





## 645 Horning Street

**Transportation Impact Analysis** 



Prepared for:

David J. Powers & Associates, Inc.

August 2, 2017















Hexagon Transportation Consultants, Inc.

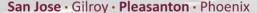
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## **Executive Summary**

This report presents the results of the Transportation Impact Analysis (TIA) conducted for the proposed commercial and light industrial development on the northwest corner of Oakland Road and Horning Street in San Jose, California. The 3.26-acre site is currently occupied by 52,634 square feet (s.f.) of various light industrial and commercial uses that will be demolished as part of the project. As proposed, the project would construct a 3,814 s.f. convenience store with 6 fuel pump stations (12 fueling positions) and an associated 1,341 s.f. car wash, a 2,494 s.f. fast food restaurant with a drive-through, and mini-storage warehouse buildings totaling 93,443 s.f. The mini-storage warehousing would be split into four buildings including two three-story buildings of 41,250 s.f. and 36,522 s.f., and two one-story buildings of 11,871 s.f. and 3,800 s.f. The project site would be accessed via a single driveway on Horning Street.

This study was conducted for the purpose of identifying potential traffic impacts related to the proposed development. The potential impacts of the project were evaluated in accordance with the standards set forth by the City of San Jose. Since the project site is located outside the downtown core area, as defined by the City's General Plan, the project is subject to the City's Transportation Level of Service Policy (Council Policy 5-3). An analysis in accordance with the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program (CMP) requirements was not prepared because the project would generate fewer than 100 net new peak hour vehicle trips. The traffic study includes an analysis of AM and PM peak hour traffic conditions for five signalized intersections and two unsignalized intersections near the project site. Project impacts on other transportation facilities, such as bicycle facilities and transit services, were determined on the basis of engineering judgment.

## **Project Trip Generation**

After applying the Institute of Transportation Engineers' (ITE) and San Jose trip rates, appropriate trip reductions, and existing use trip credits, the project would generate 2,117 new daily vehicle trips, with 61 new trips occurring during the AM peak hour and 26 new trips occurring during the PM peak hour. Using the inbound/outbound splits contained in the San Jose Traffic Impact Analysis Handbook and ITE's Trip Generation Manual, the project would produce 15 new inbound and 46 new outbound trips during the AM peak hour, and 26 new inbound and 0 new outbound trips during the PM peak hour.

## **Project Intersection Level of Service Results**

The results of the intersection level of service analysis show that, based on the City of San Jose significant impact criteria, none of the signalized study intersections would be significantly impacted by the project (see Table ES-1).



645 Horning Street TIA August 2, 2017

Table ES 1
Intersection Level of Service Summary

								Background					
				Exist	ting Existing+Project		No Pro	oject		W	ith Project		
				Avg.		Avg.		Avg.		Avg.		Incr. In	
Study		Peak	Count	Delay		Delay		Delay		Delay		Crit. Delay	Incr. In
Number	Intersection	Hour	Date	(sec.)	LOS	(sec.)	LOS	(sec.)	LOS	(sec.)	LOS	(sec.)	Crit. V/C
1	Oakland Rd & Commercial St †	AM	05/19/15	40.7	D	40.8	D	85.9	F	86.7	F	1.5	0.003
		PM	05/19/15	51.8	D	51.9	D	59.8	Е	59.9	Е	0.2	0.002
2	Oakland Rd & US 101 NB Ramps *†	AM	05/19/15	58.3	Е	59.4	E	163.2	F	164.5	F	2.7	0.006
		PM	09/09/14	20.7	С	20.9	С	57.0	E	57.8	Ε	1.4	0.004
3	Oakland Rd & US 101 SB Ramps *†	AM	05/19/15	26.4	С	26.4	С	29.7	С	29.8	С	0.3	0.008
		PM	09/09/14	31.5	С	32.0	С	89.4	F	90.6	F	2.7	0.006
5	Oakland Rd & Hedding St <sup>‡</sup>	AM	05/19/15	46.7	D	46.8	D	62.6	E	62.9	Ε	0.6	0.003
		PM	05/19/15	43.1	D	43.0	D	55.1	E	55.1	Ε	0.0	0.000
6	Tenth St & Hedding St <sup>‡</sup>	AM	05/20/15	19.2	В	19.3	В	22.1	С	22.3	С	0.2	0.001
		PM	05/19/15	40.2	D	40.2	D	50.7	D	50.7	D	0.0	0.000

### Notes:

**BOLD** indicates a deficient level of service.

<sup>\*</sup> Denotes a CMP Intersection

<sup>&</sup>lt;sup>†</sup>Denotes a US 101/Oakland/Mabury TDP Intersection

<sup>&</sup>lt;sup>‡</sup> Denotes a City of San Jose Protected Intersection

### **US 101/Oakland/Mabury Transportation Development Policy (TDP)**

As described in Chapter 1 of this traffic report, any project that would add traffic to the US 101/Oakland Road interchange during the PM peak hour is required to participate in the US 101/Oakland/Mabury TDP program. The TDP includes a fee schedule requiring all new developments to pay a "fair share" contribution for using a portion of the interchange capacity that would be created with buildout of the US 101/Oakland Road interchange and construction of a new US 101/Mabury Road interchange. Unlike most Area Development Policies that base their fees on the number of residential units or square footages built, the fee for the US 101/Oakland/Mabury TDP is based on the number of PM peak hour vehicular trips that would be added to the US 101/Oakland Road interchange (including the Oakland Road/Commercial Street intersection).

Since the proposed project would send some PM peak hour vehicle trips through this interchange, the project would be required to pay a fair share contribution toward the planned interchange improvements. Currently, the TDP traffic impact fee is \$36,847 per each new PM peak hour vehicle trip that would be added to the US 101/Oakland Road interchange. The fee is subject to an annual escalation on January 1st per the Engineering News-Record Construction Cost Index for San Francisco. The project would add 26 new trips to the interchange during the PM peak hour.

Estimated TDP Impact Fee: \$36,847 x 26 net PM peak hour trips = \$958,022

### **Other Transportation Issues**

The site plan shows adequate site access and on-site circulation, and no significant 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 recommended.

Hexagon has provided the following recommendations resulting from the site access and circulation analysis.

### Recommendations

- Reduce the proposed driveway width from 35 feet to 32 feet, which is the City standard for commercial development.
- Ensure that street parking is not permitted on the north side of Horning Street between the
  project driveway and Oakland Road, as this would create sight distance issues east of the
  project driveway.
- If feasible, the project should consider adding a second driveway on the western boundary of the site at N. 13<sup>th</sup> Street to improve site access.
- City staff have indicated that the project would be required to construct a new 10-foot sidewalk
  along the project frontage on Oakland Road, as well as install a City standard handicap ramp at
  the northwest corner of Oakland Road/Horning Street. The project applicant should coordinate
  with City staff regarding these requested pedestrian access improvements.
- The addition of a controlled mid-block crossing on Oakland Road at or near Boardwalk Way, if
  feasible, would help to encourage pedestrian activity to and from the proposed retail uses, and
  at the same time discourage jaywalking along this segment of Oakland Road. Should the City of
  San Jose be interested in pursuing a new mid-block crossing on Oakland Road, it would be
  appropriate for the project to make a fair share contribution toward this pedestrian improvement.



- Hexagon recommends that bike lanes on Oakland Road between Commercial Street and Horning Street be included in the design of the future US 101/Oakland Road interchange reconstruction project.
- Provide 14 additional parking spaces within the mini-storage warehouse facility in order to meet the City parking requirement. There appears to be adequate room within the mini-storage facility to provide the additional parking spaces.



## 1. Introduction

This report presents the results of the Transportation Impact Analysis (TIA) conducted for the proposed commercial and light industrial development on the northwest corner of Oakland Road and Horning Street in San Jose, California. The 3.26-acre site is currently occupied by 52,634 square feet (s.f.) of various light industrial and commercial uses that will be demolished as part of the project. As proposed, the project would construct a 3,814 s.f. convenience store with 6 fuel pump stations (12 fueling positions) and an associated 1,341 s.f. car wash, a 2,494 s.f. fast food restaurant with a drive-through, and mini-storage warehouse buildings totaling 93,443 s.f. The mini-storage warehousing would be split into four buildings including two three-story buildings of 41,250 s.f. and 36,522 s.f., and two one-story buildings of 11,871 s.f. and 3,800 s.f. The project site would be accessed via a single driveway on Horning Street (see Figure 1).

