HEXAGON TRANSPORTATION CONSULTANTS, INC.

Quito Village

Transportation Impact Analysis

Prepared for:

Sand Hill Property Company

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Hexagon Transportation Consultants, Inc.
Hexagon Office: 4 North Second Street, Suite 400
San Jose, CA 95113
Hexagon Job Number: 19DC04
Phone: 408.971.6100
Client Name: Sand Hill Property Company

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Executive Summary

This study was conducted for the purpose of identifying the potential transportation impacts of the proposed redevelopment of the Quito Village shopping center in Saratoga, California. The site is located at the southwest corner of Paseo Presada and Cox Avenue, and is located between the two major north-south arterials of Saratoga Avenue and Quito Road. The project proposes to demolish the existing shopping center and construct 91 residential units and 5,000 square feet (s.f.) of commercial space. The project proposes to provide 237 spaces of parking in attached garages and surface parking. The existing shopping center is partially vacant. Access to the project site would be provided via two driveways on Cox Avenue. Both existing driveways on Paseo Presada would be closed, and one new driveway would be added on Cox Avenue.

The potential impacts of the project were evaluated in accordance with the standards set forth by the City of Saratoga and the Santa Clara County Valley Transportation Authority (VTA). The study includes an analysis of AM and PM peak hour traffic conditions for four signalized intersections and two unsignalized intersections in the vicinity of the project site. Potential impacts to pedestrians, bicycles, and transit were also considered.

Based on trip generation rates recommended by the Institute of Transportation Engineers (ITE), it is estimated that the proposed project would generate 666 net new daily vehicle trips, with 42 net new trips (10 inbound and 32 outbound) during the AM peak hour and 51 net new trips (32 inbound and 19 outbound) during the PM peak hour. These estimates assume that the commercial portion of the project would generate no net trips because the proposed floor space is the less than the commercial floor space currently occupied at the project site. Additionally, no trip credits were taken for the decrease in commercial space, providing a more conservative analysis.

The results of the intersection level of service analysis under existing and cumulative scenarios, with and without the project, are summarized in Table ES-1. The results determined that under all scenarios with and without the project, most study intersections would operate in accordance with local standards during both AM and PM peak hours. The intersection of Quito Road and Cox Avenue was calculated by TRAFFIX software to have an unacceptable level of service. However, TRAFFIX software calculates level of service and delay based on continuous flow of vehicles through the intersection. If vehicles arrived in a continuous flow, it would be difficult for vehicles to turn from Cox Avenue onto Quito Road. However, because there are upstream and downstream signal-controlled intersections, this would lead to platooning of vehicles through the Quito Road/Cox Avenue intersection. This would allow for vehicles to easily find gaps in traffic to make a left or right turn from Cox Avenue onto Quito Road. Field observations were conducted and confirmed that it is unlikely the intersection is currently operating at an unacceptable level of service. The addition of project trips in the eastbound direction (7 AM peak hour trips and 4 PM peak hour trips) are unlikely to have a noticeable impact on traffic operations at this

intersection. Additionally, if future residents have difficulty making the left-turn from Cox Avenue to Quito Road (the most difficult movement), they have the option of using the signalized intersection at Bucknall Road to turn north onto Quito Road.

The report also makes the following conclusions and recommendations for the project:

- Signage should be used at the second driveway on Cox Avenue to clearly identify the retail entrance.

Table ES-1
Intersection Level of Service Summary

				Existing Conditions						Cumulative Conditions					
				No Project		with Project				No Project		with Project			
Study #	Intersection	Peak Hour	Count Date	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Incr. in Crit. Delay (sec)	Incr. in Critical V/C	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Incr. in Crit. Delay (sec)	Incr. in Critical V/C
1	Quito Road/Cox Avenue**	AM	04/30/19	22.6	C	26.8	D	0.5	0.003	32.2	D	**41.8**	E	1.1	0.083
		PM	04/30/19	**120+**	F	**120+**	F	4.3	0.014	**120+**	F	**120+**	F	6.4	0.018
2	Paseo Presada/Cox Avenue	AM	05/01/19	12.3	B	12.5	B	0.1	0.007	14.1	B	14.3	B	0.2	0.008
		PM	05/01/19	10.4	B	10.5	B	0.1	0.007	11.1	B	11.3	B	0.1	0.007
3	Saratoga Avenue/Cox Avenue	AM	05/02/19	35.2	D	35.5	D	0.1	0.003	36.2	D	36.4	D	0.1	0.003
		PM	05/02/19	37.0	D	37.5	D	0.2	0.003	38.4	D	38.8	D	0.2	0.003
4	Lawrence Expressway/Saratoga Avenue*	AM	10/03/18	49.5	D	49.7	D	0.7	0.004	54.6	D	55.2	E	1.4	0.004
		PM	11/15/18	46.5	D	46.7	D	0.3	0.006	48.5	D	48.7	D	0.4	0.006
5	Saratoga Avenue/US101 NB Ramps	AM	05/02/19	16.1	B	16.0	B	0.0	0.006	16.6	B	16.6	B	0.1	0.006
		PM	05/01/19	23.7	C	23.8	C	0.0	0.000	25.2	C	25.2	C	0.0	0.001
6	Saratoga Avenue/US 101 SB Ramps	AM	05/02/19	14.4	B	14.4	B	0.0	0.000	15.0	B	15.1	B	0.0	0.000
		PM	05/01/19	15.4	B	15.5	B	0.2	0.003	15.7	B	15.9	B	0.2	0.003

Note:
* Denotes a CMP designated Intersection
** Quito Road/Cox Avenue is a Two-Way Stop Controlled Intersection. The approach with the worst level of service and average delay is reported.
Bold indicates a substandard level of service.

1. Introduction

This study was conducted for the purpose of identifying the potential transportation impacts of the proposed redevelopment of the Quito Village shopping center in Saratoga, California. The site is located at the southwest corner of Paseo Presada and Cox Avenue, and is located between the two major north-south arterials of Saratoga Avenue and Quito Road. The project proposes to demolish the existing shopping center and construct 91 residential units and 5,000 square feet (s.f.) of commercial space. The project proposes to provide 237 spaces of parking in attached garages and surface parking. The existing shopping center is partially vacant. Access to the project site would be provided via two driveways on Cox Avenue. The existing driveways on Paseo Presada would be closed, and one new driveway would be added on Cox Avenue.

Scope of Study

This study was conducted for the purposed of identifying the potential transportation impacts related to the proposed development. The potential impacts of the project were evaluated in accordance with the standards set forth by the City of Saratoga and the Santa Clara County Valley Transportation Authority (VTA). A Congestion Management Program (CMP) analysis was not required because the project would generate fewer than 100 peak trips. The traffic study includes an analysis of AM and PM peak hour traffic conditions for four signalized intersections and two unsignalized intersections in the vicinity of the project site. An analysis on site access, on-site circulation, parking, vehicle queuing, and transit, bicycle, and pedestrian access is also included.

Study Intersections

1. Quito Road & Cox Avenue (Unsignalized Intersection)
2. Paseo Presada & Cox Avenue (Unsignalized Intersection)
3. Saratoga Avenue & Cox Avenue
4. Lawrence Expressway & Saratoga Avenue (CMP Intersection)
5. Saratoga Avenue & Northbound Highway 85 Ramps
6. Saratoga Avenue & Southbound Highway 85 Ramps

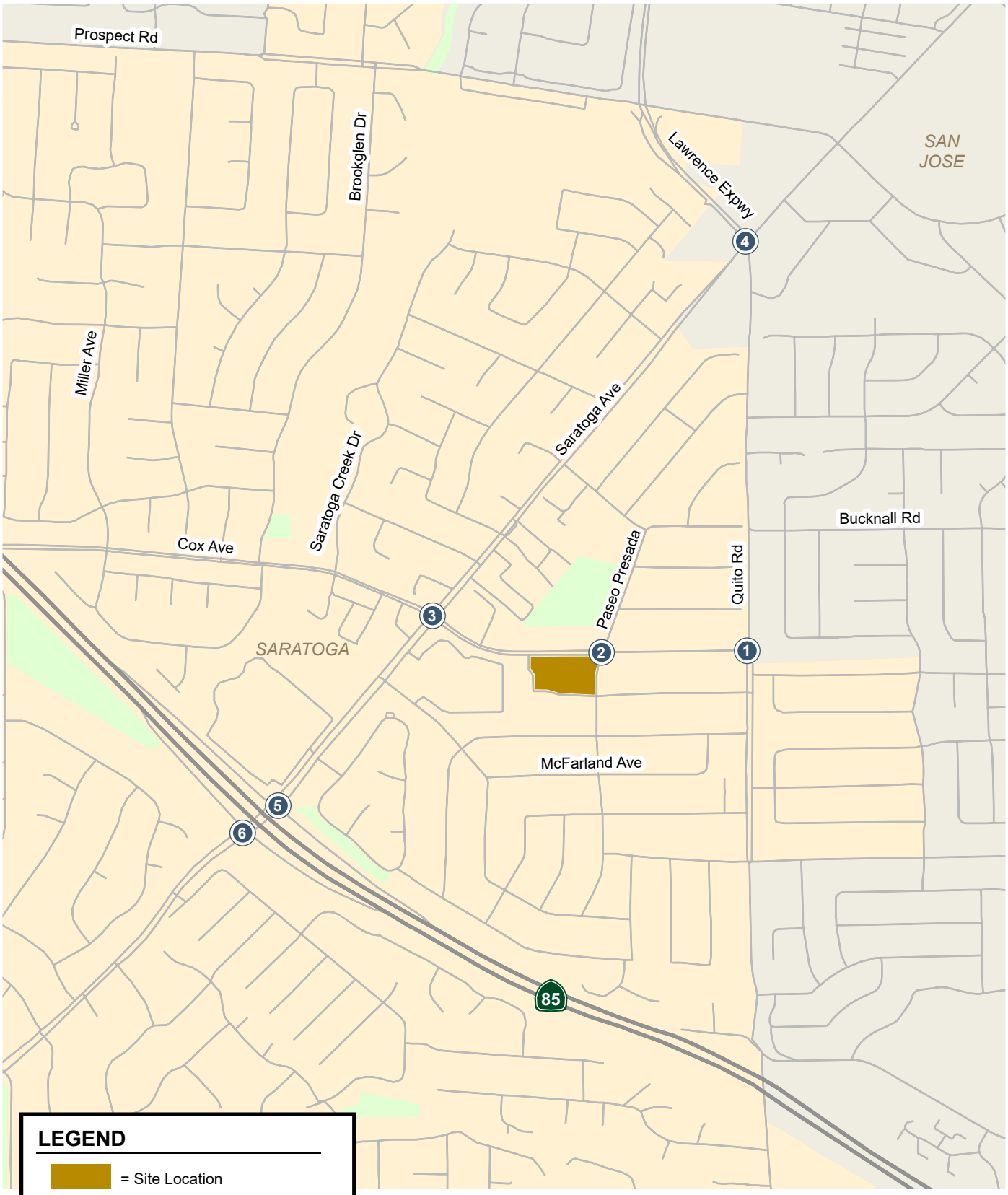


Figure 1
Site Location and Study Intersections

NORTH
Not to Scale

91 total units
4,999 sf retail
3 standard accessible surface parking spaces
38 standard surface parking spaces
14 compact surface parking spaces (25%)
55 total surface parking spaces

Net Site Area +/- 265,502 sf (6.095 ac.)
Res. Building coverage +/- 107,045 sf (40.3%)
Comm. Building Coverage +/- 6,181 sf (2.3%)
Total Building Coverage +/- 113,226 sf (42.6%)

20' wide fire access path
w/ 28' inside turning radius,
44' outside turning radius

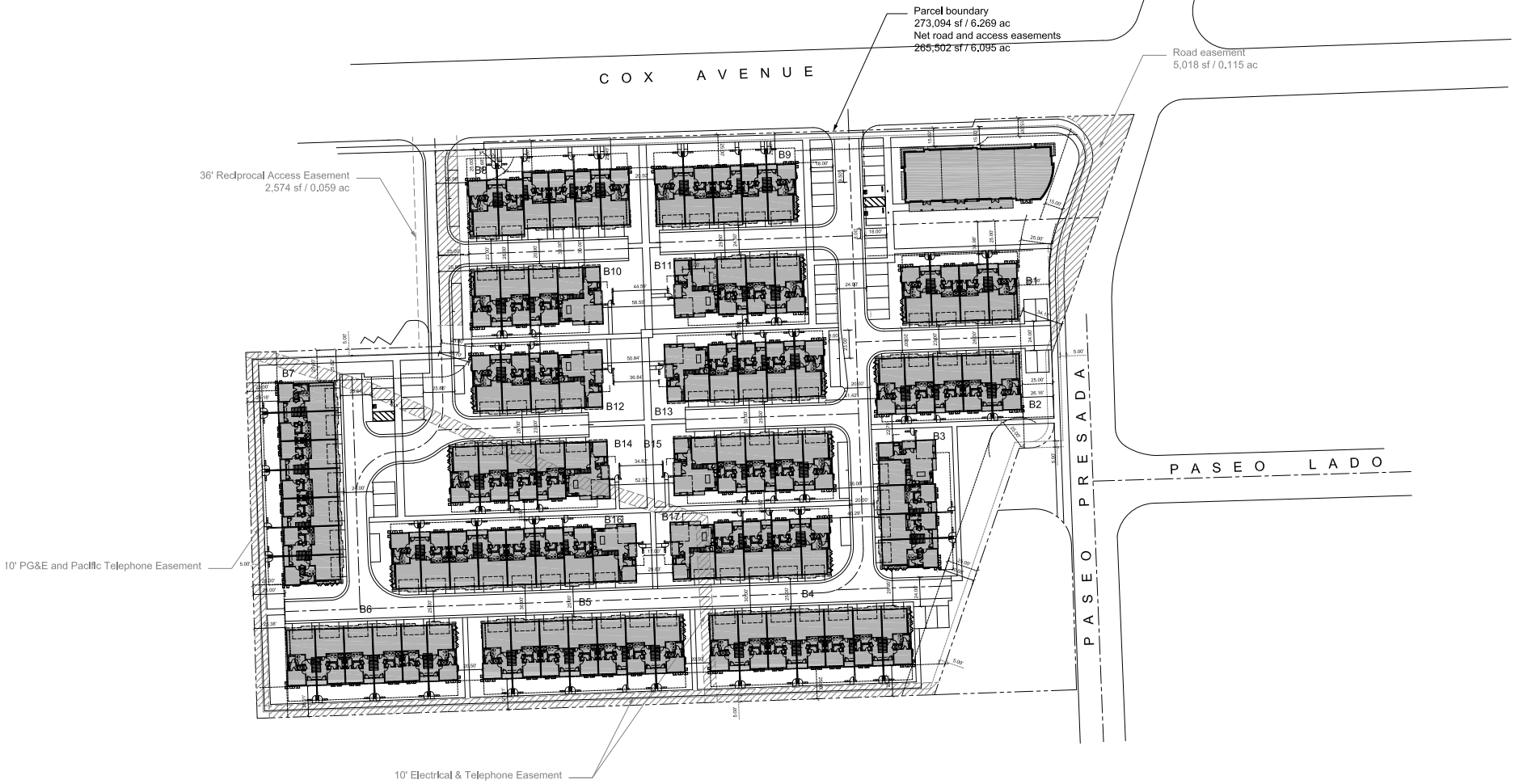


Figure 2
Site Plan

Traffic conditions at the study intersections were analyzed for both the weekday AM and PM peak hours of adjacent street traffic. The AM peak hour typically occurs between 7:00 AM and 9:00 AM and the PM peak hour typically occurs between 4:00 PM and 6:00 PM on a regular weekday. These are peak commute hours during which most traffic congestion occurs on the roadways.

Traffic conditions were evaluated for the following scenarios:

Scenario 1: *Existing Conditions.* Existing traffic volumes at study intersections were based on traffic counts conducted in October 2018, April 2019, and May 2019 and from the 2018 CMP monitoring report. The study intersections were evaluated with a level of service analysis using TRAFFIX software in accordance with the *2000 Highway Capacity Manual* methodology.

Scenario 2: *Existing plus Project Conditions.* Existing traffic volumes with the project were estimated by adding to existing traffic volumes the additional traffic generated by the project. Existing plus project conditions were evaluated relative to existing conditions in order to determine the effects the project would have on the existing roadway network.

Scenario 3: *Cumulative Conditions.* Cumulative traffic volumes represent traffic growth through a 10-year horizon. Cumulative traffic volumes were obtained by applying a 1% annual growth factor to existing volumes. Cumulative plus project conditions were evaluated relative to cumulative conditions to determine potential project impacts.

Methodology

This section presents the methods used to determine the traffic conditions for each scenario described above. It includes descriptions of the data requirements, the analysis methodologies, and the applicable level of service standards.

Data Requirements

The data required for the analysis were obtained from new traffic counts, existing data from recent traffic studies, existing data from the Santa Clara County CMP, and field observations. The following data were collected from these sources:

- Existing peak-hour intersection turning-movement volumes
- Lane configurations
- Intersection signal timing and phasing

Level of Service Standards and Analysis Methodologies

Traffic conditions at the study intersections were evaluated using level of service (LOS). *Level of Service* is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The various analysis methods are described below.

Signalized Intersections

The City of Saratoga evaluates level of service at signalized intersections based on the *2000 Highway Capacity Manual* (HCM) level of service methodology using TRAFFIX software. This method evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. The City of Saratoga level of service standard for signalized intersections is LOS D or better. The Santa Clara Congestion Management Program has a level of service standard of LOS E for CMP intersections. Table 1 shows the level of service definitions for signalized intersections.

Table 1
Signalized Intersection Level of Service Definitions Based on Control Delay

Level of Service	Description	Average Control Delay Per Vehicle (Sec.)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	Up to 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operation with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.1 to 80.0
F	Operations with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	Greater than 80.0

Source: Transportation Research Board, *2000 Highway Capacity Manual*, (Washington, D.C., 2000)

Unsignalized Intersections

The City of Saratoga does not have an adopted level of service standard for unsignalized intersections. The correlation between average control delay and level of service for unsignalized, stop-controlled intersections is presented in Table 2. Note that for unsignalized intersections under two-way stop control, the level of service is reported for the worst approach. Level of service analysis at unsignalized intersections is generally used to determine the need for modification in the type of intersection control (i.e., all-way stop or signalization). As part of the evaluation, traffic volumes, delays, and traffic signal warrants are evaluated to determine if the existing intersection control is appropriate.

Level of service calculations at the unsignalized intersections were based on the 2000 Highway Capacity Manual (2000 HCM) method. The TRAFFIX software was used to apply the 2000 HCM operations method for evaluation of conditions at unsignalized intersections. This method is applicable for one-way, two-way and all-way stop-controlled intersections. At side street stop-controlled intersections, control delay is calculated only for the stop-controlled movements, not for the intersection as a whole.

Table 2
Unsignalized Intersection Level of Service Definitions Based on Delay

Level of Service	Description	Average Delay Per Vehicle (Sec.)
A	Little or no traffic delay	10.0 or less
B	Short traffic delays	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	greater than 50.0

Source: Transportation Research Board, *2000 Highway Capacity Manual* (Washington, D.C., 2000) p17-2.

Intersection Operations

The analysis of intersection level of service was supplemented with an analysis of traffic operations for intersections where the project would add a significant number of left turns. The operations analysis is based on vehicle queuing for high demand left-turn movements at intersections. Vehicle queues were estimated using a Poisson probability distribution, which estimates the probability of "n" vehicles for a vehicle movement using the following formula:

$$P(x=n) = \frac{\lambda^n e^{-(\lambda)}}{n!}$$

Where:

P (x=n) = probability of "n" vehicles in queue per lane
n = number of vehicles in the queue per lane
λ = average # of vehicles in the queue per lane (vehicles per hr per lane/signal cycles per hr)

The basis of the analysis is as follows: (1) the Poisson probability distribution is used to estimate the 95th percentile maximum number of queued vehicles per signal cycle for a particular movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the movement. This analysis thus provides a basis for estimating future turn pocket storage requirements at signalized intersections.

The 95th percentile queue length value indicates that during the peak hour, a queue of this length or less would occur on 95 percent of the signal cycles. Or, a queue length larger than the 95th percentile queue would only occur on 5 percent of the signal cycles (about 3 cycles during the peak hour for a signal with a 60-second cycle length). Therefore, left-turn storage pocket designs based on the 95th percentile queue length would ensure that storage space would be exceeded only 5 percent of the time. The 95th percentile queue length is also known as the "design queue length."

Significant Impact Criteria

Intersection Impact Criteria

Significance criteria are used to establish what constitutes an impact. For this analysis, the criteria used to determine significant impacts on signalized intersections are based on the City of Saratoga's level of service standards.

The project is said to create a significant adverse impact on traffic conditions at a signalized intersection in the City of Saratoga if for either peak hour:

1. The level of service at the intersection degrades from an acceptable level (LOS D or better for non-CMP intersections and LOS E or better for CMP intersections) under background conditions to an unacceptable LOS E or F under background plus project conditions, <u>or</u>
2. The level of service at the intersection is an unacceptable level (LOS E or F at non-CMP intersections and LOS F at CMP intersections) under background conditions and the addition of project trips causes both the critical-movement delay at the intersection to increase by four or more seconds *and* the demand-to-capacity ratio (V/C) to increase by .01 or more.

An exception to this rule applies when the addition of project traffic reduces the amount of average delay for critical movements (i.e. the change in average delay for critical movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by .01 or more.

The City of Saratoga does not have an adopted level of service standard for unsignalized intersections. Typically, LOS D or better is considered an acceptable level of service and LOS E and LOS F are considered unacceptable levels of service. It will be assumed that there is a significant impact if the level of service degrades from an acceptable level to an unacceptable level or if the intersection is currently operating at an unacceptable level of service, the delay worsens with the addition of project trips.

Report Organization

The remainder of this report is divided into five chapters. Chapter 2 describes the existing roadway network, transit services, and pedestrian facilities. Chapter 3 presents the methods used to estimate project traffic and its impact on the existing transportation system. Chapter 4 describes the cumulative conditions, utilizing an annual growth rate analyzed with project traffic. Chapter 5 includes the analysis of vehicle queuing, site access and on-site circulation, parking, and project impacts on other transportation issues including transit, bicycle and pedestrian facilities.

2. Existing Conditions

Existing Intersection Lane Configurations and Traffic Volumes

The existing lane configurations at the study intersections were determined by observations in the field and are shown on Figure 3. Existing traffic volumes were obtained from peak hour counts collected in October 2018, April 2019, and May 2019 and from the 2018 CMP monitoring report. The existing peak-hour intersection volumes are shown on Figure 4. Intersection turning-movement counts conducted for this analysis are presented in Appendix A.

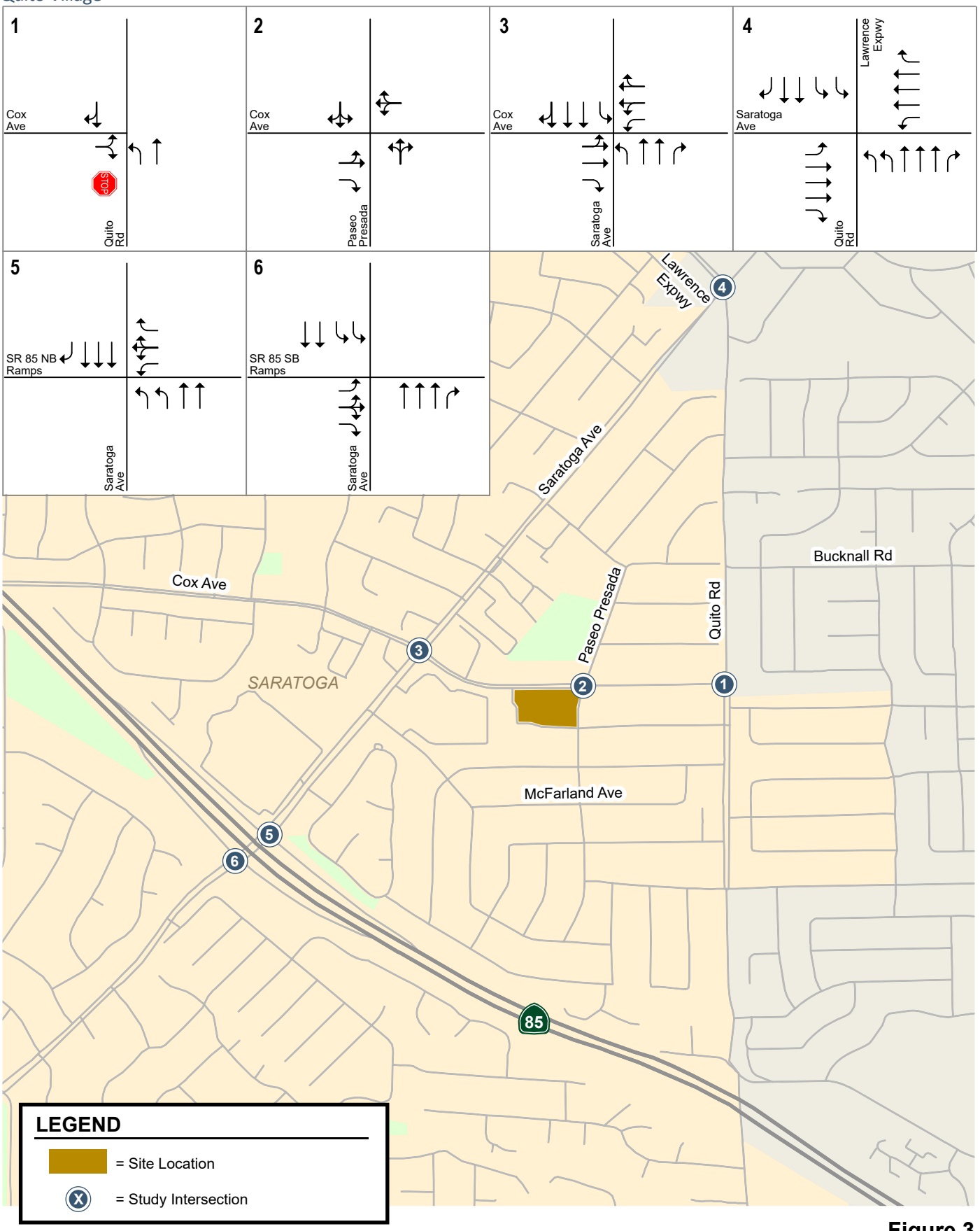


Figure 3
Existing Lane Configurations

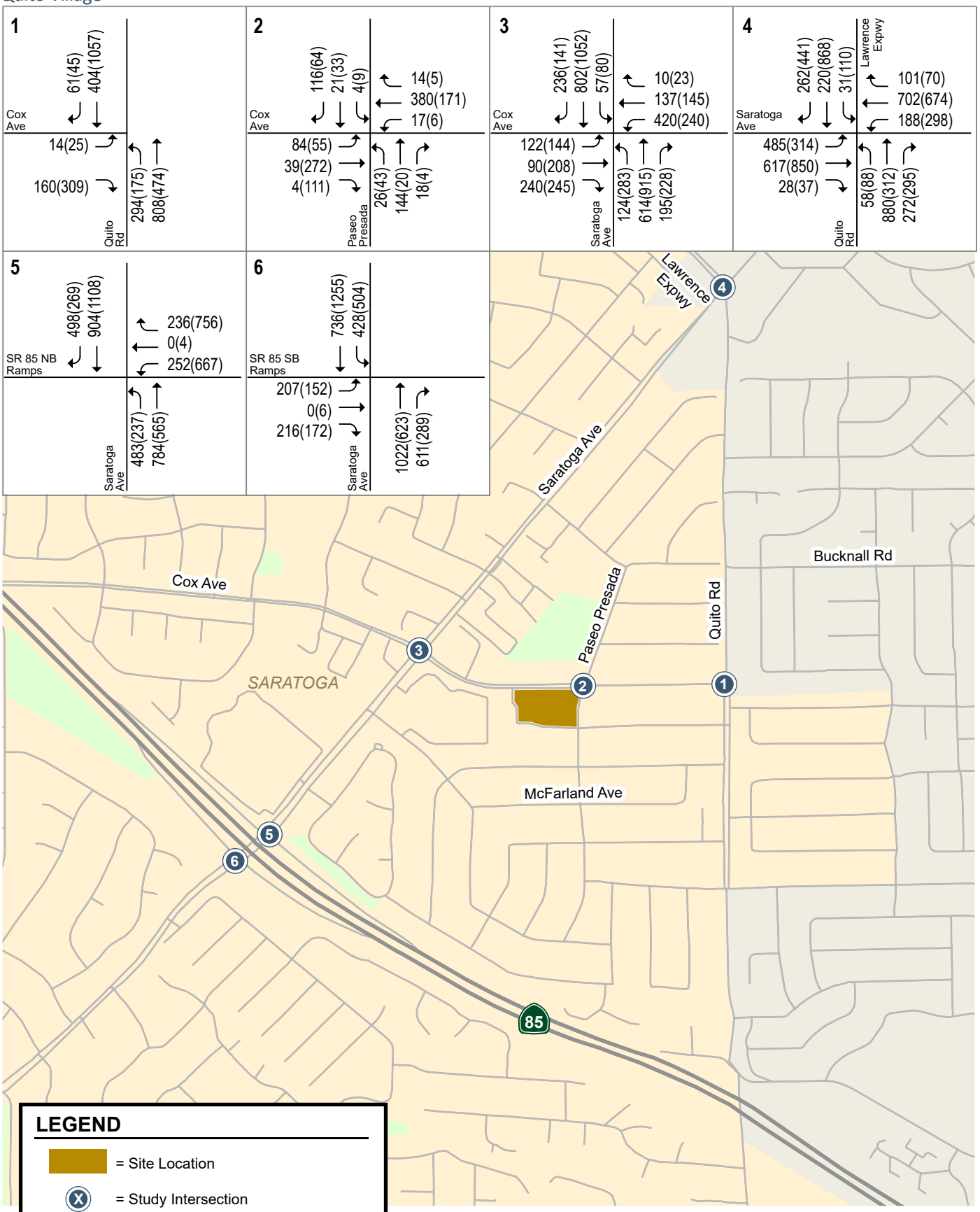


Figure 4
Existing Traffic Volumes

NORTH
Not to Scale

Existing Intersection Levels of Service

The results of the analysis show that most of the study intersections operate at an acceptable level of service during both AM and PM peak hours (see Table 3). The intersection levels of service calculation sheets are included in Appendix B.

