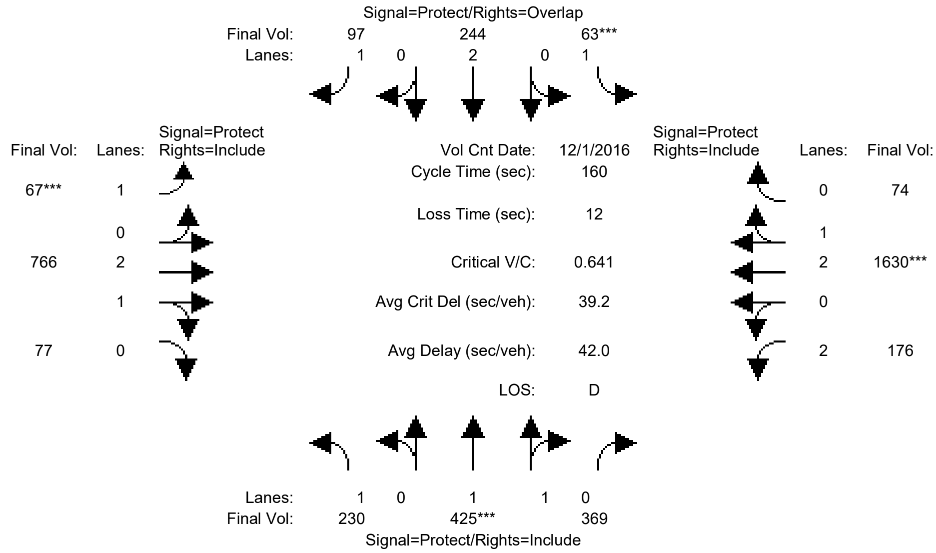
Intersection #18: El Camino Real / Hollenbeck Avenue-Pastoria Avenue



Street Name: Hollenbeck Avenue-Pastoria Avenue / El Camino Real

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	179	355	310	63	225	94	60	627	68	154	1483	74
Growth 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
Initial Bse:	179	355	310	63	225	94	60	627	68	154	1483	74
Added Vol:	51	70	59	0	19	3	7	139	9	22	147	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	230	425	369	63	244	97	67	766	77	176	1630	74
User 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
PHF 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
PHF Volume:	230	425	369	63	244	97	67	766	77	176	1630	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	230	425	369	63	244	97	67	766	77	176	1630	74
PCE 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
MLF 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
FinalVolume:	230	425	369	63	244	97	67	766	77	176	1630	74
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.95	0.92	1.00	0.92	0.92	0.99	0.95	0.83	0.98	0.95
Lanes:	1.00	1.05	0.95	1.00	2.00	1.00	1.00	2.72	0.28	2.00	2.86	0.14
Final Sat.:	1750	1979	1718	1750	3800	1750	1750	5088	511	3150	5356	243
Capacity Analysis Module:												
Vol/Sat:	0.13	0.21	0.21	0.04	0.06	0.06	0.04	0.15	0.15	0.06	0.30	0.30
Crit Moves:		****		****			****				****	
Green Time:	42.0	53.6	53.6	9.0	20.5	30.1	9.6	62.3	62.3	23.1	75.9	75.9
Volume/Cap:	0.50	0.64	0.64	0.64	0.50	0.29	0.64	0.39	0.39	0.39	0.64	0.64
Delay/Veh:	50.9	46.2	46.2	87.4	65.8	56.3	86.3	35.2	35.2	62.6	32.3	32.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.9	46.2	46.2	87.4	65.8	56.3	86.3	35.2	35.2	62.6	32.3	32.3
LOS by Move:	D	D	D	F	E	E+	F	D+	D+	E	C-	C-
HCM2kAvgQ:	10	16	16	3	5	4	4	10	10	4	20	20

Note: Queue reported is the number of cars per lane.

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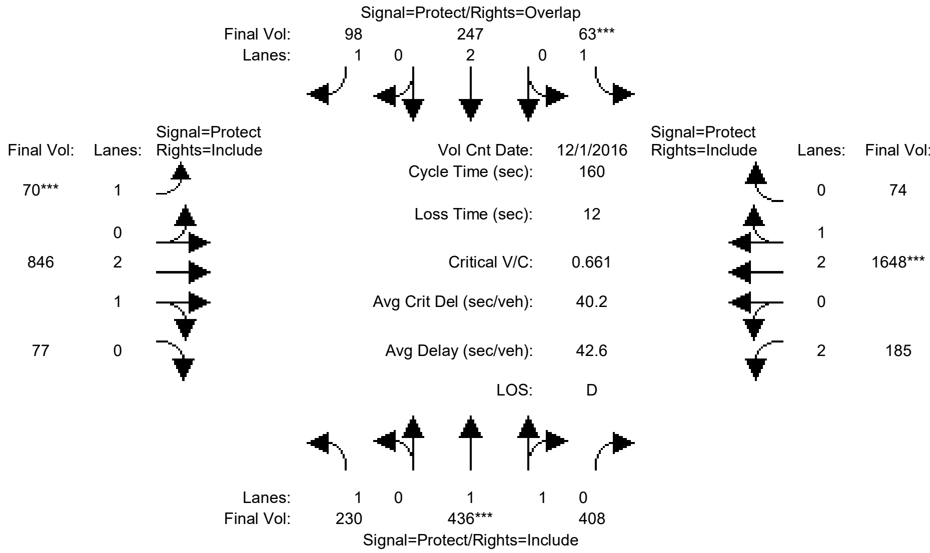
Cumulative AM Plus Project

Intersection #18: El Camino Real / Hollenbeck Avenue-Pastoria Avenue



Street Name:	Hollenbeck Avenue-Pastoria Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	179	355	310	63	225	94	60	627	68	154	1483	74
Growth 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
Initial Bse:	179	355	310	63	225	94	60	627	68	154	1483	74
Added Vol:	51	81	98	0	22	4	10	219	9	31	165	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	230	436	408	63	247	98	70	846	77	185	1648	74
User 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
PHF 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
PHF Volume:	230	436	408	63	247	98	70	846	77	185	1648	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	230	436	408	63	247	98	70	846	77	185	1648	74
PCE 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
MLF 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
FinalVolume:	230	436	408	63	247	98	70	846	77	185	1648	74
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.95	0.92	1.00	0.92	0.92	0.99	0.95	0.83	0.98	0.95
Lanes:	1.00	1.01	0.99	1.00	2.00	1.00	1.00	2.74	0.26	2.00	2.87	0.13
Final Sat.:	1750	1910	1787	1750	3800	1750	1750	5132	467	3150	5359	241
Capacity Analysis Module:												
Vol/Sat:	0.13	0.23	0.23	0.04	0.07	0.06	0.04	0.16	0.16	0.06	0.31	0.31
Crit Moves:		****		****			****				****	
Green Time:	42.8	55.2	55.2	8.7	21.2	30.8	9.7	62.0	62.0	22.1	74.4	74.4
Volume/Cap:	0.49	0.66	0.66	0.66	0.49	0.29	0.66	0.43	0.43	0.43	0.66	0.66
Delay/Veh:	50.3	45.8	45.8	90.2	65.2	55.7	88.1	36.1	36.1	63.8	33.7	33.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.3	45.8	45.8	90.2	65.2	55.7	88.1	36.1	36.1	63.8	33.7	33.7
LOS by Move:	D	D	D	F	E	E+	F	D+	D+	E	C-	C-
HCM2kAvgQ:	10	17	17	3	5	4	4	11	11	5	20	20

Note: Queue reported is the number of cars per lane.

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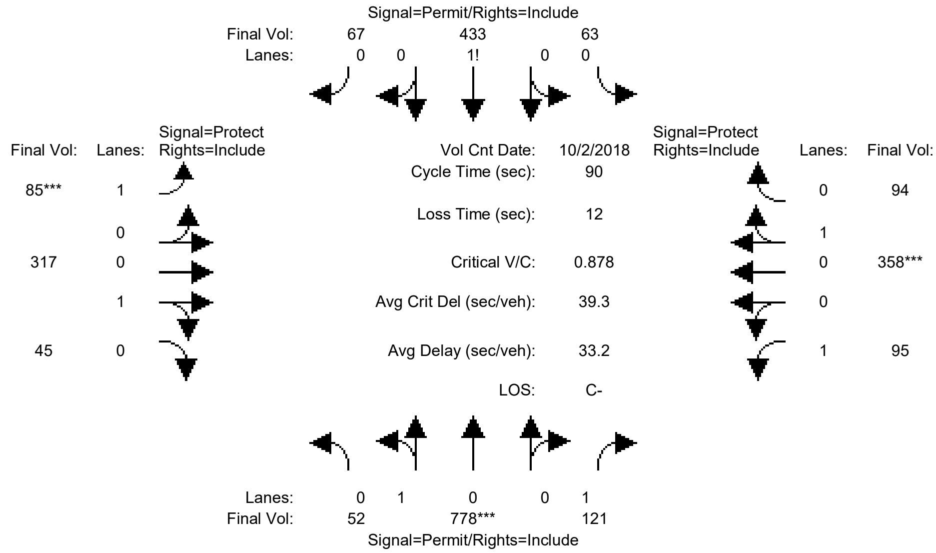
Intersection #19: Hollenbeck Avenue / Remington Avenue



Street Name:	Hollenbeck Avenue						Remington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	52	626	115	63	390	60	57	294	45	94	350	94
Growth 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
Initial Bse:	52	626	115	63	390	60	57	294	45	94	350	94
Added Vol:	0	152	6	0	43	7	28	23	0	1	8	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	52	778	121	63	433	67	85	317	45	95	358	94
User 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
PHF 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
PHF Volume:	52	778	121	63	433	67	85	317	45	95	358	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	778	121	63	433	67	85	317	45	95	358	94
PCE 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
MLF 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
FinalVolume:	52	778	121	63	433	67	85	317	45	95	358	94
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.06	0.94	1.00	0.11	0.77	0.12	1.00	0.88	0.12	1.00	0.79	0.21
Final Sat.:	113	1687	1750	196	1346	208	1750	1576	224	1750	1426	374
Capacity Analysis Module:												
Vol/Sat:	0.46	0.46	0.07	0.32	0.32	0.32	0.05	0.20	0.20	0.05	0.25	0.25
Crit Moves:		****					****				****	
Green Time:	46.0	46.0	46.0	46.0	46.0	46.0	7.0	23.1	23.1	8.9	25.0	25.0
Volume/Cap:	0.90	0.90	0.14	0.63	0.63	0.63	0.62	0.78	0.78	0.55	0.90	0.90
Delay/Veh:	32.0	32.0	11.6	17.3	17.3	17.3	49.0	39.6	39.6	42.2	50.8	50.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.0	32.0	11.6	17.3	17.3	17.3	49.0	39.6	39.6	42.2	50.8	50.8
LOS by Move:	C-	C-	B+	B	B	B	D	D	D	D	D	D
HCM2kAvgQ:	23	23	2	12	12	12	4	12	12	2	12	12

Note: Queue reported is the number of cars per lane.

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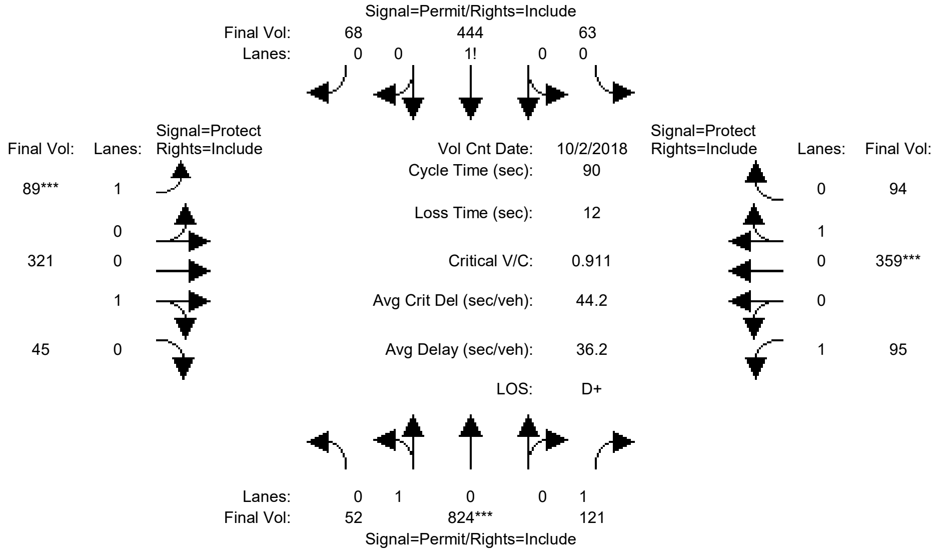
Intersection #19: Hollenbeck Avenue / Remington Avenue



Street Name:	Hollenbeck Avenue						Remington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	52	626	115	63	390	60	57	294	45	94	350	94
Growth 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
Initial Bse:	52	626	115	63	390	60	57	294	45	94	350	94
Added Vol:	0	198	6	0	54	8	32	27	0	1	9	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	52	824	121	63	444	68	89	321	45	95	359	94
User 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
PHF 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
PHF Volume:	52	824	121	63	444	68	89	321	45	95	359	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	824	121	63	444	68	89	321	45	95	359	94
PCE 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
MLF 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
FinalVolume:	52	824	121	63	444	68	89	321	45	95	359	94
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.06	0.94	1.00	0.11	0.77	0.12	1.00	0.88	0.12	1.00	0.79	0.21
Final Sat.:	107	1693	1750	192	1351	207	1750	1579	221	1750	1426	374
Capacity Analysis Module:												
Vol/Sat:	0.49	0.49	0.07	0.33	0.33	0.33	0.05	0.20	0.20	0.05	0.25	0.25
Crit Moves:		****					****				****	
Green Time:	46.8	46.8	46.8	46.8	46.8	46.8	7.0	22.6	22.6	8.6	24.2	24.2
Volume/Cap:	0.94	0.94	0.13	0.63	0.63	0.63	0.65	0.81	0.81	0.57	0.94	0.94
Delay/Veh:	36.4	36.4	11.2	16.9	16.9	16.9	51.2	42.3	42.3	43.3	57.9	57.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.4	36.4	11.2	16.9	16.9	16.9	51.2	42.3	42.3	43.3	57.9	57.9
LOS by Move:	D+	D+	B+	B	B	B	D-	D	D	D	E+	E+
HCM2kAvgQ:	26	26	2	12	12	12	4	12	12	2	12	12

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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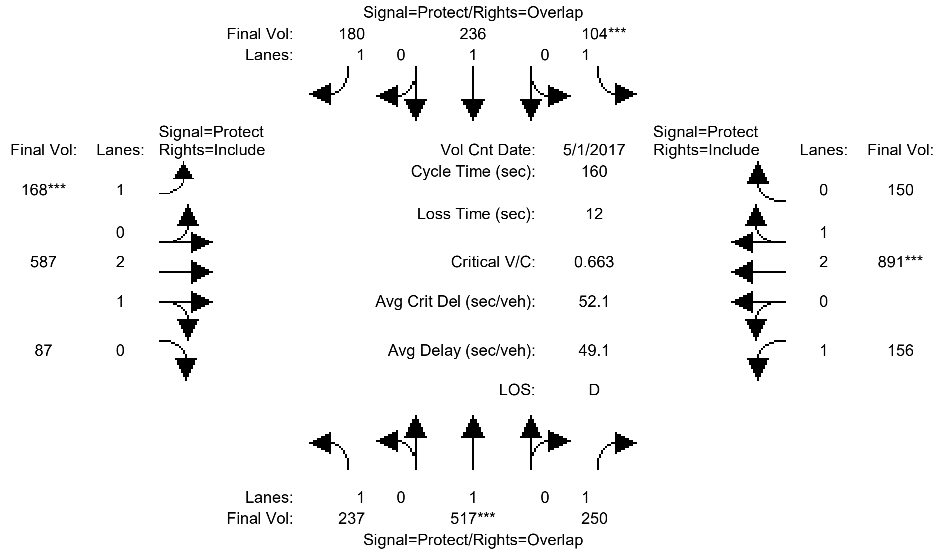
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #20: Hollenbeck Avenue / Fremont Avenue



Street Name:	Hollenbeck Avenue						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	237	411	250	104	204	168	116	545	87	156	877	149
Growth 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
Initial Bse:	237	411	250	104	204	168	116	545	87	156	877	149
Added Vol:	0	106	0	0	32	12	52	42	0	0	14	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	237	517	250	104	236	180	168	587	87	156	891	150
User 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
PHF 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
PHF Volume:	237	517	250	104	236	180	168	587	87	156	891	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	237	517	250	104	236	180	168	587	87	156	891	150
PCE 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
MLF 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
FinalVolume:	237	517	250	104	236	180	168	587	87	156	891	150
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.60	0.40	1.00	2.55	0.45
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	4876	723	1750	4792	807
Capacity Analysis Module:												
Vol/Sat:	0.14	0.27	0.14	0.06	0.12	0.10	0.10	0.12	0.12	0.09	0.19	0.19
Crit Moves:		****		****			****				****	
Green Time:	41.7	65.6	94.6	14.3	38.3	61.4	23.2	39.1	39.1	28.9	44.9	44.9
Volume/Cap:	0.52	0.66	0.24	0.66	0.52	0.27	0.66	0.49	0.49	0.49	0.66	0.66
Delay/Veh:	51.6	40.4	15.7	80.7	53.9	34.1	71.2	52.2	52.2	60.1	52.0	52.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.6	40.4	15.7	80.7	53.9	34.1	71.2	52.2	52.2	60.1	52.0	52.0
LOS by Move:	D-	D	B	F	D-	C-	E	D-	D-	E	D-	D-
HCM2kAvgQ:	10	20	6	5	10	6	9	10	10	7	14	14

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
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Intersection #20: Hollenbeck Avenue / Fremont Avenue

Signal=Protect/Rights=Overlap
Final Vol: 182 245 104***
Lanes: 1 0 1 0 1

Westbound (left side): Signal=Protect, Rights=Include
Final Vol: 176***, Lanes: 1
Lanes: 0
Final Vol: 598, Lanes: 2
Lanes: 1
Final Vol: 87, Lanes: 0

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.690
Avg Crit Del (sec/veh): 53.2
Avg Delay (sec/veh): 49.7
LOS: D

Signal=Protect, Rights=Include
Lanes: 0, Final Vol: 150
Lanes: 1
Lanes: 2, Final Vol: 893***
Lanes: 0
Lanes: 1, Final Vol: 156

Lanes: 1 0 1 0 1
Final Vol: 237 555*** 250
Signal=Protect/Rights=Overlap

Street Name:	Hollenbeck Avenue						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	237	411	250	104	204	168	116	545	87	156	877	149
Growth 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
Initial Bse:	237	411	250	104	204	168	116	545	87	156	877	149
Added Vol:	0	144	0	0	41	14	60	53	0	0	16	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	237	555	250	104	245	182	176	598	87	156	893	150
User 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
PHF 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
PHF Volume:	237	555	250	104	245	182	176	598	87	156	893	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	237	555	250	104	245	182	176	598	87	156	893	150
PCE 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
MLF 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
FinalVolume:	237	555	250	104	245	182	176	598	87	156	893	150
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.60	0.40	1.00	2.55	0.45
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	4888	711	1750	4794	805
Capacity Analysis Module:												
Vol/Sat:	0.14	0.29	0.14	0.06	0.13	0.10	0.10	0.12	0.12	0.09	0.19	0.19
Crit Moves:		****		****			****				****	
Green Time:	41.7	67.7	95.8	13.8	39.7	63.1	23.3	38.5	38.5	28.0	43.2	43.2
Volume/Cap:	0.52	0.69	0.24	0.69	0.52	0.26	0.69	0.51	0.51	0.51	0.69	0.69
Delay/Veh:	51.6	40.2	15.2	83.8	52.9	33.0	72.7	52.9	52.9	61.2	53.8	53.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.6	40.2	15.2	83.8	52.9	33.0	72.7	52.9	52.9	61.2	53.8	53.8
LOS by Move:	D-	D	B	F	D-	C-	E	D-	D-	E	D-	D-
HCM2kAvgQ:	10	21	6	5	10	6	10	10	10	7	14	14

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #21: Hollenbeck Avenue / Cascade Drive

Signal=Permit/Rights=Include
Final Vol: 65 438 14
Lanes: 0 0 1! 0 0

Final Vol: Lanes: Signal=Permit Rights=Include
96 0
0
66 1!
0
50 0

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 60
Loss Time (sec): 6
Critical V/C: 0.729
Avg Crit Del (sec/veh): 12.4
Avg Delay (sec/veh): 11.6
LOS: B+

Signal=Permit Rights=Include Lanes: Final Vol:
0 72
0
1! 136***
0
0 36

Lanes: 0 0 1! 0 0
Final Vol: 62 810*** 32
Signal=Permit/Rights=Include

Street Name:	Hollenbeck Avenue						Cascade Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	62	745	32	7	418	60	82	66	50	36	136	45
Growth 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
Initial Bse:	62	745	32	7	418	60	82	66	50	36	136	45
Added Vol:	0	65	0	7	20	5	14	0	0	0	0	27
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	62	810	32	14	438	65	96	66	50	36	136	72
User 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
PHF 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
PHF Volume:	62	810	32	14	438	65	96	66	50	36	136	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	810	32	14	438	65	96	66	50	36	136	72
PCE 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
MLF 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
FinalVolume:	62	810	32	14	438	65	96	66	50	36	136	72
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.07	0.90	0.03	0.03	0.85	0.12	0.45	0.31	0.24	0.15	0.56	0.29
Final Sat.:	120	1568	62	47	1483	220	792	545	413	258	975	516
Capacity Analysis Module:												
Vol/Sat:	0.52	0.52	0.52	0.30	0.30	0.30	0.12	0.12	0.12	0.14	0.14	0.14
Crit Moves:		****									****	
Green Time:	42.5	42.5	42.5	42.5	42.5	42.5	11.5	11.5	11.5	11.5	11.5	11.5
Volume/Cap:	0.73	0.73	0.73	0.42	0.42	0.42	0.63	0.63	0.63	0.73	0.73	0.73
Delay/Veh:	7.5	7.5	7.5	3.8	3.8	3.8	26.3	26.3	26.3	30.7	30.7	30.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.5	7.5	7.5	3.8	3.8	3.8	26.3	26.3	26.3	30.7	30.7	30.7
LOS by Move:	A	A	A	A	A	A	C	C	C	C	C	C
HCM2kAvgQ:	12	12	12	4	4	4	5	5	5	6	6	6

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #21: Hollenbeck Avenue / Cascade Drive

Signal=Permit/Rights=Include
Final Vol: 66 444 16
Lanes: 0 0 1! 0 0

Westbound (left side): Signal=Permit, Rights=Include

Final Vol:	Lanes:
103	0
	0
66	1!
	0
50	0

Vol Cnt Date:	10/2/2018
Cycle Time (sec):	60
Loss Time (sec):	6
Critical V/C:	0.749
Avg Crit Del (sec/veh):	13.1
Avg Delay (sec/veh):	12.2
LOS:	B

Signal=Permit, Rights=Include

Lanes:	Final Vol:
0	79
0	
1!	136***
0	
0	36

Lanes: 0 0 1! 0 0
Final Vol: 62 834*** 32
Signal=Permit/Rights=Include

Street Name:	Hollenbeck Avenue						Cascade Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	62	745	32	7	418	60	82	66	50	36	136	45
Growth 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
Initial Bse:	62	745	32	7	418	60	82	66	50	36	136	45
Added Vol:	0	89	0	9	26	6	21	0	0	0	0	34
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	62	834	32	16	444	66	103	66	50	36	136	79
User 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
PHF 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
PHF Volume:	62	834	32	16	444	66	103	66	50	36	136	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	834	32	16	444	66	103	66	50	36	136	79
PCE 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
MLF 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
FinalVolume:	62	834	32	16	444	66	103	66	50	36	136	79
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.07	0.90	0.03	0.03	0.84	0.13	0.47	0.30	0.23	0.14	0.55	0.31
Final Sat.:	117	1573	60	53	1477	220	823	527	400	251	948	551
Capacity Analysis Module:												
Vol/Sat:	0.53	0.53	0.53	0.30	0.30	0.30	0.13	0.13	0.13	0.14	0.14	0.14
Crit Moves:		****									****	
Green Time:	42.5	42.5	42.5	42.5	42.5	42.5	11.5	11.5	11.5	11.5	11.5	11.5
Volume/Cap:	0.75	0.75	0.75	0.42	0.42	0.42	0.65	0.65	0.65	0.75	0.75	0.75
Delay/Veh:	8.0	8.0	8.0	3.9	3.9	3.9	27.0	27.0	27.0	31.9	31.9	31.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.0	8.0	8.0	3.9	3.9	3.9	27.0	27.0	27.0	31.9	31.9	31.9
LOS by Move:	A	A	A	A	A	A	C	C	C	C	C	C
HCM2kAvgQ:	12	12	12	4	4	4	5	5	5	7	7	7

Note: Queue reported is the number of cars per lane.

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	50	0	80	845	210	305	142	1078	3235	0	0	542
Future Volume (vph)	50	0	80	845	210	305	142	1078	3235	0	0	542
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0	7.0	7.0			7.0	6.9			6.9
Lane Util. Factor		0.95	0.95	0.91	0.91			0.97	0.91			0.91
Frt		0.96	0.85	1.00	0.95			1.00	1.00			0.97
Flt Protected		0.96	1.00	0.95	0.98			0.95	1.00			1.00
Satd. Flow (prot)		1639	1504	1610	3150			3433	5085			4921
Flt Permitted		0.96	1.00	0.95	0.98			0.95	1.00			1.00
Satd. Flow (perm)		1639	1504	1610	3150			3433	5085			4921
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	50	0	80	845	210	305	142	1078	3235	0	0	542
RTOR Reduction (vph)	0	60	55	0	42	0	0	0	0	0	0	36
Lane Group Flow (vph)	0	8	7	465	853	0	0	1220	3235	0	0	655
Turn Type	Split	NA	Perm	Split	NA		Prot	Prot	NA			NA
Protected Phases	4	4		8	8		5	5	2			6
Permitted Phases			4									
Actuated Green, G (s)		16.0	16.0	35.0	35.0			38.3	68.1			22.8
Effective Green, g (s)		16.0	16.0	35.0	35.0			38.3	68.1			22.8
Actuated g/C Ratio		0.11	0.11	0.25	0.25			0.27	0.49			0.16
Clearance Time (s)		7.0	7.0	7.0	7.0			7.0	6.9			6.9
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)		187	171	402	787			939	2473			801
v/s Ratio Prot		c0.00		c0.29	0.27			0.36	c0.64			0.13
v/s Ratio Perm			0.00									
v/c Ratio		0.04	0.04	1.16	1.08			1.30	1.31			0.82
Uniform Delay, d1		55.2	55.2	52.5	52.5			50.9	36.0			56.6
Progression Factor		1.00	1.00	1.00	1.00			0.93	0.90			1.00
Incremental Delay, d2		0.4	0.5	95.0	57.2			141.9	141.4			6.5
Delay (s)		55.6	55.6	147.5	109.7			189.2	173.9			63.1
Level of Service		E	E	F	F			F	F			E
Approach Delay (s)		55.6			122.7				178.1			63.1
Approach LOS		E			F				F			E

Intersection Summary			
HCM 2000 Control Delay	152.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	27.9
Intersection Capacity Utilization	111.1%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	149
Future Volume (vph)	149
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	1.00
Adj. Flow (vph)	149
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	992	0	50	0	0	0	0	3454	1018	93	1456	0
Future Volume (vph)	992	0	50	0	0	0	0	3454	1018	93	1456	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0					6.2	6.2	6.4	5.9	
Lane Util. Factor	0.95	0.95	1.00					0.81	0.88	1.00	0.91	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1681	1583					7544	2787	1770	5085	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1681	1583					7544	2787	1770	5085	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	992	0	50	0	0	0	0	3454	1018	93	1456	0
RTOR Reduction (vph)	0	0	35	0	0	0	0	0	338	0	0	0
Lane Group Flow (vph)	496	496	15	0	0	0	0	3454	680	93	1456	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	43.0	43.0	43.0					66.8	66.8	10.6	84.1	
Effective Green, g (s)	43.0	43.0	43.0					66.8	66.8	10.6	84.1	
Actuated g/C Ratio	0.31	0.31	0.31					0.48	0.48	0.08	0.60	
Clearance Time (s)	7.0	7.0	7.0					6.2	6.2	6.4	5.9	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	516	516	486					3599	1329	134	3054	
v/s Ratio Prot	c0.30	0.30						c0.46		c0.05	0.29	
v/s Ratio Perm			0.01						0.24			
v/c Ratio	0.96	0.96	0.03					0.96	0.51	0.69	0.48	
Uniform Delay, d1	47.7	47.7	33.9					35.3	25.3	63.1	15.6	
Progression Factor	1.00	1.00	1.00					0.22	0.08	1.34	2.00	
Incremental Delay, d2	31.1	31.1	0.1					1.0	0.1	11.9	0.4	
Delay (s)	78.8	78.8	34.1					8.7	2.2	96.6	31.7	
Level of Service	E	E	C					A	A	F	C	
Approach Delay (s)		76.6			0.0			7.2			35.6	
Approach LOS		E			A			A			D	

Intersection Summary			
HCM 2000 Control Delay	23.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	99.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	9	43	263	60	219	125	4194	110	38	1363	105
Future Volume (vph)	42	9	43	263	60	219	125	4194	110	38	1363	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.81		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1556	1761	1863	1583	1770	7509		1770	5031	
Flt Permitted	0.72	1.00	1.00	0.75	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1337	1863	1556	1393	1863	1583	1770	7509		1770	5031	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	42	9	43	263	60	219	125	4194	110	38	1363	105
RTOR Reduction (vph)	0	0	30	0	0	107	0	3	0	0	6	0
Lane Group Flow (vph)	42	9	13	263	60	112	125	4301	0	38	1462	0
Confl. Peds. (#/hr)			5	5					5			
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Actuated Green, G (s)	41.0	41.0	41.0	41.0	41.0	41.0	12.4	68.6		10.0	66.0	
Effective Green, g (s)	41.0	41.0	41.0	41.0	41.0	41.0	12.4	68.6		10.0	66.0	
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29	0.29	0.09	0.49		0.07	0.47	
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	391	545	455	407	545	463	156	3679		126	2371	
v/s Ratio Prot		0.00			0.03		0.07	c0.57		0.02	c0.29	
v/s Ratio Perm	0.03		0.01	c0.19		0.07						
v/c Ratio	0.11	0.02	0.03	0.65	0.11	0.24	0.80	1.17		0.30	0.62	
Uniform Delay, d1	36.1	35.2	35.3	43.2	36.2	37.7	62.6	35.7		61.7	27.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.91		0.85	0.60	
Incremental Delay, d2	0.6	0.1	0.1	3.5	0.1	0.3	24.2	79.2		5.5	0.4	
Delay (s)	36.7	35.2	35.4	46.7	36.3	37.9	85.9	111.6		57.7	16.9	
Level of Service	D	D	D	D	D	D	F	F		E	B	
Approach Delay (s)		36.0			42.0			110.9			17.9	
Approach LOS		D			D			F			B	

Intersection Summary			
HCM 2000 Control Delay	82.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	104.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	50	0	80	909	210	305	143	1079	3239	0	0	561
Future Volume (vph)	50	0	80	909	210	305	143	1079	3239	0	0	561
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0	7.0	7.0			7.0	6.9			6.9
Lane Util. Factor		0.95	0.95	0.91	0.91			0.97	0.91			0.91
Frt		0.96	0.85	1.00	0.95			1.00	1.00			0.97
Flt Protected		0.96	1.00	0.95	0.98			0.95	1.00			1.00
Satd. Flow (prot)		1639	1504	1610	3154			3433	5085			4925
Flt Permitted		0.96	1.00	0.95	0.98			0.95	1.00			1.00
Satd. Flow (perm)		1639	1504	1610	3154			3433	5085			4925
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	50	0	80	909	210	305	143	1079	3239	0	0	561
RTOR Reduction (vph)	0	60	55	0	37	0	0	0	0	0	0	34
Lane Group Flow (vph)	0	8	7	482	905	0	0	1222	3239	0	0	676
Turn Type	Split	NA	Perm	Split	NA		Prot	Prot	NA			NA
Protected Phases	4	4		8	8		5	5	2			6
Permitted Phases			4									
Actuated Green, G (s)		16.0	16.0	35.0	35.0			38.1	68.1			23.0
Effective Green, g (s)		16.0	16.0	35.0	35.0			38.1	68.1			23.0
Actuated g/C Ratio		0.11	0.11	0.25	0.25			0.27	0.49			0.16
Clearance Time (s)		7.0	7.0	7.0	7.0			7.0	6.9			6.9
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)		187	171	402	788			934	2473			809
v/s Ratio Prot		c0.00		c0.30	0.29			0.36	c0.64			0.14
v/s Ratio Perm			0.00									
v/c Ratio		0.04	0.04	1.20	1.15			1.31	1.31			0.84
Uniform Delay, d1		55.2	55.2	52.5	52.5			51.0	36.0			56.7
Progression Factor		1.00	1.00	1.00	1.00			0.93	0.90			1.00
Incremental Delay, d2		0.4	0.5	111.3	81.5			145.9	142.2			7.5
Delay (s)		55.6	55.6	163.8	134.0			193.4	174.6			64.1
Level of Service		E	E	F	F			F	F			E
Approach Delay (s)		55.6			144.0				179.8			64.1
Approach LOS		E			F				F			E

Intersection Summary			
HCM 2000 Control Delay	157.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	27.9
Intersection Capacity Utilization	112.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	149
Future Volume (vph)	149
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	1.00
Adj. Flow (vph)	149
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	992	0	54	0	0	0	0	3460	1032	93	1539	0
Future Volume (vph)	992	0	54	0	0	0	0	3460	1032	93	1539	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0					6.2	6.2	6.4	5.9	
Lane Util. Factor	0.95	0.95	1.00					0.81	0.88	1.00	0.91	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1681	1583					7544	2787	1770	5085	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1681	1583					7544	2787	1770	5085	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	992	0	54	0	0	0	0	3460	1032	93	1539	0
RTOR Reduction (vph)	0	0	37	0	0	0	0	0	342	0	0	0
Lane Group Flow (vph)	496	496	17	0	0	0	0	3460	690	93	1539	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	43.0	43.0	43.0					66.8	66.8	10.6	84.1	
Effective Green, g (s)	43.0	43.0	43.0					66.8	66.8	10.6	84.1	
Actuated g/C Ratio	0.31	0.31	0.31					0.48	0.48	0.08	0.60	
Clearance Time (s)	7.0	7.0	7.0					6.2	6.2	6.4	5.9	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	516	516	486					3599	1329	134	3054	
v/s Ratio Prot	c0.30	0.30						c0.46		c0.05	0.30	
v/s Ratio Perm			0.01						0.25			
v/c Ratio	0.96	0.96	0.03					0.96	0.52	0.69	0.50	
Uniform Delay, d1	47.7	47.7	34.0					35.4	25.4	63.1	16.0	
Progression Factor	1.00	1.00	1.00					0.22	0.08	1.33	1.97	
Incremental Delay, d2	31.1	31.1	0.1					1.1	0.1	11.9	0.5	
Delay (s)	78.8	78.8	34.1					8.9	2.2	95.8	32.0	
Level of Service	E	E	C					A	A	F	C	
Approach Delay (s)		76.5			0.0			7.3			35.6	
Approach LOS		E			A			A			D	

Intersection Summary			
HCM 2000 Control Delay	23.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	99.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	9	43	268	60	219	125	4215	112	38	1450	105
Future Volume (vph)	42	9	43	268	60	219	125	4215	112	38	1450	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.81		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1556	1761	1863	1583	1770	7508		1770	5034	
Flt Permitted	0.72	1.00	1.00	0.75	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1337	1863	1556	1393	1863	1583	1770	7508		1770	5034	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	42	9	43	268	60	219	125	4215	112	38	1450	105
RTOR Reduction (vph)	0	0	30	0	0	107	0	3	0	0	6	0
Lane Group Flow (vph)	42	9	13	268	60	112	125	4324	0	38	1549	0
Confl. Peds. (#/hr)			5	5					5			
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Actuated Green, G (s)	41.0	41.0	41.0	41.0	41.0	41.0	12.4	68.6		10.0	66.0	
Effective Green, g (s)	41.0	41.0	41.0	41.0	41.0	41.0	12.4	68.6		10.0	66.0	
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29	0.29	0.09	0.49		0.07	0.47	
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	391	545	455	407	545	463	156	3678		126	2373	
v/s Ratio Prot		0.00			0.03		0.07	c0.58		0.02	c0.31	
v/s Ratio Perm	0.03		0.01	c0.19		0.07						
v/c Ratio	0.11	0.02	0.03	0.66	0.11	0.24	0.80	1.18		0.30	0.65	
Uniform Delay, d1	36.1	35.2	35.3	43.4	36.2	37.7	62.6	35.7		61.7	28.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.91		0.83	0.59	
Incremental Delay, d2	0.6	0.1	0.1	3.8	0.1	0.3	24.2	82.0		5.4	0.6	
Delay (s)	36.7	35.2	35.4	47.2	36.3	37.9	86.2	114.5		56.9	17.2	
Level of Service	D	D	D	D	D	D	F	F		E	B	
Approach Delay (s)		36.0			42.3			113.7			18.1	
Approach LOS		D			D			F			B	

Intersection Summary			
HCM 2000 Control Delay	84.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	104.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #25: Mathilda Avenue / Maude Avenue (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 597 1254 189***
Lanes: 1 0 4 0 2

Signal=Protect
Rights=Overlap
Final Vol: Lanes:
129*** 2
0
104 1
0
109 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 1.041
Avg Crit Del (sec/veh): 74.7
Avg Delay (sec/veh): 64.5
LOS: E

Signal=Protect
Rights=Include
Lanes: Final Vol:
0 385
1
1 467***
0
1 159

Lanes: 2 0 3 0 1
Final Vol: 811 3598*** 56
Signal=Protect/Rights=Overlap

Street Name:	Mathilda Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	599	2285	56	133	848	404	103	90	77	159	390	278
Growth 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
Initial Bse:	599	2285	56	133	848	404	103	90	77	159	390	278
Added Vol:	212	1313	0	56	406	193	26	14	32	0	77	107
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	811	3598	56	189	1254	597	129	104	109	159	467	385
User 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
PHF 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
PHF Volume:	811	3598	56	189	1254	597	129	104	109	159	467	385
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	811	3598	56	189	1254	597	129	104	109	159	467	385
PCE 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
MLF 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
FinalVolume:	811	3598	56	189	1254	597	129	104	109	159	467	385
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.95
Lanes:	2.00	3.00	1.00	2.00	4.00	1.00	2.00	1.00	1.00	1.00	1.07	0.93
Final Sat.:	3150	5700	1750	3150	7600	1750	3150	1900	1750	1750	2027	1671
Capacity Analysis Module:												
Vol/Sat:	0.26	0.63	0.03	0.06	0.17	0.34	0.04	0.05	0.06	0.09	0.23	0.23
Crit Moves:		****		****			****				****	
Green Time:	48.8	96.6	121.6	9.2	56.9	63.9	7.0	17.2	66.0	25.0	35.3	35.3
Volume/Cap:	0.84	1.05	0.04	1.05	0.46	0.85	0.94	0.51	0.15	0.58	1.05	1.05
Delay/Veh:	58.9	60.8	4.8	155.0	39.9	53.8	133.6	69.5	29.5	65.7	107	106.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.9	60.8	4.8	155.0	39.9	53.8	133.6	69.5	29.5	65.7	107	106.5
LOS by Move:	E+	E	A	F	D	D-	F	E	C	E	F	F
HCM2kAvgQ:	21	62	1	7	11	29	6	5	3	8	26	26

Note: Queue reported is the number of cars per lane.

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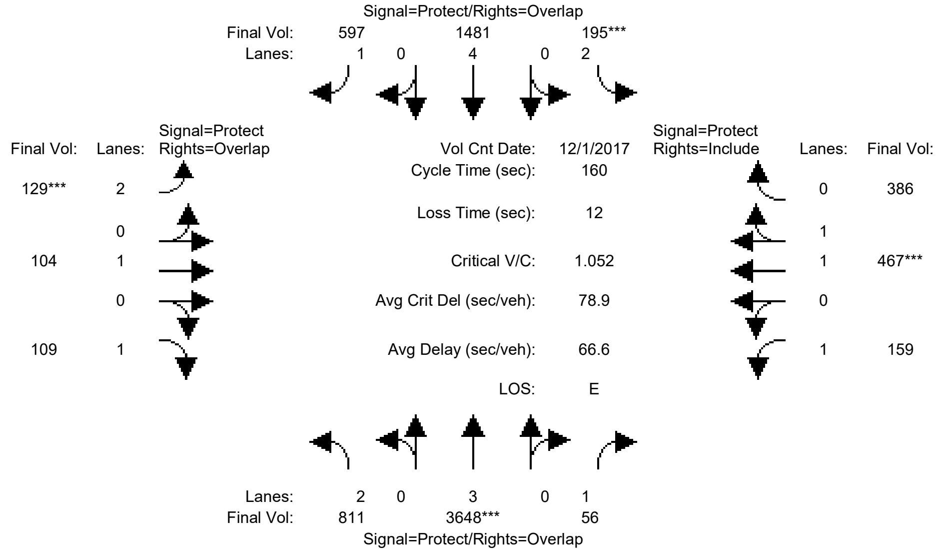
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #25: Mathilda Avenue / Maude Avenue (CMP)



Street Name:	Mathilda Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	599	2285	56	133	848	404	103	90	77	159	390	278
Growth 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
Initial Bse:	599	2285	56	133	848	404	103	90	77	159	390	278
Added Vol:	212	1363	0	56	639	193	26	14	32	0	77	108
PasserByVol:	0	0	0	6	-6	0	0	0	0	0	0	0
Initial Fut:	811	3648	56	195	1481	597	129	104	109	159	467	386
User 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
PHF 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
PHF Volume:	811	3648	56	195	1481	597	129	104	109	159	467	386
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	811	3648	56	195	1481	597	129	104	109	159	467	386
PCE 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
MLF 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
FinalVolume:	811	3648	56	195	1481	597	129	104	109	159	467	386
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.95
Lanes:	2.00	3.00	1.00	2.00	4.00	1.00	2.00	1.00	1.00	1.00	1.07	0.93
Final Sat.:	3150	5700	1750	3150	7600	1750	3150	1900	1750	1750	2024	1673
Capacity Analysis Module:												
Vol/Sat:	0.26	0.64	0.03	0.06	0.19	0.34	0.04	0.05	0.06	0.09	0.23	0.23
Crit Moves:		****		****			****				****	
Green Time:	49.0	96.8	121.6	9.4	57.1	64.1	7.0	17.1	66.1	24.8	34.9	34.9
Volume/Cap:	0.84	1.06	0.04	1.06	0.55	0.85	0.94	0.51	0.15	0.59	1.06	1.06
Delay/Veh:	58.6	65.2	4.8	157.9	41.3	53.4	133.6	69.8	29.5	66.1	111	110.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.6	65.2	4.8	157.9	41.3	53.4	133.6	69.8	29.5	66.1	111	110.8
LOS by Move:	E+	E	A	F	D	D-	F	E	C	E	F	F
HCM2kAvgQ:	21	64	1	7	14	29	6	5	3	8	26	26

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
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Intersection #26: Mathilda Avenue / Indio Avenue

Signal=Protect/Rights=Include
Final Vol: 126 1386 36***
Lanes: 0 1 2 0 1

Westbound side: Signal=Protect, Rights=Overlap
Final Vol: / Lanes:
48*** 1
0
2 0
1
271 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 1.362
Avg Crit Del (sec/veh): 242.7
Avg Delay (sec/veh): 180.6
LOS: F

Signal=Protect Rights=Include
Lanes: / Final Vol:
0 819
1
0 10***
0
1 153

Lanes: 1 0 2 1 0
Final Vol: 95 4004*** 201
Signal=Protect/Rights=Overlap

Street Name:	Mathilda Avenue						Indio Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	72	2724	175	31	1002	77	23	2	253	132	10	600
Growth 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
Initial Bse:	72	2724	175	31	1002	77	23	2	253	132	10	600
Added Vol:	23	1280	26	5	384	49	25	0	18	21	0	219
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95	4004	201	36	1386	126	48	2	271	153	10	819
User 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
PHF 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
PHF Volume:	95	4004	201	36	1386	126	48	2	271	153	10	819
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	4004	201	36	1386	126	48	2	271	153	10	819
PCE 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
MLF 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
FinalVolume:	95	4004	201	36	1386	126	48	2	271	153	10	819
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	2.85	0.15	1.00	2.74	0.26	1.00	0.01	0.99	1.00	0.01	0.99
Final Sat.:	1750	5332	268	1750	5133	467	1750	13	1787	1750	22	1778
Capacity Analysis Module:												
Vol/Sat:	0.05	0.75	0.75	0.02	0.27	0.27	0.03	0.15	0.15	0.09	0.46	0.46
Crit Moves:		****		****			****				****	
Green Time:	15.1	83.1	104.2	7.0	75.0	75.0	7.0	36.8	51.8	21.2	50.9	50.9
Volume/Cap:	0.58	1.45	1.15	0.47	0.58	0.58	0.63	0.66	0.47	0.66	1.45	1.45
Delay/Veh:	74.3	241	100.1	79.2	31.3	31.3	90.5	59.9	43.7	72.9	265	265.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	74.3	241	100.1	79.2	31.3	31.3	90.5	59.9	43.7	72.9	265	265.2
LOS by Move:	E	F	F	E-	C	C	F	E+	D	E	F	F
HCM2kAvgQ:	4	119	88	2	18	18	4	13	11	9	76	76

Note: Queue reported is the number of cars per lane.

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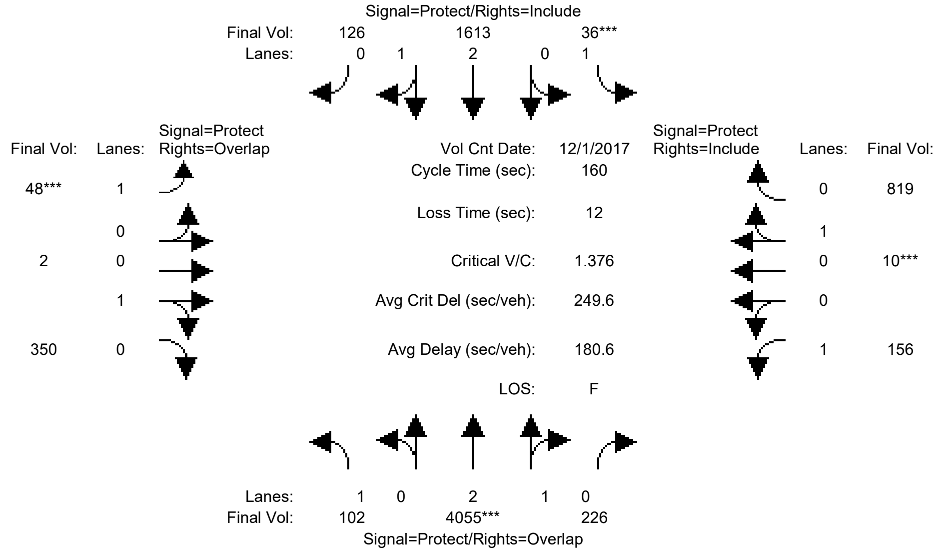
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #26: Mathilda Avenue / Indio Avenue



Street Name:	Mathilda Avenue						Indio Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	72	2724	175	31	1002	77	23	2	253	132	10	600
Growth 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
Initial Bse:	72	2724	175	31	1002	77	23	2	253	132	10	600
Added Vol:	30	1331	51	5	617	49	25	0	97	24	0	219
PasserByVol:	0	0	0	0	-6	0	0	0	0	0	0	0
Initial Fut:	102	4055	226	36	1613	126	48	2	350	156	10	819
User 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
PHF 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
PHF Volume:	102	4055	226	36	1613	126	48	2	350	156	10	819
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	4055	226	36	1613	126	48	2	350	156	10	819
PCE 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
MLF 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
FinalVolume:	102	4055	226	36	1613	126	48	2	350	156	10	819
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	2.84	0.16	1.00	2.77	0.23	1.00	0.01	0.99	1.00	0.01	0.99
Final Sat.:	1750	5304	296	1750	5194	406	1750	10	1790	1750	22	1778
Capacity Analysis Module:												
Vol/Sat:	0.06	0.76	0.76	0.02	0.31	0.31	0.03	0.20	0.20	0.09	0.46	0.46
Crit Moves:		****		****			****				****	
Green Time:	14.3	83.6	101.6	7.0	76.3	76.3	7.0	39.4	53.7	18.0	50.4	50.4
Volume/Cap:	0.65	1.46	1.20	0.47	0.65	0.65	0.63	0.79	0.58	0.79	1.46	1.46
Delay/Veh:	79.8	248	123.9	79.2	32.3	32.3	90.5	66.0	45.3	88.8	273	272.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	79.8	248	123.9	79.2	32.3	32.3	90.5	66.0	45.3	88.8	273	272.7
LOS by Move:	E-	F	F	E-	C-	C-	F	E	D	F	F	F
HCM2kAvgQ:	5	122	96	2	21	21	4	19	15	10	76	76

Note: Queue reported is the number of cars per lane.

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Intersection #27: Mathilda Avenue / California Avenue

Signal=Protect/Rights=Overlap
Final Vol: 352 1483 140***
Lanes: 1 0 3 0 1

Signal=Protect Rights=Include (West approach)
Final Vol: Lanes:
313*** 1
0
42 1
0
181 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 165
Loss Time (sec): 12
Critical V/C: 1.188
Avg Crit Del (sec/veh): 131.3
Avg Delay (sec/veh): 100.0
LOS: F

Signal=Protect Rights=Overlap (East approach)
Lanes: Final Vol:
1 342***
0
1 113
0
1 109

Lanes: 1 0 2 1 0
Final Vol: 182 3716*** 356
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	148	2756	342	69	1204	279	66	16	101	109	110	219
Growth 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
Initial Bse:	148	2756	342	69	1204	279	66	16	101	109	110	219
Added Vol:	34	960	14	71	279	73	247	26	80	0	3	123
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	182	3716	356	140	1483	352	313	42	181	109	113	342
User 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
PHF 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
PHF Volume:	182	3716	356	140	1483	352	313	42	181	109	113	342
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	182	3716	356	140	1483	352	313	42	181	109	113	342
PCE 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
MLF 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
FinalVolume:	182	3716	356	140	1483	352	313	42	181	109	113	342
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.73	0.27	1.00	3.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	5110	490	1750	5700	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.73	0.73	0.08	0.26	0.20	0.18	0.02	0.10	0.06	0.06	0.20
Crit Moves:		****		****			****					****
Green Time:	32.0	101	101.0	11.1	80.1	104.9	24.8	25.5	25.5	15.4	16.0	27.1
Volume/Cap:	0.54	1.19	1.19	1.19	0.54	0.32	1.19	0.14	0.67	0.67	0.61	1.19
Delay/Veh:	61.5	120	119.8	219.0	29.7	13.8	186.1	60.5	72.1	82.6	77.4	182.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	61.5	120	119.8	219.0	29.7	13.8	186.1	60.5	72.1	82.6	77.4	182.8
LOS by Move:	E	F	F	F	C	B	F	E	E	F	E-	F
HCM2kAvgQ:	9	96	96	11	17	8	26	2	10	6	5	27

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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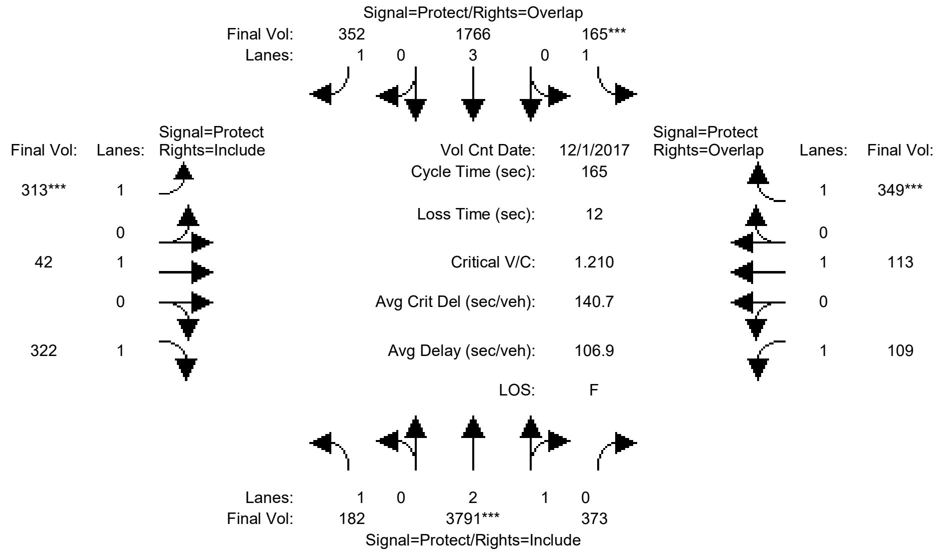
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #27: Mathilda Avenue / California Avenue



Street Name:	Mathilda Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	148	2756	342	69	1204	279	66	16	101	109	110	219
Growth 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
Initial Bse:	148	2756	342	69	1204	279	66	16	101	109	110	219
Added Vol:	34	1035	31	102	562	73	247	26	221	0	3	130
PasserByVol:	0	0	0	-6	0	0	0	0	0	0	0	0
Initial Fut:	182	3791	373	165	1766	352	313	42	322	109	113	349
User 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
PHF 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
PHF Volume:	182	3791	373	165	1766	352	313	42	322	109	113	349
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	182	3791	373	165	1766	352	313	42	322	109	113	349
PCE 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
MLF 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
FinalVolume:	182	3791	373	165	1766	352	313	42	322	109	113	349
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.72	0.28	1.00	3.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	5098	502	1750	5700	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.74	0.74	0.09	0.31	0.20	0.18	0.02	0.18	0.06	0.06	0.20
Crit Moves:		****		****			****					****
Green Time:	28.7	101	101.4	12.9	85.6	109.9	24.4	28.9	28.9	9.8	14.3	27.2
Volume/Cap:	0.60	1.21	1.21	1.21	0.60	0.30	1.21	0.13	1.05	1.05	0.68	1.21
Delay/Veh:	66.1	129	129.2	220.4	28.1	11.6	195.1	57.5	132.9	179.8	84.4	191.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	66.1	129	129.2	220.4	28.1	11.6	195.1	57.5	132.9	179.8	84.4	191.2
LOS by Move:	E	F	F	F	C	B+	F	E+	F	F	F	F
HCM2kAvgQ:	10	100	100	13	20	8	27	2	24	8	6	28

Note: Queue reported is the number of cars per lane.

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Intersection #28: Mathilda Avenue Off-Ramp / Evelyn Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Permit Rights=Include (West)
Final Vol: 0, 330, 0
Lanes: 0, 0, 1, 0, 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 65
Loss Time (sec): 6
Critical V/C: 0.490
Avg Crit Del (sec/veh): 6.5
Avg Delay (sec/veh): 7.0
LOS: A

Signal=Permit Rights=Include (East)
Lanes: 0, 0, 1, 0, 0
Final Vol: 0, 724***, 0

Lanes: 1 0 0 0 1
Final Vol: 111*** 0 104
Signal=Split/Rights=Overlap

```
Street Name:     Mathilda Avenue Off-Ramp              Evelyn Avenue
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Min. Green:    10   10    10    0    0     0   10   10    10   10   10    10
Y+R:          4.0  4.0   4.0  0.0  0.0   0.0  4.0  4.0   4.0  4.0  4.0   4.0
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 1 Apr 2017 <<
Base Vol:      71    0   101    0    0     0    0  284     0    0  678     0
Growth 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
Initial Bse:   71    0   101    0    0     0    0  284     0    0  678     0
Added Vol:     40    0     3    0    0     0    0   46     0    0   46     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:  111    0   104    0    0     0    0  330     0    0  724     0
User 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
PHF 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
PHF Volume:   111    0   104    0    0     0    0  330     0    0  724     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:  111    0   104    0    0     0    0  330     0    0  724     0
PCE 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
MLF 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
FinalVolume:  111    0   104    0    0     0    0  330     0    0  724     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  0.92 1.00  0.92 0.92 1.00  0.92 0.92 1.00  0.92 0.92 1.00  0.92
Lanes:       1.00 0.00  1.00 0.00 0.00  0.00 0.00 1.00  0.00 0.00 1.00  0.00
Final Sat.:  1750    0  1750    0    0     0    0 1900     0    0 1900     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.06 0.00  0.06 0.00 0.00  0.00 0.00 0.17  0.00 0.00 0.38  0.00
Crit Moves:  ****                                                 ****
Green Time:  10.0  0.0  10.0  0.0  0.0   0.0  0.0 49.0   0.0  0.0 49.0   0.0
Volume/Cap:  0.41 0.00  0.39 0.00 0.00  0.00 0.00 0.23  0.00 0.00 0.51  0.00
Delay/Veh:   25.9  0.0  25.7  0.0  0.0   0.0  0.0  2.5   0.0  0.0  3.5   0.0
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:  25.9  0.0  25.7  0.0  0.0   0.0  0.0  2.5   0.0  0.0  3.5   0.0
LOS by Move:    C    A     C    A    A     A    A    A     A    A    A     A
HCM2kAvgQ:      3    0     2    0    0     0    0    2     0    0    6     0
Note: Queue reported is the number of cars per lane.
```


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Intersection #28: Mathilda Avenue Off-Ramp / Evelyn Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Permit
Rights=Include

Final Vol:	Lanes:
0	0
	0
390	1
	0
0	0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 65
Loss Time (sec): 6
Critical V/C: 0.497
Avg Crit Del (sec/veh): 6.5
Avg Delay (sec/veh): 7.1
LOS: A

Signal=Permit
Rights=Include

Lanes:	Final Vol:
0	0
0	
1	737***
0	
0	0

Lanes: 1 0 0 0 1
Final Vol: 111*** 0 121
Signal=Split/Rights=Overlap

Street Name:	Mathilda Avenue Off-Ramp						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	71	0	101	0	0	0	0	284	0	0	678	0
Growth 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
Initial Bse:	71	0	101	0	0	0	0	284	0	0	678	0
Added Vol:	40	0	20	0	0	0	0	106	0	0	59	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	111	0	121	0	0	0	0	390	0	0	737	0
User 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
PHF 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
PHF Volume:	111	0	121	0	0	0	0	390	0	0	737	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	0	121	0	0	0	0	390	0	0	737	0
PCE 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
MLF 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
FinalVolume:	111	0	121	0	0	0	0	390	0	0	737	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	0	1900	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.00	0.07	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.39	0.00
Crit Moves:	****										****	
Green Time:	10.0	0.0	10.0	0.0	0.0	0.0	0.0	49.0	0.0	0.0	49.0	0.0
Volume/Cap:	0.41	0.00	0.45	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.51	0.00
Delay/Veh:	25.9	0.0	26.2	0.0	0.0	0.0	0.0	2.6	0.0	0.0	3.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.9	0.0	26.2	0.0	0.0	0.0	0.0	2.6	0.0	0.0	3.5	0.0
LOS by Move:	C	A	C	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	3	0	3	0	0	0	0	3	0	0	6	0

Note: Queue reported is the number of cars per lane.

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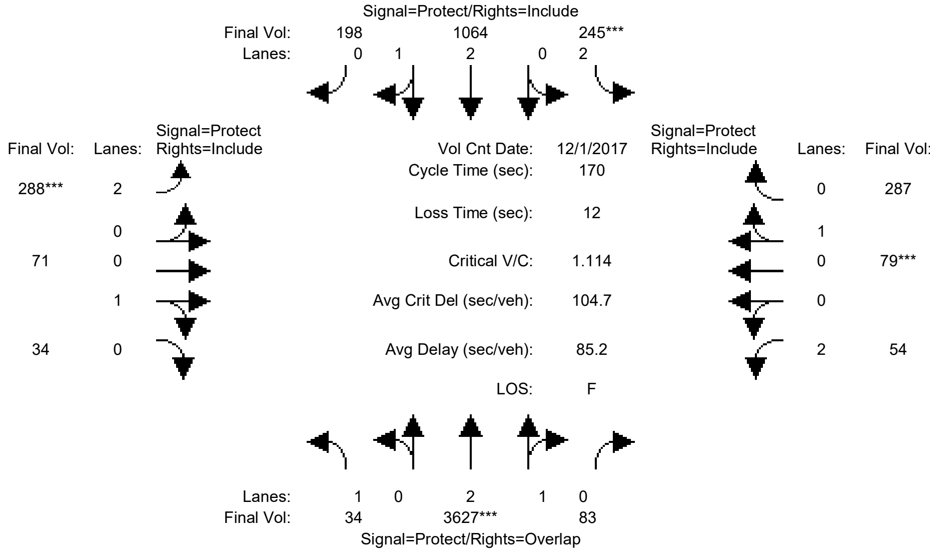
Intersection #29: Mathilda Avenue / Washington Avenue



Street Name:	Mathilda Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	24	2774	77	207	795	187	225	65	24	50	75	188
Growth 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
Initial Bse:	24	2774	77	207	795	187	225	65	24	50	75	188
Added Vol:	10	853	6	38	269	11	63	6	10	4	4	99
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	34	3627	83	245	1064	198	288	71	34	54	79	287
User 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
PHF 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
PHF Volume:	34	3627	83	245	1064	198	288	71	34	54	79	287
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	3627	83	245	1064	198	288	71	34	54	79	287
PCE 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
MLF 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
FinalVolume:	34	3627	83	245	1064	198	288	71	34	54	79	287
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.99	0.95	0.83	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	2.93	0.07	2.00	2.51	0.49	2.00	0.68	0.32	2.00	0.22	0.78
Final Sat.:	1750	5475	125	3150	4720	878	3150	1217	583	3150	389	1411
Capacity Analysis Module:												
Vol/Sat:	0.02	0.66	0.66	0.08	0.23	0.23	0.09	0.06	0.06	0.02	0.20	0.20
Crit Moves:		****		****			****				****	
Green Time:	17.5	101	119.7	11.9	95.6	95.6	14.0	26.5	26.5	18.5	31.0	31.0
Volume/Cap:	0.19	1.11	0.94	1.11	0.40	0.40	1.11	0.37	0.37	0.16	1.11	1.11
Delay/Veh:	70.3	90.4	27.6	173.6	21.1	21.1	168.0	65.2	65.2	68.9	153	153.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	70.3	90.4	27.6	173.6	21.1	21.1	168.0	65.2	65.2	68.9	153	153.4
LOS by Move:	E	F	C	F	C+	C+	F	E	E	E	F	F
HCM2kAvgQ:	2	82	61	12	12	12	12	5	5	1	26	26

Note: Queue reported is the number of cars per lane.

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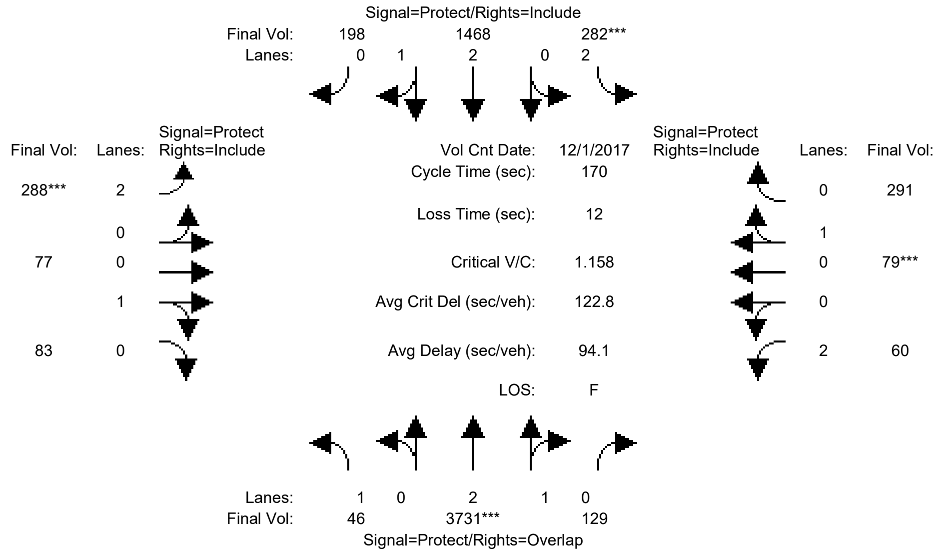
Cumulative AM Plus Project

Intersection #29: Mathilda Avenue / Washington Avenue



Street Name:	Mathilda Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	24	2774	77	207	795	187	225	65	24	50	75	188
Growth 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
Initial Bse:	24	2774	77	207	795	187	225	65	24	50	75	188
Added Vol:	22	957	52	75	673	11	63	12	59	10	4	103
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	46	3731	129	282	1468	198	288	77	83	60	79	291
User 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
PHF 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
PHF Volume:	46	3731	129	282	1468	198	288	77	83	60	79	291
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	46	3731	129	282	1468	198	288	77	83	60	79	291
PCE 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
MLF 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
FinalVolume:	46	3731	129	282	1468	198	288	77	83	60	79	291
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.99	0.95	0.83	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	2.90	0.10	2.00	2.63	0.37	2.00	0.48	0.52	2.00	0.21	0.79
Final Sat.:	1750	5413	187	3150	4934	665	3150	866	934	3150	384	1416
Capacity Analysis Module:												
Vol/Sat:	0.03	0.69	0.69	0.09	0.30	0.30	0.09	0.09	0.09	0.02	0.21	0.21
Crit Moves:		****		****			****				****	
Green Time:	13.9	101	115.0	13.1	100	100.5	13.4	29.8	29.8	13.8	30.2	30.2
Volume/Cap:	0.32	1.16	1.02	1.16	0.50	0.50	1.16	0.51	0.51	0.23	1.16	1.16
Delay/Veh:	74.9	109	47.0	185.3	20.4	20.4	184.6	64.8	64.8	73.6	170	170.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	74.9	109	47.0	185.3	20.4	20.4	184.6	64.8	64.8	73.6	170	170.1
LOS by Move:	E	F	D	F	C+	C+	F	E	E	E	F	F
HCM2kAvgQ:	3	90	76	14	17	17	13	8	8	2	28	28

Note: Queue reported is the number of cars per lane.

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Intersection #30: Mathilda Avenue / McKinley Avenue

Signal=Protect/Rights=Include
Final Vol: 48 982 105***
Lanes: 0 1 2 0 2

Signal=Protect
Rights=Include

Final Vol: Lanes:
71*** 1
0
19 0
1
12 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 180
Loss Time (sec): 12
Critical V/C: 0.876
Avg Crit Del (sec/veh): 25.2
Avg Delay (sec/veh): 23.8
LOS: C

Signal=Protect
Rights=Overlap

Lanes: Final Vol:
1 145
0
0 1***
0
2 59

Lanes: 1 0 2 1 0
Final Vol: 30 3966*** 105
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	30	3121	85	48	755	48	71	19	12	36	1	121
Growth 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
Initial Bse:	30	3121	85	48	755	48	71	19	12	36	1	121
Added Vol:	0	845	20	57	227	0	0	0	0	23	0	24
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	3966	105	105	982	48	71	19	12	59	1	145
User 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
PHF 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
PHF Volume:	30	3966	105	105	982	48	71	19	12	59	1	145
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	3966	105	105	982	48	71	19	12	59	1	145
PCE 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
MLF 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
FinalVolume:	30	3966	105	105	982	48	71	19	12	59	1	145
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.98	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	2.92	0.08	2.00	2.86	0.14	1.00	0.61	0.39	1.97	0.03	1.00
Final Sat.:	1750	5455	144	3150	5339	261	1750	1103	697	3446	58	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.73	0.73	0.03	0.18	0.18	0.04	0.02	0.02	0.02	0.02	0.08
Crit Moves:		****		****			****				****	
Green Time:	26.2	143	143.0	7.0	124	123.8	8.0	10.6	10.6	7.4	10.0	17.0
Volume/Cap:	0.12	0.91	0.91	0.86	0.27	0.27	0.91	0.29	0.29	0.42	0.31	0.88
Delay/Veh:	67.1	17.4	17.4	127.4	10.8	10.8	159.4	82.7	82.7	84.8	81.9	109.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	67.1	17.4	17.4	127.4	10.8	10.8	159.4	82.7	82.7	84.8	81.9	109.5
LOS by Move:	E	B	B	F	B+	B+	F	F	F	F	F	F
HCM2kAvgQ:	2	59	59	5	7	7	7	2	2	2	2	9

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #30: Mathilda Avenue / McKinley Avenue

Signal=Protect/Rights=Include
Final Vol: 48 990 557***
Lanes: 0 1 2 0 2

Signal=Protect
Rights=Include
Final Vol: Lanes:
71*** 1
0
19 0
1
12 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 180
Loss Time (sec): 12
Critical V/C: 1.096
Avg Crit Del (sec/veh): 101.2
Avg Delay (sec/veh): 85.8
LOS: F

Signal=Protect
Rights=Overlap
Lanes: Final Vol:
1 244
0
0 1***
0
2 102

Lanes: 1 0 2 1 0
Final Vol: 30 4028*** 317
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	30	3121	85	48	755	48	71	19	12	36	1	121
Growth 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
Initial Bse:	30	3121	85	48	755	48	71	19	12	36	1	121
Added Vol:	0	907	232	509	235	0	0	0	0	66	0	123
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	4028	317	557	990	48	71	19	12	102	1	244
User 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
PHF 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
PHF Volume:	30	4028	317	557	990	48	71	19	12	102	1	244
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	4028	317	557	990	48	71	19	12	102	1	244
PCE 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
MLF 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
FinalVolume:	30	4028	317	557	990	48	71	19	12	102	1	244
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.83	0.98	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	2.77	0.23	2.00	2.86	0.14	1.00	0.61	0.39	1.98	0.02	1.00
Final Sat.:	1750	5191	409	3150	5341	259	1750	1103	697	3469	34	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.78	0.78	0.18	0.19	0.19	0.04	0.02	0.02	0.03	0.03	0.14
Crit Moves:		****		****			****				****	
Green Time:	26.2	123	123.0	28.0	125	124.8	7.0	10.0	10.0	7.0	10.0	38.0
Volume/Cap:	0.12	1.14	1.14	1.14	0.27	0.27	1.04	0.31	0.31	0.76	0.53	0.66
Delay/Veh:	67.1	93.3	93.3	159.5	10.4	10.4	208.1	83.5	83.5	92.7	83.5	68.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	67.1	93.3	93.3	159.5	10.4	10.4	208.1	83.5	83.5	92.7	83.5	68.2
LOS by Move:	E	F	F	F	B+	B+	F	F	F	F	F	E
HCM2kAvgQ:	2	102	102	26	7	7	7	2	2	3	3	13

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Cumulative AM

Intersection #31: Mathilda Avenue / Iowa Avenue

Signal=Protect/Rights=Include
Final Vol: 60 1000 31***
Lanes: 0 1 2 0 2

Signal=Protect
Rights=Include
Final Vol: 91*** 44 36
Lanes: 1 0 1 1 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 155
Loss Time (sec): 12
Critical V/C: 0.830
Avg Crit Del (sec/veh): 21.5
Avg Delay (sec/veh): 21.3
LOS: C+

Signal=Protect
Rights=Overlap
Lanes: 1 0 1 0 2
Final Vol: 60 32*** 61

Lanes: 1 0 3 0 1
Final Vol: 23 3918*** 102
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	22	3134	54	29	760	52	57	43	34	21	29	51
Growth 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
Initial Bse:	22	3134	54	29	760	52	57	43	34	21	29	51
Added Vol:	1	784	48	2	240	8	34	1	2	40	3	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	3918	102	31	1000	60	91	44	36	61	32	60
User 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
PHF 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
PHF Volume:	23	3918	102	31	1000	60	91	44	36	61	32	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	3918	102	31	1000	60	91	44	36	61	32	60
PCE 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
MLF 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
FinalVolume:	23	3918	102	31	1000	60	91	44	36	61	32	60
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	1.00	0.95	0.83	1.00	0.92
Lanes:	1.00	3.00	1.00	2.00	2.82	0.18	1.00	1.08	0.92	2.00	1.00	1.00
Final Sat.:	1750	5700	1750	3150	5283	317	1750	2034	1664	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.69	0.06	0.01	0.19	0.19	0.05	0.02	0.02	0.02	0.02	0.03
Crit Moves:		****		****			****				****	
Green Time:	23.9	117	117.1	7.0	100	100.2	8.9	11.1	11.1	7.8	10.0	17.0
Volume/Cap:	0.09	0.91	0.08	0.22	0.29	0.29	0.91	0.30	0.30	0.39	0.26	0.31
Delay/Veh:	56.3	18.1	4.9	72.1	12.0	12.0	134.2	68.9	68.9	72.9	70.1	64.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.3	18.1	4.9	72.1	12.0	12.0	134.2	68.9	68.9	72.9	70.1	64.5
LOS by Move:	E+	B-	A	E	B+	B+	F	E	E	E	E	E
HCM2kAvgQ:	1	47	1	1	7	7	5	2	2	2	1	3

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Intersection #31: Mathilda Avenue / Iowa Avenue

Signal=Protect/Rights=Include
Final Vol: 62 1049 31***
Lanes: 0 1 2 0 2

Signal=Protect
Rights=Include

Final Vol: Lanes:
97*** 1
0
52 1
1
36 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 155
Loss Time (sec): 12
Critical V/C: 0.886
Avg Crit Del (sec/veh): 29.1
Avg Delay (sec/veh): 27.1
LOS: C

Signal=Protect
Rights=Overlap

Lanes: Final Vol:
1 91
0
1 34***
0
2 93

Lanes: 1 0 3 0 1
Final Vol: 23 4184*** 199
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	22	3134	54	29	760	52	57	43	34	21	29	51
Growth 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
Initial Bse:	22	3134	54	29	760	52	57	43	34	21	29	51
Added Vol:	1	1050	145	2	289	10	40	9	2	72	5	40
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	4184	199	31	1049	62	97	52	36	93	34	91
User 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
PHF 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
PHF Volume:	23	4184	199	31	1049	62	97	52	36	93	34	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	4184	199	31	1049	62	97	52	36	93	34	91
PCE 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
MLF 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
FinalVolume:	23	4184	199	31	1049	62	97	52	36	93	34	91
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	0.99	0.95	0.83	1.00	0.92
Lanes:	1.00	3.00	1.00	2.00	2.83	0.17	1.00	1.16	0.84	2.00	1.00	1.00
Final Sat.:	1750	5700	1750	3150	5287	312	1750	2185	1513	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.73	0.11	0.01	0.20	0.20	0.06	0.02	0.02	0.03	0.02	0.05
Crit Moves:		****		****			****				****	
Green Time:	23.0	117	117.2	7.0	101	101.1	8.8	11.1	11.1	7.8	10.0	17.0
Volume/Cap:	0.09	0.97	0.15	0.22	0.30	0.30	0.97	0.33	0.33	0.59	0.28	0.47
Delay/Veh:	57.1	25.6	5.3	72.1	11.7	11.7	153.4	69.2	69.2	77.8	70.3	66.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.1	25.6	5.3	72.1	11.7	11.7	153.4	69.2	69.2	77.8	70.3	66.6
LOS by Move:	E+	C	A	E	B+	B+	F	E	E	E-	E	E
HCM2kAvgQ:	1	59	3	1	7	7	6	2	2	3	1	4

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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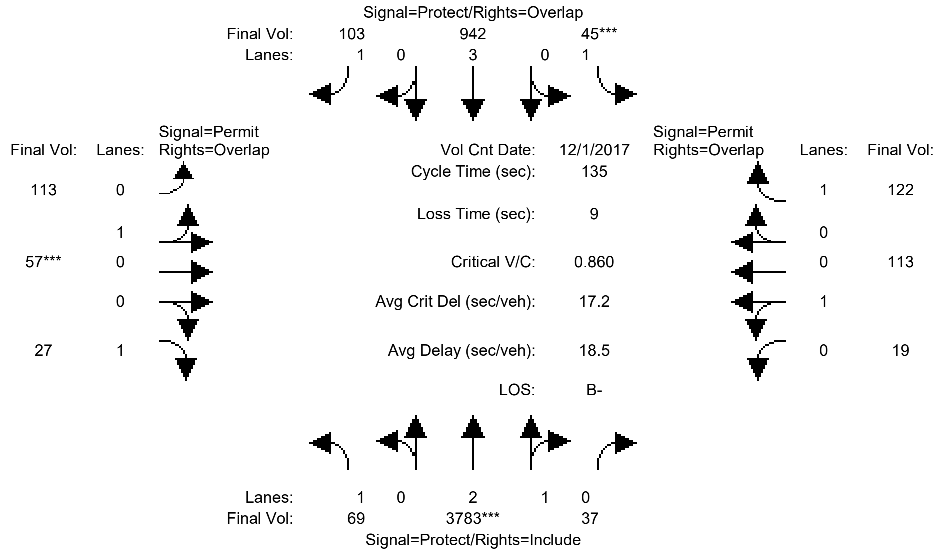
Intersection #32: Mathilda Avenue / Olive Avenue



Street Name:	Mathilda Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module: >> Count Date: 1 Dec 2017 <<

Base Vol:	69	3005	37	35	675	98	93	53	27	19	111	87
Growth 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
Initial Bse:	69	3005	37	35	675	98	93	53	27	19	111	87
Added Vol:	0	778	0	10	267	5	20	4	0	0	2	35
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	69	3783	37	45	942	103	113	57	27	19	113	122
User 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
PHF 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
PHF Volume:	69	3783	37	45	942	103	113	57	27	19	113	122
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	69	3783	37	45	942	103	113	57	27	19	113	122
PCE 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
MLF 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
FinalVolume:	69	3783	37	45	942	103	113	57	27	19	113	122

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.97	0.03	1.00	3.00	1.00	0.66	0.34	1.00	0.14	0.86	1.00
Final Sat.:	1750	5546	54	1750	5700	1750	1196	604	1750	259	1541	1750

Capacity Analysis Module:

Vol/Sat:	0.04	0.68	0.68	0.03	0.17	0.06	0.09	0.09	0.02	0.07	0.07	0.07
Crit Moves:		****		****				****				
Green Time:	26.6	105	104.5	7.0	84.9	84.9	14.5	14.5	41.1	14.5	14.5	21.5
Volume/Cap:	0.20	0.88	0.88	0.50	0.26	0.09	0.88	0.88	0.05	0.68	0.68	0.44
Delay/Veh:	45.6	13.2	13.2	66.5	11.2	9.9	93.6	93.6	33.2	67.8	67.8	52.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.6	13.2	13.2	66.5	11.2	9.9	93.6	93.6	33.2	67.8	67.8	52.4
LOS by Move:	D	B	B	E	B+	A	F	F	C-	E	E	D-
HCM2kAvgQ:	3	40	40	2	6	2	10	10	1	5	5	5

Note: Queue reported is the number of cars per lane.

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Intersection #32: Mathilda Avenue / Olive Avenue

Signal=Protect/Rights=Overlap
Final Vol: 104 1021 47***
Lanes: 1 0 3 0 1

Westbound (left side): Signal=Permit, Rights=Overlap
Final Vol: 116, Lanes: 0
Lanes: 1
Final Vol: 57***, Lanes: 0
Lanes: 0
Final Vol: 27, Lanes: 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 135
Loss Time (sec): 9
Critical V/C: 0.931
Avg Crit Del (sec/veh): 23.2
Avg Delay (sec/veh): 22.8
LOS: C+

Signal=Permit, Rights=Overlap
Lanes: 1, Final Vol: 125
Lanes: 0
Lanes: 0, Final Vol: 113
Lanes: 1
Lanes: 0, Final Vol: 19

Lanes: 1 0 2 1 0
Final Vol: 69 4140*** 37
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	69	3005	37	35	675	98	93	53	27	19	111	87
Growth 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
Initial Bse:	69	3005	37	35	675	98	93	53	27	19	111	87
Added Vol:	0	1135	0	12	346	6	23	4	0	0	2	38
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	69	4140	37	47	1021	104	116	57	27	19	113	125
User 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
PHF 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
PHF Volume:	69	4140	37	47	1021	104	116	57	27	19	113	125
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	69	4140	37	47	1021	104	116	57	27	19	113	125
PCE 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
MLF 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
FinalVolume:	69	4140	37	47	1021	104	116	57	27	19	113	125
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.97	0.03	1.00	3.00	1.00	0.67	0.33	1.00	0.14	0.86	1.00
Final Sat.:	1750	5550	50	1750	5700	1750	1207	593	1750	259	1541	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.75	0.75	0.03	0.18	0.06	0.10	0.10	0.02	0.07	0.07	0.07
Crit Moves:		****		****				****				
Green Time:	25.2	105	105.4	7.0	87.2	87.2	13.6	13.6	38.8	13.6	13.6	20.6
Volume/Cap:	0.21	0.96	0.96	0.52	0.28	0.09	0.96	0.96	0.05	0.73	0.73	0.47
Delay/Veh:	46.8	19.0	19.0	67.5	10.4	9.0	114.1	114	34.8	72.8	72.8	53.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.8	19.0	19.0	67.5	10.4	9.0	114.1	114	34.8	72.8	72.8	53.5
LOS by Move:	D	B-	B-	E	B+	A	F	F	C-	E	E	D-
HCM2kAvgQ:	3	56	56	2	6	2	11	11	1	6	6	5

Note: Queue reported is the number of cars per lane.

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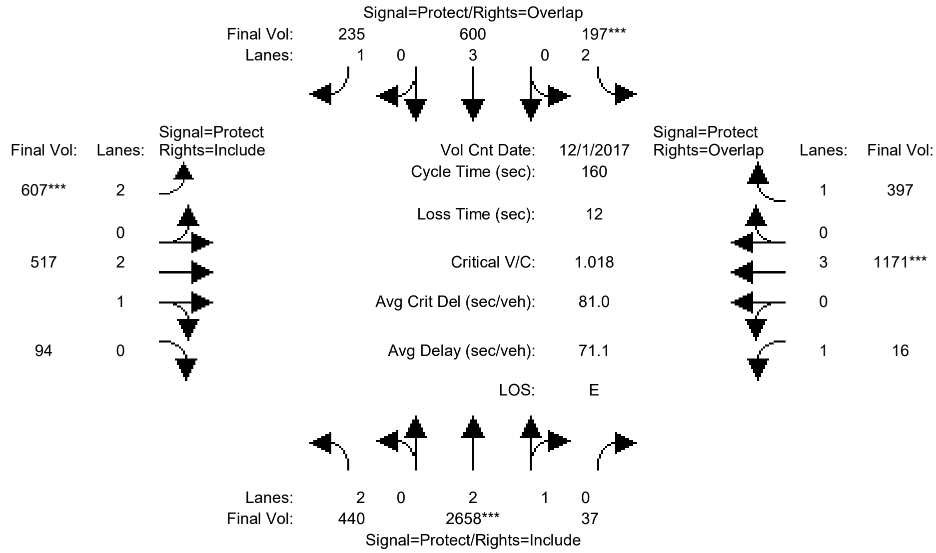
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #33: Mathilda Avenue / El Camino Real (CMP)



Street Name:	Mathilda Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	386	2099	37	172	435	158	444	490	86	16	1133	341
Growth 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
Initial Bse:	386	2099	37	172	435	158	444	490	86	16	1133	341
Added Vol:	54	559	0	25	165	77	163	27	8	0	38	56
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	440	2658	37	197	600	235	607	517	94	16	1171	397
User 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
PHF 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
PHF Volume:	440	2658	37	197	600	235	607	517	94	16	1171	397
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	440	2658	37	197	600	235	607	517	94	16	1171	397
PCE 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
MLF 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
FinalVolume:	440	2658	37	197	600	235	607	517	94	16	1171	397
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	1.00	0.92	0.83	0.99	0.95	0.92	1.00	0.92
Lanes:	2.00	2.96	0.04	2.00	3.00	1.00	2.00	2.52	0.48	1.00	3.00	1.00
Final Sat.:	3150	5523	77	3150	5700	1750	3150	4737	861	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.14	0.48	0.48	0.06	0.11	0.13	0.19	0.11	0.11	0.01	0.21	0.23
Crit Moves:		****		****			****				****	
Green Time:	48.7	75.6	75.6	9.8	36.7	67.0	30.3	44.7	44.7	17.9	32.3	42.1
Volume/Cap:	0.46	1.02	1.02	1.02	0.46	0.32	1.02	0.39	0.39	0.08	1.02	0.86
Delay/Veh:	45.3	64.4	64.4	144.6	53.3	31.5	106.4	46.8	46.8	63.9	95.1	71.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.3	64.4	64.4	144.6	53.3	31.5	106.4	46.8	46.8	63.9	95.1	71.5
LOS by Move:	D	E	E	F	D-	C	F	D	D	E	F	E
HCM2kAvgQ:	10	49	49	9	8	8	21	8	8	1	22	21

Note: Queue reported is the number of cars per lane.

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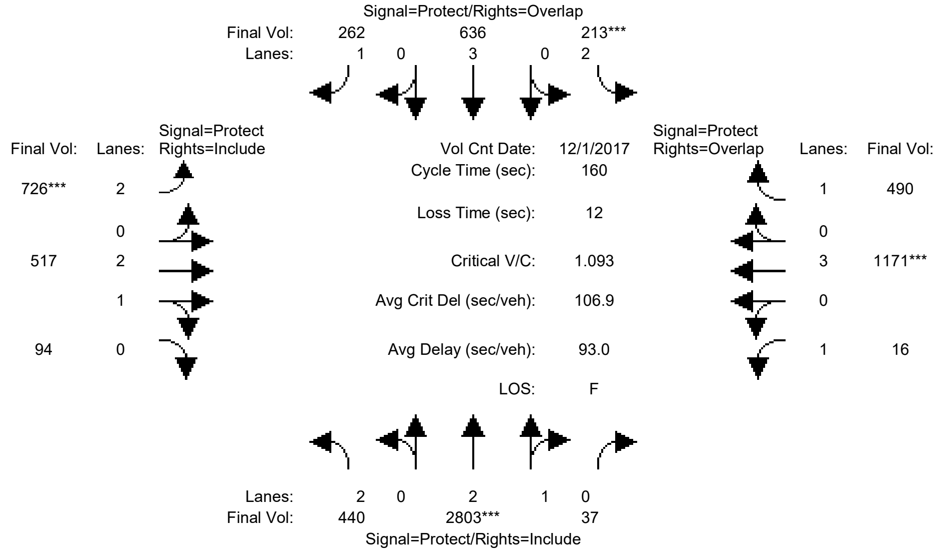
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #33: Mathilda Avenue / El Camino Real (CMP)



Street Name:	Mathilda Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	386	2099	37	172	435	158	444	490	86	16	1133	341
Growth 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
Initial Bse:	386	2099	37	172	435	158	444	490	86	16	1133	341
Added Vol:	54	704	0	41	201	104	282	27	8	0	38	149
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	440	2803	37	213	636	262	726	517	94	16	1171	490
User 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
PHF 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
PHF Volume:	440	2803	37	213	636	262	726	517	94	16	1171	490
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	440	2803	37	213	636	262	726	517	94	16	1171	490
PCE 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
MLF 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
FinalVolume:	440	2803	37	213	636	262	726	517	94	16	1171	490
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	1.00	0.92	0.83	0.99	0.95	0.92	1.00	0.92
Lanes:	2.00	2.96	0.04	2.00	3.00	1.00	2.00	2.52	0.48	1.00	3.00	1.00
Final Sat.:	3150	5527	73	3150	5700	1750	3150	4737	861	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.14	0.51	0.51	0.07	0.11	0.15	0.23	0.11	0.11	0.01	0.21	0.28
Crit Moves:		****		****			****				****	
Green Time:	46.8	74.3	74.3	9.9	37.4	71.1	33.7	45.6	45.6	18.3	30.1	40.0
Volume/Cap:	0.48	1.09	1.09	1.09	0.48	0.34	1.09	0.38	0.38	0.08	1.09	1.12
Delay/Veh:	46.9	91.5	91.5	166.4	53.2	29.3	126.0	46.1	46.1	63.5	121	140.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.9	91.5	91.5	166.4	53.2	29.3	126.0	46.1	46.1	63.5	121	140.1
LOS by Move:	D	F	F	F	D-	C	F	D	D	E	F	F
HCM2kAvgQ:	10	56	56	10	9	9	28	8	8	1	24	34

Note: Queue reported is the number of cars per lane.

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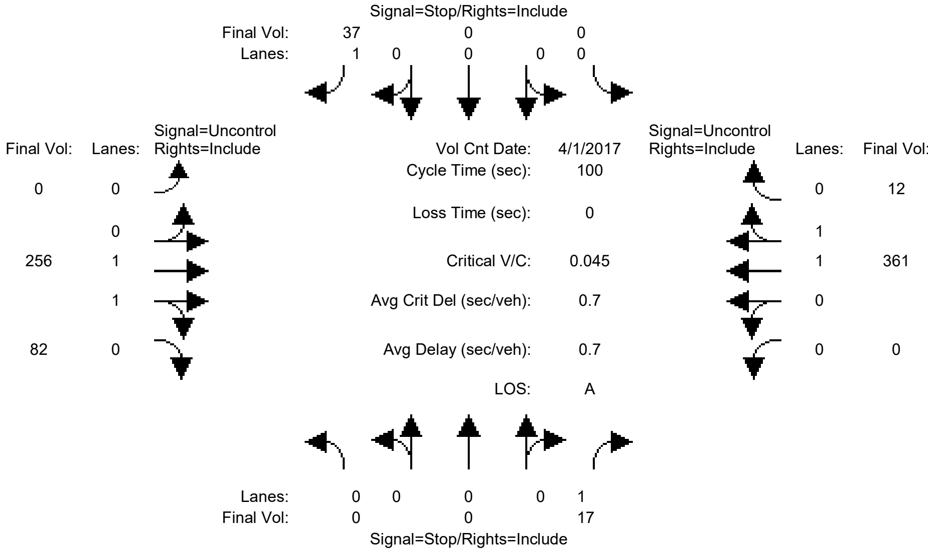
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative AM

Intersection #34: Aries Way / Washington Avenue



Street Name:	Aries Way						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	0	0	8	0	0	36	0	236	51	0	254	12
Growth 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
Initial Bse:	0	0	8	0	0	36	0	236	51	0	254	12
Added Vol:	0	0	9	0	0	1	0	20	31	0	107	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	17	0	0	37	0	256	82	0	361	12
User 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
PHF 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
PHF Volume:	0	0	17	0	0	37	0	256	82	0	361	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	17	0	0	37	0	256	82	0	361	12
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	169	xxxx	xxxx	187	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	852	xxxx	xxxx	830	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	852	xxxx	xxxx	830	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.02	xxxx	xxxx	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.1	xxxx	xxxx	0.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	9.3	xxxxx	xxxx	9.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	A	*	*	A	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		9.3			9.5			xxxxxx			xxxxxx	
ApproachLOS:		A			A			*			*	

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #34 Aries Way / Washington Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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```
------------|----------------||----------------||----------------||----------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  1    0  0  1  1  0    0  0  1  1  0
Initial Vol:    0    0    17     0    0    37     0  256    82     0  361    12
ApproachDel:        9.3              9.5            xxxxxx           xxxxxx
------------|----------------||----------------||----------------||----------------|
Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=17]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=765]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=37]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=765]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #34 Aries Way / Washington Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|----------------||----------------||----------------||----------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  1    0  0  1  1  0    0  0  1  1  0
Initial Vol:    0    0    17     0    0    37     0  256    82     0  361    12
------------|----------------||----------------||----------------||----------------|
Major Street Volume:             711
Minor Approach Volume:           37
Minor Approach Volume Threshold: 402
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #34: Aries Way / Washington Avenue

Signal=Stop/Rights=Include
Final Vol: 42 0 0
Lanes: 1 0 0 0 0

Final Vol:	Lanes:	Signal=Uncontrol Rights=Include			Signal=Uncontrol Rights=Include	Lanes:	Final Vol:
0	0		Vol Cnt Date:	4/1/2017		0	36
			Cycle Time (sec):	100			
	0		Loss Time (sec):	0		1	
346	1		Critical V/C:	0.052		1	366
	1		Avg Crit Del (sec/veh):	0.6		0	
79	0		Avg Delay (sec/veh):	0.6		0	0
			LOS:	A			

Lanes: 0 0 0 0 1
Final Vol: 0 0 16
Signal=Stop/Rights=Include

```
Street Name:                Aries Way                     Washington Avenue
Approach:       North Bound       South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 1 Apr 2017 <<
Base Vol:       0    0     8     0    0    36     0  236    51     0  254    12
Growth 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
Initial Bse:    0    0     8     0    0    36     0  236    51     0  254    12
Added Vol:      0    0     8     0    0     6     0  110    28     0  112    24
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0    16     0    0    42     0  346    79     0  366    36
User 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
PHF 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
PHF Volume:     0    0    16     0    0    42     0  346    79     0  366    36
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0    16     0    0    42     0  346    79     0  366    36
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx   6.9 xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx   3.3 xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx   213  xxxx xxxx   201  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx   799  xxxx xxxx   813  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx   799  xxxx xxxx   813  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  0.02  xxxx xxxx  0.05  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2WayQ95thQ:   xxxx xxxx   0.1  xxxx xxxx   0.2  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx   9.6 xxxxx xxxx   9.7 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     A     *    *     A     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:       9.6               9.7             xxxxxx            xxxxxx
ApproachLOS:        A                 A                 *                 *
Note: Queue reported is the number of cars per lane.
                     Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #34 Aries Way / Washington Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 1	0 0 1 1 0	0 0 1 1 0
Initial Vol:	0 0 16	0 0 42	0 346 79	0 366 36
ApproachDel:	9.6	9.7	xxxxxx	xxxxxx

Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=16]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=885]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=42]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=885]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****
Intersection #34 Aries Way / Washington Avenue
****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 1	0 0 1 1 0	0 0 1 1 0
Initial Vol:	0 0 16	0 0 42	0 346 79	0 366 36

Major Street Volume: 827
Minor Approach Volume: 42
Minor Approach Volume Threshold: 350

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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Cityline TIA
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #35: Taaffe Street / Washington Avenue

Signal=Permit/Rights=Include
Final Vol: 97 10*** 6
Lanes: 0 0 1! 0 0

Final Vol:	Lanes:	Signal=Protect Rights=Overlap			Signal=Protect Rights=Include	Lanes:	Final Vol:
76***	1		Vol Cnt Date:	4/1/2017		0	37
			Cycle Time (sec):	60			
	0		Loss Time (sec):	9		1	
143	1		Critical V/C:	0.294		0	218***
	0		Avg Crit Del (sec/veh):	14.6		0	
51	1		Avg Delay (sec/veh):	15.1		1	65
			LOS:	B			

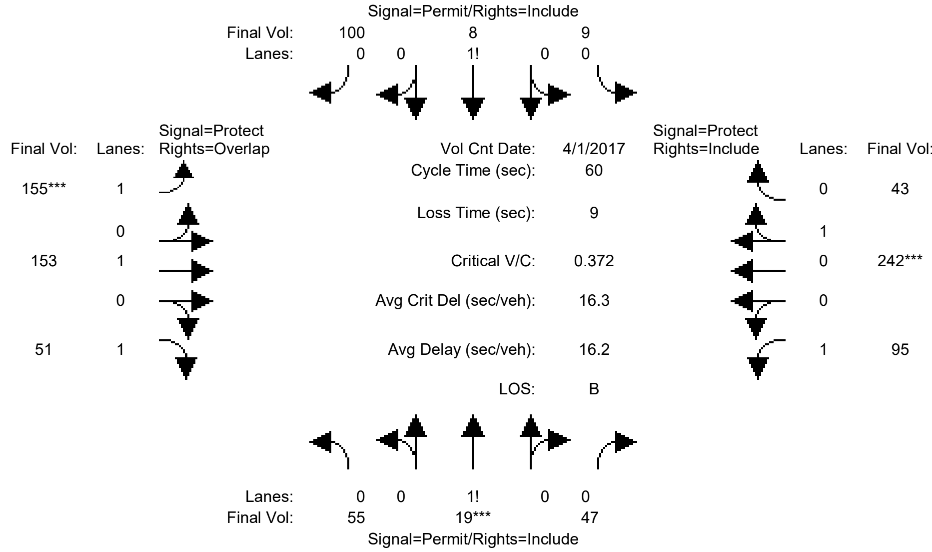
Lanes: 0 0 1! 0 0
Final Vol: 53 13 42
Signal=Permit/Rights=Include

```
Street Name:          Taaffe Street                  Washington Avenue
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Min. Green:    10   10    10    10   10    10     7   10    10     7   10    10
Y+R:          4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0   4.0  4.0   4.0
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 1 Apr 2017 <<
Base Vol:      15   12    14     6   10    97    74  120    46    23  149    37
Growth 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
Initial Bse:   15   12    14     6   10    97    74  120    46    23  149    37
Added Vol:     38    1    28     0    0     0     2   23     5    42   69     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   53   13    42     6   10    97    76  143    51    65  218    37
User 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
PHF 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
PHF Volume:    53   13    42     6   10    97    76  143    51    65  218    37
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   53   13    42     6   10    97    76  143    51    65  218    37
PCE 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
MLF 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
FinalVolume:   53   13    42     6   10    97    76  143    51    65  218    37
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.92 0.92  0.92  0.92 0.92  0.92  0.92 1.00  0.92  0.92 0.95  0.95
Lanes:       0.49 0.12  0.39  0.05 0.09  0.86  1.00 1.00  1.00  1.00 0.85  0.15
Final Sat.:   859  211   681    93  155  1502  1750 1900  1750  1750 1539   261
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:     0.06 0.06  0.06  0.06 0.06  0.06  0.04 0.08  0.03  0.04 0.14  0.14
Crit Moves:                        ****        ****                    ****
Green Time:  13.2 13.2  13.2  13.2 13.2  13.2   8.9 22.2  22.2  15.6 28.9  28.9
Volume/Cap:  0.28 0.28  0.28  0.29 0.29  0.29  0.29 0.20  0.08  0.14 0.29  0.29
Delay/Veh:   19.9 19.9  19.9  19.9 19.9  19.9  23.4 13.0  12.3  17.2  9.6   9.6
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  19.9 19.9  19.9  19.9 19.9  19.9  23.4 13.0  12.3  17.2  9.6   9.6
LOS by Move:   B-   B-    B-    B-   B-    B-     C    B     B     B    A     A
HCM2kAvgQ:      2    2     2     2    2     2     1    2     1     1    3     3
Note: Queue reported is the number of cars per lane.
```

Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #35: Taaffe Street / Washington Avenue



Street Name:	Taaffe Street						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	15	12	14	6	10	97	74	120	46	23	149	37
Growth 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
Initial Bse:	15	12	14	6	10	97	74	120	46	23	149	37
Added Vol:	40	7	33	3	-2	3	81	33	5	72	93	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	55	19	47	9	8	100	155	153	51	95	242	43
User 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
PHF 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
PHF Volume:	55	19	47	9	8	100	155	153	51	95	242	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	19	47	9	8	100	155	153	51	95	242	43
PCE 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
MLF 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
FinalVolume:	55	19	47	9	8	100	155	153	51	95	242	43
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	0.45	0.16	0.39	0.08	0.07	0.85	1.00	1.00	1.00	1.00	0.85	0.15
Final Sat.:	795	275	680	135	120	1496	1750	1900	1750	1750	1528	272
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.07	0.07	0.07	0.09	0.08	0.03	0.05	0.16	0.16
Crit Moves:		****					****				****	
Green Time:	11.2	11.2	11.2	11.2	11.2	11.2	14.3	23.4	23.4	16.4	25.5	25.5
Volume/Cap:	0.37	0.37	0.37	0.36	0.36	0.36	0.37	0.21	0.07	0.20	0.37	0.37
Delay/Veh:	22.1	22.1	22.1	22.0	22.0	22.0	19.7	12.3	11.5	17.0	12.1	12.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	22.1	22.1	22.1	22.0	22.0	22.0	19.7	12.3	11.5	17.0	12.1	12.1
LOS by Move:	C+	C+	C+	C+	C+	C+	B-	B	B+	B	B	B
HCM2kAvgQ:	2	2	2	2	2	2	3	2	1	2	4	4

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Cumulative AM

Intersection #36: Iowa Avenue / Taaffe Street

Signal=Permit/Rights=Include
Final Vol: 91 6*** 42
Lanes: 0 0 1! 0 0

Signal=Protect Rights=Include (West side)
Final Vol: 95*** Lanes: 1
Lanes: 0
Final Vol: 48 Lanes: 0
Lanes: 1
Final Vol: 14 Lanes: 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 100
Loss Time (sec): 12
Critical V/C: 0.216
Avg Crit Del (sec/veh): 26.4
Avg Delay (sec/veh): 25.8
LOS: C

Signal=Protect Rights=Include (East side)
Lanes: 0 Final Vol: 39
Lanes: 1
Lanes: 0 Final Vol: 63***
Lanes: 0
Lanes: 1 Final Vol: 8

Lanes: 0 0 1! 0 0
Final Vol: 10 20 9
Signal=Permit/Rights=Include

Street Name:	Taaffe Street						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	10	20	9	15	6	48	46	46	14	8	53	13
Growth 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
Initial Bse:	10	20	9	15	6	48	46	46	14	8	53	13
Added Vol:	0	0	0	27	0	43	49	2	0	0	10	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	20	9	42	6	91	95	48	14	8	63	39
User 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
PHF 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
PHF Volume:	10	20	9	42	6	91	95	48	14	8	63	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	20	9	42	6	91	95	48	14	8	63	39
PCE 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
MLF 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
FinalVolume:	10	20	9	42	6	91	95	48	14	8	63	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.26	0.51	0.23	0.30	0.04	0.66	1.00	0.77	0.23	1.00	0.62	0.38
Final Sat.:	449	897	404	529	76	1146	1750	1394	406	1750	1112	688
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.08	0.08	0.08	0.05	0.03	0.03	0.00	0.06	0.06
Crit Moves:					****		****				****	
Green Time:	36.7	36.7	36.7	36.7	36.7	36.7	25.1	30.2	30.2	21.1	26.2	26.2
Volume/Cap:	0.06	0.06	0.06	0.22	0.22	0.22	0.22	0.11	0.11	0.02	0.22	0.22
Delay/Veh:	20.5	20.5	20.5	21.9	21.9	21.9	29.9	25.3	25.3	31.3	29.1	29.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.5	20.5	20.5	21.9	21.9	21.9	29.9	25.3	25.3	31.3	29.1	29.1
LOS by Move:	C+	C+	C+	C+	C+	C+	C	C	C	C	C	C
HCM2kAvgQ:	1	1	1	3	3	3	2	1	1	0	2	2

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #36: Iowa Avenue / Taaffe Street

Signal=Permit/Rights=Include
Final Vol: 117 6*** 52
Lanes: 0 0 1! 0 0

Signal=Protect Rights=Include (west approach)
Final Vol: 167*** Lanes: 1
Lanes: 0
Final Vol: 82 Lanes: 0
Lanes: 1
Final Vol: 14 Lanes: 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 100
Loss Time (sec): 12
Critical V/C: 0.326
Avg Crit Del (sec/veh): 28.0
Avg Delay (sec/veh): 27.1
LOS: C

Signal=Protect Rights=Include (east approach)
Lanes: 0 Final Vol: 63
Lanes: 1
Lanes: 0 Final Vol: 102***
Lanes: 0
Lanes: 1 Final Vol: 8

Lanes: 0 0 1! 0 0
Final Vol: 10 20 9
Signal=Permit/Rights=Include

Street Name:	Taaffe Street						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	10	20	9	15	6	48	46	46	14	8	53	13
Growth 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
Initial Bse:	10	20	9	15	6	48	46	46	14	8	53	13
Added Vol:	0	0	0	37	0	69	121	36	0	0	49	50
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	20	9	52	6	117	167	82	14	8	102	63
User 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
PHF 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
PHF Volume:	10	20	9	52	6	117	167	82	14	8	102	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	20	9	52	6	117	167	82	14	8	102	63
PCE 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
MLF 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
FinalVolume:	10	20	9	52	6	117	167	82	14	8	102	63
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.26	0.51	0.23	0.30	0.03	0.67	1.00	0.85	0.15	1.00	0.62	0.38
Final Sat.:	449	897	404	520	60	1170	1750	1537	262	1750	1113	687
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.10	0.10	0.10	0.10	0.05	0.05	0.00	0.09	0.09
Crit Moves:					****		****				****	
Green Time:	30.7	30.7	30.7	30.7	30.7	30.7	29.3	33.7	33.7	23.6	28.1	28.1
Volume/Cap:	0.07	0.07	0.07	0.33	0.33	0.33	0.33	0.16	0.16	0.02	0.33	0.33
Delay/Veh:	24.7	24.7	24.7	27.1	27.1	27.1	28.0	23.3	23.3	29.3	28.8	28.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.7	24.7	24.7	27.1	27.1	27.1	28.0	23.3	23.3	29.3	28.8	28.8
LOS by Move:	C	C	C	C	C	C	C	C	C	C	C	C
HCM2kAvgQ:	1	1	1	5	5	5	4	2	2	0	4	4

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #37: Frances Street / Evelyn Avenue

Signal=Permit/Rights=Overlap
Final Vol: 77 10 71
Lanes: 1 0 0 1 0

Signal=Protect Rights=Include (Eastbound)
Final Vol: 39*** / 284 / 66
Lanes: 1 / 0 / 0 / 1 / 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 120
Loss Time (sec): 9
Critical V/C: 0.411
Avg Crit Del (sec/veh): 15.7
Avg Delay (sec/veh): 18.8
LOS: B-

Signal=Protect Rights=Overlap (Westbound)
Lanes: 1 / 0 / 1 / 0 / 1
Final Vol: 95 / 567*** / 70

Lanes: 0 1 0 0 1
Final Vol: 95 12*** 43
Signal=Permit/Rights=Overlap

Street Name:	Frances Street						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	94	12	37	71	10	77	39	238	64	66	527	95
Growth 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
Initial Bse:	94	12	37	71	10	77	39	238	64	66	527	95
Added Vol:	1	0	6	0	0	0	0	46	2	4	40	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95	12	43	71	10	77	39	284	66	70	567	95
User 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
PHF 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
PHF Volume:	95	12	43	71	10	77	39	284	66	70	567	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	12	43	71	10	77	39	284	66	70	567	95
PCE 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
MLF 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
FinalVolume:	95	12	43	71	10	77	39	284	66	70	567	95
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	0.89	0.11	1.00	0.88	0.12	1.00	1.00	0.81	0.19	1.00	1.00	1.00
Final Sat.:	1598	202	1750	1578	222	1750	1750	1461	339	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.02	0.05	0.05	0.04	0.02	0.19	0.19	0.04	0.30	0.05
Crit Moves:		****					****				****	
Green Time:	17.3	17.3	38.9	17.3	17.3	24.3	7.0	72.1	72.1	21.6	86.7	86.7
Volume/Cap:	0.41	0.41	0.08	0.31	0.31	0.22	0.38	0.32	0.32	0.22	0.41	0.08
Delay/Veh:	47.8	47.8	28.1	46.7	46.7	40.2	56.8	12.0	12.0	42.4	6.8	4.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.8	47.8	28.1	46.7	46.7	40.2	56.8	12.0	12.0	42.4	6.8	4.9
LOS by Move:	D	D	C	D	D	D	E+	B	B	D	A	A
HCM2kAvgQ:	4	4	1	3	3	3	1	7	7	2	8	1

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #37: Frances Street / Evelyn Avenue

Signal=Permit/Rights=Overlap
Final Vol: 77 10 71
Lanes: 1 0 0 1 0

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Overlap	Lanes:	Final Vol:
			Vol Cnt Date:	4/1/2017			
39***	1		Cycle Time (sec):	120		1	95
	0		Loss Time (sec):	9		0	
313	0		Critical V/C:	0.415		1	572***
	1		Avg Crit Del (sec/veh):	15.8		0	
91	0		Avg Delay (sec/veh):	18.6		1	72
			LOS:	B-			

Lanes: 0 1 0 0 1
Final Vol: 97 12*** 46
Signal=Permit/Rights=Overlap

Street Name:	Frances Street						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	94	12	37	71	10	77	39	238	64	66	527	95
Growth 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
Initial Bse:	94	12	37	71	10	77	39	238	64	66	527	95
Added Vol:	3	0	9	0	0	0	0	75	27	6	45	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	97	12	46	71	10	77	39	313	91	72	572	95
User 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
PHF 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
PHF Volume:	97	12	46	71	10	77	39	313	91	72	572	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	97	12	46	71	10	77	39	313	91	72	572	95
PCE 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
MLF 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
FinalVolume:	97	12	46	71	10	77	39	313	91	72	572	95
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	0.89	0.11	1.00	0.88	0.12	1.00	1.00	0.77	0.23	1.00	1.00	1.00
Final Sat.:	1602	198	1750	1578	222	1750	1750	1395	405	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.03	0.05	0.05	0.04	0.02	0.22	0.22	0.04	0.30	0.05
Crit Moves:		****					****				****	
Green Time:	17.4	17.4	36.7	17.4	17.4	24.4	7.0	74.3	74.3	19.3	86.6	86.6
Volume/Cap:	0.42	0.42	0.09	0.31	0.31	0.22	0.38	0.36	0.36	0.26	0.42	0.08
Delay/Veh:	47.8	47.8	29.7	46.6	46.6	40.1	56.8	11.4	11.4	44.5	6.9	4.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.8	47.8	29.7	46.6	46.6	40.1	56.8	11.4	11.4	44.5	6.9	4.9
LOS by Move:	D	D	C	D	D	D	E+	B+	B+	D	A	A
HCM2kAvgQ:	4	4	1	3	3	3	1	7	7	3	8	1

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative AM

Intersection #38: Washington Avenue / Frances Street

Signal=Stop/Rights=Include
Final Vol: 79 0 26
Lanes: 0 0 1! 0 0

Final Vol:	Lanes:	Signal=Uncontrol Rights=Include			Signal=Uncontrol Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	12/1/2017			
81	1		Cycle Time (sec):	80		1	52
	0		Loss Time (sec):	9		0	
130	1		Critical V/C:	0.100		1	251
	0		Avg Crit Del (sec/veh):	3.0		0	
0	0		Avg Delay (sec/veh):	3.0		0	0
			LOS:	B			

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Stop/Rights=Include

```
Street Name:           Frances Street                Washington Avenue
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 1 Dec 2017 <<
Base Vol:        0    0     0    26    0    73    74   86     0     0  147    52
Growth 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
Initial Bse:     0    0     0    26    0    73    74   86     0     0  147    52
Added Vol:       0    0     0     0    0     6     7   44     0     0  104     0
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:     0    0     0    26    0    79    81  130     0     0  251    52
User 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
PHF 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
PHF Volume:      0    0     0    26    0    79    81  130     0     0  251    52
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:     0    0     0    26    0    79    81  130     0     0  251    52
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   543  543   251   303 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   504  450   793  1269 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   480  421   793  1269 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.05 0.00  0.10  0.06 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.2 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   8.0 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  682 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.5 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 11.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    B     *     *    *     *     *    *     *
ApproachDel:    xxxxxx            11.2            xxxxxx            xxxxxx
ApproachLOS:         *               B                 *                 *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #38 Washington Avenue / Frances Street
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  1  0  1
Initial Vol:    0    0     0    26    0    79    81  130     0     0  251    52
ApproachDel:    xxxxxx             11.2            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=105]
   SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=619]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #38 Washington Avenue / Frances Street
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  1  0  1
Initial Vol:    0    0     0    26    0    79    81  130     0     0  251    52
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             514
Minor Approach Volume:           105
Minor Approach Volume Threshold: 514
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #38: Washington Avenue / Frances Street

Signal=Stop/Rights=Include
Final Vol: 96 0 34
Lanes: 0 0 1! 0 0

Signal=Uncontrol
Rights=Include

Final Vol:	Lanes:			Lanes:	Final Vol:
85	1			1	53
	0			0	
143	1			1	295
	0			0	
0	0			0	0

Signal=Uncontrol
Rights=Include

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 80
Loss Time (sec): 9
Critical V/C: 0.128
Avg Crit Del (sec/veh): 3.2
Avg Delay (sec/veh): 3.2
LOS: B

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Stop/Rights=Include

```
Street Name:          Frances Street                Washington Avenue
Approach:       North Bound      South Bound       East Bound        West Bound
Movement:      L  -  T  -  R   L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 1 Dec 2017 <<
Base Vol:        0    0     0    26    0    73    74   86     0     0  147    52
Growth 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
Initial Bse:     0    0     0    26    0    73    74   86     0     0  147    52
Added Vol:       0    0     0     8    0    23    11   57     0     0  148     1
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:     0    0     0    34    0    96    85  143     0     0  295    53
User 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
PHF 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
PHF Volume:      0    0     0    34    0    96    85  143     0     0  295    53
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:     0    0     0    34    0    96    85  143     0     0  295    53
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   608  608   295   348 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   462  413   749  1222 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   438  384   749  1222 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.08 0.00  0.13  0.07 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.2 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   8.2 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:      LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  632 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.8 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 12.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    B     *     *    *     *     *    *     *
ApproachDel:     xxxxxx             12.2             xxxxxx            xxxxxx
ApproachLOS:        *                 B                 *                 *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #38 Washington Avenue / Frances Street
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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```
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Lanes:       0  0  0  0  0   0  0  1! 0  0   1  0  1  0  0   0  0  1  0  1
Initial Vol:   0    0     0   34    0    96   85  143     0     0  295    53
ApproachDel:   xxxxxx             12.2           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.4]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=130]
   SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=706]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

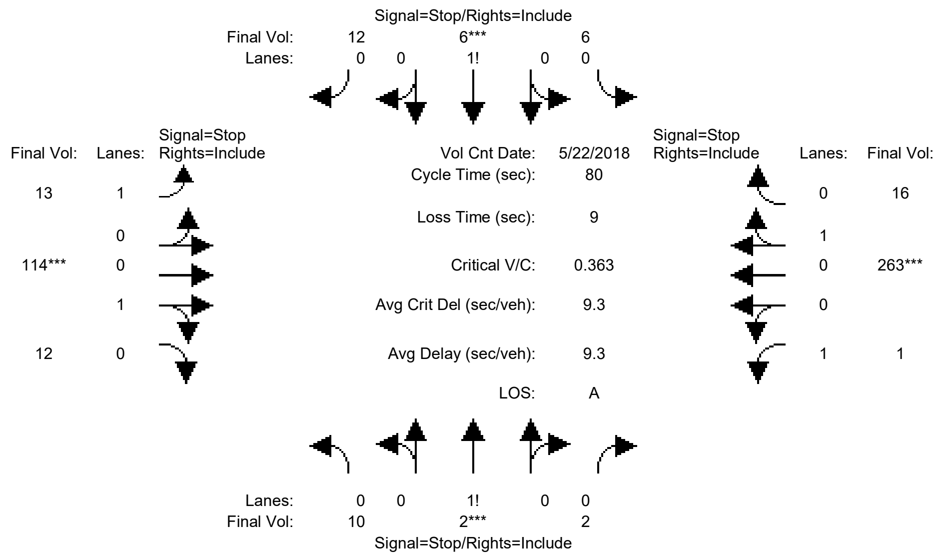
The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #38 Washington Avenue / Frances Street
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Lanes:       0  0  0  0  0   0  0  1! 0  0   1  0  1  0  0   0  0  1  0  1
Initial Vol:   0    0     0   34    0    96   85  143     0     0  295    53
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            576
Minor Approach Volume:          130
Minor Approach Volume Threshold: 475
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cumulative AM

Intersection #39: Murphy Avenue / Washington Avenue



Street Name:	Murphy Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10

Volume Module: >> Count Date: 22 May 2018 <<

Base Vol:	10	1	2	6	5	12	12	71	12	1	159	16
Growth 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
Initial Bse:	10	1	2	6	5	12	12	71	12	1	159	16
Added Vol:	0	1	0	0	1	0	1	43	0	0	104	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	2	2	6	6	12	13	114	12	1	263	16
User 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
PHF 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
PHF Volume:	10	2	2	6	6	12	13	114	12	1	263	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	2	2	6	6	12	13	114	12	1	263	16
PCE 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
MLF 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
FinalVolume:	10	2	2	6	6	12	13	114	12	1	263	16

Saturation Flow Module:

Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.72	0.14	0.14	0.25	0.25	0.50	1.00	0.90	0.10	1.00	0.94	0.06
Final Sat.:	481	96	96	180	180	359	674	684	72	688	724	44

Capacity Analysis Module:

Vol/Sat:	0.02	0.02	0.02	0.03	0.03	0.03	0.02	0.17	0.17	0.00	0.36	0.36
Crit Moves:		****			****			****			****	
Delay/Veh:	8.0	8.0	8.0	7.8	7.8	7.8	8.1	8.3	8.3	7.9	9.9	9.9
Delay 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
AdjDel/Veh:	8.0	8.0	8.0	7.8	7.8	7.8	8.1	8.3	8.3	7.9	9.9	9.9
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:		8.0			7.8			8.3			9.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.0			7.8			8.3			9.9	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.6	0.6

Note: Queue reported is the number of cars per lane.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #39 Murphy Avenue / Washington Avenue

****

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Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Stop Sign	Stop Sign
Lanes:	0 0 1! 0 0	0 0 1! 0 0	1 0 0 1 0	1 0 0 1 0
Initial Vol:	10 2 2	6 6 12	13 114 12	1 263 16

Major Street Volume: 419
Minor Approach Volume: 24
Minor Approach Volume Threshold: 585

SIGNAL WARRANT DISCLAIMER
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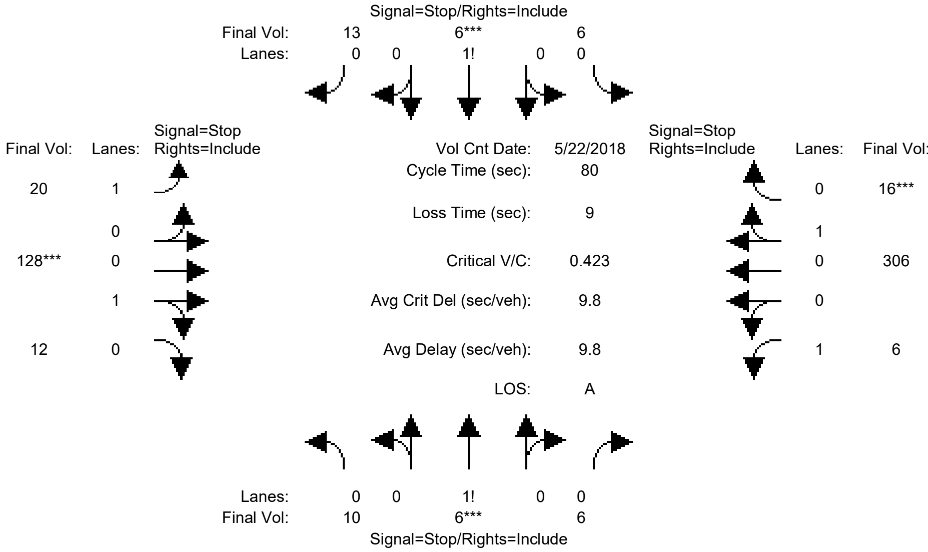
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #39: Murphy Avenue / Washington Avenue



Street Name:	Murphy Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 22 May 2018 <<												
Base Vol:	10	1	2	6	5	12	12	71	12	1	159	16
Growth 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
Initial Bse:	10	1	2	6	5	12	12	71	12	1	159	16
Added Vol:	0	5	4	0	1	1	8	57	0	5	147	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	6	6	6	6	13	20	128	12	6	306	16
User 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
PHF 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
PHF Volume:	10	6	6	6	6	13	20	128	12	6	306	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	6	6	6	6	13	20	128	12	6	306	16
PCE 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
MLF 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
FinalVolume:	10	6	6	6	6	13	20	128	12	6	306	16
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.46	0.27	0.27	0.24	0.24	0.52	1.00	0.91	0.09	1.00	0.95	0.05
Final Sat.:	302	181	181	165	165	358	664	679	64	681	723	38
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.04	0.04	0.04	0.03	0.19	0.19	0.01	0.42	0.42
Crit Moves:		****			****			****				****
Delay/Veh:	8.1	8.1	8.1	7.9	7.9	7.9	8.2	8.6	8.6	8.0	10.8	10.8
Delay 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
AdjDel/Veh:	8.1	8.1	8.1	7.9	7.9	7.9	8.2	8.6	8.6	8.0	10.8	10.8
LOS by Move:	A	A	A	A	A	A	A	A	A	A	B	B
ApproachDel:		8.1			7.9			8.5			10.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.1			7.9			8.5			10.7	
LOS by Appr:		A			A			A			B	
AllWayAvgQ:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.7	0.7

Note: Queue reported is the number of cars per lane.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #39 Murphy Avenue / Washington Avenue

****

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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign        Stop Sign        Stop Sign
Lanes:        0  0  1! 0  0    0  0  1! 0  0    1  0  0  1  0    1  0  0  1  0
Initial Vol:   10    6     6     6    6    13    20  128    12     6  306    16
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            488
Minor Approach Volume:          25
Minor Approach Volume Threshold: 532
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative AM

Intersection #40: Iowa Avenue / Murphy Avenue

Signal=Stop/Rights=Ignore
Final Vol: 0 0 0
Lanes: 0 0 1! 0 0

Signal=Uncontrol
Rights=Include
Final Vol: Lanes:
2 1
0
71 1
0
0 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 100
Loss Time (sec): 9
Critical V/C: 0.001
Avg Crit Del (sec/veh): 0.1
Avg Delay (sec/veh): 0.1
LOS: A

Signal=Uncontrol
Rights=Include
Lanes: Final Vol:
0 72
1
0 94
0
0 0

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Stop/Rights=Include

```
Street Name:          Murphy Avenue                        Iowa Avenue
Approach:      North Bound       South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 1 Dec 2017 <<
Base Vol:        0    0     0     0    0     6     1   42     0     0   59    72
Growth 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
Initial Bse:     0    0     0     0    0     6     1   42     0     0   59    72
Added Vol:       0    0     0     0    0     0     1   29     0     0   35     0
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:     0    0     0     0    0     6     2   71     0     0   94    72
User Adj:     1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0    0     0     0    0     0     2   71     0     0   94    72
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:     0    0     0     0    0     0     2   71     0     0   94    72
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx   130   166 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx   925  1424 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx   925  1424 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  0.00  0.00 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.0 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.5 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:    xxxxxx            xxxxxx            xxxxxx            xxxxxx
ApproachLOS:         *                 *                 *                 *
Note: Queue reported is the number of cars per lane.
                     Peak Hour Delay Signal Warrant Report
*********************************************************************************
Intersection #40 Iowa Avenue / Murphy Avenue
*********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```


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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0    0     0     0    0     6     2   71     0     0   94    72
ApproachDel:    xxxxxx           xxxxxx           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=OVERFLOW]
   SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=6]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=245]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #40 Iowa Avenue / Murphy Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0    0     0     0    0     6     2   71     0     0   94    72
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             239
Minor Approach Volume:           6
Minor Approach Volume Threshold: 778
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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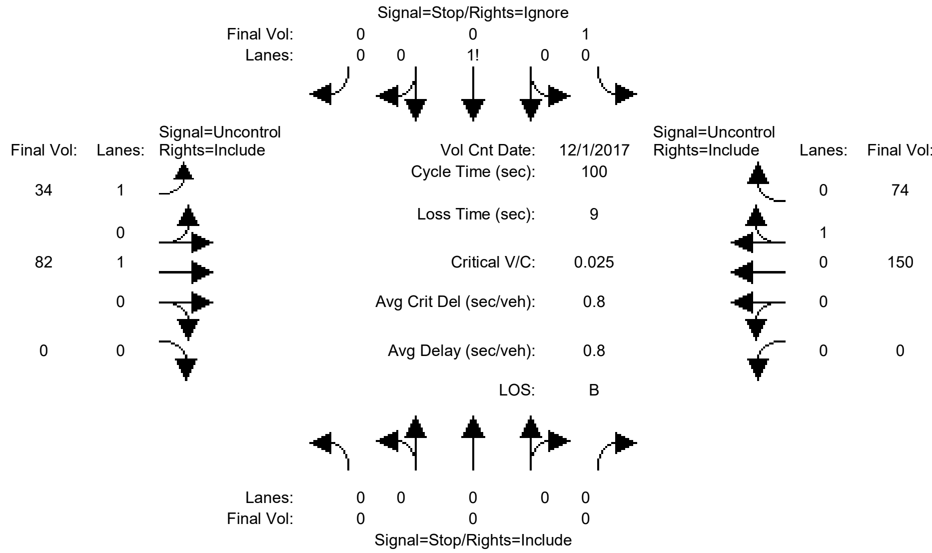
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #40: Iowa Avenue / Murphy Avenue



Street Name:	Murphy Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	0	0	0	0	6	1	42	0	0	59	72
Growth 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
Initial Bse:	0	0	0	0	0	6	1	42	0	0	59	72
Added Vol:	0	0	0	1	0	8	33	40	0	0	91	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	1	0	14	34	82	0	0	150	74
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	1	0	0	34	82	0	0	150	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	1	0	0	34	82	0	0	150	74
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	337	337	187	224	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	663	587	860	1357	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	650	572	860	1357	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.00	0.00	0.00	0.03	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	650	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	10.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:		xxxxxx			10.5			xxxxxx			xxxxxx	
ApproachLOS:		*			B			*			*	

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #40 Iowa Avenue / Murphy Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0    0     0     1    0    14    34   82     0     0  150    74
ApproachDel:    xxxxxx             10.5            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=15]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=355]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #40 Iowa Avenue / Murphy Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0    0     0     1    0    14    34   82     0     0  150    74
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            340
Minor Approach Volume:          15
Minor Approach Volume Threshold: 657
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
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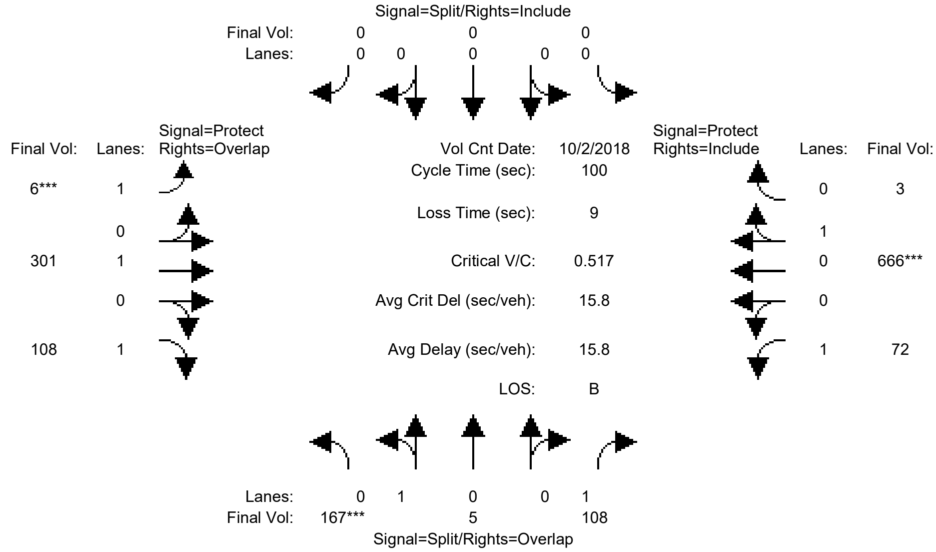
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #41: Sunnyvale Avenue / Maude Avenue



Street Name:	Sunnyvale Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	166	0	104	0	0	0	0	236	108	56	483	0
Growth 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
Initial Bse:	166	0	104	0	0	0	0	236	108	56	483	0
Added Vol:	1	5	4	0	0	0	6	65	0	16	183	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	167	5	108	0	0	0	6	301	108	72	666	3
User 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
PHF 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
PHF Volume:	167	5	108	0	0	0	6	301	108	72	666	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	167	5	108	0	0	0	6	301	108	72	666	3
PCE 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
MLF 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
FinalVolume:	167	5	108	0	0	0	6	301	108	72	666	3
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	0.97	0.03	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.99	0.01
Final Sat.:	1748	52	1750	0	0	0	1750	1900	1750	1750	1792	8
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.06	0.00	0.00	0.00	0.00	0.16	0.06	0.04	0.37	0.37
Crit Moves:	****						****				****	
Green Time:	17.2	17.2	39.8	0.0	0.0	0.0	7.0	51.2	68.4	22.6	66.8	66.8
Volume/Cap:	0.56	0.56	0.16	0.00	0.00	0.00	0.05	0.31	0.09	0.18	0.56	0.56
Delay/Veh:	40.2	40.2	19.4	0.0	0.0	0.0	43.6	14.3	5.4	31.4	9.3	9.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.2	40.2	19.4	0.0	0.0	0.0	43.6	14.3	5.4	31.4	9.3	9.3
LOS by Move:	D	D	B-	A	A	A	D	B	A	C	A	A
HCM2kAvgQ:	5	5	2	0	0	0	0	5	1	2	11	11

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #41: Sunnyvale Avenue / Maude Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Protect
Rights=Overlap

Final Vol:	Lanes:
6***	1
	0
301	1
	0
114	1

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 100
Loss Time (sec): 9
Critical V/C: 0.518
Avg Crit Del (sec/veh): 16.0
Avg Delay (sec/veh): 15.9
LOS: B

Signal=Protect
Rights=Include

Lanes:	Final Vol:
0	3
1	
0	666***
0	
1	77

Lanes: 0 1 0 0 1
Final Vol: 169 5*** 110
Signal=Split/Rights=Overlap

Street Name:	Sunnyvale Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	166	0	104	0	0	0	0	236	108	56	483	0
Growth 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
Initial Bse:	166	0	104	0	0	0	0	236	108	56	483	0
Added Vol:	3	5	6	0	0	0	6	65	0	16	183	3
PasserByVol:	0	0	0	0	0	0	0	0	6	5	0	0
Initial Fut:	169	5	110	0	0	0	6	301	114	77	666	3
User 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
PHF 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
PHF Volume:	169	5	110	0	0	0	6	301	114	77	666	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	169	5	110	0	0	0	6	301	114	77	666	3
PCE 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
MLF 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
FinalVolume:	169	5	110	0	0	0	6	301	114	77	666	3
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	0.97	0.03	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.99	0.01
Final Sat.:	1748	52	1750	0	0	0	1750	1900	1750	1750	1792	8
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.06	0.00	0.00	0.00	0.00	0.16	0.07	0.04	0.37	0.37
Crit Moves:		****					****				****	
Green Time:	17.3	17.3	39.9	0.0	0.0	0.0	7.0	51.1	68.4	22.6	66.7	66.7
Volume/Cap:	0.56	0.56	0.16	0.00	0.00	0.00	0.05	0.31	0.10	0.19	0.56	0.56
Delay/Veh:	40.1	40.1	19.4	0.0	0.0	0.0	43.6	14.4	5.4	31.6	9.4	9.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.1	40.1	19.4	0.0	0.0	0.0	43.6	14.4	5.4	31.6	9.4	9.4
LOS by Move:	D	D	B-	A	A	A	D	B	A	C	A	A
HCM2kAvgQ:	5	5	2	0	0	0	0	5	1	2	11	11

Note: Queue reported is the number of cars per lane.

