

Appendix E
Traffic Impact Analysis



HEXAGON TRANSPORTATION CONSULTANTS, INC.

2905 Senter Road Plaza

Traffic Impact Analysis

Prepared for:

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Executive Summary

This report presents the results of the Traffic Impact Analysis (TIA) prepared for a proposed commercial development at 2905 Senter Road in San Jose, California. The 1.05-acre site is currently occupied by commercial uses that will be demolished as part of this project. As proposed, the project would construct a 6,471 square-foot (s.f.) high-turnover sit-down restaurant, 3,385 s.f. of retail space, and 4,260 s.f. of office space. The project would be accessed via one driveway on Senter Road and one driveway on Lewis Road. The driveway on Senter Road would be restricted to right-in/right-out only movements due to the existing raised median on Senter Road. The driveway on Lewis Road would be a full access driveway.

Scope of Study

This study was conducted for the purpose of identifying potential traffic impacts related to the proposed development. The impacts of the project were evaluated following the standards and methodologies set forth by the City of San Jose. Since the project would not generate more than 100 peak hour trips, an analysis in accordance with the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program (CMP) guidelines was not required. The study determined the traffic impacts of the proposed development on six signalized intersections within the vicinity of the project site during the weekday AM and PM peak periods of traffic. The study also includes an operations analysis, based on vehicle-storage requirements, at selected intersections, and a review of site access and on-site circulation.

Project Trip Generation

The trip generation rates published in the Institute of Transportation Engineers' (ITE) manual entitled *Trip Generation, 10th Edition* (2017) were used to estimate the project trip generation. The trip rates published for Office (ITE land use code 710), Shopping Center (ITE land use code 820) and High-Turnover Sit-Down Restaurant (ITE land use code 932) were used to estimate trips generated by the proposed uses for this project. Pass-by reductions of 34% and 43% were applied to the shopping center and restaurant uses, respectively, during the PM peak hour to account for any traffic attracted from the traffic stream on Senter Road. These pass-by reductions were based on the ITE Trip Generation Handbook (Third Edition). No pass-by reductions were applied during the AM peak hour.

Based on the standard ITE trip rates, it is estimated that the proposed project would generate 721 net daily vehicle trips, with 74 trips occurring during the AM peak hour and 50 trips occurring during the PM peak hour. Using the inbound/outbound splits recommended by ITE, the project would generate 42 inbound trips and 32 outbound trips during the AM peak hour, and 27 inbound trips and 23 outbound trips during the PM peak hour.

Intersection Level of Service Analysis

The results of the intersection level of service analysis show that, measured against the City of San Jose level of service impact criteria, none of the study intersections would be significantly impacted by the project.

Other Transportation Issues

The queueing analysis showed that under existing conditions, the 95th percentile queues for certain left-turn movements exceed the available vehicle storage capacity. The analysis showed that the addition of project traffic to these left-turn movements would increase the queue by a maximum of 1 to 2 vehicles. The project would not cause an adverse impact to the traffic operations at these study intersections.

The site plan shows adequate site access and on-site circulation, and no significant traffic operational issues are expected to occur as a result of the project. The project would not have an adverse effect on the existing transit, pedestrian, or bicycle facilities in the study area. Thus, no project-sponsored improvements are identified.

Based on the City of San Jose's parking code requirement for outdoor restaurant dining, the project would meet the parking requirement for up to 30 outdoor seats.

Hexagon provides the following recommendations resulting from the site access and circulation evaluation.

Project Recommendations

- The two parking spaces located at the end of the dead-end drive aisle should be designated as compact spaces.
- The curb segments adjacent to the project driveway on Lewis Road should be painted red to prohibit parking and provide the 32-foot width necessary to comply with the City's fire code.
- The site plan should be revised to show the required bicycle and motorcycle parking.

Table ES 1
Intersection Level of Service Summary

ID	Intersection	Peak Hour	Existing		Existing + Project		Background		Background + Project			
			Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Incr. In Crit. Delay (sec)	Incr. In Crit. V/C
1	Senter Rd and Tully Rd*	AM	44.8	D	44.9	D	46.0	D	46.1	D	0.1	0.001
		PM	50.7	D	50.9	D	52.2	D-	52.4	D-	0.2	0.003
2	Senter Rd and Umbarger Rd	AM	34.7	C-	35.0	C-	34.7	C-	35.0	C-	0.6	0.008
		PM	35.9	D+	36.0	D+	36.4	D+	36.4	D+	0.2	0.005
3	Senter Rd and Lewis Rd	AM	32.0	C-	33.1	C-	32.3	C-	33.3	C-	0.8	0.008
		PM	29.6	C	30.9	C	30.4	C	31.6	C	0.9	0.008
4	Senter Rd and Southside Dr	AM	28.2	C	28.1	C	29.3	C	29.2	C	-0.1	0.004
		PM	20.6	C+	20.5	C+	20.8	C+	20.7	C+	-0.1	0.002
5	Senter Rd and Capitol Expressway*	AM	52.1	D-	52.7	D-	64.8	E	65.9	E	1.9	0.006
		PM	57.2	E+	57.3	E+	61.3	E	61.5	E	0.5	0.003
6	Monterey Hwy and Lewis Rd	AM	19.6	B-	19.9	B-	20.9	C+	21.2	C+	0.4	0.003
		PM	23.8	C	23.9	C	24.8	C	24.9	C	0.1	0.001

Notes:
 * Denotes VTA CMP intersection
Bold indicates a substandard level of service.

1. Introduction

This report presents the results of the Traffic Impact Analysis (TIA) prepared for a proposed commercial development at 2905 Senter Road in San Jose, California (see Figure 1). The 1.05-acre site is currently occupied by commercial uses that will be demolished as part of this project. As proposed, the project would construct a 6,471 square-foot (s.f.) high-turnover sit-down restaurant, 3,385 s.f. of retail space, and 4,260 s.f. of office space (see Figure 2). The project would be accessed via one driveway on Senter Road and one driveway on Lewis Road. The driveway on Senter Road would be restricted to right-in/right-out only movements due to the existing raised median on Senter Road. The driveway on Lewis Road would be a full-access driveway.

Scope of Study

This study was conducted for the purpose of identifying potential traffic impacts related to the proposed development. The impacts of the project were evaluated following the standards and methodologies set forth by the City of San Jose. Since the project would not generate more than 100 net peak hour trips, an analysis in accordance with the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program (CMP) guidelines was not required. The study determined the traffic impacts of the proposed development on six signalized intersections within the vicinity of the project site during the weekday AM and PM peak periods of traffic. The study intersections are identified below.

Study Intersections

1. Senter Road and Tully Road (CMP)
2. Senter Road and Umbarger Road
3. Senter Road and Lewis Road
4. Senter Road and Southside Drive
5. Senter Road and Capitol Expressway (CMP)
6. Monterey Road and Lewis Road

Traffic conditions at the study intersections were analyzed for the weekday AM and PM peak hours of traffic. The AM peak hour of traffic is generally between 7:00 and 9:00 AM, and the PM peak hour is typically between 4:00 and 6:00 PM. It is during these periods on an average day that the most congested traffic conditions occur.

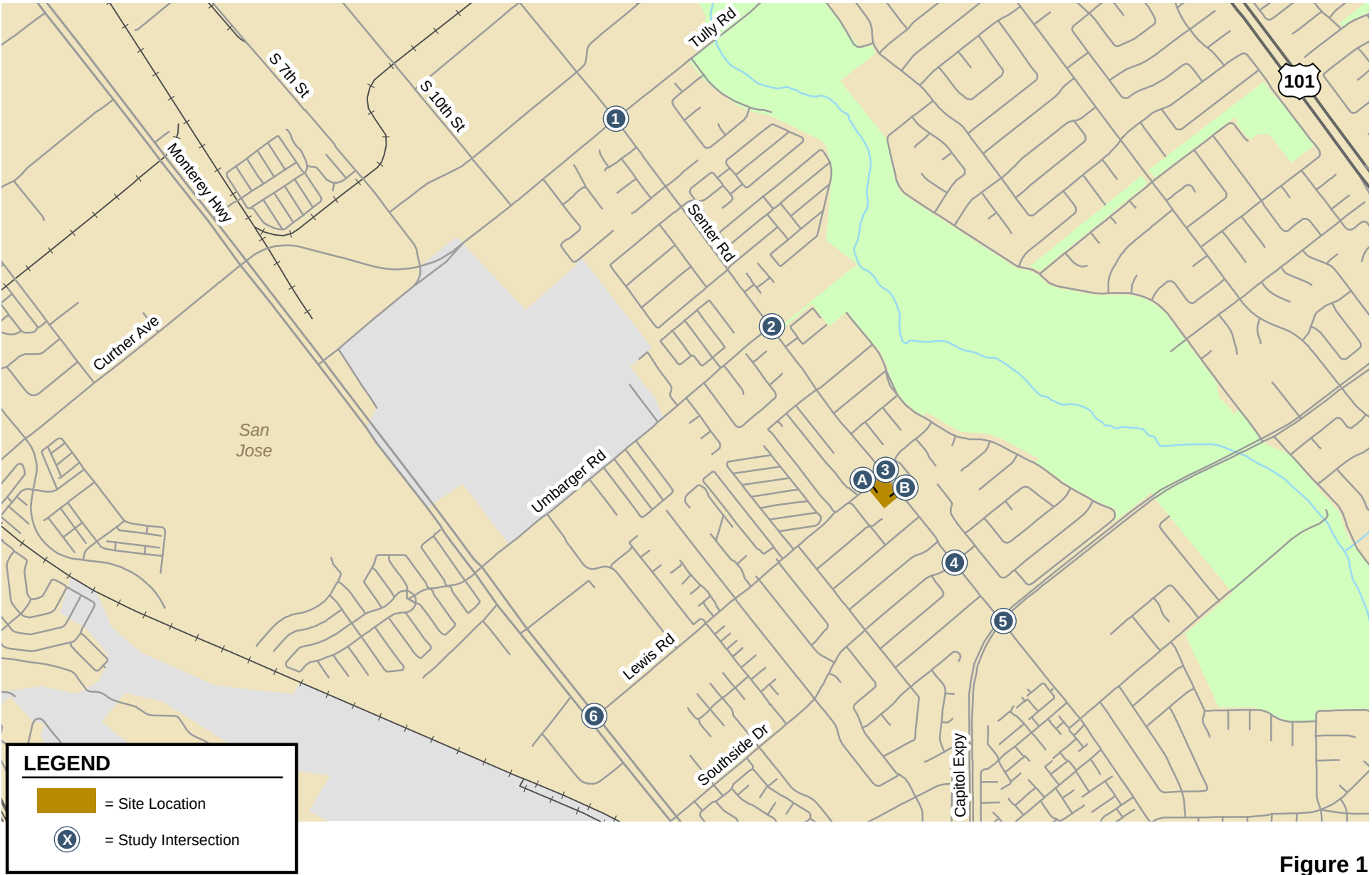


Figure 1
Site Location and Study Intersections

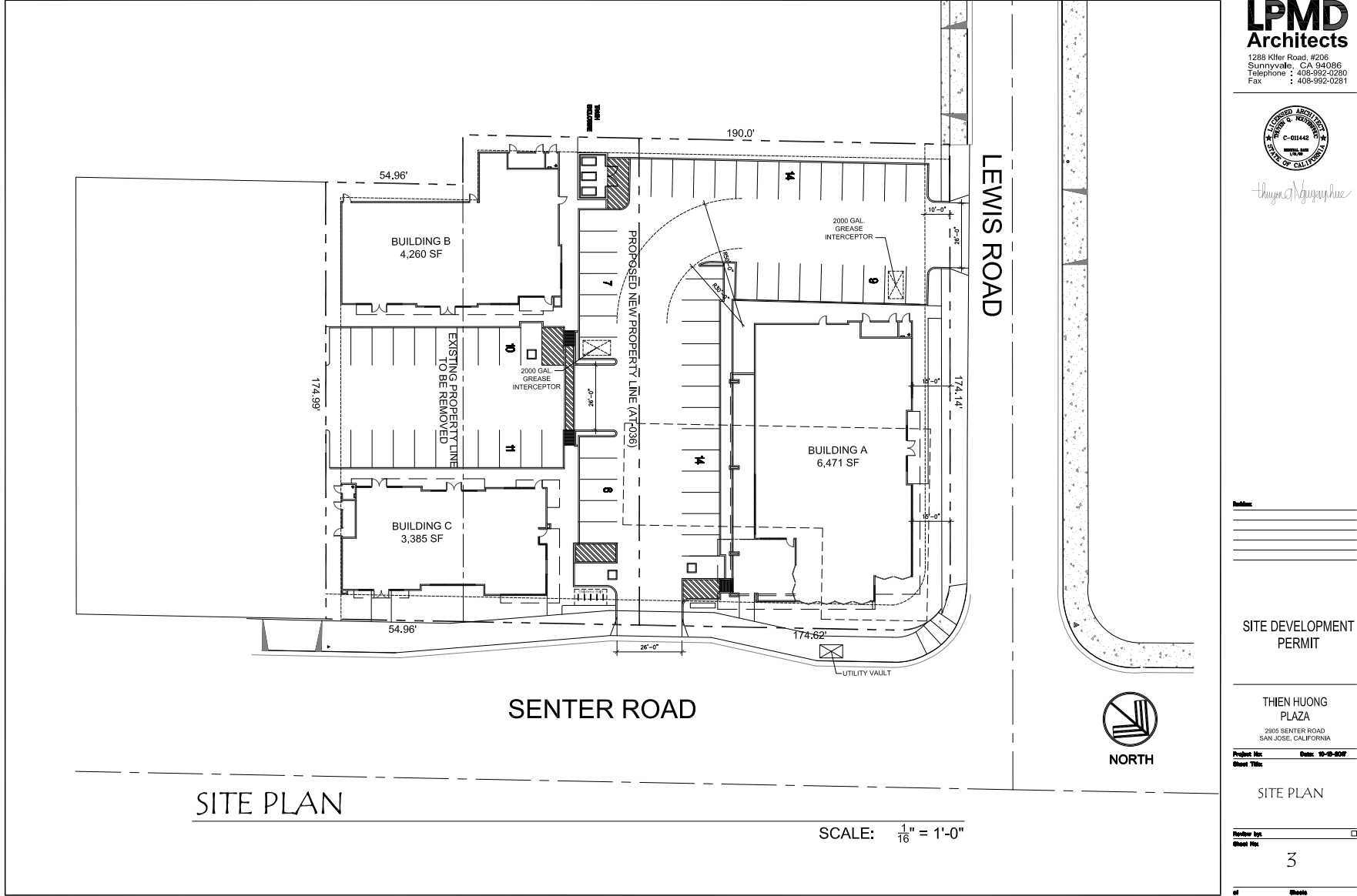


Figure 2
Site Plan and Proposed Parking Layout

Traffic conditions were evaluated for the following scenarios:

Scenario 1: *Existing Conditions.* Existing AM peak hour traffic volumes for all study intersections were obtained from manual turning-movement counts conducted on Wednesday, May 2nd, 2018. Based on correspondence with City staff, older counts dated October 27, 2015 were used for study intersections 5 and 6 during the AM peak hour as the new AM counts showed lower volumes for certain movements at these intersections. Existing PM peak hour traffic volumes for intersections 2, 3, 4 and 6 were obtained from new manual turning-movement counts conducted on Tuesday, May 1st, 2018. The PM peak hour volumes for the CMP study intersections of Senter Road/Tully Road and Senter Road/Capitol Expressway were obtained from the Santa Clara Valley Transportation Authority (VTA) traffic count database. The CMP intersection of Senter Road/Tully Road has a PM peak hour count dated October 18, 2016 and the CMP intersection of Senter Road/Capitol Expressway has a PM peak hour count dated November 1, 2016. All intersection count data were approved by the City of San Jose Department of Transportation prior to using the data for the traffic impact analysis. The new traffic counts are included in Appendix A.

Scenario 2: *Existing Plus Project Conditions.* Existing plus project peak hour traffic volumes 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 existing traffic conditions. Existing plus project traffic conditions could potentially occur if the project were to be constructed and occupied prior to other approved development in the area.

Scenario 3: *Background Conditions.* Background traffic volumes were estimated by adding to existing peak hour volumes the projected volumes from approved but not yet completed developments. The added traffic from approved but not yet completed developments was provided by the City of San Jose in the form of the Approved Trips Inventory (ATI). The ATI is contained in Appendix B.

Scenario 4: *Background Plus Project Conditions.* Projected near-term peak hour traffic volumes with the project were estimated by adding to background traffic volumes the additional traffic generated by the project. Background plus project conditions were evaluated relative to background conditions in order to determine potential project impacts according to the City of San Jose Level of Service Policy (Council Policy 5-3).

Methodology

This section describes 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, the City of San Jose, and field observations. The following data were collected from these sources:

- existing traffic volumes
- approved project trips
- intersection lane configurations
- signal timing and phasing

Analysis Methodologies and Level of Service Standards

Traffic conditions at the signalized 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.

City of San Jose Signalized Intersections

The City of San Jose level of service methodology for signalized intersections is the 2000 *Highway Capacity Manual* (HCM) method. This method is applied using the TRAFFIX software. The 2000 HCM operations method evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. Since TRAFFIX is also the CMP-designated intersection level of service methodology, the City of San Jose methodology employs the CMP default values for the analysis parameters. The City of San Jose level of service standard for signalized intersections is LOS D or better, whether or not the intersection is a CMP intersection. The correlation between average control delay and level of service is shown in Table 1.

Table 1
Intersection Level of Service Definitions Based on Average Delay

Level of Service	Description	Average Control Delay Per Vehicle (sec.)
A	Signal progression is extremely favorable. Most vehicles arrive during the green phase and do not stop at all. Short cycle lengths may also contribute to the very low vehicle delay.	10.0 or less
B+	Operations characterized by good signal progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average vehicle delay.	10.1 to 12.0
B		12.1 to 18.0
B-		18.1 to 20.0
C+	Higher delays may result from fair signal progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though may still pass through the intersection without stopping.	20.1 to 23.0
C		23.1 to 32.0
C-		32.1 to 35.0
D+	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lengths, or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 39.0
D		39.1 to 51.0
D-		51.1 to 55.0
E+	This is considered to be the limit of acceptable delay. These high delay values generally indicate poor signal progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Individual cycle failures occur frequently.	55.1 to 60.0
E		60.1 to 75.0
E-		75.1 to 80.0
F	This level of delay is considered unacceptable by most drivers. This condition often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes of such delay levels.	greater than 80.0
Source: Transportation Research Board, <i>2000 Highway Capacity Manual</i> (Washington, D.C., 2000) p10-16. VTA Traffic Level of Service Analysis Guidelines (June 2003), Table 2.		

Intersection Operations

The operations analysis is based on vehicle queuing for high-demand turning-movements at intersections. Vehicle queues are 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 = Avg. # of vehicles in 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 left-turn 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.”

Freeway Segments

According to CMP guidelines, an analysis of freeway segment levels of service is only required if a project is estimated to add trips to a freeway segment equal to or greater than one percent of the capacity of that segment. Based on the distribution of project-generated trips, the number of trips that would be added to the freeways in the area is expected to be well below the one percent threshold. Thus, a CMP freeway analysis was not prepared.

General Plan Transportation Policies

The Circulation Element of the Envision San Jose 2040 General Plan includes a set of balanced, long-range, multi-modal transportation goals and policies that provide for a transportation network that is safe, efficient, and sustainable (minimizes environmental, financial, and neighborhood impacts). These transportation goals and policies are intended to improve multi-modal accessibility to all land uses and create a city where people are less reliant on driving to meet their daily needs. San Jose’s Transportation Goals, Policies, and Actions aim to:

- Establish circulation policies that increase bicycle, pedestrian, and transit travel while reducing motor vehicle trips to increase the City’s share of travel by alternative transportation modes.
- Promote San Jose as a walking and bicycling-first city by providing and prioritizing funding for projects that enhance and improve bicycle and pedestrian facilities.

Significant 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 City of San Jose Level of

Service standards. The City of San Jose LOS Policy 5-3 was the adopted established threshold for CEQA at the onset of this study.

City of San Jose Definition of Significant Intersection Impacts

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

1. The level of service at the intersection degrades from an acceptable LOS D or better under background conditions to an unacceptable LOS E or F under background plus project conditions, or
2. The level of service at the intersection is an unacceptable LOS E or F under background conditions and the addition of project trips cause both the critical-movement delay at the intersection to increase by four (4) or more seconds and the volume-to-capacity ratio (V/C) to increase by one percent (.01) or more.

An exception to rule #2 above applies when the addition of project trips 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.

A significant impact by City of San Jose standards is said to be satisfactorily mitigated when measures are implemented that would restore intersection level of service to background conditions or better.

Report Organization

The remainder of this report is divided into six chapters. Chapter 2 describes existing conditions including the existing roadway network, transit service, and existing bicycle and pedestrian facilities. Chapter 3 describes the method used to estimate project traffic and presents the intersection operations under existing plus project conditions. Chapter 4 presents the intersection operations under background conditions. Chapter 5 presents the intersection operations under background plus project conditions and describes the project's impact on the near-term transportation system when the project is expected to be fully occupied. Chapter 6 describes non-level of service operational issues associated with the proposed project. Chapter 7 presents the conclusions of the traffic impact analysis

2. Existing Conditions

This chapter describes the existing conditions for all the major transportation facilities within the vicinity of the site, including the roadway network, transit service, and bicycle and pedestrian facilities. Also included are the existing levels of service of the key intersections in the study area.

Existing Roadway Network

Regional access to the project site is provided by SR 87, US 101 and I-280. Local access to the project site is provided via Capitol Expressway, Tully Road, Monterey Road, Senter Road, Lewis Road, Umbarger Road and Southside Drive. These facilities are described below.

SR 87 provides access to the project site via full interchanges at Tully Road to the north and Capitol Expressway to the south. SR 87 is oriented in a north/south direction with four mixed-flow lanes and two HOV lanes.

US 101 is a north-south freeway that extends through and beyond the Bay Area, connecting San Francisco to San Jose. US 101 is eight lanes wide (three mixed-flow lanes and one HOV lane in each direction) within the vicinity of the project site. US 101 provides site access via full interchanges at Tully Road and Capitol Expressway.

I-280 is a north-south freeway that extends from US 101 in San Jose to I-80 in San Francisco. It is generally an east-west oriented eight-lane freeway within the vicinity of downtown San Jose. I-280 provides access to the site via partial interchanges at Vine Street, First Street, Seventh Street, Tenth Street, and the Eleventh Street. I-280 connects to US 101, I-680 and SR 87.

Capitol Expressway is an east-west Grand Boulevard that extends from Almaden Expressway to the west to I-680 to the east. Capitol Expressway has a posted speed limit of 50 mph and is six lanes wide in the project vicinity. Discontinuous sidewalks exist on both sides of Capitol Expressway. Most of the segments on Capitol Expressway have wide shoulders on both directions that can be used by bicyclists.

Monterey Road is a north-south Grand Boulevard that extends from Gilroy in the south to central San Jose in the north, where it eventually becomes El Camino Real, extending all the way north to San Francisco. Monterey Road has a posted speed limit of 45 mph and consists of six travel lanes with a raised median within the study area. Monterey Road has sidewalks on both sides of the street, bike lanes in both directions and no on-street parking permitted in the project vicinity. Monterey Road intersects Lewis Road in the immediate vicinity of the project site.

Tully Road is an east-west City Connector Street that extends from Monterey Road to the west to US 101 to the east. East of US 101, Tully Road is classified as a Main Street extending east to White Road. East of White Road it is classified as a City Connector to Ruby Road. East of Ruby Road, it transitions into a Local Connector Street called Murillo Avenue. Tully Road has a posted speed limit of 40 mph and consists of six travel lanes with a raised median in the project vicinity. Tully Road has sidewalks on both sides of the street, bike lanes in both directions and no on-street parking permitted in the study area. Tully Road provides access to the site via its connection to Senter Road. West of Monterey Road, Tully Road becomes Curtner Avenue and provides access to SR 87. To the east, Tully Road provides access to US 101.

Senter Road is a north-south City Connector that extends from Keyes Street/Story Road to the north and Sylvandale Avenue to the south. South of Sylvandale Avenue it is classified as a Local Connector Street and connects to Monterey Road. Senter Road has a posted speed limit of 40 mph and consists of four to six lanes with some sections having a raised median and others with a painted median. Senter Road has sidewalks on both sides of the street and bikes lanes in both directions. On-street parallel parking is provided on the east side of Senter Road north of Balfour Drive to 170 feet south of Baltic Way. Senter Road provides direct access to the project site via a right-in/right-out driveway.

Lewis Road is a two-lane east-west roadway that extends from Monterey Road to the west and Lone Bluff Way to the east. Lewis Road has a posted speed limit of 30 mph in the project vicinity and consists of one travel lane in each direction. Lewis Road has sidewalks on both sides on most roadway segments with on-street parking allowed on both sides of the street. There is no sidewalk on the south side of Lewis Road approximately 130 feet to the west and east of Garden Avenue and along the project frontage. The project will construct sidewalk along its frontage on Lewis Road. No bike lanes are provided on Lewis Road. Lewis Road provides direct access to the project via a full-access unsignalized driveway that would be located approximately 150 feet to the west of Senter Road.

Umbarger Road is an east-west City Connector Street that extends from Monterey Road to the west and Senter Road to the east. Umbarger Road has a posted speed limit of 35 mph in the project vicinity and consists of one travel lane in each direction. Umbarger Road has continuous sidewalks on the south side and discontinuous sidewalks on the north side of the street. Although no striped bike lanes exist, the wide shoulders provided on Umbarger Road can be used by bicyclists. Parking is generally allowed on both sides on most of the roadway segments along Umbarger Road. Umbarger Road is located north of the project site.

Southside Drive is an east-west residential roadway that extends from Monterey Road to the west and Yuma Drive to the east. Southside Drive has a posted speed limit of 25 mph in the project vicinity and consists of one travel lane in each direction. Southside Drive has sidewalks on both sides of the street with missing sidewalks on some segments. Although there are no striped bike lanes, the roadway carries low traffic volumes and is conducive to bicycle traffic. Southside Drive is located to the south of the proposed project.

Existing Bicycle and Pedestrian Facilities

San Jose desires to provide a safe, efficient, fiscally, economically, and environmentally-sensitive transportation system that balances the needs of bicyclists, pedestrians, and public transit riders with those of automobiles and trucks. The existing bicycle, pedestrian, and transit facilities in the study area are described below.

Existing Bicycle Facilities

Class II bicycle facilities (bike lanes) are provided along the following roadways in the study area (see Figure 3):

- Monterey Road, between Keyes Street and Metcalf Road
- Curtner Avenue/Tully Road, between Leigh Avenue and Ruby Avenue
- Senter Road, between Keyes Street and Monterey Road (with a 1,200-foot segment missing between Singleton Road and Sylvandale Road)
- Seventh Street, between San Jose State University and Tully Road
- 10th Street, between Old Bayshore Highway and Tully Road

Wide shoulders are provided on Capitol Expressway and segments of Umbarger Road and may be used by bicyclists. Although there are no striped bike lanes or Sharrows (shared bike routes) on Southside Drive, this residential street carries relatively low traffic volumes and is conducive to bicycle travel. Lewis Road has narrow shoulders, street parking and no bicycle facilities. Thus, bicyclists should ride with extreme caution on Lewis Road.

The Guadalupe River/Los Alamitos Creek multi-use trail system runs through the City of San Jose along the Guadalupe River, adjacent to SR 87, and is a City of San Jose and Santa Clara County Class I bicycle facility (off-street bike path). It runs between Willow Street and Curtner Avenue within the study area and continues southward to connect to the bicycle lane on Narvaez Avenue. This path accesses the Tamien Caltrain/Light Rail station, located just north of Alma Avenue, and the Curtner Light Rail station to the south. Bike lockers and bike racks are provided at both the Tamien and Curtner LRT stations.

The southern portion of the Coyote Creek Trail is located to the east of the project and connects to Senter Road via Balfour Drive. The Coyote Creek Trail is a multi-use trail system that is planned and partially developed as one of the longest trail systems, ultimately extending from the Bay to the City's southern boundary. The southern portion begins at Tully Road and extends southward through county jurisdiction and reaches Morgan Hill.

Existing Pedestrian Facilities

Pedestrian facilities in the study area consist of sidewalks along most of the surrounding roadways. There is no sidewalk along the project frontage on Lewis Road. This short segment of Lewis Road has a dirt pedestrian path.

Crosswalks with pedestrian signal heads and push buttons are located on all approaches of the Senter Road/Lewis Road intersection, and ADA compliant ramps are provided on all four corners of the intersection. Enhanced crosswalks with traffic control devices (Rectangular Rapid Flashing Beacons, or RRFBs) are also located on Senter Road to the north at Balfour Drive and to the south at Independence Drive.

Overall, the existing network of sidewalks and crosswalks in the immediate vicinity of the project site has good connectivity and provides pedestrians with safe routes to transit services and other points of interest in the study area.