Table 3
Existing Intersection Level of Service

Study Number	Intersection	Peak Hour	Count Date	Existing Conditions Avg. Delay (sec)	Existing Conditions LOS
1	Quito Road/Cox Avenue**	AM	04/30/19	22.6	C
		PM	04/30/19	**120+**	**F**
2	Paseo Presada/Cox Avenue	AM	05/01/19	12.3	B
		PM	05/01/19	10.4	B
3	Saratoga Avenue/Cox Avenue	AM	05/02/19	35.2	D
		PM	05/02/19	37.0	D
4	Lawrence Expressway/Saratoga Avenue*	AM	10/03/18	49.5	D
		PM	11/15/18	46.5	D
5	Saratoga Avenue/US101 NB Ramps	AM	05/02/19	16.1	B
		PM	05/01/19	23.7	C
6	Saratoga Avenue/US 101 SB Ramps	AM	05/02/19	14.4	B
		PM	05/01/19	15.4	B

Note:
* Denotes a CMP designated Intersection
** Quito Road/Cox Avenue is a Two-Way Stop Controlled Intersection. The approach with the worst level of service and average delay is reported.
Bold indicates a substandard level of service.

Cox Avenue at Quito Road calculates to LOS F for the traffic at the stop sign, with an average delay of greater than 120 seconds during the PM peak hour. The TRAFFIX software calculates delay as if vehicles were arriving in a continuous flow on Quito Road. However, because of upstream and downstream signals, vehicles arrive at the intersection in platoons, allowing for drivers to find gaps in traffic more easily to turn onto Quito Road from Cox Avenue. Field observations, described below, showed that the traffic from Cox Avenue actually was able to turn onto Quito Road with less delay than the calcuations show.

Observed Existing Traffic Conditions

Traffic conditions were observed in the field in order to identify existing operational deficiencies and to confirm the accuracy of calculated intersection levels of service. The purpose of this effort was (1) to identify any existing traffic problems that may not be directly related to level of service, and (2) to identify any locations where the level of service analysis does not accurately reflect existing traffic conditions.

Overall, most study intersections operated adequately during both the AM and PM peak hours of traffic, and the level of service analysis appears to accurately reflect actual existing traffic conditions. However, field observations showed that some operational problems currently occur during the AM and PM peak commute hours. These issues are described below.

The intersections of Paseo Presada/Cox Avenue (Study Intersection 2) and Lawrence Expressway/Saratoga Avenue (Study Intersection 4) operated adequately during the AM and PM peak hours of traffic, and the level of service analysis accurately reflects actual existing traffic conditions.

During the AM peak hour, the intersection of Quito Road/Cox Avenue (Study Intersection 1) was observed to sometimes have vehicles slowing due to spillback in the northbound direction. This was observed to be due to the signalized intersection at Quito Road & Bucknall Road.

During the AM peak hour, the intersection of Saratoga Avenue/SR 85 Northbound Ramps (Study Intersection 5), was observed to have long queues in the southbound right turn and northbound left turn lanes. It was observed that slow traffic on northbound SR 85 and ramp metering caused long queues spilling onto Saratoga Avenue. The southbound right turn movement was observed to be sometimes queued to the intersection of Saratoga Avenue/Vineyard Lane, one block away.

During the AM peak hour, the intersection of Saratoga Avenue/SR 85 Southbound Ramps (Study Intersection 6) was observed to have long queues, approximately 12 vehicles per lane, for the no.1 and no.2 through lanes, due to vehicles queuing for the northbound left turn lanes at Saratoga Avenue/SR 85 Northbound Ramps (Study Intersection 5).

During the PM peak hour, the intersection of Quito Road/Cox Avenue (Study Intersection 1) was observed to have periods of high vehicular traffic on Quito Road and occasionally caused delays to those waiting to turn from Cox Avenue. During the heaviest waves of traffic, it was observed that vehicles had some difficulty turning to and from Cox Avenue.

During the PM peak hour, the intersection of Saratoga Avenue/Cox Avenue (Study Intersection 3) was observed to have a high volume of vehicles heading southbound on Saratoga Avenue. It was observed that queues occasionally blocked the southbound left-turn pocket. The southbound through movement queue does clear within one cycle.

During the PM peak hour, the intersection of Saratoga Avenue/SR 85 Northbound Ramps (Study Intersection 5) was observed to have more vehicles queuing in the no.1 through lane in order the access the left-turn lanes turning on SR 85 Southbound. It was observed that the spillback from this intersection occasionally caused some delays at the upstream intersection.

3. Project Conditions

This chapter describes traffic conditions with the project and includes: (1) the method by which project traffic is estimated and (2) a level of service summary. Existing plus project conditions are represented by existing traffic conditions with the addition of traffic generated by the project.

Roadway Network

It is assumed in this analysis that the transportation network under project conditions would be the same as the existing transportation network.

Project Trip Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear were estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic traveling to and from the proposed mixed-use development was estimated for the AM and PM peak hours. As part of the project trip distribution, the directions to and from which the project trips would travel were estimated. In the project trip assignment, the project trips were assigned to specific streets and intersections. These procedures are described below.

Trip Generation

Through empirical research, data have been collected that indicate the amount of traffic that can be expected to be generated by many types of land uses. The standard trip generation rates can be applied to predict the future traffic increases that would result from a new development. The standard trip generation rates come from the publication titled Institute of Transportation Engineers (ITE) *Trip Generation, 10th Edition.*

Project trip generation was estimated by applying to the size and uses of the development by the appropriate trip generation rates obtained from the ITE *Trip Generation Manual, 10th Edition* (2017). The average trip generation rates for Multi-Family Housing (Low Rise) (Land Use 220) were applied to the project. The ITE defines Multi-Family Housing (Low Rise) as a building with three or more units and has less than 3 floors.

The existing site contains two buildings (approximately 70,000-80,000 s.f.), consisting of small restaurants, a Starbucks coffee shop, office space, commercial uses such as hair salons, and an empty market. The use-permit for the project site allows for these uses to operate indefinitely. If the market at the existing site were to return into operation, there would be a large number of trips to the project site. Table 4 shows the estimated number of vehicular trips generated by the existing site at full occupancy. It should be noted that the existing site has not been at full occupancy for many years, and the analyses in this report reflect the current occupancy, which is much lower.

Table 4
Existing Trip Generation (Full Occupancy)

Land Use	ITE Land Use Code	Size	Daily Rate	Daily Trip	AM Peak Hour Rate	AM Peak Hour Trip In	AM Peak Hour Trip Out	AM Peak Hour Trip Total	PM Peak Hour Rate	PM Peak Hour Trip In	PM Peak Hour Trip Out	PM Peak Hour Trip Total
Shopping Center	820	20,000 Square Feet	37.75	755	0.94	12	7	19	3.81	36	40	76
Coffee/Donut Shop without Drive-Through Window	936	2,000 Square Feet	754.55	1,509	101.14	103	99	202	36.31	37	36	73
Fast Casual Restaurant	930	5,000 Square Feet	315.17	1,576	2.07	7	3	10	14.13	39	32	71
Hair Salon	918	5,000 Square Feet							1.45	1	6	7
Supermarket	850	20,000 Square Feet	106.78	2,136	3.82	46	30	76	9.24	94	91	185
Total Project Trip				**5,976**		**168**	**139**	**307**		**207**	**205**	**412**

Source: ITE Trip Generation Manual, 10th Edition 2017

For the purpose of this analysis, it is assumed that the existing occupied commercial space is about the same as the proposed commercial space, so there would be change in retail trips. There is currently a Starbucks and several small restaurants operating at the project site. The new commercial space is expected to have a smaller floor space than the currently occupied uses. Although the commercial space removed is expected to be greater than the proposed new commercial space, no trip credits were taken to provide a more conservative estimate of net project trips.

Net Project Trips

The project is estimated to generate 666 net new daily vehicle trips, with 42 net new trips (10 inbound and 32 outbound) during the AM peak hour and 51 net new trips (32 inbound and 19 outbound) during the PM peak hour (See Table 5).

Table 5
Project Trip Generation

Land Use	ITE Land Use Code	Size	Daily Rate	Daily Trip	AM Peak Hour Rate	AM Peak Hour Trip In	AM Peak Hour Trip Out	PM Peak Hour Rate	PM Peak Hour Trip In	PM Peak Hour Trip Out
Multifamily Housing (Low-Rise)	220	91 Dwelling Units	7.320	666	0.460	10	32	0.560	32	19
Total Project Trip				**666**		**10**	**32**		**32**	**19**

Source: ITE Trip Generation Manual, 10th Edition 2017

Trip Distribution and Trip Assignment

The trip distribution pattern for the project was estimated based on existing travel patterns on the surrounding roadway system and the locations of complementary land uses. The peak hour vehicle trips generated by the project were assigned to the roadway network in accordance with the trip distribution pattern. Figure 5 shows the trip distribution pattern for the project site. Figure 6 shows the trip assignment.

The trip distribution and trip assignment assumed approximately 80% of residents headed northward towards Saratoga Avenue and Lawrence Expressway would utilize Saratoga Avenue to head north. The other 20% of residents would utilize Quito Road to head north. For the inbound direction, it was assumed approximately 50% would utilize Saratoga Avenue and 50% would utilize Quito Road.

Figure 5
Trip Distribution

NORTH
Not to Scale

Quito Village

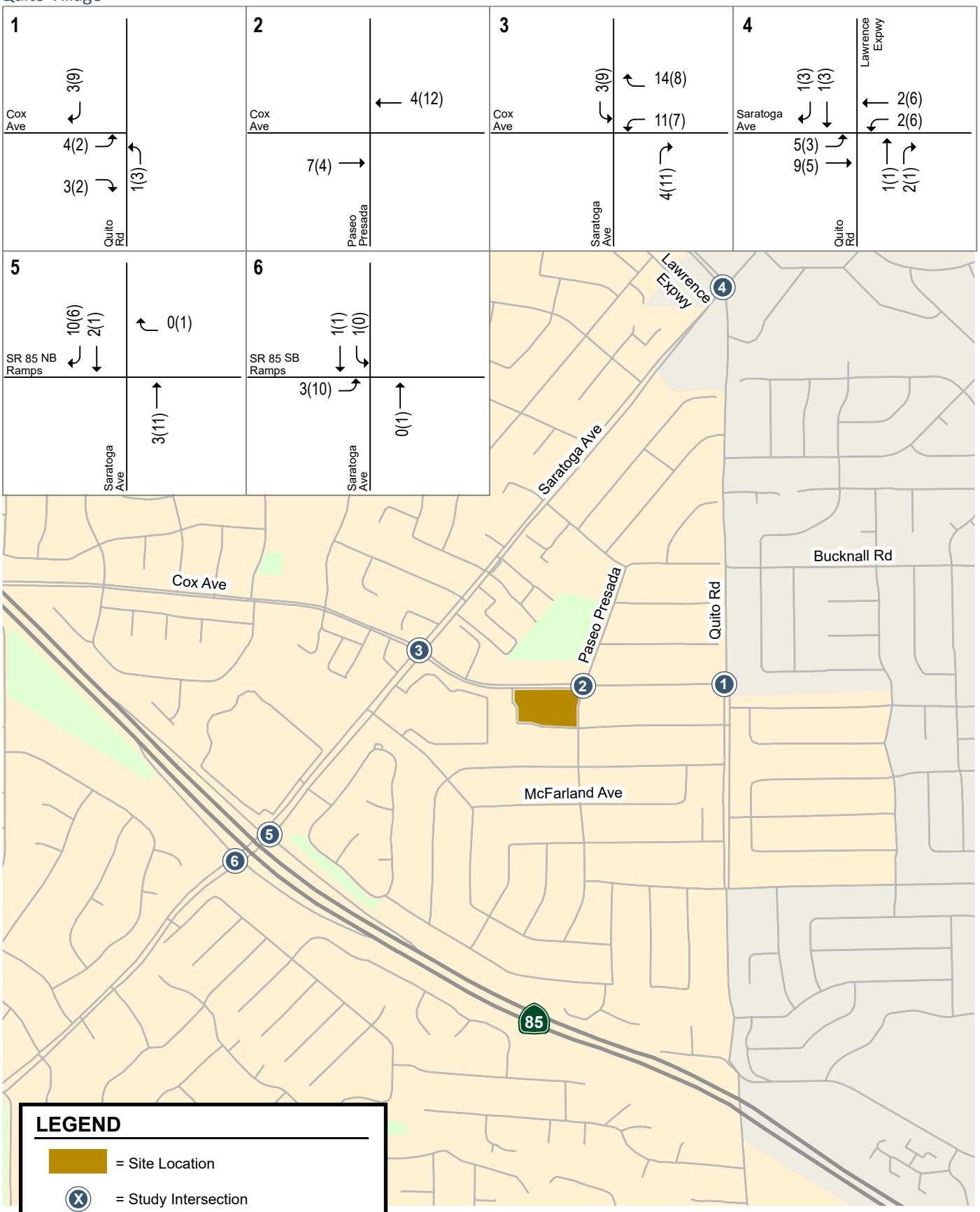


Figure 6
Trip Assignment

HEXAGON

NORTH
Not to Scale

Existing Plus Project Traffic Volumes

Project trips, as represented in the above project trip assignment, were added to existing traffic volumes to obtain existing plus project traffic volumes. The existing plus project traffic volumes are shown on Figure 7.

Existing Plus Project Intersection Analysis

Table 6 shows that most of the study intersections would continue to operate at an acceptable level of service during both the AM and PM peak hours. The intersection levels of service calculation sheets are included in Appendix B.

During the PM peak hour, the Quito Road/Cox Avenue intersection calculates to LOS F both with and without the project. It should be noted that TRAFFIX software calculates level of service and delay based on continuous flow of vehicles through the intersection. There are upstream and downstream signal-controlled intersections, which would lead to platooning of vehicles through the Quito Road/Cox Avenue intersection. This would allow for vehicles to easily find gaps in traffic to make a left or right turn from Cox Avenue onto Quito Road.

The project would add 7 new AM peak hour trips and 4 new PM peak hour trips to the eastbound Cox Avenue movement. This is equivalent to approximately one trip in the AM peak hour every 8 minutes and one trip in the PM peak hour every 15 minutes. Field observations were conducted and confirmed that the intersection is currently operating at an acceptable level of service. The addition of these project trips is unlikely to have a noticeable effect on traffic operations at this intersection. However, if future residents experience heavy delays after project opening from the eastbound left turn movement (the most difficult movement) from Cox Avenue to Quito Road, they can shift their travel patterns by using Paseo Presada to Bucknall Road, where there is a signalized intersection at Bucknall Road/Quito Road.

The Quito Road/Cox Avenue intersection meets the requirements for the Manual on Uniform Traffic Control Devices (MUTCD) peak hour signal warrant. However, a signal is not recommended because traffic has the option of using the Quito Road/Bucknall Road intersection.

Table 6
Existing Plus Project Intersection Level of Service

Study #	Intersection	Peak Hour	Existing Conditions: No Project Avg. Delay (sec)	No Project LOS	With Project Avg. Delay (sec)	With Project LOS	Incr. in Crit. Delay (sec)	Incr. in Crit. V/C
1	Quito Road/Cox Avenue**	AM	22.6	C	27.9	D	0.7	0.018
		PM	**120+**	**F**	**120+**	**F**	6.4	0.021
2	Paseo Presada/Cox Avenue	AM	12.3	B	12.6	B	0.3	0.011
		PM	10.4	B	10.5	B	0.1	0.006
3	Saratoga Avenue/Cox Avenue	AM	35.2	D	35.6	D	0.2	0.004
		PM	37.0	D	37.6	D	0.3	0.004
4	Lawrence Expressway/Saratoga Avenue*	AM	49.5	D	49.8	D	1.0	0.005
		PM	46.5	D	46.7	D	0.3	0.007
5	Saratoga Avenue/US101 NB Ramps	AM	16.1	B	16.0	B	0.0	0.007
		PM	23.7	C	23.8	C	0.0	0.000
6	Saratoga Avenue/US 101 SB Ramps	AM	14.4	B	14.4	B	0.0	0.000
		PM	15.4	B	15.6	B	0.3	0.004

Note:
* Denotes a CMP designated Intersection
** Quito Road/Cox Avenue is a Two-Way Stop Controlled Intersection. The approach with the worst level of service and average delay is reported.
Bold indicates a substandard level of service.

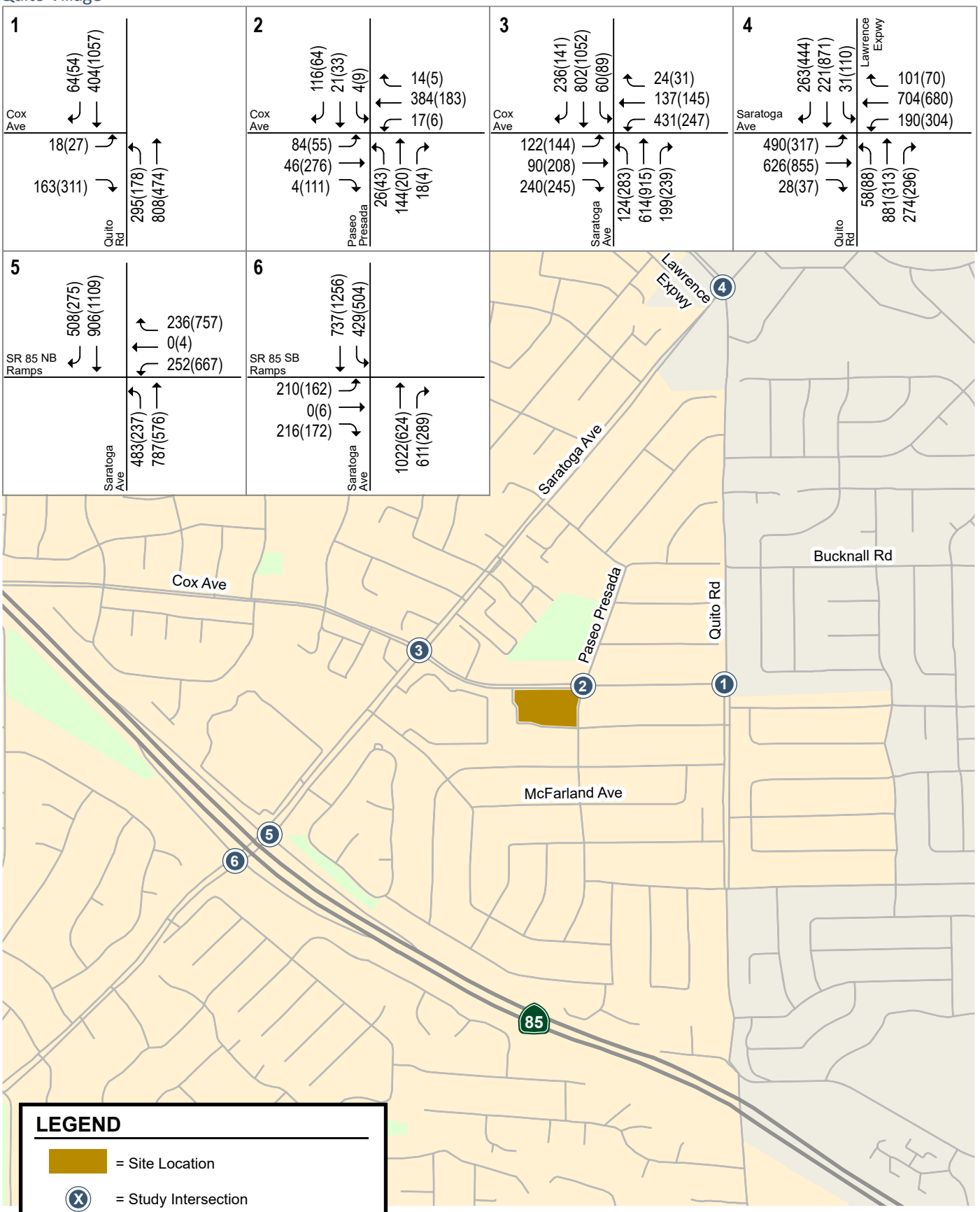


Figure 7
Existing Plus Project Traffic Volumes

HEXAGON

NORTH
Not to Scale

4. Cumulative Conditions

This chapter presents a summary of the traffic conditions that would occur under cumulative conditions with the proposed project. Cumulative conditions represent future traffic conditions with expected growth in the area. The expected future traffic growth was estimated by applying an annual growth factor to the existing counts over 10 years. Thus, cumulative conditions reflect a horizon year of 2029.

Roadway Network and Traffic Volumes

The intersection lane configurations under cumulative conditions were assumed to be the same as described under existing conditions.

Traffic volumes under cumulative no project conditions for the study intersections were estimated by applying a 1.0 percent annual growth rate to the existing traffic counts. The growth rate was applied to the study intersections through the year 2029 (ten-year horizon). Figure 8 shows the traffic volumes under cumulative conditions (no project). Figure 9 shows the traffic volumes under cumulative plus project conditions.

Intersection Levels of Service Analysis

The results of the level of service analysis under cumulative conditions show that most of the study intersections would operate at an acceptable level of service during both AM and PM peak hours (see Table 7). The intersection level of service calculation sheets are provided in Appendix B.

The intersection of Quito Road/Cox Avenue would continue to have an unacceptable level of service, but would not be noticeably changed by the project. The project would add 7 new AM peak hour trips and 4 new PM peak hour trips to the eastbound Cox Avenue movement. This is equivalent to approximately one trip in the AM peak hour every 8 minutes and one trip in the PM peak hour every 15 minutes. The addition of trips to the eastbound movement are unlikely to have a noticeable effect on traffic operations at the intersection.

As previously mentioned, TRAFFIX software calculates level of service and delay based on continuous flow of vehicles through the intersection. There are upstream and downstream signal-controlled intersections, which would lead to platooning of vehicles through the Quito Road/Cox Avenue intersection. This would allow for vehicles to easily find gaps in traffic to make a left or right turn from Cox Avenue onto Quito Road.

Additionally, if future residents experience heavy delays after project opening from the eastbound left turn movement (the most difficult movement) from Cox Avenue to Quito Road, they can shift their travel patterns by using Paseo Presada to Bucknall Road, where there is a signalized intersection at Bucknall Road/Quito Road.