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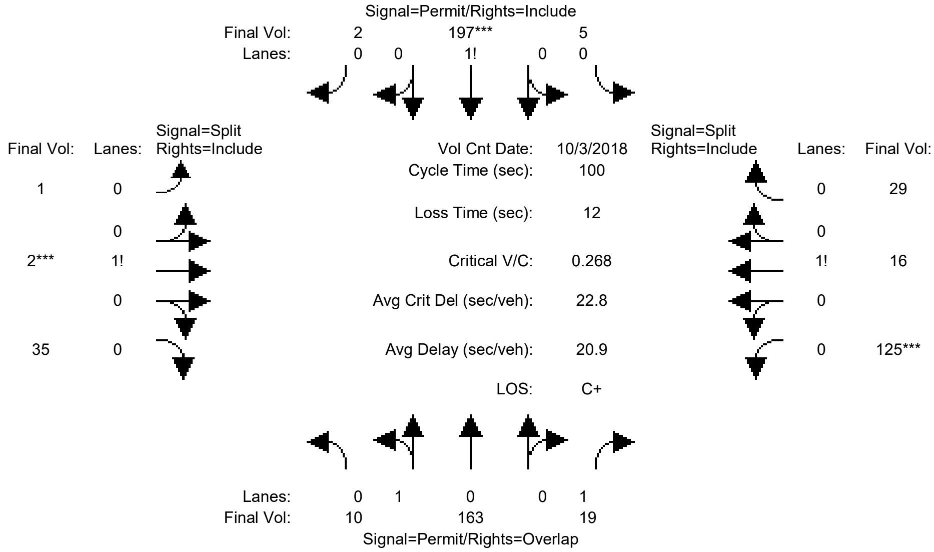
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #42: Sunnyvale Road / Arques Avenue



Street Name:	Sunnyvale Raod						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	10	152	19	5	181	2	1	2	35	125	16	29
Growth 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
Initial Bse:	10	152	19	5	181	2	1	2	35	125	16	29
Added Vol:	0	11	0	0	16	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	163	19	5	197	2	1	2	35	125	16	29
User 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
PHF 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
PHF Volume:	10	163	19	5	197	2	1	2	35	125	16	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	163	19	5	197	2	1	2	35	125	16	29
PCE 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
MLF 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
FinalVolume:	10	163	19	5	197	2	1	2	35	125	16	29
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.06	0.94	1.00	0.02	0.97	0.01	0.03	0.05	0.92	0.74	0.09	0.17
Final Sat.:	104	1696	1750	43	1690	17	46	92	1612	1287	165	299
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.01	0.12	0.12	0.12	0.02	0.02	0.02	0.10	0.10	0.10
Crit Moves:					****			****		****		
Green Time:	42.5	42.5	78.0	42.5	42.5	42.5	10.0	10.0	10.0	35.5	35.5	35.5
Volume/Cap:	0.23	0.23	0.01	0.27	0.27	0.27	0.22	0.22	0.22	0.27	0.27	0.27
Delay/Veh:	18.4	18.4	2.5	18.9	18.9	18.9	42.0	42.0	42.0	23.3	23.3	23.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.4	18.4	2.5	18.9	18.9	18.9	42.0	42.0	42.0	23.3	23.3	23.3
LOS by Move:	B-	B-	A	B-	B-	B-	D	D	D	C	C	C
HCM2kAvgQ:	3	3	0	4	4	4	1	1	1	4	4	4

Note: Queue reported is the number of cars per lane.

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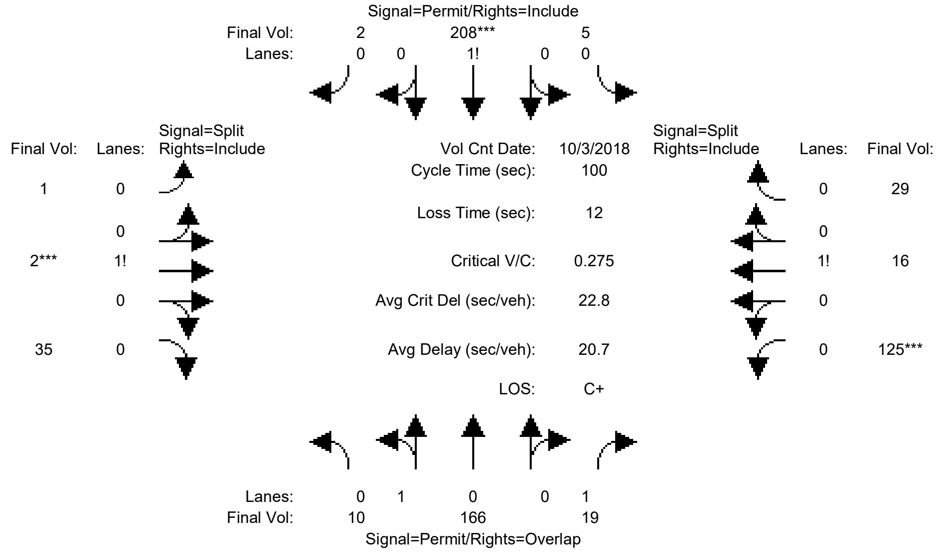
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #42: Sunnyvale Road / Arques Avenue



Street Name:	Sunnyvale Raod						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	10	152	19	5	181	2	1	2	35	125	16	29
Growth 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
Initial Bse:	10	152	19	5	181	2	1	2	35	125	16	29
Added Vol:	0	14	0	0	16	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	11	0	0	0	0	0	0	0
Initial Fut:	10	166	19	5	208	2	1	2	35	125	16	29
User 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
PHF 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
PHF Volume:	10	166	19	5	208	2	1	2	35	125	16	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	166	19	5	208	2	1	2	35	125	16	29
PCE 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
MLF 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
FinalVolume:	10	166	19	5	208	2	1	2	35	125	16	29
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.06	0.94	1.00	0.02	0.97	0.01	0.03	0.05	0.92	0.74	0.09	0.17
Final Sat.:	102	1698	1750	41	1693	16	46	92	1612	1287	165	299
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.01	0.12	0.12	0.12	0.02	0.02	0.02	0.10	0.10	0.10
Crit Moves:					****			****		****		
Green Time:	43.6	43.6	78.0	43.6	43.6	43.6	10.0	10.0	10.0	34.4	34.4	34.4
Volume/Cap:	0.22	0.22	0.01	0.28	0.28	0.28	0.22	0.22	0.22	0.28	0.28	0.28
Delay/Veh:	17.8	17.8	2.5	18.4	18.4	18.4	42.0	42.0	42.0	24.1	24.1	24.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.8	17.8	2.5	18.4	18.4	18.4	42.0	42.0	42.0	24.1	24.1	24.1
LOS by Move:	B	B	A	B-	B-	B-	D	D	D	C	C	C
HCM2kAvgQ:	3	3	0	4	4	4	1	1	1	4	4	4

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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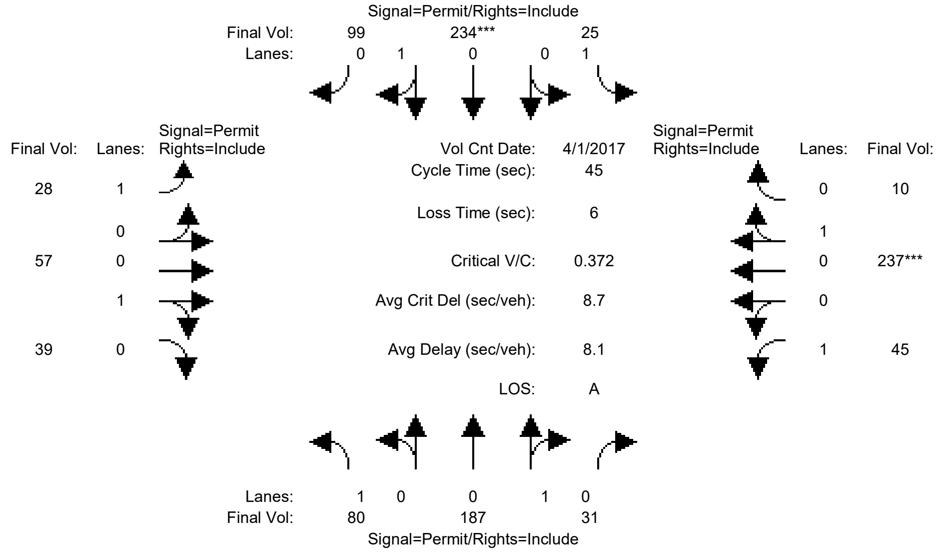
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #43: Sunnyvale Avenue / California Avenue



Street Name:	Sunnyvale Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	75	179	31	16	227	99	28	48	35	45	207	7
Growth 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
Initial Bse:	75	179	31	16	227	99	28	48	35	45	207	7
Added Vol:	5	8	0	9	7	0	0	9	4	0	30	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	187	31	25	234	99	28	57	39	45	237	10
User 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
PHF 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
PHF Volume:	80	187	31	25	234	99	28	57	39	45	237	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	187	31	25	234	99	28	57	39	45	237	10
PCE 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
MLF 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
FinalVolume:	80	187	31	25	234	99	28	57	39	45	237	10
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.86	0.14	1.00	0.70	0.30	1.00	0.59	0.41	1.00	0.96	0.04
Final Sat.:	1750	1544	256	1750	1265	535	1750	1069	731	1750	1727	73
Capacity Analysis Module:												
Vol/Sat:	0.05	0.12	0.12	0.01	0.19	0.19	0.02	0.05	0.05	0.03	0.14	0.14
Crit Moves:					****						****	
Green Time:	22.4	22.4	22.4	22.4	22.4	22.4	16.6	16.6	16.6	16.6	16.6	16.6
Volume/Cap:	0.09	0.24	0.24	0.03	0.37	0.37	0.04	0.14	0.14	0.07	0.37	0.37
Delay/Veh:	6.0	6.6	6.6	5.8	7.2	7.2	9.1	9.6	9.6	9.2	10.7	10.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.0	6.6	6.6	5.8	7.2	7.2	9.1	9.6	9.6	9.2	10.7	10.7
LOS by Move:	A	A	A	A	A	A	A	A	A	A	B+	B+
HCM2kAvgQ:	1	2	2	0	3	3	0	1	1	0	3	3

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #43: Sunnyvale Avenue / California Avenue

Signal=Permit/Rights=Include
Final Vol: 99 245*** 25
Lanes: 0 1 0 0 1

Final Vol: Lanes: Signal=Permit Rights=Include
28 1
0
57 0
1
65 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 45
Loss Time (sec): 6
Critical V/C: 0.379
Avg Crit Del (sec/veh): 8.7
Avg Delay (sec/veh): 8.2
LOS: A

Signal=Permit Rights=Include Lanes: Final Vol:
0 10
1
0 237***
0
1 45

Lanes: 1 0 0 1 0
Final Vol: 88 190 31
Signal=Permit/Rights=Include

Street Name:	Sunnyvale Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	75	179	31	16	227	99	28	48	35	45	207	7
Growth 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
Initial Bse:	75	179	31	16	227	99	28	48	35	45	207	7
Added Vol:	13	11	0	9	7	0	0	9	36	0	30	3
PasserByVol:	0	0	0	0	11	0	0	0	-6	0	0	0
Initial Fut:	88	190	31	25	245	99	28	57	65	45	237	10
User 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
PHF 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
PHF Volume:	88	190	31	25	245	99	28	57	65	45	237	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	190	31	25	245	99	28	57	65	45	237	10
PCE 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
MLF 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
FinalVolume:	88	190	31	25	245	99	28	57	65	45	237	10
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.86	0.14	1.00	0.71	0.29	1.00	0.47	0.53	1.00	0.96	0.04
Final Sat.:	1750	1548	252	1750	1282	518	1750	841	959	1750	1727	73
Capacity Analysis Module:												
Vol/Sat:	0.05	0.12	0.12	0.01	0.19	0.19	0.02	0.07	0.07	0.03	0.14	0.14
Crit Moves:					****						****	
Green Time:	22.7	22.7	22.7	22.7	22.7	22.7	16.3	16.3	16.3	16.3	16.3	16.3
Volume/Cap:	0.10	0.24	0.24	0.03	0.38	0.38	0.04	0.19	0.19	0.07	0.38	0.38
Delay/Veh:	5.9	6.4	6.4	5.6	7.1	7.1	9.3	10.0	10.0	9.4	11.0	11.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.9	6.4	6.4	5.6	7.1	7.1	9.3	10.0	10.0	9.4	11.0	11.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	B+	B+
HCM2kAvgQ:	1	2	2	0	3	3	0	1	1	0	3	3

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #44: Sunnyvale Avenue / Evelyn Avenue

Signal=Protect/Rights=Include
Final Vol: 136 238*** 24
Lanes: 0 1 1 0 1

Final Vol: Lanes: Signal=Protect Rights=Overlap

79*** 1
0
276 1
0
46 1

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 90
Loss Time (sec): 12
Critical V/C: 0.538
Avg Crit Del (sec/veh): 27.2
Avg Delay (sec/veh): 26.3
LOS: C

Signal=Protect Rights=Overlap Lanes: Final Vol:

1 70
0
1 498***
0
1 67

Lanes: 1 0 1 1 0
Final Vol: 102*** 233 45
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	100	224	29	24	227	136	75	233	46	49	454	70
Growth 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
Initial Bse:	100	224	29	24	227	136	75	233	46	49	454	70
Added Vol:	2	9	16	0	11	0	4	43	0	18	44	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	102	233	45	24	238	136	79	276	46	67	498	70
User 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
PHF 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
PHF Volume:	102	233	45	24	238	136	79	276	46	67	498	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	233	45	24	238	136	79	276	46	67	498	70
PCE 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
MLF 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
FinalVolume:	102	233	45	24	238	136	79	276	46	67	498	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.67	0.33	1.00	1.25	0.75	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	3101	599	1750	2354	1345	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.08	0.08	0.01	0.10	0.10	0.05	0.15	0.03	0.04	0.26	0.04
Crit Moves:	****				****		****				****	
Green Time:	9.7	15.7	15.7	11.0	16.9	16.9	7.5	33.4	43.2	17.9	43.8	54.8
Volume/Cap:	0.54	0.43	0.43	0.11	0.54	0.54	0.54	0.39	0.05	0.19	0.54	0.07
Delay/Veh:	41.1	33.7	33.7	35.4	33.9	33.9	43.5	21.1	12.5	30.3	16.7	7.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.1	33.7	33.7	35.4	33.9	33.9	43.5	21.1	12.5	30.3	16.7	7.2
LOS by Move:	D	C-	C-	D+	C-	C-	D	C+	B	C	B	A
HCM2kAvgQ:	3	3	3	1	5	5	3	6	1	2	9	1

Note: Queue reported is the number of cars per lane.

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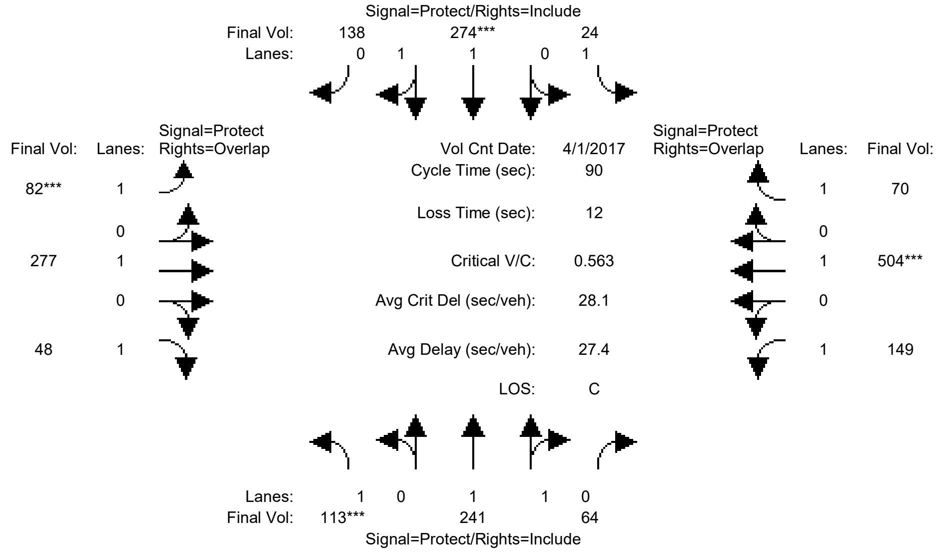
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #44: Sunnyvale Avenue / Evelyn Avenue



Street Name:	Sunnyvale Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	100	224	29	24	227	136	75	233	46	49	454	70
Growth 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
Initial Bse:	100	224	29	24	227	136	75	233	46	49	454	70
Added Vol:	13	17	35	0	42	2	7	44	2	105	50	0
PasserByVol:	0	0	0	0	5	0	0	0	0	-5	0	0
Initial Fut:	113	241	64	24	274	138	82	277	48	149	504	70
User 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
PHF 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
PHF Volume:	113	241	64	24	274	138	82	277	48	149	504	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	113	241	64	24	274	138	82	277	48	149	504	70
PCE 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
MLF 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
FinalVolume:	113	241	64	24	274	138	82	277	48	149	504	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.57	0.43	1.00	1.31	0.69	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	2923	776	1750	2460	1239	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.08	0.08	0.01	0.11	0.11	0.05	0.15	0.03	0.09	0.27	0.04
Crit Moves:	****				****		****				****	
Green Time:	10.3	16.5	16.5	11.6	17.8	17.8	7.5	31.5	41.8	18.4	42.4	54.0
Volume/Cap:	0.56	0.45	0.45	0.11	0.56	0.56	0.56	0.42	0.06	0.42	0.56	0.07
Delay/Veh:	41.4	33.1	33.1	34.9	33.6	33.6	44.7	22.7	13.3	31.9	18.0	7.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.4	33.1	33.1	34.9	33.6	33.6	44.7	22.7	13.3	31.9	18.0	7.5
LOS by Move:	D	C-	C-	C-	C-	C-	D	C+	B	C	B	A
HCM2kAvgQ:	3	4	4	1	5	5	3	6	1	4	9	1

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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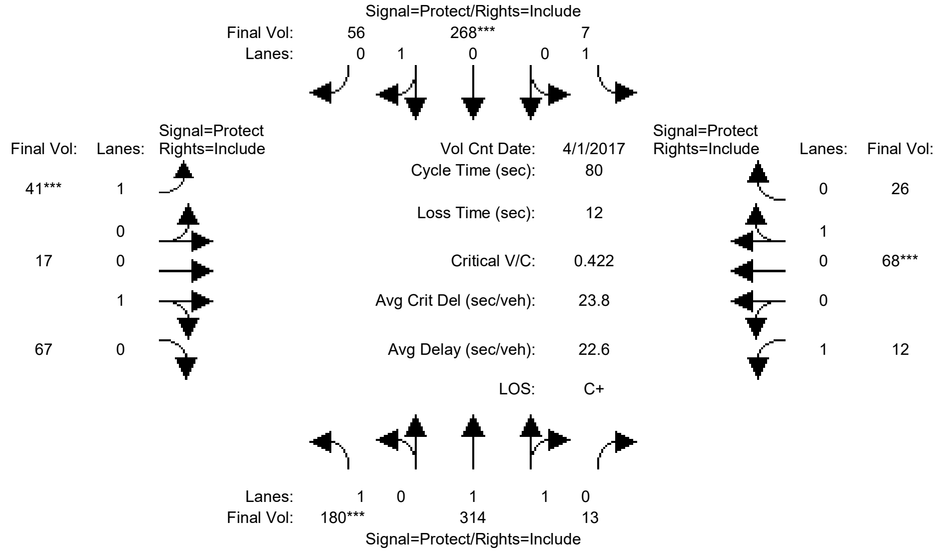
Cumulative AM

Intersection #45: Sunnyvale Avenue / Washington Avenue



Street Name:	Sunnyvale Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	88	299	13	7	252	43	29	17	37	12	68	26
Growth 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
Initial Bse:	88	299	13	7	252	43	29	17	37	12	68	26
Added Vol:	92	15	0	0	16	13	12	0	30	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	180	314	13	7	268	56	41	17	67	12	68	26
User 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
PHF 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
PHF Volume:	180	314	13	7	268	56	41	17	67	12	68	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	314	13	7	268	56	41	17	67	12	68	26
PCE 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
MLF 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
FinalVolume:	180	314	13	7	268	56	41	17	67	12	68	26
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	1.92	0.08	1.00	0.83	0.17	1.00	0.20	0.80	1.00	0.72	0.28
Final Sat.:	1750	3553	147	1750	1489	311	1750	364	1436	1750	1302	498
Capacity Analysis Module:												
Vol/Sat:	0.10	0.09	0.09	0.00	0.18	0.18	0.02	0.05	0.05	0.01	0.05	0.05
Crit Moves:	****				****		****				****	
Green Time:	18.5	30.0	30.0	21.0	32.5	32.5	7.0	10.0	10.0	7.0	10.0	10.0
Volume/Cap:	0.44	0.24	0.24	0.02	0.44	0.44	0.27	0.37	0.37	0.08	0.42	0.42
Delay/Veh:	27.1	17.2	17.2	21.9	17.7	17.7	35.0	33.2	33.2	33.8	33.6	33.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.1	17.2	17.2	21.9	17.7	17.7	35.0	33.2	33.2	33.8	33.6	33.6
LOS by Move:	C	B	B	C+	B	B	D+	C-	C-	C-	C-	C-
HCM2kAvgQ:	4	3	3	0	6	6	1	2	2	0	3	3

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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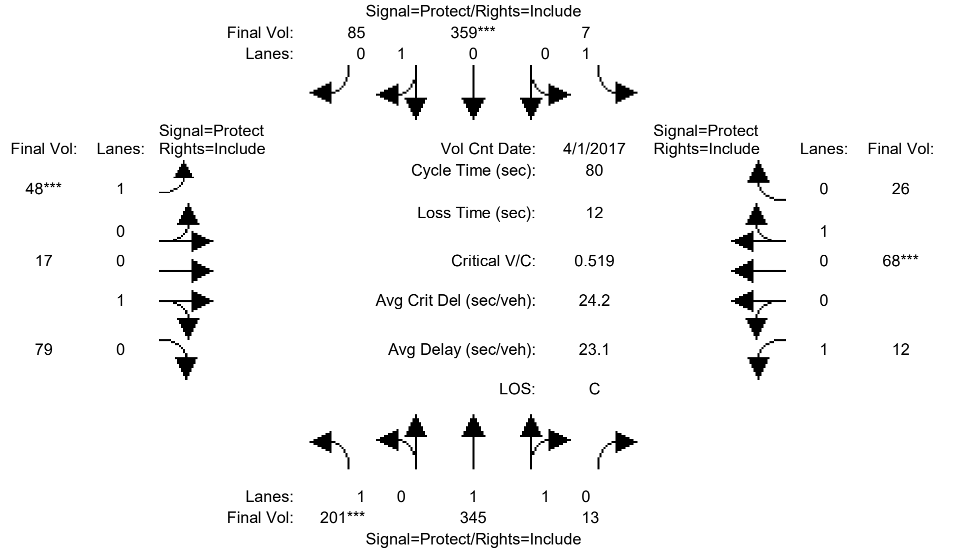
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #45: Sunnyvale Avenue / Washington Avenue



Street Name:	Sunnyvale Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	88	299	13	7	252	43	29	17	37	12	68	26
Growth 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
Initial Bse:	88	299	13	7	252	43	29	17	37	12	68	26
Added Vol:	113	46	0	0	107	42	19	0	42	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	201	345	13	7	359	85	48	17	79	12	68	26
User 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
PHF 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
PHF Volume:	201	345	13	7	359	85	48	17	79	12	68	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	201	345	13	7	359	85	48	17	79	12	68	26
PCE 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
MLF 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
FinalVolume:	201	345	13	7	359	85	48	17	79	12	68	26
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	1.93	0.07	1.00	0.81	0.19	1.00	0.18	0.82	1.00	0.72	0.28
Final Sat.:	1750	3566	134	1750	1455	345	1750	319	1481	1750	1302	498
Capacity Analysis Module:												
Vol/Sat:	0.11	0.10	0.10	0.00	0.25	0.25	0.03	0.05	0.05	0.01	0.05	0.05
Crit Moves:	****				****		****				****	
Green Time:	16.2	30.0	30.0	21.0	34.8	34.8	7.0	10.0	10.0	7.0	10.0	10.0
Volume/Cap:	0.57	0.26	0.26	0.02	0.57	0.57	0.31	0.43	0.43	0.08	0.42	0.42
Delay/Veh:	30.9	17.4	17.4	21.9	17.9	17.9	35.4	33.7	33.7	33.8	33.6	33.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.9	17.4	17.4	21.9	17.9	17.9	35.4	33.7	33.7	33.8	33.6	33.6
LOS by Move:	C	B	B	C+	B	B	D+	C-	C-	C-	C-	C-
HCM2kAvgQ:	6	3	3	0	8	8	2	3	3	0	3	3

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Cumulative Plus Project AM

Level Of Service Computation Report
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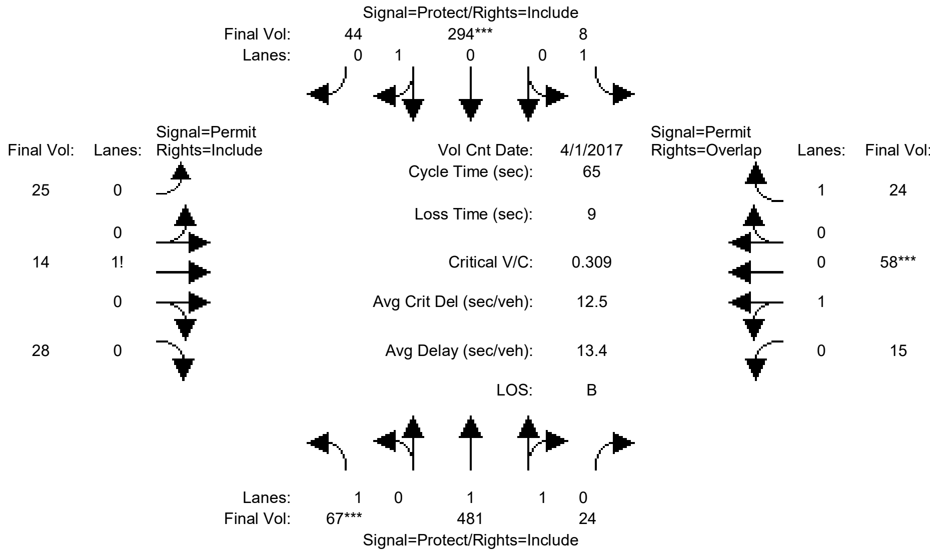
Cumulative AM

Intersection #46: Sunnyvale Avenue / McKinley Avenue



Street Name:	Sunnyvale Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	43	383	24	8	256	34	16	14	12	15	58	24
Growth 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
Initial Bse:	43	383	24	8	256	34	16	14	12	15	58	24
Added Vol:	24	98	0	0	38	10	9	0	16	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	481	24	8	294	44	25	14	28	15	58	24
User 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
PHF 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
PHF Volume:	67	481	24	8	294	44	25	14	28	15	58	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	481	24	8	294	44	25	14	28	15	58	24
PCE 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
MLF 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
FinalVolume:	67	481	24	8	294	44	25	14	28	15	58	24
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	1.00	1.90	0.10	1.00	0.87	0.13	0.37	0.21	0.42	0.21	0.79	1.00
Final Sat.:	1750	3524	176	1750	1566	234	653	366	731	370	1430	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.14	0.14	0.00	0.19	0.19	0.04	0.04	0.04	0.04	0.04	0.01
Crit Moves:	****				****						****	
Green Time:	7.8	27.1	27.1	18.9	38.2	38.2	10.0	10.0	10.0	10.0	10.0	28.9
Volume/Cap:	0.32	0.33	0.33	0.02	0.32	0.32	0.25	0.25	0.25	0.26	0.26	0.03
Delay/Veh:	27.1	12.9	12.9	16.4	7.0	7.0	24.7	24.7	24.7	24.8	24.8	10.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.1	12.9	12.9	16.4	7.0	7.0	24.7	24.7	24.7	24.8	24.8	10.2
LOS by Move:	C	B	B	B	A	A	C	C	C	C	C	B+
HCM2kAvgQ:	2	4	4	0	4	4	1	1	1	2	2	0

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
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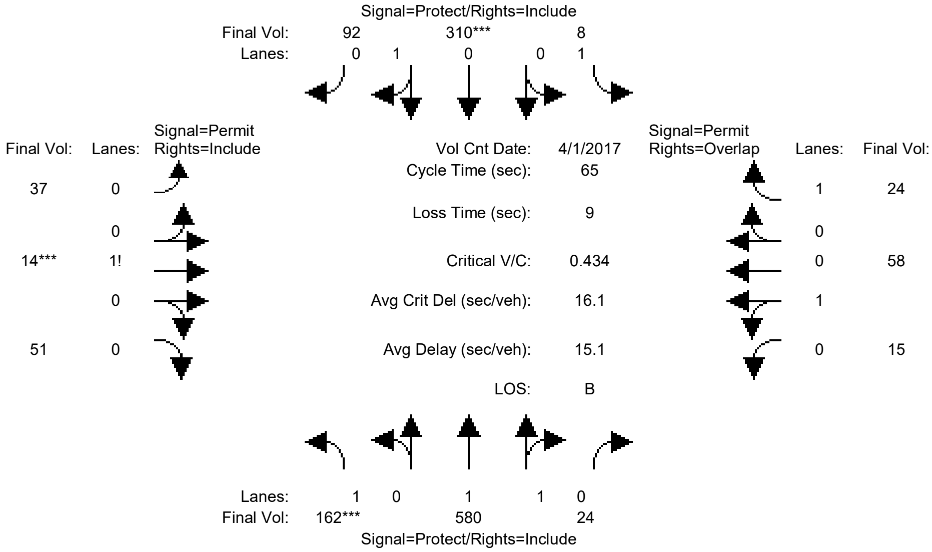
Cumulative AM Plus Project

Intersection #46: Sunnyvale Avenue / McKinley Avenue



Street Name:	Sunnyvale Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	43	383	24	8	256	34	16	14	12	15	58	24
Growth 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
Initial Bse:	43	383	24	8	256	34	16	14	12	15	58	24
Added Vol:	119	197	0	0	54	58	21	0	39	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	162	580	24	8	310	92	37	14	51	15	58	24
User 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
PHF 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
PHF Volume:	162	580	24	8	310	92	37	14	51	15	58	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	162	580	24	8	310	92	37	14	51	15	58	24
PCE 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
MLF 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
FinalVolume:	162	580	24	8	310	92	37	14	51	15	58	24
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	1.00	1.92	0.08	1.00	0.77	0.23	0.36	0.14	0.50	0.21	0.79	1.00
Final Sat.:	1750	3553	147	1750	1388	412	635	240	875	370	1430	1750
Capacity Analysis Module:												
Vol/Sat:	0.09	0.16	0.16	0.00	0.22	0.22	0.06	0.06	0.06	0.04	0.04	0.01
Crit Moves:	****				****			****				
Green Time:	13.5	27.7	27.7	18.3	32.5	32.5	10.0	10.0	10.0	10.0	10.0	28.3
Volume/Cap:	0.45	0.38	0.38	0.02	0.45	0.45	0.38	0.38	0.38	0.26	0.26	0.03
Delay/Veh:	23.4	12.9	12.9	16.9	10.8	10.8	25.6	25.6	25.6	24.8	24.8	10.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.4	12.9	12.9	16.9	10.8	10.8	25.6	25.6	25.6	24.8	24.8	10.5
LOS by Move:	C	B	B	B	B+	B+	C	C	C	C	C	B+
HCM2kAvgQ:	4	4	4	0	6	6	2	2	2	2	2	0

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

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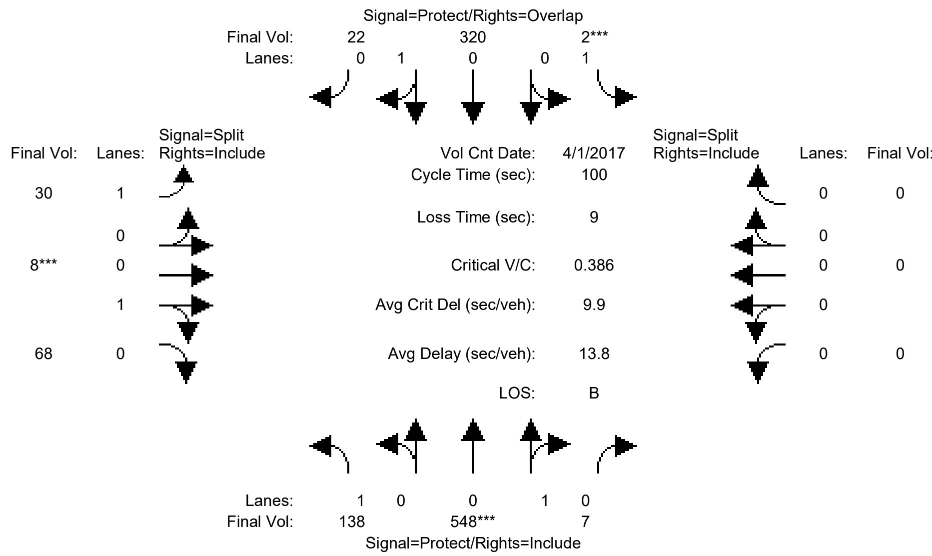
Cumulative AM

Intersection #47: Sunnyvale Avenue / Iowa Avenue



Street Name:	Sunnyvale Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	103	425	7	2	266	22	30	8	39	0	0	0
Growth 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
Initial Bse:	103	425	7	2	266	22	30	8	39	0	0	0
Added Vol:	35	123	0	0	54	0	0	0	29	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	138	548	7	2	320	22	30	8	68	0	0	0
User 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
PHF 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
PHF Volume:	138	548	7	2	320	22	30	8	68	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	548	7	2	320	22	30	8	68	0	0	0
PCE 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
MLF 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
FinalVolume:	138	548	7	2	320	22	30	8	68	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	0.99	0.01	1.00	0.94	0.06	1.00	0.11	0.89	0.00	0.00	0.00
Final Sat.:	1750	1777	23	1750	1684	116	1750	189	1611	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.31	0.31	0.00	0.19	0.19	0.02	0.04	0.04	0.00	0.00	0.00
Crit Moves:		****		****				****				
Green Time:	23.7	73.9	73.9	7.0	57.2	67.3	10.1	10.1	10.1	0.0	0.0	0.0
Volume/Cap:	0.33	0.42	0.42	0.02	0.33	0.28	0.17	0.42	0.42	0.00	0.00	0.00
Delay/Veh:	32.1	5.1	5.1	43.3	11.5	6.7	41.6	43.7	43.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.1	5.1	5.1	43.3	11.5	6.7	41.6	43.7	43.7	0.0	0.0	0.0
LOS by Move:	C-	A	A	D	B+	A	D	D	D	A	A	A
HCM2kAvgQ:	4	7	7	0	6	4	1	2	2	0	0	0

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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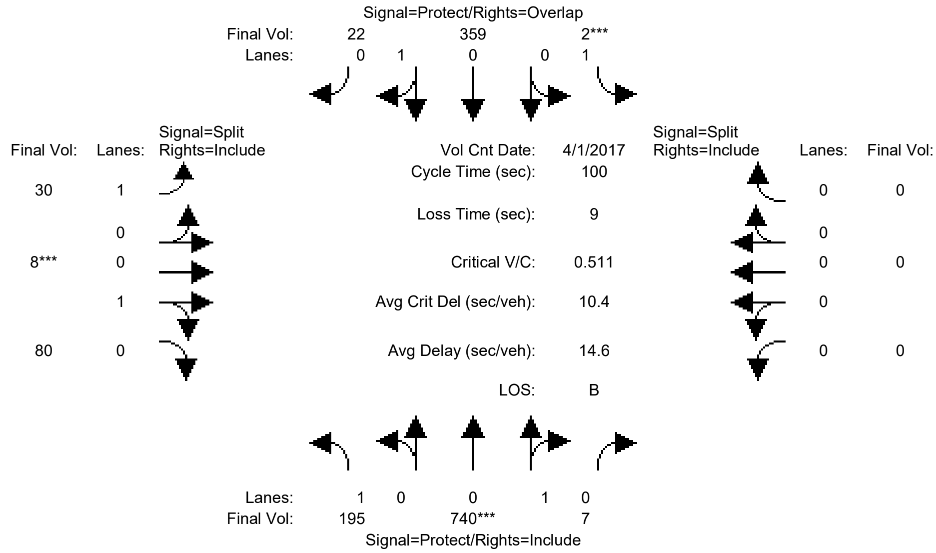
Cumulative AM Plus Project

Intersection #47: Sunnyvale Avenue / Iowa Avenue



Street Name:	Sunnyvale Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	103	425	7	2	266	22	30	8	39	0	0	0
Growth 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
Initial Bse:	103	425	7	2	266	22	30	8	39	0	0	0
Added Vol:	92	315	0	0	93	0	0	0	41	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	195	740	7	2	359	22	30	8	80	0	0	0
User 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
PHF 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
PHF Volume:	195	740	7	2	359	22	30	8	80	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	195	740	7	2	359	22	30	8	80	0	0	0
PCE 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
MLF 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
FinalVolume:	195	740	7	2	359	22	30	8	80	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	0.99	0.01	1.00	0.94	0.06	1.00	0.09	0.91	0.00	0.00	0.00
Final Sat.:	1750	1783	17	1750	1696	104	1750	164	1636	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.42	0.42	0.00	0.21	0.21	0.02	0.05	0.05	0.00	0.00	0.00
Crit Moves:		****		****				****				
Green Time:	27.9	74.0	74.0	7.0	53.1	63.1	10.0	10.0	10.0	0.0	0.0	0.0
Volume/Cap:	0.40	0.56	0.56	0.02	0.40	0.34	0.17	0.49	0.49	0.00	0.00	0.00
Delay/Veh:	29.8	6.3	6.3	43.3	14.2	8.8	41.7	44.7	44.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.8	6.3	6.3	43.3	14.2	8.8	41.7	44.7	44.7	0.0	0.0	0.0
LOS by Move:	C	A	A	D	B	A	D	D	D	A	A	A
HCM2kAvgQ:	5	10	10	0	7	6	1	3	3	0	0	0

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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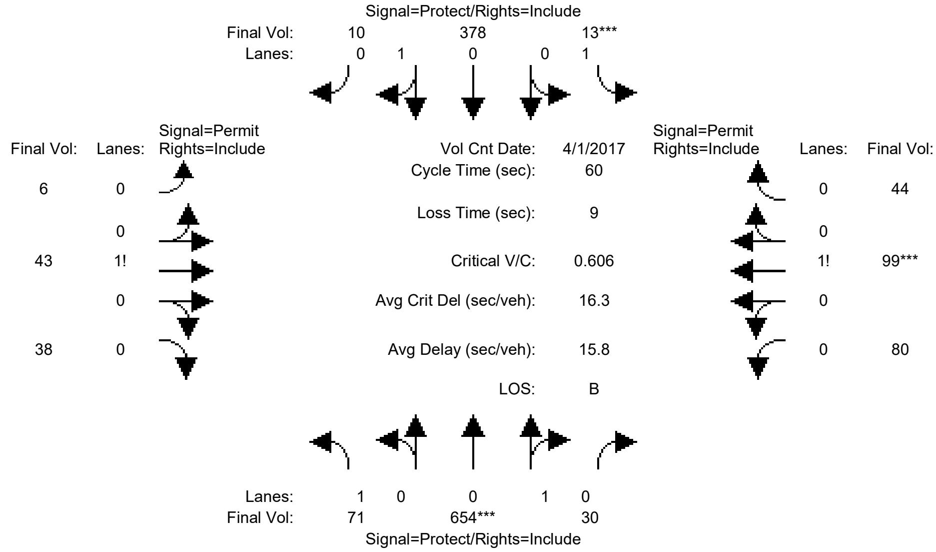
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #48: Sunnyvale Avenue / Olive Avenue



Street Name:		Sunnyvale Avenue							Olive Avenue			
Approach:		North Bound			South Bound			East Bound			West Bound	
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	35	496	30	13	295	10	6	43	24	80	99	44
Growth 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
Initial Bse:	35	496	30	13	295	10	6	43	24	80	99	44
Added Vol:	36	158	0	0	83	0	0	0	14	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	71	654	30	13	378	10	6	43	38	80	99	44
User 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
PHF 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
PHF Volume:	71	654	30	13	378	10	6	43	38	80	99	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	654	30	13	378	10	6	43	38	80	99	44
PCE 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
MLF 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
FinalVolume:	71	654	30	13	378	10	6	43	38	80	99	44
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	1.00	0.96	0.04	1.00	0.97	0.03	0.07	0.49	0.44	0.36	0.44	0.20
Final Sat.:	1750	1721	79	1750	1754	46	121	865	764	628	777	345
Capacity Analysis Module:												
Vol/Sat:	0.04	0.38	0.38	0.01	0.22	0.22	0.05	0.05	0.05	0.13	0.13	0.13
Crit Moves:		****		****							****	
Green Time:	14.0	33.0	33.0	7.0	25.9	25.9	11.0	11.0	11.0	11.0	11.0	11.0
Volume/Cap:	0.17	0.69	0.69	0.06	0.50	0.50	0.27	0.27	0.27	0.69	0.69	0.69
Delay/Veh:	18.6	12.0	12.0	23.7	12.8	12.8	21.5	21.5	21.5	29.2	29.2	29.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	18.6	12.0	12.0	23.7	12.8	12.8	21.5	21.5	21.5	29.2	29.2	29.2
LOS by Move:	B-	B+	B+	C	B	B	C+	C+	C+	C	C	C
HCM2kAvgQ:	1	10	10	0	5	5	1	1	1	6	6	6

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
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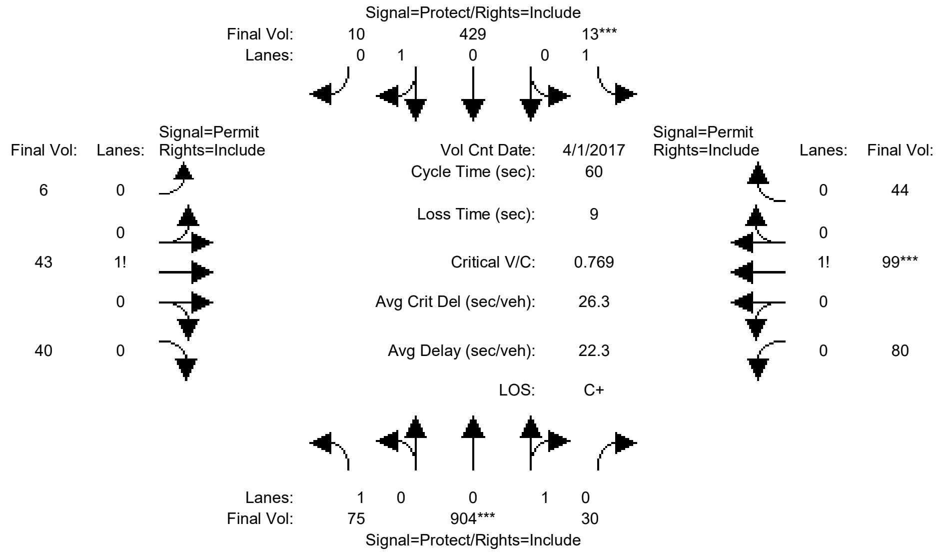
Cumulative AM Plus Project

Intersection #48: Sunnyvale Avenue / Olive Avenue



Street Name:	Sunnyvale Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	35	496	30	13	295	10	6	43	24	80	99	44
Growth 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
Initial Bse:	35	496	30	13	295	10	6	43	24	80	99	44
Added Vol:	40	408	0	0	134	0	0	0	16	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	75	904	30	13	429	10	6	43	40	80	99	44
User 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
PHF 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
PHF Volume:	75	904	30	13	429	10	6	43	40	80	99	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	904	30	13	429	10	6	43	40	80	99	44
PCE 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
MLF 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
FinalVolume:	75	904	30	13	429	10	6	43	40	80	99	44
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	1.00	0.97	0.03	1.00	0.98	0.02	0.07	0.48	0.45	0.36	0.44	0.20
Final Sat.:	1750	1742	58	1750	1759	41	118	846	787	628	777	345
Capacity Analysis Module:												
Vol/Sat:	0.04	0.52	0.52	0.01	0.24	0.24	0.05	0.05	0.05	0.13	0.13	0.13
Crit Moves:		****		****							****	
Green Time:	13.3	34.0	34.0	7.0	27.7	27.7	10.0	10.0	10.0	10.0	10.0	10.0
Volume/Cap:	0.19	0.92	0.92	0.06	0.53	0.53	0.31	0.31	0.31	0.76	0.76	0.76
Delay/Veh:	19.3	24.2	24.2	23.7	12.1	12.1	22.5	22.5	22.5	35.3	35.3	35.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.3	24.2	24.2	23.7	12.1	12.1	22.5	22.5	22.5	35.3	35.3	35.3
LOS by Move:	B-	C	C	C	B	B	C+	C+	C+	D+	D+	D+
HCM2kAvgQ:	1	19	19	0	6	6	1	1	1	6	6	6

Note: Queue reported is the number of cars per lane.

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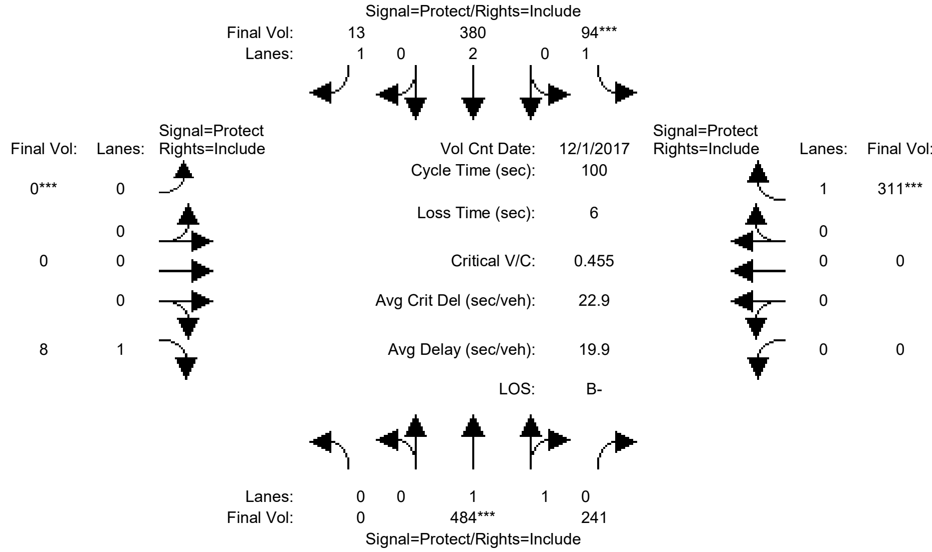
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #49: Sunnyvale Avenue / Old San Francisco Road



Street Name:	Sunnyvale Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	10	0	0	10	0	0	10
Y+R:	0.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	439	237	43	334	13	0	0	8	0	0	161
Growth 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
Initial Bse:	0	439	237	43	334	13	0	0	8	0	0	161
Added Vol:	0	45	4	51	46	0	0	0	0	0	0	150
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	484	241	94	380	13	0	0	8	0	0	311
User 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
PHF 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
PHF Volume:	0	484	241	94	380	13	0	0	8	0	0	311
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	484	241	94	380	13	0	0	8	0	0	311
PCE 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
MLF 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
FinalVolume:	0	484	241	94	380	13	0	0	8	0	0	311
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	1.32	0.68	1.00	2.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Final Sat.:	0	2469	1229	1750	3800	1750	0	0	1750	0	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.05	0.10	0.01	0.00	0.00	0.00	0.00	0.00	0.18
Crit Moves:		****		****			****					****
Green Time:	0.0	43.1	43.1	11.8	54.9	54.9	0.0	0.0	39.1	0.0	0.0	39.1
Volume/Cap:	0.00	0.45	0.45	0.45	0.18	0.01	0.00	0.00	0.01	0.00	0.00	0.45
Delay/Veh:	0.0	20.3	20.3	42.7	11.3	10.2	0.0	0.0	18.6	0.0	0.0	23.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	20.3	20.3	42.7	11.3	10.2	0.0	0.0	18.6	0.0	0.0	23.0
LOS by Move:	A	C+	C+	D	B+	B+	A	A	B-	A	A	C
HCM2kAvgQ:	0	8	8	3	3	0	0	0	0	0	0	7

Note: Queue reported is the number of cars per lane.

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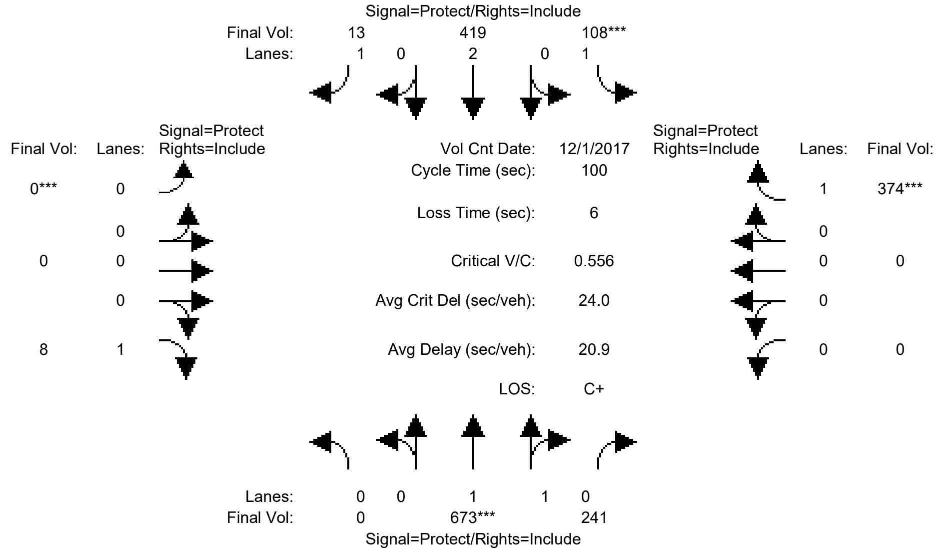
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #49: Sunnyvale Avenue / Old San Francisco Road



Street Name:	Sunnyvale Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	10	0	0	10	0	0	10
Y+R:	0.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	439	237	43	334	13	0	0	8	0	0	161
Growth 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
Initial Bse:	0	439	237	43	334	13	0	0	8	0	0	161
Added Vol:	0	234	4	65	85	0	0	0	0	0	0	213
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	673	241	108	419	13	0	0	8	0	0	374
User 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
PHF 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
PHF Volume:	0	673	241	108	419	13	0	0	8	0	0	374
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	673	241	108	419	13	0	0	8	0	0	374
PCE 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
MLF 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
FinalVolume:	0	673	241	108	419	13	0	0	8	0	0	374
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	1.46	0.54	1.00	2.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Final Sat.:	0	2724	975	1750	3800	1750	0	0	1750	0	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.06	0.11	0.01	0.00	0.00	0.00	0.00	0.00	0.21
Crit Moves:		****		****			****					****
Green Time:	0.0	44.5	44.5	11.1	55.6	55.6	0.0	0.0	38.4	0.0	0.0	38.4
Volume/Cap:	0.00	0.56	0.56	0.56	0.20	0.01	0.00	0.00	0.01	0.00	0.00	0.56
Delay/Veh:	0.0	20.9	20.9	45.6	11.1	10.0	0.0	0.0	19.0	0.0	0.0	25.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	20.9	20.9	45.6	11.1	10.0	0.0	0.0	19.0	0.0	0.0	25.1
LOS by Move:	A	C+	C+	D	B+	A	A	A	B-	A	A	C
HCM2kAvgQ:	0	10	10	3	3	0	0	0	0	0	0	9

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #50: Sunnyvale Avenue / El Camino Real

Signal=Protect/Rights=Include
Final Vol: 52 277 85***
Lanes: 0 1 1 0 2

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	4/1/2017			
166***	2		Cycle Time (sec):	180		0	192
	0		Loss Time (sec):	12		1	
531	2		Critical V/C:	0.555		2	1536***
	1		Avg Crit Del (sec/veh):	38.7		0	
49	0		Avg Delay (sec/veh):	41.3		1	84
			LOS:	D			

Lanes: 1 0 1 1 0
Final Vol: 78 426*** 55
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	78	409	55	56	261	52	162	484	49	84	1441	164
Growth 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
Initial Bse:	78	409	55	56	261	52	162	484	49	84	1441	164
Added Vol:	0	17	0	29	16	0	4	47	0	0	95	28
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	78	426	55	85	277	52	166	531	49	84	1536	192
User 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
PHF 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
PHF Volume:	78	426	55	85	277	52	166	531	49	84	1536	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	426	55	85	277	52	166	531	49	84	1536	192
PCE 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
MLF 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
FinalVolume:	78	426	55	85	277	52	166	531	49	84	1536	192
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.98	0.95	0.83	0.99	0.95	0.92	0.99	0.95
Lanes:	1.00	1.76	0.24	2.00	1.68	0.32	2.00	2.74	0.26	1.00	2.65	0.35
Final Sat.:	1750	3277	423	3150	3115	585	3150	5126	473	1750	4977	622
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.13	0.03	0.09	0.09	0.05	0.10	0.10	0.05	0.31	0.31
Crit Moves:		****		****			****				****	
Green Time:	17.0	42.1	42.1	8.7	33.9	33.9	17.1	80.0	80.0	37.1	100	100.0
Volume/Cap:	0.47	0.56	0.56	0.56	0.47	0.47	0.56	0.23	0.23	0.23	0.56	0.56
Delay/Veh:	79.4	61.5	61.5	88.2	65.6	65.6	80.1	31.0	31.0	59.9	25.9	25.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	79.4	61.5	61.5	88.2	65.6	65.6	80.1	31.0	31.0	59.9	25.9	25.9
LOS by Move:	E-	E	E	F	E	E	F	C	C	E+	C	C
HCM2kAvgQ:	4	11	11	3	8	8	5	6	6	4	20	20

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #50: Sunnyvale Avenue / El Camino Real

Signal=Protect/Rights=Include
Final Vol: 52 295 107***
Lanes: 0 1 1 0 2

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
166***	2		Vol Cnt Date:	4/1/2017		0	302
			Cycle Time (sec):	180			
	0		Loss Time (sec):	12		1	
548	2		Critical V/C:	0.625		2	1628***
	1		Avg Crit Del (sec/veh):	40.7		0	
49	0		Avg Delay (sec/veh):	42.6		1	84
			LOS:	D			

Lanes: 1 0 1 1 0
Final Vol: 78 506*** 55
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	78	409	55	56	261	52	162	484	49	84	1441	164
Growth 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
Initial Bse:	78	409	55	56	261	52	162	484	49	84	1441	164
Added Vol:	0	97	0	51	34	0	4	64	0	0	187	138
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	78	506	55	107	295	52	166	548	49	84	1628	302
User 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
PHF 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
PHF Volume:	78	506	55	107	295	52	166	548	49	84	1628	302
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	506	55	107	295	52	166	548	49	84	1628	302
PCE 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
MLF 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
FinalVolume:	78	506	55	107	295	52	166	548	49	84	1628	302
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.98	0.95	0.83	0.99	0.95	0.92	0.99	0.95
Lanes:	1.00	1.80	0.20	2.00	1.69	0.31	2.00	2.74	0.26	1.00	2.51	0.49
Final Sat.:	1750	3337	363	3150	3145	554	3150	5140	460	1750	4723	876
Capacity Analysis Module:												
Vol/Sat:	0.04	0.15	0.15	0.03	0.09	0.09	0.05	0.11	0.11	0.05	0.34	0.34
Crit Moves:		****		****			****				****	
Green Time:	17.2	43.7	43.7	9.8	36.3	36.3	15.2	79.0	79.0	35.6	99.3	99.3
Volume/Cap:	0.47	0.62	0.62	0.62	0.47	0.47	0.62	0.24	0.24	0.24	0.62	0.62
Delay/Veh:	79.1	62.2	62.2	90.4	63.8	63.8	84.3	31.8	31.8	61.2	28.0	28.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	79.1	62.2	62.2	90.4	63.8	63.8	84.3	31.8	31.8	61.2	28.0	28.0
LOS by Move:	E-	E	E	F	E	E	F	C	C	E	C	C
HCM2kAvgQ:	4	13	13	4	8	8	5	7	7	4	23	23

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #51: Mathilda Avenue / Talisman Drive

Signal=Protect/Rights=Include
Final Vol: 15 746 50***
Lanes: 0 1 2 0 1

Signal=Protect Rights=Include
Final Vol: Lanes:
22 1
0
6 1
0
31*** 1

Vol Cnt Date: 12/1/2016
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.757
Avg Crit Del (sec/veh): 25.0
Avg Delay (sec/veh): 24.5
LOS: C

Signal=Protect Rights=Include
Lanes: Final Vol:
0 28
1
0 2
0
2 314***

Lanes: 1 0 3 0 1
Final Vol: 30 3161*** 0
Signal=Protect/Rights=Ignore

Street Name:	Mathilda Avenue						Talisman Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	30	2549	638	50	572	15	22	6	31	298	2	28
Growth 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
Initial Bse:	30	2549	638	50	572	15	22	6	31	298	2	28
Added Vol:	0	612	17	0	174	0	0	0	0	16	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	3161	655	50	746	15	22	6	31	314	2	28
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	3161	0	50	746	15	22	6	31	314	2	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	3161	0	50	746	15	22	6	31	314	2	28
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	3161	0	50	746	15	22	6	31	314	2	28
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92	0.83	0.95	0.95
Lanes:	1.00	3.00	1.00	1.00	2.94	0.06	1.00	1.00	1.00	2.00	0.07	0.93
Final Sat.:	1750	5700	1750	1750	5489	110	1750	1900	1750	3150	120	1680
Capacity Analysis Module:												
Vol/Sat:	0.02	0.55	0.00	0.03	0.14	0.14	0.01	0.00	0.02	0.10	0.02	0.02
Crit Moves:		****		****					****	****		
Green Time:	28.7	111	0.0	7.0	89.3	89.3	12.3	10.0	10.0	20.0	17.6	17.6
Volume/Cap:	0.10	0.80	0.00	0.65	0.24	0.24	0.16	0.05	0.28	0.80	0.15	0.15
Delay/Veh:	54.9	18.0	0.0	93.7	18.1	18.1	69.6	70.7	73.0	79.1	64.8	64.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	54.9	18.0	0.0	93.7	18.1	18.1	69.6	70.7	73.0	79.1	64.8	64.8
LOS by Move:	D-	B-	A	F	B-	B-	E	E	E	E-	E	E
HCM2kAvgQ:	1	33	0	3	6	6	1	0	2	9	1	1

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
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Cumulative AM Plus Project

Intersection #51: Mathilda Avenue / Talisman Drive

Signal=Protect/Rights=Include
Final Vol: 15 781 50***
Lanes: 0 1 2 0 1

Signal=Protect Rights=Include (Eastbound)
Final Vol: 22, 6, 31***
Lanes: 1, 0, 1, 0, 1

Vol Cnt Date: 12/1/2016
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.791
Avg Crit Del (sec/veh): 26.7
Avg Delay (sec/veh): 25.9
LOS: C

Signal=Protect Rights=Include (Westbound)
Lanes: 0, 1, 0, 0, 2
Final Vol: 28, 2, 332***

Lanes: 1 0 3 0 1
Final Vol: 30 3307*** 0
Signal=Protect/Rights=Ignore

Street Name:	Mathilda Avenue						Talisman Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	30	2549	638	50	572	15	22	6	31	298	2	28
Growth 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
Initial Bse:	30	2549	638	50	572	15	22	6	31	298	2	28
Added Vol:	0	758	97	0	209	0	0	0	0	34	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	3307	735	50	781	15	22	6	31	332	2	28
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	3307	0	50	781	15	22	6	31	332	2	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	3307	0	50	781	15	22	6	31	332	2	28
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	3307	0	50	781	15	22	6	31	332	2	28
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92	0.83	0.95	0.95
Lanes:	1.00	3.00	1.00	1.00	2.94	0.06	1.00	1.00	1.00	2.00	0.07	0.93
Final Sat.:	1750	5700	1750	1750	5494	106	1750	1900	1750	3150	120	1680
Capacity Analysis Module:												
Vol/Sat:	0.02	0.58	0.00	0.03	0.14	0.14	0.01	0.00	0.02	0.11	0.02	0.02
Crit Moves:		****		****					****	****		
Green Time:	27.7	111	0.0	7.0	90.1	90.1	12.4	10.0	10.0	20.1	17.7	17.7
Volume/Cap:	0.10	0.84	0.00	0.65	0.25	0.25	0.16	0.05	0.28	0.84	0.15	0.15
Delay/Veh:	55.8	19.7	0.0	93.7	17.8	17.8	69.5	70.7	73.0	82.8	64.7	64.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.8	19.7	0.0	93.7	17.8	17.8	69.5	70.7	73.0	82.8	64.7	64.7
LOS by Move:	E+	B-	A	F	B	B	E	E	E	F	E	E
HCM2kAvgQ:	1	36	0	3	6	6	1	0	2	10	1	1

Note: Queue reported is the number of cars per lane.

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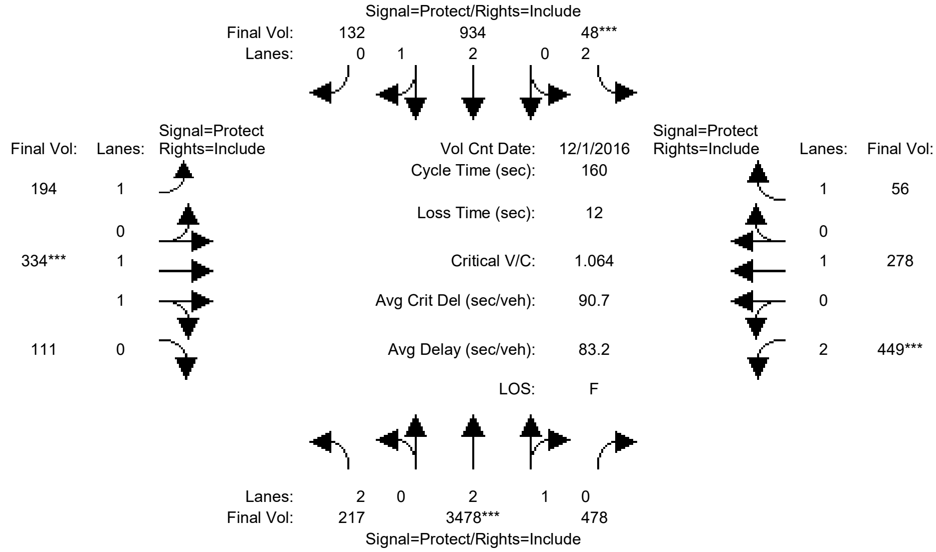
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #52: Sunnyvale-Saratoga Road / Remington Drive (CMP)



Street Name:	Sunnyvale-Saratoga Road						Remington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	217	2869	417	48	750	126	174	325	111	425	275	56
Growth 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
Initial Bse:	217	2869	417	48	750	126	174	325	111	425	275	56
Added Vol:	0	609	61	0	184	6	20	9	0	24	3	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	217	3478	478	48	934	132	194	334	111	449	278	56
User 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
PHF 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
PHF Volume:	217	3478	478	48	934	132	194	334	111	449	278	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	3478	478	48	934	132	194	334	111	449	278	56
PCE 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
MLF 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
FinalVolume:	217	3478	478	48	934	132	194	334	111	449	278	56
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.83	1.00	0.92
Lanes:	2.00	2.62	0.38	2.00	2.61	0.39	1.00	1.49	0.51	2.00	1.00	1.00
Final Sat.:	3150	4922	677	3150	4906	693	1750	2776	923	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.71	0.71	0.02	0.19	0.19	0.11	0.12	0.12	0.14	0.15	0.03
Crit Moves:		****		****				****		****		
Green Time:	29.2	103	102.8	7.0	80.6	80.6	16.5	17.5	17.5	20.7	21.8	21.8
Volume/Cap:	0.38	1.10	1.10	0.35	0.38	0.38	1.08	1.10	1.10	1.10	1.08	0.24
Delay/Veh:	57.9	78.6	78.6	75.8	24.4	24.4	160.6	146	145.8	144.0	147	62.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.9	78.6	78.6	75.8	24.4	24.4	160.6	146	145.8	144.0	147	62.2
LOS by Move:	E+	E-	E-	E-	C	C	F	F	F	F	F	E
HCM2kAvgQ:	5	76	76	1	10	10	13	14	14	17	17	2

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #52: Sunnyvale-Saratoga Road / Remington Drive (CMP)

Signal=Protect/Rights=Include
Final Vol: 133 986 48***
Lanes: 0 1 2 0 2

Signal=Protect Rights=Include (West approach)

Final Vol:	Lanes:
198	1
	0
334***	1
	1
111	0

Vol Cnt Date: 12/1/2016
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 1.107
Avg Crit Del (sec/veh): 107.9
Avg Delay (sec/veh): 96.8
LOS: F

Signal=Protect Rights=Include (East approach)

Lanes:	Final Vol:
1	56
0	
1	278
0	
2	449***

Lanes: 2 0 2 1 0
Final Vol: 217 3699*** 478
Signal=Protect/Rights=Include

Street Name:	Sunnyvale-Saratoga Road						Remington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	217	2869	417	48	750	126	174	325	111	425	275	56
Growth 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
Initial Bse:	217	2869	417	48	750	126	174	325	111	425	275	56
Added Vol:	0	830	61	0	236	7	24	9	0	24	3	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	217	3699	478	48	986	133	198	334	111	449	278	56
User 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
PHF 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
PHF Volume:	217	3699	478	48	986	133	198	334	111	449	278	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	3699	478	48	986	133	198	334	111	449	278	56
PCE 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
MLF 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
FinalVolume:	217	3699	478	48	986	133	198	334	111	449	278	56
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.83	1.00	0.92
Lanes:	2.00	2.64	0.36	2.00	2.63	0.37	1.00	1.49	0.51	2.00	1.00	1.00
Final Sat.:	3150	4958	641	3150	4934	665	1750	2776	923	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.75	0.75	0.02	0.20	0.20	0.11	0.12	0.12	0.14	0.15	0.03
Crit Moves:		****		****				****		****		
Green Time:	28.5	104	104.3	7.0	82.7	82.7	16.0	16.8	16.8	19.9	20.7	20.7
Volume/Cap:	0.39	1.14	1.14	0.35	0.39	0.39	1.13	1.14	1.14	1.14	1.13	0.25
Delay/Veh:	58.5	96.7	96.7	75.8	23.4	23.4	179.2	163	162.9	161.2	167	63.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.5	96.7	96.7	75.8	23.4	23.4	179.2	163	162.9	161.2	167	63.2
LOS by Move:	E+	F	F	E-	C	C	F	F	F	F	F	E
HCM2kAvgQ:	5	86	86	1	11	11	14	15	15	18	18	3

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #53: Sunnyvale-Saratoga Road / Fremont Avenue (CMP)

Signal=Protect/Rights=Include
Final Vol: 298 1059 187***
Lanes: 0 1 2 0 2

Signal=Protect Rights=Include | Signal=Protect Rights=Overlap

Final Vol:	Lanes:				Lanes:	Final Vol:
360***	2	Vol Cnt Date:	12/1/2016		1	218
	0	Cycle Time (sec):	160		0	
529	2	Loss Time (sec):	12		2	779***
	1	Critical V/C:	1.071		0	
166	0	Avg Crit Del (sec/veh):	89.1		2	220
		Avg Delay (sec/veh):	72.9			
		LOS:	E			

Lanes: 2 0 3 0 1
Final Vol: 363 3489*** 148
Signal=Protect/Rights=Overlap

Street Name:	Sunnyvale-Saratoga Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	363	2868	148	179	876	281	325	518	166	220	778	204
Growth 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
Initial Bse:	363	2868	148	179	876	281	325	518	166	220	778	204
Added Vol:	0	621	0	8	183	17	35	11	0	0	1	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	363	3489	148	187	1059	298	360	529	166	220	779	218
User 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
PHF 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
PHF Volume:	363	3489	148	187	1059	298	360	529	166	220	779	218
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	363	3489	148	187	1059	298	360	529	166	220	779	218
PCE 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
MLF 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
FinalVolume:	363	3489	148	187	1059	298	360	529	166	220	779	218
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	0.99	0.95	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	2.32	0.68	2.00	2.26	0.74	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	4369	1229	3150	4261	1337	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.61	0.08	0.06	0.24	0.24	0.11	0.12	0.12	0.07	0.21	0.12
Crit Moves:		****		****			****				****	
Green Time:	32.3	91.4	108.6	8.9	68.0	68.0	17.1	30.5	30.5	17.2	30.6	39.5
Volume/Cap:	0.57	1.07	0.12	1.07	0.57	0.57	1.07	0.65	0.65	0.65	1.07	0.50
Delay/Veh:	58.8	73.1	9.1	163.8	35.3	35.3	140.7	61.2	61.2	73.0	119	52.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.8	73.1	9.1	163.8	35.3	35.3	140.7	61.2	61.2	73.0	119	52.8
LOS by Move:	E+	E	A	F	D+	D+	F	E	E	E	F	D-
HCM2kAvgQ:	9	63	3	7	17	17	14	10	10	6	24	10

Note: Queue reported is the number of cars per lane.

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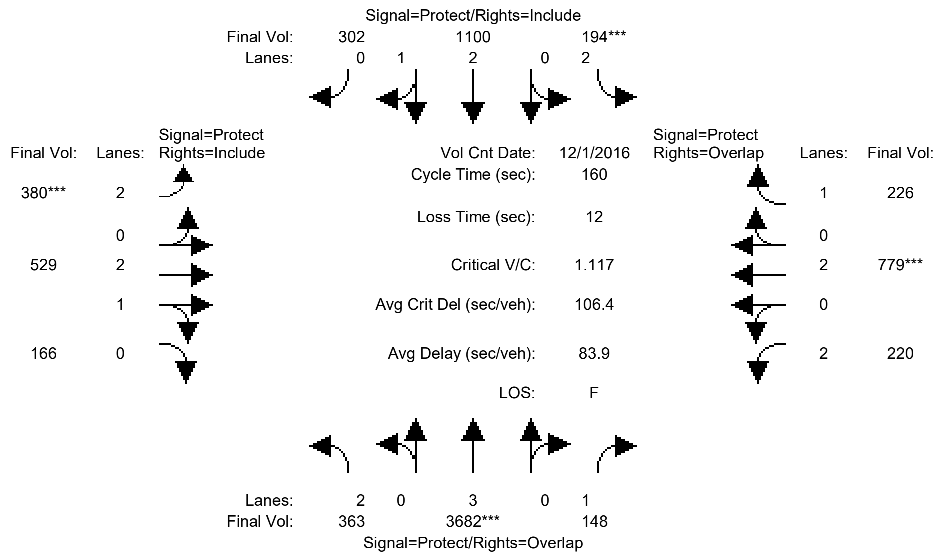
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #53: Sunnyvale-Saratoga Road / Fremont Avenue (CMP)



Street Name:	Sunnyvale-Saratoga Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	363	2868	148	179	876	281	325	518	166	220	778	204
Growth 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
Initial Bse:	363	2868	148	179	876	281	325	518	166	220	778	204
Added Vol:	0	814	0	15	224	21	55	11	0	0	1	22
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	363	3682	148	194	1100	302	380	529	166	220	779	226
User 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
PHF 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
PHF Volume:	363	3682	148	194	1100	302	380	529	166	220	779	226
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	363	3682	148	194	1100	302	380	529	166	220	779	226
PCE 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
MLF 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
FinalVolume:	363	3682	148	194	1100	302	380	529	166	220	779	226
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	0.99	0.95	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	2.33	0.67	2.00	2.26	0.74	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	4392	1206	3150	4261	1337	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.65	0.08	0.06	0.25	0.25	0.12	0.12	0.12	0.07	0.21	0.13
Crit Moves:		****		****			****				****	
Green Time:	31.9	92.5	109.3	8.8	69.4	69.4	17.3	29.9	29.9	16.8	29.4	38.2
Volume/Cap:	0.58	1.12	0.12	1.12	0.58	0.58	1.12	0.67	0.67	0.67	1.12	0.54
Delay/Veh:	59.3	91.1	8.8	178.7	34.6	34.6	155.6	62.1	62.1	74.0	136	54.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	59.3	91.1	8.8	178.7	34.6	34.6	155.6	62.1	62.1	74.0	136	54.7
LOS by Move:	E+	F	A	F	C-	C-	F	E	E	E	F	D-
HCM2kAvgQ:	9	71	2	8	17	17	15	11	11	6	25	10

Note: Queue reported is the number of cars per lane.

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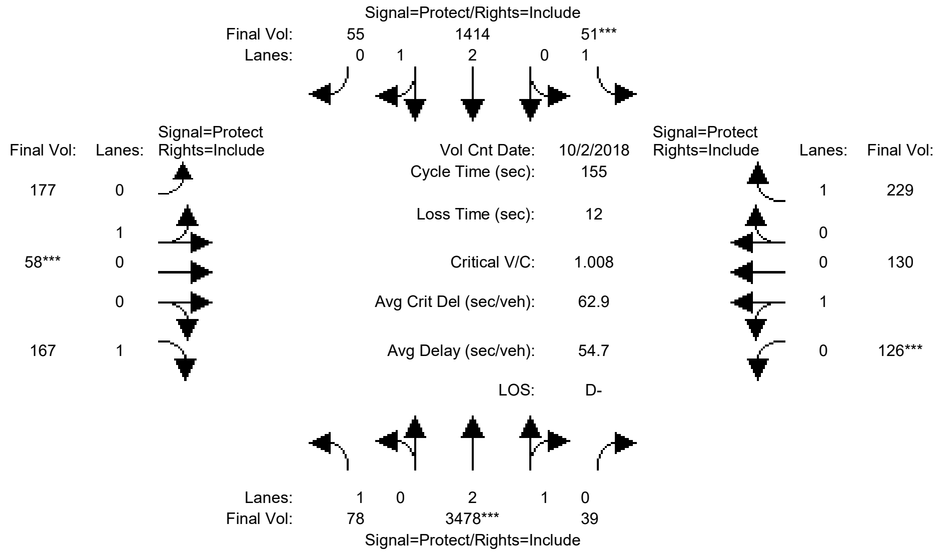
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #54: Sunnyvale-Saratoga Road / Alberta Avenue - Harwick Way



Street Name:	Sunnyvale-Saratoga Road						Alberta Avenue - Harwick Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	78	2899	39	51	1244	42	135	58	167	126	130	229
Growth 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
Initial Bse:	78	2899	39	51	1244	42	135	58	167	126	130	229
Added Vol:	0	579	0	0	170	13	42	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	78	3478	39	51	1414	55	177	58	167	126	130	229
User 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
PHF 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
PHF Volume:	78	3478	39	51	1414	55	177	58	167	126	130	229
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	3478	39	51	1414	55	177	58	167	126	130	229
PCE 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
MLF 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
FinalVolume:	78	3478	39	51	1414	55	177	58	167	126	130	229
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.97	0.03	1.00	2.88	0.12	0.75	0.25	1.00	0.49	0.51	1.00
Final Sat.:	1750	5538	62	1750	5390	210	1356	444	1750	886	914	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.63	0.63	0.03	0.26	0.26	0.13	0.13	0.10	0.14	0.14	0.13
Crit Moves:		****		****				****		****		
Green Time:	15.0	94.8	94.8	7.0	86.9	86.9	19.7	19.7	19.7	21.5	21.5	21.5
Volume/Cap:	0.46	1.03	1.03	0.65	0.47	0.47	1.03	1.03	0.75	1.03	1.03	0.94
Delay/Veh:	68.2	52.8	52.8	89.7	20.4	20.4	134.2	134	78.6	130.8	131	108.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	68.2	52.8	52.8	89.7	20.4	20.4	134.2	134	78.6	130.8	131	108.8
LOS by Move:	E	D-	D-	F	C+	C+	F	F	E-	F	F	F
HCM2kAvgQ:	4	62	62	3	13	13	17	17	10	18	18	15

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #54: Sunnyvale-Saratoga Road / Alberta Avenue - Harwick Way

Signal=Protect/Rights=Include
Final Vol: 60 1451 51***
Lanes: 0 1 2 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
199***	0		Vol Cnt Date:	10/2/2018		1	229
			Cycle Time (sec):	155			
	1		Loss Time (sec):	12		0	
58	0		Critical V/C:	1.054		0	130***
	0		Avg Crit Del (sec/veh):	79.8		1	
167	1		Avg Delay (sec/veh):	66.7		0	126
			LOS:	E			

Lanes: 1 0 2 1 0
Final Vol: 78 3649*** 39
Signal=Protect/Rights=Include

Street Name:	Sunnyvale-Saratoga Road						Alberta Avenue - Harwick Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	78	2899	39	51	1244	42	135	58	167	126	130	229
Growth 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
Initial Bse:	78	2899	39	51	1244	42	135	58	167	126	130	229
Added Vol:	0	750	0	0	207	18	64	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	78	3649	39	51	1451	60	199	58	167	126	130	229
User 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
PHF 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
PHF Volume:	78	3649	39	51	1451	60	199	58	167	126	130	229
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	3649	39	51	1451	60	199	58	167	126	130	229
PCE 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
MLF 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
FinalVolume:	78	3649	39	51	1451	60	199	58	167	126	130	229
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.97	0.03	1.00	2.88	0.12	0.77	0.23	1.00	0.49	0.51	1.00
Final Sat.:	1750	5541	59	1750	5377	222	1394	406	1750	886	914	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.66	0.66	0.03	0.27	0.27	0.14	0.14	0.10	0.14	0.14	0.13
Crit Moves:		****		****			****				****	
Green Time:	14.6	94.9	94.9	7.0	87.3	87.3	20.6	20.6	20.6	20.5	20.5	20.5
Volume/Cap:	0.47	1.08	1.08	0.65	0.48	0.48	1.08	1.08	0.72	1.08	1.08	0.99
Delay/Veh:	68.7	70.3	70.3	89.7	20.4	20.4	146.9	147	74.8	147.0	147	123.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	68.7	70.3	70.3	89.7	20.4	20.4	146.9	147	74.8	147.0	147	123.2
LOS by Move:	E	E	E	F	C+	C+	F	F	E	F	F	F
HCM2kAvgQ:	4	68	68	3	14	14	19	19	10	19	19	16

Note: Queue reported is the number of cars per lane.

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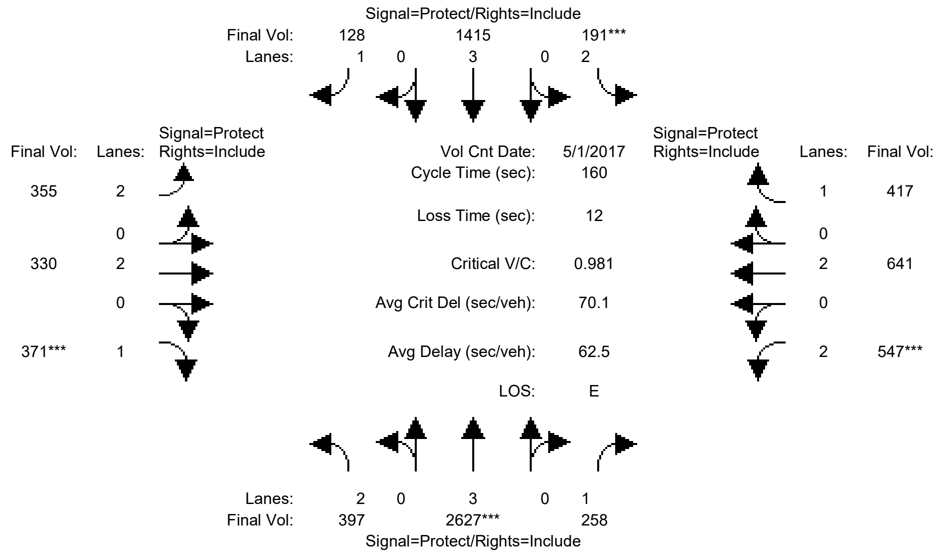
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #55: De Anza Boulevard / Homestead Road (CMP)



Street Name:	De Anza Boulevard						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	397	2184	199	174	1284	107	278	319	371	527	637	359
Growth 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
Initial Bse:	397	2184	199	174	1284	107	278	319	371	527	637	359
Added Vol:	0	443	59	17	131	21	77	11	0	20	4	58
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	397	2627	258	191	1415	128	355	330	371	547	641	417
User 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
PHF 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
PHF Volume:	397	2627	258	191	1415	128	355	330	371	547	641	417
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	397	2627	258	191	1415	128	355	330	371	547	641	417
PCE 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
MLF 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
FinalVolume:	397	2627	258	191	1415	128	355	330	371	547	641	417
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.13	0.46	0.15	0.06	0.25	0.07	0.11	0.09	0.21	0.17	0.17	0.24
Crit Moves:		****		****					****	****		
Green Time:	28.7	75.2	75.2	9.9	56.4	56.4	20.2	34.6	34.6	28.3	42.7	42.7
Volume/Cap:	0.70	0.98	0.31	0.98	0.70	0.21	0.89	0.40	0.98	0.98	0.63	0.89
Delay/Veh:	65.7	54.9	26.6	133.6	45.7	36.3	90.4	54.1	103.4	98.6	53.0	75.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	65.7	54.9	26.6	133.6	45.7	36.3	90.4	54.1	103.4	98.6	53.0	75.5
LOS by Move:	E	D-	C	F	D	D+	F	D-	F	F	D-	E-
HCM2kAvgQ:	11	44	8	7	20	4	11	7	23	19	14	23

Note: Queue reported is the number of cars per lane.

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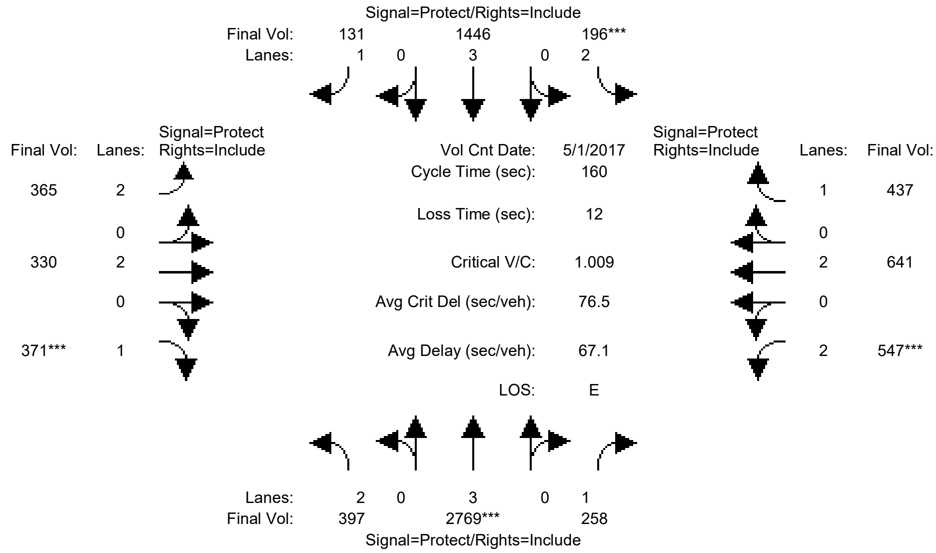
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #55: De Anza Boulevard / Homestead Road (CMP)



Street Name:	De Anza Boulevard						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	397	2184	199	174	1284	107	278	319	371	527	637	359
Growth 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
Initial Bse:	397	2184	199	174	1284	107	278	319	371	527	637	359
Added Vol:	0	585	59	22	162	24	87	11	0	20	4	78
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	397	2769	258	196	1446	131	365	330	371	547	641	437
User 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
PHF 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
PHF Volume:	397	2769	258	196	1446	131	365	330	371	547	641	437
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	397	2769	258	196	1446	131	365	330	371	547	641	437
PCE 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
MLF 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
FinalVolume:	397	2769	258	196	1446	131	365	330	371	547	641	437
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.13	0.49	0.15	0.06	0.25	0.07	0.12	0.09	0.21	0.17	0.17	0.25
Crit Moves:		****		****					****	****		
Green Time:	28.8	77.0	77.0	9.9	58.0	58.0	19.4	33.6	33.6	27.5	41.8	41.8
Volume/Cap:	0.70	1.01	0.31	1.01	0.70	0.21	0.96	0.41	1.01	1.01	0.65	0.96
Delay/Veh:	65.4	61.0	25.5	142.1	44.6	35.3	104.8	55.0	112.5	107.2	54.1	89.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	65.4	61.0	25.5	142.1	44.6	35.3	104.8	55.0	112.5	107.2	54.1	89.4
LOS by Move:	E	E	C	F	D	D+	F	E+	F	F	D-	F
HCM2kAvgQ:	10	48	8	7	20	5	12	7	23	19	14	26

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #56: De Anza Boulevard / I-280 NB Ramps (CMP)

Signal=Protect/Rights=Include
Final Vol: 673*** 1743 0
Lanes: 0 1 4 0 0

Signal=Split
Rights=Include
Final Vol: Lanes:
0 0
0
0 0
0
0 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 1.053
Avg Crit Del (sec/veh): 89.4
Avg Delay (sec/veh): 49.4
LOS: D

Signal=Split
Rights=Include
Lanes: Final Vol:
1 984
0
1! 1***
0
1 592

Lanes: 2 0 3 0 0
Final Vol: 438*** 2305 0
Signal=Protect/Rights=Include

Street Name:	De Anza Boulevard						I-280 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	4.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	438	2066	0	0	1647	618	0	0	0	592	1	720
Growth 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
Initial Bse:	438	2066	0	0	1647	618	0	0	0	592	1	720
Added Vol:	0	239	0	0	96	55	0	0	0	0	0	264
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	438	2305	0	0	1743	673	0	0	0	592	1	984
User 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
PHF 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
PHF Volume:	438	2305	0	0	1743	673	0	0	0	592	1	984
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	438	2305	0	0	1743	673	0	0	0	592	1	984
PCE 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
MLF 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
FinalVolume:	438	2305	0	0	1743	673	0	0	0	592	1	984
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.92	0.92
Lanes:	2.00	3.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00	1.37	0.01	1.62
Final Sat.:	3150	5700	0	0	7600	1750	0	0	0	2407	2	2841
Capacity Analysis Module:												
Vol/Sat:	0.14	0.40	0.00	0.00	0.23	0.38	0.00	0.00	0.00	0.25	0.45	0.35
Crit Moves:	****					****					****	
Green Time:	21.1	79.5	0.0	0.0	58.4	58.4	0.0	0.0	0.0	68.5	68.5	68.5
Volume/Cap:	1.05	0.81	0.00	0.00	0.63	1.05	0.00	0.00	0.00	0.57	1.05	0.81
Delay/Veh:	128.4	35.9	0.0	0.0	42.2	85.6	0.0	0.0	0.0	35.0	84.5	42.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	128.4	35.9	0.0	0.0	42.2	85.6	0.0	0.0	0.0	35.0	84.5	42.7
LOS by Move:	F	D+	A	A	D	F	A	A	A	D+	F	D
HCM2kAvgQ:	16	31	0	0	17	42	0	0	0	17	51	29

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Cumulative AM Plus Project

Intersection #56: De Anza Boulevard / I-280 NB Ramps (CMP)

Signal=Protect/Rights=Include
Final Vol: 687*** 1760 0
Lanes: 0 1 4 0 0

Signal=Split
Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 1.081
Avg Crit Del (sec/veh): 99.3
Avg Delay (sec/veh): 52.0
LOS: D-

Signal=Split
Rights=Include
Lanes: 1 0 1! 0 1
Final Vol: 1046 1*** 592

Lanes: 2 0 3 0 0
Final Vol: 438*** 2384 0
Signal=Protect/Rights=Include

Street Name:	De Anza Boulevard						I-280 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	4.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	438	2066	0	0	1647	618	0	0	0	592	1	720
Growth 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
Initial Bse:	438	2066	0	0	1647	618	0	0	0	592	1	720
Added Vol:	0	318	0	0	113	69	0	0	0	0	0	326
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	438	2384	0	0	1760	687	0	0	0	592	1	1046
User 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
PHF 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
PHF Volume:	438	2384	0	0	1760	687	0	0	0	592	1	1046
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	438	2384	0	0	1760	687	0	0	0	592	1	1046
PCE 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
MLF 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
FinalVolume:	438	2384	0	0	1760	687	0	0	0	592	1	1046
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.92	0.92
Lanes:	2.00	3.00	0.00	0.00	4.00	1.00	0.00	0.00	0.00	1.36	0.01	1.63
Final Sat.:	3150	5700	0	0	7600	1750	0	0	0	2382	2	2866
Capacity Analysis Module:												
Vol/Sat:	0.14	0.42	0.00	0.00	0.23	0.39	0.00	0.00	0.00	0.25	0.47	0.36
Crit Moves:	****					****					****	
Green Time:	20.6	78.7	0.0	0.0	58.1	58.1	0.0	0.0	0.0	69.3	69.3	69.3
Volume/Cap:	1.08	0.85	0.00	0.00	0.64	1.08	0.00	0.00	0.00	0.57	1.08	0.84
Delay/Veh:	138.0	38.2	0.0	0.0	42.6	96.1	0.0	0.0	0.0	34.5	93.8	44.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	138.0	38.2	0.0	0.0	42.6	96.1	0.0	0.0	0.0	34.5	93.8	44.0
LOS by Move:	F	D+	A	A	D	F	A	A	A	C-	F	D
HCM2kAvgQ:	16	34	0	0	17	44	0	0	0	17	55	32

Note: Queue reported is the number of cars per lane.

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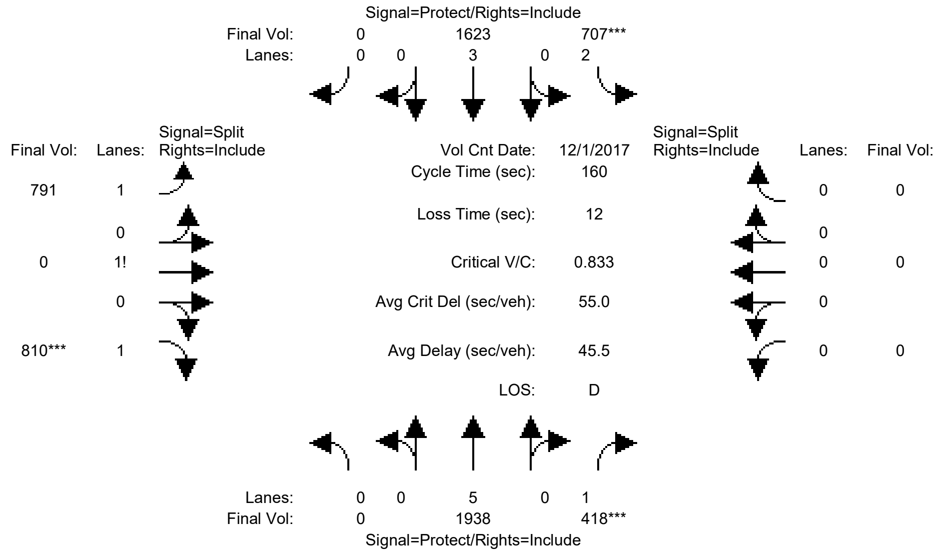
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #57: De Anza Boulevard / I-280 SB Ramps (CMP)



Street Name:	De Anza Boulevard						I-280 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	10	10	10	0	0	0
Y+R:	0.0	4.0	4.0	4.0	4.0	0.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	1845	418	637	1597	0	645	0	810	0	0	0
Growth 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
Initial Bse:	0	1845	418	637	1597	0	645	0	810	0	0	0
Added Vol:	0	93	0	70	26	0	146	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1938	418	707	1623	0	791	0	810	0	0	0
User 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
PHF 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
PHF Volume:	0	1938	418	707	1623	0	791	0	810	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1938	418	707	1623	0	791	0	810	0	0	0
PCE 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
MLF 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
FinalVolume:	0	1938	418	707	1623	0	791	0	810	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	5.00	1.00	2.00	3.00	0.00	1.49	0.00	1.51	0.00	0.00	0.00
Final Sat.:	0	9500	1750	3150	5700	0	2615	0	2635	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.24	0.22	0.28	0.00	0.30	0.00	0.31	0.00	0.00	0.00
Crit Moves:			****	****					****			
Green Time:	0.0	45.9	45.9	43.1	89.0	0.0	59.0	0.0	59.0	0.0	0.0	0.0
Volume/Cap:	0.00	0.71	0.83	0.83	0.51	0.00	0.82	0.00	0.83	0.00	0.00	0.00
Delay/Veh:	0.0	52.0	64.9	62.2	22.2	0.0	48.6	0.0	49.3	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	52.0	64.9	62.2	22.2	0.0	48.6	0.0	49.3	0.0	0.0	0.0
LOS by Move:	A	D-	E	E	C+	A	D	A	D	A	A	A
HCM2kAvgQ:	0	18	23	20	16	0	27	0	28	0	0	0

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #57: De Anza Boulevard / I-280 SB Ramps (CMP)

Signal=Protect/Rights=Include
Final Vol: 0 1628 719***
Lanes: 0 0 3 0 2

Signal=Split
Rights=Include

Final Vol:	Lanes:
848***	1
	0
0	1!
	0
810	1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.852
Avg Crit Del (sec/veh): 56.0
Avg Delay (sec/veh): 46.5
LOS: D

Signal=Split
Rights=Include

Lanes:	Final Vol:
0	0
0	
0	0
0	
0	0

Lanes: 0 0 5 0 1
Final Vol: 0 1959 418***
Signal=Protect/Rights=Include

Street Name:	De Anza Boulevard						I-280 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	10	10	10	0	0	0
Y+R:	0.0	4.0	4.0	4.0	4.0	0.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	1845	418	637	1597	0	645	0	810	0	0	0
Growth 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
Initial Bse:	0	1845	418	637	1597	0	645	0	810	0	0	0
Added Vol:	0	114	0	82	31	0	203	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1959	418	719	1628	0	848	0	810	0	0	0
User 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
PHF 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
PHF Volume:	0	1959	418	719	1628	0	848	0	810	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1959	418	719	1628	0	848	0	810	0	0	0
PCE 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
MLF 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
FinalVolume:	0	1959	418	719	1628	0	848	0	810	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	5.00	1.00	2.00	3.00	0.00	1.51	0.00	1.49	0.00	0.00	0.00
Final Sat.:	0	9500	1750	3150	5700	0	2645	0	2605	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.24	0.23	0.29	0.00	0.32	0.00	0.31	0.00	0.00	0.00
Crit Moves:			****	****			****					
Green Time:	0.0	44.9	44.9	42.9	87.8	0.0	60.2	0.0	60.2	0.0	0.0	0.0
Volume/Cap:	0.00	0.74	0.85	0.85	0.52	0.00	0.85	0.00	0.83	0.00	0.00	0.00
Delay/Veh:	0.0	53.3	67.8	63.8	23.0	0.0	49.6	0.0	48.1	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	53.3	67.8	63.8	23.0	0.0	49.6	0.0	48.1	0.0	0.0	0.0
LOS by Move:	A	D-	E	E	C+	A	D	A	D	A	A	A
HCM2kAvgQ:	0	18	23	20	16	0	29	0	28	0	0	0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #58: Fair Oaks Avenue / US 101 NB Ramps

Signal=Protect/Rights=Ignore
Final Vol: 0 964*** 0
Lanes: 1 0 2 0 0

Final Vol:	Lanes:	Signal=Split Rights=Include			Signal=Split Rights=Include	Lanes:	Final Vol:
0	0		Vol Cnt Date:	4/1/2017		1	312
			Cycle Time (sec):	60			
	0		Loss Time (sec):	9		0	
0	0		Critical V/C:	0.901		1!	0
	0		Avg Crit Del (sec/veh):	34.3		0	
0	0		Avg Delay (sec/veh):	25.8		1	329***
			LOS:	C			

Lanes: 1 0 2 0 0
Final Vol: 679*** 870 0
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						US 101 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	0.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	619	911	0	0	846	573	0	0	0	297	0	312
Growth 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
Initial Bse:	619	911	0	0	846	573	0	0	0	297	0	312
Added Vol:	60	-41	0	0	118	63	0	0	0	32	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	679	870	0	0	964	636	0	0	0	329	0	312
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	679	870	0	0	964	0	0	0	0	329	0	312
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	679	870	0	0	964	0	0	0	0	329	0	312
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	679	870	0	0	964	0	0	0	0	329	0	312
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.51	0.00	1.49
Final Sat.:	1750	3800	0	0	3800	1750	0	0	0	2648	0	2602
Capacity Analysis Module:												
Vol/Sat:	0.39	0.23	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.12	0.00	0.12
Crit Moves:	****				****					****		
Green Time:	24.8	41.0	0.0	0.0	16.2	0.0	0.0	0.0	0.0	10.0	0.0	10.0
Volume/Cap:	0.94	0.34	0.00	0.00	0.94	0.00	0.00	0.00	0.00	0.75	0.00	0.72
Delay/Veh:	36.9	4.0	0.0	0.0	37.0	0.0	0.0	0.0	0.0	27.4	0.0	26.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.9	4.0	0.0	0.0	37.0	0.0	0.0	0.0	0.0	27.4	0.0	26.5
LOS by Move:	D+	A	A	A	D+	A	A	A	A	C	A	C
HCM2kAvgQ:	15	3	0	0	11	0	0	0	0	6	0	6

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
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Cumulative AM Plus Project

Intersection #58: Fair Oaks Avenue / US 101 NB Ramps

Signal=Protect/Rights=Ignore
Final Vol: 0 987*** 0
Lanes: 1 0 2 0 0

Signal=Split
Rights=Include

Final Vol:	Lanes:
0	0
	0
0	0
	0
0	0

Vol Cnt Date:	4/1/2017
Cycle Time (sec):	60
Loss Time (sec):	9
Critical V/C:	0.921
Avg Crit Del (sec/veh):	36.1
Avg Delay (sec/veh):	27.0
LOS:	C

Signal=Split
Rights=Include

Lanes:	Final Vol:
1	312
0	
1!	0
0	
1	365***

Lanes: 1 0 2 0 0
Final Vol: 679*** 875 0
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						US 101 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	0.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	619	911	0	0	846	573	0	0	0	297	0	312
Growth 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
Initial Bse:	619	911	0	0	846	573	0	0	0	297	0	312
Added Vol:	60	-36	0	0	141	63	0	0	0	68	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	679	875	0	0	987	636	0	0	0	365	0	312
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	679	875	0	0	987	0	0	0	0	365	0	312
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	679	875	0	0	987	0	0	0	0	365	0	312
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	679	875	0	0	987	0	0	0	0	365	0	312
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.54	0.00	1.46
Final Sat.:	1750	3800	0	0	3800	1750	0	0	0	2694	0	2557
Capacity Analysis Module:												
Vol/Sat:	0.39	0.23	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.14	0.00	0.12
Crit Moves:	****				****					****		
Green Time:	24.6	41.0	0.0	0.0	16.4	0.0	0.0	0.0	0.0	10.0	0.0	10.0
Volume/Cap:	0.95	0.34	0.00	0.00	0.95	0.00	0.00	0.00	0.00	0.81	0.00	0.73
Delay/Veh:	38.8	4.0	0.0	0.0	38.2	0.0	0.0	0.0	0.0	30.2	0.0	26.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.8	4.0	0.0	0.0	38.2	0.0	0.0	0.0	0.0	30.2	0.0	26.8
LOS by Move:	D+	A	A	A	D+	A	A	A	A	C	A	C
HCM2kAvgQ:	15	3	0	0	11	0	0	0	0	7	0	6

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Intersection #59: Fair Oaks Avenue / Ahwanee Avenue

Signal=Protect/Rights=Include
Final Vol: 341 1091 37***
Lanes: 0 1 2 0 1

Westbound (left side): Signal=Permit, Rights=Include
Final Vol: 266, 30***, 66
Lanes: 0, 1, 0, 0, 1

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 90
Loss Time (sec): 6
Critical V/C: 0.638
Avg Crit Del (sec/veh): 16.4
Avg Delay (sec/veh): 17.3
LOS: B

Signal=Permit, Rights=Include
Lanes: 1, 0, 0, 1, 0
Final Vol: 266, 80, 43

Lanes: 1 0 2 0 1
Final Vol: 71 1558*** 29
Signal=Protect/Rights=Overlap

Street Name:	Fair Oaks Avenue						Ahwanee Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	70	1521	28	37	930	341	266	30	64	41	80	266
Growth 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
Initial Bse:	70	1521	28	37	930	341	266	30	64	41	80	266
Added Vol:	1	37	1	0	161	0	0	0	2	2	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	71	1558	29	37	1091	341	266	30	66	43	80	266
User 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
PHF 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
PHF Volume:	71	1558	29	37	1091	341	266	30	66	43	80	266
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	1558	29	37	1091	341	266	30	66	43	80	266
PCE 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
MLF 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
FinalVolume:	71	1558	29	37	1091	341	266	30	66	43	80	266
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.99	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.26	0.74	0.90	0.10	1.00	0.35	0.65	1.00
Final Sat.:	1750	3800	1750	1750	4265	1333	1618	182	1750	629	1171	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.41	0.02	0.02	0.26	0.26	0.16	0.16	0.04	0.07	0.07	0.15
Crit Moves:		****		****				****				
Green Time:	14.4	55.0	55.0	7.0	47.5	47.5	22.0	22.0	22.0	22.0	22.0	22.0
Volume/Cap:	0.25	0.67	0.03	0.27	0.48	0.48	0.67	0.67	0.15	0.28	0.28	0.62
Delay/Veh:	33.5	12.3	6.9	40.2	13.6	13.6	34.7	34.7	26.8	27.9	27.9	33.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.5	12.3	6.9	40.2	13.6	13.6	34.7	34.7	26.8	27.9	27.9	33.0
LOS by Move:	C-	B	A	D	B	B	C-	C-	C	C	C	C-
HCM2kAvgQ:	2	13	0	1	8	8	9	9	2	3	3	8

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Cumulative AM Plus Project

Intersection #59: Fair Oaks Avenue / Ahwanee Avenue

Signal=Protect/Rights=Include
Final Vol: 341 1150 37***
Lanes: 0 1 2 0 1

Signal=Permit
Rights=Include

Final Vol: Lanes:
266 0
1
30*** 0
0
67 1

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 90
Loss Time (sec): 6
Critical V/C: 0.642
Avg Crit Del (sec/veh): 16.4
Avg Delay (sec/veh): 17.2
LOS: B

Signal=Permit
Rights=Include

Lanes: Final Vol:
1 266
0
0 80
1
0 44

Lanes: 1 0 2 0 1
Final Vol: 71 1570*** 29
Signal=Protect/Rights=Overlap

Street Name:	Fair Oaks Avenue						Ahwanee Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	70	1521	28	37	930	341	266	30	64	41	80	266
Growth 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
Initial Bse:	70	1521	28	37	930	341	266	30	64	41	80	266
Added Vol:	1	49	1	0	220	0	0	0	3	3	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	71	1570	29	37	1150	341	266	30	67	44	80	266
User 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
PHF 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
PHF Volume:	71	1570	29	37	1150	341	266	30	67	44	80	266
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	1570	29	37	1150	341	266	30	67	44	80	266
PCE 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
MLF 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
FinalVolume:	71	1570	29	37	1150	341	266	30	67	44	80	266
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.99	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.29	0.71	0.90	0.10	1.00	0.35	0.65	1.00
Final Sat.:	1750	3800	1750	1750	4318	1280	1618	182	1750	639	1161	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.41	0.02	0.02	0.27	0.27	0.16	0.16	0.04	0.07	0.07	0.15
Crit Moves:		****		****				****				
Green Time:	14.0	55.1	55.1	7.0	48.0	48.0	21.9	21.9	21.9	21.9	21.9	21.9
Volume/Cap:	0.26	0.68	0.03	0.27	0.50	0.50	0.68	0.68	0.16	0.28	0.28	0.62
Delay/Veh:	33.9	12.3	6.9	40.2	13.5	13.5	35.0	35.0	26.9	28.0	28.0	33.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.9	12.3	6.9	40.2	13.5	13.5	35.0	35.0	26.9	28.0	28.0	33.2
LOS by Move:	C-	B	A	D	B	B	C-	C-	C	C	C	C-
HCM2kAvgQ:	2	13	0	1	8	8	9	9	2	3	3	8

Note: Queue reported is the number of cars per lane.

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Intersection #60: Fair Oaks Avenue / Duane Avenue

Signal=Protect/Rights=Include
Final Vol: 60 903 131***
Lanes: 0 1 2 0 1

Signal=Protect
Rights=Include

Final Vol:	Lanes:
169	1
	0
185***	0
	1
105	0

Vol Cnt Date:	4/1/2017
Cycle Time (sec):	90
Loss Time (sec):	12
Critical V/C:	0.949
Avg Crit Del (sec/veh):	51.6
Avg Delay (sec/veh):	41.8
LOS:	D

Signal=Protect
Rights=Include

Lanes:	Final Vol:
1	244
0	
1	193
0	
1	337***

Lanes: 1 0 1 1 0
Final Vol: 71 1128*** 329
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						Duane Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	9	1120	233	131	745	53	139	136	23	234	140	244
Growth 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
Initial Bse:	9	1120	233	131	745	53	139	136	23	234	140	244
Added Vol:	62	8	96	0	158	7	30	49	82	103	53	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	71	1128	329	131	903	60	169	185	105	337	193	244
User 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
PHF 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
PHF Volume:	71	1128	329	131	903	60	169	185	105	337	193	244
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	1128	329	131	903	60	169	185	105	337	193	244
PCE 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
MLF 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
FinalVolume:	71	1128	329	131	903	60	169	185	105	337	193	244
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	1.54	0.46	1.00	2.81	0.19	1.00	0.64	0.36	1.00	1.00	1.00
Final Sat.:	1750	2864	835	1750	5251	349	1750	1148	652	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.39	0.39	0.07	0.17	0.17	0.10	0.16	0.16	0.19	0.10	0.14
Crit Moves:		****		****				****		****		
Green Time:	13.8	37.4	37.4	7.1	30.6	30.6	13.7	15.3	15.3	18.3	19.8	19.8
Volume/Cap:	0.26	0.95	0.95	0.95	0.51	0.51	0.63	0.95	0.95	0.95	0.46	0.63
Delay/Veh:	34.1	38.2	38.2	102.2	23.9	23.9	40.7	74.9	74.9	70.0	31.3	35.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.1	38.2	38.2	102.2	23.9	23.9	40.7	74.9	74.9	70.0	31.3	35.2
LOS by Move:	C-	D+	D+	F	C	C	D	E	E	E	C	D+
HCM2kAvgQ:	2	23	23	5	7	7	6	13	13	12	4	7

Note: Queue reported is the number of cars per lane.

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Intersection #60: Fair Oaks Avenue / Duane Avenue

Signal=Protect/Rights=Include
Final Vol: 60 965 131***
Lanes: 0 1 2 0 1

Signal=Protect
Rights=Include

Final Vol: Lanes:
169 1
0
185*** 0
1
105 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 90
Loss Time (sec): 12
Critical V/C: 0.953
Avg Crit Del (sec/veh): 52.4
Avg Delay (sec/veh): 42.0
LOS: D

Signal=Protect
Rights=Include

Lanes: Final Vol:
1 244
0
1 193
0
1 337***

Lanes: 1 0 1 1 0
Final Vol: 73 1142*** 329
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						Duane Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	9	1120	233	131	745	53	139	136	23	234	140	244
Growth 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
Initial Bse:	9	1120	233	131	745	53	139	136	23	234	140	244
Added Vol:	64	22	96	0	220	7	30	49	82	103	53	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	73	1142	329	131	965	60	169	185	105	337	193	244
User 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
PHF 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
PHF Volume:	73	1142	329	131	965	60	169	185	105	337	193	244
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	1142	329	131	965	60	169	185	105	337	193	244
PCE 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
MLF 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
FinalVolume:	73	1142	329	131	965	60	169	185	105	337	193	244
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	1.54	0.46	1.00	2.82	0.18	1.00	0.64	0.36	1.00	1.00	1.00
Final Sat.:	1750	2872	827	1750	5272	328	1750	1148	652	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.40	0.40	0.07	0.18	0.18	0.10	0.16	0.16	0.19	0.10	0.14
Crit Moves:		****		****				****		****		
Green Time:	13.3	37.5	37.5	7.1	31.3	31.3	13.7	15.2	15.2	18.2	19.7	19.7
Volume/Cap:	0.28	0.95	0.95	0.95	0.53	0.53	0.64	0.95	0.95	0.95	0.46	0.64
Delay/Veh:	34.7	38.8	38.8	103.7	23.7	23.7	40.9	76.1	76.1	71.2	31.4	35.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.7	38.8	38.8	103.7	23.7	23.7	40.9	76.1	76.1	71.2	31.4	35.4
LOS by Move:	C-	D+	D+	F	C	C	D	E-	E-	E	C	D+
HCM2kAvgQ:	2	23	23	5	7	7	6	13	13	12	4	7

Note: Queue reported is the number of cars per lane.

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Intersection #61: Fair Oaks Avenue / Wolfe Road

Signal=Permit/Rights=Overlap
Final Vol: 938 488 0
Lanes: 2 0 2 0 0

Final Vol:	Lanes:	Signal=Split Rights=Overlap			Signal=Split Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	4/1/2017			
921***	2		Cycle Time (sec):	60		0	0
	0		Loss Time (sec):	6		0	
0	0		Critical V/C:	0.525		0	0
	0		Avg Crit Del (sec/veh):	11.8		0	
8	1		Avg Delay (sec/veh):	8.8		0	0
			LOS:	A			

Lanes: 0 0 2 0 0
Final Vol: 0 685*** 0
Signal=Permit/Rights=Include

Street Name:	Fair Oaks Avenue						Wolfe Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	0	0	10	10	10	0	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	0	561	0	0	361	722	879	0	8	0	0	0
Growth 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
Initial Bse:	0	561	0	0	361	722	879	0	8	0	0	0
Added Vol:	0	124	0	0	127	216	42	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	685	0	0	488	938	921	0	8	0	0	0
User 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
PHF 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
PHF Volume:	0	685	0	0	488	938	921	0	8	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	685	0	0	488	938	921	0	8	0	0	0
PCE 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
MLF 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
FinalVolume:	0	685	0	0	488	938	921	0	8	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.83	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3800	0	0	3800	3150	3150	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.00	0.00	0.13	0.30	0.29	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green Time:	0.0	20.6	0.0	0.0	20.6	54.0	33.4	0.0	33.4	0.0	0.0	0.0
Volume/Cap:	0.00	0.53	0.00	0.00	0.37	0.33	0.53	0.00	0.01	0.00	0.00	0.00
Delay/Veh:	0.0	16.2	0.0	0.0	15.0	0.5	8.6	0.0	5.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	16.2	0.0	0.0	15.0	0.5	8.6	0.0	5.9	0.0	0.0	0.0
LOS by Move:	A	B	A	A	B	A	A	A	A	A	A	A
HCM2kAvgQ:	0	5	0	0	3	2	6	0	0	0	0	0

Note: Queue reported is the number of cars per lane.

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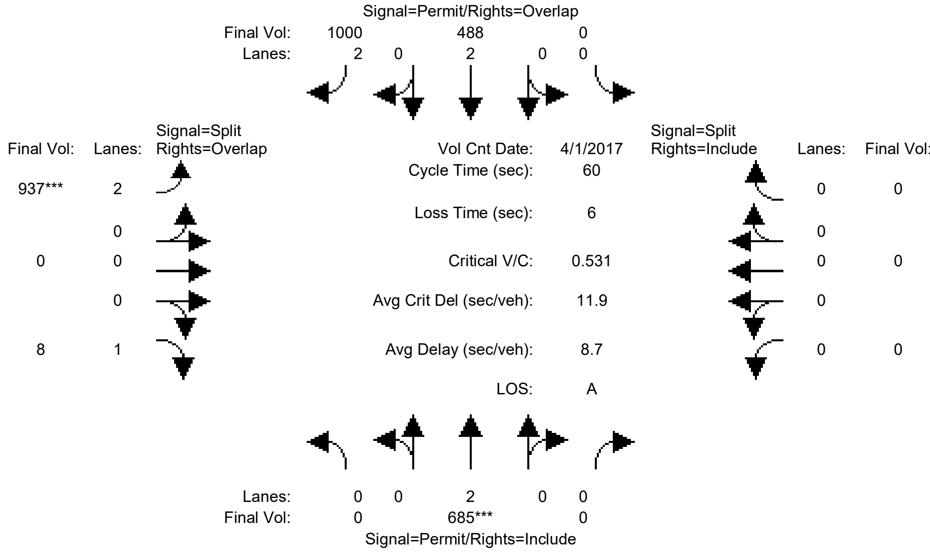
Intersection #61: Fair Oaks Avenue / Wolfe Road



Street Name:	Fair Oaks Avenue						Wolfe Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	0	0	10	10	10	0	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	0	561	0	0	361	722	879	0	8	0	0	0
Growth 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
Initial Bse:	0	561	0	0	361	722	879	0	8	0	0	0
Added Vol:	0	124	0	0	127	278	58	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	685	0	0	488	1000	937	0	8	0	0	0
User 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
PHF 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
PHF Volume:	0	685	0	0	488	1000	937	0	8	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	685	0	0	488	1000	937	0	8	0	0	0
PCE 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
MLF 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
FinalVolume:	0	685	0	0	488	1000	937	0	8	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.83	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3800	0	0	3800	3150	3150	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.00	0.00	0.13	0.32	0.30	0.00	0.00	0.00	0.00	0.00
Crit Moves:		****					****					
Green Time:	0.0	20.4	0.0	0.0	20.4	54.0	33.6	0.0	33.6	0.0	0.0	0.0
Volume/Cap:	0.00	0.53	0.00	0.00	0.38	0.35	0.53	0.00	0.01	0.00	0.00	0.00
Delay/Veh:	0.0	16.4	0.0	0.0	15.2	0.5	8.6	0.0	5.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	16.4	0.0	0.0	15.2	0.5	8.6	0.0	5.8	0.0	0.0	0.0
LOS by Move:	A	B	A	A	B	A	A	A	A	A	A	A
HCM2kAvgQ:	0	5	0	0	3	2	6	0	0	0	0	0

Note: Queue reported is the number of cars per lane.