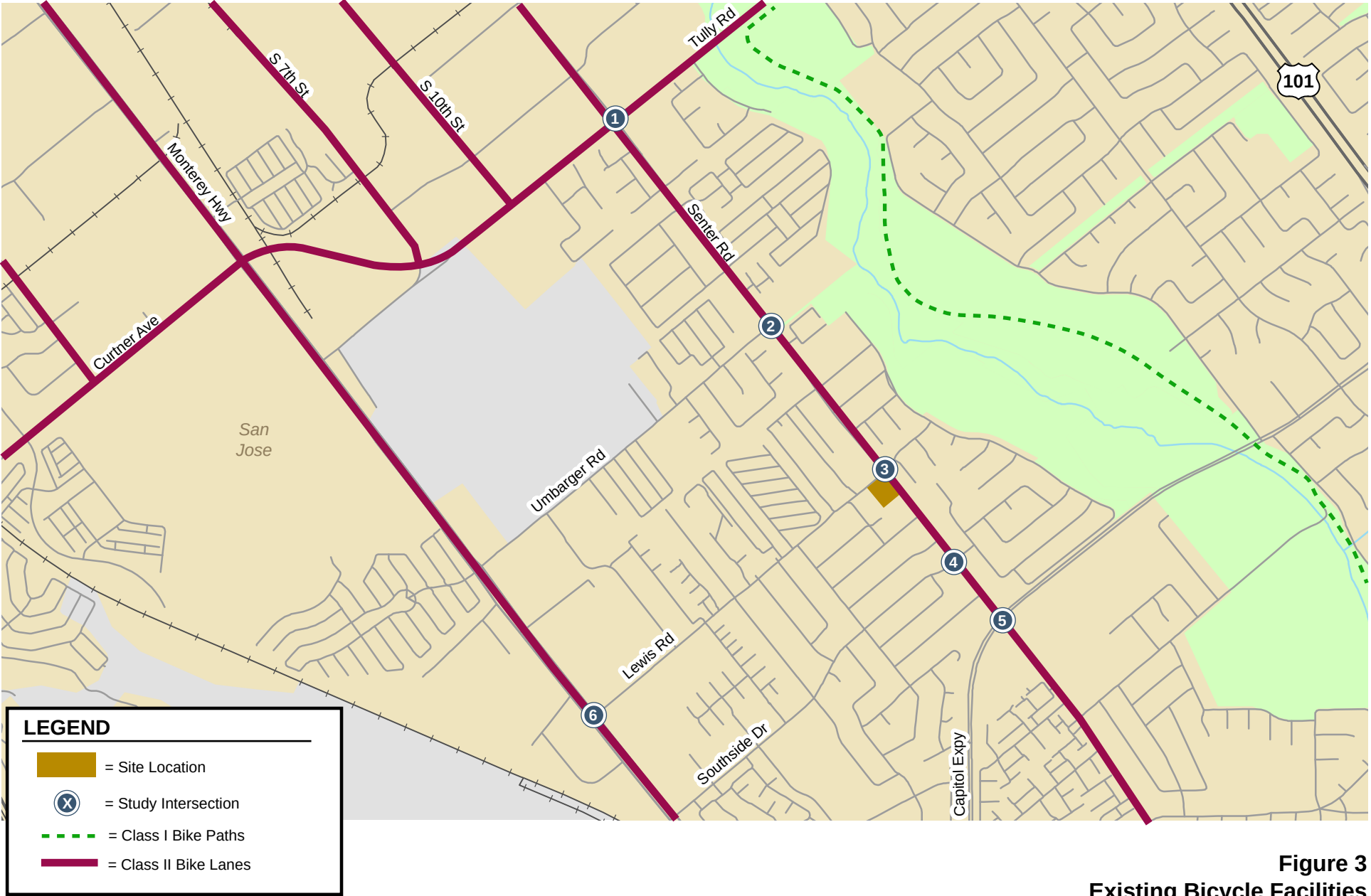


Figure 3
Existing Bicycle Facilities

Existing Transit Services

There are three VTA bus lines that operate within walking distance (approximately ½ mile) of the project site. (see Figure 4). Note that additional bus lines that operate within approximately 1 mile of the project site also are shown on Figure 4.

VTA Bus Service

Local Route 42 provides service between Kaiser San Jose and Evergreen Valley College. Route 42 operates along Capitol Expressway in the project study area, with 45- to 50-minute headways during the weekday peak commute hours and 60-minute headways during most of the day on weekends. The closest bus stop served by Route 42 is located on Capitol Expressway near Senter Road, approximately 0.35 miles south of the project site.

Local Route 70 provides service between the Capitol LRT Station and Great Mall/Main Transit Center. Route 70 operates along Capitol Expressway in the project study area, with 15- to 20-minute headways during the weekday peak commute hours and during most of the day on weekends. Stops for Route 70 are located on Capitol Expressway near Senter Road, about 0.35 miles south of the project site.

Local Route 73 provides service between the Snell/Capitol intersection and downtown San Jose. Route 73 operates along Senter Road in the project study area, with 15-minute headways during the weekday peak commute hours and 30-minute headways during most of the day on weekends. Bus stops on Senter Road for Route 73 in the northbound and southbound directions are located just north of Lewis Road, a short walk from the project site.

Existing Intersection Lane Configurations

The existing lane configurations at the study intersections were confirmed by observations in the field and are shown on Figure 5.

Existing Traffic Volumes

Existing AM peak hour traffic volumes for all study intersections were obtained from manual turning-movement counts conducted on Wednesday, May 2nd, 2018. Based on correspondence with City staff, older counts dated October 27, 2015 were used for study intersections 5 and 6 during the AM peak hour as the new counts showed lower volumes for certain movements through these intersections. Existing PM peak hour traffic volumes for intersections 2, 3, 4 and 6 were obtained from new manual turning-movement counts conducted on Tuesday, May 1st, 2018. The PM peak hour volumes for the CMP study intersections of Senter Road/Tully Road and Senter Road/Capitol Expressway were obtained from the Santa Clara Valley Transportation Authority (VTA) Traffic count database. The CMP intersection of Senter Road/Tully Road has a PM peak hour count dated October 18, 2016 and the CMP intersection of Senter Road/Capitol Expressway has a PM peak hour count dated November 1, 2016. All intersection count data were approved by the City of San Jose Department of Transportation prior to using the data for the traffic impact analysis. The existing peak hour traffic volumes are shown graphically on Figure 6.

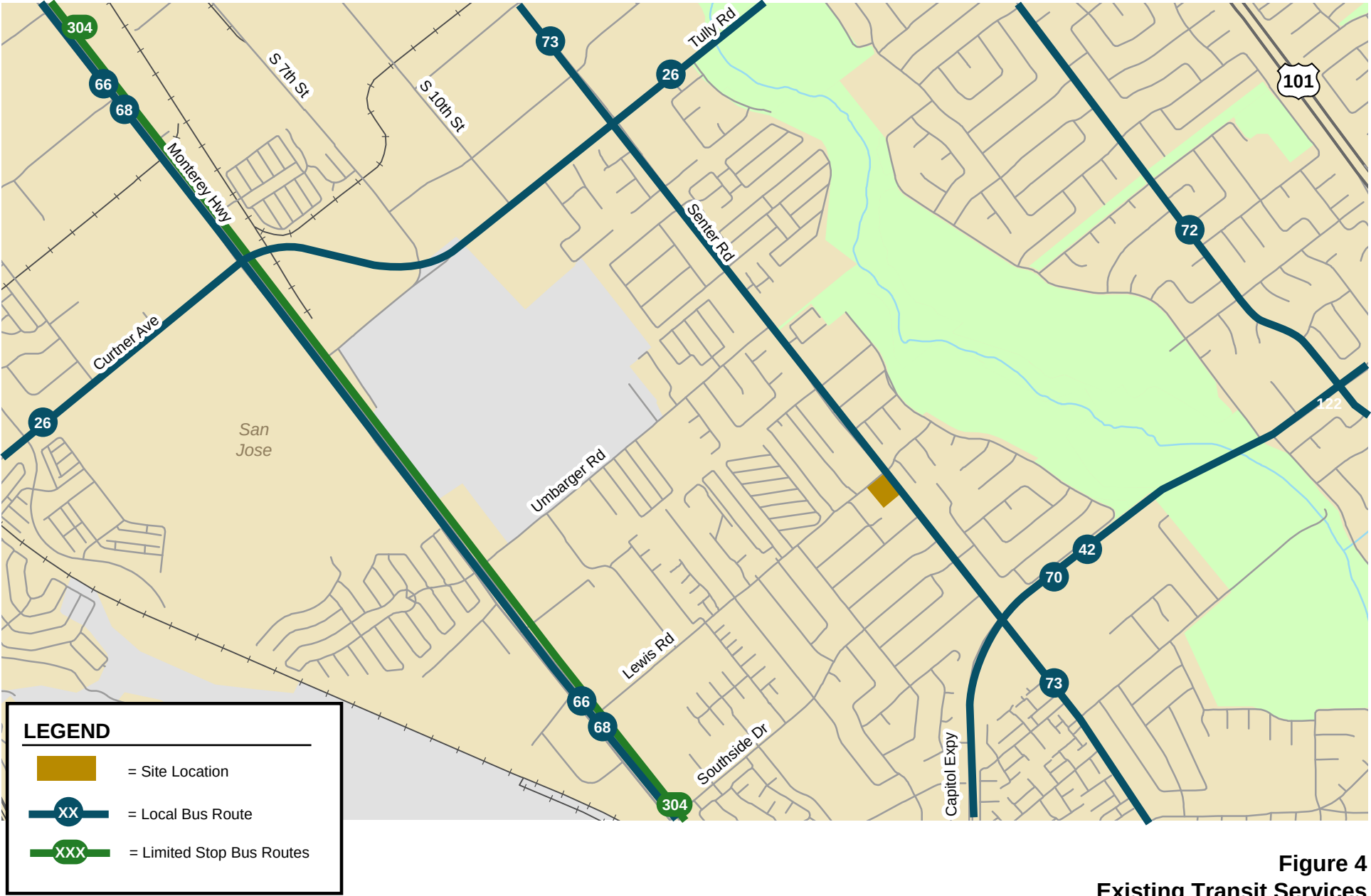


Figure 4
Existing Transit Services

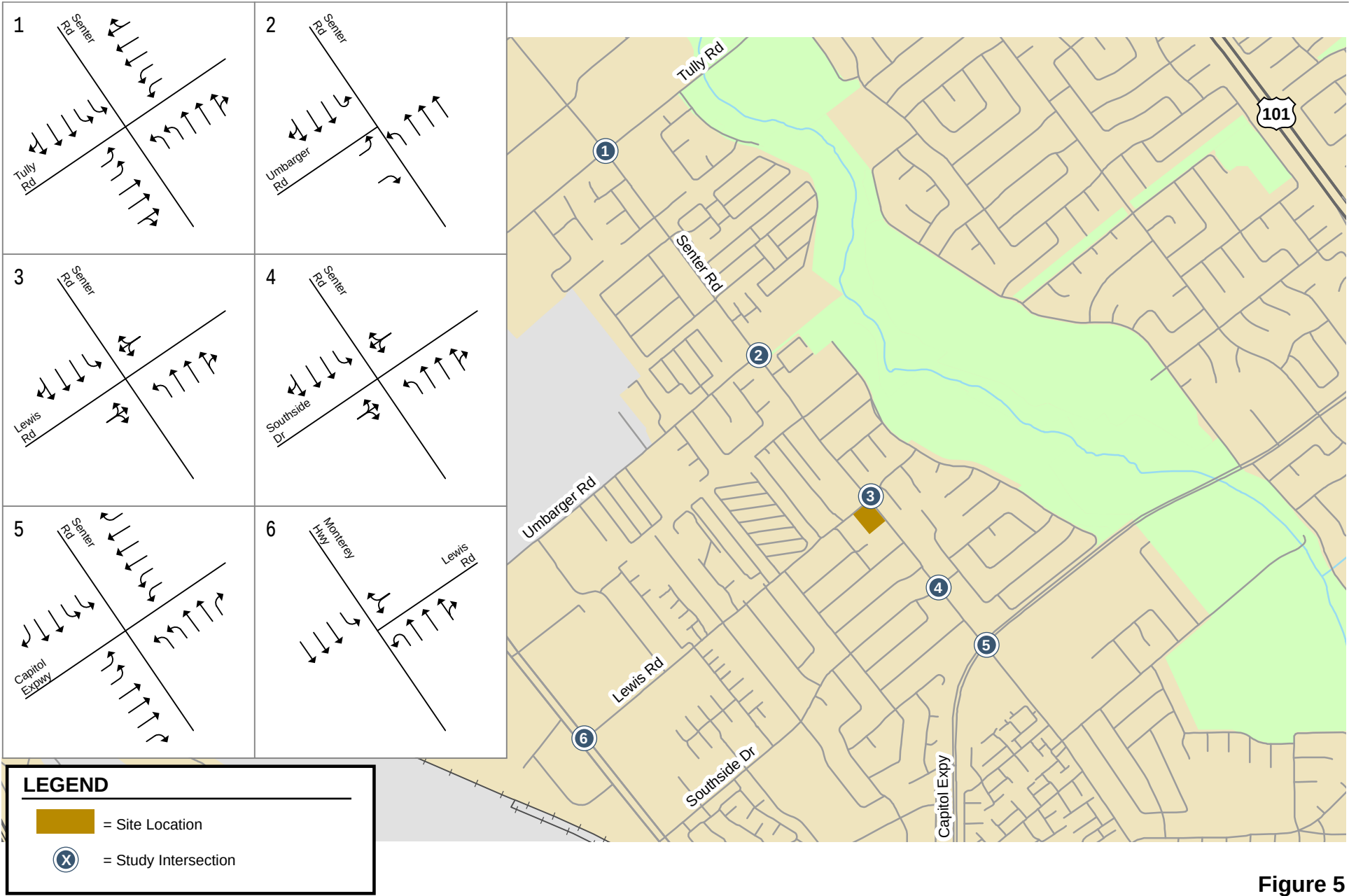


Figure 5
Existing Lane Configurations

2905 Senter Road Commercial

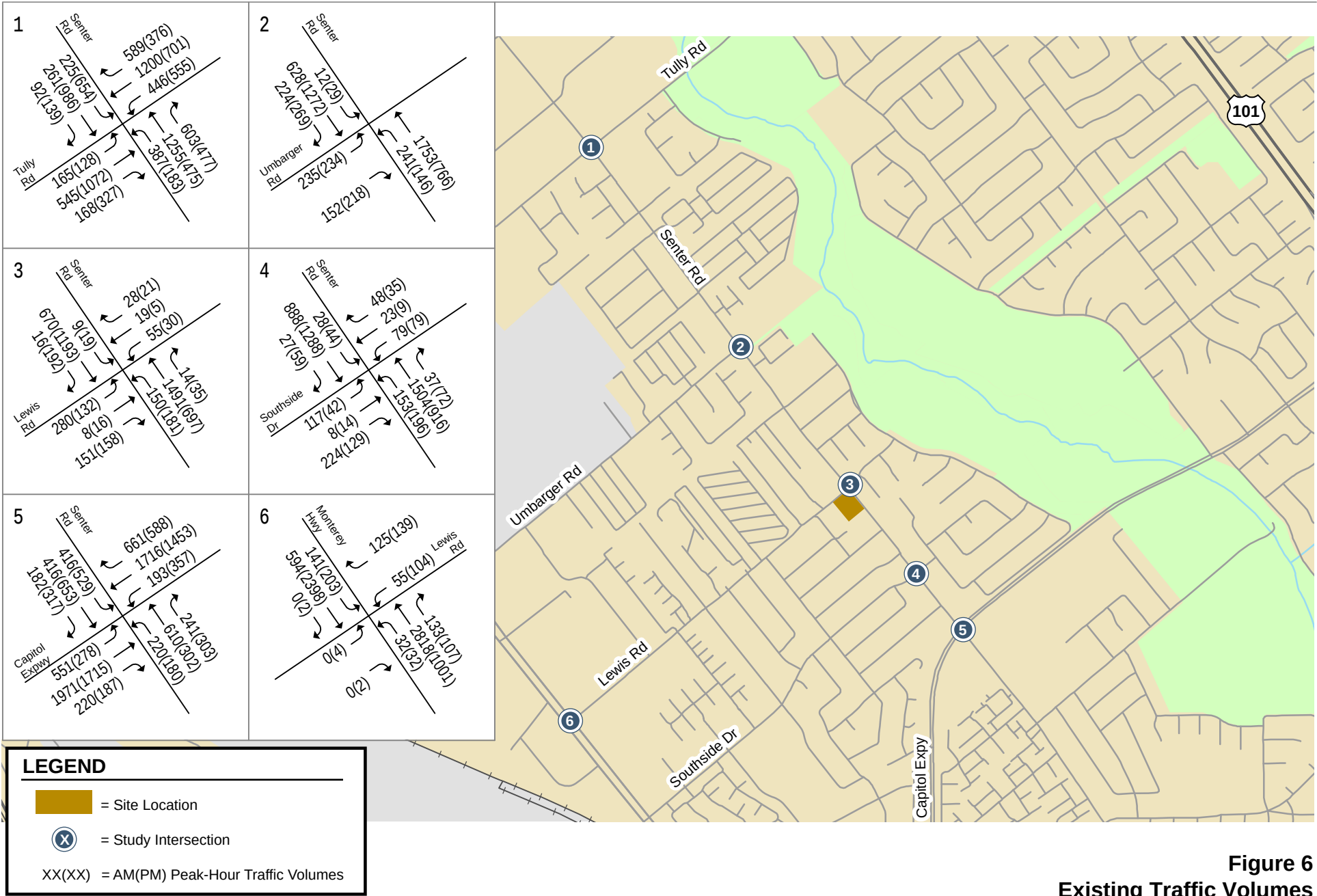


Figure 6
Existing Traffic Volumes

Existing Intersection Levels of Service

The results of the intersection level of service analysis show that all but one of the study intersections currently operate at an acceptable LOS D or better during both the AM and PM peak hours of traffic (see Table 2). The intersection of Senter Road and Capitol Expressway currently operates at an unacceptable LOS E during the PM peak hour.

The intersection level of service calculation sheets are included in Appendix D.

Table 2
Existing Intersection Levels of Service

ID	Intersection	Peak Hour	Count Date	Avg. Delay (sec)	LOS
1	Senter Rd and Tully Rd*	AM	05/02/18	44.8	D
		PM	10/18/16	50.7	D
2	Senter Rd and Umbarger Rd	AM	05/02/18	34.7	C-
		PM	05/01/18	35.9	D+
3	Senter Rd and Lewis Rd	AM	05/02/18	32.0	C-
		PM	05/01/18	29.6	C
4	Senter Rd and Southside Dr	AM	05/02/18	28.2	C
		PM	05/01/18	20.6	C+
5	Senter Rd and Capitol Expressway*	AM	10/27/15	52.1	D-
		PM	11/01/16	57.2	E+
6	Monterey Hwy and Lewis Rd	AM	10/27/15	19.6	B-
		PM	05/02/18	23.8	C

Notes:
 * Denotes VTA CMP intersection
Bold indicates a substandard level of service.

Observed Existing Traffic Conditions

Traffic conditions were observed in the field to identify existing operational deficiencies and to confirm the accuracy of calculated 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 actual existing traffic conditions. AM and PM field observations revealed that overall the study intersections operate well, and the level of service calculations accurately reflect existing conditions. However, operational issues were observed for some turning movements as described below.

Senter Road/Capitol Expressway

During the AM peak hour, field observations showed heavy eastbound and westbound traffic volumes on Capitol Expressway. The eastbound left-turn movement from Capitol Expressway onto northbound Senter Road was not able to clear in one cycle. Traffic congestion was also observed for the northbound and southbound approaches on Senter Road, but all turning movements were able to clear in one cycle. The southbound through traffic on Senter Road was observed to extend past the southbound left-turn pocket of the intersection and block access to the turn pocket. However, because

of the lagging signal phase for the southbound left-turn movement, vehicles were able to access the southbound left-turn pocket and complete their turn once the southbound through movement received a green signal.

During the PM peak hour, field observations showed heavy traffic volumes on eastbound and westbound Capitol Expressway, but traffic generally cleared in one cycle. Long queues were observed for the southbound right-turn and southbound left-turn movements on Senter Road, but traffic was mostly able to clear in one cycle.

Monterey Road/Lewis Road

During the AM peak hour, heavy congestion was observed for the northbound through movement on Monterey Road. Occasionally, during the end of the green phase for the northbound through movement, there was delay caused by spillback from the downstream intersections. It was observed that when Lewis Road received the green phase, downstream traffic on northbound Monterey Road spilled back into the intersection. However, due to very low traffic volumes on Lewis Road, westbound traffic on Lewis Road was able to clear in one cycle.

During the PM peak hour, no significant traffic operational issues were noted. Traffic on all approaches was able to clear in one cycle.

Senter Road/Lewis Road

During the AM and PM peak hours, field observations showed approximately 8 to 9 vehicles queued on the eastbound approach on Lewis Road. However, the eastbound traffic was able to clear in one cycle.

Senter Road/Tully Road

During the AM peak hour, field observations showed congestion for the westbound approach. No significant issues were observed during the PM peak hour.

3.

Existing Plus Project Conditions

This chapter describes existing plus project traffic conditions, including the method by which project traffic is estimated. Existing plus project traffic conditions could potentially occur if the project were to be occupied prior to the other approved projects in the area. It is unlikely that this traffic condition would occur, since other approved projects expected to add traffic to the study area would likely be built and occupied during the time the project is going through the development review process.

Transportation Network Under Existing Plus Project Conditions

It is assumed in this analysis that the transportation network under existing plus 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 are 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 entering and exiting the site is estimated for the AM and PM peak hours. As part of the project trip distribution, an estimate is made of the directions to and from which the project trips would travel. In the project trip assignment, the project trips are assigned to specific streets. These procedures are described further in the following sections.

Trip Generation

The magnitude of traffic added to the roadway system by a particular development is estimated by multiplying the applicable trip generation rates by the size of the development. The standard trip generation rates are based on counts of similar types of development and are published in the Institute of Transportation Engineers (ITE) manual entitled *Trip Generation*, 10th Edition. The trip rates published for Office (ITE land use code 710), Shopping Center (ITE land use code 820) and High-Turnover Sit-Down Restaurant (ITE land use code 932) were used to estimate trips generated by the proposed uses for this project (see Table 3). Pass-by reductions of 34% and 43% were applied to the shopping center and restaurant uses, respectively, during the PM peak hour to account for any traffic attracted from the traffic stream on Senter Road. These pass-by reductions were based on the ITE Trip Generation Handbook (Third Edition). No pass-by reductions were applied during the AM peak hour.

Due to the mixed-use nature of the project, there would be some internal trip capture between the retail, office and restaurant uses. Internal trip capture is the portion of trips generated by a mixed-use

development that both begin and end within the development (walking trips). However, to provide a conservative estimate of project trips, no internal trip reduction was applied to the project.

The project site is occupied by a commercial building that will be demolished as part of this project. Trips that are generated by existing uses to be removed generally can be subtracted from the gross project trip generation estimates. However, since the existing use is underutilized and generates a negligible amount of traffic during the AM and PM peak hours, no existing trip credits were applied.

Based on the standard ITE trip rates, it is estimated that the proposed project would generate 721 net daily vehicle trips, with 74 trips occurring during the AM peak hour and 50 trips occurring during the PM peak hour. Using the inbound/outbound splits recommended by ITE, the project would generate 42 inbound trips and 32 outbound trips during the AM peak hour, and 27 inbound trips and 23 outbound trips during the PM peak hour.

Table 3
Project Trip Generation Estimates

Proposed Land Use	Land Use ¹	Size	Daily Rate	Daily Trips	AM Peak Hour				PM Peak Hour			
					Rate	In	Out	Total Trips	Rate	In	Out	Total Trips
Office	710	4,260 SF	9.74	41	1.16	4	1	5	1.15	1	4	5
Shopping Center	820	3,385 SF	37.75	128	0.94	2	2	4	3.81	6	7	13
Pass-By Reduction (Daily/AM/PM)(17%/0%/34%) ²				(22)		0	0	0		(2)	(2)	(4)
High-Turnover Sit-Down Restaurant	932	6,471 SF	112.18	726	9.94	36	29	65	9.77	39	24	63
Pass-By Reduction (Daily/AM/PM)(21%/0%/43%) ²				(152)		0	0	0		(17)	(10)	(27)
Net Project Trips:				721		42	32	74		27	23	50
Notes:												
¹ Rates based on ITE Trip Generation, 10th Edition.												
² PM peak hour pass-by trip reduction based on ITE Trip Generation Handbook (Third Edition). There is no AM peak hour pass-by trip reduction for these land uses. Daily pass-by trip reduction percentage assumed to be average of AM and PM pass-by reduction.												

Trip Distribution

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 (see Figure 7).

Trip Assignment

The project-generated trips were assigned to the roadway network based on the project trip distribution pattern. The trip assignment took into account the project driveway locations and freeway access points. Project trips at the driveways and at the study intersections are shown on Figure 8.

Existing Plus Project Traffic Volumes

The project trips were added to existing traffic volumes to obtain existing plus project traffic volumes (see Figure 9). Traffic volumes for all components of traffic are tabulated in Appendix C.