Table 7
Cumulative Plus Project Intersection Level of Service

Study #	Intersection	Peak Hour	Cumulative Conditions: No Project Avg. Delay (sec)	No Project LOS	With Project Avg. Delay (sec)	With Project LOS	Incr. in Crit. Delay (sec)	Incr. In Crit. V/C
1	Quito Road/Cox Avenue**	AM	32.2	D	**41.8**	**E**	1.1	0.083
		PM	**120+**	**F**	**120+**	**F**	6.4	0.018
2	Paseo Presada/Cox Avenue	AM	14.1	B	14.3	B	0.2	0.008
		PM	11.1	B	11.3	B	0.1	0.007
3	Saratoga Avenue/Cox Avenue	AM	36.2	D	36.4	D	0.1	0.003
		PM	38.4	D	38.8	D	0.2	0.003
4	Lawrence Expressway/Saratoga Avenue*	AM	54.6	D	55.2	E	1.4	0.004
		PM	48.5	D	48.7	D	0.4	0.006
5	Saratoga Avenue/US101 NB Ramps	AM	16.6	B	16.6	B	0.1	0.006
		PM	25.2	C	25.2	C	0.0	0.001
6	Saratoga Avenue/US 101 SB Ramps	AM	15.0	B	15.1	B	0.0	0.000
		PM	15.7	B	15.9	B	0.2	0.003

Note:
* Denotes a CMP designated Intersection
** Quito Road/Cox Avenue is a Two-Way Stop Controlled Intersection. The approach with the worst level of service and average delay is reported.
Bold indicates a substandard level of service.

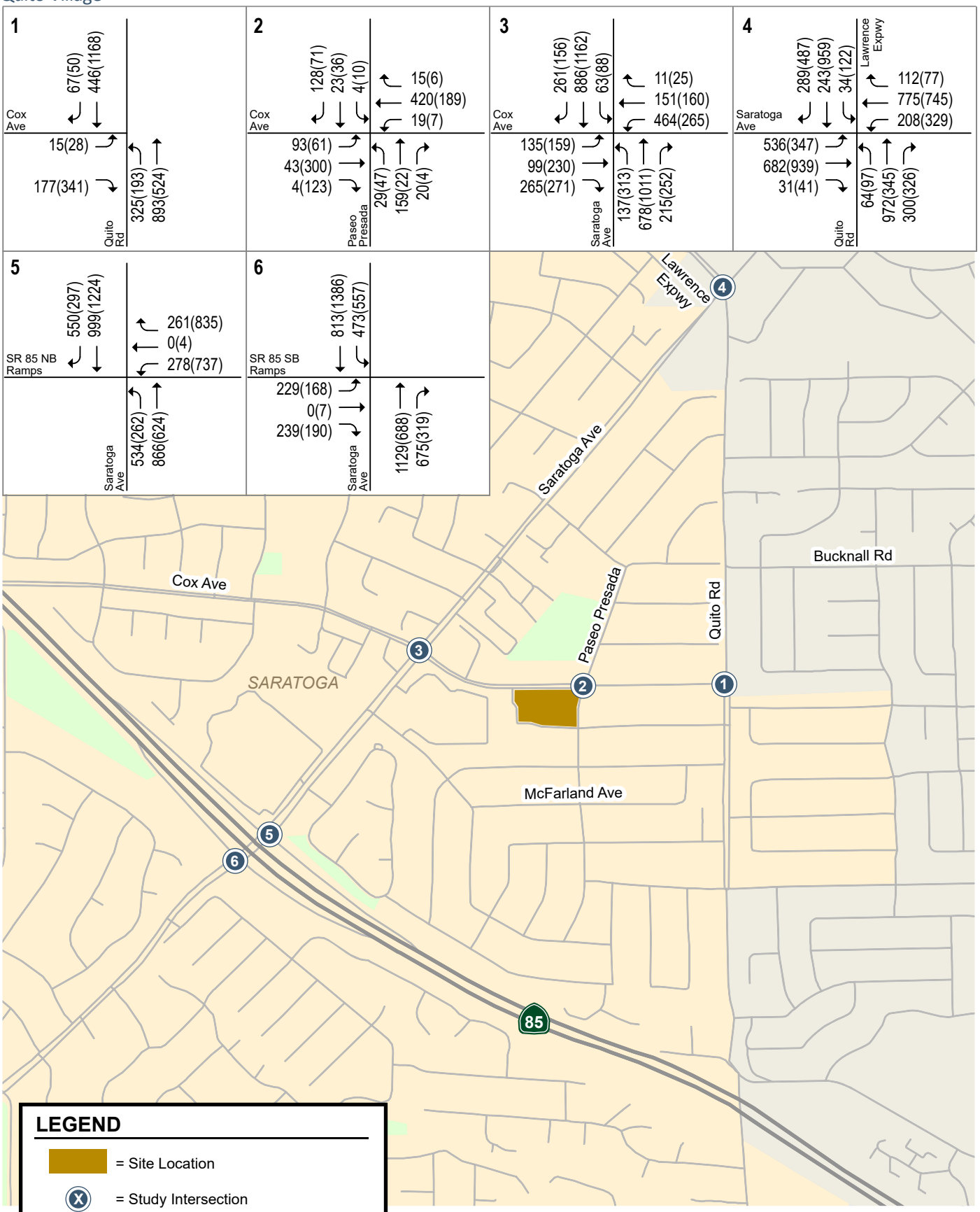


Figure 8
Cumulative Traffic Volumes

NORTH
Not to Scale

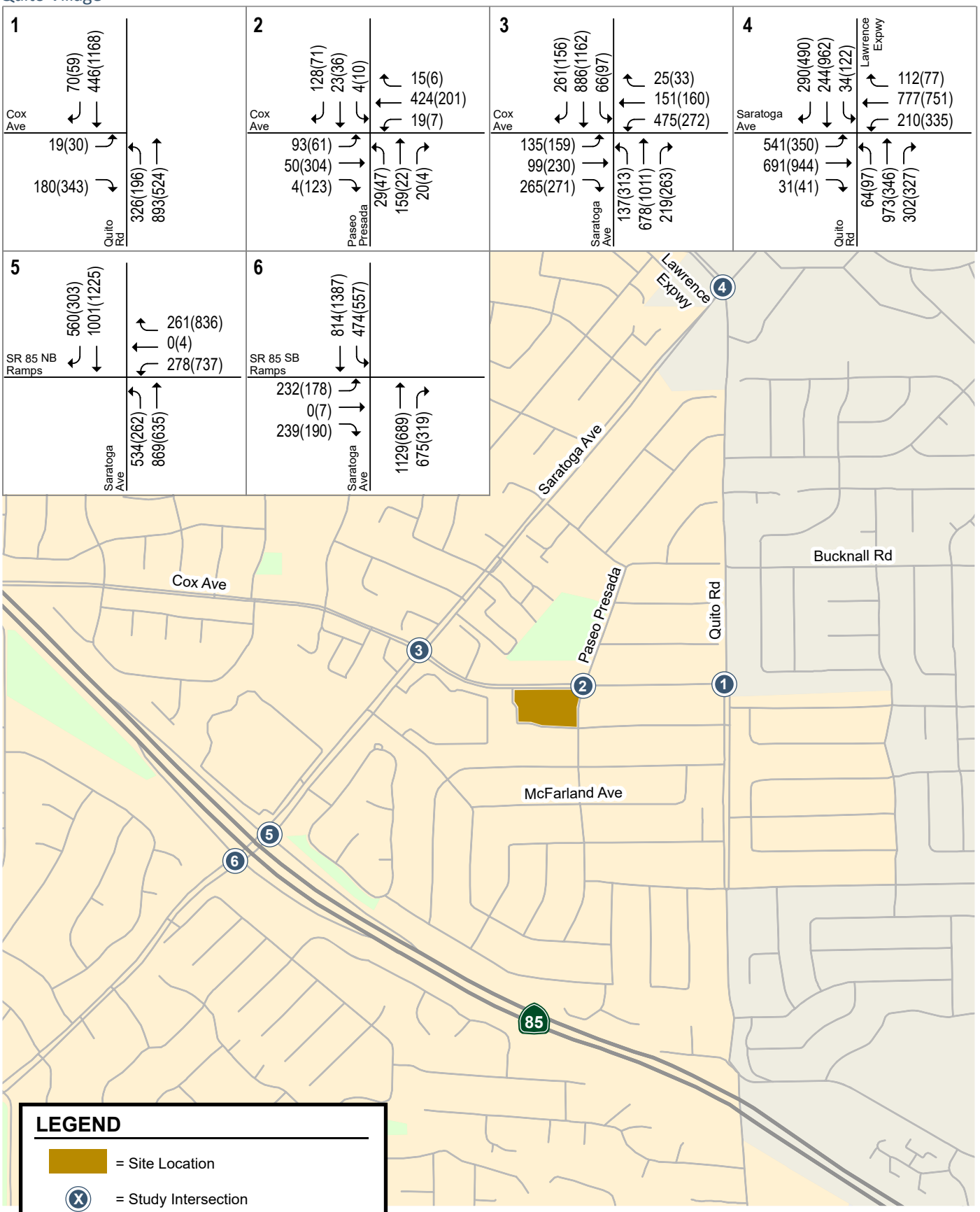


Figure 9
Cumulative Plus Project Traffic Volumes

NORTH
Not to Scale

5. Other Transportation Issues

This chapter presents other transportation issues associated with the project. These include an analysis of:

- Intersection queuing analysis
- Site access and circulation
- Truck access and circulation
- Parking analysis
- Potential impacts to pedestrian, bicycle, and transit facilities

The analyses in this chapter are based on professional judgement in accordance with the standards and methods employed by traffic engineering professionals. Although operational issues are not considered CEQA impacts, they do describe traffic conditions that are relevant to describing the effects of added project traffic.

Intersection Queueing Analysis

The operations analysis is based on vehicle queuing for turning movements where the project would add at least 10 new peak-hour trips (see Table 8). The following turn movements were examined as part of the queuing analysis for this project:

- Left turn from southbound Saratoga Avenue to eastbound Cox Avenue
- Left turn from westbound Cox Avenue to southbound Saratoga Avenue
- Right turn from southbound Saratoga Avenue to westbound SR 85 North Ramp
- Left turn from eastbound SR 85 South Ramp to northbound Saratoga Avenue

The turning movements, vehicular queues, and any deficiencies are discussed below.

Saratoga Avenue and SR 85 Northbound Ramps

The southbound right turn on Saratoga Avenue is a shared through-right turn lane. As previously mentioned in chapter 2, it was observed that vehicles frequently queue the entire block (approximately 20 vehicles or more) due to ramp metering on the SR 85 northbound ramp. For the purposes of the analysis, it was assumed that the right turn movement has a storage length of 450 feet, which is the length until the previous block on Saratoga Avenue. The queuing analysis shows that the current queues exceed the “storage length” on Saratoga Avenue. The addition of project trips (10 trips in the AM peak hour) would add approximately an average of one vehicle to every 4 cycles. It is unlikely that the addition of project trips would have a noticeable impact at the intersection.

Table 8
Queuing Analysis

	Saratoga Avenue & Cox Avenue				Saratoga Ave & SR 85 NB Ramps		Saratoga Ave & SR 85 SB Ramps	
	SBL		WBL		SBR		EBL	
Measurement	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**	**AM**	**PM**
Existing								
Cycle/Delay [1] (sec)	130	140	130	140	95	100	95	100
Volume (vphpl)	57	80	210	120	498	269	104	76
95th %. Queue (veh/ln.)	5	6	12	8	19	12	6	5
95th %. Queue (ft./ln) [2]	125	150	300	200	475	300	150	125
Storage (ft./ ln.)	175	175	400	400	450	450	400	400
Adequate (Y/N)	Y	Y	Y	Y	**N**	Y	Y	Y
Existing Plus Project								
Cycle/Delay [1] (sec)	130	140	130	140	95	100	95	100
Volume (vphpl)	60	89	216	124	508	275	105	81
95th %. Queue (veh/ln.)	5	7	13	9	20	12	6	5
95th %. Queue (ft./ln) [2]	125	175	325	225	500	300	150	125
Storage (ft./ ln.)	175	175	400	400	450	450	400	400
Adequate (Y/N)	Y	Y	Y	Y	**N**	Y	Y	Y
Cumulative								
Cycle/Delay [1] (sec)	130	140	130	140	95	100	95	100
Volume (vphpl)	63	88	232	133	550	297	115	84
95th %. Queue (veh/ln.)	5	7	13	9	21	13	6	5
95th %. Queue (ft./ln) [2]	125	175	325	225	525	325	150	125
Storage (ft./ ln.)	175	175	400	400	450	450	400	400
Adequate (Y/N)	Y	Y	Y	Y	**N**	Y	Y	Y
Cumulative Plus Project								
Cycle/Delay [1] (sec)	130	140	130	140	95	100	95	100
Volume (vphpl)	66	97	238	136	560	303	116	89
95th %. Queue (veh/ln.)	5	7	14	9	21	13	6	5
95th %. Queue (ft./ln) [2]	125	175	350	225	525	325	150	125
Storage (ft./ ln.)	175	175	400	400	450	450	400	400
Adequate (Y/N)	Y	Y	Y	Y	**N**	Y	Y	Y

Notes:
SBL = southbound left movement; WBL = westbound left movement; SBR = southbound right movement;
EBL = eastbound left movement
[1] Vehicle queue calculations based on cycle length for signalized intersections.
[2] Assumes 25 Feet Per Vehicle Queued.

Site Access and Circulation

The site access and on-site circulation evaluation is based on the September 13, 2019 site plan prepared by Kenneth Rodrigues & Partners Inc. Site access was evaluated to determine the adequacy of the site's driveways with regard to the following: traffic volume, delays, vehicle queues, geometric design, and corner sight distance. On-site vehicular circulation was reviewed in accordance with generally accepted traffic engineering standards and transportation planning principles.

Site Access

The site plan shows two driveways accessing the project site. One is an existing driveway and one would be a new driveway on Cox Avenue. The project also would close two driveways on Paseo Prasada. The new driveway on Cox Avenue would be designed to directly access the commercial properties on the corner.

Sight Distance at the Project Driveways

The project access points should be free and clear of any obstructions to optimize sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other roadway users travelling on adjacent roadways. Landscaping and parking should not conflict with a driver's ability to locate a gap in traffic and see oncoming pedestrians and bicyclists. Adequate corner sight distance (sight distance triangles) should be provided at all site access points in accordance with City standards.

Cox Avenue has a speed limit of 25 miles per hour. The Caltrans recommended stopping sight distance is 150 feet. At all driveways to the project site, the stopping sight distances are adequate.

Project Driveway Operations

The project-generated gross trips that are estimated to occur at the project driveways are 10 inbound, 32 outbound during the AM peak hour and 32 inbound, 19 outbound during the PM peak hour. Because of the fairly low project trips at the driveways and low/moderate volume on Cox Avenue, the driveways would operate without delays or queuing.

On-Site Circulation

On-site circulation was reviewed with generally accepted traffic engineering standards. The proposed site plan would provide vehicle traffic with adequate connectivity through the parking areas. The areas for non-residential uses have no dead-end aisles. Drive aisles with dead-ends intended for residents should have signage alerting visitors that the aisle is for residents only. Signage should be used at the second driveway to make clear that it provides access to the retail building.

The site plan shows good pedestrian circulation throughout the site. There would be walkways connecting the proposed sidewalks on Cox Avenue and Paseo Presada to the commercial space. Additionally, walkways within the project site would provide good pedestrian connectivity away from drive aisles.

Truck Access and Circulation

The drive aisles within the project site are shown to be 24 feet in width in the commercial area and a minimum of 20 feet in width in residential areas. Larger trucks may have trouble turning at the intersections of the drive aisles, therefore truck loading and deliveries are recommended to take place

on either Cox Avenue or Paseo Presada during off-peak times, such as early morning. Garbage trucks can easily navigate the drive aisles without impeding traffic.

Parking

The proposed project would not be required to provide parking in accordance with the City code. The project parking would be provided in accordance with the policies of Senate Bill 35 (SB35). Therefore, the analyses in this section is for informational purposes only.

The project would provide residential parking in garages on the first floor of each unit. Guest parking would be provided as surface spaces throughout the project site (as shown on site plan). Commercial parking would be provided adjacent to the commercial building. The site plan shows the commercial parking spaces to be 9.5 feet in width and 18 feet in length, which is the typical size for parking spaces in Saratoga under Saratoga Zoning Code Section 15-35.040. The site plan shows 14 compact spaces measuring 8 feet in width and 18 feet in length. Two handicapped parking spaces would be provided adjacent to the commercial building, per ADA requirements. The site plan does not specify whether the ADA parking spaces are van accessible, however, the spaces are measured to be van accessible. It is recommended that a minimum of one of these spaces be van accessible.

The proposed site plan shows that it will provide 182 parking spaces on the ground floor of the residential units, 16 surface spaces directly adjacent to the commercial building, and 37 additional surface spaces.

Each unit would have two parking spaces in a covered garage on the ground floor of each unit. A total of 182 spaces are shown for the 91 proposed units. Additionally, there would be 53 parking spaces provided throughout the site, with 14 spaces, including 2 ADA parking spaces, directly adjacent to the commercial building. It is anticipated that some of the surface spaces designated for guest parking could be used for commercial parking.

Table 9
Surface Parking Provided

	Commercial	Guest
ADA	2	1
Compact	14	0
Standard	9	27
Total:	25	28
	53	

Pedestrian, Bicycle, and Transit Analysis

All new development projects in Saratoga should encourage multi-modal travel, consistent with the goals of the City's General Plan. It is the goal of the General Plan that all development projects accommodate and encourage the use of non-automobile transportation modes to achieve Saratoga's transit, pedestrian, and bicycle goals.

Pedestrian Facilites

Most of the residential streets in the area lack sidewalks. However, sidewalks are present linking the site to Saratoga Avenue where bus stops are present. The proposed project would install sidewalks along its frontages on Cox Avenue and Paseo Prasada. The addition of sidewalks on Cox Avenue and Paseo Prasada would provide better pedestrian connectivity to the project site and encourage residents, employees, and patrons of the site to walk and access the bus stops on Saratoga Avenue more safely.

Bicycle Facilies

Class II striped bike lanes are provided along various roadways in the vicinity of the project site. There are no bicycle facilities on Cox Avenue, between Paseo Presada and Quito Road. However, it is unlikely that many people would use this segment, as most would use the existing bike lanes on Saratoga Avenue. Bicycle facilities in the project area are adequate. The project is not proposing any modifications or improvements to the existing bicycle network. The project should provide bicycle parking for customers to the commercial space on the project site. On-site bicycle circulation is adequate. There is direct access to bicycle lanes from the project driveways on Cox Avenue.

Transit Service

There are several VTA bus lines that serve the immediate project area. The bus stops closest to the project site are on Saratoga Avenue at Cox Avenue. VTA bus route 58 runs from West Valley College to Alviso, via Saratoga Avenue. VTA bus route 57 runs from West Valley College to Great America via Quito Road. However, Quito Road is not easily assessible because there are no sidewalks on Cox Avenue. The project is not expected to generate a significant increase in demand for transit services.

Quito Village Redevelopment
Technical Appendices

Appendix A

Traffic Counts

AM Peak-Hour Volume Count Worksheet- Saratoga(19DC04)

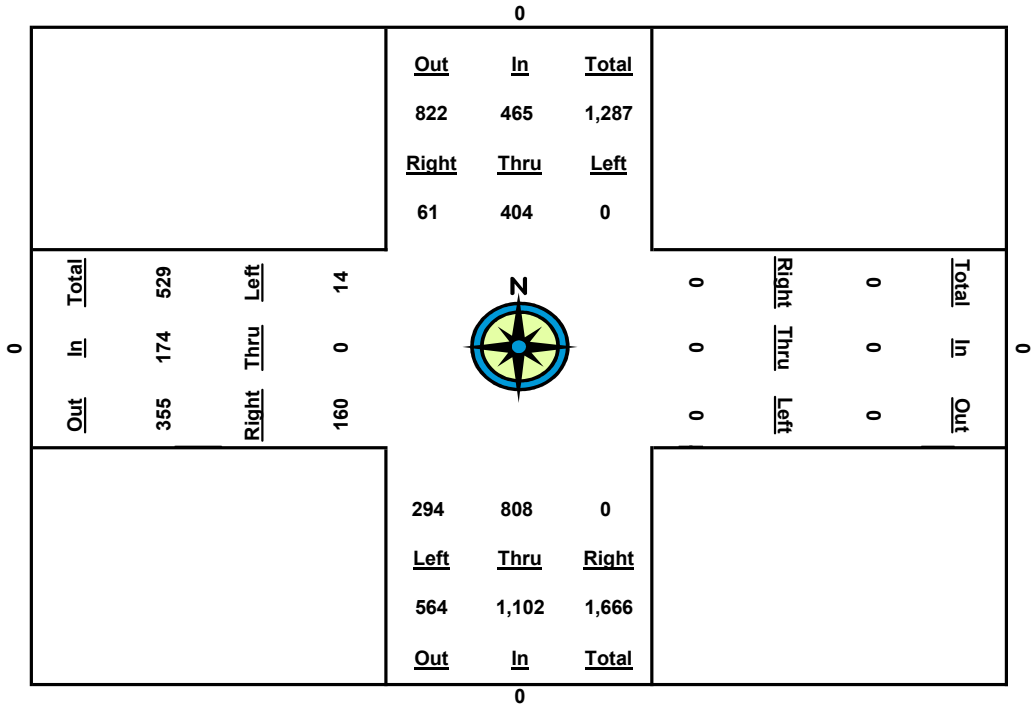
AUTO CENSUS
Traffic Monitoring and Analysis
1220 Tasman Dr #316
Sunnyvale, CA 94089
Phone 408-533-3398

Date: Tuesday, April 30th
Counter: Patti, Matt
Intersection Name: Quito(N/S) & Cox(W)
Weather: Fair

	North Approach				East Approach				South Approach				West Approach			
Start Time	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	14	38	0	52	0	0	0	0	0	172	58	230	18	0	2	20
7:30	21	86	0	107	0	0	0	0	0	401	155	556	26	0	2	28
7:45	31	144	0	175	0	0	0	0	0	632	229	861	45	0	3	48
8:00	41	256	0	297	0	0	0	0	0	834	297	1,131	81	0	7	88
8:15	58	377	0	435	0	0	0	0	0	1,027	372	1,399	133	0	10	143
8:30	76	469	0	545	0	0	0	0	0	1,221	470	1,691	178	0	13	191
8:45	92	548	0	640	0	0	0	0	0	1,440	523	1,963	205	0	17	222
9:00	102	626	0	728	0	0	0	0	0	1,642	582	2,224	225	0	22	247

Peak Hour	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**PK Hour**
7:00 - 8:00	41	256	0	297	0	0	0	0	0	834	297	1,131	81	0	7	88	1,516
7:15 - 8:15	44	339	0	383	0	0	0	0	0	855	314	1,169	115	0	8	123	1,675
7:30 - 8:30	55	383	0	438	0	0	0	0	0	820	315	1,135	152	0	11	163	1,736
7:45 - 8:45	61	404	0	465	0	0	0	0	0	808	294	1,102	160	0	14	174	1,741
8:00 - 9:00	61	370	0	431	0	0	0	0	0	808	285	1,093	144	0	15	159	1,683
Peak Volumes:	**61**	**404**	**0**	**465**	**0**	**0**	**0**	**0**	**0**	**808**	**294**	**1,102**	**160**	**0**	**14**	**174**	**1,741**

Cut and Paste	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**
	294	808	0	0	404	61	14	0	160	0	0	0



PM Peak-Hour Volume Count Worksheet- Saratoga(19DC04)

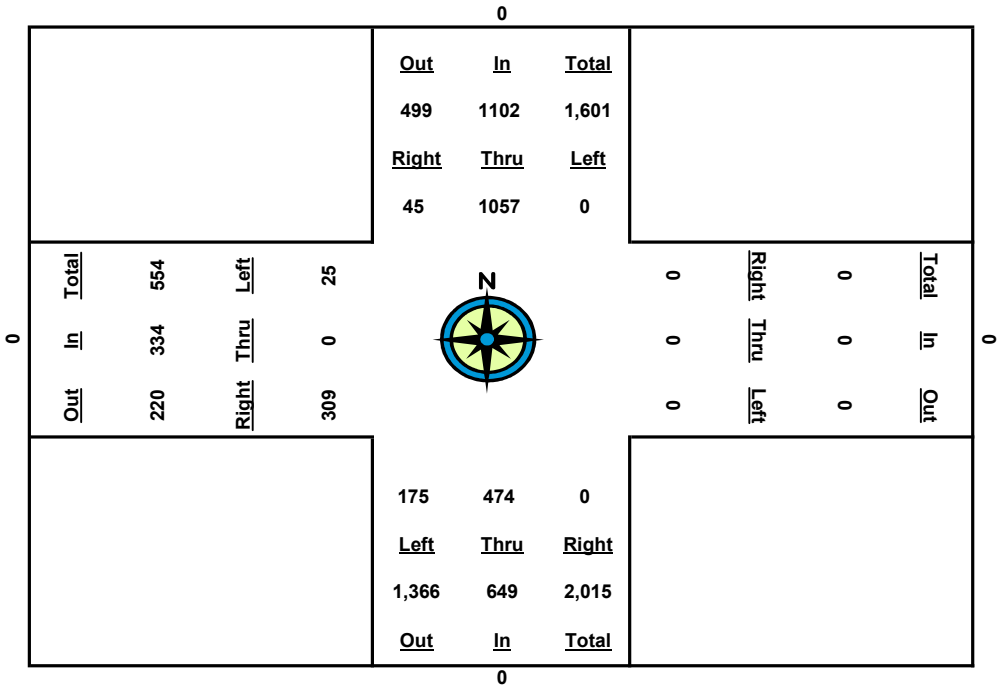
AUTO CENSUS
Traffic Monitoring and Analysis
1220 Tasman Dr. #316
Sunnyvale, CA 94089
Phone 408-533-3398

Date: Tuesday, April 30th
Counter: Patti, Matt
Intersection Name: Quito(N/S) & Cox(W)
Weather: Fair

	North Approach				East Approach				South Approach				West Approach			
Start Time	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	10	196	0	206	0	0	0	0	0	99	29	128	57	0	9	66
4:30	20	401	0	421	0	0	0	0	0	200	45	245	127	0	19	146
4:45	26	632	0	658	0	0	0	0	0	320	81	401	177	0	26	203
5:00	38	869	0	907	0	0	0	0	0	427	115	542	232	0	29	261
5:15	50	1,128	0	1,178	0	0	0	0	0	556	164	720	304	0	37	341
5:30	61	1,359	0	1,420	0	0	0	0	0	671	208	879	368	0	43	411
5:45	72	1,649	0	1,721	0	0	0	0	0	793	255	1,048	463	0	47	510
6:00	83	1,926	0	2,009	0	0	0	0	0	901	290	1,191	541	0	54	595