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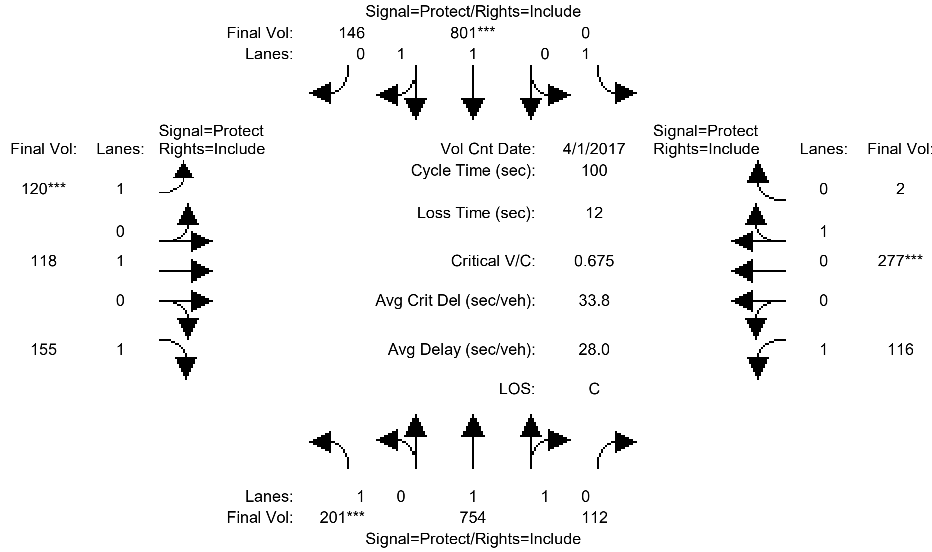
Intersection #62: Fair Oaks Avenue / Maude Avenue



Street Name:	Fair Oaks Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	142	732	16	0	623	108	100	100	125	13	171	2
Growth 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
Initial Bse:	142	732	16	0	623	108	100	100	125	13	171	2
Added Vol:	59	22	96	0	178	38	20	18	30	103	106	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	201	754	112	0	801	146	120	118	155	116	277	2
User 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
PHF 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
PHF Volume:	201	754	112	0	801	146	120	118	155	116	277	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	201	754	112	0	801	146	120	118	155	116	277	2
PCE 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
MLF 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
FinalVolume:	201	754	112	0	801	146	120	118	155	116	277	2
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	1.00	1.73	0.27	1.00	1.68	0.32	1.00	1.00	1.00	1.00	0.99	0.01
Final Sat.:	1750	3221	478	1750	3129	570	1750	1900	1750	1750	1787	13
Capacity Analysis Module:												
Vol/Sat:	0.11	0.23	0.23	0.00	0.26	0.26	0.07	0.06	0.09	0.07	0.16	0.16
Crit Moves:	****				****		****				****	
Green Time:	17.0	54.9	54.9	0.0	37.9	37.9	10.2	19.5	19.5	13.6	22.9	22.9
Volume/Cap:	0.68	0.43	0.43	0.00	0.68	0.68	0.68	0.32	0.45	0.49	0.68	0.68
Delay/Veh:	45.0	13.4	13.4	0.0	27.2	27.2	53.2	35.1	36.5	41.5	39.5	39.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.0	13.4	13.4	0.0	27.2	27.2	53.2	35.1	36.5	41.5	39.5	39.5
LOS by Move:	D	B	B	A	C	C	D-	D+	D+	D	D	D
HCM2kAvgQ:	6	8	8	0	12	12	4	3	4	4	9	9

Note: Queue reported is the number of cars per lane.

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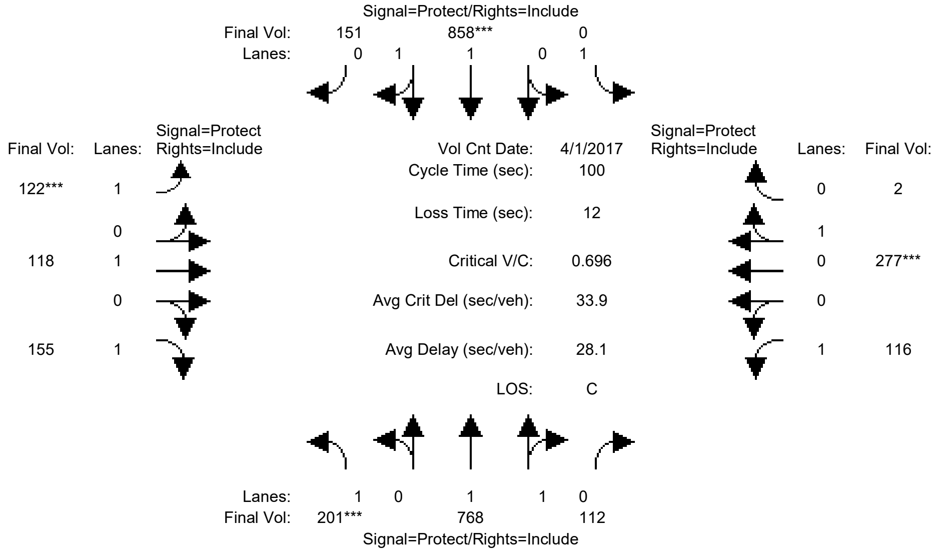
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #62: Fair Oaks Avenue / Maude Avenue



Street Name:	Fair Oaks Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	142	732	16	0	623	108	100	100	125	13	171	2
Growth 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
Initial Bse:	142	732	16	0	623	108	100	100	125	13	171	2
Added Vol:	59	36	96	0	240	38	22	18	30	103	106	0
PasserByVol:	0	0	0	0	-5	5	0	0	0	0	0	0
Initial Fut:	201	768	112	0	858	151	122	118	155	116	277	2
User 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
PHF 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
PHF Volume:	201	768	112	0	858	151	122	118	155	116	277	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	201	768	112	0	858	151	122	118	155	116	277	2
PCE 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
MLF 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
FinalVolume:	201	768	112	0	858	151	122	118	155	116	277	2
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	1.00	1.74	0.26	1.00	1.69	0.31	1.00	1.00	1.00	1.00	0.99	0.01
Final Sat.:	1750	3229	471	1750	3146	554	1750	1900	1750	1750	1787	13
Capacity Analysis Module:												
Vol/Sat:	0.11	0.24	0.24	0.00	0.27	0.27	0.07	0.06	0.09	0.07	0.16	0.16
Crit Moves:	****				****		****				****	
Green Time:	16.5	55.7	55.7	0.0	39.2	39.2	10.0	19.0	19.0	13.3	22.3	22.3
Volume/Cap:	0.70	0.43	0.43	0.00	0.70	0.70	0.70	0.33	0.47	0.50	0.70	0.70
Delay/Veh:	46.6	13.0	13.0	0.0	26.9	26.9	55.1	35.5	37.0	41.9	41.0	41.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.6	13.0	13.0	0.0	26.9	26.9	55.1	35.5	37.0	41.9	41.0	41.0
LOS by Move:	D	B	B	A	C	C	E+	D+	D+	D	D	D
HCM2kAvgQ:	6	8	8	0	13	13	4	3	4	4	10	10

Note: Queue reported is the number of cars per lane.

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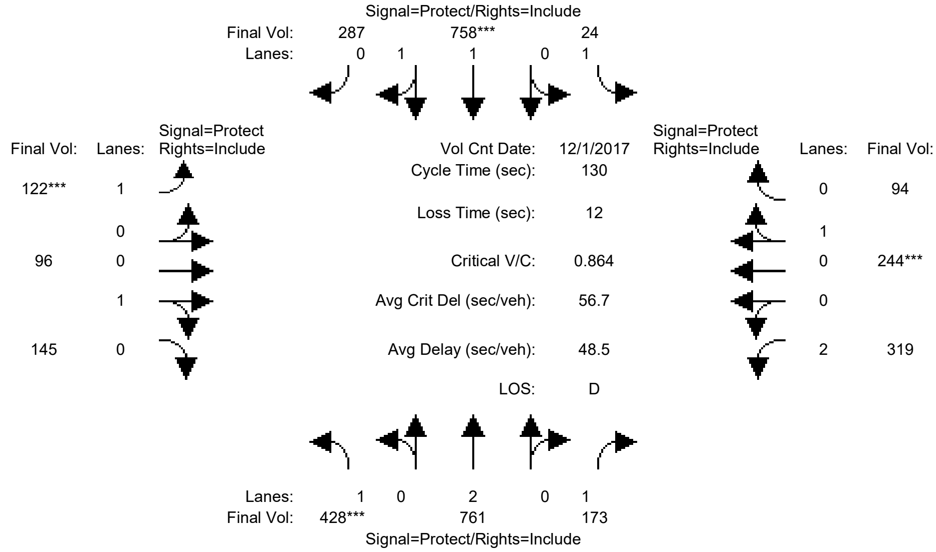
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #63: Fair Oaks Avenue / Arques Avenue



Street Name:	Fair Oaks Avenue						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	272	691	173	24	603	131	63	96	57	223	244	45
Growth 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
Initial Bse:	272	691	173	24	603	131	63	96	57	223	244	45
Added Vol:	156	70	0	0	155	156	59	0	88	96	0	49
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	428	761	173	24	758	287	122	96	145	319	244	94
User 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
PHF 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
PHF Volume:	428	761	173	24	758	287	122	96	145	319	244	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	428	761	173	24	758	287	122	96	145	319	244	94
PCE 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
MLF 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
FinalVolume:	428	761	173	24	758	287	122	96	145	319	244	94
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	1.44	0.56	1.00	0.40	0.60	2.00	0.72	0.28
Final Sat.:	1750	3800	1750	1750	2683	1016	1750	717	1083	3150	1299	501
Capacity Analysis Module:												
Vol/Sat:	0.24	0.20	0.10	0.01	0.28	0.28	0.07	0.13	0.13	0.10	0.19	0.19
Crit Moves:	****				****		****				****	
Green Time:	36.8	62.5	62.5	16.8	42.5	42.5	10.5	22.0	22.0	16.7	28.2	28.2
Volume/Cap:	0.86	0.42	0.21	0.11	0.86	0.86	0.86	0.79	0.79	0.79	0.86	0.86
Delay/Veh:	58.9	22.1	19.6	50.2	47.7	47.7	97.9	64.7	64.7	65.0	66.8	66.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.9	22.1	19.6	50.2	47.7	47.7	97.9	64.7	64.7	65.0	66.8	66.8
LOS by Move:	E+	C+	B-	D	D	D	F	E	E	E	E	E
HCM2kAvgQ:	18	9	4	1	20	20	8	12	12	8	15	15

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #63: Fair Oaks Avenue / Arques Avenue

Signal=Protect/Rights=Include
Final Vol: 287 816*** 24
Lanes: 0 1 1 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
122***	1					0	94
	0					1	
96	0					0	244***
	1					0	
145	0					2	341

Vol Cnt Date:	12/1/2017
Cycle Time (sec):	130
Loss Time (sec):	12
Critical V/C:	0.882
Avg Crit Del (sec/veh):	58.2
Avg Delay (sec/veh):	50.0
LOS:	D

Lanes: 1 0 2 0 1
Final Vol: 428*** 775 173
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	272	691	173	24	603	131	63	96	57	223	244	45
Growth 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
Initial Bse:	272	691	173	24	603	131	63	96	57	223	244	45
Added Vol:	156	84	0	0	218	156	59	0	88	118	0	49
PasserByVol:	0	0	0	0	-5	0	0	0	0	0	0	0
Initial Fut:	428	775	173	24	816	287	122	96	145	341	244	94
User 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
PHF 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
PHF Volume:	428	775	173	24	816	287	122	96	145	341	244	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	428	775	173	24	816	287	122	96	145	341	244	94
PCE 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
MLF 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
FinalVolume:	428	775	173	24	816	287	122	96	145	341	244	94
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	1.47	0.53	1.00	0.40	0.60	2.00	0.72	0.28
Final Sat.:	1750	3800	1750	1750	2737	962	1750	717	1083	3150	1299	501
Capacity Analysis Module:												
Vol/Sat:	0.24	0.20	0.10	0.01	0.30	0.30	0.07	0.13	0.13	0.11	0.19	0.19
Crit Moves:	****				****		****				****	
Green Time:	36.1	63.3	63.3	16.7	44.0	44.0	10.3	21.0	21.0	17.0	27.7	27.7
Volume/Cap:	0.88	0.42	0.20	0.11	0.88	0.88	0.88	0.83	0.83	0.83	0.88	0.88
Delay/Veh:	61.9	21.6	19.1	50.3	48.2	48.2	102.6	70.5	70.5	68.3	70.0	70.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	61.9	21.6	19.1	50.3	48.2	48.2	102.6	70.5	70.5	68.3	70.0	70.0
LOS by Move:	E	C+	B-	D	D	D	F	E	E	E	E	E
HCM2kAvgQ:	18	9	4	1	22	22	8	12	12	9	15	15

Note: Queue reported is the number of cars per lane.

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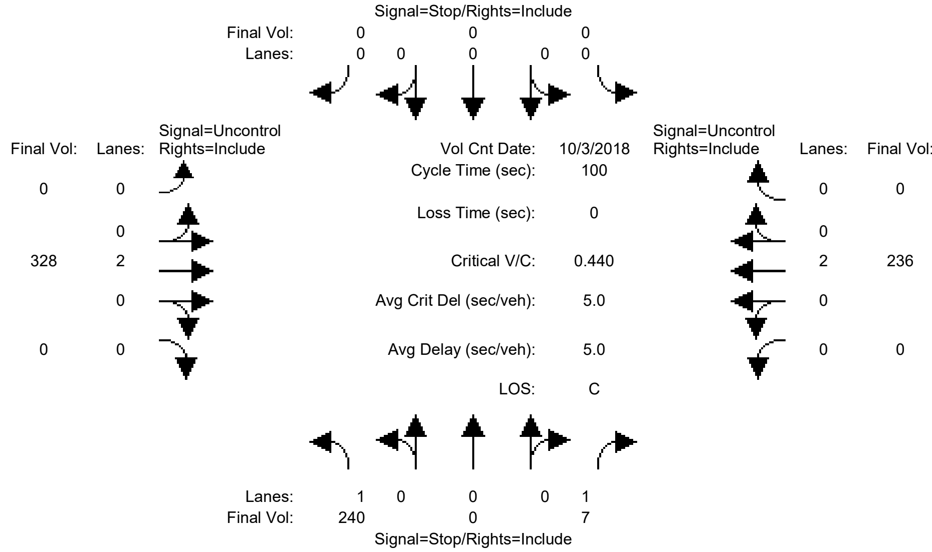
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative AM

Intersection #64: Central Expressway WB Off-Ramp / Arques Avenue



Street Name:	Central Expressway WB Ramp						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	95	0	7	0	0	0	0	328	0	0	236	0
Growth 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
Initial Bse:	95	0	7	0	0	0	0	328	0	0	236	0
Added Vol:	145	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	240	0	7	0	0	0	0	328	0	0	236	0
User 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
PHF 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
PHF Volume:	240	0	7	0	0	0	0	328	0	0	236	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	240	0	7	0	0	0	0	328	0	0	236	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	446	xxxx	164	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	546	xxxx	858	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	546	xxxx	858	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.44	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	2.2	xxxx	0.0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	16.7	xxxx	9.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	C	*	A	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		16.5			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		C			*			*			*	

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Lanes:        1  0  0  0  1   0  0  0  0  0   0  0  2  0  0   0  0  2  0  0
Initial Vol:  240    0     7     0    0     0     0  328     0     0  236     0
ApproachDel:      16.5          xxxxxx           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=1.1]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=247]
   SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=811]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Lanes:        1  0  0  0  1   0  0  0  0  0   0  0  2  0  0   0  0  2  0  0
Initial Vol:  240    0     7     0    0     0     0  328     0     0  236     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            564
Minor Approach Volume:          247
Minor Approach Volume Threshold: 620
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #64: Central Expressway WB Off-Ramp / Arques Avenue

Signal=Stop/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Final Vol:	Lanes:	Signal=Uncontrol Rights=Include			Signal=Uncontrol Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	10/3/2018			
0	0		Cycle Time (sec):	100		0	0
			Loss Time (sec):	0			
	0					0	
328	2		Critical V/C:	0.480		2	236
	0		Avg Crit Del (sec/veh):	5.6		0	
0	0		Avg Delay (sec/veh):	5.6		0	0
			LOS:	C			

Lanes: 1 0 0 0 1
Final Vol: 262 0 7
Signal=Stop/Rights=Include

```
Street Name:    Central Expressway WB Ramp            Arques Avenue
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 3 Oct 2018 <<
Base Vol:      95    0     7     0    0     0     0  328     0     0  236     0
Growth 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
Initial Bse:   95    0     7     0    0     0     0  328     0     0  236     0
Added Vol:    167    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  262    0     7     0    0     0     0  328     0     0  236     0
User 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
PHF 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
PHF Volume:   262    0     7     0    0     0     0  328     0     0  236     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:  262    0     7     0    0     0     0  328     0     0  236     0
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:  6.8 xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:  3.5 xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol:  446 xxxx   164  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.:  546 xxxx   858  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:    546 xxxx   858  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  0.48 xxxx  0.01  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2WayQ95thQ:   2.6 xxxx   0.0  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del: 17.5 xxxx   9.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    C    *     A     *    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      17.3           xxxxxx           xxxxxx           xxxxxx
ApproachLOS:        C               *                *                *
Note: Queue reported is the number of cars per lane.
                   Peak Hour Delay Signal Warrant Report
*********************************************************************************
Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue
*********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        1  0  0  0  1    0  0  0  0  0    0  0  2  0  0    0  0  2  0  0
Initial Vol:  262    0     7     0    0     0     0  328     0     0  236     0
ApproachDel:      17.3           xxxxxx           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=1.3]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=269]
   SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=833]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        1  0  0  0  1    0  0  0  0  0    0  0  2  0  0    0  0  2  0  0
Initial Vol:  262    0     7     0    0     0     0  328     0     0  236     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             564
Minor Approach Volume:           269
Minor Approach Volume Threshold: 620
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #65: Fair Oaks Avenue / California Avenue

Signal=Protect/Rights=Include
Final Vol: 92 1059 52***
Lanes: 0 1 1 0 1

Signal=Split
Rights=Include

Final Vol: Lanes:
39*** 0
1
48 0
0
49 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 100
Loss Time (sec): 9
Critical V/C: 0.601
Avg Crit Del (sec/veh): 9.7
Avg Delay (sec/veh): 11.2
LOS: B+

Signal=Split
Rights=Include

Lanes: Final Vol:
0 0
0
0 0
0
0 0

Lanes: 1 0 1 1 0
Final Vol: 133 1356*** 377
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	100	1130	342	43	729	92	39	48	31	0	0	0
Growth 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
Initial Bse:	100	1130	342	43	729	92	39	48	31	0	0	0
Added Vol:	33	226	35	9	330	0	0	0	18	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	133	1356	377	52	1059	92	39	48	49	0	0	0
User 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
PHF 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
PHF Volume:	133	1356	377	52	1059	92	39	48	49	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133	1356	377	52	1059	92	39	48	49	0	0	0
PCE 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
MLF 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
FinalVolume:	133	1356	377	52	1059	92	39	48	49	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.92	1.00	0.92
Lanes:	1.00	1.55	0.45	1.00	1.84	0.16	0.45	0.55	1.00	0.00	0.00	0.00
Final Sat.:	1750	2894	805	1750	3404	296	807	993	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.47	0.47	0.03	0.31	0.31	0.05	0.05	0.03	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green Time:	15.9	74.0	74.0	7.0	65.1	65.1	10.0	10.0	10.0	0.0	0.0	0.0
Volume/Cap:	0.48	0.63	0.63	0.42	0.48	0.48	0.48	0.48	0.28	0.00	0.00	0.00
Delay/Veh:	39.6	6.8	6.8	46.9	9.0	9.0	44.6	44.6	42.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.6	6.8	6.8	46.9	9.0	9.0	44.6	44.6	42.5	0.0	0.0	0.0
LOS by Move:	D	A	A	D	A	A	D	D	D	A	A	A
HCM2kAvgQ:	5	14	14	2	9	9	3	3	1	0	0	0

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #65: Fair Oaks Avenue / California Avenue

Signal=Protect/Rights=Include
Final Vol: 92 1138 52***
Lanes: 0 1 1 0 1

Westbound approach: Signal=Split, Rights=Include. Lanes / Final Vol: 0 / 0; 0; 0 / 0; 0; 0 / 0

Eastbound approach: Signal=Split, Rights=Include.

Final Vol:	Lanes:
39***	0
	1
48	0
	0
49	1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 100
Loss Time (sec): 9
Critical V/C: 0.606
Avg Crit Del (sec/veh): 9.8
Avg Delay (sec/veh): 11.2
LOS: B+

Lanes: 1 0 1 1 0
Final Vol: 133 1369*** 382
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	100	1130	342	43	729	92	39	48	31	0	0	0
Growth 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
Initial Bse:	100	1130	342	43	729	92	39	48	31	0	0	0
Added Vol:	33	239	40	9	414	0	0	0	18	0	0	0
PasserByVol:	0	0	0	0	-5	0	0	0	0	0	0	0
Initial Fut:	133	1369	382	52	1138	92	39	48	49	0	0	0
User 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
PHF 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
PHF Volume:	133	1369	382	52	1138	92	39	48	49	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133	1369	382	52	1138	92	39	48	49	0	0	0
PCE 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
MLF 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
FinalVolume:	133	1369	382	52	1138	92	39	48	49	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.92	1.00	0.92
Lanes:	1.00	1.55	0.45	1.00	1.85	0.15	0.45	0.55	1.00	0.00	0.00	0.00
Final Sat.:	1750	2892	807	1750	3423	277	807	993	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.47	0.47	0.03	0.33	0.33	0.05	0.05	0.03	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green Time:	15.1	74.0	74.0	7.0	65.9	65.9	10.0	10.0	10.0	0.0	0.0	0.0
Volume/Cap:	0.50	0.64	0.64	0.42	0.50	0.50	0.48	0.48	0.28	0.00	0.00	0.00
Delay/Veh:	40.6	6.9	6.9	46.9	8.9	8.9	44.6	44.6	42.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.6	6.9	6.9	46.9	8.9	8.9	44.6	44.6	42.5	0.0	0.0	0.0
LOS by Move:	D	A	A	D	A	A	D	D	D	A	A	A
HCM2kAvgQ:	5	14	14	2	9	9	3	3	1	0	0	0

Note: Queue reported is the number of cars per lane.

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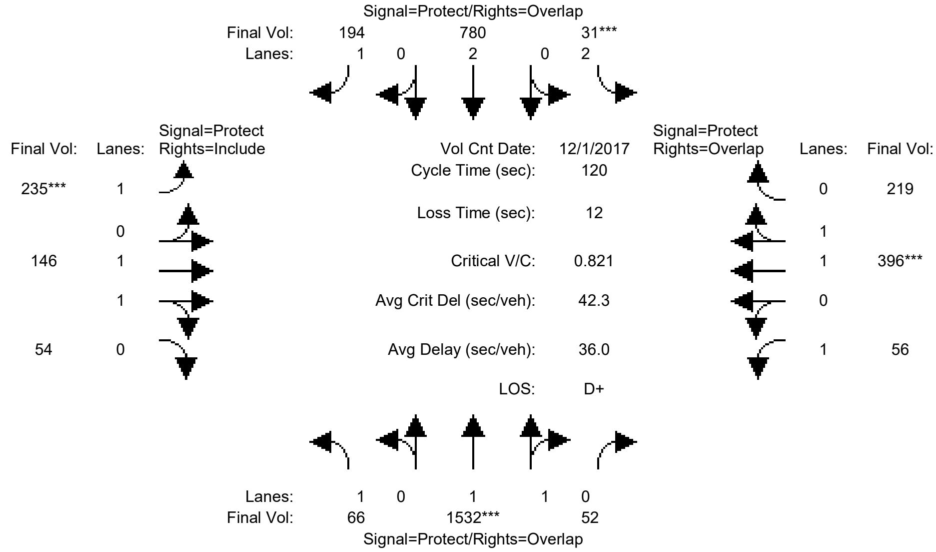
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #66: Fair Oaks Avenue / Evelyn Avenue



Street Name:	Fair Oaks Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	65	1178	52	29	616	144	188	135	53	56	385	218
Growth 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
Initial Bse:	65	1178	52	29	616	144	188	135	53	56	385	218
Added Vol:	1	354	0	2	164	50	47	11	1	0	11	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	66	1532	52	31	780	194	235	146	54	56	396	219
User 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
PHF 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
PHF Volume:	66	1532	52	31	780	194	235	146	54	56	396	219
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	1532	52	31	780	194	235	146	54	56	396	219
PCE 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
MLF 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
FinalVolume:	66	1532	52	31	780	194	235	146	54	56	396	219
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.83	1.00	0.92	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	1.00	1.93	0.07	2.00	2.00	1.00	1.00	1.45	0.55	1.00	1.27	0.73
Final Sat.:	1750	3578	121	3150	3800	1750	1750	2700	999	1750	2381	1317
Capacity Analysis Module:												
Vol/Sat:	0.04	0.43	0.43	0.01	0.21	0.11	0.13	0.05	0.05	0.03	0.17	0.17
Crit Moves:		****		****			****				****	
Green Time:	14.7	59.3	76.5	7.0	51.7	70.3	18.6	24.5	24.5	17.2	23.0	30.0
Volume/Cap:	0.31	0.87	0.67	0.17	0.48	0.19	0.87	0.26	0.26	0.22	0.87	0.66
Delay/Veh:	48.9	31.4	14.6	54.2	24.7	11.7	73.5	40.4	40.4	46.0	57.9	42.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.9	31.4	14.6	54.2	24.7	11.7	73.5	40.4	40.4	46.0	57.9	42.3
LOS by Move:	D	C	B	D-	C	B+	E	D	D	D	E+	D
HCM2kAvgQ:	2	26	18	1	10	4	10	3	3	2	14	11

Note: Queue reported is the number of cars per lane.

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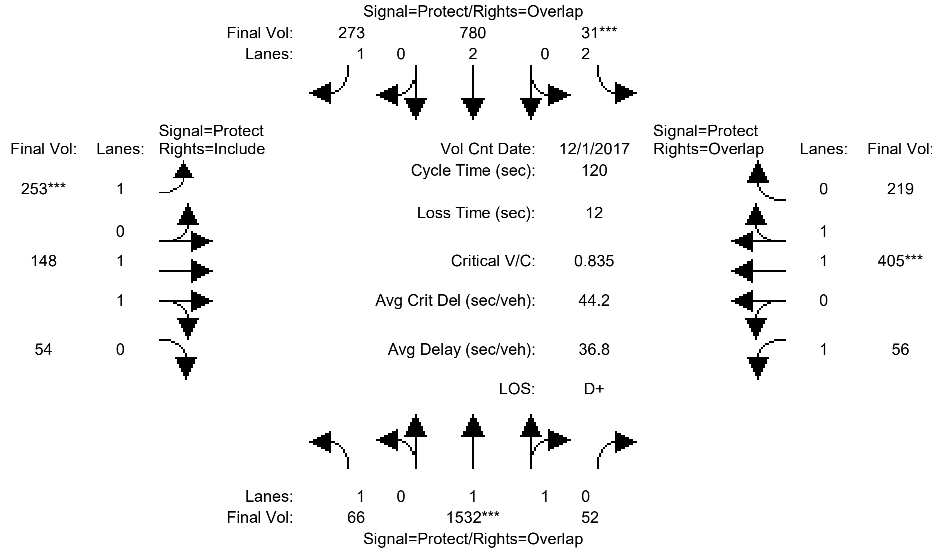
Cityline TIA
SJ17-1787
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #66: Fair Oaks Avenue / Evelyn Avenue



Street Name:	Fair Oaks Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	65	1178	52	29	616	144	188	135	53	56	385	218
Growth 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
Initial Bse:	65	1178	52	29	616	144	188	135	53	56	385	218
Added Vol:	1	354	0	2	164	134	65	13	1	0	20	1
PasserByVol:	0	0	0	0	0	-5	0	0	0	0	0	0
Initial Fut:	66	1532	52	31	780	273	253	148	54	56	405	219
User 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
PHF 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
PHF Volume:	66	1532	52	31	780	273	253	148	54	56	405	219
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	1532	52	31	780	273	253	148	54	56	405	219
PCE 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
MLF 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
FinalVolume:	66	1532	52	31	780	273	253	148	54	56	405	219
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.83	1.00	0.92	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	1.00	1.93	0.07	2.00	2.00	1.00	1.00	1.45	0.55	1.00	1.28	0.72
Final Sat.:	1750	3578	121	3150	3800	1750	1750	2710	989	1750	2400	1298
Capacity Analysis Module:												
Vol/Sat:	0.04	0.43	0.43	0.01	0.21	0.16	0.14	0.05	0.05	0.03	0.17	0.17
Crit Moves:		****		****			****				****	
Green Time:	14.5	58.3	75.9	7.0	50.9	70.6	19.7	25.1	25.1	17.6	23.0	30.0
Volume/Cap:	0.31	0.88	0.68	0.17	0.48	0.27	0.88	0.26	0.26	0.22	0.88	0.68
Delay/Veh:	49.1	33.2	15.0	54.2	25.3	12.2	74.4	39.9	39.9	45.6	59.5	42.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.1	33.2	15.0	54.2	25.3	12.2	74.4	39.9	39.9	45.6	59.5	42.6
LOS by Move:	D	C-	B	D-	C	B	E	D	D	D	E+	D
HCM2kAvgQ:	2	27	18	1	10	5	11	3	3	2	15	12

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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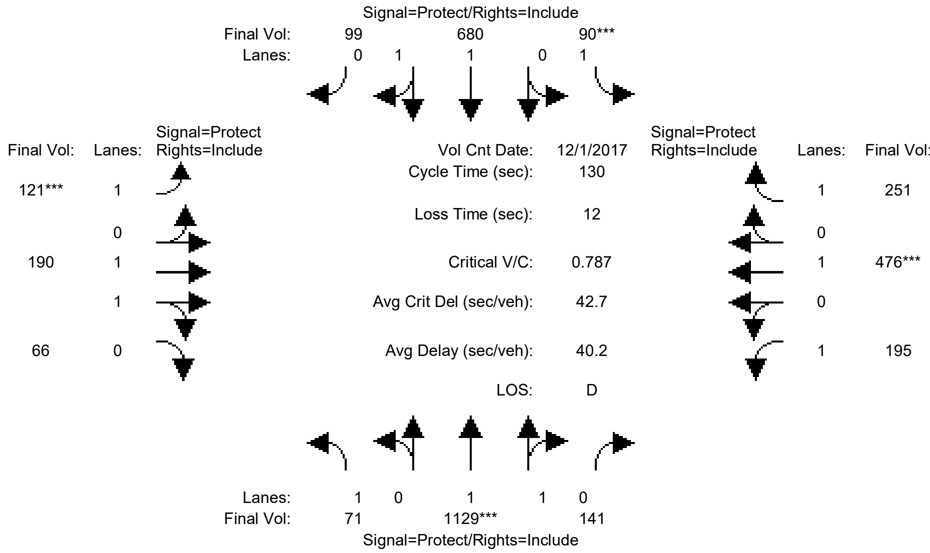
Cumulative AM

Intersection #67: Fair Oaks Avenue / Old San Francisco Road



Street Name:	Fair Oaks Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	71	850	123	55	550	99	121	139	64	181	337	175
Growth 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
Initial Bse:	71	850	123	55	550	99	121	139	64	181	337	175
Added Vol:	0	279	18	35	130	0	0	51	2	14	139	76
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	71	1129	141	90	680	99	121	190	66	195	476	251
User 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
PHF 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
PHF Volume:	71	1129	141	90	680	99	121	190	66	195	476	251
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	1129	141	90	680	99	121	190	66	195	476	251
PCE 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
MLF 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
FinalVolume:	71	1129	141	90	680	99	121	190	66	195	476	251
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.77	0.23	1.00	1.74	0.26	1.00	1.47	0.53	1.00	1.00	1.00
Final Sat.:	1750	3289	411	1750	3229	470	1750	2745	954	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.34	0.34	0.05	0.21	0.21	0.07	0.07	0.07	0.11	0.25	0.14
Crit Moves:		****		****			****				****	
Green Time:	13.3	56.7	56.7	8.5	51.9	51.9	11.4	21.6	21.6	31.2	41.4	41.4
Volume/Cap:	0.40	0.79	0.79	0.79	0.53	0.53	0.79	0.42	0.42	0.46	0.79	0.45
Delay/Veh:	56.1	34.1	34.1	89.3	30.1	30.1	81.2	49.0	49.0	43.0	47.1	35.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.1	34.1	34.1	89.3	30.1	30.1	81.2	49.0	49.0	43.0	47.1	35.8
LOS by Move:	E+	C-	C-	F	C	C	F	D	D	D	D	D+
HCM2kAvgQ:	3	23	23	4	12	12	6	5	5	7	17	8

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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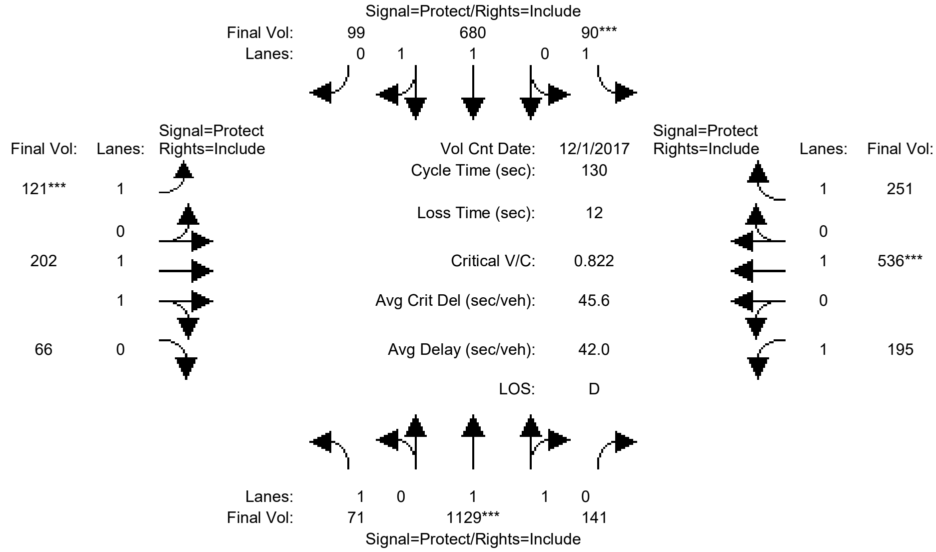
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #67: Fair Oaks Avenue / Old San Francisco Road



Street Name:	Fair Oaks Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	71	850	123	55	550	99	121	139	64	181	337	175
Growth 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
Initial Bse:	71	850	123	55	550	99	121	139	64	181	337	175
Added Vol:	0	279	18	35	130	0	0	63	2	14	199	76
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	71	1129	141	90	680	99	121	202	66	195	536	251
User 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
PHF 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
PHF Volume:	71	1129	141	90	680	99	121	202	66	195	536	251
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	1129	141	90	680	99	121	202	66	195	536	251
PCE 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
MLF 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
FinalVolume:	71	1129	141	90	680	99	121	202	66	195	536	251
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.77	0.23	1.00	1.74	0.26	1.00	1.49	0.51	1.00	1.00	1.00
Final Sat.:	1750	3289	411	1750	3229	470	1750	2788	911	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.34	0.34	0.05	0.21	0.21	0.07	0.07	0.07	0.11	0.28	0.14
Crit Moves:		****		****			****				****	
Green Time:	12.7	54.3	54.3	8.1	49.7	49.7	10.9	22.7	22.7	32.9	44.6	44.6
Volume/Cap:	0.41	0.82	0.82	0.82	0.55	0.55	0.82	0.42	0.42	0.44	0.82	0.42
Delay/Veh:	56.8	37.2	37.2	97.3	31.9	31.9	88.0	48.2	48.2	41.5	47.3	33.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.8	37.2	37.2	97.3	31.9	31.9	88.0	48.2	48.2	41.5	47.3	33.2
LOS by Move:	E+	D+	D+	F	C	C	F	D	D	D	D	C-
HCM2kAvgQ:	3	25	25	4	12	12	6	5	5	7	19	8

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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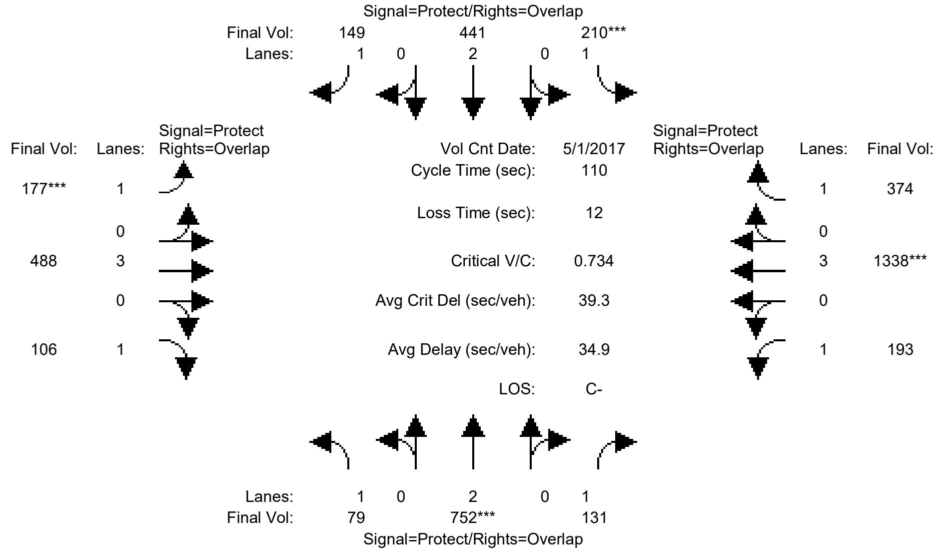
Cumulative AM

Intersection #68: Fair Oaks Avenue / El Camino Real (CMP)



Street Name:	Fair Oaks Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	79	682	131	109	414	138	149	439	106	193	1227	173
Growth 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
Initial Bse:	79	682	131	109	414	138	149	439	106	193	1227	173
Added Vol:	0	70	0	101	27	11	28	49	0	0	111	201
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	79	752	131	210	441	149	177	488	106	193	1338	374
User 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
PHF 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
PHF Volume:	79	752	131	210	441	149	177	488	106	193	1338	374
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	752	131	210	441	149	177	488	106	193	1338	374
PCE 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
MLF 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
FinalVolume:	79	752	131	210	441	149	177	488	106	193	1338	374
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.07	0.12	0.12	0.09	0.10	0.09	0.06	0.11	0.23	0.21
Crit Moves:		****		****			****				****	
Green Time:	16.9	29.7	57.3	18.0	30.8	45.9	15.2	22.7	39.6	27.6	35.2	53.2
Volume/Cap:	0.29	0.73	0.14	0.73	0.41	0.20	0.73	0.41	0.17	0.44	0.73	0.44
Delay/Veh:	41.9	39.4	13.7	53.2	32.5	20.5	56.5	38.1	24.1	35.4	34.8	19.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.9	39.4	13.7	53.2	32.5	20.5	56.5	38.1	24.1	35.4	34.8	19.0
LOS by Move:	D	D	B	D-	C-	C+	E+	D+	C	D+	C-	B-
HCM2kAvgQ:	2	11	2	9	6	3	6	5	3	6	15	9

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Cumulative AM Plus Project

Intersection #68: Fair Oaks Avenue / El Camino Real (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 149 441 210***
Lanes: 1 0 2 0 1

Signal=Protect
Rights=Overlap

Final Vol: Lanes:
177*** 1
0
526 3
0
106 1

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 110
Loss Time (sec): 12
Critical V/C: 0.774
Avg Crit Del (sec/veh): 39.8
Avg Delay (sec/veh): 35.3
LOS: D+

Signal=Protect
Rights=Overlap

Lanes: Final Vol:
1 374
0
3 1541***
0
1 193

Lanes: 1 0 2 0 1
Final Vol: 79 752*** 131
Signal=Protect/Rights=Overlap

Street Name:	Fair Oaks Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	79	682	131	109	414	138	149	439	106	193	1227	173
Growth 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
Initial Bse:	79	682	131	109	414	138	149	439	106	193	1227	173
Added Vol:	0	70	0	101	27	11	28	87	0	0	314	201
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	79	752	131	210	441	149	177	526	106	193	1541	374
User 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
PHF 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
PHF Volume:	79	752	131	210	441	149	177	526	106	193	1541	374
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	79	752	131	210	441	149	177	526	106	193	1541	374
PCE 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
MLF 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
FinalVolume:	79	752	131	210	441	149	177	526	106	193	1541	374
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.07	0.12	0.12	0.09	0.10	0.09	0.06	0.11	0.27	0.21
Crit Moves:		****		****			****				****	
Green Time:	16.0	28.1	56.9	17.1	29.2	43.6	14.4	24.1	40.1	28.8	38.4	55.5
Volume/Cap:	0.31	0.77	0.14	0.77	0.44	0.21	0.77	0.42	0.17	0.42	0.77	0.42
Delay/Veh:	42.8	41.9	13.9	57.6	33.9	22.1	61.3	37.2	23.8	34.4	33.9	17.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.8	41.9	13.9	57.6	33.9	22.1	61.3	37.2	23.8	34.4	33.9	17.5
LOS by Move:	D	D	B	E+	C-	C+	E	D+	C	C-	C-	B
HCM2kAvgQ:	2	11	2	9	6	4	7	5	3	6	17	9

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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2000 HCM Operations (Future Volume Alternative)
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Intersection #69: Wolfe Road / Old San Francisco Road

Signal=Protect/Rights=Include
Final Vol: 113 535 41***
Lanes: 0 1 2 0 2

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
133***	1		Vol Cnt Date:	12/1/2017			
			Cycle Time (sec):	150		0	109
	0		Loss Time (sec):	12		1	
353	1		Critical V/C:	0.687		1	579***
	1		Avg Crit Del (sec/veh):	37.9		0	
80	0		Avg Delay (sec/veh):	39.5		1	133
			LOS:	D			

Lanes: 2 0 2 1 0
Final Vol: 117 1919*** 79
Signal=Protect/Rights=Include

Street Name:	Wolfe Road						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	82	1762	70	37	444	113	133	258	70	129	385	86
Growth 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
Initial Bse:	82	1762	70	37	444	113	133	258	70	129	385	86
Added Vol:	35	157	9	4	91	0	0	95	10	4	194	23
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	117	1919	79	41	535	113	133	353	80	133	579	109
User 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
PHF 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
PHF Volume:	117	1919	79	41	535	113	133	353	80	133	579	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	117	1919	79	41	535	113	133	353	80	133	579	109
PCE 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
MLF 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
FinalVolume:	117	1919	79	41	535	113	133	353	80	133	579	109
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	2.00	2.88	0.12	2.00	2.46	0.54	1.00	1.62	0.38	1.00	1.67	0.33
Final Sat.:	3150	5378	221	3150	4622	976	1750	3016	683	1750	3113	586
Capacity Analysis Module:												
Vol/Sat:	0.04	0.36	0.36	0.01	0.12	0.12	0.08	0.12	0.12	0.08	0.19	0.19
Crit Moves:		****		****			****				****	
Green Time:	23.7	75.5	75.5	7.0	58.8	58.8	16.1	33.6	33.6	21.8	39.4	39.4
Volume/Cap:	0.23	0.71	0.71	0.28	0.30	0.30	0.71	0.52	0.52	0.52	0.71	0.71
Delay/Veh:	55.5	29.6	29.6	70.1	31.4	31.4	76.5	51.7	51.7	61.2	52.6	52.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.5	29.6	29.6	70.1	31.4	31.4	76.5	51.7	51.7	61.2	52.6	52.6
LOS by Move:	E+	C	C	E	C	C	E-	D-	D-	E	D-	D-
HCM2kAvgQ:	3	23	23	1	7	7	7	9	9	7	16	16

Note: Queue reported is the number of cars per lane.

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2000 HCM Operations (Future Volume Alternative)
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Intersection #69: Wolfe Road / Old San Francisco Road

Signal=Protect/Rights=Include
Final Vol: 113 535 41***
Lanes: 0 1 2 0 2

Signal=Protect Rights=Include (Westbound side: Signal=Protect Rights=Include)

Final Vol:	Lanes:				Lanes:	Final Vol:
133***	1		Vol Cnt Date:	12/1/2017	0	109
	0		Cycle Time (sec):	150	1	
364	1		Loss Time (sec):	12	1	630***
	1		Critical V/C:	0.702	0	
81	0		Avg Crit Del (sec/veh):	39.0	1	133
			Avg Delay (sec/veh):	40.4		
			LOS:	D		

Lanes: 2 0 2 1 0
Final Vol: 125 1919*** 79
Signal=Protect/Rights=Include

Street Name:	Wolfe Road						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	82	1762	70	37	444	113	133	258	70	129	385	86
Growth 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
Initial Bse:	82	1762	70	37	444	113	133	258	70	129	385	86
Added Vol:	43	157	9	4	91	0	0	106	11	4	245	23
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	125	1919	79	41	535	113	133	364	81	133	630	109
User 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
PHF 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
PHF Volume:	125	1919	79	41	535	113	133	364	81	133	630	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	125	1919	79	41	535	113	133	364	81	133	630	109
PCE 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
MLF 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
FinalVolume:	125	1919	79	41	535	113	133	364	81	133	630	109
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	2.00	2.88	0.12	2.00	2.46	0.54	1.00	1.63	0.37	1.00	1.70	0.30
Final Sat.:	3150	5378	221	3150	4622	976	1750	3026	673	1750	3154	546
Capacity Analysis Module:												
Vol/Sat:	0.04	0.36	0.36	0.01	0.12	0.12	0.08	0.12	0.12	0.08	0.20	0.20
Crit Moves:		****		****			****				****	
Green Time:	23.2	73.9	73.9	7.0	57.6	57.6	15.7	35.0	35.0	22.1	41.4	41.4
Volume/Cap:	0.26	0.72	0.72	0.28	0.30	0.30	0.72	0.52	0.52	0.52	0.72	0.72
Delay/Veh:	56.0	31.0	31.0	70.1	32.2	32.2	78.4	50.7	50.7	60.8	51.8	51.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.0	31.0	31.0	70.1	32.2	32.2	78.4	50.7	50.7	60.8	51.8	51.8
LOS by Move:	E+	C	C	E	C-	C-	E-	D	D	E	D-	D-
HCM2kAvgQ:	3	23	23	1	7	7	7	9	9	7	17	17

Note: Queue reported is the number of cars per lane.

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Intersection #70: Wolfe Road / El Camino Real (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 81 670 141***
Lanes: 1 0 3 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Overlap			Signal=Protect Rights=Overlap	Lanes:	Final Vol:
			Vol Cnt Date:	5/1/2017			
			Cycle Time (sec):	130			
53***	1					1	414
			Loss Time (sec):	12			
	0					0	
482	3		Critical V/C:	0.777		3	1381***
	0		Avg Crit Del (sec/veh):	41.1		0	
279	1		Avg Delay (sec/veh):	40.8		2	476
			LOS:	D			

Lanes: 2 0 2 0 1
Final Vol: 410 1337*** 87
Signal=Protect/Rights=Include

Street Name:	Wolfe Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	343	1278	85	83	652	66	62	356	255	472	1152	322
Growth 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
Initial Bse:	343	1278	85	83	652	66	62	356	255	472	1152	322
Added Vol:	67	59	2	58	18	15	-9	126	24	4	229	92
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	410	1337	87	141	670	81	53	482	279	476	1381	414
User 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
PHF 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
PHF Volume:	410	1337	87	141	670	81	53	482	279	476	1381	414
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	410	1337	87	141	670	81	53	482	279	476	1381	414
PCE 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
MLF 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
FinalVolume:	410	1337	87	141	670	81	53	482	279	476	1381	414
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	3800	1750	1750	5700	1750	1750	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.13	0.35	0.05	0.08	0.12	0.05	0.03	0.08	0.16	0.15	0.24	0.24
Crit Moves:		****		****			****				****	
Green Time:	37.4	57.9	57.9	13.3	33.8	40.8	7.0	16.8	54.2	30.0	39.9	53.1
Volume/Cap:	0.45	0.79	0.11	0.79	0.45	0.15	0.56	0.65	0.38	0.65	0.79	0.58
Delay/Veh:	38.3	33.5	21.1	77.8	40.6	32.2	67.6	55.9	26.6	47.4	43.8	31.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.3	33.5	21.1	77.8	40.6	32.2	67.6	55.9	26.6	47.4	43.8	31.0
LOS by Move:	D+	C-	C+	E-	D	C-	E	E+	C	D	D	C
HCM2kAvgQ:	8	22	2	6	7	2	3	7	8	11	18	14

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Cumulative AM Plus Project

Intersection #70: Wolfe Road / El Camino Real (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 81 670 141***
Lanes: 1 0 3 0 1

Signal=Protect
Rights=Overlap
Final Vol: Lanes:
53*** 1
0
510 3
0
289 1

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 130
Loss Time (sec): 12
Critical V/C: 0.808
Avg Crit Del (sec/veh): 42.6
Avg Delay (sec/veh): 41.5
LOS: D

Signal=Protect
Rights=Overlap
Lanes: Final Vol:
1 414
0
3 1543***
0
2 476

Lanes: 2 0 2 0 1
Final Vol: 451 1337*** 87
Signal=Protect/Rights=Include

Street Name:	Wolfe Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	343	1278	85	83	652	66	62	356	255	472	1152	322
Growth 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
Initial Bse:	343	1278	85	83	652	66	62	356	255	472	1152	322
Added Vol:	108	59	2	58	18	15	-9	154	34	4	391	92
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	451	1337	87	141	670	81	53	510	289	476	1543	414
User 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
PHF 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
PHF Volume:	451	1337	87	141	670	81	53	510	289	476	1543	414
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	451	1337	87	141	670	81	53	510	289	476	1543	414
PCE 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
MLF 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
FinalVolume:	451	1337	87	141	670	81	53	510	289	476	1543	414
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	3800	1750	1750	5700	1750	1750	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.14	0.35	0.05	0.08	0.12	0.05	0.03	0.09	0.17	0.15	0.27	0.24
Crit Moves:		****		****			****				****	
Green Time:	37.5	55.5	55.5	12.7	30.8	37.8	7.0	18.5	56.0	31.2	42.7	55.5
Volume/Cap:	0.50	0.82	0.12	0.82	0.50	0.16	0.56	0.63	0.38	0.63	0.82	0.55
Delay/Veh:	38.8	36.4	22.5	83.9	43.2	34.4	67.6	54.1	25.6	45.9	43.3	28.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.8	36.4	22.5	83.9	43.2	34.4	67.6	54.1	25.6	45.9	43.3	28.9
LOS by Move:	D+	D+	C+	F	D	C-	E	D-	C	D	D	C
HCM2kAvgQ:	9	23	2	7	7	2	3	7	8	11	21	13

Note: Queue reported is the number of cars per lane.

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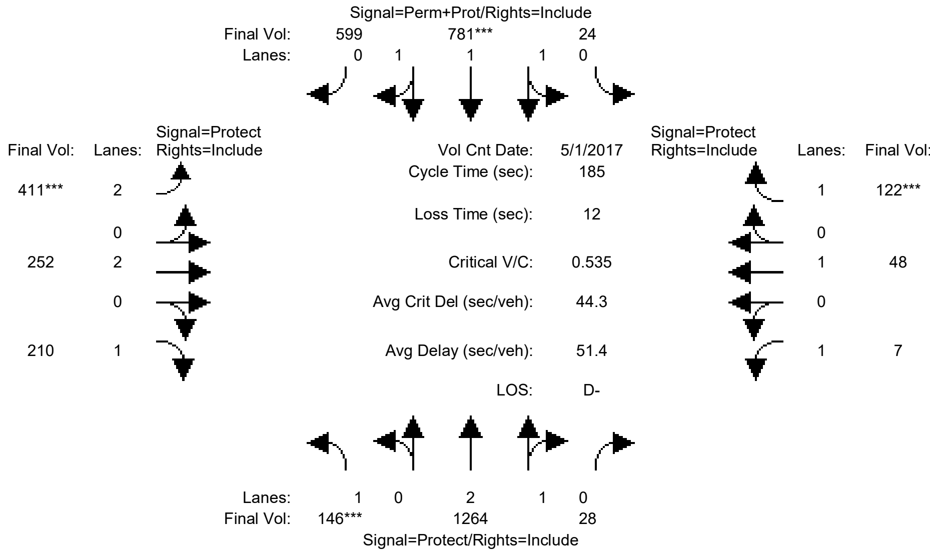
Cumulative AM

Intersection #71: Wolfe Road / Fremont Avenue



Street Name:	Wolfe Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	144	1147	28	24	743	591	400	225	208	7	48	122
Growth 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
Initial Bse:	144	1147	28	24	743	591	400	225	208	7	48	122
Added Vol:	2	117	0	0	38	8	11	27	2	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	146	1264	28	24	781	599	411	252	210	7	48	122
User 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
PHF 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
PHF Volume:	146	1264	28	24	781	599	411	252	210	7	48	122
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	146	1264	28	24	781	599	411	252	210	7	48	122
PCE 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
MLF 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
FinalVolume:	146	1264	28	24	781	599	411	252	210	7	48	122
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.95	0.98	0.95	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.93	0.07	0.06	1.94	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	5478	121	111	3605	1800	3150	3800	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.23	0.23	0.00	0.22	0.33	0.13	0.07	0.12	0.00	0.03	0.07
Crit Moves:	****				****		****					****
Green Time:	24.0	61.6	61.6	60.9	95.6	95.6	34.9	40.7	40.7	12.8	18.6	18.6
Volume/Cap:	0.64	0.69	0.69	0.66	0.42	0.64	0.69	0.30	0.55	0.06	0.25	0.69
Delay/Veh:	82.7	54.6	54.6	53.9	27.7	33.1	73.6	60.5	65.6	80.6	77.4	91.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	82.7	54.6	54.6	53.9	27.7	33.1	73.6	60.5	65.6	80.6	77.4	91.7
LOS by Move:	F	D-	D-	D-	C	C-	E	E	E	F	E-	F
HCM2kAvgQ:	9	21	21	19	14	25	13	6	11	0	3	8

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Intersection #71: Wolfe Road / Fremont Avenue

Signal=Perm+Prot/Rights=Include
Final Vol: 599 791*** 24
Lanes: 0 1 1 1 0

Signal=Protect
Rights=Include

Final Vol: Lanes:
411*** 2
0
256 2
0
212 1

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 185
Loss Time (sec): 12
Critical V/C: 0.543
Avg Crit Del (sec/veh): 44.8
Avg Delay (sec/veh): 51.7
LOS: D-

Signal=Protect
Rights=Include

Lanes: Final Vol:
1 122***
0
1 48
0
1 7

Lanes: 1 0 2 1 0
Final Vol: 154*** 1305 28
Signal=Protect/Rights=Include

Street Name:	Wolfe Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	144	1147	28	24	743	591	400	225	208	7	48	122
Growth 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
Initial Bse:	144	1147	28	24	743	591	400	225	208	7	48	122
Added Vol:	10	158	0	0	48	8	11	31	4	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	154	1305	28	24	791	599	411	256	212	7	48	122
User 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
PHF 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
PHF Volume:	154	1305	28	24	791	599	411	256	212	7	48	122
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	154	1305	28	24	791	599	411	256	212	7	48	122
PCE 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
MLF 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
FinalVolume:	154	1305	28	24	791	599	411	256	212	7	48	122
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.95	0.98	0.95	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.93	0.07	0.06	1.94	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	5482	118	109	3606	1800	3150	3800	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.09	0.24	0.24	0.00	0.22	0.33	0.13	0.07	0.12	0.00	0.03	0.07
Crit Moves:	****				****		****					****
Green Time:	25.2	62.6	62.6	60.7	95.2	95.2	34.3	40.1	40.1	12.5	18.3	18.3
Volume/Cap:	0.65	0.70	0.70	0.67	0.43	0.65	0.70	0.31	0.56	0.06	0.25	0.70
Delay/Veh:	81.8	54.3	54.3	54.3	28.0	33.4	74.4	61.0	66.4	80.9	77.7	93.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	81.8	54.3	54.3	54.3	28.0	33.4	74.4	61.0	66.4	80.9	77.7	93.0
LOS by Move:	F	D-	D-	D-	C	C-	E	E	E	F	E-	F
HCM2kAvgQ:	9	22	22	20	14	25	13	6	11	0	3	8

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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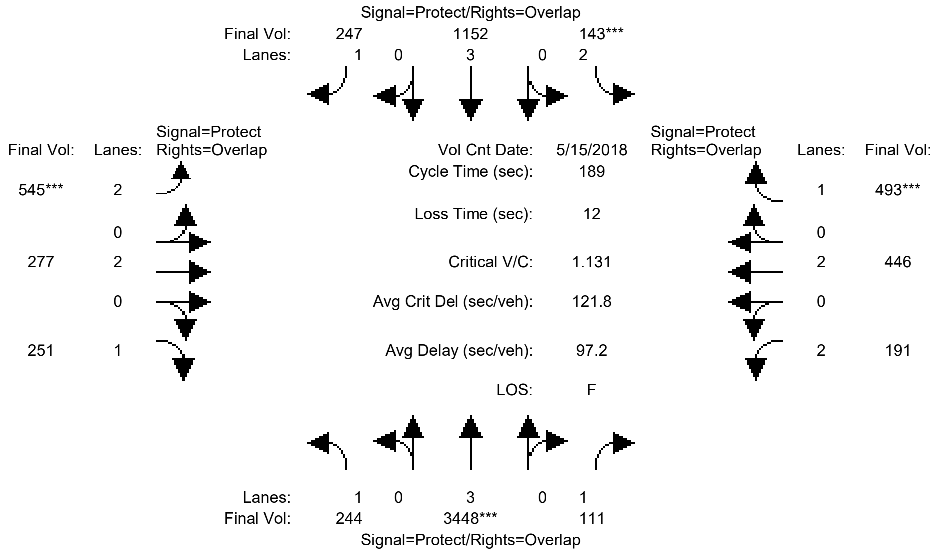
Cumulative AM

Intersection #72: Lawrence Expressway / Monroe Street (CMP)



Street Name:	Lawrence Expressway						Monroe Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	17	96	96	13	91	91	23	42	42	15	33	33
Y+R:	6.0	6.2	6.2	6.1	6.2	6.2	5.7	5.6	5.6	5.6	5.7	5.7
Volume Module: >> Count Date: 15 May 2018 <<												
Base Vol:	141	3950	111	139	1249	214	457	262	229	191	410	475
Growth 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
Initial Bse:	141	3950	111	139	1249	214	457	262	229	191	410	475
Added Vol:	103	414	0	4	191	33	88	15	22	0	36	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	244	4364	111	143	1440	247	545	277	251	191	446	493
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	244	3448	111	143	1152	247	545	277	251	191	446	493
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	244	3448	111	143	1152	247	545	277	251	191	446	493
PCE 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
MLF 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
FinalVolume:	244	3448	111	143	1152	247	545	277	251	191	446	493
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1750	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.14	0.60	0.06	0.05	0.20	0.14	0.17	0.07	0.14	0.06	0.12	0.28
Crit Moves:		****		****			****					****
Green Time:	22.1	100	116.9	13.0	91.0	119.6	28.6	47.1	69.2	16.8	35.2	48.2
Volume/Cap:	1.19	1.14	0.10	0.66	0.42	0.22	1.14	0.29	0.39	0.68	0.63	1.10
Delay/Veh:	207.6	113	14.7	93.2	31.9	14.9	166.5	57.7	44.7	90.2	72.7	144.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	207.6	113	14.7	93.2	31.9	14.9	166.5	57.7	44.7	90.2	72.7	144.1
LOS by Move:	F	F	B	F	C	B	F	E+	D	F	E	F
HCM2kAvgQ:	21	82	3	6	14	6	27	6	11	8	12	40

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Intersection #72: Lawrence Expressway / Monroe Street (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 261 1152 143***
Lanes: 1 0 3 0 2

Signal=Protect Rights=Overlap (Eastbound) | Signal=Protect Rights=Overlap (Westbound)

Final Vol:	Lanes:				Lanes:	Final Vol:
548***	2	Vol Cnt Date:	5/15/2018		1	493***
	0	Cycle Time (sec):	189		0	
281	2	Loss Time (sec):	12		2	459
	0	Critical V/C:	1.132		0	
254	1	Avg Crit Del (sec/veh):	122.3		2	191
		Avg Delay (sec/veh):	98.5			
		LOS:	F			

Lanes: 1 0 3 0 1
Final Vol: 259 3448*** 111
Signal=Protect/Rights=Overlap

Street Name:	Lawrence Expressway						Monroe Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	17	96	96	13	91	91	23	42	42	15	33	33
Y+R:	6.0	6.2	6.2	6.1	6.2	6.2	5.7	5.6	5.6	5.6	5.7	5.7
Volume Module: >> Count Date: 15 May 2018 <<												
Base Vol:	141	3950	111	139	1249	214	457	262	229	191	410	475
Growth 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
Initial Bse:	141	3950	111	139	1249	214	457	262	229	191	410	475
Added Vol:	118	414	0	4	191	47	91	19	25	0	49	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	259	4364	111	143	1440	261	548	281	254	191	459	493
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	259	3448	111	143	1152	261	548	281	254	191	459	493
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	259	3448	111	143	1152	261	548	281	254	191	459	493
PCE 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
MLF 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
FinalVolume:	259	3448	111	143	1152	261	548	281	254	191	459	493
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1750	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.15	0.60	0.06	0.05	0.20	0.15	0.17	0.07	0.15	0.06	0.12	0.28
Crit Moves:		****		****			****					****
Green Time:	22.0	100	116.9	13.0	91.0	119.8	28.8	47.1	69.2	16.8	35.2	48.2
Volume/Cap:	1.27	1.14	0.10	0.66	0.42	0.24	1.14	0.30	0.40	0.68	0.65	1.10
Delay/Veh:	237.8	113	14.7	93.2	31.9	15.0	166.7	57.7	44.8	90.1	73.3	144.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	237.8	113	14.7	93.2	31.9	15.0	166.7	57.7	44.8	90.1	73.3	144.4
LOS by Move:	F	F	B	F	C	B	F	E+	D	F	E	F
HCM2kAvgQ:	23	82	3	6	14	7	27	6	11	8	13	40

Note: Queue reported is the number of cars per lane.

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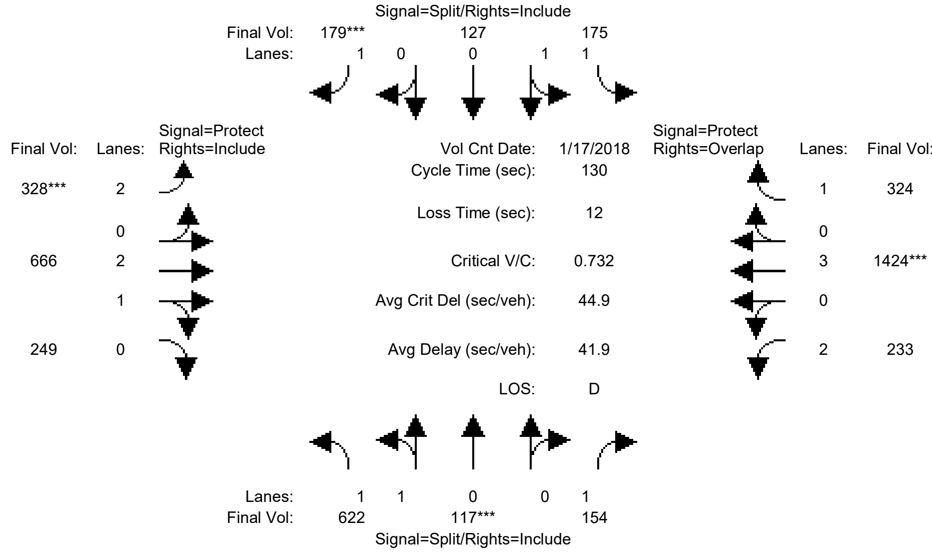
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #73: Lawrence Expressway / El Camino Real (CMP)



Street Name:	Lawrence Expressway						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 17 Jan 2018 <<												
Base Vol:	493	108	154	163	125	175	308	520	196	233	1231	270
Growth 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
Initial Bse:	493	108	154	163	125	175	308	520	196	233	1231	270
Added Vol:	129	9	0	12	2	4	20	146	53	0	193	54
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	622	117	154	175	127	179	328	666	249	233	1424	324
User 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
PHF 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
PHF Volume:	622	117	154	175	127	179	328	666	249	233	1424	324
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	622	117	154	175	127	179	328	666	249	233	1424	324
PCE 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
MLF 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
FinalVolume:	622	117	154	175	127	179	328	666	249	233	1424	324
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.95	0.92	0.92	0.95	0.92	0.83	1.00	0.95	0.83	1.00	0.92
Lanes:	1.69	0.31	1.00	1.17	0.83	1.00	2.00	2.15	0.85	2.00	3.00	1.00
Final Sat.:	2988	562	1750	2057	1493	1750	3150	4074	1523	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.21	0.21	0.09	0.09	0.09	0.10	0.10	0.16	0.16	0.07	0.25	0.19
Crit Moves:		****				****	****				****	
Green Time:	37.0	37.0	37.0	18.2	18.2	18.2	18.5	43.3	43.3	19.6	44.4	62.5
Volume/Cap:	0.73	0.73	0.31	0.61	0.61	0.73	0.73	0.49	0.49	0.49	0.73	0.38
Delay/Veh:	44.8	44.8	36.9	54.8	54.8	64.4	59.5	34.8	34.8	51.4	39.1	21.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.8	44.8	36.9	54.8	54.8	64.4	59.5	34.8	34.8	51.4	39.1	21.8
LOS by Move:	D	D	D+	D-	D-	E	E+	C-	C-	D-	D	C+
HCM2kAvgQ:	13	13	5	6	6	8	9	10	10	5	16	9

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Intersection #73: Lawrence Expressway / El Camino Real (CMP)

Signal=Split/Rights=Include
Final Vol: 179*** 127 175
Lanes: 1 0 0 1 1

Signal=Protect
Rights=Include

Final Vol:	Lanes:
328***	2
	0
680	2
	1
269	0

Vol Cnt Date:	1/17/2018
Cycle Time (sec):	130
Loss Time (sec):	12
Critical V/C:	0.775
Avg Crit Del (sec/veh):	46.4
Avg Delay (sec/veh):	43.2
LOS:	D

Signal=Protect
Rights=Overlap

Lanes:	Final Vol:
1	324
0	
3	1483***
0	
2	233

Lanes: 1 1 0 0 1
Final Vol: 724*** 117 154
Signal=Split/Rights=Include

Street Name:	Lawrence Expressway						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 17 Jan 2018 <<												
Base Vol:	493	108	154	163	125	175	308	520	196	233	1231	270
Growth 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
Initial Bse:	493	108	154	163	125	175	308	520	196	233	1231	270
Added Vol:	231	9	0	12	2	4	20	160	73	0	252	54
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	724	117	154	175	127	179	328	680	269	233	1483	324
User 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
PHF 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
PHF Volume:	724	117	154	175	127	179	328	680	269	233	1483	324
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	724	117	154	175	127	179	328	680	269	233	1483	324
PCE 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
MLF 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
FinalVolume:	724	117	154	175	127	179	328	680	269	233	1483	324
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.95	0.92	0.92	0.95	0.92	0.83	1.00	0.95	0.83	1.00	0.92
Lanes:	1.73	0.27	1.00	1.17	0.83	1.00	2.00	2.12	0.88	2.00	3.00	1.00
Final Sat.:	3056	494	1750	2057	1493	1750	3150	4011	1587	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.24	0.24	0.09	0.09	0.09	0.10	0.10	0.17	0.17	0.07	0.26	0.19
Crit Moves:	****					****	****				****	
Green Time:	39.7	39.7	39.7	17.2	17.2	17.2	17.5	42.5	42.5	18.6	43.6	60.8
Volume/Cap:	0.78	0.78	0.29	0.64	0.64	0.78	0.78	0.52	0.52	0.52	0.78	0.40
Delay/Veh:	44.6	44.6	34.7	56.6	56.6	69.6	63.1	35.7	35.7	52.6	40.8	22.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.6	44.6	34.7	56.6	56.6	69.6	63.1	35.7	35.7	52.6	40.8	22.9
LOS by Move:	D	D	C-	E+	E+	E	E	D+	D+	D-	D	C+
HCM2kAvgQ:	15	15	5	6	6	8	9	10	10	5	18	9

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #74: Lawrence Expressway / Benton Street

Signal=Protect/Rights=Include
Final Vol: 76 1730 166***
Lanes: 1 0 3 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
144***	1		Vol Cnt Date:	10/3/2018		1	485***
			Cycle Time (sec):	180			
	0		Loss Time (sec):	12		0	
146	2		Critical V/C:	1.056		2	275
	0		Avg Crit Del (sec/veh):	92.0		0	
158	1		Avg Delay (sec/veh):	71.8		1	250
			LOS:	E			

Lanes: 1 0 3 0 1
Final Vol: 118 3028*** 157
Signal=Protect/Rights=Include

Street Name:	Lawrence Expressway						Benton Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	118	3300	157	163	1927	74	136	146	158	250	275	471
Growth 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
Initial Bse:	118	3300	157	163	1927	74	136	146	158	250	275	471
Added Vol:	0	533	0	3	235	2	8	0	0	0	0	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	118	3833	157	166	2162	76	144	146	158	250	275	485
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	118	3028	157	166	1730	76	144	146	158	250	275	485
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	118	3028	157	166	1730	76	144	146	158	250	275	485
PCE 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
MLF 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
FinalVolume:	118	3028	157	166	1730	76	144	146	158	250	275	485
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.53	0.09	0.09	0.30	0.04	0.08	0.04	0.09	0.14	0.07	0.28
Crit Moves:		****		****			****					****
Green Time:	19.4	90.6	90.6	16.2	87.3	87.3	14.0	23.7	23.7	37.5	47.2	47.2
Volume/Cap:	0.63	1.06	0.18	1.06	0.63	0.09	1.06	0.29	0.68	0.68	0.28	1.06
Delay/Veh:	83.3	78.7	24.5	169.3	34.7	25.0	175.8	70.9	82.8	71.1	52.9	123.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	83.3	78.7	24.5	169.3	34.7	25.0	175.8	70.9	82.8	71.1	52.9	123.9
LOS by Move:	F	E-	C	F	C-	C	F	E	F	E	D-	F
HCM2kAvgQ:	6	61	5	12	23	2	13	4	10	14	6	36

Note: Queue reported is the number of cars per lane.

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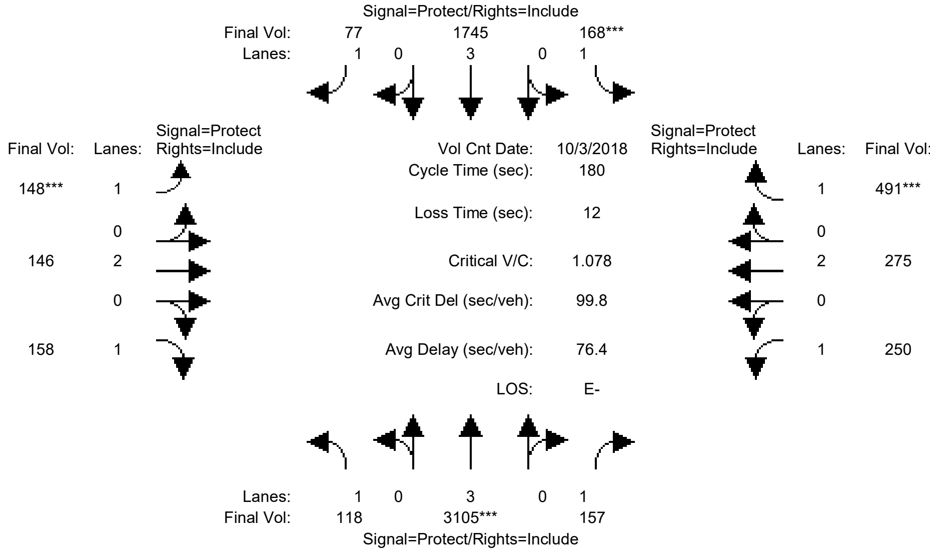
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #74: Lawrence Expressway / Benton Street



Street Name:	Lawrence Expressway						Benton Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	118	3300	157	163	1927	74	136	146	158	250	275	471
Growth 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
Initial Bse:	118	3300	157	163	1927	74	136	146	158	250	275	471
Added Vol:	0	631	0	5	254	3	12	0	0	0	0	20
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	118	3931	157	168	2181	77	148	146	158	250	275	491
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	118	3105	157	168	1745	77	148	146	158	250	275	491
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	118	3105	157	168	1745	77	148	146	158	250	275	491
PCE 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
MLF 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
FinalVolume:	118	3105	157	168	1745	77	148	146	158	250	275	491
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.54	0.09	0.10	0.31	0.04	0.08	0.04	0.09	0.14	0.07	0.28
Crit Moves:		****		****			****					****
Green Time:	19.3	91.0	91.0	16.0	87.7	87.7	14.1	23.6	23.6	37.4	46.9	46.9
Volume/Cap:	0.63	1.08	0.18	1.08	0.63	0.09	1.08	0.29	0.69	0.69	0.28	1.08
Delay/Veh:	83.5	86.7	24.3	176.4	34.6	24.8	182.1	71.0	83.2	71.4	53.2	131.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	83.5	86.7	24.3	176.4	34.6	24.8	182.1	71.0	83.2	71.4	53.2	131.2
LOS by Move:	F	F	C	F	C-	C	F	E	F	E	D-	F
HCM2kAvgQ:	6	64	5	13	23	2	13	4	10	15	6	38

Note: Queue reported is the number of cars per lane.

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Intersection #75: Lawrence Expressway / Lochinvar Avenue

Signal=Protect/Rights=Include
Final Vol: 42 1954 87***
Lanes: 1 0 3 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	10/3/2018			
110	0		Cycle Time (sec):	180		0	183
	1		Loss Time (sec):	12		0	
36***	0		Critical V/C:	0.920		1!	35
	0		Avg Crit Del (sec/veh):	48.4		0	
60	1		Avg Delay (sec/veh):	40.8		0	87***
			LOS:	D			

Lanes: 1 0 3 0 1
Final Vol: 92 3155*** 169
Signal=Protect/Rights=Include

Street Name:	Lawrence Expressway						Lochinvar Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	92	3483	169	84	2213	40	102	36	60	87	35	169
Growth 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
Initial Bse:	92	3483	169	84	2213	40	102	36	60	87	35	169
Added Vol:	0	511	0	3	229	2	8	0	0	0	0	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	92	3994	169	87	2442	42	110	36	60	87	35	183
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	92	3155	169	87	1954	42	110	36	60	87	35	183
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	3155	169	87	1954	42	110	36	60	87	35	183
PCE 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
MLF 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
FinalVolume:	92	3155	169	87	1954	42	110	36	60	87	35	183
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.75	0.25	1.00	0.29	0.11	0.60
Final Sat.:	1750	5700	1750	1750	5700	1750	1356	444	1750	499	201	1050
Capacity Analysis Module:												
Vol/Sat:	0.05	0.55	0.10	0.05	0.34	0.02	0.08	0.08	0.03	0.17	0.17	0.17
Crit Moves:		****		****				****		****		
Green Time:	15.7	108	108.3	9.7	102	102.3	15.9	15.9	15.9	34.1	34.1	34.1
Volume/Cap:	0.60	0.92	0.16	0.92	0.60	0.04	0.92	0.92	0.39	0.92	0.92	0.92
Delay/Veh:	85.8	36.6	15.9	151.6	25.8	17.2	129.9	130	79.1	101.4	101	101.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	85.8	36.6	15.9	151.6	25.8	17.2	129.9	130	79.1	101.4	101	101.4
LOS by Move:	F	D+	B	F	C	B	F	F	E-	F	F	F
HCM2kAvgQ:	5	48	4	6	23	1	11	11	4	21	21	21

Note: Queue reported is the number of cars per lane.

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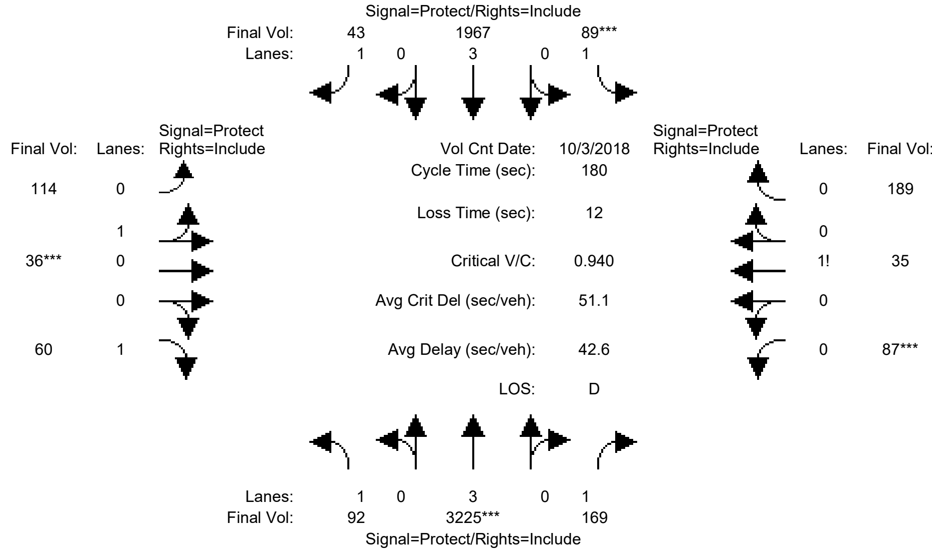
2000 HCM Operations (Future Volume Alternative)
Cumulative AM Plus Project

Intersection #75: Lawrence Expressway / Lochinvar Avenue



Street Name:	Lawrence Expressway						Lochinvar Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	92	3483	169	84	2213	40	102	36	60	87	35	169
Growth 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
Initial Bse:	92	3483	169	84	2213	40	102	36	60	87	35	169
Added Vol:	0	599	0	5	246	3	12	0	0	0	0	20
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	92	4082	169	89	2459	43	114	36	60	87	35	189
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	92	3225	169	89	1967	43	114	36	60	87	35	189
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	3225	169	89	1967	43	114	36	60	87	35	189
PCE 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
MLF 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
FinalVolume:	92	3225	169	89	1967	43	114	36	60	87	35	189
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.76	0.24	1.00	0.28	0.11	0.61
Final Sat.:	1750	5700	1750	1750	5700	1750	1368	432	1750	490	197	1064
Capacity Analysis Module:												
Vol/Sat:	0.05	0.57	0.10	0.05	0.35	0.02	0.08	0.08	0.03	0.18	0.18	0.18
Crit Moves:		****		****				****		****		
Green Time:	15.6	108	108.3	9.7	102	102.4	16.0	16.0	16.0	34.0	34.0	34.0
Volume/Cap:	0.61	0.94	0.16	0.94	0.61	0.04	0.94	0.94	0.39	0.94	0.94	0.94
Delay/Veh:	86.1	39.0	15.9	157.8	25.9	17.2	135.2	135	79.0	106.1	106	106.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	86.1	39.0	15.9	157.8	25.9	17.2	135.2	135	79.0	106.1	106	106.1
LOS by Move:	F	D+	B	F	C	B	F	F	E-	F	F	F
HCM2kAvgQ:	5	51	4	6	23	1	12	12	4	22	22	22

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Cumulative Plus Project AM

Level Of Service Computation Report
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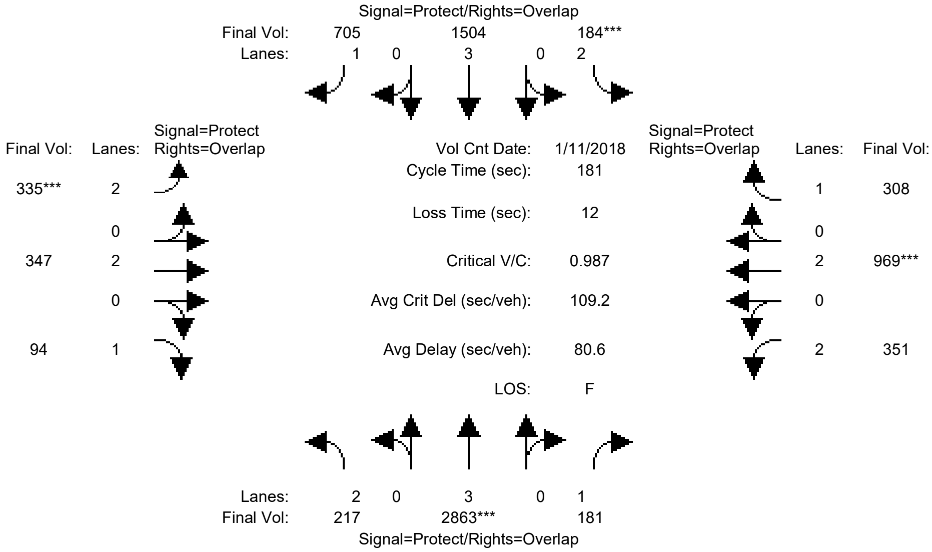
Cumulative AM

Intersection #76: Lawrence Expressway / Homestead Road (CMP)



Street Name:	Lawrence Expressway						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	16	86	86	23	93	93	24	44	44	18	35	35
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 11 Jan 2018 <<												
Base Vol:	217	3207	181	177	1681	682	265	329	94	351	902	284
Growth 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
Initial Bse:	217	3207	181	177	1681	682	265	329	94	351	902	284
Added Vol:	0	417	0	7	199	23	70	18	0	0	67	24
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	217	3624	181	184	1880	705	335	347	94	351	969	308
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	217	2863	181	184	1504	705	335	347	94	351	969	308
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	2863	181	184	1504	705	335	347	94	351	969	308
PCE 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
MLF 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
FinalVolume:	217	2863	181	184	1504	705	335	347	94	351	969	308
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.50	0.10	0.06	0.26	0.40	0.11	0.09	0.05	0.11	0.26	0.18
Crit Moves:		****		****			****				****	
Green Time:	15.8	85.1	104.5	22.7	92.0	115.7	23.7	41.9	57.7	19.4	37.6	60.3
Volume/Cap:	0.79	1.07	0.18	0.46	0.52	0.63	0.81	0.39	0.17	1.04	1.23	0.53
Delay/Veh:	95.9	87.7	18.3	75.1	30.2	21.1	88.8	59.8	45.0	141.0	186	50.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	95.9	87.7	18.3	75.1	30.2	21.1	88.8	59.8	45.0	141.0	186	50.3
LOS by Move:	F	F	B-	E-	C	C+	F	E+	D	F	F	D
HCM2kAvgQ:	7	62	5	6	18	25	12	8	4	16	40	15

Note: Queue reported is the number of cars per lane.

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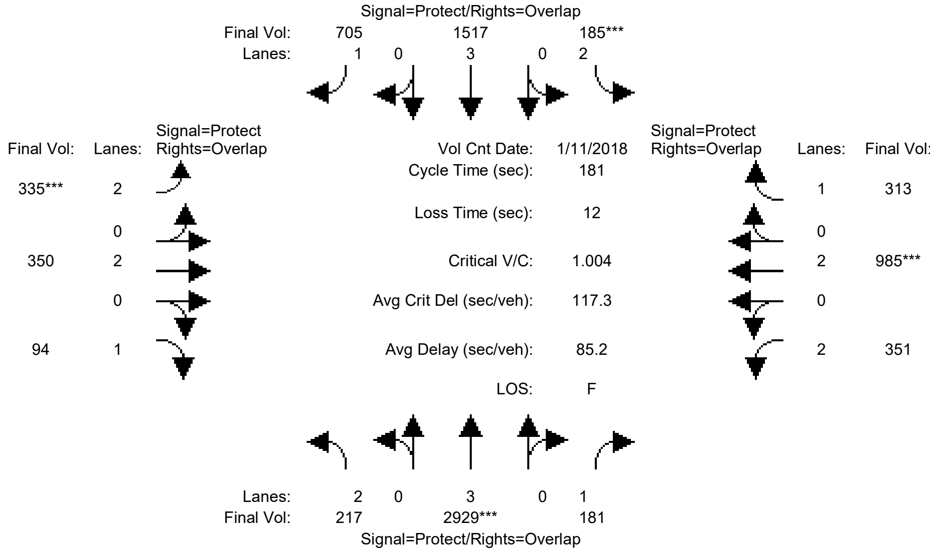
Intersection #76: Lawrence Expressway / Homestead Road (CMP)



Street Name:	Lawrence Expressway						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	16	86	86	23	93	93	24	44	44	18	35	35
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 11 Jan 2018 <<												
Base Vol:	217	3207	181	177	1681	682	265	329	94	351	902	284
Growth 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
Initial Bse:	217	3207	181	177	1681	682	265	329	94	351	902	284
Added Vol:	0	500	0	8	215	23	70	21	0	0	83	29
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	217	3707	181	185	1896	705	335	350	94	351	985	313
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	217	2929	181	185	1517	705	335	350	94	351	985	313
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	217	2929	181	185	1517	705	335	350	94	351	985	313
PCE 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
MLF 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
FinalVolume:	217	2929	181	185	1517	705	335	350	94	351	985	313
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.51	0.10	0.06	0.27	0.40	0.11	0.09	0.05	0.11	0.26	0.18
Crit Moves:		****		****			****				****	
Green Time:	15.8	85.1	104.5	22.7	92.0	115.7	23.7	41.9	57.7	19.4	37.6	60.3
Volume/Cap:	0.79	1.09	0.18	0.47	0.52	0.63	0.81	0.40	0.17	1.04	1.25	0.54
Delay/Veh:	95.9	97.3	18.3	75.2	30.3	21.1	88.8	59.8	45.0	141.0	195	50.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	95.9	97.3	18.3	75.2	30.3	21.1	88.8	59.8	45.0	141.0	195	50.5
LOS by Move:	F	F	B-	E-	C	C+	F	E+	D	F	F	D
HCM2kAvgQ:	7	65	5	6	18	25	12	8	4	16	41	15

Note: Queue reported is the number of cars per lane.

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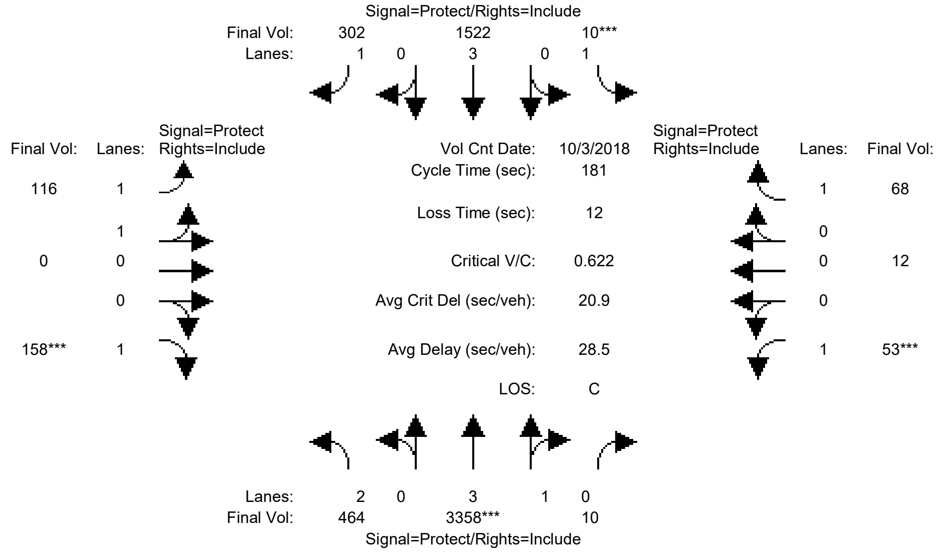
Cumulative Plus Project AM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #77: Lawrence Expressway / Lehigh Drive



Street Name:	Lawrence Expressway						Lehigh Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	464	3856	10	7	1709	300	108	0	158	53	12	54
Growth 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
Initial Bse:	464	3856	10	7	1709	300	108	0	158	53	12	54
Added Vol:	0	395	0	3	194	2	8	0	0	0	0	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	464	4251	10	10	1903	302	116	0	158	53	12	68
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	464	3358	10	10	1522	302	116	0	158	53	12	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	464	3358	10	10	1522	302	116	0	158	53	12	68
PCE 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
MLF 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
FinalVolume:	464	3358	10	10	1522	302	116	0	158	53	12	68
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.92	1.00	0.92	0.93	1.00	0.92	0.95	0.95	0.95
Lanes:	2.00	3.99	0.01	1.00	3.00	1.00	2.00	0.00	1.00	0.82	0.18	1.00
Final Sat.:	3150	7478	22	1750	5700	1750	3550	0	1750	1468	332	1800
Capacity Analysis Module:												
Vol/Sat:	0.15	0.45	0.45	0.01	0.27	0.17	0.03	0.00	0.09	0.04	0.04	0.04
Crit Moves:		****		****					****	****		
Green Time:	47.4	126	126.4	7.0	86.0	86.0	14.7	0.0	25.4	10.2	20.9	20.9
Volume/Cap:	0.56	0.64	0.64	0.15	0.56	0.36	0.40	0.00	0.64	0.64	0.31	0.33
Delay/Veh:	58.7	15.2	15.2	85.1	34.3	30.4	80.0	0.0	79.2	90.4	73.9	74.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.7	15.2	15.2	85.1	34.3	30.4	80.0	0.0	79.2	90.4	73.9	74.0
LOS by Move:	E+	B	B	F	C-	C	E-	A	E-	F	E	E
HCM2kAvgQ:	12	24	24	1	19	11	4	0	10	5	4	4

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
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Intersection #77: Lawrence Expressway / Lehigh Drive

Signal=Protect/Rights=Include
Final Vol: 303 1534 12***
Lanes: 1 0 3 0 1

Signal=Protect Rights=Include
Final Vol: 120 Lanes: 1
Lanes: 1
Final Vol: 0 Lanes: 0
Lanes: 0
Final Vol: 158*** Lanes: 1

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 181
Loss Time (sec): 12
Critical V/C: 0.632
Avg Crit Del (sec/veh): 21.0
Avg Delay (sec/veh): 28.4
LOS: C

Signal=Protect Rights=Include
Lanes: 1 Final Vol: 74
Lanes: 0
Lanes: 0 Final Vol: 12
Lanes: 0
Lanes: 1 Final Vol: 53***

Lanes: 2 0 3 1 0
Final Vol: 464 3415*** 10
Signal=Protect/Rights=Include

Street Name:	Lawrence Expressway						Lehigh Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	464	3856	10	7	1709	300	108	0	158	53	12	54
Growth 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
Initial Bse:	464	3856	10	7	1709	300	108	0	158	53	12	54
Added Vol:	0	467	0	5	208	3	12	0	0	0	0	20
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	464	4323	10	12	1917	303	120	0	158	53	12	74
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	464	3415	10	12	1534	303	120	0	158	53	12	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	464	3415	10	12	1534	303	120	0	158	53	12	74
PCE 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
MLF 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
FinalVolume:	464	3415	10	12	1534	303	120	0	158	53	12	74
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.92	1.00	0.92	0.93	1.00	0.92	0.95	0.95	0.95
Lanes:	2.00	3.99	0.01	1.00	3.00	1.00	2.00	0.00	1.00	0.82	0.18	1.00
Final Sat.:	3150	7478	22	1750	5700	1750	3550	0	1750	1468	332	1800
Capacity Analysis Module:												
Vol/Sat:	0.15	0.46	0.46	0.01	0.27	0.17	0.03	0.00	0.09	0.04	0.04	0.04
Crit Moves:		****		****					****	****		
Green Time:	47.4	127	126.9	7.0	86.5	86.5	14.5	0.0	25.1	10.0	20.7	20.7
Volume/Cap:	0.56	0.65	0.65	0.18	0.56	0.36	0.42	0.00	0.65	0.65	0.32	0.36
Delay/Veh:	58.8	15.2	15.2	85.5	34.0	30.1	80.3	0.0	80.0	90.8	74.1	74.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.8	15.2	15.2	85.5	34.0	30.1	80.3	0.0	80.0	90.8	74.1	74.6
LOS by Move:	E+	B	B	F	C-	C	F	A	E-	F	E	E
HCM2kAvgQ:	12	25	25	1	19	11	4	0	10	5	4	4

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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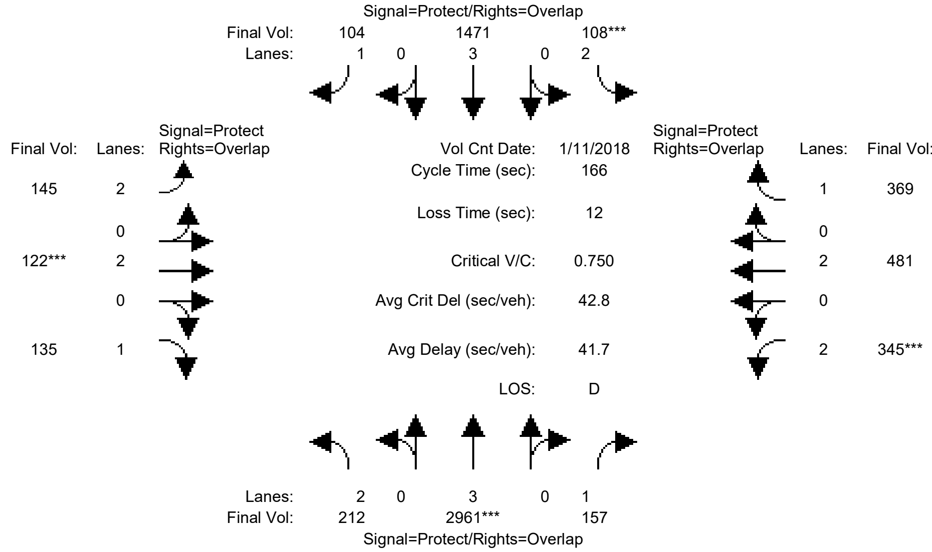
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative AM

Intersection #78: Lawrence Expressway / Pruneridge Avenue



Street Name:	Lawrence Expressway						Pruneridge Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	16	89	89	13	87	87	14	22	22	25	34	34
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 11 Jan 2018 <<												
Base Vol:	212	3375	157	105	1651	102	137	122	135	345	481	355
Growth 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
Initial Bse:	212	3375	157	105	1651	102	137	122	135	345	481	355
Added Vol:	0	373	0	3	188	2	8	0	0	0	0	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	212	3748	157	108	1839	104	145	122	135	345	481	369
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	212	2961	157	108	1471	104	145	122	135	345	481	369
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	212	2961	157	108	1471	104	145	122	135	345	481	369
PCE 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
MLF 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
FinalVolume:	212	2961	157	108	1471	104	145	122	135	345	481	369
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.52	0.09	0.03	0.26	0.06	0.05	0.03	0.08	0.11	0.13	0.21
Crit Moves:		****		****				****		****		
Green Time:	16.6	94.0	119.0	13.0	90.4	104.1	13.7	22.0	38.6	25.0	33.3	46.3
Volume/Cap:	0.67	0.92	0.13	0.44	0.47	0.09	0.56	0.24	0.33	0.73	0.63	0.76
Delay/Veh:	77.6	37.3	7.4	74.3	23.3	12.3	75.9	64.8	53.4	72.8	62.5	61.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	77.6	37.3	7.4	74.3	23.3	12.3	75.9	64.8	53.4	72.8	62.5	61.4
LOS by Move:	E-	D+	A	E	C	B	E-	E	D-	E	E	E
HCM2kAvgQ:	7	48	3	3	15	2	5	3	6	11	12	20

Note: Queue reported is the number of cars per lane.

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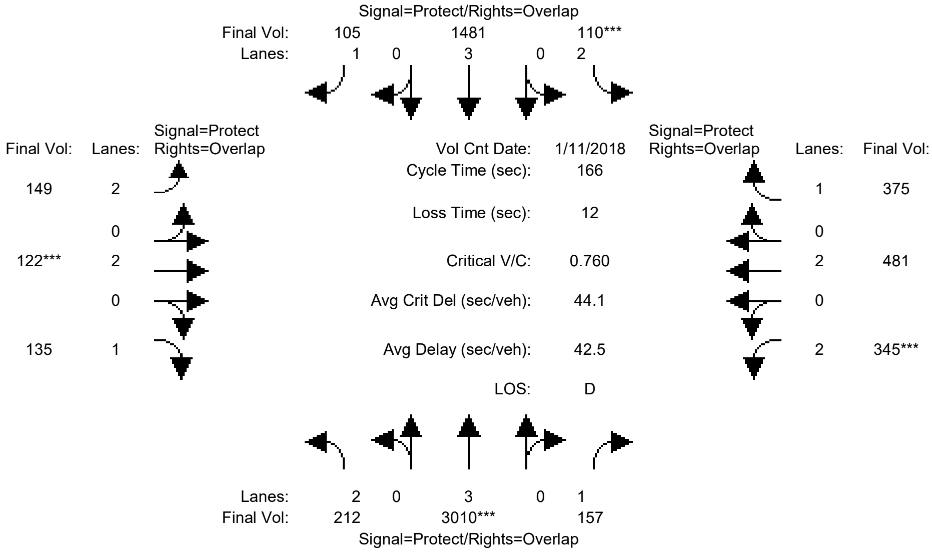
Intersection #78: Lawrence Expressway / Pruneridge Avenue



Street Name:	Lawrence Expressway						Pruneridge Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	16	89	89	13	87	87	14	22	22	25	34	34
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 11 Jan 2018 <<												
Base Vol:	212	3375	157	105	1651	102	137	122	135	345	481	355
Growth 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
Initial Bse:	212	3375	157	105	1651	102	137	122	135	345	481	355
Added Vol:	0	435	0	5	200	3	12	0	0	0	0	20
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	212	3810	157	110	1851	105	149	122	135	345	481	375
User Adj:	1.00	0.79	1.00	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	212	3010	157	110	1481	105	149	122	135	345	481	375
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	212	3010	157	110	1481	105	149	122	135	345	481	375
PCE 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
MLF 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
FinalVolume:	212	3010	157	110	1481	105	149	122	135	345	481	375
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.53	0.09	0.03	0.26	0.06	0.05	0.03	0.08	0.11	0.13	0.21
Crit Moves:		****		****				****		****		
Green Time:	16.6	94.0	119.0	13.0	90.4	104.1	13.7	22.0	38.6	25.0	33.3	46.3
Volume/Cap:	0.67	0.93	0.13	0.45	0.48	0.10	0.57	0.24	0.33	0.73	0.63	0.77
Delay/Veh:	77.6	38.9	7.4	74.3	23.4	12.3	76.4	64.8	53.4	72.8	62.5	62.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	77.6	38.9	7.4	74.3	23.4	12.3	76.4	64.8	53.4	72.8	62.5	62.2
LOS by Move:	E-	D+	A	E	C	B	E-	E	D-	E	E	E
HCM2kAvgQ:	7	50	3	3	15	2	5	3	6	11	12	20

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Intersection #79: Calabazas Boulevard / El Camino Real

Signal=Protect/Rights=Include
Final Vol: 109 58 73***
Lanes: 0 1 0 0 1

Signal=Protect
Rights=Include
Final Vol: Lanes:
43*** 1
0
769 3
0
7 1

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 120
Loss Time (sec): 12
Critical V/C: 0.539
Avg Crit Del (sec/veh): 20.0
Avg Delay (sec/veh): 22.4
LOS: C+

Signal=Protect
Rights=Include
Lanes: Final Vol:
0 90
1
2 1721***
0
1 54

Lanes: 1 0 0 1 0
Final Vol: 20 76*** 95
Signal=Protect/Rights=Include

Street Name:	Calabazas Boulevard						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	14	76	95	73	58	103	41	615	5	54	1487	90
Growth 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
Initial Bse:	14	76	95	73	58	103	41	615	5	54	1487	90
Added Vol:	6	0	0	0	0	6	2	154	2	0	234	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	76	95	73	58	109	43	769	7	54	1721	90
User 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
PHF 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
PHF Volume:	20	76	95	73	58	109	43	769	7	54	1721	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	76	95	73	58	109	43	769	7	54	1721	90
PCE 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
MLF 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
FinalVolume:	20	76	95	73	58	109	43	769	7	54	1721	90
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	1.00	0.44	0.56	1.00	0.35	0.65	1.00	3.00	1.00	1.00	2.85	0.15
Final Sat.:	1750	800	1000	1750	625	1175	1750	5700	1750	1750	5321	278
Capacity Analysis Module:												
Vol/Sat:	0.01	0.10	0.10	0.04	0.09	0.09	0.02	0.13	0.00	0.03	0.32	0.32
Crit Moves:		****		****			****				****	
Green Time:	11.6	20.9	20.9	9.2	18.4	18.4	7.0	54.4	54.4	23.5	71.0	71.0
Volume/Cap:	0.12	0.55	0.55	0.55	0.60	0.60	0.42	0.30	0.01	0.16	0.55	0.55
Delay/Veh:	49.9	47.3	47.3	58.1	51.2	51.2	57.3	20.8	18.0	40.2	15.0	15.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.9	47.3	47.3	58.1	51.2	51.2	57.3	20.8	18.0	40.2	15.0	15.0
LOS by Move:	D	D	D	E+	D-	D-	E+	C+	B	D	B	B
HCM2kAvgQ:	1	7	7	4	7	7	2	6	0	2	13	13

Note: Queue reported is the number of cars per lane.

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Intersection #79: Calabazas Boulevard / El Camino Real

Signal=Protect/Rights=Include
Final Vol: 113 58 73***
Lanes: 0 1 0 0 1

Signal=Protect Rights=Include (West approach)
Final Vol: Lanes:
44*** 1
0
781 3
0
8 1

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 120
Loss Time (sec): 12
Critical V/C: 0.550
Avg Crit Del (sec/veh): 19.8
Avg Delay (sec/veh): 22.3
LOS: C+

Signal=Protect Rights=Include (East approach)
Lanes: Final Vol:
0 90
1
2 1774***
0
1 54

Lanes: 1 0 0 1 0
Final Vol: 24 76*** 95
Signal=Protect/Rights=Include

Street Name:	Calabazas Boulevard						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	14	76	95	73	58	103	41	615	5	54	1487	90
Growth 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
Initial Bse:	14	76	95	73	58	103	41	615	5	54	1487	90
Added Vol:	10	0	0	0	0	10	3	166	3	0	287	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	76	95	73	58	113	44	781	8	54	1774	90
User 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
PHF 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
PHF Volume:	24	76	95	73	58	113	44	781	8	54	1774	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	76	95	73	58	113	44	781	8	54	1774	90
PCE 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
MLF 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
FinalVolume:	24	76	95	73	58	113	44	781	8	54	1774	90
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	1.00	0.44	0.56	1.00	0.34	0.66	1.00	3.00	1.00	1.00	2.85	0.15
Final Sat.:	1750	800	1000	1750	611	1189	1750	5700	1750	1750	5329	270
Capacity Analysis Module:												
Vol/Sat:	0.01	0.10	0.10	0.04	0.10	0.10	0.03	0.14	0.00	0.03	0.33	0.33
Crit Moves:		****		****			****				****	
Green Time:	11.2	20.4	20.4	9.0	18.2	18.2	7.0	55.1	55.1	23.5	71.6	71.6
Volume/Cap:	0.15	0.56	0.56	0.56	0.63	0.63	0.43	0.30	0.01	0.16	0.56	0.56
Delay/Veh:	50.4	47.9	47.9	58.9	52.2	52.2	57.5	20.4	17.6	40.3	14.8	14.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.4	47.9	47.9	58.9	52.2	52.2	57.5	20.4	17.6	40.3	14.8	14.8
LOS by Move:	D	D	D	E+	D-	D-	E+	C+	B	D	B	B
HCM2kAvgQ:	1	7	7	4	7	7	2	6	0	2	14	14

Note: Queue reported is the number of cars per lane.

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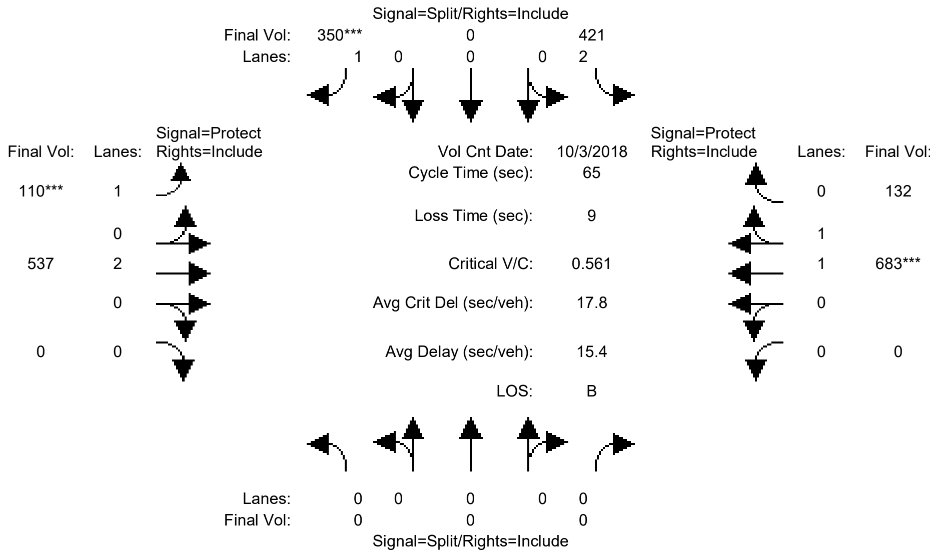
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #1: Ellis Street / Middlefield Road



Street Name:	Ellis Street						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	416	0	350	110	497	0	0	585	119
Growth 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
Initial Bse:	0	0	0	416	0	350	110	497	0	0	585	119
Added Vol:	0	0	0	5	0	0	0	40	0	0	98	13
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	421	0	350	110	537	0	0	683	132
User 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
PHF 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
PHF Volume:	0	0	0	421	0	350	110	537	0	0	683	132
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	421	0	350	110	537	0	0	683	132
PCE 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
MLF 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
FinalVolume:	0	0	0	421	0	350	110	537	0	0	683	132
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	1.67	0.33
Final Sat.:	0	0	0	3150	0	1750	1750	3800	0	0	3100	599
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.20	0.06	0.14	0.00	0.00	0.22	0.22
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	23.2	0.0	23.2	7.3	32.8	0.0	0.0	25.5	25.5
Volume/Cap:	0.00	0.00	0.00	0.37	0.00	0.56	0.56	0.28	0.00	0.00	0.56	0.56
Delay/Veh:	0.0	0.0	0.0	15.7	0.0	18.0	31.0	9.4	0.0	0.0	15.9	15.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	15.7	0.0	18.0	31.0	9.4	0.0	0.0	15.9	15.9
LOS by Move:	A	A	A	B	A	B	C	A	A	A	B	B
HCM2kAvgQ:	0	0	0	4	0	7	2	3	0	0	6	6

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
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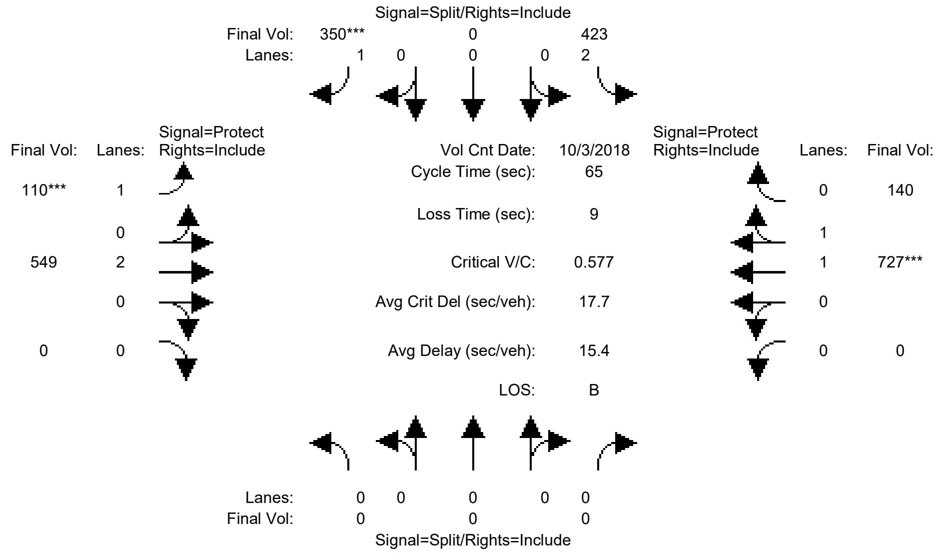
Cumulative PM Plus Project

Intersection #1: Ellis Street / Middlefield Road



Street Name:	Ellis Street						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	416	0	350	110	497	0	0	585	119
Growth 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
Initial Bse:	0	0	0	416	0	350	110	497	0	0	585	119
Added Vol:	0	0	0	7	0	0	0	52	0	0	142	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	423	0	350	110	549	0	0	727	140
User 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
PHF 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
PHF Volume:	0	0	0	423	0	350	110	549	0	0	727	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	423	0	350	110	549	0	0	727	140
PCE 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
MLF 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
FinalVolume:	0	0	0	423	0	350	110	549	0	0	727	140
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	2.00	0.00	0.00	1.67	0.33
Final Sat.:	0	0	0	3150	0	1750	1750	3800	0	0	3102	597
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.20	0.06	0.14	0.00	0.00	0.23	0.23
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	22.5	0.0	22.5	7.1	33.5	0.0	0.0	26.4	26.4
Volume/Cap:	0.00	0.00	0.00	0.39	0.00	0.58	0.58	0.28	0.00	0.00	0.58	0.58
Delay/Veh:	0.0	0.0	0.0	16.3	0.0	18.7	31.9	9.0	0.0	0.0	15.5	15.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	16.3	0.0	18.7	31.9	9.0	0.0	0.0	15.5	15.5
LOS by Move:	A	A	A	B	A	B-	C	A	A	A	B	B
HCM2kAvgQ:	0	0	0	4	0	7	2	3	0	0	7	7

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
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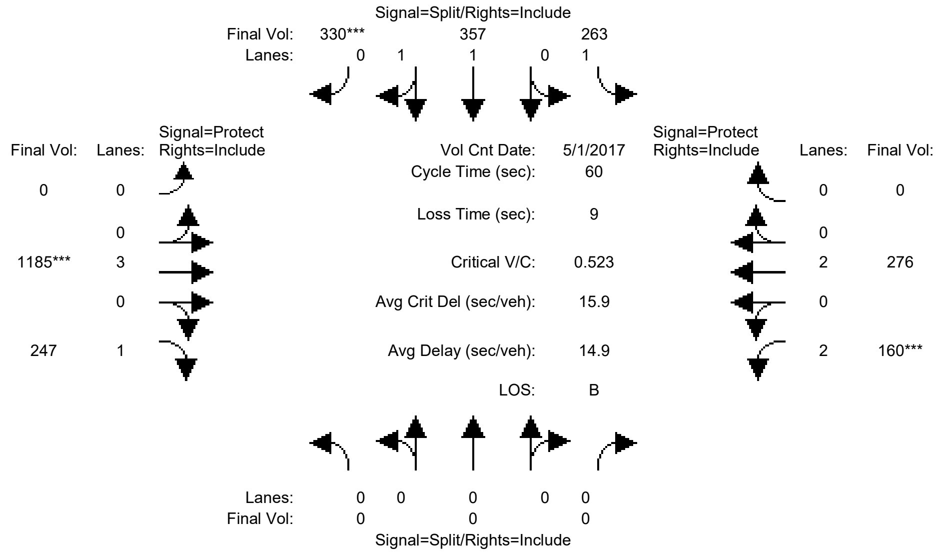
Cumulative PM

Intersection #2: SR 237 WB / Middlefield Road



Street Name:	SR 237 WB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	10	10	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	0	0	0	233	357	287	0	1140	247	129	208	0
Growth 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
Initial Bse:	0	0	0	233	357	287	0	1140	247	129	208	0
Added Vol:	0	0	0	30	0	43	0	45	0	31	68	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	263	357	330	0	1185	247	160	276	0
User 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
PHF 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
PHF Volume:	0	0	0	263	357	330	0	1185	247	160	276	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	263	357	330	0	1185	247	160	276	0
PCE 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
MLF 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
FinalVolume:	0	0	0	263	357	330	0	1185	247	160	276	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	1.01	0.99	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1750	1921	1776	0	5700	1750	3150	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.19	0.19	0.00	0.21	0.14	0.05	0.07	0.00
Crit Moves:						****		****		****		
Green Time:	0.0	0.0	0.0	20.8	20.8	20.8	0.0	23.2	23.2	7.0	30.2	0.0
Volume/Cap:	0.00	0.00	0.00	0.43	0.54	0.54	0.00	0.54	0.36	0.44	0.14	0.00
Delay/Veh:	0.0	0.0	0.0	15.6	16.2	16.2	0.0	14.5	13.4	25.5	8.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	15.6	16.2	16.2	0.0	14.5	13.4	25.5	8.0	0.0
LOS by Move:	A	A	A	B	B	B	A	B	B	C	A	A
HCM2kAvgQ:	0	0	0	4	6	6	0	6	3	2	1	0

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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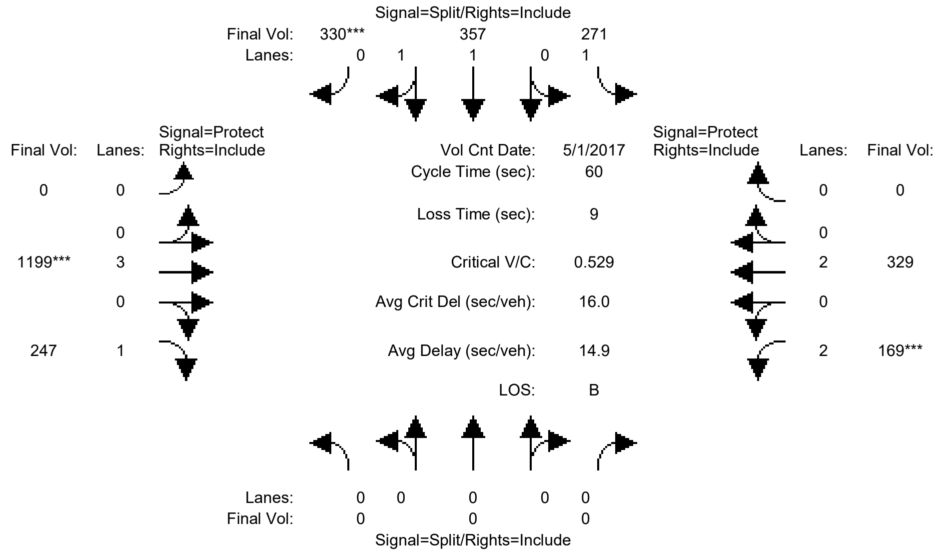
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #2: SR 237 WB / Middlefield Road



Street Name:	SR 237 WB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	10	10	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	0	0	0	233	357	287	0	1140	247	129	208	0
Growth 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
Initial Bse:	0	0	0	233	357	287	0	1140	247	129	208	0
Added Vol:	0	0	0	38	0	43	0	59	0	40	121	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	271	357	330	0	1199	247	169	329	0
User 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
PHF 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
PHF Volume:	0	0	0	271	357	330	0	1199	247	169	329	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	271	357	330	0	1199	247	169	329	0
PCE 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
MLF 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
FinalVolume:	0	0	0	271	357	330	0	1199	247	169	329	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.95	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	1.01	0.99	0.00	3.00	1.00	2.00	2.00	0.00
Final Sat.:	0	0	0	1750	1921	1776	0	5700	1750	3150	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.15	0.19	0.19	0.00	0.21	0.14	0.05	0.09	0.00
Crit Moves:						****		****		****		
Green Time:	0.0	0.0	0.0	20.6	20.6	20.6	0.0	23.4	23.4	7.0	30.4	0.0
Volume/Cap:	0.00	0.00	0.00	0.45	0.54	0.54	0.00	0.54	0.36	0.46	0.17	0.00
Delay/Veh:	0.0	0.0	0.0	15.8	16.3	16.3	0.0	14.4	13.4	25.6	8.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	15.8	16.3	16.3	0.0	14.4	13.4	25.6	8.1	0.0
LOS by Move:	A	A	A	B	B	B	A	B	B	C	A	A
HCM2kAvgQ:	0	0	0	5	6	6	0	6	3	2	2	0

Note: Queue reported is the number of cars per lane.

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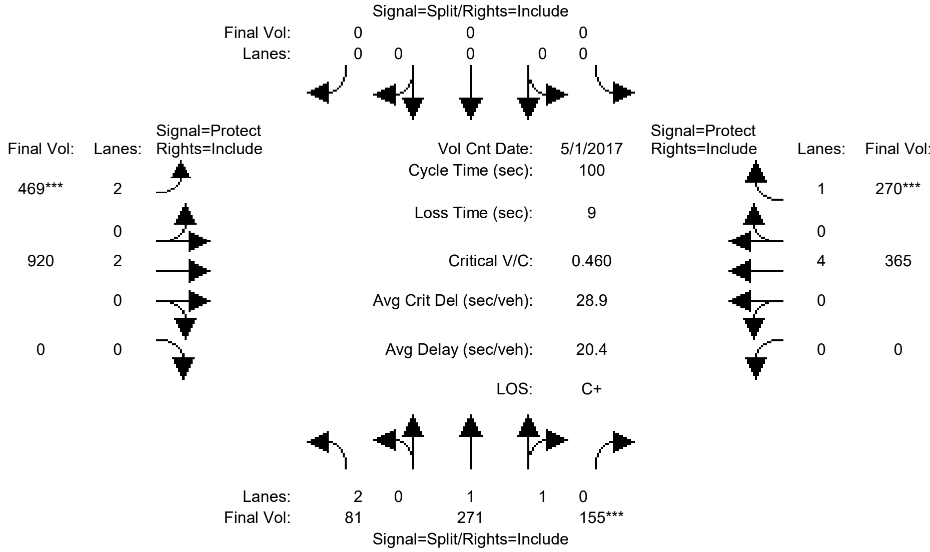
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #3: SR 237 EB / Middlefield Road



Street Name:	SR 237 EB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	81	271	141	0	0	0	459	854	0	0	266	223
Growth 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
Initial Bse:	81	271	141	0	0	0	459	854	0	0	266	223
Added Vol:	0	0	14	0	0	0	10	66	0	0	99	47
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	81	271	155	0	0	0	469	920	0	0	365	270
User 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
PHF 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
PHF Volume:	81	271	155	0	0	0	469	920	0	0	365	270
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	271	155	0	0	0	469	920	0	0	365	270
PCE 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
MLF 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
FinalVolume:	81	271	155	0	0	0	469	920	0	0	365	270
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	1.25	0.75	0.00	0.00	0.00	2.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	3150	2353	1346	0	0	0	3150	3800	0	0	7600	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.12	0.00	0.00	0.00	0.15	0.24	0.00	0.00	0.05	0.15
Crit Moves:			****				****					****
Green Time:	25.1	25.1	25.1	0.0	0.0	0.0	32.4	65.9	0.0	0.0	33.6	33.6
Volume/Cap:	0.10	0.46	0.46	0.00	0.00	0.00	0.46	0.37	0.00	0.00	0.14	0.46
Delay/Veh:	28.9	32.1	32.1	0.0	0.0	0.0	27.2	7.7	0.0	0.0	23.2	26.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.9	32.1	32.1	0.0	0.0	0.0	27.2	7.7	0.0	0.0	23.2	26.7
LOS by Move:	C	C-	C-	A	A	A	C	A	A	A	C	C
HCM2kAvgQ:	1	6	6	0	0	0	7	6	0	0	2	7

Note: Queue reported is the number of cars per lane.

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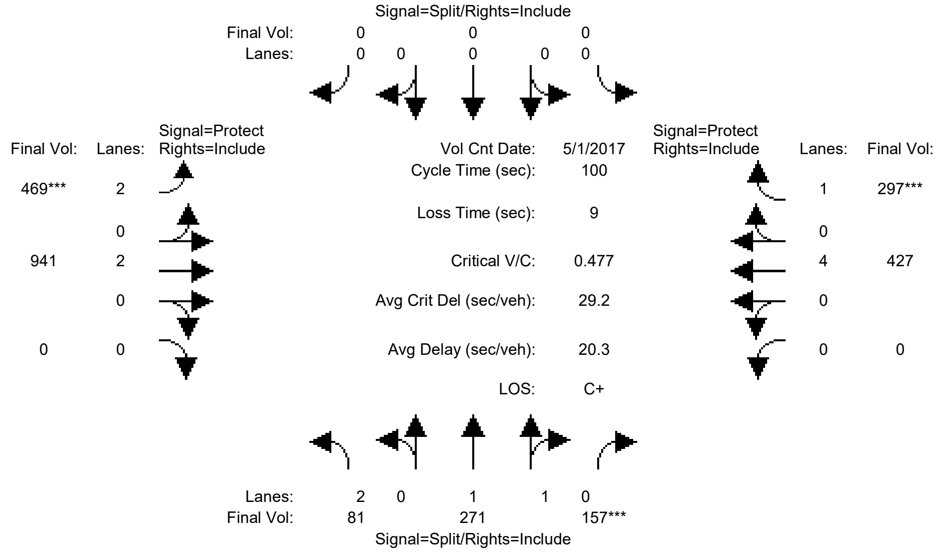
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #3: SR 237 EB / Middlefield Road



Street Name:	SR 237 EB						Middlefield Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	81	271	141	0	0	0	459	854	0	0	266	223
Growth 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
Initial Bse:	81	271	141	0	0	0	459	854	0	0	266	223
Added Vol:	0	0	16	0	0	0	10	87	0	0	161	74
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	81	271	157	0	0	0	469	941	0	0	427	297
User 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
PHF 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
PHF Volume:	81	271	157	0	0	0	469	941	0	0	427	297
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	271	157	0	0	0	469	941	0	0	427	297
PCE 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
MLF 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
FinalVolume:	81	271	157	0	0	0	469	941	0	0	427	297
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	1.25	0.75	0.00	0.00	0.00	2.00	2.00	0.00	0.00	4.00	1.00
Final Sat.:	3150	2342	1357	0	0	0	3150	3800	0	0	7600	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.12	0.00	0.00	0.00	0.15	0.25	0.00	0.00	0.06	0.17
Crit Moves:			****				****					****
Green Time:	24.2	24.2	24.2	0.0	0.0	0.0	31.2	66.8	0.0	0.0	35.6	35.6
Volume/Cap:	0.11	0.48	0.48	0.00	0.00	0.00	0.48	0.37	0.00	0.00	0.16	0.48
Delay/Veh:	29.5	32.9	32.9	0.0	0.0	0.0	28.2	7.4	0.0	0.0	22.0	25.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.5	32.9	32.9	0.0	0.0	0.0	28.2	7.4	0.0	0.0	22.0	25.6
LOS by Move:	C	C-	C-	A	A	A	C	A	A	A	C+	C
HCM2kAvgQ:	1	6	6	0	0	0	7	6	0	0	2	8

Note: Queue reported is the number of cars per lane.

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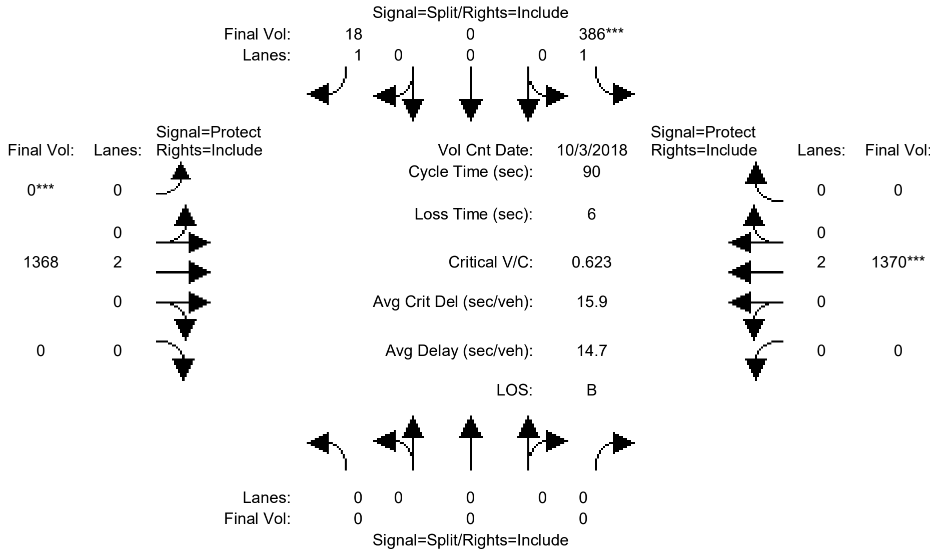
Cumulative PM

Intersection #4: SR-85 SB Off-Ramp / Central Expressway



Street Name:	SR-85 SB Off-Ramp						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	0	0	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	372	0	18	0	1264	0	0	1225	0
Growth 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
Initial Bse:	0	0	0	372	0	18	0	1264	0	0	1225	0
Added Vol:	0	0	0	14	0	0	0	104	0	0	145	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	386	0	18	0	1368	0	0	1370	0
User 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
PHF 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
PHF Volume:	0	0	0	386	0	18	0	1368	0	0	1370	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	386	0	18	0	1368	0	0	1370	0
PCE 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
MLF 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
FinalVolume:	0	0	0	386	0	18	0	1368	0	0	1370	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	1750	0	1750	0	3800	0	0	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.22	0.00	0.01	0.00	0.36	0.00	0.00	0.36	0.00
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	31.9	0.0	31.9	0.0	52.1	0.0	0.0	52.1	0.0
Volume/Cap:	0.00	0.00	0.00	0.62	0.00	0.03	0.00	0.62	0.00	0.00	0.62	0.00
Delay/Veh:	0.0	0.0	0.0	26.0	0.0	19.0	0.0	13.0	0.0	0.0	13.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	26.0	0.0	19.0	0.0	13.0	0.0	0.0	13.0	0.0
LOS by Move:	A	A	A	C	A	B-	A	B	A	A	B	A
HCM2kAvgQ:	0	0	0	10	0	0	0	12	0	0	12	0

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
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Intersection #4: SR-85 SB Off-Ramp / Central Expressway

Signal=Split/Rights=Include
Final Vol: 18 0 387***
Lanes: 1 0 0 0 1

Signal=Protect Rights=Include (West approach)
Final Vol: 0*** Lanes: 0
Lanes: 0
Final Vol: 1384 Lanes: 2
Lanes: 0
Final Vol: 0 Lanes: 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 90
Loss Time (sec): 6
Critical V/C: 0.639
Avg Crit Del (sec/veh): 15.9
Avg Delay (sec/veh): 14.5
LOS: B

Signal=Protect Rights=Include (East approach)
Lanes: 0 Final Vol: 0
Lanes: 0
Lanes: 2 Final Vol: 1426***
Lanes: 0
Lanes: 0 Final Vol: 0

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	SR-85 SB Off-Ramp						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	0	10	0	0	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	372	0	18	0	1264	0	0	1225	0
Growth 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
Initial Bse:	0	0	0	372	0	18	0	1264	0	0	1225	0
Added Vol:	0	0	0	15	0	0	0	120	0	0	201	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	387	0	18	0	1384	0	0	1426	0
User 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
PHF 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
PHF Volume:	0	0	0	387	0	18	0	1384	0	0	1426	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	387	0	18	0	1384	0	0	1426	0
PCE 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
MLF 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
FinalVolume:	0	0	0	387	0	18	0	1384	0	0	1426	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	1750	0	1750	0	3800	0	0	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.22	0.00	0.01	0.00	0.36	0.00	0.00	0.38	0.00
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	31.1	0.0	31.1	0.0	52.9	0.0	0.0	52.9	0.0
Volume/Cap:	0.00	0.00	0.00	0.64	0.00	0.03	0.00	0.62	0.00	0.00	0.64	0.00
Delay/Veh:	0.0	0.0	0.0	27.0	0.0	19.5	0.0	12.6	0.0	0.0	12.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	27.0	0.0	19.5	0.0	12.6	0.0	0.0	12.9	0.0
LOS by Move:	A	A	A	C	A	B-	A	B	A	A	B	A
HCM2kAvgQ:	0	0	0	10	0	0	0	12	0	0	13	0

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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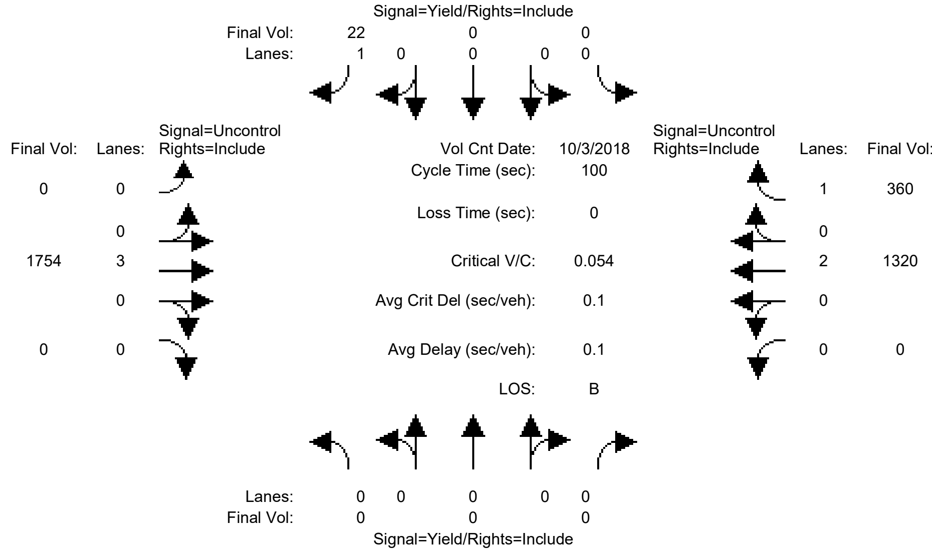
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative PM

Intersection #5: SR-85 NB On-Ramp - Easy Street / Central Expressway