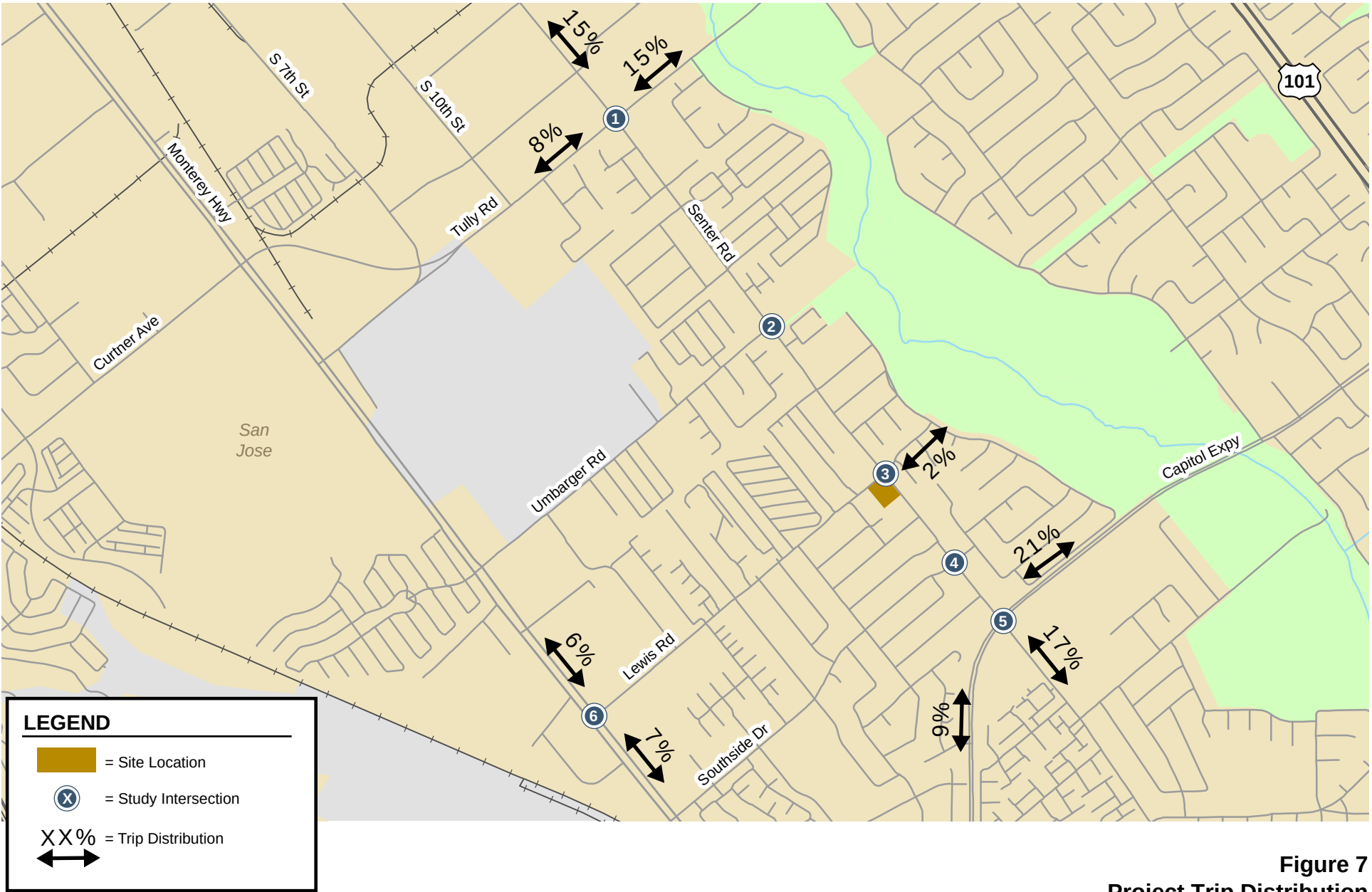


Figure 7
Project Trip Distribution

2905 Senter Road Commercial

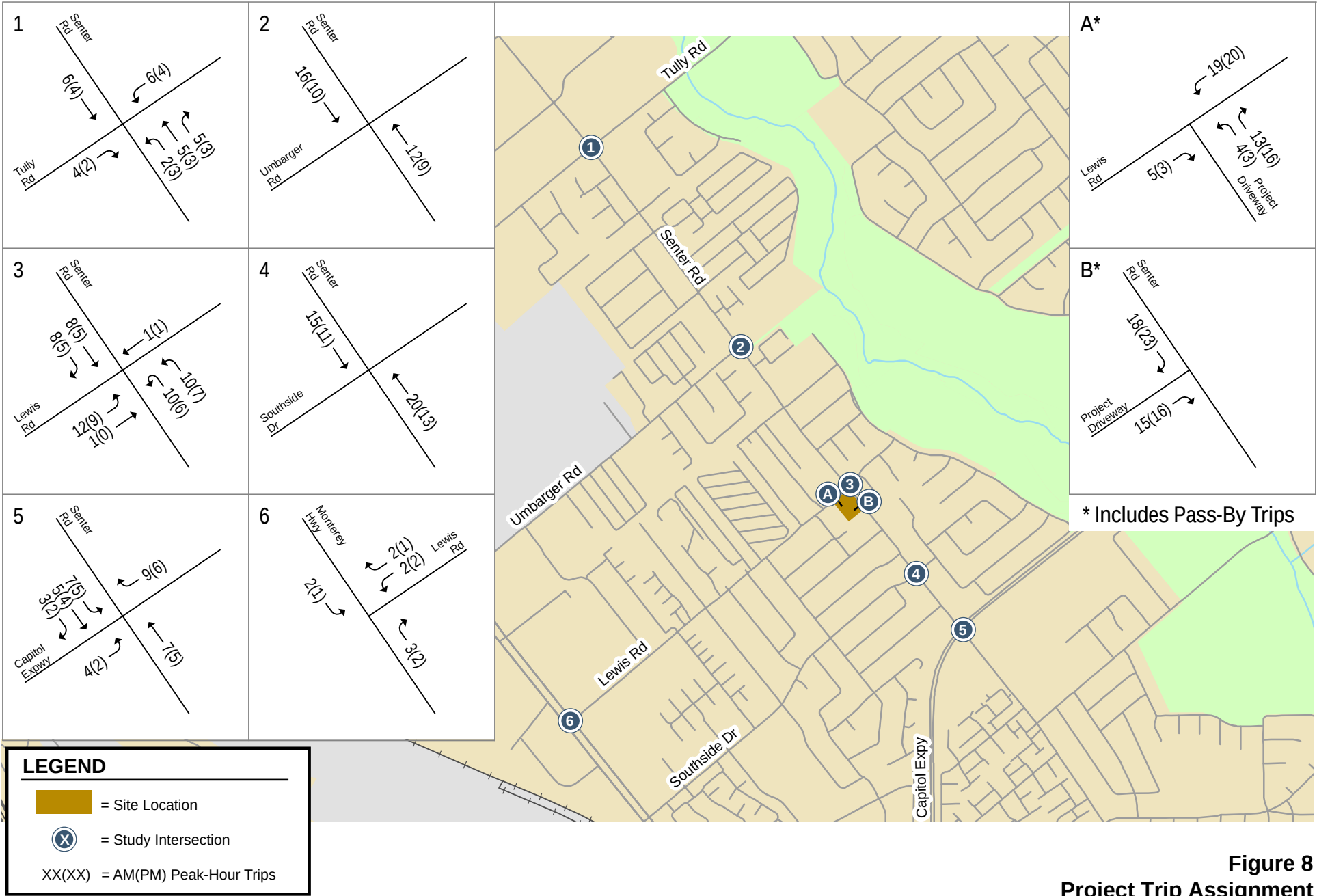
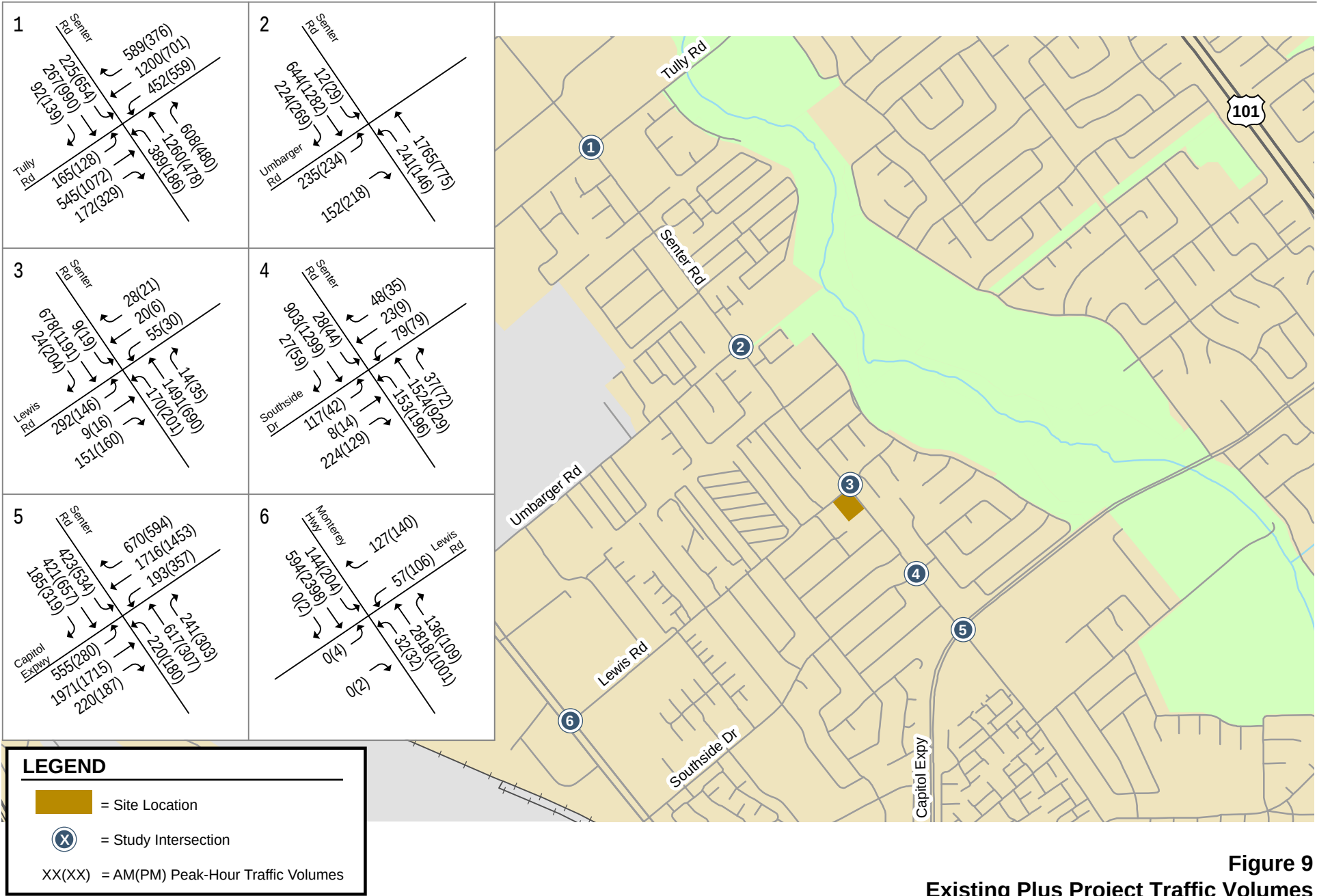


Figure 8
Project Trip Assignment

2905 Senter Road Commercial



Intersection Levels of Service Under Existing Plus Project Conditions

The results of the intersection level of service analysis show that all but one of the study intersections would operate at an acceptable LOS D or better during both the AM and PM peak hours of traffic under existing plus project conditions (see Table 4). The intersection of Senter Road and Capitol Expressway currently operates at an unacceptable LOS E during the PM peak hour and would continue to operate at LOS E during the PM peak hour with the addition of project traffic.

Table 4
Existing Plus Project Intersection Levels of Service

ID	Intersection	Peak Hour	Existing		Existing + Project	
			Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS
1	Senter Rd and Tully Rd*	AM	44.8	D	44.9	D
		PM	50.7	D	50.9	D
2	Senter Rd and Umbarger Rd	AM	34.7	C-	35.0	C-
		PM	35.9	D+	36.0	D+
3	Senter Rd and Lewis Rd	AM	32.0	C-	33.1	C-
		PM	29.6	C	30.9	C
4	Senter Rd and Southside Dr	AM	28.2	C	28.1	C
		PM	20.6	C+	20.5	C+
5	Senter Rd and Capitol Expressway*	AM	52.1	D-	52.7	D-
		PM	57.2	E+	57.3	E+
6	Monterey Hwy and Lewis Rd	AM	19.6	B-	19.9	B-
		PM	23.8	C	23.9	C

Notes:
 * Denotes VTA CMP intersection
Bold indicates a substandard level of service.

It should be noted that the intersection of Senter Road and Southside Drive shows a slight decrease in average vehicle delay with the addition of project-generated traffic. The average vehicle delay calculated by the 2000 Highway Capacity Manual (HCM) methodology is a weighted average. Thus, decreases in average delay can result when project traffic is added to non-critical intersection movements that have low vehicle delays but high corresponding traffic volumes.

The existing plus project condition intersection analysis is provided for informational purposes only. The City of San Jose's Transportation Level of Service Policy (Council Policy 5-3) does not include impact criteria for the existing plus project traffic scenario. Based on Policy 5-3, traffic related impacts in the City of San Jose are determined based on comparing background plus project traffic conditions to background (baseline) traffic conditions.

The level of service calculation sheets are included in Appendix D.

4. Background Conditions

This chapter presents background traffic conditions, which are defined as conditions just prior to completion of the proposed project. It describes the planned transportation system, the procedure used to determine background traffic volumes, and the resulting traffic conditions. The background scenario predicts a realistic traffic condition that would occur as approved development gets built and occupied.

Background Transportation Network

At the direction of the City of San Jose, it was assumed in this analysis that the transportation network under background conditions would be the same as the existing transportation network.

Background Traffic Volumes

Background peak hour traffic volumes were estimated by adding to existing peak hour volumes the estimated traffic from approved but not yet constructed developments (see Figure 10). The added traffic from approved but not yet constructed developments in the City of San Jose was obtained from the City's Approved Trips Inventory (ATI). The ATI is contained in Appendix B.

Intersection Levels of Service Under Background Conditions

The results of the intersection level of service analysis show that all but one of the study intersections would operate at an acceptable LOS D or better during both the AM and PM peak hours of traffic under background conditions (see Table 5). The intersection of Senter Road and Capitol Expressway currently operates at an unacceptable LOS E during the PM peak hour and would operate at LOS E during both the AM and PM peak hours under background conditions due to the addition of traffic generated by approved projects in the study area.

The intersection level of service calculation sheets are included in Appendix D.

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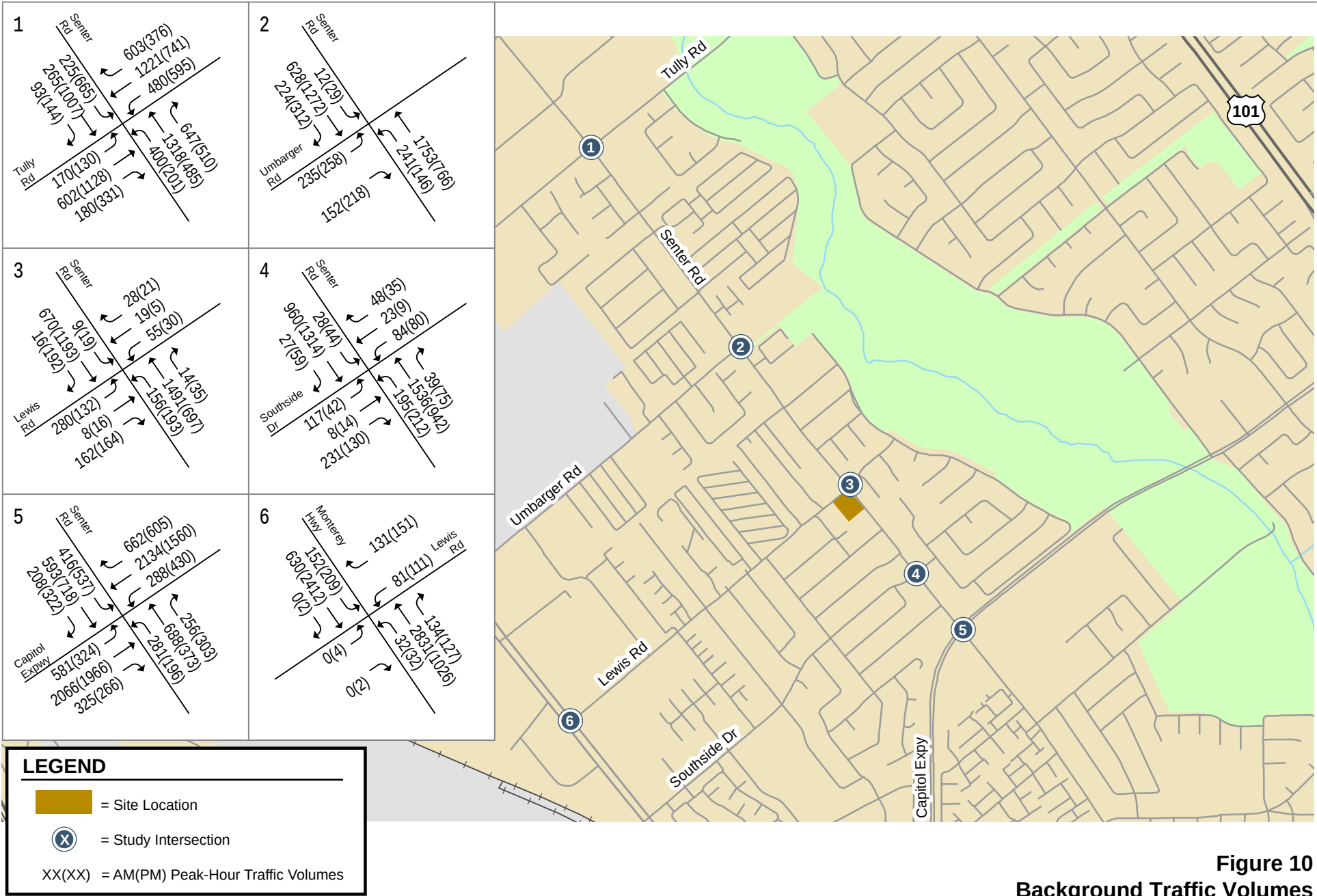


Figure 10
Background Traffic Volumes

Table 5
Background Intersection Levels of Service

ID	Intersection	Peak Hour	Existing		Background	
			Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS
1	Senter Rd and Tully Rd*	AM	44.8	D	46.0	D
		PM	50.7	D	52.2	D-
2	Senter Rd and Umbarger Rd	AM	34.7	C-	34.7	C-
		PM	35.9	D+	36.4	D+
3	Senter Rd and Lewis Rd	AM	32.0	C-	32.3	C-
		PM	29.6	C	30.4	C
4	Senter Rd and Southside Dr	AM	28.2	C	29.3	C
		PM	20.6	C+	20.8	C+
5	Senter Rd and Capitol Expressway*	AM	52.1	D-	64.8	E
		PM	57.2	E+	61.3	E
6	Monterey Hwy and Lewis Rd	AM	19.6	B-	20.9	C+
		PM	23.8	C	24.8	C

Notes:

* Denotes VTA CMP intersection

Bold indicates a substandard level of service.

5.

Background Plus Project Conditions

This chapter describes near-term traffic conditions that likely would occur when the project is complete. It includes a description of the transportation system under background plus project conditions, the method by which project traffic is estimated, and any impacts caused by the project. Background plus project conditions were evaluated relative to background conditions in order to determine potential project impacts. This traffic scenario represents a more congested traffic condition than the existing plus project scenario, since it includes traffic generated by approved but not yet built projects in the area.

Transportation Network Under Background Plus Project Conditions

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

Project Trip Estimates

As described in Chapter 3, the project would generate 721 daily vehicle trips, with 74 trips occurring during the AM peak hour (42 inbound trips and 32 outbound trips) and 50 trips occurring during the PM peak hour (27 inbound trips and 23 outbound trips).

Background Plus Project Traffic Volumes

The AM and PM peak hour trips generated by the project were added to background traffic volumes to obtain background plus project traffic volumes (see Figure 11). The project trips were assigned to the roadway system in accordance with the trip distribution pattern discussed in Chapter 3. Traffic volumes for all components of traffic are tabulated in Appendix C.

Intersection LOS Under Background Plus Project Conditions

The results of the intersection level of service analysis under background plus project conditions (see Table 6) show that, although the Senter Road and Capitol Expressway intersection would continue to operate at an unacceptable LOS E during both the AM and PM peak hours, the project would not cause the intersection critical-movement delay to increase by four or more seconds and the V/C to increase by 0.01 or more. Therefore, measured against the City of San Jose level of service impact criteria, the intersection impact is considered less than significant. All other study intersections would operate at an acceptable LOS D or better during both the AM and PM peak hours of traffic.

2905 Senter Road Commercial

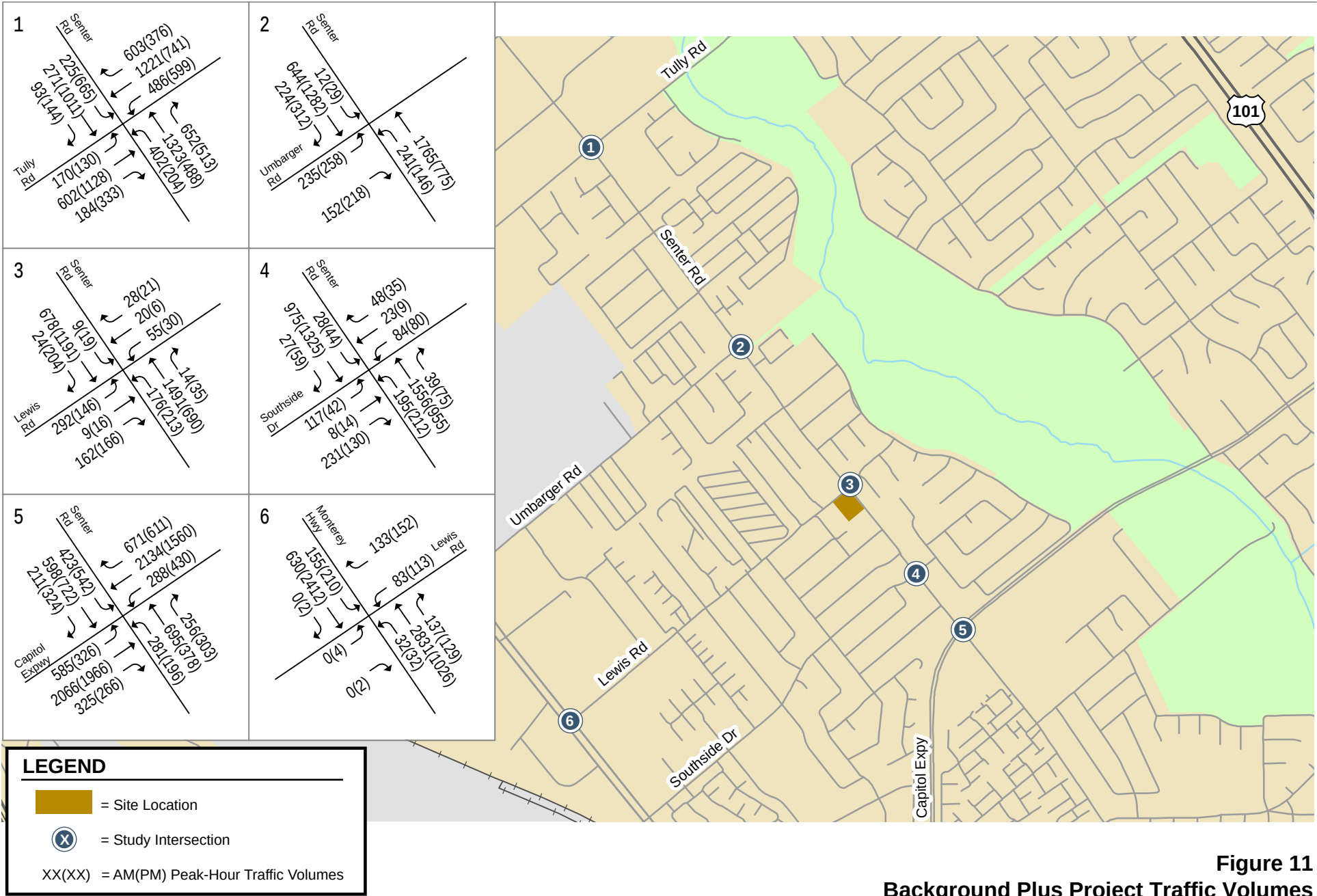


Table 6
Intersection Levels of Service Under Background Plus Project Conditions

ID	Intersection	Peak Hour	Background		Background + Project			
			Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Incr. In Crit. Delay (sec)	Incr. In Crit. V/C
1	Senter Rd and Tully Rd*	AM	46.0	D	46.1	D	0.1	0.001
		PM	52.2	D-	52.4	D-	0.2	0.003
2	Senter Rd and Umbarger Rd	AM	34.7	C-	35.0	C-	0.6	0.008
		PM	36.4	D+	36.4	D+	0.2	0.005
3	Senter Rd and Lewis Rd	AM	32.3	C-	33.3	C-	0.8	0.008
		PM	30.4	C	31.6	C	0.9	0.008
4	Senter Rd and Southside Dr	AM	29.3	C	29.2	C	-0.1	0.004
		PM	20.8	C+	20.7	C+	-0.1	0.002
5	Senter Rd and Capitol Expressway*	AM	64.8	E	65.9	E	1.9	0.006
		PM	61.3	E	61.5	E	0.5	0.003
6	Monterey Hwy and Lewis Rd	AM	20.9	C+	21.2	C+	0.4	0.003
		PM	24.8	C	24.9	C	0.1	0.001

Notes:
 * Denotes VTA CMP intersection
Bold indicates a substandard level of service.

Note that the intersection of Senter Road and Southside Drive shows a slight decrease in average delay with the addition of project-generated traffic. The average vehicle delay calculated by the 2000 Highway Capacity Manual (HCM) methodology is a weighted average. Thus, decreases in average delay can result when project traffic is added to non-critical intersection movements that have low vehicle delays but high corresponding traffic volumes.

The level of service calculation sheets are included in Appendix D.

6.

Other Transportation Issues

This chapter presents an analysis of other transportation issues associated with the project site, including:

- Intersection operations analysis – vehicle queuing and storage at selected intersections
- Potential project impacts to transit, bicycle, and pedestrian facilities
- Site access and on-site circulation
- Parking supply

These other transportation issues were evaluated to determine if any deficiencies would exist under background plus project conditions that may not be specifically linked to environmental impact reporting. These may not be considered environmental issues, and may not be evaluated in an environmental assessment, but have been included in the traffic study to meet the requirements of the City of San Jose. Unlike the level of service impact methodology, which is adopted by the City Council, the analyses in this chapter are based on professional judgment in accordance with the standards and methods employed by the traffic engineering community.

Intersection Operations Analysis

The analysis of intersection level of service was supplemented with an operations analysis for intersections where the project would add left turns. For the purposes of the traffic study, a vehicular queueing analysis was conducted at study intersections along Senter Road where the project would add at least 5 vehicle trips to a left-turn movement during either the AM or PM peak hour. The vehicle queue estimates and a tabulated summary of the findings are shown in Tables 7 and 8.

Senter Road and Tully Road Intersection

The queuing analysis indicates that the 95th percentile vehicle queue for the westbound left-turn lanes at the Senter Road/Tully Road intersection currently exceeds the existing vehicle storage capacity during the AM and PM peak hours of traffic and would continue to do so under both background and background plus project conditions. Each of the two left-turn lanes provide 325 feet of vehicle storage and currently requires 450 feet based on the queuing analysis. This was confirmed by field observations. The median on Tully Road provides room for lengthening of the dual westbound left-turn pockets by an additional 300 feet. However, the project would not increase the 95th percentile vehicle queues for the westbound left turns during either of the peak hours.

Table 7
Vehicle Queuing and Left-Turn Pocket Storage Analysis – AM Peak Hour

	Senter Rd & Tully Rd	Senter Rd & Lewis Rd		Senter Rd & Capitol Expwy
Movement:	WBL	NBL	EBL ³	SBL
Peak Hour Period:	AM	AM	AM	AM
Existing				
Cycle/Delay ¹ (sec)	150	150	150	150
Volume (vphpl)	223	150	288	208
Avg. Queue (veh/ln.)	9	5	7	9
Avg. Queue ² (ft./ln)	225	125	175	225
95th %. Queue (veh/ln.)	14	9	10	14
95th %. Queue (ft./ln)	350	225	250	350
Storage (ft./ ln.)	325	225	400	250
Adequate (Y/N)	N	Y	Y	N
Background				
Cycle/Delay ¹ (sec)	150	150	150	150
Volume (vphpl)	240	156	288	208
Avg. Queue (veh/ln.)	10	6	7	9
Avg. Queue ² (ft./ln)	250	150	175	225
95th %. Queue (veh/ln.)	15	11	10	14
95th %. Queue (ft./ln)	375	275	250	350
Storage (ft./ ln.)	325	225	400	250
Adequate (Y/N)	N	N	Y	N
Background Plus Project				
Cycle/Delay ¹ (sec)	150	150	150	150
Volume (vphpl)	243	176	301	212
Avg. Queue (veh/ln.)	10	6	7	9
Avg. Queue ² (ft./ln)	250	150	175	225
95th %. Queue (veh/ln.)	15	11	11	14
95th %. Queue (ft./ln)	375	275	275	350
Storage (ft./ ln.)	325	225	400	250
Adequate (Y/N)	N	N	Y	N
Notes:				
¹ Vehicle queue calculations based on cycle length for signalized intersections				
² Assumes 25 feet per vehicle queued.				
³ Lewis Road provides approximately 400 feet of vehicle storage between Senter Road and Hunken Drive.				

Table 8
Vehicle Queuing and Left-Turn Pocket Storage Analysis – PM Peak Hour

	Senter Rd & Tully Rd	Senter Rd & Lewis Rd		Senter Rd & Capitol Expwy
Movement:	WBL	NBL	EBL ³	SBL
Peak Hour Period:	PM	PM	PM	PM
Existing				
Cycle/Delay ¹ (sec)	160	150	150	185
Volume (vphpl)	278	181	148	265
Avg. Queue (veh/ln.)	12	5	4	14
Avg. Queue ² (ft./ln)	300	125	100	350
95th %. Queue (veh/ln.)	18	9	6	20
95th %. Queue (ft./ln)	450	225	150	500
Storage (ft./ ln.)	325	225	400	250
Adequate (Y/N)	N	Y	Y	N
Background				
Cycle/Delay ¹ (sec)	160	150	150	185
Volume (vphpl)	298	193	148	269
Avg. Queue (veh/ln.)	13	5	4	14
Avg. Queue ² (ft./ln)	325	125	100	350
95th %. Queue (veh/ln.)	19	9	6	20
95th %. Queue (ft./ln)	475	225	150	500
Storage (ft./ ln.)	325	225	400	250
Adequate (Y/N)	N	Y	Y	N
Background Plus Project				
Cycle/Delay ¹ (sec)	160	150	150	185
Volume (vphpl)	300	213	162	271
Avg. Queue (veh/ln.)	13	6	5	14
Avg. Queue ² (ft./ln)	325	150	125	350
95th %. Queue (veh/ln.)	19	10	8	20
95th %. Queue (ft./ln)	475	250	200	500
Storage (ft./ ln.)	325	225	400	250
Adequate (Y/N)	N	N	Y	N
Notes:				
¹ Vehicle queue calculations based on cycle length for signalized intersections				
² Assumes 25 feet per vehicle queued.				
³ Lewis Road provides approximately 400 feet of vehicle storage between Senter Road and Hunken Drive.				

Senter Road and Lewis Road Intersection

The northbound left-turn lane at the Senter Road/Lewis Road intersection currently accommodates the 95th percentile vehicle queues during both the AM and PM peak hours of traffic, and no operational issues were observed during the AM or PM peak hour field observations. The queuing analysis indicates that the maximum vehicle queue under background conditions would exceed the vehicle storage capacity of the northbound left-turn pocket by two vehicles during the AM peak hour as a result of approved projects in the area. The results of the queuing analysis also show that the project would not increase the northbound left-turn maximum vehicle queue length during the AM peak hour and would increase the maximum queue length by just one vehicle during the PM peak hour.

Senter Road and Capitol Expressway Intersection

The queuing analysis indicates that the 95th percentile vehicle queue for the southbound left-turn lanes at the Senter Road/Capitol Expressway intersection currently exceeds the existing vehicle storage capacity during the AM and PM peak hours of traffic and would continue to do so under both background and background plus project conditions. This was confirmed by field observations. Even though the left turns back up, they do not impede southbound through traffic because Senter Road has two through lanes southbound. Field observations showed that the southbound vehicular queues were usually able to clear in one cycle due to the long green phase. The median on Senter Road provides room for lengthening of the dual southbound left-turn pocket by an additional 200 feet. However, the project would not increase the 95th percentile vehicle queues for the southbound left turns during either of the peak hours.

Transit Services

Although no transit reduction was applied to the estimated trip generation for the project, some of the project trips could be made by transit. It is assumed that some employees of the proposed office and retail/restaurant land uses would utilize the existing bus service. Applying a three percent transit mode share yields an estimate of approximately 2 new transit riders during both the AM and PM peak hours. Local bus line 73 operates along Senter Road in the project study area, with 15-minute headways during the weekday peak commute hours and 30-minute headways during most of the day on weekends. The bus stops for Route 73, both northbound and southbound, are located on Senter Road just north of Lewis Road. It is estimated that potential new riders could be accommodated by the current available capacity of the bus service in the study area. Thus, no transit-related improvements would be necessary with the project.

Transit Delay

To assess the project's effect on transit vehicle delay, the delay experienced by Route 73 running through the study intersection of Senter Road/Lewis Road was estimated based on the average vehicle delay calculated as part of the intersection level of service analysis. Table 9 summarizes the bus travel times through the study intersection and the increase in transit vehicle delay with the addition of the project trips. Note that since VTA does not have significance thresholds to determine impacts on transit vehicle delay, this analysis is presented for information purposes only. The results show that the project would result in minimal changes (less than 1 percent) in transit travel time for Bus Route 73. Thus, it can be concluded that the addition of project-generated traffic is so minor that the delay increases experienced by the bus routes that operate within the study area would be imperceptible.

Table 9
Transit Delay

Route	Direction	Peak Hour	Existing Travel Time ¹ (sec)	Increase in Delay ² (sec)	Increase in Transit Delay (%)
73	Northbound	AM	420	3.0	0.7%
		PM	420	0.9	0.2%
	Southbound	AM	480	3.0	0.6%
		PM	540	1.1	0.2%

Note:

1. Travel time is based on the VTA's bus schedule for two timepoints closest to each end of the study area.
2. Increase in transit delay/travel time from background conditions to background+project conditions. The transit delay is calculated by adding together the delay of all relevant movements at the study intersections.

Bicycle and Pedestrian Facilities

All new development projects in San Jose 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 San Jose's mobility goals and reduce vehicle trip generation and vehicle miles traveled. In addition, the adopted City Bike Master Plan establishes goals, policies and actions to make bicycling a daily part of life in San Jose. The Master Plan includes designated bike lanes along all City streets, as well as on designated bike corridors. In order to further the goals of the City, pedestrian and bicycle facilities should be encouraged with new development projects when feasible.

Bicycle Facilities

Bike lanes exist on Senter Road adjacent to the project site. These bike lanes connect to other bike lanes on Tully Road and Keyes Street to the north, as well as Capitol Expressway to the south, which does not have designated bike lanes but does provide wide shoulders that can be used by bicyclists. The existing network of bike lanes in the study area provides good connectivity and would provide bicyclists with a safe connection between the project site and other surrounding land uses.