Peak Hour	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**PK Hour**
4:00 - 5:00	38	869	0	907	0	0	0	0	0	427	115	542	232	0	29	261	1,710
4:15 - 5:15	40	932	0	972	0	0	0	0	0	457	135	592	247	0	28	275	1,839
4:30 - 5:30	41	958	0	999	0	0	0	0	0	471	163	634	241	0	24	265	1,898
4:45 - 5:45	46	1,017	0	1,063	0	0	0	0	0	473	174	647	286	0	21	307	2,017
5:00 - 6:00	45	1,057	0	1,102	0	0	0	0	0	474	175	649	309	0	25	334	2,085
Peak Volumes:	**45**	**1,057**	**0**	**1,102**	**0**	**0**	**0**	**0**	**0**	**474**	**175**	**649**	**309**	**0**	**25**	**334**	**2,085**

Cut and Paste	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**
	175	474	0	0	1,057	45	25	0	309	0	0	0



AM Peak-Hour Volume Count Worksheet- Saratoga(19DC04)

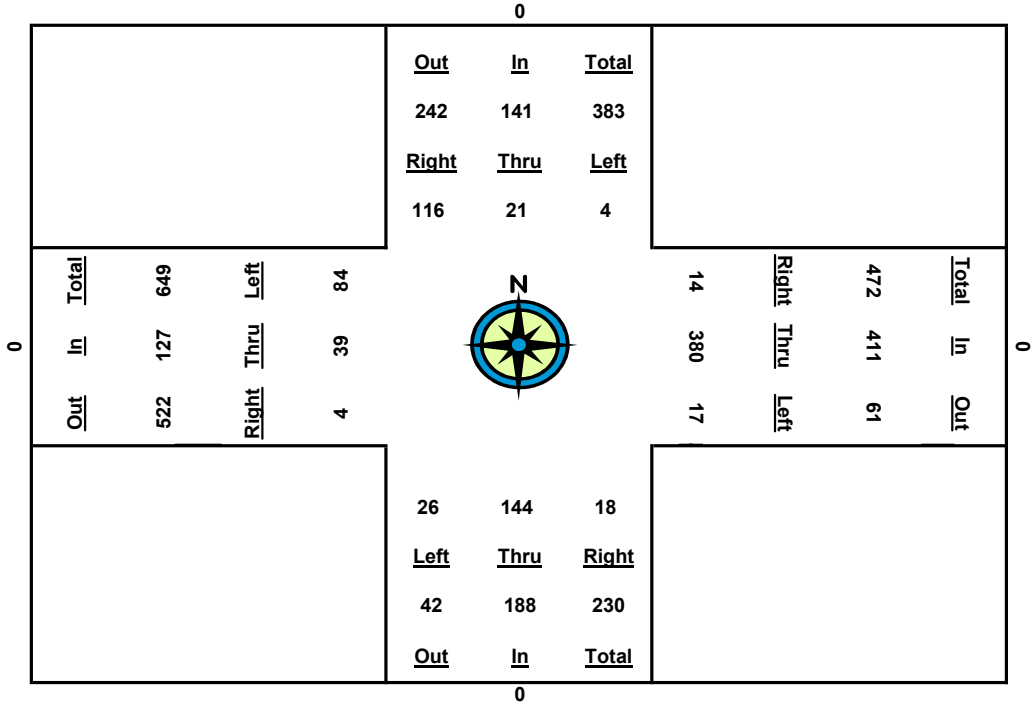
Date: Wed, May 1st
Counter: Jo, Kilbee
Intersection Name: Paseo Presada(N/S), Cox(E/W)
Weather: Fair

AUTO CENSUS
Traffic Monitoring and Analysis
1220 Tasman Dr #316
Sunnyvale, CA 94089
Phone 408-533-3398

	North Approach				East Approach				South Approach				West Approach			
Start Time	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	7	3	0	10	0	83	3	86	1	7	3	11	4	3	2	9
7:30	35	6	0	41	1	163	5	169	3	26	12	41	5	13	9	27
7:45	66	8	0	74	3	247	10	260	7	55	17	79	7	24	44	75
8:00	96	17	1	114	8	354	17	379	11	89	23	123	8	33	66	107
8:15	123	24	4	151	14	463	20	497	19	151	29	199	8	42	86	136
8:30	137	26	7	170	17	529	21	567	27	167	31	225	8	44	105	157
8:45	161	31	8	200	18	574	27	619	31	185	35	251	10	45	118	173
9:00	185	37	15	237	20	648	30	698	37	228	46	311	13	56	132	201

Peak Hour	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**PK Hour**
7:00 - 8:00	96	17	1	114	8	354	17	379	11	89	23	123	8	33	66	107	723
7:15 - 8:15	116	21	4	141	14	380	17	411	18	144	26	188	4	39	84	127	867
7:30 - 8:30	102	20	7	129	16	366	16	398	24	141	19	184	3	31	96	130	841
7:45 - 8:45	95	23	8	126	15	327	17	359	24	130	18	172	3	21	74	98	755
8:00 - 9:00	89	20	14	123	12	294	13	319	26	139	23	188	5	23	66	94	724
Peak Volumes:	**116**	**21**	**4**	**141**	**14**	**380**	**17**	**411**	**18**	**144**	**26**	**188**	**4**	**39**	**84**	**127**	**867**

Cut and Paste	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**
	26	144	18	4	21	116	84	39	4	17	380	14



PM Peak-Hour Volume Count Worksheet- Saratoga(19DC04)

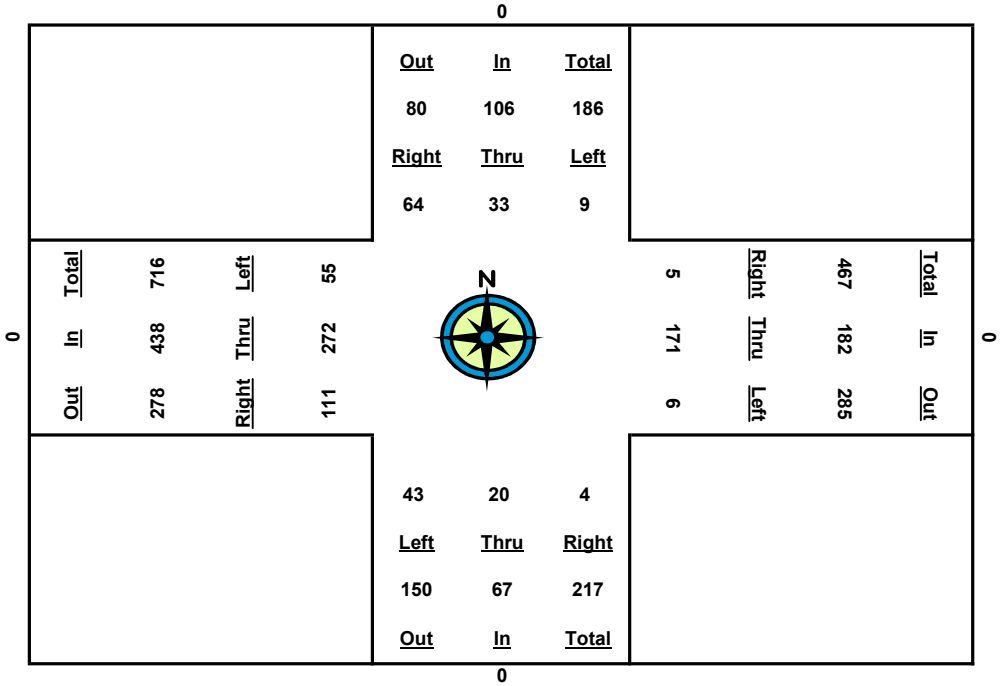
Date: Wed, May 1st
Counter: Jo, Kilbee
Intersection Name: Paseo Presada(N/S), Cox(E/W)
Weather: Fair

AUTO CENSUS
Traffic Monitoring and Analysis
1220 Tasman Dr. #316
Sunnyvale, CA 94089
Phone 408-533-3398

	North Approach				East Approach				South Approach				West Approach			
Start Time	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	15	6	0	21	0	33	1	34	1	5	9	15	20	54	15	89
4:30	19	12	4	35	2	71	2	75	3	9	16	28	35	89	28	152
4:45	37	21	6	64	3	105	3	111	4	16	23	43	59	168	46	273
5:00	56	27	9	92	5	139	4	148	4	20	36	60	85	228	54	367
5:15	69	37	11	117	5	193	7	205	5	25	48	78	115	290	67	472
5:30	83	45	13	141	7	242	8	257	7	29	59	95	146	361	83	590
5:45	121	53	17	191	8	261	10	279	10	36	69	115	170	420	106	696
6:00	140	55	20	215	9	296	11	316	10	39	73	122	192	475	114	781

Peak Hour	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**PK Hour**
4:00 - 5:00	56	27	9	92	5	139	4	148	4	20	36	60	85	228	54	367	667
4:15 - 5:15	54	31	11	96	5	160	6	171	4	20	39	63	95	236	52	383	713
4:30 - 5:30	64	33	9	106	5	171	6	182	4	20	43	67	111	272	55	438	793
4:45 - 5:45	84	32	11	127	5	156	7	168	6	20	46	72	111	252	60	423	790
5:00 - 6:00	84	28	11	123	4	157	7	168	6	19	37	62	107	247	60	414	767
Peak Volumes:	**64**	**33**	**9**	**106**	**5**	**171**	**6**	**182**	**4**	**20**	**43**	**67**	**111**	**272**	**55**	**438**	**793**

Cut and Paste	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**
	43	20	4	9	33	64	55	272	111	6	171	5



AM Peak-Hour Volume Count Worksheet- Saratoga(19DC04)

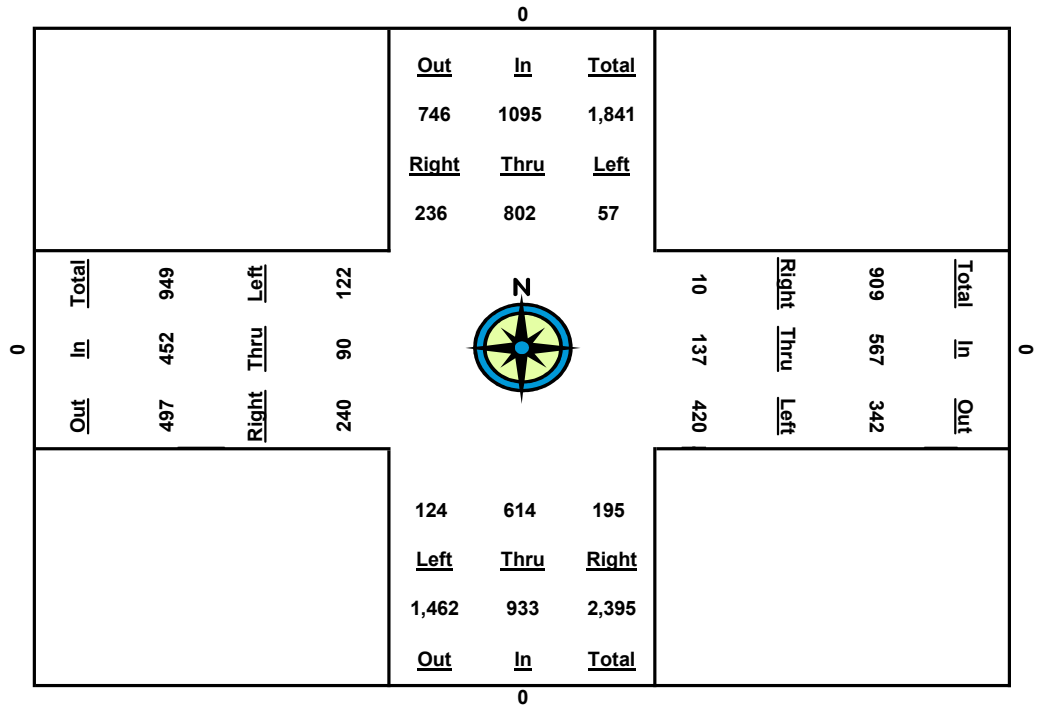
Date: Thursday, May 2nd
Counter: Jo, Kilbee
Intersection Name: Saratoga(N/S) & Cox(E/W)
Weather: Fair

AUTO CENSUS
Traffic Monitoring and Analysis
1220 Tasman Dr #316
Sunnyvale, CA 94089
Phone 408-533-3398

	North Approach				East Approach				South Approach				West Approach			
Start Time	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	15	89	5	109	9	17	77	103	28	48	14	90	32	85	21	138
7:30	41	241	23	305	12	50	181	243	46	143	22	211	67	93	27	187
7:45	76	413	32	521	19	82	248	349	76	271	87	434	123	100	32	255
8:00	128	623	49	800	20	114	256	390	114	460	105	679	184	122	49	355
8:15	208	809	65	1,082	22	141	357	520	167	598	142	907	242	148	103	493
8:30	262	1,065	80	1,407	24	191	425	640	216	741	168	1,125	282	164	122	568
8:45	322	1,233	87	1,642	25	218	593	836	271	943	201	1,415	376	186	148	710
9:00	364	1,425	106	1,895	30	251	676	957	309	1,074	229	1,612	424	212	171	807

Peak Hour	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**Right**	**Thru**	**Left**	**Total**	**PK Hour**
7:00 - 8:00	128	623	49	800	20	114	256	390	114	460	105	679	184	122	49	355	2,224
7:15 - 8:15	193	720	60	973	13	124	280	417	139	550	128	817	210	63	82	355	2,562
7:30 - 8:30	221	824	57	1,102	12	141	244	397	170	598	146	914	215	71	95	381	2,794
7:45 - 8:45	246	820	55	1,121	6	136	345	487	195	672	114	981	253	86	116	455	3,044
8:00 - 9:00	236	802	57	1,095	10	137	420	567	195	614	124	933	240	90	122	452	3,047
Peak Volumes:	**236**	**802**	**57**	**1,095**	**10**	**137**	**420**	**567**	**195**	**614**	**124**	**933**	**240**	**90**	**122**	**452**	**3,047**

Cut and Paste	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**
	124	614	195	57	802	236	122	90	240	420	137	10



PM Peak-Hour Volume Count Worksheet- Saratoga(19DC04)

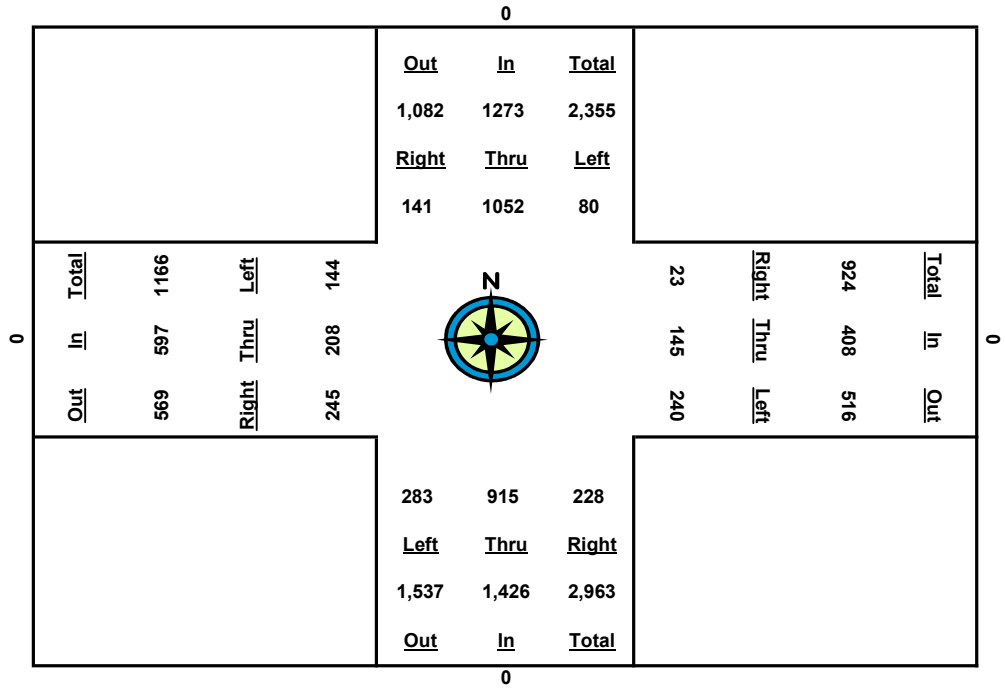
Date: Thursday, May 2nd
Counter: Jo, Kilbee
Intersection Name: Saratoga(N/S) & Cox(E/W)
Weather: Fair

AUTO CENSUS
Traffic Monitoring and Analysis
1220 Tasman Dr. #316
Sunnyvale, CA 94089
Phone 408-533-3398

	North Approach				East Approach				South Approach				West Approach			
Start Time	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	42	270	12	324	6	23	26	55	74	207	81	362	73	43	49	165
4:30	60	560	30	650	8	60	93	161	117	406	139	662	122	87	75	284
4:45	87	827	57	971	17	76	161	254	170	614	213	997	192	134	114	440
5:00	113	999	84	1,196	19	117	206	342	232	810	300	1,342	246	175	146	567
5:15	158	1,304	102	1,564	34	154	274	462	273	1,084	334	1,691	318	230	188	736
5:30	190	1,556	125	1,871	36	195	344	575	335	1,292	405	2,032	371	280	231	882
5:45	228	1,879	137	2,244	40	221	401	662	398	1,529	496	2,423	437	342	258	1,037
6:00	251	2,043	159	2,453	48	243	434	725	432	1,637	531	2,600	465	373	269	1,107

Peak Hour	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	PK Hour
4:00 - 5:00	113	999	84	1,196	19	117	206	342	232	810	300	1,342	246	175	146	567	3,447
4:15 - 5:15	116	1,034	90	1,240	28	131	248	407	199	877	253	1,329	245	187	139	571	3,547
4:30 - 5:30	130	996	95	1,221	28	135	251	414	218	886	266	1,370	249	193	156	598	3,603
4:45 - 5:45	141	1,052	80	1,273	23	145	240	408	228	915	283	1,426	245	208	144	597	3,704
5:00 - 6:00	138	1,044	75	1,257	29	126	228	383	200	827	231	1,258	219	198	123	540	3,438
Peak Volumes:	**141**	**1,052**	**80**	**1,273**	**23**	**145**	**240**	**408**	**228**	**915**	**283**	**1,426**	**245**	**208**	**144**	**597**	**3,704**

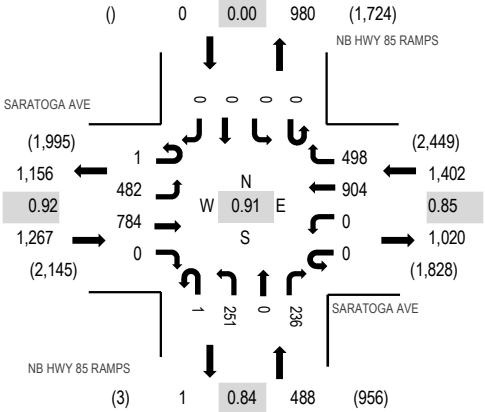
Cut and Paste	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
	283	915	228	80	1,052	141	144	208	245	240	145	23



All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

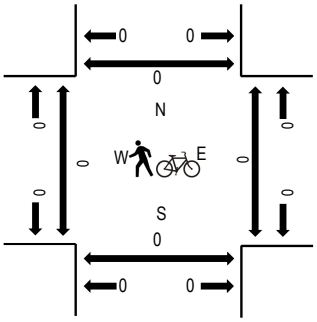
Location: 1 NB HWY 85 RAMPS & SARATOGA AVE AM
Date: Thursday, May 2, 2019
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 08:00 AM - 08:15 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	SARATOGA AVE Eastbound				SARATOGA AVE Westbound				NB HWY 85 RAMPS Northbound				NB HWY 85 RAMPS Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	90	90	0	0	0	115	106	0	31	1	76	0	0	0	0	509	2,564	0	0	0	0
7:15 AM	0	96	104	0	0	0	122	106	0	49	1	50	0	0	0	0	528	2,923	0	0	0	0
7:30 AM	0	104	175	0	0	0	196	118	0	62	0	56	0	0	0	0	711	3,157	0	0	0	0
7:45 AM	0	125	180	0	0	0	255	128	0	71	0	57	0	0	0	0	816	3,105	0	0	0	0
8:00 AM	1	125	217	0	0	0	264	147	0	60	0	54	0	0	0	0	868	2,986	0	0	0	0
8:15 AM	0	128	212	0	0	0	189	105	1	58	0	69	0	0	0	0	762		0	0	0	0
8:30 AM	0	77	201	0	0	0	185	85	0	40	0	71	0	0	0	0	659		0	0	0	0
8:45 AM	0	78	142	0	0	0	224	104	2	73	0	74	0	0	0	0	697		0	0	0	0

Peak Rolling Hour Flow Rates

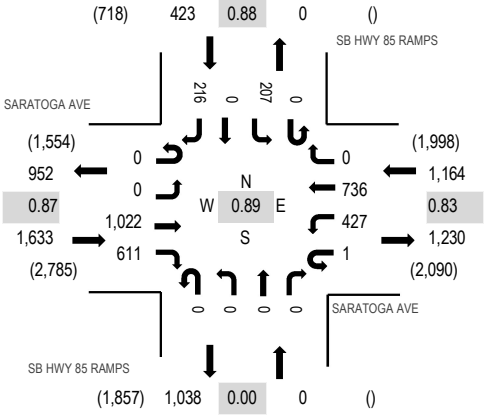
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	1	474	779	0	0	0	889	497	1	247	0	232	0	0	0	0	3,120
Mediums	0	8	5	0	0	0	15	1	0	3	0	4	0	0	0	0	36
Total	1	482	784	0	0	0	904	498	1	251	0	236	0	0	0	0	3,157

All Traffic Data Services Inc.

(303) 216-2439
www.alltrafficdata.net

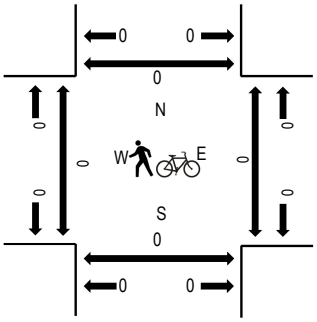
Location: 2 SB HWY 85 RAMPS & SARATOGA AVE AM
Date: Thursday, May 2, 2019
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 08:00 AM - 08:15 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	SARATOGA AVE Eastbound				SARATOGA AVE Westbound				SB HWY 85 RAMPS Northbound				SB HWY 85 RAMPS Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	149	77	0	61	77	0	0	0	0	0	0	21	0	32	417	2,405	0	0	0	0
7:15 AM	0	0	165	98	0	74	100	0	0	0	0	0	0	24	0	32	493	2,896	0	0	0	0
7:30 AM	0	0	206	113	0	91	179	0	0	0	0	0	0	47	0	54	690	3,220	0	0	0	0
7:45 AM	0	0	243	143	0	109	190	0	0	0	0	0	0	63	0	57	805	3,208	0	0	0	0
8:00 AM	0	0	277	174	0	119	233	0	0	0	0	0	0	50	0	55	908	3,096	0	0	0	0
8:15 AM	0	0	296	181	1	108	134	0	0	0	0	0	0	47	0	50	817		0	0	0	0
8:30 AM	0	0	211	138	0	123	117	0	0	0	0	0	0	55	0	34	678		0	0	0	0
8:45 AM	0	0	190	124	0	124	158	0	0	0	0	0	0	45	0	52	693		0	0	0	0

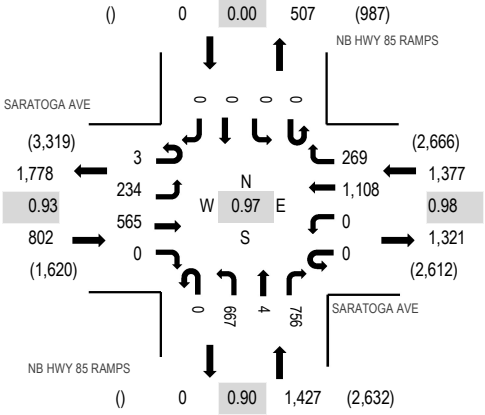
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	2	2	0	0	1	0	0	0	0	0	0	0	0	1	6
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	1,010	609	1	424	721	0	0	0	0	0	0	204	0	210	3,179
Mediums	0	0	10	0	0	3	14	0	0	0	0	0	0	3	0	5	35
Total	0	0	1,022	611	1	427	736	0	0	0	0	0	0	207	0	216	3,220

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

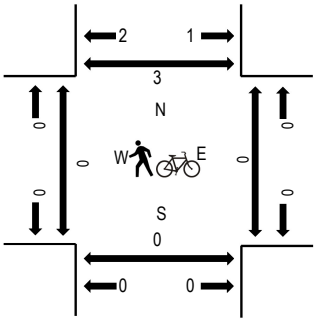
Location: 1 NB HWY 85 RAMPS & SARATOGA AVE PM
Date: Wednesday, May 1, 2019
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	SARATOGA AVE Eastbound				SARATOGA AVE Westbound				NB HWY 85 RAMPS Northbound				NB HWY 85 RAMPS Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	55	166	0	0	0	252	62	0	131	2	148	0	0	0	0	816	3,312	0	0	0	0
4:15 PM	1	53	142	0	0	0	269	77	0	122	1	171	0	0	0	0	836	3,383	0	0	0	0
4:30 PM	1	65	148	0	0	0	250	51	0	118	2	176	0	0	0	0	811	3,480	0	0	0	2
4:45 PM	0	47	140	0	0	0	263	65	0	134	0	200	0	0	0	0	849	3,541	0	0	1	0
5:00 PM	1	67	136	0	0	0	269	76	0	148	2	188	0	0	0	0	887	3,606	0	0	0	2
5:15 PM	0	56	147	0	0	0	275	59	0	190	1	205	0	0	0	0	933		0	0	0	0
5:30 PM	0	54	124	0	0	0	277	68	0	150	1	198	0	0	0	0	872		0	0	0	1
5:45 PM	2	57	158	0	0	0	287	66	0	179	0	165	0	0	0	0	914		0	0	0	0

Peak Rolling Hour Flow Rates

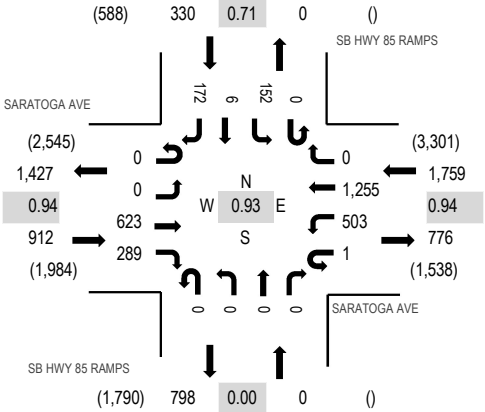
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	2	232	562	0	0	0	1,100	267	0	666	4	753	0	0	0	0	3,586
Mediums	1	2	3	0	0	0	7	2	0	1	0	3	0	0	0	0	19
Total	3	234	565	0	0	0	1,108	269	0	667	4	756	0	0	0	0	3,606

All Traffic Data Services Inc.