The City of San Jose has requested that an alternative access scenario be evaluated. The alternative scenario includes a second driveway providing access to the project site on N. 13<sup>th</sup> Street. The alternative access scenario would not change the trip assignment at the study intersections and was therefore only evaluated from an operational standpoint. This alternative access evaluation is included in Chapter 6 of this report.

## **Scope of Study**

This study was conducted for the purpose of identifying the potential traffic impacts related to the proposed development. The potential impacts of the project were evaluated following the standards and methodologies set forth by the City of San Jose. Since the project site is located outside the downtown core area, as defined by the City's General Plan, the project is subject to the City's Transportation Level of Service Policy (Council Policy 5-3). An analysis in accordance with the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program (CMP) requirements was not prepared because the project would generate fewer than 100 net new peak hour vehicle trips. The traffic study includes an analysis of AM and PM peak hour traffic conditions for five signalized intersections and two unsignalized intersections near the project site. Project impacts on other transportation facilities, such as bicycle facilities and transit services, were determined based on engineering judgment.

### **Study Intersections**

- Oakland Road and Commercial Street (US 101/Oakland TDP)
- 2. Oakland Road and US 101 NB Ramps (US 101/Oakland TDP) (CMP)
- 3. Oakland Road and US 101 SB Ramps (US 101/Oakland TDP) (CMP)
- 4. Oakland Road and Horning Street (unsignalized)
- 5. Oakland Road and Hedding Street (Protected)
- 6. N 10<sup>th</sup> Street and Hedding Street (Protected)
- 7. N 10<sup>th</sup> Street and Horning Street (unsignalized)









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

- **Scenario 1:** Existing Conditions. Existing traffic volumes at study intersections were based on traffic counts conducted in October 2016 or counts provided by the City of San Jose. The five signalized study intersections were evaluated with a level of service analysis using TRAFFIX software in accordance with the 2000 Highway Capacity Manual methodology. The new intersection count data are included in Appendix A.
- **Scenario 2:** Existing plus Project Conditions. Existing traffic volumes with the project were estimated by adding to existing traffic volumes the additional traffic generated by the project. Existing plus project conditions were evaluated relative to existing conditions in order to determine the effects the project would have on the existing roadway network.
- **Scenario 3:** Background Conditions. Background traffic volumes reflect traffic added by nearby approved projects that are not yet completed or occupied. The added traffic from approved but not yet completed developments was provided by the City of San Jose in the form of the Approved Trip Inventory (ATI), included 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's Level of Service Policy.

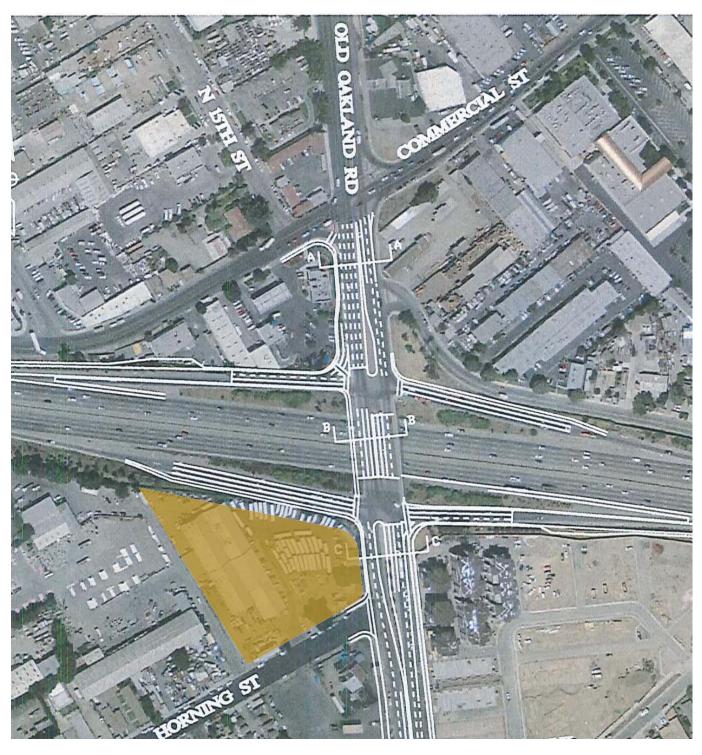
## **US 101/Oakland/Mabury Transportation Development Policy (TDP)**

The City of San Jose assesses an impact fee for any new PM peak hour traffic that would be added to the US 101/Oakland Road interchange. The City has identified operational problems along the Oakland Road corridor at the US 101 interchange, which are due primarily to the capacity constraints of the interchange. As a result, the City has identified two key capital improvement projects: 1) modification of the US 101/Oakland Road interchange, including improvements to the Oakland Road/Commercial Street intersection (see Figure 2), and 2) construction of a new US 101/Mabury Road interchange. Both interchange projects will create additional capacity for accessing and crossing US 101, which will be crucial to accommodate future growth in the vicinity. To fund these interchange improvements, the City has adopted the US 101/Oakland/Mabury Transportation Development Policy (TDP) impact fee. The fee for the US 101/Oakland/Mabury TDP is based on the number of PM peak hour vehicular trips that a project would add to the US 101/Oakland Road interchange. As of January 2017, the TDP traffic impact fee is \$36,847 for each new PM peak hour vehicle trip that would be added to the US 101/Oakland Road interchange. Projects are required to pay the traffic impact fee prior to Public Works clearance.

## **City of San Jose Protected Intersections**

Two of the intersections that are analyzed in this study are identified as Protected Intersections in the City's Transportation Level of Service Policy, Council Policy 5-3. Protected intersections consist of locations that have been built to their planned maximum capacity and where expansion of the intersection would have an adverse effect on other transportation facilities (such as pedestrian, bicycle, transit systems, etc.). Protected Intersections are, therefore, not required to maintain a Level of Service D, which is the City of San Jose standard. The deficiencies at all Protected Intersections in the City of San Jose have been disclosed and overridden in previous EIRs.





## **LEGEND**

= Project Site

If a development project has significant traffic impacts at a designated Protected Intersection, the project may be approved if offsetting Transportation System Improvements are provided. The offsetting improvements are intended to provide other transportation benefits for the community adjacent to the traffic impact. The improvements may include enhancements to pedestrian, bicycle, and transit facilities, as well as neighborhood traffic calming measures and other roadway improvements.

The City will identify the specific offsetting improvements, which should be agreed upon by the community. Priority is given to improvements identified in previously adopted plans such as area-wide specific or master plans, redevelopment plans, or plans prepared through the Strong Neighborhoods Initiative. Community outreach should occur in conjunction with the project review and approval process. Once the specific improvements have been identified, the developer must submit improvement plans to the City of San Jose Department of Public Works for review and approval. The specific offsetting improvements proposed can be finalized during the subsequent planning permit stages and can be described in the Final EIR.

The City of San Jose LOS Policy has established that the value of offsetting improvements should equal \$2,920 per net peak hour trip generated by the project for one protected intersection impact, and \$4,380 per net peak hour project trip for two or more protected intersection impacts. For the purpose of determining the Protected Intersection LOS impact value, net peak hour project trips are defined as the total number of peak hour trips generated by the project during the highest peak hour period after all appropriate credits have been applied.

## 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, the Santa Clara VTA CMP, and field observations. The following data were collected from these sources:

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

### Level of Service Standards and Analysis Methodologies

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

### City of San Jose Signalized Intersections

The City of San Jose level of service methodology for signalized intersection 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 intersection is LOS D or better. The correlation between average control delay and level of service standards is shown in Table 1.



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

Level of Service	Description	Average Control Delay Per Vehicle (sec.)					
Α	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					
В	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 20.0					
С	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 35.0					
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lenghts, or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 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 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, 2000 Highway Capacity Manual (Washington, D.C., 2000) p10-16.							

### **Unsignalized Intersections**

Two of the study intersections are unsignalized. The need for signalization of unsignalized intersections is assessed based on the Peak Hour Volume Warrant (Warrant 3) described in the *Manual on Uniform Traffic Control Devices (MUTCD 2010 Edition, Part 4)*. This method makes no evaluation of intersection level of service, but simply provides an indication whether vehicular peak hour traffic volumes are, or would be, sufficient to justify installation of a traffic signal. Intersections that meet the peak hour warrant are subject to further analysis before determining that a traffic signal is necessary. Additional analysis may include unsignalized level of service analysis and/or operation analysis such as evaluating vehicle queuing and delay. Other types of traffic control devices, signage, or geometric changes may be preferable based on existing field conditions and intersection spacing.