The project would be expected to add a small amount of bicycle traffic to the roadways in the study area. No improvements to the bicycle network would be necessary with the project. However, the project should provide bicycle parking that meets the City requirements to encourage the use of bicycles.

Pedestrian Facilities

Pedestrian traffic primarily would be generated by employees of the proposed office development walking to and from the bus stops on Senter Road, and by residents of the adjacent neighborhoods walking to and from the proposed retail and restaurant uses. Senter Road has sidewalks on both sides of the street in the project vicinity. Crosswalks with pedestrian signal heads and push buttons are located on all approaches of the Senter Road/Lewis Road intersection, and ADA compliant ramps are provided on all four corners of the intersection. In addition, enhanced crosswalks with traffic control devices (Rectangular Rapid Flashing Beacons, or RRFBs) are located on Senter Road to the north at Balfour Drive and to the south at Independence Drive.

While the network of sidewalks in the study area is largely continuous, a standard sidewalk is missing along the project frontage on Lewis Road. This short segment of Lewis Road currently has a dirt

pedestrian path. The project would construct a new sidewalk along its frontage on Lewis Road. Note that the site plan shows an abrupt transition between the existing sidewalk on Senter Road and the new sidewalk on Lewis Road. A smoother transition should be provided on the corner at the ADA curb ramp location, similar to the existing condition on the northwest corner of the intersection.

Overall, the existing network of sidewalks in the study area has adequate connectivity and would provide pedestrians with a safe connection between the project site and other points of interest. It can be concluded that the existing pedestrian facilities would be adequate to serve the anticipated pedestrian demand under existing plus project and background plus project conditions. However, ADA requires a minimum sidewalk width of 4 feet. Currently, only about 3 feet of clearance is provided at the project corner adjacent to the large signal pole. The project should provide at least 4 feet of clearance on the sidewalk at the large signal pole. Adequate sidewalk width (4 feet or more) is provided at the signal controller box and small signal pole on this corner. The project should maintain this clearance.

Pedestrian Visibility

The existing signal controller box on Lewis Road creates a slight visual barrier between pedestrians on the project corner and vehicles traveling on eastbound Lewis Road approaching the corner. However, based on field observations, the positioning of the signal controller box does not appear to cause any significant issues associated with pedestrian visibility at the project corner.

Site Access and On-Site Circulation

The site access and circulation evaluation are based on the October 13, 2017 site plan prepared by LPMD Architects (see Figure 2 in Chapter 1).

Project Driveways

Access to the project site would be provided via two driveways, one on Senter Road and one on Lewis Road. The design and operation of each driveway are described below.

Senter Road Driveway

The driveway on Senter Road would be located approximately 100 feet south of Lewis Road and would be restricted to right-in/right-out movements because of the raised median island on Senter Road. The Senter Road driveway would provide direct access to the at-grade parking areas on the project site. The site plan shows the driveway to be 26 feet wide measured at the throat, which is adequate for vehicle ingress and egress and conforms to the City's requirements for driveway design. The site plan also shows a nonstandard acceleration/deceleration lane on Senter Road at this project driveway. City of San Jose staff have indicated that they do not support this driveway design feature.

Senter Road Driveway Operations

The project generated trips that are expected to occur at the Senter Road project driveway are 18 inbound and 15 outbound trips during the AM peak hour and 23 inbound and 16 outbound trips during the PM peak hour. The operations analysis shows that this driveway would operate with a delay of 10 seconds (LOS A) during the AM peak hour and 11.2 seconds (LOS B) during the PM peak hour. The traffic signal at Senter Road/Lewis Road would create sufficient gaps in traffic on Senter Road to allow traffic to exit this project driveway.

Lewis Road Driveway

The driveway on Lewis Road would be located approximately 150 feet west of Senter Road and would provide full access to the project. The Lewis Road driveway would provide direct access to the at-grade parking areas on the project site. The site plan shows the driveway to be 26 feet wide measured at the

throat, which is adequate for vehicle ingress and egress and conforms to the City's requirements for driveway design.

Lewis Road Driveway Operations

The project generated trips that are expected to occur at the project driveway on Lewis Road are 24 inbound and 17 outbound trips during the AM peak hour and 23 inbound and 19 outbound trips during the PM peak hour. The operations analysis shows that the driveway is estimated to operate with an outbound vehicle delay of 11.8 seconds (LOS B) during the AM peak hour and 10.8 seconds (LOS B) during the PM peak hour. However, these delay estimates do not take into account the potential queuing issues along Lewis Road. At the signalized intersection of Senter Road/Lewis Road, field observations show that the vehicular queues (8 to 9 vehicles) on eastbound Lewis Road extend well past the proposed project driveway location. These queues would block access to and from Lewis Road and cause momentary delays for inbound and outbound vehicles at this project driveway, resulting in some potential queuing issues. Of particular concern are vehicles turning left into the site from Lewis Road. If these vehicles were blocked, it would impede the westbound traffic flow on Lewis Road, resulting in a potential back-up to Senter Road. However, as employees and patrons of the project became familiar with the traffic conditions on Lewis Road, they could use the Senter Road driveway instead.

Sight Distance at Project Driveways

Providing the appropriate sight distance reduces the likelihood of a collision at an intersection or driveway. Sight distance generally should be provided in accordance with Caltrans standards. The minimum acceptable sight distance is often considered the Caltrans stopping sight distance. Sight distance requirements vary depending on the roadway speeds.

For Senter Road, which has a posted speed limit of 40 mph, the Caltrans recommended stopping sight distance is 305 feet. This means that a driver must be able to see 305 feet down Senter Road in order to stop and avoid a collision with a vehicle or pedestrian. Based on the site plan provided, adequate sight distance would be provided at the project driveway on Senter Road.

For Lewis Road, which has a posted speed limit of 30 mph, the Caltrans recommended stopping sight distance is 200 feet. This means that a driver must be able to see 200 feet down Lewis Road in order to stop and avoid a collision with a vehicle or pedestrian. Based on the site plan provided, adequate sight distance would be provided at the project driveway on Lewis Road. The existing utility poles and signal controller box on Lewis Road would not affect sight distance or pedestrian visibility at the Lewis Road project driveway.

On-Site Circulation

The site plan shows efficient on-site circulation with all parking provided at 90-degrees. According to the site plan, the drive aisles would measure 26 feet wide. The City's standard width for two-way drive aisles is 26 feet wide where 90-degree parking is provided. This allows sufficient room for vehicles to back out of parking spaces to circulate throughout the parking area. The site plan shows one dead-end aisle in the southern parking lot that would be provided between Buildings B and C. The dead-end parking aisle is shown to extend approximately 1.5 feet beyond the last parking stall, in order to facilitate vehicles parked in the end spaces to back out of their stalls. Additional room for backing out would be desirable but is not possible due to the adjacent property line. Thus, designating these two spaces as compact spaces is recommended.

Truck Access and Circulation

Truck Access and On-Site Circulation

The site plan was reviewed for truck access by the method of truck turning-movement templates. Access was reviewed for the truck type SU-30, which represents garbage trucks, small to medium delivery vehicles, and various emergency vehicles. Analysis using the appropriate truck turning template shows that the project driveways and drive aisle dimensions would be adequate to accommodate these truck types.

Garbage Collection

The site plan shows that the trash enclosure would be located on site at the west end of the property, where the main north/south and east/west drive aisles intersect. On-site garbage collection activities would involve rolling the trash bins out of the trash enclosures, collecting the waste material, and returning the bins to the enclosures. Since the bins would be stored in outside trash enclosures, adequate overhead clearance would be provided to empty the dumpsters over the truck. Garbage trucks could enter the site via either the Senter Road or Lewis Road driveway and exit the other driveway.

Emergency Vehicle Access

Fire code requires driveways to provide at least 32 feet for fire access. The project driveways would be 26 feet wide measured at the throat. As it currently exists, on-street parking is permitted along both sides of Lewis Road adjacent to the project site. Following the development of this project, the curb segments adjacent to the new project driveway on Lewis Road should be painted red to prohibit parking and provide additional width necessary to comply with the City's fire code.

The City of San Jose Fire Department additionally requires that all portions of the buildings be within 150 feet of a fire department access road and requires a minimum of six feet clearance from the property line along all sides of the building. According to the project site plan, the project would meet the six-foot clearance requirement. The project would also meet the 150-foot fire access requirement.

Loading Activities

The project is not proposing any off-street freight loading spaces. As the proposed buildings on site would be less than 10,000 s.f. each, the project would not be required to provide any off-street freight loading spaces. Deliveries to the proposed uses during business hours are expected to be made on site by small to medium sized delivery vehicles that would be able to park in the standard parking spaces. Large trucks would need to utilize the drive aisles to park and make deliveries. Thus, large delivery trucks should only enter the site outside of business hours to avoid blocking parked vehicles.

Parking

According to the City of San Jose Zoning Regulations (Chapter 20.90, Table 20-190), the project is required to provide one off-street parking stall per 250 s.f. of office space and one off-street parking stall per 200 s.f. of retail space. For restaurant, the project is required to provide the greater of one parking space for every 2.5 seats or one parking space per 40 square feet (s.f.) of dining area. The project proposes a 1,200 s.f. indoor dining room with 80 seats.

Based on these parking ratios, the project is required to provide 66 off-street parking spaces, as follows:

- Office (4,260 SF / 1,000 SF) x 4.0 = 17 parking stalls

- Retail (3,385 SF/1,000 SF) x 5.0 = 17 parking stalls
- Restaurant (greater of 80 seats/2.5 or 1,200 SF/40) = 32 parking stalls based on 80 seats.

The site plan shows a total of 68 parking spaces, which is two spaces greater than that required by the City Code.

In addition to the above uses, the project proposes 25 to 50 seats for outdoor dining. For any outdoor dining that is incidental to a public eating establishment, the project is required to provide zero parking spaces for up to 25 seats and 1 parking space per 2.5 seats over 25 seats. Based on this parking requirement for outdoor seating, the project would meet the parking code for up to 30 seats for outdoor dining. For a total of 50 seats for outdoor dining the project would need to provide an additional 8 parking spaces, bringing the total number of required on-site parking spaces to 76, which would equate to a parking deficit of 8 spaces based on the City Code.

Bicycle Parking

According to the City's Bicycle Parking Standards (Chapter 20.90, Table 20-190), the project is required to provide one bicycle parking space for every 4,000 s.f. of floor area for office uses, one bicycle parking space for every 3,000 s.f. of floor area for retail uses, and one bicycle parking space per 50 restaurant seats or one space per 800 s.f. of dining area (whichever is greater). This equates to a total parking requirement of 5 bicycle spaces. The Zoning Code states that when the bicycle parking required for a land use is based solely on square footage, at least 80 percent of the bicycle parking should be short-term spaces, and no more than 20 percent should be long-term spaces.

Definition of Long-Term and Short-Term Bicycle Parking

Long-term bicycle parking facilities are secure bicycle storage facilities for tenants of a building that fully enclose and protect bicycles and may include:

- A covered, access-controlled enclosure such as a fenced and gated area with short-term bicycle parking facilities,
- An access-controlled room with short-term bicycle parking facilities, and
- Individual bicycle lockers that securely enclose one bicycle per locker.

Short-term bicycle parking facilities are accessible and usable by visitors, guests or business patrons and may include:

- Permanently anchored bicycle racks,
- Covered, lockable enclosures with permanently anchored racks for bicycles,
- Lockable bicycle rooms with permanently anchored racks, and
- Lockable, permanently anchored bicycle lockers.

Bicycle Parking Provided

The site plan does not show any bicycle parking. Therefore, bicycle parking could not be evaluated.

Motorcycle Parking

According to the City's Motorcycle Parking Standards (Chapter 20.90, Table 20-250), the project should provide one motorcycle parking space for every 50 code-required vehicle spaces. This equates to a parking requirement of 2 motorcycle spaces. The site plan does not show any motorcycle parking. Therefore, motorcycle parking could not be evaluated.

Vision Zero San Jose

Senter Road between Story Road and Monterey Road is designated as a “Safety Priority Street” as part of San Jose’s Vision Zero policy (*Vision Zero San Jose*, April 2015). The goal of Vision Zero San Jose is to create a community culture that prioritizes traffic safety. Vision Zero is designed to create policies that focus on roadway safety for all modes of travel, particularly non-automobile modes. Streets with these “Safety Priority Street” designations are given priority within the City’s Transportation Capital Improvement Program (CIP) to provide safer transportation systems for all users.

Senter Road Improvements

LED streetlight conversion was recently completed on Senter Road to help improve night-time safety. No other safety improvements for Senter Road are identified in the 2015 Vision Zero San Jose document. The project applicant should work with the City of San Jose to determine if additional projects designed to improve safety along Senter Road have been recently identified. If so, it would be appropriate for the project to make a fair share contribution toward those planned improvements.

Construction Activities

Typical activities related to the construction of any development could include lane narrowing and/or lane closures, sidewalk and pedestrian crosswalk closures, and bike lane closures. In the event of any type of closure, clear signage (e.g., closure and detour signs) must be provided to ensure vehicles, pedestrians and bicyclists are able to adequately reach their intended destinations safely.

The project would be required to submit a construction management plan for City approval that addresses the construction schedule, street closures and/or detours, construction staging areas and parking, and the planned truck routes.

7. Conclusions

The potential impacts of the project were evaluated in accordance with the standards set forth by the City of San Jose. The study included the analysis of AM and PM peak hour traffic conditions for six signalized intersections. Project impacts on other transportation facilities, such as bicycle facilities and transit service, were determined on the basis of engineering judgment.

Intersection Level of Service Analysis

The results of the intersection level of service analysis show that, measured against the City of San Jose level of service impact criteria, none of the study intersections would be significantly impacted by the project.

Other Transportation Issues

The queueing analysis showed that under existing conditions, the 95th percentile queue for certain left-turn movements exceed the available vehicle storage capacity. The analysis showed that the addition of project traffic to these left-turn movements would increase the queue by a maximum of 1 to 2 vehicles. The project would not cause an adverse impact to the traffic operations at these study intersections.

The site plan shows adequate site access and on-site circulation, and no significant traffic operational issues are expected to occur as a result of the project. The project would not have an adverse effect on the existing transit, pedestrian, or bicycle facilities in the study area. Thus, no project-sponsored improvements are identified.

Based on the City of San Jose's parking code requirement for outdoor restaurant dining, the project would meet the parking requirement for up to 30 outdoor seats.

Hexagon has provided the following recommendation resulting from the site access and circulation evaluation.

Project Recommendations

- The two parking spaces located at the end of the dead-end drive aisle should be designated as compact spaces.
- The curb segments adjacent to the project driveway on Lewis Road should be painted red to prohibit parking and provide the 32-foot width necessary to comply with the City's fire code.
- The site plan should be revised to show the required bicycle and motorcycle parking.

2905 Senter Road Plaza

Technical Appendices

September 14, 2018

Appendix A

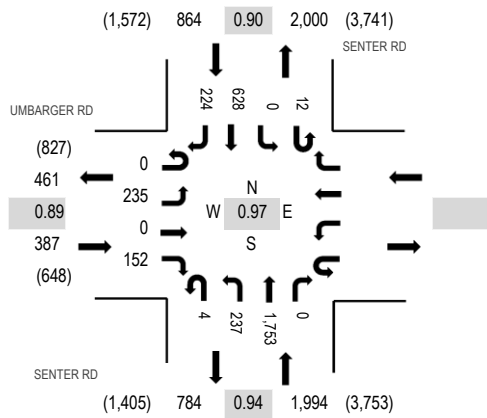
Intersection Counts



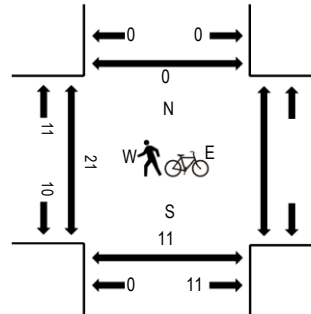
(303) 216-2439
www.alltrafficdata.net

Location: 1 SENTER RD & UMBARGER RD AM
Date and Start Time: Wednesday, May 2, 2018
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	UMBARGER RD Eastbound				Westbound				SENER RD Northbound				SENER RD 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	1	56	0	37					1	38	360	0	3	0	104	38	638	3,145	2		1	0
7:15 AM	0	67	0	48					2	44	462	0	3	0	162	46	834	3,245	2		1	0
7:30 AM	0	65	0	47					1	73	426	0	4	0	160	58	834	3,204	6		6	0
7:45 AM	0	49	0	39					1	58	453	0	4	0	173	62	839	3,069	6		3	0
8:00 AM	0	54	0	18					0	62	412	0	1	0	133	58	738	2,828	4		1	0
8:15 AM	0	33	0	16					1	48	490	0	0	0	152	53	793		5		3	0
8:30 AM	0	33	0	24					1	58	400	0	3	0	130	50	699		4		5	0
8:45 AM	0	42	0	19					3	40	319	0	2	0	133	40	598		7		1	0

Peak Rolling Hour Flow Rates

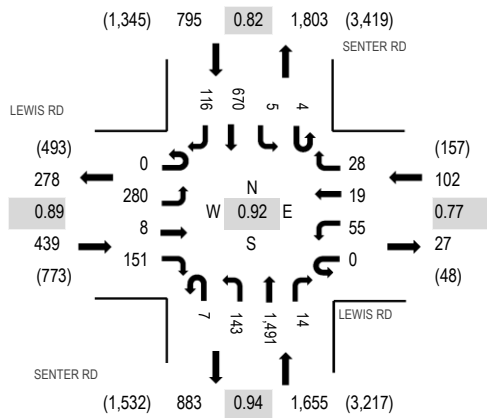
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	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	2	0	3					0	0	3	0	0	0	1	7	16
Lights	0	219	0	144					4	234	1,723	0	12	0	609	211	3,156
Mediums	0	14	0	5					0	3	27	0	0	0	18	6	73
Total	0	235	0	152					4	237	1,753	0	12	0	628	224	3,245



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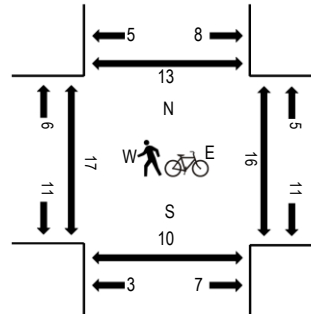
Location: 2 SENTER RD & LEWIS RD AM
Date and Start Time: Wednesday, May 2, 2018
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	LEWIS RD Eastbound				LEWIS RD Westbound				SENER RD Northbound				SENER RD 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	52	0	45	0	5	0	7	0	34	280	2	0	0	111	11	547	2,827	3	4	0	2
7:15 AM	0	71	1	34	0	9	2	7	0	36	355	4	1	2	153	20	695	2,991	4	3	5	1
7:30 AM	0	71	2	51	0	20	6	7	0	24	387	2	0	2	209	32	813	2,989	4	6	1	3
7:45 AM	0	60	1	42	0	14	9	6	4	37	383	5	1	0	174	36	772	2,859	2	4	1	5
8:00 AM	0	78	4	24	0	12	2	8	3	46	366	3	2	1	134	28	711	2,665	5	3	3	4
8:15 AM	0	63	2	22	0	11	0	5	5	44	408	3	0	0	109	21	693		1	1	0	4
8:30 AM	0	42	0	36	0	2	2	6	9	22	390	5	2	0	139	28	683		2	7	1	7
8:45 AM	0	36	0	36	0	8	1	8	5	34	316	5	1	4	106	18	578		2	5	0	5

Peak Rolling Hour Flow Rates

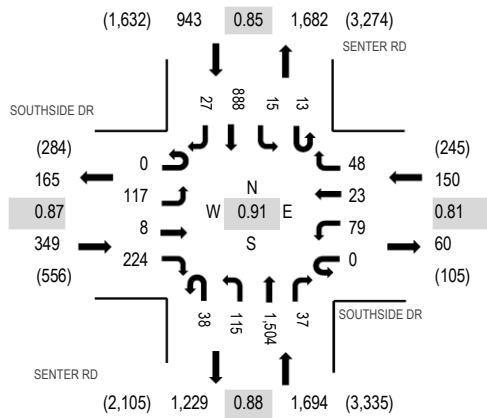
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	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	1	4	0	0	0	4	0	9
Lights	0	274	8	151	0	54	19	27	7	140	1,467	14	4	5	647	111	2,928
Mediums	0	6	0	0	0	1	0	1	0	2	20	0	0	0	19	5	54
Total	0	280	8	151	0	55	19	28	7	143	1,491	14	4	5	670	116	2,991



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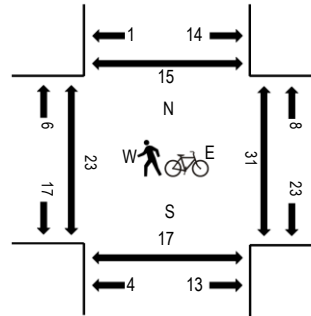
Location: 3 SENTER RD & SOUTHSIDE DR AM
Date and Start Time: Wednesday, May 2, 2018
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	SOUTHSIDE DR Eastbound				SOUTHSIDE DR Westbound				SENTER RD Northbound				SENTER RD 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	17	3	46	0	23	1	9	12	23	294	4	1	0	153	4	590	3,044	4	4	2	0
7:15 AM	0	24	1	60	0	22	3	11	10	23	383	12	5	5	229	3	791	3,136	5	5	3	2
7:30 AM	0	25	1	58	0	27	8	13	10	26	353	5	2	1	264	9	802	3,087	6	11	7	8
7:45 AM	0	36	3	61	0	19	9	11	9	36	405	8	4	4	245	11	861	2,955	10	7	6	3
8:00 AM	0	32	3	45	0	11	3	13	9	30	363	12	2	5	150	4	682	2,724	1	3	1	2
8:15 AM	0	26	2	31	0	11	0	5	10	28	464	6	1	1	147	10	742		2	1	2	2
8:30 AM	0	23	3	23	0	9	1	9	13	16	367	7	1	6	187	5	670		4	3	1	3
8:45 AM	0	11	1	21	0	17	0	10	15	21	353	8	1	4	158	10	630		5	2	1	3

Peak Rolling Hour Flow Rates

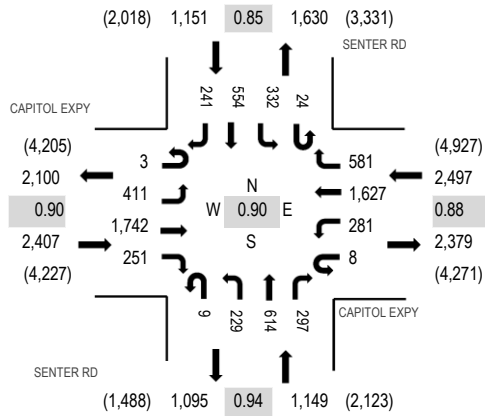
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	1	0	4	0	0	0	5	0	10
Lights	0	116	7	223	0	77	22	44	37	112	1,483	37	12	14	865	27	3,076
Mediums	0	1	1	1	0	2	1	4	0	3	17	0	1	1	18	0	50
Total	0	117	8	224	0	79	23	48	38	115	1,504	37	13	15	888	27	3,136



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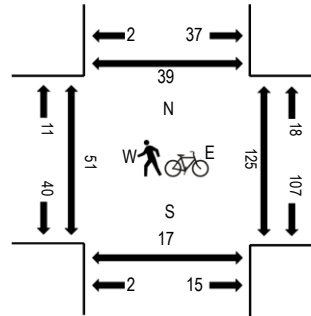
Location: 4 SENTER RD & CAPITOL EXPY AM
Date and Start Time: Wednesday, May 2, 2018
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	CAPITOL EXPY Eastbound				CAPITOL EXPY Westbound				SENTER RD Northbound				SENTER RD 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	1	74	398	91	0	96	320	100	4	56	169	75	4	74	142	51	1,655	7,204	9	12	7	7
7:15 AM	1	123	502	41	2	73	385	132	4	44	141	67	8	92	135	64	1,814	7,111	9	18	2	7
7:30 AM	1	108	451	67	4	73	488	166	0	70	145	86	7	80	189	64	1,999	6,872	19	29	4	9
7:45 AM	0	106	391	52	2	39	434	183	1	59	159	69	5	86	88	62	1,736	6,411	9	64	3	16
8:00 AM	2	111	370	23	2	28	393	152	0	60	159	40	3	96	49	74	1,562	6,091	3	27	2	8
8:15 AM	6	125	310	16	0	25	388	202	0	55	161	47	2	90	72	76	1,575		5	7	1	1
8:30 AM	3	110	311	16	0	30	448	174	1	50	126	58	0	95	59	57	1,538		5	11	2	3
8:45 AM	1	72	333	11	0	25	402	161	0	34	134	49	9	91	38	56	1,416		2	13	2	3

Peak Rolling Hour Flow Rates

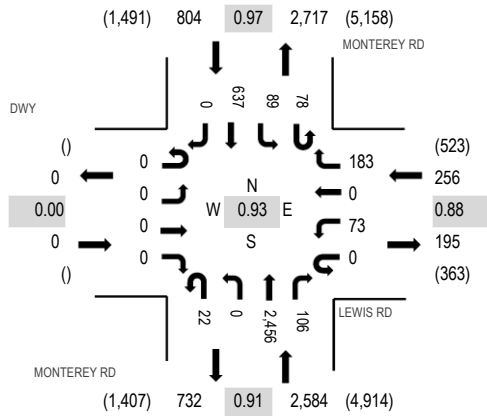
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	3	10	0	0	0	10	2	0	0	1	0	0	3	0	1	30
Lights	3	405	1,712	249	8	274	1,571	573	9	226	605	291	24	322	546	237	7,055
Mediums	0	3	20	2	0	7	46	6	0	3	8	6	0	7	8	3	119
Total	3	411	1,742	251	8	281	1,627	581	9	229	614	297	24	332	554	241	7,204



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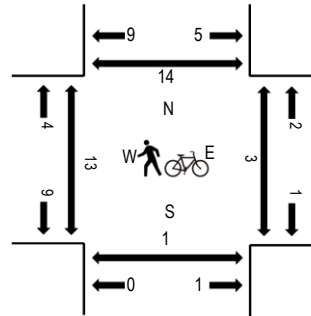
Location: 5 MONTEREY RD & LEWIS RD AM
Date and Start Time: Wednesday, May 2, 2018
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:00 AM - 07:15 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	DWY Eastbound				LEWIS RD Westbound				MONTEREY RD Northbound				MONTEREY RD 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	0	0	0	16	0	50	7	0	684	21	20	27	153	0	978	3,644	1	0	0	1
7:15 AM	0	0	0	0	0	18	0	42	5	0	557	30	24	20	160	0	856	3,479	4	1	0	5
7:30 AM	0	0	0	0	0	18	0	44	3	0	640	28	17	22	169	0	941	3,465	1	1	0	1
7:45 AM	0	0	0	0	0	21	0	47	7	0	575	27	17	20	155	0	869	3,447	6	0	1	6
8:00 AM	0	0	0	0	0	34	0	44	5	0	553	21	18	11	127	0	813	3,284	0	0	0	0
8:15 AM	0	0	0	0	0	20	0	43	5	0	564	25	23	26	136	0	842		4	1	0	2
8:30 AM	0	0	0	0	0	27	0	40	13	0	628	32	17	15	151	0	923		2	0	0	0
8:45 AM	0	0	0	0	0	23	0	36	9	0	452	23	23	15	125	0	706		2	0	0	2

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	2	0	0	12	0	0	1	6	0	21
Lights	0	0	0	0	0	66	0	175	22	0	2,397	101	77	85	589	0	3,512
Mediums	0	0	0	0	0	7	0	6	0	0	47	5	1	3	42	0	111
Total	0	0	0	0	0	73	0	183	22	0	2,456	106	78	89	637	0	3,644



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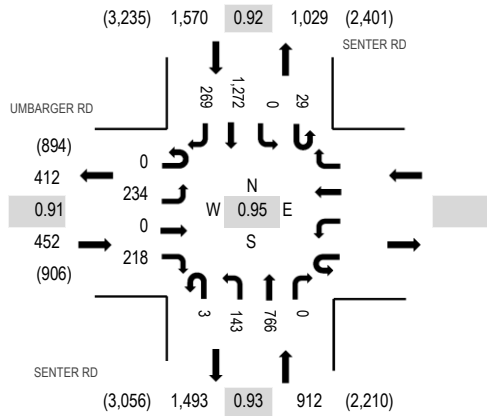
Location: 1 SENTER RD & UMBARGER RD AM

Date and Start Time: Tuesday, May 1, 2018

Peak Hour: 05:00 PM - 06:00 PM

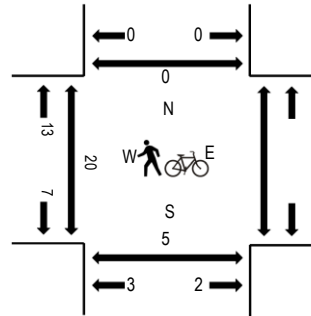
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	UMBARGER RD Eastbound				Westbound				SENTER RD Northbound				SENTER RD 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
8:45 AM	0	42	0	19					3	40	319	0	2	0	133	40	598		7		1	0
4:00 PM	0	67	0	44					1	25	225	0	2	0	340	58	762	2,819	4		4	0
4:15 PM	0	44	0	31					3	42	193	0	6	0	259	60	638	2,833	6		4	0
4:30 PM	0	51	0	60					2	48	185	0	6	0	351	69	772	2,890	6		2	0
4:45 PM	0	55	0	41					0	44	168	0	7	0	276	56	647	2,870	5		1	0
5:00 PM	0	63	0	61					0	30	196	0	4	0	345	77	776	2,934	3		1	0
5:15 PM	0	61	0	49					0	35	165	0	6	0	324	55	695		0		0	0
5:30 PM	0	59	0	42					2	35	217	0	4	0	329	64	752		9		2	0
5:45 PM	0	51	0	66					1	43	188	0	15	0	274	73	711		6		1	0