(303) 216-2439
www.alltrafficdata.net

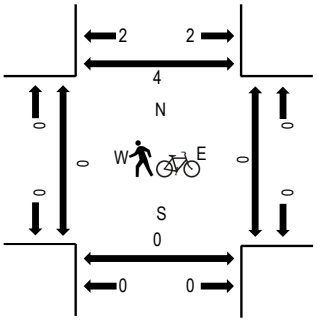
Location: 2 SB HWY 85 RAMPS & SARATOGA AVE PM
Date: Wednesday, May 1, 2019
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:45 PM - 06:00 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	SARATOGA AVE Eastbound				SARATOGA AVE Westbound				SB HWY 85 RAMPS Northbound				SB HWY 85 RAMPS Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	174	111	1	136	254	0	0	0	0	0	0	29	0	38	743	2,872	0	0	0	0
4:15 PM	0	0	146	106	0	145	238	0	0	0	0	0	0	40	0	35	710	2,881	0	0	0	0
4:30 PM	0	0	160	114	0	134	234	0	0	0	0	0	0	34	1	19	696	2,918	0	0	0	2
4:45 PM	0	0	151	110	1	135	264	0	0	0	0	0	0	26	0	36	723	2,917	0	0	0	0
5:00 PM	0	0	174	78	0	146	282	0	0	0	0	0	0	27	0	45	752	3,001	0	0	0	2
5:15 PM	0	0	157	77	0	131	318	0	0	0	0	0	0	31	1	32	747		0	0	0	0
5:30 PM	0	0	138	64	1	115	300	0	0	0	0	0	0	35	1	41	695		0	0	0	2
5:45 PM	0	0	154	70	0	111	355	0	0	0	0	0	0	59	4	54	807		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	614	286	1	501	1,248	0	0	0	0	0	0	151	6	169	2,976
Mediums	0	0	9	3	0	2	7	0	0	0	0	0	0	1	0	3	25
Total	0	0	623	289	1	503	1,255	0	0	0	0	0	0	152	6	172	3,001

Appendix B

Level of Service Calculations

Scenario Report

Scenario:	None
Command:	Default Command
Volume:	Existing AM
Geometry:	AM
Impact Fee:	Default Impact Fee
Trip Generation:	No Project
Trip Distribution:	Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

```
------------------------------------------------------------------------------
------------------------------------------------------------------------------
                      Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
******************************************************************************
Intersection #1 Quito Road/Cox Avenue
******************************************************************************
Average Delay (sec/veh):      3.8       Worst Case Level Of Service: C[ 22.6]
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Lanes:        1  0  1  0  0    0  0  0  1  0    0  0  1! 0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     294  808     0     0  404    61    14    0   160     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:  294  808     0     0  404    61    14    0   160     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:  294  808     0     0  404    61    14    0   160     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:   294  808     0     0  404    61    14    0   160     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:  294  808     0     0  404    61    14    0   160     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2 xxxxx xxxx xxxxx
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  465 xxxx xxxxx  xxxx xxxx xxxxx  1831 1831   435  xxxx xxxx xxxxx
Potent Cap.: 1107 xxxx xxxxx  xxxx xxxx xxxxx    85   77   626  xxxx xxxx xxxxx
Move Cap.:   1107 xxxx xxxxx  xxxx xxxx xxxxx    68   57   626  xxxx xxxx xxxxx
Volume/Cap:  0.27 xxxx  xxxx  xxxx xxxx  xxxx  0.21 0.00  0.26  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    1.1 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:  9.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx 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  376 xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx  2.4 xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx 22.6 xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    C     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx             22.6           xxxxxx
ApproachLOS:         *                *               C                *
******************************************************************************
Note: Queue reported is the number of cars per lane.
******************************************************************************
```

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Paseo Presada/Cox Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.595
Loss Time (sec):	0	Average Delay (sec/veh):	12.3
Optimal Cycle:	0	Level Of Service:	B

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		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	26	144	18	4	21	116	84	39	4	17	380	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:	26	144	18	4	21	116	84	39	4	17	380	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:	26	144	18	4	21	116	84	39	4	17	380	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:	26	144	18	4	21	116	84	39	4	17	380	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	144	18	4	21	116	84	39	4	17	380	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:	26	144	18	4	21	116	84	39	4	17	380	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:	0.14	0.77	0.09	0.03	0.15	0.82	0.68	0.32	1.00	0.04	0.93	0.03
Final Sat.:	84	466	58	18	95	525	376	174	654	29	639	24
Capacity Analysis Module:												
Vol/Sat:	0.31	0.31	0.31	0.22	0.22	0.22	0.22	0.22	0.01	0.59	0.59	0.59
Crit Moves:		****			****			****			****	
Delay/Veh:	10.6	10.6	10.6	9.4	9.4	9.4	10.5	10.5	7.8	14.7	14.7	14.7
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:	10.6	10.6	10.6	9.4	9.4	9.4	10.5	10.5	7.8	14.7	14.7	14.7
LOS by Move:	B	B	B	A	A	A	B	B	A	B	B	B
ApproachDel:		10.6			9.4			10.4			14.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		10.6			9.4			10.4			14.7	
LOS by Appr:		B			A			B			B	
AllWayAvgQ:	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.0	1.3	1.3	1.3

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

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

Intersection #3 Saratoga Avenue/Cox Avenue

Cycle (sec):	130	Critical Vol./Cap.(X):	0.546
Loss Time (sec):	0	Average Delay (sec/veh):	35.2
Optimal Cycle:	50	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	1 0	2 0	1	1 0	2 1	0	0 1	1 0	1	1 1	0 1	0
Volume Module:												
Base Vol:	124	614	195	57	802	236	122	90	240	420	137	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:	124	614	195	57	802	236	122	90	240	420	137	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:	124	614	195	57	802	236	122	90	240	420	137	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:	124	614	195	57	802	236	122	90	240	420	137	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	614	195	57	802	236	122	90	240	420	137	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:	124	614	195	57	802	236	122	90	240	420	137	10
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.88	0.88	0.92	0.92	0.85	0.91	0.91	0.91
Lanes:	1.00	2.00	1.00	1.00	2.32	0.68	1.00	1.00	1.00	2.00	0.93	0.07
Final Sat.:	1805	3610	1615	1805	3871	1139	1754	1754	1615	3470	1617	118
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.12	0.03	0.21	0.21	0.07	0.05	0.15	0.12	0.08	0.08
Crit Moves:	****				****				****	****		
Green/Cycle:	0.13	0.43	0.43	0.08	0.38	0.38	0.27	0.27	0.27	0.22	0.22	0.22
Volume/Cap:	0.55	0.40	0.28	0.40	0.55	0.55	0.26	0.19	0.55	0.55	0.38	0.38
Uniform Del:	53.3	25.8	24.3	56.9	31.5	31.5	37.0	36.3	40.4	44.8	43.0	43.0
IncremntDel:	2.7	0.2	0.2	1.8	0.3	0.3	0.2	0.1	1.4	0.6	0.2	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	56.1	25.9	24.5	58.7	31.9	31.9	37.1	36.4	41.8	45.4	43.2	43.2
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:	56.1	25.9	24.5	58.7	31.9	31.9	37.1	36.4	41.8	45.4	43.2	43.2
LOS by Move:	E	C	C	E	C	C	D	D	D	D	D	D
HCM2kAvgQ:	5	9	5	2	12	12	4	3	9	8	5	5

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

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

Intersection #4 LAWRENCE EXPWY/SARATOGA

Cycle (sec):	150	Critical Vol./Cap.(X):	0.523
Loss Time (sec):	12	Average Delay (sec/veh):	49.5
Optimal Cycle:	105	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Include			Include		
Min. Green:	14	10	10	14	55	10	14	10	10	14	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module: >> Count Date: 3 Oct 2018 << 7:45-8:45												
Base Vol:	58	880	272	31	220	262	485	617	28	188	702	101
Growth Adj:	1.00	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	880	272	31	220	262	485	617	28	188	702	101
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	880	272	31	220	262	485	617	28	188	702	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:	58	880	272	31	220	262	485	617	28	188	702	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	880	272	31	220	262	485	617	28	188	702	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:	58	880	272	31	220	262	485	617	28	188	702	101
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.95	0.85	0.95	0.91	0.85	0.95	0.91	0.85
Lanes:	2.00	3.00	1.00	2.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	3502	5187	1615	3502	3610	1615	1805	5187	1615	1805	5187	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.17	0.17	0.01	0.06	0.16	0.27	0.12	0.02	0.10	0.14	0.06
Crit Moves:	****				****		****				****	
Green/Cycle:	0.09	0.30	0.51	0.16	0.37	0.67	0.31	0.25	0.25	0.21	0.15	0.15
Volume/Cap:	0.18	0.57	0.33	0.05	0.17	0.24	0.88	0.49	0.07	0.49	0.88	0.41
Uniform Del:	62.7	44.7	21.5	53.0	32.0	9.6	49.4	48.5	43.5	51.6	62.1	57.2
IncremntDel:	0.3	0.5	0.2	0.0	0.1	0.1	14.9	0.3	0.1	1.0	10.9	1.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	63.0	45.2	21.8	53.0	32.1	9.7	64.3	48.8	43.6	52.6	73.0	58.3
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:	63.0	45.2	21.8	53.0	32.1	9.7	64.3	48.8	43.6	52.6	73.0	58.3
LOS by Move:	E	D	C	D	C	A	E	D	D	D	E	E
HCM2kAvgQ:	1	13	7	1	3	5	23	9	1	8	14	4

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

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

Intersection #5 Saratoga Avenue/US101 NB Ramps

Cycle (sec):	95	Critical Vol./Cap.(X):	0.543
Loss Time (sec):	0	Average Delay (sec/veh):	16.1
Optimal Cycle:	50	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	483	784	0	0	904	498	0	0	0	252	0	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:	483	784	0	0	904	498	0	0	0	252	0	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:	483	784	0	0	904	498	0	0	0	252	0	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:	483	784	0	0	904	498	0	0	0	252	0	236
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	483	784	0	0	904	498	0	0	0	252	0	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:	483	784	0	0	904	498	0	0	0	252	0	236
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	1.00	1.00	0.91	0.85	1.00	1.00	1.00	0.90	1.00	0.90
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.52	0.00	1.48
Final Sat.:	3502	3610	0	0	5187	1615	0	0	0	2604	0	2548
Capacity Analysis Module:												
Vol/Sat:	0.14	0.22	0.00	0.00	0.17	0.31	0.00	0.00	0.00	0.10	0.00	0.09
Crit Moves:	****					****				****		
Green/Cycle:	0.25	0.82	0.00	0.00	0.57	0.57	0.00	0.00	0.00	0.18	0.00	0.18
Volume/Cap:	0.54	0.26	0.00	0.00	0.31	0.54	0.00	0.00	0.00	0.54	0.00	0.52
Uniform Del:	30.7	1.9	0.0	0.0	10.7	12.8	0.0	0.0	0.0	35.5	0.0	35.4
IncremntDel:	0.7	0.0	0.0	0.0	0.1	0.7	0.0	0.0	0.0	0.7	0.0	0.5
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	31.4	2.0	0.0	0.0	10.8	13.5	0.0	0.0	0.0	36.2	0.0	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:	31.4	2.0	0.0	0.0	10.8	13.5	0.0	0.0	0.0	36.2	0.0	35.9
LOS by Move:	C	A	A	A	B	B	A	A	A	D	A	D
HCM2kAvgQ:	6	3	0	0	5	9	0	0	0	5	0	5

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

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

Intersection #6 Saratoga Avenue/US 101 SB Ramps

Cycle (sec):	95	Critical Vol./Cap.(X):	0.584
Loss Time (sec):	0	Average Delay (sec/veh):	14.4
Optimal Cycle:	55	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	0 0	3 0	1	2 0	2 0	0	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	1022	611	428	736	0	207	0	216	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	1022	611	428	736	0	207	0	216	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	1022	611	428	736	0	207	0	216	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	1022	611	428	736	0	207	0	216	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1022	611	428	736	0	207	0	216	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	1022	611	428	736	0	207	0	216	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.85	0.92	0.95	1.00	0.90	1.00	0.90	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	2.00	0.00	1.49	0.00	1.51	0.00	0.00	0.00
Final Sat.:	0	5187	1615	3502	3610	0	2549	0	2586	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.38	0.12	0.20	0.00	0.08	0.00	0.08	0.00	0.00	0.00
Crit Moves:			****	****					****			
Green/Cycle:	0.00	0.65	0.65	0.21	0.86	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Volume/Cap:	0.00	0.30	0.58	0.58	0.24	0.00	0.57	0.00	0.58	0.00	0.00	0.00
Uniform Del:	0.0	7.3	9.5	33.8	1.2	0.0	38.0	0.0	38.1	0.0	0.0	0.0
IncremntDel:	0.0	0.1	0.9	1.2	0.0	0.0	1.0	0.0	1.2	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	0.0	7.4	10.3	35.1	1.3	0.0	39.0	0.0	39.3	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	7.4	10.3	35.1	1.3	0.0	39.0	0.0	39.3	0.0	0.0	0.0
LOS by Move:	A	A	B	D	A	A	D	A	D	A	A	A
HCM2kAvgQ:	0	5	11	6	2	0	5	0	5	0	0	0

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

****

Scenario Report

Scenario:	Existing AM
Command:	Default Command
Volume:	Existing AM
Geometry:	AM
Impact Fee:	Default Impact Fee
Trip Generation:	No Project
Trip Distribution:	Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