### **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.

## **Report Organization**

The remainder of this report is divided into seven chapters. Chapter 2 describes the existing roadway network, transit services, and pedestrian and bicycle facilities. Chapter 3 presents the intersection operations under existing plus project conditions and describes the method used to estimate project traffic. 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. Chapter 6 describes non-level of service operational issues associated with the proposed project. Chapter 7 presents the conclusions of the traffic study.



# 2. **Existing Conditions**

This chapter describes the existing conditions for transportation facilities in the vicinity of the site, including the roadway network, transit service, and pedestrian and bicycle facilities.

## **Existing Roadway Network**

Regional access to the project site is provided via US 101, I-880 and Highway 87 (SR 87). These facilities are described below.

*US 101* is an eight-lane freeway (three mixed-flow lanes and one HOV lane in each direction) in the vicinity of the site. US 101 extends northward through San Francisco and southward through Gilroy. Access to and from the site is provided via a full interchange at Oakland Road.

*I-880* is a six-lane freeway in the vicinity of the site. It extends northeast to Oakland and south to I-280 in San Jose, at which point it transitions into SR 17 to Santa Cruz. Access to the project study area is provided via interchanges at Old Bayshore Highway and US 101.

SR 87 is primarily a six-lane freeway (four mixed-flow lanes and two HOV lanes) that is aligned in a north-south orientation within the project vicinity. SR 87 begins at its interchange with SR 85 and extends northward, terminating at is junction with US 101. Access to the project site from SR 87 is provided via its interchanges with US 101 and Taylor Street.

Local access to the site is provided on Oakland Road/N. 13<sup>th</sup> Street, N. 10<sup>th</sup> Street, N. 11<sup>th</sup> Street, E. Hedding Street, E. Taylor Street, and Horning Street. These roadways are described below.

*E. Hedding Street* is a four-lane, east-west arterial that begins at Winchester Boulevard as a transition from Pruneridge Avenue. Hedding extends eastward toward US 101, where it changes designation to Berryessa Road. Hedding Street provides access to the project site via N. 10<sup>th</sup> Street, N. 11<sup>th</sup> Street, and N. 13<sup>th</sup> Street/Oakland Road.

*E. Taylor Street* is a two-lane, east-west arterial that begins at The Alameda as a transition from Naglee Avenue and extends eastward into east San Jose. Taylor Street changes designation to Mabury Road at the US 101 overcrossing. Taylor Street provides access to the project site via N. 10<sup>th</sup> Street, N. 11<sup>th</sup> Street, and N. 13<sup>th</sup> Street/Oakland Road.

*N.* 10<sup>th</sup> Street is a one-way, three-lane southbound street between Hedding Street and Keyes Street. North of Hedding Street, N. 10<sup>th</sup> Street becomes a two-way four-lane arterial up to its termination point at I-880. South of Santa Clara Street, it becomes S. 10<sup>th</sup> Street. South of Keyes Street the roadway



becomes a two-way four-lane roadway to its termination point at Tully Road. N. 10<sup>th</sup> Street provides access to the project site via Horning Street.

*N. 11<sup>th</sup> Street* is a one-way, three-lane northbound street that runs from Keyes Street to Hedding Street. South of Santa Clara Street, it becomes S. 11<sup>th</sup> Street. N. 11<sup>th</sup> Street provides access to the project site via E. Hedding Street.

*N.* 13<sup>th</sup> Street is a north-south two-lane collector that extends from Margaret Street in downtown San Jose to Hedding Street, where it changes designation to Oakland Road. South of Santa Clara Street, it becomes S. 13<sup>th</sup> Street. N. 13<sup>th</sup> Street provides access to the project site via Oakland Road and Hedding Street.

Oakland Road is a north-south arterial that begins at Hedding Street in the south as a transition from N. 13<sup>th</sup> Street, and continues to Montague Expressway where it becomes S. Main Street in the north. North of US 101, Oakland Road is primarily a six-lane roadway with a two-way center left-turn lane. South of US 101, Oakland Road is a four-lane arterial until its intersection with Hedding Street. Oakland Road provides access to the project site via Horning Street.

Horning Street is an east-west, two-lane local street that extends between Oakland Road and N. 10<sup>th</sup> Street. Horning Street would provide direct access to the project site.

### **Existing Pedestrian, Bicycle and Transit Facilities**

San Jose desires to provide a safe, efficient, fiscally, economically, and environmentally-sensitive transportation system that balances the need 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.

### **Pedestrian and Bicycle Facilities**

Pedestrian facilities consist mostly of sidewalks along the streets in the study area. Although the network of sidewalks in the immediate vicinity of the project site generally provides good connectivity for pedestrians, sidewalks do not exist on the west side of N. 10<sup>th</sup> Street between Hedding Street and Commercial Street, or along the north side of Hedding Street between N. 11<sup>th</sup> Street and N. 10<sup>th</sup> Street. Sidewalks are sporadic along the east side of N. 10<sup>th</sup> Street between Hedding Street and Commercial Street. In addition, there are no sidewalks along the project frontage on Horning Street.

Crosswalks with pedestrian signal heads and push buttons are located at all the signalized intersections in the study area. However, while sidewalks exist on both sides of Oakland Road, including the US 101 overpass, there are no crosswalks provided to allow pedestrians to cross Oakland Road at the US 101 on- and off-ramp locations. In addition, the intersection of Oakland Road and Commercial Street has no crosswalk on the northbound approach of the intersection.

Class II bicycle facilities (striped bike lanes) exist in the study area (see Figure 3) along the following streets:

- Hedding Street
- Oakland Road, north of Commercial Street and south of Horning Street
- N. 13th Street, south of Hedding Street
- N. 10<sup>th</sup> Street
- N. 11<sup>th</sup> Street
- N. 7<sup>th</sup> Street, between Commercial Street and Hedding Street
- Commercial Street, between N. 4th Street and N. 10th Street



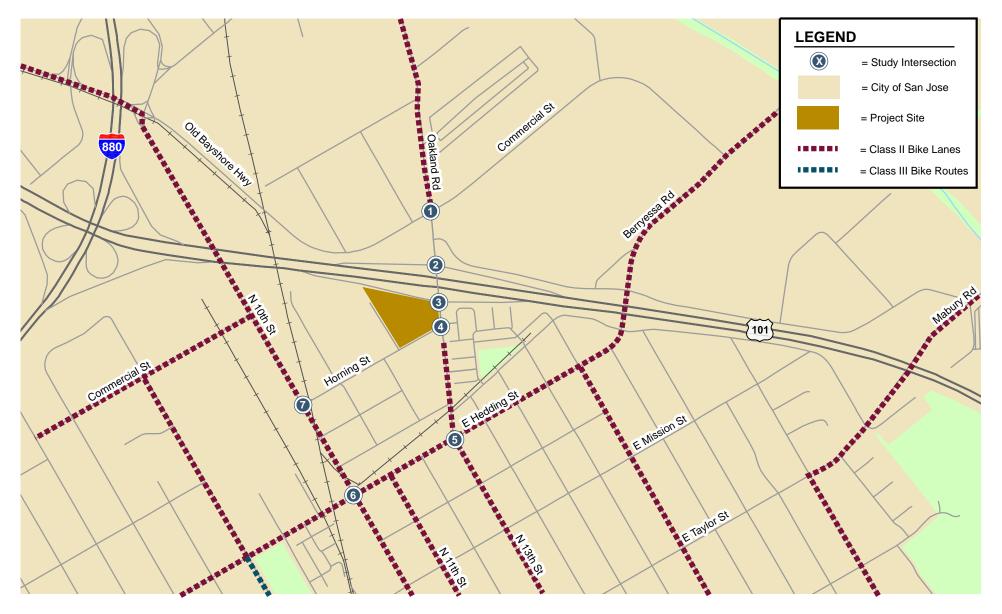


Figure 3 Existing Bicycle Facilities





Class III bicycle facilities (Sharrows) exist in the project vicinity along N. 7<sup>th</sup> Street south of Hedding Street, and Taylor Street. Sharrows are painted shared lane markings on a road that indicate to motorists that bicyclists may use the full travel lane. Sharrows are most often used on roadways that are too narrow to install a standard striped bike lane.

Hedding Street provides a direct connection to the Guadalupe River trail system, approximately one mile west of the project site near Ruff Drive. The Guadalupe River trail system is an 11-mile paved trail that runs through the City of San Jose along the Guadalupe River and is shared with pedestrians and separated from motor vehicle traffic. The Guadalupe River trail is a continuous Class I bikeway from Curtner Avenue in the south to Alviso in the north. Hedding Street also provides a connection to the Civic Center LRT station 3/4 of a mile west of the project site on N. 1st Street.