```
Street Name:  SR-85 NB On-Ramp - Easy Street          Central Expressway
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 3 Oct 2018 <<
Base Vol:       0    0     0     0    0    22      0 1636     0      0 1175   326
Growth 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
Initial Bse:    0    0     0     0    0    22      0 1636     0      0 1175   326
Added Vol:      0    0     0     0    0     0      0  118     0      0  145    34
PasserByVol:    0    0     0     0    0     0      0    0     0      0    0     0
Initial Fut:    0    0     0     0    0    22      0 1754     0      0 1320   360
User 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
PHF 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
PHF Volume:     0    0     0     0    0    22      0 1754     0      0 1320   360
Reduct Vol:     0    0     0     0    0     0      0    0     0      0    0     0
FinalVolume:    0    0     0     0    0    22      0 1754     0      0 1320   360
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx   660  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx   410  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx   410  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  0.05  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2WayQ95thQ:   xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx  14.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     B      *    *     *      *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *      *    *     *      *    *     *
ApproachDel:     xxxxxx             14.3             xxxxxx            xxxxxx
ApproachLOS:          *                B                  *                 *
Note: Queue reported is the number of cars per lane.
                     Peak Hour Delay Signal Warrant Report
*********************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
*********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    0  0  3  0  0    0  0  2  0  1
Initial Vol:    0    0     0     0    0    22     0 1754     0     0 1320   360
ApproachDel:    xxxxxx              14.3            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Yield Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Controller not stop sign.
Signal Warrant Rule #2: [approach volume=22]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=3456]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    0  0  3  0  0    0  0  2  0  1
Initial Vol:    0    0     0     0    0    22     0 1754     0     0 1320   360
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            3434
Minor Approach Volume:          22
Minor Approach Volume Threshold: -140 [less than minimum of 100]
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
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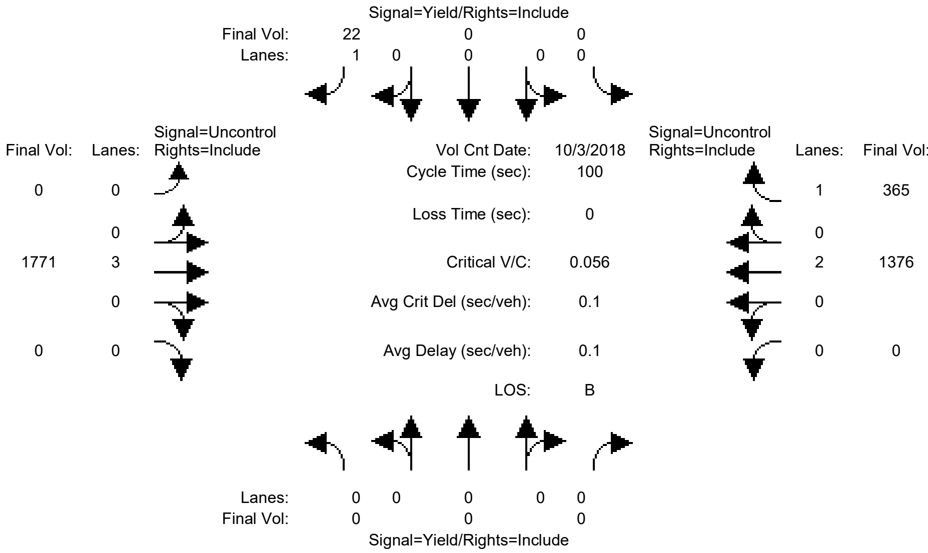
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #5: SR-85 NB On-Ramp - Easy Street / Central Expressway




```
Street Name:  SR-85 NB On-Ramp - Easy Street          Central Expressway
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 3 Oct 2018 <<
Base Vol:       0    0     0     0    0    22     0 1636     0     0 1175   326
Growth 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
Initial Bse:    0    0     0     0    0    22     0 1636     0     0 1175   326
Added Vol:      0    0     0     0    0     0     0  135     0     0  201    39
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     0    0    22     0 1771     0     0 1376   365
User 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
PHF 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
PHF Volume:     0    0     0     0    0    22     0 1771     0     0 1376   365
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0     0    0    22     0 1771     0     0 1376   365
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx   688  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx   393  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx   393  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  0.06  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx  14.7 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     B     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:    xxxxxx              14.7             xxxxxx            xxxxxx
ApproachLOS:         *                B                   *                 *
Note: Queue reported is the number of cars per lane.
                     Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    0  0  3  0  0    0  0  2  0  1
Initial Vol:    0    0     0     0    0    22     0 1771     0     0 1376   365
ApproachDel:    xxxxxx             14.7             xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Yield Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
   FAIL - Controller not stop sign.
Signal Warrant Rule #2: [approach volume=22]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=3534]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 SR-85 NB On-Ramp - Easy Street / Central Expressway
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Yield Sign       Yield Sign      Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    0  0  3  0  0    0  0  2  0  1
Initial Vol:    0    0     0     0    0    22     0 1771     0     0 1376   365
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             3512
Minor Approach Volume:           22
Minor Approach Volume Threshold: -148 [less than minimum of 100]
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

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Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #6: Whisman Station Drive / Central Expressway (CMP)

Signal=Split/Rights=Overlap
Final Vol: 240 0 53***
Lanes: 1 0 0 0 2

Signal=Protect
Rights=Include

Final Vol:	Lanes:
261***	1
	0
1487	3
	0
0	0

Vol Cnt Date:	10/3/2018
Cycle Time (sec):	100
Loss Time (sec):	9
Critical V/C:	0.460
Avg Crit Del (sec/veh):	19.0
Avg Delay (sec/veh):	11.9
LOS:	B+

Signal=Protect
Rights=Overlap

Lanes:	Final Vol:
1	225
0	
3	1442***
0	
0	0

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Whisman Station Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	44	0	240	261	1369	0	0	1263	204
Growth 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
Initial Bse:	0	0	0	44	0	240	261	1369	0	0	1263	204
Added Vol:	0	0	0	9	0	0	0	118	0	0	179	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	53	0	240	261	1487	0	0	1442	225
User 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
PHF 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
PHF Volume:	0	0	0	53	0	240	261	1487	0	0	1442	225
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	53	0	240	261	1487	0	0	1442	225
PCE 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
MLF 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
FinalVolume:	0	0	0	53	0	240	261	1487	0	0	1442	225
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3150	0	1750	1750	5700	0	0	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.14	0.15	0.26	0.00	0.00	0.25	0.13
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	40.0	30.0	81.0	0.0	0.0	51.0	61.0
Volume/Cap:	0.00	0.00	0.00	0.17	0.00	0.34	0.50	0.32	0.00	0.00	0.50	0.21
Delay/Veh:	0.0	0.0	0.0	41.4	0.0	21.1	29.5	2.5	0.0	0.0	16.2	8.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	41.4	0.0	21.1	29.5	2.5	0.0	0.0	16.2	8.8
LOS by Move:	A	A	A	D	A	C+	C	A	A	A	B	A
HCM2kAvgQ:	0	0	0	1	0	6	7	4	0	0	9	3

Note: Queue reported is the number of cars per lane.

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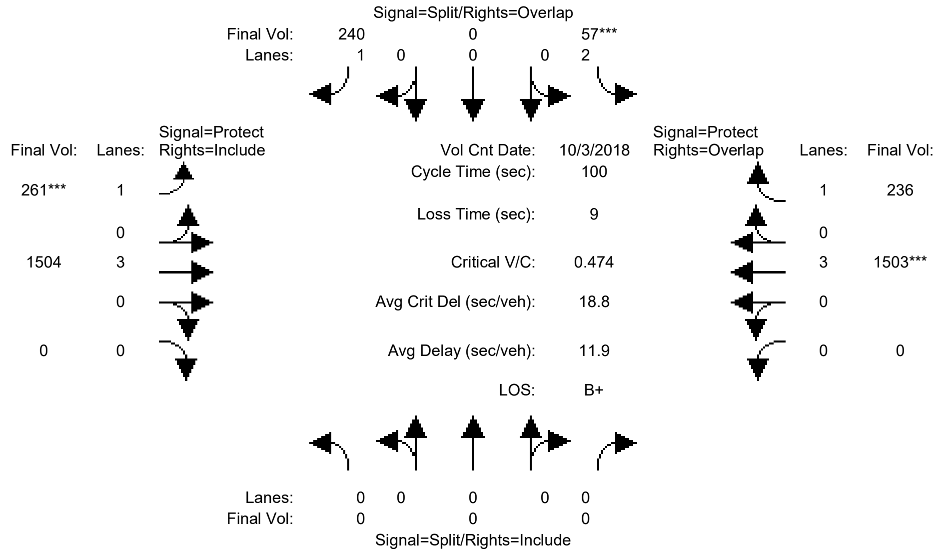
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #6: Whisman Station Drive / Central Expressway (CMP)



Street Name:	Whisman Station Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	44	0	240	261	1369	0	0	1263	204
Growth 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
Initial Bse:	0	0	0	44	0	240	261	1369	0	0	1263	204
Added Vol:	0	0	0	13	0	0	0	135	0	0	240	32
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	57	0	240	261	1504	0	0	1503	236
User 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
PHF 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
PHF Volume:	0	0	0	57	0	240	261	1504	0	0	1503	236
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	57	0	240	261	1504	0	0	1503	236
PCE 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
MLF 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
FinalVolume:	0	0	0	57	0	240	261	1504	0	0	1503	236
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	1.00	3.00	0.00	0.00	3.00	1.00
Final Sat.:	0	0	0	3150	0	1750	1750	5700	0	0	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.14	0.15	0.26	0.00	0.00	0.26	0.13
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	39.3	29.3	81.0	0.0	0.0	51.7	61.7
Volume/Cap:	0.00	0.00	0.00	0.18	0.00	0.35	0.51	0.33	0.00	0.00	0.51	0.22
Delay/Veh:	0.0	0.0	0.0	41.5	0.0	21.7	30.3	2.5	0.0	0.0	16.0	8.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	41.5	0.0	21.7	30.3	2.5	0.0	0.0	16.0	8.6
LOS by Move:	A	A	A	D	A	C+	C	A	A	A	B	A
HCM2kAvgQ:	0	0	0	1	0	6	7	4	0	0	10	3

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #7: Ferguson Drive / Central Expressway (CMP)

Signal=Split/Rights=Overlap
Final Vol: 80 0 78***
Lanes: 1 0 0 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Overlap	Lanes:	Final Vol:
			Vol Cnt Date:	10/3/2018			
123***	1		Cycle Time (sec):	90		1	90
	0		Loss Time (sec):	9		0	
1274	3		Critical V/C:	0.603		2	1626***
	0		Avg Crit Del (sec/veh):	12.4		0	
0	0		Avg Delay (sec/veh):	8.7		0	0
			LOS:	A			

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Ferguson Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	69	0	80	123	1147	0	0	1426	69
Growth 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
Initial Bse:	0	0	0	69	0	80	123	1147	0	0	1426	69
Added Vol:	0	0	0	9	0	0	0	127	0	0	200	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	78	0	80	123	1274	0	0	1626	90
User 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
PHF 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
PHF Volume:	0	0	0	78	0	80	123	1274	0	0	1626	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	78	0	80	123	1274	0	0	1626	90
PCE 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
MLF 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
FinalVolume:	0	0	0	78	0	80	123	1274	0	0	1626	90
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	5700	0	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.05	0.07	0.22	0.00	0.00	0.43	0.05
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	20.0	10.0	71.0	0.0	0.0	61.0	71.0
Volume/Cap:	0.00	0.00	0.00	0.40	0.00	0.21	0.63	0.28	0.00	0.00	0.63	0.07
Delay/Veh:	0.0	0.0	0.0	38.6	0.0	28.8	44.8	2.6	0.0	0.0	8.7	2.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	38.6	0.0	28.8	44.8	2.6	0.0	0.0	8.7	2.1
LOS by Move:	A	A	A	D+	A	C	D	A	A	A	A	A
HCM2kAvgQ:	0	0	0	3	0	2	4	3	0	0	13	1

Note: Queue reported is the number of cars per lane.

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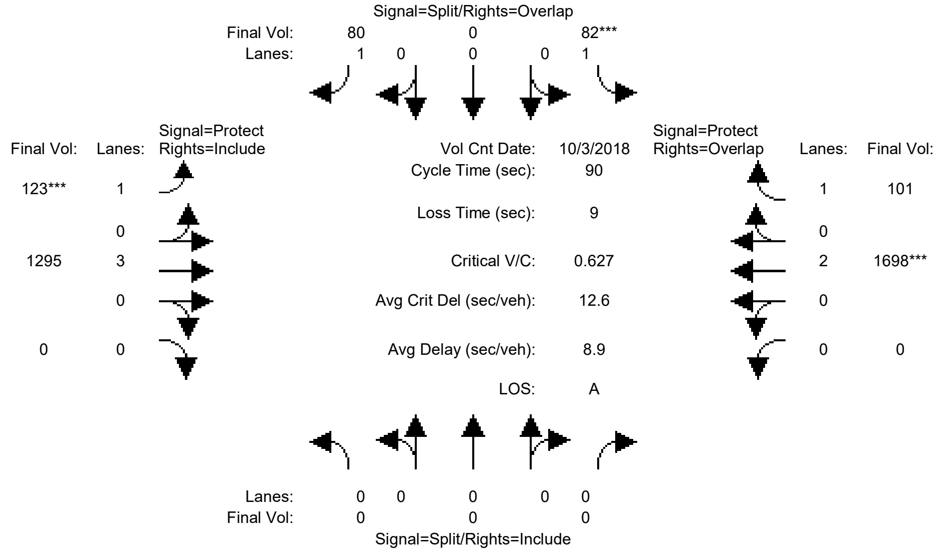
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #7: Ferguson Drive / Central Expressway (CMP)



Street Name:	Ferguson Drive						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	69	0	80	123	1147	0	0	1426	69
Growth 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
Initial Bse:	0	0	0	69	0	80	123	1147	0	0	1426	69
Added Vol:	0	0	0	13	0	0	0	148	0	0	272	32
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	82	0	80	123	1295	0	0	1698	101
User 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
PHF 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
PHF Volume:	0	0	0	82	0	80	123	1295	0	0	1698	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	82	0	80	123	1295	0	0	1698	101
PCE 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
MLF 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
FinalVolume:	0	0	0	82	0	80	123	1295	0	0	1698	101
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	5700	0	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.05	0.00	0.05	0.07	0.23	0.00	0.00	0.45	0.06
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	19.7	9.7	71.0	0.0	0.0	61.3	71.3
Volume/Cap:	0.00	0.00	0.00	0.42	0.00	0.21	0.66	0.29	0.00	0.00	0.66	0.07
Delay/Veh:	0.0	0.0	0.0	38.8	0.0	29.1	46.7	2.6	0.0	0.0	8.9	2.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	38.8	0.0	29.1	46.7	2.6	0.0	0.0	8.9	2.1
LOS by Move:	A	A	A	D+	A	C	D	A	A	A	A	A
HCM2kAvgQ:	0	0	0	3	0	2	4	3	0	0	13	1

Note: Queue reported is the number of cars per lane.

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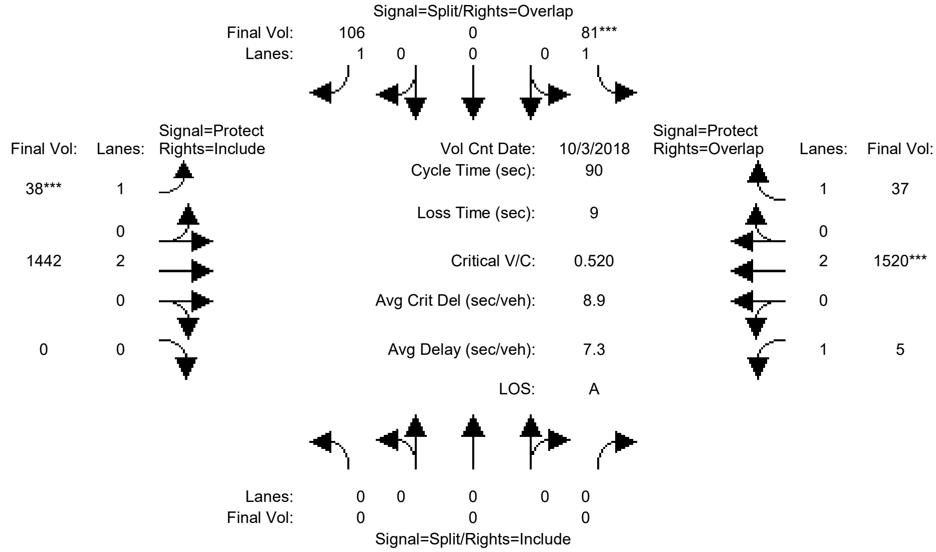
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #8: Bernardo Avenue / Central Expressway



Street Name:	Bernardo Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	72	0	106	38	1305	0	5	1299	16
Growth 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
Initial Bse:	0	0	0	72	0	106	38	1305	0	5	1299	16
Added Vol:	0	0	0	9	0	0	0	137	0	0	221	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	81	0	106	38	1442	0	5	1520	37
User 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
PHF 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
PHF Volume:	0	0	0	81	0	106	38	1442	0	5	1520	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	81	0	106	38	1442	0	5	1520	37
PCE 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
MLF 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
FinalVolume:	0	0	0	81	0	106	38	1442	0	5	1520	37
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	3800	0	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.05	0.00	0.06	0.02	0.38	0.00	0.00	0.40	0.02
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	17.0	7.0	70.5	0.0	0.5	64.0	74.0
Volume/Cap:	0.00	0.00	0.00	0.42	0.00	0.32	0.28	0.48	0.00	0.48	0.56	0.03
Delay/Veh:	0.0	0.0	0.0	38.7	0.0	32.1	40.2	3.5	0.0	76.3	6.5	1.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	38.7	0.0	32.1	40.2	3.5	0.0	76.3	6.5	1.5
LOS by Move:	A	A	A	D+	A	C-	D	A	A	E-	A	A
HCM2kAvgQ:	0	0	0	3	0	3	1	7	0	0	10	0

Note: Queue reported is the number of cars per lane.

Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #8: Bernardo Avenue / Central Expressway

Signal=Split/Rights=Overlap
Final Vol: 106 0 85***
Lanes: 1 0 0 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Overlap	Lanes:	Final Vol:
			Vol Cnt Date:	10/3/2018			
			Cycle Time (sec):	90			
38***	1					1	48
			Loss Time (sec):	9			
	0					0	
1466	2		Critical V/C:	0.547		2	1604***
	0		Avg Crit Del (sec/veh):	9.2		0	
0	0		Avg Delay (sec/veh):	7.4		1	5
			LOS:	A			

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Split/Rights=Include

Street Name:	Bernardo Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	10	0	10	7	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	0	0	0	72	0	106	38	1305	0	5	1299	16
Growth 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
Initial Bse:	0	0	0	72	0	106	38	1305	0	5	1299	16
Added Vol:	0	0	0	13	0	0	0	161	0	0	305	32
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	85	0	106	38	1466	0	5	1604	48
User 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
PHF 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
PHF Volume:	0	0	0	85	0	106	38	1466	0	5	1604	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	85	0	106	38	1466	0	5	1604	48
PCE 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
MLF 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
FinalVolume:	0	0	0	85	0	106	38	1466	0	5	1604	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	1750	0	1750	1750	3800	0	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.05	0.00	0.06	0.02	0.39	0.00	0.00	0.42	0.03
Crit Moves:				****			****				****	
Green Time:	0.0	0.0	0.0	10.0	0.0	17.0	7.0	70.5	0.0	0.5	64.0	74.0
Volume/Cap:	0.00	0.00	0.00	0.44	0.00	0.32	0.28	0.49	0.00	0.49	0.59	0.03
Delay/Veh:	0.0	0.0	0.0	38.9	0.0	32.1	40.2	3.6	0.0	77.7	6.9	1.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	38.9	0.0	32.1	40.2	3.6	0.0	77.7	6.9	1.5
LOS by Move:	A	A	A	D+	A	C-	D	A	A	E-	A	A
HCM2kAvgQ:	0	0	0	3	0	3	1	7	0	0	11	0

Note: Queue reported is the number of cars per lane.

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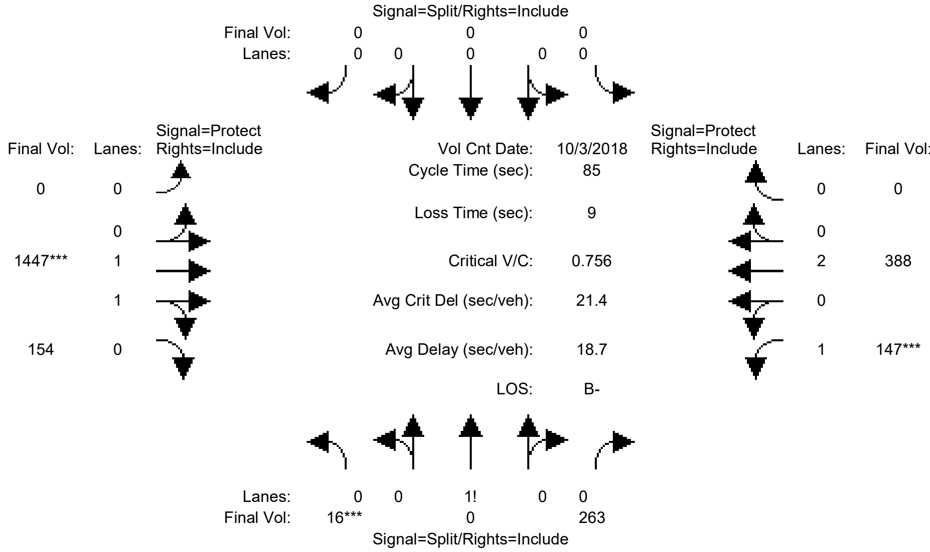
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #9: Moorpark Way / Evelyn Avenue



Street Name:	Moorpark Way						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	16	0	250	0	0	0	0	1372	154	114	304	0
Growth 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
Initial Bse:	16	0	250	0	0	0	0	1372	154	114	304	0
Added Vol:	0	0	13	0	0	0	0	75	0	33	84	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	0	263	0	0	0	0	1447	154	147	388	0
User 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
PHF 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
PHF Volume:	16	0	263	0	0	0	0	1447	154	147	388	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	0	263	0	0	0	0	1447	154	147	388	0
PCE 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
MLF 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
FinalVolume:	16	0	263	0	0	0	0	1447	154	147	388	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	0.06	0.00	0.94	0.00	0.00	0.00	0.00	1.80	0.20	1.00	2.00	0.00
Final Sat.:	100	0	1650	0	0	0	0	3344	356	1750	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.16	0.00	0.16	0.00	0.00	0.00	0.00	0.43	0.43	0.08	0.10	0.00
Crit Moves:	****							****		****		
Green Time:	17.9	0.0	17.9	0.0	0.0	0.0	0.0	48.6	48.6	9.4	58.1	0.0
Volume/Cap:	0.76	0.00	0.76	0.00	0.00	0.00	0.00	0.76	0.76	0.76	0.15	0.00
Delay/Veh:	40.2	0.0	40.2	0.0	0.0	0.0	0.0	15.3	15.3	52.2	4.8	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.2	0.0	40.2	0.0	0.0	0.0	0.0	15.3	15.3	52.2	4.8	0.0
LOS by Move:	D	A	D	A	A	A	A	B	B	D-	A	A
HCM2kAvgQ:	9	0	9	0	0	0	0	17	17	4	2	0

Note: Queue reported is the number of cars per lane.

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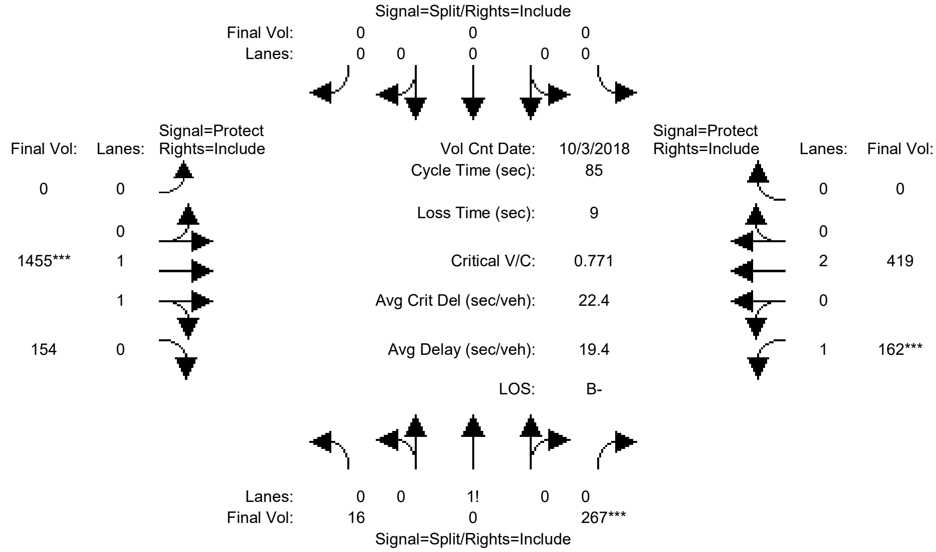
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #9: Moorpark Way / Evelyn Avenue



Street Name:		Moorpark Way						Evelyn Avenue				
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	16	0	250	0	0	0	0	1372	154	114	304	0
Growth 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
Initial Bse:	16	0	250	0	0	0	0	1372	154	114	304	0
Added Vol:	0	0	17	0	0	0	0	83	0	48	115	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	0	267	0	0	0	0	1455	154	162	419	0
User 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
PHF 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
PHF Volume:	16	0	267	0	0	0	0	1455	154	162	419	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	0	267	0	0	0	0	1455	154	162	419	0
PCE 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
MLF 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
FinalVolume:	16	0	267	0	0	0	0	1455	154	162	419	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	0.06	0.00	0.94	0.00	0.00	0.00	0.00	1.80	0.20	1.00	2.00	0.00
Final Sat.:	99	0	1651	0	0	0	0	3346	354	1750	3800	0
Capacity Analysis Module:												
Vol/Sat:	0.16	0.00	0.16	0.00	0.00	0.00	0.00	0.43	0.43	0.09	0.11	0.00
Crit Moves:			****					****		****		
Green Time:	17.8	0.0	17.8	0.0	0.0	0.0	0.0	48.0	48.0	10.2	58.2	0.0
Volume/Cap:	0.77	0.00	0.77	0.00	0.00	0.00	0.00	0.77	0.77	0.77	0.16	0.00
Delay/Veh:	41.3	0.0	41.3	0.0	0.0	0.0	0.0	16.1	16.1	52.2	4.8	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.3	0.0	41.3	0.0	0.0	0.0	0.0	16.1	16.1	52.2	4.8	0.0
LOS by Move:	D	A	D	A	A	A	A	B	B	D-	A	A
HCM2kAvgQ:	10	0	10	0	0	0	0	18	18	5	2	0

Note: Queue reported is the number of cars per lane.

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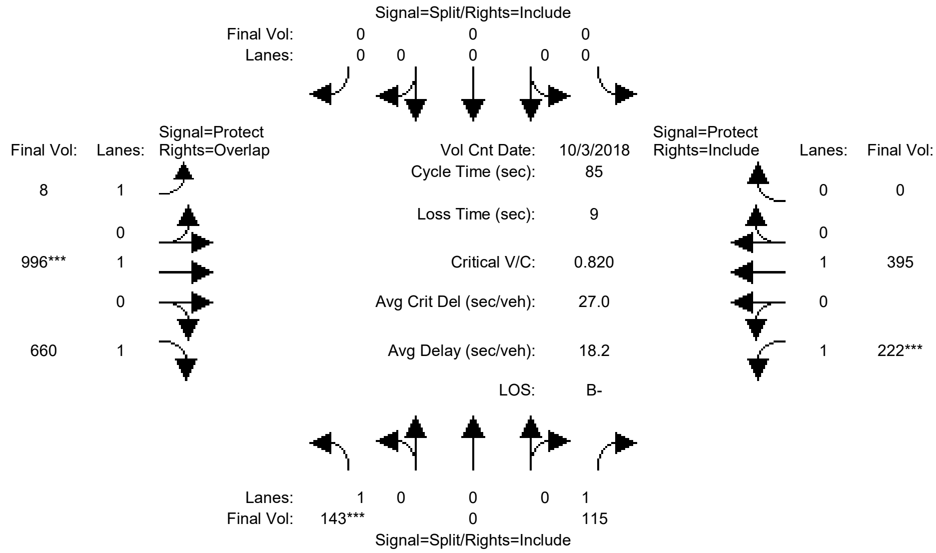
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #10: Bernardo Avenue / Evelyn Avenue



Street Name:	Bernardo Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	143	0	102	0	0	0	8	908	660	189	278	0
Growth 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
Initial Bse:	143	0	102	0	0	0	8	908	660	189	278	0
Added Vol:	0	0	13	0	0	0	0	88	0	33	117	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	143	0	115	0	0	0	8	996	660	222	395	0
User 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
PHF 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
PHF Volume:	143	0	115	0	0	0	8	996	660	222	395	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	0	115	0	0	0	8	996	660	222	395	0
PCE 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
MLF 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
FinalVolume:	143	0	115	0	0	0	8	996	660	222	395	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	1750	1900	1750	1750	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.07	0.00	0.00	0.00	0.00	0.52	0.38	0.13	0.21	0.00
Crit Moves:	****							****		****		
Green Time:	10.0	0.0	10.0	0.0	0.0	0.0	1.4	53.1	63.1	12.9	64.6	0.0
Volume/Cap:	0.69	0.00	0.56	0.00	0.00	0.00	0.27	0.84	0.51	0.84	0.27	0.00
Delay/Veh:	45.9	0.0	38.8	0.0	0.0	0.0	46.3	18.0	4.8	55.5	3.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.9	0.0	38.8	0.0	0.0	0.0	46.3	18.0	4.8	55.5	3.2	0.0
LOS by Move:	D	A	D+	A	A	A	D	B	A	E+	A	A
HCM2kAvgQ:	5	0	4	0	0	0	0	21	7	6	3	0

Note: Queue reported is the number of cars per lane.

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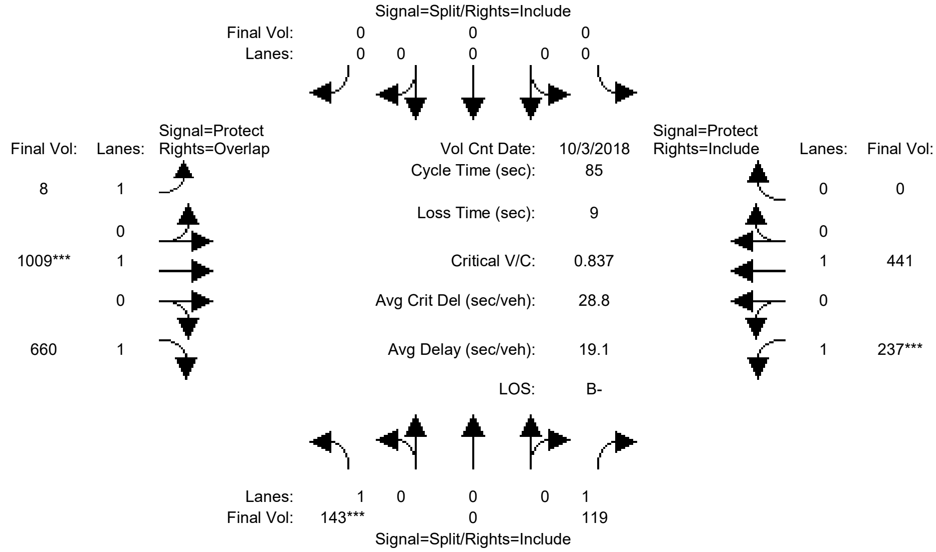
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #10: Bernardo Avenue / Evelyn Avenue



Street Name:	Bernardo Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	0	10	10	7	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	143	0	102	0	0	0	8	908	660	189	278	0
Growth 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
Initial Bse:	143	0	102	0	0	0	8	908	660	189	278	0
Added Vol:	0	0	17	0	0	0	0	101	0	48	163	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	143	0	119	0	0	0	8	1009	660	237	441	0
User 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
PHF 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
PHF Volume:	143	0	119	0	0	0	8	1009	660	237	441	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	0	119	0	0	0	8	1009	660	237	441	0
PCE 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
MLF 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
FinalVolume:	143	0	119	0	0	0	8	1009	660	237	441	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	1750	1900	1750	1750	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.00	0.07	0.00	0.00	0.00	0.00	0.53	0.38	0.14	0.23	0.00
Crit Moves:	****							****		****		
Green Time:	10.0	0.0	10.0	0.0	0.0	0.0	1.3	52.6	62.6	13.4	64.7	0.0
Volume/Cap:	0.69	0.00	0.58	0.00	0.00	0.00	0.30	0.86	0.51	0.86	0.30	0.00
Delay/Veh:	45.9	0.0	39.5	0.0	0.0	0.0	47.9	19.7	5.1	57.4	3.3	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.9	0.0	39.5	0.0	0.0	0.0	47.9	19.7	5.1	57.4	3.3	0.0
LOS by Move:	D	A	D	A	A	A	D	B-	A	E+	A	A
HCM2kAvgQ:	5	0	4	0	0	0	0	22	8	7	3	0

Note: Queue reported is the number of cars per lane.

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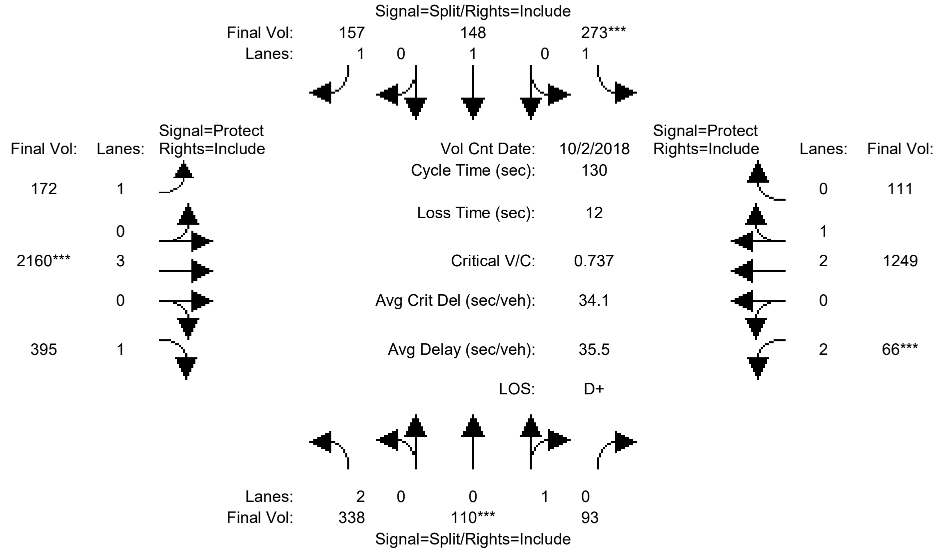
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #11: Sylvan Avenue / El Camino Real



Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	338	110	90	268	148	157	172	1932	395	59	974	99
Growth 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
Initial Bse:	338	110	90	268	148	157	172	1932	395	59	974	99
Added Vol:	0	0	3	5	0	0	0	228	0	7	275	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	338	110	93	273	148	157	172	2160	395	66	1249	111
User 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
PHF 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
PHF Volume:	338	110	93	273	148	157	172	2160	395	66	1249	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	338	110	93	273	148	157	172	2160	395	66	1249	111
PCE 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
MLF 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
FinalVolume:	338	110	93	273	148	157	172	2160	395	66	1249	111
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.95	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.99	0.95
Lanes:	2.00	0.54	0.46	1.00	1.00	1.00	1.00	3.00	1.00	2.00	2.75	0.25
Final Sat.:	3150	975	825	1750	1900	1750	1750	5700	1750	3150	5142	457
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.16	0.08	0.09	0.10	0.38	0.23	0.02	0.24	0.24
Crit Moves:		****		****				****		****		
Green Time:	19.3	19.3	19.3	26.7	26.7	26.7	20.7	64.9	64.9	7.0	51.2	51.2
Volume/Cap:	0.72	0.76	0.76	0.76	0.38	0.44	0.62	0.76	0.45	0.39	0.62	0.62
Delay/Veh:	58.2	65.0	65.0	57.6	45.1	45.9	55.1	27.4	21.4	60.9	32.1	32.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.2	65.0	65.0	57.6	45.1	45.9	55.1	27.4	21.4	60.9	32.1	32.1
LOS by Move:	E+	E	E	E+	D	D	E+	C	C+	E	C-	C-
HCM2kAvgQ:	9	10	10	13	5	6	8	24	11	1	14	14

Note: Queue reported is the number of cars per lane.

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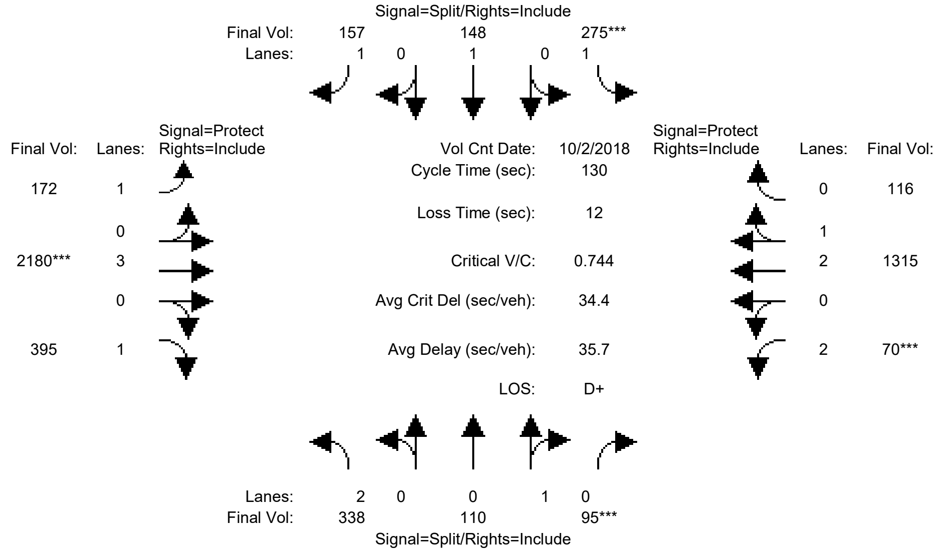
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #11: Sylvan Avenue / El Camino Real



Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	338	110	90	268	148	157	172	1932	395	59	974	99
Growth 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
Initial Bse:	338	110	90	268	148	157	172	1932	395	59	974	99
Added Vol:	0	0	5	7	0	0	0	248	0	11	341	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	338	110	95	275	148	157	172	2180	395	70	1315	116
User 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
PHF 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
PHF Volume:	338	110	95	275	148	157	172	2180	395	70	1315	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	338	110	95	275	148	157	172	2180	395	70	1315	116
PCE 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
MLF 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
FinalVolume:	338	110	95	275	148	157	172	2180	395	70	1315	116
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.95	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.83	0.99	0.95
Lanes:	2.00	0.54	0.46	1.00	1.00	1.00	1.00	3.00	1.00	2.00	2.75	0.25
Final Sat.:	3150	966	834	1750	1900	1750	1750	5700	1750	3150	5145	454
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.16	0.08	0.09	0.10	0.38	0.23	0.02	0.26	0.26
Crit Moves:			****	****				****		****		
Green Time:	19.3	19.3	19.3	26.7	26.7	26.7	20.0	65.0	65.0	7.0	52.0	52.0
Volume/Cap:	0.72	0.77	0.77	0.77	0.38	0.44	0.64	0.77	0.45	0.41	0.64	0.64
Delay/Veh:	58.2	65.5	65.5	58.2	45.1	45.9	56.7	27.6	21.4	61.1	32.1	32.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.2	65.5	65.5	58.2	45.1	45.9	56.7	27.6	21.4	61.1	32.1	32.1
LOS by Move:	E+	E	E	E+	D	D	E+	C	C+	E	C-	C-
HCM2kAvgQ:	9	10	10	13	5	6	8	24	11	2	15	15

Note: Queue reported is the number of cars per lane.

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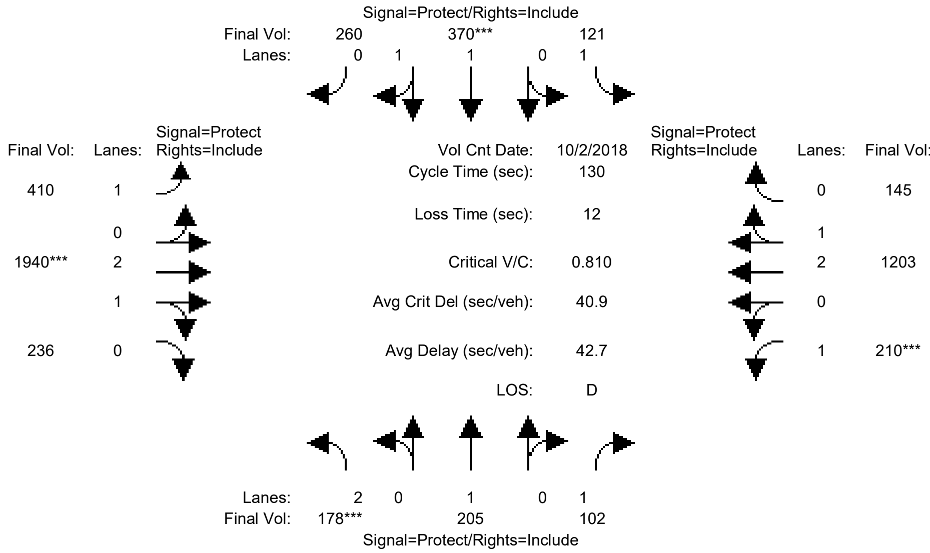
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #12: Bernardo Avenue / El Camino Real



Street Name:	Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	178	205	99	116	370	260	410	1703	236	203	908	133
Growth 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
Initial Bse:	178	205	99	116	370	260	410	1703	236	203	908	133
Added Vol:	0	0	3	5	0	0	0	237	0	7	295	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	178	205	102	121	370	260	410	1940	236	210	1203	145
User 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
PHF 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
PHF Volume:	178	205	102	121	370	260	410	1940	236	210	1203	145
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	178	205	102	121	370	260	410	1940	236	210	1203	145
PCE 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
MLF 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
FinalVolume:	178	205	102	121	370	260	410	1940	236	210	1203	145
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	2.00	1.00	1.00	1.00	1.15	0.85	1.00	2.66	0.34	1.00	2.67	0.33
Final Sat.:	3150	1900	1750	1750	2172	1526	1750	4992	607	1750	4997	602
Capacity Analysis Module:												
Vol/Sat:	0.06	0.11	0.06	0.07	0.17	0.17	0.23	0.39	0.39	0.12	0.24	0.24
Crit Moves:	****				****			****		****		
Green Time:	9.1	22.2	22.2	14.2	27.3	27.3	40.2	62.4	62.4	19.3	41.4	41.4
Volume/Cap:	0.81	0.63	0.34	0.63	0.81	0.81	0.76	0.81	0.81	0.81	0.76	0.76
Delay/Veh:	79.4	54.1	48.2	62.1	55.3	55.3	46.5	30.7	30.7	70.8	41.7	41.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	79.4	54.1	48.2	62.1	55.3	55.3	46.5	30.7	30.7	70.8	41.7	41.7
LOS by Move:	E-	D-	D	E	E+	E+	D	C	C	E	D	D
HCM2kAvgQ:	6	8	4	6	14	14	16	25	25	9	16	16

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
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Intersection #12: Bernardo Avenue / El Camino Real

Signal=Protect/Rights=Include
Final Vol: 260 370*** 123
Lanes: 0 1 1 0 1

Westbound: Signal=Protect, Rights=Include
Lanes: 0, 1, 2, 0, 1
Final Vol: 150, 1277, 214***

Eastbound: Signal=Protect, Rights=Include
Final Vol: 410, 1962***, 236
Lanes: 1, 0, 2, 1, 0

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 130
Loss Time (sec): 12
Critical V/C: 0.817
Avg Crit Del (sec/veh): 41.3
Avg Delay (sec/veh): 43.0
LOS: D

Lanes: 2 0 1 0 1
Final Vol: 178*** 205 104
Signal=Protect/Rights=Include

Street Name:	Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	178	205	99	116	370	260	410	1703	236	203	908	133
Growth 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
Initial Bse:	178	205	99	116	370	260	410	1703	236	203	908	133
Added Vol:	0	0	5	7	0	0	0	259	0	11	369	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	178	205	104	123	370	260	410	1962	236	214	1277	150
User 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
PHF 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
PHF Volume:	178	205	104	123	370	260	410	1962	236	214	1277	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	178	205	104	123	370	260	410	1962	236	214	1277	150
PCE 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
MLF 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
FinalVolume:	178	205	104	123	370	260	410	1962	236	214	1277	150
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	2.00	1.00	1.00	1.00	1.15	0.85	1.00	2.67	0.33	1.00	2.67	0.33
Final Sat.:	3150	1900	1750	1750	2172	1526	1750	4998	601	1750	5011	589
Capacity Analysis Module:												
Vol/Sat:	0.06	0.11	0.06	0.07	0.17	0.17	0.23	0.39	0.39	0.12	0.25	0.25
Crit Moves:	****				****			****		****		
Green Time:	9.0	21.9	21.9	14.2	27.1	27.1	39.2	62.5	62.5	19.5	42.7	42.7
Volume/Cap:	0.82	0.64	0.35	0.64	0.82	0.82	0.78	0.82	0.82	0.82	0.78	0.78
Delay/Veh:	80.5	54.8	48.6	62.6	55.9	55.9	48.5	31.0	31.0	71.4	41.5	41.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	80.5	54.8	48.6	62.6	55.9	55.9	48.5	31.0	31.0	71.4	41.5	41.5
LOS by Move:	F	D-	D	E	E+	E+	D	C	C	E	D	D
HCM2kAvgQ:	6	9	4	6	14	14	16	25	25	9	16	16

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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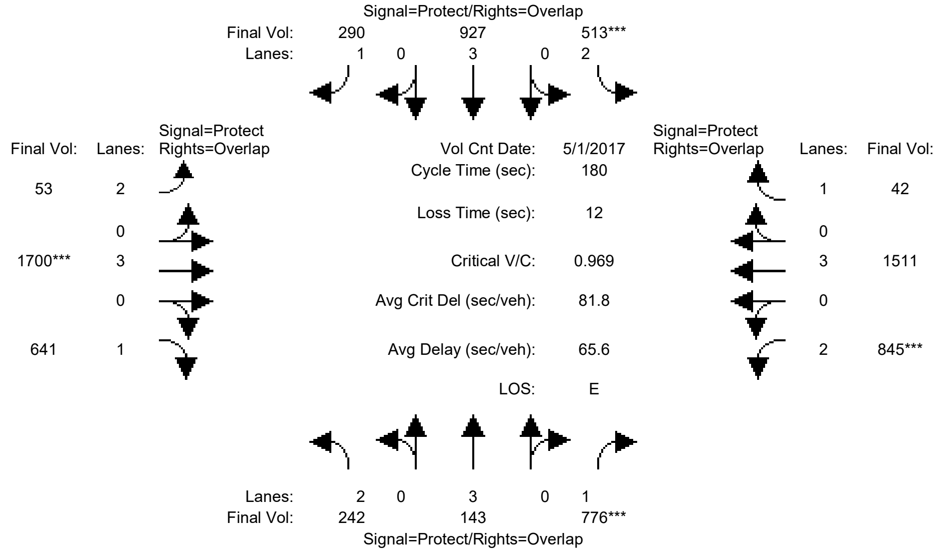
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #13: Mary Avenue / Central Expressway (CMP)



Street Name:	Mary Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	212	115	605	377	772	210	39	1527	621	686	1251	18
Growth 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
Initial Bse:	212	115	605	377	772	210	39	1527	621	686	1251	18
Added Vol:	30	28	171	136	155	80	14	173	20	159	260	24
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	242	143	776	513	927	290	53	1700	641	845	1511	42
User 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
PHF 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
PHF Volume:	242	143	776	513	927	290	53	1700	641	845	1511	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	242	143	776	513	927	290	53	1700	641	845	1511	42
PCE 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
MLF 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
FinalVolume:	242	143	776	513	927	290	53	1700	641	845	1511	42
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.03	0.44	0.16	0.16	0.17	0.02	0.30	0.37	0.27	0.27	0.02
Crit Moves:			****	****				****		****		
Green Time:	20.1	32.5	82.4	30.2	42.6	56.1	13.5	55.4	75.5	49.8	91.8	122.0
Volume/Cap:	0.69	0.14	0.97	0.97	0.69	0.53	0.22	0.97	0.87	0.97	0.52	0.04
Delay/Veh:	82.5	62.0	71.9	105.7	64.1	52.1	78.8	76.3	59.0	87.5	29.6	9.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	82.5	62.0	71.9	105.7	64.1	52.1	78.8	76.3	59.0	87.5	29.6	9.6
LOS by Move:	F	E	E	F	E	D-	E-	E-	E+	F	C	A
HCM2kAvgQ:	8	2	49	21	16	14	2	34	36	32	18	1

Note: Queue reported is the number of cars per lane.

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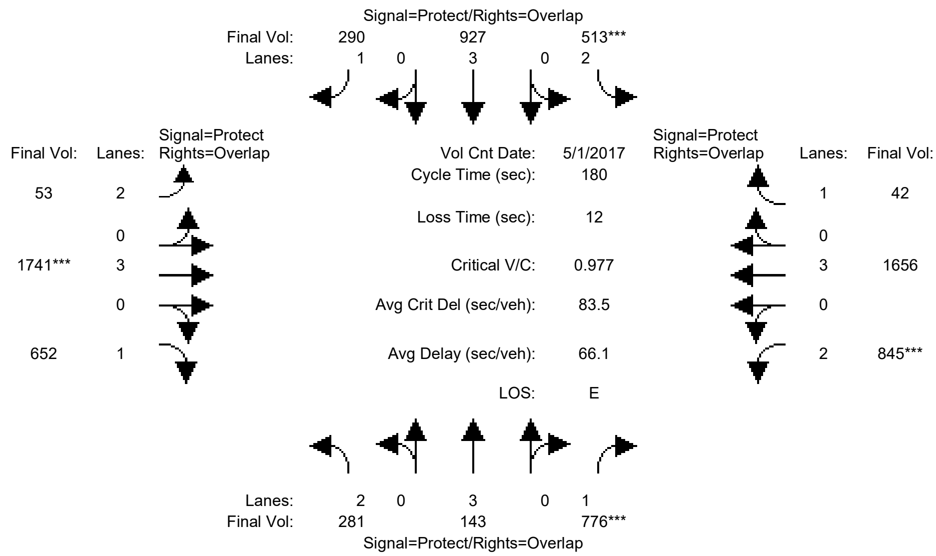
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #13: Mary Avenue / Central Expressway (CMP)



Street Name:	Mary Avenue						Central Expressway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	212	115	605	377	772	210	39	1527	621	686	1251	18
Growth 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
Initial Bse:	212	115	605	377	772	210	39	1527	621	686	1251	18
Added Vol:	69	28	171	136	155	80	14	214	31	159	405	24
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	281	143	776	513	927	290	53	1741	652	845	1656	42
User 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
PHF 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
PHF Volume:	281	143	776	513	927	290	53	1741	652	845	1656	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	281	143	776	513	927	290	53	1741	652	845	1656	42
PCE 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
MLF 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
FinalVolume:	281	143	776	513	927	290	53	1741	652	845	1656	42
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.09	0.03	0.44	0.16	0.16	0.17	0.02	0.31	0.37	0.27	0.29	0.02
Crit Moves:			****	****				****		****		
Green Time:	22.1	32.3	81.7	30.0	40.2	52.7	12.5	56.3	78.3	49.4	93.2	123.2
Volume/Cap:	0.73	0.14	0.98	0.98	0.73	0.57	0.24	0.98	0.86	0.98	0.56	0.04
Delay/Veh:	82.9	62.2	74.4	107.9	67.0	55.4	79.9	77.3	55.2	89.6	29.7	9.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	82.9	62.2	74.4	107.9	67.0	55.4	79.9	77.3	55.2	89.6	29.7	9.2
LOS by Move:	F	E	E	F	E	E+	E-	E-	E+	F	C	A
HCM2kAvgQ:	9	2	50	21	17	15	2	35	36	33	20	1

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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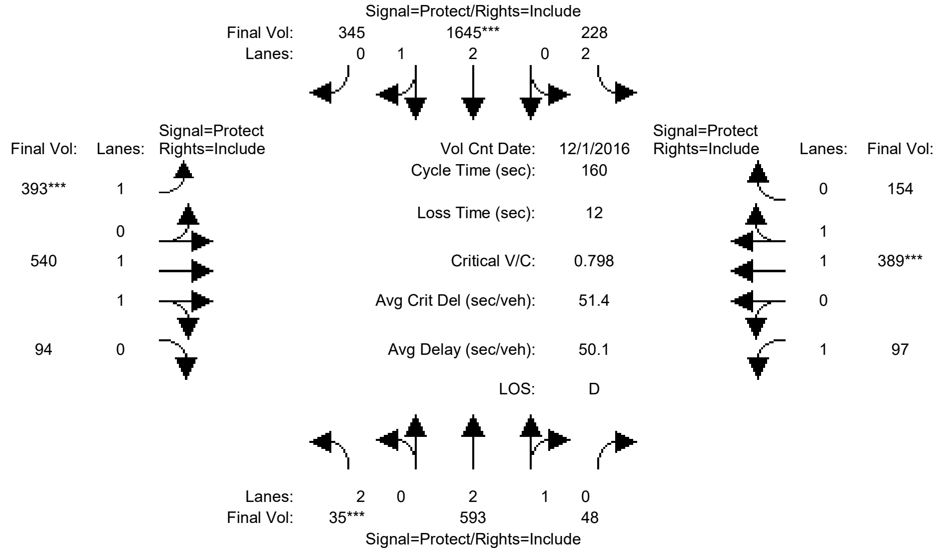
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #14: Mary Avenue / Evelyn Avenue



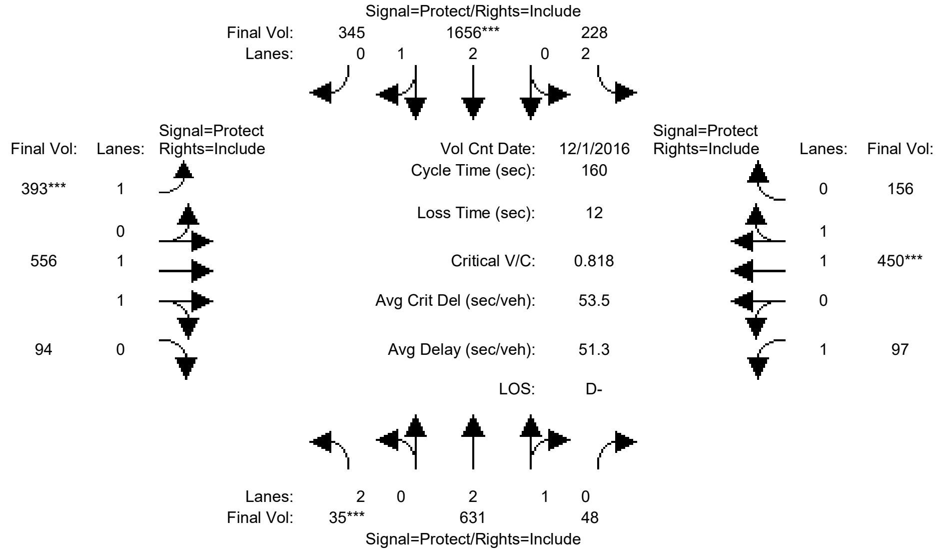
Street Name:	Mary Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	36	428	44	224	1358	303	344	486	95	79	280	140
Growth 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
Initial Bse:	36	428	44	224	1358	303	344	486	95	79	280	140
Added Vol:	-1	165	4	4	287	42	49	54	-1	18	109	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	35	593	48	228	1645	345	393	540	94	97	389	154
User 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
PHF 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
PHF Volume:	35	593	48	228	1645	345	393	540	94	97	389	154
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	593	48	228	1645	345	393	540	94	97	389	154
PCE 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
MLF 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
FinalVolume:	35	593	48	228	1645	345	393	540	94	97	389	154
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	2.00	2.77	0.23	2.00	2.46	0.54	1.00	1.70	0.30	1.00	1.42	0.58
Final Sat.:	3150	5180	419	3150	4628	971	1750	3151	549	1750	2650	1049
Capacity Analysis Module:												
Vol/Sat:	0.01	0.11	0.11	0.07	0.36	0.36	0.22	0.17	0.17	0.06	0.15	0.15
Crit Moves:	****				****		****				****	
Green Time:	7.0	46.5	46.5	29.4	69.0	69.0	43.6	54.4	54.4	17.6	28.5	28.5
Volume/Cap:	0.25	0.39	0.39	0.39	0.82	0.82	0.82	0.50	0.50	0.50	0.82	0.82
Delay/Veh:	75.0	45.6	45.6	57.9	42.6	42.6	65.8	42.4	42.4	69.2	71.7	71.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	75.0	45.6	45.6	57.9	42.6	42.6	65.8	42.4	42.4	69.2	71.7	71.7
LOS by Move:	E	D	D	E+	D	D	E	D	D	E	E	E
HCM2kAvgQ:	1	8	8	6	29	29	19	12	12	5	15	15

Note: Queue reported is the number of cars per lane.

Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #14: Mary Avenue / Evelyn Avenue



Street Name:	Mary Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	36	428	44	224	1358	303	344	486	95	79	280	140
Growth 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
Initial Bse:	36	428	44	224	1358	303	344	486	95	79	280	140
Added Vol:	-1	203	4	4	298	42	49	70	-1	18	170	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	35	631	48	228	1656	345	393	556	94	97	450	156
User 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
PHF 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
PHF Volume:	35	631	48	228	1656	345	393	556	94	97	450	156
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	631	48	228	1656	345	393	556	94	97	450	156
PCE 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
MLF 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
FinalVolume:	35	631	48	228	1656	345	393	556	94	97	450	156
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	2.00	2.78	0.22	2.00	2.46	0.54	1.00	1.70	0.30	1.00	1.47	0.53
Final Sat.:	3150	5204	396	3150	4633	965	1750	3165	535	1750	2747	952
Capacity Analysis Module:												
Vol/Sat:	0.01	0.12	0.12	0.07	0.36	0.36	0.22	0.18	0.18	0.06	0.16	0.16
Crit Moves:	****				****		****				****	
Green Time:	7.0	46.7	46.7	27.9	67.6	67.6	42.5	55.8	55.8	17.6	31.0	31.0
Volume/Cap:	0.25	0.42	0.42	0.42	0.85	0.85	0.85	0.50	0.50	0.50	0.85	0.85
Delay/Veh:	75.0	45.8	45.8	59.3	44.6	44.6	69.2	41.5	41.5	69.2	71.4	71.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	75.0	45.8	45.8	59.3	44.6	44.6	69.2	41.5	41.5	69.2	71.4	71.4
LOS by Move:	E	D	D	E+	D	D	E	D	D	E	E	E
HCM2kAvgQ:	1	9	9	6	30	30	19	12	12	5	17	17

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #15: Mary Avenue / Washington Avenue

Signal=Protect/Rights=Include
Final Vol: 84 1526*** 84
Lanes: 0 1 1 0 1

Westbound approach: Signal=Permit, Rights=Include
Eastbound approach: Signal=Permit, Rights=Include

Final Vol:	Lanes:				Lanes:	Final Vol:
44	0		Vol Cnt Date:	11/1/2017	1	43
			Cycle Time (sec):	100		
	1		Loss Time (sec):	12	0	
130	0		Critical V/C:	0.663	0	119***
	0		Avg Crit Del (sec/veh):	16.8	1	
42	1		Avg Delay (sec/veh):	19.0	0	84
			LOS:	B-		

Lanes: 1 0 1 1 0
Final Vol: 62*** 515 80
Signal=Protect/Rights=Include

Street Name:	Mary Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Nov 2017 <<												
Base Vol:	60	367	79	68	1258	63	39	110	41	82	85	28
Growth 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
Initial Bse:	60	367	79	68	1258	63	39	110	41	82	85	28
Added Vol:	2	148	1	16	268	21	5	20	1	2	34	15
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	62	515	80	84	1526	84	44	130	42	84	119	43
User 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
PHF 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
PHF Volume:	62	515	80	84	1526	84	44	130	42	84	119	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	515	80	84	1526	84	44	130	42	84	119	43
PCE 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
MLF 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
FinalVolume:	62	515	80	84	1526	84	44	130	42	84	119	43
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	1.72	0.28	1.00	1.89	0.11	0.25	0.75	1.00	0.41	0.59	1.00
Final Sat.:	1750	3202	497	1750	3507	193	455	1345	1750	745	1055	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.16	0.16	0.05	0.44	0.44	0.10	0.10	0.02	0.11	0.11	0.02
Crit Moves:	****				****						****	
Green Time:	7.0	49.7	49.7	21.6	64.3	64.3	16.7	16.7	16.7	16.7	16.7	16.7
Volume/Cap:	0.51	0.32	0.32	0.22	0.68	0.68	0.58	0.58	0.14	0.68	0.68	0.15
Delay/Veh:	48.2	15.2	15.2	32.6	12.1	12.1	41.3	41.3	35.8	45.2	45.2	35.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.2	15.2	15.2	32.6	12.1	12.1	41.3	41.3	35.8	45.2	45.2	35.8
LOS by Move:	D	B	B	C-	B	B	D	D	D+	D	D	D+
HCM2kAvgQ:	2	5	5	2	15	15	6	6	1	6	6	1

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
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Cumulative PM Plus Project

Intersection #15: Mary Avenue / Washington Avenue

Signal=Protect/Rights=Include
Final Vol: 84 1526*** 94
Lanes: 0 1 1 0 1

Signal=Permit
Rights=Include

Final Vol: Lanes:
44 0
1
135 0
0
42 1

Vol Cnt Date: 11/1/2017
Cycle Time (sec): 100
Loss Time (sec): 12
Critical V/C: 0.670
Avg Crit Del (sec/veh): 17.5
Avg Delay (sec/veh): 19.8
LOS: B-

Signal=Permit
Rights=Include

Lanes: Final Vol:
1 81
0
0 131***
1
0 84

Lanes: 1 0 1 1 0
Final Vol: 62*** 515 80
Signal=Protect/Rights=Include

Street Name:	Mary Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Nov 2017 <<												
Base Vol:	60	367	79	68	1258	63	39	110	41	82	85	28
Growth 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
Initial Bse:	60	367	79	68	1258	63	39	110	41	82	85	28
Added Vol:	2	148	1	26	268	21	5	25	1	2	46	53
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	62	515	80	94	1526	84	44	135	42	84	131	81
User 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
PHF 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
PHF Volume:	62	515	80	94	1526	84	44	135	42	84	131	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	515	80	94	1526	84	44	135	42	84	131	81
PCE 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
MLF 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
FinalVolume:	62	515	80	94	1526	84	44	135	42	84	131	81
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	1.72	0.28	1.00	1.89	0.11	0.25	0.75	1.00	0.39	0.61	1.00
Final Sat.:	1750	3202	497	1750	3507	193	442	1358	1750	703	1097	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.16	0.16	0.05	0.44	0.44	0.10	0.10	0.02	0.12	0.12	0.05
Crit Moves:	****				****						****	
Green Time:	7.0	49.2	49.2	21.4	63.6	63.6	17.4	17.4	17.4	17.4	17.4	17.4
Volume/Cap:	0.51	0.33	0.33	0.25	0.68	0.68	0.57	0.57	0.14	0.68	0.68	0.27
Delay/Veh:	48.2	15.5	15.5	33.0	12.6	12.6	40.3	40.3	35.1	44.8	44.8	36.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.2	15.5	15.5	33.0	12.6	12.6	40.3	40.3	35.1	44.8	44.8	36.2
LOS by Move:	D	B	B	C-	B	B	D	D	D+	D	D	D+
HCM2kAvgQ:	2	5	5	2	16	16	6	6	1	7	7	2

Note: Queue reported is the number of cars per lane.

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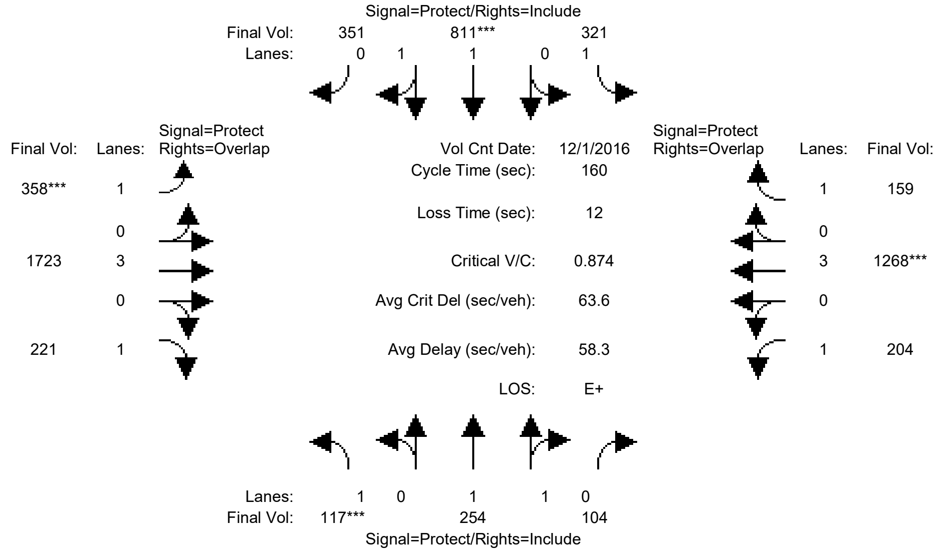
Cumulative PM

Intersection #16: Mary Avenue / El Camino Real (CMP)



Street Name:	Mary Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	117	254	101	214	811	209	233	1603	221	197	1096	140
Growth 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
Initial Bse:	117	254	101	214	811	209	233	1603	221	197	1096	140
Added Vol:	0	0	3	107	0	142	125	120	0	7	172	19
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	117	254	104	321	811	351	358	1723	221	204	1268	159
User 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
PHF 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
PHF Volume:	117	254	104	321	811	351	358	1723	221	204	1268	159
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	117	254	104	321	811	351	358	1723	221	204	1268	159
PCE 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
MLF 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
FinalVolume:	117	254	104	321	811	351	358	1723	221	204	1268	159
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.40	0.60	1.00	1.38	0.62	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	2624	1075	1750	2582	1117	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.10	0.10	0.18	0.31	0.31	0.20	0.30	0.13	0.12	0.22	0.09
Crit Moves:	****				****		****				****	
Green Time:	12.2	24.1	24.1	45.7	57.5	57.5	37.5	56.4	68.7	21.8	40.7	86.4
Volume/Cap:	0.87	0.64	0.64	0.64	0.87	0.87	0.87	0.86	0.29	0.86	0.87	0.17
Delay/Veh:	115.5	66.5	66.5	52.9	54.5	54.5	77.3	51.9	30.0	92.7	63.3	18.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	115.5	66.5	66.5	52.9	54.5	54.5	77.3	51.9	30.0	92.7	63.3	18.7
LOS by Move:	F	E	E	D-	D-	D-	E-	D-	C	F	E	B-
HCM2kAvgQ:	9	9	9	15	29	29	18	26	7	11	21	4

Note: Queue reported is the number of cars per lane.

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Intersection #16: Mary Avenue / El Camino Real (CMP)

Signal=Protect/Rights=Include
Final Vol: 351 811*** 321
Lanes: 0 1 1 0 1

Final Vol: / Lanes: / Signal=Protect Rights=Overlap (west approach)
358*** 1
0
1748 3
0
221 1

Vol Cnt Date: 12/1/2016
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 0.889
Avg Crit Del (sec/veh): 65.0
Avg Delay (sec/veh): 59.0
LOS: E+

Signal=Protect Rights=Overlap / Lanes: / Final Vol: (east approach)
1 159
0
3 1351***
0
1 208

Lanes: 1 0 1 1 0
Final Vol: 117*** 254 106
Signal=Protect/Rights=Include

Street Name:	Mary Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	117	254	101	214	811	209	233	1603	221	197	1096	140
Growth 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
Initial Bse:	117	254	101	214	811	209	233	1603	221	197	1096	140
Added Vol:	0	0	5	107	0	142	125	145	0	11	255	19
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	117	254	106	321	811	351	358	1748	221	208	1351	159
User 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
PHF 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
PHF Volume:	117	254	106	321	811	351	358	1748	221	208	1351	159
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	117	254	106	321	811	351	358	1748	221	208	1351	159
PCE 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
MLF 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
FinalVolume:	117	254	106	321	811	351	358	1748	221	208	1351	159
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.39	0.61	1.00	1.38	0.62	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	2610	1089	1750	2582	1117	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.10	0.10	0.18	0.31	0.31	0.20	0.31	0.13	0.12	0.24	0.09
Crit Moves:	****				****		****				****	
Green Time:	12.0	23.8	23.8	44.8	56.5	56.5	36.8	57.3	69.3	22.2	42.6	87.4
Volume/Cap:	0.89	0.66	0.66	0.66	0.89	0.89	0.89	0.86	0.29	0.86	0.89	0.17
Delay/Veh:	120.0	67.1	67.1	54.0	56.7	56.7	80.5	51.4	29.6	92.1	63.3	18.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	120.0	67.1	67.1	54.0	56.7	56.7	80.5	51.4	29.6	92.1	63.3	18.2
LOS by Move:	F	E	E	D-	E+	E+	F	D-	C	F	E	B-
HCM2kAvgQ:	9	9	9	15	29	29	18	26	7	11	22	4

Note: Queue reported is the number of cars per lane.

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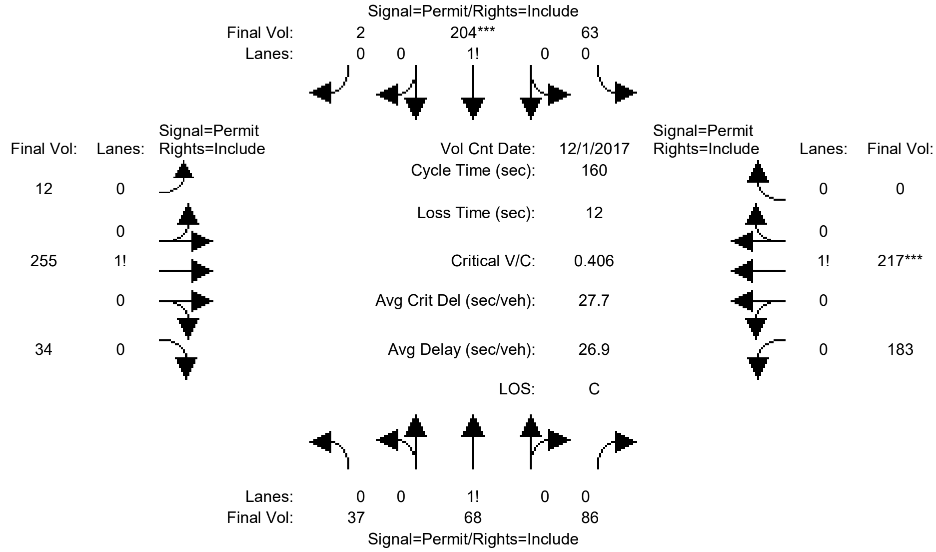
Cumulative PM

Intersection #17: Pastoria Avenue / Washington Avenue



Street Name:	Pastoria Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	37	66	63	55	186	0	12	218	34	146	168	0
Growth 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
Initial Bse:	37	66	63	55	186	0	12	218	34	146	168	0
Added Vol:	0	2	23	8	18	2	0	37	0	37	49	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	37	68	86	63	204	2	12	255	34	183	217	0
User 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
PHF 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
PHF Volume:	37	68	86	63	204	2	12	255	34	183	217	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	68	86	63	204	2	12	255	34	183	217	0
PCE 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
MLF 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
FinalVolume:	37	68	86	63	204	2	12	255	34	183	217	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	0.19	0.36	0.45	0.23	0.76	0.01	0.04	0.85	0.11	0.46	0.54	0.00
Final Sat.:	339	623	788	410	1327	13	70	1483	198	823	976	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.15	0.15	0.15	0.17	0.17	0.17	0.22	0.22	0.00
Crit Moves:					****						****	
Green Time:	60.5	60.5	60.5	60.5	60.5	60.5	87.5	87.5	87.5	87.5	87.5	0.0
Volume/Cap:	0.29	0.29	0.29	0.41	0.41	0.41	0.31	0.31	0.31	0.41	0.41	0.00
Delay/Veh:	35.0	35.0	35.0	37.0	37.0	37.0	20.0	20.0	20.0	21.4	21.4	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.0	35.0	35.0	37.0	37.0	37.0	20.0	20.0	20.0	21.4	21.4	0.0
LOS by Move:	C-	C-	C-	D+	D+	D+	C+	C+	C+	C+	C+	A
HCM2kAvgQ:	7	7	7	10	10	10	8	8	8	11	11	0

Note: Queue reported is the number of cars per lane.

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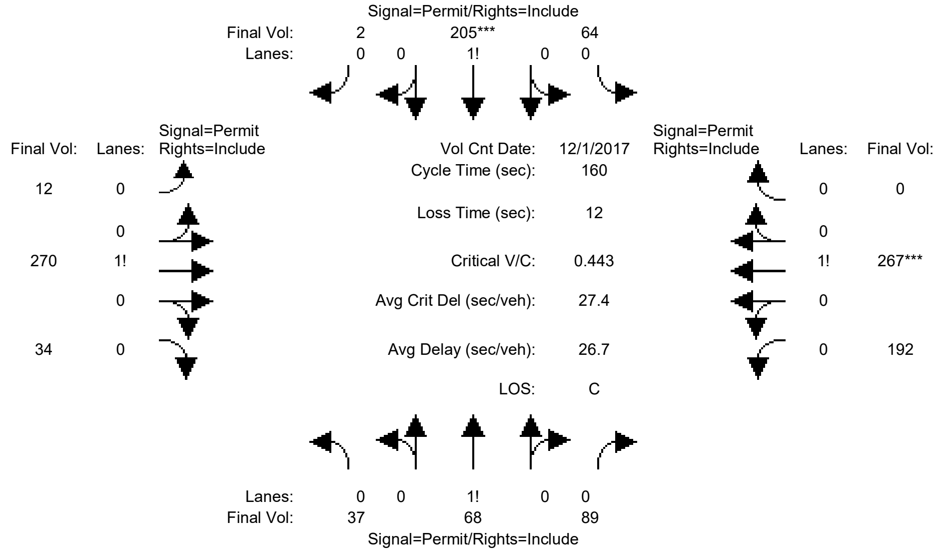
Intersection #17: Pastoria Avenue / Washington Avenue



Street Name:	Pastoria Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	37	66	63	55	186	0	12	218	34	146	168	0
Growth 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
Initial Bse:	37	66	63	55	186	0	12	218	34	146	168	0
Added Vol:	0	2	26	9	19	2	0	52	0	46	99	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	37	68	89	64	205	2	12	270	34	192	267	0
User 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
PHF 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
PHF Volume:	37	68	89	64	205	2	12	270	34	192	267	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	68	89	64	205	2	12	270	34	192	267	0
PCE 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
MLF 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
FinalVolume:	37	68	89	64	205	2	12	270	34	192	267	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	0.19	0.35	0.46	0.23	0.76	0.01	0.04	0.85	0.11	0.42	0.58	0.00
Final Sat.:	334	613	803	413	1324	13	66	1495	188	753	1047	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.15	0.15	0.15	0.18	0.18	0.18	0.26	0.26	0.00
Crit Moves:					****						****	
Green Time:	55.9	55.9	55.9	55.9	55.9	55.9	92.1	92.1	92.1	92.1	92.1	0.0
Volume/Cap:	0.32	0.32	0.32	0.44	0.44	0.44	0.31	0.31	0.31	0.44	0.44	0.00
Delay/Veh:	38.4	38.4	38.4	40.6	40.6	40.6	17.8	17.8	17.8	19.7	19.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.4	38.4	38.4	40.6	40.6	40.6	17.8	17.8	17.8	19.7	19.7	0.0
LOS by Move:	D+	D+	D+	D	D	D	B	B	B	B-	B-	A
HCM2kAvgQ:	7	7	7	11	11	11	8	8	8	12	12	0

Note: Queue reported is the number of cars per lane.

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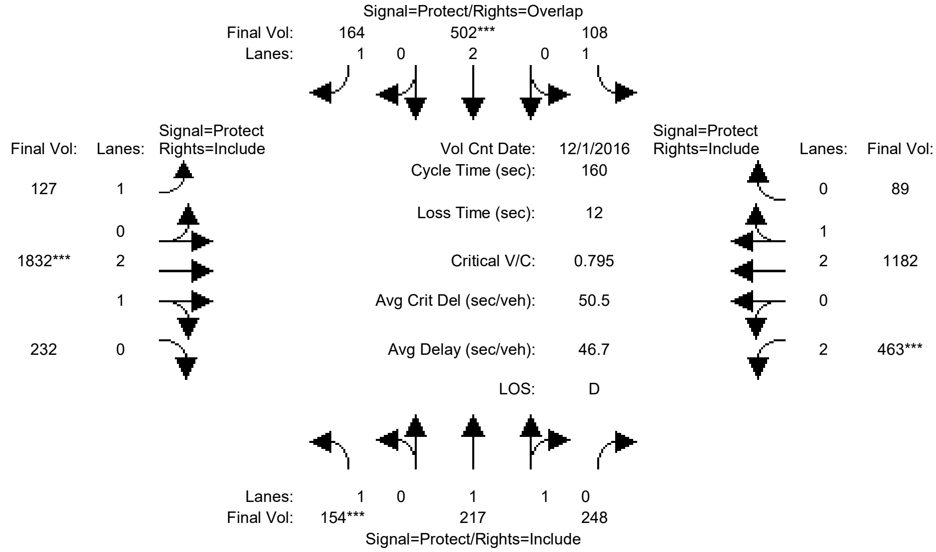
Intersection #18: El Camino Real / Hollenbeck Avenue-Pastoria Avenue



Street Name: Hollenbeck Avenue-Pastoria Avenue / El Camino Real

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	144	182	175	108	420	153	120	1658	182	357	1005	89
Growth 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
Initial Bse:	144	182	175	108	420	153	120	1658	182	357	1005	89
Added Vol:	10	35	73	0	82	11	7	174	50	106	177	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	154	217	248	108	502	164	127	1832	232	463	1182	89
User 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
PHF 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
PHF Volume:	154	217	248	108	502	164	127	1832	232	463	1182	89
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	154	217	248	108	502	164	127	1832	232	463	1182	89
PCE 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
MLF 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
FinalVolume:	154	217	248	108	502	164	127	1832	232	463	1182	89
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.83	0.99	0.95
Lanes:	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.65	0.35	2.00	2.78	0.22
Final Sat.:	1750	1900	1750	1750	3800	1750	1750	4970	629	3150	5207	392
Capacity Analysis Module:												
Vol/Sat:	0.09	0.11	0.14	0.06	0.13	0.09	0.07	0.37	0.37	0.15	0.23	0.23
Crit Moves:	****				****			****		****		
Green Time:	17.7	30.8	30.8	13.4	26.6	51.7	25.1	74.2	74.2	29.6	78.6	78.6
Volume/Cap:	0.80	0.59	0.74	0.74	0.80	0.29	0.46	0.80	0.80	0.80	0.46	0.46
Delay/Veh:	89.4	60.1	65.2	89.0	71.0	40.7	62.5	38.3	38.3	69.8	26.9	26.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	89.4	60.1	65.2	89.0	71.0	40.7	62.5	38.3	38.3	69.8	26.9	26.9
LOS by Move:	F	E	E	F	E	D	E	D+	D+	E	C	C
HCM2kAvgQ:	8	9	12	6	12	6	6	28	28	13	13	13

Note: Queue reported is the number of cars per lane.

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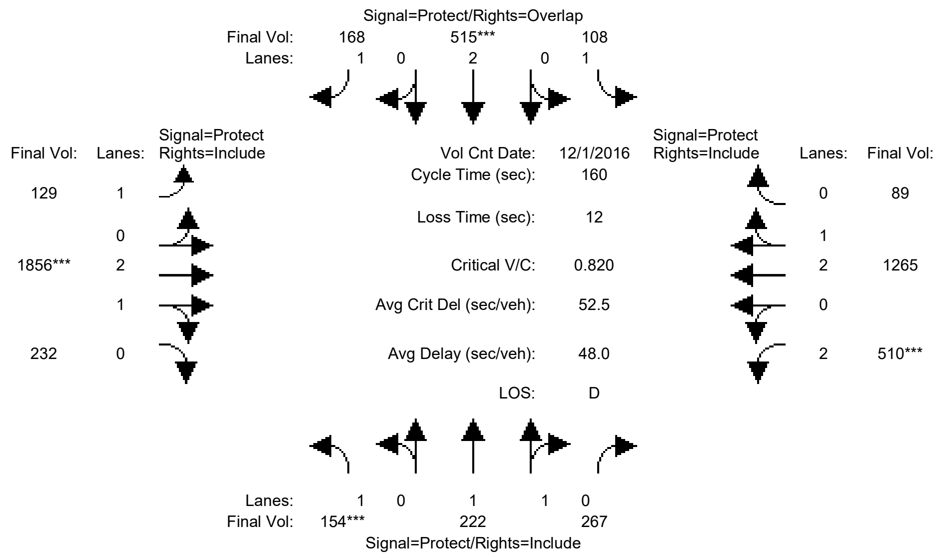
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #18: El Camino Real / Hollenbeck Avenue-Pastoria Avenue



Street Name:	Hollenbeck Avenue-Pastoria Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	144	182	175	108	420	153	120	1658	182	357	1005	89
Growth 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
Initial Bse:	144	182	175	108	420	153	120	1658	182	357	1005	89
Added Vol:	10	40	92	0	95	15	9	198	50	153	260	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	154	222	267	108	515	168	129	1856	232	510	1265	89
User 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
PHF 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
PHF Volume:	154	222	267	108	515	168	129	1856	232	510	1265	89
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	154	222	267	108	515	168	129	1856	232	510	1265	89
PCE 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
MLF 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
FinalVolume:	154	222	267	108	515	168	129	1856	232	510	1265	89
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.83	0.98	0.95
Lanes:	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.65	0.35	2.00	2.80	0.20
Final Sat.:	1750	1900	1750	1750	3800	1750	1750	4977	622	3150	5231	368
Capacity Analysis Module:												
Vol/Sat:	0.09	0.12	0.15	0.06	0.14	0.10	0.07	0.37	0.37	0.16	0.24	0.24
Crit Moves:	****				****			****		****		
Green Time:	17.2	31.1	31.1	12.6	26.4	50.8	24.4	72.8	72.8	31.6	80.0	80.0
Volume/Cap:	0.82	0.60	0.79	0.79	0.82	0.30	0.48	0.82	0.82	0.82	0.48	0.48
Delay/Veh:	93.9	60.1	67.9	97.6	72.9	41.5	63.4	40.1	40.1	70.0	26.5	26.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	93.9	60.1	67.9	97.6	72.9	41.5	63.4	40.1	40.1	70.0	26.5	26.5
LOS by Move:	F	E	E	F	E	D	E	D	D	E	C	C
HCM2kAvgQ:	8	10	14	6	13	6	6	29	29	14	14	14

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Intersection #19: Hollenbeck Avenue / Remington Avenue

Signal=Permit/Rights=Include
Final Vol: 112 785*** 91
Lanes: 0 0 1! 0 0

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
54	1		Vol Cnt Date:	10/2/2018		0	91
			Cycle Time (sec):	100			
	0		Loss Time (sec):	12		1	
351***	0		Critical V/C:	0.986		0	315
	1		Avg Crit Del (sec/veh):	61.1		0	
56	0		Avg Delay (sec/veh):	50.2		1	135***
			LOS:	D			

Lanes: 0 1 0 0 1
Final Vol: 29 460 173
Signal=Permit/Rights=Include

Street Name:	Hollenbeck Avenue						Remington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	29	360	172	91	585	75	35	332	56	129	281	91
Growth 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
Initial Bse:	29	360	172	91	585	75	35	332	56	129	281	91
Added Vol:	0	100	1	0	200	37	19	19	0	6	34	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	460	173	91	785	112	54	351	56	135	315	91
User 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
PHF 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
PHF Volume:	29	460	173	91	785	112	54	351	56	135	315	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	460	173	91	785	112	54	351	56	135	315	91
PCE 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
MLF 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
FinalVolume:	29	460	173	91	785	112	54	351	56	135	315	91
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.06	0.94	1.00	0.09	0.80	0.11	1.00	0.86	0.14	1.00	0.78	0.22
Final Sat.:	107	1693	1750	161	1390	198	1750	1552	248	1750	1397	403
Capacity Analysis Module:												
Vol/Sat:	0.27	0.27	0.10	0.56	0.56	0.56	0.03	0.23	0.23	0.08	0.23	0.23
Crit Moves:					****			****		****		
Green Time:	57.2	57.2	57.2	57.2	57.2	57.2	7.3	22.9	22.9	7.8	23.5	23.5
Volume/Cap:	0.47	0.47	0.17	0.99	0.99	0.99	0.42	0.99	0.99	0.99	0.96	0.96
Delay/Veh:	12.9	12.9	10.2	46.0	46.0	46.0	46.6	78.9	78.9	118.5	71.6	71.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.9	12.9	10.2	46.0	46.0	46.0	46.6	78.9	78.9	118.5	71.6	71.6
LOS by Move:	B	B	B+	D	D	D	D	E-	E-	F	E	E
HCM2kAvgQ:	9	9	3	36	36	36	2	19	19	5	14	14

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #19: Hollenbeck Avenue / Remington Avenue

Signal=Permit/Rights=Include
Final Vol: 118 839*** 91
Lanes: 0 0 1! 0 0

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
57	1		Vol Cnt Date:	10/2/2018		0	91
			Cycle Time (sec):	100			
	0		Loss Time (sec):	12		1	
354***	0		Critical V/C:	1.027		0	321
	1		Avg Crit Del (sec/veh):	71.5		0	
56	0		Avg Delay (sec/veh):	58.3		1	135***
			LOS:	E+			

Lanes: 0 1 0 0 1
Final Vol: 29 480 173
Signal=Permit/Rights=Include

Street Name:	Hollenbeck Avenue						Remington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	29	360	172	91	585	75	35	332	56	129	281	91
Growth 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
Initial Bse:	29	360	172	91	585	75	35	332	56	129	281	91
Added Vol:	0	120	1	0	254	43	22	22	0	6	40	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	480	173	91	839	118	57	354	56	135	321	91
User 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
PHF 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
PHF Volume:	29	480	173	91	839	118	57	354	56	135	321	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	480	173	91	839	118	57	354	56	135	321	91
PCE 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
MLF 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
FinalVolume:	29	480	173	91	839	118	57	354	56	135	321	91
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.06	0.94	1.00	0.09	0.80	0.11	1.00	0.86	0.14	1.00	0.78	0.22
Final Sat.:	103	1697	1750	152	1401	197	1750	1554	246	1750	1402	398
Capacity Analysis Module:												
Vol/Sat:	0.28	0.28	0.10	0.60	0.60	0.60	0.03	0.23	0.23	0.08	0.23	0.23
Crit Moves:					****			****		****		
Green Time:	58.3	58.3	58.3	58.3	58.3	58.3	7.0	22.2	22.2	7.5	22.7	22.7
Volume/Cap:	0.48	0.48	0.17	1.03	1.03	1.03	0.47	1.03	1.03	1.03	1.01	1.01
Delay/Veh:	12.5	12.5	9.7	56.1	56.1	56.1	47.5	91.0	91.0	132.1	85.4	85.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.5	12.5	9.7	56.1	56.1	56.1	47.5	91.0	91.0	132.1	85.4	85.4
LOS by Move:	B	B	A	E+	E+	E+	D	F	F	F	F	F
HCM2kAvgQ:	9	9	3	41	41	41	2	20	20	6	15	15

Note: Queue reported is the number of cars per lane.

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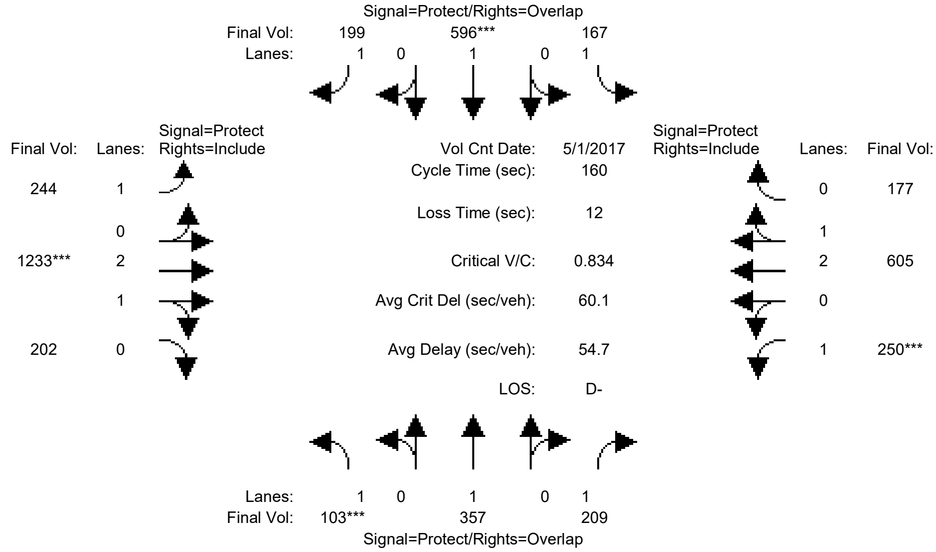
Cumulative PM

Intersection #20: Hollenbeck Avenue / Fremont Avenue



Street Name:	Hollenbeck Avenue						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	103	279	209	166	450	140	222	1205	202	250	550	176
Growth 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
Initial Bse:	103	279	209	166	450	140	222	1205	202	250	550	176
Added Vol:	0	78	0	1	146	59	22	28	0	0	55	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	103	357	209	167	596	199	244	1233	202	250	605	177
User 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
PHF 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
PHF Volume:	103	357	209	167	596	199	244	1233	202	250	605	177
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	103	357	209	167	596	199	244	1233	202	250	605	177
PCE 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
MLF 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
FinalVolume:	103	357	209	167	596	199	244	1233	202	250	605	177
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.56	0.44	1.00	2.30	0.70
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	4811	788	1750	4331	1267
Capacity Analysis Module:												
Vol/Sat:	0.06	0.19	0.12	0.10	0.31	0.11	0.14	0.26	0.26	0.14	0.14	0.14
Crit Moves:	****				****			****		****		
Green Time:	11.3	47.4	74.8	24.1	60.2	98.4	38.2	49.2	49.2	27.4	38.3	38.3
Volume/Cap:	0.83	0.63	0.26	0.63	0.83	0.18	0.58	0.83	0.83	0.83	0.58	0.58
Delay/Veh:	109.7	51.2	25.9	68.8	53.8	13.5	55.9	55.3	55.3	82.0	54.5	54.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	109.7	51.2	25.9	68.8	53.8	13.5	55.9	55.3	55.3	82.0	54.5	54.5
LOS by Move:	F	D-	C	E	D-	B	E+	E+	E+	F	D-	D-
HCM2kAvgQ:	6	15	6	8	25	4	12	24	24	12	11	11

Note: Queue reported is the number of cars per lane.

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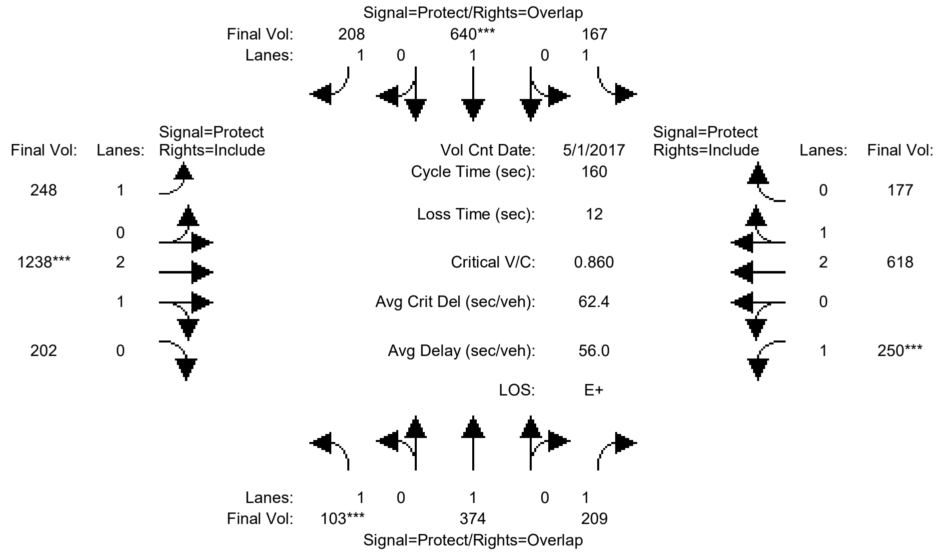
Intersection #20: Hollenbeck Avenue / Fremont Avenue



Street Name:	Hollenbeck Avenue						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	103	279	209	166	450	140	222	1205	202	250	550	176
Growth 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
Initial Bse:	103	279	209	166	450	140	222	1205	202	250	550	176
Added Vol:	0	95	0	1	190	68	26	33	0	0	68	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	103	374	209	167	640	208	248	1238	202	250	618	177
User 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
PHF 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
PHF Volume:	103	374	209	167	640	208	248	1238	202	250	618	177
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	103	374	209	167	640	208	248	1238	202	250	618	177
PCE 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
MLF 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
FinalVolume:	103	374	209	167	640	208	248	1238	202	250	618	177
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.56	0.44	1.00	2.31	0.69
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	4813	785	1750	4352	1246
Capacity Analysis Module:												
Vol/Sat:	0.06	0.20	0.12	0.10	0.34	0.12	0.14	0.26	0.26	0.14	0.14	0.14
Crit Moves:	****				****			****		****		
Green Time:	10.9	49.6	76.1	24.0	62.6	99.8	37.2	47.8	47.8	26.6	37.2	37.2
Volume/Cap:	0.86	0.64	0.25	0.64	0.86	0.19	0.61	0.86	0.86	0.86	0.61	0.61
Delay/Veh:	116.5	49.7	25.1	68.9	54.6	12.9	57.6	57.7	57.7	86.9	55.7	55.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	116.5	49.7	25.1	68.9	54.6	12.9	57.6	57.7	57.7	86.9	55.7	55.7
LOS by Move:	F	D	C	E	D-	B	E+	E+	E+	F	E+	E+
HCM2kAvgQ:	6	15	6	8	27	4	12	25	25	12	11	11

Note: Queue reported is the number of cars per lane.

Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #21: Hollenbeck Avenue / Cascade Drive

Signal=Permit/Rights=Include
Final Vol: 89 917*** 55
Lanes: 0 0 1! 0 0

Signal=Permit
Rights=Include

Final Vol: 78, 65***, 65
Lanes: 0, 0, 1!, 0, 0

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 70
Loss Time (sec): 6
Critical V/C: 0.793
Avg Crit Del (sec/veh): 14.1
Avg Delay (sec/veh): 11.6
LOS: B+

Signal=Permit
Rights=Include

Lanes: 0, 0, 1!, 0, 0
Final Vol: 43, 36, 29

Lanes: 0 0 1! 0 0
Final Vol: 31 543 27
Signal=Permit/Rights=Include

Street Name:	Hollenbeck Avenue						Cascade Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	31	497	27	19	830	67	64	65	65	29	36	24
Growth 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
Initial Bse:	31	497	27	19	830	67	64	65	65	29	36	24
Added Vol:	0	46	0	36	87	22	14	0	0	0	0	19
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	543	27	55	917	89	78	65	65	29	36	43
User 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
PHF 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
PHF Volume:	31	543	27	55	917	89	78	65	65	29	36	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	543	27	55	917	89	78	65	65	29	36	43
PCE 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
MLF 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
FinalVolume:	31	543	27	55	917	89	78	65	65	29	36	43
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.05	0.91	0.04	0.05	0.87	0.08	0.38	0.31	0.31	0.27	0.33	0.40
Final Sat.:	90	1581	79	91	1512	147	656	547	547	470	583	697
Capacity Analysis Module:												
Vol/Sat:	0.34	0.34	0.34	0.61	0.61	0.61	0.12	0.12	0.12	0.06	0.06	0.06
Crit Moves:					****			****				
Green Time:	53.5	53.5	53.5	53.5	53.5	53.5	10.5	10.5	10.5	10.5	10.5	10.5
Volume/Cap:	0.45	0.45	0.45	0.79	0.79	0.79	0.79	0.79	0.79	0.41	0.41	0.41
Delay/Veh:	3.2	3.2	3.2	8.3	8.3	8.3	43.9	43.9	43.9	28.0	28.0	28.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	3.2	3.2	3.2	8.3	8.3	8.3	43.9	43.9	43.9	28.0	28.0	28.0
LOS by Move:	A	A	A	A	A	A	D	D	D	C	C	C
HCM2kAvgQ:	5	5	5	15	15	15	7	7	7	3	3	3

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #21: Hollenbeck Avenue / Cascade Drive

Signal=Permit/Rights=Include
Final Vol: 97 945*** 65
Lanes: 0 0 1! 0 0

Final Vol:	Lanes:	Signal=Permit Rights=Include			Signal=Permit Rights=Include	Lanes:	Final Vol:
81	0		Vol Cnt Date:	10/2/2018		0	46
			Cycle Time (sec):	70			
	0		Loss Time (sec):	6		0	
65***	1!		Critical V/C:	0.824		1!	36
	0		Avg Crit Del (sec/veh):	15.6		0	
65	0		Avg Delay (sec/veh):	12.6		0	29
			LOS:	B			

Lanes: 0 0 1! 0 0
Final Vol: 31 553 27
Signal=Permit/Rights=Include

Street Name:	Hollenbeck Avenue						Cascade Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	31	497	27	19	830	67	64	65	65	29	36	24
Growth 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
Initial Bse:	31	497	27	19	830	67	64	65	65	29	36	24
Added Vol:	0	56	0	46	115	30	17	0	0	0	0	22
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	553	27	65	945	97	81	65	65	29	36	46
User 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
PHF 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
PHF Volume:	31	553	27	65	945	97	81	65	65	29	36	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	553	27	65	945	97	81	65	65	29	36	46
PCE 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
MLF 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
FinalVolume:	31	553	27	65	945	97	81	65	65	29	36	46
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.05	0.91	0.04	0.06	0.85	0.09	0.38	0.31	0.31	0.26	0.32	0.42
Final Sat.:	89	1584	77	103	1494	153	672	539	539	457	568	725
Capacity Analysis Module:												
Vol/Sat:	0.35	0.35	0.35	0.63	0.63	0.63	0.12	0.12	0.12	0.06	0.06	0.06
Crit Moves:					****			****				
Green Time:	53.8	53.8	53.8	53.8	53.8	53.8	10.2	10.2	10.2	10.2	10.2	10.2
Volume/Cap:	0.45	0.45	0.45	0.82	0.82	0.82	0.82	0.82	0.82	0.43	0.43	0.43
Delay/Veh:	3.1	3.1	3.1	9.4	9.4	9.4	48.0	48.0	48.0	28.4	28.4	28.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	3.1	3.1	3.1	9.4	9.4	9.4	48.0	48.0	48.0	28.4	28.4	28.4
LOS by Move:	A	A	A	A	A	A	D	D	D	C	C	C
HCM2kAvgQ:	5	5	5	16	16	16	7	7	7	3	3	3

Note: Queue reported is the number of cars per lane.

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	80	0	190	754	120	64	92	222	665	0	0	3012
Future Volume (vph)	80	0	190	754	120	64	92	222	665	0	0	3012
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0	7.0	7.0			7.0	6.9			6.9
Lane Util. Factor		0.95	0.95	0.91	0.91			0.97	0.91			0.91
Frt		0.94	0.85	1.00	0.98			1.00	1.00			0.97
Flt Protected		0.97	1.00	0.95	0.97			0.95	1.00			1.00
Satd. Flow (prot)		1611	1504	1610	3224			3433	5085			4948
Flt Permitted		0.97	1.00	0.95	0.97			0.95	1.00			1.00
Satd. Flow (perm)		1611	1504	1610	3224			3433	5085			4948
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	80	0	190	754	120	64	92	222	665	0	0	3012
RTOR Reduction (vph)	0	114	114	0	6	0	0	0	0	0	0	23
Lane Group Flow (vph)	0	25	17	377	555	0	0	314	665	0	0	3652
Turn Type	Split	NA	Perm	Split	NA		Prot	Prot	NA			NA
Protected Phases	4	4		8	8		5	5	2			6
Permitted Phases			4									
Actuated Green, G (s)		18.0	18.0	33.0	33.0			8.0	78.1			63.1
Effective Green, g (s)		18.0	18.0	33.0	33.0			8.0	78.1			63.1
Actuated g/C Ratio		0.12	0.12	0.22	0.22			0.05	0.52			0.42
Clearance Time (s)		7.0	7.0	7.0	7.0			7.0	6.9			6.9
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)		193	180	354	709			183	2647			2081
v/s Ratio Prot		c0.02		c0.23	0.17			c0.09	0.13			c0.74
v/s Ratio Perm			0.01									
v/c Ratio		0.13	0.09	1.06	1.00dl			1.72	0.25			1.75
Uniform Delay, d1		59.0	58.7	58.5	55.1			71.0	19.8			43.5
Progression Factor		1.00	1.00	1.00	1.00			0.94	0.74			1.00
Incremental Delay, d2		1.4	1.0	66.1	8.4			344.2	0.1			341.7
Delay (s)		60.3	59.7	124.6	63.5			411.0	14.8			385.1
Level of Service		E	E	F	E			F	B			F
Approach Delay (s)		60.1			88.1				141.9			385.1
Approach LOS		E			F				F			F

Intersection Summary			
HCM 2000 Control Delay	282.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	27.9
Intersection Capacity Utilization	134.4%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	663
Future Volume (vph)	663
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	1.00
Adj. Flow (vph)	663
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	
Intersection Summary	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	159	12	181	0	0	0	0	851	876	466	3771	0
Future Volume (vph)	159	12	181	0	0	0	0	851	876	466	3771	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0					6.2	6.2	6.4	5.9	
Lane Util. Factor	0.95	0.95	1.00					0.81	0.88	1.00	0.91	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1697	1583					7544	2787	1770	5085	
Flt Permitted	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1697	1583					7544	2787	1770	5085	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	159	12	181	0	0	0	0	851	876	466	3771	0
RTOR Reduction (vph)	0	0	58	0	0	0	0	0	487	0	0	0
Lane Group Flow (vph)	86	85	123	0	0	0	0	851	389	466	3771	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	26.0	26.0	26.0					59.7	59.7	44.7	111.1	
Effective Green, g (s)	26.0	26.0	26.0					59.7	59.7	44.7	111.1	
Actuated g/C Ratio	0.17	0.17	0.17					0.40	0.40	0.30	0.74	
Clearance Time (s)	7.0	7.0	7.0					6.2	6.2	6.4	5.9	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	291	294	274					3002	1109	527	3766	
v/s Ratio Prot	0.05	0.05						0.11		0.26	c0.74	
v/s Ratio Perm			c0.08						0.14			
v/c Ratio	0.30	0.29	0.45					0.28	0.35	0.88	1.00	
Uniform Delay, d1	54.0	54.0	55.6					30.6	31.6	50.2	19.5	
Progression Factor	1.00	1.00	1.00					0.67	4.72	1.21	0.47	
Incremental Delay, d2	2.6	2.5	5.3					0.0	0.2	4.4	7.3	
Delay (s)	56.6	56.4	60.8					20.7	149.2	64.9	16.3	
Level of Service	E	E	E					C	F	E	B	
Approach Delay (s)		58.7			0.0			85.9			21.7	
Approach LOS		E			A			F			C	

Intersection Summary			
HCM 2000 Control Delay	41.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	94.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	56	171	109	8	68	62	1538	456	253	3666	81
Future Volume (vph)	81	56	171	109	8	68	62	1538	456	253	3666	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.81		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	1.00	1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1556	1761	1863	1583	1770	7228		1770	5069	
Flt Permitted	0.75	1.00	1.00	0.72	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1402	1863	1556	1335	1863	1583	1770	7228		1770	5069	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	81	56	171	109	8	68	62	1538	456	253	3666	81
RTOR Reduction (vph)	0	0	97	0	0	49	0	40	0	0	1	0
Lane Group Flow (vph)	81	56	74	109	8	19	62	1954	0	253	3746	0
Confl. Peds. (#/hr)			5	5					5			
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Actuated Green, G (s)	41.0	41.0	41.0	41.0	41.0	41.0	10.0	58.5		30.1	78.4	
Effective Green, g (s)	41.0	41.0	41.0	41.0	41.0	41.0	10.0	58.5		30.1	78.4	
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	0.27	0.07	0.39		0.20	0.52	
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	383	509	425	364	509	432	118	2818		355	2649	
v/s Ratio Prot		0.03			0.00		0.04	c0.27		0.14	c0.74	
v/s Ratio Perm	0.06		0.05	c0.08		0.01						
v/c Ratio	0.21	0.11	0.17	0.30	0.02	0.04	0.53	0.69		0.71	1.41	
Uniform Delay, d1	42.0	40.8	41.6	43.1	39.8	40.1	67.7	38.2		55.9	35.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.21	0.99		0.71	0.52	
Incremental Delay, d2	0.3	0.1	0.2	2.1	0.1	0.2	15.6	0.7		2.0	186.9	
Delay (s)	42.3	40.9	41.8	45.2	39.8	40.3	97.4	38.4		41.5	205.4	
Level of Service	D	D	D	D	D	D	F	D		D	F	
Approach Delay (s)		41.8			43.2			40.2			195.0	
Approach LOS		D			D			D			F	

Intersection Summary			
HCM 2000 Control Delay	134.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	110.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	80	0	190	771	120	64	96	227	680	0	0	3018
Future Volume (vph)	80	0	190	771	120	64	96	227	680	0	0	3018
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.0	7.0	7.0	7.0			7.0	6.9			6.9
Lane Util. Factor		0.95	0.95	0.91	0.91			0.97	0.91			0.91
Frt		0.94	0.85	1.00	0.98			1.00	1.00			0.97
Flt Protected		0.97	1.00	0.95	0.97			0.95	1.00			1.00
Satd. Flow (prot)		1611	1504	1610	3224			3433	5085			4948
Flt Permitted		0.97	1.00	0.95	0.97			0.95	1.00			1.00
Satd. Flow (perm)		1611	1504	1610	3224			3433	5085			4948
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	80	0	190	771	120	64	96	227	680	0	0	3018
RTOR Reduction (vph)	0	114	114	0	6	0	0	0	0	0	0	23
Lane Group Flow (vph)	0	25	17	385	564	0	0	323	680	0	0	3658
Turn Type	Split	NA	Perm	Split	NA		Prot	Prot	NA			NA
Protected Phases	4	4		8	8		5	5	2			6
Permitted Phases			4									
Actuated Green, G (s)		18.0	18.0	33.0	33.0			8.0	78.1			63.1
Effective Green, g (s)		18.0	18.0	33.0	33.0			8.0	78.1			63.1
Actuated g/C Ratio		0.12	0.12	0.22	0.22			0.05	0.52			0.42
Clearance Time (s)		7.0	7.0	7.0	7.0			7.0	6.9			6.9
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0	3.0			3.0
Lane Grp Cap (vph)		193	180	354	709			183	2647			2081
v/s Ratio Prot		c0.02		c0.24	0.17			c0.09	0.13			c0.74
v/s Ratio Perm			0.01									
v/c Ratio		0.13	0.09	1.09	1.03dl			1.77	0.26			1.76
Uniform Delay, d1		59.0	58.7	58.5	55.3			71.0	19.9			43.5
Progression Factor		1.00	1.00	1.00	1.00			0.94	0.74			1.00
Incremental Delay, d2		1.4	1.0	73.3	9.0			365.6	0.1			343.0
Delay (s)		60.3	59.7	131.8	64.3			432.4	14.9			386.4
Level of Service		E	E	F	E			F	B			F
Approach Delay (s)		60.1			91.5				149.3			386.4
Approach LOS		E			F				F			F

Intersection Summary			
HCM 2000 Control Delay	283.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.34		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	27.9
Intersection Capacity Utilization	135.2%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	663
Future Volume (vph)	663
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Peak-hour factor, PHF	1.00
Adj. Flow (vph)	663
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	159	12	183	0	0	0	0	876	941	466	3794	0
Future Volume (vph)	159	12	183	0	0	0	0	876	941	466	3794	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0					6.2	6.2	6.4	5.9	
Lane Util. Factor	0.95	0.95	1.00					0.81	0.88	1.00	0.91	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1697	1583					7544	2787	1770	5085	
Flt Permitted	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1697	1583					7544	2787	1770	5085	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	159	12	183	0	0	0	0	876	941	466	3794	0
RTOR Reduction (vph)	0	0	58	0	0	0	0	0	487	0	0	0
Lane Group Flow (vph)	86	85	125	0	0	0	0	876	454	466	3794	0
Turn Type	Split	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	26.0	26.0	26.0					59.7	59.7	44.7	111.1	
Effective Green, g (s)	26.0	26.0	26.0					59.7	59.7	44.7	111.1	
Actuated g/C Ratio	0.17	0.17	0.17					0.40	0.40	0.30	0.74	
Clearance Time (s)	7.0	7.0	7.0					6.2	6.2	6.4	5.9	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	291	294	274					3002	1109	527	3766	
v/s Ratio Prot	0.05	0.05						0.12		0.26	c0.75	
v/s Ratio Perm			c0.08						0.16			
v/c Ratio	0.30	0.29	0.46					0.29	0.41	0.88	1.01	
Uniform Delay, d1	54.0	54.0	55.7					30.8	32.5	50.2	19.5	
Progression Factor	1.00	1.00	1.00					0.65	3.41	1.23	0.57	
Incremental Delay, d2	2.6	2.5	5.4					0.0	0.2	1.8	6.4	
Delay (s)	56.6	56.4	61.1					20.2	110.8	63.4	17.5	
Level of Service	E	E	E					C	F	E	B	
Approach Delay (s)		58.9			0.0			67.1			22.5	
Approach LOS		E			A			E			C	

Intersection Summary			
HCM 2000 Control Delay	37.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	95.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	56	171	111	8	68	62	1626	461	253	3691	81
Future Volume (vph)	81	56	171	111	8	68	62	1626	461	253	3691	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.81		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	1.00	1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1556	1761	1863	1583	1770	7238		1770	5069	
Flt Permitted	0.75	1.00	1.00	0.72	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1402	1863	1556	1335	1863	1583	1770	7238		1770	5069	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	81	56	171	111	8	68	62	1626	461	253	3691	81
RTOR Reduction (vph)	0	0	97	0	0	49	0	37	0	0	1	0
Lane Group Flow (vph)	81	56	74	111	8	19	62	2050	0	253	3771	0
Confl. Peds. (#/hr)			5	5					5			
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Actuated Green, G (s)	41.0	41.0	41.0	41.0	41.0	41.0	10.0	61.0		27.6	78.4	
Effective Green, g (s)	41.0	41.0	41.0	41.0	41.0	41.0	10.0	61.0		27.6	78.4	
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	0.27	0.07	0.41		0.18	0.52	
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.4		7.0	6.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	383	509	425	364	509	432	118	2943		325	2649	
v/s Ratio Prot		0.03			0.00		0.04	c0.28		0.14	c0.74	
v/s Ratio Perm	0.06		0.05	c0.08		0.01						
v/c Ratio	0.21	0.11	0.17	0.30	0.02	0.04	0.53	0.70		0.78	1.42	
Uniform Delay, d1	42.0	40.8	41.6	43.2	39.8	40.1	67.7	36.8		58.3	35.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.19	0.96		0.72	0.52	
Incremental Delay, d2	0.3	0.1	0.2	2.2	0.1	0.2	15.7	0.7		3.3	191.2	
Delay (s)	42.3	40.9	41.8	45.4	39.8	40.3	96.2	36.2		45.3	209.9	
Level of Service	D	D	D	D	D	D	F	D		D	F	
Approach Delay (s)		41.8			43.3			38.0			199.6	
Approach LOS		D			D			D			F	

Intersection Summary			
HCM 2000 Control Delay	135.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	111.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Cityline TIA
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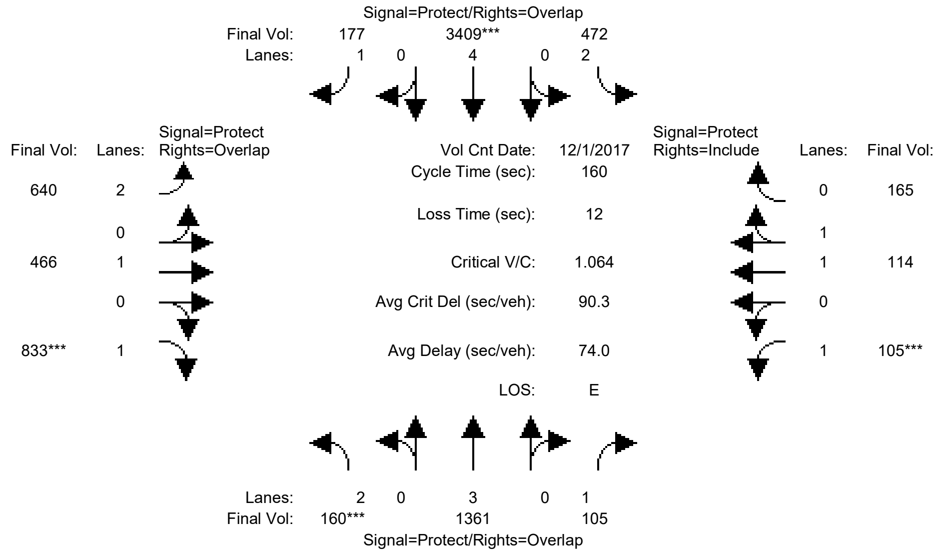
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #25: Mathilda Avenue / Maude Avenue (CMP)



Street Name:	Mathilda Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	124	894	105	308	2062	144	470	374	623	105	101	110
Growth 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
Initial Bse:	124	894	105	308	2062	144	470	374	623	105	101	110
Added Vol:	36	467	0	164	1347	33	170	92	210	0	13	55
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	160	1361	105	472	3409	177	640	466	833	105	114	165
User 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
PHF 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
PHF Volume:	160	1361	105	472	3409	177	640	466	833	105	114	165
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	1361	105	472	3409	177	640	466	833	105	114	165
PCE 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
MLF 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
FinalVolume:	160	1361	105	472	3409	177	640	466	833	105	114	165
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	4.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	3150	5700	1750	3150	7600	1750	3150	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.24	0.06	0.15	0.45	0.10	0.20	0.25	0.48	0.06	0.06	0.09
Crit Moves:	****				****				****	****		
Green Time:	7.6	46.1	55.1	28.9	67.4	117.2	49.8	63.9	71.6	9.0	23.1	23.1
Volume/Cap:	1.06	0.83	0.17	0.83	1.06	0.14	0.65	0.61	1.06	1.06	0.42	0.65
Delay/Veh:	167.8	56.9	36.7	72.9	82.7	6.4	49.2	39.7	94.9	184.6	62.7	68.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	167.8	56.9	36.7	72.9	82.7	6.4	49.2	39.7	94.9	184.6	62.7	68.2
LOS by Move:	F	E+	D+	E	F	A	D	D	F	F	E	E
HCM2kAvgQ:	6	21	4	12	45	3	17	18	55	7	5	8

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #25: Mathilda Avenue / Maude Avenue (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 177 3475*** 474
Lanes: 1 0 4 0 2

Westbound (left side of diagram): Signal=Protect, Rights=Overlap
Final Vol: / Lanes:
640 / 2
0
466 / 1
0
833*** / 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 1.074
Avg Crit Del (sec/veh): 93.5
Avg Delay (sec/veh): 76.8
LOS: E-

Signal=Protect, Rights=Include
Lanes: / Final Vol:
0 / 174
1
1 / 114
0
1 / 105***

Lanes: 2 0 3 0 1
Final Vol: 160*** 1582 105
Signal=Protect/Rights=Overlap

Street Name:	Mathilda Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	124	894	105	308	2062	144	470	374	623	105	101	110
Growth 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
Initial Bse:	124	894	105	308	2062	144	470	374	623	105	101	110
Added Vol:	36	688	0	164	1415	33	170	92	210	0	13	64
PasserByVol:	0	0	0	2	-2	0	0	0	0	0	0	0
Initial Fut:	160	1582	105	474	3475	177	640	466	833	105	114	174
User 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
PHF 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
PHF Volume:	160	1582	105	474	3475	177	640	466	833	105	114	174
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	1582	105	474	3475	177	640	466	833	105	114	174
PCE 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
MLF 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
FinalVolume:	160	1582	105	474	3475	177	640	466	833	105	114	174
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	4.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	3150	5700	1750	3150	7600	1750	3150	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.28	0.06	0.15	0.46	0.10	0.20	0.25	0.48	0.06	0.06	0.10
Crit Moves:	****				****				****	****		
Green Time:	7.6	49.1	58.0	26.6	68.1	116.7	48.5	63.4	70.9	8.9	23.8	23.8
Volume/Cap:	1.07	0.90	0.17	0.90	1.07	0.14	0.67	0.62	1.07	1.07	0.40	0.67
Delay/Veh:	171.0	60.3	34.7	84.6	85.9	6.6	50.6	40.3	98.5	187.9	62.1	68.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	171.0	60.3	34.7	84.6	85.9	6.6	50.6	40.3	98.5	187.9	62.1	68.5
LOS by Move:	F	E	C-	F	F	A	D	D	F	F	E	E
HCM2kAvgQ:	6	26	4	13	47	3	17	18	55	7	5	9

Note: Queue reported is the number of cars per lane.

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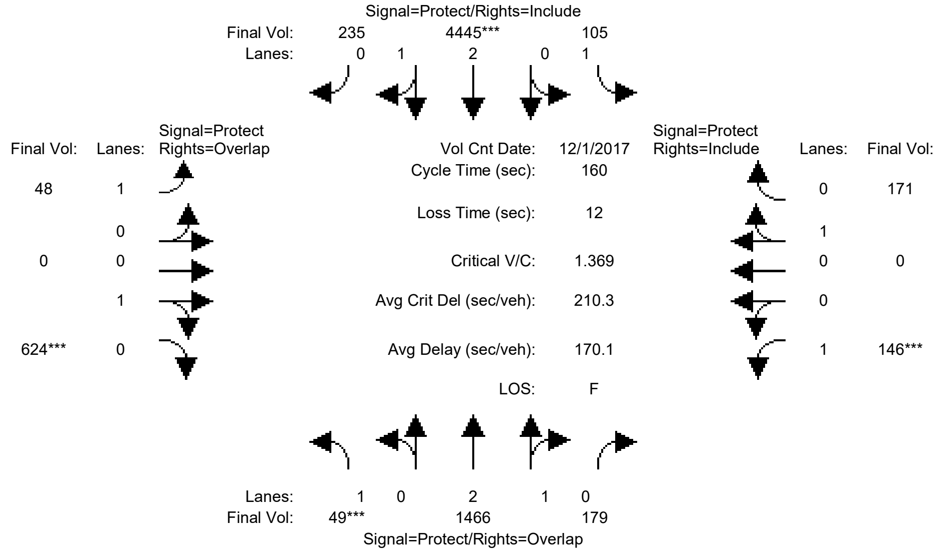
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #26: Mathilda Avenue / Indio Avenue



Street Name:	Mathilda Avenue						Indio Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	27	1040	133	79	3088	61	42	0	573	120	0	100
Growth 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
Initial Bse:	27	1040	133	79	3088	61	42	0	573	120	0	100
Added Vol:	22	426	46	26	1357	174	6	0	51	26	0	71
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	49	1466	179	105	4445	235	48	0	624	146	0	171
User 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
PHF 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
PHF Volume:	49	1466	179	105	4445	235	48	0	624	146	0	171
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	1466	179	105	4445	235	48	0	624	146	0	171
PCE 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
MLF 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
FinalVolume:	49	1466	179	105	4445	235	48	0	624	146	0	171
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	1.00	0.95	0.92	1.00	0.95
Lanes:	1.00	2.66	0.34	1.00	2.84	0.16	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	1750	4990	609	1750	5318	281	1750	0	1800	1750	0	1800
Capacity Analysis Module:												
Vol/Sat:	0.03	0.29	0.29	0.06	0.84	0.84	0.03	0.00	0.35	0.08	0.00	0.10
Crit Moves:	****				****				****	****		
Green Time:	7.0	85.9	95.5	17.5	96.4	96.4	14.1	0.0	41.9	9.6	0.0	9.6
Volume/Cap:	0.64	0.55	0.49	0.55	1.39	1.39	0.31	0.00	1.32	1.39	0.00	1.58
Delay/Veh:	92.1	24.5	18.5	70.8	208	207.7	69.6	0.0	218.3	297.3	0.0	375.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	92.1	24.5	18.5	70.8	208	207.7	69.6	0.0	218.3	297.3	0.0	375.2
LOS by Move:	F	C	B-	E	F	F	E	A	F	F	A	F
HCM2kAvgQ:	2	17	14	5	126	126	3	0	53	15	0	18

Note: Queue reported is the number of cars per lane.

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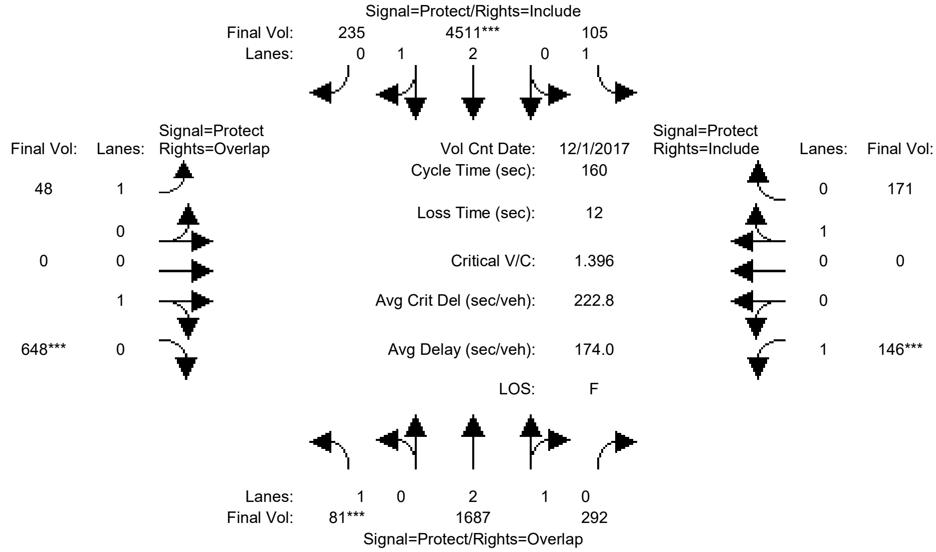
Intersection #26: Mathilda Avenue / Indio Avenue



Street Name:	Mathilda Avenue						Indio Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	27	1040	133	79	3088	61	42	0	573	120	0	100
Growth 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
Initial Bse:	27	1040	133	79	3088	61	42	0	573	120	0	100
Added Vol:	54	647	159	26	1425	174	6	0	75	26	0	71
PasserByVol:	0	0	0	0	-2	0	0	0	0	0	0	0
Initial Fut:	81	1687	292	105	4511	235	48	0	648	146	0	171
User 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
PHF 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
PHF Volume:	81	1687	292	105	4511	235	48	0	648	146	0	171
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	1687	292	105	4511	235	48	0	648	146	0	171
PCE 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
MLF 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
FinalVolume:	81	1687	292	105	4511	235	48	0	648	146	0	171
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	1.00	0.95	0.92	1.00	0.95
Lanes:	1.00	2.54	0.46	1.00	2.85	0.15	1.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	1750	4773	826	1750	5322	277	1750	0	1800	1750	0	1800
Capacity Analysis Module:												
Vol/Sat:	0.05	0.35	0.35	0.06	0.85	0.85	0.03	0.00	0.36	0.08	0.00	0.10
Crit Moves:	****				****				****	****		
Green Time:	7.0	88.1	97.5	14.9	96.0	96.0	14.2	0.0	42.5	9.5	0.0	9.5
Volume/Cap:	1.06	0.64	0.58	0.64	1.41	1.41	0.31	0.00	1.35	1.41	0.00	1.61
Delay/Veh:	196.1	25.5	19.1	78.4	219	219.4	69.5	0.0	231.4	308.4	0.0	388.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	196.1	25.5	19.1	78.4	219	219.4	69.5	0.0	231.4	308.4	0.0	388.2
LOS by Move:	F	C	B-	E-	F	F	E	A	F	F	A	F
HCM2kAvgQ:	5	21	18	5	131	131	3	0	56	15	0	19

Note: Queue reported is the number of cars per lane.

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Intersection #27: Mathilda Avenue / California Avenue

Signal=Protect/Rights=Overlap
Final Vol: 438 4044*** 503
Lanes: 1 0 3 0 1

Signal=Protect Rights=Include (westbound side: Final Vol: / Lanes:)
233 1
0
191 1
0
425*** 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 135
Loss Time (sec): 12
Critical V/C: 1.183
Avg Crit Del (sec/veh): 128.0
Avg Delay (sec/veh): 94.4
LOS: F

Signal=Protect Rights=Overlap (Lanes: / Final Vol:)
1 163
0
1 45
0
1 80***

Lanes: 1 0 2 1 0
Final Vol: 139*** 1476 351
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	97	1116	300	253	2973	326	138	176	326	80	41	125
Growth 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
Initial Bse:	97	1116	300	253	2973	326	138	176	326	80	41	125
Added Vol:	42	360	51	250	1071	112	95	15	99	0	4	38
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	139	1476	351	503	4044	438	233	191	425	80	45	163
User 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
PHF 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
PHF Volume:	139	1476	351	503	4044	438	233	191	425	80	45	163
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	1476	351	503	4044	438	233	191	425	80	45	163
PCE 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
MLF 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
FinalVolume:	139	1476	351	503	4044	438	233	191	425	80	45	163
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.40	0.60	1.00	3.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	4523	1076	1750	5700	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.33	0.33	0.29	0.71	0.25	0.13	0.10	0.24	0.05	0.02	0.09
Crit Moves:	****				****				****	****		
Green Time:	8.9	47.2	47.2	41.5	79.8	101.8	22.0	27.3	27.3	7.0	12.3	53.8
Volume/Cap:	1.20	0.93	0.93	0.93	1.20	0.33	0.82	0.50	1.20	0.88	0.26	0.23
Delay/Veh:	210.4	51.4	51.4	69.0	121	5.6	70.9	48.8	168.2	121.2	58.0	27.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	210.4	51.4	51.4	69.0	121	5.6	70.9	48.8	168.2	121.2	58.0	27.1
LOS by Move:	F	D-	D-	E	F	A	E	D	F	F	E+	C
HCM2kAvgQ:	12	29	29	21	79	6	12	7	31	4	2	5

Note: Queue reported is the number of cars per lane.

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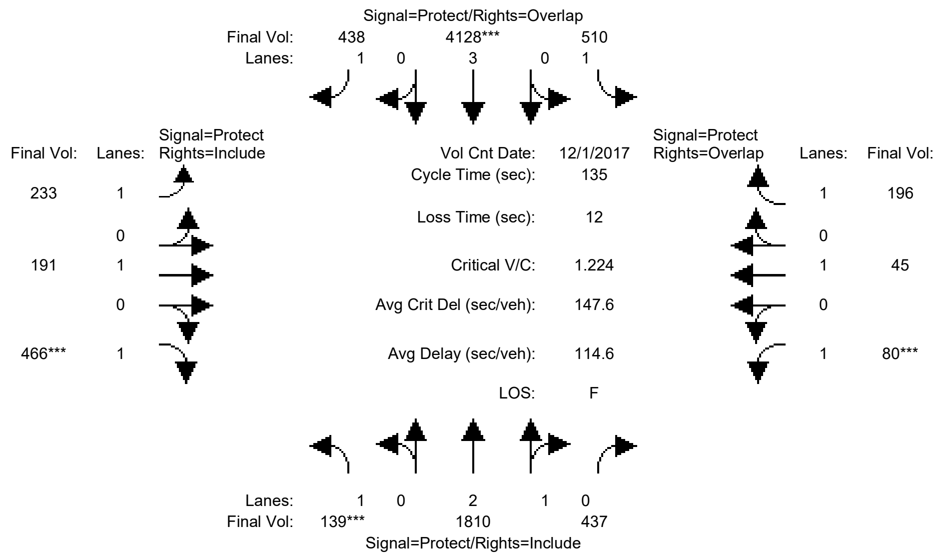
Intersection #27: Mathilda Avenue / California Avenue



Street Name:	Mathilda Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	97	1116	300	253	2973	326	138	176	326	80	41	125
Growth 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
Initial Bse:	97	1116	300	253	2973	326	138	176	326	80	41	125
Added Vol:	42	694	137	259	1155	112	95	15	140	0	4	71
PasserByVol:	0	0	0	-2	0	0	0	0	0	0	0	0
Initial Fut:	139	1810	437	510	4128	438	233	191	466	80	45	196
User 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
PHF 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
PHF Volume:	139	1810	437	510	4128	438	233	191	466	80	45	196
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	139	1810	437	510	4128	438	233	191	466	80	45	196
PCE 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
MLF 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
FinalVolume:	139	1810	437	510	4128	438	233	191	466	80	45	196
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.40	0.60	1.00	3.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	4509	1089	1750	5700	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.40	0.40	0.29	0.72	0.25	0.13	0.10	0.27	0.05	0.02	0.11
Crit Moves:	****				****				****	****		
Green Time:	8.6	50.5	50.5	36.7	78.5	101.6	23.0	28.9	28.9	7.0	12.8	49.5
Volume/Cap:	1.25	1.07	1.07	1.07	1.25	0.33	0.78	0.47	1.25	0.88	0.25	0.31
Delay/Veh:	228.3	85.0	85.0	111.6	141	5.7	65.9	47.2	184.0	121.2	57.4	30.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	228.3	85.0	85.0	111.6	141	5.7	65.9	47.2	184.0	121.2	57.4	30.8
LOS by Move:	F	F	F	F	F	A	E	D	F	F	E+	C
HCM2kAvgQ:	12	42	42	26	86	6	12	7	35	4	2	6

Note: Queue reported is the number of cars per lane.

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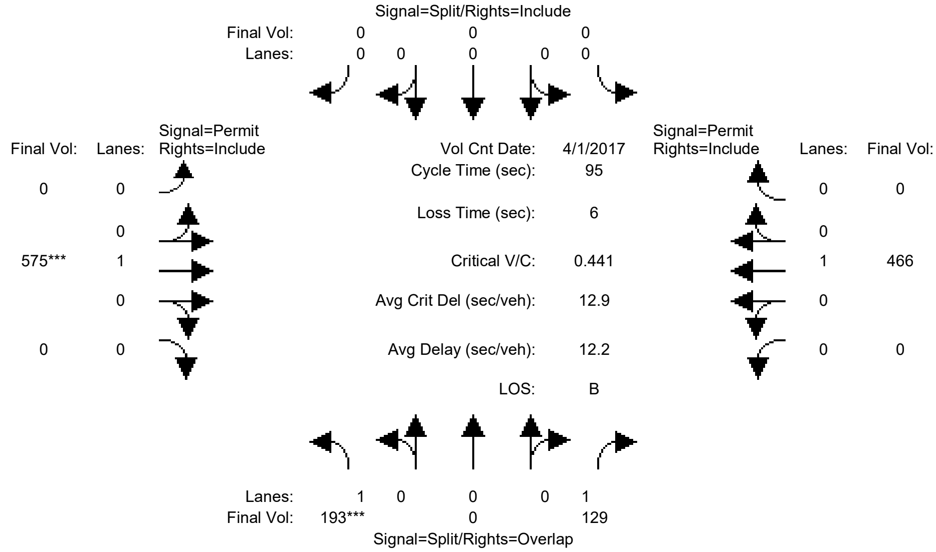
Intersection #28: Mathilda Avenue Off-Ramp / Evelyn Avenue



Street Name:	Mathilda Avenue Off-Ramp						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	108	0	126	0	0	0	0	522	0	0	392	0
Growth 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
Initial Bse:	108	0	126	0	0	0	0	522	0	0	392	0
Added Vol:	85	0	3	0	0	0	0	53	0	0	74	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	193	0	129	0	0	0	0	575	0	0	466	0
User 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
PHF 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
PHF Volume:	193	0	129	0	0	0	0	575	0	0	466	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	193	0	129	0	0	0	0	575	0	0	466	0
PCE 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
MLF 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
FinalVolume:	193	0	129	0	0	0	0	575	0	0	466	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	0	1900	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.07	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.25	0.00
Crit Moves:	****							****				
Green Time:	23.8	0.0	23.8	0.0	0.0	0.0	0.0	65.2	0.0	0.0	65.2	0.0
Volume/Cap:	0.44	0.00	0.29	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.36	0.00
Delay/Veh:	30.7	0.0	29.2	0.0	0.0	0.0	0.0	6.9	0.0	0.0	6.3	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.7	0.0	29.2	0.0	0.0	0.0	0.0	6.9	0.0	0.0	6.3	0.0
LOS by Move:	C	A	C	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	5	0	3	0	0	0	0	8	0	0	6	0

Note: Queue reported is the number of cars per lane.

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Intersection #28: Mathilda Avenue Off-Ramp / Evelyn Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Permit Rights=Include (West side)
Final Vol: 0, 589***, 0
Lanes: 0, 0, 1, 0, 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 95
Loss Time (sec): 6
Critical V/C: 0.449
Avg Crit Del (sec/veh): 12.8
Avg Delay (sec/veh): 12.0
LOS: B

Signal=Permit Rights=Include (East side)
Lanes: 0, 0, 1, 0, 0
Final Vol: 0, 528, 0

Lanes: 1 0 0 0 1
Final Vol: 193*** 0 132
Signal=Split/Rights=Overlap

Street Name:	Mathilda Avenue Off-Ramp						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	108	0	126	0	0	0	0	522	0	0	392	0
Growth 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
Initial Bse:	108	0	126	0	0	0	0	522	0	0	392	0
Added Vol:	85	0	6	0	0	0	0	67	0	0	136	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	193	0	132	0	0	0	0	589	0	0	528	0
User 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
PHF 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
PHF Volume:	193	0	132	0	0	0	0	589	0	0	528	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	193	0	132	0	0	0	0	589	0	0	528	0
PCE 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
MLF 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
FinalVolume:	193	0	132	0	0	0	0	589	0	0	528	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Final Sat.:	1750	0	1750	0	0	0	0	1900	0	0	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.08	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.28	0.00
Crit Moves:	****							****				
Green Time:	23.4	0.0	23.4	0.0	0.0	0.0	0.0	65.6	0.0	0.0	65.6	0.0
Volume/Cap:	0.45	0.00	0.31	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.40	0.00
Delay/Veh:	31.1	0.0	29.6	0.0	0.0	0.0	0.0	6.8	0.0	0.0	6.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.1	0.0	29.6	0.0	0.0	0.0	0.0	6.8	0.0	0.0	6.5	0.0
LOS by Move:	C	A	C	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	5	0	4	0	0	0	0	8	0	0	6	0

Note: Queue reported is the number of cars per lane.

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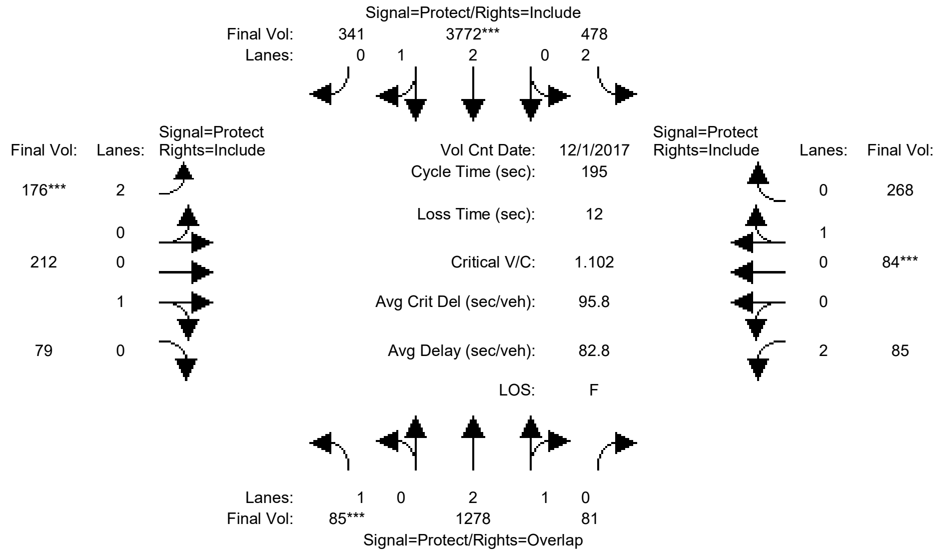
Intersection #29: Mathilda Avenue / Washington Avenue



Street Name:	Mathilda Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	54	929	67	341	2859	298	158	194	49	75	71	160
Growth 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
Initial Bse:	54	929	67	341	2859	298	158	194	49	75	71	160
Added Vol:	31	349	14	137	913	43	18	18	30	10	13	108
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	85	1278	81	478	3772	341	176	212	79	85	84	268
User 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
PHF 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
PHF Volume:	85	1278	81	478	3772	341	176	212	79	85	84	268
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	1278	81	478	3772	341	176	212	79	85	84	268
PCE 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
MLF 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
FinalVolume:	85	1278	81	478	3772	341	176	212	79	85	84	268
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.99	0.95	0.83	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	2.81	0.19	2.00	2.74	0.26	2.00	0.73	0.27	2.00	0.24	0.76
Final Sat.:	1750	5266	334	3150	5135	464	3150	1311	489	3150	430	1370
Capacity Analysis Module:												
Vol/Sat:	0.05	0.24	0.24	0.15	0.73	0.73	0.06	0.16	0.16	0.03	0.20	0.20
Crit Moves:	****				****		****				****	
Green Time:	8.6	85.2	93.3	53.3	130	129.9	9.9	36.4	36.4	8.1	34.6	34.6
Volume/Cap:	1.10	0.56	0.51	0.56	1.10	1.10	1.10	0.87	0.87	0.65	1.10	1.10
Delay/Veh:	226.3	41.1	35.2	61.5	83.3	83.3	193.9	97.3	97.3	103.2	161	160.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	226.3	41.1	35.2	61.5	83.3	83.3	193.9	97.3	97.3	103.2	161	160.9
LOS by Move:	F	D	D+	E	F	F	F	F	F	F	F	F
HCM2kAvgQ:	9	20	18	15	99	99	8	19	19	3	28	28

Note: Queue reported is the number of cars per lane.

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Intersection #29: Mathilda Avenue / Washington Avenue

Signal=Protect/Rights=Include
Final Vol: 342 3913*** 477
Lanes: 0 1 2 0 2

Signal=Protect Rights=Include
Final Vol: Lanes:
177*** 2
0
214 0
1
97 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 195
Loss Time (sec): 12
Critical V/C: 1.189
Avg Crit Del (sec/veh): 135.2
Avg Delay (sec/veh): 107.8
LOS: F

Signal=Protect Rights=Include
Lanes: Final Vol:
0 307
1
0 91***
0
2 130

Lanes: 1 0 2 1 0
Final Vol: 137*** 1692 101
Signal=Protect/Rights=Overlap

Street Name:	Mathilda Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	54	929	67	341	2859	298	158	194	49	75	71	160
Growth 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
Initial Bse:	54	929	67	341	2859	298	158	194	49	75	71	160
Added Vol:	83	763	34	136	1054	44	19	20	48	55	20	147
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	137	1692	101	477	3913	342	177	214	97	130	91	307
User 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
PHF 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
PHF Volume:	137	1692	101	477	3913	342	177	214	97	130	91	307
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	137	1692	101	477	3913	342	177	214	97	130	91	307
PCE 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
MLF 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
FinalVolume:	137	1692	101	477	3913	342	177	214	97	130	91	307
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.99	0.95	0.83	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	2.82	0.18	2.00	2.75	0.25	2.00	0.69	0.31	2.00	0.23	0.77
Final Sat.:	1750	5284	315	3150	5149	450	3150	1239	561	3150	412	1388
Capacity Analysis Module:												
Vol/Sat:	0.08	0.32	0.32	0.15	0.76	0.76	0.06	0.17	0.17	0.04	0.22	0.22
Crit Moves:	****				****		****				****	
Green Time:	12.8	93.4	102.1	44.2	125	124.7	9.2	36.7	36.7	8.8	36.3	36.3
Volume/Cap:	1.19	0.67	0.61	0.67	1.19	1.19	1.19	0.92	0.92	0.92	1.19	1.19
Delay/Veh:	234.3	39.6	32.9	71.2	123	123.1	226.3	107	106.5	144.2	190	190.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	234.3	39.6	32.9	71.2	123	123.1	226.3	107	106.5	144.2	190	190.2
LOS by Move:	F	D	C-	E	F	F	F	F	F	F	F	F
HCM2kAvgQ:	14	27	25	16	112	112	9	21	21	5	34	34

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Intersection #30: Mathilda Avenue / McKinley Avenue

Signal=Protect/Rights=Include
Final Vol: 79 3474*** 269
Lanes: 0 1 2 0 2

Signal=Protect
Rights=Include
Final Vol: 93 58*** 70
Lanes: 1 0 0 1 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 150
Loss Time (sec): 12
Critical V/C: 0.843
Avg Crit Del (sec/veh): 24.1
Avg Delay (sec/veh): 25.3
LOS: C

Signal=Protect
Rights=Overlap
Lanes: 1 0 0 0 2
Final Vol: 178 0 166***

Lanes: 1 0 2 1 0
Final Vol: 30*** 1251 126
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	30	933	63	89	2698	79	93	58	70	92	0	102
Growth 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
Initial Bse:	30	933	63	89	2698	79	93	58	70	92	0	102
Added Vol:	0	318	63	180	776	0	0	0	0	74	0	76
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	1251	126	269	3474	79	93	58	70	166	0	178
User 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
PHF 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
PHF Volume:	30	1251	126	269	3474	79	93	58	70	166	0	178
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	1251	126	269	3474	79	93	58	70	166	0	178
PCE 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
MLF 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
FinalVolume:	30	1251	126	269	3474	79	93	58	70	166	0	178
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.83	0.98	0.95	0.92	0.95	0.95	0.83	1.00	0.92
Lanes:	1.00	2.72	0.28	2.00	2.93	0.07	1.00	0.45	0.55	2.00	0.00	1.00
Final Sat.:	1750	5087	512	3150	5475	125	1750	816	984	3150	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.25	0.25	0.09	0.63	0.63	0.05	0.07	0.07	0.05	0.00	0.10
Crit Moves:	****				****			****		****		
Green Time:	7.0	86.6	86.6	30.1	110	109.6	16.4	12.3	12.3	9.1	0.0	39.2
Volume/Cap:	0.37	0.43	0.43	0.43	0.87	0.87	0.49	0.87	0.87	0.87	0.00	0.39
Delay/Veh:	72.1	17.9	17.9	52.9	17.1	17.1	64.8	107	106.6	101.7	0.0	46.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	72.1	17.9	17.9	52.9	17.1	17.1	64.8	107	106.6	101.7	0.0	46.1
LOS by Move:	E	B	B	D-	B	B	E	F	F	F	A	D
HCM2kAvgQ:	2	12	12	7	42	42	5	9	9	5	0	7

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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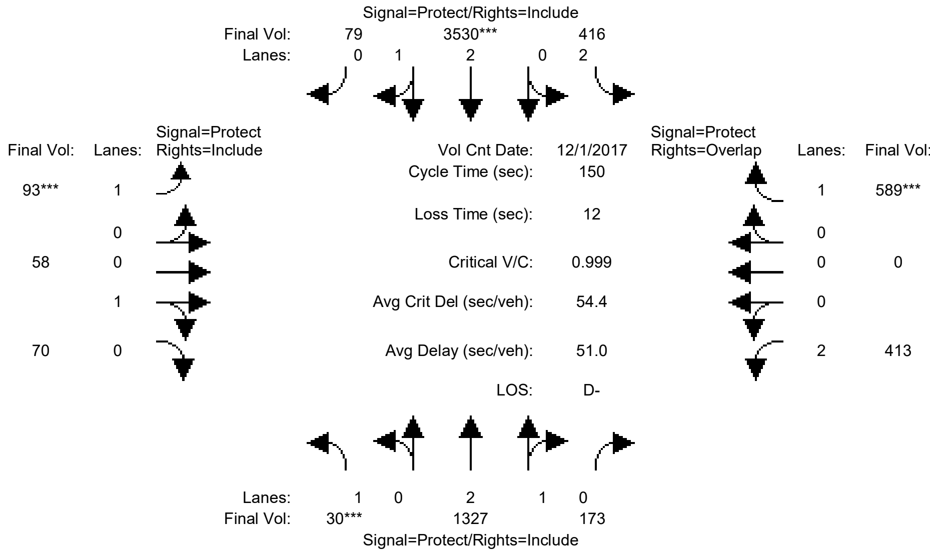
Intersection #30: Mathilda Avenue / McKinley Avenue



Street Name:	Mathilda Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	30	933	63	89	2698	79	93	58	70	92	0	102
Growth 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
Initial Bse:	30	933	63	89	2698	79	93	58	70	92	0	102
Added Vol:	0	394	110	327	832	0	0	0	0	321	0	487
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	1327	173	416	3530	79	93	58	70	413	0	589
User 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
PHF 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
PHF Volume:	30	1327	173	416	3530	79	93	58	70	413	0	589
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	1327	173	416	3530	79	93	58	70	413	0	589
PCE 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
MLF 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
FinalVolume:	30	1327	173	416	3530	79	93	58	70	413	0	589
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.83	0.98	0.95	0.92	0.95	0.95	0.83	1.00	0.92
Lanes:	1.00	2.64	0.36	2.00	2.93	0.07	1.00	0.45	0.55	2.00	0.00	1.00
Final Sat.:	1750	4953	646	3150	5477	123	1750	816	984	3150	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.27	0.27	0.13	0.64	0.64	0.05	0.07	0.07	0.13	0.00	0.34
Crit Moves:	****				****		****					****
Green Time:	7.0	67.4	67.4	33.2	93.6	93.6	7.7	13.2	13.2	24.3	0.0	62.9
Volume/Cap:	0.37	0.60	0.60	0.60	1.03	1.03	1.03	0.81	0.81	0.81	0.00	0.80
Delay/Veh:	72.1	31.5	31.5	53.8	52.8	52.8	175.3	93.3	93.3	70.2	0.0	44.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	72.1	31.5	31.5	53.8	52.8	52.8	175.3	93.3	93.3	70.2	0.0	44.5
LOS by Move:	E	C	C	D-	D-	D-	F	F	F	E	A	D
HCM2kAvgQ:	2	17	17	11	66	66	8	8	8	12	0	26

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Intersection #31: Mathilda Avenue / Iowa Avenue

Signal=Protect/Rights=Include
Final Vol: 89 3668*** 104
Lanes: 0 1 2 0 2

Westbound (right side): Signal=Protect, Rights=Overlap
Eastbound (left side): Signal=Protect, Rights=Include

Final Vol:	Lanes:			Lanes:	Final Vol:
88	1			1	61
	0	Vol Cnt Date:	12/1/2017	0	
102***	1	Cycle Time (sec):	185	1	72
	1	Loss Time (sec):	12	0	
58	0	Critical V/C:	0.873	2	235***
		Avg Crit Del (sec/veh):	28.5		
		Avg Delay (sec/veh):	28.2		
		LOS:	C		

Lanes: 1 0 3 0 1
Final Vol: 48*** 1055 196
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	46	750	48	95	2860	56	62	99	57	75	58	57
Growth 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
Initial Bse:	46	750	48	95	2860	56	62	99	57	75	58	57
Added Vol:	2	305	148	9	808	33	26	3	1	160	14	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	48	1055	196	104	3668	89	88	102	58	235	72	61
User 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
PHF 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
PHF Volume:	48	1055	196	104	3668	89	88	102	58	235	72	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	1055	196	104	3668	89	88	102	58	235	72	61
PCE 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
MLF 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
FinalVolume:	48	1055	196	104	3668	89	88	102	58	235	72	61
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	0.99	0.95	0.83	1.00	0.92
Lanes:	1.00	3.00	1.00	2.00	2.93	0.07	1.00	1.26	0.74	2.00	1.00	1.00
Final Sat.:	1750	5700	1750	3150	5467	133	1750	2358	1341	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.19	0.11	0.03	0.67	0.67	0.05	0.04	0.04	0.07	0.04	0.03
Crit Moves:	****				****			****		****		
Green Time:	7.0	122	122.4	25.0	140	140.4	12.3	10.0	10.0	15.6	13.3	38.3
Volume/Cap:	0.72	0.28	0.17	0.24	0.88	0.88	0.75	0.80	0.80	0.88	0.53	0.17
Delay/Veh:	120.6	13.0	12.0	71.8	18.9	18.9	108.7	107	106.6	111.3	86.7	60.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	120.6	13.0	12.0	71.8	18.9	18.9	108.7	107	106.6	111.3	86.7	60.5
LOS by Move:	F	B	B	E	B-	B-	F	F	F	F	F	E
HCM2kAvgQ:	3	8	4	3	54	54	6	5	5	9	4	3

Note: Queue reported is the number of cars per lane.

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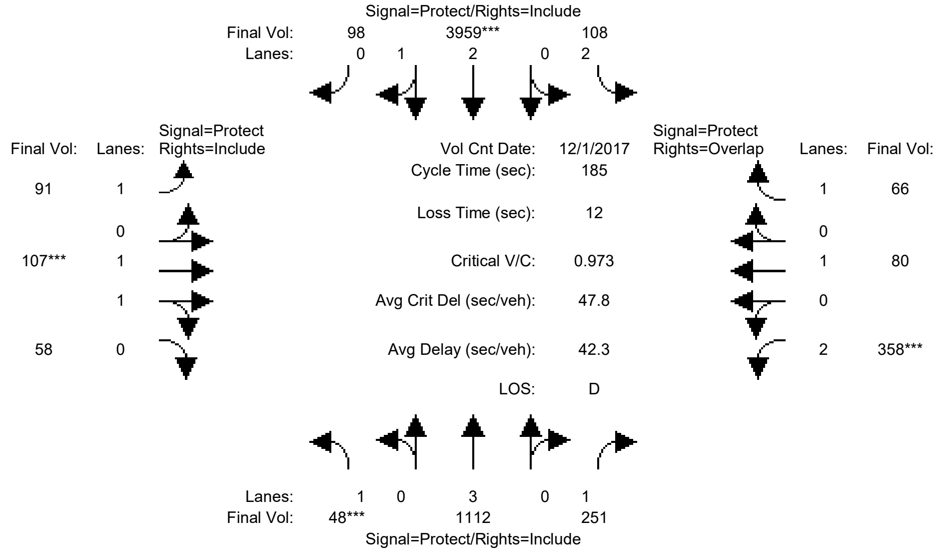
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #31: Mathilda Avenue / Iowa Avenue



Street Name:	Mathilda Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	46	750	48	95	2860	56	62	99	57	75	58	57
Growth 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
Initial Bse:	46	750	48	95	2860	56	62	99	57	75	58	57
Added Vol:	2	362	203	13	1099	42	29	8	1	283	22	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	48	1112	251	108	3959	98	91	107	58	358	80	66
User 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
PHF 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
PHF Volume:	48	1112	251	108	3959	98	91	107	58	358	80	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	1112	251	108	3959	98	91	107	58	358	80	66
PCE 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
MLF 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
FinalVolume:	48	1112	251	108	3959	98	91	107	58	358	80	66
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	0.99	0.95	0.83	1.00	0.92
Lanes:	1.00	3.00	1.00	2.00	2.92	0.08	1.00	1.28	0.72	2.00	1.00	1.00
Final Sat.:	1750	5700	1750	3150	5465	135	1750	2398	1300	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.20	0.14	0.03	0.72	0.72	0.05	0.04	0.04	0.11	0.04	0.04
Crit Moves:	****				****			****		****		
Green Time:	7.0	119	118.8	23.0	135	134.8	15.3	10.0	10.0	21.2	15.9	38.9
Volume/Cap:	0.72	0.30	0.22	0.28	0.99	0.99	0.63	0.83	0.83	0.99	0.49	0.18
Delay/Veh:	120.6	14.8	13.9	73.8	37.4	37.4	90.7	110	110.2	127.6	83.0	60.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	120.6	14.8	13.9	73.8	37.4	37.4	90.7	110	110.2	127.6	83.0	60.2
LOS by Move:	F	B	B	E	D+	D+	F	F	F	F	F	E
HCM2kAvgQ:	3	9	6	3	82	82	5	5	5	14	4	3

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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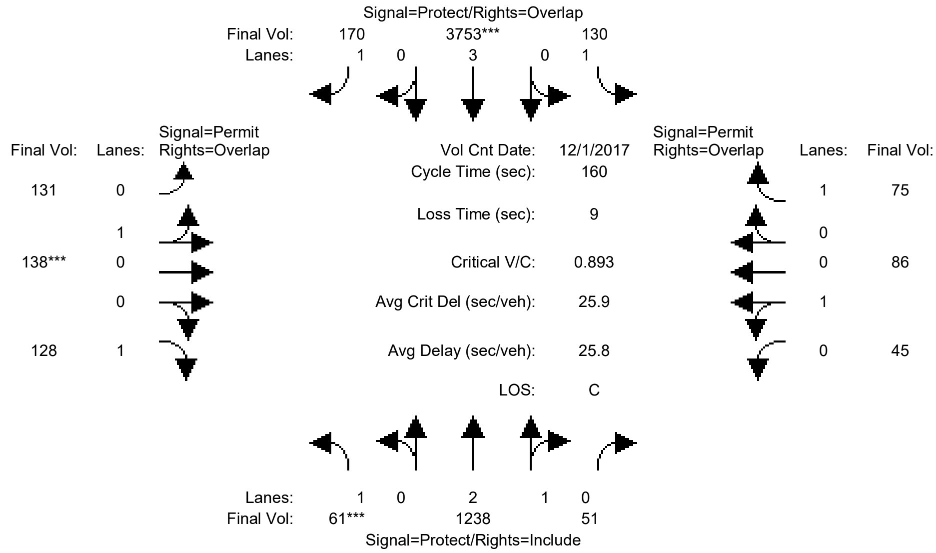
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #32: Mathilda Avenue / Olive Avenue



Street Name:	Mathilda Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	61	808	51	92	2846	146	121	136	128	45	81	60
Growth 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
Initial Bse:	61	808	51	92	2846	146	121	136	128	45	81	60
Added Vol:	0	430	0	38	907	24	10	2	0	0	5	15
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	1238	51	130	3753	170	131	138	128	45	86	75
User 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
PHF 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
PHF Volume:	61	1238	51	130	3753	170	131	138	128	45	86	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	1238	51	130	3753	170	131	138	128	45	86	75
PCE 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
MLF 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
FinalVolume:	61	1238	51	130	3753	170	131	138	128	45	86	75
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.88	0.12	1.00	3.00	1.00	0.49	0.51	1.00	0.34	0.66	1.00
Final Sat.:	1750	5378	222	1750	5700	1750	877	923	1750	618	1182	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.23	0.23	0.07	0.66	0.10	0.15	0.15	0.07	0.07	0.07	0.04
Crit Moves:	****				****			****				
Green Time:	7.0	94.0	94.0	30.3	117	117.4	26.6	26.6	33.6	26.6	26.6	57.0
Volume/Cap:	0.80	0.39	0.39	0.39	0.90	0.13	0.90	0.90	0.35	0.44	0.44	0.12
Delay/Veh:	118.3	17.7	17.7	57.5	19.6	6.3	92.9	92.9	54.4	61.0	61.0	34.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	118.3	17.7	17.7	57.5	19.6	6.3	92.9	92.9	54.4	61.0	61.0	34.7
LOS by Move:	F	B	B	E+	B-	A	F	F	D-	E	E	C-
HCM2kAvgQ:	5	11	11	6	46	2	17	17	6	6	6	3

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #32: Mathilda Avenue / Olive Avenue

Signal=Protect/Rights=Overlap
Final Vol: 174 4151*** 141
Lanes: 1 0 3 0 1

Westbound side: Signal=Permit, Rights=Overlap
Final Vol: 133 / Lanes: 0
Lanes: 1
Final Vol: 138*** / Lanes: 0
Lanes: 0
Final Vol: 128 / Lanes: 1

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 9
Critical V/C: 0.968
Avg Crit Del (sec/veh): 34.6
Avg Delay (sec/veh): 31.6
LOS: C

Signal=Permit
Rights=Overlap
Lanes: 1, Final Vol: 76
Lanes: 0
Lanes: 0, Final Vol: 86
Lanes: 1
Lanes: 0, Final Vol: 45

Lanes: 1 0 2 1 0
Final Vol: 61*** 1347 51
Signal=Protect/Rights=Include

Street Name:	Mathilda Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	61	808	51	92	2846	146	121	136	128	45	81	60
Growth 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
Initial Bse:	61	808	51	92	2846	146	121	136	128	45	81	60
Added Vol:	0	539	0	49	1305	28	12	2	0	0	5	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	1347	51	141	4151	174	133	138	128	45	86	76
User 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
PHF 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
PHF Volume:	61	1347	51	141	4151	174	133	138	128	45	86	76
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	1347	51	141	4151	174	133	138	128	45	86	76
PCE 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
MLF 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
FinalVolume:	61	1347	51	141	4151	174	133	138	128	45	86	76
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.89	0.11	1.00	3.00	1.00	0.49	0.51	1.00	0.34	0.66	1.00
Final Sat.:	1750	5395	204	1750	5700	1750	883	917	1750	618	1182	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.25	0.25	0.08	0.73	0.10	0.15	0.15	0.07	0.07	0.07	0.04
Crit Moves:	****				****			****				
Green Time:	7.0	95.5	95.5	30.8	119	119.3	24.7	24.7	31.7	24.7	24.7	55.5
Volume/Cap:	0.80	0.42	0.42	0.42	0.98	0.13	0.98	0.98	0.37	0.47	0.47	0.13
Delay/Veh:	118.3	17.4	17.4	57.6	28.1	5.8	114.7	115	56.2	63.0	63.0	35.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	118.3	17.4	17.4	57.6	28.1	5.8	114.7	115	56.2	63.0	63.0	35.8
LOS by Move:	F	B	B	E+	C	A	F	F	E+	E	E	D+
HCM2kAvgQ:	5	12	12	6	61	2	18	18	6	6	6	3

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #33: Mathilda Avenue / El Camino Real (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 590 2735*** 651
Lanes: 1 0 3 0 2

Signal=Protect
Rights=Include

Final Vol:	Lanes:
369	2
	0
1518***	2
	1
262	0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 160
Loss Time (sec): 12
Critical V/C: 1.021
Avg Crit Del (sec/veh): 77.6
Avg Delay (sec/veh): 65.7
LOS: E

Signal=Protect
Rights=Overlap

Lanes:	Final Vol:
1	198
0	
3	934
0	
1	100***

Lanes: 2 0 2 1 0
Final Vol: 283*** 730 80
Signal=Protect/Rights=Include

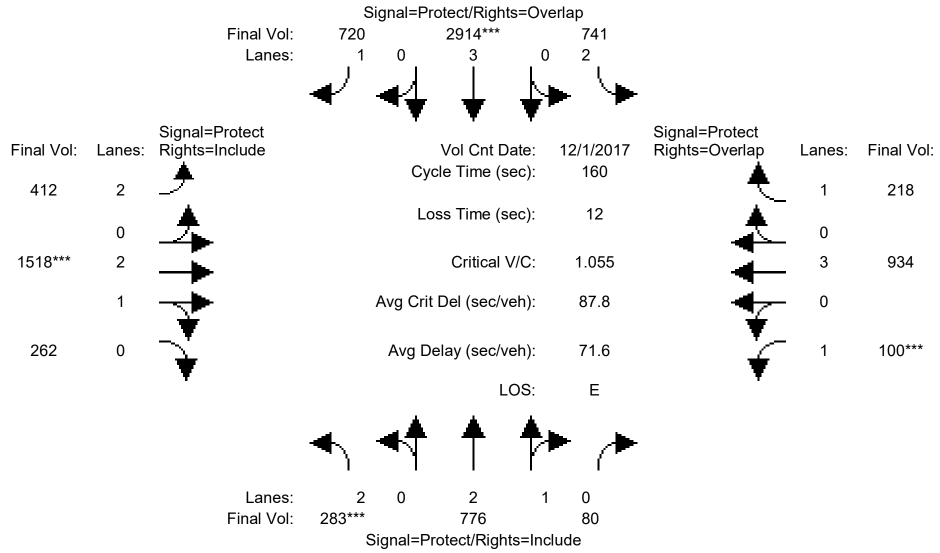
Street Name:	Mathilda Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	273	474	80	610	2109	350	211	1481	210	100	901	182
Growth 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
Initial Bse:	273	474	80	610	2109	350	211	1481	210	100	901	182
Added Vol:	10	256	0	41	626	240	158	37	52	0	33	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	283	730	80	651	2735	590	369	1518	262	100	934	198
User 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
PHF 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
PHF Volume:	283	730	80	651	2735	590	369	1518	262	100	934	198
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	283	730	80	651	2735	590	369	1518	262	100	934	198
PCE 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
MLF 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
FinalVolume:	283	730	80	651	2735	590	369	1518	262	100	934	198
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	1.00	0.92	0.83	0.99	0.95	0.92	1.00	0.92
Lanes:	2.00	2.69	0.31	2.00	3.00	1.00	2.00	2.54	0.46	1.00	3.00	1.00
Final Sat.:	3150	5046	553	3150	5700	1750	3150	4775	824	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.09	0.14	0.14	0.21	0.48	0.34	0.12	0.32	0.32	0.06	0.16	0.11
Crit Moves:	****				****			****		****		
Green Time:	14.1	36.7	36.7	52.5	75.2	99.7	24.5	49.8	49.8	9.0	34.3	86.8
Volume/Cap:	1.02	0.63	0.63	0.63	1.02	0.54	0.77	1.02	1.02	1.02	0.77	0.21
Delay/Veh:	132.6	56.5	56.5	46.8	65.4	17.7	72.2	82.2	82.2	172.4	62.0	19.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	132.6	56.5	56.5	46.8	65.4	17.7	72.2	82.2	82.2	172.4	62.0	19.0
LOS by Move:	F	E+	E+	D	E	B	E	F	F	F	E	B-
HCM2kAvgQ:	10	12	12	16	52	17	10	33	33	7	14	5

Note: Queue reported is the number of cars per lane.

Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #33: Mathilda Avenue / El Camino Real (CMP)



Street Name:	Mathilda Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	273	474	80	610	2109	350	211	1481	210	100	901	182
Growth 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
Initial Bse:	273	474	80	610	2109	350	211	1481	210	100	901	182
Added Vol:	10	302	0	131	805	370	201	37	52	0	33	36
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	283	776	80	741	2914	720	412	1518	262	100	934	218
User 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
PHF 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
PHF Volume:	283	776	80	741	2914	720	412	1518	262	100	934	218
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	283	776	80	741	2914	720	412	1518	262	100	934	218
PCE 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
MLF 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
FinalVolume:	283	776	80	741	2914	720	412	1518	262	100	934	218
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	1.00	0.92	0.83	0.99	0.95	0.92	1.00	0.92
Lanes:	2.00	2.71	0.29	2.00	3.00	1.00	2.00	2.54	0.46	1.00	3.00	1.00
Final Sat.:	3150	5076	523	3150	5700	1750	3150	4775	824	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.09	0.15	0.15	0.24	0.51	0.41	0.13	0.32	0.32	0.06	0.16	0.12
Crit Moves:	****				****			****		****		
Green Time:	13.6	35.9	35.9	55.2	77.5	102.8	25.2	48.2	48.2	8.7	31.6	86.9
Volume/Cap:	1.06	0.68	0.68	0.68	1.06	0.64	0.83	1.06	1.06	1.06	0.83	0.23
Delay/Veh:	143.4	58.4	58.4	46.6	75.2	18.7	76.4	94.1	94.1	183.9	66.9	19.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	143.4	58.4	58.4	46.6	75.2	18.7	76.4	94.1	94.1	183.9	66.9	19.2
LOS by Move:	F	E+	E+	D	E-	B-	E-	F	F	F	E	B-
HCM2kAvgQ:	11	13	13	19	58	23	12	34	34	7	15	6

Note: Queue reported is the number of cars per lane.

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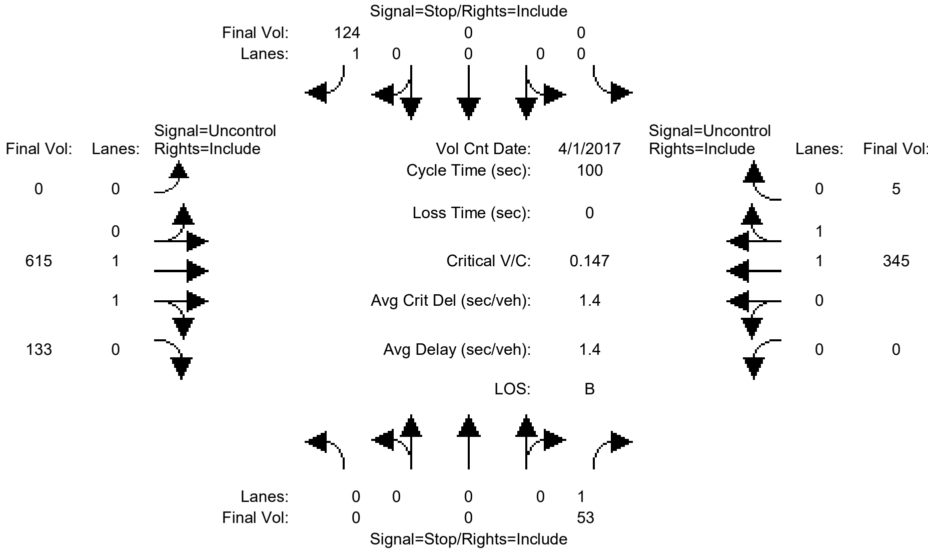
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative PM

Intersection #34: Aries Way / Washington Avenue