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------------------------------------------------------------------------------
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                      Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
******************************************************************************
Intersection #1 Quito Road/Cox Avenue
******************************************************************************
Average Delay (sec/veh):      3.8       Worst Case Level Of Service: C[ 22.6]
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Lanes:        1  0  1  0  0    0  0  0  1  0    0  0  1! 0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     294  808     0     0  404    61    14    0   160     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:  294  808     0     0  404    61    14    0   160     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:  294  808     0     0  404    61    14    0   160     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:   294  808     0     0  404    61    14    0   160     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:  294  808     0     0  404    61    14    0   160     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2 xxxxx xxxx xxxxx
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  465 xxxx xxxxx  xxxx xxxx xxxxx  1831 1831   435  xxxx xxxx xxxxx
Potent Cap.: 1107 xxxx xxxxx  xxxx xxxx xxxxx    85   77   626  xxxx xxxx xxxxx
Move Cap.:   1107 xxxx xxxxx  xxxx xxxx xxxxx    68   57   626  xxxx xxxx xxxxx
Volume/Cap:  0.27 xxxx  xxxx  xxxx xxxx  xxxx  0.21 0.00  0.26  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    1.1 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:  9.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx 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  376 xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx  2.4 xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx 22.6 xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    C     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx             22.6           xxxxxx
ApproachLOS:         *                *                C                *
******************************************************************************
Note: Queue reported is the number of cars per lane.
******************************************************************************
```

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Paseo Presada/Cox Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.595
Loss Time (sec):	0	Average Delay (sec/veh):	12.3
Optimal Cycle:	0	Level Of Service:	B

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		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	26	144	18	4	21	116	84	39	4	17	380	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:	26	144	18	4	21	116	84	39	4	17	380	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:	26	144	18	4	21	116	84	39	4	17	380	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:	26	144	18	4	21	116	84	39	4	17	380	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	144	18	4	21	116	84	39	4	17	380	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:	26	144	18	4	21	116	84	39	4	17	380	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:	0.14	0.77	0.09	0.03	0.15	0.82	0.68	0.32	1.00	0.04	0.93	0.03
Final Sat.:	84	466	58	18	95	525	376	174	654	29	639	24
Capacity Analysis Module:												
Vol/Sat:	0.31	0.31	0.31	0.22	0.22	0.22	0.22	0.22	0.01	0.59	0.59	0.59
Crit Moves:		****			****			****			****	
Delay/Veh:	10.6	10.6	10.6	9.4	9.4	9.4	10.5	10.5	7.8	14.7	14.7	14.7
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:	10.6	10.6	10.6	9.4	9.4	9.4	10.5	10.5	7.8	14.7	14.7	14.7
LOS by Move:	B	B	B	A	A	A	B	B	A	B	B	B
ApproachDel:		10.6			9.4			10.4			14.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		10.6			9.4			10.4			14.7	
LOS by Appr:		B			A			B			B	
AllWayAvgQ:	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.0	1.3	1.3	1.3

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

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

Intersection #3 Saratoga Avenue/Cox Avenue

Cycle (sec):	130	Critical Vol./Cap.(X):	0.546
Loss Time (sec):	0	Average Delay (sec/veh):	35.2
Optimal Cycle:	50	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	1 0	2 0	1	1 0	2 1	0	0 1	1 0	1	1 1	0 1	0
Volume Module:												
Base Vol:	124	614	195	57	802	236	122	90	240	420	137	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:	124	614	195	57	802	236	122	90	240	420	137	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:	124	614	195	57	802	236	122	90	240	420	137	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:	124	614	195	57	802	236	122	90	240	420	137	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	614	195	57	802	236	122	90	240	420	137	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:	124	614	195	57	802	236	122	90	240	420	137	10
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.88	0.88	0.92	0.92	0.85	0.91	0.91	0.91
Lanes:	1.00	2.00	1.00	1.00	2.32	0.68	1.00	1.00	1.00	2.00	0.93	0.07
Final Sat.:	1805	3610	1615	1805	3871	1139	1754	1754	1615	3470	1617	118
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.12	0.03	0.21	0.21	0.07	0.05	0.15	0.12	0.08	0.08
Crit Moves:	****				****				****	****		
Green/Cycle:	0.13	0.43	0.43	0.08	0.38	0.38	0.27	0.27	0.27	0.22	0.22	0.22
Volume/Cap:	0.55	0.40	0.28	0.40	0.55	0.55	0.26	0.19	0.55	0.55	0.38	0.38
Uniform Del:	53.3	25.8	24.3	56.9	31.5	31.5	37.0	36.3	40.4	44.8	43.0	43.0
IncremntDel:	2.7	0.2	0.2	1.8	0.3	0.3	0.2	0.1	1.4	0.6	0.2	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	56.1	25.9	24.5	58.7	31.9	31.9	37.1	36.4	41.8	45.4	43.2	43.2
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:	56.1	25.9	24.5	58.7	31.9	31.9	37.1	36.4	41.8	45.4	43.2	43.2
LOS by Move:	E	C	C	E	C	C	D	D	D	D	D	D
HCM2kAvgQ:	5	9	5	2	12	12	4	3	9	8	5	5

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

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

Intersection #4 LAWRENCE EXPWY/SARATOGA

Cycle (sec):	150	Critical Vol./Cap.(X):	0.523
Loss Time (sec):	12	Average Delay (sec/veh):	49.5
Optimal Cycle:	105	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:		Ovl			Ovl			Include			Include	
Min. Green:	14	10	10	14	55	10	14	10	10	14	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 0	1	1 0	3 0	1	1 0	3 0	1

Volume Module: >> Count Date: 3 Oct 2018 << 7:45-8:45

Base Vol:	58	880	272	31	220	262	485	617	28	188	702	101
Growth Adj:	1.00	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	880	272	31	220	262	485	617	28	188	702	101
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	880	272	31	220	262	485	617	28	188	702	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:	58	880	272	31	220	262	485	617	28	188	702	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	880	272	31	220	262	485	617	28	188	702	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:	58	880	272	31	220	262	485	617	28	188	702	101

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.95	0.85	0.95	0.91	0.85	0.95	0.91	0.85
Lanes:	2.00	3.00	1.00	2.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	3502	5187	1615	3502	3610	1615	1805	5187	1615	1805	5187	1615

Capacity Analysis Module:

Vol/Sat:	0.02	0.17	0.17	0.01	0.06	0.16	0.27	0.12	0.02	0.10	0.14	0.06
Crit Moves:	****				****		****				****	
Green/Cycle:	0.09	0.30	0.51	0.16	0.37	0.67	0.31	0.25	0.25	0.21	0.15	0.15
Volume/Cap:	0.18	0.57	0.33	0.05	0.17	0.24	0.88	0.49	0.07	0.49	0.88	0.41
Uniform Del:	62.7	44.7	21.5	53.0	32.0	9.6	49.4	48.5	43.5	51.6	62.1	57.2
IncremntDel:	0.3	0.5	0.2	0.0	0.1	0.1	14.9	0.3	0.1	1.0	10.9	1.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	63.0	45.2	21.8	53.0	32.1	9.7	64.3	48.8	43.6	52.6	73.0	58.3
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:	63.0	45.2	21.8	53.0	32.1	9.7	64.3	48.8	43.6	52.6	73.0	58.3
LOS by Move:	E	D	C	D	C	A	E	D	D	D	E	E
HCM2kAvgQ:	1	13	7	1	3	5	23	9	1	8	14	4

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

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

Intersection #5 Saratoga Avenue/US101 NB Ramps

Cycle (sec):	95	Critical Vol./Cap.(X):	0.543
Loss Time (sec):	0	Average Delay (sec/veh):	16.1
Optimal Cycle:	50	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	483	784	0	0	904	498	0	0	0	252	0	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:	483	784	0	0	904	498	0	0	0	252	0	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:	483	784	0	0	904	498	0	0	0	252	0	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:	483	784	0	0	904	498	0	0	0	252	0	236
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	483	784	0	0	904	498	0	0	0	252	0	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:	483	784	0	0	904	498	0	0	0	252	0	236
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	1.00	1.00	0.91	0.85	1.00	1.00	1.00	0.90	1.00	0.90
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.52	0.00	1.48
Final Sat.:	3502	3610	0	0	5187	1615	0	0	0	2604	0	2548
Capacity Analysis Module:												
Vol/Sat:	0.14	0.22	0.00	0.00	0.17	0.31	0.00	0.00	0.00	0.10	0.00	0.09
Crit Moves:	****					****				****		
Green/Cycle:	0.25	0.82	0.00	0.00	0.57	0.57	0.00	0.00	0.00	0.18	0.00	0.18
Volume/Cap:	0.54	0.26	0.00	0.00	0.31	0.54	0.00	0.00	0.00	0.54	0.00	0.52
Uniform Del:	30.7	1.9	0.0	0.0	10.7	12.8	0.0	0.0	0.0	35.5	0.0	35.4
IncremntDel:	0.7	0.0	0.0	0.0	0.1	0.7	0.0	0.0	0.0	0.7	0.0	0.5
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	31.4	2.0	0.0	0.0	10.8	13.5	0.0	0.0	0.0	36.2	0.0	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:	31.4	2.0	0.0	0.0	10.8	13.5	0.0	0.0	0.0	36.2	0.0	35.9
LOS by Move:	C	A	A	A	B	B	A	A	A	D	A	D
HCM2kAvgQ:	6	3	0	0	5	9	0	0	0	5	0	5

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

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

Intersection #6 Saratoga Avenue/US 101 SB Ramps

Cycle (sec):	95	Critical Vol./Cap.(X):	0.584
Loss Time (sec):	0	Average Delay (sec/veh):	14.4
Optimal Cycle:	55	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	0 0	3 0	1	2 0	2 0	0	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	1022	611	428	736	0	207	0	216	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	1022	611	428	736	0	207	0	216	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	1022	611	428	736	0	207	0	216	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	1022	611	428	736	0	207	0	216	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1022	611	428	736	0	207	0	216	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	1022	611	428	736	0	207	0	216	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.85	0.92	0.95	1.00	0.90	1.00	0.90	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	2.00	0.00	1.49	0.00	1.51	0.00	0.00	0.00
Final Sat.:	0	5187	1615	3502	3610	0	2549	0	2586	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.38	0.12	0.20	0.00	0.08	0.00	0.08	0.00	0.00	0.00
Crit Moves:			****	****					****			
Green/Cycle:	0.00	0.65	0.65	0.21	0.86	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Volume/Cap:	0.00	0.30	0.58	0.58	0.24	0.00	0.57	0.00	0.58	0.00	0.00	0.00
Uniform Del:	0.0	7.3	9.5	33.8	1.2	0.0	38.0	0.0	38.1	0.0	0.0	0.0
IncremntDel:	0.0	0.1	0.9	1.2	0.0	0.0	1.0	0.0	1.2	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	0.0	7.4	10.3	35.1	1.3	0.0	39.0	0.0	39.3	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	7.4	10.3	35.1	1.3	0.0	39.0	0.0	39.3	0.0	0.0	0.0
LOS by Move:	A	A	B	D	A	A	D	A	D	A	A	A
HCM2kAvgQ:	0	5	11	6	2	0	5	0	5	0	0	0

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

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Scenario Report

Scenario:	Existing PM
Command:	Default Command
Volume:	Existing PM
Geometry:	PM
Impact Fee:	Default Impact Fee
Trip Generation:	No Project
Trip Distribution:	Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

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------------------------------------------------------------------------------
------------------------------------------------------------------------------
                      Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
******************************************************************************
Intersection #1 Quito Road/Cox Avenue
******************************************************************************
Average Delay (sec/veh):     52.0       Worst Case Level Of Service: F[317.8]
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Lanes:        1  0  1  0  0    0  0  0  1  0    0  0  1! 0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     175  474     0     0 1057    45    25    0   309     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:  175  474     0     0 1057    45    25    0   309     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:  175  474     0     0 1057    45    25    0   309     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:   175  474     0     0 1057    45    25    0   309     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:  175  474     0     0 1057    45    25    0   309     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2 xxxxx xxxx xxxxx
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1102 xxxx xxxxx  xxxx xxxx xxxxx  1904 1904  1080  xxxx xxxx xxxxx
Potent Cap.:  641 xxxx xxxxx  xxxx xxxx xxxxx    77   70   268  xxxx xxxx xxxxx
Move Cap.:    641 xxxx xxxxx  xxxx xxxx xxxxx    60   51   268  xxxx xxxx xxxxx
Volume/Cap:  0.27 xxxx  xxxx  xxxx xxxx  xxxx  0.41 0.00  1.15  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    1.1 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del: 12.7 xxxx xxxxx xxxxx xxxx xxxxx 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  213 xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx 21.1 xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx  318 xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    F     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx            317.8           xxxxxx
ApproachLOS:         *                *                F                *
******************************************************************************
Note: Queue reported is the number of cars per lane.
******************************************************************************
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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Paseo Presada/Cox Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.481
Loss Time (sec):	0	Average Delay (sec/veh):	10.4
Optimal Cycle:	0	Level Of Service:	B

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		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	43	20	4	9	33	64	55	272	111	6	171	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:	43	20	4	9	33	64	55	272	111	6	171	5
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:	43	20	4	9	33	64	55	272	111	6	171	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:	43	20	4	9	33	64	55	272	111	6	171	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	20	4	9	33	64	55	272	111	6	171	5
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	20	4	9	33	64	55	272	111	6	171	5
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:	0.64	0.30	0.06	0.08	0.31	0.61	0.17	0.83	1.00	0.03	0.94	0.03
Final Sat.:	383	178	36	56	204	396	114	565	799	23	664	19
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.16	0.16	0.16	0.48	0.48	0.14	0.26	0.26	0.26
Crit Moves:	****			****				****			****	
Delay/Veh:	9.2	9.2	9.2	8.9	8.9	8.9	12.5	12.5	7.8	9.5	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:	9.2	9.2	9.2	8.9	8.9	8.9	12.5	12.5	7.8	9.5	9.5	9.5
LOS by Move:	A	A	A	A	A	A	B	B	A	A	A	A
ApproachDel:	9.2			8.9			11.3			9.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.2			8.9			11.3			9.5		
LOS by Appr:	A			A			B			A		
AllWayAvgQ:	0.1	0.1	0.1	0.2	0.2	0.2	0.9	0.9	0.2	0.3	0.3	0.3

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

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

Intersection #3 Saratoga Avenue/Cox Avenue

Cycle (sec):	140	Critical Vol./Cap.(X):	0.621
Loss Time (sec):	0	Average Delay (sec/veh):	37.0
Optimal Cycle:	60	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	1 0	2 0	1	1 0	2 1	0	0 1	1 0	1	1 1	0 1	0
Volume Module:												
Base Vol:	283	915	228	80	1052	141	144	208	245	240	145	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:	283	915	228	80	1052	141	144	208	245	240	145	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:	283	915	228	80	1052	141	144	208	245	240	145	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:	283	915	228	80	1052	141	144	208	245	240	145	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	283	915	228	80	1052	141	144	208	245	240	145	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:	283	915	228	80	1052	141	144	208	245	240	145	23
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.89	0.89	0.93	0.93	0.85	0.92	0.92	0.92
Lanes:	1.00	2.00	1.00	1.00	2.65	0.35	0.82	1.18	1.00	1.76	1.07	0.17
Final Sat.:	1805	3610	1615	1805	4492	602	1447	2091	1615	3068	1854	294
Capacity Analysis Module:												
Vol/Sat:	0.16	0.25	0.14	0.04	0.23	0.23	0.10	0.10	0.15	0.08	0.08	0.08
Crit Moves:	****				****				****			****
Green/Cycle:	0.25	0.54	0.54	0.09	0.38	0.38	0.24	0.24	0.24	0.13	0.13	0.13
Volume/Cap:	0.62	0.47	0.26	0.47	0.62	0.62	0.41	0.41	0.62	0.62	0.62	0.62
Uniform Del:	46.4	20.2	17.5	60.2	35.5	35.5	44.4	44.4	47.1	58.0	58.0	58.0
IncremntDel:	2.6	0.2	0.2	2.1	0.6	0.6	0.3	0.3	3.0	1.8	1.8	1.8
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	49.0	20.4	17.7	62.2	36.1	36.1	44.7	44.7	50.2	59.8	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:	49.0	20.4	17.7	62.2	36.1	36.1	44.7	44.7	50.2	59.8	59.8	59.8
LOS by Move:	D	C	B	E	D	D	D	D	D	E	E	E
HCM2kAvgQ:	11	12	5	3	15	15	7	7	10	7	7	7

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

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

Intersection #4 LAWRENCE EXPWY/SARATOGA

Cycle (sec):	150	Critical Vol./Cap.(X):	0.646
Loss Time (sec):	12	Average Delay (sec/veh):	46.5
Optimal Cycle:	105	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Include			Include		
Min. Green:	14	10	10	14	55	10	14	10	10	14	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module: >> Count Date: 15 Nov 2018 << 5:00 - 6:00 PM												
Base Vol:	88	312	295	110	868	441	314	850	37	298	674	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:	88	312	295	110	868	441	314	850	37	298	674	70
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	312	295	110	868	441	314	850	37	298	674	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:	88	312	295	110	868	441	314	850	37	298	674	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	312	295	110	868	441	314	850	37	298	674	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:	88	312	295	110	868	441	314	850	37	298	674	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.95	0.85	0.95	0.91	0.85	0.95	0.91	0.85
Lanes:	2.00	3.00	1.00	2.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	3502	5187	1615	3502	3610	1615	1805	5187	1615	1805	5187	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.06	0.18	0.03	0.24	0.27	0.17	0.16	0.02	0.17	0.13	0.04
Crit Moves:	****				****			****		****		
Green/Cycle:	0.09	0.19	0.42	0.27	0.37	0.63	0.26	0.23	0.23	0.23	0.20	0.20
Volume/Cap:	0.27	0.31	0.43	0.12	0.66	0.43	0.66	0.72	0.10	0.72	0.66	0.22
Uniform Del:	63.2	52.1	30.6	41.5	39.6	14.1	49.3	53.3	45.6	53.1	55.6	50.6
IncremntDel:	0.4	0.2	0.4	0.1	1.2	0.3	3.4	2.1	0.1	5.8	1.6	0.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	63.7	52.3	31.0	41.5	40.8	14.4	52.7	55.4	45.7	59.0	57.2	50.9
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:	63.7	52.3	31.0	41.5	40.8	14.4	52.7	55.4	45.7	59.0	57.2	50.9
LOS by Move:	E	D	C	D	D	B	D	E	D	E	E	D
HCM2kAvgQ:	2	5	9	2	18	10	13	13	1	14	11	3

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

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

Intersection #5 Saratoga Avenue/US101 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.721
Loss Time (sec):	0	Average Delay (sec/veh):	23.7
Optimal Cycle:	82	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	237	565	0	0	1108	269	0	0	0	667	4	756
Growth Adj:	1.00	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	565	0	0	1108	269	0	0	0	667	4	756
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:	237	565	0	0	1108	269	0	0	0	667	4	756
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	565	0	0	1108	269	0	0	0	667	4	756
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	237	565	0	0	1108	269	0	0	0	667	4	756
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	237	565	0	0	1108	269	0	0	0	667	4	756
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	1.00	1.00	0.91	0.85	1.00	1.00	1.00	0.86	0.86	0.86
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.46	0.01	1.53
Final Sat.:	3502	3610	0	0	5187	1615	0	0	0	2386	9	2487
Capacity Analysis Module:												
Vol/Sat:	0.07	0.16	0.00	0.00	0.21	0.17	0.00	0.00	0.00	0.28	0.44	0.30
Crit Moves:	****				****						****	
Green/Cycle:	0.09	0.39	0.00	0.00	0.30	0.30	0.00	0.00	0.00	0.61	0.61	0.61
Volume/Cap:	0.72	0.40	0.00	0.00	0.72	0.56	0.00	0.00	0.00	0.46	0.72	0.50
Uniform Del:	44.0	22.0	0.0	0.0	31.5	29.7	0.0	0.0	0.0	10.6	13.6	10.9
IncremntDel:	7.6	0.2	0.0	0.0	1.7	1.5	0.0	0.0	0.0	0.1	1.3	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00
Delay/Veh:	51.6	22.2	0.0	0.0	33.2	31.2	0.0	0.0	0.0	10.7	14.9	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:	51.6	22.2	0.0	0.0	33.2	31.2	0.0	0.0	0.0	10.7	14.9	11.1
LOS by Move:	D	C	A	A	C	C	A	A	A	B	B	B
HCM2kAvgQ:	4	6	0	0	11	7	0	0	0	8	16	9

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

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

Intersection #6 Saratoga Avenue/US 101 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.451
Loss Time (sec):	0	Average Delay (sec/veh):	15.4
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	0 0	3 0	1	2 0	2 0	0	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	623	289	504	1255	0	152	6	172	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	623	289	504	1255	0	152	6	172	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	623	289	504	1255	0	152	6	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:	0	623	289	504	1255	0	152	6	172	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	623	289	504	1255	0	152	6	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:	0	623	289	504	1255	0	152	6	172	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.85	0.92	0.95	1.00	0.86	0.86	0.86	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	2.00	0.00	1.45	0.04	1.51	0.00	0.00	0.00
Final Sat.:	0	5187	1615	3502	3610	0	2369	58	2466	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.18	0.14	0.35	0.00	0.06	0.10	0.07	0.00	0.00	0.00
Crit Moves:	****				****			****				
Green/Cycle:	0.00	0.43	0.43	0.34	0.77	0.00	0.23	0.23	0.23	0.00	0.00	0.00
Volume/Cap:	0.00	0.28	0.42	0.42	0.45	0.00	0.28	0.45	0.31	0.00	0.00	0.00
Uniform Del:	0.0	18.6	20.0	25.1	4.0	0.0	31.8	33.2	32.0	0.0	0.0	0.0
IncremntDel:	0.0	0.1	0.4	0.2	0.1	0.0	0.1	0.4	0.2	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Delay/Veh:	0.0	18.7	20.4	25.4	4.1	0.0	31.9	33.6	32.1	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	18.7	20.4	25.4	4.1	0.0	31.9	33.6	32.1	0.0	0.0	0.0
LOS by Move:	A	B	C	C	A	A	C	C	C	A	A	A
HCM2kAvgQ:	0	5	6	6	7	0	3	5	3	0	0	0

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

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Scenario Report

Scenario:	Cumulative AM
Command:	Default Command
Volume:	Cumulative AM
Geometry:	AM
Impact Fee:	Default Impact Fee
Trip Generation:	No Project
Trip Distribution:	Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

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

Intersection #1 Quito Road/Cox Avenue

Average Delay (sec/veh): 4.9 Worst Case Level Of Service: D[32.2]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	1	0	0		0	0	0	1	0		0	0	1!	0	0		0	0	0	0	0	
Volume Module:																								
Base Vol:	325		893		0		0		446		67		15		0		177		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:	325		893		0		0		446		67		15		0		177		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:	325		893		0		0		446		67		15		0		177		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:	325		893		0		0		446		67		15		0		177		0		0		0	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	325		893		0		0		446		67		15		0		177		0		0		0	
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx							6.4		6.5		6.2	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx							3.5		4.0		3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																								
Cnflict Vol:	513	xxxx	xxxxx	xxxx	xxxx	xxxxx							2023		2023		480	xxxx	xxxx	xxxxx				
Potent Cap.:	1063	xxxx	xxxxx	xxxx	xxxx	xxxxx							65		59		590	xxxx	xxxx	xxxxx				
Move Cap.:	1063	xxxx	xxxxx	xxxx	xxxx	xxxxx							49		41		590	xxxx	xxxx	xxxxx				
Volume/Cap:	0.31	xxxx	xxxx	xxxx	xxxx	xxxx							0.30		0.00		0.30	xxxx	xxxx	xxxx				
Level Of Service Module:																								
2Way95thQ:	1.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx												
Control Del:	9.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	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	318	xxxxx	xxxx	xxxx	xxxxx												
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	3.7	xxxxx	xxxxx	xxxx	xxxxx												
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	32.2	xxxxx	xxxxx	xxxx	xxxxx												
Shared LOS:	*	*	*	*	*	*	*	D	*	*	*	*												
ApproachDel:	xxxxxx			xxxxxx			32.2			xxxxxx														
ApproachLOS:	*			*			D			*														

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

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Paseo Presada/Cox Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.676
Loss Time (sec):	0	Average Delay (sec/veh):	14.1
Optimal Cycle:	0	Level Of Service:	B

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		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	29	159	20	4	23	128	93	43	4	19	420	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:	29	159	20	4	23	128	93	43	4	19	420	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:	29	159	20	4	23	128	93	43	4	19	420	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:	29	159	20	4	23	128	93	43	4	19	420	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	159	20	4	23	128	93	43	4	19	420	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:	29	159	20	4	23	128	93	43	4	19	420	15
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:	0.14	0.76	0.10	0.02	0.15	0.83	0.68	0.32	1.00	0.04	0.93	0.03
Final Sat.:	81	445	56	16	90	498	361	167	623	28	621	22
Capacity Analysis Module:												
Vol/Sat:	0.36	0.36	0.36	0.26	0.26	0.26	0.26	0.26	0.01	0.68	0.68	0.68
Crit Moves:		****		****				****			****	
Delay/Veh:	11.5	11.5	11.5	10.0	10.0	10.0	11.1	11.1	8.1	17.7	17.7	17.7
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:	11.5	11.5	11.5	10.0	10.0	10.0	11.1	11.1	8.1	17.7	17.7	17.7
LOS by Move:	B	B	B	A	A	A	B	B	A	C	C	C
ApproachDel:	11.5			10.0			11.0			17.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	11.5			10.0			11.0			17.7		
LOS by Appr:	B			A			B			C		
AllWayAvgQ:	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.0	1.8	1.8	1.8

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

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

Intersection #3 Saratoga Avenue/Cox Avenue

Cycle (sec):	130	Critical Vol./Cap.(X):	0.603
Loss Time (sec):	0	Average Delay (sec/veh):	36.2
Optimal Cycle:	57	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	1 0	2 0	1	1 0	2 1	0	0 1	1 0	1	1 1	0 1	0
Volume Module:												
Base Vol:	137	678	215	63	886	261	135	99	265	464	151	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:	137	678	215	63	886	261	135	99	265	464	151	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:	137	678	215	63	886	261	135	99	265	464	151	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:	137	678	215	63	886	261	135	99	265	464	151	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	137	678	215	63	886	261	135	99	265	464	151	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:	137	678	215	63	886	261	135	99	265	464	151	11
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.88	0.88	0.92	0.92	0.85	0.91	0.91	0.91
Lanes:	1.00	2.00	1.00	1.00	2.32	0.68	1.00	1.00	1.00	2.00	0.93	0.07
Final Sat.:	1805	3610	1615	1805	3870	1140	1754	1754	1615	3470	1617	118
Capacity Analysis Module:												
Vol/Sat:	0.08	0.19	0.13	0.03	0.23	0.23	0.08	0.06	0.16	0.13	0.09	0.09
Crit Moves:	****				****				****	****		
Green/Cycle:	0.13	0.43	0.43	0.08	0.38	0.38	0.27	0.27	0.27	0.22	0.22	0.22
Volume/Cap:	0.60	0.44	0.31	0.44	0.60	0.60	0.28	0.21	0.60	0.60	0.42	0.42
Uniform Del:	53.7	26.3	24.7	57.1	32.4	32.4	37.3	36.5	41.2	45.4	43.4	43.4
IncremntDel:	4.5	0.2	0.3	2.2	0.5	0.5	0.2	0.1	2.4	1.0	0.2	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	58.2	26.5	24.9	59.3	33.0	33.0	37.5	36.6	43.5	46.4	43.6	43.6
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:	58.2	26.5	24.9	59.3	33.0	33.0	37.5	36.6	43.5	46.4	43.6	43.6
LOS by Move:	E	C	C	E	C	C	D	D	D	D	D	D
HCM2kAvgQ:	5	10	5	2	13	13	4	3	10	9	6	6

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

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

Intersection #4 LAWRENCE EXPWY/SARATOGA

Cycle (sec):	150	Critical Vol./Cap.(X):	0.578
Loss Time (sec):	12	Average Delay (sec/veh):	54.6
Optimal Cycle:	105	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Include			Include		
Min. Green:	14	10	10	14	55	10	14	10	10	14	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	64	972	300	34	243	289	536	682	31	208	775	112
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	64	972	300	34	243	289	536	682	31	208	775	112
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:	64	972	300	34	243	289	536	682	31	208	775	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:	64	972	300	34	243	289	536	682	31	208	775	112
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	972	300	34	243	289	536	682	31	208	775	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:	64	972	300	34	243	289	536	682	31	208	775	112
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.95	0.85	0.95	0.91	0.85	0.95	0.91	0.85
Lanes:	2.00	3.00	1.00	2.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	3502	5187	1615	3502	3610	1615	1805	5187	1615	1805	5187	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.19	0.19	0.01	0.07	0.18	0.30	0.13	0.02	0.12	0.15	0.07
Crit Moves:	****				****		****				****	
Green/Cycle:	0.09	0.31	0.52	0.15	0.37	0.67	0.31	0.25	0.25	0.21	0.15	0.15
Volume/Cap:	0.20	0.61	0.36	0.06	0.18	0.27	0.97	0.54	0.08	0.54	0.97	0.45
Uniform Del:	62.8	44.3	21.1	54.3	32.3	9.8	51.4	49.2	43.6	52.3	63.1	57.7
IncremntDel:	0.3	0.7	0.3	0.1	0.1	0.1	30.7	0.5	0.1	1.5	24.7	1.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	63.1	45.0	21.3	54.4	32.3	9.9	82.1	49.7	43.7	53.7	87.8	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:	63.1	45.0	21.3	54.4	32.3	9.9	82.1	49.7	43.7	53.7	87.8	59.0
LOS by Move:	E	D	C	D	C	A	F	D	D	D	F	E
HCM2kAvgQ:	2	14	8	1	4	5	28	10	1	9	17	5

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

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

Intersection #5 Saratoga Avenue/US101 NB Ramps

Cycle (sec):	95	Critical Vol./Cap.(X):	0.600
Loss Time (sec):	0	Average Delay (sec/veh):	16.6
Optimal Cycle:	57	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	534	866	0	0	999	550	0	0	0	278	0	261
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	534	866	0	0	999	550	0	0	0	278	0	261
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:	534	866	0	0	999	550	0	0	0	278	0	261
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	534	866	0	0	999	550	0	0	0	278	0	261
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	534	866	0	0	999	550	0	0	0	278	0	261
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	534	866	0	0	999	550	0	0	0	278	0	261
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	1.00	1.00	0.91	0.85	1.00	1.00	1.00	0.90	1.00	0.90
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.52	0.00	1.48
Final Sat.:	3502	3610	0	0	5187	1615	0	0	0	2603	0	2549
Capacity Analysis Module:												
Vol/Sat:	0.15	0.24	0.00	0.00	0.19	0.34	0.00	0.00	0.00	0.11	0.00	0.10
Crit Moves:	****					****				****		
Green/Cycle:	0.25	0.82	0.00	0.00	0.57	0.57	0.00	0.00	0.00	0.18	0.00	0.18
Volume/Cap:	0.60	0.29	0.00	0.00	0.34	0.60	0.00	0.00	0.00	0.60	0.00	0.58
Uniform Del:	31.2	2.0	0.0	0.0	11.0	13.5	0.0	0.0	0.0	35.9	0.0	35.8
IncremntDel:	1.1	0.1	0.0	0.0	0.1	1.1	0.0	0.0	0.0	1.1	0.0	0.9
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	32.3	2.0	0.0	0.0	11.1	14.6	0.0	0.0	0.0	37.1	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:	32.3	2.0	0.0	0.0	11.1	14.6	0.0	0.0	0.0	37.1	0.0	36.6
LOS by Move:	C	A	A	A	B	B	A	A	A	D	A	D
HCM2kAvgQ:	7	3	0	0	5	10	0	0	0	6	0	6

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

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

Intersection #6 Saratoga Avenue/US 101 SB Ramps

Cycle (sec):	95	Critical Vol./Cap.(X):	0.645
Loss Time (sec):	0	Average Delay (sec/veh):	15.0
Optimal Cycle:	64	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	0 0	3 0	1	2 0	2 0	0	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	1129	675	473	813	0	229	0	239	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	1129	675	473	813	0	229	0	239	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	1129	675	473	813	0	229	0	239	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	1129	675	473	813	0	229	0	239	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1129	675	473	813	0	229	0	239	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	1129	675	473	813	0	229	0	239	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.85	0.92	0.95	1.00	0.90	1.00	0.90	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	2.00	0.00	1.49	0.00	1.51	0.00	0.00	0.00
Final Sat.:	0	5187	1615	3502	3610	0	2549	0	2586	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.42	0.14	0.23	0.00	0.09	0.00	0.09	0.00	0.00	0.00
Crit Moves:			****	****					****			
Green/Cycle:	0.00	0.65	0.65	0.21	0.86	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Volume/Cap:	0.00	0.34	0.65	0.65	0.26	0.00	0.63	0.00	0.65	0.00	0.00	0.00
Uniform Del:	0.0	7.5	10.1	34.3	1.3	0.0	38.3	0.0	38.4	0.0	0.0	0.0
IncremntDel:	0.0	0.1	1.4	2.0	0.0	0.0	1.7	0.0	2.0	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	0.0	7.6	11.5	36.3	1.3	0.0	40.0	0.0	40.4	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:	0.0	7.6	11.5	36.3	1.3	0.0	40.0	0.0	40.4	0.0	0.0	0.0
LOS by Move:	A	A	B	D	A	A	D	A	D	A	A	A
HCM2kAvgQ:	0	5	13	7	2	0	5	0	6	0	0	0

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

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Scenario Report

Scenario:	Cumulative PM
Command:	Default Command
Volume:	Cumulative PM
Geometry:	PM
Impact Fee:	Default Impact Fee
Trip Generation:	No Project
Trip Distribution:	Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

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

Intersection #1 Quito Road/Cox Avenue

Average Delay (sec/veh): 93.4 Worst Case Level Of Service: F[575.6]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	1	0	0	0	0	0	1	0	0	0	1!	0	0	0	0	0	0	0
Volume Module:																				
Base Vol:	193	524		0	0	1168		50			28		0		341	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:	193	524		0	0	1168		50			28		0		341	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:	193	524		0	0	1168		50			28		0		341	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:	193	524		0	0	1168		50			28		0		341	0		0		0
Reduct Vol:	0	0		0	0	0		0			0		0		0	0		0		0
FinalVolume:	193	524		0	0	1168		50			28		0		341	0		0		0
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx					6.4		6.5		6.2	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx					3.5		4.0		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	1218	xxxx	xxxxx	xxxx	xxxx	xxxxx					2103		2103		1193	xxxx	xxxx	xxxxx		
Potent Cap.:	580	xxxx	xxxxx	xxxx	xxxx	xxxxx					57		52		230	xxxx	xxxx	xxxxx		
Move Cap.:	580	xxxx	xxxxx	xxxx	xxxx	xxxxx					43		35		230	xxxx	xxxx	xxxxx		
Volume/Cap:	0.33	xxxx	xxxx	xxxx	xxxx	xxxx					0.66		0.00		1.48	xxxx	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	1.5	xxxx	xxxxx	xxxx	xxxx	xxxxx					xxxx		xxxx		xxxxx	xxxx	xxxx	xxxxx		
Control Del:	14.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx					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		172		xxxxx	xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx		29.3		xxxxx	xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx		576		xxxxx	xxxxx	xxxx	xxxxx		
Shared LOS:	*	*		*	*	*					*		F		*	*		*		
ApproachDel:	xxxxxx			xxxxxx							575.6					xxxxxx				
ApproachLOS:	*			*							F					*				

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

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Paseo Presada/Cox Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.539
Loss Time (sec):	0	Average Delay (sec/veh):	11.1
Optimal Cycle:	0	Level Of Service:	B

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		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	47	22	4	10	36	71	61	300	123	7	189	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:	47	22	4	10	36	71	61	300	123	7	189	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:	47	22	4	10	36	71	61	300	123	7	189	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:	47	22	4	10	36	71	61	300	123	7	189	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	22	4	10	36	71	61	300	123	7	189	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:	47	22	4	10	36	71	61	300	123	7	189	6
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:	0.65	0.30	0.05	0.08	0.31	0.61	0.17	0.83	1.00	0.03	0.94	0.03
Final Sat.:	369	173	31	54	195	384	113	557	784	24	644	20
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.13	0.18	0.18	0.18	0.54	0.54	0.16	0.29	0.29	0.29
Crit Moves:		****				****		****			****	
Delay/Veh:	9.5	9.5	9.5	9.3	9.3	9.3	13.8	13.8	8.0	10.0	10.0	10.0
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:	9.5	9.5	9.5	9.3	9.3	9.3	13.8	13.8	8.0	10.0	10.0	10.0
LOS by Move:	A	A	A	A	A	A	B	B	A	B	B	B
ApproachDel:		9.5			9.3			12.3			10.0	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		9.5			9.3			12.3			10.0	
LOS by Appr:		A			A			B			B	
AllWayAvgQ:	0.1	0.1	0.1	0.2	0.2	0.2	1.1	1.1	0.2	0.4	0.4	0.4

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

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

Intersection #3 Saratoga Avenue/Cox Avenue

Cycle (sec):	140	Critical Vol./Cap.(X):	0.686
Loss Time (sec):	0	Average Delay (sec/veh):	38.4
Optimal Cycle:	73	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	1 0	2 0	1	1 0	2 1	0	0 1	1 0	1	1 1	0 1	0
Volume Module:												
Base Vol:	313	1011	252	88	1162	156	159	230	271	265	160	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:	313	1011	252	88	1162	156	159	230	271	265	160	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:	313	1011	252	88	1162	156	159	230	271	265	160	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:	313	1011	252	88	1162	156	159	230	271	265	160	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	313	1011	252	88	1162	156	159	230	271	265	160	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:	313	1011	252	88	1162	156	159	230	271	265	160	25
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.89	0.89	0.93	0.93	0.85	0.92	0.92	0.92
Lanes:	1.00	2.00	1.00	1.00	2.64	0.36	0.82	1.18	1.00	1.77	1.07	0.16
Final Sat.:	1805	3610	1615	1805	4491	603	1446	2092	1615	3072	1855	290
Capacity Analysis Module:												
Vol/Sat:	0.17	0.28	0.16	0.05	0.26	0.26	0.11	0.11	0.17	0.09	0.09	0.09
Crit Moves:	****				****				****			****
Green/Cycle:	0.25	0.54	0.54	0.09	0.38	0.38	0.24	0.24	0.24	0.13	0.13	0.13
Volume/Cap:	0.69	0.52	0.29	0.52	0.69	0.69	0.45	0.45	0.69	0.69	0.69	0.69
Uniform Del:	47.3	20.9	17.8	60.5	36.6	36.6	44.9	44.9	48.0	58.6	58.6	58.6
IncremntDel:	4.3	0.3	0.2	2.9	1.1	1.1	0.4	0.4	5.0	3.0	3.0	3.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	51.6	21.2	18.0	63.4	37.7	37.7	45.3	45.3	53.0	61.6	61.6	61.6
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:	51.6	21.2	18.0	63.4	37.7	37.7	45.3	45.3	53.0	61.6	61.6	61.6
LOS by Move:	D	C	B	E	D	D	D	D	D	E	E	E
HCM2kAvgQ:	12	14	6	3	17	17	8	8	12	8	8	8

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

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

Intersection #4 LAWRENCE EXPWY/SARATOGA

Cycle (sec):	150	Critical Vol./Cap.(X):	0.714
Loss Time (sec):	12	Average Delay (sec/veh):	48.5
Optimal Cycle:	105	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Include			Include		
Min. Green:	14	10	10	14	55	10	14	10	10	14	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	97	345	326	122	959	487	347	939	41	329	745	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:	97	345	326	122	959	487	347	939	41	329	745	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:	97	345	326	122	959	487	347	939	41	329	745	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:	97	345	326	122	959	487	347	939	41	329	745	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	97	345	326	122	959	487	347	939	41	329	745	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:	97	345	326	122	959	487	347	939	41	329	745	77
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.95	0.85	0.95	0.91	0.85	0.95	0.91	0.85
Lanes:	2.00	3.00	1.00	2.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	3502	5187	1615	3502	3610	1615	1805	5187	1615	1805	5187	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.07	0.20	0.03	0.27	0.30	0.19	0.18	0.03	0.18	0.14	0.05
Crit Moves:	****				****			****		****		
Green/Cycle:	0.09	0.19	0.42	0.27	0.37	0.63	0.26	0.23	0.23	0.23	0.20	0.20
Volume/Cap:	0.30	0.35	0.48	0.13	0.72	0.48	0.73	0.79	0.11	0.79	0.73	0.24
Uniform Del:	63.4	52.5	31.3	41.6	41.0	14.7	50.4	54.4	45.7	54.3	56.5	50.8
IncremntDel:	0.5	0.2	0.5	0.1	2.0	0.4	5.7	3.6	0.1	9.8	2.7	0.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	63.9	52.7	31.9	41.7	43.0	15.1	56.1	58.1	45.9	64.1	59.2	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:	63.9	52.7	31.9	41.7	43.0	15.1	56.1	58.1	45.9	64.1	59.2	51.2
LOS by Move:	E	D	C	D	D	B	E	E	D	E	E	D
HCM2kAvgQ:	2	5	11	2	21	12	15	15	1	16	13	3

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

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

Intersection #5 Saratoga Avenue/US101 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.796
Loss Time (sec):	0	Average Delay (sec/veh):	25.2
Optimal Cycle:	112	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	262	624	0	0	1224	297	0	0	0	737	4	835
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	262	624	0	0	1224	297	0	0	0	737	4	835
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:	262	624	0	0	1224	297	0	0	0	737	4	835
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	624	0	0	1224	297	0	0	0	737	4	835
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	262	624	0	0	1224	297	0	0	0	737	4	835
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	262	624	0	0	1224	297	0	0	0	737	4	835
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	1.00	1.00	0.91	0.85	1.00	1.00	1.00	0.86	0.86	0.86
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.46	0.01	1.53
Final Sat.:	3502	3610	0	0	5187	1615	0	0	0	2387	8	2487
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.00	0.00	0.24	0.18	0.00	0.00	0.00	0.31	0.49	0.34
Crit Moves:	****				****						****	
Green/Cycle:	0.09	0.39	0.00	0.00	0.30	0.30	0.00	0.00	0.00	0.61	0.61	0.61
Volume/Cap:	0.80	0.44	0.00	0.00	0.80	0.62	0.00	0.00	0.00	0.51	0.80	0.55
Uniform Del:	44.4	22.5	0.0	0.0	32.4	30.3	0.0	0.0	0.0	11.0	14.8	11.5
IncremntDel:	12.7	0.2	0.0	0.0	3.0	2.5	0.0	0.0	0.0	0.1	2.3	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00
Delay/Veh:	57.0	22.7	0.0	0.0	35.4	32.8	0.0	0.0	0.0	11.2	17.1	11.7
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:	57.0	22.7	0.0	0.0	35.4	32.8	0.0	0.0	0.0	11.2	17.1	11.7
LOS by Move:	E	C	A	A	D	C	A	A	A	B	B	B
HCM2kAvgQ:	4	7	0	0	13	8	0	0	0	9	20	10

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

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

Intersection #6 Saratoga Avenue/US 101 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.498
Loss Time (sec):	0	Average Delay (sec/veh):	15.7
Optimal Cycle:	45	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	0 0	3 0	1	2 0	2 0	0	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	688	319	557	1386	0	168	7	190	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	688	319	557	1386	0	168	7	190	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	688	319	557	1386	0	168	7	190	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	688	319	557	1386	0	168	7	190	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	688	319	557	1386	0	168	7	190	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	688	319	557	1386	0	168	7	190	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.85	0.92	0.95	1.00	0.86	0.86	0.86	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	2.00	0.00	1.45	0.04	1.51	0.00	0.00	0.00
Final Sat.:	0	5187	1615	3502	3610	0	2367	61	2464	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.20	0.16	0.38	0.00	0.07	0.11	0.08	0.00	0.00	0.00
Crit Moves:	****				****			****				
Green/Cycle:	0.00	0.43	0.43	0.34	0.77	0.00	0.23	0.23	0.23	0.00	0.00	0.00
Volume/Cap:	0.00	0.31	0.46	0.46	0.50	0.00	0.31	0.50	0.34	0.00	0.00	0.00
Uniform Del:	0.0	18.9	20.5	25.6	4.3	0.0	32.0	33.5	32.2	0.0	0.0	0.0
IncremntDel:	0.0	0.1	0.5	0.3	0.1	0.0	0.2	0.5	0.2	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Delay/Veh:	0.0	19.0	20.9	25.9	4.4	0.0	32.1	34.1	32.4	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:	0.0	19.0	20.9	25.9	4.4	0.0	32.1	34.1	32.4	0.0	0.0	0.0
LOS by Move:	A	B	C	C	A	A	C	C	C	A	A	A
HCM2kAvgQ:	0	5	7	6	8	0	3	5	3	0	0	0

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

****

Scenario Report

Scenario:	Existing+P AM
Command:	Default Command
Volume:	Existing AM
Geometry:	AM
Impact Fee:	Default Impact Fee
Trip Generation:	With Project AM
Trip Distribution:	Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