### **Transit Services**

Existing transit services in the study area are provided by the Santa Clara Valley Transportation Authority (VTA) and are described below. The local bus lines that serve the project study area are shown on Figure 4.

The VTA bus lines that operate within the study area are listed in Table 2, including their terminus points, headways, and nearest stops. Three of these bus routes, including route 66 which stops along Oakland Road just south of Horning Street, provide service to the Civic Center LRT station, approximately one mile from the project site. LRT trains stop at this station on 15-minute headways during weekday commute hours, and on 30-minute headways the remainder of the weekday and weekend. This station serves the northbound and southbound LRT 901 and LRT 902 trains.

Table 2
Existing VTA Bus Service

Bus Route	Route Description	Hours of Operation	Headway	Closest Stop					
Local Route 12 *	San Jose Civic Center to Eastridge Transit Center via San Jose Flea Market	10:00am - 7:00 pm (weekends)	30 mins	Hedding & 11th					
Local Route 62 *	Good Samaritan Hospital to Sierra & Piedmont via Union	6:00am - 11:00pm (weekdays) 6:30am - 10:00pm (weekends)	30 - 60 mins	Hedding & 11th					
Local Route 66 *	Kaiser San Jose to Milpitas/Dixon Road via Downtown SJ	5:30am - 11:00pm (weekdays) 5:30am - 11:30pm (weekends)	30 mins	Oakland & Horning					
Community Route 65	Kooser & Blossom Hill to Hedding & 13th	6:00am - 7:00pm (weekdays)	30 - 45 mins	13th & Hedding					
Notes:									
* These bus routes serve the Civic Center LRT Station									

## **Existing Intersection Lane Configurations**

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

## **Existing Traffic Volumes**

Existing traffic volumes were obtained from new peak hour counts collected in October 2016, and from the City of San Jose. The existing peak hour intersection volumes are shown on Figure 6. New intersection turning-movement counts conducted for this analysis are included in Appendix A.



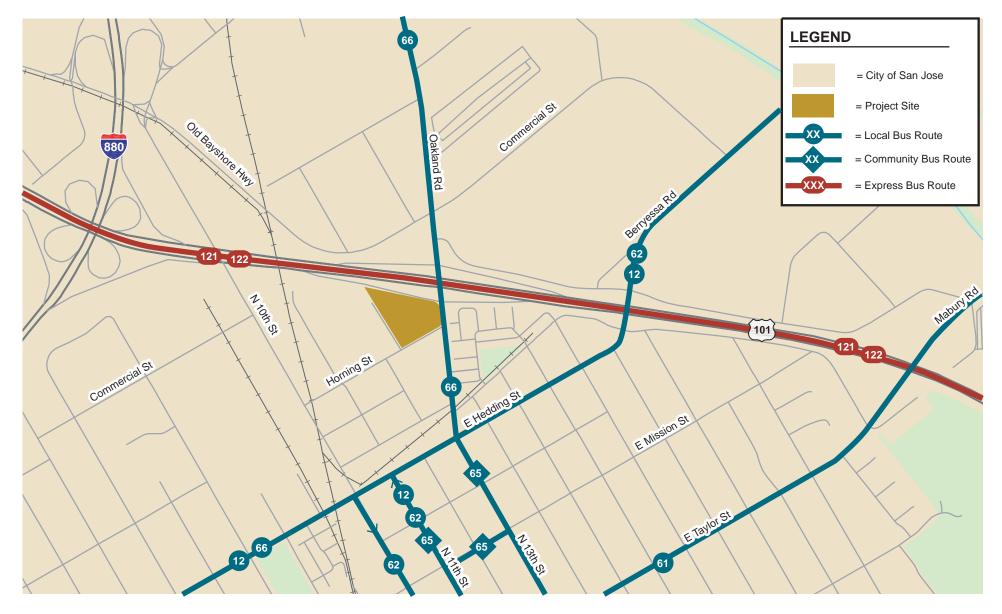
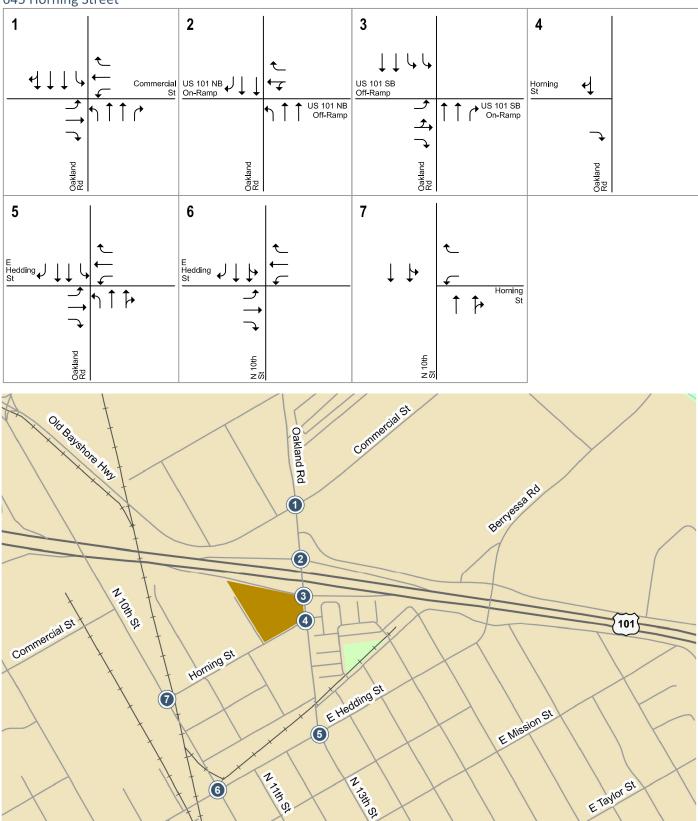


Figure 4 Existing Transit Service











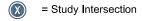
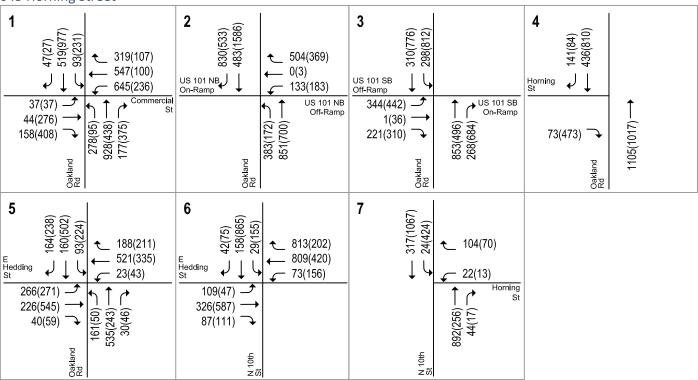
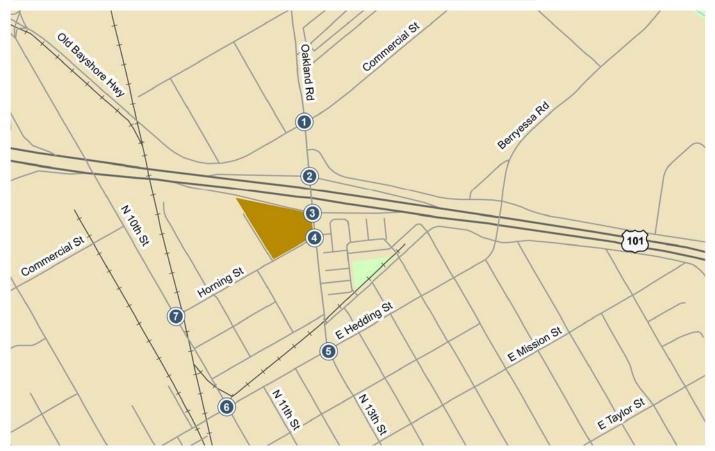


Figure 5 Existing Lane Configurations

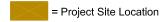








**LEGEND** 



= Study Intersection

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 6 Existing Traffic Volumes





## **Existing Intersection Levels of Service**

The results of the intersection level of service analysis show that, measured against the City of San Jose level of service standards, one of the five signalized study intersections currently operates at an unacceptable LOS E during the AM peak hour of traffic (see Table 3):

Oakland Road & US 101 NB Ramps – LOS E during the AM peak hour

The remaining study intersections currently operate at an acceptable LOS D or better during both the AM and PM peak hours. The intersection level of service calculation sheets are included in Appendix D.