```
Street Name:              Aries Way                      Washington Avenue
Approach:      North Bound       South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 1 Apr 2017 <<
Base Vol:        0     0    22     0     0   122     0   534    45     0   215     5
Growth 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
Initial Bse:     0     0    22     0     0   122     0   534    45     0   215     5
Added Vol:       0     0    31     0     0     2     0    81    88     0   130     0
PasserByVol:     0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:     0     0    53     0     0   124     0   615   133     0   345     5
User 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
PHF 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
PHF Volume:      0     0    53     0     0   124     0   615   133     0   345     5
Reduct Vol:      0     0     0     0     0     0     0     0     0     0     0     0
FinalVolume:     0     0    53     0     0   124     0   615   133     0   345     5
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx   6.9 xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx   3.3 xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx   374  xxxx xxxx   175  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx   629  xxxx xxxx   844  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx   629  xxxx xxxx   844  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  0.08  xxxx xxxx  0.15  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2WayQ95thQ:   xxxx xxxx   0.3  xxxx xxxx   0.5  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx  11.2 xxxxx xxxx  10.0 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:     *     *     B     *     *     A     *     *     *     *     *     *
Movement:      LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *     *     *     *     *     *     *     *     *     *     *     *
ApproachDel:       11.2              10.0             xxxxxx            xxxxxx
ApproachLOS:          B                 A                 *                 *
Note: Queue reported is the number of cars per lane.
                       Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #34 Aries Way / Washington Avenue
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```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Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 1	0 0 1 1 0	0 0 1 1 0
Initial Vol:	0 0 53	0 0 124	0 615 133	0 345 5
ApproachDel:	11.2	10.0	xxxxxx	xxxxxx

Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=53]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=1275]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=124]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=1275]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #34 Aries Way / Washington Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 1	0 0 1 1 0	0 0 1 1 0
Initial Vol:	0 0 53	0 0 124	0 615 133	0 345 5

Major Street Volume: 1098
Minor Approach Volume: 124
Minor Approach Volume Threshold: 253

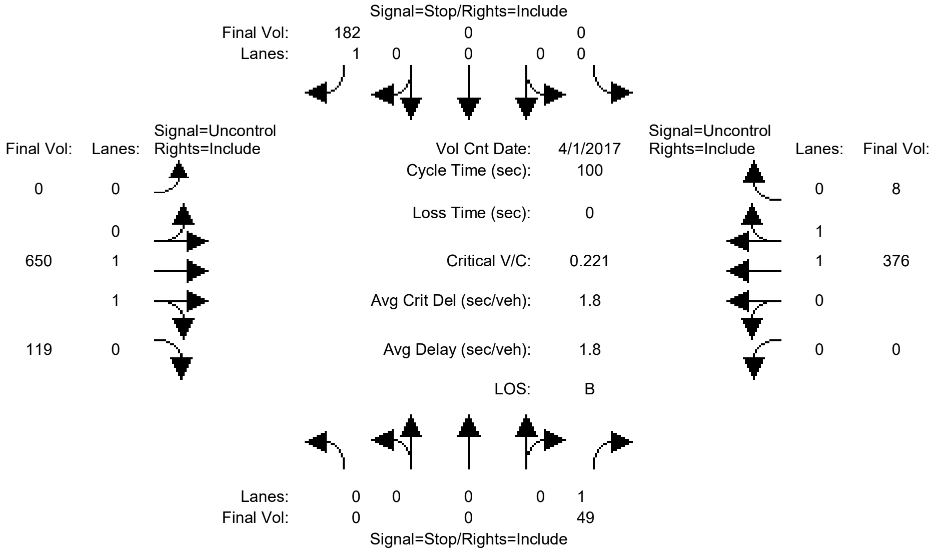
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #34: Aries Way / Washington Avenue




```
Street Name:              Aries Way                         Washington Avenue
Approach:      North Bound       South Bound        East Bound         West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 1 Apr 2017 <<
Base Vol:       0    0    22     0    0   122     0  534    45     0  215     5
Growth 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
Initial Bse:    0    0    22     0    0   122     0  534    45     0  215     5
Added Vol:      0    0    27     0    0    60     0  116    74     0  161     3
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0    49     0    0   182     0  650   119     0  376     8
User 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
PHF 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
PHF Volume:     0    0    49     0    0   182     0  650   119     0  376     8
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0    49     0    0   182     0  650   119     0  376     8
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx   6.9 xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx   3.3 xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx   385  xxxx xxxx   192  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx   619  xxxx xxxx   823  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx   619  xxxx xxxx   823  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  0.08  xxxx xxxx  0.22  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx   0.3  xxxx xxxx   0.8  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx  11.3 xxxxx xxxx  10.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     B     *    *     B     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      11.3              10.6             xxxxxx            xxxxxx
ApproachLOS:         B                 B                *                 *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
******************************************************************************
Intersection #34 Aries Way / Washington Avenue
******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  1    0  0  1  1  0    0  0  1  1  0
Initial Vol:    0    0    49     0    0   182     0  650   119     0  376     8
ApproachDel:      11.3             10.6            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=49]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=1384]
   SUCCEED - Total volume greater than or equal to 800 for intersection
             with four or more approaches.
--------------------------------------------------------------------------------
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.5]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=182]
   SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=1384]
   SUCCEED - Total volume greater than or equal to 800 for intersection
             with four or more approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #34 Aries Way / Washington Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  1    0  0  1  1  0    0  0  1  1  0
Initial Vol:    0    0    49     0    0   182     0  650   119     0  376     8
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             1153
Minor Approach Volume:           182
Minor Approach Volume Threshold: 236
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #35: Taaffe Street / Washington Avenue

Signal=Permit/Rights=Include
Final Vol: 46 37 16
Lanes: 0 0 1! 0 0

Westbound side		
Signal=Protect / Rights=Include	Lanes	Final Vol
	0	20
	1	
	0	141
	0	
	1	161***

Eastbound side		
Final Vol	Lanes	Signal=Protect / Rights=Overlap
89	1	
	0	
434***	1	
	0	
130	1	

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 60
Loss Time (sec): 9
Critical V/C: 0.601
Avg Crit Del (sec/veh): 19.3
Avg Delay (sec/veh): 18.0
LOS: B

Lanes: 0 0 1! 0 0
Final Vol: 159 19*** 155
Signal=Permit/Rights=Include

Street Name:	Taaffe Street						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	45	19	26	15	36	46	88	338	114	29	125	20
Growth 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
Initial Bse:	45	19	26	15	36	46	88	338	114	29	125	20
Added Vol:	114	0	129	1	1	0	1	96	16	132	16	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	159	19	155	16	37	46	89	434	130	161	141	20
User 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
PHF 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
PHF Volume:	159	19	155	16	37	46	89	434	130	161	141	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	159	19	155	16	37	46	89	434	130	161	141	20
PCE 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
MLF 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
FinalVolume:	159	19	155	16	37	46	89	434	130	161	141	20
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	0.48	0.06	0.46	0.16	0.37	0.47	1.00	1.00	1.00	1.00	0.88	0.12
Final Sat.:	836	100	815	283	654	813	1750	1900	1750	1750	1576	224
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.19	0.06	0.06	0.06	0.05	0.23	0.07	0.09	0.09	0.09
Crit Moves:		****						****		****		
Green Time:	19.0	19.0	19.0	19.0	19.0	19.0	13.2	22.8	22.8	9.2	18.8	18.8
Volume/Cap:	0.60	0.60	0.60	0.18	0.18	0.18	0.23	0.60	0.20	0.60	0.29	0.29
Delay/Veh:	19.1	19.1	19.1	15.0	15.0	15.0	19.6	16.4	12.6	27.5	15.8	15.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.1	19.1	19.1	15.0	15.0	15.0	19.6	16.4	12.6	27.5	15.8	15.8
LOS by Move:	B-	B-	B-	B	B	B	B-	B	B	C	B	B
HCM2kAvgQ:	7	7	7	2	2	2	1	6	2	4	3	3

Note: Queue reported is the number of cars per lane.

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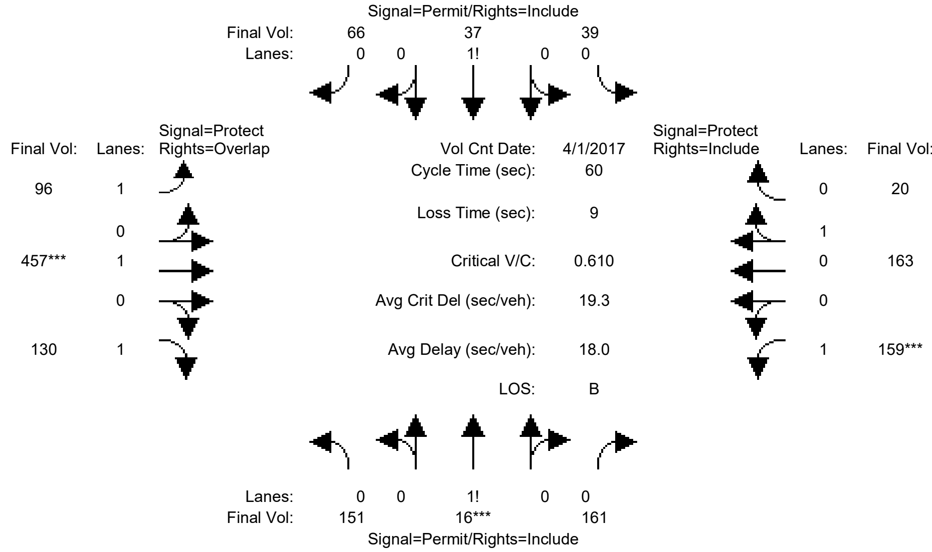
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #35: Taaffe Street / Washington Avenue



Street Name:	Taaffe Street						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	45	19	26	15	36	46	88	338	114	29	125	20
Growth 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
Initial Bse:	45	19	26	15	36	46	88	338	114	29	125	20
Added Vol:	106	-3	135	24	1	20	8	119	16	130	38	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	151	16	161	39	37	66	96	457	130	159	163	20
User 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
PHF 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
PHF Volume:	151	16	161	39	37	66	96	457	130	159	163	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	16	161	39	37	66	96	457	130	159	163	20
PCE 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
MLF 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
FinalVolume:	151	16	161	39	37	66	96	457	130	159	163	20
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	0.46	0.05	0.49	0.27	0.26	0.47	1.00	1.00	1.00	1.00	0.89	0.11
Final Sat.:	806	85	859	481	456	813	1750	1900	1750	1750	1603	197
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.19	0.08	0.08	0.08	0.05	0.24	0.07	0.09	0.10	0.10
Crit Moves:		****						****		****		
Green Time:	18.4	18.4	18.4	18.4	18.4	18.4	13.4	23.6	23.6	8.9	19.2	19.2
Volume/Cap:	0.61	0.61	0.61	0.26	0.26	0.26	0.25	0.61	0.19	0.61	0.32	0.32
Delay/Veh:	19.8	19.8	19.8	15.9	15.9	15.9	19.5	16.0	12.0	28.1	15.8	15.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.8	19.8	19.8	15.9	15.9	15.9	19.5	16.0	12.0	28.1	15.8	15.8
LOS by Move:	B-	B-	B-	B	B	B	B-	B	B	C	B	B
HCM2kAvgQ:	7	7	7	2	2	2	1	6	2	4	3	3

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #36: Iowa Avenue / Taaffe Street

Signal=Permit/Rights=Include
Final Vol: 300 39*** 138
Lanes: 0 0 1! 0 0

Final Vol: Lanes: Signal=Protect Rights=Include
211*** 1
0
175 0
1
17 0

Vol Cnt Date: 12/1/2017
Cycle Time (sec): 100
Loss Time (sec): 12
Critical V/C: 0.558
Avg Crit Del (sec/veh): 27.5
Avg Delay (sec/veh): 28.3
LOS: C

Signal=Protect Rights=Include Lanes: Final Vol:
0 101
1
0 76***
0
1 31

Lanes: 0 0 1! 0 0
Final Vol: 9 20 13
Signal=Permit/Rights=Include

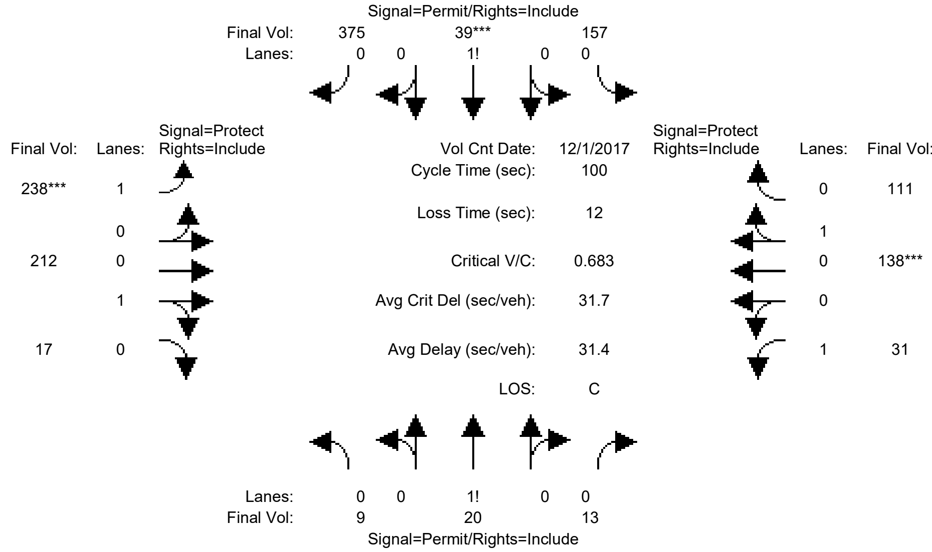
Street Name:	Taaffe Street						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	9	20	13	59	39	126	60	166	17	31	72	24
Growth 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
Initial Bse:	9	20	13	59	39	126	60	166	17	31	72	24
Added Vol:	0	0	0	79	0	174	151	9	0	0	4	77
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	20	13	138	39	300	211	175	17	31	76	101
User 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
PHF 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
PHF Volume:	9	20	13	138	39	300	211	175	17	31	76	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	20	13	138	39	300	211	175	17	31	76	101
PCE 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
MLF 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
FinalVolume:	9	20	13	138	39	300	211	175	17	31	76	101
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.21	0.48	0.31	0.29	0.08	0.63	1.00	0.91	0.09	1.00	0.43	0.57
Final Sat.:	375	833	542	506	143	1101	1750	1641	159	1750	773	1027
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.27	0.27	0.27	0.12	0.11	0.11	0.02	0.10	0.10
Crit Moves:					****		****				****	
Green Time:	48.8	48.8	48.8	48.8	48.8	48.8	21.6	23.7	23.7	15.5	17.6	17.6
Volume/Cap:	0.05	0.05	0.05	0.56	0.56	0.56	0.56	0.45	0.45	0.11	0.56	0.56
Delay/Veh:	13.5	13.5	13.5	18.8	18.8	18.8	36.8	33.4	33.4	36.5	39.9	39.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.5	13.5	13.5	18.8	18.8	18.8	36.8	33.4	33.4	36.5	39.9	39.9
LOS by Move:	B	B	B	B-	B-	B-	D+	C-	C-	D+	D	D
HCM2kAvgQ:	1	1	1	11	11	11	6	5	5	1	5	5

Note: Queue reported is the number of cars per lane.

Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #36: Iowa Avenue / Taaffe Street



Street Name:	Taaffe Street						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	9	20	13	59	39	126	60	166	17	31	72	24
Growth 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
Initial Bse:	9	20	13	59	39	126	60	166	17	31	72	24
Added Vol:	0	0	0	98	0	249	178	46	0	0	66	87
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	20	13	157	39	375	238	212	17	31	138	111
User 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
PHF 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
PHF Volume:	9	20	13	157	39	375	238	212	17	31	138	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	20	13	157	39	375	238	212	17	31	138	111
PCE 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
MLF 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
FinalVolume:	9	20	13	157	39	375	238	212	17	31	138	111
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	0.21	0.48	0.31	0.27	0.07	0.66	1.00	0.93	0.07	1.00	0.55	0.45
Final Sat.:	375	833	542	481	120	1149	1750	1666	134	1750	998	802
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.33	0.33	0.33	0.14	0.13	0.13	0.02	0.14	0.14
Crit Moves:					****		****				****	
Green Time:	47.8	47.8	47.8	47.8	47.8	47.8	19.9	25.9	25.9	14.3	20.3	20.3
Volume/Cap:	0.05	0.05	0.05	0.68	0.68	0.68	0.68	0.49	0.49	0.12	0.68	0.68
Delay/Veh:	14.0	14.0	14.0	22.5	22.5	22.5	42.6	32.2	32.2	37.6	42.1	42.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	14.0	14.0	14.0	22.5	22.5	22.5	42.6	32.2	32.2	37.6	42.1	42.1
LOS by Move:	B	B	B	C+	C+	C+	D	C-	C-	D+	D	D
HCM2kAvgQ:	1	1	1	15	15	15	7	6	6	1	8	8

Note: Queue reported is the number of cars per lane.

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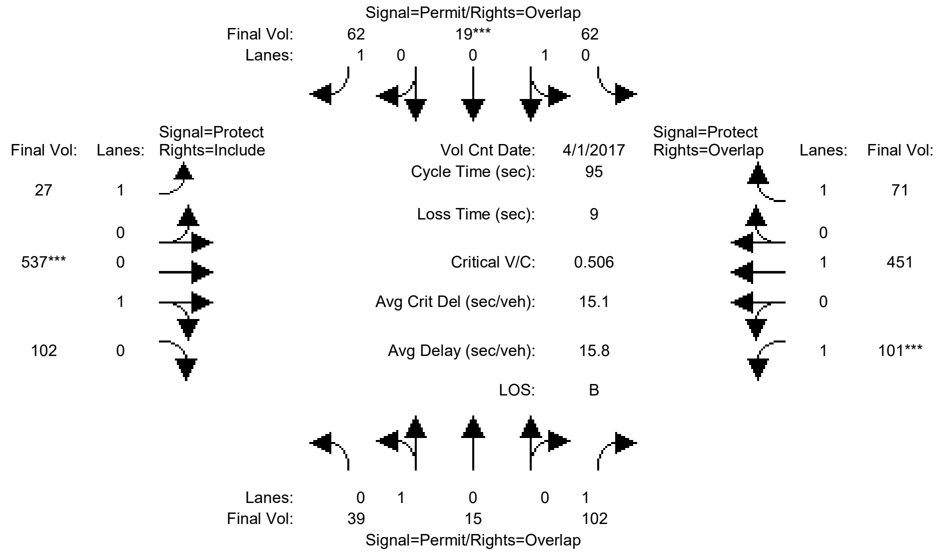
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #37: Frances Street / Evelyn Avenue



Street Name:	Frances Street						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	36	15	66	62	19	62	27	494	96	87	397	71
Growth 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
Initial Bse:	36	15	66	62	19	62	27	494	96	87	397	71
Added Vol:	3	0	36	0	0	0	0	43	6	14	54	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	15	102	62	19	62	27	537	102	101	451	71
User 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
PHF 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
PHF Volume:	39	15	102	62	19	62	27	537	102	101	451	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	15	102	62	19	62	27	537	102	101	451	71
PCE 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
MLF 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
FinalVolume:	39	15	102	62	19	62	27	537	102	101	451	71
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	0.72	0.28	1.00	0.77	0.23	1.00	1.00	0.84	0.16	1.00	1.00	1.00
Final Sat.:	1300	500	1750	1378	422	1750	1750	1513	287	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.06	0.05	0.05	0.04	0.02	0.36	0.36	0.06	0.24	0.04
Crit Moves:					****			****		****		
Green Time:	10.0	10.0	20.6	10.0	10.0	28.0	18.0	65.4	65.4	10.6	58.0	58.0
Volume/Cap:	0.29	0.29	0.27	0.43	0.43	0.12	0.08	0.52	0.52	0.52	0.39	0.07
Delay/Veh:	40.0	40.0	31.3	41.4	41.4	24.6	31.8	7.5	7.5	42.1	9.7	7.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.0	40.0	31.3	41.4	41.4	24.6	31.8	7.5	7.5	42.1	9.7	7.5
LOS by Move:	D	D	C	D	D	C	C	A	A	D	A	A
HCM2kAvgQ:	2	2	3	3	3	1	1	9	9	4	7	1

Note: Queue reported is the number of cars per lane.

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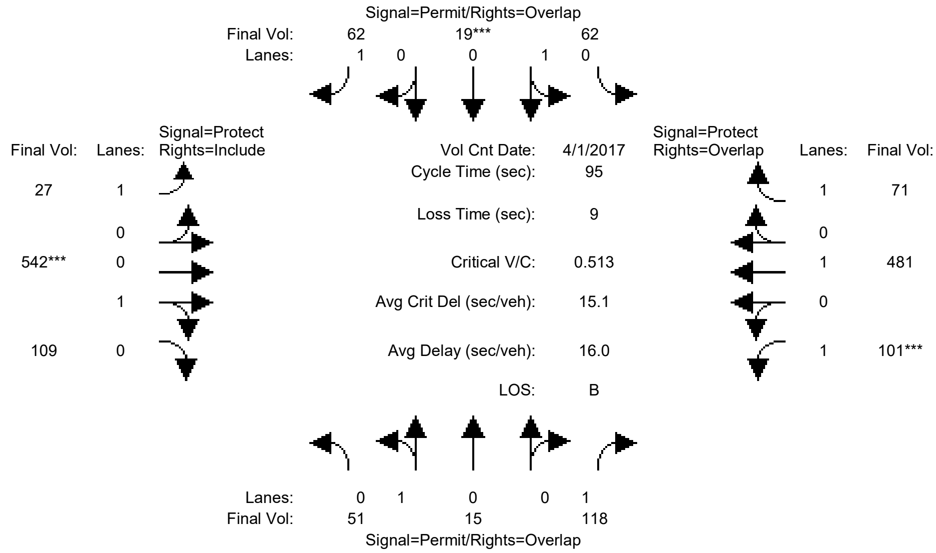
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #37: Frances Street / Evelyn Avenue



Street Name:	Frances Street						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	36	15	66	62	19	62	27	494	96	87	397	71
Growth 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
Initial Bse:	36	15	66	62	19	62	27	494	96	87	397	71
Added Vol:	15	0	52	0	0	0	0	48	13	14	84	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	51	15	118	62	19	62	27	542	109	101	481	71
User 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
PHF 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
PHF Volume:	51	15	118	62	19	62	27	542	109	101	481	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	15	118	62	19	62	27	542	109	101	481	71
PCE 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
MLF 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
FinalVolume:	51	15	118	62	19	62	27	542	109	101	481	71
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	0.77	0.23	1.00	0.77	0.23	1.00	1.00	0.83	0.17	1.00	1.00	1.00
Final Sat.:	1391	409	1750	1378	422	1750	1750	1499	301	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.07	0.05	0.05	0.04	0.02	0.36	0.36	0.06	0.25	0.04
Crit Moves:					****			****		****		
Green Time:	10.0	10.0	20.5	10.0	10.0	27.1	17.1	65.5	65.5	10.5	58.9	58.9
Volume/Cap:	0.35	0.35	0.31	0.43	0.43	0.12	0.09	0.52	0.52	0.52	0.41	0.07
Delay/Veh:	40.6	40.6	31.8	41.4	41.4	25.2	32.5	7.6	7.6	42.6	9.4	7.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.6	40.6	31.8	41.4	41.4	25.2	32.5	7.6	7.6	42.6	9.4	7.2
LOS by Move:	D	D	C	D	D	C	C-	A	A	D	A	A
HCM2kAvgQ:	2	2	3	3	3	1	1	10	10	4	7	1

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative PM

Intersection #38: Washington Avenue / Frances Street

```
                    Signal=Stop/Rights=Include
          Final Vol:   109         0         138
             Lanes:      0    0    1!    0    0

                 Signal=Uncontrol                                  Signal=Uncontrol
Final Vol: Lanes: Rights=Include    Vol Cnt Date:   12/1/2017   Rights=Include   Lanes:  Final Vol:
                                 Cycle Time (sec):     80
   135       1                                                                     1       55
                                  Loss Time (sec):      9
             0                                                                     0
   507       1                      Critical V/C:   0.576                          1      253
             0                 Avg Crit Del (sec/veh):  8.7                        0
     0       0                    Avg Delay (sec/veh):  8.7                        0        0
                                              LOS:      E

             Lanes:      0    0    0    0    0
          Final Vol:     0         0         0
                    Signal=Stop/Rights=Include
```

```
Street Name:           Frances Street                  Washington Avenue
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 1 Dec 2017 <<
Base Vol:        0    0     0   138    0    89    96  320     0     0  125    55
Growth 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
Initial Bse:     0    0     0   138    0    89    96  320     0     0  125    55
Added Vol:       0    0     0     0    0    20    39  187     0     0  128     0
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:     0    0     0   138    0   109   135  507     0     0  253    55
User 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
PHF 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
PHF Volume:      0    0     0   138    0   109   135  507     0     0  253    55
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:     0    0     0   138    0   109   135  507     0     0  253    55
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  1030 1030   253   308 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   261  235   791  1264 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   240  210   791  1264 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.58 0.00  0.14  0.11 xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2WayQ95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.4 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   8.2 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:     *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  346 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  5.3 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 37.6 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    E     *     *    *     *     *    *     *
ApproachDel:     xxxxxx            37.6              xxxxxx            xxxxxx
ApproachLOS:          *               E                   *                 *
Note: Queue reported is the number of cars per lane.
                        Peak Hour Delay Signal Warrant Report
*********************************************************************************
Intersection #38 Washington Avenue / Frances Street
*********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  1  0  1
Initial Vol:    0    0     0   138    0   109   135  507     0     0  253    55
ApproachDel:    xxxxxx              37.6           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=2.6]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=247]
   SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1197]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
```

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

```
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #38 Washington Avenue / Frances Street
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  1  0  1
Initial Vol:    0    0     0   138    0   109   135  507     0     0  253    55
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            950
Minor Approach Volume:          247
Minor Approach Volume Threshold: 303
--------------------------------------------------------------------------------
```

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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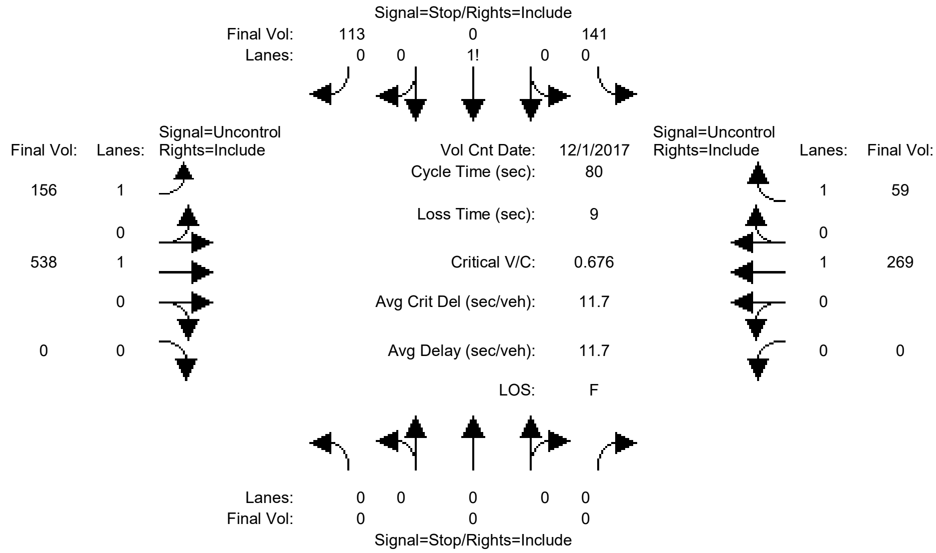
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #38: Washington Avenue / Frances Street




```
Street Name:          Frances Street                 Washington Avenue
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 1 Dec 2017 <<
Base Vol:       0    0     0   138    0    89    96  320     0     0  125    55
Growth 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
Initial Bse:    0    0     0   138    0    89    96  320     0     0  125    55
Added Vol:      0    0     0     3    0    24    60  218     0     0  144     4
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0   141    0   113   156  538     0     0  269    59
User 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
PHF 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
PHF Volume:     0    0     0   141    0   113   156  538     0     0  269    59
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0   141    0   113   156  538     0     0  269    59
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  1119 1119   269   328 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   231  209   775  1243 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   209  182   775  1243 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.68 0.00  0.15  0.13 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.4 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   8.3 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT   LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  309 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  6.9 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 53.4 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    F     *     *    *     *     *    *     *
ApproachDel:     xxxxxx            53.4             xxxxxx            xxxxxx
ApproachLOS:          *               F                  *                 *
Note: Queue reported is the number of cars per lane.
                     Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #38 Washington Avenue / Frances Street
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  1  0  1
Initial Vol:    0    0     0   141    0   113   156  538     0     0  269    59
ApproachDel:    xxxxxx              53.4            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=3.8]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=254]
   SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1276]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #38 Washington Avenue / Frances Street
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  1  0  1
Initial Vol:    0    0     0   141    0   113   156  538     0     0  269    59
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             1022
Minor Approach Volume:           254
Minor Approach Volume Threshold: 277
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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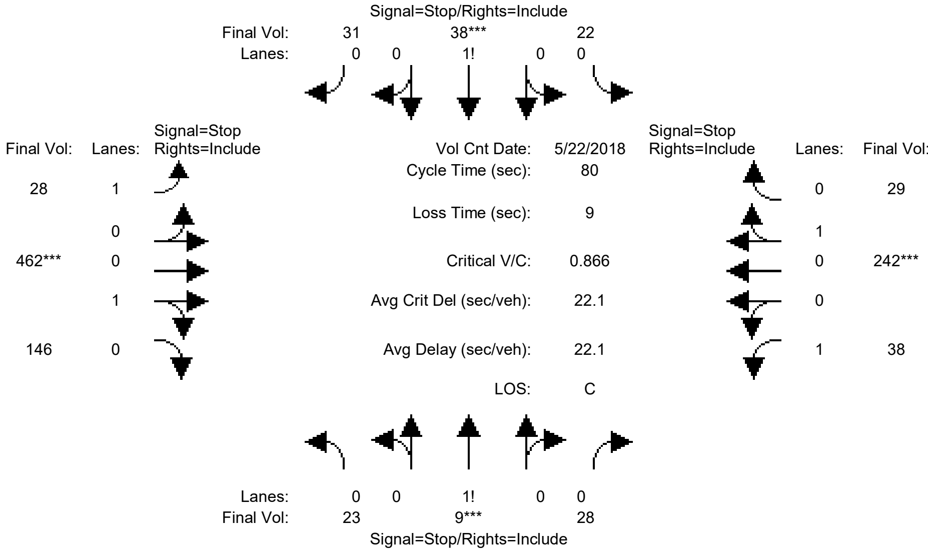
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cumulative PM

Intersection #39: Murphy Avenue / Washington Avenue



Street Name:	Murphy Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 22 May 2018 <<												
Base Vol:	23	9	28	22	36	30	28	276	146	37	115	29
Growth 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
Initial Bse:	23	9	28	22	36	30	28	276	146	37	115	29
Added Vol:	0	0	0	0	2	1	0	186	0	1	127	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	9	28	22	38	31	28	462	146	38	242	29
User 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
PHF 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
PHF Volume:	23	9	28	22	38	31	28	462	146	38	242	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	9	28	22	38	31	28	462	146	38	242	29
PCE 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
MLF 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
FinalVolume:	23	9	28	22	38	31	28	462	146	38	242	29
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.38	0.15	0.47	0.24	0.42	0.34	1.00	0.76	0.24	1.00	0.89	0.11
Final Sat.:	209	82	255	134	231	188	615	533	169	576	572	69
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.16	0.16	0.16	0.05	0.87	0.87	0.07	0.42	0.42
Crit Moves:		****			****			****			****	
Delay/Veh:	9.8	9.8	9.8	10.1	10.1	10.1	8.7	31.1	31.1	9.2	12.0	12.0
Delay 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
AdjDel/Veh:	9.8	9.8	9.8	10.1	10.1	10.1	8.7	31.1	31.1	9.2	12.0	12.0
LOS by Move:	A	A	A	B	B	B	A	D	D	A	B	B
ApproachDel:		9.8			10.1			30.1			11.6	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		9.8			10.1			30.1			11.6	
LOS by Appr:		A			B			D			B	
AllWayAvgQ:	0.1	0.1	0.1	0.2	0.2	0.2	0.0	4.5	4.5	0.1	0.7	0.7

Note: Queue reported is the number of cars per lane.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #39 Murphy Avenue / Washington Avenue

****

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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign        Stop Sign        Stop Sign
Lanes:        0  0  1! 0  0   0  0  1! 0  0   1  0  0  1  0   1  0  0  1  0
Initial Vol:   23    9    28   22   38    31   28  462   146   38  242    29
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            945
Minor Approach Volume:          91
Minor Approach Volume Threshold: 304
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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a traffic signal in the future.  Intersections that exceed this warrant
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signal warrant (such as the 4-hour or 8-hour warrants).

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```

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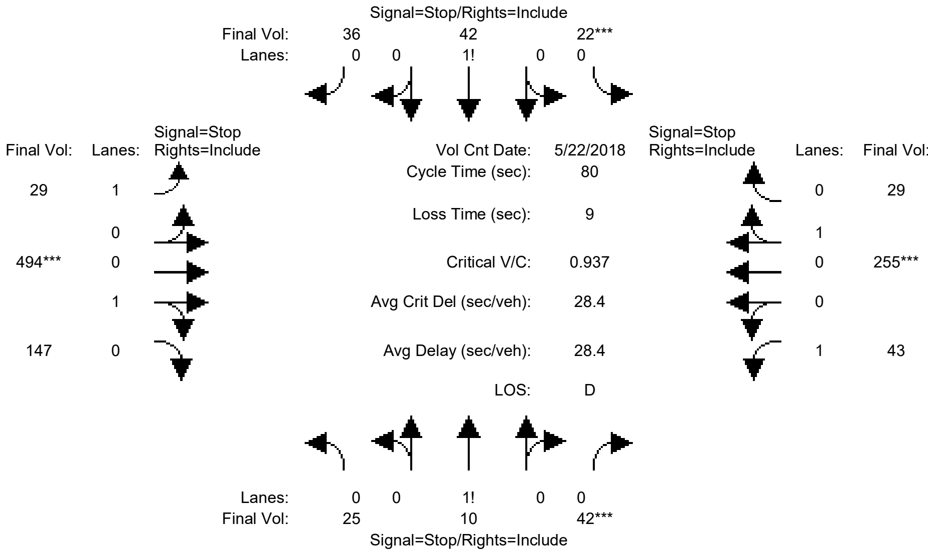
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #39: Murphy Avenue / Washington Avenue



Street Name:	Murphy Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 22 May 2018 <<												
Base Vol:	23	9	28	22	36	30	28	276	146	37	115	29
Growth 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
Initial Bse:	23	9	28	22	36	30	28	276	146	37	115	29
Added Vol:	2	1	14	0	6	6	1	218	1	6	140	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	10	42	22	42	36	29	494	147	43	255	29
User 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
PHF 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
PHF Volume:	25	10	42	22	42	36	29	494	147	43	255	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	10	42	22	42	36	29	494	147	43	255	29
PCE 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
MLF 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
FinalVolume:	25	10	42	22	42	36	29	494	147	43	255	29
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.32	0.13	0.55	0.22	0.42	0.36	1.00	0.77	0.23	1.00	0.90	0.10
Final Sat.:	176	71	296	120	229	196	601	527	157	566	558	63
Capacity Analysis Module:												
Vol/Sat:	0.14	0.14	0.14	0.18	0.18	0.18	0.05	0.94	0.94	0.08	0.46	0.46
Crit Moves:			****	****				****			****	
Delay/Veh:	10.2	10.2	10.2	10.5	10.5	10.5	8.9	42.5	42.5	9.4	12.8	12.8
Delay 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
AdjDel/Veh:	10.2	10.2	10.2	10.5	10.5	10.5	8.9	42.5	42.5	9.4	12.8	12.8
LOS by Move:	B	B	B	B	B	B	A	E	E	A	B	B
ApproachDel:		10.2			10.5			41.0			12.4	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		10.2			10.5			41.0			12.4	
LOS by Appr:		B			B			E			B	
AllWayAvgQ:	0.1	0.1	0.1	0.2	0.2	0.2	0.0	6.6	6.6	0.1	0.8	0.8

Note: Queue reported is the number of cars per lane.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #39 Murphy Avenue / Washington Avenue

****

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```
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|----------------||----------------||----------------||----------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Stop Sign        Stop Sign        Stop Sign        Stop Sign
Lanes:        0  0  1! 0  0    0  0  1! 0  0    1  0  0  1  0    1  0  0  1  0
Initial Vol:   25   10    42    22   42    36    29  494   147    43  255    29
------------|----------------||----------------||----------------||----------------|
Major Street Volume:            997
Minor Approach Volume:          100
Minor Approach Volume Threshold: 286
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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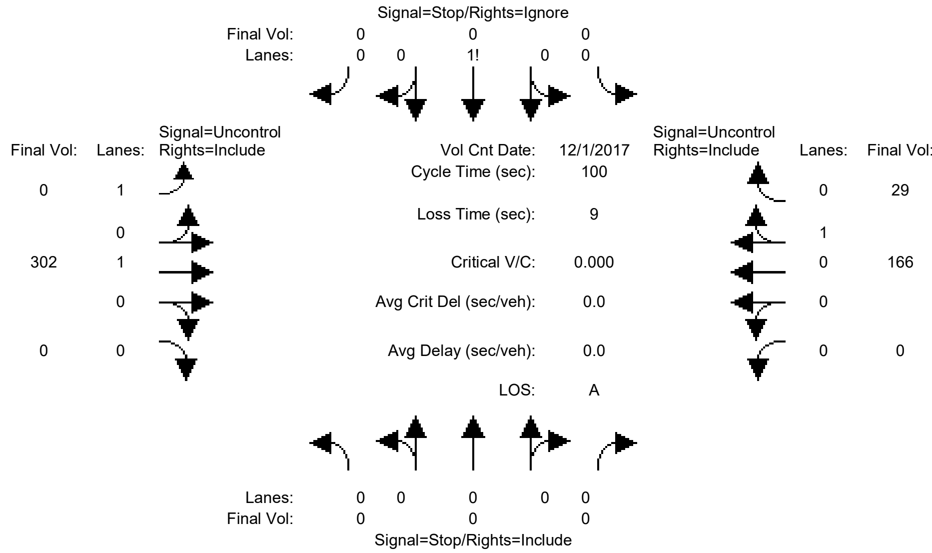
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative PM

Intersection #40: Iowa Avenue / Murphy Avenue




```
Street Name:          Murphy Avenue                        Iowa Avenue
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 1 Dec 2017 <<
Base Vol:       0    0     0     0    0     0     0  214     0     0   86    29
Growth 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
Initial Bse:    0    0     0     0    0     0     0  214     0     0   86    29
Added Vol:      0    0     0     0    0     1     0   88     0     0   80     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     0    0     1     0  302     0     0  166    29
User Adj:    1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0     0    0     0     0  302     0     0  166    29
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0     0    0     0     0  302     0     0  166    29
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx   6.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx   181  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx   867  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx   867  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  0.00  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx           xxxxxx           xxxxxx
ApproachLOS:         *                *                *                *
Note: Queue reported is the number of cars per lane.
                   Peak Hour Delay Signal Warrant Report
*********************************************************************************
Intersection #40 Iowa Avenue / Murphy Avenue
*********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0    0     0     0    0     1     0  302     0     0  166    29
ApproachDel:    xxxxxx           xxxxxx           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=OVERFLOW]
   SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=1]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=498]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
```

SIGNAL WARRANT DISCLAIMER
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Peak Hour Volume Signal Warrant Report [Urban]

```
********************************************************************************
Intersection #40 Iowa Avenue / Murphy Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    1  0  1  0  0    0  0  0  1  0
Initial Vol:    0    0     0     0    0     1     0  302     0     0  166    29
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             497
Minor Approach Volume:           1
Minor Approach Volume Threshold: 526
--------------------------------------------------------------------------------
```

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #40: Iowa Avenue / Murphy Avenue

Signal=Stop/Rights=Ignore
Final Vol: 0 0 5
Lanes: 0 0 1! 0 0

Final Vol:	Lanes:	Signal=Uncontrol Rights=Include			Signal=Uncontrol Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	12/1/2017			
33	1		Cycle Time (sec):	100		0	31
	0		Loss Time (sec):	9		1	
325	1		Critical V/C:	0.024		0	184
	0		Avg Crit Del (sec/veh):	0.6		0	
0	0		Avg Delay (sec/veh):	0.6		0	0
			LOS:	B			

Lanes: 0 0 0 0 0
Final Vol: 0 0 0
Signal=Stop/Rights=Include

```
Street Name:          Murphy Avenue                      Iowa Avenue
Approach:      North Bound       South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 1 Dec 2017 <<
Base Vol:       0    0     0     0    0     0     0  214     0     0   86    29
Growth 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
Initial Bse:    0    0     0     0    0     0     0  214     0     0   86    29
Added Vol:      0    0     0     5    0    55    33  111     0     0   98     2
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     5    0    55    33  325     0     0  184    31
User Adj:    1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0     5    0     0    33  325     0     0  184    31
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0     5    0     0    33  325     0     0  184    31
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   591  591   200   215 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   473  423   847  1367 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   464  412   847  1367 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.01 0.00  0.00  0.02 xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.1 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.7 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  464 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.0 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 12.8 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    B     *     *    *     *     *    *     *
ApproachDel:     xxxxxx             12.8             xxxxxx            xxxxxx
ApproachLOS:        *                 B                 *                 *
Note: Queue reported is the number of cars per lane.
                     Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #40 Iowa Avenue / Murphy Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

```
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:       0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
Initial Vol:   0    0    0     5    0    55    33  325    0      0  184    31
ApproachDel:   xxxxxx              12.8           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=60]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=633]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #40 Iowa Avenue / Murphy Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:     North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:       0  0  0  0  0    0  0  1! 0  0    1  0  1  0  0    0  0  0  1  0
Initial Vol:   0    0    0     5    0    55    33  325    0      0  184    31
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            573
Minor Approach Volume:          60
Minor Approach Volume Threshold: 477
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

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jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

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Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #41: Sunnyvale Avenue / Maude Avenue

Signal=Split/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Westbound side: Final Vol: 27 / 844*** / 328; Lanes: 1, 0, 1, 0, 1; Signal=Protect Rights=Overlap

Vol Cnt Date: 10/2/2018
Cycle Time (sec): 120
Loss Time (sec): 9
Critical V/C: 0.622
Avg Crit Del (sec/veh): 20.1
Avg Delay (sec/veh): 17.1
LOS: B

Signal=Protect Rights=Include; Lanes: 0, 1, 0, 0, 1; Final Vol: 10 / 307 / 98***

Lanes: 0 1 0 0 1
Final Vol: 110 26*** 118
Signal=Split/Rights=Overlap

Street Name:	Sunnyvale Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	104	0	121	0	0	0	0	616	328	98	245	0
Growth 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
Initial Bse:	104	0	121	0	0	0	0	616	328	98	245	0
Added Vol:	6	26	-3	0	0	0	27	228	0	0	62	10
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	110	26	118	0	0	0	27	844	328	98	307	10
User 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
PHF 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
PHF Volume:	110	26	118	0	0	0	27	844	328	98	307	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	26	118	0	0	0	27	844	328	98	307	10
PCE 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
MLF 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
FinalVolume:	110	26	118	0	0	0	27	844	328	98	307	10
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	0.81	0.19	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.97	0.03
Final Sat.:	1456	344	1750	0	0	0	1750	1900	1750	1750	1743	57
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.07	0.00	0.00	0.00	0.02	0.44	0.19	0.06	0.18	0.18
Crit Moves:		****						****		****		
Green Time:	14.6	14.6	25.4	0.0	0.0	0.0	24.0	85.6	100.2	10.8	72.4	72.4
Volume/Cap:	0.62	0.62	0.32	0.00	0.00	0.00	0.08	0.62	0.22	0.62	0.29	0.29
Delay/Veh:	55.6	55.6	40.5	0.0	0.0	0.0	39.1	9.8	2.1	60.1	11.6	11.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.6	55.6	40.5	0.0	0.0	0.0	39.1	9.8	2.1	60.1	11.6	11.6
LOS by Move:	E+	E+	D	A	A	A	D	A	A	E	B+	B+
HCM2kAvgQ:	5	5	4	0	0	0	1	16	3	4	6	6

Note: Queue reported is the number of cars per lane.

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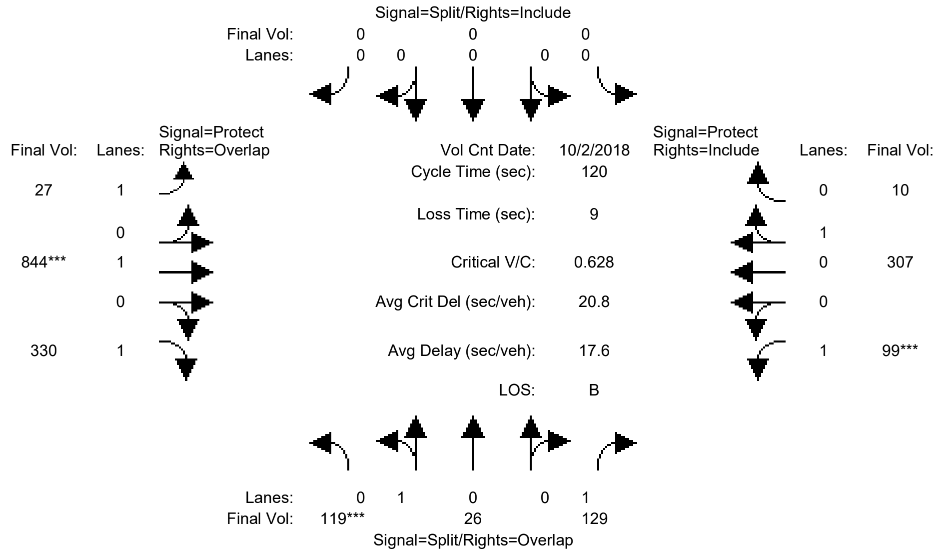
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #41: Sunnyvale Avenue / Maude Avenue



Street Name:	Sunnyvale Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	104	0	121	0	0	0	0	616	328	98	245	0
Growth 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
Initial Bse:	104	0	121	0	0	0	0	616	328	98	245	0
Added Vol:	15	26	8	0	0	0	27	228	0	0	62	10
PasserByVol:	0	0	0	0	0	0	0	0	2	1	0	0
Initial Fut:	119	26	129	0	0	0	27	844	330	99	307	10
User 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
PHF 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
PHF Volume:	119	26	129	0	0	0	27	844	330	99	307	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	119	26	129	0	0	0	27	844	330	99	307	10
PCE 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
MLF 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
FinalVolume:	119	26	129	0	0	0	27	844	330	99	307	10
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	0.82	0.18	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.97	0.03
Final Sat.:	1477	323	1750	0	0	0	1750	1900	1750	1750	1743	57
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.07	0.00	0.00	0.00	0.02	0.44	0.19	0.06	0.18	0.18
Crit Moves:	****							****		****		
Green Time:	15.4	15.4	26.2	0.0	0.0	0.0	23.8	84.8	100.2	10.8	71.8	71.8
Volume/Cap:	0.63	0.63	0.34	0.00	0.00	0.00	0.08	0.63	0.23	0.63	0.29	0.29
Delay/Veh:	55.0	55.0	40.1	0.0	0.0	0.0	39.3	10.2	2.1	60.5	11.9	11.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.0	55.0	40.1	0.0	0.0	0.0	39.3	10.2	2.1	60.5	11.9	11.9
LOS by Move:	E+	E+	D	A	A	A	D	B+	A	E	B+	B+
HCM2kAvgQ:	5	5	4	0	0	0	1	16	3	4	6	6

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #42: Sunnyvale Road / Arques Avenue

Signal=Permit/Rights=Include
Final Vol: 1 442*** 5
Lanes: 0 0 1! 0 0

Signal=Split
Rights=Include

Final Vol:	Lanes:				Lanes:	Final Vol:
5	0	Vol Cnt Date:	10/3/2018		0	27
		Cycle Time (sec):	56			
	0	Loss Time (sec):	12		0	
5***	1!	Critical V/C:	0.520		1!	15
	0	Avg Crit Del (sec/veh):	17.6		0	
55	0	Avg Delay (sec/veh):	15.4		0	160***
		LOS:	B			

Signal=Split
Rights=Include

Lanes: 0 1 0 0 1
Final Vol: 29 253 42
Signal=Permit/Rights=Overlap

Street Name:	Sunnyvale Raod						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	29	224	42	5	442	1	5	5	55	160	15	27
Growth 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
Initial Bse:	29	224	42	5	442	1	5	5	55	160	15	27
Added Vol:	0	29	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	253	42	5	442	1	5	5	55	160	15	27
User 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
PHF 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
PHF Volume:	29	253	42	5	442	1	5	5	55	160	15	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	253	42	5	442	1	5	5	55	160	15	27
PCE 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
MLF 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
FinalVolume:	29	253	42	5	442	1	5	5	55	160	15	27
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.10	0.90	1.00	0.01	0.98	0.01	0.08	0.08	0.84	0.80	0.07	0.13
Final Sat.:	185	1615	1750	20	1727	4	135	135	1481	1386	130	234
Capacity Analysis Module:												
Vol/Sat:	0.16	0.16	0.02	0.26	0.26	0.26	0.04	0.04	0.04	0.12	0.12	0.12
Crit Moves:					****			****		****		
Green Time:	23.4	23.4	34.0	23.4	23.4	23.4	10.0	10.0	10.0	10.6	10.6	10.6
Volume/Cap:	0.37	0.37	0.04	0.61	0.61	0.61	0.21	0.21	0.21	0.61	0.61	0.61
Delay/Veh:	11.5	11.5	4.4	14.3	14.3	14.3	20.0	20.0	20.0	24.2	24.2	24.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.5	11.5	4.4	14.3	14.3	14.3	20.0	20.0	20.0	24.2	24.2	24.2
LOS by Move:	B+	B+	A	B	B	B	B-	B-	B-	C	C	C
HCM2kAvgQ:	3	3	0	7	7	7	1	1	1	3	3	3

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #42: Sunnyvale Road / Arques Avenue

Signal=Permit/Rights=Include
Final Vol: 1 445*** 5
Lanes: 0 0 1! 0 0

Signal=Split Rights=Include (Eastbound)
Final Vol: 5, 5***, 55
Lanes: 0, 0, 1!, 0, 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 56
Loss Time (sec): 12
Critical V/C: 0.522
Avg Crit Del (sec/veh): 17.6
Avg Delay (sec/veh): 15.4
LOS: B

Signal=Split Rights=Include (Westbound)
Lanes: 0, 0, 1!, 0, 0
Final Vol: 27, 15, 160***

Lanes: 0 1 0 0 1
Final Vol: 29 272 42
Signal=Permit/Rights=Overlap

Street Name:	Sunnyvale Raod						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	29	224	42	5	442	1	5	5	55	160	15	27
Growth 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
Initial Bse:	29	224	42	5	442	1	5	5	55	160	15	27
Added Vol:	0	48	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	3	0	0	0	0	0	0	0
Initial Fut:	29	272	42	5	445	1	5	5	55	160	15	27
User 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
PHF 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
PHF Volume:	29	272	42	5	445	1	5	5	55	160	15	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	272	42	5	445	1	5	5	55	160	15	27
PCE 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
MLF 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
FinalVolume:	29	272	42	5	445	1	5	5	55	160	15	27
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.10	0.90	1.00	0.01	0.98	0.01	0.08	0.08	0.84	0.80	0.07	0.13
Final Sat.:	173	1627	1750	19	1727	4	135	135	1481	1386	130	234
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.02	0.26	0.26	0.26	0.04	0.04	0.04	0.12	0.12	0.12
Crit Moves:					****			****		****		
Green Time:	23.5	23.5	34.0	23.5	23.5	23.5	10.0	10.0	10.0	10.5	10.5	10.5
Volume/Cap:	0.40	0.40	0.04	0.61	0.61	0.61	0.21	0.21	0.21	0.61	0.61	0.61
Delay/Veh:	11.7	11.7	4.4	14.3	14.3	14.3	20.0	20.0	20.0	24.3	24.3	24.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.7	11.7	4.4	14.3	14.3	14.3	20.0	20.0	20.0	24.3	24.3	24.3
LOS by Move:	B+	B+	A	B	B	B	B-	B-	B-	C	C	C
HCM2kAvgQ:	4	4	0	7	7	7	1	1	1	3	3	3

Note: Queue reported is the number of cars per lane.

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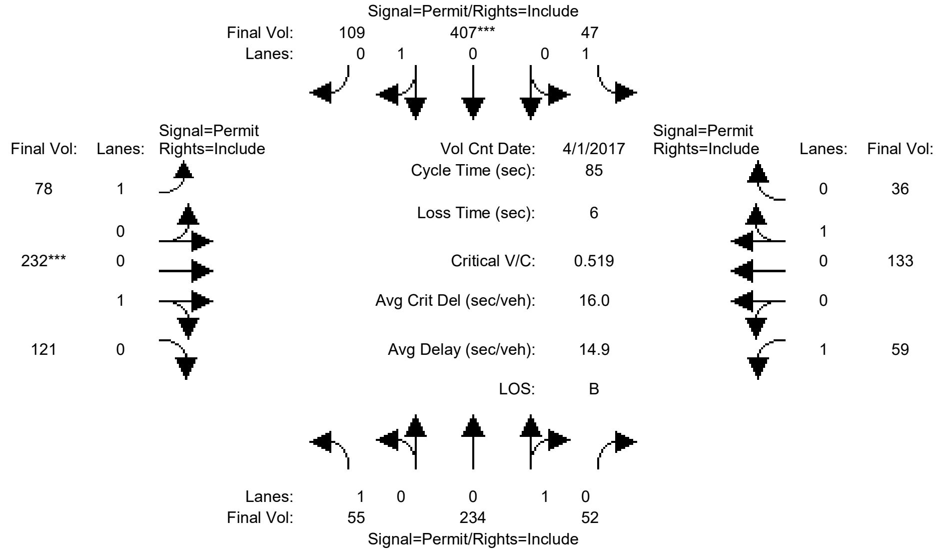
Intersection #43: Sunnyvale Avenue / California Avenue



Street Name:	Sunnyvale Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	44	215	52	44	410	109	78	204	110	59	123	26
Growth 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
Initial Bse:	44	215	52	44	410	109	78	204	110	59	123	26
Added Vol:	11	19	0	3	-3	0	0	28	11	0	10	10
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	55	234	52	47	407	109	78	232	121	59	133	36
User 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
PHF 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
PHF Volume:	55	234	52	47	407	109	78	232	121	59	133	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	234	52	47	407	109	78	232	121	59	133	36
PCE 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
MLF 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
FinalVolume:	55	234	52	47	407	109	78	232	121	59	133	36
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.82	0.18	1.00	0.79	0.21	1.00	0.66	0.34	1.00	0.79	0.21
Final Sat.:	1750	1473	327	1750	1420	380	1750	1183	617	1750	1417	383
Capacity Analysis Module:												
Vol/Sat:	0.03	0.16	0.16	0.03	0.29	0.29	0.04	0.20	0.20	0.03	0.09	0.09
Crit Moves:					****			****				
Green Time:	46.9	46.9	46.9	46.9	46.9	46.9	32.1	32.1	32.1	32.1	32.1	32.1
Volume/Cap:	0.06	0.29	0.29	0.05	0.52	0.52	0.12	0.52	0.52	0.09	0.25	0.25
Delay/Veh:	8.8	10.3	10.3	8.8	12.5	12.5	17.3	21.2	21.2	17.1	18.4	18.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.8	10.3	10.3	8.8	12.5	12.5	17.3	21.2	21.2	17.1	18.4	18.4
LOS by Move:	A	B+	B+	A	B	B	B	C+	C+	B	B-	B-
HCM2kAvgQ:	1	4	4	1	9	9	1	7	7	1	3	3

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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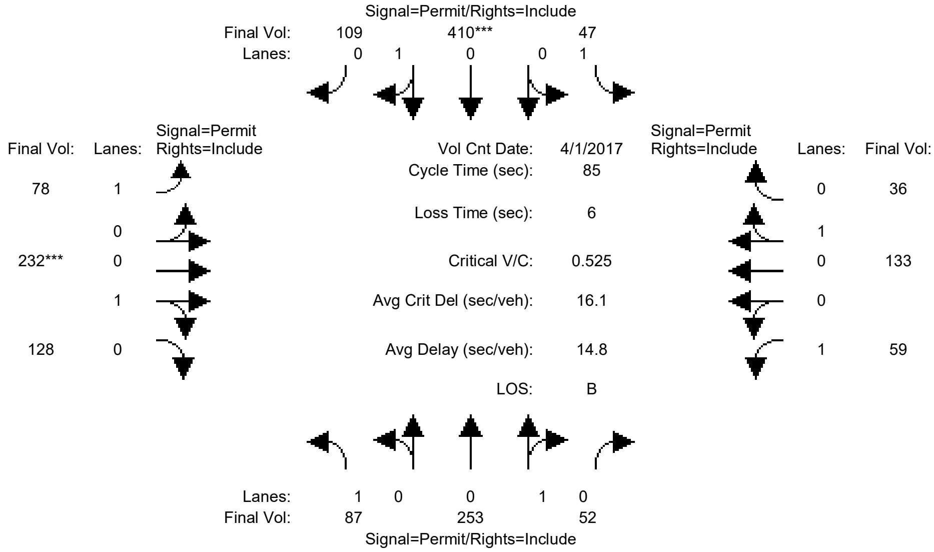
Intersection #43: Sunnyvale Avenue / California Avenue



Street Name:	Sunnyvale Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	44	215	52	44	410	109	78	204	110	59	123	26
Growth 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
Initial Bse:	44	215	52	44	410	109	78	204	110	59	123	26
Added Vol:	43	38	0	3	-3	0	0	28	20	0	10	10
PasserByVol:	0	0	0	0	3	0	0	0	-2	0	0	0
Initial Fut:	87	253	52	47	410	109	78	232	128	59	133	36
User 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
PHF 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
PHF Volume:	87	253	52	47	410	109	78	232	128	59	133	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	87	253	52	47	410	109	78	232	128	59	133	36
PCE 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
MLF 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
FinalVolume:	87	253	52	47	410	109	78	232	128	59	133	36
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.83	0.17	1.00	0.79	0.21	1.00	0.64	0.36	1.00	0.79	0.21
Final Sat.:	1750	1493	307	1750	1422	378	1750	1160	640	1750	1417	383
Capacity Analysis Module:												
Vol/Sat:	0.05	0.17	0.17	0.03	0.29	0.29	0.04	0.20	0.20	0.03	0.09	0.09
Crit Moves:					****			****				
Green Time:	46.6	46.6	46.6	46.6	46.6	46.6	32.4	32.4	32.4	32.4	32.4	32.4
Volume/Cap:	0.09	0.31	0.31	0.05	0.53	0.53	0.12	0.53	0.53	0.09	0.25	0.25
Delay/Veh:	9.1	10.6	10.6	8.9	12.7	12.7	17.1	21.1	21.1	16.9	18.2	18.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.1	10.6	10.6	8.9	12.7	12.7	17.1	21.1	21.1	16.9	18.2	18.2
LOS by Move:	A	B+	B+	A	B	B	B	C+	C+	B	B-	B-
HCM2kAvgQ:	1	4	4	1	9	9	1	7	7	1	3	3

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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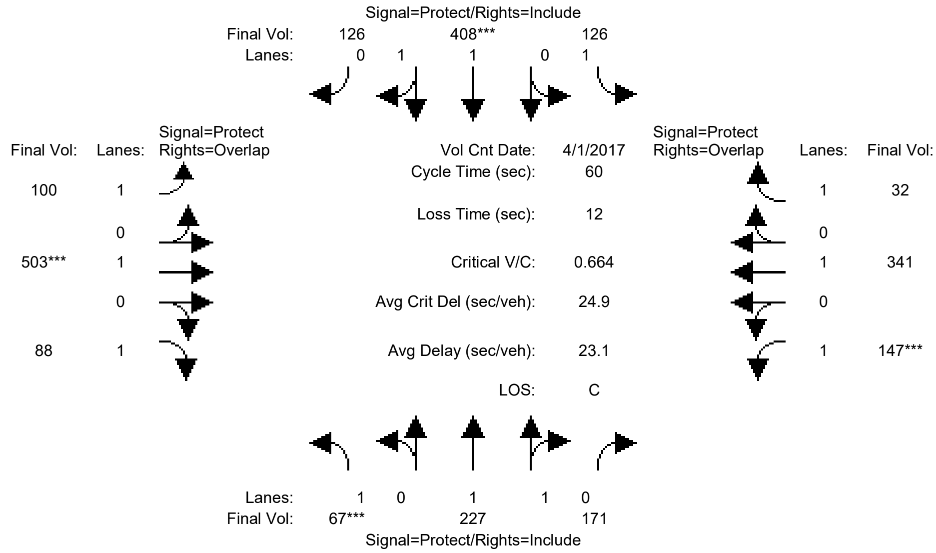
Cumulative PM

Intersection #44: Sunnyvale Avenue / Evelyn Avenue



Street Name:	Sunnyvale Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	67	218	115	126	400	126	79	446	86	92	279	32
Growth 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
Initial Bse:	67	218	115	126	400	126	79	446	86	92	279	32
Added Vol:	0	9	56	0	8	0	21	57	2	55	62	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	67	227	171	126	408	126	100	503	88	147	341	32
User 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
PHF 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
PHF Volume:	67	227	171	126	408	126	100	503	88	147	341	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	227	171	126	408	126	100	503	88	147	341	32
PCE 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
MLF 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
FinalVolume:	67	227	171	126	408	126	100	503	88	147	341	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.12	0.88	1.00	1.52	0.48	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	2109	1589	1750	2826	873	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.11	0.07	0.14	0.14	0.06	0.26	0.05	0.08	0.18	0.02
Crit Moves:	****				****			****		****		
Green Time:	7.0	11.2	11.2	7.8	12.0	12.0	11.4	22.0	29.0	7.0	17.6	25.4
Volume/Cap:	0.33	0.58	0.58	0.55	0.72	0.72	0.30	0.72	0.10	0.72	0.61	0.04
Delay/Veh:	25.3	23.5	23.5	27.4	25.9	25.9	21.4	20.1	8.5	37.3	20.3	10.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	25.3	23.5	23.5	27.4	25.9	25.9	21.4	20.1	8.5	37.3	20.3	10.2
LOS by Move:	C	C	C	C	C	C	C+	C+	A	D+	C+	B+
HCM2kAvgQ:	1	3	3	2	5	5	2	10	1	3	5	0

Note: Queue reported is the number of cars per lane.

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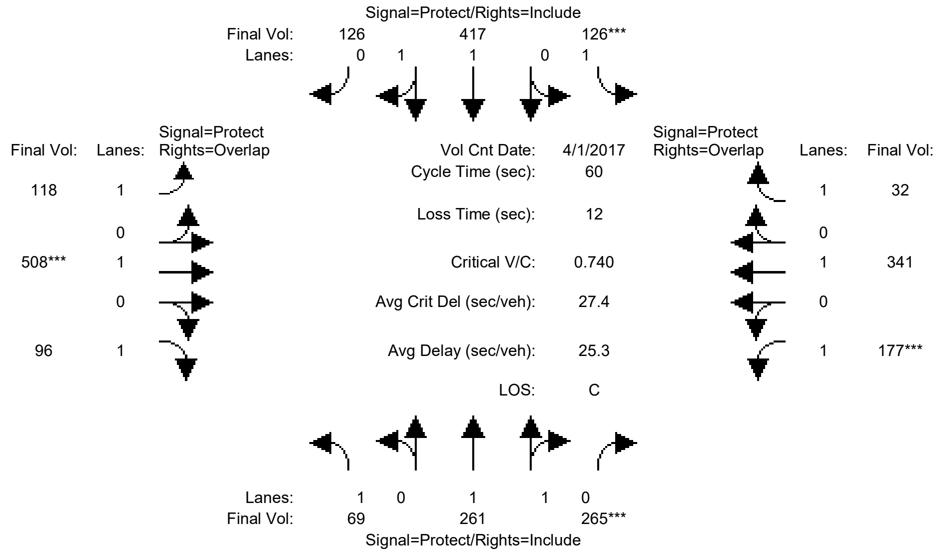
Intersection #44: Sunnyvale Avenue / Evelyn Avenue



Street Name:	Sunnyvale Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	67	218	115	126	400	126	79	446	86	92	279	32
Growth 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
Initial Bse:	67	218	115	126	400	126	79	446	86	92	279	32
Added Vol:	2	43	150	0	16	0	39	62	10	86	62	0
PasserByVol:	0	0	0	0	1	0	0	0	0	-1	0	0
Initial Fut:	69	261	265	126	417	126	118	508	96	177	341	32
User 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
PHF 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
PHF Volume:	69	261	265	126	417	126	118	508	96	177	341	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	69	261	265	126	417	126	118	508	96	177	341	32
PCE 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
MLF 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
FinalVolume:	69	261	265	126	417	126	118	508	96	177	341	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	1.52	0.48	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	1900	1750	1750	2841	858	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.14	0.15	0.07	0.15	0.15	0.07	0.27	0.05	0.10	0.18	0.02
Crit Moves:			****	****				****		****		
Green Time:	7.8	11.9	11.9	7.0	11.1	11.1	11.4	21.1	28.9	8.0	17.6	24.6
Volume/Cap:	0.30	0.69	0.76	0.62	0.79	0.79	0.35	0.76	0.11	0.76	0.61	0.04
Delay/Veh:	24.4	25.0	27.6	30.8	29.5	29.5	21.7	22.3	8.6	38.8	20.2	10.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.4	25.0	27.6	30.8	29.5	29.5	21.7	22.3	8.6	38.8	20.2	10.7
LOS by Move:	C	C	C	C	C	C	C+	C+	A	D+	C+	B+
HCM2kAvgQ:	1	5	5	2	5	5	2	10	1	3	5	0

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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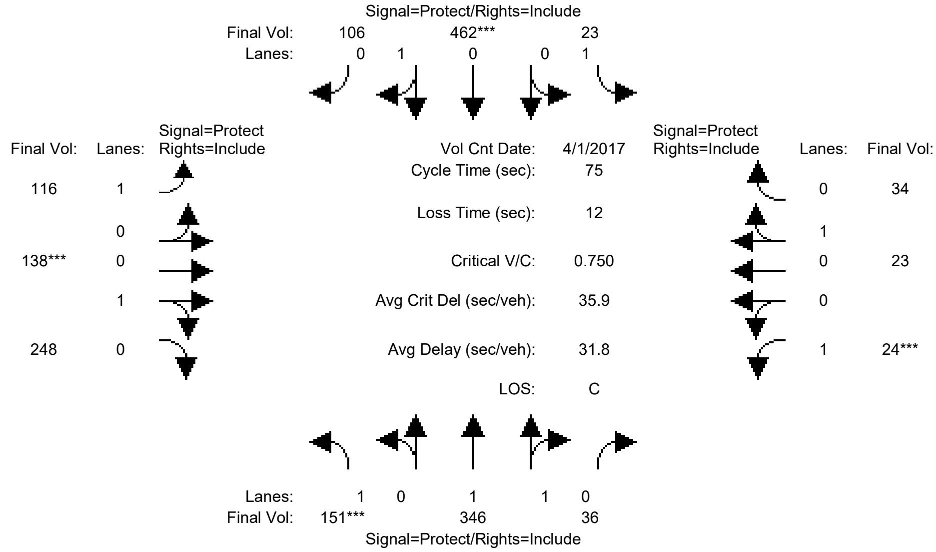
Cumulative PM

Intersection #45: Sunnyvale Avenue / Washington Avenue



Street Name:	Sunnyvale Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	60	322	36	23	437	66	75	138	103	24	23	34
Growth 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
Initial Bse:	60	322	36	23	437	66	75	138	103	24	23	34
Added Vol:	91	24	0	0	25	40	41	0	145	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	151	346	36	23	462	106	116	138	248	24	23	34
User 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
PHF 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
PHF Volume:	151	346	36	23	462	106	116	138	248	24	23	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	346	36	23	462	106	116	138	248	24	23	34
PCE 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
MLF 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
FinalVolume:	151	346	36	23	462	106	116	138	248	24	23	34
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	1.81	0.19	1.00	0.81	0.19	1.00	0.36	0.64	1.00	0.40	0.60
Final Sat.:	1750	3351	349	1750	1464	336	1750	644	1156	1750	726	1074
Capacity Analysis Module:												
Vol/Sat:	0.09	0.10	0.10	0.01	0.32	0.32	0.07	0.21	0.21	0.01	0.03	0.03
Crit Moves:	****				****			****		****		
Green Time:	7.8	21.5	21.5	15.0	28.7	28.7	10.9	19.5	19.5	7.0	15.6	15.6
Volume/Cap:	0.83	0.36	0.36	0.07	0.83	0.83	0.46	0.83	0.83	0.15	0.15	0.15
Delay/Veh:	58.3	21.5	21.5	24.4	29.0	29.0	30.6	37.6	37.6	31.7	24.5	24.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.3	21.5	21.5	24.4	29.0	29.0	30.6	37.6	37.6	31.7	24.5	24.5
LOS by Move:	E+	C+	C+	C	C	C	C	D+	D+	C	C	C
HCM2kAvgQ:	6	4	4	0	13	13	3	12	12	1	1	1

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
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Intersection #45: Sunnyvale Avenue / Washington Avenue

Signal=Protect/Rights=Include
Final Vol: 111 504*** 23
Lanes: 0 1 0 0 1

Final Vol: Lanes: Signal=Protect Rights=Include
143 1
0
138*** 0
1
268 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 75
Loss Time (sec): 12
Critical V/C: 0.811
Avg Crit Del (sec/veh): 44.3
Avg Delay (sec/veh): 37.0
LOS: D+

Signal=Protect Rights=Include Lanes: Final Vol:
0 34
1
0 23
0
1 24***

Lanes: 1 0 1 1 0
Final Vol: 176*** 450 36
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						Washington Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	60	322	36	23	437	66	75	138	103	24	23	34
Growth 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
Initial Bse:	60	322	36	23	437	66	75	138	103	24	23	34
Added Vol:	116	128	0	0	67	45	68	0	165	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	176	450	36	23	504	111	143	138	268	24	23	34
User 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
PHF 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
PHF Volume:	176	450	36	23	504	111	143	138	268	24	23	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	176	450	36	23	504	111	143	138	268	24	23	34
PCE 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
MLF 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
FinalVolume:	176	450	36	23	504	111	143	138	268	24	23	34
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	1.85	0.15	1.00	0.82	0.18	1.00	0.34	0.66	1.00	0.40	0.60
Final Sat.:	1750	3426	274	1750	1475	325	1750	612	1188	1750	726	1074
Capacity Analysis Module:												
Vol/Sat:	0.10	0.13	0.13	0.01	0.34	0.34	0.08	0.23	0.23	0.01	0.03	0.03
Crit Moves:	****				****			****		****		
Green Time:	8.4	21.8	21.8	15.3	28.7	28.7	10.7	18.9	18.9	7.0	15.2	15.2
Volume/Cap:	0.89	0.45	0.45	0.06	0.89	0.89	0.57	0.89	0.89	0.15	0.16	0.16
Delay/Veh:	69.3	22.0	22.0	24.2	35.9	35.9	33.3	46.8	46.8	31.7	24.8	24.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	69.3	22.0	22.0	24.2	35.9	35.9	33.3	46.8	46.8	31.7	24.8	24.8
LOS by Move:	E	C+	C+	C	D+	D+	C-	D	D	C	C	C
HCM2kAvgQ:	8	5	5	0	15	15	4	13	13	1	1	1

Note: Queue reported is the number of cars per lane.