Peak Rolling Hour Flow Rates

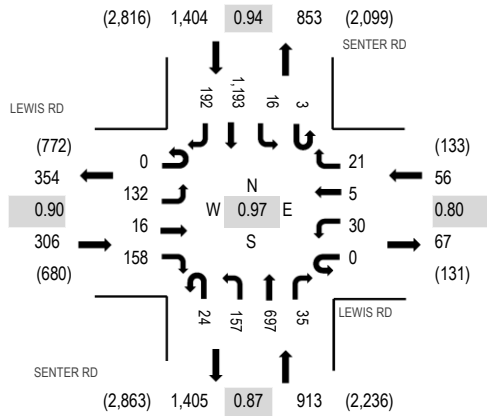
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	1					0	0	1	0	0	0	1	3	6
Lights	0	230	0	216					3	142	758	0	29	0	1,262	262	2,902
Mediums	0	4	0	1					0	1	7	0	0	0	9	4	26
Total	0	234	0	218					3	143	766	0	29	0	1,272	269	2,934



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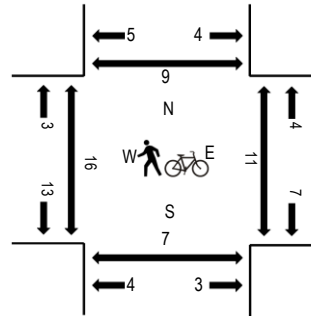
Location: 2 SENTER RD & LEWIS RD AM
Date and Start Time: Tuesday, May 1, 2018
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	LEWIS RD Eastbound				LEWIS RD Westbound				SENER RD Northbound				SENER RD 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
8:45 AM	0	36	0	36	0	8	1	8	5	34	316	5	1	4	106	18	578		2	5	0	5
4:00 PM	0	42	1	45	0	12	2	2	2	40	168	6	0	0	298	41	659	2,608	6	2	2	4
4:15 PM	0	27	0	33	0	14	2	3	8	45	216	12	2	4	255	43	664	2,639	5	3	1	3
4:30 PM	0	28	4	39	0	7	1	4	1	50	179	6	1	4	274	54	652	2,646	6	1	0	1
4:45 PM	0	32	4	47	0	6	1	6	7	39	175	9	0	5	255	47	633	2,642	4	4	0	1
5:00 PM	0	30	4	48	0	9	2	6	6	39	171	10	1	4	310	50	690	2,679	2	3	0	2
5:15 PM	0	27	2	35	0	9	2	4	4	38	171	6	1	5	325	42	671		1	3	1	2
5:30 PM	0	43	4	41	0	9	0	5	11	31	152	10	0	3	288	51	648		5	1	3	3
5:45 PM	0	32	6	34	0	3	1	6	3	49	203	9	1	4	270	49	670		7	4	3	2

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	2	0	0	0	2	0	4
Lights	0	132	16	158	0	28	5	21	24	157	686	35	3	16	1,183	192	2,656
Mediums	0	0	0	0	0	2	0	0	0	0	9	0	0	0	8	0	19
Total	0	132	16	158	0	30	5	21	24	157	697	35	3	16	1,193	192	2,679



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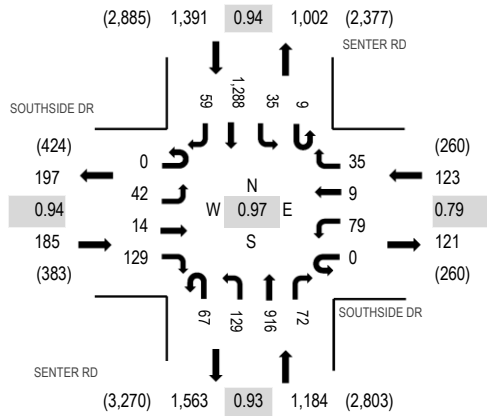
Location: 3 SENTER RD & SOUTHSIDE DR AM

Date and Start Time: Tuesday, May 1, 2018

Peak Hour: 05:00 PM - 06:00 PM

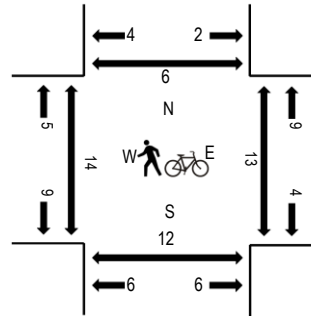
Peak 15-Minutes: 05:30 PM - 05:45 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	SOUTHSIDE DR Eastbound				SOUTHSIDE DR Westbound				SENER RD Northbound				SENER RD 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
8:45 AM	0	11	1	21	0	17	0	10	15	21	353	8	1	4	158	10	630		5	2	1	3
4:00 PM	0	9	2	37	0	24	0	12	25	34	221	20	2	4	318	17	725	2,818	2	2	5	2
4:15 PM	0	6	4	29	0	10	1	9	14	39	259	16	2	6	304	12	711	2,820	5	5	2	0
4:30 PM	0	10	0	22	0	18	1	9	19	36	228	31	2	9	302	10	697	2,814	1	6	3	4
4:45 PM	0	9	3	34	0	19	1	6	12	32	216	20	0	11	309	13	685	2,860	5	8	2	2
5:00 PM	0	10	2	34	0	11	3	9	18	29	220	26	2	11	338	14	727	2,883	6	2	4	1
5:15 PM	0	7	3	38	0	21	3	4	9	34	200	10	2	6	351	17	705		2	5	0	2
5:30 PM	0	9	5	28	0	21	2	10	21	37	253	15	4	6	319	13	743		0	4	3	2
5:45 PM	0	16	4	29	0	26	1	12	19	29	243	21	1	12	280	15	708		5	2	5	1

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	1	0	0	0	2	0	3
Lights	0	42	13	129	0	79	9	34	67	128	903	72	9	35	1,279	59	2,858
Mediums	0	0	1	0	0	0	0	1	0	1	12	0	0	0	7	0	22
Total	0	42	14	129	0	79	9	35	67	129	916	72	9	35	1,288	59	2,883



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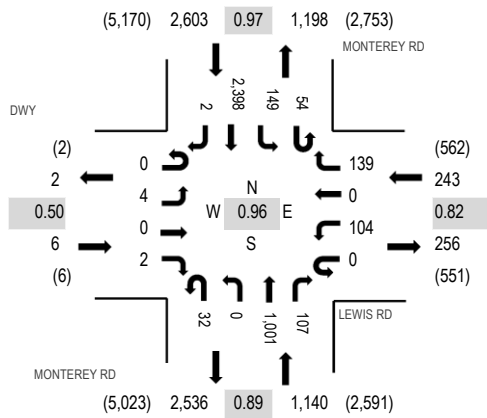
Location: 5 MONTEREY RD & LEWIS RD AM

Date and Start Time: Tuesday, May 1, 2018

Peak Hour: 04:45 PM - 05:45 PM

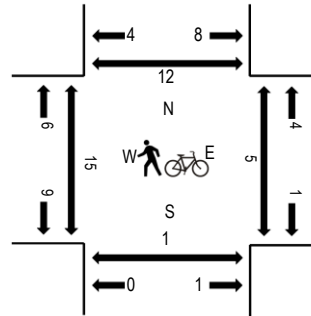
Peak 15-Minutes: 05:30 PM - 05:45 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	DWY Eastbound				LEWIS RD Westbound				MONTEREY RD Northbound				MONTEREY RD 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
8:45 AM	0	0	0	0	0	23	0	36	9	0	452	23	23	15	125	0	706		2	0	0	2
4:00 PM	0	0	0	0	0	34	0	31	2	0	220	21	8	33	568	0	917	3,768	2	0	0	2
4:15 PM	0	0	0	0	0	19	0	34	5	0	237	25	11	35	549	0	915	3,801	5	0	0	0
4:30 PM	0	0	0	0	0	49	0	40	2	0	219	28	12	51	528	0	929	3,886	3	0	0	2
4:45 PM	0	1	0	1	0	37	0	36	12	0	240	26	6	42	604	2	1,007	3,992	3	1	1	4
5:00 PM	0	0	0	0	0	26	0	34	6	0	244	17	18	43	562	0	950	3,855	6	2	0	5
5:15 PM	0	2	0	1	0	30	0	40	7	0	240	28	11	33	608	0	1,000		2	0	0	1
5:30 PM	0	1	0	0	0	11	0	29	7	0	277	36	19	31	624	0	1,035		3	0	0	0
5:45 PM	0	0	0	0	0	23	0	30	4	0	186	18	16	46	547	0	870		1	0	0	1

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	1	0	1	0	2	0	4
Lights	0	4	0	2	0	104	0	139	32	0	977	98	53	147	2,369	2	3,927
Mediums	0	0	0	0	0	0	0	0	0	0	23	9	0	2	27	0	61
Total	0	4	0	2	0	104	0	139	32	0	1,001	107	54	149	2,398	2	3,992

Appendix B
City of San Jose Approved Trips Inventory

AM APPROVED TRIPS

03/16/2018

Intersection of: SENTER/TULLY

Page No: 1

Traffic Node Number: 3117

Permit No. / Description / Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
CP15-078 CHARATIES HOUSING RESIDENTIAL PROJECT 2500 SENTER ROAD	3	0	0	0	0	0	0	0	11	9	0	0
NSJ NORTH SAN JOSE	10	33	7	0	0	0	0	1	0	0	1	0
PDC02-066 GOBLE LANE GOBLE LN & MONTEREY RD (SW/C)	0	4	37	0	2	0	0	37	0	20	20	0
PDC13-009 (IND) COMMUNICATION HILL	0	17	0	0	2	1	4	13	1	4	0	10
PDC13-009 (RES) COMMUNICATIONS HILL	0	9	0	0	0	0	1	6	0	1	0	4
PDC13-009 (RET) COMMUNICATIONS HILL	0	0	0	0	0	0	0	0	0	0	0	0

TOTAL:	13	63	44	0	4	1	5	57	12	34	21	14
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	LEFT	THRU	RIGHT
NORTH	0	4	1
EAST	34	21	14
SOUTH	13	63	44
WEST	5	57	12

PM APPROVED TRIPS

03/16/2018

Intersection of: SENTER/TULLY

Page No: 2

Traffic Node Number: 3117

Permit No. / Description / Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
CP15-078 CHARATIES HOUSING RESIDENTIAL PROJECT 2500 SENTER ROAD	18	0	5	0	0	0	0	0	2	2	0	0
NSJ NORTH SAN JOSE	0	2	1	11	17	2	1	9	2	0	0	0
PDC02-066 GOBLE LANE GOBLE LN & MONTEREY RD (SW/C)	0	2	21	0	4	0	0	21	0	38	38	0
PDC13-009 (IND) COMMUNICATION HILL	0	5	5	0	0	3	1	16	0	0	2	0
PDC13-009 (RES) COMMUNICATIONS HILL	0	1	1	0	0	0	0	9	0	0	0	0
PDC13-009 (RET) COMMUNICATIONS HILL	0	0	0	0	0	0	0	1	0	0	0	0
TOTAL:	18	10	33	11	21	5	2	56	4	40	40	0
			LEFT	THRU	RIGHT							
			NORTH	11	21	5						
			EAST	40	40	0						
			SOUTH	18	10	33						
			WEST	2	56	4						

AM APPROVED TRIPS

03/16/2018

Intersection of: LEWIS/MONTEREY

Page No: 1

Traffic Node Number: 3646

Permit No. / Description / Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
PDC02-066 GOBLE LANE GOBLE LN & MONTEREY RD (SW/C)	0	13	0	11	23	0	0	0	0	0	0	6
PDC13-009 (IND) COMMUNICATION HILL	0	0	1	0	9	0	0	0	0	17	0	0
PDC13-009 (RES) COMMUNICATIONS HILL	0	0	0	0	4	0	0	0	0	9	0	0
PDC13-009 (RET) COMMUNICATIONS HILL	0	0	0	0	0	0	0	0	0	0	0	0

TOTAL:	0	13	1	11	36	0	0	0	0	26	0	6
--------	---	----	---	----	----	---	---	---	---	----	---	---

	LEFT	THRU	RIGHT
NORTH	11	36	0
EAST	26	0	6
SOUTH	0	13	1
WEST	0	0	0

PM APPROVED TRIPS

03/16/2018

Intersection of: LEWIS/MONTEREY

Page No: 2

Traffic Node Number: 3646

Permit No. / Description / Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
PDC02-066 GOBLE LANE GOBLE LN & MONTEREY RD (SW/C)	0	25	0	6	14	0	0	0	0	0	0	12
PDC13-009 (IND) COMMUNICATION HILL	0	0	13	0	0	0	0	0	0	5	0	0
PDC13-009 (RES) COMMUNICATIONS HILL	0	0	7	0	0	0	0	0	0	2	0	0
PDC13-009 (RET) COMMUNICATIONS HILL	0	0	0	0	0	0	0	0	0	0	0	0

TOTAL:	0	25	20	6	14	0	0	0	0	7	0	12
--------	---	----	----	---	----	---	---	---	---	---	---	----

	LEFT	THRU	RIGHT
NORTH	6	14	0
EAST	7	0	12
SOUTH	0	25	20
WEST	0	0	0

AM APPROVED TRIPS

03/16/2018

Intersection of: LEWIS/SENER

Page No: 1

Traffic Node Number: 3647

Permit No. / Description / Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
PDC02-066	6	0	0	0	0	0	0	0	11	0	0	0
GOBLE LANE												
GOBLE LN & MONTEREY RD (SW/C)												
TOTAL:	6	0	0	0	0	0	0	0	11	0	0	0

	LEFT	THRU	RIGHT
NORTH	0	0	0
EAST	0	0	0
SOUTH	6	0	0
WEST	0	0	11

PM APPROVED TRIPS

03/16/2018

Intersection of: LEWIS/SETER

Page No: 2

Traffic Node Number: 3647

Permit No. / Description / Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
PDC02-066	12	0	0	0	0	0	0	0	6	0	0	0
GOBLE LANE												
GOBLE LN & MONTEREY RD (SW/C)												
TOTAL:	12	0	0	0	0	0	0	0	6	0	0	0

	LEFT	THRU	RIGHT
NORTH	0	0	0
EAST	0	0	0
SOUTH	12	0	0
WEST	0	0	6

AM APPROVED TRIPS

03/16/2018

Intersection of: SENTER/SOUTHSIDE

Page No: 1

Traffic Node Number: 3799

Permit No. / Description / Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
SP15-027 ROCKETSHIP SENTER 3167 SENTER ROAD	42	32	2	0	72	0	0	0	7	5	0	0

TOTAL:	42	32	2	0	72	0	0	0	7	5	0	0
--------	----	----	---	---	----	---	---	---	---	---	---	---

	LEFT	THRU	RIGHT
NORTH	0	72	0
EAST	5	0	0
SOUTH	42	32	2
WEST	0	0	7

PM APPROVED TRIPS

03/16/2018

Intersection of: SENTER/SOUTHSIDE

Page No: 2

Traffic Node Number: 3799

Permit No. / Description / Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
SP15-027 ROCKETSHIP SENTER 3167 SENTER ROAD	16	26	3	0	26	0	0	0	1	1	0	0
TOTAL:	16	26	3	0	26	0	0	0	1	1	0	0

	LEFT	THRU	RIGHT
NORTH	0	26	0
EAST	1	0	0
SOUTH	16	26	3
WEST	0	0	1

AM APPROVED TRIPS

03/16/2018

Intersection of: SENTER/UMBARGER

Page No: 1

Traffic Node Number: 3801

Permit No. / Description / Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
PDC02-066	0	0	0	0	0	23	42	0	0	0	0	0
GOBLE LANE												
GOBLE LN & MONTEREY RD (SW/C)												
TOTAL:	0	0	0	0	0	23	42	0	0	0	0	0

	LEFT	THRU	RIGHT
NORTH	0	0	23
EAST	0	0	0
SOUTH	0	0	0
WEST	42	0	0

PM APPROVED TRIPS

03/16/2018

Intersection of: SENTER/UMBARGER

Page No: 2

Traffic Node Number: 3801

Permit No. / Description / Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
PDC02-066	0	0	0	0	0	43	24	0	0	0	0	0
GOBLE LANE												
GOBLE LN & MONTEREY RD (SW/C)												
TOTAL:	0	0	0	0	0	43	24	0	0	0	0	0

	LEFT	THRU	RIGHT
NORTH	0	0	43
EAST	0	0	0
SOUTH	0	0	0
WEST	24	0	0

AM APPROVED TRIPS

03/16/2018

Intersection of: CAPITOL/SENER

Page No: 1

Traffic Node Number: 5720

Permit No. / Description / Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
CP15-078 CHARATIES HOUSING RESIDENTIAL PROJECT 2500 SENTER ROAD	0	5	0	0	40	0	0	0	0	0	0	0
NSJ NORTH SAN JOSE	3	11	2	0	1	0	10	40	3	0	5	1
PDC02-066 GOBLE LANE GOBLE LN & MONTEREY RD (SW/C)	0	6	0	0	11	0	0	0	0	0	0	0
PDC13-009 (IND) COMMUNICATION HILL	38	0	9	0	0	17	0	36	6	0	264	0
PDC13-009 (RES) COMMUNICATIONS HILL	20	0	4	0	0	9	0	19	2	0	145	0
PDC13-009 (RET) COMMUNICATIONS HILL	0	0	0	0	0	0	0	0	0	0	4	0
SP15-027 ROCKETSHIP SENTER 3167 SENTER ROAD	0	56	0	0	125	0	20	0	94	95	0	0

TOTAL:	61	78	15	0	177	26	30	95	105	95	418	1
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	LEFT	THRU	RIGHT
NORTH	0	177	26
EAST	95	418	1
SOUTH	61	78	15
WEST	30	95	105

PM APPROVED TRIPS

03/16/2018

Intersection of: CAPITOL/SETER

Page No: 2

Traffic Node Number: 5720

Permit No. / Description / Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
CP15-078 CHARATIES HOUSING RESIDENTIAL PROJECT 2500 SENTER ROAD	0	33	0	0	7	0	0	0	0	0	0	0
NSJ NORTH SAN JOSE	0	0	0	8	14	5	0	0	0	8	29	8
PDC02-066 GOBLE LANE GOBLE LN & MONTEREY RD (SW/C)	0	12	0	0	6	0	0	0	0	0	0	0
PDC13-009 (IND) COMMUNICATION HILL	10	0	0	0	0	0	16	153	30	4	48	6
PDC13-009 (RES) COMMUNICATIONS HILL	5	0	0	0	0	0	9	93	18	1	28	2
PDC13-009 (RET) COMMUNICATIONS HILL	1	0	0	0	0	0	1	5	1	0	2	1
SP15-027 ROCKETSHIP SENTER 3167 SENTER ROAD	0	26	0	0	38	0	20	0	30	60	0	0

TOTAL:	16	71	0	8	65	5	46	251	79	73	107	17
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	LEFT	THRU	RIGHT
NORTH	8	65	5
EAST	73	107	17
SOUTH	16	71	0
WEST	46	251	79

Appendix C

Volume Summary Tables

Intersection Number: **1**
 Traffic Node Number: 3117
 Intersection Name: Senter Rd and Tully Rd
 Peak Hour: AM
 Count Date: 05/02/18
 Date of Analysis: 05/23/18

Scenario	Movements												Total	
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach				
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	92	261	225	589	1200	446	603	1255	387	168	545	165	5936	
Approved Project Trips	San Jose ATI	1	4	0	14	21	34	44	63	13	12	57	5	268
Background Conditions		93	265	225	603	1221	480	647	1318	400	180	602	170	6204
Proposed Project Trips		0	6	0	0	0	6	5	5	2	4	0	0	28
Existing + Project Conditions		92	267	225	589	1200	452	608	1260	389	172	545	165	5964
Background + Project Conditions		93	271	225	603	1221	486	652	1323	402	184	602	170	6232

Intersection Number: **2**
 Traffic Node Number: 3801
 Intersection Name: Senter Rd and Umbarger Rd
 Peak Hour: AM
 Count Date: 05/02/18
 Date of Analysis: 05/23/18

Scenario	Movements												Total	
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach				
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	224	628	12	0	0	0	0	1753	241	152	0	235	3245	
Approved Project Trips	San Jose ATI	23	0	0	0	0	0	0	0	0	0	42	65	
Background Conditions		224	628	12	0	0	0	0	1753	241	152	0	235	3245
Proposed Project Trips		0	16	0	0	0	0	0	12	0	0	0	0	28
Existing + Project Conditions		224	644	12	0	0	0	0	1765	241	152	0	235	3273
Background + Project Conditions		224	644	12	0	0	0	0	1765	241	152	0	235	3273

Intersection Number: **3**
 Traffic Node Number: 3647
 Intersection Name: Senter Rd and Lewis Rd
 Peak Hour: AM
 Count Date: 05/02/18
 Date of Analysis: 05/23/18

Scenario	Movements												Total	
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach				
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	16	670	9	28	19	55	14	1491	150	151	8	280	2891	
Approved Project Trips	San Jose ATI	0	0	0	0	0	0	0	0	6	11	0	0	17
Background Conditions		16	670	9	28	19	55	14	1491	156	162	8	280	2908
Proposed Project Trips		8	8	0	0	1	0	0	0	20	0	1	12	50
Existing + Project Conditions		24	678	9	28	20	55	14	1491	170	151	9	292	2941
Background + Project Conditions		24	678	9	28	20	55	14	1491	176	162	9	292	2958

Intersection Number: **4**
 Traffic Node Number: 3799
 Intersection Name: Senter Rd and Southside Dr
 Peak Hour: AM
 Count Date: 05/02/18
 Date of Analysis: 05/23/18

Scenario	Movements												Total	
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach				
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	27	888	28	48	23	79	37	1504	153	224	8	117	3136	
Approved Project Trips														
	San Jose ATI	0	72	0	0	0	5	2	32	42	7	0	0	160
Background Conditions		27	960	28	48	23	84	39	1536	195	231	8	117	3296
Proposed Project Trips		0	15	0	0	0	0	0	20	0	0	0	0	35

Existing + Project Conditions		27	903	28	48	23	79	37	1524	153	224	8	117	3171	
Background + Project Conditions		27	975	28	48	23	84	39	1556	195	231	8	117	3331	
Intersection Number:		5													
Traffic Node Number:		5720													
Intersection Name:		Senter Rd and Capitol Expressway													
Peak Hour:		AM													
Count Date:		10/27/15													
		Date of Analysis: 05/23/18													
		Movements													
Scenario		Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			Total	
		RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions		182	416	416	661	1716	193	241	610	220	220	1971	551	7397	
Approved Project Trips		San Jose ATI	26	177	0	1	418	95	15	78	61	105	95	30	1101
Background Conditions		208	593	416	662	2134	288	256	688	281	325	2066	581	8498	
Proposed Project Trips		3	5	7	9	0	0	0	7	0	0	0	4	35	
Existing + Project Conditions		185	421	423	670	1716	193	241	617	220	220	1971	555	7432	
Background + Project Conditions		211	598	423	671	2134	288	256	695	281	325	2066	585	8533	
Intersection Number:		6													
Traffic Node Number:		3646													
Intersection Name:		Monterey Hwy and Lewis Rd													
Peak Hour:		AM													
Count Date:		10/27/15													
		Date of Analysis: 05/23/18													
		Movements													
Scenario		Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			Total	
		RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions		0	594	141	125	0	55	133	2818	32	0	0	0	3898	
Approved Project Trips		San Jose ATI	0	36	11	6	0	26	1	13	0	0	0	93	
Background Conditions		0	630	152	131	0	81	134	2831	32	0	0	0	3991	
Proposed Project Trips		0	0	3	2	0	2	3	0	0	0	0	0	10	
Existing + Project Conditions		0	594	144	127	0	57	136	2818	32	0	0	0	3908	
Background + Project Conditions		0	630	155	133	0	83	137	2831	32	0	0	0	4001	

Intersection Number: **1**
 Traffic Node Number: 3117
 Intersection Name: Senter Rd and Tully Rd
 Peak Hour: PM
 Count Date: 10/18/16
 Date of Analysis: 05/23/18

Scenario	Movements												Total	
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach				
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	139	986	654	376	701	555	477	475	183	327	1072	128	6073	
Approved Project Trips	San Jose ATI	5	21	11	0	40	40	33	10	18	4	56	2	240
Background Conditions		144	1007	665	376	741	595	510	485	201	331	1128	130	6313
Proposed Project Trips		0	4	0	0	0	4	3	3	3	2	0	0	19
Existing + Project Conditions		139	990	654	376	701	559	480	478	186	329	1072	128	6092
Background + Project Conditions		144	1011	665	376	741	599	513	488	204	333	1128	130	6332

Intersection Number: **2**
 Traffic Node Number: 3801
 Intersection Name: Senter Rd and Umbarger Rd
 Peak Hour: PM
 Count Date: 05/01/18
 Date of Analysis: 05/23/18

Scenario	Movements												Total	
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach				
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	269	1272	29	0	0	0	0	766	146	218	0	234	2934	
Approved Project Trips	San Jose ATI	43	0	0	0	0	0	0	0	0	0	24	67	
Background Conditions		312	1272	29	0	0	0	0	766	146	218	0	258	3001
Proposed Project Trips		0	10	0	0	0	0	0	9	0	0	0	19	
Existing + Project Conditions		269	1282	29	0	0	0	0	775	146	218	0	234	2953
Background + Project Conditions		312	1282	29	0	0	0	0	775	146	218	0	258	3020

Intersection Number: **3**
 Traffic Node Number: 3647
 Intersection Name: Senter Rd and Lewis Rd
 Peak Hour: PM
 Count Date: 05/01/18
 Date of Analysis: 05/23/18

Scenario	Movements												Total	
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach				
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	192	1193	19	21	5	30	35	697	181	158	16	132	2679	
Approved Project Trips	San Jose ATI	0	0	0	0	0	0	0	0	12	6	0	0	18
Background Conditions		192	1193	19	21	5	30	35	697	193	164	16	132	2697
Proposed Project Trips		12	-2	0	0	1	0	0	-7	20	2	0	14	40
Existing + Project Conditions		204	1191	19	21	6	30	35	690	201	160	16	146	2719
Background + Project Conditions		204	1191	19	21	6	30	35	690	213	166	16	146	2737

Intersection Number: **4**
 Traffic Node Number: 3799
 Intersection Name: Senter Rd and Southside Dr
 Peak Hour: PM
 Count Date: 05/01/18
 Date of Analysis: 05/23/18

Scenario	Movements												Total	
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach				
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	59	1288	44	35	9	79	72	916	196	129	14	42	2883	
Approved Project Trips	San Jose ATI	0	26	0	0	0	1	3	26	16	1	0	0	73
Background Conditions		59	1314	44	35	9	80	75	942	212	130	14	42	2956
Proposed Project Trips		0	11	0	0	0	0	0	13	0	0	0	0	24

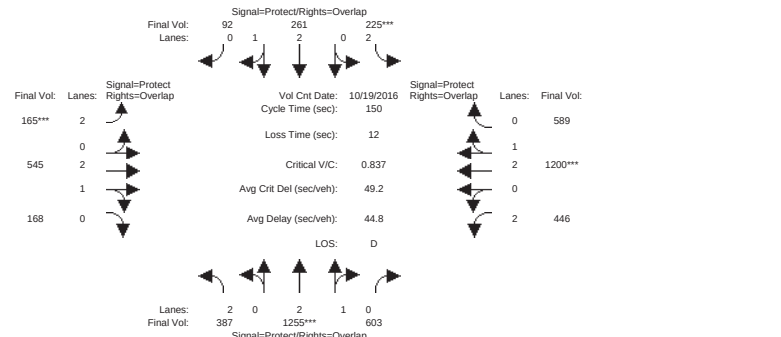
Existing + Project Conditions		59	1299	44	35	9	79	72	929	196	129	14	42	2907	
Background + Project Conditions		59	1325	44	35	9	80	75	955	212	130	14	42	2980	
Intersection Number:		5													
Traffic Node Number:		5720													
Intersection Name:		Senter Rd and Capitol Expressway													
Peak Hour:		PM													
Count Date:		05/01/18													
		Date of Analysis: 05/23/18													
		Movements													
		Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach				
Scenario		RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total	
Existing Conditions		317	653	529	588	1453	357	303	302	180	187	1715	278	6862	
Approved Project Trips		San Jose ATI	5	65	8	17	107	73	0	71	16	79	251	46	
Background Conditions		322	718	537	605	1560	430	303	373	196	266	1966	324	7600	
Proposed Project Trips		2	4	5	6	0	0	0	5	0	0	0	2	24	
Existing + Project Conditions		319	657	534	594	1453	357	303	307	180	187	1715	280	6886	
Background + Project Conditions		324	722	542	611	1560	430	303	378	196	266	1966	326	7624	
Intersection Number:		6													
Traffic Node Number:		3646													
Intersection Name:		Monterey Hwy and Lewis Rd													
Peak Hour:		PM													
Count Date:		10/05/16													
		Date of Analysis: 05/23/18													
		Movements													
		Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach				
Scenario		RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total	
Existing Conditions		2	2398	203	139	0	104	107	1001	32	2	0	4	3992	
Approved Project Trips		San Jose ATI	0	14	6	12	0	7	20	25	0	0	0	84	
Background Conditions		2	2412	209	151	0	111	127	1026	32	2	0	4	4076	
Proposed Project Trips		0	0	1	1	0	2	2	0	0	0	0	0	6	
Existing + Project Conditions		2	2398	204	140	0	106	109	1001	32	2	0	4	3998	
Background + Project Conditions		2	2412	210	152	0	113	129	1026	32	2	0	4	4082	