```
------------------------------------------------------------------------------
------------------------------------------------------------------------------
                      Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
******************************************************************************
Intersection #1 Quito Road/Cox Avenue
******************************************************************************
Average Delay (sec/veh):      4.4       Worst Case Level Of Service: D[ 26.8]
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Lanes:        1  0  1  0  0    0  0  0  1  0    0  0  1! 0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     294  808     0     0  404    61    14    0   160     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:  294  808     0     0  404    61    14    0   160     0    0     0
Added Vol:      1    0     0     0    0     3     4    0     3     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  295  808     0     0  404    64    18    0   163     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:   295  808     0     0  404    64    18    0   163     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:  295  808     0     0  404    64    18    0   163     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2 xxxxx xxxx xxxxx
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  468 xxxx xxxxx  xxxx xxxx xxxxx  1834 1834   436  xxxx xxxx xxxxx
Potent Cap.: 1104 xxxx xxxxx  xxxx xxxx xxxxx    85   77   625  xxxx xxxx xxxxx
Move Cap.:   1104 xxxx xxxxx  xxxx xxxx xxxxx    67   56   625  xxxx xxxx xxxxx
Volume/Cap:  0.27 xxxx  xxxx  xxxx xxxx  xxxx  0.27 0.00  0.26  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    1.1 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:  9.4 xxxx xxxxx xxxxx xxxx xxxxx xxxxx 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  342 xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx  2.9 xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx 26.8 xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    D     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx             26.8           xxxxxx
ApproachLOS:         *                *                D                *
******************************************************************************
Note: Queue reported is the number of cars per lane.
******************************************************************************
```

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Paseo Presada/Cox Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.602
Loss Time (sec):	0	Average Delay (sec/veh):	12.5
Optimal Cycle:	0	Level Of Service:	B

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		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	26	144	18	4	21	116	84	39	4	17	380	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:	26	144	18	4	21	116	84	39	4	17	380	14
Added Vol:	0	0	0	0	0	0	0	7	0	0	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	144	18	4	21	116	84	46	4	17	384	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:	26	144	18	4	21	116	84	46	4	17	384	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	144	18	4	21	116	84	46	4	17	384	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:	26	144	18	4	21	116	84	46	4	17	384	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:	0.14	0.77	0.09	0.03	0.15	0.82	0.65	0.35	1.00	0.04	0.93	0.03
Final Sat.:	83	462	58	18	94	519	355	195	652	28	638	23
Capacity Analysis Module:												
Vol/Sat:	0.31	0.31	0.31	0.22	0.22	0.22	0.24	0.24	0.01	0.60	0.60	0.60
Crit Moves:		****			****			****			****	
Delay/Veh:	10.7	10.7	10.7	9.4	9.4	9.4	10.6	10.6	7.9	15.0	15.0	15.0
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:	10.7	10.7	10.7	9.4	9.4	9.4	10.6	10.6	7.9	15.0	15.0	15.0
LOS by Move:	B	B	B	A	A	A	B	B	A	B	B	B
ApproachDel:		10.7			9.4			10.5			15.0	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		10.7			9.4			10.5			15.0	
LOS by Appr:		B			A			B			B	
AllWayAvgQ:	0.4	0.4	0.4	0.2	0.2	0.2	0.3	0.3	0.0	1.3	1.3	1.3

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

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

Intersection #3 Saratoga Avenue/Cox Avenue

Cycle (sec):	130	Critical Vol./Cap.(X):	0.549
Loss Time (sec):	0	Average Delay (sec/veh):	35.5
Optimal Cycle:	51	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	1 0	2 0	1	1 0	2 1	0	0 1	1 0	1	1 1	0 1	0
Volume Module:												
Base Vol:	124	614	195	57	802	236	122	90	240	420	137	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:	124	614	195	57	802	236	122	90	240	420	137	10
Added Vol:	0	0	4	3	0	0	0	0	0	11	0	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	124	614	199	60	802	236	122	90	240	431	137	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:	124	614	199	60	802	236	122	90	240	431	137	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	614	199	60	802	236	122	90	240	431	137	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:	124	614	199	60	802	236	122	90	240	431	137	24
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.88	0.88	0.92	0.92	0.85	0.91	0.91	0.91
Lanes:	1.00	2.00	1.00	1.00	2.32	0.68	1.00	1.00	1.00	2.00	0.85	0.15
Final Sat.:	1805	3610	1615	1805	3871	1139	1754	1754	1615	3463	1473	258
Capacity Analysis Module:												
Vol/Sat:	0.07	0.17	0.12	0.03	0.21	0.21	0.07	0.05	0.15	0.12	0.09	0.09
Crit Moves:	****				****				****	****		
Green/Cycle:	0.13	0.42	0.42	0.08	0.38	0.38	0.27	0.27	0.27	0.23	0.23	0.23
Volume/Cap:	0.55	0.40	0.29	0.40	0.55	0.55	0.26	0.19	0.55	0.55	0.41	0.41
Uniform Del:	53.4	26.3	24.9	56.6	31.8	31.8	37.2	36.4	40.6	44.4	42.8	42.8
IncremntDel:	2.9	0.2	0.2	1.8	0.3	0.3	0.2	0.1	1.5	0.6	0.2	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	56.3	26.5	25.1	58.4	32.1	32.1	37.3	36.5	42.1	45.0	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:	56.3	26.5	25.1	58.4	32.1	32.1	37.3	36.5	42.1	45.0	43.0	43.0
LOS by Move:	E	C	C	E	C	C	D	D	D	D	D	D
HCM2kAvgQ:	5	9	5	2	12	12	4	3	9	8	6	6

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

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

Intersection #4 LAWRENCE EXPWY/SARATOGA

Cycle (sec):	150	Critical Vol./Cap.(X):	0.527
Loss Time (sec):	12	Average Delay (sec/veh):	49.7
Optimal Cycle:	105	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Include			Include		
Min. Green:	14	10	10	14	55	10	14	10	10	14	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module: >> Count Date: 3 Oct 2018 << 7:45-8:45												
Base Vol:	58	880	272	31	220	262	485	617	28	188	702	101
Growth Adj:	1.00	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	880	272	31	220	262	485	617	28	188	702	101
Added Vol:	0	1	2	0	1	1	5	9	0	2	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	881	274	31	221	263	490	626	28	190	704	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:	58	881	274	31	221	263	490	626	28	190	704	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	881	274	31	221	263	490	626	28	190	704	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:	58	881	274	31	221	263	490	626	28	190	704	101
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.95	0.85	0.95	0.91	0.85	0.95	0.91	0.85
Lanes:	2.00	3.00	1.00	2.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	3502	5187	1615	3502	3610	1615	1805	5187	1615	1805	5187	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.17	0.17	0.01	0.06	0.16	0.27	0.12	0.02	0.11	0.14	0.06
Crit Moves:	****				****		****				****	
Green/Cycle:	0.09	0.30	0.51	0.16	0.37	0.67	0.31	0.25	0.25	0.21	0.15	0.15
Volume/Cap:	0.18	0.57	0.33	0.05	0.17	0.24	0.89	0.49	0.07	0.49	0.89	0.41
Uniform Del:	62.7	44.7	21.6	53.0	32.0	9.6	49.5	48.5	43.4	51.7	62.2	57.4
IncremntDel:	0.3	0.5	0.2	0.0	0.1	0.1	15.7	0.3	0.1	1.0	11.6	1.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	63.0	45.2	21.8	53.0	32.1	9.7	65.2	48.8	43.5	52.7	73.8	58.4
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:	63.0	45.2	21.8	53.0	32.1	9.7	65.2	48.8	43.5	52.7	73.8	58.4
LOS by Move:	E	D	C	D	C	A	E	D	D	D	E	E
HCM2kAvgQ:	1	13	7	1	3	5	23	9	1	8	14	4

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

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

Intersection #5 Saratoga Avenue/US101 NB Ramps

Cycle (sec):	95	Critical Vol./Cap.(X):	0.549
Loss Time (sec):	0	Average Delay (sec/veh):	16.0
Optimal Cycle:	51	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	483	784	0	0	904	498	0	0	0	252	0	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:	483	784	0	0	904	498	0	0	0	252	0	236
Added Vol:	0	3	0	0	2	10	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	483	787	0	0	906	508	0	0	0	252	0	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:	483	787	0	0	906	508	0	0	0	252	0	236
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	483	787	0	0	906	508	0	0	0	252	0	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:	483	787	0	0	906	508	0	0	0	252	0	236
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	1.00	1.00	0.91	0.85	1.00	1.00	1.00	0.90	1.00	0.90
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.52	0.00	1.48
Final Sat.:	3502	3610	0	0	5187	1615	0	0	0	2604	0	2548
Capacity Analysis Module:												
Vol/Sat:	0.14	0.22	0.00	0.00	0.17	0.31	0.00	0.00	0.00	0.10	0.00	0.09
Crit Moves:	****					****				****		
Green/Cycle:	0.25	0.82	0.00	0.00	0.57	0.57	0.00	0.00	0.00	0.18	0.00	0.18
Volume/Cap:	0.55	0.26	0.00	0.00	0.30	0.55	0.00	0.00	0.00	0.55	0.00	0.53
Uniform Del:	30.9	1.9	0.0	0.0	10.5	12.7	0.0	0.0	0.0	35.7	0.0	35.5
IncremntDel:	0.7	0.0	0.0	0.0	0.1	0.7	0.0	0.0	0.0	0.7	0.0	0.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	31.6	1.9	0.0	0.0	10.6	13.4	0.0	0.0	0.0	36.4	0.0	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:	31.6	1.9	0.0	0.0	10.6	13.4	0.0	0.0	0.0	36.4	0.0	36.1
LOS by Move:	C	A	A	A	B	B	A	A	A	D	A	D
HCM2kAvgQ:	6	3	0	0	5	9	0	0	0	5	0	5

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

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

Intersection #6 Saratoga Avenue/US 101 SB Ramps

Cycle (sec):	95	Critical Vol./Cap.(X):	0.584
Loss Time (sec):	0	Average Delay (sec/veh):	14.4
Optimal Cycle:	55	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	0 0	3 0	1	2 0	2 0	0	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	1022	611	428	736	0	207	0	216	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	1022	611	428	736	0	207	0	216	0	0	0
Added Vol:	0	0	0	1	1	0	3	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1022	611	429	737	0	210	0	216	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	1022	611	429	737	0	210	0	216	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1022	611	429	737	0	210	0	216	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	1022	611	429	737	0	210	0	216	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.85	0.92	0.95	1.00	0.90	1.00	0.90	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	2.00	0.00	1.49	0.00	1.51	0.00	0.00	0.00
Final Sat.:	0	5187	1615	3502	3610	0	2558	0	2582	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.38	0.12	0.20	0.00	0.08	0.00	0.08	0.00	0.00	0.00
Crit Moves:			****	****					****			
Green/Cycle:	0.00	0.65	0.65	0.21	0.86	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Volume/Cap:	0.00	0.30	0.58	0.58	0.24	0.00	0.57	0.00	0.58	0.00	0.00	0.00
Uniform Del:	0.0	7.4	9.5	33.8	1.2	0.0	38.0	0.0	38.1	0.0	0.0	0.0
IncremntDel:	0.0	0.1	0.9	1.2	0.0	0.0	1.1	0.0	1.2	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	0.0	7.4	10.4	35.0	1.3	0.0	39.1	0.0	39.3	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	7.4	10.4	35.0	1.3	0.0	39.1	0.0	39.3	0.0	0.0	0.0
LOS by Move:	A	A	B	D	A	A	D	A	D	A	A	A
HCM2kAvgQ:	0	5	11	6	2	0	5	0	5	0	0	0

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

****

Scenario Report

Scenario:	Existing+P PM
Command:	Default Command
Volume:	Existing PM
Geometry:	PM
Impact Fee:	Default Impact Fee
Trip Generation:	With Project PM
Trip Distribution:	Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

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------------------------------------------------------------------------------
------------------------------------------------------------------------------
                      Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
******************************************************************************
Intersection #1 Quito Road/Cox Avenue
******************************************************************************
Average Delay (sec/veh):     56.3       Worst Case Level Of Service: F[343.2]
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Lanes:        1  0  1  0  0    0  0  0  1  0    0  0  1! 0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     175  474     0     0 1057    45    25    0   309     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:  175  474     0     0 1057    45    25    0   309     0    0     0
Added Vol:      3    0     0     0    0     9     2    0     2     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  178  474     0     0 1057    54    27    0   311     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:   178  474     0     0 1057    54    27    0   311     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:  178  474     0     0 1057    54    27    0   311     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2 xxxxx xxxx xxxxx
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1111 xxxx xxxxx  xxxx xxxx xxxxx  1914 1914  1084  xxxx xxxx xxxxx
Potent Cap.:  636 xxxx xxxxx  xxxx xxxx xxxxx    75   69   266  xxxx xxxx xxxxx
Move Cap.:    636 xxxx xxxxx  xxxx xxxx xxxxx    59   49   266  xxxx xxxx xxxxx
Volume/Cap:  0.28 xxxx  xxxx  xxxx xxxx  xxxx  0.46 0.00  1.17  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    1.1 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del: 12.8 xxxx xxxxx xxxxx xxxx xxxxx 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  208 xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx 22.0 xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx  343 xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    F     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx            343.2           xxxxxx
ApproachLOS:         *                *                F                *
******************************************************************************
Note: Queue reported is the number of cars per lane.
******************************************************************************
```

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Paseo Presada/Cox Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.488
Loss Time (sec):	0	Average Delay (sec/veh):	10.5
Optimal Cycle:	0	Level Of Service:	B

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		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	43	20	4	9	33	64	55	272	111	6	171	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:	43	20	4	9	33	64	55	272	111	6	171	5
Added Vol:	0	0	0	0	0	0	0	4	0	0	12	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	43	20	4	9	33	64	55	276	111	6	183	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:	43	20	4	9	33	64	55	276	111	6	183	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	20	4	9	33	64	55	276	111	6	183	5
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	20	4	9	33	64	55	276	111	6	183	5
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:	0.64	0.30	0.06	0.08	0.31	0.61	0.17	0.83	1.00	0.03	0.94	0.03
Final Sat.:	379	176	35	55	202	392	113	565	797	22	665	18
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.16	0.16	0.16	0.49	0.49	0.14	0.28	0.28	0.28
Crit Moves:	****			****				****			****	
Delay/Veh:	9.2	9.2	9.2	9.0	9.0	9.0	12.6	12.6	7.8	9.7	9.7	9.7
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:	9.2	9.2	9.2	9.0	9.0	9.0	12.6	12.6	7.8	9.7	9.7	9.7
LOS by Move:	A	A	A	A	A	A	B	B	A	A	A	A
ApproachDel:	9.2			9.0			11.4			9.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.2			9.0			11.4			9.7		
LOS by Appr:	A			A			B			A		
AllWayAvgQ:	0.1	0.1	0.1	0.2	0.2	0.2	0.9	0.9	0.2	0.3	0.3	0.3

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

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

Intersection #3 Saratoga Avenue/Cox Avenue

Cycle (sec):	140	Critical Vol./Cap.(X):	0.624
Loss Time (sec):	0	Average Delay (sec/veh):	37.5
Optimal Cycle:	61	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	1 0	2 0	1	1 0	2 1	0	0 1	1 0	1	1 1	0 1	0
Volume Module:												
Base Vol:	283	915	228	80	1052	141	144	208	245	240	145	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:	283	915	228	80	1052	141	144	208	245	240	145	23
Added Vol:	0	0	11	9	0	0	0	0	0	7	0	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	283	915	239	89	1052	141	144	208	245	247	145	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:	283	915	239	89	1052	141	144	208	245	247	145	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	283	915	239	89	1052	141	144	208	245	247	145	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:	283	915	239	89	1052	141	144	208	245	247	145	31
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.89	0.89	0.93	0.93	0.85	0.91	0.91	0.91
Lanes:	1.00	2.00	1.00	1.00	2.65	0.35	0.82	1.18	1.00	1.75	1.03	0.22
Final Sat.:	1805	3610	1615	1805	4492	602	1447	2091	1615	3040	1784	381
Capacity Analysis Module:												
Vol/Sat:	0.16	0.25	0.15	0.05	0.23	0.23	0.10	0.10	0.15	0.08	0.08	0.08
Crit Moves:	****				****				****			****
Green/Cycle:	0.25	0.52	0.52	0.10	0.38	0.38	0.24	0.24	0.24	0.13	0.13	0.13
Volume/Cap:	0.62	0.48	0.28	0.48	0.62	0.62	0.41	0.41	0.62	0.62	0.62	0.62
Uniform Del:	46.5	21.2	18.6	59.4	35.7	35.7	44.5	44.5	47.3	57.6	57.6	57.6
IncremntDel:	2.7	0.2	0.2	2.0	0.7	0.7	0.3	0.3	3.1	1.8	1.8	1.8
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	49.2	21.4	18.8	61.4	36.3	36.3	44.8	44.8	50.4	59.5	59.5	59.5
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:	49.2	21.4	18.8	61.4	36.3	36.3	44.8	44.8	50.4	59.5	59.5	59.5
LOS by Move:	D	C	B	E	D	D	D	D	D	E	E	E
HCM2kAvgQ:	11	13	5	3	15	15	7	7	10	7	7	7

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

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

Intersection #4 LAWRENCE EXPWY/SARATOGA

Cycle (sec):	150	Critical Vol./Cap.(X):	0.652
Loss Time (sec):	12	Average Delay (sec/veh):	46.7
Optimal Cycle:	105	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Include			Include		
Min. Green:	14	10	10	14	55	10	14	10	10	14	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 0	1	1 0	3 0	1	1 0	3 0	1

Volume Module: >> Count Date: 15 Nov 2018 << 5:00 - 6:00 PM

Base Vol:	88	312	295	110	868	441	314	850	37	298	674	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:	88	312	295	110	868	441	314	850	37	298	674	70
Added Vol:	0	1	1	0	3	3	3	5	0	6	6	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	88	313	296	110	871	444	317	855	37	304	680	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:	88	313	296	110	871	444	317	855	37	304	680	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	313	296	110	871	444	317	855	37	304	680	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:	88	313	296	110	871	444	317	855	37	304	680	70

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.95	0.85	0.95	0.91	0.85	0.95	0.91	0.85
Lanes:	2.00	3.00	1.00	2.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	3502	5187	1615	3502	3610	1615	1805	5187	1615	1805	5187	1615

Capacity Analysis Module:

Vol/Sat:	0.03	0.06	0.18	0.03	0.24	0.27	0.18	0.16	0.02	0.17	0.13	0.04
Crit Moves:	****				****			****		****		
Green/Cycle:	0.09	0.19	0.42	0.27	0.37	0.63	0.26	0.23	0.23	0.23	0.20	0.20
Volume/Cap:	0.27	0.31	0.43	0.12	0.66	0.44	0.67	0.72	0.10	0.72	0.67	0.22
Uniform Del:	63.2	52.2	30.5	41.5	39.6	14.2	49.4	53.6	45.8	53.1	55.7	50.6
IncremntDel:	0.4	0.2	0.4	0.1	1.2	0.3	3.6	2.3	0.1	6.2	1.7	0.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	63.7	52.3	30.9	41.5	40.9	14.5	53.0	55.8	45.9	59.3	57.4	51.0
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:	63.7	52.3	30.9	41.5	40.9	14.5	53.0	55.8	45.9	59.3	57.4	51.0
LOS by Move:	E	D	C	D	D	B	D	E	D	E	E	D
HCM2kAvgQ:	2	5	9	2	18	10	13	13	1	14	11	3

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

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

Intersection #5 Saratoga Avenue/US101 NB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.721
Loss Time (sec):	0	Average Delay (sec/veh):	23.8
Optimal Cycle:	82	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	237	565	0	0	1108	269	0	0	0	667	4	756
Growth Adj:	1.00	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	565	0	0	1108	269	0	0	0	667	4	756
Added Vol:	0	11	0	0	1	6	0	0	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	237	576	0	0	1109	275	0	0	0	667	4	757
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	576	0	0	1109	275	0	0	0	667	4	757
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	237	576	0	0	1109	275	0	0	0	667	4	757
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	237	576	0	0	1109	275	0	0	0	667	4	757
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	1.00	1.00	0.91	0.85	1.00	1.00	1.00	0.86	0.86	0.86
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.46	0.01	1.53
Final Sat.:	3502	3610	0	0	5187	1615	0	0	0	2385	9	2488
Capacity Analysis Module:												
Vol/Sat:	0.07	0.16	0.00	0.00	0.21	0.17	0.00	0.00	0.00	0.28	0.44	0.30
Crit Moves:	****				****						****	
Green/Cycle:	0.09	0.39	0.00	0.00	0.30	0.30	0.00	0.00	0.00	0.61	0.61	0.61
Volume/Cap:	0.72	0.41	0.00	0.00	0.72	0.57	0.00	0.00	0.00	0.46	0.72	0.50
Uniform Del:	44.0	22.1	0.0	0.0	31.5	29.8	0.0	0.0	0.0	10.6	13.6	10.9
IncremntDel:	7.6	0.2	0.0	0.0	1.7	1.7	0.0	0.0	0.0	0.1	1.3	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00
Delay/Veh:	51.7	22.3	0.0	0.0	33.2	31.5	0.0	0.0	0.0	10.7	14.9	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:	51.7	22.3	0.0	0.0	33.2	31.5	0.0	0.0	0.0	10.7	14.9	11.1
LOS by Move:	D	C	A	A	C	C	A	A	A	B	B	B
HCM2kAvgQ:	4	7	0	0	11	7	0	0	0	8	16	9