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Intersection #46: Sunnyvale Avenue / McKinley Avenue

Signal=Protect/Rights=Include
Final Vol: 83 661*** 12
Lanes: 0 1 0 0 1

Final Vol: Lanes: Signal=Permit Rights=Include
70 0
0
59*** 1!
0
143 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 160
Loss Time (sec): 9
Critical V/C: 0.661
Avg Crit Del (sec/veh): 35.5
Avg Delay (sec/veh): 31.5
LOS: C

Signal=Permit Rights=Overlap Lanes: Final Vol:
1 21
0
0 38
1
0 30

Lanes: 1 0 1 1 0
Final Vol: 97*** 482 23
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	48	392	23	12	518	53	45	59	85	30	38	21
Growth 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
Initial Bse:	48	392	23	12	518	53	45	59	85	30	38	21
Added Vol:	49	90	0	0	143	30	25	0	58	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	97	482	23	12	661	83	70	59	143	30	38	21
User 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
PHF 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
PHF Volume:	97	482	23	12	661	83	70	59	143	30	38	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	97	482	23	12	661	83	70	59	143	30	38	21
PCE 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
MLF 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
FinalVolume:	97	482	23	12	661	83	70	59	143	30	38	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	1.00	1.91	0.09	1.00	0.89	0.11	0.26	0.22	0.52	0.44	0.56	1.00
Final Sat.:	1750	3531	169	1750	1599	201	450	380	920	794	1006	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.14	0.14	0.01	0.41	0.41	0.16	0.16	0.16	0.04	0.04	0.01
Crit Moves:	****				****			****				
Green Time:	13.4	85.9	85.9	27.5	xxxx	100.0	37.6	37.6	37.6	37.6	37.6	65.1
Volume/Cap:	0.66	0.25	0.25	0.04	0.66	0.66	0.66	0.66	0.66	0.16	0.16	0.03
Delay/Veh:	81.8	20.0	20.0	55.3	20.7	20.7	59.4	59.4	59.4	48.8	48.8	28.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	81.8	20.0	20.0	55.3	20.7	20.7	59.4	59.4	59.4	48.8	48.8	28.5
LOS by Move:	F	B-	B-	E+	C+	C+	E+	E+	E+	D	D	C
HCM2kAvgQ:	6	7	7	1	24	24	12	12	12	3	3	1

Note: Queue reported is the number of cars per lane.

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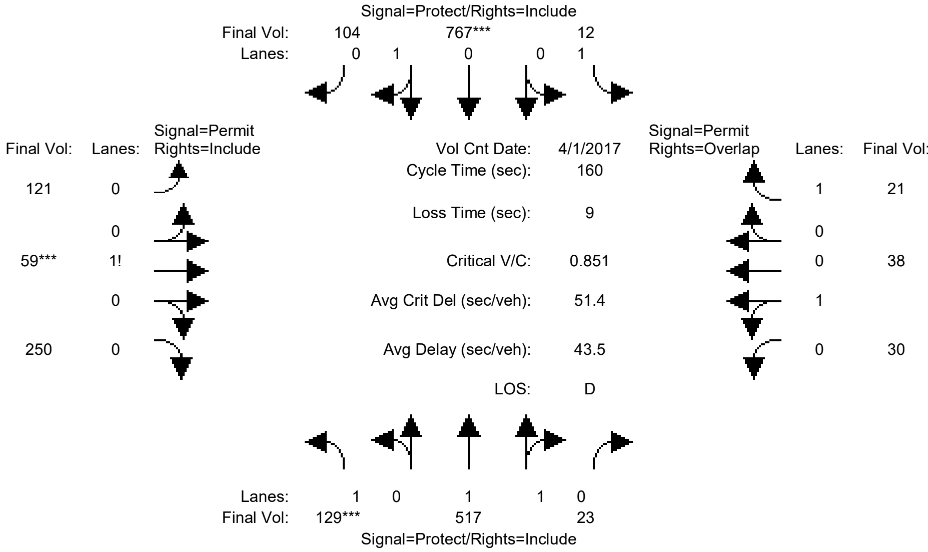
Intersection #46: Sunnyvale Avenue / McKinley Avenue



Street Name:	Sunnyvale Avenue						McKinley Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	48	392	23	12	518	53	45	59	85	30	38	21
Growth 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
Initial Bse:	48	392	23	12	518	53	45	59	85	30	38	21
Added Vol:	81	125	0	0	249	51	76	0	165	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	129	517	23	12	767	104	121	59	250	30	38	21
User 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
PHF 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
PHF Volume:	129	517	23	12	767	104	121	59	250	30	38	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	517	23	12	767	104	121	59	250	30	38	21
PCE 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
MLF 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
FinalVolume:	129	517	23	12	767	104	121	59	250	30	38	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	1.00	1.91	0.09	1.00	0.88	0.12	0.28	0.14	0.58	0.44	0.56	1.00
Final Sat.:	1750	3542	158	1750	1585	215	492	240	1017	794	1006	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.15	0.15	0.01	0.48	0.48	0.25	0.25	0.25	0.04	0.04	0.01
Crit Moves:	****				****			****				
Green Time:	13.9	80.6	80.6	24.2	91.0	91.0	46.2	46.2	46.2	46.2	46.2	70.4
Volume/Cap:	0.85	0.29	0.29	0.05	0.85	0.85	0.85	0.85	0.85	0.13	0.13	0.03
Delay/Veh:	106.3	23.1	23.1	58.1	35.8	35.8	66.7	66.7	66.7	42.2	42.2	25.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	106.3	23.1	23.1	58.1	35.8	35.8	66.7	66.7	66.7	42.2	42.2	25.4
LOS by Move:	F	C	C	E+	D+	D+	E	E	E	D	D	C
HCM2kAvgQ:	9	8	8	1	39	39	21	21	21	3	3	1

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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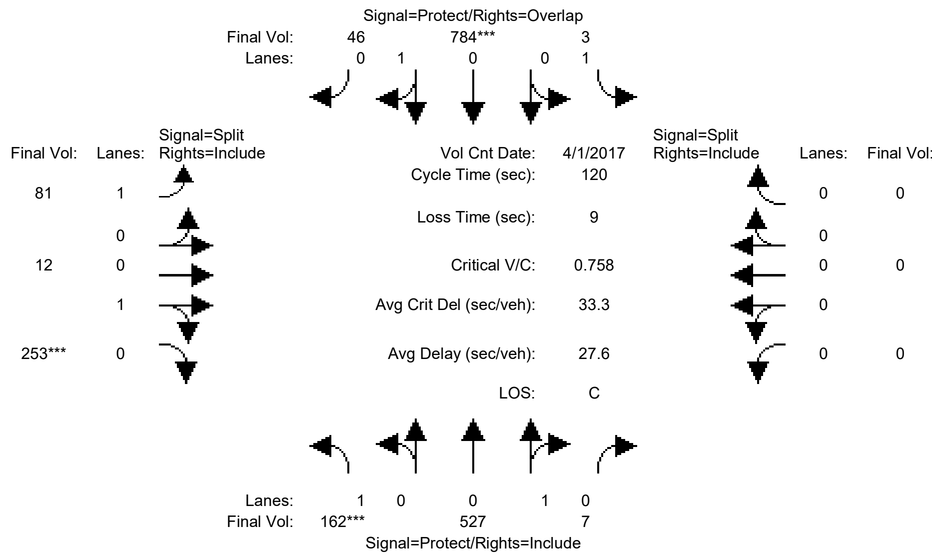
Intersection #47: Sunnyvale Avenue / Iowa Avenue



Street Name:	Sunnyvale Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	82	388	7	3	583	46	81	12	165	0	0	0
Growth 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
Initial Bse:	82	388	7	3	583	46	81	12	165	0	0	0
Added Vol:	80	139	0	0	201	0	0	0	88	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	162	527	7	3	784	46	81	12	253	0	0	0
User 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
PHF 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
PHF Volume:	162	527	7	3	784	46	81	12	253	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	162	527	7	3	784	46	81	12	253	0	0	0
PCE 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
MLF 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
FinalVolume:	162	527	7	3	784	46	81	12	253	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	0.99	0.01	1.00	0.94	0.06	1.00	0.05	0.95	0.00	0.00	0.00
Final Sat.:	1750	1776	24	1750	1700	100	1750	82	1718	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.30	0.30	0.00	0.46	0.46	0.05	0.15	0.15	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green Time:	14.7	73.3	73.3	14.4	73.0	96.3	23.3	23.3	23.3	0.0	0.0	0.0
Volume/Cap:	0.76	0.49	0.49	0.01	0.76	0.57	0.24	0.76	0.76	0.00	0.00	0.00
Delay/Veh:	65.4	13.3	13.3	46.6	20.2	4.9	41.2	54.9	54.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	65.4	13.3	13.3	46.6	20.2	4.9	41.2	54.9	54.9	0.0	0.0	0.0
LOS by Move:	E	B	B	D	C+	A	D	D-	D-	A	A	A
HCM2kAvgQ:	6	11	11	0	24	12	3	10	10	0	0	0

Note: Queue reported is the number of cars per lane.

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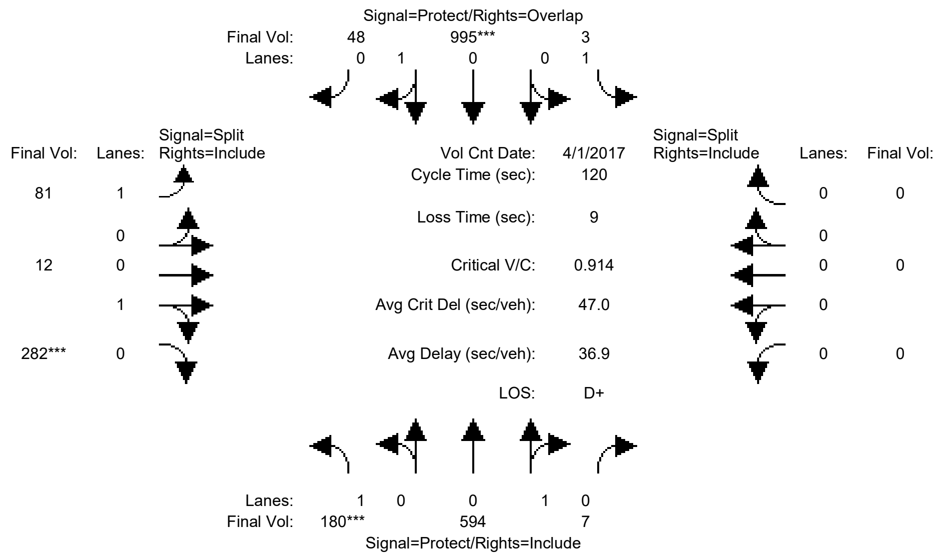
Intersection #47: Sunnyvale Avenue / Iowa Avenue



Street Name:	Sunnyvale Avenue						Iowa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	82	388	7	3	583	46	81	12	165	0	0	0
Growth 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
Initial Bse:	82	388	7	3	583	46	81	12	165	0	0	0
Added Vol:	98	206	0	0	412	2	0	0	117	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	180	594	7	3	995	48	81	12	282	0	0	0
User 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
PHF 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
PHF Volume:	180	594	7	3	995	48	81	12	282	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	594	7	3	995	48	81	12	282	0	0	0
PCE 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
MLF 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
FinalVolume:	180	594	7	3	995	48	81	12	282	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	0.99	0.01	1.00	0.95	0.05	1.00	0.04	0.96	0.00	0.00	0.00
Final Sat.:	1750	1779	21	1750	1717	83	1750	73	1727	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.33	0.33	0.00	0.58	0.58	0.05	0.16	0.16	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green Time:	13.5	76.2	76.2	13.3	76.1	97.5	21.4	21.4	21.4	0.0	0.0	0.0
Volume/Cap:	0.91	0.53	0.53	0.02	0.91	0.71	0.26	0.91	0.91	0.00	0.00	0.00
Delay/Veh:	93.5	12.4	12.4	47.5	30.4	6.7	42.9	77.6	77.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	93.5	12.4	12.4	47.5	30.4	6.7	42.9	77.6	77.6	0.0	0.0	0.0
LOS by Move:	F	B	B	D	C	A	D	E-	E-	A	A	A
HCM2kAvgQ:	8	12	12	0	39	19	3	13	13	0	0	0

Note: Queue reported is the number of cars per lane.

Cityline TIA
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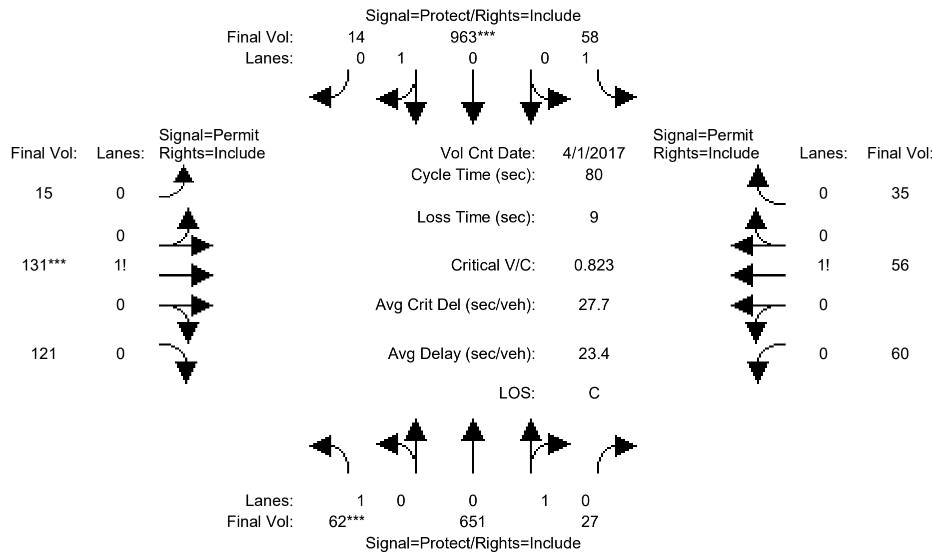
Cumulative PM

Intersection #48: Sunnyvale Avenue / Olive Avenue



Street Name:	Sunnyvale Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	42	433	27	58	674	14	15	131	81	60	56	35
Growth 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
Initial Bse:	42	433	27	58	674	14	15	131	81	60	56	35
Added Vol:	20	218	0	0	289	0	0	0	40	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	62	651	27	58	963	14	15	131	121	60	56	35
User 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
PHF 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
PHF Volume:	62	651	27	58	963	14	15	131	121	60	56	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	651	27	58	963	14	15	131	121	60	56	35
PCE 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
MLF 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
FinalVolume:	62	651	27	58	963	14	15	131	121	60	56	35
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	1.00	0.96	0.04	1.00	0.99	0.01	0.06	0.49	0.45	0.40	0.37	0.23
Final Sat.:	1750	1728	72	1750	1774	26	98	859	793	695	649	406
Capacity Analysis Module:												
Vol/Sat:	0.04	0.38	0.38	0.03	0.54	0.54	0.15	0.15	0.15	0.09	0.09	0.09
Crit Moves:	****				****			****				
Green Time:	7.0	46.2	46.2	10.7	50.0	50.0	14.0	14.0	14.0	14.0	14.0	14.0
Volume/Cap:	0.40	0.65	0.65	0.25	0.87	0.87	0.87	0.87	0.87	0.49	0.49	0.49
Delay/Veh:	36.3	12.9	12.9	31.6	19.8	19.8	54.4	54.4	54.4	31.0	31.0	31.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.3	12.9	12.9	31.6	19.8	19.8	54.4	54.4	54.4	31.0	31.0	31.0
LOS by Move:	D+	B	B	C	B-	B-	D-	D-	D-	C	C	C
HCM2kAvgQ:	2	12	12	1	21	21	7	7	7	4	4	4

Note: Queue reported is the number of cars per lane.

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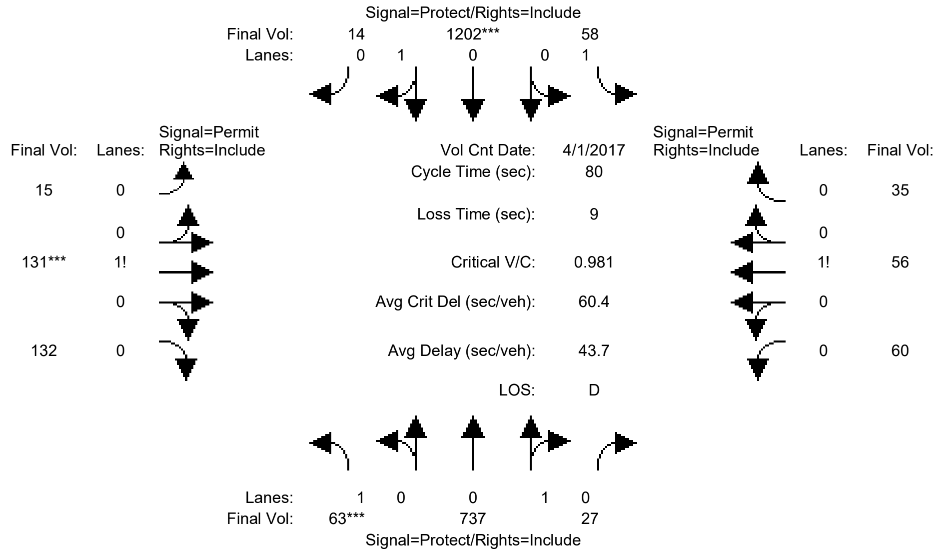
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #48: Sunnyvale Avenue / Olive Avenue



Street Name:	Sunnyvale Avenue						Olive Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	42	433	27	58	674	14	15	131	81	60	56	35
Growth 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
Initial Bse:	42	433	27	58	674	14	15	131	81	60	56	35
Added Vol:	21	304	0	0	528	0	0	0	51	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	63	737	27	58	1202	14	15	131	132	60	56	35
User 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
PHF 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
PHF Volume:	63	737	27	58	1202	14	15	131	132	60	56	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	737	27	58	1202	14	15	131	132	60	56	35
PCE 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
MLF 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
FinalVolume:	63	737	27	58	1202	14	15	131	132	60	56	35
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	1.00	0.96	0.04	1.00	0.99	0.01	0.05	0.48	0.47	0.40	0.37	0.23
Final Sat.:	1750	1736	64	1750	1779	21	94	825	831	695	649	406
Capacity Analysis Module:												
Vol/Sat:	0.04	0.42	0.42	0.03	0.68	0.68	0.16	0.16	0.16	0.09	0.09	0.09
Crit Moves:	****				****			****				
Green Time:	7.0	48.8	48.8	10.1	51.8	51.8	12.2	12.2	12.2	12.2	12.2	12.2
Volume/Cap:	0.41	0.70	0.70	0.26	1.04	1.04	1.04	1.04	1.04	0.57	0.57	0.57
Delay/Veh:	36.3	12.6	12.6	32.3	52.4	52.4	100.7	101	100.7	34.3	34.3	34.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.3	12.6	12.6	32.3	52.4	52.4	100.7	101	100.7	34.3	34.3	34.3
LOS by Move:	D+	B	B	C-	D-	D-	F	F	F	C-	C-	C-
HCM2kAvgQ:	2	13	13	1	38	38	9	9	9	5	5	5

Note: Queue reported is the number of cars per lane.

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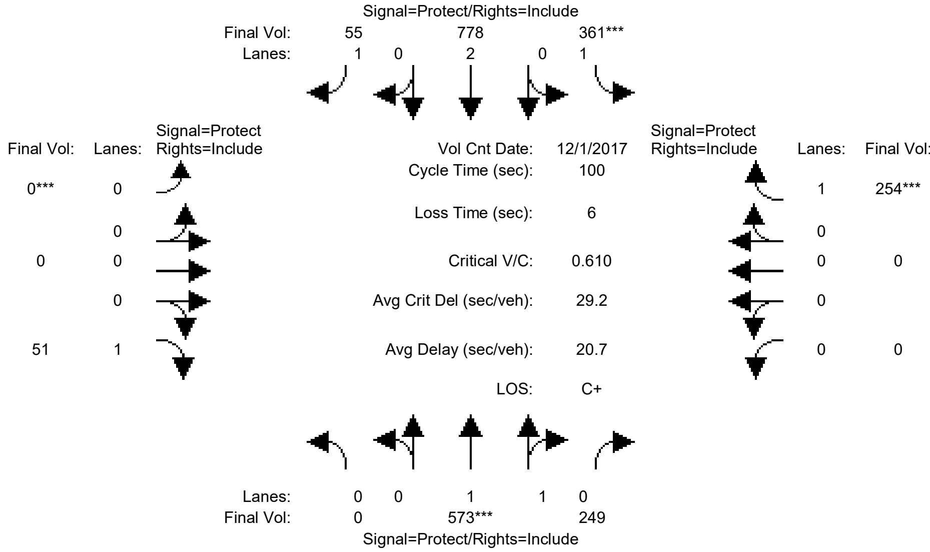
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #49: Sunnyvale Avenue / Old San Francisco Road



Street Name:	Sunnyvale Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	10	0	0	10	0	0	10
Y+R:	0.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	463	247	147	663	55	0	0	51	0	0	126
Growth 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
Initial Bse:	0	463	247	147	663	55	0	0	51	0	0	126
Added Vol:	0	110	2	214	115	0	0	0	0	0	0	128
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	573	249	361	778	55	0	0	51	0	0	254
User 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
PHF 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
PHF Volume:	0	573	249	361	778	55	0	0	51	0	0	254
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	573	249	361	778	55	0	0	51	0	0	254
PCE 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
MLF 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
FinalVolume:	0	573	249	361	778	55	0	0	51	0	0	254
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	1.38	0.62	1.00	2.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Final Sat.:	0	2578	1120	1750	3800	1750	0	0	1750	0	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.22	0.21	0.20	0.03	0.00	0.00	0.03	0.00	0.00	0.15
Crit Moves:		****		****			****					****
Green Time:	0.0	36.4	36.4	33.8	70.2	70.2	0.0	0.0	23.8	0.0	0.0	23.8
Volume/Cap:	0.00	0.61	0.61	0.61	0.29	0.04	0.00	0.00	0.12	0.00	0.00	0.61
Delay/Veh:	0.0	26.8	26.8	29.5	5.6	4.6	0.0	0.0	30.0	0.0	0.0	36.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	26.8	26.8	29.5	5.6	4.6	0.0	0.0	30.0	0.0	0.0	36.6
LOS by Move:	A	C	C	C	A	A	A	A	C	A	A	D+
HCM2kAvgQ:	0	10	10	9	4	1	0	0	1	0	0	7

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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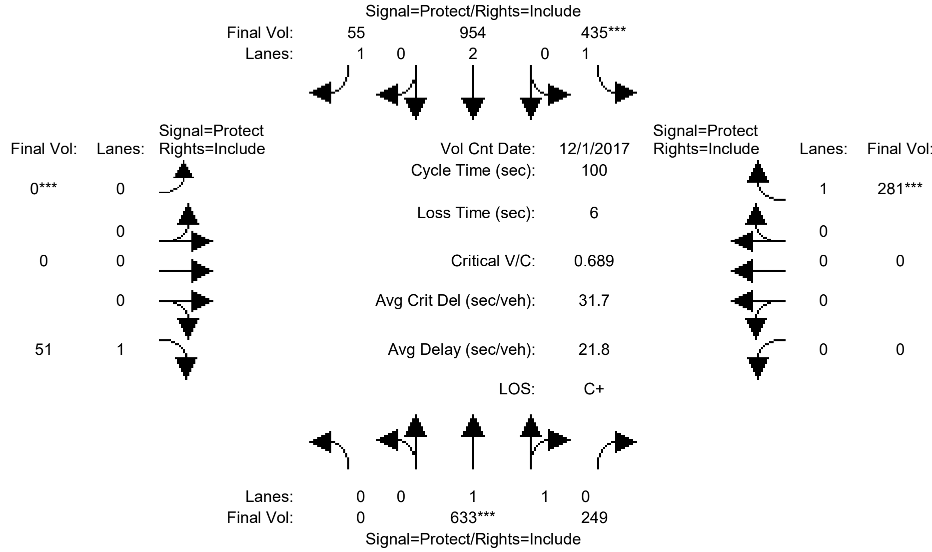
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #49: Sunnyvale Avenue / Old San Francisco Road



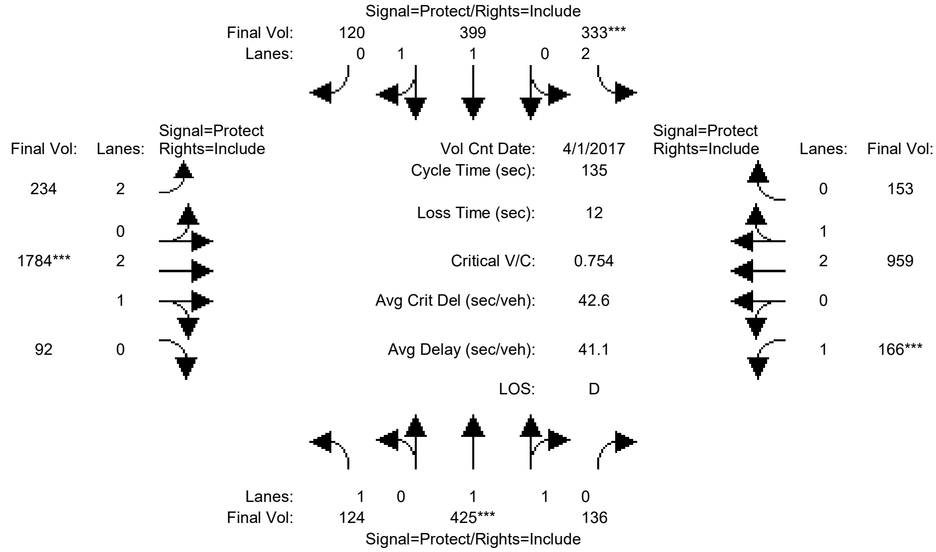
Street Name:	Sunnyvale Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	10	0	0	10	0	0	10
Y+R:	0.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	463	247	147	663	55	0	0	51	0	0	126
Growth 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
Initial Bse:	0	463	247	147	663	55	0	0	51	0	0	126
Added Vol:	0	170	2	288	291	0	0	0	0	0	0	155
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	633	249	435	954	55	0	0	51	0	0	281
User 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
PHF 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
PHF Volume:	0	633	249	435	954	55	0	0	51	0	0	281
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	633	249	435	954	55	0	0	51	0	0	281
PCE 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
MLF 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
FinalVolume:	0	633	249	435	954	55	0	0	51	0	0	281
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	1.42	0.58	1.00	2.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Final Sat.:	0	2655	1044	1750	3800	1750	0	0	1750	0	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.24	0.25	0.25	0.03	0.00	0.00	0.03	0.00	0.00	0.16
Crit Moves:		****		****			****					****
Green Time:	0.0	34.6	34.6	36.1	70.7	70.7	0.0	0.0	23.3	0.0	0.0	23.3
Volume/Cap:	0.00	0.69	0.69	0.69	0.36	0.04	0.00	0.00	0.13	0.00	0.00	0.69
Delay/Veh:	0.0	29.7	29.7	30.4	5.8	4.4	0.0	0.0	30.4	0.0	0.0	40.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	29.7	29.7	30.4	5.8	4.4	0.0	0.0	30.4	0.0	0.0	40.0
LOS by Move:	A	C	C	C	A	A	A	A	C	A	A	D
HCM2kAvgQ:	0	11	11	11	5	1	0	0	1	0	0	8

Note: Queue reported is the number of cars per lane.

Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #50: Sunnyvale Avenue / El Camino Real



Street Name:	Sunnyvale Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	124	376	136	269	348	120	232	1708	92	166	910	93
Growth 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
Initial Bse:	124	376	136	269	348	120	232	1708	92	166	910	93
Added Vol:	0	49	0	64	51	0	2	76	0	0	49	60
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	124	425	136	333	399	120	234	1784	92	166	959	153
User 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
PHF 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
PHF Volume:	124	425	136	333	399	120	234	1784	92	166	959	153
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	425	136	333	399	120	234	1784	92	166	959	153
PCE 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
MLF 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
FinalVolume:	124	425	136	333	399	120	234	1784	92	166	959	153
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.98	0.95	0.83	0.98	0.95	0.92	0.99	0.95
Lanes:	1.00	1.50	0.50	2.00	1.52	0.48	2.00	2.85	0.15	1.00	2.57	0.43
Final Sat.:	1750	2802	897	3150	2844	855	3150	5325	275	1750	4828	770
Capacity Analysis Module:												
Vol/Sat:	0.07	0.15	0.15	0.11	0.14	0.14	0.07	0.34	0.34	0.09	0.20	0.20
Crit Moves:		****		****				****		****		
Green Time:	15.5	27.1	27.1	18.9	30.6	30.6	20.9	60.0	60.0	17.0	56.0	56.0
Volume/Cap:	0.62	0.75	0.75	0.75	0.62	0.62	0.48	0.75	0.75	0.75	0.48	0.48
Delay/Veh:	62.8	55.2	55.2	63.0	48.4	48.4	52.8	32.7	32.7	70.8	29.0	29.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	62.8	55.2	55.2	63.0	48.4	48.4	52.8	32.7	32.7	70.8	29.0	29.0
LOS by Move:	E	E+	E+	E	D	D	D-	C-	C-	E	C	C
HCM2kAvgQ:	5	11	11	8	10	10	5	20	20	7	11	11

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #50: Sunnyvale Avenue / El Camino Real

Signal=Protect/Rights=Include
Final Vol: 120 483 425***
Lanes: 0 1 1 0 2

Signal=Protect Rights=Include
Final Vol: Lanes:
234 2
0
1874*** 2
1
92 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 135
Loss Time (sec): 12
Critical V/C: 0.811
Avg Crit Del (sec/veh): 46.1
Avg Delay (sec/veh): 43.5
LOS: D

Signal=Protect Rights=Include
Lanes: Final Vol:
0 189
1
2 979
0
1 166***

Lanes: 1 0 1 1 0
Final Vol: 124 450*** 136
Signal=Protect/Rights=Include

Street Name:	Sunnyvale Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	124	376	136	269	348	120	232	1708	92	166	910	93
Growth 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
Initial Bse:	124	376	136	269	348	120	232	1708	92	166	910	93
Added Vol:	0	74	0	156	135	0	2	166	0	0	69	96
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	124	450	136	425	483	120	234	1874	92	166	979	189
User 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
PHF 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
PHF Volume:	124	450	136	425	483	120	234	1874	92	166	979	189
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	450	136	425	483	120	234	1874	92	166	979	189
PCE 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
MLF 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
FinalVolume:	124	450	136	425	483	120	234	1874	92	166	979	189
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	0.98	0.95	0.83	0.98	0.95	0.92	0.99	0.95
Lanes:	1.00	1.52	0.48	2.00	1.59	0.41	2.00	2.85	0.15	1.00	2.50	0.50
Final Sat.:	1750	2841	859	3150	2963	736	3150	5338	262	1750	4693	906
Capacity Analysis Module:												
Vol/Sat:	0.07	0.16	0.16	0.13	0.16	0.16	0.07	0.35	0.35	0.09	0.21	0.21
Crit Moves:		****		****				****		****		
Green Time:	14.8	26.4	26.4	22.4	34.0	34.0	19.5	58.4	58.4	15.8	54.7	54.7
Volume/Cap:	0.65	0.81	0.81	0.81	0.65	0.65	0.51	0.81	0.81	0.81	0.51	0.51
Delay/Veh:	65.1	58.9	58.9	63.5	46.7	46.7	54.4	35.7	35.7	79.3	30.4	30.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	65.1	58.9	58.9	63.5	46.7	46.7	54.4	35.7	35.7	79.3	30.4	30.4
LOS by Move:	E	E+	E+	E	D	D	D-	D+	D+	E-	C	C
HCM2kAvgQ:	5	12	12	11	11	11	5	22	22	8	12	12

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
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Intersection #51: Mathilda Avenue / Talisman Drive

Signal=Protect/Rights=Include
Final Vol: 57 2883*** 91
Lanes: 0 1 2 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	12/1/2016			
14	1		Cycle Time (sec):	160		0	45
	0		Loss Time (sec):	12		1	
5	1		Critical V/C:	0.794		0	21
	0		Avg Crit Del (sec/veh):	34.6		0	
28***	1		Avg Delay (sec/veh):	33.2		2	536***
			LOS:	C-			

Lanes: 1 0 3 0 1
Final Vol: 41*** 978 0
Signal=Protect/Rights=Ignore

Street Name:	Mathilda Avenue						Talisman Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	41	712	658	91	2205	57	14	5	28	485	21	45
Growth 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
Initial Bse:	41	712	658	91	2205	57	14	5	28	485	21	45
Added Vol:	0	266	49	0	678	0	0	0	0	51	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	978	707	91	2883	57	14	5	28	536	21	45
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	41	978	0	91	2883	57	14	5	28	536	21	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	978	0	91	2883	57	14	5	28	536	21	45
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	41	978	0	91	2883	57	14	5	28	536	21	45
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92	0.83	0.95	0.95
Lanes:	1.00	3.00	1.00	1.00	2.94	0.06	1.00	1.00	1.00	2.00	0.32	0.68
Final Sat.:	1750	5700	1750	1750	5491	109	1750	1900	1750	3150	573	1227
Capacity Analysis Module:												
Vol/Sat:	0.02	0.17	0.00	0.05	0.53	0.53	0.01	0.00	0.02	0.17	0.04	0.04
Crit Moves:	****				****				****	****		
Green Time:	7.0	81.3	0.0	24.6	98.9	98.9	17.3	10.0	10.0	32.1	24.7	24.7
Volume/Cap:	0.54	0.34	0.00	0.34	0.85	0.85	0.07	0.04	0.26	0.85	0.24	0.24
Delay/Veh:	82.2	23.4	0.0	61.1	26.7	26.7	64.3	70.6	72.7	72.2	59.8	59.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	82.2	23.4	0.0	61.1	26.7	26.7	64.3	70.6	72.7	72.2	59.8	59.8
LOS by Move:	F	C	A	E	C	C	E	E	E	E	E+	E+
HCM2kAvgQ:	2	9	0	4	36	36	1	0	2	16	3	3

Note: Queue reported is the number of cars per lane.

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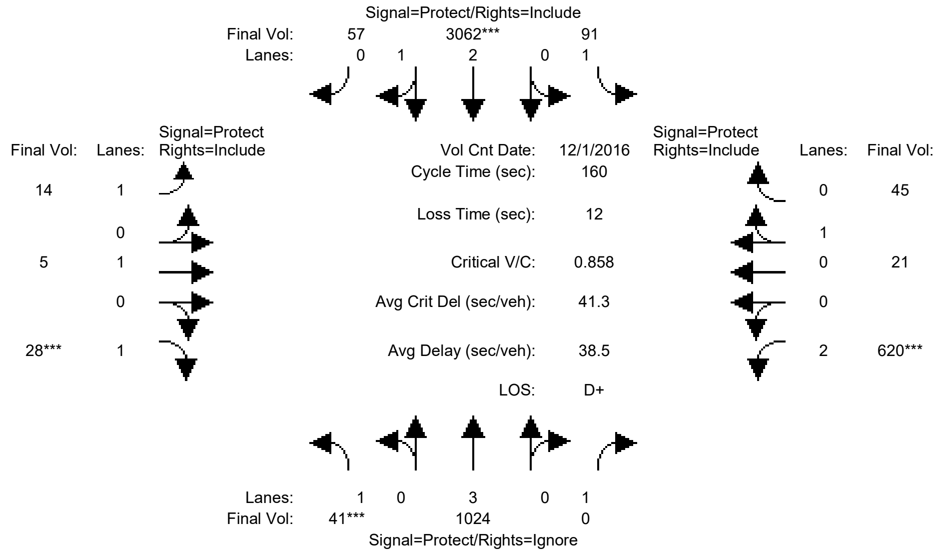
Cumulative PM Plus Project

Intersection #51: Mathilda Avenue / Talisman Drive



Street Name:	Mathilda Avenue						Talisman Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	41	712	658	91	2205	57	14	5	28	485	21	45
Growth 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
Initial Bse:	41	712	658	91	2205	57	14	5	28	485	21	45
Added Vol:	0	312	74	0	857	0	0	0	0	135	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	1024	732	91	3062	57	14	5	28	620	21	45
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	41	1024	0	91	3062	57	14	5	28	620	21	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	1024	0	91	3062	57	14	5	28	620	21	45
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	41	1024	0	91	3062	57	14	5	28	620	21	45
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	1.00	0.92	0.83	0.95	0.95
Lanes:	1.00	3.00	1.00	1.00	2.94	0.06	1.00	1.00	1.00	2.00	0.32	0.68
Final Sat.:	1750	5700	1750	1750	5498	102	1750	1900	1750	3150	573	1227
Capacity Analysis Module:												
Vol/Sat:	0.02	0.18	0.00	0.05	0.56	0.56	0.01	0.00	0.02	0.20	0.04	0.04
Crit Moves:	****				****				****	****		
Green Time:	7.0	80.5	0.0	23.3	96.8	96.8	18.2	10.0	10.0	34.2	26.0	26.0
Volume/Cap:	0.54	0.36	0.00	0.36	0.92	0.92	0.07	0.04	0.26	0.92	0.23	0.23
Delay/Veh:	82.2	24.2	0.0	62.5	32.9	32.9	63.5	70.6	72.7	79.6	58.6	58.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	82.2	24.2	0.0	62.5	32.9	32.9	63.5	70.6	72.7	79.6	58.6	58.6
LOS by Move:	F	C	A	E	C-	C-	E	E	E	E-	E+	E+
HCM2kAvgQ:	2	10	0	4	43	43	1	0	2	19	3	3

Note: Queue reported is the number of cars per lane.

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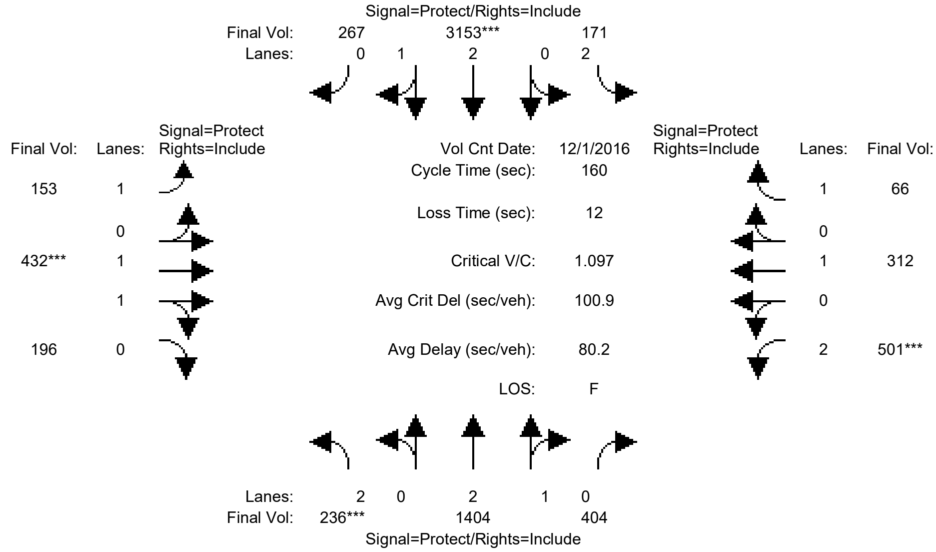
Intersection #52: Sunnyvale-Saratoga Road / Remington Drive (CMP)



Street Name:	Sunnyvale-Saratoga Road						Remington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	236	1106	382	171	2453	237	136	429	196	427	303	66
Growth 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
Initial Bse:	236	1106	382	171	2453	237	136	429	196	427	303	66
Added Vol:	0	298	22	0	700	30	17	3	0	74	9	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	236	1404	404	171	3153	267	153	432	196	501	312	66
User 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
PHF 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
PHF Volume:	236	1404	404	171	3153	267	153	432	196	501	312	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	236	1404	404	171	3153	267	153	432	196	501	312	66
PCE 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
MLF 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
FinalVolume:	236	1404	404	171	3153	267	153	432	196	501	312	66
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.99	0.95	0.83	1.00	0.92
Lanes:	2.00	2.31	0.69	2.00	2.76	0.24	1.00	1.36	0.64	2.00	1.00	1.00
Final Sat.:	3150	4347	1251	3150	5162	437	1750	2544	1154	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.32	0.32	0.05	0.61	0.61	0.09	0.17	0.17	0.16	0.16	0.04
Crit Moves:	****				****			****		****		
Green Time:	10.9	85.6	85.6	14.4	89.1	89.1	16.7	24.8	24.8	23.2	31.3	31.3
Volume/Cap:	1.10	0.60	0.60	0.60	1.10	1.10	0.84	1.10	1.10	1.10	0.84	0.19
Delay/Veh:	164.2	25.9	25.9	73.7	84.8	84.8	98.1	134	134.4	139.4	77.4	54.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	164.2	25.9	25.9	73.7	84.8	84.8	98.1	134	134.4	139.4	77.4	54.1
LOS by Move:	F	C	C	E	F	F	F	F	F	F	E-	D-
HCM2kAvgQ:	9	20	20	5	68	68	7	18	18	19	15	3

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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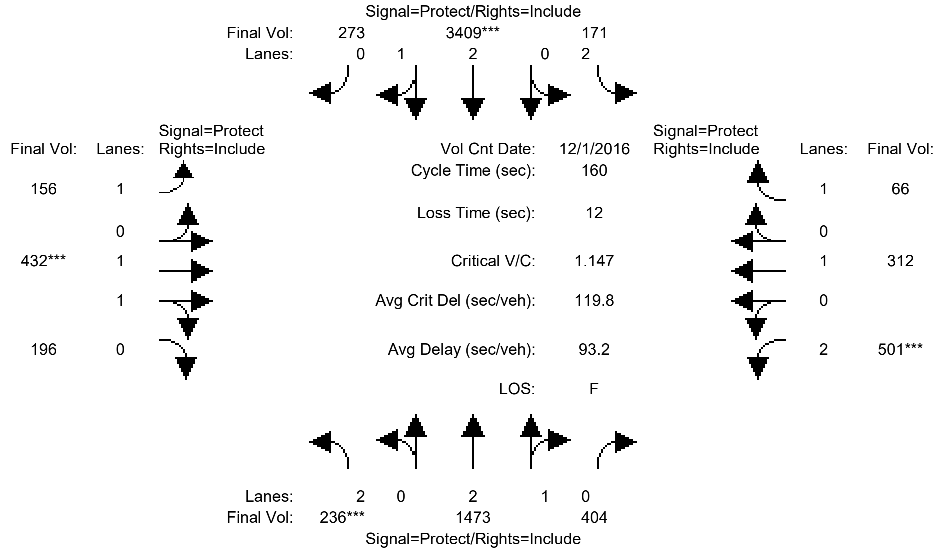
Cumulative PM Plus Project

Intersection #52: Sunnyvale-Saratoga Road / Remington Drive (CMP)



Street Name:	Sunnyvale-Saratoga Road						Remington Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	236	1106	382	171	2453	237	136	429	196	427	303	66
Growth 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
Initial Bse:	236	1106	382	171	2453	237	136	429	196	427	303	66
Added Vol:	0	367	22	0	956	36	20	3	0	74	9	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	236	1473	404	171	3409	273	156	432	196	501	312	66
User 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
PHF 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
PHF Volume:	236	1473	404	171	3409	273	156	432	196	501	312	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	236	1473	404	171	3409	273	156	432	196	501	312	66
PCE 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
MLF 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
FinalVolume:	236	1473	404	171	3409	273	156	432	196	501	312	66
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.99	0.95	0.83	1.00	0.92
Lanes:	2.00	2.33	0.67	2.00	2.77	0.23	1.00	1.36	0.64	2.00	1.00	1.00
Final Sat.:	3150	4393	1205	3150	5184	415	1750	2544	1154	3150	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.34	0.34	0.05	0.66	0.66	0.09	0.17	0.17	0.16	0.16	0.04
Crit Moves:	****				****			****		****		
Green Time:	10.4	87.9	87.9	14.2	91.7	91.7	16.1	23.7	23.7	22.2	29.7	29.7
Volume/Cap:	1.15	0.61	0.61	0.61	1.15	1.15	0.88	1.15	1.15	1.15	0.88	0.20
Delay/Veh:	182.9	24.8	24.8	74.1	105	104.6	108.0	154	154.2	158.9	85.7	55.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	182.9	24.8	24.8	74.1	105	104.6	108.0	154	154.2	158.9	85.7	55.4
LOS by Move:	F	C	C	E	F	F	F	F	F	F	F	E+
HCM2kAvgQ:	10	20	20	5	78	78	8	20	20	20	16	3

Note: Queue reported is the number of cars per lane.

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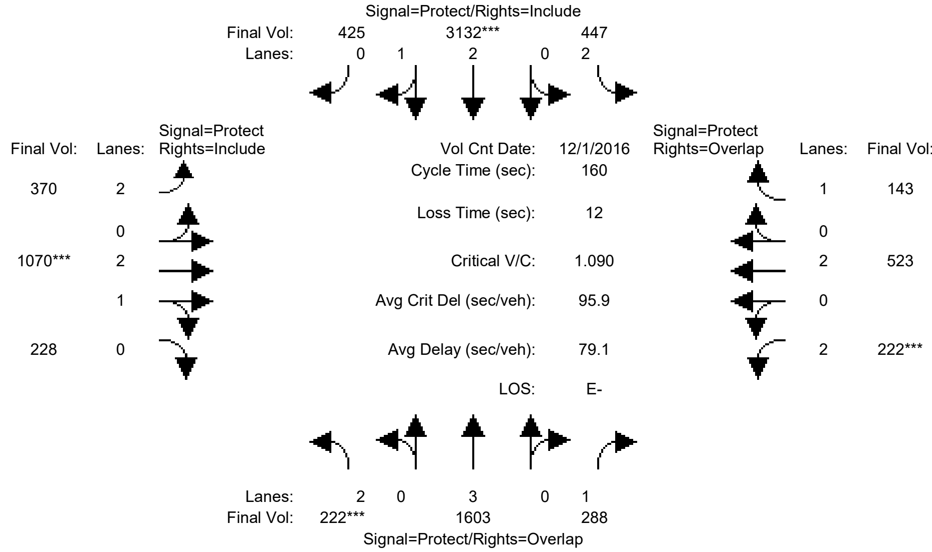
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #53: Sunnyvale-Saratoga Road / Fremont Avenue (CMP)



Street Name:	Sunnyvale-Saratoga Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	222	1334	288	420	2455	356	332	1065	228	222	522	129
Growth 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
Initial Bse:	222	1334	288	420	2455	356	332	1065	228	222	522	129
Added Vol:	0	269	0	27	677	69	38	5	0	0	1	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	222	1603	288	447	3132	425	370	1070	228	222	523	143
User 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
PHF 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
PHF Volume:	222	1603	288	447	3132	425	370	1070	228	222	523	143
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	222	1603	288	447	3132	425	370	1070	228	222	523	143
PCE 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
MLF 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
FinalVolume:	222	1603	288	447	3132	425	370	1070	228	222	523	143
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	0.99	0.95	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	2.63	0.37	2.00	2.45	0.55	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	4930	669	3150	4615	983	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.28	0.16	0.14	0.64	0.64	0.12	0.23	0.23	0.07	0.14	0.08
Crit Moves:	****				****			****		****		
Green Time:	10.3	68.9	79.2	34.7	93.3	93.3	20.4	34.0	34.0	10.3	23.9	58.7
Volume/Cap:	1.09	0.65	0.33	0.65	1.09	1.09	0.92	1.09	1.09	1.09	0.92	0.22
Delay/Veh:	163.9	36.8	24.6	59.4	79.6	79.6	94.9	117	117.1	163.9	87.3	35.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	163.9	36.8	24.6	59.4	79.6	79.6	94.9	117	117.1	163.9	87.3	35.1
LOS by Move:	F	D+	C	E+	E-	E-	F	F	F	F	F	D+
HCM2kAvgQ:	9	20	9	11	67	67	11	26	26	9	14	5

Note: Queue reported is the number of cars per lane.

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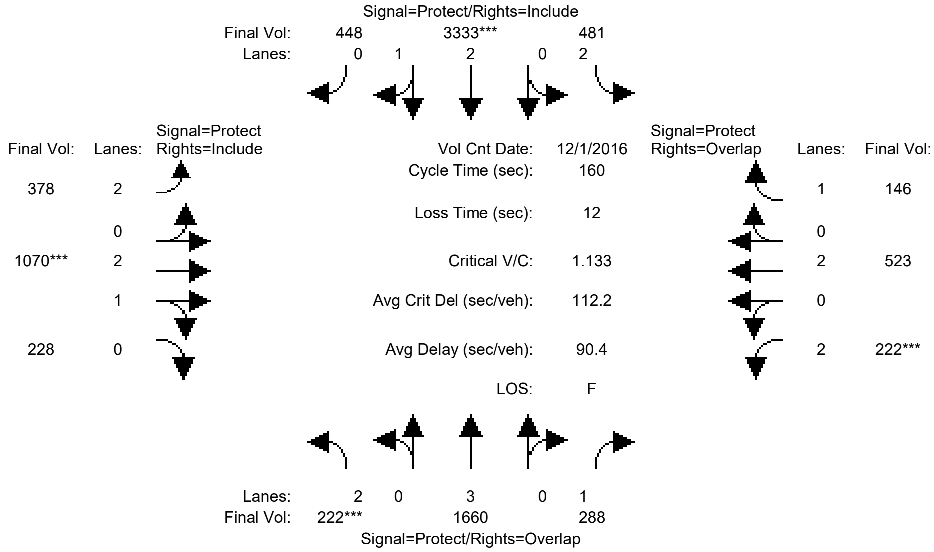
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #53: Sunnyvale-Saratoga Road / Fremont Avenue (CMP)



Street Name:	Sunnyvale-Saratoga Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2016 <<												
Base Vol:	222	1334	288	420	2455	356	332	1065	228	222	522	129
Growth 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
Initial Bse:	222	1334	288	420	2455	356	332	1065	228	222	522	129
Added Vol:	0	326	0	61	878	92	46	5	0	0	1	17
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	222	1660	288	481	3333	448	378	1070	228	222	523	146
User 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
PHF 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
PHF Volume:	222	1660	288	481	3333	448	378	1070	228	222	523	146
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	222	1660	288	481	3333	448	378	1070	228	222	523	146
PCE 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
MLF 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
FinalVolume:	222	1660	288	481	3333	448	378	1070	228	222	523	146
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	0.99	0.95	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	2.63	0.37	2.00	2.45	0.55	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	4936	663	3150	4615	983	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.29	0.16	0.15	0.68	0.68	0.12	0.23	0.23	0.07	0.14	0.08
Crit Moves:	****				****			****		****		
Green Time:	10.0	69.1	79.0	36.2	95.4	95.4	19.9	32.7	32.7	10.0	22.8	59.0
Volume/Cap:	1.13	0.67	0.33	0.67	1.13	1.13	0.97	1.13	1.13	1.13	0.97	0.23
Delay/Veh:	179.7	37.2	24.7	59.1	96.5	96.5	106.1	135	134.8	179.7	98.2	34.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	179.7	37.2	24.7	59.1	96.5	96.5	106.1	135	134.8	179.7	98.2	34.9
LOS by Move:	F	D+	C	E+	F	F	F	F	F	F	F	C-
HCM2kAvgQ:	9	21	9	12	77	77	12	28	28	9	15	5

Note: Queue reported is the number of cars per lane.

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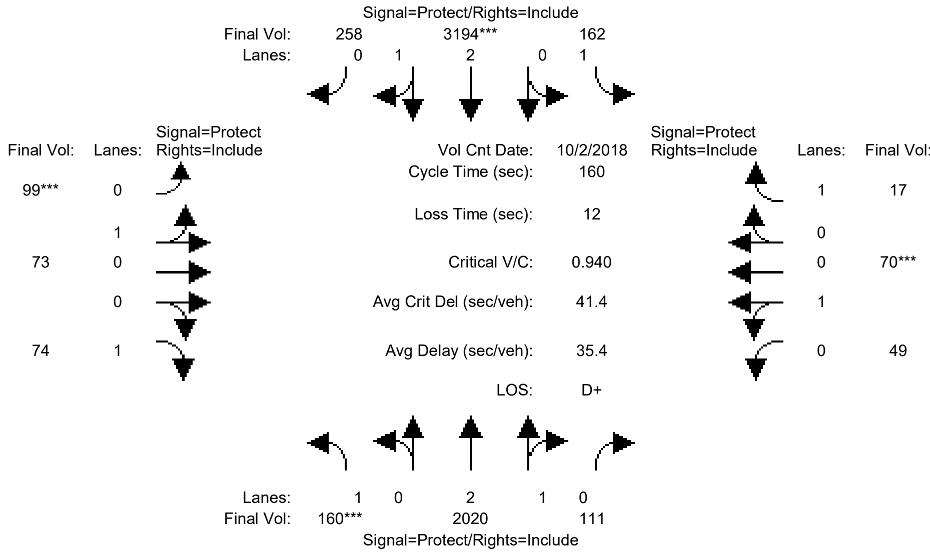
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #54: Sunnyvale-Saratoga Road / Alberta Avenue - Harwick Way



Street Name:	Sunnyvale-Saratoga Road						Alberta Avenue - Harwick Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	160	1782	111	162	2574	200	68	73	74	49	70	17
Growth 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
Initial Bse:	160	1782	111	162	2574	200	68	73	74	49	70	17
Added Vol:	0	238	0	0	620	58	31	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	160	2020	111	162	3194	258	99	73	74	49	70	17
User 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
PHF 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
PHF Volume:	160	2020	111	162	3194	258	99	73	74	49	70	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	2020	111	162	3194	258	99	73	74	49	70	17
PCE 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
MLF 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
FinalVolume:	160	2020	111	162	3194	258	99	73	74	49	70	17
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.84	0.16	1.00	2.77	0.23	0.58	0.42	1.00	0.41	0.59	1.00
Final Sat.:	1750	5308	292	1750	5181	418	1036	764	1750	741	1059	1750
Capacity Analysis Module:												
Vol/Sat:	0.09	0.38	0.38	0.09	0.62	0.62	0.10	0.10	0.04	0.07	0.07	0.01
Crit Moves:	****				****		****				****	
Green Time:	15.6	96.9	96.9	23.6	105	104.9	16.3	16.3	16.3	11.3	11.3	11.3
Volume/Cap:	0.94	0.63	0.63	0.63	0.94	0.94	0.94	0.94	0.42	0.94	0.94	0.14
Delay/Veh:	123.3	20.5	20.5	69.0	30.5	30.5	120.7	121	69.0	135.5	136	70.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	123.3	20.5	20.5	69.0	30.5	30.5	120.7	121	69.0	135.5	136	70.3
LOS by Move:	F	C+	C+	E	C	C	F	F	E	F	F	E
HCM2kAvgQ:	8	21	21	7	48	48	12	12	4	9	9	1

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #54: Sunnyvale-Saratoga Road / Alberta Avenue - Harwick Way

Signal=Protect/Rights=Include
Final Vol: 281 3370*** 162
Lanes: 0 1 2 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
107***	0		Vol Cnt Date:	10/2/2018		1	17
	1		Cycle Time (sec):	160		0	
73	0		Loss Time (sec):	12		0	70***
	0		Critical V/C:	0.983		1	
74	1		Avg Crit Del (sec/veh):	48.7		0	49
			Avg Delay (sec/veh):	40.0			
			LOS:	D			

Lanes: 1 0 2 1 0
Final Vol: 160*** 2069 111
Signal=Protect/Rights=Include

Street Name:	Sunnyvale-Saratoga Road						Alberta Avenue - Harwick Way					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	160	1782	111	162	2574	200	68	73	74	49	70	17
Growth 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
Initial Bse:	160	1782	111	162	2574	200	68	73	74	49	70	17
Added Vol:	0	287	0	0	796	81	39	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	160	2069	111	162	3370	281	107	73	74	49	70	17
User 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
PHF 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
PHF Volume:	160	2069	111	162	3370	281	107	73	74	49	70	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	2069	111	162	3370	281	107	73	74	49	70	17
PCE 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
MLF 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
FinalVolume:	160	2069	111	162	3370	281	107	73	74	49	70	17
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.99	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.84	0.16	1.00	2.76	0.24	0.59	0.41	1.00	0.41	0.59	1.00
Final Sat.:	1750	5314	285	1750	5168	431	1070	730	1750	741	1059	1750
Capacity Analysis Module:												
Vol/Sat:	0.09	0.39	0.39	0.09	0.65	0.65	0.10	0.10	0.04	0.07	0.07	0.01
Crit Moves:	****				****		****				****	
Green Time:	14.9	97.7	97.7	23.2	106	106.1	16.3	16.3	16.3	10.8	10.8	10.8
Volume/Cap:	0.98	0.64	0.64	0.64	0.98	0.98	0.98	0.98	0.42	0.98	0.98	0.14
Delay/Veh:	137.8	20.2	20.2	69.7	37.3	37.3	133.2	133	69.0	150.9	151	70.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	137.8	20.2	20.2	69.7	37.3	37.3	133.2	133	69.0	150.9	151	70.9
LOS by Move:	F	C+	C+	E	D+	D+	F	F	E	F	F	E
HCM2kAvgQ:	9	21	21	7	56	56	13	13	4	9	9	1

Note: Queue reported is the number of cars per lane.

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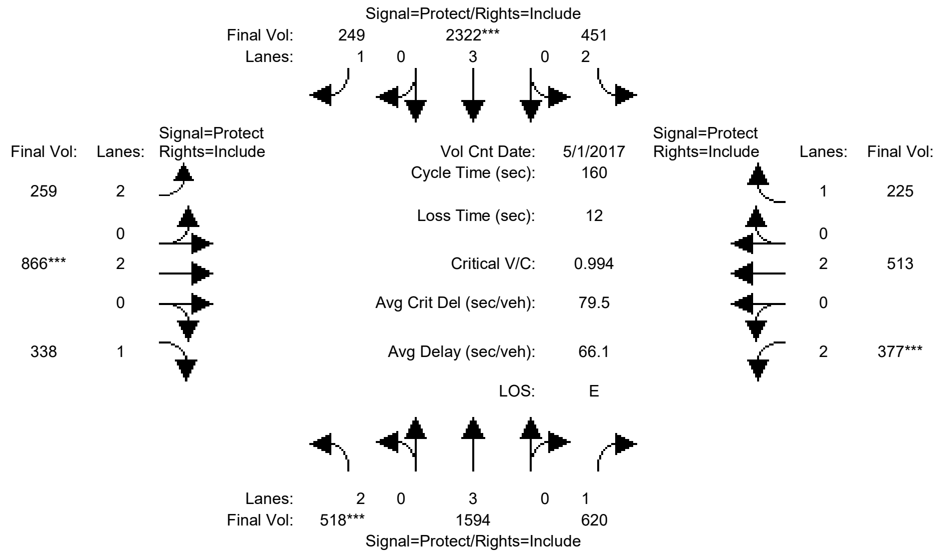
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #55: De Anza Boulevard / Homestead Road (CMP)



Street Name:	De Anza Boulevard						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	518	1413	598	385	1849	168	229	862	338	316	502	198
Growth 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
Initial Bse:	518	1413	598	385	1849	168	229	862	338	316	502	198
Added Vol:	0	181	22	66	473	81	30	4	0	61	11	27
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	518	1594	620	451	2322	249	259	866	338	377	513	225
User 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
PHF 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
PHF Volume:	518	1594	620	451	2322	249	259	866	338	377	513	225
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	518	1594	620	451	2322	249	259	866	338	377	513	225
PCE 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
MLF 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
FinalVolume:	518	1594	620	451	2322	249	259	866	338	377	513	225
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.16	0.28	0.35	0.14	0.41	0.14	0.08	0.23	0.19	0.12	0.14	0.13
Crit Moves:	****				****			****		****		
Green Time:	26.5	65.6	65.6	26.5	65.6	65.6	21.2	36.7	36.7	19.3	34.8	34.8
Volume/Cap:	0.99	0.68	0.86	0.86	0.99	0.35	0.62	0.99	0.84	0.99	0.62	0.59
Delay/Veh:	104.5	39.5	53.9	79.1	64.2	32.8	68.5	90.5	73.7	114.8	58.1	58.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	104.5	39.5	53.9	79.1	64.2	32.8	68.5	90.5	73.7	114.8	58.1	58.7
LOS by Move:	F	D	D-	E-	E	C-	E	F	E	F	E+	E+
HCM2kAvgQ:	18	21	31	12	38	8	7	25	18	13	11	11

Note: Queue reported is the number of cars per lane.

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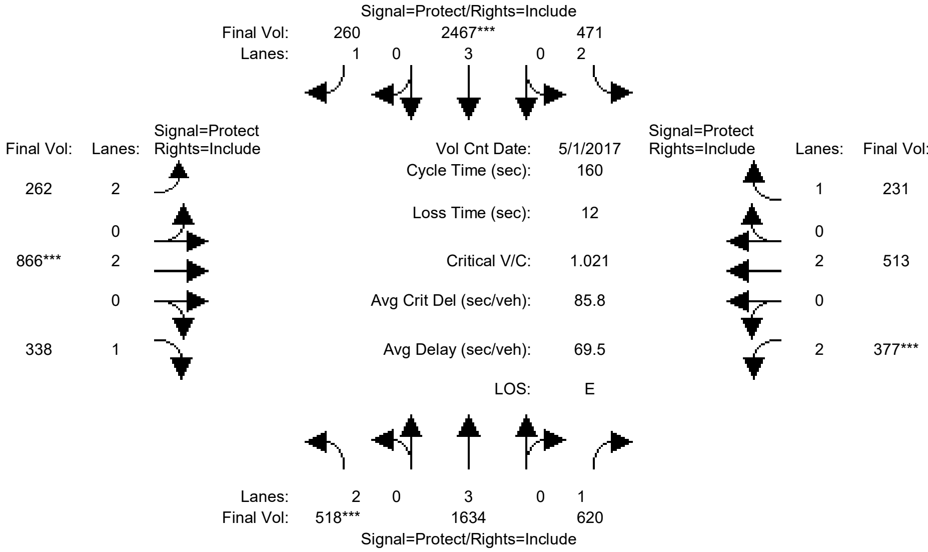
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #55: De Anza Boulevard / Homestead Road (CMP)



Street Name:	De Anza Boulevard						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	518	1413	598	385	1849	168	229	862	338	316	502	198
Growth 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
Initial Bse:	518	1413	598	385	1849	168	229	862	338	316	502	198
Added Vol:	0	221	22	86	618	92	33	4	0	61	11	33
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	518	1634	620	471	2467	260	262	866	338	377	513	231
User 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
PHF 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
PHF Volume:	518	1634	620	471	2467	260	262	866	338	377	513	231
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	518	1634	620	471	2467	260	262	866	338	377	513	231
PCE 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
MLF 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
FinalVolume:	518	1634	620	471	2467	260	262	866	338	377	513	231
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.16	0.29	0.35	0.15	0.43	0.15	0.08	0.23	0.19	0.12	0.14	0.13
Crit Moves:	****				****			****		****		
Green Time:	25.8	65.8	65.8	27.8	67.8	67.8	20.8	35.7	35.7	18.7	33.7	33.7
Volume/Cap:	1.02	0.70	0.86	0.86	1.02	0.35	0.64	1.02	0.87	1.02	0.64	0.63
Delay/Veh:	112.6	39.8	53.3	77.4	70.1	31.5	69.5	98.6	77.8	123.0	59.4	60.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	112.6	39.8	53.3	77.4	70.1	31.5	69.5	98.6	77.8	123.0	59.4	60.8
LOS by Move:	F	D	D-	E-	E	C	E	F	E-	F	E+	E
HCM2kAvgQ:	18	21	31	13	41	9	7	25	18	14	11	11

Note: Queue reported is the number of cars per lane.

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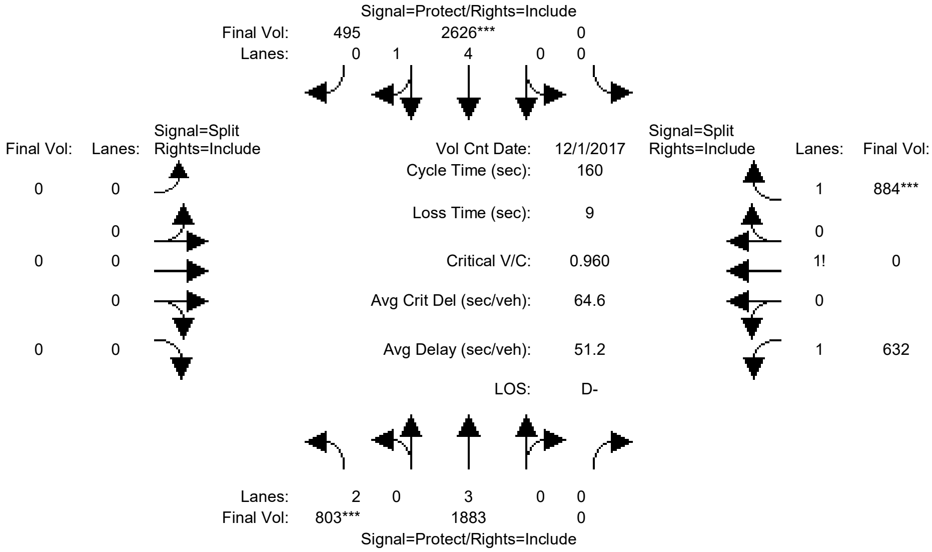
Intersection #56: De Anza Boulevard / I-280 NB Ramps (CMP)



Street Name:	De Anza Boulevard						I-280 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	4.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	803	1769	0	0	2247	340	0	0	0	632	0	795
Growth 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
Initial Bse:	803	1769	0	0	2247	340	0	0	0	632	0	795
Added Vol:	0	114	0	0	379	155	0	0	0	0	0	89
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	803	1883	0	0	2626	495	0	0	0	632	0	884
User 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
PHF 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
PHF Volume:	803	1883	0	0	2626	495	0	0	0	632	0	884
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	803	1883	0	0	2626	495	0	0	0	632	0	884
PCE 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
MLF 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
FinalVolume:	803	1883	0	0	2626	495	0	0	0	632	0	884
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	3.00	0.00	0.00	4.17	0.83	0.00	0.00	0.00	1.42	0.00	1.58
Final Sat.:	3150	5700	0	0	7906	1490	0	0	0	2480	0	2770
Capacity Analysis Module:												
Vol/Sat:	0.25	0.33	0.00	0.00	0.33	0.33	0.00	0.00	0.00	0.25	0.00	0.32
Crit Moves:	****				****							****
Green Time:	42.5	97.8	0.0	0.0	55.3	55.3	0.0	0.0	0.0	53.2	0.0	53.2
Volume/Cap:	0.96	0.54	0.00	0.00	0.96	0.96	0.00	0.00	0.00	0.77	0.00	0.96
Delay/Veh:	79.8	18.2	0.0	0.0	59.7	59.7	0.0	0.0	0.0	49.7	0.0	66.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	79.8	18.2	0.0	0.0	59.7	59.7	0.0	0.0	0.0	49.7	0.0	66.7
LOS by Move:	E-	B-	A	A	E+	E+	A	A	A	D	A	E
HCM2kAvgQ:	25	17	0	0	29	29	0	0	0	22	0	34

Note: Queue reported is the number of cars per lane.

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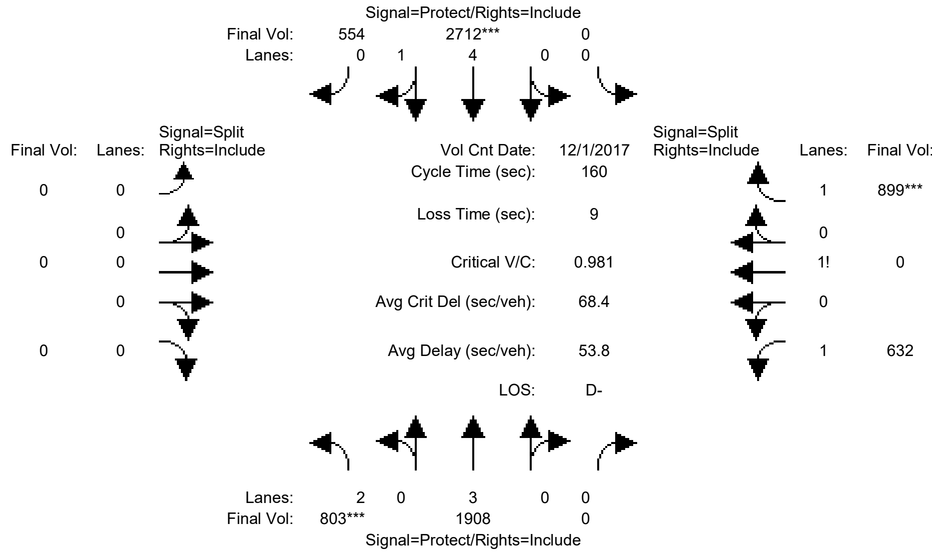
Intersection #56: De Anza Boulevard / I-280 NB Ramps (CMP)



Street Name:	De Anza Boulevard						I-280 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	4.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	803	1769	0	0	2247	340	0	0	0	632	0	795
Growth 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
Initial Bse:	803	1769	0	0	2247	340	0	0	0	632	0	795
Added Vol:	0	139	0	0	465	214	0	0	0	0	0	104
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	803	1908	0	0	2712	554	0	0	0	632	0	899
User 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
PHF 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
PHF Volume:	803	1908	0	0	2712	554	0	0	0	632	0	899
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	803	1908	0	0	2712	554	0	0	0	632	0	899
PCE 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
MLF 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
FinalVolume:	803	1908	0	0	2712	554	0	0	0	632	0	899
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	3.00	0.00	0.00	4.11	0.89	0.00	0.00	0.00	1.41	0.00	1.59
Final Sat.:	3150	5700	0	0	7803	1594	0	0	0	2472	0	2778
Capacity Analysis Module:												
Vol/Sat:	0.25	0.33	0.00	0.00	0.35	0.35	0.00	0.00	0.00	0.26	0.00	0.32
Crit Moves:	****				****							****
Green Time:	41.6	98.2	0.0	0.0	56.7	56.7	0.0	0.0	0.0	52.8	0.0	52.8
Volume/Cap:	0.98	0.55	0.00	0.00	0.98	0.98	0.00	0.00	0.00	0.78	0.00	0.98
Delay/Veh:	85.6	18.1	0.0	0.0	62.7	62.7	0.0	0.0	0.0	50.3	0.0	71.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	85.6	18.1	0.0	0.0	62.7	62.7	0.0	0.0	0.0	50.3	0.0	71.6
LOS by Move:	F	B-	A	A	E	E	A	A	A	D	A	E
HCM2kAvgQ:	26	17	0	0	31	31	0	0	0	22	0	35

Note: Queue reported is the number of cars per lane.

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Intersection #57: De Anza Boulevard / I-280 SB Ramps (CMP)

Signal=Protect/Rights=Include
Final Vol: 0 2461 857***
Lanes: 0 0 3 0 2

Signal=Split
Rights=Include

Final Vol:	Lanes:				Lanes:	Final Vol:
447	1	Vol Cnt Date:	12/1/2017		0	0
		Cycle Time (sec):	160			
	0	Loss Time (sec):	9		0	
26***	1!	Critical V/C:	0.921		0	0
	0	Avg Crit Del (sec/veh):	67.9		0	
528	1	Avg Delay (sec/veh):	42.2		0	0
		LOS:	D			

Signal=Split
Rights=Include

Lanes: 0 0 5 0 1
Final Vol: 0 2160 532***
Signal=Protect/Rights=Include

Street Name:	De Anza Boulevard						I-280 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	10	10	10	0	0	0
Y+R:	0.0	4.0	4.0	4.0	4.0	0.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	2115	532	585	2354	0	378	26	528	0	0	0
Growth 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
Initial Bse:	0	2115	532	585	2354	0	378	26	528	0	0	0
Added Vol:	0	45	0	272	107	0	69	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2160	532	857	2461	0	447	26	528	0	0	0
User 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
PHF 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
PHF Volume:	0	2160	532	857	2461	0	447	26	528	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2160	532	857	2461	0	447	26	528	0	0	0
PCE 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
MLF 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
FinalVolume:	0	2160	532	857	2461	0	447	26	528	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92
Lanes:	0.00	5.00	1.00	2.00	3.00	0.00	1.44	0.05	1.51	0.00	0.00	0.00
Final Sat.:	0	9500	1750	3150	5700	0	2512	89	2650	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.23	0.30	0.27	0.43	0.00	0.18	0.29	0.20	0.00	0.00	0.00
Crit Moves:			****	****				****				
Green Time:	0.0	52.8	52.8	47.2	100	0.0	51.0	51.0	51.0	0.0	0.0	0.0
Volume/Cap:	0.00	0.69	0.92	0.92	0.69	0.00	0.56	0.92	0.63	0.00	0.00	0.00
Delay/Veh:	0.0	47.1	71.9	68.7	20.4	0.0	45.6	65.1	47.2	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	47.1	71.9	68.7	20.4	0.0	45.6	65.1	47.2	0.0	0.0	0.0
LOS by Move:	A	D	E	E	C+	A	D	E	D	A	A	A
HCM2kAvgQ:	0	19	31	23	24	0	14	30	16	0	0	0

Note: Queue reported is the number of cars per lane.

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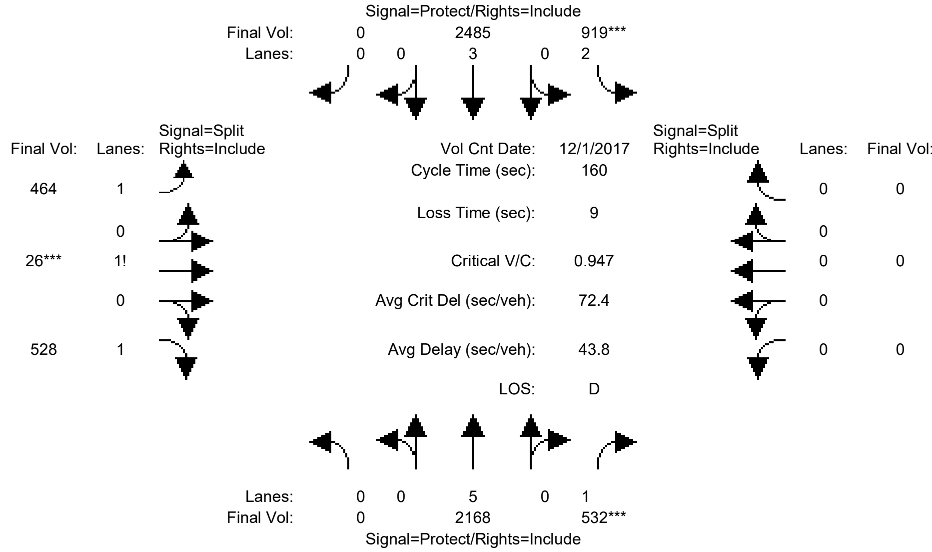
Intersection #57: De Anza Boulevard / I-280 SB Ramps (CMP)



Street Name:	De Anza Boulevard						I-280 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	10	10	10	0	0	0
Y+R:	0.0	4.0	4.0	4.0	4.0	0.0	4.0	4.0	4.0	0.0	0.0	0.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	0	2115	532	585	2354	0	378	26	528	0	0	0
Growth 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
Initial Bse:	0	2115	532	585	2354	0	378	26	528	0	0	0
Added Vol:	0	53	0	334	131	0	86	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2168	532	919	2485	0	464	26	528	0	0	0
User 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
PHF 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
PHF Volume:	0	2168	532	919	2485	0	464	26	528	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2168	532	919	2485	0	464	26	528	0	0	0
PCE 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
MLF 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
FinalVolume:	0	2168	532	919	2485	0	464	26	528	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.92	0.92	0.92	0.92	1.00	0.92
Lanes:	0.00	5.00	1.00	2.00	3.00	0.00	1.44	0.05	1.51	0.00	0.00	0.00
Final Sat.:	0	9500	1750	3150	5700	0	2528	87	2635	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.23	0.30	0.29	0.44	0.00	0.18	0.30	0.20	0.00	0.00	0.00
Crit Moves:			****	****				****				
Green Time:	0.0	51.3	51.3	49.3	101	0.0	50.4	50.4	50.4	0.0	0.0	0.0
Volume/Cap:	0.00	0.71	0.95	0.95	0.69	0.00	0.58	0.95	0.64	0.00	0.00	0.00
Delay/Veh:	0.0	48.6	78.5	71.6	20.1	0.0	46.5	69.8	47.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	48.6	78.5	71.6	20.1	0.0	46.5	69.8	47.8	0.0	0.0	0.0
LOS by Move:	A	D	E-	E	C+	A	D	E	D	A	A	A
HCM2kAvgQ:	0	19	32	25	25	0	14	31	16	0	0	0

Note: Queue reported is the number of cars per lane.

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Intersection #58: Fair Oaks Avenue / US 101 NB Ramps

Signal=Protect/Rights=Ignore
Final Vol: 0 1437*** 0
Lanes: 1 0 2 0 0

Signal=Split
Rights=Include
Final Vol: Lanes:
0 0
0
0 0
0
0 0

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 60
Loss Time (sec): 9
Critical V/C: 1.076
Avg Crit Del (sec/veh): 72.1
Avg Delay (sec/veh): 40.2
LOS: D

Signal=Split
Rights=Include
Lanes: Final Vol:
1 347
0
1! 1***
0
1 854

Lanes: 1 0 2 0 0
Final Vol: 344*** 1365 0
Signal=Protect/Rights=Include

Street Name:	Fair Oaks Avenue						US 101 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	0.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	276	1151	0	0	1415	187	0	0	0	826	1	347
Growth 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
Initial Bse:	276	1151	0	0	1415	187	0	0	0	826	1	347
Added Vol:	68	214	0	0	22	4	0	0	0	28	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	344	1365	0	0	1437	191	0	0	0	854	1	347
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	344	1365	0	0	1437	0	0	0	0	854	1	347
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	344	1365	0	0	1437	0	0	0	0	854	1	347
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	344	1365	0	0	1437	0	0	0	0	854	1	347
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.93	0.95	0.92
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.70	0.01	1.29
Final Sat.:	1750	3800	0	0	3800	1750	0	0	0	3030	3	2260
Capacity Analysis Module:												
Vol/Sat:	0.20	0.36	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.28	0.34	0.15
Crit Moves:	****				****						****	
Green Time:	11.0	32.0	0.0	0.0	21.1	0.0	0.0	0.0	0.0	19.0	19.0	19.0
Volume/Cap:	1.08	0.67	0.00	0.00	1.08	0.00	0.00	0.00	0.00	0.89	1.08	0.49
Delay/Veh:	96.7	11.1	0.0	0.0	67.5	0.0	0.0	0.0	0.0	27.4	70.5	16.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	96.7	11.1	0.0	0.0	67.5	0.0	0.0	0.0	0.0	27.4	70.5	16.7
LOS by Move:	F	B+	A	A	E	A	A	A	A	C	E	B
HCM2kAvgQ:	12	9	0	0	22	0	0	0	0	14	23	5

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
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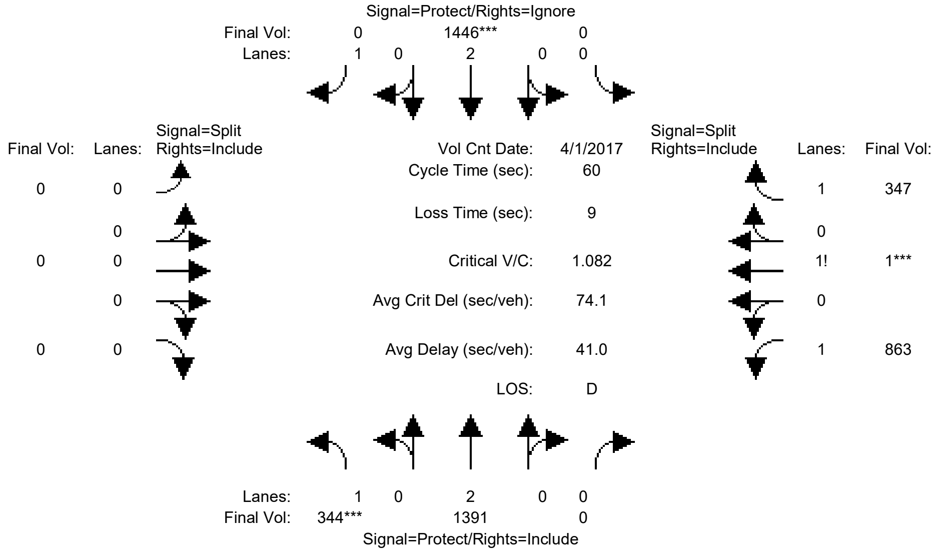
Cumulative PM Plus Project

Intersection #58: Fair Oaks Avenue / US 101 NB Ramps



Street Name:	Fair Oaks Avenue						US 101 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	0	0	0	10	10	10
Y+R:	4.0	4.0	0.0	0.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	276	1151	0	0	1415	187	0	0	0	826	1	347
Growth 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
Initial Bse:	276	1151	0	0	1415	187	0	0	0	826	1	347
Added Vol:	68	240	0	0	31	4	0	0	0	37	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	344	1391	0	0	1446	191	0	0	0	863	1	347
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	344	1391	0	0	1446	0	0	0	0	863	1	347
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	344	1391	0	0	1446	0	0	0	0	863	1	347
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	344	1391	0	0	1446	0	0	0	0	863	1	347
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.93	0.95	0.92
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.70	0.01	1.29
Final Sat.:	1750	3800	0	0	3800	1750	0	0	0	3034	3	2256
Capacity Analysis Module:												
Vol/Sat:	0.20	0.37	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.28	0.34	0.15
Crit Moves:	****				****						****	
Green Time:	10.9	32.0	0.0	0.0	21.1	0.0	0.0	0.0	0.0	19.0	19.0	19.0
Volume/Cap:	1.08	0.69	0.00	0.00	1.08	0.00	0.00	0.00	0.00	0.90	1.08	0.49
Delay/Veh:	98.7	11.3	0.0	0.0	69.6	0.0	0.0	0.0	0.0	27.9	72.6	16.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	98.7	11.3	0.0	0.0	69.6	0.0	0.0	0.0	0.0	27.9	72.6	16.7
LOS by Move:	F	B+	A	A	E	A	A	A	A	C	E	B
HCM2kAvgQ:	12	10	0	0	23	0	0	0	0	14	23	5

Note: Queue reported is the number of cars per lane.

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Intersection #59: Fair Oaks Avenue / Ahwanee Avenue

Signal=Protect/Rights=Include
Final Vol: 283 2844*** 91
Lanes: 0 1 2 0 1

Signal=Permit Rights=Include (West approach)
Final Vol: 120, 51***, 103
Lanes: 0, 1, 0, 0, 1

Vol Cnt Date: 4/1/2017
Cycle Time (sec): 90
Loss Time (sec): 6
Critical V/C: 0.741
Avg Crit Del (sec/veh): 11.2
Avg Delay (sec/veh): 11.9
LOS: B+

Signal=Permit Rights=Include (East approach)
Lanes: 1, 0, 0, 1, 0
Final Vol: 55, 30, 31

Lanes: 1 0 2 0 1
Final Vol: 66*** 1264 47
Signal=Protect/Rights=Overlap

Street Name:	Fair Oaks Avenue						Ahwanee Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	63	1000	44	91	2738	283	120	51	101	29	30	55
Growth 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
Initial Bse:	63	1000	44	91	2738	283	120	51	101	29	30	55
Added Vol:	3	264	3	0	106	0	0	0	2	2	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	66	1264	47	91	2844	283	120	51	103	31	30	55
User 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
PHF 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
PHF Volume:	66	1264	47	91	2844	283	120	51	103	31	30	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	1264	47	91	2844	283	120	51	103	31	30	55
PCE 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
MLF 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
FinalVolume:	66	1264	47	91	2844	283	120	51	103	31	30	55
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.99	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.72	0.28	0.70	0.30	1.00	0.51	0.49	1.00
Final Sat.:	1750	3800	1750	1750	5093	507	1263	537	1750	915	885	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.33	0.03	0.05	0.56	0.56	0.10	0.10	0.06	0.03	0.03	0.03
Crit Moves:	****				****			****				
Green Time:	7.0	59.0	59.0	13.8	65.8	65.8	11.2	11.2	11.2	11.2	11.2	11.2
Volume/Cap:	0.48	0.51	0.04	0.34	0.76	0.76	0.76	0.76	0.47	0.27	0.27	0.25
Delay/Veh:	42.5	8.2	5.5	34.8	8.3	8.3	52.5	52.5	38.3	36.4	36.4	36.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.5	8.2	5.5	34.8	8.3	8.3	52.5	52.5	38.3	36.4	36.4	36.2
LOS by Move:	D	A	A	C-	A	A	D-	D-	D+	D+	D+	D+
HCM2kAvgQ:	2	8	0	2	16	16	7	7	3	2	2	2

Note: Queue reported is the number of cars per lane.

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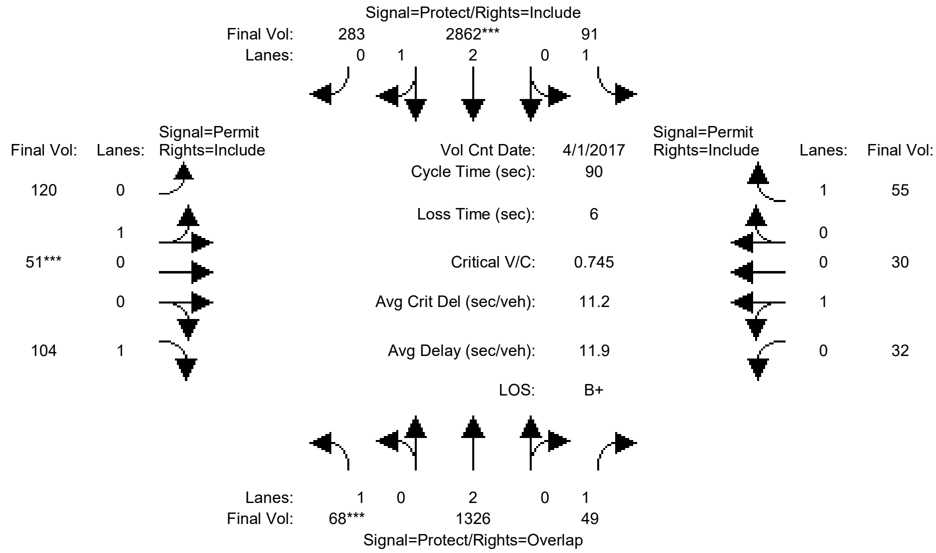
Intersection #59: Fair Oaks Avenue / Ahwanee Avenue



Street Name:	Fair Oaks Avenue						Ahwanee Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	63	1000	44	91	2738	283	120	51	101	29	30	55
Growth 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
Initial Bse:	63	1000	44	91	2738	283	120	51	101	29	30	55
Added Vol:	5	326	5	0	124	0	0	0	3	3	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	68	1326	49	91	2862	283	120	51	104	32	30	55
User 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
PHF 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
PHF Volume:	68	1326	49	91	2862	283	120	51	104	32	30	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	68	1326	49	91	2862	283	120	51	104	32	30	55
PCE 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
MLF 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
FinalVolume:	68	1326	49	91	2862	283	120	51	104	32	30	55
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.99	0.95	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.72	0.28	0.70	0.30	1.00	0.52	0.48	1.00
Final Sat.:	1750	3800	1750	1750	5095	504	1263	537	1750	929	871	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.35	0.03	0.05	0.56	0.56	0.10	0.10	0.06	0.03	0.03	0.03
Crit Moves:	****				****			****				
Green Time:	7.0	59.6	59.6	13.3	65.9	65.9	11.1	11.1	11.1	11.1	11.1	11.1
Volume/Cap:	0.50	0.53	0.04	0.35	0.77	0.77	0.77	0.77	0.48	0.28	0.28	0.25
Delay/Veh:	42.7	8.1	5.3	35.3	8.3	8.3	53.0	53.0	38.4	36.5	36.5	36.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.7	8.1	5.3	35.3	8.3	8.3	53.0	53.0	38.4	36.5	36.5	36.3
LOS by Move:	D	A	A	D+	A	A	D-	D-	D+	D+	D+	D+
HCM2kAvgQ:	2	9	0	2	17	17	7	7	4	2	2	2

Note: Queue reported is the number of cars per lane.

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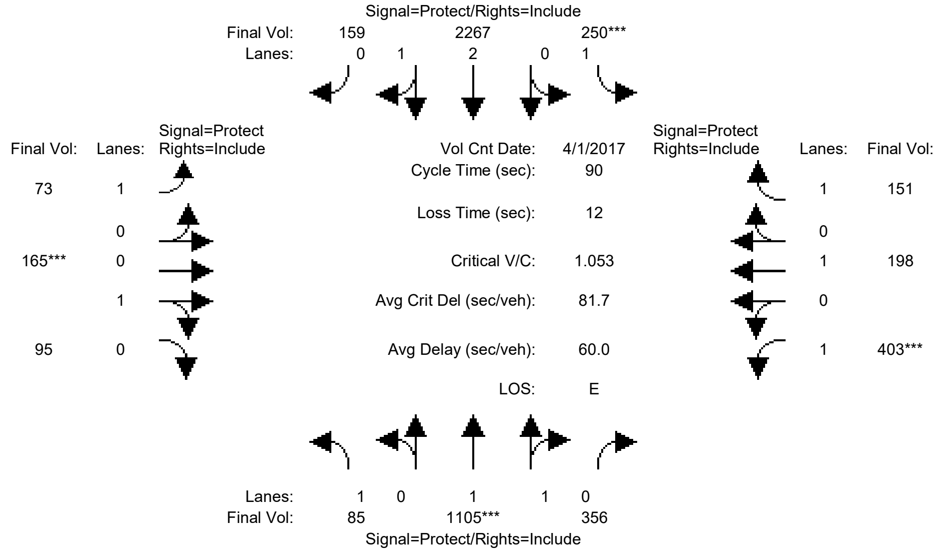
Intersection #60: Fair Oaks Avenue / Duane Avenue



Street Name:	Fair Oaks Avenue						Duane Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	13	843	246	250	2186	129	65	109	27	282	136	151
Growth 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
Initial Bse:	13	843	246	250	2186	129	65	109	27	282	136	151
Added Vol:	72	262	110	0	81	30	8	56	68	121	62	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	85	1105	356	250	2267	159	73	165	95	403	198	151
User 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
PHF 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
PHF Volume:	85	1105	356	250	2267	159	73	165	95	403	198	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	1105	356	250	2267	159	73	165	95	403	198	151
PCE 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
MLF 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
FinalVolume:	85	1105	356	250	2267	159	73	165	95	403	198	151
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	1.50	0.50	1.00	2.80	0.20	1.00	0.63	0.37	1.00	1.00	1.00
Final Sat.:	1750	2798	901	1750	5232	367	1750	1142	658	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.39	0.39	0.14	0.43	0.43	0.04	0.14	0.14	0.23	0.10	0.09
Crit Moves:		****		****				****		****		
Green Time:	7.0	33.8	33.8	12.2	39.0	39.0	13.2	12.3	12.3	19.7	18.8	18.8
Volume/Cap:	0.62	1.05	1.05	1.05	1.00	1.00	0.28	1.05	1.05	1.05	0.50	0.41
Delay/Veh:	49.0	67.5	67.5	111.9	43.9	43.9	34.8	111	110.7	95.8	32.4	31.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.0	67.5	67.5	111.9	43.9	43.9	34.8	111	110.7	95.8	32.4	31.5
LOS by Move:	D	E	E	F	D	D	C-	F	F	F	C-	C
HCM2kAvgQ:	3	29	29	10	27	27	2	14	14	17	5	4

Note: Queue reported is the number of cars per lane.

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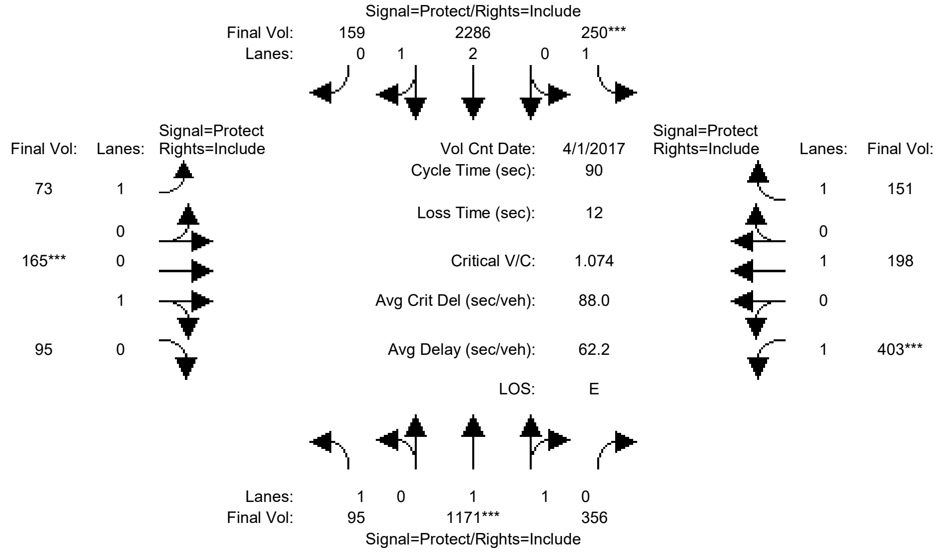
Intersection #60: Fair Oaks Avenue / Duane Avenue



Street Name:	Fair Oaks Avenue						Duane Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	13	843	246	250	2186	129	65	109	27	282	136	151
Growth 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
Initial Bse:	13	843	246	250	2186	129	65	109	27	282	136	151
Added Vol:	82	328	110	0	100	30	8	56	68	121	62	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95	1171	356	250	2286	159	73	165	95	403	198	151
User 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
PHF 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
PHF Volume:	95	1171	356	250	2286	159	73	165	95	403	198	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	1171	356	250	2286	159	73	165	95	403	198	151
PCE 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
MLF 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
FinalVolume:	95	1171	356	250	2286	159	73	165	95	403	198	151
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.95	0.95	0.92	1.00	0.92
Lanes:	1.00	1.52	0.48	1.00	2.80	0.20	1.00	0.63	0.37	1.00	1.00	1.00
Final Sat.:	1750	2837	862	1750	5235	364	1750	1142	658	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.41	0.41	0.14	0.44	0.44	0.04	0.14	0.14	0.23	0.10	0.09
Crit Moves:		****		****				****		****		
Green Time:	7.0	34.6	34.6	12.0	39.5	39.5	12.9	12.1	12.1	19.3	18.5	18.5
Volume/Cap:	0.69	1.07	1.07	1.07	0.99	0.99	0.29	1.07	1.07	1.07	0.51	0.42
Delay/Veh:	54.7	74.0	74.0	118.9	41.8	41.8	35.1	118	117.6	102.8	32.8	31.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	54.7	74.0	74.0	118.9	41.8	41.8	35.1	118	117.6	102.8	32.8	31.9
LOS by Move:	D-	E	E	F	D	D	D+	F	F	F	C-	C
HCM2kAvgQ:	3	31	31	11	26	26	2	14	14	18	5	4

Note: Queue reported is the number of cars per lane.

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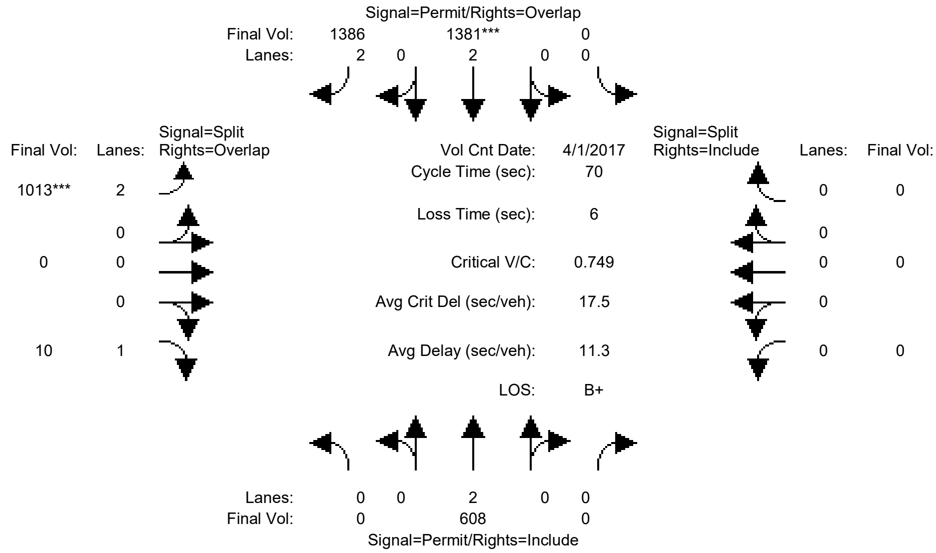
Cumulative PM

Intersection #61: Fair Oaks Avenue / Wolfe Road



Street Name:	Fair Oaks Avenue						Wolfe Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	0	0	10	10	10	0	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	0	463	0	0	1226	1272	714	0	10	0	0	0
Growth 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
Initial Bse:	0	463	0	0	1226	1272	714	0	10	0	0	0
Added Vol:	0	145	0	0	155	114	299	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	608	0	0	1381	1386	1013	0	10	0	0	0
User 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
PHF 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
PHF Volume:	0	608	0	0	1381	1386	1013	0	10	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	608	0	0	1381	1386	1013	0	10	0	0	0
PCE 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
MLF 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
FinalVolume:	0	608	0	0	1381	1386	1013	0	10	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.83	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3800	0	0	3800	3150	3150	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.16	0.00	0.00	0.36	0.44	0.32	0.00	0.01	0.00	0.00	0.00
Crit Moves:					****		****					
Green Time:	0.0	34.0	0.0	0.0	34.0	64.0	30.0	0.0	30.0	0.0	0.0	0.0
Volume/Cap:	0.00	0.33	0.00	0.00	0.75	0.48	0.75	0.00	0.01	0.00	0.00	0.00
Delay/Veh:	0.0	11.2	0.0	0.0	16.3	0.6	19.2	0.0	11.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	11.2	0.0	0.0	16.3	0.6	19.2	0.0	11.5	0.0	0.0	0.0
LOS by Move:	A	B+	A	A	B	A	B-	A	B+	A	A	A
HCM2kAvgQ:	0	4	0	0	11	3	11	0	0	0	0	0

Note: Queue reported is the number of cars per lane.

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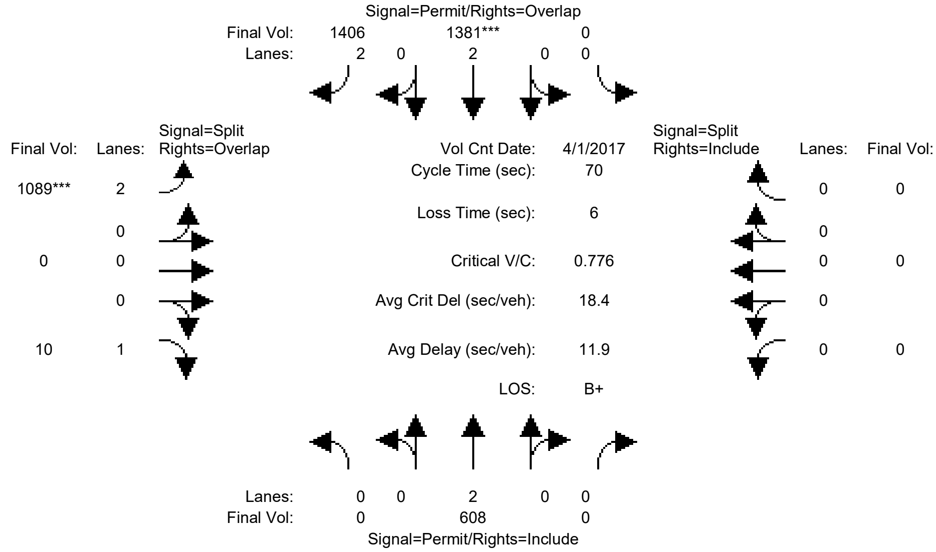
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #61: Fair Oaks Avenue / Wolfe Road



Street Name:	Fair Oaks Avenue						Wolfe Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	0	0	10	10	10	0	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	0	463	0	0	1226	1272	714	0	10	0	0	0
Growth 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
Initial Bse:	0	463	0	0	1226	1272	714	0	10	0	0	0
Added Vol:	0	145	0	0	155	134	375	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	608	0	0	1381	1406	1089	0	10	0	0	0
User 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
PHF 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
PHF Volume:	0	608	0	0	1381	1406	1089	0	10	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	608	0	0	1381	1406	1089	0	10	0	0	0
PCE 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
MLF 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
FinalVolume:	0	608	0	0	1381	1406	1089	0	10	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.83	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3800	0	0	3800	3150	3150	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.16	0.00	0.00	0.36	0.45	0.35	0.00	0.01	0.00	0.00	0.00
Crit Moves:					****		****					
Green Time:	0.0	32.8	0.0	0.0	32.8	64.0	31.2	0.0	31.2	0.0	0.0	0.0
Volume/Cap:	0.00	0.34	0.00	0.00	0.78	0.49	0.78	0.00	0.01	0.00	0.00	0.00
Delay/Veh:	0.0	11.9	0.0	0.0	17.7	0.6	19.2	0.0	10.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	11.9	0.0	0.0	17.7	0.6	19.2	0.0	10.8	0.0	0.0	0.0
LOS by Move:	A	B+	A	A	B	A	B-	A	B+	A	A	A
HCM2kAvgQ:	0	4	0	0	11	3	12	0	0	0	0	0

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
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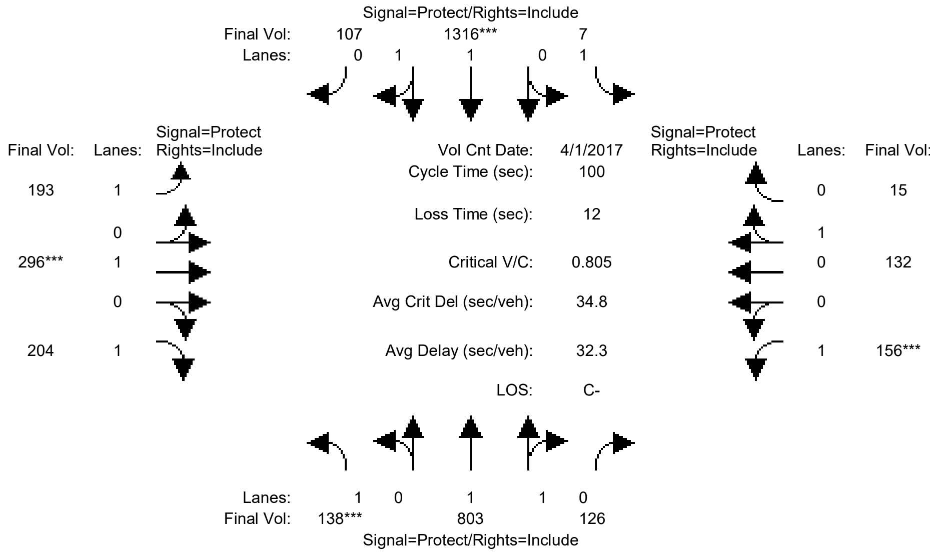
Cumulative PM

Intersection #62: Fair Oaks Avenue / Maude Avenue



Street Name:	Fair Oaks Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	95	580	16	7	1208	101	117	201	149	35	109	15
Growth 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
Initial Bse:	95	580	16	7	1208	101	117	201	149	35	109	15
Added Vol:	43	223	110	0	108	6	76	95	55	121	23	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	138	803	126	7	1316	107	193	296	204	156	132	15
User 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
PHF 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
PHF Volume:	138	803	126	7	1316	107	193	296	204	156	132	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	803	126	7	1316	107	193	296	204	156	132	15
PCE 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
MLF 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
FinalVolume:	138	803	126	7	1316	107	193	296	204	156	132	15
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	1.00	1.72	0.28	1.00	1.85	0.15	1.00	1.00	1.00	1.00	0.90	0.10
Final Sat.:	1750	3198	502	1750	3422	278	1750	1900	1750	1750	1616	184
Capacity Analysis Module:												
Vol/Sat:	0.08	0.25	0.25	0.00	0.38	0.38	0.11	0.16	0.12	0.09	0.08	0.08
Crit Moves:	****				****			****		****		
Green Time:	9.8	45.0	45.0	12.6	47.8	47.8	16.0	19.4	19.4	11.1	14.5	14.5
Volume/Cap:	0.81	0.56	0.56	0.03	0.81	0.81	0.69	0.81	0.60	0.81	0.56	0.56
Delay/Veh:	67.7	20.6	20.6	38.4	25.0	25.0	46.9	50.7	39.8	64.7	42.7	42.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	67.7	20.6	20.6	38.4	25.0	25.0	46.9	50.7	39.8	64.7	42.7	42.7
LOS by Move:	E	C+	C+	D+	C	C	D	D	D	E	D	D
HCM2kAvgQ:	5	10	10	0	19	19	6	9	6	7	5	5

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project PM

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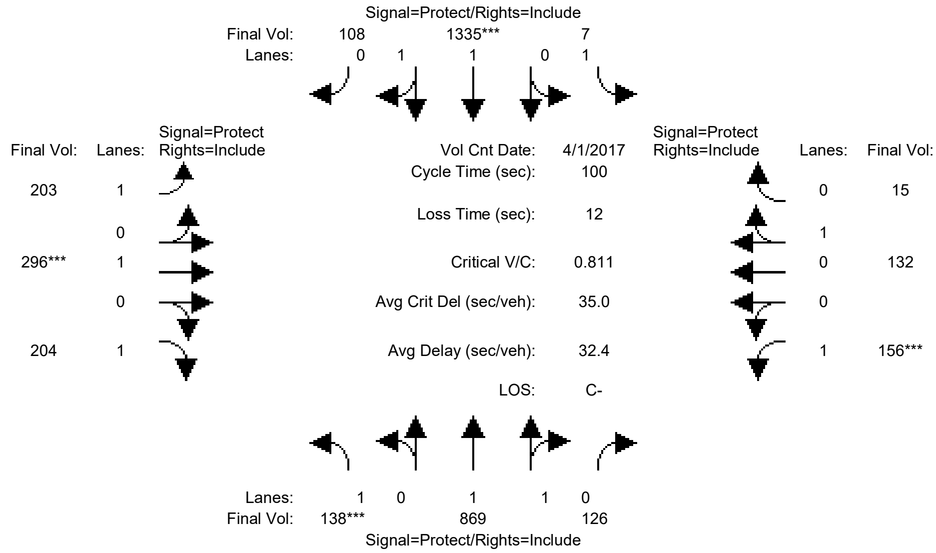
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #62: Fair Oaks Avenue / Maude Avenue



Street Name:	Fair Oaks Avenue						Maude Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Apr 2017 <<												
Base Vol:	95	580	16	7	1208	101	117	201	149	35	109	15
Growth 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
Initial Bse:	95	580	16	7	1208	101	117	201	149	35	109	15
Added Vol:	43	289	110	0	128	6	86	95	55	121	23	0
PasserByVol:	0	0	0	0	-1	1	0	0	0	0	0	0
Initial Fut:	138	869	126	7	1335	108	203	296	204	156	132	15
User 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
PHF 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
PHF Volume:	138	869	126	7	1335	108	203	296	204	156	132	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	869	126	7	1335	108	203	296	204	156	132	15
PCE 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
MLF 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
FinalVolume:	138	869	126	7	1335	108	203	296	204	156	132	15
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	1.00	1.74	0.26	1.00	1.85	0.15	1.00	1.00	1.00	1.00	0.90	0.10
Final Sat.:	1750	3231	468	1750	3423	277	1750	1900	1750	1750	1616	184
Capacity Analysis Module:												
Vol/Sat:	0.08	0.27	0.27	0.00	0.39	0.39	0.12	0.16	0.12	0.09	0.08	0.08
Crit Moves:	****				****			****		****		
Green Time:	9.7	45.9	45.9	11.9	48.1	48.1	16.2	19.2	19.2	11.0	14.0	14.0
Volume/Cap:	0.81	0.59	0.59	0.03	0.81	0.81	0.72	0.81	0.61	0.81	0.58	0.58
Delay/Veh:	68.8	20.6	20.6	39.0	25.0	25.0	48.1	51.5	40.1	65.7	43.8	43.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	68.8	20.6	20.6	39.0	25.0	25.0	48.1	51.5	40.1	65.7	43.8	43.8
LOS by Move:	E	C+	C+	D+	C	C	D	D-	D	E	D	D
HCM2kAvgQ:	5	11	11	0	19	19	6	9	6	7	5	5

Note: Queue reported is the number of cars per lane.