Appendix D

Intersection Level of Service Calculations

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

Intersection #3117: SENTER/TULLY

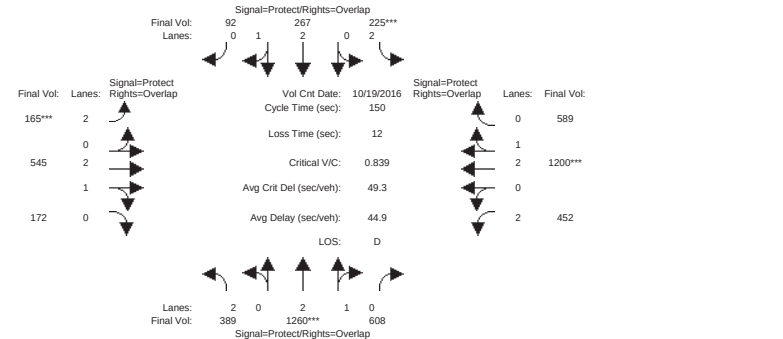


Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count	Date: 19 Oct 2016 << 7:35-8:35											
Base Vol:	387	1255	603	225	261	92	165	545	168	446	1200	589
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	387	1255	603	225	261	92	165	545	168	446	1200	589
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:	387	1255	603	225	261	92	165	545	168	446	1200	589
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	387	1255	603	225	261	92	165	545	168	446	1200	589
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	387	1255	603	225	261	92	165	545	168	446	1200	589
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	387	1255	603	225	261	92	165	545	168	446	1200	589
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.95	0.83	0.99	0.95	0.83	0.99	0.95	0.83	1.00	0.95
Lanes:	2.00	2.00	1.00	2.00	2.19	0.81	2.00	2.27	0.73	2.00	2.00	1.00
Final Sat.:	3150	3797	1800	3150	4139	1459	3150	4279	1319	3150	3799	1800
Capacity Analysis Module:												
Vol/Sat:	0.12	0.33	0.34	0.07	0.06	0.06	0.05	0.13	0.13	0.14	0.32	0.33
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.31	0.39	0.63	0.09	0.17	0.23	0.06	0.21	0.52	0.23	0.38	0.46
Volume/Cap:	0.39	0.84	0.53	0.84	0.37	0.27	0.84	0.61	0.25	0.61	0.84	0.71
Delay/Veh:	40.8	44.0	15.9	87.6	55.5	47.4	95.3	54.8	19.9	53.1	45.6	33.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.8	44.0	15.9	87.6	55.5	47.4	95.3	54.8	19.9	53.1	45.6	33.1
LOS by Move:	D	D	D	F	E+	D	F	D-	B-	D-	D	C-
HCM2kAvgQ:	8	25	15	8	5	4	7	11	6	12	27	23

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

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

Intersection #3117: SENTER/TULLY



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count	Date: 19 Oct 2016 << 7:35-8:35											
Base Vol:	389	1260	608	225	267	92	165	545	172	452	1200	589
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	389	1260	608	225	267	92	165	545	172	452	1200	589
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:	389	1260	608	225	267	92	165	545	172	452	1200	589
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	389	1260	608	225	267	92	165	545	172	452	1200	589
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	389	1260	608	225	267	92	165	545	172	452	1200	589
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	389	1260	608	225	267	92	165	545	172	452	1200	589
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.95	0.83	0.99	0.95	0.83	0.99	0.95	0.83	1.00	0.95
Lanes:	2.00	2.00	1.00	2.00	2.20	0.80	2.00	2.25	0.75	2.00	2.00	1.00
Final Sat.:	3150	3798	1800	3150	4163	1434	3150	4255	1343	3150	3799	1800
Capacity Analysis Module:												
Vol/Sat:	0.12	0.33	0.34	0.07	0.06	0.06	0.05	0.13	0.13	0.14	0.32	0.33
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.31	0.40	0.63	0.09	0.17	0.23	0.06	0.21	0.52	0.23	0.38	0.46
Volume/Cap:	0.40	0.84	0.54	0.84	0.38	0.28	0.84	0.62	0.25	0.62	0.84	0.71
Delay/Veh:	40.7	44.0	15.9	87.8	55.7	47.5	95.5	55.1	19.9	53.3	45.7	33.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.7	44.0	15.9	87.8	55.7	47.5	95.5	55.1	19.9	53.3	45.7	33.2
LOS by Move:	D	D	D	F	E+	D	F	E+	B-	D-	D	C-
HCM2kAvgQ:	8	25	16	8	5	5	7	11	6	12	27	23

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

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

Figure 1 is a signal timing diagram for the intersection of Highway 101 and Highway 102. The diagram is divided into several sections:

- Top Section:** Shows the 'Signal=Protect/Right=Overlap' phase with a 'Final Vol: Lanes' table. The table has two columns: 'Final Vol:' and 'Lanes'. The values are: 93 (0 lanes), 1 (1 lane), 265 (2 lanes), 0 (0 lanes), and 225*** (2 lanes).
- Central Section:** Contains timing parameters for the 'Signal=Protect/Right=Overlap' phase:
 - Vol Cnt Date: n/a
 - Cycle Time (sec): 150
 - Loss Time (sec): 12
 - Critical V/C: 0.863
 - Avg Crit Del (sec/veh): 50.7
 - Avg Delay (sec/veh): 46.0
 - LOS: D
- Bottom Section:** Shows the 'Signal=Protect/Right=Overlap' phase with a 'Final Vol: Lanes' table. The table has two columns: 'Final Vol:' and 'Lanes'. The values are: 400 (2 lanes), 1318*** (2 lanes), 647 (1 lane), and 0 (0 lanes).
- Left and Right Sections:** Show the 'Signal=Protect/Right=Overlap' phase with a 'Final Vol: Lanes' table. The table has two columns: 'Final Vol:' and 'Lanes'. The values are: 170*** (2 lanes), 602 (0 lanes), 180 (1 lane), and 225*** (2 lanes).

Traffix 8.0.0715Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background + Project AM

Signal=Protect/Right=Overlap

Final Vol: Lanes: 93 0 1 1 271 2 0 0 225*** 2

Final Vol: Lanes: 170*** 2 0 0 602 2 1 1 184 0

Vol Cnt Date: Cycle Time (sec): n/a 150

Loss Time (sec): 12

Critical V/C: 0.864

Avg Crt Del (sec/veh): 50.8

Avg Delay (sec/veh): 46.1

LOS: D

Signal=Protect Right=Overlap

Lanes: Final Vol: 0 0 1 1 2 2 1221*** 0 2 486

Final Vol: Lanes: 402 2 0 2 1323*** 1 0 652

Signal=Protect/Right=Overlap

Traffix 8.0.0715

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

[illegible]

Traffix 8.0.0715

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

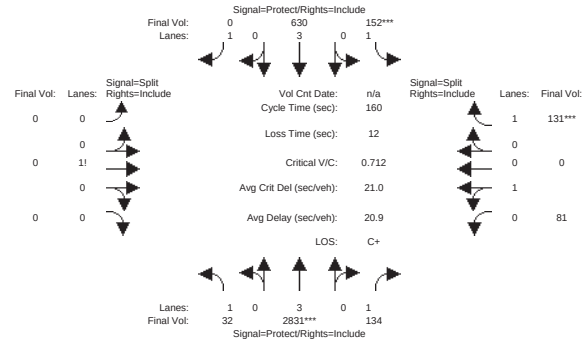
Final Vol:	Lanes:	Signal=Split Rights=Include	Vol Cnt Date: 10/27/2015	Signal=Split Rights=Include	Lanes:	Final Vol:
0	0		Cycle Time (sec): 160		1	127***
0	0		Loss Time (sec): 12		0	0
0	1		Critical VIC: 0.702		0	0
0	0		Avg Crit Del (sec/veh): 20.1		1	0
0	0		Avg Delay (sec/veh): 19.9		0	57
			LOS: B-			

Traffix 8.0.0715

2905 Senter Road

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

Intersection #3646: LEWIS/MONTEREY



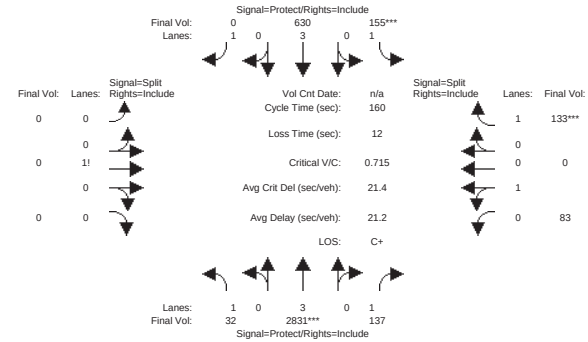
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	32	2831	134	152	630	0	0	0	0	81	0	131
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	2831	134	152	630	0	0	0	0	81	0	131
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	2831	134	152	630	0	0	0	0	81	0	131
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	2831	134	152	630	0	0	0	0	81	0	131
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	2831	134	152	630	0	0	0	0	81	0	131
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	2831	134	152	630	0	0	0	0	81	0	131
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	0	1750	0	1800	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.50	0.08	0.09	0.11	0.00	0.00	0.00	0.00	0.05	0.00	0.07
Crit Moves:	****											
Green/Cycle:	0.23	0.70	0.70	0.12	0.59	0.00	0.00	0.00	0.00	0.11	0.00	0.11
Volume/Cap:	0.08	0.71	0.11	0.71	0.19	0.00	0.00	0.00	0.00	0.43	0.00	0.71
Delay/Veh:	48.1	15.1	8.0	78.2	15.3	0.0	0.0	0.0	0.0	68.6	0.0	81.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDeL/Veh:	48.1	15.1	8.0	78.2	15.3	0.0	0.0	0.0	0.0	68.6	0.0	81.5
LOS by Move:	D	B	A	E-	B	A	A	A	A	E	A	F
HCM2kAvgQ:	1	28	2	9	5	0	0	0	0	4	0	8

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

2905 Senter Road

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background + Project AM

Intersection #3646: LEWIS/MONTEREY



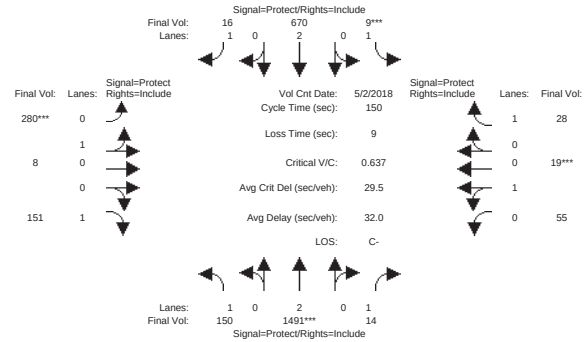
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	32	2831	137	155	630	0	0	0	0	83	0	133
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	2831	137	155	630	0	0	0	0	83	0	133
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	2831	137	155	630	0	0	0	0	83	0	133
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	2831	137	155	630	0	0	0	0	83	0	133
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	2831	137	155	630	0	0	0	0	83	0	133
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	2831	137	155	630	0	0	0	0	83	0	133
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	0	1750	0	1800	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.50	0.08	0.09	0.11	0.00	0.00	0.00	0.00	0.05	0.00	0.08
Crit Moves:	****											
Green/Cycle:	0.23	0.69	0.69	0.12	0.59	0.00	0.00	0.00	0.00	0.11	0.00	0.11
Volume/Cap:	0.08	0.71	0.11	0.71	0.19	0.00	0.00	0.00	0.00	0.43	0.00	0.71
Delay/Veh:	48.1	15.4	8.1	78.1	15.4	0.0	0.0	0.0	0.0	68.6	0.0	81.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDeL/Veh:	48.1	15.4	8.1	78.1	15.4	0.0	0.0	0.0	0.0	68.6	0.0	81.6
LOS by Move:	D	B	A	E-	B	A	A	A	A	E	A	F
HCM2kAvgQ:	1	28	2	9	5	0	0	0	0	4	0	8

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

2905 Senter Road

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

Intersection #3647: LEWIS/SENTER



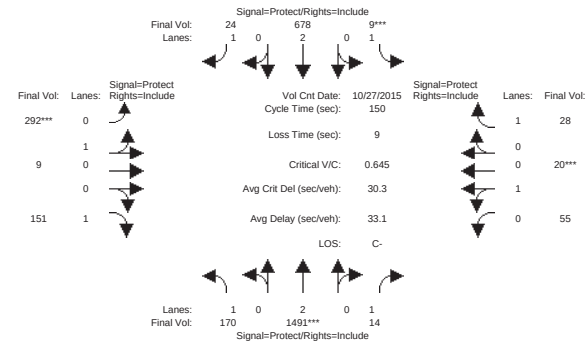
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 May 2018 << 7:20-8:20												
Base Vol:	150	1491	14	9	670	16	280	8	151	55	19	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	1491	14	9	670	16	280	8	151	55	19	28
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	150	1491	14	9	670	16	280	8	151	55	19	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	1491	14	9	670	16	280	8	151	55	19	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	1491	14	9	670	16	280	8	151	55	19	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	1491	14	9	670	16	280	8	151	55	19	28
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.97	0.03	1.00	0.74	0.26	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	50	1750	1338	462	1750
Capacity Analysis Module:												
Vol/Sat:	0.09	0.39	0.01	0.01	0.18	0.01	0.16	0.16	0.09	0.04	0.04	0.02
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.21	0.59	0.59	0.05	0.43	0.43	0.24	0.22	0.22	0.09	0.07	0.07
Volume/Cap:	0.41	0.67	0.01	0.11	0.41	0.02	0.67	0.74	0.40	0.46	0.62	0.24
Delay/Veh:	52.3	21.8	12.9	69.1	30.1	24.9	55.7	62.3	51.1	66.8	77.4	67.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDeL/Veh:	52.3	21.8	12.9	69.1	30.1	24.9	55.7	62.3	51.1	66.8	77.4	67.5
LOS by Move:	D-	C+	B	E	C	C	E+	E	D-	E	E-	E
HCM2kAvgQ:	7	23	0	0	10	0	13	14	7	4	4	2

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

2905 Senter Road

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

Intersection #3647: LEWIS/SENTER



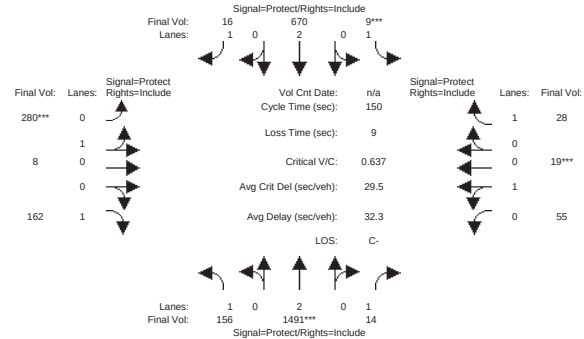
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 27 Oct 2015 << 7:20-8:20												
Base Vol:	170	1491	14	9	678	24	292	9	151	55	20	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	1491	14	9	678	24	292	9	151	55	20	28
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	170	1491	14	9	678	24	292	9	151	55	20	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	1491	14	9	678	24	292	9	151	55	20	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	1491	14	9	678	24	292	9	151	55	20	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	170	1491	14	9	678	24	292	9	151	55	20	28
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.97	0.03	1.00	0.73	0.27	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1746	54	1750	1320	480	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.39	0.01	0.01	0.18	0.01	0.17	0.17	0.09	0.04	0.04	0.02
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.22	0.58	0.58	0.05	0.41	0.41	0.25	0.22	0.22	0.09	0.07	0.07
Volume/Cap:	0.44	0.68	0.01	0.11	0.44	0.03	0.68	0.75	0.38	0.47	0.63	0.24
Delay/Veh:	51.2	22.7	13.4	69.1	32.5	26.9	55.2	61.6	50.0	67.0	78.1	67.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDeL/Veh:	51.2	22.7	13.4	69.1	32.5	26.9	55.2	61.6	50.0	67.0	78.1	67.5
LOS by Move:	D-	C+	B	E	C-	C	E+	E	D	E	E-	E
HCM2kAvgQ:	7	23	0	0	11	1	14	15	6	4	5	2

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

2905 Senter Road

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

Intersection #3647: LEWIS/SENTER



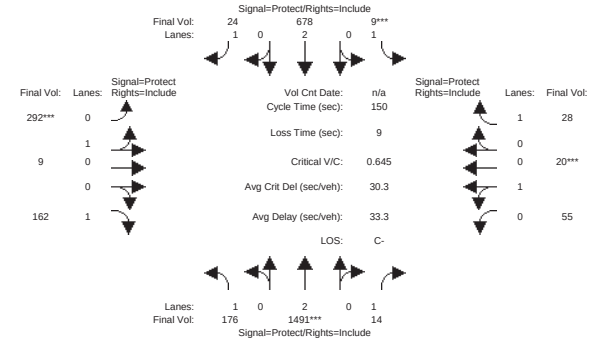
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	156	1491	14	9	670	16	280	8	162	55	19	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	156	1491	14	9	670	16	280	8	162	55	19	28
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	156	1491	14	9	670	16	280	8	162	55	19	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	156	1491	14	9	670	16	280	8	162	55	19	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	156	1491	14	9	670	16	280	8	162	55	19	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	156	1491	14	9	670	16	280	8	162	55	19	28
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.97	0.03	1.00	0.74	0.26	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	50	1750	1338	462	1750
Capacity Analysis Module:												
Vol/Sat:	0.09	0.39	0.01	0.01	0.18	0.01	0.16	0.16	0.09	0.04	0.04	0.02
Crit Moves:	****											
Green/Cycle:	0.21	0.59	0.59	0.05	0.42	0.42	0.24	0.22	0.22	0.09	0.07	0.07
Volume/Cap:	0.42	0.67	0.01	0.11	0.42	0.02	0.67	0.74	0.43	0.46	0.62	0.24
Delay/Veh:	51.8	21.8	12.9	69.1	30.7	25.4	55.7	62.3	51.6	66.8	77.4	67.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDeL/Veh:	51.8	21.8	12.9	69.1	30.7	25.4	55.7	62.3	51.6	66.8	77.4	67.5
LOS by Move:	D-	C+	B	E	C	C	E+	E	D-	E	E-	E
HCM2kAvgQ:	7	23	0	0	10	0	13	14	7	4	4	2

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

2905 Senter Road

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background + Project AM

Intersection #3647: LEWIS/SENTER



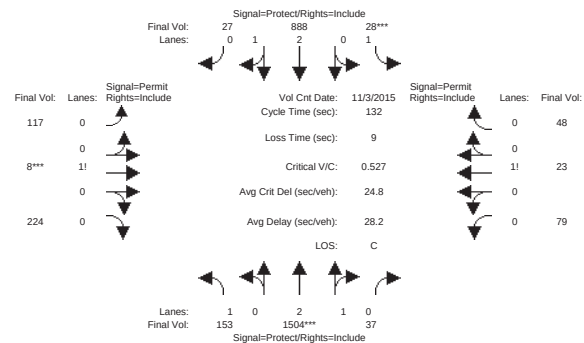
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	176	1491	14	9	678	24	292	9	162	55	20	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	176	1491	14	9	678	24	292	9	162	55	20	28
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	176	1491	14	9	678	24	292	9	162	55	20	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	176	1491	14	9	678	24	292	9	162	55	20	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	176	1491	14	9	678	24	292	9	162	55	20	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	176	1491	14	9	678	24	292	9	162	55	20	28
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.97	0.03	1.00	0.73	0.27	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1746	54	1750	1320	480	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.39	0.01	0.01	0.18	0.01	0.17	0.17	0.09	0.04	0.04	0.02
Crit Moves:	****											
Green/Cycle:	0.23	0.58	0.58	0.05	0.40	0.40	0.25	0.22	0.22	0.09	0.07	0.07
Volume/Cap:	0.45	0.68	0.01	0.11	0.45	0.03	0.68	0.75	0.41	0.47	0.63	0.24
Delay/Veh:	50.8	22.7	13.4	69.1	33.0	27.3	55.2	61.6	50.4	67.0	78.1	67.5
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:	50.8	22.7	13.4	69.1	33.0	27.3	55.2	61.6	50.4	67.0	78.1	67.5
LOS by Move:	D+	C+	B	E	C-	C	E+	E	D	E	E-	E
HCM2kAvgQ:	8	23	0	0	11	1	14	15	7	4	5	2

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

2905 Senter Road

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

Intersection #3799: SENTER/SOUTHSIDE



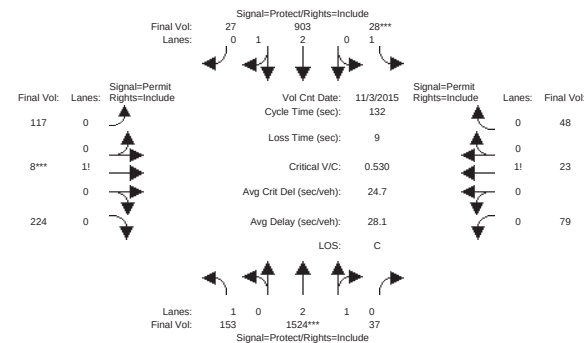
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Nov 2015 << 7:15-8:15												
Base Vol:	153	1504	37	28	888	27	117	8	224	79	23	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	1504	37	28	888	27	117	8	224	79	23	48
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	153	1504	37	28	888	27	117	8	224	79	23	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	153	1504	37	28	888	27	117	8	224	79	23	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	1504	37	28	888	27	117	8	224	79	23	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	153	1504	37	28	888	27	117	8	224	79	23	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	1.00	2.93	0.07	1.00	2.91	0.09	0.34	0.02	0.64	0.53	0.15	0.32
Final Sat.:	1750	5465	134	1750	5435	165	587	40	1123	922	268	560
Capacity Analysis Module:												
Vol/Sat:	0.09	0.28	0.28	0.02	0.16	0.16	0.20	0.20	0.20	0.09	0.09	0.09
Crit Moves:	****											
Green/Cycle:	0.20	0.51	0.51	0.05	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
Volume/Cap:	0.45	0.54	0.54	0.30	0.45	0.45	0.54	0.54	0.54	0.23	0.23	0.23
Delay/Veh:	47.7	22.1	22.1	62.0	31.8	31.8	33.7	33.7	33.7	28.9	28.9	28.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.7	22.1	22.1	62.0	31.8	31.8	33.7	33.7	33.7	28.9	28.9	28.9
LOS by Move:	D	C+	C+	E	C	C	C-	C-	C-	C	C	C
HCM2kAvgQ:	5	13	13	1	9	9	12	12	12	4	4	4

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

2905 Senter Road

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

Intersection #3799: SENTER/SOUTHSIDE



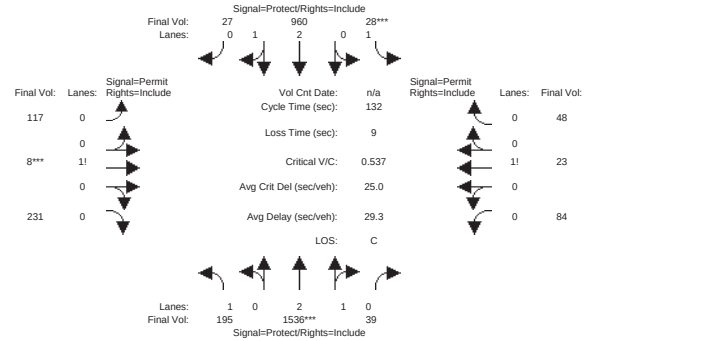
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Nov 2015 << 7:15-8:15												
Base Vol:	153	1524	37	28	903	27	117	8	224	79	23	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	1524	37	28	903	27	117	8	224	79	23	48
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	153	1524	37	28	903	27	117	8	224	79	23	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	153	1524	37	28	903	27	117	8	224	79	23	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	153	1524	37	28	903	27	117	8	224	79	23	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	153	1524	37	28	903	27	117	8	224	79	23	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	1.00	2.93	0.07	1.00	2.91	0.09	0.34	0.02	0.64	0.53	0.15	0.32
Final Sat.:	1750	5467	133	1750	5437	163	587	40	1123	922	268	560
Capacity Analysis Module:												
Vol/Sat:	0.09	0.28	0.28	0.02	0.17	0.17	0.20	0.20	0.20	0.09	0.09	0.09
Crit Moves:	****											
Green/Cycle:	0.19	0.51	0.51	0.05	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
Volume/Cap:	0.45	0.54	0.54	0.30	0.45	0.45	0.54	0.54	0.54	0.23	0.23	0.23
Delay/Veh:	47.8	22.0	22.0	62.0	31.5	31.5	34.1	34.1	34.1	29.2	29.2	29.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.8	22.0	22.0	62.0	31.5	31.5	34.1	34.1	34.1	29.2	29.2	29.2
LOS by Move:	D	C+	C+	E	C	C	C-	C-	C-	C	C	C
HCM2kAvgQ:	5	13	13	1	10	10	12	12	12	4	4	4

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

2905 Senter Road

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

Intersection #3799: SENTER/SOUTHSIDE



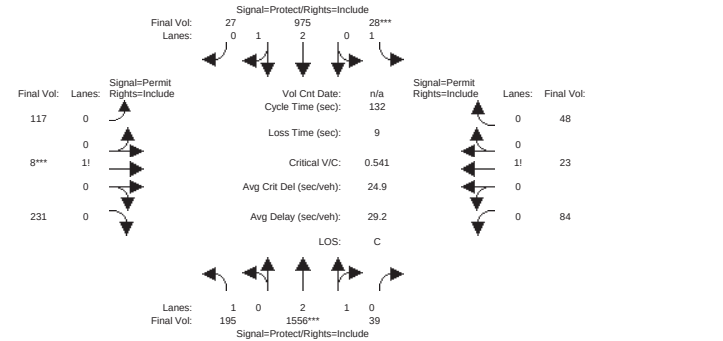
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	195	1536	39	28	960	27	117	8	231	84	23	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	195	1536	39	28	960	27	117	8	231	84	23	48
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	195	1536	39	28	960	27	117	8	231	84	23	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	195	1536	39	28	960	27	117	8	231	84	23	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	195	1536	39	28	960	27	117	8	231	84	23	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	195	1536	39	28	960	27	117	8	231	84	23	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	1.00	2.92	0.08	1.00	2.91	0.09	0.33	0.02	0.65	0.54	0.15	0.31
Final Sat.:	1750	5461	139	1750	5447	153	575	39	1136	948	260	542
Capacity Analysis Module:												
Vol/Sat:	0.11	0.28	0.28	0.02	0.18	0.18	0.20	0.20	0.20	0.09	0.09	0.09
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.22	0.51	0.51	0.05	0.34	0.34	0.37	0.37	0.37	0.37	0.37	0.37
Volume/Cap:	0.51	0.55	0.55	0.30	0.51	0.51	0.55	0.55	0.55	0.24	0.24	0.24
Delay/Veh:	46.6	22.3	22.3	62.0	34.6	34.6	34.0	34.0	34.0	29.0	29.0	29.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.6	22.3	22.3	62.0	34.6	34.6	34.0	34.0	34.0	29.0	29.0	29.0
LOS by Move:	D	C+	C+	E	C-	C-	C-	C-	C-	C	C	C
HCM2kAvgQ:	7	13	13	1	11	11	12	12	12	5	5	5

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

2905 Senter Road

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background + Project AM

Intersection #3799: SENTER/SOUTHSIDE



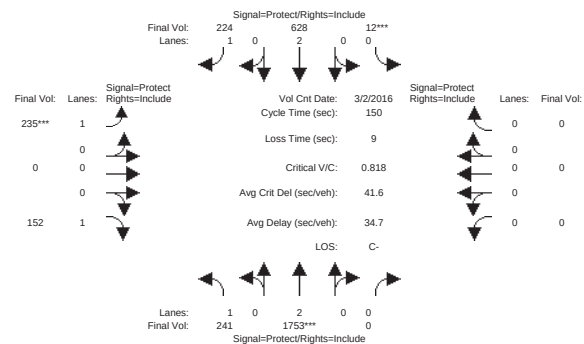
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	195	1556	39	28	975	27	117	8	231	84	23	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	195	1556	39	28	975	27	117	8	231	84	23	48
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	195	1556	39	28	975	27	117	8	231	84	23	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	195	1556	39	28	975	27	117	8	231	84	23	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	195	1556	39	28	975	27	117	8	231	84	23	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	195	1556	39	28	975	27	117	8	231	84	23	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	1.00	2.92	0.08	1.00	2.92	0.08	0.33	0.02	0.65	0.54	0.15	0.31
Final Sat.:	1750	5463	137	1750	5449	151	575	39	1136	948	260	542
Capacity Analysis Module:												
Vol/Sat:	0.11	0.28	0.28	0.02	0.18	0.18	0.20	0.20	0.20	0.09	0.09	0.09
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.22	0.51	0.51	0.05	0.35	0.35	0.37	0.37	0.37	0.37	0.37	0.37
Volume/Cap:	0.51	0.56	0.56	0.30	0.51	0.51	0.56	0.56	0.56	0.24	0.24	0.24
Delay/Veh:	46.7	22.2	22.2	62.0	34.3	34.3	34.4	34.4	34.4	29.3	29.3	29.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.7	22.2	22.2	62.0	34.3	34.3	34.4	34.4	34.4	29.3	29.3	29.3
LOS by Move:	D	C+	C+	E	C-	C-	C-	C-	C-	C	C	C
HCM2kAvgQ:	7	14	14	1	11	11	12	12	12	5	5	5

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

2905 Senter Road

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

Intersection #3801: SENTER/UMBARGER



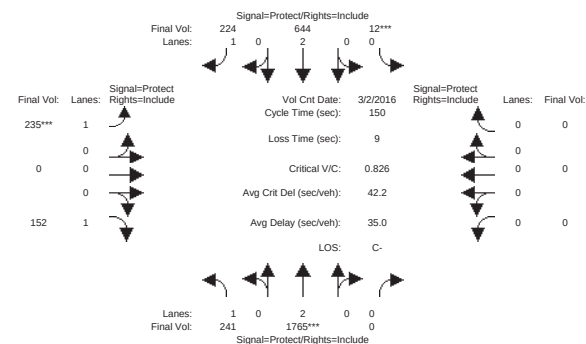
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	10	0	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Mar 2016 << 5/2/18												
Base Vol:	241	1753	0	12	628	224	235	0	152	0	0	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:	241	1753	0	12	628	224	235	0	152	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:	241	1753	0	12	628	224	235	0	152	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:	241	1753	0	12	628	224	235	0	152	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	241	1753	0	12	628	224	235	0	152	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
Final Volume:	241	1753	0	12	628	224	235	0	152	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.95	0.97	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	0.00	0.04	1.96	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1750	3800	0	69	3631	1750	1750	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.14	0.46	0.00	0.17	0.17	0.13	0.13	0.00	0.09	0.00	0.00	0.00
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.34	0.56	0.00	0.21	0.43	0.43	0.16	0.00	0.16	0.00	0.00	0.00
Volume/Cap:	0.40	0.82	0.00	0.82	0.40	0.30	0.82	0.00	0.53	0.00	0.00	0.00
Delay/Veh:	37.9	29.0	0.0	63.1	29.4	28.0	77.1	0.0	59.2	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.9	29.0	0.0	63.1	29.4	28.0	77.1	0.0	59.2	0.0	0.0	0.0
LOS by Move:	D+	C	A	E	C	C	E-	A	E+	A	A	A
HCM2kAvgQ:	9	32	0	15	10	7	13	0	7	0	0	0