Table 3
Existing Intersection Levels of Service

Study Number	Intersection	Peak Hour	Count Date	Avg. Delay (sec.)	LOS
1	Oakland Rd & Commercial St †	AM	05/19/15	40.7	D
		PM	05/19/15	51.8	D
2	Oakland Rd & US 101 NB Ramps * <sup>†</sup>	AM	05/19/15	58.3	Ε
		PM	09/09/14	20.7	С
3	Oakland Rd & US 101 SB Ramps *†	AM	05/19/15	26.4	С
		PM	09/09/14	31.5	С
5	Oakland Rd & Hedding St <sup>‡</sup>	AM	05/19/15	46.7	D
		PM	05/19/15	43.1	D
6	Tenth St & Hedding St <sup>‡</sup>	AM	05/20/15	19.2	В
		PM	05/19/15	40.2	D

#### Notes:

BOLD indicates a deficient 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 intersection levels of service. The purpose of this effort was (1) to identify any existing traffic problems that may not be directly related to level of service, and (2) to identify any locations where the level of service analysis does not accurately reflect existing traffic conditions.

Traffic congestion in the study area generally occurs in the northbound direction during the AM peak hour, and in the southbound direction during the PM peak hour. The AM and PM peak hour field observations show that the level of service calculations accurately reflect actual existing conditions. However, field observations revealed that some minor operational problems currently occur that may not be reflected in the intersection level of service calculations, as indicated below.

### Oakland Road at US 101 Ramps and Commercial Street

Observations show that vehicle queues for every movement at the US 101 interchange with Oakland Road are lengthy and extend out of the existing storage pockets during both the AM and PM peak



<sup>\*</sup> Denotes a CMP Intersection.

<sup>&</sup>lt;sup>†</sup>Denotes a US 101/Oakland/Mabury TDP Intersection.

<sup>&</sup>lt;sup>‡</sup> Denotes a City of San Jose Protected Intersection.

hours. Not all vehicles clear during their allotted green times. The problems at the interchange are due to the physical constraints (close intersection spacing and inadequate capacity) of the interchange to serve the large demand. The vehicle queues also affect the Oakland Road/Commercial Street intersection operations, since these intersections are closely spaced.

During the AM peak hour, northbound Oakland Road experiences heavy traffic volume and long vehicle queues, due in large part to the high left-turn movement demand onto northbound US 101. Intersections on the overpass experience a relatively high volume of truck traffic. Their wide turn requirements and slower speeds impede the normal flow of traffic at these intersections. Northbound left-turn vehicle queues at the intersection of Commercial Street and Oakland Road occasionally spill out of the turn pocket, blocking through traffic. Since the southbound left-turn lane on Oakland Road at the south ramps feeds the on-ramp to southbound US 101, southbound vehicle queues frequently extend past Commercial Street.

During the PM peak hour, southbound Oakland Road experiences heavy traffic volume and long vehicle queues, due in large part to the high left-turn movement demand onto southbound US 101. Many of the turning movements at the interchange and at the Oakland Road/Commercial Street intersection require two signal cycles for all vehicles to clear. Left-turn traffic from westbound Commercial Street onto southbound Oakland Road consistently blocks the intersection due to delays at the US 101 southbound on-ramp.

### Oakland Road and Hedding Street

During the AM peak hour, westbound through traffic on Hedding Street consistently queues past North 17<sup>th</sup> Street and requires two signal cycles to clear the intersection. Eastbound left-turn traffic occasionally spills out of the left-turn pocket but all vehicles clear in one signal cycle.

During the PM peak hour, the eastbound left-turn vehicle queues frequently spill out of the left-turn pocket. As a result, it often takes two signal cycles for all vehicles to clear the intersection.

### **North Tenth Street and Hedding Street**

During the PM peak hour, the eastbound vehicle queues on Hedding Street frequently back up to North Fourth Street. As a result, it takes two signal cycles for all vehicles to clear the intersections along Hedding Street.



# 3. **Existing Plus Project Conditions**

This chapter describes the 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 conditions 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 were estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic traveling to and from the project site was estimated for the AM and PM peak hours. As part of the trip distribution, the directions to and from which the project trips would travel were estimated. In the trip assignment, the project trips were assigned to specific streets and intersections. These procedures are described below.

### **Trip Generation**

Through empirical research, data have been collected that quantify the amount of traffic produced by common land uses. Thus, for the most common land uses there are standard trip generation rates that can be applied to help predict the future traffic increases that would result from a new development. 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. Trip generation rates resulting from new development proposed within the City of San Jose typically are estimated using either the trip rates detailed in the *San Jose Traffic Impact Analysis Handbook*, November 2009, or the trip rates published in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 9<sup>th</sup> *Edition* (2012). Both sources for trip generation rates were utilized in this traffic study.

### **Existing Trip Credits**

Trips that are generated by existing uses can be subtracted from the gross project trip generation estimates. Accordingly, trip credits were applied to account for the light industrial buildings that would be removed as part of the project. City of San Jose trip generation rates for Auto Repair (a light industrial land use) were applied to estimate the existing trip credits, per City staff direction.



### **Pass-By Reductions**

Pass-by trip reductions were applied to the proposed Fast Food with Drive-Through and Convenience Market with Gas Station uses. Pass-by-trips are trips that would already be on the adjacent roadways (and so are already counted in the existing and background traffic) but would turn into the site while passing by. Justification for applying the pass-by trip reduction is founded on the observation that such traffic is not actually generated by these retail uses, but is already part of the ambient traffic levels. The pass-by reductions applied to each use are based on the recommended reductions included in ITE's *Trip Generation Manual*.

### **Net Project Trips**

After applying the ITE and San Jose rates, appropriate trip reductions, and existing use trip credits, the project would generate 2,117 new daily vehicle trips, with 61 new trips occurring during the AM peak hour and 26 new trips occurring during the PM peak hour. Using the inbound/outbound splits contained in the San Jose Traffic Impact Analysis Handbook and ITE's Trip Generation Manual, the project would produce 15 new inbound and 46 new outbound trips during the AM peak hour, and 26 new inbound and 0 new outbound trips during the PM peak hour (see Table 4).

Table 4
Project Trip Generation Estimates

					AM Peak Hour			PI	M Peak	k Hour	lour	
			Daily Trip	Daily	Pk-Hr		Trips		Pk-Hr		Trips	
Land Use	ş	Size	Rates	Trips	Rate	ln	Out	Total	Rate	ln	Out	Total
Existing Use												
General Light Industrial 1	52.634	ksf	20.00	1,053	1.60	59	25	84	2.20	46	70	116
Proposed Use <sup>2</sup>												
Convenience Market with Gas	12	fuel pos.	542.60	6,511	16.57	100	99	199	19.07	115	114	229
Pumps (and Car Wash) 4		Pass-By T	rips <sup>3</sup>	-4,200	63%	(63)	(62)	(125)	66%	(76)	(75)	(151)
		Gas Static	on Total:	2,311		37	37	74		39	39	78
Fast Food with Drive-Through	2.494	ksf	496.12	1,237	45.42	58	55	113	32.65	42	39	81
		Pass-By T	√rips ³	-612	49%	(28)	(27)	(55)	50%	(21)	(20)	(41)
	•	Fast Food	Total:	625		30	28	58		21	19	40
Mini-Warehouse	93.443	ksf	2.50	234	0.14	7	6	13	0.26	12	12	24
Total Proposed Trips:				3,170		74	71	145		72	70	142
Net Project Trips (Proposed	d - Exist	ing):		2,117		15	46	61		26	0	26

#### Notes:

Convenience Market with Gasoline Pumps (Land Use 853), average rates per fueling position were used.

Fast Food with Drive-Through (Land Use 934), average rates per 1,000 SF were used.

Mini-Warehouse (Land Use 151), average rates per 1,000 SF were used.



<sup>&</sup>lt;sup>1</sup>Light Industrial trips based on *San Jose Traffic Impact Analysis Handbook* (November 2009) trip rates for Auto Repair.

<sup>&</sup>lt;sup>2</sup> Proposed use daily and peak hour trip rates based on ITE Trip Generation Manual, 9th Edition (2012).

<sup>&</sup>lt;sup>3</sup> Pass-By trips based on ITE rates and applied to Convenience Store with Gas Station and Fast Food with Drive-Through uses as directed by the City of San Jose. Peak hour pass-by percentages applied are shown in the Pk-Hr Rate column.