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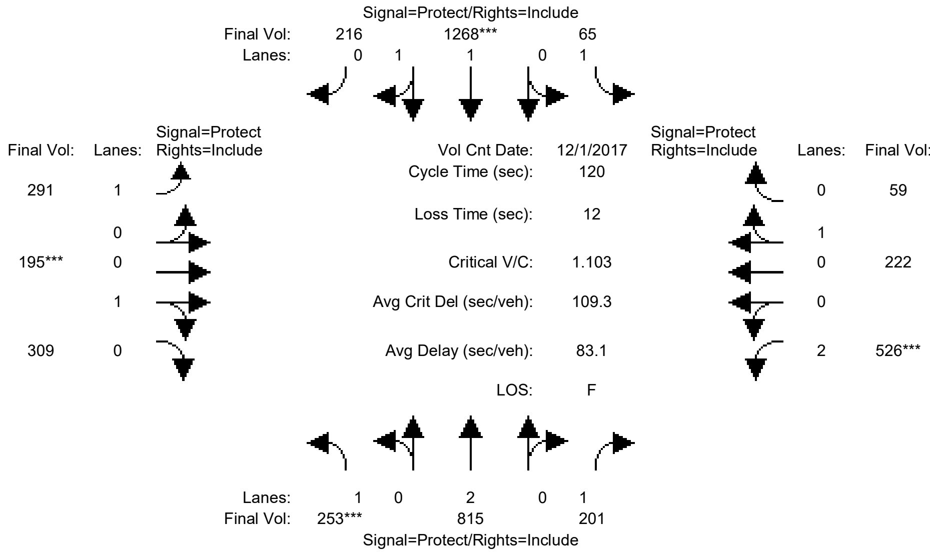
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #63: Fair Oaks Avenue / Arques Avenue



Street Name:	Fair Oaks Avenue						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	166	631	201	65	1099	101	110	195	161	483	222	48
Growth 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
Initial Bse:	166	631	201	65	1099	101	110	195	161	483	222	48
Added Vol:	87	184	0	0	169	115	181	0	148	43	0	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	253	815	201	65	1268	216	291	195	309	526	222	59
User 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
PHF 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
PHF Volume:	253	815	201	65	1268	216	291	195	309	526	222	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	253	815	201	65	1268	216	291	195	309	526	222	59
PCE 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
MLF 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
FinalVolume:	253	815	201	65	1268	216	291	195	309	526	222	59
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	1.70	0.30	1.00	0.39	0.61	2.00	0.79	0.21
Final Sat.:	1750	3800	1750	1750	3161	538	1750	696	1104	3150	1422	378
Capacity Analysis Module:												
Vol/Sat:	0.14	0.21	0.11	0.04	0.40	0.40	0.17	0.28	0.28	0.17	0.16	0.16
Crit Moves:	****				****			****		****		
Green Time:	15.7	46.7	46.7	12.7	43.6	43.6	25.1	30.5	30.5	18.2	23.5	23.5
Volume/Cap:	1.10	0.55	0.30	0.35	1.10	1.10	0.80	1.10	1.10	1.10	0.80	0.80
Delay/Veh:	141.9	29.0	25.6	51.0	96.0	96.0	56.5	118	117.9	123.2	57.8	57.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	141.9	29.0	25.6	51.0	96.0	96.0	56.5	118	117.9	123.2	57.8	57.8
LOS by Move:	F	C	C	D	F	F	E+	F	F	F	E+	E+
HCM2kAvgQ:	14	11	5	2	37	37	13	30	30	17	11	11

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project PM

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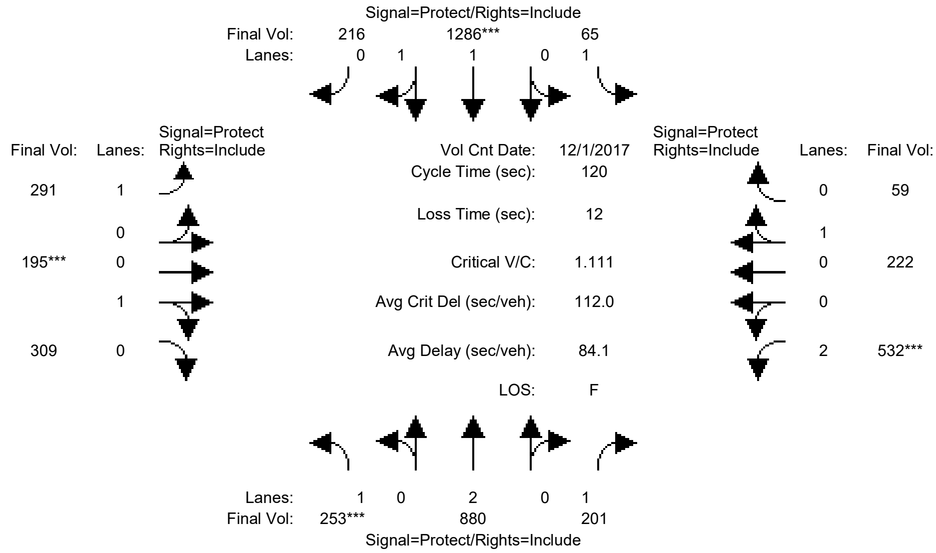
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #63: Fair Oaks Avenue / Arques Avenue



Street Name:	Fair Oaks Avenue						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	166	631	201	65	1099	101	110	195	161	483	222	48
Growth 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
Initial Bse:	166	631	201	65	1099	101	110	195	161	483	222	48
Added Vol:	87	249	0	0	188	115	181	0	148	49	0	11
PasserByVol:	0	0	0	0	-1	0	0	0	0	0	0	0
Initial Fut:	253	880	201	65	1286	216	291	195	309	532	222	59
User 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
PHF 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
PHF Volume:	253	880	201	65	1286	216	291	195	309	532	222	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	253	880	201	65	1286	216	291	195	309	532	222	59
PCE 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
MLF 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
FinalVolume:	253	880	201	65	1286	216	291	195	309	532	222	59
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	1.70	0.30	1.00	0.39	0.61	2.00	0.79	0.21
Final Sat.:	1750	3800	1750	1750	3168	532	1750	696	1104	3150	1422	378
Capacity Analysis Module:												
Vol/Sat:	0.14	0.23	0.11	0.04	0.41	0.41	0.17	0.28	0.28	0.17	0.16	0.16
Crit Moves:	****				****			****		****		
Green Time:	15.6	47.5	47.5	12.0	43.9	43.9	25.0	30.3	30.3	18.2	23.5	23.5
Volume/Cap:	1.11	0.58	0.29	0.37	1.11	1.11	0.80	1.11	1.11	1.11	0.80	0.80
Delay/Veh:	144.6	29.1	25.0	51.8	98.8	98.8	56.7	121	120.7	125.7	58.0	58.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	144.6	29.1	25.0	51.8	98.8	98.8	56.7	121	120.7	125.7	58.0	58.0
LOS by Move:	F	C	C	D-	F	F	E+	F	F	F	E+	E+
HCM2kAvgQ:	14	12	5	2	38	38	13	30	30	17	11	11

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative PM

Intersection #64: Central Expressway WB Off-Ramp / Arques Avenue

Signal=Stop/Rights=Include
Final Vol: 0 0 0
Lanes: 0 0 0 0 0

Signal=Uncontrol Rights=Include
Final Vol: Lanes:
0 0
0
326 2
0
0 0

Vol Cnt Date: 10/3/2018
Cycle Time (sec): 100
Loss Time (sec): 0
Critical V/C: 0.681
Avg Crit Del (sec/veh): 8.0
Avg Delay (sec/veh): 8.0
LOS: D

Signal=Uncontrol Rights=Include
Lanes: Final Vol:
0 0
0
2 456
0
0 0

Lanes: 1 0 0 0 1
Final Vol: 318 0 30
Signal=Stop/Rights=Include

Street Name:	Central Expressway WB Ramp						Arques Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	264	0	30	0	0	0	0	326	0	0	456	0
Growth 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
Initial Bse:	264	0	30	0	0	0	0	326	0	0	456	0
Added Vol:	54	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	318	0	30	0	0	0	0	326	0	0	456	0
User 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
PHF 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
PHF Volume:	318	0	30	0	0	0	0	326	0	0	456	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	318	0	30	0	0	0	0	326	0	0	456	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	554	xxxx	163	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	467	xxxx	859	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	467	xxxx	859	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.68	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	5.0	xxxx	0.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	27.6	xxxx	9.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	D	*	A	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		26.0			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		D			*			*			*	

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Lanes:        1  0  0  0  1   0  0  0  0  0   0  0  2  0  0   0  0  2  0  0
Initial Vol:  318    0    30    0    0     0     0  326     0     0  456     0
ApproachDel:      26.0          xxxxxx           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=2.5]
   FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=348]
   SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1130]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