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

2905 Senter Road

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

Intersection #3801: SENTER/UMBARGER



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	10	0	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Mar 2016 << 7:15-8:15												
Base Vol:	241	1765	0	12	644	224	235	0	152	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:	241	1765	0	12	644	224	235	0	152	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:	241	1765	0	12	644	224	235	0	152	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:	241	1765	0	12	644	224	235	0	152	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	241	1765	0	12	644	224	235	0	152	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
Final Volume:	241	1765	0	12	644	224	235	0	152	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.95	0.97	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	0.00	0.04	1.96	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1750	3800	0	68	3632	1750	1750	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.14	0.46	0.00	0.18	0.18	0.13	0.13	0.00	0.09	0.00	0.00	0.00
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.34	0.56	0.00	0.21	0.44	0.44	0.16	0.00	0.16	0.00	0.00	0.00
Volume/Cap:	0.41	0.83	0.00	0.83	0.41	0.29	0.83	0.00	0.53	0.00	0.00	0.00
Delay/Veh:	38.4	29.6	0.0	63.3	29.0	27.4	78.4	0.0	59.6	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.4	29.6	0.0	63.3	29.0	27.4	78.4	0.0	59.6	0.0	0.0	0.0
LOS by Move:	D+	C	A	E	C	C	E-	A	E+	A	A	A
HCM2kAvgQ:	9	33	0	15	10	7	13	0	7	0	0	0

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

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

The diagram illustrates a four-lane intersection with the following traffic movements and timing:

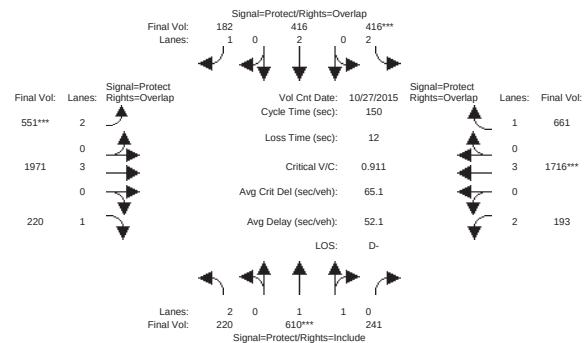
- Northbound (Top):**
 - Final Vol: 224, Lanes: 1, 0, 2, 0, 12***
 - Signal: Protect/Rights=Include
 - Vol Cnt Date: n/a
 - Cycle Time (sec): 150
 - Loss Time (sec): 9
 - Critical V/C: 0.818
 - Avg Crit Del (sec/veh): 41.6
 - Avg Delay (sec/veh): 34.7
 - LOS: C-
- Southbound (Bottom):**
 - Final Vol: 241, Lanes: 1, 0, 2, 0, 0
 - Signal: Protect/Rights=Include
 - Vol Cnt Date: n/a
 - Cycle Time (sec): 150
 - Loss Time (sec): 9
 - Critical V/C: 0.818
 - Avg Crit Del (sec/veh): 41.6
 - Avg Delay (sec/veh): 34.7
 - LOS: C-
- Eastbound (Right):**
 - Final Vol: 0, Lanes: 0, 0, 0, 0
 - Signal: Protect/Rights=Include
 - Vol Cnt Date: n/a
 - Cycle Time (sec): 150
 - Loss Time (sec): 9
 - Critical V/C: 0.818
 - Avg Crit Del (sec/veh): 41.6
 - Avg Delay (sec/veh): 34.7
 - LOS: C-
- Westbound (Left):**
 - Final Vol: 235***, Lanes: 1, 0, 0, 0, 152
 - Signal: Protect/Rights=Include
 - Vol Cnt Date: n/a
 - Cycle Time (sec): 150
 - Loss Time (sec): 9
 - Critical V/C: 0.818
 - Avg Crit Del (sec/veh): 41.6
 - Avg Delay (sec/veh): 34.7
 - LOS: C-

Traffix 8.0.0715Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background + Project AM[illegible]Traffix 8.0.0715

2905 Senter Road

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

Intersection #5720: CAPITOL/SENTER



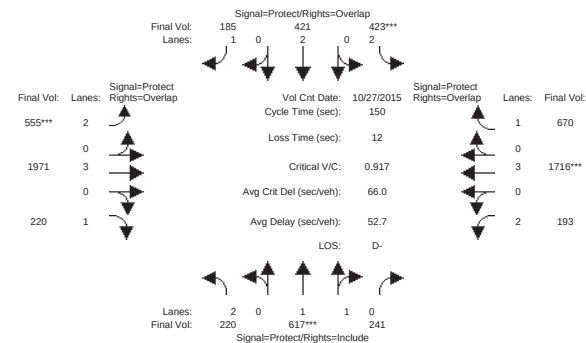
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 27 Oct 2015 << 7:15-8:15												
Base Vol:	220	610	241	416	416	182	551	1971	220	193	1716	661
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	220	610	241	416	416	182	551	1971	220	193	1716	661
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:	220	610	241	416	416	182	551	1971	220	193	1716	661
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	220	610	241	416	416	182	551	1971	220	193	1716	661
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	220	610	241	416	416	182	551	1971	220	193	1716	661
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	220	610	241	416	416	182	551	1971	220	193	1716	661
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	1.42	0.58	2.00	2.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	2651	1048	3150	3800	1750	3150	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.23	0.23	0.13	0.11	0.10	0.17	0.35	0.13	0.06	0.30	0.38
Crit Moves:	****											
Green/Cycle:	0.15	0.25	0.25	0.14	0.24	0.43	0.19	0.44	0.60	0.08	0.33	0.48
Volume/Cap:	0.45	0.91	0.91	0.91	0.45	0.24	0.91	0.78	0.21	0.78	0.91	0.79
Delay/Veh:	58.3	67.2	67.2	85.4	48.7	26.9	77.4	37.1	13.9	82.4	55.2	38.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDeL/Veh:	58.3	67.2	67.2	85.4	48.7	26.9	77.4	37.1	13.9	82.4	55.2	38.5
LOS by Move:	E+	E	E	F	D	C	E-	D+	B	F	E+	D+
HCM2kAvgQ:	6	23	23	13	8	5	18	28	7	7	28	29

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

2905 Senter Road

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

Intersection #5720: CAPITOL/SENTER



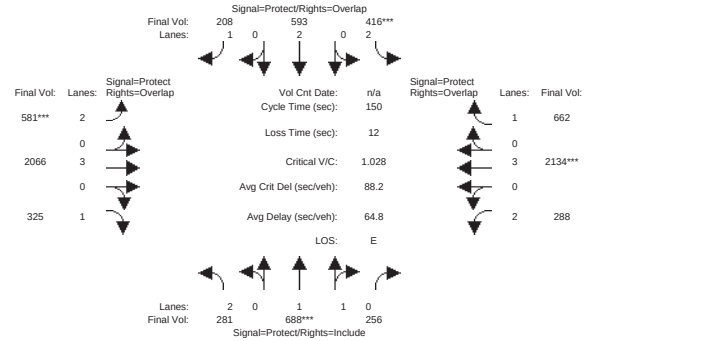
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 27 Oct 2015 << 7:15-8:15												
Base Vol:	220	617	241	423	421	185	555	1971	220	193	1716	670
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	220	617	241	423	421	185	555	1971	220	193	1716	670
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:	220	617	241	423	421	185	555	1971	220	193	1716	670
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	220	617	241	423	421	185	555	1971	220	193	1716	670
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	220	617	241	423	421	185	555	1971	220	193	1716	670
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	220	617	241	423	421	185	555	1971	220	193	1716	670
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	1.42	0.58	2.00	2.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	2660	1039	3150	3800	1750	3150	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.23	0.23	0.13	0.11	0.11	0.18	0.35	0.13	0.06	0.30	0.38
Crit Moves:	****											
Green/Cycle:	0.15	0.25	0.25	0.15	0.25	0.44	0.19	0.44	0.60	0.08	0.33	0.47
Volume/Cap:	0.45	0.92	0.92	0.92	0.45	0.24	0.92	0.78	0.21	0.78	0.92	0.81
Delay/Veh:	58.3	68.0	68.0	86.2	48.4	26.7	78.3	37.3	14.1	82.7	56.0	39.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDeL/Veh:	58.3	68.0	68.0	86.2	48.4	26.7	78.3	37.3	14.1	82.7	56.0	39.4
LOS by Move:	E+	E	E	F	D	C	E-	D+	B	F	E+	D
HCM2kAvgQ:	6	23	23	13	8	6	19	28	7	7	29	29

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

2905 Senter Road

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

Intersection #5720: CAPITOL/SENTER



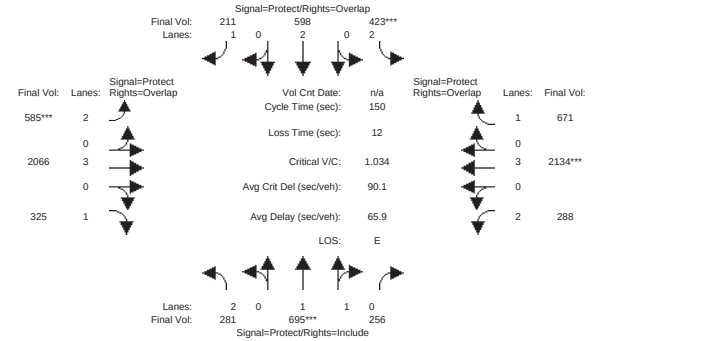
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	281	688	256	416	593	208	581	2066	325	288	2134	662
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	281	688	256	416	593	208	581	2066	325	288	2134	662
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:	281	688	256	416	593	208	581	2066	325	288	2134	662
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	281	688	256	416	593	208	581	2066	325	288	2134	662
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	281	688	256	416	593	208	581	2066	325	288	2134	662
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	281	688	256	416	593	208	581	2066	325	288	2134	662
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	1.44	0.56	2.00	2.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	2696	1003	3150	3800	1750	3150	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.09	0.26	0.26	0.13	0.16	0.12	0.18	0.36	0.19	0.09	0.37	0.38
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.14	0.25	0.25	0.13	0.24	0.42	0.18	0.43	0.57	0.11	0.36	0.49
Volume/Cap:	0.65	1.03	1.03	1.03	0.65	0.28	1.03	0.84	0.33	0.84	1.03	0.77
Delay/Veh:	64.9	93.6	93.6	117.6	53.1	28.9	106.9	40.3	17.1	81.5	75.1	35.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	64.9	93.6	93.6	117.6	53.1	28.9	106.9	40.3	17.1	81.5	75.1	35.3
LOS by Move:	E	F	F	F	D-	C	F	D	B	F	E-	D+
HCM2kAvgQ:	8	29	29	14	12	6	22	31	11	10	40	27

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

2905 Senter Road

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background + Project AM

Intersection #5720: CAPITOL/SENTER

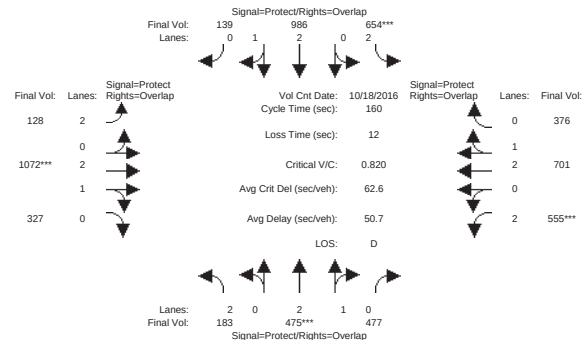


Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	281	695	256	423	598	211	585	2066	325	288	2134	671
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	281	695	256	423	598	211	585	2066	325	288	2134	671
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:	281	695	256	423	598	211	585	2066	325	288	2134	671
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	281	695	256	423	598	211	585	2066	325	288	2134	671
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	281	695	256	423	598	211	585	2066	325	288	2134	671
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	281	695	256	423	598	211	585	2066	325	288	2134	671
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.98	0.95	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	1.45	0.55	2.00	2.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	2703	996	3150	3800	1750	3150	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.09	0.26	0.26	0.13	0.16	0.12	0.19	0.36	0.19	0.09	0.37	0.38
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.14	0.25	0.25	0.13	0.24	0.42	0.18	0.43	0.57	0.11	0.36	0.49
Volume/Cap:	0.65	1.03	1.03	1.03	0.65	0.29	1.03	0.84	0.33	0.84	1.03	0.78
Delay/Veh:	64.9	95.2	95.2	118.9	52.9	28.8	108.5	40.6	17.3	81.9	77.1	36.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	64.9	95.2	95.2	118.9	52.9	28.8	108.5	40.6	17.3	81.9	77.1	36.0
LOS by Move:	E	F	F	F	D-	C	F	D	B	F	E-	D+
HCM2kAvgQ:	8	29	29	15	12	7	22	31	11	10	41	28

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

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

Intersection #3117: SENTER/TULLY



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 18 Oct 2016 << 4:45-5:45												
Base Vol:	183	475	477	654	986	139	128	1072	327	555	701	376
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	183	475	477	654	986	139	128	1072	327	555	701	376
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:	183	475	477	654	986	139	128	1072	327	555	701	376
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	183	475	477	654	986	139	128	1072	327	555	701	376
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	183	475	477	654	986	139	128	1072	327	555	701	376
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	183	475	477	654	986	139	128	1072	327	555	701	376

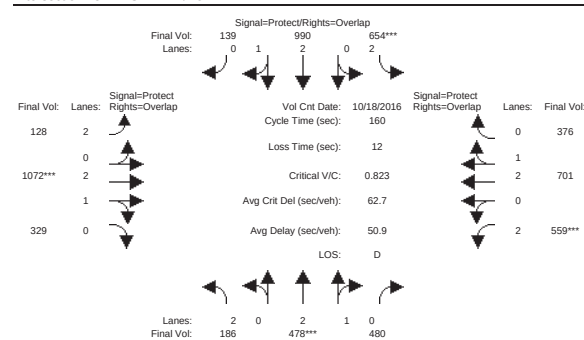
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	0.99	0.95	0.83	1.00	0.92
Lanes:	2.00	2.00	1.00	2.00	2.62	0.38	2.00	2.27	0.73	2.00	2.00	1.00
Final Sat.:	3150	3800	1750	3150	4907	692	3150	4289	1308	3150	3800	1750

Capacity Analysis Module:												
Vol/Sat:	0.06	0.13	0.27	0.21	0.20	0.20	0.04	0.25	0.25	0.18	0.18	0.21
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.09	0.15	0.37	0.25	0.31	0.41	0.10	0.30	0.40	0.21	0.42	0.67
Volume/Cap:	0.64	0.82	0.74	0.82	0.64	0.49	0.41	0.82	0.63	0.82	0.44	0.32
Delay/Veh:	75.0	70.4	46.4	63.1	47.8	34.5	68.5	54.9	39.6	67.8	33.1	10.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	75.0	70.4	46.4	63.1	47.8	34.5	68.5	54.9	39.6	67.8	33.1	10.9
LOS by Move:	E	E	D	E	D	C-	E	D-	D	E	C-	B+
HCM2kAvgQ:	5	11	21	20	16	13	4	23	19	18	12	8

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

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Project PM

Intersection #3117: SENTER/TULLY



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 18 Oct 2016 << 4:45-5:45												
Base Vol:	186	478	480	654	990	139	128	1072	329	559	701	376
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	186	478	480	654	990	139	128	1072	329	559	701	376
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	186	478	480	654	990	139	128	1072	329	559	701	376
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	186	478	480	654	990	139	128	1072	329	559	701	376
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	186	478	480	654	990	139	128	1072	329	559	701	376
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	186	478	480	654	990	139	128	1072	329	559	701	376

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	0.99	0.95	0.83	1.00	0.92
Lanes:	2.00	2.00	1.00	2.00	2.62	0.38	2.00	2.27	0.73	2.00	2.00	1.00
Final Sat.:	3150	3800	1750	3150	4910	689	3150	4283	1315	3150	3800	1750

Capacity Analysis Module:												
Vol/Sat:	0.06	0.13	0.27	0.21	0.20	0.20	0.04	0.25	0.25	0.18	0.18	0.21
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.09	0.15	0.37	0.25	0.31	0.41	0.10	0.30	0.40	0.22	0.42	0.67
Volume/Cap:	0.64	0.82	0.74	0.82	0.64	0.49	0.41	0.82	0.63	0.82	0.44	0.32
Delay/Veh:	75.0	70.5	46.4	63.4	48.1	34.7	68.5	55.0	39.5	67.8	33.1	11.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	75.0	70.5	46.4	63.4	48.1	34.7	68.5	55.0	39.5	67.8	33.1	11.0
LOS by Move:	E	E	D	E	D	C-	E	D	D	E	C-	B+
HCM2kAvgQ:	5	11	21	20	16	13	4	23	19	18	12	8

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

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

The diagram illustrates a four-way intersection with the following details:

- Top Approach:**
 - Signal: Protect/Right=Overlap
 - Final Vol: Lanes: 144 (0), 1007 (2), 665*** (0, 2)
- Left Approach:**
 - Signal: Protect/Right=Overlap
 - Final Vol: Lanes: 130 (2), 1128*** (0, 2), 331 (1, 0)
- Right Approach:**
 - Signal: Protect/Right=Overlap
 - Lanes: 0, 1, 2, 0, 2
 - Final Vol: 376, 741, 595***
- Bottom Approach:**
 - Lanes: 2, 0, 2, 1, 0
 - Final Vol: 201, 485***, 510
 - Signal: Protect/Right=Overlap
- Intersection Data:**
 - Vol Cnt Date: n/a
 - Cycle Time (sec): 160
 - Loss Time (sec): 12
 - Critical VIC: 0.852
 - Avg Cnt Del (sec/veh): 64.6
 - Avg Delay (sec/veh): 52.2
 - LOS: D-

Traffix 8.0.0715Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background + Project PM

The diagram illustrates a four-way intersection with traffic signals and vehicle counts. The intersection is divided into four quadrants, each with a set of traffic lights and a corresponding vehicle count table.

Top-Left Quadrant:

- Signal: Protect/Right=Overlap
- Final Vol: Lanes: 144 0 1 2 0 2
- Vol Cnt Date: n/a
- Cycle Time (sec): 160
- Loss Time (sec): 12
- Critical VIC: 0.855
- Avg Crt Del (sec/veh): 64.9
- Avg Delay (sec/veh): 52.4
- LOS: D-

Top-Right Quadrant:

- Signal: Protect/Right=Overlap
- Lanes: Final Vol: 0 376

Bottom-Left Quadrant:

- Signal: Protect/Right=Overlap
- Lanes: Final Vol: 2 0 2 1 0
- Vol Cnt Date: n/a
- Cycle Time (sec): 160
- Loss Time (sec): 12
- Critical VIC: 0.855
- Avg Crt Del (sec/veh): 64.9
- Avg Delay (sec/veh): 52.4
- LOS: D-

Bottom-Right Quadrant:

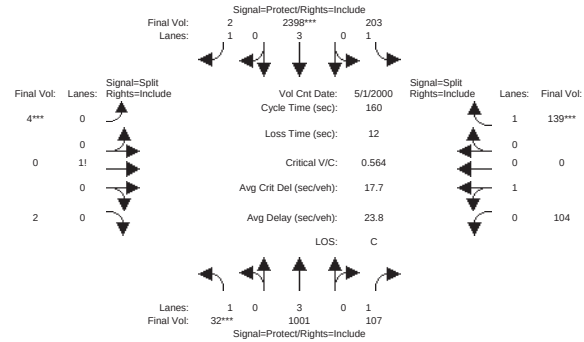
- Signal: Protect/Right=Overlap
- Lanes: Final Vol: 2 0 2 1 0
- Vol Cnt Date: n/a
- Cycle Time (sec): 160
- Loss Time (sec): 12
- Critical VIC: 0.855
- Avg Crt Del (sec/veh): 64.9
- Avg Delay (sec/veh): 52.4
- LOS: D-

Traffix 8.0.0715

2905 Senter Road

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

Intersection #3646: LEWIS/MONTEREY



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:	>> Count Date: 1 May 2000 << 4:50-5:50											
Base Vol:	32	1001	107	203	2398	2	4	0	2	104	0	139
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	1001	107	203	2398	2	4	0	2	104	0	139
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	1001	107	203	2398	2	4	0	2	104	0	139
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	1001	107	203	2398	2	4	0	2	104	0	139
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	1001	107	203	2398	2	4	0	2	104	0	139
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	1001	107	203	2398	2	4	0	2	104	0	139

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.67	0.00	0.33	1.00	0.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1167	0	583	1800	0	1750

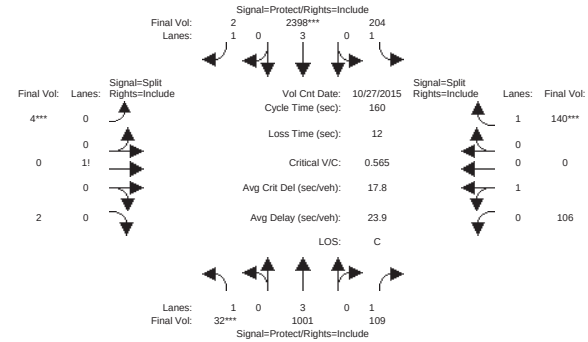
Capacity Analysis Module:												
Vol/Sat:	0.02	0.18	0.06	0.12	0.42	0.00	0.00	0.00	0.00	0.06	0.00	0.08
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.04	0.44	0.44	0.29	0.69	0.69	0.06	0.00	0.06	0.13	0.00	0.13
Volume/Cap:	0.42	0.40	0.14	0.40	0.61	0.00	0.05	0.00	0.05	0.44	0.00	0.61
Delay/Veh:	78.2	30.4	26.7	46.0	13.7	7.8	70.8	0.0	70.8	65.6	0.0	70.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDeL/Veh:	78.2	30.4	26.7	46.0	13.7	7.8	70.8	0.0	70.8	65.6	0.0	70.6
LOS by Move:	E	C	C	D	B	A	E	A	E	E	A	E
HCM2kAvgQ:	2	11	3	9	21	0	0	0	0	5	0	8

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

2905 Senter Road

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Project PM

Intersection #3646: LEWIS/MONTEREY



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:	>> Count Date: 27 Oct 2015 << 4:50-5:50											
Base Vol:	32	1001	109	204	2398	2	4	0	2	106	0	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	1001	109	204	2398	2	4	0	2	106	0	140
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	1001	109	204	2398	2	4	0	2	106	0	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	1001	109	204	2398	2	4	0	2	106	0	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	1001	109	204	2398	2	4	0	2	106	0	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	1001	109	204	2398	2	4	0	2	106	0	140

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.67	0.00	0.33	1.00	0.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1167	0	583	1800	0	1750

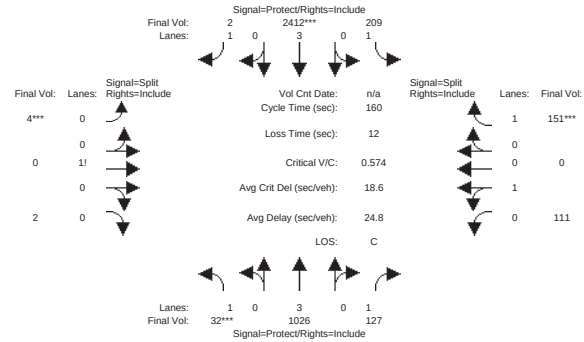
Capacity Analysis Module:												
Vol/Sat:	0.02	0.18	0.06	0.12	0.42	0.00	0.00	0.00	0.00	0.06	0.00	0.08
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.04	0.44	0.44	0.29	0.69	0.69	0.06	0.00	0.06	0.13	0.00	0.13
Volume/Cap:	0.42	0.40	0.14	0.40	0.61	0.00	0.05	0.00	0.05	0.45	0.00	0.61
Delay/Veh:	78.2	30.6	26.9	45.9	13.7	7.8	70.8	0.0	70.8	65.6	0.0	70.5
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:	78.2	30.6	26.9	45.9	13.7	7.8	70.8	0.0	70.8	65.6	0.0	70.5
LOS by Move:	E	C	C	D	B	A	E	A	E	E	A	E
HCM2kAvgQ:	2	11	3	9	21	0	0	0	0	5	0	8

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

2905 Senter Road

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

Intersection #3646: LEWIS/MONTEREY



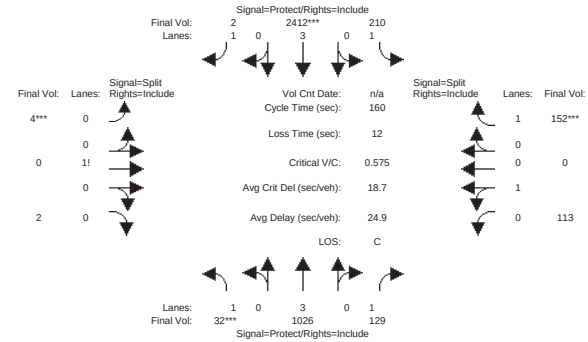
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	32	1026	127	209	2412	2	4	0	2	111	0	151
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	1026	127	209	2412	2	4	0	2	111	0	151
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	1026	127	209	2412	2	4	0	2	111	0	151
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	1026	127	209	2412	2	4	0	2	111	0	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	1026	127	209	2412	2	4	0	2	111	0	151
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	1026	127	209	2412	2	4	0	2	111	0	151
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.67	0.00	0.33	1.00	0.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1167	0	583	1800	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.18	0.07	0.12	0.42	0.00	0.00	0.00	0.00	0.06	0.00	0.09
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.04	0.44	0.44	0.29	0.68	0.68	0.06	0.00	0.06	0.14	0.00	0.14
Volume/Cap:	0.42	0.41	0.17	0.41	0.62	0.00	0.05	0.00	0.05	0.44	0.00	0.62
Delay/Veh:	78.2	31.2	27.6	46.5	14.5	8.2	70.8	0.0	70.8	64.5	0.0	69.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDeL/Veh:	78.2	31.2	27.6	46.5	14.5	8.2	70.8	0.0	70.8	64.5	0.0	69.9
LOS by Move:	E	C	C	D	B	A	E	A	E	E	A	E
HCM2kAvgQ:	2	11	4	9	21	0	0	0	0	6	0	8

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

2905 Senter Road

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background + Project PM

Intersection #3646: LEWIS/MONTEREY



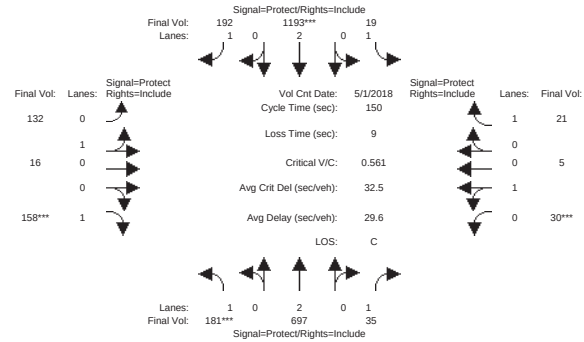
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	32	1026	129	210	2412	2	4	0	2	113	0	152
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	1026	129	210	2412	2	4	0	2	113	0	152
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	1026	129	210	2412	2	4	0	2	113	0	152
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	1026	129	210	2412	2	4	0	2	113	0	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	1026	129	210	2412	2	4	0	2	113	0	152
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	1026	129	210	2412	2	4	0	2	113	0	152
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	0.67	0.00	0.33	1.00	0.00	1.00
Final Sat.:	1750	5700	1750	1750	5700	1750	1167	0	583	1800	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.18	0.07	0.12	0.42	0.00	0.00	0.00	0.00	0.06	0.00	0.09
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.04	0.43	0.43	0.29	0.68	0.68	0.06	0.00	0.06	0.14	0.00	0.14
Volume/Cap:	0.42	0.41	0.17	0.41	0.62	0.00	0.05	0.00	0.05	0.45	0.00	0.62
Delay/Veh:	78.2	31.4	27.8	46.5	14.6	8.2	70.8	0.0	70.8	64.5	0.0	69.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDeL/Veh:	78.2	31.4	27.8	46.5	14.6	8.2	70.8	0.0	70.8	64.5	0.0	69.9
LOS by Move:	E	C	C	D	B	A	E	A	E	E	A	E
HCM2kAvgQ:	2	11	4	9	21	0	0	0	0	6	0	8

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

2905 Senter Road

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

Intersection #3647: LEWIS/SENTER



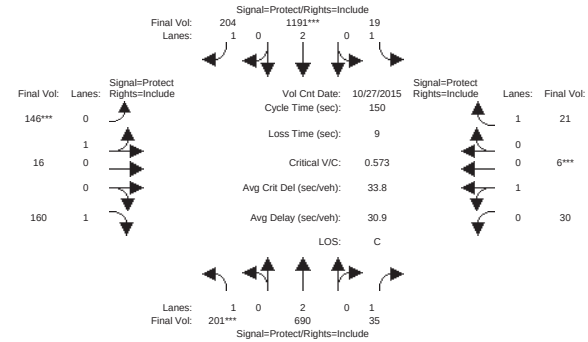
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2018 << 4:45-5:45												
Base Vol:	181	697	35	19	1193	192	132	16	158	30	5	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	181	697	35	19	1193	192	132	16	158	30	5	21
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	181	697	35	19	1193	192	132	16	158	30	5	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	181	697	35	19	1193	192	132	16	158	30	5	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	181	697	35	19	1193	192	132	16	158	30	5	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	181	697	35	19	1193	192	132	16	158	30	5	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.89	0.11	1.00	0.86	0.14	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1605	195	1750	1543	257	1750
Capacity Analysis Module:												
Vol/Sat:	0.10	0.18	0.02	0.01	0.31	0.11	0.08	0.08	0.09	0.02	0.02	0.01
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.18	0.57	0.57	0.15	0.54	0.54	0.12	0.16	0.16	0.07	0.10	0.10
Volume/Cap:	0.58	0.32	0.03	0.07	0.58	0.20	0.67	0.53	0.58	0.29	0.20	0.12
Delay/Veh:	59.3	16.9	14.0	55.5	23.5	17.9	70.7	60.2	62.0	68.0	62.6	61.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDeL/Veh:	59.3	16.9	14.0	55.5	23.5	17.9	70.7	60.2	62.0	68.0	62.6	61.9
LOS by Move:	E+	B	B	E+	C	B	E	E	E	E	E	E
HCM2kAvgQ:	9	8	1	1	18	5	8	7	8	2	2	1