Trips associated with the Car Wash use are included in the Convience Market with Gas Station trip generation.

### **Trip Distribution**

The trip distribution patterns for the project were developed based on existing travel patterns on the surrounding roadway system, trip distributions developed for projects with similar uses in the study area, and the locations of complementary land uses. The project trip distribution patterns are shown graphically on Figure 7.

### **Trip Assignment**

The peak hour trips associated with the proposed project were added to the transportation network in accordance with the distribution pattern discussed above. All project trips would enter and exit the project site via the proposed driveway on Horning Street. At its intersection with Horning Street, Oakland Road is divided by a raised center median. This median would prevent vehicles from making left turns to and from Horning Street. This existing site access limitation is described in more detail below.

### **Outbound Vehicles**

Outbound vehicles assigned to travel northbound along Oakland Road, or assigned to northbound or southbound US 101, would be required to turn right from Horning Street onto southbound Oakland Road, and make a U-turn at the existing left-turn pocket at Boardwalk Way. No other outbound movements would be restricted.

### **Inbound Vehicles**

Most inbound vehicles other than those originating from US 101 or Oakland Road north of the project site, as well as some inbound vehicles originating from Berryessa Road and Commercial Street east of US 101, would access the project site via Horning Street at its intersection with N. 10<sup>th</sup> Street. While Uturns are allowed at the intersection of Oakland Road/US 101 northbound ramps, this is a relatively circuitous inbound travel path. Thus, regular shopping center users originating from the south or west would likely utilize the intersection of N. 10<sup>th</sup> Street/Horning Street. A long-term goal of the City should be to provide improved access to Horning Street from northbound Oakland Road. Figure 8 shows the net project trip assignment on the existing transportation network.

## **Existing Plus Project Traffic Volumes**

Project trips, as represented in the above project trip assignment, were added to existing traffic volumes to obtain existing plus project traffic volumes (see Figure 9). Traffic volumes for all components of traffic are tabulated in Appendix C.

## **Existing Plus Project Intersection Analysis**

The results of the intersection level of service analysis under existing plus project conditions show that, measured against the City of San Jose level of service standards, one of the five signalized study intersections would continue to operate at an unacceptable LOS E during the AM peak hour of traffic (see Table 5):

Oakland Road & US 101 NB Ramps

The remaining study intersections would continue to operate at an acceptable LOS D or better during both the AM and PM peak hours under existing plus project conditions. The intersection level of service calculation sheets are included in Appendix D.



Note that the existing plus project condition intersection analysis is provided here 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 the Policy, traffic related impacts in the City of San Jose are determined based on the background plus project traffic scenario.

Table 5
Existing Plus Project Intersection Levels of Service

			Existing		Existing +	- Project
Study Number	Intersection	Peak Hour	Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	Los
1	Oakland Rd & Commercial St †	AM	40.7	D	40.8	D
		PM	51.8	D	51.9	D
2	Oakland Rd & US 101 NB Ramps *†	AM	58.3	Е	59.4	Е
		PM	20.7	С	20.9	С
3	Oakland Rd & US 101 SB Ramps * <sup>†</sup>	AM	26.4	С	26.4	С
		PM	31.5	С	32.0	С
5	Oakland Rd & Hedding St <sup>‡</sup>	AM	46.7	D	46.8	D
		PM	43.1	D	43.0	D
6	Tenth St & Hedding St <sup>‡</sup>	AM	19.2	В	19.3	В
		PM	40.2	D	40.2	D

#### Notes:

**BOLD** indicates a deficient level of service.



<sup>\*</sup> Denotes a CMP Intersection.

<sup>&</sup>lt;sup>†</sup>Denotes a US 101/Oakland/Mabury TDP Intersection.

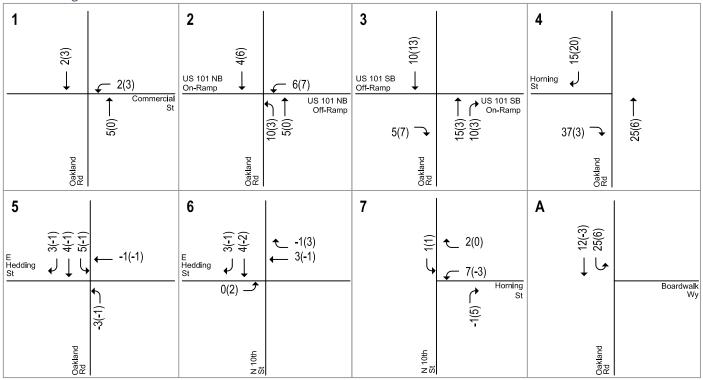
<sup>&</sup>lt;sup>‡</sup> Denotes a City of San Jose Protected Intersection.



Figure 7
Project Trip Distribution Patterns



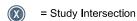






**LEGEND** 



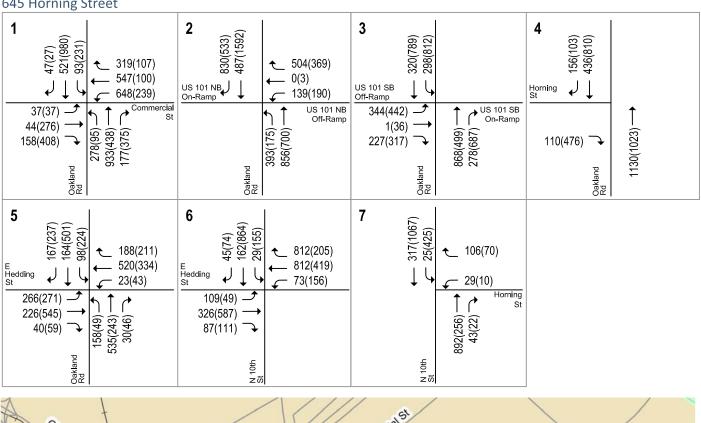


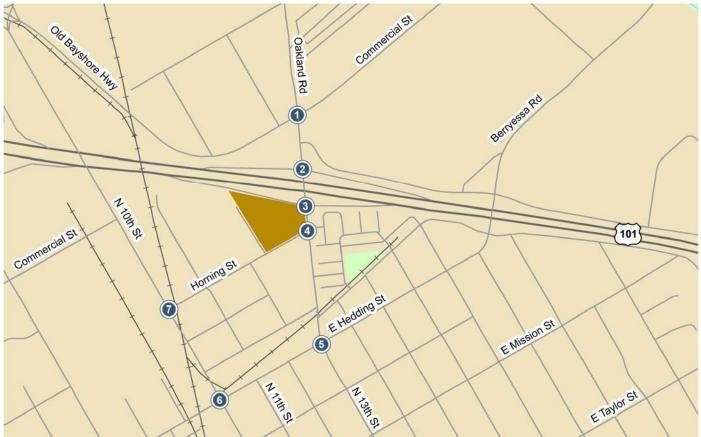
XX(XX) = AM(PM) Peak-Hour Trips











**LEGEND** 



= Study Intersection

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 9 **Existing Plus Project Traffic Volumes** 





## 4.

## **Background Conditions**

This chapter presents background traffic conditions, which are defined as conditions just prior to completion of the proposed project. Traffic volumes for background conditions comprise volumes from existing traffic volumes plus traffic generated by other approved developments in the vicinity of the site. This chapter describes the procedure used to determine background traffic volumes and the resulting traffic conditions. The background scenario predicts a realistic traffic conditions that would occur as approved development gets built and occupied.

## **Transportation Network Under Background Conditions**

It was assumed in this analysis that the transportation network under background conditions would be the same as the existing 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. The added traffic from approved but not yet constructed developments in the City of San Jose was obtained from the City's Approved Trip Inventory (ATI). Background traffic volumes are shown graphically on Figure 10.

The ATI is contained in Appendix B. Traffic volumes for all components of traffic are tabulated in Appendix C.

## **Background Intersection Analysis**

The results of the intersection level of service analysis under background conditions show that, measured against the City of San Jose level of service standards, four of the five signalized study intersections would operate at an unacceptable LOS E or F during at least one of the peak hours of traffic (see Table 6) as shown below.

- Oakland Road & Commercial Street LOS F during the AM, LOS E during the PM
- Oakland Road & US 101 NB Ramps LOS F during the AM, LOS E during the PM
- Oakland Road & US 101 SB Ramps LOS F during the PM peak hour
- Oakland Road & Hedding Street LOS E during the AM and PM peak hours



The remaining study intersection would continue to operate at an acceptable LOS D or better during both the AM and PM peak hours under background conditions. The intersection level of service calculation sheets are included in Appendix D.