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

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

Intersection #6 Saratoga Avenue/US 101 SB Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.454
Loss Time (sec):	0	Average Delay (sec/veh):	15.5
Optimal Cycle:	42	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	0 0	3 0	1	2 0	2 0	0	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	623	289	504	1255	0	152	6	172	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	623	289	504	1255	0	152	6	172	0	0	0
Added Vol:	0	1	0	0	1	0	10	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	624	289	504	1256	0	162	6	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:	0	624	289	504	1256	0	162	6	172	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	624	289	504	1256	0	162	6	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:	0	624	289	504	1256	0	162	6	172	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.85	0.92	0.95	1.00	0.86	0.86	0.86	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	2.00	0.00	1.47	0.03	1.50	0.00	0.00	0.00
Final Sat.:	0	5187	1615	3502	3610	0	2395	57	2442	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.18	0.14	0.35	0.00	0.07	0.11	0.07	0.00	0.00	0.00
Crit Moves:	****				****			****				
Green/Cycle:	0.00	0.42	0.42	0.34	0.77	0.00	0.23	0.23	0.23	0.00	0.00	0.00
Volume/Cap:	0.00	0.28	0.42	0.42	0.45	0.00	0.29	0.45	0.30	0.00	0.00	0.00
Uniform Del:	0.0	18.8	20.2	25.3	4.2	0.0	31.5	32.8	31.6	0.0	0.0	0.0
IncremntDel:	0.0	0.1	0.4	0.2	0.1	0.0	0.1	0.4	0.2	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Delay/Veh:	0.0	18.9	20.6	25.6	4.3	0.0	31.6	33.3	31.7	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	18.9	20.6	25.6	4.3	0.0	31.6	33.3	31.7	0.0	0.0	0.0
LOS by Move:	A	B	C	C	A	A	C	C	C	A	A	A
HCM2kAvgQ:	0	5	6	6	7	0	3	5	3	0	0	0

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

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Scenario Report

Scenario:	Cumulative+P AM
Command:	Default Command
Volume:	Cumulative AM
Geometry:	AM
Impact Fee:	Default Impact Fee
Trip Generation:	With Project AM
Trip Distribution:	Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

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                      Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
******************************************************************************
Intersection #1 Quito Road/Cox Avenue
******************************************************************************
Average Delay (sec/veh):      6.0       Worst Case Level Of Service: E[ 41.8]
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Lanes:        1  0  1  0  0    0  0  0  1  0    0  0  1! 0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     325  893     0     0  446    67    15    0   177     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:  325  893     0     0  446    67    15    0   177     0    0     0
Added Vol:      1    0     0     0    0     3     4    0     3     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  326  893     0     0  446    70    19    0   180     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:   326  893     0     0  446    70    19    0   180     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:  326  893     0     0  446    70    19    0   180     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2 xxxxx xxxx xxxxx
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  516 xxxx xxxxx  xxxx xxxx xxxxx  2026 2026   481  xxxx xxxx xxxxx
Potent Cap.: 1060 xxxx xxxxx  xxxx xxxx xxxxx    64   58   589  xxxx xxxx xxxxx
Move Cap.:   1060 xxxx xxxxx  xxxx xxxx xxxxx    49   40   589  xxxx xxxx xxxxx
Volume/Cap:  0.31 xxxx  xxxx  xxxx xxxx  xxxx  0.39 0.00  0.31  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:    1.3 xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:  9.9 xxxx xxxxx xxxxx xxxx xxxxx xxxxx 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  287 xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx  4.7 xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx 41.8 xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    E     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx             41.8           xxxxxx
ApproachLOS:         *                *               E                *
******************************************************************************
Note: Queue reported is the number of cars per lane.
******************************************************************************
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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Paseo Presada/Cox Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.684
Loss Time (sec):	0	Average Delay (sec/veh):	14.3
Optimal Cycle:	0	Level Of Service:	B

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		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	29	159	20	4	23	128	93	43	4	19	420	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:	29	159	20	4	23	128	93	43	4	19	420	15
Added Vol:	0	0	0	0	0	0	0	7	0	0	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	159	20	4	23	128	93	50	4	19	424	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:	29	159	20	4	23	128	93	50	4	19	424	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	159	20	4	23	128	93	50	4	19	424	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:	29	159	20	4	23	128	93	50	4	19	424	15
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:	0.14	0.76	0.10	0.02	0.15	0.83	0.65	0.35	1.00	0.04	0.93	0.03
Final Sat.:	81	442	56	15	89	494	343	185	621	28	620	22
Capacity Analysis Module:												
Vol/Sat:	0.36	0.36	0.36	0.26	0.26	0.26	0.27	0.27	0.01	0.68	0.68	0.68
Crit Moves:		****		****			****				****	
Delay/Veh:	11.5	11.5	11.5	10.0	10.0	10.0	11.2	11.2	8.1	18.1	18.1	18.1
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:	11.5	11.5	11.5	10.0	10.0	10.0	11.2	11.2	8.1	18.1	18.1	18.1
LOS by Move:	B	B	B	B	B	B	B	B	A	C	C	C
ApproachDel:		11.5			10.0			11.1			18.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		11.5			10.0			11.1			18.1	
LOS by Appr:		B			B			B			C	
AllWayAvgQ:	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.0	1.8	1.8	1.8

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

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

Intersection #3 Saratoga Avenue/Cox Avenue

Cycle (sec):	130	Critical Vol./Cap.(X):	0.606
Loss Time (sec):	0	Average Delay (sec/veh):	36.4
Optimal Cycle:	58	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	1 0	2 0	1	1 0	2 1	0	0 1	1 0	1	1 1	0 1	0
Volume Module:												
Base Vol:	137	678	215	63	886	261	135	99	265	464	151	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:	137	678	215	63	886	261	135	99	265	464	151	11
Added Vol:	0	0	4	3	0	0	0	0	0	11	0	14
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	137	678	219	66	886	261	135	99	265	475	151	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:	137	678	219	66	886	261	135	99	265	475	151	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	137	678	219	66	886	261	135	99	265	475	151	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:	137	678	219	66	886	261	135	99	265	475	151	25
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.88	0.88	0.92	0.92	0.85	0.91	0.91	0.91
Lanes:	1.00	2.00	1.00	1.00	2.32	0.68	1.00	1.00	1.00	2.00	0.86	0.14
Final Sat.:	1805	3610	1615	1805	3870	1140	1754	1754	1615	3463	1485	246
Capacity Analysis Module:												
Vol/Sat:	0.08	0.19	0.14	0.04	0.23	0.23	0.08	0.06	0.16	0.14	0.10	0.10
Crit Moves:	****				****				****	****		
Green/Cycle:	0.13	0.42	0.42	0.08	0.38	0.38	0.27	0.27	0.27	0.23	0.23	0.23
Volume/Cap:	0.61	0.45	0.32	0.45	0.61	0.61	0.28	0.21	0.61	0.61	0.45	0.45
Uniform Del:	53.8	26.8	25.2	56.9	32.6	32.6	37.5	36.6	41.4	45.1	43.3	43.3
IncremntDel:	4.7	0.2	0.3	2.1	0.6	0.6	0.2	0.1	2.4	1.0	0.2	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	58.5	27.0	25.5	59.0	33.2	33.2	37.6	36.7	43.8	46.1	43.5	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:	58.5	27.0	25.5	59.0	33.2	33.2	37.6	36.7	43.8	46.1	43.5	43.5
LOS by Move:	E	C	C	E	C	C	D	D	D	D	D	D
HCM2kAvgQ:	5	10	6	2	13	13	4	3	10	10	7	7

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

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

Intersection #4 LAWRENCE EXPWY/SARATOGA

Cycle (sec):	150	Critical Vol./Cap.(X):	0.582
Loss Time (sec):	12	Average Delay (sec/veh):	55.2
Optimal Cycle:	105	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Include			Include		
Min. Green:	14	10	10	14	55	10	14	10	10	14	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0 3	0 1		2 0 2	0 1		1 0 3	0 1		1 0 3	0 1	
Volume Module:												
Base Vol:	64	972	300	34	243	289	536	682	31	208	775	112
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	64	972	300	34	243	289	536	682	31	208	775	112
Added Vol:	0	1	2	0	1	1	5	9	0	2	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	64	973	302	34	244	290	541	691	31	210	777	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:	64	973	302	34	244	290	541	691	31	210	777	112
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	973	302	34	244	290	541	691	31	210	777	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:	64	973	302	34	244	290	541	691	31	210	777	112
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.95	0.85	0.95	0.91	0.85	0.95	0.91	0.85
Lanes:	2.00	3.00	1.00	2.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	3502	5187	1615	3502	3610	1615	1805	5187	1615	1805	5187	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.19	0.19	0.01	0.07	0.18	0.30	0.13	0.02	0.12	0.15	0.07
Crit Moves:	****				****		****				****	
Green/Cycle:	0.09	0.31	0.52	0.15	0.37	0.67	0.31	0.25	0.25	0.21	0.15	0.15
Volume/Cap:	0.20	0.61	0.36	0.06	0.18	0.27	0.98	0.54	0.08	0.54	0.98	0.45
Uniform Del:	62.8	44.3	21.1	54.4	32.3	9.8	51.5	49.3	43.5	52.4	63.2	57.8
IncremntDel:	0.3	0.7	0.3	0.1	0.1	0.1	32.3	0.5	0.1	1.6	26.3	1.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	63.1	45.0	21.4	54.4	32.3	9.9	83.8	49.7	43.6	54.0	89.5	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:	63.1	45.0	21.4	54.4	32.3	9.9	83.8	49.7	43.6	54.0	89.5	59.1
LOS by Move:	E	D	C	D	C	A	F	D	D	D	F	E
HCM2kAvgQ:	2	14	8	1	4	5	28	10	1	9	17	5

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

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

Intersection #5 Saratoga Avenue/US101 NB Ramps

Cycle (sec):	95	Critical Vol./Cap.(X):	0.606
Loss Time (sec):	0	Average Delay (sec/veh):	16.6
Optimal Cycle:	58	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	534	866	0	0	999	550	0	0	0	278	0	261
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	534	866	0	0	999	550	0	0	0	278	0	261
Added Vol:	0	3	0	0	2	10	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	534	869	0	0	1001	560	0	0	0	278	0	261
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	534	869	0	0	1001	560	0	0	0	278	0	261
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	534	869	0	0	1001	560	0	0	0	278	0	261
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	534	869	0	0	1001	560	0	0	0	278	0	261
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	1.00	1.00	0.91	0.85	1.00	1.00	1.00	0.90	1.00	0.90
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.52	0.00	1.48
Final Sat.:	3502	3610	0	0	5187	1615	0	0	0	2603	0	2549
Capacity Analysis Module:												
Vol/Sat:	0.15	0.24	0.00	0.00	0.19	0.35	0.00	0.00	0.00	0.11	0.00	0.10
Crit Moves:	****					****				****		
Green/Cycle:	0.25	0.82	0.00	0.00	0.57	0.57	0.00	0.00	0.00	0.18	0.00	0.18
Volume/Cap:	0.61	0.29	0.00	0.00	0.34	0.61	0.00	0.00	0.00	0.61	0.00	0.58
Uniform Del:	31.4	1.9	0.0	0.0	10.8	13.3	0.0	0.0	0.0	36.1	0.0	35.9
IncremntDel:	1.2	0.1	0.0	0.0	0.1	1.2	0.0	0.0	0.0	1.2	0.0	0.9
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	32.6	2.0	0.0	0.0	10.8	14.5	0.0	0.0	0.0	37.3	0.0	36.8
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:	32.6	2.0	0.0	0.0	10.8	14.5	0.0	0.0	0.0	37.3	0.0	36.8
LOS by Move:	C	A	A	A	B	B	A	A	A	D	A	D
HCM2kAvgQ:	7	3	0	0	5	10	0	0	0	6	0	6

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

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

Intersection #6 Saratoga Avenue/US 101 SB Ramps

Cycle (sec):	95	Critical Vol./Cap.(X):	0.646
Loss Time (sec):	0	Average Delay (sec/veh):	15.1
Optimal Cycle:	64	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	0 0	3 0	1	2 0	2 0	0	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	1129	675	473	813	0	229	0	239	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	1129	675	473	813	0	229	0	239	0	0	0
Added Vol:	0	0	0	1	1	0	3	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1129	675	474	814	0	232	0	239	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	1129	675	474	814	0	232	0	239	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1129	675	474	814	0	232	0	239	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	1129	675	474	814	0	232	0	239	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.85	0.92	0.95	1.00	0.90	1.00	0.90	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	2.00	0.00	1.49	0.00	1.51	0.00	0.00	0.00
Final Sat.:	0	5187	1615	3502	3610	0	2557	0	2583	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.42	0.14	0.23	0.00	0.09	0.00	0.09	0.00	0.00	0.00
Crit Moves:			****	****					****			
Green/Cycle:	0.00	0.65	0.65	0.21	0.86	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Volume/Cap:	0.00	0.34	0.65	0.65	0.26	0.00	0.63	0.00	0.65	0.00	0.00	0.00
Uniform Del:	0.0	7.6	10.2	34.3	1.3	0.0	38.3	0.0	38.4	0.0	0.0	0.0
IncremntDel:	0.0	0.1	1.4	2.0	0.0	0.0	1.8	0.0	2.0	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	0.0	7.6	11.6	36.3	1.3	0.0	40.1	0.0	40.4	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:	0.0	7.6	11.6	36.3	1.3	0.0	40.1	0.0	40.4	0.0	0.0	0.0
LOS by Move:	A	A	B	D	A	A	D	A	D	A	A	A
HCM2kAvgQ:	0	5	13	7	2	0	5	0	6	0	0	0

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

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Scenario Report

Scenario:	Cumulative+P PM
Command:	Default Command
Volume:	Cumulative PM
Geometry:	PM
Impact Fee:	Default Impact Fee
Trip Generation:	With Project PM
Trip Distribution:	Distribution
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

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

Intersection #1 Quito Road/Cox Avenue

Average Delay (sec/veh): 99.8 Worst Case Level Of Service: F[612.9]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	1 0	1 0	0		0 0	0 1	0		0 0	1! 0	0		0 0	0 0	0	
Volume Module:																
Base Vol:	193	524	0	0	1168	50			28	0	341		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:	193	524	0	0	1168	50			28	0	341		0	0	0	
Added Vol:	3	0	0	0	0	9			2	0	2		0	0	0	
PasserByVol:	0	0	0	0	0	0			0	0	0		0	0	0	
Initial Fut:	196	524	0	0	1168	59			30	0	343		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:	196	524	0	0	1168	59			30	0	343		0	0	0	
Reduct Vol:	0	0	0	0	0	0			0	0	0		0	0	0	
FinalVolume:	196	524	0	0	1168	59			30	0	343		0	0	0	
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.4	6.5	6.2		xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	4.0	3.3		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1227	xxxx	xxxxx	xxxx	xxxx	xxxxx			2114	2114	1198		xxxx	xxxx	xxxxx	
Potent Cap.:	575	xxxx	xxxxx	xxxx	xxxx	xxxxx			57	51	229		xxxx	xxxx	xxxxx	
Move Cap.:	575	xxxx	xxxxx	xxxx	xxxx	xxxxx			42	34	229		xxxx	xxxx	xxxxx	
Volume/Cap:	0.34	xxxx	xxxx	xxxx	xxxx	xxxx			0.72	0.00	1.50		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	1.5	xxxx	xxxxx	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	14.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx			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	168	xxxxx		xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	30.3	xxxxx		xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	613	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*	*	*	*			*	F	*		*	*	*	
ApproachDel:	xxxxxx			xxxxxx					612.9				xxxxxx			
ApproachLOS:	*			*					F				*			

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

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Paseo Presada/Cox Avenue

Cycle (sec):	100	Critical Vol./Cap.(X):	0.546
Loss Time (sec):	0	Average Delay (sec/veh):	11.3
Optimal Cycle:	0	Level Of Service:	B

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		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	47	22	4	10	36	71	61	300	123	7	189	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:	47	22	4	10	36	71	61	300	123	7	189	6
Added Vol:	0	0	0	0	0	0	0	4	0	0	12	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	47	22	4	10	36	71	61	304	123	7	201	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:	47	22	4	10	36	71	61	304	123	7	201	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	47	22	4	10	36	71	61	304	123	7	201	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:	47	22	4	10	36	71	61	304	123	7	201	6
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:	0.65	0.30	0.05	0.08	0.31	0.61	0.17	0.83	1.00	0.03	0.94	0.03
Final Sat.:	366	171	31	54	193	381	112	557	781	22	646	19
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.13	0.19	0.19	0.19	0.55	0.55	0.16	0.31	0.31	0.31
Crit Moves:		****				****		****		****		
Delay/Veh:	9.5	9.5	9.5	9.3	9.3	9.3	14.0	14.0	8.0	10.2	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:	9.5	9.5	9.5	9.3	9.3	9.3	14.0	14.0	8.0	10.2	10.2	10.2
LOS by Move:	A	A	A	A	A	A	B	B	A	B	B	B
ApproachDel:	9.5			9.3			12.5			10.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.5			9.3			12.5			10.2		
LOS by Appr:	A			A			B			B		
AllWayAvgQ:	0.1	0.1	0.1	0.2	0.2	0.2	1.1	1.1	0.2	0.4	0.4	0.4

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

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

Intersection #3 Saratoga Avenue/Cox Avenue

Cycle (sec):	140	Critical Vol./Cap.(X):	0.689
Loss Time (sec):	0	Average Delay (sec/veh):	38.8
Optimal Cycle:	73	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	1 0	2 0	1	1 0	2 1	0	0 1	1 0	1	1 1	0 1	0
Volume Module:												
Base Vol:	313	1011	252	88	1162	156	159	230	271	265	160	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:	313	1011	252	88	1162	156	159	230	271	265	160	25
Added Vol:	0	0	11	9	0	0	0	0	0	7	0	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	313	1011	263	97	1162	156	159	230	271	272	160	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:	313	1011	263	97	1162	156	159	230	271	272	160	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	313	1011	263	97	1162	156	159	230	271	272	160	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:	313	1011	263	97	1162	156	159	230	271	272	160	33
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.89	0.89	0.93	0.93	0.85	0.91	0.91	0.91
Lanes:	1.00	2.00	1.00	1.00	2.64	0.36	0.82	1.18	1.00	1.76	1.03	0.21
Final Sat.:	1805	3610	1615	1805	4491	603	1446	2092	1615	3045	1791	369
Capacity Analysis Module:												
Vol/Sat:	0.17	0.28	0.16	0.05	0.26	0.26	0.11	0.11	0.17	0.09	0.09	0.09
Crit Moves:	****				****				****			****
Green/Cycle:	0.25	0.53	0.53	0.10	0.38	0.38	0.24	0.24	0.24	0.13	0.13	0.13
Volume/Cap:	0.69	0.53	0.31	0.53	0.69	0.69	0.45	0.45	0.69	0.69	0.69	0.69
Uniform Del:	47.4	21.8	18.8	59.8	36.8	36.8	45.0	45.0	48.1	58.2	58.2	58.2
IncremntDel:	4.5	0.3	0.2	3.0	1.1	1.1	0.4	0.4	5.1	3.0	3.0	3.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	51.9	22.1	19.0	62.8	37.9	37.9	45.4	45.4	53.3	61.3	61.3	61.3
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:	51.9	22.1	19.0	62.8	37.9	37.9	45.4	45.4	53.3	61.3	61.3	61.3
LOS by Move:	D	C	B	E	D	D	D	D	D	E	E	E
HCM2kAvgQ:	12	15	6	4	17	17	8	8	12	8	8	8

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

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

Intersection #4 LAWRENCE EXPWY/SARATOGA

Cycle (sec): 150 Critical Vol./Cap.(X): 0.719
Loss Time (sec): 12 Average Delay (sec/veh): 48.7
Optimal Cycle: 105 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Include			Include		
Min. Green:	14	10	10	14	55	10	14	10	10	14	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	3 0	1	2 0	2 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	97	345	326	122	959	487	347	939	41	329	745	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:	97	345	326	122	959	487	347	939	41	329	745	77
Added Vol:	0	1	1	0	3	3	3	5	0	6	6	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	97	346	327	122	962	490	350	944	41	335	751	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:	97	346	327	122	962	490	350	944	41	335	751	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	97	346	327	122	962	490	350	944	41	335	751	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:	97	346	327	122	962	490	350	944	41	335	751	77
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.95	0.85	0.95	0.91	0.85	0.95	0.91	0.85
Lanes:	2.00	3.00	1.00	2.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	3502	5187	1615	3502	3610	1615	1805	5187	1615	1805	5187	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.07	0.20	0.03	0.27	0.30	0.19	0.18	0.03	0.19	0.14	0.05
Crit Moves:	****				****			****		****		
Green/Cycle:	0.09	0.19	0.42	0.27	0.37	0.63	0.26	0.23	0.23	0.23	0.20	0.20
Volume/Cap:	0.30	0.35	0.48	0.13	0.73	0.48	0.74	0.80	0.11	0.80	0.74	0.24
Uniform Del:	63.4	52.5	31.2	41.6	41.0	14.7	50.5	54.7	45.9	54.3	56.6	50.8
IncremntDel:	0.5	0.2	0.5	0.1	2.1	0.4	5.9	3.9	0.1	10.4	2.8	0.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	63.9	52.7	31.7	41.7	43.1	15.1	56.4	58.6	46.0	64.7	59.4	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:	63.9	52.7	31.7	41.7	43.1	15.1	56.4	58.6	46.0	64.7	59.4	51.2
LOS by Move:	E	D	C	D	D	B	E	E	D	E	E	D

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HCM2kAvgQ:      2    5    11     2   21    12    15   15     1    16   13     3
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Note: Queue reported is the number of cars per lane.

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

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Intersection #5 Saratoga Avenue/US101 NB Ramps

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.797
Loss Time (sec):	0	Average Delay (sec/veh):	25.2
Optimal Cycle:	112	Level Of Service:	C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	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
Lanes:	2 0	2 0	0	0 0	3 0	1	0 0	0 0	0	1 0	1! 0	1
Volume Module:												
Base Vol:	262	624	0	0	1224	297	0	0	0	737	4	835
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	262	624	0	0	1224	297	0	0	0	737	4	835
Added Vol:	0	11	0	0	1	6	0	0	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	262	635	0	0	1225	303	0	0	0	737	4	836
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	635	0	0	1225	303	0	0	0	737	4	836
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	262	635	0	0	1225	303	0	0	0	737	4	836
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	262	635	0	0	1225	303	0	0	0	737	4	836
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	1.00	1.00	0.91	0.85	1.00	1.00	1.00	0.86	0.86	0.86
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.46	0.01	1.53
Final Sat.:	3502	3610	0	0	5187	1615	0	0	0	2386	8	2488
Capacity Analysis Module:												
Vol/Sat:	0.07	0.18	0.00	0.00	0.24	0.19	0.00	0.00	0.00	0.31	0.49	0.34
Crit Moves:	****				****						****	
Green/Cycle:	0.09	0.39	0.00	0.00	0.30	0.30	0.00	0.00	0.00	0.61	0.61	0.61
Volume/Cap:	0.80	0.45	0.00	0.00	0.80	0.63	0.00	0.00	0.00	0.51	0.80	0.55
Uniform Del:	44.4	22.6	0.0	0.0	32.4	30.5	0.0	0.0	0.0	11.0	14.8	11.5
IncremntDel:	12.7	0.2	0.0	0.0	3.0	2.8	0.0	0.0	0.0	0.1	2.3	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00
Delay/Veh:	57.1	22.8	0.0	0.0	35.4	33.2	0.0	0.0	0.0	11.2	17.2	11.7
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:	57.1	22.8	0.0	0.0	35.4	33.2	0.0	0.0	0.0	11.2	17.2	11.7

LOS by Move:	E	C	A	A	D	C	A	A	A	B	B	B
HCM2kAvgQ:	4	7	0	0	13	8	0	0	0	9	20	10

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

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

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Intersection #6 Saratoga Avenue/US 101 SB Ramps

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Cycle (sec):	100	Critical Vol./Cap.(X):	0.501
Loss Time (sec):	0	Average Delay (sec/veh):	15.9
Optimal Cycle:	46	Level Of Service:	B

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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:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		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	
Lanes:	0	0 3	0 1		2	0 2	0 0		1	0 1!	0 1		0	0 0	0 0	
Volume Module:																
Base Vol:	0	688	319		557	1386	0		168	7	190		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	688	319		557	1386	0		168	7	190		0	0	0	
Added Vol:	0	1	0		0	1	0		10	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	689	319		557	1387	0		178	7	190		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	689	319		557	1387	0		178	7	190		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	689	319		557	1387	0		178	7	190		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	689	319		557	1387	0		178	7	190		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.91	0.85		0.92	0.95	1.00		0.86	0.86	0.86		1.00	1.00	1.00	
Lanes:	0.00	3.00	1.00		2.00	2.00	0.00		1.46	0.04	1.50		0.00	0.00	0.00	
Final Sat.:	0	5187	1615		3502	3610	0		2391	60	2442		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.13	0.20		0.16	0.38	0.00		0.07	0.12	0.08		0.00	0.00	0.00	
Crit Moves:	****					****				****						
Green/Cycle:	0.00	0.42	0.42		0.34	0.77	0.00		0.23	0.23	0.23		0.00	0.00	0.00	
Volume/Cap:	0.00	0.31	0.47		0.47	0.50	0.00		0.32	0.50	0.33		0.00	0.00	0.00	
Uniform Del:	0.0	19.1	20.6		25.8	4.4	0.0		31.7	33.3	31.8		0.0	0.0	0.0	
IncremntDel:	0.0	0.1	0.5		0.3	0.1	0.0		0.2	0.5	0.2		0.0	0.0	0.0	
InitQueuDel:	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	
Delay Adj:	0.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	1.00		0.00	0.00	0.00	
Delay/Veh:	0.0	19.2	21.1		26.0	4.6	0.0		31.9	33.8	32.0		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	19.2	21.1	26.0	4.6	0.0	31.9	33.8	32.0	0.0	0.0	0.0
LOS by Move:	A	B	C	C	A	A	C	C	C	A	A	A
HCM2kAvgQ:	0	5	7	6	8	0	3	6	3	0	0	0

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

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