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

2905 Senter Road

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Project PM

Intersection #3647: LEWIS/SENTER



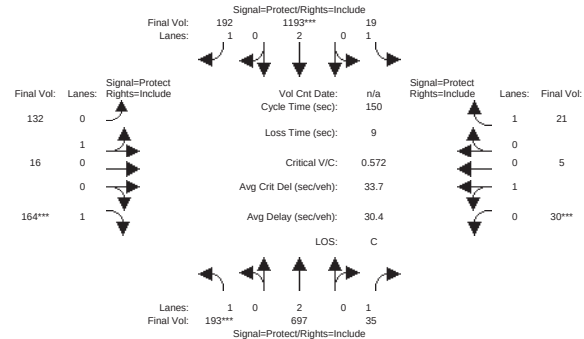
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 27 Oct 2015 << 4:45-5:45												
Base Vol:	201	690	35	19	1191	204	146	16	160	30	6	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	201	690	35	19	1191	204	146	16	160	30	6	21
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	201	690	35	19	1191	204	146	16	160	30	6	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	201	690	35	19	1191	204	146	16	160	30	6	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	201	690	35	19	1191	204	146	16	160	30	6	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	201	690	35	19	1191	204	146	16	160	30	6	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.90	0.10	1.00	0.83	0.17	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1622	178	1750	1500	300	1750
Capacity Analysis Module:												
Vol/Sat:	0.11	0.18	0.02	0.01	0.31	0.12	0.09	0.09	0.09	0.02	0.02	0.01
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.19	0.57	0.57	0.15	0.53	0.53	0.15	0.13	0.13	0.09	0.07	0.07
Volume/Cap:	0.59	0.32	0.03	0.07	0.59	0.22	0.59	0.71	0.72	0.22	0.30	0.18
Delay/Veh:	57.9	16.7	13.9	55.2	24.8	19.0	62.8	73.1	74.3	63.7	68.1	66.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDeL/Veh:	57.9	16.7	13.9	55.2	24.8	19.0	62.8	73.1	74.3	63.7	68.1	66.9
LOS by Move:	E+	B	B	E+	C	B-	E	E	E	E	E	E
HCM2kAvgQ:	10	8	1	1	18	5	8	9	9	2	2	1

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

2905 Senter Road

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

Intersection #3647: LEWIS/SENTER



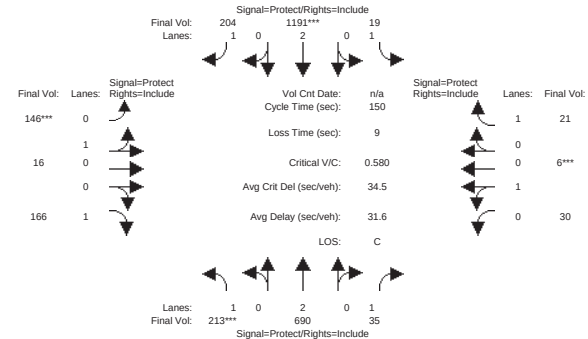
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	193	697	35	19	1193	192	132	16	164	30	5	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	193	697	35	19	1193	192	132	16	164	30	5	21
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	193	697	35	19	1193	192	132	16	164	30	5	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	193	697	35	19	1193	192	132	16	164	30	5	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	193	697	35	19	1193	192	132	16	164	30	5	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	193	697	35	19	1193	192	132	16	164	30	5	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.89	0.11	1.00	0.86	0.14	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1605	195	1750	1543	257	1750
Capacity Analysis Module:												
Vol/Sat:	0.11	0.18	0.02	0.01	0.31	0.11	0.08	0.08	0.09	0.02	0.02	0.01
Crit Moves:	****			****			****			****		
Green/Cycle:	0.19	0.57	0.57	0.15	0.53	0.53	0.12	0.16	0.16	0.07	0.10	0.10
Volume/Cap:	0.59	0.32	0.04	0.07	0.59	0.21	0.66	0.52	0.59	0.29	0.19	0.12
Delay/Veh:	58.8	17.1	14.1	55.5	24.7	18.8	70.0	59.7	62.1	68.0	62.4	61.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.8	17.1	14.1	55.5	24.7	18.8	70.0	59.7	62.1	68.0	62.4	61.7
LOS by Move:	E+	B		E+	C	B-	E	E+		E	E	E
HCM2kAvgQ:	9	8	1	1	18	5	8	7	8	2	2	1

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

2905 Senter Road

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background + Project PM

Intersection #3647: LEWIS/SENTER



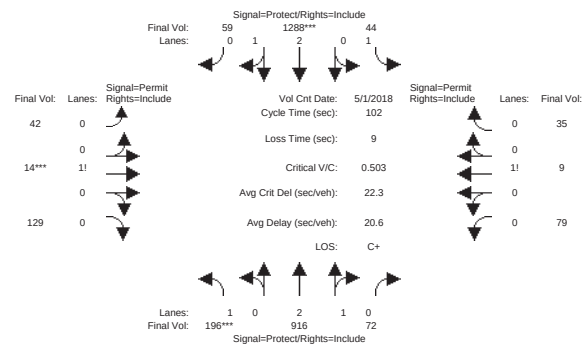
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	213	690	35	19	1191	204	146	16	166	30	6	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	213	690	35	19	1191	204	146	16	166	30	6	21
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	213	690	35	19	1191	204	146	16	166	30	6	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	213	690	35	19	1191	204	146	16	166	30	6	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	213	690	35	19	1191	204	146	16	166	30	6	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	213	690	35	19	1191	204	146	16	166	30	6	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.95	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.90	0.10	1.00	0.83	0.17	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1622	178	1750	1500	300	1750
Capacity Analysis Module:												
Vol/Sat:	0.12	0.18	0.02	0.01	0.31	0.12	0.09	0.09	0.09	0.02	0.02	0.01
Crit Moves:	****			****			****			****		
Green/Cycle:	0.20	0.58	0.58	0.15	0.52	0.52	0.15	0.13	0.13	0.09	0.07	0.07
Volume/Cap:	0.60	0.32	0.03	0.07	0.60	0.22	0.60	0.71	0.75	0.22	0.30	0.18
Delay/Veh:	57.2	16.6	13.8	55.2	25.6	19.6	63.4	72.6	76.1	64.2	68.1	66.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.2	16.6	13.8	55.2	25.6	19.6	63.4	72.6	76.1	64.2	68.1	66.9
LOS by Move:	E+	B		E+	C	B-	E	E		E	E	E
HCM2kAvgQ:	10	8	1	1	18	5	8	9	10	2	2	1

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

2905 Senter Road

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

Intersection #3799: SENTER/SOUTHSIDE



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:	>> Count Date: 1 May 2018 << 4:45-5:45											
Base Vol:	196	916	72	44	1288	59	42	14	129	79	9	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	196	916	72	44	1288	59	42	14	129	79	9	35
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:	196	916	72	44	1288	59	42	14	129	79	9	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	196	916	72	44	1288	59	42	14	129	79	9	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	196	916	72	44	1288	59	42	14	129	79	9	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	196	916	72	44	1288	59	42	14	129	79	9	35

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	1.00	2.77	0.23	1.00	2.86	0.14	0.23	0.07	0.70	0.65	0.07	0.28
Final Sat.:	1750	5191	408	1750	5354	245	397	132	1220	1124	128	498

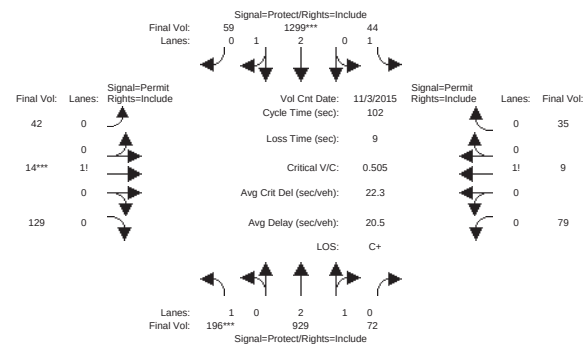
Capacity Analysis Module:												
Vol/Sat:	0.11	0.18	0.18	0.03	0.24	0.24	0.11	0.11	0.11	0.07	0.07	0.07
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.22	0.51	0.51	0.20	0.48	0.48	0.21	0.21	0.21	0.21	0.21	0.21
Volume/Cap:	0.50	0.35	0.35	0.13	0.50	0.50	0.50	0.50	0.50	0.33	0.33	0.33
Delay/Veh:	35.7	15.2	15.2	34.0	18.4	18.4	36.7	36.7	36.7	34.7	34.7	34.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDeL/Veh:	35.7	15.2	15.2	34.0	18.4	18.4	36.7	36.7	36.7	34.7	34.7	34.7
LOS by Move:	D+	B	B	C-	B-	B-	D+	D+	D+	C-	C-	C-
HCM2kAvgQ:	5	6	6	1	10	10	6	6	6	4	4	4

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

2905 Senter Road

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Project PM

Intersection #3799: SENTER/SOUTHSIDE



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:	>> Count Date: 3 Nov 2015 << 4:45-5:45											
Base Vol:	196	929	72	44	1299	59	42	14	129	79	9	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	196	929	72	44	1299	59	42	14	129	79	9	35
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:	196	929	72	44	1299	59	42	14	129	79	9	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	196	929	72	44	1299	59	42	14	129	79	9	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	196	929	72	44	1299	59	42	14	129	79	9	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	196	929	72	44	1299	59	42	14	129	79	9	35

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	1.00	2.78	0.22	1.00	2.86	0.14	0.23	0.07	0.70	0.65	0.07	0.28
Final Sat.:	1750	5197	403	1750	5356	243	397	132	1220	1124	128	498

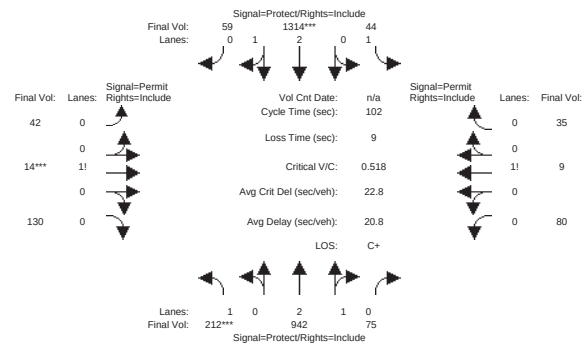
Capacity Analysis Module:												
Vol/Sat:	0.11	0.18	0.18	0.03	0.24	0.24	0.11	0.11	0.11	0.07	0.07	0.07
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.22	0.51	0.51	0.19	0.48	0.48	0.21	0.21	0.21	0.21	0.21	0.21
Volume/Cap:	0.50	0.35	0.35	0.13	0.50	0.50	0.50	0.50	0.50	0.34	0.34	0.34
Delay/Veh:	35.8	15.1	15.1	34.1	18.3	18.3	36.8	36.8	36.8	34.8	34.8	34.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDeL/Veh:	35.8	15.1	15.1	34.1	18.3	18.3	36.8	36.8	36.8	34.8	34.8	34.8
LOS by Move:	D+	B	B	C-	B-	B-	D+	D+	D+	C-	C-	C-
HCM2kAvgQ:	5	6	6	1	10	10	6	6	6	4	4	4

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

2905 Senter Road

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

Intersection #3799: SENTER/SOUTHSIDE



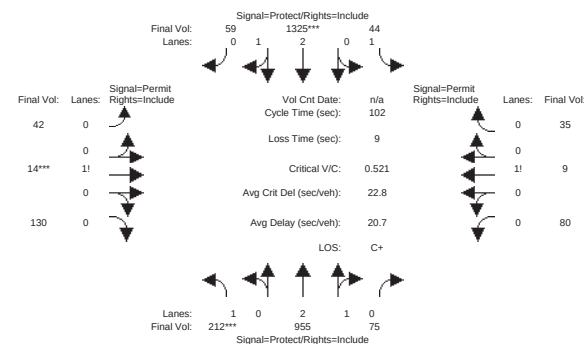
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	212	942	75	44	1314	59	42	14	130	80	9	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	212	942	75	44	1314	59	42	14	130	80	9	35
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	212	942	75	44	1314	59	42	14	130	80	9	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	212	942	75	44	1314	59	42	14	130	80	9	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	212	942	75	44	1314	59	42	14	130	80	9	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	212	942	75	44	1314	59	42	14	130	80	9	35
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	1.00	2.77	0.23	1.00	2.87	0.13	0.23	0.07	0.70	0.65	0.07	0.28
Final Sat.:	1750	5186	413	1750	5359	241	395	132	1223	1129	127	494
Capacity Analysis Module:												
Vol/Sat:	0.12	0.18	0.18	0.03	0.25	0.25	0.11	0.11	0.11	0.07	0.07	0.07
Crit Moves:	****			****			****					
Green/Cycle:	0.23	0.51	0.51	0.19	0.47	0.47	0.21	0.21	0.21	0.21	0.21	0.21
Volume/Cap:	0.52	0.35	0.35	0.13	0.52	0.52	0.52	0.52	0.52	0.35	0.35	0.35
Delay/Veh:	35.3	14.9	14.9	34.2	18.9	18.9	37.4	37.4	37.4	35.3	35.3	35.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDeL/Veh:	35.3	14.9	14.9	34.2	18.9	18.9	37.4	37.4	37.4	35.3	35.3	35.3
LOS by Move:	D+	B	B	C-	B-	B-	D+	D+	D+	D+	D+	D+
HCM2kAvgQ:	6	6	6	1	10	10	6	6	6	4	4	4

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

2905 Senter Road

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background + Project PM

Intersection #3799: SENTER/SOUTHSIDE



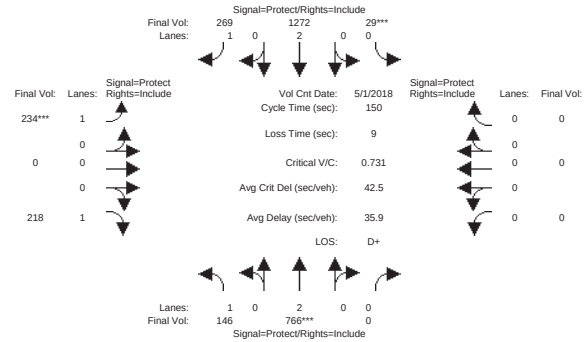
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	212	955	75	44	1325	59	42	14	130	80	9	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	212	955	75	44	1325	59	42	14	130	80	9	35
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	212	955	75	44	1325	59	42	14	130	80	9	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	212	955	75	44	1325	59	42	14	130	80	9	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	212	955	75	44	1325	59	42	14	130	80	9	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	212	955	75	44	1325	59	42	14	130	80	9	35
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	1.00	2.77	0.23	1.00	2.87	0.13	0.23	0.07	0.70	0.65	0.07	0.28
Final Sat.:	1750	5192	408	1750	5361	239	395	132	1223	1129	127	494
Capacity Analysis Module:												
Vol/Sat:	0.12	0.18	0.18	0.03	0.25	0.25	0.11	0.11	0.11	0.07	0.07	0.07
Crit Moves:	****			****			****					
Green/Cycle:	0.23	0.52	0.52	0.19	0.47	0.47	0.20	0.20	0.20	0.20	0.20	0.20
Volume/Cap:	0.52	0.36	0.36	0.13	0.52	0.52	0.52	0.52	0.52	0.35	0.35	0.35
Delay/Veh:	35.4	14.8	14.8	34.3	18.9	18.9	37.5	37.5	37.5	35.3	35.3	35.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDeL/Veh:	35.4	14.8	14.8	34.3	18.9	18.9	37.5	37.5	37.5	35.3	35.3	35.3
LOS by Move:	D+	B	B	C-	B-	B-	D+	D+	D+	D+	D+	D+
HCM2kAvgQ:	6	6	6	1	10	10	6	6	6	4	4	4

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

2905 Senter Road

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

Intersection #3801: SENTER/UMBARGER



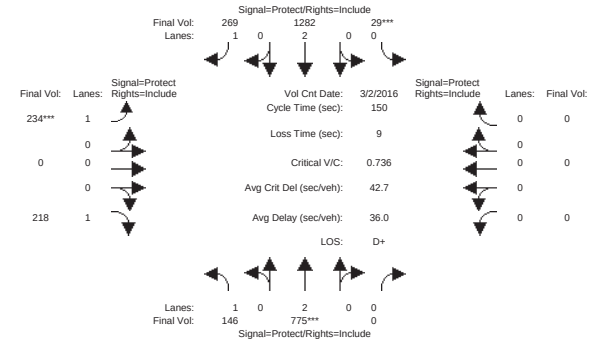
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	10	0	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 1 May 2018 << 4:30-5:30												
Base Vol:	146	766	0	29	1272	269	234	0	218	0	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:	146	766	0	29	1272	269	234	0	218	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:	146	766	0	29	1272	269	234	0	218	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	146	766	0	29	1272	269	234	0	218	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	146	766	0	29	1272	269	234	0	218	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	146	766	0	29	1272	269	234	0	218	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.95	0.97	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	0.00	0.05	1.95	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1750	3800	0	82	3617	1750	1750	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.20	0.00	0.35	0.35	0.15	0.13	0.00	0.12	0.00	0.00	0.00
Crit Moves:	****											
Green/Cycle:	0.15	0.28	0.00	0.48	0.61	0.61	0.18	0.00	0.18	0.00	0.00	0.00
Volume/Cap:	0.57	0.73	0.00	0.73	0.57	0.25	0.73	0.00	0.68	0.00	0.00	0.00
Delay/Veh:	63.0	51.9	0.0	32.7	17.8	13.5	66.1	0.0	63.1	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:	63.0	51.9	0.0	32.7	17.8	13.5	66.1	0.0	63.1	0.0	0.0	0.0
LOS by Move:	E	D-	A	C-	B	B	E	A	E	A	A	A
HCM2kAvgQ:	7	16	0	24	18	6	12	0	11	0	0	0

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

2905 Senter Road

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Project PM

Intersection #3801: SENTER/UMBARGER



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	0	0	10	10	10	0	10	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 2 Mar 2016 << 4:30-5:30												
Base Vol:	146	775	0	29	1282	269	234	0	218	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:	146	775	0	29	1282	269	234	0	218	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:	146	775	0	29	1282	269	234	0	218	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	146	775	0	29	1282	269	234	0	218	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	146	775	0	29	1282	269	234	0	218	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	146	775	0	29	1282	269	234	0	218	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.95	0.97	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	2.00	0.00	0.05	1.95	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1750	3800	0	82	3618	1750	1750	0	1750	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.20	0.00	0.35	0.35	0.15	0.13	0.00	0.12	0.00	0.00	0.00
Crit Moves:	****											
Green/Cycle:	0.14	0.28	0.00	0.48	0.61	0.61	0.18	0.00	0.18	0.00	0.00	0.00
Volume/Cap:	0.58	0.74	0.00	0.74	0.58	0.25	0.74	0.00	0.69	0.00	0.00	0.00
Delay/Veh:	63.2	52.0	0.0	32.9	17.7	13.3	66.7	0.0	63.5	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDeL/Veh:	63.2	52.0	0.0	32.9	17.7	13.3	66.7	0.0	63.5	0.0	0.0	0.0
LOS by Move:	E	D-	A	C-	B	B	E	A	E	A	A	A
HCM2kAvgQ:	7	16	0	24	18	6	12	0	11	0	0	0

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

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

Diagram illustrating a three-phase traffic signal cycle for a three-lane intersection. The diagram shows the sequence of signal changes for the three phases: Phase 1 (Left Turn, Through, Right Turn), Phase 2 (Through, Left Turn, Right Turn), and Phase 3 (Through, Left Turn, Right Turn). Each phase is represented by a set of arrows indicating the direction of traffic flow and the corresponding signal state (red, yellow, green). The diagram also includes a table of signal timing parameters for each phase.

Phase	Signal	Final Vol: Lanes	Signal: Protect Rights=Include	Vol Cnt Date: Cycle Time (sec):	Loss Time (sec):	Critical V/C:	Avg Crit Del (sec/veh):	Avg Delay (sec/veh):	LOS:
1	Left Turn, Through, Right Turn	258*** 1	0	312 1	150	0.745	43.8	36.4	D+
2	Through, Left Turn, Right Turn	0 0	0	1272 2	9	0.745	43.8	36.4	D+
3	Through, Left Turn, Right Turn	0 0	0	29*** 0	9	0.745	43.8	36.4	D+

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

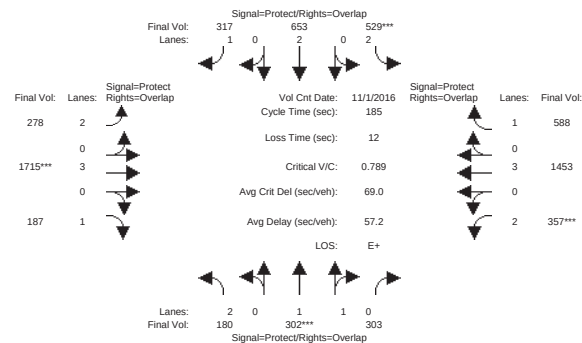
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background + Project PM[illegible]

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

2905 Senter Road

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

Intersection #5720: CAPITOL/SENTER



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	24	39	39	38	53	53	27	77	77	32	81	81
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:	>> Count Date: 1 Nov 2016 << 5:30-6:30											
Base Vol:	180	302	303	529	653	317	278	1715	187	357	1453	588
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	302	303	529	653	317	278	1715	187	357	1453	588
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:	180	302	303	529	653	317	278	1715	187	357	1453	588
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	180	302	303	529	653	317	278	1715	187	357	1453	588
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	302	303	529	653	317	278	1715	187	357	1453	588
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	180	302	303	529	653	317	278	1715	187	357	1453	588

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	1.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	1900	1750	3150	3800	1750	3150	5700	1750	3150	5700	1750

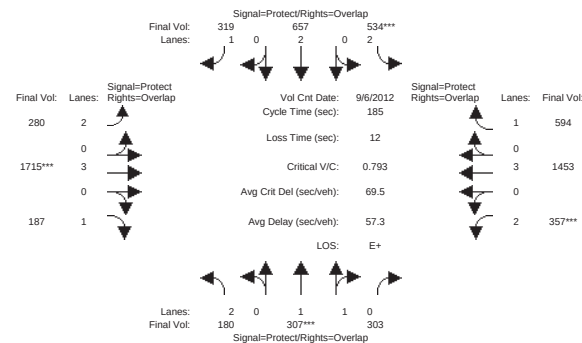
Capacity Analysis Module:												
Vol/Sat:	0.06	0.16	0.17	0.17	0.17	0.18	0.09	0.30	0.11	0.11	0.25	0.34
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.12	0.20	0.36	0.19	0.27	0.41	0.14	0.39	0.51	0.16	0.41	0.60
Volume/Cap:	0.47	0.81	0.48	0.88	0.64	0.45	0.64	0.77	0.21	0.70	0.62	0.56
Delay/Veh:	82.0	82.4	49.6	91.2	65.5	43.2	84.0	54.6	26.7	82.8	46.3	23.9
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:	82.0	82.4	49.6	91.2	65.5	43.2	84.0	54.6	26.7	82.8	46.3	23.9
LOS by Move:	F	F	D	F	E	D	F	D	C	F	D	C
HCM2kAvgQ:	6	19	15	20	17	14	10	32	8	13	23	22

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

2905 Senter Road

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing + Project PM

Intersection #5720: CAPITOL/SENTER



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	24	39	39	38	53	53	27	77	77	32	81	81
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:	>> Count Date: 6 Sep 2012 << 5:30-6:30											
Base Vol:	180	307	303	534	657	319	280	1715	187	357	1453	594
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	307	303	534	657	319	280	1715	187	357	1453	594
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:	180	307	303	534	657	319	280	1715	187	357	1453	594
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	180	307	303	534	657	319	280	1715	187	357	1453	594
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	307	303	534	657	319	280	1715	187	357	1453	594
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	180	307	303	534	657	319	280	1715	187	357	1453	594

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.95	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	1.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	1899	1800	3150	3800	1750	3150	5700	1750	3150	5700	1750

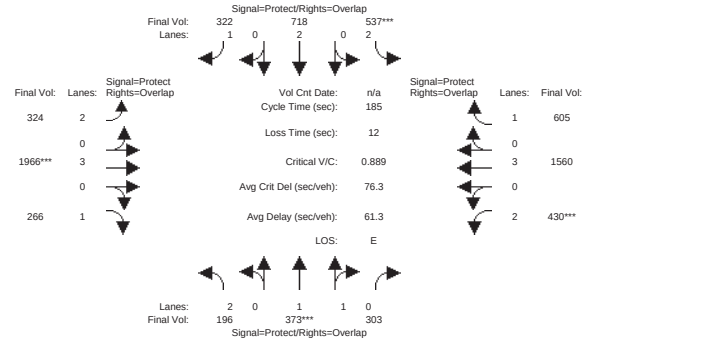
Capacity Analysis Module:												
Vol/Sat:	0.06	0.16	0.17	0.17	0.17	0.18	0.09	0.30	0.11	0.11	0.25	0.34
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.12	0.20	0.36	0.19	0.27	0.41	0.14	0.39	0.51	0.16	0.41	0.60
Volume/Cap:	0.47	0.82	0.47	0.88	0.65	0.45	0.65	0.77	0.21	0.70	0.62	0.56
Delay/Veh:	82.0	83.4	49.2	92.2	65.6	43.3	84.2	54.6	26.7	82.8	46.3	24.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDeL/Veh:	82.0	83.4	49.2	92.2	65.6	43.3	84.2	54.6	26.7	82.8	46.3	24.1
LOS by Move:	F	F	D	F	E	D	F	D	C	F	D	C
HCM2kAvgQ:	6	19	14	20	17	15	11	32	8	13	23	22

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

2905 Senter Road

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

Intersection #5720: CAPITOL/SENTER



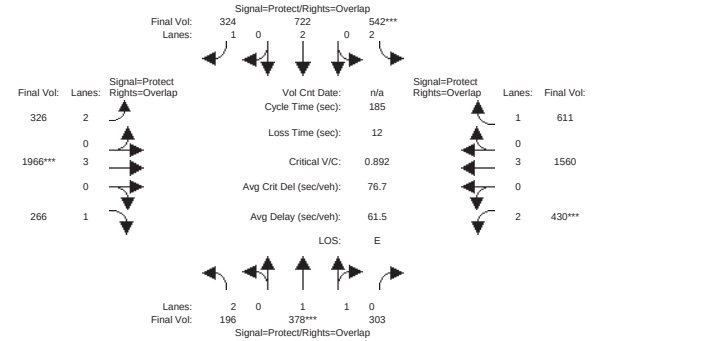
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	24	39	39	38	53	53	27	77	77	32	81	81
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	196	373	303	537	718	322	324	1966	266	430	1560	605
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	196	373	303	537	718	322	324	1966	266	430	1560	605
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:	196	373	303	537	718	322	324	1966	266	430	1560	605
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	373	303	537	718	322	324	1966	266	430	1560	605
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	196	373	303	537	718	322	324	1966	266	430	1560	605
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	196	373	303	537	718	322	324	1966	266	430	1560	605
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.95	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	1.00	0.92	2.00	2.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	2040	1657	3150	3800	1750	3150	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.18	0.18	0.17	0.19	0.18	0.10	0.34	0.15	0.14	0.27	0.35
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.12	0.20	0.36	0.19	0.27	0.41	0.14	0.39	0.51	0.16	0.41	0.60
Volume/Cap:	0.51	0.93	0.51	0.89	0.71	0.45	0.75	0.89	0.30	0.84	0.66	0.57
Delay/Veh:	82.7	96.2	50.2	92.9	67.8	43.4	89.1	61.2	28.2	92.9	47.7	24.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDeL/Veh:	82.7	96.2	50.2	92.9	67.8	43.4	89.1	61.2	28.2	92.9	47.7	24.4
LOS by Move:	F	F	D	F	E	D	F	E	C	F	D	C
HCM2kAvgQ:	7	24	16	20	19	15	13	40	12	17	25	23

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

2905 Senter Road

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background + Project PM

Intersection #5720: CAPITOL/SENTER



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	24	39	39	38	53	53	27	77	77	32	81	81
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	196	378	303	542	722	324	326	1966	266	430	1560	611
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	196	378	303	542	722	324	326	1966	266	430	1560	611
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:	196	378	303	542	722	324	326	1966	266	430	1560	611
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	378	303	542	722	324	326	1966	266	430	1560	611
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	196	378	303	542	722	324	326	1966	266	430	1560	611
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	196	378	303	542	722	324	326	1966	266	430	1560	611
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.99	0.95	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92
Lanes:	2.00	1.00	0.91	2.00	2.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00
Final Sat.:	3150	2053	1645	3150	3800	1750	3150	5700	1750	3150	5700	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.18	0.18	0.17	0.19	0.19	0.10	0.34	0.15	0.14	0.27	0.35
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green/Cycle:	0.12	0.20	0.36	0.19	0.27	0.41	0.14	0.39	0.51	0.16	0.41	0.60
Volume/Cap:	0.51	0.93	0.51	0.90	0.71	0.46	0.75	0.89	0.30	0.84	0.66	0.58
Delay/Veh:	82.7	97.5	50.3	94.1	67.9	43.4	89.4	61.2	28.2	92.9	47.7	24.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDeL/Veh:	82.7	97.5	50.3	94.1	67.9	43.4	89.4	61.2	28.2	92.9	47.7	24.6
LOS by Move:	F	F	D	F	E	D	F	E	C	F	D	C
HCM2kAvgQ:	7	24	16	20	19	15	13	40	12	17	25	23

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