Table 6
Background Intersection Levels of Service

			Exist	ing	Backgr	ound
Study Number	Intersection	Peak Hour	Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS
1	Oakland Rd & Commercial St †	AM	40.7	D	85.9	F
		PM	51.8	D	59.8	Е
2	Oakland Rd & US 101 NB Ramps *†	AM	58.3	E	163.2	F
		PM	20.7	С	57.0	E
3	Oakland Rd & US 101 SB Ramps * <sup>†</sup>	AM	26.4	С	29.7	С
		PM	31.5	С	89.4	F
5	Oakland Rd & Hedding St <sup>‡</sup>	AM	46.7	D	62.6	Е
		PM	43.1	D	55.1	E
6	Tenth St & Hedding St <sup>‡</sup>	AM	19.2	В	22.1	С
		PM	40.2	D	50.7	D

### Notes:

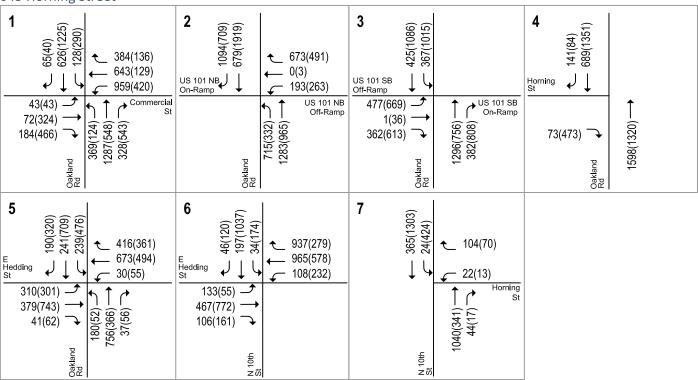
**BOLD** indicates a deficient level of service.

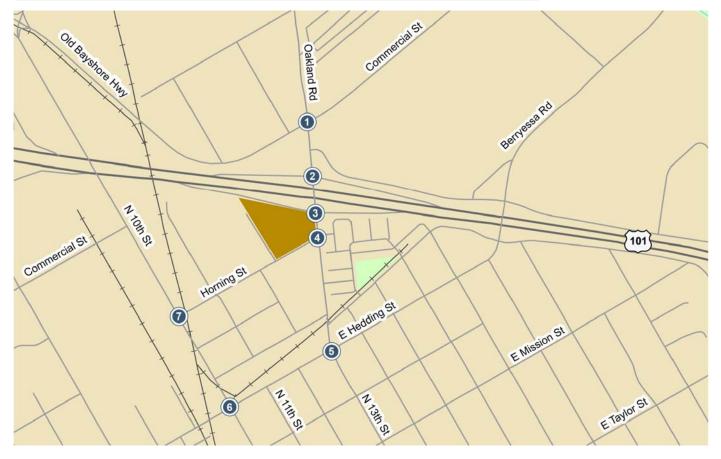


<sup>\*</sup> Denotes a CMP Intersection.

<sup>&</sup>lt;sup>†</sup>Denotes a US 101/Oakland/Mabury TDP Intersection.

<sup>&</sup>lt;sup>‡</sup> Denotes a City of San Jose Protected Intersection.





**LEGEND** 



Study Intersection

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 10 Background Traffic Volumes





# 5. Background Plus Project Conditions

This chapter describes the near-term traffic conditions that most likely would occur when the project is complete. It includes a description of the City of San Jose significance criteria used to establish what constitutes a project impact, 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.

## **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 is the adopted threshold for CEQA.

### 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:

- The level of service at the intersection degrades form an acceptable LOS D or better under background conditions to an unacceptable LOS E or F under background plus project conditions, or
- 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, or
- 3. The level of service at a designated Protected Intersection is an unacceptable LOS E or F under background conditions and the addition of project trips causes both the critical-movement delay at the intersection to increase by two (2) or more seconds *and* the volume-to-capacity ratio (V/C) to increase by one-half percent (.005) or more.

An exception to rule #2 above applies when the addition of project traffic reduces the amount of average delay for critical movements (i.e., the change in average stopped 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.

## **Transportation Network Under Background Plus Project Conditions**

It was 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 shown in Table 4 in Chapter 3, after applying the ITE and San Jose rates, appropriate trip reductions, and existing use trip credits, the project would generate 2,117 new daily vehicle trips, with 61 new trips occurring during the AM peak hour and 26 new trips occurring during the PM peak hour. Using the inbound/outbound splits contained in the San Jose Traffic Impact Analysis Handbook and ITE's Trip Generation Manual, the project would produce 15 new inbound and 46 new outbound trips during the AM peak hour, and 26 new inbound and 0 new outbound trips during the PM peak hour.

## **Background Plus Project Traffic Volumes**

The peak hour vehicle trips generated by the project were assigned to the roadway network in accordance with the trip distribution patterns as described in Chapter 3. The net peak hour project trips were added to the background traffic volumes to obtain background plus project traffic volumes (see Figure 11).

Traffic volumes for all components of traffic are tabulated in Appendix C.

## **Background Plus Project Intersection Analysis**

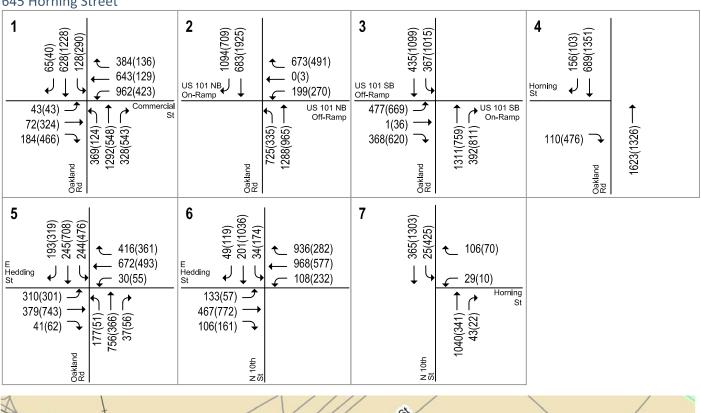
The results of the intersection level of service analysis under background plus project conditions show that, measured against the City of San Jose level of service standards, four of the five signalized study intersections would continue to operate at an unacceptable LOS E or F during at least one of the peak hours of traffic (see Table 7) as shown below.

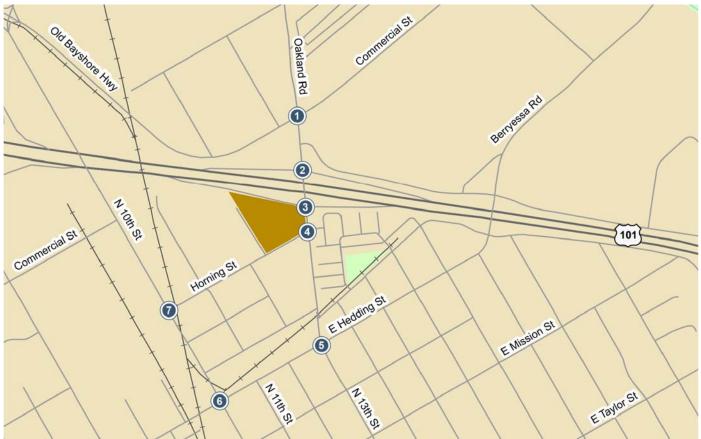
- Oakland Road & Commercial Street LOS F during the AM, LOS E during the PM
- Oakland Road & US 101 NB Ramps LOS F during the AM, LOS E during the PM
- Oakland Road & US 101 SB Ramps LOS F during the PM peak hour
- Oakland Road & Hedding Street LOS E during the AM and PM peak hours

When measured against the City of San Jose significant impact criteria, however, none of the study intersections would be significantly impacted by the project. The remaining study intersection would continue to operate at an acceptable LOS D or better during both the AM and PM peak hours under background plus project conditions.