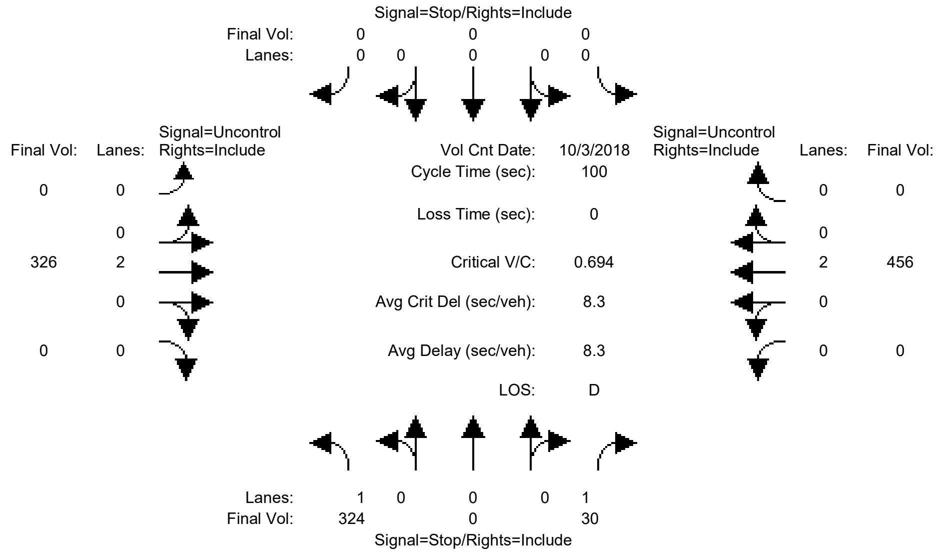
The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Lanes:        1  0  0  0  1   0  0  0  0  0   0  0  2  0  0   0  0  2  0  0
Initial Vol:  318    0    30    0    0     0     0  326     0     0  456     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:            782
Minor Approach Volume:          348
Minor Approach Volume Threshold: 480
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #64: Central Expressway WB Off-Ramp / Arques Avenue




```
Street Name:    Central Expressway WB Ramp            Arques Avenue
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Volume Module: >> Count Date: 3 Oct 2018 <<
Base Vol:     264    0    30     0    0     0     0  326     0     0  456     0
Growth 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
Initial Bse:  264    0    30     0    0     0     0  326     0     0  456     0
Added Vol:     60    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  324    0    30     0    0     0     0  326     0     0  456     0
User 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
PHF 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
PHF Volume:   324    0    30     0    0     0     0  326     0     0  456     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:  324    0    30     0    0     0     0  326     0     0  456     0
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:  6.8 xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:  3.5 xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol:  554 xxxx   163  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.:  467 xxxx   859  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:    467 xxxx   859  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  0.69 xxxx  0.03  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2Way95thQ:    5.2 xxxx   0.1  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del: 28.4 xxxx   9.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    D    *     A     *    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:       26.8            xxxxxx            xxxxxx            xxxxxx
ApproachLOS:          D                 *                 *                 *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 0	0 0 2 0 0
Initial Vol:	324 0 30	0 0 0	0 326 0	0 456 0
ApproachDel:	26.8	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=2.6]
FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=354]
SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1136]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #64 Central Expressway WB Off-Ramp / Arques Avenue

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 0	0 0 2 0 0
Initial Vol:	324 0 30	0 0 0	0 326 0	0 456 0

Major Street Volume: 782
Minor Approach Volume: 354
Minor Approach Volume Threshold: 480

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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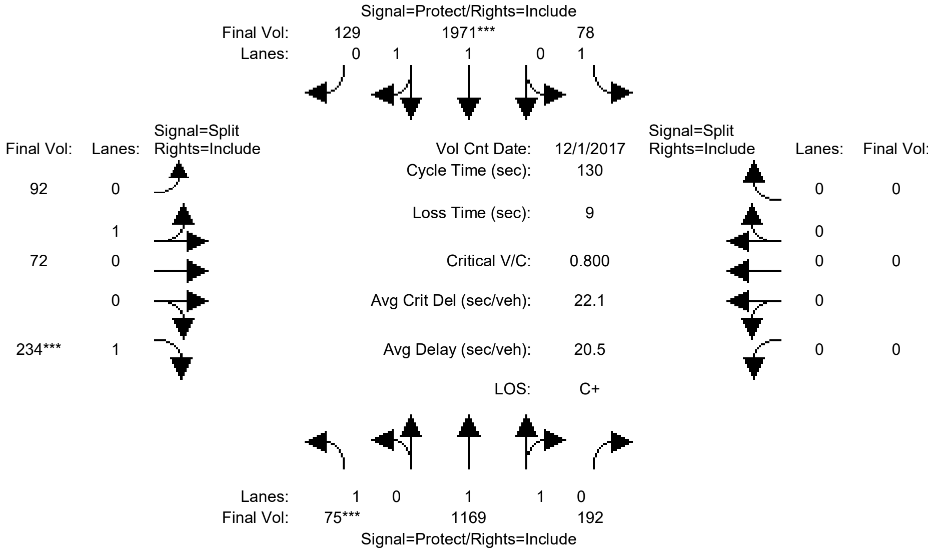
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #65: Fair Oaks Avenue / California Avenue



Street Name:	Fair Oaks Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	56	898	89	31	1658	129	92	72	202	0	0	0
Growth 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
Initial Bse:	56	898	89	31	1658	129	92	72	202	0	0	0
Added Vol:	19	271	103	47	313	0	0	0	32	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	75	1169	192	78	1971	129	92	72	234	0	0	0
User 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
PHF 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
PHF Volume:	75	1169	192	78	1971	129	92	72	234	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	1169	192	78	1971	129	92	72	234	0	0	0
PCE 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
MLF 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
FinalVolume:	75	1169	192	78	1971	129	92	72	234	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.92	1.00	0.92
Lanes:	1.00	1.71	0.29	1.00	1.87	0.13	0.56	0.44	1.00	0.00	0.00	0.00
Final Sat.:	1750	3178	522	1750	3473	227	1010	790	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.37	0.37	0.04	0.57	0.57	0.09	0.09	0.13	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green Time:	7.0	86.6	86.6	12.7	92.3	92.3	21.7	21.7	21.7	0.0	0.0	0.0
Volume/Cap:	0.80	0.55	0.55	0.46	0.80	0.80	0.54	0.54	0.80	0.00	0.00	0.00
Delay/Veh:	96.9	11.7	11.7	57.4	14.5	14.5	51.7	51.7	66.4	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	96.9	11.7	11.7	57.4	14.5	14.5	51.7	51.7	66.4	0.0	0.0	0.0
LOS by Move:	F	B+	B+	E+	B	B	D-	D-	E	A	A	A
HCM2kAvgQ:	5	15	15	3	27	27	6	6	10	0	0	0

Note: Queue reported is the number of cars per lane.

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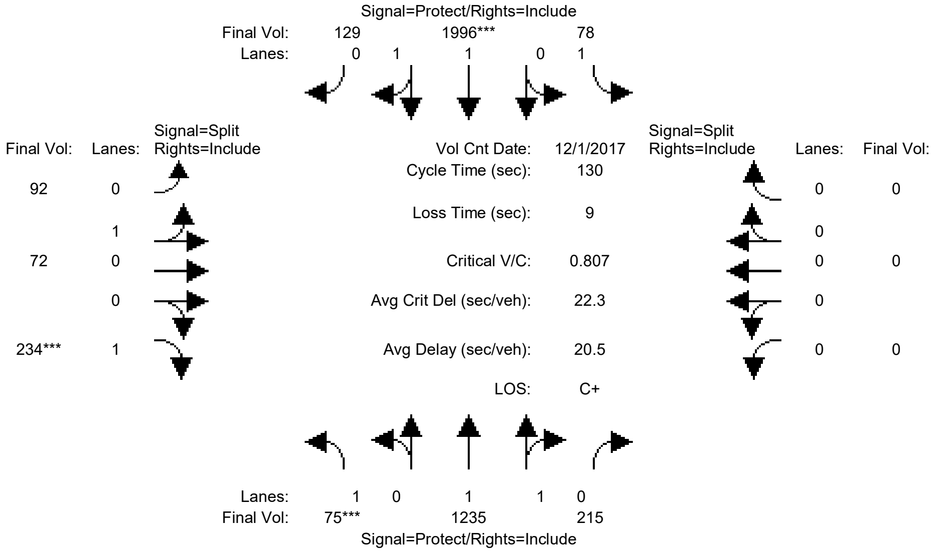
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #65: Fair Oaks Avenue / California Avenue



Street Name:	Fair Oaks Avenue						California Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	56	898	89	31	1658	129	92	72	202	0	0	0
Growth 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
Initial Bse:	56	898	89	31	1658	129	92	72	202	0	0	0
Added Vol:	19	337	126	47	339	0	0	0	32	0	0	0
PasserByVol:	0	0	0	0	-1	0	0	0	0	0	0	0
Initial Fut:	75	1235	215	78	1996	129	92	72	234	0	0	0
User 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
PHF 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
PHF Volume:	75	1235	215	78	1996	129	92	72	234	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	75	1235	215	78	1996	129	92	72	234	0	0	0
PCE 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
MLF 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
FinalVolume:	75	1235	215	78	1996	129	92	72	234	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.95	0.95	0.92	0.92	1.00	0.92
Lanes:	1.00	1.70	0.30	1.00	1.88	0.12	0.56	0.44	1.00	0.00	0.00	0.00
Final Sat.:	1750	3151	549	1750	3475	225	1010	790	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.39	0.39	0.04	0.57	0.57	0.09	0.09	0.13	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green Time:	7.0	87.5	87.5	12.0	92.5	92.5	21.5	21.5	21.5	0.0	0.0	0.0
Volume/Cap:	0.80	0.58	0.58	0.48	0.81	0.81	0.55	0.55	0.81	0.00	0.00	0.00
Delay/Veh:	96.9	11.8	11.8	58.3	14.7	14.7	52.0	52.0	67.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	96.9	11.8	11.8	58.3	14.7	14.7	52.0	52.0	67.6	0.0	0.0	0.0
LOS by Move:	F	B+	B+	E+	B	B	D-	D-	E	A	A	A
HCM2kAvgQ:	5	16	16	3	27	27	6	6	10	0	0	0

Note: Queue reported is the number of cars per lane.

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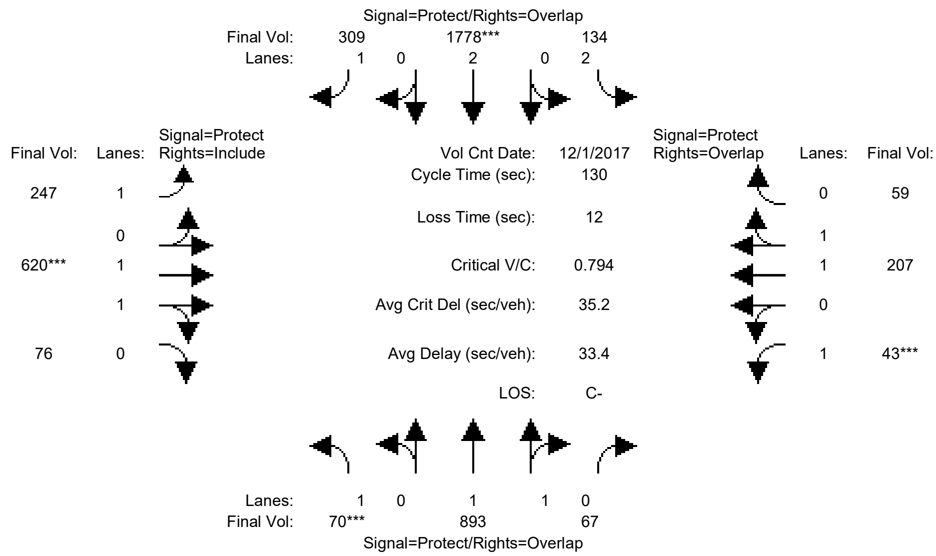
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #66: Fair Oaks Avenue / Evelyn Avenue



Street Name:	Fair Oaks Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	72	723	67	133	1418	216	159	594	77	43	180	57
Growth 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
Initial Bse:	72	723	67	133	1418	216	159	594	77	43	180	57
Added Vol:	-2	170	0	1	360	93	88	26	-1	0	27	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	70	893	67	134	1778	309	247	620	76	43	207	59
User 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
PHF 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
PHF Volume:	70	893	67	134	1778	309	247	620	76	43	207	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	893	67	134	1778	309	247	620	76	43	207	59
PCE 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
MLF 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
FinalVolume:	70	893	67	134	1778	309	247	620	76	43	207	59
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	1.00	0.92	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.86	0.14	2.00	2.00	1.00	1.00	1.78	0.22	1.00	1.54	0.46
Final Sat.:	1750	3442	258	3150	3800	1750	1750	3296	404	1750	2879	821
Capacity Analysis Module:												
Vol/Sat:	0.04	0.26	0.26	0.04	0.47	0.18	0.14	0.19	0.19	0.02	0.07	0.07
Crit Moves:	****				****			****		****		
Green Time:	7.0	67.2	74.2	14.0	74.2	98.0	23.8	29.8	29.8	7.0	13.0	26.9
Volume/Cap:	0.74	0.50	0.45	0.40	0.82	0.23	0.77	0.82	0.82	0.46	0.72	0.35
Delay/Veh:	87.5	20.7	16.3	54.9	25.1	4.9	61.3	53.9	53.9	63.1	63.5	44.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	87.5	20.7	16.3	54.9	25.1	4.9	61.3	53.9	53.9	63.1	63.5	44.3
LOS by Move:	F	C+	B	D-	C	A	E	D-	D-	E	E	D
HCM2kAvgQ:	3	12	11	3	30	4	10	14	14	2	7	5

Note: Queue reported is the number of cars per lane.

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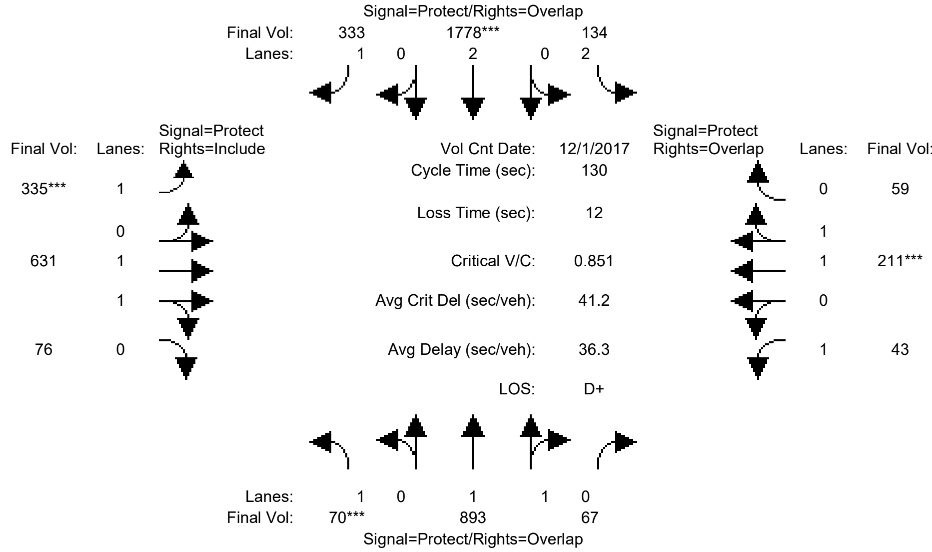
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #66: Fair Oaks Avenue / Evelyn Avenue



Street Name:	Fair Oaks Avenue						Evelyn Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	72	723	67	133	1418	216	159	594	77	43	180	57
Growth 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
Initial Bse:	72	723	67	133	1418	216	159	594	77	43	180	57
Added Vol:	-2	170	0	1	360	118	176	37	-1	0	31	2
PasserByVol:	0	0	0	0	0	-1	0	0	0	0	0	0
Initial Fut:	70	893	67	134	1778	333	335	631	76	43	211	59
User 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
PHF 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
PHF Volume:	70	893	67	134	1778	333	335	631	76	43	211	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	893	67	134	1778	333	335	631	76	43	211	59
PCE 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
MLF 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
FinalVolume:	70	893	67	134	1778	333	335	631	76	43	211	59
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.83	1.00	0.92	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	1.00	1.86	0.14	2.00	2.00	1.00	1.00	1.78	0.22	1.00	1.55	0.45
Final Sat.:	1750	3442	258	3150	3800	1750	1750	3302	398	1750	2891	808
Capacity Analysis Module:												
Vol/Sat:	0.04	0.26	0.26	0.04	0.47	0.19	0.19	0.19	0.19	0.02	0.07	0.07
Crit Moves:	****				****		****				****	
Green Time:	7.0	64.5	73.3	13.4	70.9	99.9	29.0	31.3	31.3	8.8	11.1	24.5
Volume/Cap:	0.74	0.52	0.46	0.41	0.86	0.25	0.86	0.79	0.79	0.36	0.86	0.39
Delay/Veh:	87.5	22.5	16.8	55.5	29.0	4.4	65.5	51.3	51.3	59.8	78.9	46.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	87.5	22.5	16.8	55.5	29.0	4.4	65.5	51.3	51.3	59.8	78.9	46.6
LOS by Move:	F	C+	B	E+	C	A	E	D-	D-	E+	E-	D
HCM2kAvgQ:	3	13	11	3	32	4	14	13	13	2	8	5

Note: Queue reported is the number of cars per lane.

Cityline TIA
SJ17-1787
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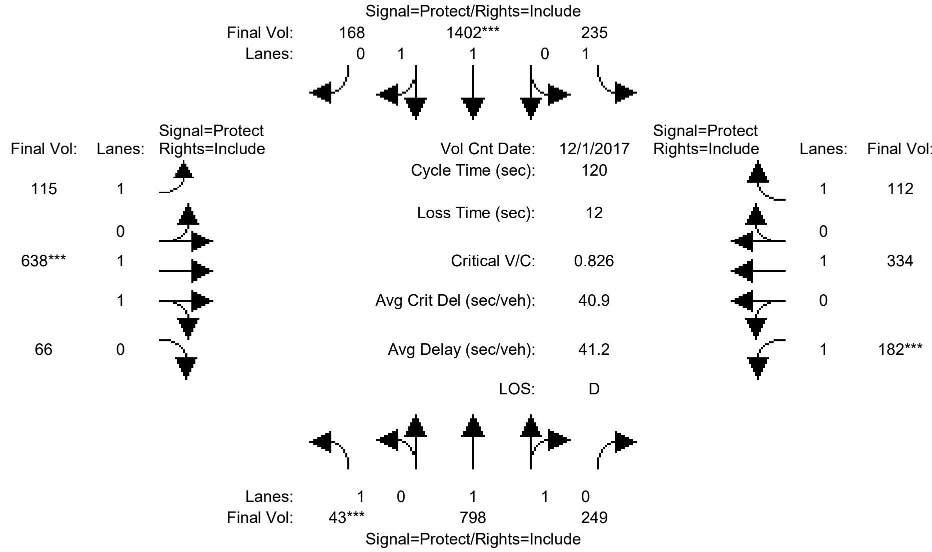
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #67: Fair Oaks Avenue / Old San Francisco Road



Street Name:	Fair Oaks Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	37	668	237	160	1118	168	115	438	64	146	219	74
Growth 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
Initial Bse:	37	668	237	160	1118	168	115	438	64	146	219	74
Added Vol:	6	130	12	75	284	0	0	200	2	36	115	38
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	43	798	249	235	1402	168	115	638	66	182	334	112
User 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
PHF 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
PHF Volume:	43	798	249	235	1402	168	115	638	66	182	334	112
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	798	249	235	1402	168	115	638	66	182	334	112
PCE 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
MLF 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
FinalVolume:	43	798	249	235	1402	168	115	638	66	182	334	112
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.51	0.49	1.00	1.78	0.22	1.00	1.81	0.19	1.00	1.00	1.00
Final Sat.:	1750	2819	880	1750	3304	396	1750	3353	347	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.28	0.28	0.13	0.42	0.42	0.07	0.19	0.19	0.10	0.18	0.06
Crit Moves:	****				****			****		****		
Green Time:	7.0	45.2	45.2	21.4	59.6	59.6	11.3	26.7	26.7	14.6	30.1	30.1
Volume/Cap:	0.42	0.75	0.75	0.75	0.85	0.85	0.70	0.85	0.85	0.85	0.70	0.26
Delay/Veh:	57.3	34.9	34.9	56.5	30.5	30.5	65.4	53.4	53.4	78.5	45.5	36.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.3	34.9	34.9	56.5	30.5	30.5	65.4	53.4	53.4	78.5	45.5	36.3
LOS by Move:	E+	C-	C-	E+	C	C	E	D-	D-	E-	D	D+
HCM2kAvgQ:	2	18	18	9	25	25	5	14	14	8	11	3

Note: Queue reported is the number of cars per lane.

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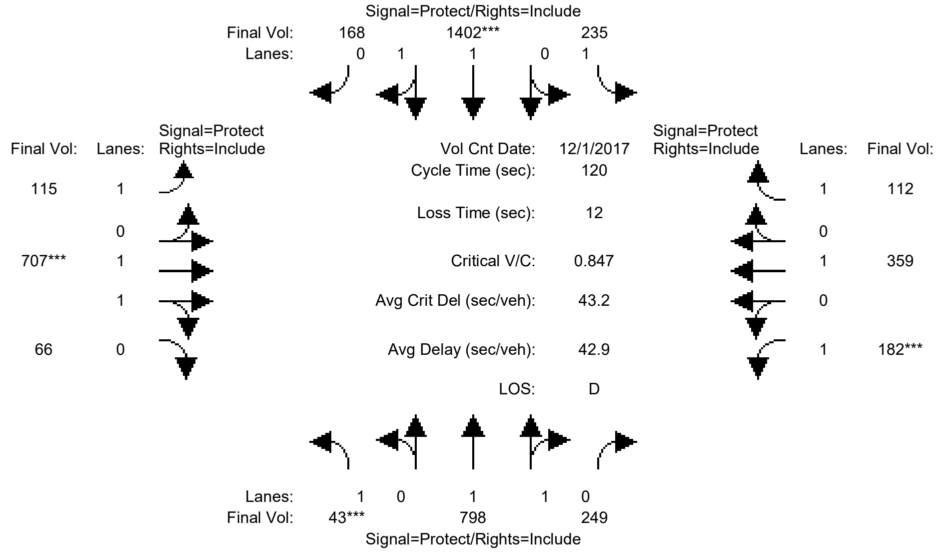
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #67: Fair Oaks Avenue / Old San Francisco Road



Street Name:	Fair Oaks Avenue						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	37	668	237	160	1118	168	115	438	64	146	219	74
Growth 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
Initial Bse:	37	668	237	160	1118	168	115	438	64	146	219	74
Added Vol:	6	130	12	75	284	0	0	269	2	36	140	38
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	43	798	249	235	1402	168	115	707	66	182	359	112
User 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
PHF 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
PHF Volume:	43	798	249	235	1402	168	115	707	66	182	359	112
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	798	249	235	1402	168	115	707	66	182	359	112
PCE 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
MLF 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
FinalVolume:	43	798	249	235	1402	168	115	707	66	182	359	112
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.51	0.49	1.00	1.78	0.22	1.00	1.82	0.18	1.00	1.00	1.00
Final Sat.:	1750	2819	880	1750	3304	396	1750	3384	316	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.28	0.28	0.13	0.42	0.42	0.07	0.21	0.21	0.10	0.19	0.06
Crit Moves:	****				****			****		****		
Green Time:	7.0	44.2	44.2	21.0	58.1	58.1	11.1	28.6	28.6	14.2	31.8	31.8
Volume/Cap:	0.42	0.77	0.77	0.77	0.88	0.88	0.71	0.88	0.88	0.88	0.71	0.24
Delay/Veh:	57.3	36.1	36.1	58.5	32.9	32.9	66.9	53.8	53.8	83.4	44.7	34.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.3	36.1	36.1	58.5	32.9	32.9	66.9	53.8	53.8	83.4	44.7	34.9
LOS by Move:	E+	D+	D+	E+	C-	C-	E	D-	D-	F	D	C-
HCM2kAvgQ:	2	19	19	9	26	26	5	15	15	8	12	3

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Cumulative Plus Project PM

Level Of Service Computation Report
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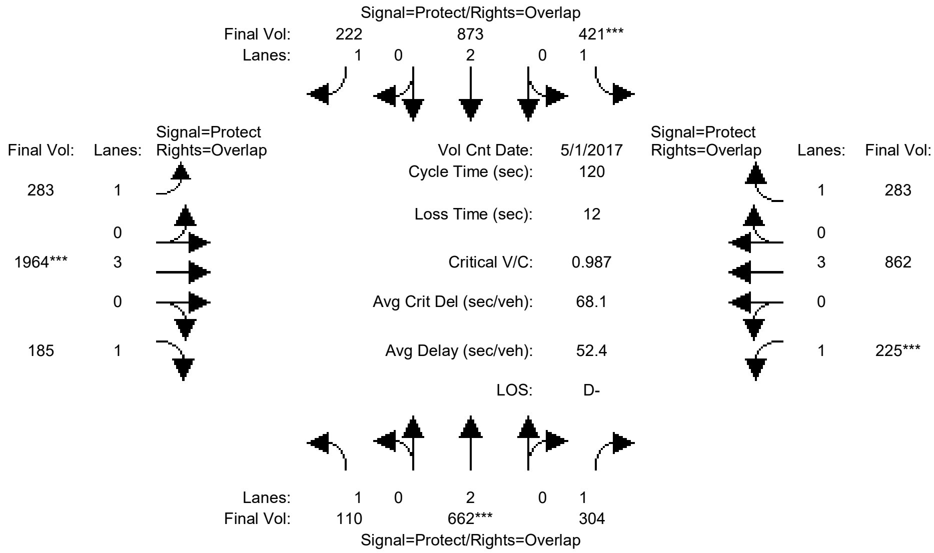
Cumulative PM

Intersection #68: Fair Oaks Avenue / El Camino Real (CMP)



Street Name:	Fair Oaks Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	110	636	304	217	789	189	273	1834	185	225	786	187
Growth 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
Initial Bse:	110	636	304	217	789	189	273	1834	185	225	786	187
Added Vol:	0	26	0	204	84	33	10	130	0	0	76	96
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	110	662	304	421	873	222	283	1964	185	225	862	283
User 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
PHF 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
PHF Volume:	110	662	304	421	873	222	283	1964	185	225	862	283
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	662	304	421	873	222	283	1964	185	225	862	283
PCE 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
MLF 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
FinalVolume:	110	662	304	421	873	222	283	1964	185	225	862	283
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.17	0.17	0.24	0.23	0.13	0.16	0.34	0.11	0.13	0.15	0.16
Crit Moves:		****		****				****		****		
Green Time:	10.8	21.2	36.8	29.3	39.6	69.4	29.7	41.9	52.7	15.6	27.8	57.1
Volume/Cap:	0.70	0.99	0.57	0.99	0.70	0.22	0.65	0.99	0.24	0.99	0.65	0.34
Delay/Veh:	65.7	80.5	36.3	85.1	36.7	12.4	44.0	55.8	21.2	107.7	42.9	19.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	65.7	80.5	36.3	85.1	36.7	12.4	44.0	55.8	21.2	107.7	42.9	19.9
LOS by Move:	E	F	D+	F	D+	B	D	E+	C+	F	D	B-
HCM2kAvgQ:	4	14	10	22	15	4	10	27	4	13	10	7

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #68: Fair Oaks Avenue / El Camino Real (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 222 873 421***
Lanes: 1 0 2 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Overlap			Signal=Protect Rights=Overlap	Lanes:	Final Vol:
			Vol Cnt Date:	5/1/2017			
283	1		Cycle Time (sec):	120		1	283
	0		Loss Time (sec):	12		0	
2146***	3		Critical V/C:	1.022		3	917
	0		Avg Crit Del (sec/veh):	76.2		0	
185	1		Avg Delay (sec/veh):	57.1		1	225***
			LOS:	E+			

Lanes: 1 0 2 0 1
Final Vol: 110 662*** 304
Signal=Protect/Rights=Overlap

Street Name:	Fair Oaks Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	110	636	304	217	789	189	273	1834	185	225	786	187
Growth 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
Initial Bse:	110	636	304	217	789	189	273	1834	185	225	786	187
Added Vol:	0	26	0	204	84	33	10	312	0	0	131	96
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	110	662	304	421	873	222	283	2146	185	225	917	283
User 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
PHF 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
PHF Volume:	110	662	304	421	873	222	283	2146	185	225	917	283
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	662	304	421	873	222	283	2146	185	225	917	283
PCE 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
MLF 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
FinalVolume:	110	662	304	421	873	222	283	2146	185	225	917	283
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	5700	1750	1750	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.17	0.17	0.24	0.23	0.13	0.16	0.38	0.11	0.13	0.16	0.16
Crit Moves:		****		****				****		****		
Green Time:	10.5	20.5	35.5	28.2	38.2	68.0	29.7	44.2	54.7	15.1	29.6	57.8
Volume/Cap:	0.72	1.02	0.59	1.02	0.72	0.22	0.65	1.02	0.23	1.02	0.65	0.34
Delay/Veh:	68.8	90.8	37.7	95.9	38.3	13.0	44.1	63.3	20.0	118.9	41.7	19.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	68.8	90.8	37.7	95.9	38.3	13.0	44.1	63.3	20.0	118.9	41.7	19.5
LOS by Move:	E	F	D+	F	D+	B	D	E	C+	F	D	B-
HCM2kAvgQ:	4	15	10	23	15	4	10	30	4	14	11	7

Note: Queue reported is the number of cars per lane.

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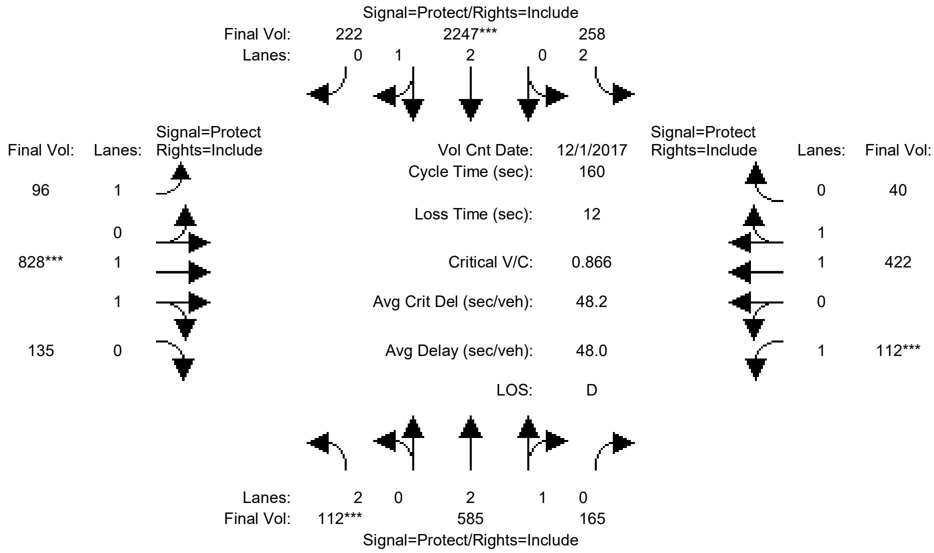
Cumulative PM

Intersection #69: Wolfe Road / Old San Francisco Road



Street Name:	Wolfe Road						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	87	484	162	236	2073	222	96	588	87	99	258	35
Growth 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
Initial Bse:	87	484	162	236	2073	222	96	588	87	99	258	35
Added Vol:	25	101	3	22	174	0	0	240	48	13	164	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	112	585	165	258	2247	222	96	828	135	112	422	40
User 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
PHF 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
PHF Volume:	112	585	165	258	2247	222	96	828	135	112	422	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	112	585	165	258	2247	222	96	828	135	112	422	40
PCE 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
MLF 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
FinalVolume:	112	585	165	258	2247	222	96	828	135	112	422	40
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	2.00	2.32	0.68	2.00	2.72	0.28	1.00	1.71	0.29	1.00	1.82	0.18
Final Sat.:	3150	4366	1232	3150	5096	503	1750	3181	519	1750	3379	320
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.13	0.08	0.44	0.44	0.05	0.26	0.26	0.06	0.12	0.12
Crit Moves:	****				****			****		****		
Green Time:	7.0	54.8	54.8	33.5	81.2	81.2	18.2	48.0	48.0	11.8	41.5	41.5
Volume/Cap:	0.81	0.39	0.39	0.39	0.87	0.87	0.48	0.87	0.87	0.87	0.48	0.48
Delay/Veh:	105.3	40.1	40.1	54.9	37.8	37.8	68.3	60.5	60.5	115.7	50.5	50.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	105.3	40.1	40.1	54.9	37.8	37.8	68.3	60.5	60.5	115.7	50.5	50.5
LOS by Move:	F	D	D	D-	D+	D+	E	E	E	F	D	D
HCM2kAvgQ:	3	9	9	6	36	36	4	22	22	8	10	10

Note: Queue reported is the number of cars per lane.

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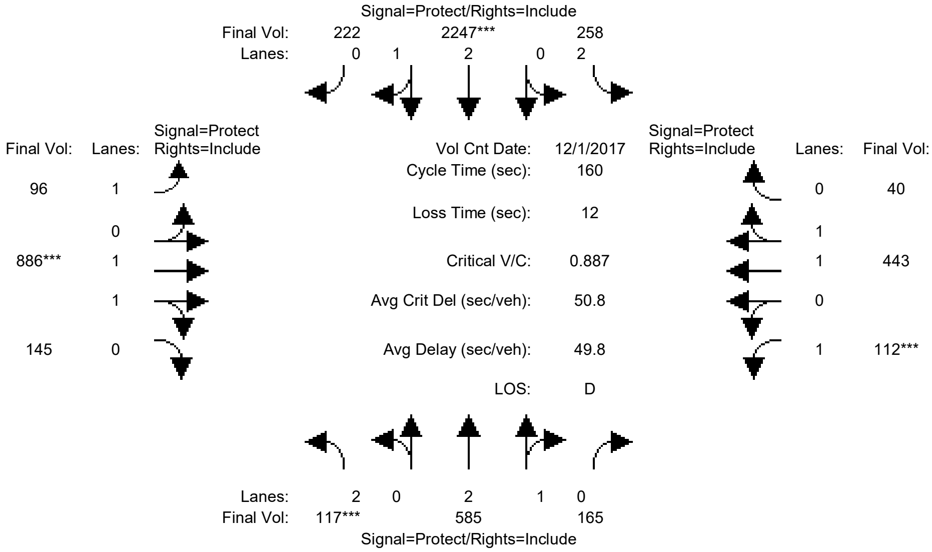
Cumulative PM Plus Project

Intersection #69: Wolfe Road / Old San Francisco Road



Street Name:	Wolfe Road						Old San Francisco Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 Dec 2017 <<												
Base Vol:	87	484	162	236	2073	222	96	588	87	99	258	35
Growth 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
Initial Bse:	87	484	162	236	2073	222	96	588	87	99	258	35
Added Vol:	30	101	3	22	174	0	0	298	58	13	185	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	117	585	165	258	2247	222	96	886	145	112	443	40
User 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
PHF 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
PHF Volume:	117	585	165	258	2247	222	96	886	145	112	443	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	117	585	165	258	2247	222	96	886	145	112	443	40
PCE 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
MLF 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
FinalVolume:	117	585	165	258	2247	222	96	886	145	112	443	40
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95
Lanes:	2.00	2.32	0.68	2.00	2.72	0.28	1.00	1.71	0.29	1.00	1.83	0.17
Final Sat.:	3150	4366	1232	3150	5096	503	1750	3179	520	1750	3393	306
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.13	0.08	0.44	0.44	0.05	0.28	0.28	0.06	0.13	0.13
Crit Moves:	****				****			****		****		
Green Time:	7.0	53.6	53.6	32.8	79.3	79.3	18.2	50.1	50.1	11.5	43.4	43.4
Volume/Cap:	0.85	0.40	0.40	0.40	0.89	0.89	0.48	0.89	0.89	0.89	0.48	0.48
Delay/Veh:	112.3	41.0	41.0	55.5	40.3	40.3	68.3	61.0	61.0	121.7	49.2	49.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	112.3	41.0	41.0	55.5	40.3	40.3	68.3	61.0	61.0	121.7	49.2	49.2
LOS by Move:	F	D	D	E+	D	D	E	E	E	F	D	D
HCM2kAvgQ:	3	9	9	6	37	37	4	24	24	8	10	10

Note: Queue reported is the number of cars per lane.

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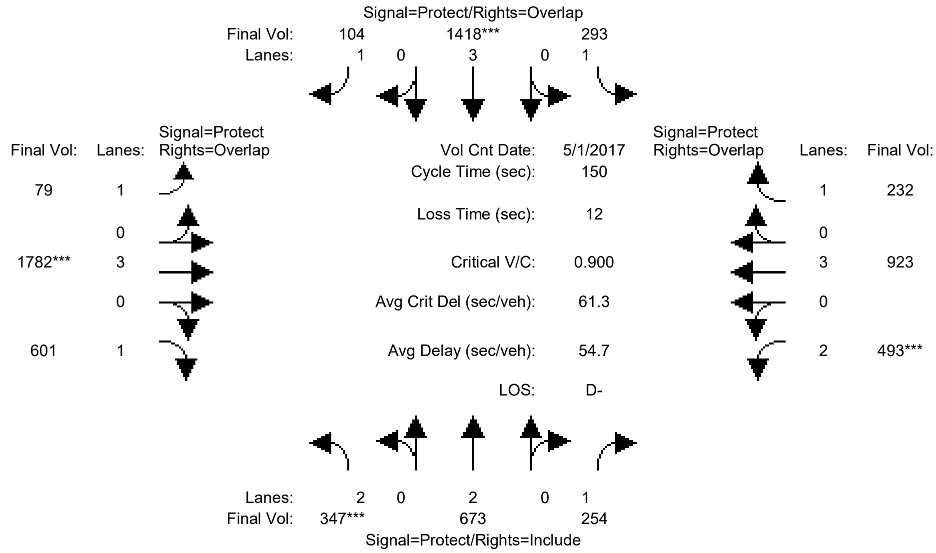
Cumulative PM

Intersection #70: Wolfe Road / El Camino Real (CMP)



Street Name:	Wolfe Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	307	651	253	190	1354	107	65	1542	521	479	774	169
Growth 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
Initial Bse:	307	651	253	190	1354	107	65	1542	521	479	774	169
Added Vol:	40	22	1	103	64	-3	14	240	80	14	149	63
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	347	673	254	293	1418	104	79	1782	601	493	923	232
User 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
PHF 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
PHF Volume:	347	673	254	293	1418	104	79	1782	601	493	923	232
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	347	673	254	293	1418	104	79	1782	601	493	923	232
PCE 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
MLF 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
FinalVolume:	347	673	254	293	1418	104	79	1782	601	493	923	232
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	3800	1750	1750	5700	1750	1750	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.11	0.18	0.15	0.17	0.25	0.06	0.05	0.31	0.34	0.16	0.16	0.13
Crit Moves:	****				****			****		****		
Green Time:	18.4	30.7	30.7	29.1	41.5	58.9	17.5	52.1	70.5	26.1	60.7	89.8
Volume/Cap:	0.90	0.86	0.71	0.86	0.90	0.15	0.39	0.90	0.73	0.90	0.40	0.22
Delay/Veh:	88.2	67.5	61.8	78.5	59.7	29.5	62.5	52.5	35.5	78.5	31.8	14.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	88.2	67.5	61.8	78.5	59.7	29.5	62.5	52.5	35.5	78.5	31.8	14.1
LOS by Move:	F	E	E	E-	E+	C	E	D-	D+	E-	C	B
HCM2kAvgQ:	9	14	11	14	21	3	4	29	24	17	10	5

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
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Intersection #70: Wolfe Road / El Camino Real (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 104 1418*** 293
Lanes: 1 0 3 0 1

Signal=Protect
Rights=Overlap

Final Vol: Lanes:
79 1
0
1921*** 3
0
644 1

Vol Cnt Date: 5/1/2017
Cycle Time (sec): 150
Loss Time (sec): 12
Critical V/C: 0.931
Avg Crit Del (sec/veh): 64.7
Avg Delay (sec/veh): 56.8
LOS: E+

Signal=Protect
Rights=Overlap

Lanes: Final Vol:
1 232
0
3 965
0
2 493***

Lanes: 2 0 2 0 1
Final Vol: 360*** 673 254
Signal=Protect/Rights=Include

Street Name:	Wolfe Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	307	651	253	190	1354	107	65	1542	521	479	774	169
Growth 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
Initial Bse:	307	651	253	190	1354	107	65	1542	521	479	774	169
Added Vol:	53	22	1	103	64	-3	14	379	123	14	191	63
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	360	673	254	293	1418	104	79	1921	644	493	965	232
User 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
PHF 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
PHF Volume:	360	673	254	293	1418	104	79	1921	644	493	965	232
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	360	673	254	293	1418	104	79	1921	644	493	965	232
PCE 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
MLF 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
FinalVolume:	360	673	254	293	1418	104	79	1921	644	493	965	232
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	3800	1750	1750	5700	1750	1750	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.11	0.18	0.15	0.17	0.25	0.06	0.05	0.34	0.37	0.16	0.17	0.13
Crit Moves:	****				****			****		****		
Green Time:	18.4	30.1	30.1	28.4	40.1	57.3	17.2	54.3	72.7	25.2	62.3	90.8
Volume/Cap:	0.93	0.88	0.72	0.88	0.93	0.16	0.39	0.93	0.76	0.93	0.41	0.22
Delay/Veh:	94.1	70.2	63.4	82.4	64.2	30.6	62.9	54.3	35.5	84.9	31.0	13.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	94.1	70.2	63.4	82.4	64.2	30.6	62.9	54.3	35.5	84.9	31.0	13.6
LOS by Move:	F	E	E	F	E	C	E	D-	D+	F	C	B
HCM2kAvgQ:	9	14	11	14	21	3	4	32	27	17	10	5

Note: Queue reported is the number of cars per lane.

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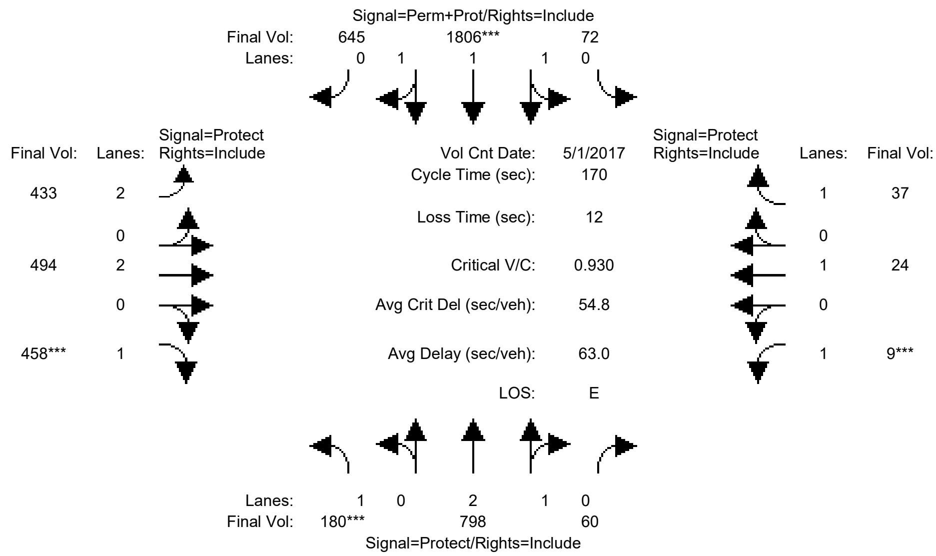
Intersection #71: Wolfe Road / Fremont Avenue



Street Name:	Wolfe Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	175	743	60	72	1677	615	424	472	453	9	24	37
Growth 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
Initial Bse:	175	743	60	72	1677	615	424	472	453	9	24	37
Added Vol:	5	55	0	0	129	30	9	22	5	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	180	798	60	72	1806	645	433	494	458	9	24	37
User 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
PHF 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
PHF Volume:	180	798	60	72	1806	645	433	494	458	9	24	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	798	60	72	1806	645	433	494	458	9	24	37
PCE 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
MLF 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
FinalVolume:	180	798	60	72	1806	645	433	494	458	9	24	37
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.95	0.97	0.95	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.78	0.22	0.09	2.13	0.78	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	5208	392	157	3936	1406	3150	3800	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.15	0.15	0.00	0.46	0.46	0.14	0.13	0.26	0.01	0.01	0.02
Crit Moves:	****				****				****	****		
Green Time:	19.4	26.5	26.5	82.3	86.4	86.4	36.6	45.2	45.2	7.0	15.7	15.7
Volume/Cap:	0.90	0.98	0.98	0.95	0.90	0.90	0.64	0.49	0.98	0.12	0.14	0.23
Delay/Veh:	112.3	97.9	97.9	50.1	42.5	42.5	62.8	53.0	99.3	79.3	71.3	72.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	112.3	97.9	97.9	50.1	42.5	42.5	62.8	53.0	99.3	79.3	71.3	72.3
LOS by Move:	F	F	F	D	D	D	E	D-	F	E-	E	E
HCM2kAvgQ:	11	18	18	43	40	40	11	10	25	1	1	2

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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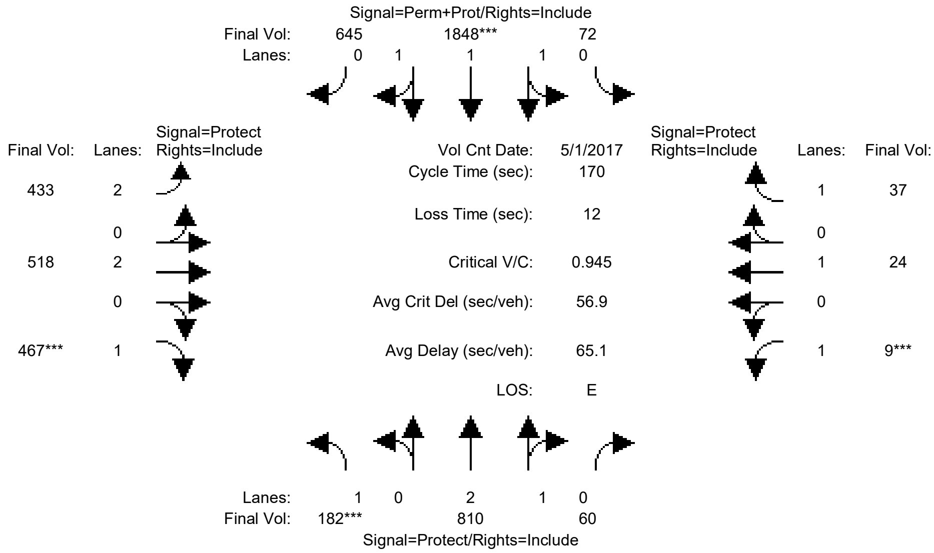
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #71: Wolfe Road / Fremont Avenue



Street Name:	Wolfe Road						Fremont Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2017 <<												
Base Vol:	175	743	60	72	1677	615	424	472	453	9	24	37
Growth 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
Initial Bse:	175	743	60	72	1677	615	424	472	453	9	24	37
Added Vol:	7	67	0	0	171	30	9	46	14	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	182	810	60	72	1848	645	433	518	467	9	24	37
User 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
PHF 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
PHF Volume:	182	810	60	72	1848	645	433	518	467	9	24	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	182	810	60	72	1848	645	433	518	467	9	24	37
PCE 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
MLF 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
FinalVolume:	182	810	60	72	1848	645	433	518	467	9	24	37
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.95	0.97	0.95	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.79	0.21	0.08	2.15	0.77	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	5213	386	154	3962	1383	3150	3800	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.16	0.16	0.00	0.47	0.47	0.14	0.14	0.27	0.01	0.01	0.02
Crit Moves:	****				****				****	****		
Green Time:	19.3	26.4	26.4	82.3	86.4	86.4	36.7	45.3	45.3	7.0	15.7	15.7
Volume/Cap:	0.92	1.00	1.00	0.96	0.92	0.92	0.64	0.51	1.00	0.12	0.14	0.23
Delay/Veh:	116.1	102	102.4	52.8	44.0	44.0	62.7	53.4	104.1	79.3	71.3	72.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	116.1	102	102.4	52.8	44.0	44.0	62.7	53.4	104.1	79.3	71.3	72.3
LOS by Move:	F	F	F	D-	D	D	E	D-	F	E-	E	E
HCM2kAvgQ:	11	18	18	44	41	41	11	10	26	1	1	2

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #72: Lawrence Expressway / Monroe Street (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 491 3310*** 264
Lanes: 1 0 3 0 2

Final Vol:	Lanes:	Signal=Protect Rights=Overlap			Signal=Protect Rights=Overlap	Lanes:	Final Vol:
281	2		Vol Cnt Date:	10/5/2016		1	169
			Cycle Time (sec):	190			
	0		Loss Time (sec):	12		0	
567	2		Critical V/C:	1.127		2	246
	0		Avg Crit Del (sec/veh):	162.3		0	
734***	1		Avg Delay (sec/veh):	111.5		2	188***
			LOS:	F			

Lanes: 1 0 3 0 1
Final Vol: 220*** 1440 154
Signal=Protect/Rights=Overlap

Street Name:	Lawrence Expressway						Monroe Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	27	97	97	25	96	96	23	44	44	23	44	44
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 5 Oct 2016 <<												
Base Vol:	178	1591	154	246	3759	387	241	512	616	188	210	164
Growth 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
Initial Bse:	178	1591	154	246	3759	387	241	512	616	188	210	164
Added Vol:	42	209	0	18	431	104	40	55	118	0	36	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	220	1800	154	264	4190	491	281	567	734	188	246	169
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	220	1440	154	264	3310	491	281	567	734	188	246	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	220	1440	154	264	3310	491	281	567	734	188	246	169
PCE 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
MLF 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
FinalVolume:	220	1440	154	264	3310	491	281	567	734	188	246	169
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1750	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.13	0.25	0.09	0.08	0.58	0.28	0.09	0.15	0.42	0.06	0.06	0.10
Crit Moves:	****				****				****	****		
Green Time:	25.4	92.0	113.6	23.7	90.3	111.9	21.6	41.4	66.8	21.6	41.4	65.1
Volume/Cap:	0.94	0.52	0.15	0.67	1.22	0.48	0.78	0.69	1.19	0.52	0.30	0.28
Delay/Veh:	129.2	28.6	10.4	88.9	168	32.9	97.8	75.0	167.8	85.8	66.3	48.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	129.2	28.6	10.4	88.9	168	32.9	97.8	75.0	167.8	85.8	66.3	48.6
LOS by Move:	F	C	B+	F	F	C-	F	E-	F	F	E	D
HCM2kAvgQ:	15	15	2	10	92	23	12	17	66	7	6	8

Note: Queue reported is the number of cars per lane.

Cityline TIA
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Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #72: Lawrence Expressway / Monroe Street (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 496 3310*** 264
Lanes: 1 0 3 0 2

Signal=Protect
Rights=Overlap

Final Vol:	Lanes:
296	2
	0
584	2
	0
751***	1

Vol Cnt Date:	10/5/2016
Cycle Time (sec):	190
Loss Time (sec):	12
Critical V/C:	1.137
Avg Crit Del (sec/veh):	164.5
Avg Delay (sec/veh):	112.9
LOS:	F

Signal=Protect
Rights=Overlap

Lanes:	Final Vol:
1	169
0	
2	254
0	
2	188***

Lanes: 1 0 3 0 1
Final Vol: 226*** 1440 154
Signal=Protect/Rights=Overlap

Street Name:	Lawrence Expressway						Monroe Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	27	97	97	25	96	96	23	44	44	23	44	44
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 5 Oct 2016 <<												
Base Vol:	178	1591	154	246	3759	387	241	512	616	188	210	164
Growth 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
Initial Bse:	178	1591	154	246	3759	387	241	512	616	188	210	164
Added Vol:	48	209	0	18	431	109	55	72	135	0	44	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	226	1800	154	264	4190	496	296	584	751	188	254	169
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	226	1440	154	264	3310	496	296	584	751	188	254	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	226	1440	154	264	3310	496	296	584	751	188	254	169
PCE 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
MLF 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
FinalVolume:	226	1440	154	264	3310	496	296	584	751	188	254	169
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1750	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.13	0.25	0.09	0.08	0.58	0.28	0.09	0.15	0.43	0.06	0.07	0.10
Crit Moves:	****				****				****	****		
Green Time:	25.4	92.0	113.6	23.7	90.3	111.9	21.6	41.4	66.8	21.6	41.4	65.1
Volume/Cap:	0.97	0.52	0.15	0.67	1.22	0.48	0.83	0.71	1.22	0.52	0.31	0.28
Delay/Veh:	136.2	28.6	10.4	88.9	168	33.1	102.0	75.8	179.1	85.8	66.4	48.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	136.2	28.6	10.4	88.9	168	33.1	102.0	75.8	179.1	85.8	66.4	48.6
LOS by Move:	F	C	B+	F	F	C-	F	E-	F	F	E	D
HCM2kAvgQ:	15	15	2	10	92	24	13	17	69	7	6	8

Note: Queue reported is the number of cars per lane.

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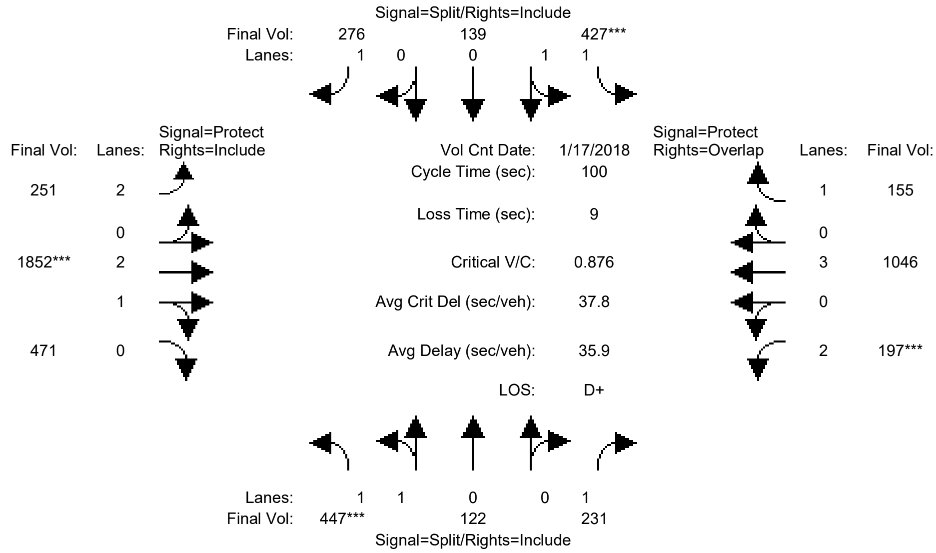
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #73: Lawrence Expressway / El Camino Real (CMP)



Street Name:	Lawrence Expressway						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 17 Jan 2018 <<												
Base Vol:	395	120	231	374	130	274	244	1615	347	197	869	141
Growth 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
Initial Bse:	395	120	231	374	130	274	244	1615	347	197	869	141
Added Vol:	52	2	0	53	9	2	7	237	124	0	177	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	447	122	231	427	139	276	251	1852	471	197	1046	155
User 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
PHF 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
PHF Volume:	447	122	231	427	139	276	251	1852	471	197	1046	155
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	447	122	231	427	139	276	251	1852	471	197	1046	155
PCE 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
MLF 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
FinalVolume:	447	122	231	427	139	276	251	1852	471	197	1046	155
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.95	0.92	0.93	0.95	0.92	0.83	0.99	0.95	0.83	1.00	0.92
Lanes:	1.58	0.42	1.00	1.52	0.48	1.00	2.00	2.37	0.63	2.00	3.00	1.00
Final Sat.:	2789	761	1750	2678	872	1750	3150	4463	1135	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.16	0.16	0.13	0.16	0.16	0.16	0.08	0.41	0.41	0.06	0.18	0.09
Crit Moves:	****			****				****		****		
Green Time:	18.3	18.3	18.3	18.2	18.2	18.2	16.5	47.4	47.4	7.1	38.0	56.2
Volume/Cap:	0.88	0.88	0.72	0.88	0.88	0.87	0.48	0.88	0.88	0.88	0.48	0.16
Delay/Veh:	52.5	52.5	46.3	52.6	52.6	61.0	38.6	27.3	27.3	75.6	23.7	10.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.5	52.5	46.3	52.6	52.6	61.0	38.6	27.3	27.3	75.6	23.7	10.6
LOS by Move:	D-	D-	D	D-	D-	E	D+	C	C	E-	C	B+
HCM2kAvgQ:	10	10	7	8	8	8	5	25	25	4	8	2

Note: Queue reported is the number of cars per lane.

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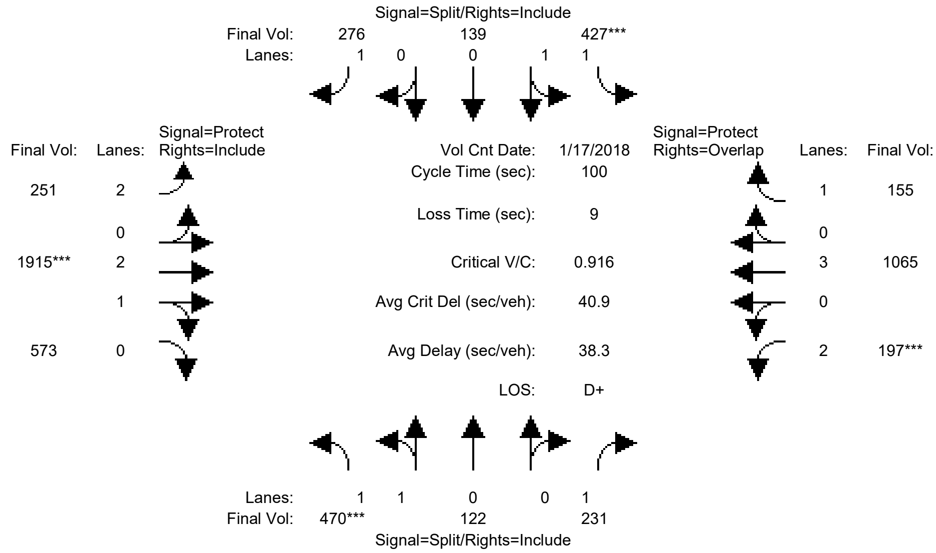
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #73: Lawrence Expressway / El Camino Real (CMP)



Street Name:	Lawrence Expressway						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 17 Jan 2018 <<												
Base Vol:	395	120	231	374	130	274	244	1615	347	197	869	141
Growth 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
Initial Bse:	395	120	231	374	130	274	244	1615	347	197	869	141
Added Vol:	75	2	0	53	9	2	7	300	226	0	196	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	470	122	231	427	139	276	251	1915	573	197	1065	155
User 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
PHF 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
PHF Volume:	470	122	231	427	139	276	251	1915	573	197	1065	155
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	470	122	231	427	139	276	251	1915	573	197	1065	155
PCE 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
MLF 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
FinalVolume:	470	122	231	427	139	276	251	1915	573	197	1065	155
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.95	0.92	0.93	0.95	0.92	0.83	0.99	0.95	0.83	1.00	0.92
Lanes:	1.59	0.41	1.00	1.52	0.48	1.00	2.00	2.28	0.72	2.00	3.00	1.00
Final Sat.:	2818	732	1750	2678	872	1750	3150	4309	1289	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.13	0.16	0.16	0.16	0.08	0.44	0.44	0.06	0.19	0.09
Crit Moves:	****			****				****		****		
Green Time:	18.2	18.2	18.2	17.4	17.4	17.4	16.6	48.4	48.4	7.0	38.9	56.2
Volume/Cap:	0.92	0.92	0.73	0.92	0.92	0.91	0.48	0.92	0.92	0.89	0.48	0.16
Delay/Veh:	58.3	58.3	46.7	59.3	59.3	69.6	38.5	29.5	29.5	79.6	23.1	10.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.3	58.3	46.7	59.3	59.3	69.6	38.5	29.5	29.5	79.6	23.1	10.6
LOS by Move:	E+	E+	D	E+	E+	E	D+	C	C	E-	C	B+
HCM2kAvgQ:	10	10	7	9	9	8	5	28	28	4	8	2

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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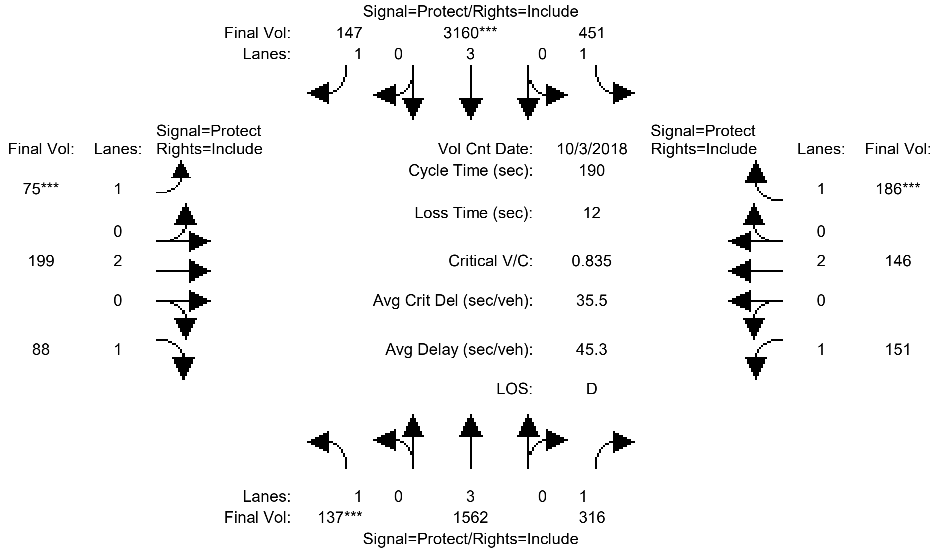
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #74: Lawrence Expressway / Benton Street



Street Name:	Lawrence Expressway						Benton Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	137	1698	316	437	3443	138	72	199	88	151	146	182
Growth 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
Initial Bse:	137	1698	316	437	3443	138	72	199	88	151	146	182
Added Vol:	0	254	0	14	557	9	3	0	0	0	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	137	1952	316	451	4000	147	75	199	88	151	146	186
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	137	1562	316	451	3160	147	75	199	88	151	146	186
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	137	1562	316	451	3160	147	75	199	88	151	146	186
PCE 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
MLF 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
FinalVolume:	137	1562	316	451	3160	147	75	199	88	151	146	186
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.27	0.18	0.26	0.55	0.08	0.04	0.05	0.05	0.09	0.04	0.11
Crit Moves:	****				****		****					****
Green Time:	17.8	74.2	74.2	69.8	126	126.2	9.8	12.9	12.9	21.1	24.2	24.2
Volume/Cap:	0.83	0.70	0.46	0.70	0.83	0.13	0.83	0.77	0.74	0.78	0.30	0.83
Delay/Veh:	113.8	49.6	43.5	54.7	25.7	11.7	135.3	101	109.0	100.0	75.6	103.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	113.8	49.6	43.5	54.7	25.7	11.7	135.3	101	109.0	100.0	75.6	103.8
LOS by Move:	F	D	D	D-	C	B+	F	F	F	F	E-	F
HCM2kAvgQ:	9	25	14	23	44	3	7	7	7	11	4	14

Note: Queue reported is the number of cars per lane.

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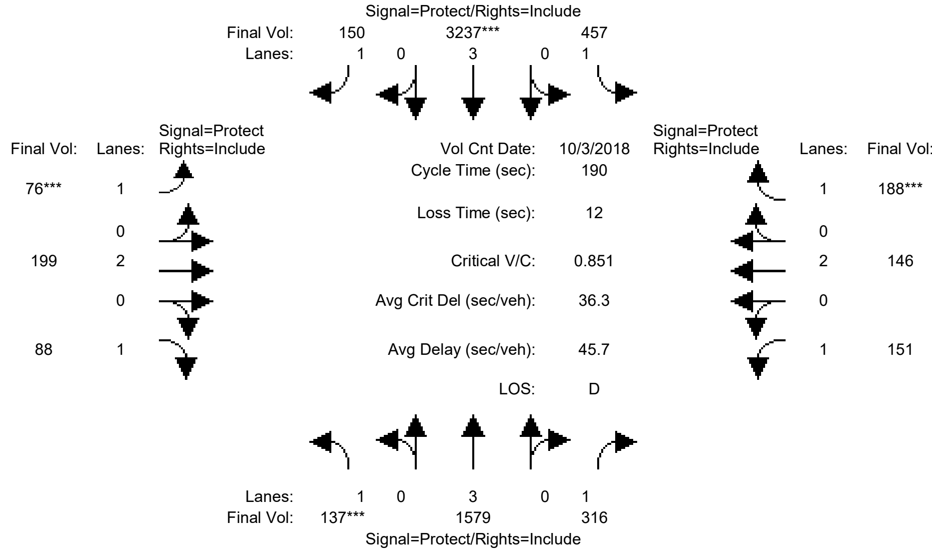
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #74: Lawrence Expressway / Benton Street



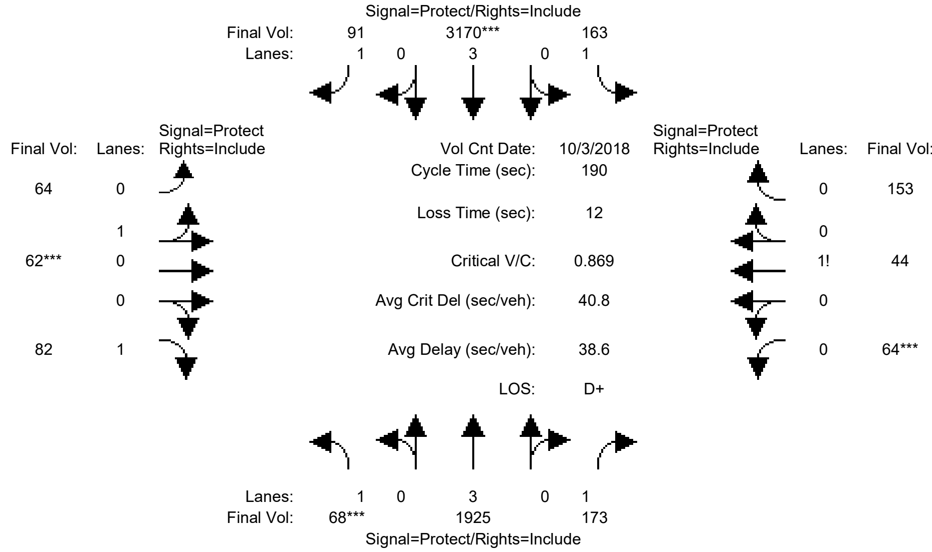
Street Name:	Lawrence Expressway						Benton Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	137	1698	316	437	3443	138	72	199	88	151	146	182
Growth 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
Initial Bse:	137	1698	316	437	3443	138	72	199	88	151	146	182
Added Vol:	0	276	0	20	654	12	4	0	0	0	0	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	137	1974	316	457	4097	150	76	199	88	151	146	188
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	137	1579	316	457	3237	150	76	199	88	151	146	188
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	137	1579	316	457	3237	150	76	199	88	151	146	188
PCE 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
MLF 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
FinalVolume:	137	1579	316	457	3237	150	76	199	88	151	146	188
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1750	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.28	0.18	0.26	0.57	0.09	0.04	0.05	0.05	0.09	0.04	0.11
Crit Moves:	****				****		****					****
Green Time:	17.5	74.3	74.3	70.0	127	126.8	9.7	12.8	12.8	20.9	24.0	24.0
Volume/Cap:	0.85	0.71	0.46	0.71	0.85	0.13	0.85	0.78	0.75	0.78	0.30	0.85
Delay/Veh:	117.6	49.8	43.5	54.9	26.3	11.5	139.5	101	110.1	100.9	75.8	106.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	117.6	49.8	43.5	54.9	26.3	11.5	139.5	101	110.1	100.9	75.8	106.8
LOS by Move:	F	D	D	D-	C	B+	F	F	F	F	E-	F
HCM2kAvgQ:	9	25	14	23	46	3	7	7	7	11	4	14

Note: Queue reported is the number of cars per lane.

Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #75: Lawrence Expressway / Lochinvar Avenue



Street Name:	Lawrence Expressway						Lochinvar Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	68	2159	173	149	3479	82	61	62	82	64	44	149
Growth 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
Initial Bse:	68	2159	173	149	3479	82	61	62	82	64	44	149
Added Vol:	0	247	0	14	534	9	3	0	0	0	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	68	2406	173	163	4013	91	64	62	82	64	44	153
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	68	1925	173	163	3170	91	64	62	82	64	44	153
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	68	1925	173	163	3170	91	64	62	82	64	44	153
PCE 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
MLF 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
FinalVolume:	68	1925	173	163	3170	91	64	62	82	64	44	153
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.51	0.49	1.00	0.24	0.17	0.59
Final Sat.:	1750	5700	1750	1750	5700	1750	914	886	1750	429	295	1026
Capacity Analysis Module:												
Vol/Sat:	0.04	0.34	0.10	0.09	0.56	0.05	0.07	0.07	0.05	0.15	0.15	0.15
Crit Moves:	****				****			****		****		
Green Time:	8.5	102	102.0	28.1	122	121.6	15.3	15.3	15.3	32.6	32.6	32.6
Volume/Cap:	0.87	0.63	0.18	0.63	0.87	0.08	0.87	0.87	0.58	0.87	0.87	0.87
Delay/Veh:	150.1	31.2	22.7	80.9	30.2	13.0	125.5	126	90.3	99.3	99.3	99.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	150.1	31.2	22.7	80.9	30.2	13.0	125.5	126	90.3	99.3	99.3	99.3
LOS by Move:	F	C	C+	F	C	B	F	F	F	F	F	F
HCM2kAvgQ:	5	25	5	9	48	2	10	10	6	18	18	18

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #75: Lawrence Expressway / Lochinvar Avenue

Signal=Protect/Rights=Include
Final Vol: 94 3239*** 169
Lanes: 1 0 3 0 1

Final Vol:	Lanes:	Signal=Protect Rights=Include			Signal=Protect Rights=Include	Lanes:	Final Vol:
			Vol Cnt Date:	10/3/2018			
			Cycle Time (sec):	190			
65	0					0	155
			Loss Time (sec):	12			
	1					0	
62***	0		Critical V/C:	0.884		1!	44
	0		Avg Crit Del (sec/veh):	41.7		0	
82	1		Avg Delay (sec/veh):	39.2		0	64***
			LOS:	D			

Lanes: 1 0 3 0 1
Final Vol: 68*** 1941 173
Signal=Protect/Rights=Include

Street Name:	Lawrence Expressway						Lochinvar Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	68	2159	173	149	3479	82	61	62	82	64	44	149
Growth 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
Initial Bse:	68	2159	173	149	3479	82	61	62	82	64	44	149
Added Vol:	0	267	0	20	621	12	4	0	0	0	0	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	68	2426	173	169	4100	94	65	62	82	64	44	155
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	68	1941	173	169	3239	94	65	62	82	64	44	155
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	68	1941	173	169	3239	94	65	62	82	64	44	155
PCE 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
MLF 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
FinalVolume:	68	1941	173	169	3239	94	65	62	82	64	44	155
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.51	0.49	1.00	0.24	0.17	0.59
Final Sat.:	1750	5700	1750	1750	5700	1750	921	879	1750	426	293	1031
Capacity Analysis Module:												
Vol/Sat:	0.04	0.34	0.10	0.10	0.57	0.05	0.07	0.07	0.05	0.15	0.15	0.15
Crit Moves:	****				****			****		****		
Green Time:	8.4	102	101.7	28.8	122	122.2	15.2	15.2	15.2	32.3	32.3	32.3
Volume/Cap:	0.88	0.64	0.18	0.64	0.88	0.08	0.88	0.88	0.59	0.88	0.88	0.88
Delay/Veh:	155.1	31.6	22.9	80.7	30.9	12.8	129.2	129	90.7	102.3	102	102.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	155.1	31.6	22.9	80.7	30.9	12.8	129.2	129	90.7	102.3	102	102.3
LOS by Move:	F	C	C+	F	C	B	F	F	F	F	F	F
HCM2kAvgQ:	5	25	5	9	50	2	10	10	6	19	19	19

Note: Queue reported is the number of cars per lane.

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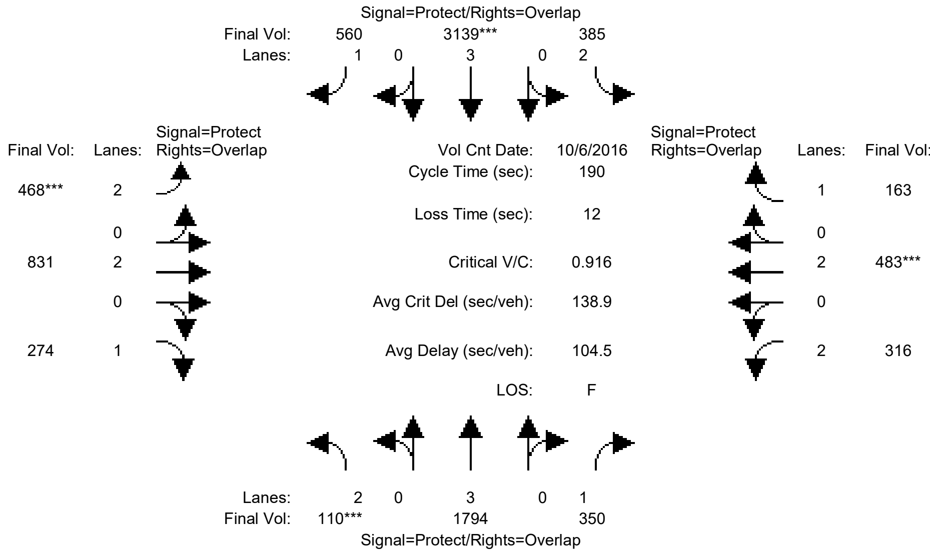
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #76: Lawrence Expressway / Homestead Road (CMP)



Street Name:	Lawrence Expressway						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	18	86	86	30	97	97	27	46	46	27	46	46
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 6 Oct 2016 <<												
Base Vol:	110	2031	350	358	3539	487	442	757	274	316	455	153
Growth 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
Initial Bse:	110	2031	350	358	3539	487	442	757	274	316	455	153
Added Vol:	0	211	0	27	435	73	26	74	0	0	28	10
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	110	2242	350	385	3974	560	468	831	274	316	483	163
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	110	1794	350	385	3139	560	468	831	274	316	483	163
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1794	350	385	3139	560	468	831	274	316	483	163
PCE 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
MLF 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
FinalVolume:	110	1794	350	385	3139	560	468	831	274	316	483	163
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.31	0.20	0.12	0.55	0.32	0.15	0.22	0.16	0.10	0.13	0.09
Crit Moves:	****				****		****				****	
Green Time:	17.0	81.3	106.8	28.4	92.6	118.2	25.5	43.5	60.5	25.5	43.5	71.8
Volume/Cap:	0.39	0.74	0.36	0.82	1.13	0.51	1.11	0.96	0.49	0.75	0.56	0.25
Delay/Veh:	92.9	73.1	44.9	103.4	148	44.7	162.7	96.9	56.0	90.9	69.3	43.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	92.9	73.1	44.9	103.4	148	44.7	162.7	96.9	56.0	90.9	69.3	43.1
LOS by Move:	F	E	D	F	F	D	F	F	E+	F	E	D
HCM2kAvgQ:	4	34	19	14	76	31	22	28	14	13	13	7

Note: Queue reported is the number of cars per lane.

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Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #76: Lawrence Expressway / Homestead Road (CMP)

Signal=Protect/Rights=Overlap
Final Vol: 560 3204*** 390
Lanes: 1 0 3 0 2

Final Vol:	Lanes:	Signal=Protect Rights=Overlap			Signal=Protect Rights=Overlap	Lanes:	Final Vol:
			Vol Cnt Date:	10/6/2016			
468***	2		Cycle Time (sec):	190		1	165
			Loss Time (sec):	12			
	0					0	
848	2		Critical V/C:	0.930		2	488***
	0		Avg Crit Del (sec/veh):	146.4		0	
274	1		Avg Delay (sec/veh):	108.7		2	316
			LOS:	F			

Lanes: 2 0 3 0 1
Final Vol: 110*** 1808 350
Signal=Protect/Rights=Overlap

Street Name:	Lawrence Expressway						Homestead Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	18	86	86	30	97	97	27	46	46	27	46	46
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 6 Oct 2016 <<												
Base Vol:	110	2031	350	358	3539	487	442	757	274	316	455	153
Growth 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
Initial Bse:	110	2031	350	358	3539	487	442	757	274	316	455	153
Added Vol:	0	229	0	32	517	73	26	91	0	0	33	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	110	2260	350	390	4056	560	468	848	274	316	488	165
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	110	1808	350	390	3204	560	468	848	274	316	488	165
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	1808	350	390	3204	560	468	848	274	316	488	165
PCE 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
MLF 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
FinalVolume:	110	1808	350	390	3204	560	468	848	274	316	488	165
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.32	0.20	0.12	0.56	0.32	0.15	0.22	0.16	0.10	0.13	0.09
Crit Moves:	****				****		****				****	
Green Time:	17.0	81.3	106.8	28.4	92.6	118.2	25.5	43.5	60.5	25.5	43.5	71.8
Volume/Cap:	0.39	0.74	0.36	0.83	1.15	0.51	1.11	0.98	0.49	0.75	0.56	0.25
Delay/Veh:	92.9	73.5	44.9	104.5	158	44.7	162.7	101	56.0	90.9	69.4	43.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	92.9	73.5	44.9	104.5	158	44.7	162.7	101	56.0	90.9	69.4	43.1
LOS by Move:	F	E	D	F	F	D	F	F	E+	F	E	D
HCM2kAvgQ:	4	35	19	14	80	31	22	29	14	13	13	7

Note: Queue reported is the number of cars per lane.

Cityline TIA
SJ17-1787
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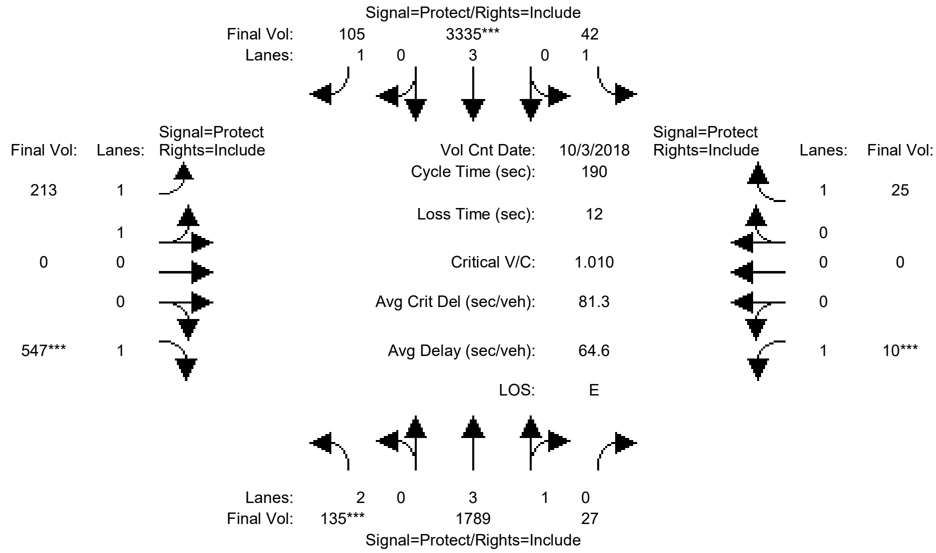
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #77: Lawrence Expressway / Lehigh Drive



Street Name:	Lawrence Expressway						Lehigh Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	135	2032	27	28	3809	96	210	0	547	10	0	21
Growth 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
Initial Bse:	135	2032	27	28	3809	96	210	0	547	10	0	21
Added Vol:	0	204	0	14	413	9	3	0	0	0	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	135	2236	27	42	4222	105	213	0	547	10	0	25
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	135	1789	27	42	3335	105	213	0	547	10	0	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	135	1789	27	42	3335	105	213	0	547	10	0	25
PCE 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
MLF 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
FinalVolume:	135	1789	27	42	3335	105	213	0	547	10	0	25
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.92	1.00	0.92	0.93	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	3.94	0.06	1.00	3.00	1.00	2.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	3150	7388	112	1750	5700	1750	3550	0	1750	1750	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.24	0.24	0.02	0.59	0.06	0.06	0.00	0.31	0.01	0.00	0.01
Crit Moves:	****				****				****	****		
Green Time:	7.8	99.1	99.1	15.1	106	106.4	34.0	0.0	56.8	7.0	0.0	7.0
Volume/Cap:	1.05	0.46	0.46	0.30	1.05	0.11	0.34	0.00	1.05	0.16	0.00	0.39
Delay/Veh:	182.8	28.8	28.8	83.7	71.1	19.6	68.4	0.0	118.2	89.8	0.0	93.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	182.8	28.8	28.8	83.7	71.1	19.6	68.4	0.0	118.2	89.8	0.0	93.2
LOS by Move:	F	C	C	F	E	B-	E	A	F	F	A	F
HCM2kAvgQ:	6	16	16	2	66	3	6	0	42	1	0	2

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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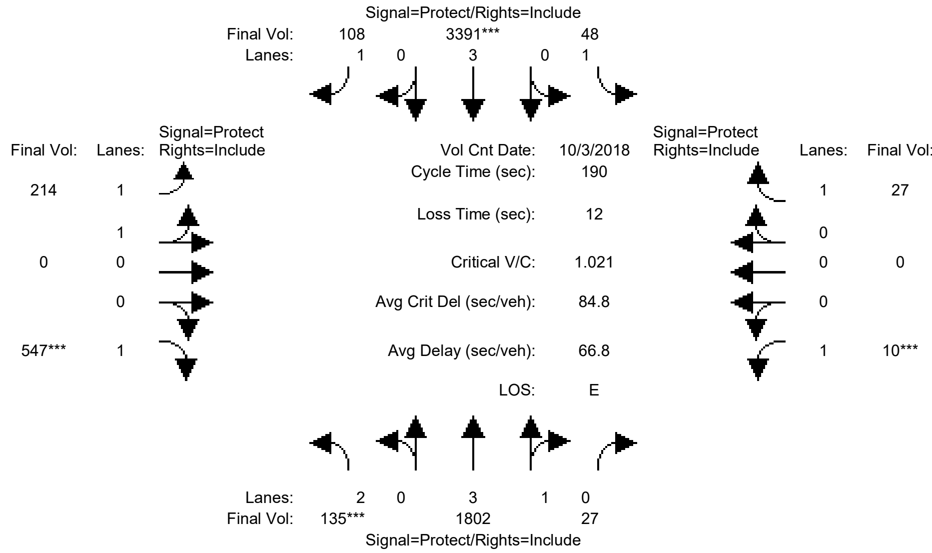
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #77: Lawrence Expressway / Lehigh Drive



Street Name:	Lawrence Expressway						Lehigh Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Oct 2018 <<												
Base Vol:	135	2032	27	28	3809	96	210	0	547	10	0	21
Growth 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
Initial Bse:	135	2032	27	28	3809	96	210	0	547	10	0	21
Added Vol:	0	220	0	20	484	12	4	0	0	0	0	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	135	2252	27	48	4293	108	214	0	547	10	0	27
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	135	1802	27	48	3391	108	214	0	547	10	0	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	135	1802	27	48	3391	108	214	0	547	10	0	27
PCE 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
MLF 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
FinalVolume:	135	1802	27	48	3391	108	214	0	547	10	0	27
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.92	1.00	0.92	0.93	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	3.94	0.06	1.00	3.00	1.00	2.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	3150	7389	111	1750	5700	1750	3550	0	1750	1750	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.24	0.24	0.03	0.59	0.06	0.06	0.00	0.31	0.01	0.00	0.02
Crit Moves:	****				****				****	****		
Green Time:	7.7	99.7	99.7	15.1	107	107.1	33.8	0.0	56.2	7.0	0.0	7.0
Volume/Cap:	1.06	0.46	0.46	0.35	1.06	0.11	0.34	0.00	1.06	0.16	0.00	0.42
Delay/Veh:	186.5	28.5	28.5	84.3	74.7	19.3	68.7	0.0	122.0	89.8	0.0	93.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	186.5	28.5	28.5	84.3	74.7	19.3	68.7	0.0	122.0	89.8	0.0	93.9
LOS by Move:	F	C	C	F	E	B-	E	A	F	F	A	F
HCM2kAvgQ:	6	16	16	3	69	3	6	0	42	1	0	2

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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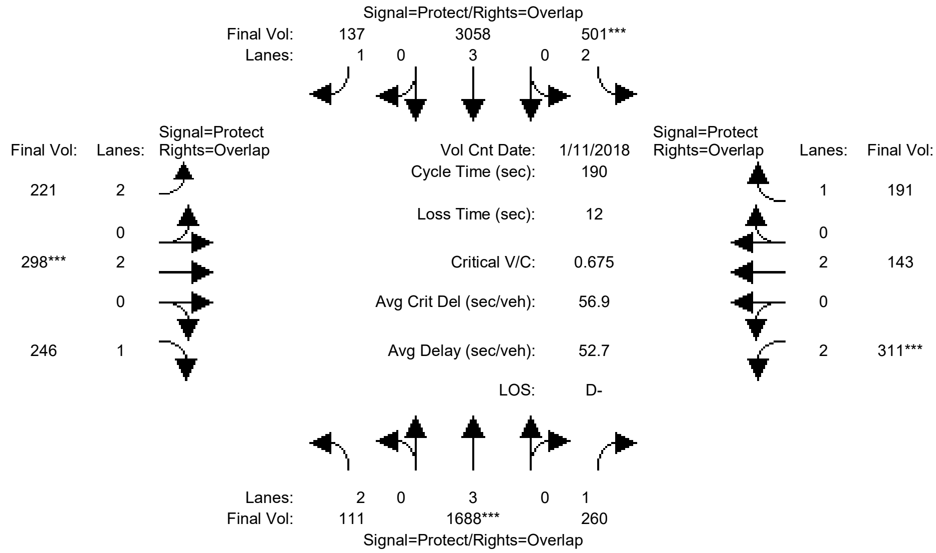
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #78: Lawrence Expressway / Pruneridge Avenue



Street Name:	Lawrence Expressway						Pruneridge Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	18	84	84	40	106	106	16	29	29	21	34	34
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 11 Jan 2018 <<												
Base Vol:	111	1913	260	487	3480	128	218	298	246	311	143	187
Growth 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
Initial Bse:	111	1913	260	487	3480	128	218	298	246	311	143	187
Added Vol:	0	197	0	14	391	9	3	0	0	0	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	111	2110	260	501	3871	137	221	298	246	311	143	191
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	111	1688	260	501	3058	137	221	298	246	311	143	191
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	1688	260	501	3058	137	221	298	246	311	143	191
PCE 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
MLF 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
FinalVolume:	111	1688	260	501	3058	137	221	298	246	311	143	191
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.15	0.16	0.54	0.08	0.07	0.08	0.14	0.10	0.04	0.11
Crit Moves:		****		****				****		****		
Green Time:	18.0	84.0	108.9	40.1	106	123.3	17.2	29.0	47.0	24.9	36.6	76.8
Volume/Cap:	0.37	0.67	0.26	0.75	0.96	0.12	0.77	0.51	0.57	0.75	0.20	0.27
Delay/Veh:	81.5	42.7	20.5	75.2	48.7	12.7	96.7	74.8	64.4	87.3	64.4	38.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	81.5	42.7	20.5	75.2	48.7	12.7	96.7	74.8	64.4	87.3	64.4	38.1
LOS by Move:	F	D	C+	E-	D	B	F	E	E	F	E	D+
HCM2kAvgQ:	4	25	8	15	53	3	9	8	14	12	3	8

Note: Queue reported is the number of cars per lane.

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Cityline TIA
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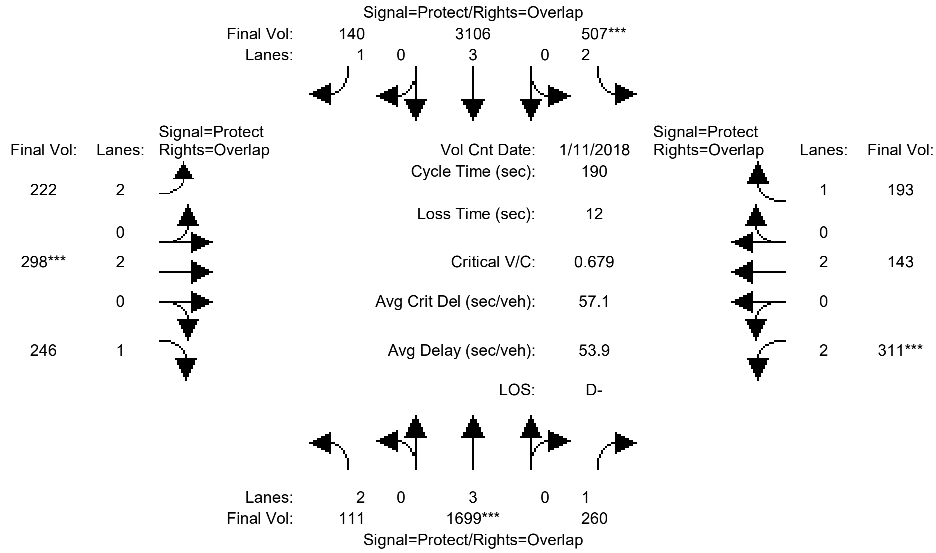
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #78: Lawrence Expressway / Pruneridge Avenue



Street Name:	Lawrence Expressway						Pruneridge Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	18	84	84	40	106	106	16	29	29	21	34	34
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 11 Jan 2018 <<												
Base Vol:	111	1913	260	487	3480	128	218	298	246	311	143	187
Growth 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
Initial Bse:	111	1913	260	487	3480	128	218	298	246	311	143	187
Added Vol:	0	211	0	20	452	12	4	0	0	0	0	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	111	2124	260	507	3932	140	222	298	246	311	143	193
User Adj:	1.00	0.80	1.00	1.00	0.79	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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
PHF Volume:	111	1699	260	507	3106	140	222	298	246	311	143	193
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	1699	260	507	3106	140	222	298	246	311	143	193
PCE 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
MLF 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
FinalVolume:	111	1699	260	507	3106	140	222	298	246	311	143	193
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	3800	1750	3150	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.15	0.16	0.54	0.08	0.07	0.08	0.14	0.10	0.04	0.11
Crit Moves:		****		****				****		****		
Green Time:	18.0	84.0	108.7	40.3	106	123.4	17.2	29.0	47.0	24.7	36.5	76.8
Volume/Cap:	0.37	0.67	0.26	0.76	0.97	0.12	0.78	0.51	0.57	0.76	0.20	0.27
Delay/Veh:	81.4	42.9	20.6	75.4	51.3	12.7	97.4	74.8	64.4	87.8	64.5	38.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	81.4	42.9	20.6	75.4	51.3	12.7	97.4	74.8	64.4	87.8	64.5	38.1
LOS by Move:	F	D	C+	E-	D-	B	F	E	E	F	E	D+
HCM2kAvgQ:	4	26	8	15	55	3	9	8	14	12	3	8

Note: Queue reported is the number of cars per lane.

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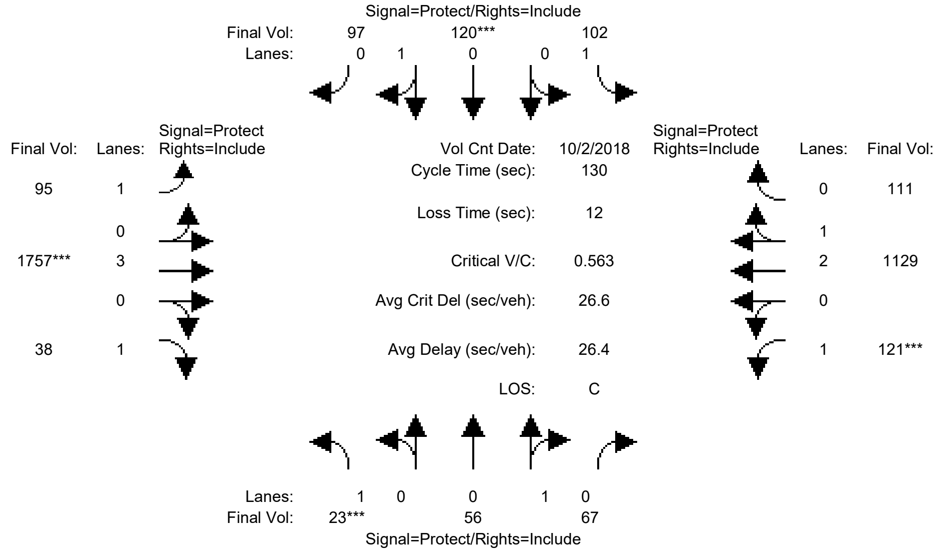
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM

Intersection #79: Calabazas Boulevard / El Camino Real



Street Name:	Calabazas Boulevard						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	20	56	67	102	120	94	88	1481	31	121	945	111
Growth 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
Initial Bse:	20	56	67	102	120	94	88	1481	31	121	945	111
Added Vol:	3	0	0	0	0	3	7	276	7	0	184	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	56	67	102	120	97	95	1757	38	121	1129	111
User 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
PHF 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
PHF Volume:	23	56	67	102	120	97	95	1757	38	121	1129	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	56	67	102	120	97	95	1757	38	121	1129	111
PCE 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
MLF 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
FinalVolume:	23	56	67	102	120	97	95	1757	38	121	1129	111
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92	0.92	0.99	0.95
Lanes:	1.00	0.46	0.54	1.00	0.55	0.45	1.00	3.00	1.00	1.00	2.72	0.28
Final Sat.:	1750	820	980	1750	995	805	1750	5700	1750	1750	5098	501
Capacity Analysis Module:												
Vol/Sat:	0.01	0.07	0.07	0.06	0.12	0.12	0.05	0.31	0.02	0.07	0.22	0.22
Crit Moves:	****				****			****		****		
Green Time:	7.0	19.3	19.3	14.6	26.9	26.9	16.6	68.7	68.7	15.4	67.6	67.6
Volume/Cap:	0.24	0.46	0.46	0.52	0.58	0.58	0.43	0.58	0.04	0.58	0.43	0.43
Delay/Veh:	60.3	51.9	51.9	56.8	48.9	48.9	53.6	21.2	14.8	58.4	19.4	19.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	60.3	51.9	51.9	56.8	48.9	48.9	53.6	21.2	14.8	58.4	19.4	19.4
LOS by Move:	E	D-	D-	E+	D	D	D-	C+	B	E+	B-	B-
HCM2kAvgQ:	1	5	5	5	9	9	4	15	1	5	10	10

Note: Queue reported is the number of cars per lane.

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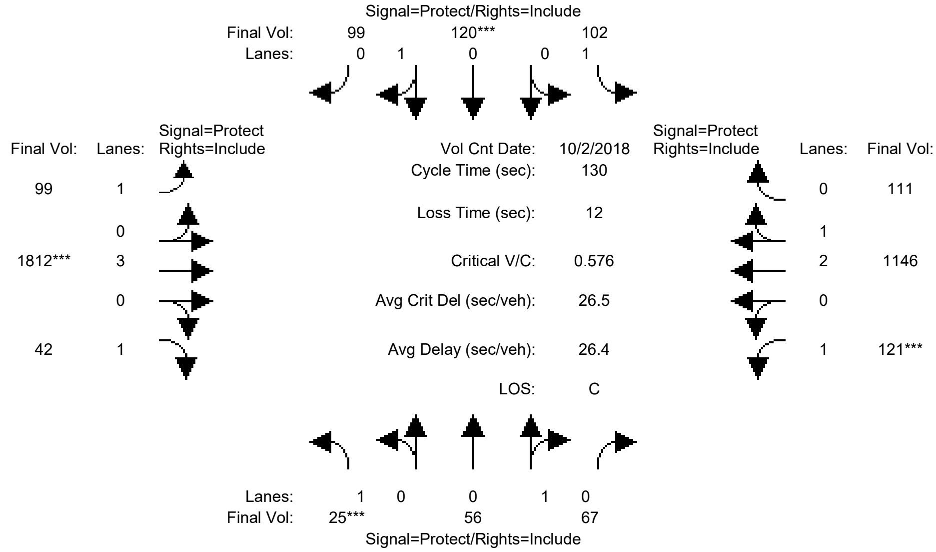
Cityline TIA
SJ17-1787
Cumulative Plus Project PM

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative PM Plus Project

Intersection #79: Calabazas Boulevard / El Camino Real



Street Name:	Calabazas Boulevard						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Oct 2018 <<												
Base Vol:	20	56	67	102	120	94	88	1481	31	121	945	111
Growth 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
Initial Bse:	20	56	67	102	120	94	88	1481	31	121	945	111
Added Vol:	5	0	0	0	0	5	11	331	11	0	201	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	56	67	102	120	99	99	1812	42	121	1146	111
User 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
PHF 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
PHF Volume:	25	56	67	102	120	99	99	1812	42	121	1146	111
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	56	67	102	120	99	99	1812	42	121	1146	111
PCE 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
MLF 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
FinalVolume:	25	56	67	102	120	99	99	1812	42	121	1146	111
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	1.00	0.92	0.92	0.99	0.95
Lanes:	1.00	0.46	0.54	1.00	0.55	0.45	1.00	3.00	1.00	1.00	2.73	0.27
Final Sat.:	1750	820	980	1750	986	814	1750	5700	1750	1750	5105	494
Capacity Analysis Module:												
Vol/Sat:	0.01	0.07	0.07	0.06	0.12	0.12	0.06	0.32	0.02	0.07	0.22	0.22
Crit Moves:	****				****			****		****		
Green Time:	7.0	19.1	19.1	14.5	26.5	26.5	17.0	69.4	69.4	15.1	67.5	67.5
Volume/Cap:	0.27	0.47	0.47	0.52	0.60	0.60	0.43	0.60	0.04	0.60	0.43	0.43
Delay/Veh:	60.5	52.1	52.1	57.1	49.5	49.5	53.4	21.1	14.5	59.3	19.5	19.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	60.5	52.1	52.1	57.1	49.5	49.5	53.4	21.1	14.5	59.3	19.5	19.5
LOS by Move:	E	D-	D-	E+	D	D	D-	C+	B	E+	B-	B-
HCM2kAvgQ:	1	5	5	5	9	9	4	15	1	5	10	10

Note: Queue reported is the number of cars per lane.

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APPENDIX C: DETAILED TRIP GENERATION CALCULATIONS

DOWNTOWN SPECIFIC PLAN LAND USE DESCRIPTION - TRIP GENERATION ESTIMATES

Land Use	ITE Code	Size	Units	Daily		AM Peak Hour				PM Peak Hour			
				Rate	Trips	Rate	In	Out	Total	Rate	In	Out	Total
(A) Existing													
Multi-Family Housing (Mid-Rise)	221	20	du	5.44	109	0.36	2	5	7	0.44	5	4	9
Transit Reduction (Housing near Employment)				*3%*	*-3*	*3%*	*0*	*(1)*	*(1)*	*3%*	*(1)*	*0*	*(1)*
Transit Reduction (Housing near Caltrain Station)				*9%*	*-10*	*9%*	*0*	*(1)*	*(1)*	*9%*	*(1)*	*0*	*(1)*
Mixed-Use Reduction (Housing and Retail Reduction)				*15%*	*-16*	*15%*	*0*	*(1)*	*(1)*	*15%*	*(1)*	*0*	*(1)*
Existing Housing Subtotal (E)				-	**80**	-	**2**	**2**	**4**	-	**2**	**4**	**6**
Shopping Center	820	181	ksf	37.75	6,833	0.94	106	64	170	3.81	331	359	690
Mixed-Use Reduction (Housing and Retail Reduction)				-	*(16)*	-	*(1)*	*0*	*(1)*	-	*0*	*(1)*	*(1)*
Existing Retail Subtotal (F)				-	**6,817**	-	**105**	**64**	**169**	-	**331**	**358**	**689**
General Office Building	710	8	ksf	9.74	78	1.16	8	1	9	1.15	1	8	9
Transit Reduction (Housing near Employment)				*3%*	*(3)*	*3%*	*(1)*	*0*	*(1)*	*3%*	*0*	*(1)*	*(1)*
Transit Reduction (Employment near Caltrain Station)				*6%*	*(5)*	*6%*	*(1)*	*0*	*(1)*	*6%*	*0*	*(1)*	*(1)*
Existing Office Subtotal (G)				-	**70**	-	**6**	**1**	**7**	-	**1**	**6**	**7**
Net Existing Project Trips (H) = (E) + (F) + (G)				-	**6,967**	-	**113**	**67**	**180**	-	**334**	**368**	**702**
(B) Existing Plus Approved But Not Yet Constructed or Occupied													
Multi-Family Housing (Mid-Rise)	221	70	du	5.44	381	0.36	7	18	25	0.44	19	12	31
Transit Reduction (Housing near Employment)				*3%*	*(11)*	*3%*	*0*	*0*	*0*	*3%*	*0*	*0*	*0*
Transit Reduction (Housing near Caltrain Station)				*9%*	*(34)*	*9%*	*(1)*	*(2)*	*(3)*	*9%*	*(2)*	*(1)*	*(3)*
Mixed-Use Reduction (Housing and Retail Reduction)				*15%*	*(57)*	*15%*	*(1)*	*(2)*	*(3)*	*15%*	*(2)*	*(2)*	*(4)*
Approved Housing Subtotal (I)				-	**279**	-	**5**	**14**	**19**	-	**15**	**9**	**24**
Shopping Center	820	181	ksf	37.75	6833	0.94	106	64	170	3.81	331	359	690
Mixed-Use Reduction (Housing and Retail Reduction)				-	*(57)*	-	*(2)*	*(1)*	*(3)*	-	*(2)*	*(2)*	*(4)*
Approved Retail Subtotal (J)				-	**6,776**	-	**104**	**63**	**167**	-	**329**	**357**	**686**
General Office Building	710	8	ksf	9.74	78	1.16	8	1	9	1.15	1	8	9
Transit Reduction (Housing near Employment)				3%	*(11)*	3%	*0*	*0*	*0*	3%	*0*	*0*	*0*
Transit Reduction (Employment near Caltrain Station)				6%	(5)	6%	0	0	0	6%	0	0	0
Approved Office Subtotal (K)				-	**62**	-	**8**	**1**	**9**	-	**1**	**8**	**9**
Net Approved Project Trips (L) = (I) + (J) + (K)				-	**7,117**	-	**117**	**78**	**195**	-	**345**	**374**	**719**
(C) Allowed by Adopted DSP													
Multi-Family Housing (Mid-Rise)	221	93	du	5.44	506	0.36	9	24	33	0.44	25	16	41
Transit Reduction (Housing near Employment)				*3%*	*(15)*	*3%*	*0*	*(1)*	*(1)*	*3%*	*(1)*	*0*	*(1)*
Transit Reduction (Housing near Caltrain Station)				*9%*	*(46)*	*9%*	*(1)*	*(2)*	*(3)*	*9%*	*(2)*	*(1)*	*(4)*
Mixed-Use Reduction (Housing and Retail Reduction)				*15%*	*(76)*	*15%*	*(1)*	*(4)*	*(5)*	*15%*	*(4)*	*(2)*	*(6)*
Allowed Housing Subtotal (M)				-	**369**	-	**7**	**17**	**24**	-	**18**	**13**	**30**
Shopping Center	820	181	ksf	37.75	6833	0.94	105	65	170	3.81	331	359	690
Mixed-Use Reduction (Housing and Retail Reduction)				-	*(76)*	-	*(4)*	*(1)*	*(5)*	-	*(2)*	*(4)*	*(6)*
Mixed-Use Development Reduction (Hotel and Retail Reduction)				-	*(167)*	-	*(4)*	*(5)*	*(9)*	-	*(6)*	*(6)*	*(12)*
Allowed Retail Subtotal (N)				-	**6,590**	-	**97**	**59**	**156**	-	**323**	**349**	**672**
General Office Building	710	18	ksf	9.74	174	1.16	18	3	21	1.15	3	18	21
Transit Reduction (Housing near Employment)				3%	*(15)*	3%	*(1)*	*0*	*(1)*	3%	*0*	*(1)*	*(1)*
Transit Reduction (Employment near Caltrain Station)				6%	(10)	6%	(1)	0	(2)	6%	0	(1)	(1)
Allowed Office Subtotal (O)				-	**149**	-	**16**	**3**	**18**	-	**3**	**16**	**19**
Hotel	310	200	rm	8.36	1,672	0.47	55	39	94	0.60	61	59	120
Mixed-Use Development Reduction (Hotel and Retail Reduction)				*10%*	*(167)*	*10%*	*(5)*	*(4)*	*(9)*	*10%*	*(6)*	*(6)*	*(12)*
Allowed Hotel Subtotal (P)				-	**1,505**	-	**50**	**35**	**85**	-	**55**	**53**	**108**
Net Allowed Project Trips (Q) = (M) + (N) + (O) + (P)				-	**8,613**	-	**170**	**114**	**283**	-	**399**	**431**	**829**
(D) Allowed by DSP w/ Proposed Amendments													
Multi-Family Housing (Mid-Rise)	221	843	du	5.44	4,586	0.36	79	224	303	0.44	226	145	371
Transit Reduction (Housing near Employment)				*3%*	*(138)*	*3%*	*(2)*	*(7)*	*(9)*	*3%*	*(7)*	*(4)*	*(11)*
Transit Reduction (Housing near Caltrain Station)				*9%*	*(413)*	*9%*	*(7)*	*(20)*	*(27)*	*9%*	*(20)*	*(13)*	*(33)*
Mixed-Use Reduction (Housing and Retail Reduction)				*15%*	*(688)*	*15%*	*(14)*	*(23)*	*(37)*	*15%*	*(34)*	*(22)*	*(56)*
Proposed Housing Subtotal (R)				-	**3,347**	-	**56**	**174**	**230**	-	**165**	**106**	**271**
Shopping Center	820	260	ksf	37.75	9,817	0.94	151	93	244	3.81	476	515	991
Mixed-Use Reduction (Housing and Retail Reduction)				*15%*	*(688)*	*15%*	*(23)*	*(14)*	*(37)*	*15%*	*(22)*	*(34)*	*(56)*
Proposed Retail Subtotal (S)				-	**9,129**	-	**128**	**79**	**207**	-	**454**	**481**	**935**
General Office Building	710	861	ksf	9.74	8,382	1.16	858	140	998	1.15	158	832	990
Transit Reduction (Housing near Employment)				*3%*	*(138)*	*3%*	*(7)*	*(2)*	*(9)*	*3%*	*(4)*	*(7)*	*(11)*
Transit Reduction (Employment near Caltrain Station)				*6%*	*(503)*	*6%*	*(52)*	*(8)*	*(60)*	*6%*	*(9)*	*(50)*	*(59)*
Proposed Office Subtotal (T)				-	**7,741**	-	**799**	**130**	**929**	-	**145**	**775**	**920**
Net Proposed Project Trips (U) = (R) + (S) + (T)				-	**20,217**	-	**983**	**383**	**1,366**	-	**764**	**1,362**	**2,126**
Cityline TIA Analysis Net New Trip Generation													
Net New Office = (T) - (G) = Proposed - Existing					7,671		793	129	922		144	769	913
Net New Residential= (R) - (E) = Proposed - Existing					3,267		54	172	226		163	102	265
Net New Retail = (S) - (F) = Proposed - Existing					2,312		23	15	38		123	123	246
Net New Total					**13,250**		**870**	**316**	**1,186**		**430**	**994**	**1,424**

APPENDIX C - TRIP GENERATION ESTIMATES

Land Use	ITE Code	Size	Units	Daily		AM Peak Hour				PM Peak Hour			
				Rate	Trips	Rate	In	Out	Total	Rate	In	Out	Total
Reduced Project Description (Net New Trips)													
Multi-Family Housing (Mid-Rise)	221	500	du	5.44	2720	0.36	47	133	180	0.44	134	86	220
Transit Reduction (Housing near Employment)				*3%*	*-82*	*3%*	*(1)*	*(4)*	*(5)*	*3%*	*(4)*	*(3)*	*(7)*
Transit Reduction (Housing near Caltrain Station)				*9%*	*-245*	*9%*	*(4)*	*(12)*	*(16)*	*9%*	*(12)*	*(8)*	*(20)*
Mixed-Use Reduction (Housing and Retail Reduction)				*15%*	*-408*	*15%*	*(7)*	*(20)*	*(27)*	*15%*	*(20)*	*(13)*	*(33)*
Housing Subtotal (A)				-	**1985**	-	**35**	**97**	**132**	-	**98**	**62**	**160**
Shopping Center	820	79	ksf	37.75	2,985	0.94	46	28	74	3.81	144	157	301
Mixed-Use Reduction (Housing and Retail Reduction)				-	*(408)*	-	*(20)*	*(7)*	*(27)*	-	*(13)*	*(20)*	*(33)*
Retail Subtotal (B)				-	**2,577**	-	**26**	**21**	**47**	-	**131**	**137**	**268**
General Office Building	710	400	ksf	9.74	3896	1.16	399	65	464	1.15	74	386	460
Transit Reduction (Housing near Employment)				*3%*	*(82)*	*3%*	*(4)*	*(1)*	*(5)*	*3%*	*(3)*	*(4)*	*(7)*
Transit Reduction (Employment near Caltrain Station)				*6%*	*(234)*	*6%*	*(24)*	*(4)*	*(28)*	*6%*	*(4)*	*(24)*	*(28)*
Office Subtotal (C)				-	**3580**	-	**371**	**60**	**431**	-	**67**	**358**	**425**
Net New Reduced Project Trips (D) = (A) + (B) + (C)				-	**8,142**	-	**432**	**178**	**610**	-	**296**	**557**	**853**

APPENDIX D: PEAK HOUR SIGNAL WARRANT ANALYSIS CALCULATIONS

FEHR PEERS

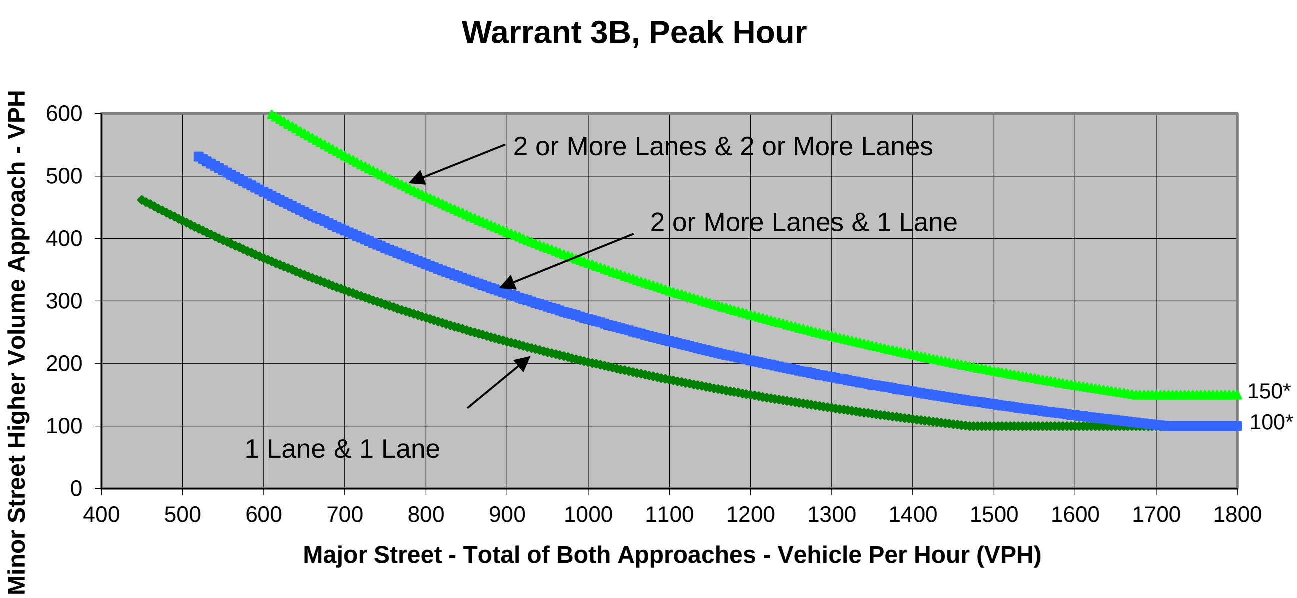
		Project	Cityline Sunnyvale
Major Street	Central Expressway	Scenario	Existing Plus Project
Minor Street	SR 85 NB	Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	0
Through	0	0	1,207	1,161
Right	0	24	0	607
Total	0	24	1,207	1,768

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Central Expressway	Minor Street SR 85 NB	Warrant Met
Number of Approach Lanes	**3**	**1**	**NO**
Traffic Volume (VPH) *	**2,975**	**24**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Major Street	Washington Avenue		Project	Cityline Sunnyvale
Minor Street	Aries Way		Scenario	Existing Plus Project
			Peak Hour	AM

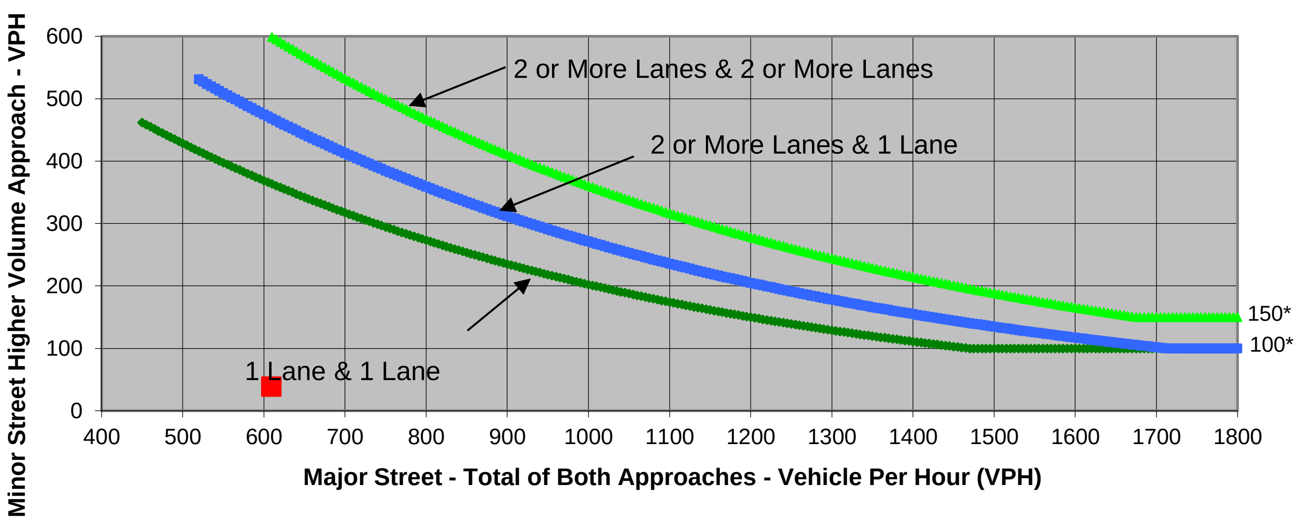
Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	0
Through	0	0	294	236
Right	8	39	46	33
Total	8	39	340	269

Major Street Direction

	North/South
x	East/West

Warrant 3B, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Washington Avenue	Minor Street Aries Way	Warrant Met
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**609**	**39**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

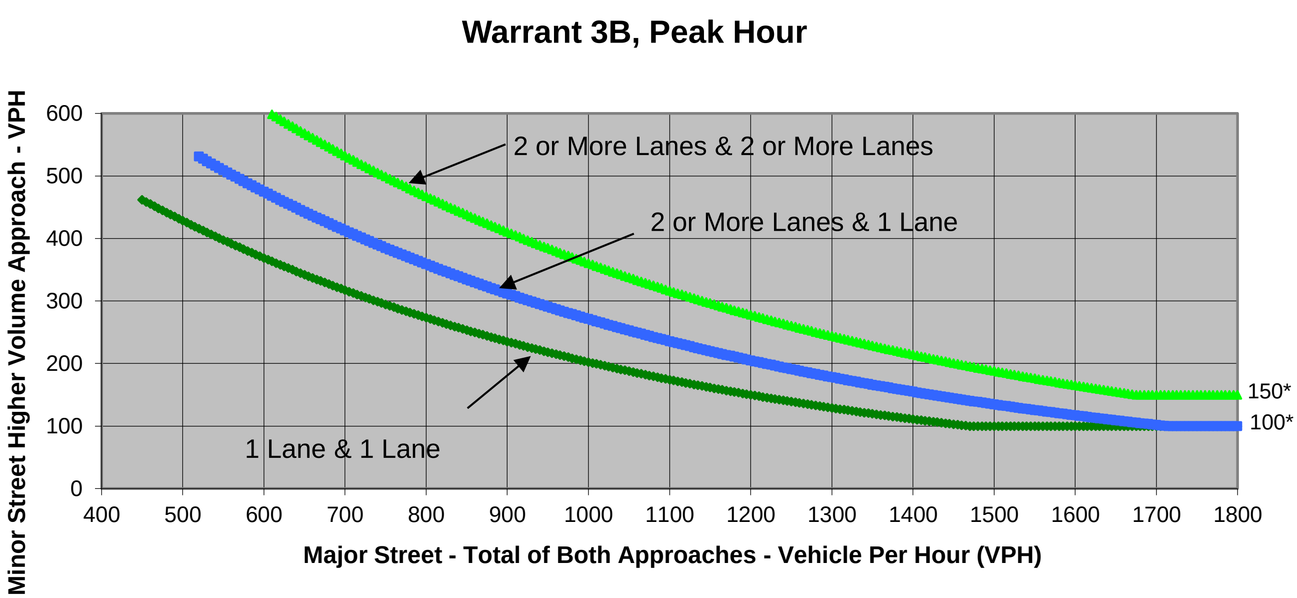
			Project	Cityline Sunnyvale
Major Street	Washington Avenue		Scenario	Existing Plus Project
Minor Street	Frances Street		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	23	68	0
Through	0	0	91	172
Right	0	80	0	46
Total	0	103	159	218

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Washington Avenue	Minor Street Frances Street	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**377**	**103**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

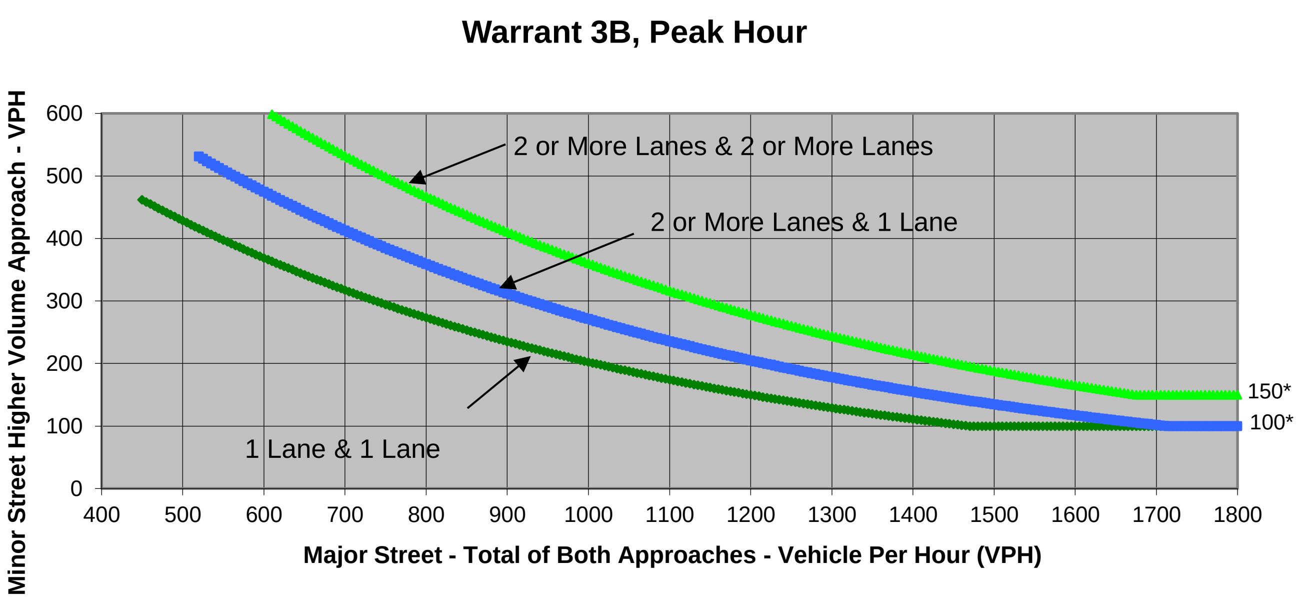
		Project	Cityline Sunnyvale
Major Street	Washington Avenue	Scenario	Existing Plus Project
Minor Street	Murphy Avenue	Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	9	5	18	2
Through	5	5	71	181
Right	6	11	10	14
Total	20	21	99	197

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Washington Avenue	Minor Street Murphy Avenue	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**296**	**21**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

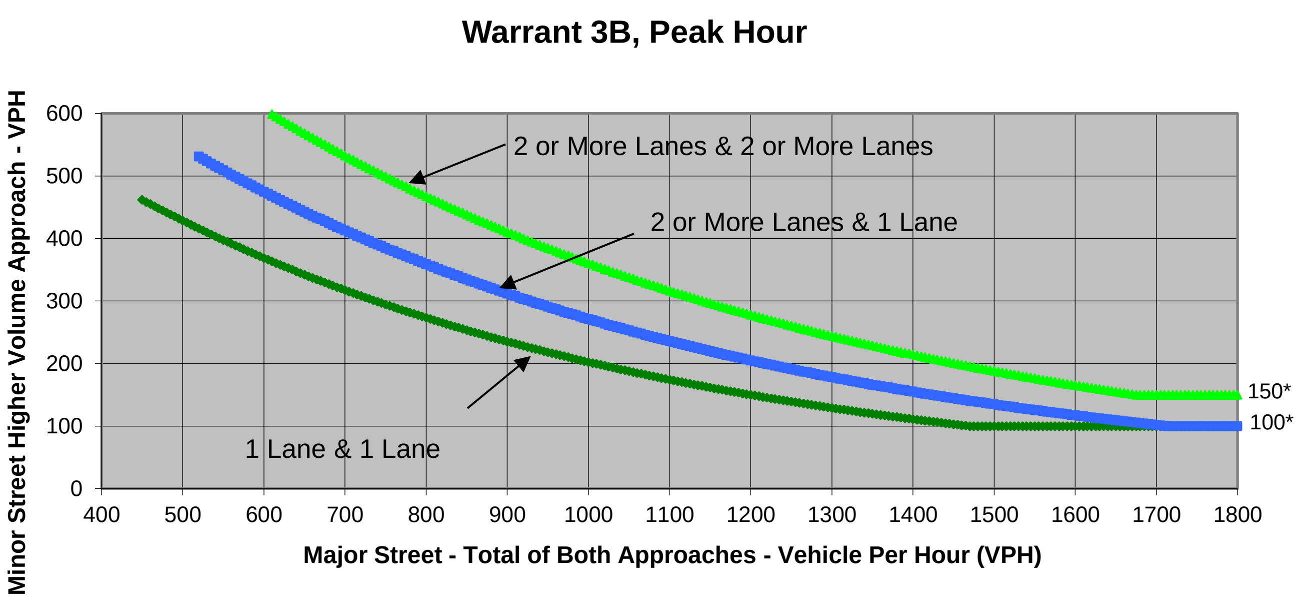
Major Street	Iowa Avenue	Project	Cityline Sunnyvale
Minor Street	Murphy Avenue	Scenario	Existing Plus Project
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	1	11	0
Through	0	0	50	107
Right	0	0	0	63
Total	0	1	61	170

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Iowa Avenue	Minor Street Murphy Avenue	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**231**	**1**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

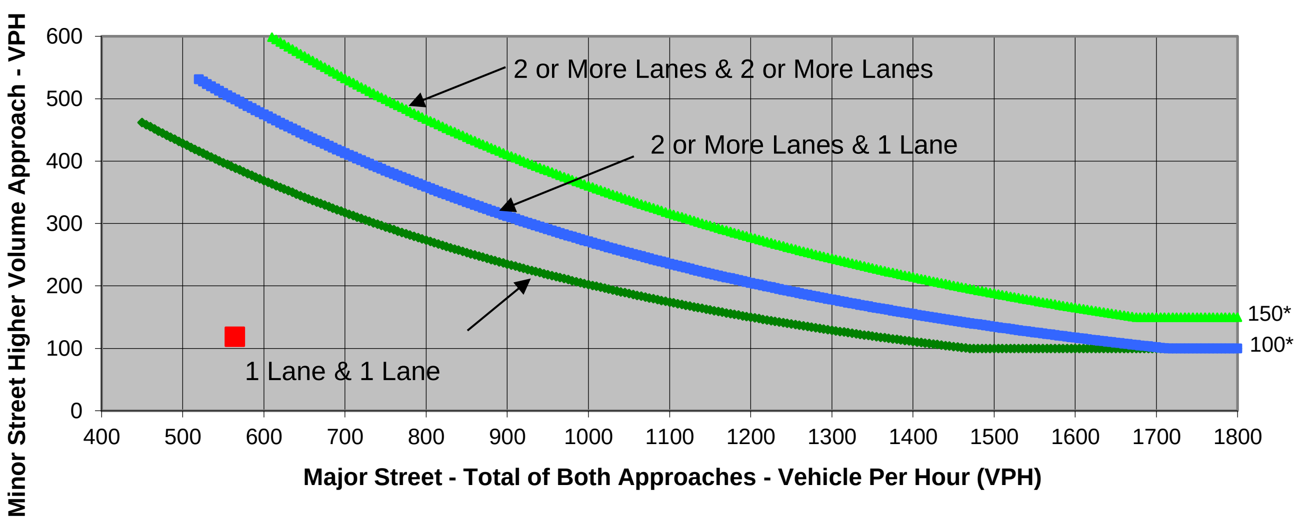
Major Street	Arques Avenue		Project	Cityline Sunnyvale
Minor Street	Central Expressway WB		Scenario	Existing Plus Project
			Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	112	0	0	0
Through	0	0	328	236
Right	7	0	0	0
Total	119	0	328	236

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Arques Avenue	Minor Street Central Expressway WB	Warrant Met
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**564**	**119**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Major Street	Central Expressway
Minor Street	SR 85 NB

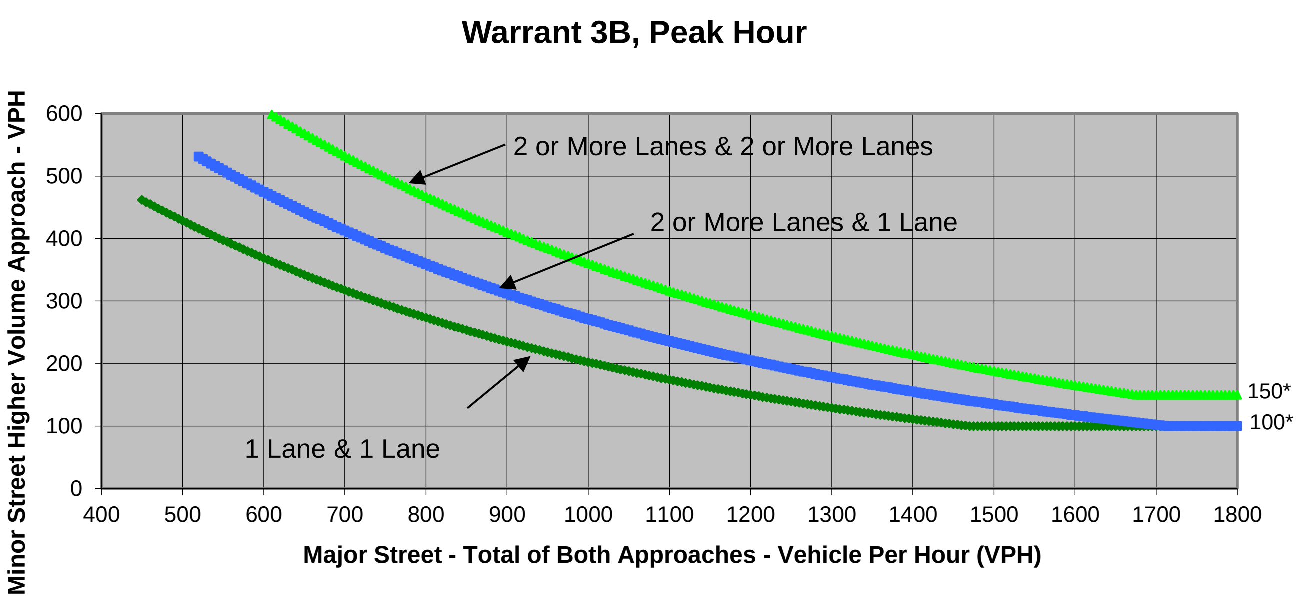
Project	Cityline Sunnyvale
Scenario	Existing Plus Project
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	0
Through	0	0	1,655	1,213
Right	0	22	0	329
Total	0	22	1,655	1,542

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Central Expressway	Minor Street SR 85 NB	Warrant Met
Number of Approach Lanes	**3**	**1**	**NO**
Traffic Volume (VPH) *	**3,197**	**22**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

Major Street	Washington Avenue	Project	Cityline Sunnyvale
Minor Street	Aries Way	Scenario	Existing Plus Project
		Peak Hour	PM

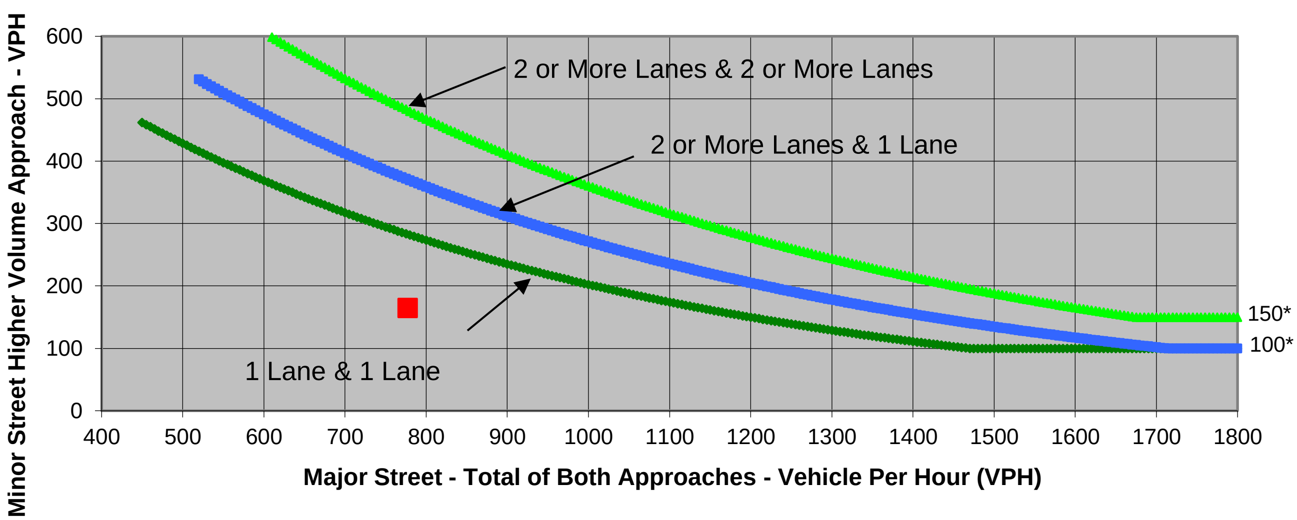
Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	0
Through	0	0	499	227
Right	20	165	44	7
Total	20	165	543	234

Major Street Direction

	North/South
x	East/West

Warrant 3B, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Washington Avenue	Minor Street Aries Way	Warrant Met
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**777**	**165**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

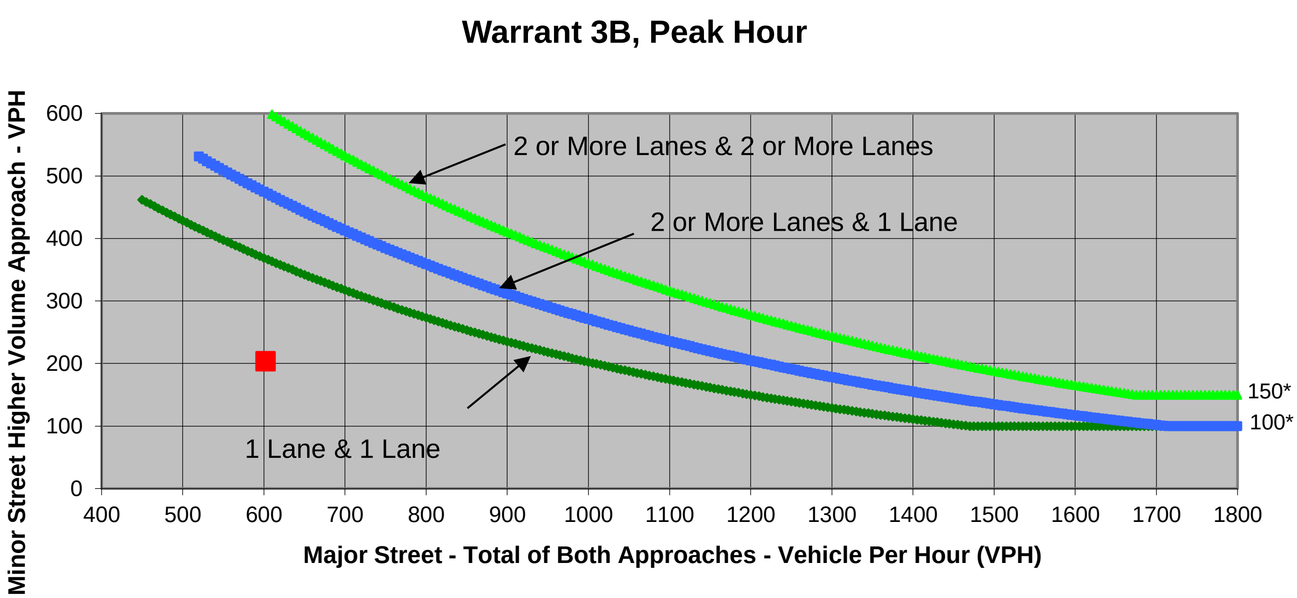
Major Street	Washington Avenue	Project	Cityline Sunnyvale
Minor Street	Frances Street	Scenario	Existing Plus Project
		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	122	106	0
Through	0	0	317	131
Right	0	82	0	48
Total	0	204	423	179

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Washington Avenue	Minor Street Frances Street	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**602**	**204**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

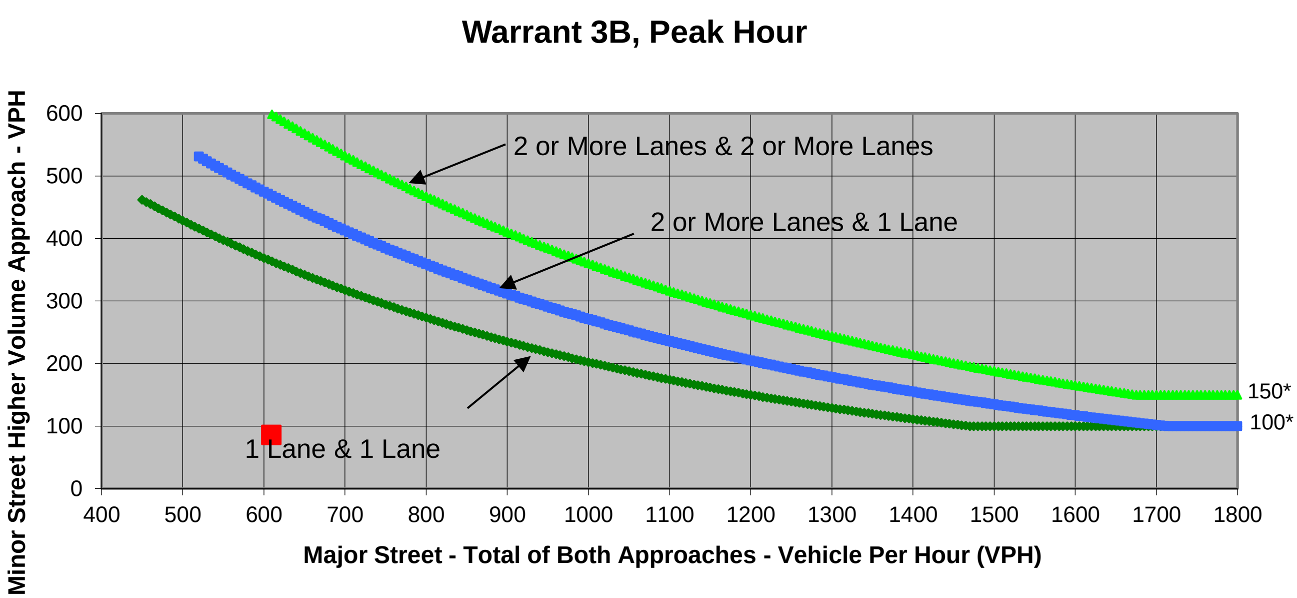
			Project	Cityline Sunnyvale
Major Street	Washington Avenue		Scenario	Existing Plus Project
Minor Street	Murphy Avenue		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	20	19	25	37
Through	9	35	278	117
Right	37	32	127	25
Total	66	86	430	179

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Washington Avenue	Minor Street Murphy Avenue	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**609**	**86**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

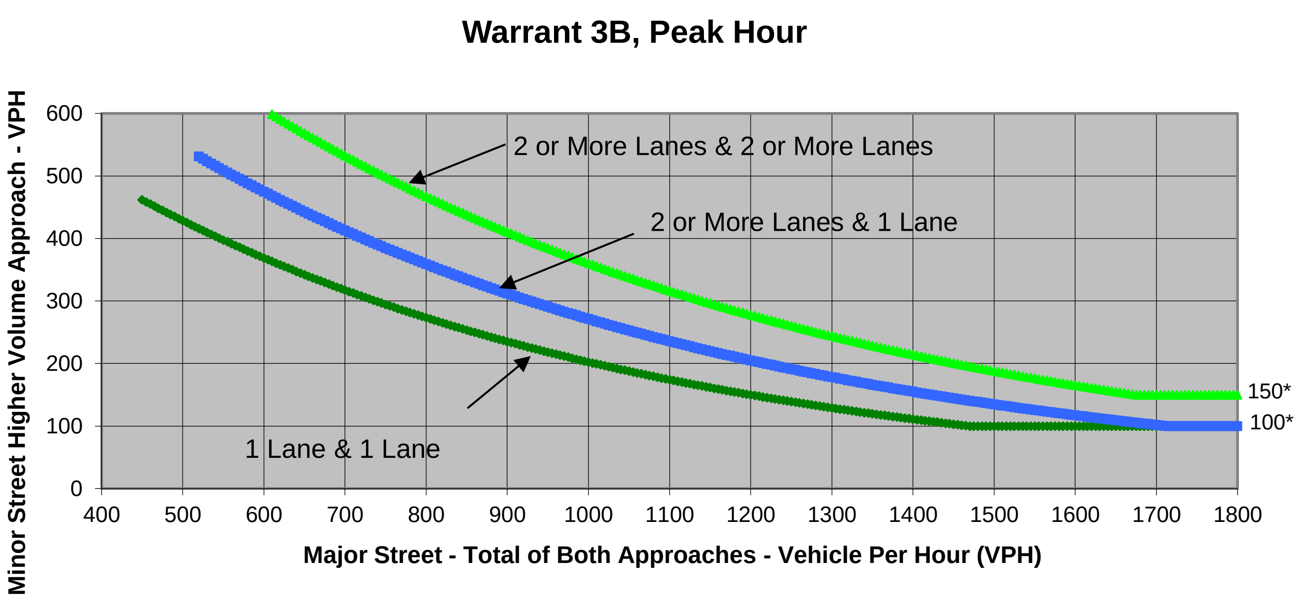
			Project	Cityline Sunnyvale
Major Street	Iowa Avenue		Scenario	Existing Plus Project
Minor Street	Murphy Avenue		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	3	33	0
Through	0	0	211	97
Right	0	0	0	27
Total	0	3	244	124

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Iowa Avenue	Minor Street Murphy Avenue	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**368**	**3**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

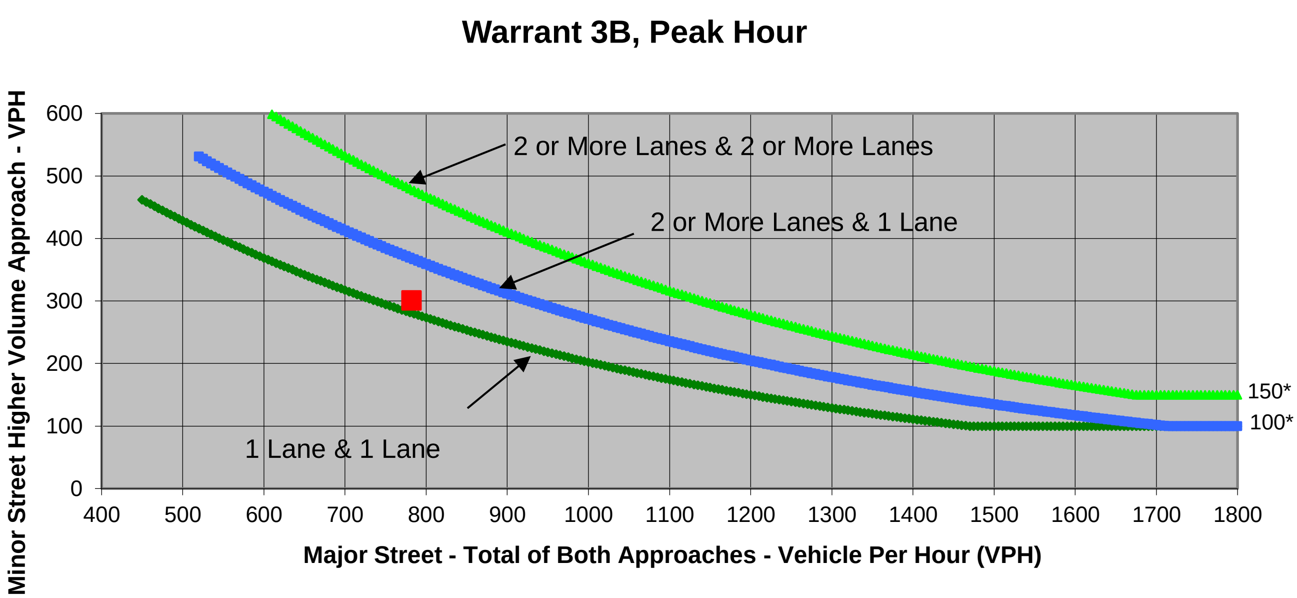
Major Street	Arques Avenue		Project	Cityline Sunnyvale
Minor Street	Central Expressway WB		Scenario	Existing Plus Project
			Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	271	0	0	0
Through	0	0	326	456
Right	30	0	0	0
Total	301	0	326	456

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Arques Avenue	Minor Street Central Expressway WB	Warrant Met
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**782**	**301**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

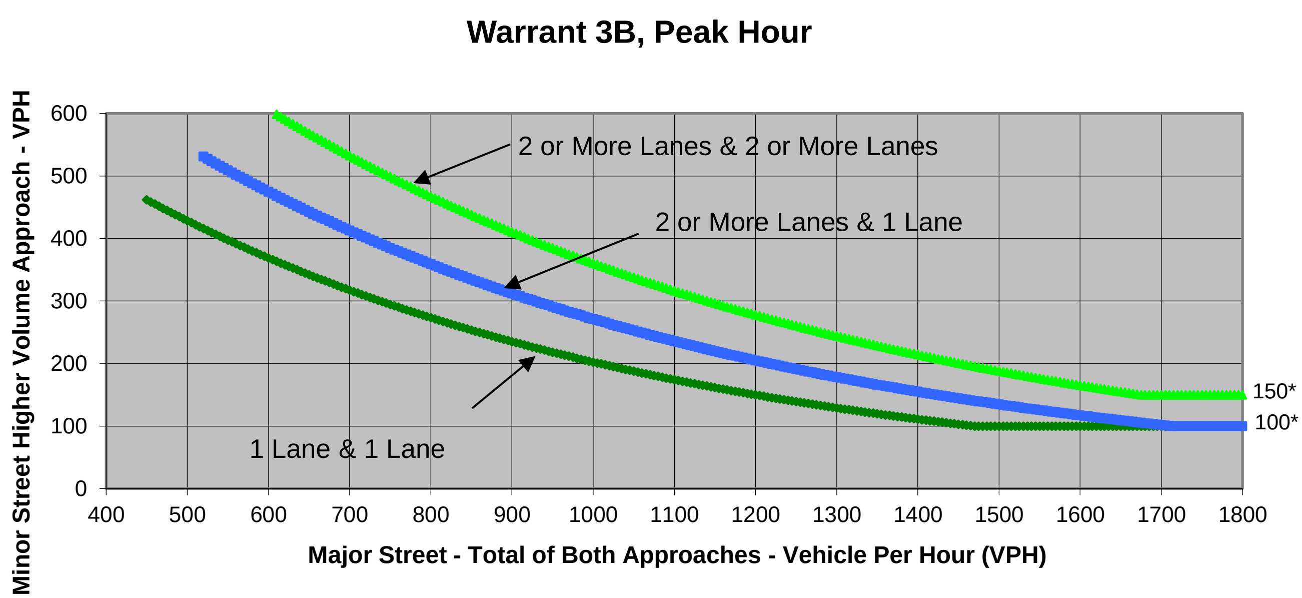
Major Street	Central Expressway		Project	Cityline Sunnyvale
Minor Street	SR 85 NB		Scenario	Background Plus Project
			Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	0
Through	0	0	1,317	1,237
Right	0	24	0	615
Total	0	24	1,317	1,852

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Central Expressway	Minor Street SR 85 NB	Warrant Met
Number of Approach Lanes	**3**	**1**	**NO**
Traffic Volume (VPH) *	**3,169**	**24**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

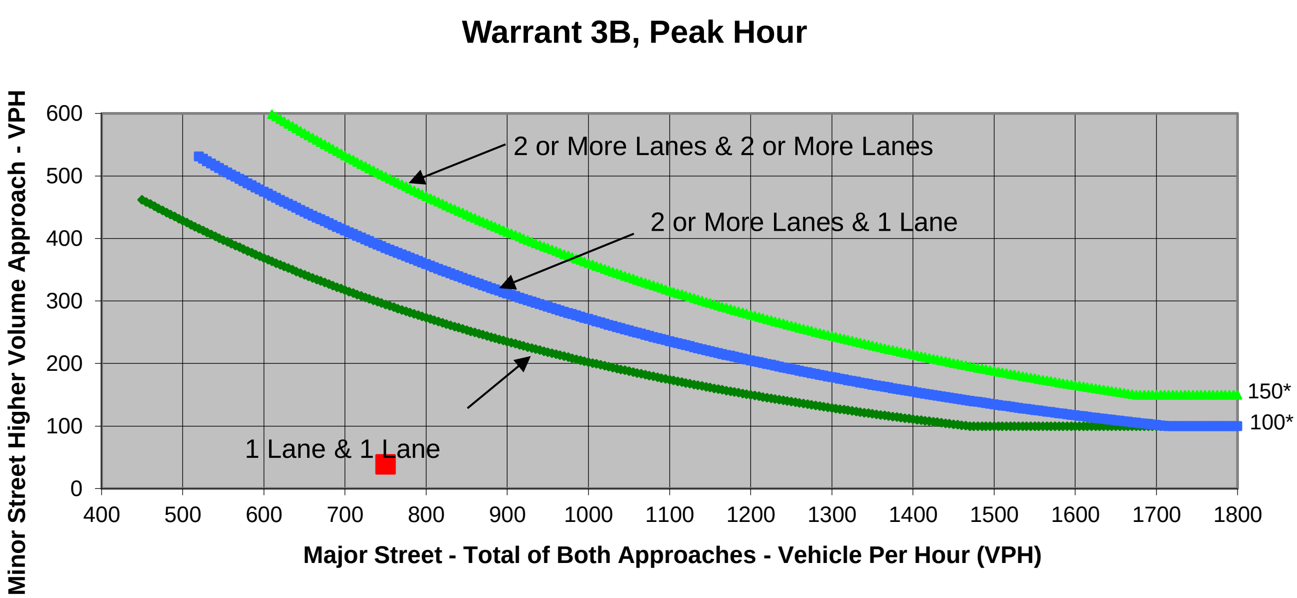
		Project	Cityline Sunnyvale
Major Street	Washington Avenue	Scenario	Background Plus Project
Minor Street	Aries Way	Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	0
Through	0	0	311	333
Right	16	39	72	34
Total	16	39	383	367

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Washington Avenue	**Minor Street** Aries Way	**Warrant Met**
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**750**	**39**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

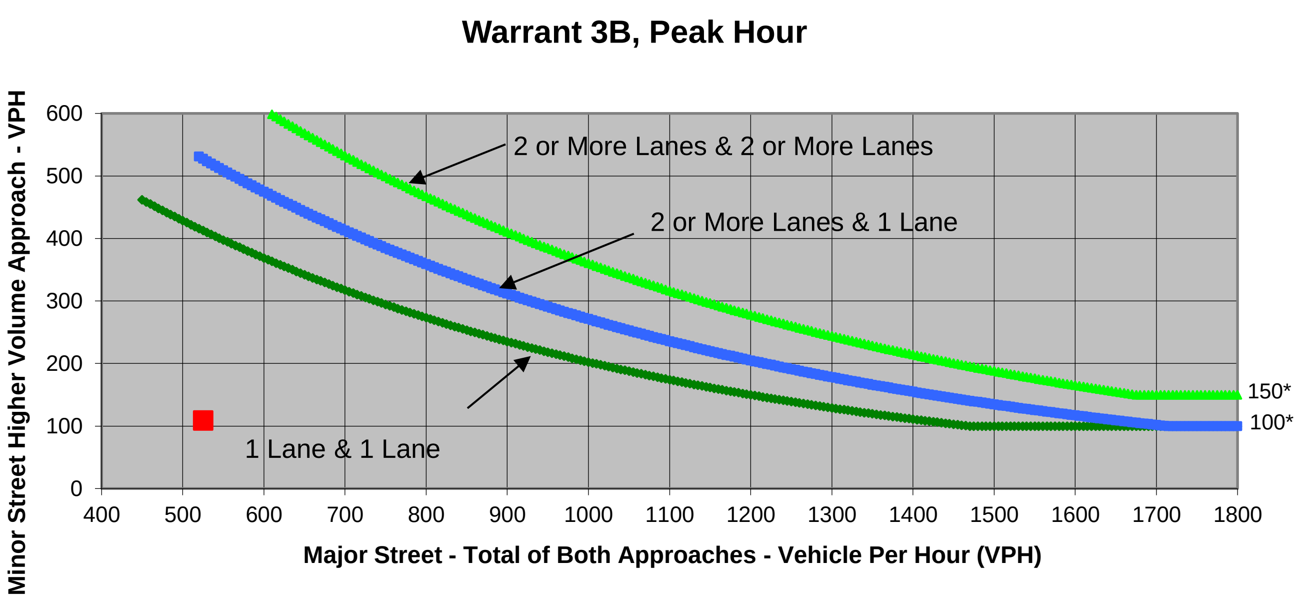
			Project	Cityline Sunnyvale
Major Street	Washington Avenue		Scenario	Background Plus Project
Minor Street	Frances Street		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	23	76	0
Through	0	0	132	271
Right	0	86	0	46
Total	0	109	208	317

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Washington Avenue	Minor Street Frances Street	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**525**	**109**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

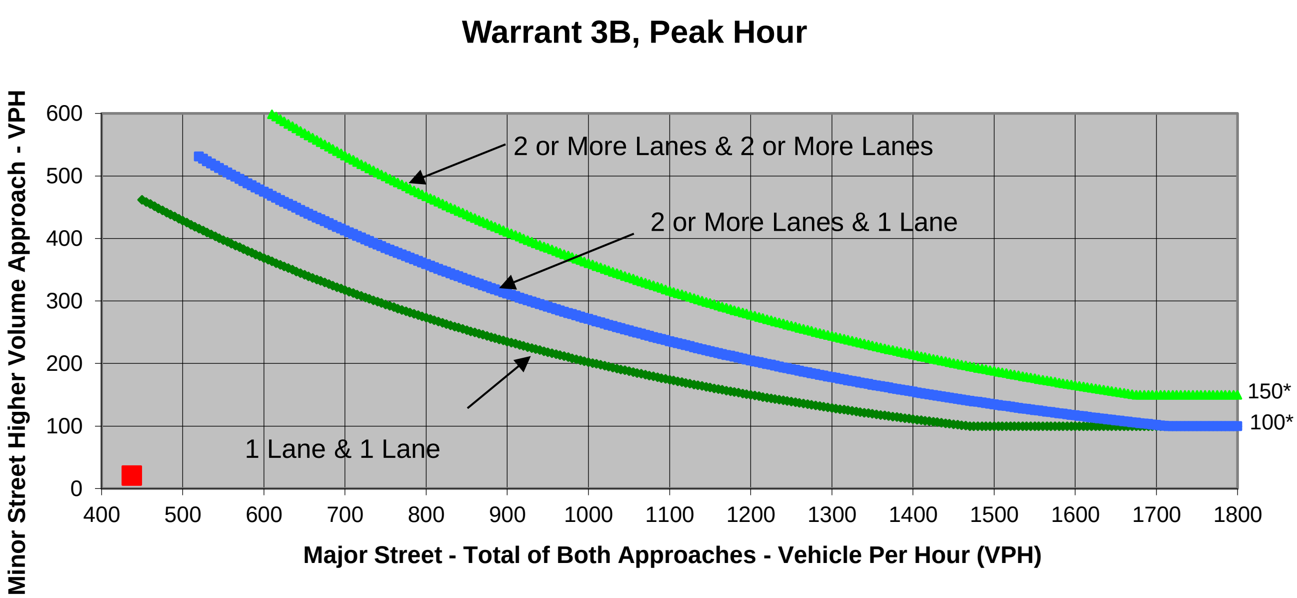
			Project	Cityline Sunnyvale
Major Street	Washington Avenue		Scenario	Background Plus Project
Minor Street	Murphy Avenue		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	9	5	18	3
Through	6	5	112	280
Right	6	11	10	14
Total	21	21	140	297

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Washington Avenue	Minor Street Murphy Avenue	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**437**	**21**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

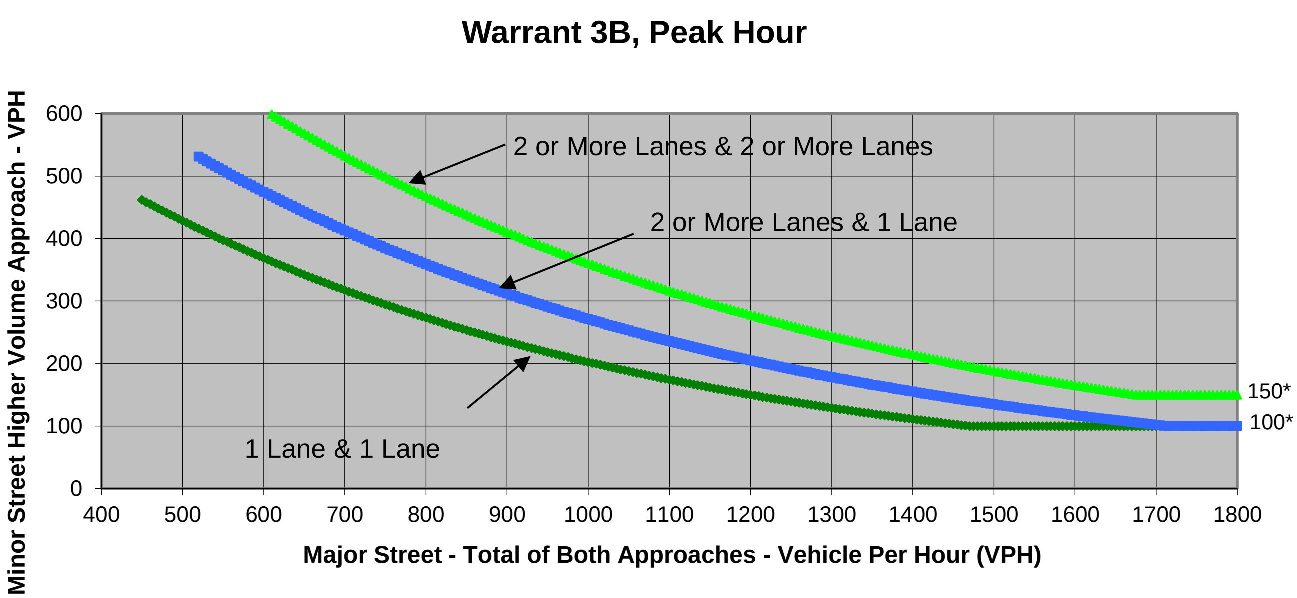
Major Street	Iowa Avenue		Project	Cityline Sunnyvale
Minor Street	Murphy Avenue		Scenario	Background Plus Project
			Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	1	12	0
Through	0	0	77	140
Right	0	0	0	63
Total	0	1	89	203

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Iowa Avenue	Minor Street Murphy Avenue	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**292**	**1**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

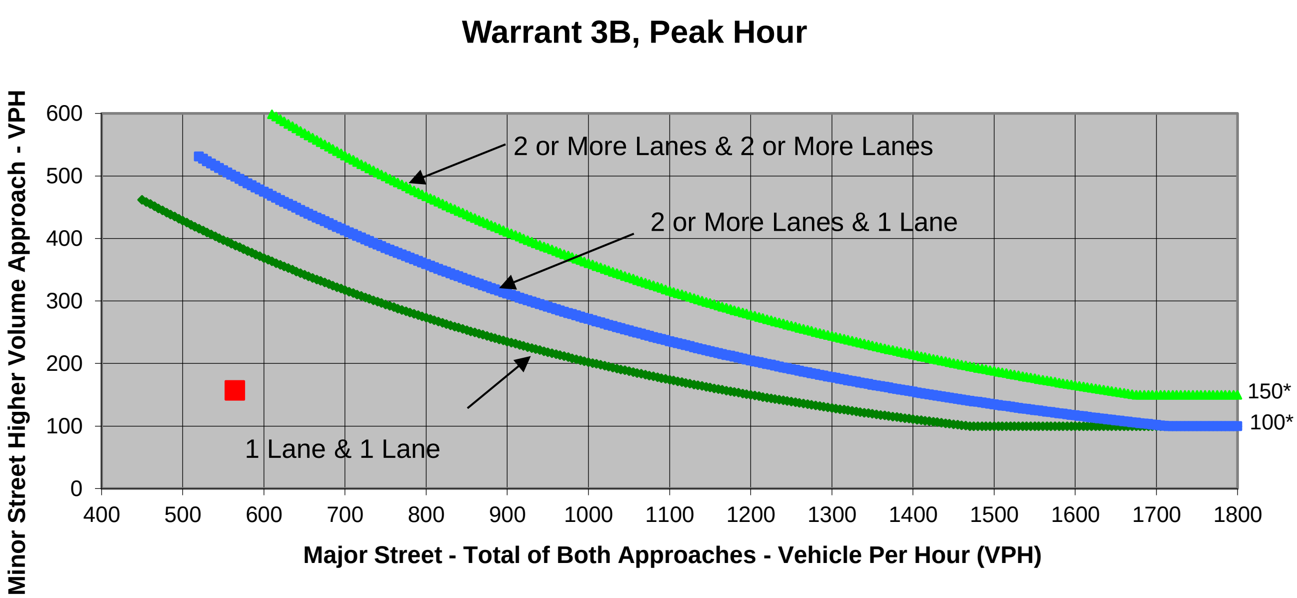
Major Street	Arques Avenue		Project	Cityline Sunnyvale
Minor Street	Central Expressway WB		Scenario	Background Plus Project
			Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	150	0	0	0
Through	0	0	328	236
Right	7	0	0	0
Total	157	0	328	236

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Arques Avenue	Minor Street Central Expressway WB	Warrant Met
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**564**	**157**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

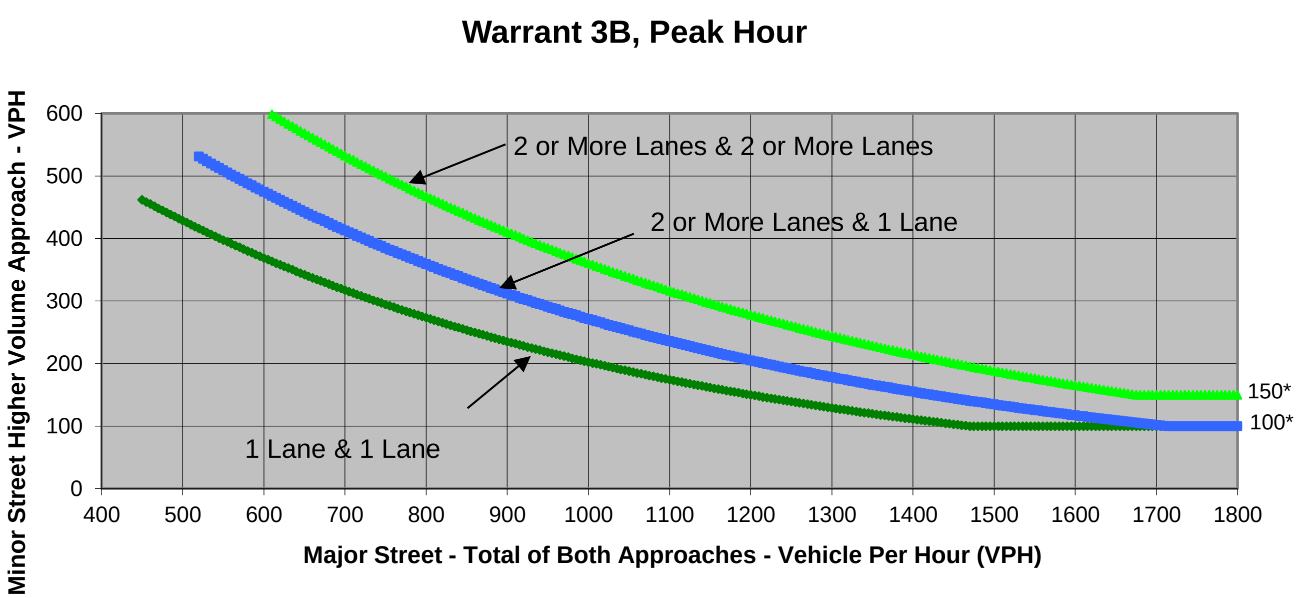
			Project	Cityline Sunnyvale
Major Street	Central Expressway		Scenario	Background With Project
Minor Street	SR 85 NB		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	0
Through	0	0	1,762	1,337
Right	0	22	0	353
Total	0	22	1,762	1,690

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Central Expressway	SR 85 NB	
Number of Approach Lanes	**3**	**1**	**NO**
Traffic Volume (VPH) *	**3,452**	**22**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

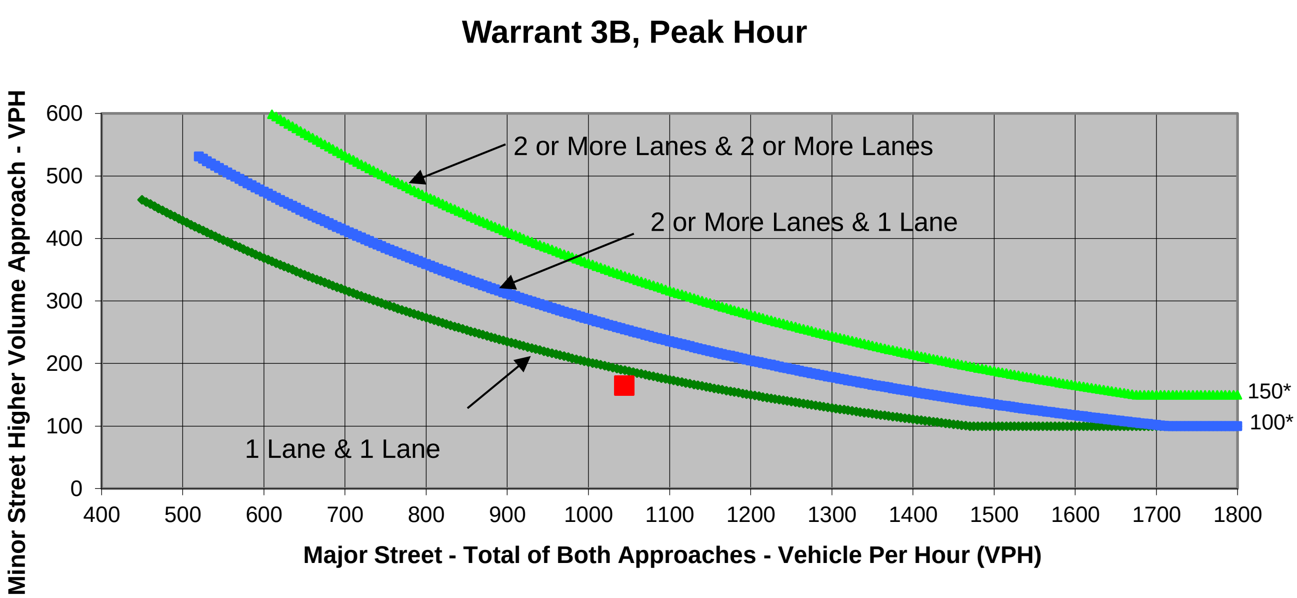
Major Street	Washington Avenue	Project	Cityline Sunnyvale
Minor Street	Aries Way	Scenario	Background With Project
		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	0
Through	0	0	573	342
Right	47	165	122	7
Total	47	165	695	349

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Washington Avenue	Minor Street Aries Way	Warrant Met
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**1,044**	**165**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

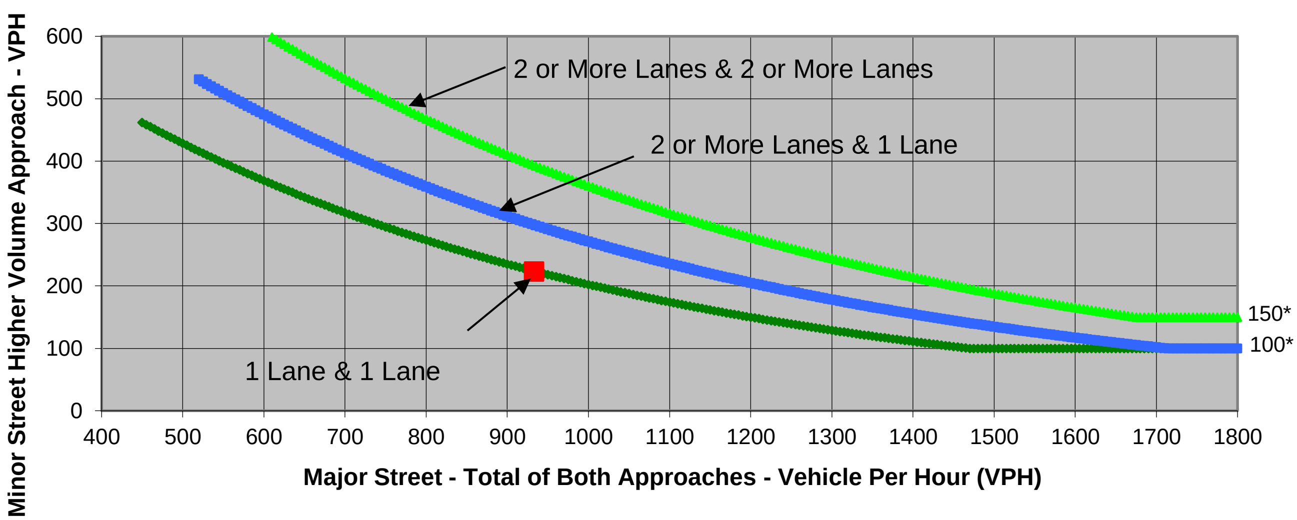
Major Street	Washington Avenue	Project	Cityline Sunnyvale
Minor Street	Frances Street	Scenario	Background With Project
		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	122	143	0
Through	0	0	492	250
Right	0	101	0	48
Total	0	223	635	298

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Washington Avenue	Minor Street Frances Street	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**933**	**223**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

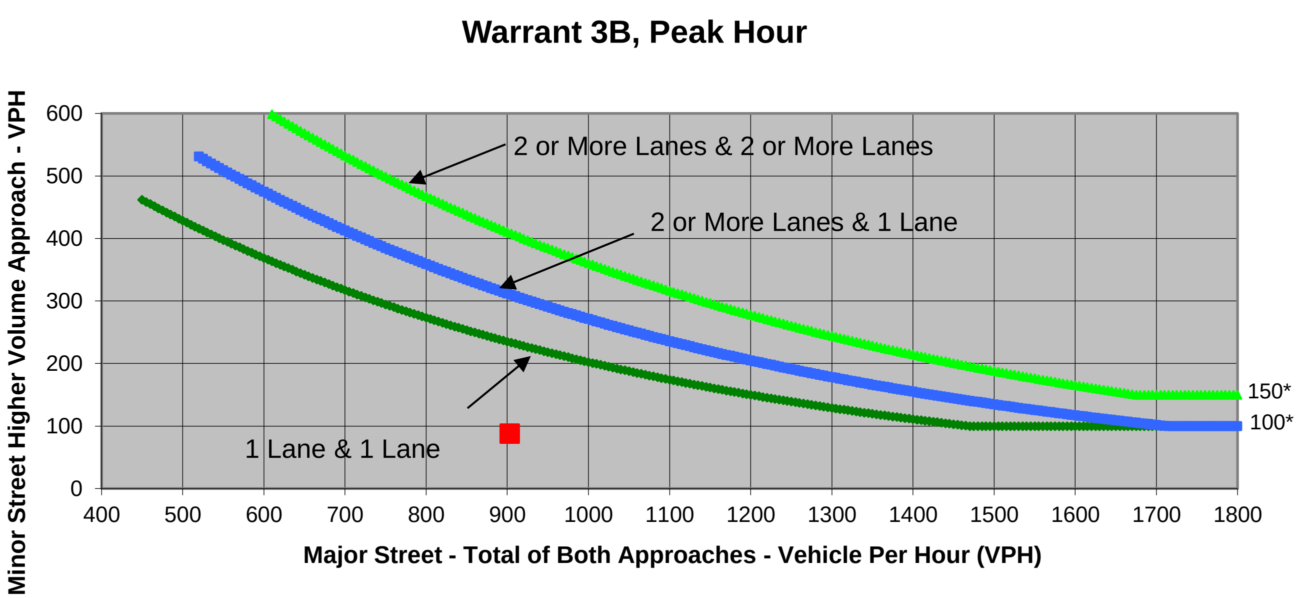
			Project	Cityline Sunnyvale
Major Street	Washington Avenue		Scenario	Background With Project
Minor Street	Murphy Avenue		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	20	19	25	38
Through	9	37	453	235
Right	37	32	127	25
Total	66	88	605	298

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Washington Avenue	Minor Street Murphy Avenue	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**903**	**88**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

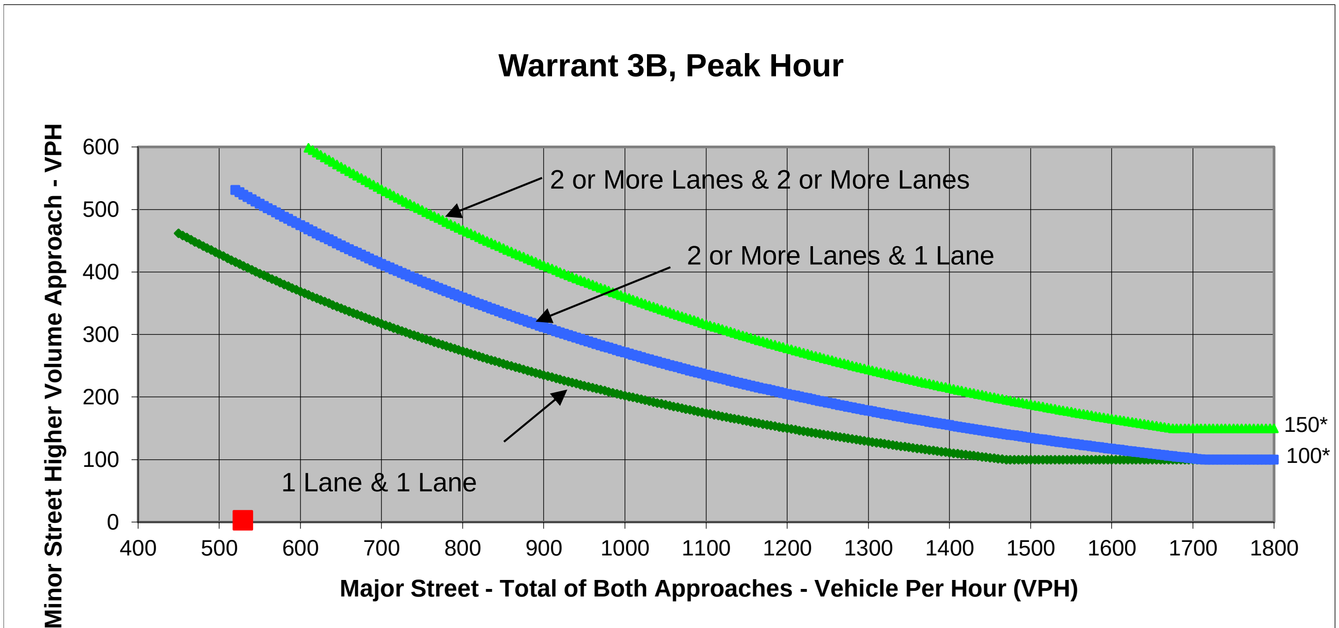
Major Street	Iowa Avenue		Project	Cityline Sunnyvale
Minor Street	Murphy Avenue		Scenario	Background With Project
			Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	3	33	0
Through	0	0	295	174
Right	0	0	0	27
Total	0	3	328	201

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Iowa Avenue	Minor Street Murphy Avenue	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**529**	**3**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

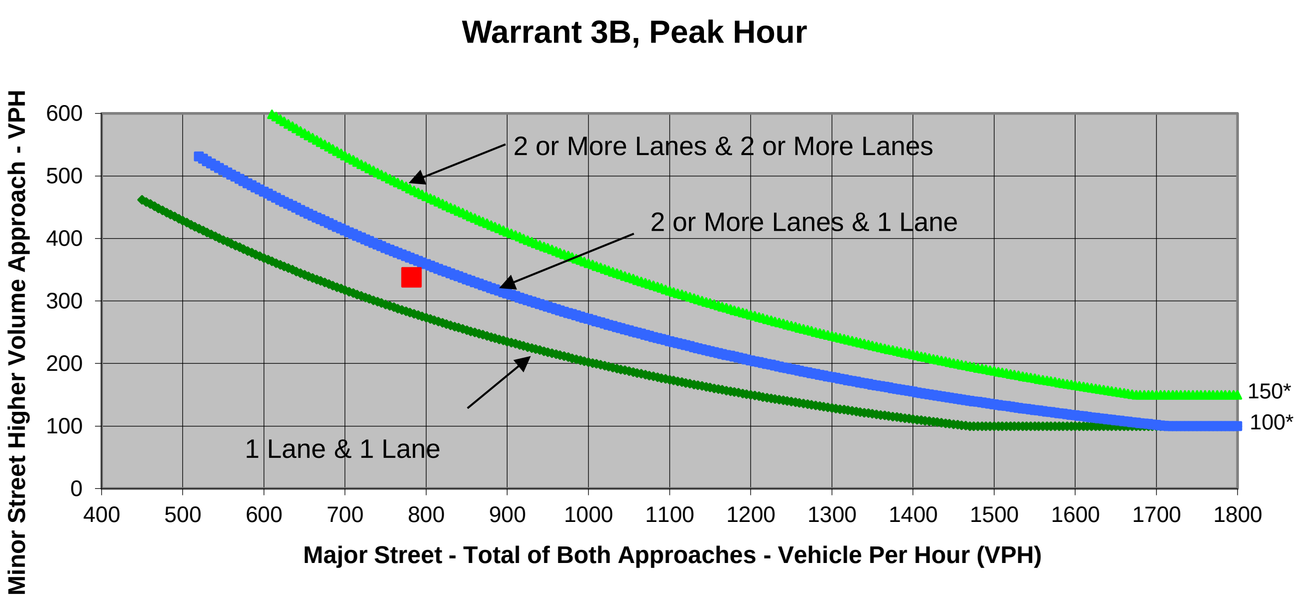
Major Street	Arques Avenue	Project	Cityline Sunnyvale
Minor Street	Central Expressway WB	Scenario	Background With Project
		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	308	0	0	0
Through	0	0	326	456
Right	30	0	0	0
Total	338	0	326	456

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Arques Avenue	Minor Street Central Expressway WB	Warrant Met
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**782**	**338**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

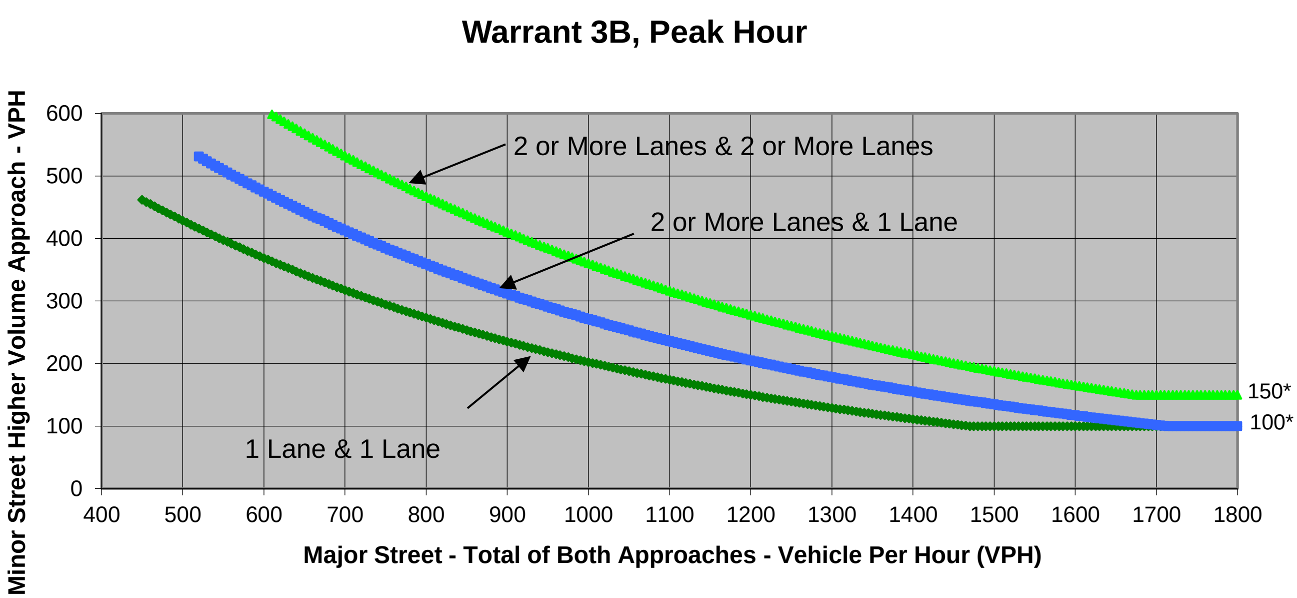
Major Street	Central Expressway		Project	Cityline Sunnyvale
Minor Street	SR 85 NB		Scenario	Cumulative With Project
			Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	0
Through	0	0	1,383	1,248
Right	0	24	0	618
Total	0	24	1,383	1,866

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Central Expressway	Minor Street SR 85 NB	Warrant Met
Number of Approach Lanes	**3**	**1**	**NO**
Traffic Volume (VPH) *	**3,249**	**24**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

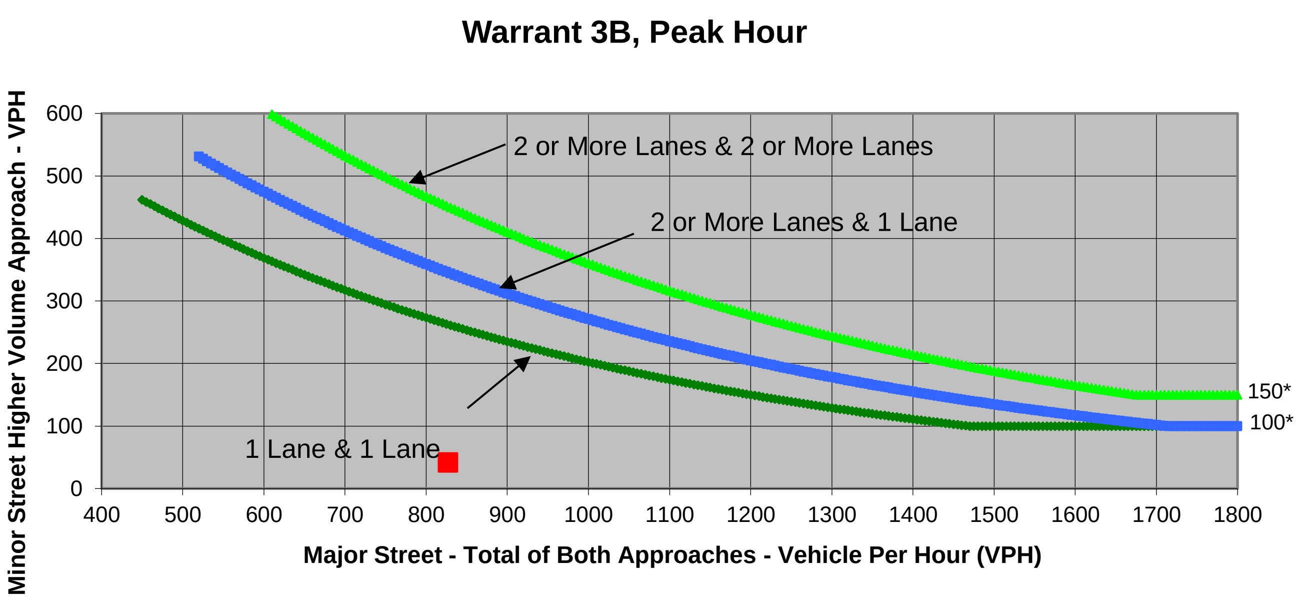
Major Street	Washington Avenue		Project	Cityline Sunnyvale
Minor Street	Aries Way		Scenario	Cumulative With Project
			Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	0
Through	0	0	346	366
Right	16	42	79	36
Total	16	42	425	402

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Washington Avenue	Minor Street Aries Way	Warrant Met
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**827**	**42**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

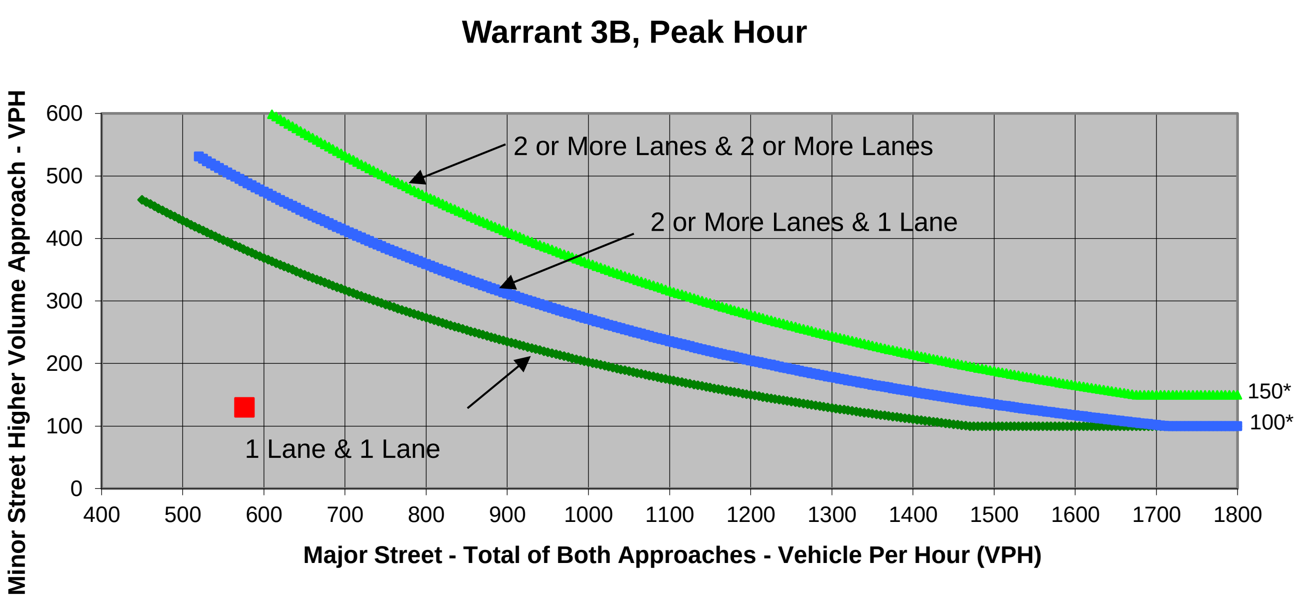
Major Street	Washington Avenue		Project	Cityline Sunnyvale
Minor Street	Frances Street		Scenario	Cumulative With Project
			Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	34	85	0
Through	0	0	143	295
Right	0	96	0	53
Total	0	130	228	348

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Washington Avenue	Minor Street Frances Street	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**576**	**130**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

			Project	Cityline Sunnyvale
Major Street	Washington Avenue		Scenario	Cumulative With Project
Minor Street	Murphy Avenue		Peak Hour	AM

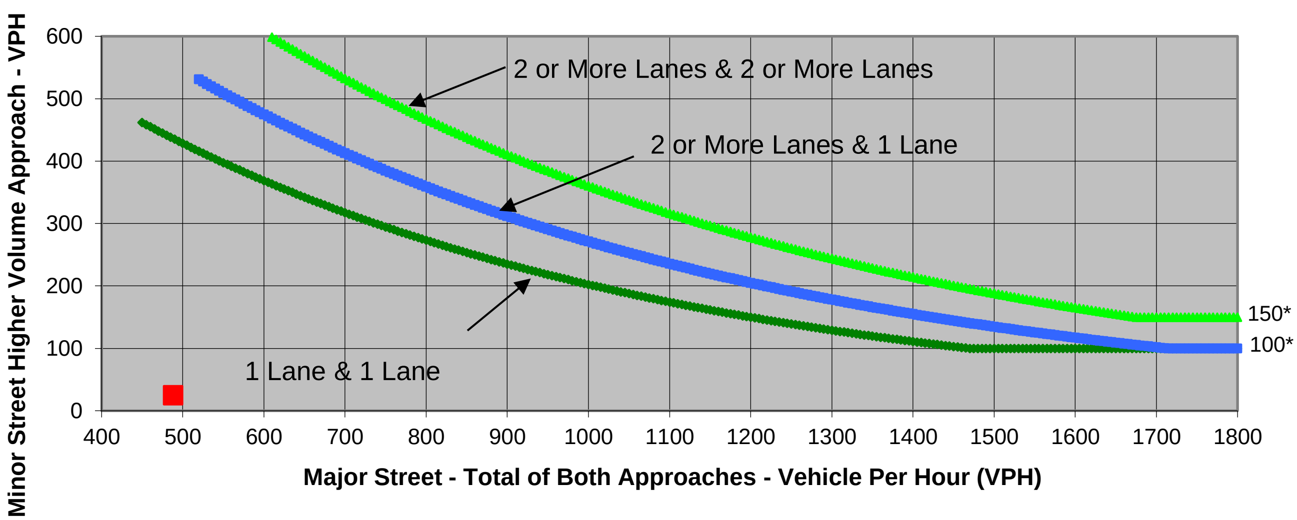
Turn Movement Volumes

	NB	SB	EB	WB
Left	10	6	20	6
Through	6	6	128	306
Right	6	13	12	16
Total	22	25	160	328

Major Street Direction

	North/South
x	East/West

Warrant 3B, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Washington Avenue	Minor Street Murphy Avenue	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**488**	**25**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

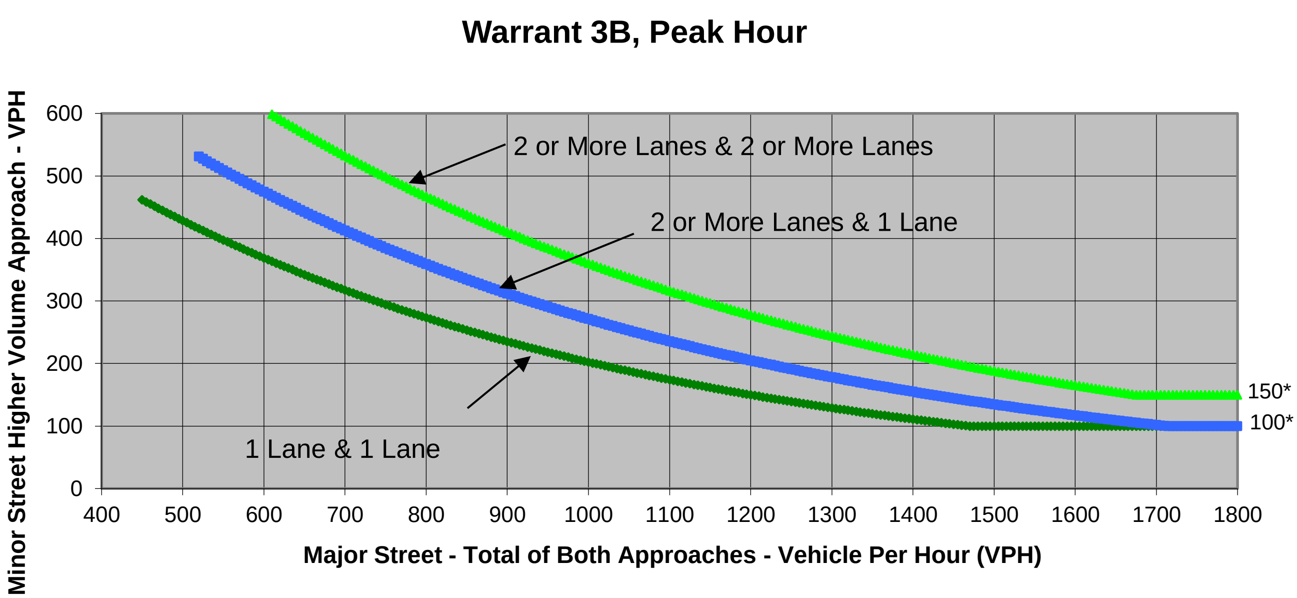
			Project	Cityline Sunnyvale
Major Street	Iowa Avenue		Scenario	Cumulative With Project
Minor Street	Murphy Avenue		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	1	34	0
Through	0	0	82	150
Right	0	0	0	74
Total	0	1	116	224

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	**Minor Street**	**Warrant Met**
	Iowa Avenue	Murphy Avenue	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**340**	**1**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

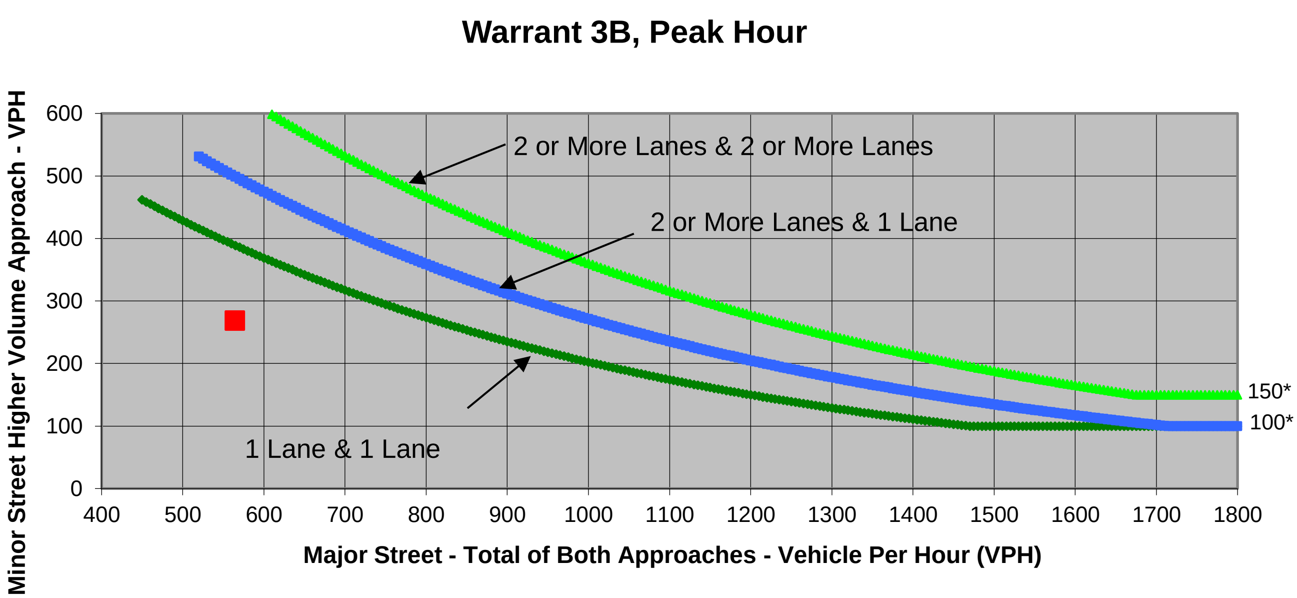
Major Street	Arques Avenue	Project	Cityline Sunnyvale
Minor Street	Central Expressway WB	Scenario	Cumulative With Project
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	262	0	0	0
Through	0	0	328	236
Right	7	0	0	0
Total	269	0	328	236

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Arques Avenue	Minor Street Central Expressway WB	Warrant Met
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**564**	**269**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR & PEERS

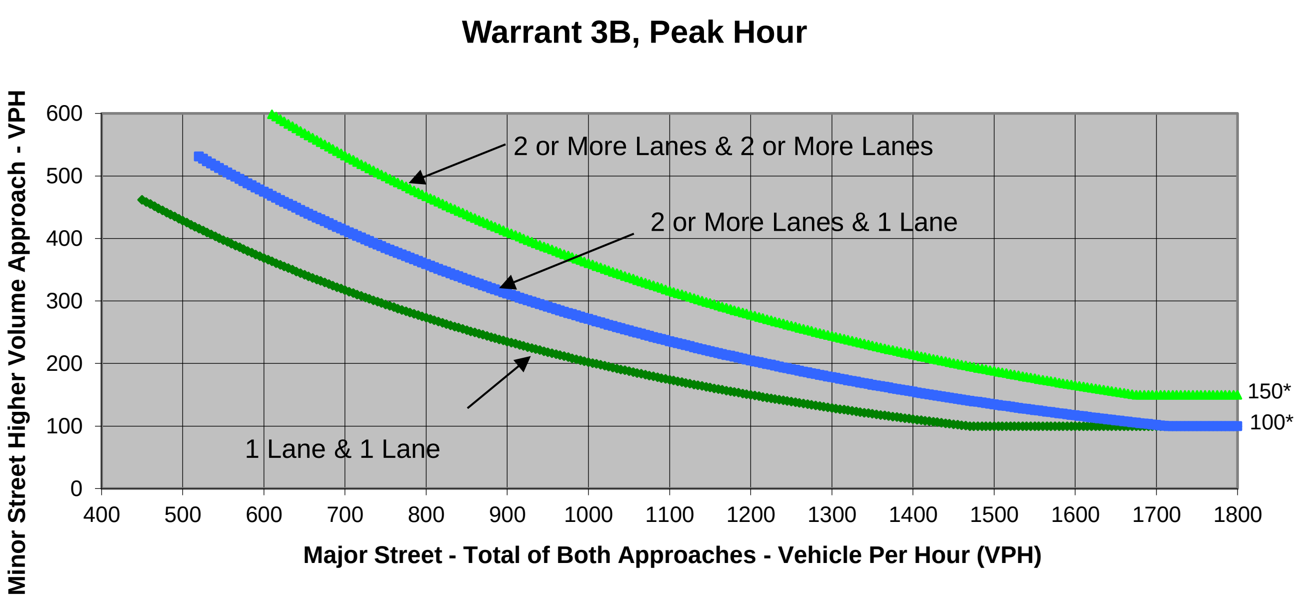
Major Street	Central Expressway		Project	Cityline Sunnyvale
Minor Street	SR 85 NB		Scenario	Cumulative With Project
			Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	0
Through	0	0	1,754	1,320
Right	0	22	0	360
Total	0	22	1,754	1,680

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Central Expressway	Minor Street SR 85 NB	Warrant Met
Number of Approach Lanes	**3**	**1**	**NO**
Traffic Volume (VPH) *	**3,434**	**22**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

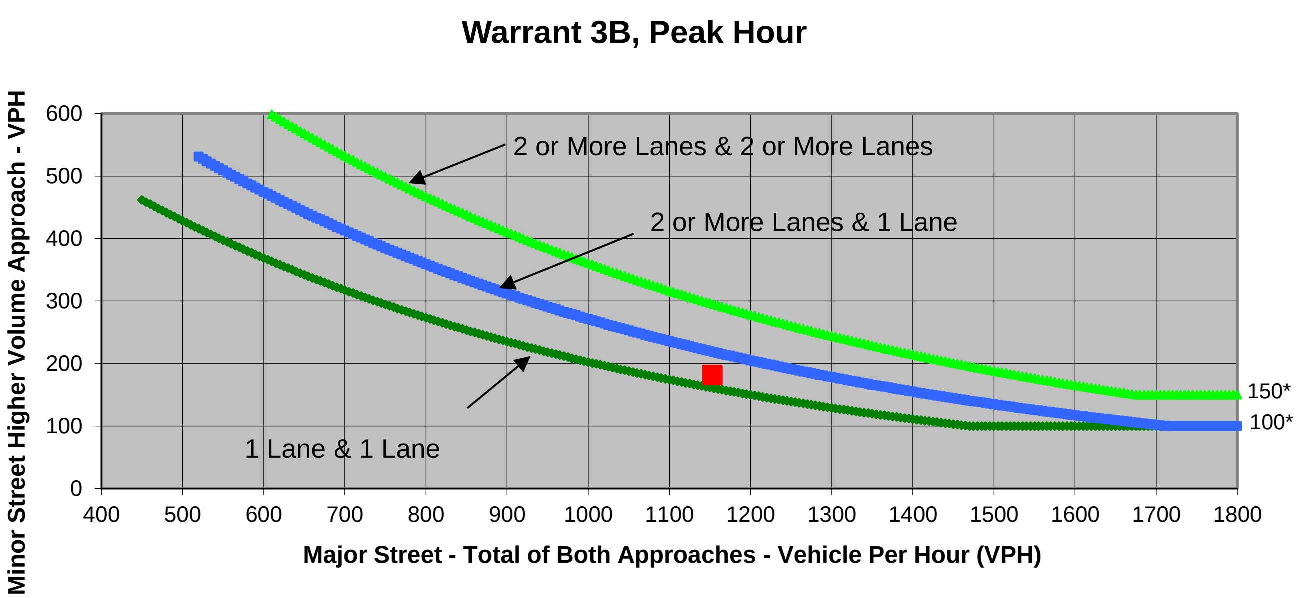
Major Street	Washington Avenue		Project	Cityline Sunnyvale
			Scenario	Cumulative With Project
Minor Street	Aries Way		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	0
Through	0	0	650	376
Right	49	182	119	8
Total	49	182	769	384

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Washington Avenue	Minor Street Aries Way	Warrant Met
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**1,153**	**182**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

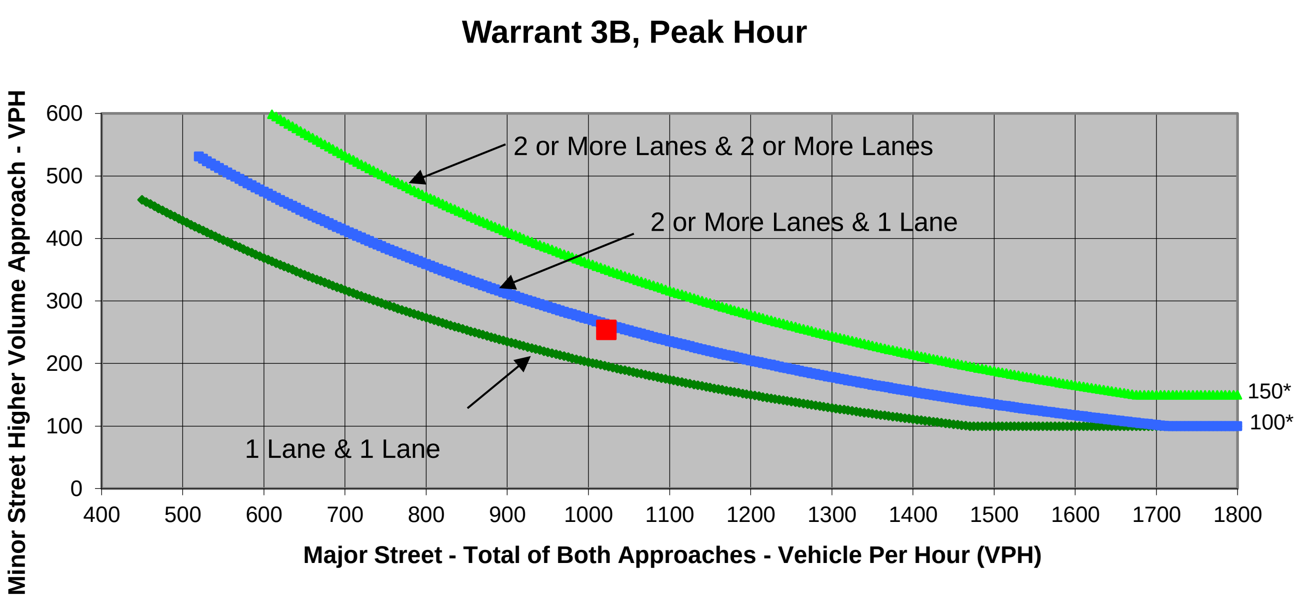
			Project	Cityline Sunnyvale
Major Street	Washington Avenue		Scenario	Cumulative With Project
Minor Street	Frances Street		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	141	156	0
Through	0	0	538	269
Right	0	113	0	59
Total	0	254	694	328

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Washington Avenue	Minor Street Frances Street	Warrant Met
Number of Approach Lanes	**1**	**1**	**YES**
Traffic Volume (VPH) *	**1,022**	**254**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

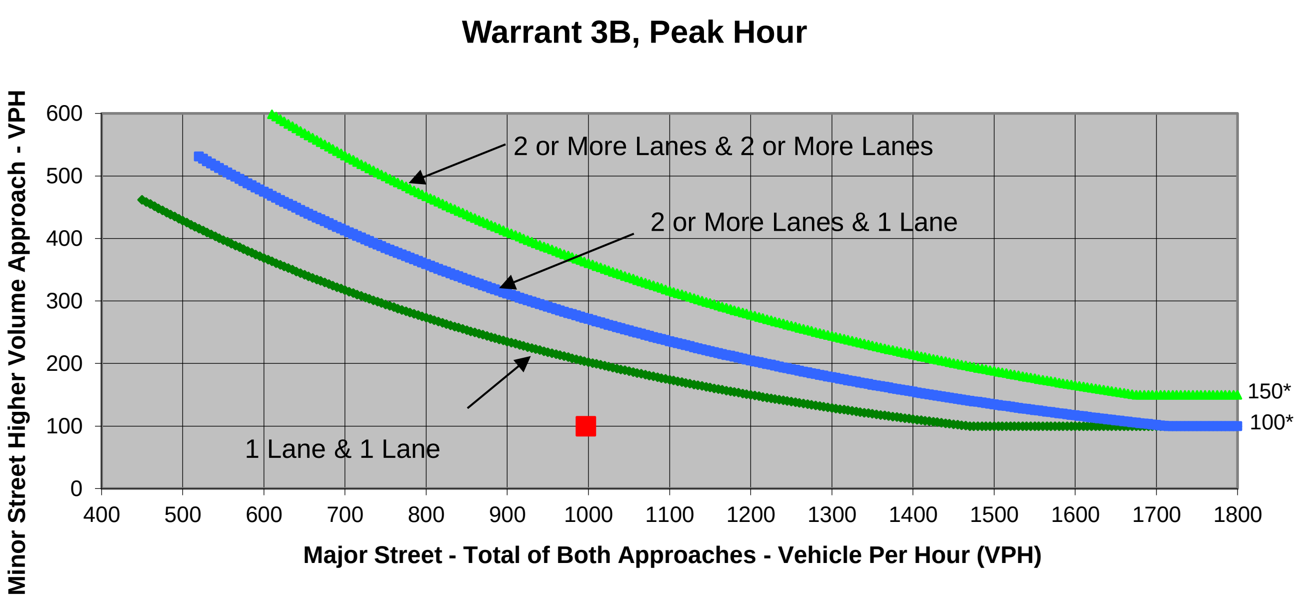
		Project	Cityline Sunnyvale
Major Street	Washington Avenue	Scenario	Cumulative With Project
Minor Street	Murphy Avenue	Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	25	22	29	43
Through	10	42	494	255
Right	42	36	147	29
Total	77	100	670	327

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Washington Avenue	Minor Street Murphy Avenue	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**997**	**100**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

		Project	Cityline Sunnyvale
Major Street	Iowa Avenue	Scenario	Cumulative With Project
Minor Street	Murphy Avenue	Peak Hour	PM

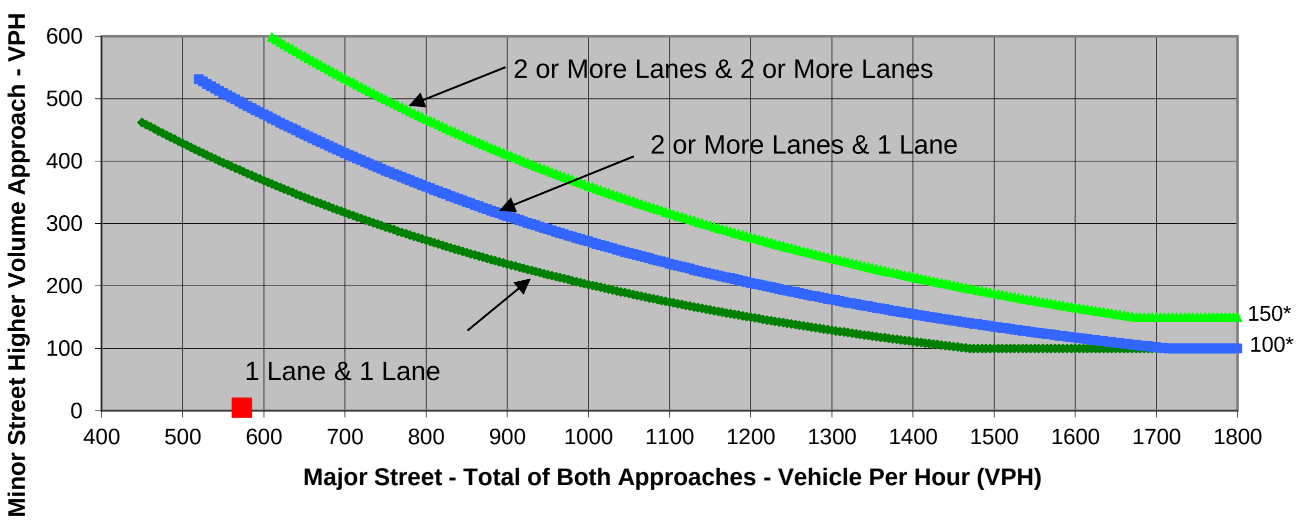
Turn Movement Volumes

	NB	SB	EB	WB
Left	0	5	33	0
Through	0	0	325	184
Right	0	0	0	31
Total	0	5	358	215

Major Street Direction

	North/South
x	East/West

Warrant 3B, Peak Hour



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Iowa Avenue	Minor Street Murphy Avenue	Warrant Met
Number of Approach Lanes	**1**	**1**	**<u>NO</u>**
Traffic Volume (VPH) *	**573**	**5**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

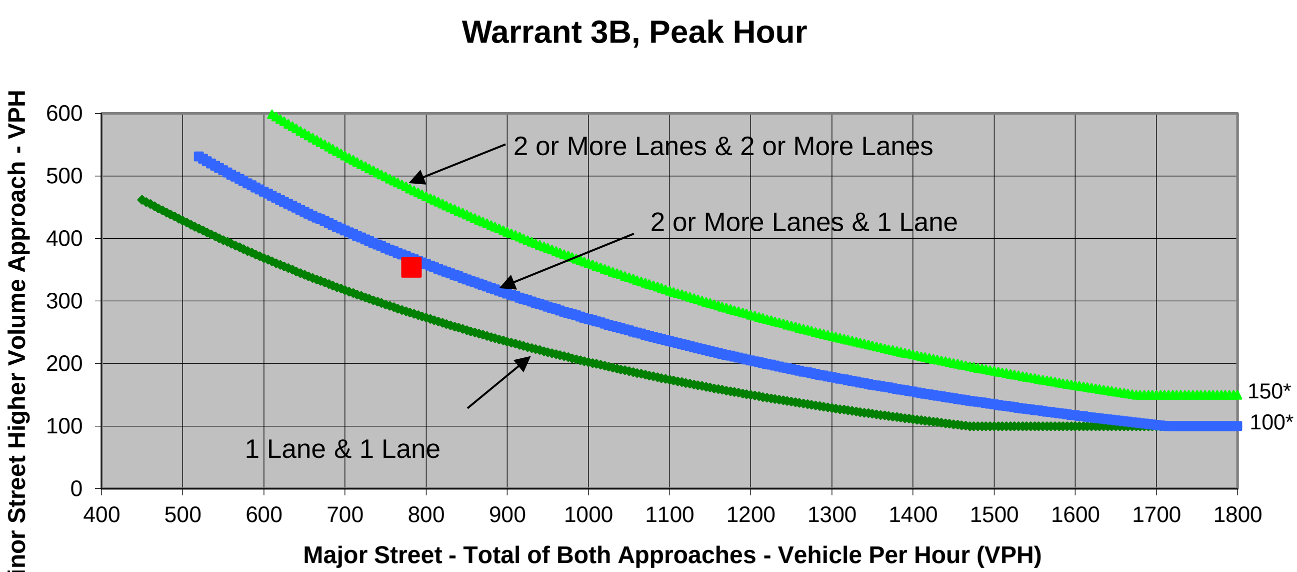
		Project	Cityline Sunnyvale
Major Street	Arques Avenue	Scenario	Cumulative With Project
Minor Street	Central Expressway WB	Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	324	0	0	0
Through	0	0	326	456
Right	30	0	0	0
Total	354	0	326	456

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Arques Avenue	Minor Street Central Expressway WB	Warrant Met
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**782**	**354**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

APPENDIX E: APPROVED, NOT OCCUPIED AND PENDING PROJECTS

Approved & Pending Projects

Table 1 outlines the approved land use projects considered for Background and Background Plus Project Conditions in the City of Sunnyvale. **Table 2** outlines the pending land use projects considered for Cumulative and Cumulative Plus Project Conditions in the City of Sunnyvale.

Table 1: City of Sunnyvale Approved But Not Yet Constructed Projects

ID#	Project Title/Project Applicant	Description
1	1120 Innovation Way	Moffett Park Major Special Development Permit for the redevelopment of a former fire station site to a new 7-story, 113,550 sq. ft. hotel with 180 rooms including a 4,500 s.f. restaurant area.
2	1235 Bordeaux Dr.	Major Moffett Park Special Development Permit to demolish an existing 41,832 sq. ft. one-story industrial building and construct two new hotels on the same site - 8-story, 164-room AC Hotel and 8-story, 186-room Courtyard Marriott Hotel with a detached three-and-a-half level, above grade parking structure. Miscellaneous Plan Permit #2017-7587 proposes minor architectural changes for the hotels and parking garage and associated height increase, room count distribution (reflected in above numbers), lot coverage increase to 45%, and various landscaping changes.
3	750 Lakeway Drive	Redevelopment of a 232 room hotel with a partial demolition of 32 rooms and construction of a new 7-story hotel with 111 guest rooms (79 net new rooms) including 32 structured parking spaces and associated site modifications.
4	767 N. Mathilda Ave.	Redevelop a commercial site with a 6-story 238-room hotel with surface parking (Hilton Garden Inn)
5	795 S. Fair Oaks Ave.	182 room, 5-story hotel
6	1081 Innovation Way	New 2.43M sq. ft. office campus with 70% FAR development in a MP-TOD Zoning District. (Juniper Networks)
7	1111 Lockheed Martin Way	Develop 47-acre parcel with five, 8-story office buildings, 4 parking structures and one amenitiy building for a total floor area of 1,651,795 s.f. and 80% FAR. Project includes a General Plan Amendment to modify the Moffett Park Specific Plan, Rezone to MP-TOD, Special Development Permit for site and architectural review, and an Environmental Impact Report.
8	1152 Bordeaux Dr.	Major Moffett Park Design Review Application for 1.77 million square feet of office with parking structures and ammenities building.
9	1194 N. Mathilda Ave.	Allow a new 248,259 sq. ft., 5-story office/ R & D building over a 3-level parking structure attached to the building (including one-level of underground basement parking. Project includes reconfiguration of existing surface parking lot.
10	215 Moffett Park Drive	Major Moffett Park Design Review to allow a new 86,400 square foot R&D building, 5,000 sq. ft. restaurant, and 3-level

Table 1: City of Sunnyvale Approved But Not Yet Constructed Projects

ID#	Project Title/Project Applicant	Description
		parking garage resulting in resulting in total of 248,460 square feet of building area on the site and 59.9% FAR with LEED Gold incentive.
11	221 N. Mathilda Ave.	Allow redevelopment of a 4.3-acre site (former Mellow's Nursery) into a three-story office/R&D building with a four-level parking structure with partial sub-grade parking, resulting in 145, 516 square feet of floor area (80% FAR). The project includes a request for a Resource Alteration Permit for modifications to a Heritage Resource.
12	280 Santa Ana Ct./ 280 N. Wolfe	Allow three 6-story office buildings with a total of 777,170 sf and 30,000 sf of amenities.
13	495 E. Java Dr.	Expansion of the NetApp campus (site 1) utilizing the green building bonus to enable 76.4% FAR and a total of 1,496,971 s.f.; previously approved buildings 5 and 6 will increase by 120,993 s.f including a fifth story. A new 4-level parking garage is also proposed.
14	549 Baltic Way	Expansion of the NetApp campus (site 3) utilizing the green building bonus to enable 60%; FAR for a total of 483,326 s.f. the site would be redeveloped with two 5-story buildings (15 &16).
15	589 W. Java	Yahoo! campus expansion to add a new, 6-story 315,000 sq. ft. office building, 24,000 sq. ft. special use amenities building and one parking structure.
16	610 N. Mary Ave.	Peery Park Plan Review Permit to allow the demolition of 28 existing office/industrial bldgs totaling 768,665 sq. ft. & construction of nine three-story & three four-story office bldgs totaling 1,471,400 sq. ft.; a one-story & two, two-story amenity bldgs totaling 40,000 sq. ft.; a four-level, & three six-level above-grade parking structures; an east-west private street with public access; abandonment of Maude Ct; pedestrian and bicycle routes; & site and offsite improvements. Tentative Map to allow 28 exist lots to be merged into 7 lots.
17	615 N. Mathilda Ave.	Redevlop 8 parcels by combining the site into one site and construct two new 4-story office R&D buildings with a total of 330,353 s.f. (includes 13,988 s.f. amenities area) resulting in 100% FAR, and serviced by a new 5-level parking garage. The project is located in the PPSP.
18	684 W. Maude Ave.	Peery Park Plan Review Permit to construct a 174,545-square foot, four-story corporate/research and development (R&D) office building and a 6-level parking structure on a 4.01-acre site resulting in a total of 100% FAR.
19	1120 Kifer Rd.	Redevelop a 7.99-acre industrial property with mixed-use, including 7,400 square feet of retail and 520 apartment units (Greystar).
20	1250 Lakeside Dr.	Allow two new buildings: 1) a 6-story, 263 room hotel with an attached 3,000 sq. ft. restaurantand an attached 3-level above grade parking structure, and

Table 1: City of Sunnyvale Approved But Not Yet Constructed Projects

ID#	Project Title/Project Applicant	Description
		2) 5-story, 250 unit apartment building over a 2-level podium parking garage. Includes an amendment to the Lakeside Specific Plan.
21	2502 Town Center Ln.	2007-0030: To allow a mixed-use project, including 292 residential units, 315,000 square feet of office use, a 200-room hotel, and 1,000,000 square feet of retail use (including : 79,094 sq. ft. cinema with 1,800 seats, existing Target (173,008 sq. ft.) and existing Macy's (177,000 sq. ft.)). in DSP Block 18 Zoning District. (Town Center) 2016-7290: Amend the Final Conditions of Approval for the Sunnyvale Town Center project, including: allowing rental housing units with a ground floor leasing office; allowing temporary parking lot and landscaping improvements at Redwood Plaza; adding allowable ground floor uses; clarifying the expiration of Special Development Permit design approvals; and updating conditions of approval to meet current City policies and standards pertaining to, but not limited to, public improvements, green building and affordable housing. 2016-7968 - Cinema plans were modified (sq. ft. inreased from 60,000 sq. ft. to 79,094 sq. ft. (to include the mezzanine space not previously counted) and reduced the number of seats from 2,950 to 1,800. 2017-7527 - Modification to previously approved Sunnyvale Town Center project, including architectural and site revisions to the 94 multi-family residential units facing Iowa Avenue (Blocks 1, 4 and 5). 333 W. Iowa - parcels 209-34-020, 209-35-013, and 209-35-024
22	520 Almanor Ave.	Peery Park Plan Review Permit to to construct a 207,620-sq. ft., four-story corporate/research and development (R&D) office building and a 7-level, partially underground parking structure with attached ground floor retail of up to 4,000 sq. ft. on a 4.4-acre site resulting in a total of 110% FAR. The project includes outdoor dining/recreation areas and a pedestrian/bicycle path for public use.
23	675 Almanor Ave.	Allow a 150,651 sq. ft. four-story office/R&D building and a detached five-level and partial underground parking structure, resulting in 100% FAR and located within the Peery Park Specific Plan area. The project includes a 2,500 sq. ft. retail space on the ground floor
24	871 and 895 E. Fremont Ave.	Redevelopment of a 5.49-acre site with 138 residential units (39 townhomes and 99 apartments) plus 6,934 square feet of retail/office use with surface and underground parking. Project involves Rezoning of 895 E. Fremont Ave. from C-1/ECR to R-3/ECR and preparation of an Environmental Impact Report (EIR).

Table 1: City of Sunnyvale Approved But Not Yet Constructed Projects

ID#	Project Title/Project Applicant	Description
25	1008 E. El Camino Real	Rezone the property at 1314-1320 Poplar Ave. from R-1/ECR (Low Density Residential/Precise Plan for El Camino Real) to C-2/ECR (Highway Business Commercial/Precise Plan for El Camino Real) and redevelop former mobile home park (Conversion Impact Report certified and closure approved in January 2016) and existing duplex property comprising a project site of 2.1 acres into a 108-unit, 5-story mixed income (20% of units will be affordable to very low income households) rental housing complex with associated site improvements.
26	1139 Karlstad Dr.	To demolish an existing 100,517 sq. ft. one-story industrial building and construct a four-story, 250-unit residential apartment building above a podium parking structure. The project proposes a State affordable housing and green building density bonus and includes 20 very low-income units.
27	520-550 E Weddell	General Plan Amendment and Rezone from Industrial to Residential High Density (M-S/POA to R-4/PD) for 550 Weddell and Special Development Permit to allow redevelopment with 465 apartment units for 550 and 520 Weddell.
28	610 E. Weddell Dr.	General Plan Amendment Initiation request to study a change from Industrial to High Density Residential; Rezone from M-S/PD to R-4/PD; and Special Development Permit to allow development of 205 apartment units.
29	701-729 E. Evelyn Ave.	Allow 204 townhome units
30	728, 740, 750, 760 and 814 San Aleso Ave.	Redevelop industrial property into 118 multi-family units, including 96 townhome condominiums and 22 duets) within the Peery Park Specific Plan.
31	915 De Guigne Dr.	450 townhouse units and demolition of the existing maufacturing site. Also see GPA and RZ under 2014-7416

Source: City of Sunnyvale, 2018

Table 2: City of Sunnyvale Pending Projects

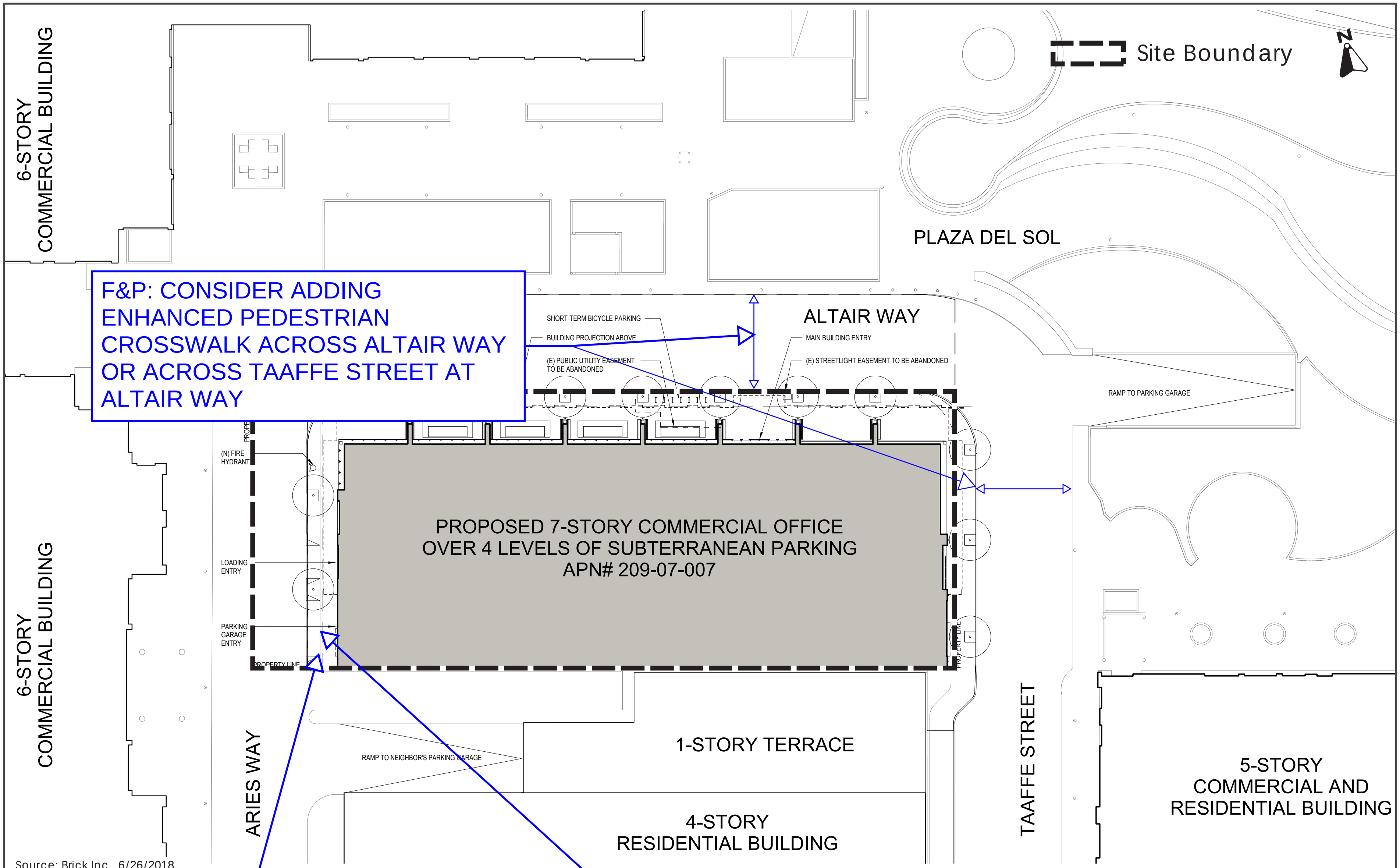
ID#	Project Title/Project Applicant	Description
1	1080 Stewart Drive	Redevelop a hotel site (Residence Inn) resulting in a total 357 guest rooms. The new 7-story building will contain 133 rooms (24 of the 248 existing guest rooms are to to be demolished, resulting in a net increase of 109 rooms).
2	1100 N. Mathilda Ave.	Addition, demolition, renovation to an existing 173- room hotel to result in a 358-room hotel (remove 83 rooms, save and renovate 88 rooms, new 270 rooms) and 18,086 s.f. of meeting areas, Food and bev 8,581 s.f. and 8,000 s.f. of spa use) served by 296 parking spaces (203 spaces in the 3-level parking structure) and associated site improvements.
3	1296 Lawrence Station Rd.	For a new 105,553-s.f. extended-stay hotel with 135 hotel rooms and 73 parking spaces, resulting in 44.9% lot coverage.
4	150 Aries Way	Specific Plan Amendment, rezone, environmental reveiw to consider amending the Downtown Specific Plan (DSP) land use designation from high density residential to retail and office, as well as increase the allowable height from 85 feet to 111 feet. Including a proposal for a 104,440 s.f. seven story building with underground parking resultingin a 4.75 FAR and a request for an exception from the parking standard by providing 232 spaces and valet service where 314 spaces are required.
5	250 E. Java Dr.	Major Moffett Park Special Development Permit for a new 5-story hotel with 180 guest rooms and 6,000 SF of ground floor retail.
6	830 E. El Camino Real	Demolish an existing single story restaurant (Crazy Buffet) and construct a new 127-unit, four-story hotel with underground parking garage on a 2.56-acre parcel.
7	861 E. El Camino Real	Allow a 162-room hotel (Hampton Inn), including underground parking
8	1050 Kifer Rd.	Redevelop a 21.7-acre site (Intuitive Surgical), including construction of two new four-story office/R&D buildings and two parking structures resulting in 755,144 square feet and 80% Floor Area Ratio (FAR). Project includes retention of an existing one-story building and a multi-use trail, and is located within the future Lawrence Station Area Plan.
9	1060 Stewart Dr.	"Demolish seven (120,399 s.f.) of the nine (293,455 s.f.) existing mini-storage buildings; construct two, 4-story, mini-warehouse buildings (170,016 s.f. and 147,376 s.f., total new 317,392 s.f.), resulting in a total of 490,448 s.f. for the entire site (net new 196,993 s.f.), resulting in 43.4% Lot Coverage and 166% FAR for the public storage (self storage) use. See PR comments (File No. 2017-7416) for previous comments."
10	360 Caribbean Dr.	Major Moffett Park Special Development Permit for the redevelopment of a 40.5 acre site for two new 5-story R&D office buildings totaling 1,041,890 s.f. including a 4-level parking structure resulting in 59% FAR. The existing 710,381 s.f of office & manufacturing buildings will be demolished.
11	445 N. Mary Ave.	New 4-story office building, 4.5-level parking structure and associated site work and landscaping to an existing campus

Table 2: City of Sunnyvale Pending Projects

ID#	Project Title/Project Applicant	Description
		consisting of 2 4-story office buildings and one 2-level parking deck. The project will result in 100% FAR.
12	899 Kifer Rd.	To allow a General Plan Amendment for an Industrial Intensification Designation and Rezoning from MS to MS/100% FAR.
13	1 AMD Place	Redevelop a site to construct 1,074 dwelling units (130 townhomes, 887 mid-rise apartments, 57 walk up apartments) including extension of a public street, and dedication of a 6.5 acre public park.

Source: City of Sunnyvale, 2018

APPENDIX F: SITE PLAN MARK-UP



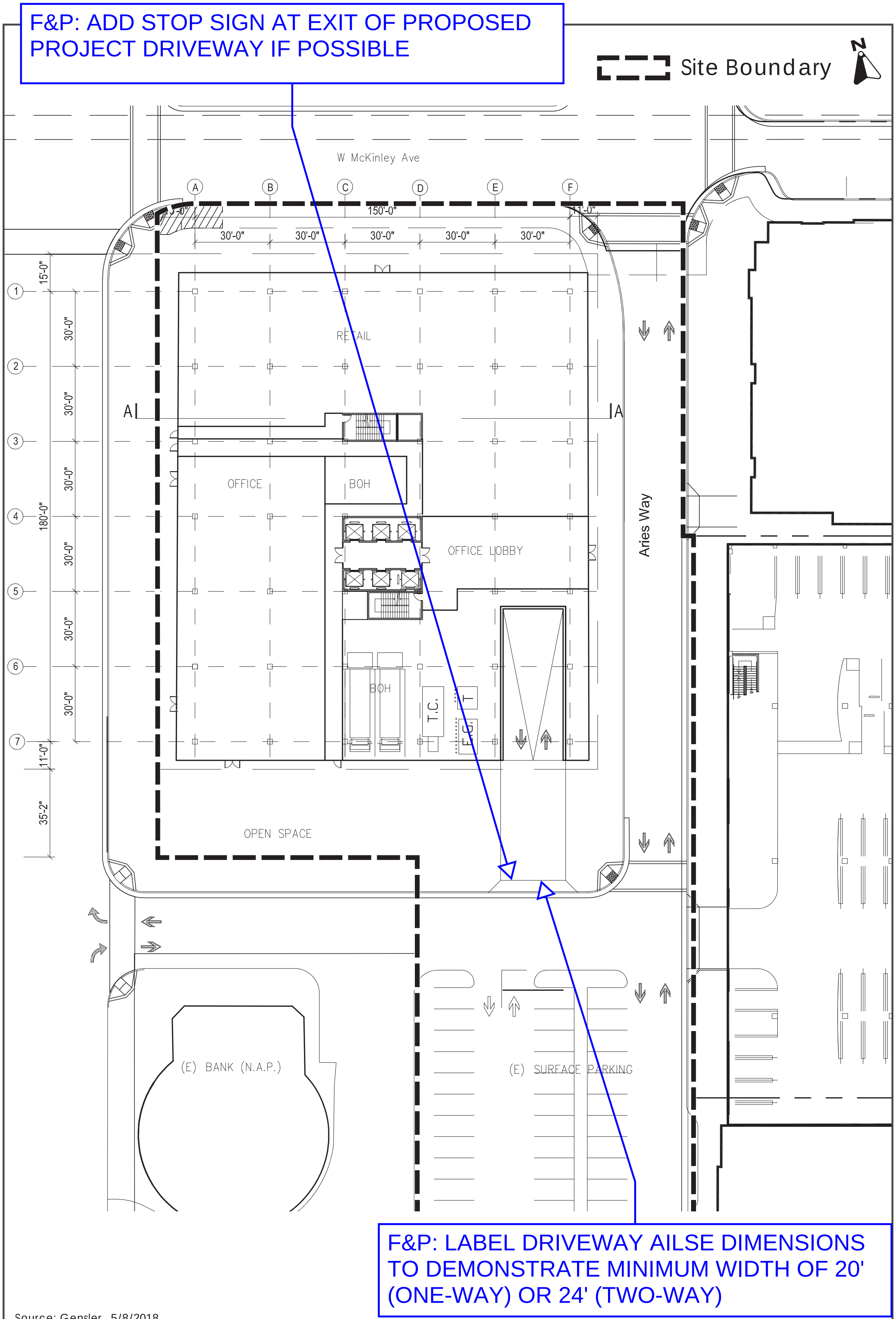
F&P: CONSIDER ADDING ENHANCED PEDESTRIAN CROSSWALK ACROSS ALTAIR WAY OR ACROSS TAAFFE STREET AT ALTAIR WAY

Source: Brick Inc., 6/26/2018.

100 ALTAIR WAY CONCEPTUAL SITE PLAN | FIGURE 1.3-5

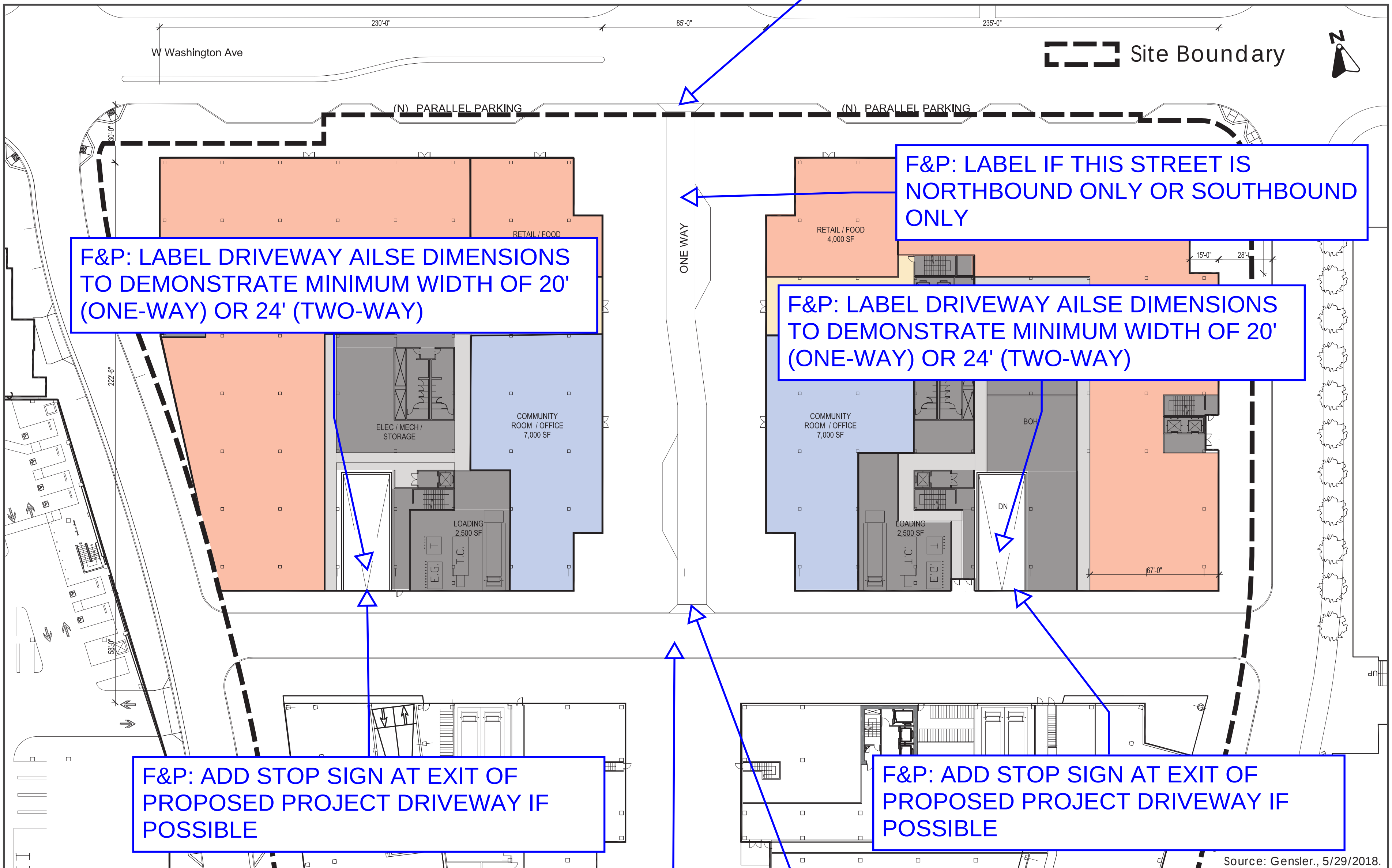
F&P: ADD STOP SIGN AT EXIT OF PROPOSED PROJECT DRIVEWAY IF POSSIBLE

F&P: LABEL DRIVEWAY AILSE DIMENSIONS TO DEMONSTRATE MINIMUM WIDTH OF 20' (ONE-WAY) OR 24' (TWO-WAY)



Source: Gensler., 5/8/2018.

300 MATHILDA AVENUE CONCEPTUAL SITE PLAN	FIGURE 1.3-7



MACY'S CONCEPTUAL SITE PLAN

FIGURE 1.3-9

F&P: INSTALL ENHANCED PEDESTRIAN CROSSWALK ACROSS EAST-WEST ACCESS ROAD

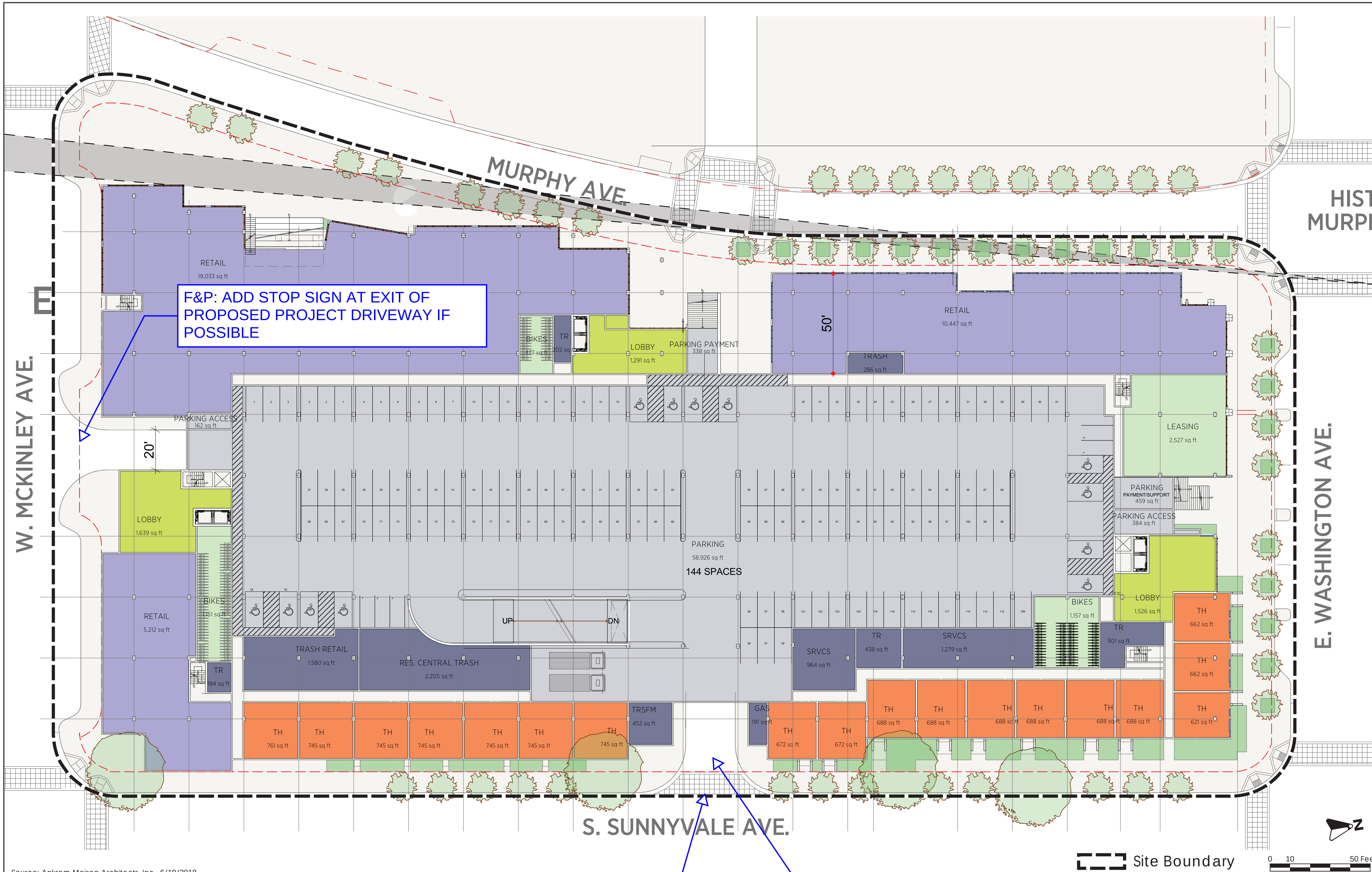
F&P: IF SOUTHBOUND ONLY STREET, CONSIDER ADDING STOP SIGN AT INTERSECTION

F&P: ADD STOP SIGN AT EXIT OF PROPOSED PROJECT DRIVEWAY IF POSSIBLE

REDWOOD SQUARE CONCEPTUAL SITE PLAN

FIGURE 1.3-11

F&P: LABEL DRIVEWAY AILSE DIMENSIONS TO DEMONSTRATE MINIMUM WIDTH OF 20' (ONE-WAY) OR 24' (TWO-WAY)



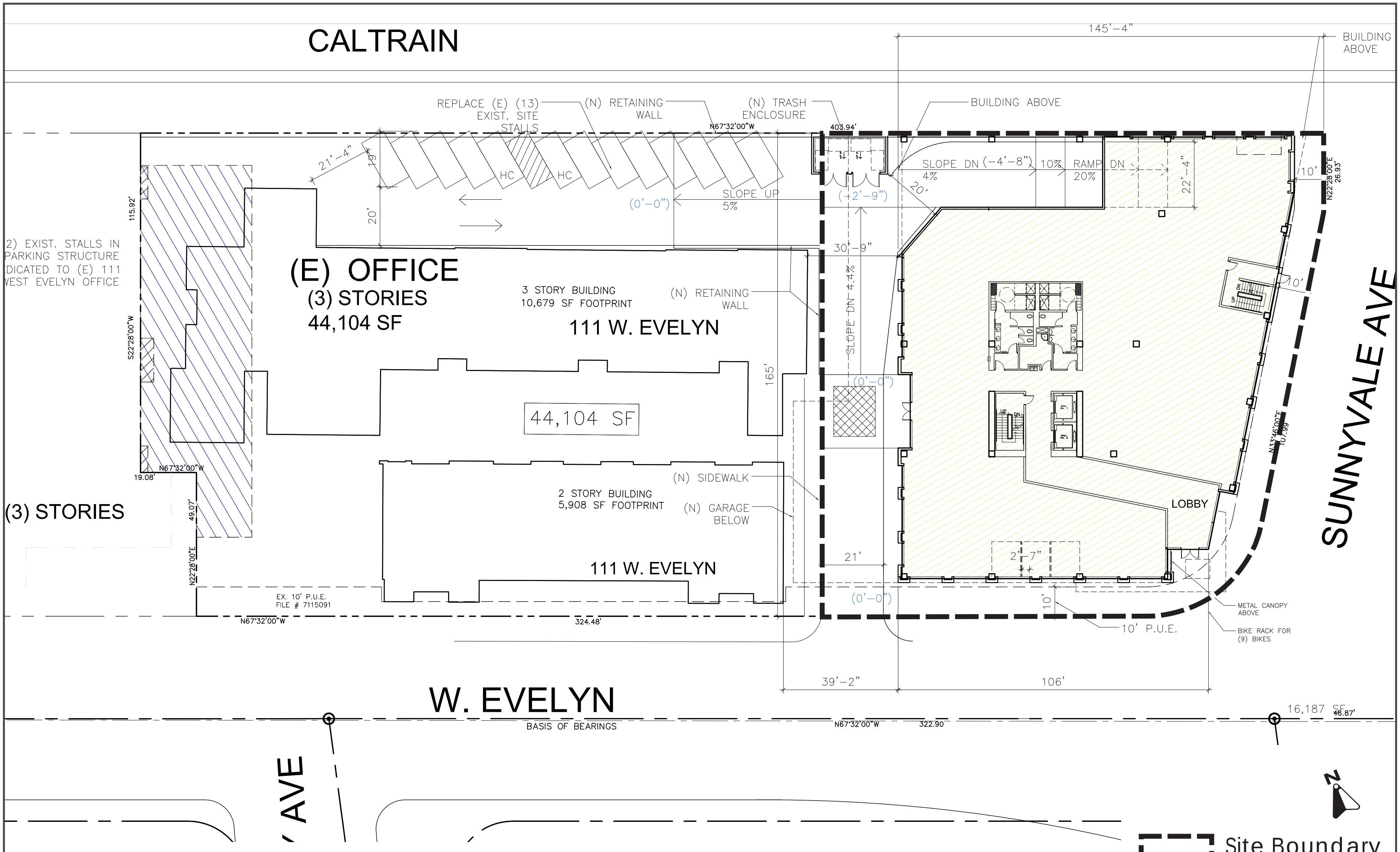
Source: Ankrom Moisan Architects, Inc., 6/19/2018.

SUB-BLOCK 6 CONCEPTUAL SITE PLAN

FIGURE 1.3-13

F&P: ADD STOP SIGN AT EXIT OF PROPOSED PROJECT DRIVEWAY IF POSSIBLE

F&P: LABEL DRIVEWAY AILSE DIMENSIONS TO DEMONSTRATE MINIMUM WIDTH OF 20' (ONE-WAY) OR 24' (TWO-WAY)



Source: Chang Architecture, 7/13/2018.

MURPHY SQUARE CONCEPTUAL SITE PLAN

FIGURE 1.3-15