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







**LEGEND** 



= Study Intersection

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 11 **Background Plus Project Traffic Volumes** 





Table 7
Background Plus Project Intersection Levels of Service

			Exis	ting	Backg	round	Background + Project			ect
			Avg		Avg.		Avg.		Incr. In	
Study		Peak	Delay	LOS	Delay		Delay		Crit. Delay	
Number	Intersection	Hour			(sec.)	LOS	(sec.)	LOS	(sec.)	Crit. V/C
1	Oakland Rd & Commercial St †	AM	40.7	D	85.9	F	86.7	F	1.5	0.003
		PM	51.8	D	59.8	Ε	59.9	Ε	0.2	0.002
2	Oakland Rd & US 101 NB Ramps *†	AM	58.3	Е	163.2	F	164.5	F	2.7	0.006
		PM	20.7	С	57.0	Ε	57.8	Ε	1.4	0.004
3	Oakland Rd & US 101 SB Ramps *†	AM	26.4	С	29.7	С	29.8	С	0.3	0.008
		PM	31.5	С	89.4	F	90.6	F	2.7	0.006
5	Oakland Rd & Hedding St <sup>‡</sup>	AM	46.7	D	62.6	Е	62.9	Е	0.6	0.003
		PM	43.1	D	55.1	Ε	55.1	Ε	0.0	0.000
6	Tenth St & Hedding St <sup>‡</sup>	AM	19.2	В	22.1	С	22.3	С	0.2	0.001
		PM	40.2	D	50.7	D	50.7	D	0.0	0.000

### Notes:

**BOLD** indicates a deficient level of service.

## **US 101/Oakland/Mabury Transportation Development Policy (TDP)**

As described in Chapter 1, any project that would add traffic to the US 101/Oakland Road interchange during the PM peak hour is required to participate in the US 101/Oakland/Mabury TDP program. The TDP includes a fee schedule requiring all new developments to pay a "fair share" contribution for using a portion of the interchange capacity that would be created with buildout of the US 101/Oakland Road interchange and construction of a new US 101/Mabury Road interchange. Unlike most Area Development Policies that base their fees on the number of residential units or square footages built, the fee for the US 101/Oakland/Mabury TDP is based on the number of PM peak hour vehicular trips that would be added to the US 101/Oakland Road interchange (including the Oakland Road/Commercial Street intersection).

Since the proposed project would send some PM peak hour vehicle trips through this interchange, the project would be required to pay a fair share contribution toward the planned interchange improvements. Currently, the TDP traffic impact fee is \$36,847 per each new PM peak hour vehicle trip that would be added to the US 101/Oakland Road interchange. The fee is subject to an annual escalation on January 1<sup>st</sup> per the Engineering News-Record Construction Cost Index for San Francisco. The project would add 26 new trips to the interchange during the PM peak hour.

Estimated TDP Impact Fee: \$36,847 x 26 net PM peak hour trips = \$958,022



<sup>\*</sup> Denotes a CMP Intersection.

<sup>&</sup>lt;sup>†</sup>Denotes a US 101/Oakland/Mabury TDP Intersection.

<sup>&</sup>lt;sup>‡</sup> Denotes a City of San Jose Protected Intersection.

### 6.

## **Other Transportation Issues**

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

- Intersection operations analysis vehicle queuing at selected intersections
- Site access, on-site circulation and parking
- Potential impacts to transit, bicycle and pedestrian facilities
- Impacts to roadway travel lanes, bicycle lanes, and pedestrian facilities during construction

Unlike the level of service impact methodology, which is adopted by the City Council, the analyses in this chapter are based on professional judgement 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 analysis of traffic operations for intersections where the project would add a significant number of left or right turns. The operations analysis is based on vehicle queuing for high-demand turn movements at intersections. Vehicle queues were estimated using a Poisson probability distribution, which estimates the probability of "n" vehicles for a vehicle movement using the following formula:

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

Where:

P(x=n) = probability of "n" vehicles in queue per lane

n = number of vehicles in the queue per lane

 $\lambda$  = average # of vehicles in the queue per lane (vehicles per hr per lane/signal cycles per hr)

The basis of the analysis is as follows: (1) the Poisson probability distribution is used to estimate the 95<sup>th</sup> percentile maximum number of queued vehicles for a particular turn 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 turn movement. This analysis thus provides a basis for estimating future turn pocket storage requirements at intersections.

For signalized intersections, the 95<sup>th</sup> 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 95<sup>th</sup> 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). Thus, turn pocket storage designs based on the 95<sup>th</sup> percentile queue length would ensure that storage space would be exceeded only 5 percent of the time for a signalized movement. Vehicle queuing at unsignalized intersections without dedicated turn pockets also was evaluated. Table 8 shows the results of the queuing analysis.



Table 8 Intersection Queuing Analysis Results

Movement Peak Hour Period	Oaklan US 101 N NB			id Rd & ing St LT	Horni	h St & ing St B LT	Boardw	nd Rd & alk Way ' U-Turn	Horn	nd Rd & ing St RT
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Existing										
Cycle/Delay <sup>1</sup> (sec)	120	83	140	150	15.3	20.2	13.2	29.4	10	29.6
Lanes	1	1	1	1	1	1	1	1	1	1
Volume (vph)	383	205	93	224	22	13	60	395	73	473
Volume (vphpl)	383	205	93	224	22	13	60	395	73	473
Avg. Queue (veh/ln)	12.8	4.7	3.6	9.3	0.1	0.1	0.2	3.2	0.2	3.9
Avg. Queue <sup>2</sup> (ft/In)	319	118	90	233	2	2	6	81	5	97
95th% Queue (veh/ln)	19	9	7	15	1	1	1	6	1	7
95th% Queue (ft/In)	475	225	175	375	25	25	25	150	25	175
Storage (ft/ In)	150	150	125	125	250	250	200	200	150	150
Adequate (Y/N)	N	N	N	N	Y	Υ	Υ	Υ	Υ	N
Existing Plus Project										
	120	02	140	150	16	20.2	10.7	20.2	40.2	31.3
Cycle/Delay <sup>1</sup> (sec)		83		150		20.2	13.7	30.2	10.3	
Lanes	1	1	1	1	1	1	1	1	1	1
Volume (vph)	393	208	98	224	29	13	85	401	110	476
Volume (vphpl)	393	208	98	224	29	13	85	401	110	476
Avg. Queue (veh/ln)	13.1	4.8	3.8	9.3	0.1	0.1	0.3	3.4	0.3	4.1
Avg. Queue <sup>2</sup> (ft/ln)	328	120	95	233	3	2	8	84	8	103
95th% Queue (veh/ln)	19	9	7	15	1	1	1	7	1	8
95th% Queue (ft/In)	475	225	175 125	375	25 250	25	25	175	25	200 150
Storage (ft/ In) Adequate (Y/N)	150	150 <i>N</i>	125 <b>N</b>	125 <i>N</i>	250 Y	250	200 Y	200	150 Y	
. , ,	N	N	N	N	ĭ	Y	ĭ	Y	T	N
Background										
Cycle/Delay <sup>1</sup> (sec)	120	83	140	150	17.5	27.1	17.1	56.1	11.2	134.5
Lanes	1	1	1	1	1	1	1	1	1	1
Volume (vph)	715	365	239	476	22	13	60	395	73	473
Volume (vphpl)	715	365	239	476	22	13	60	395	73	473
Avg. Queue (veh/ln)	23.8	8.4	9.3	19.8	0.1	0.1	0.3	6.2	0.2	17.7
Avg. Queue <sup>2</sup> (ft/ln)	596	210	232	496	3	2	7	154	6	442
95th% Queue (veh/ln)	32	13	15	26	1	1	1	10	1	19
95th% Queue (ft/In)	800	325	375	650	25	25	25	250	25	475
Storage (ft/ In)	150	150	125	125	250	250	200	200	150	150
Adequate (Y/N)	N	N	N	N	Υ	Υ	Υ	N	Υ	N
Background Plus Proj	ect									
Cycle/Delay <sup>1</sup> (sec)	120	83	140	150	18.6	27.1	18.2	58.8	11.7	144.1
Lanes	1	1	1	1	1	1	1	1	1	1
Volume (vph)	725	368	244	476	29	13	85	401	110	476
Volume (vphpl)	725	368	244	476	29	13	85	401	110	476
Avg. Queue (veh/ln)	24.2	8.5	9.5	19.8	0.1	0.1	0.4	6.5	0.4	19.1
Avg. Queue <sup>2</sup> (ft/ln)	604	212	237	496	4	2	11	164	9	476
95th% Queue (veh/ln)	33	14	15	26	1	1	2	11	2	19
95th% Queue (ft/ln)	825	350	375	650	25	25	50	275	50	475
Storage (ft/ In)	150	150	125	125	250	250	200	200	150	150
Adequate (Y/N)	N	N	N	N	Y	Y	Y	N	Y	N

#### Notes:

WB = westbound; EB = eastbound; SB = southbound; NB = northbound; RT = right turn movement; LT = left turn movement; TH = through movement.

Vehicle queue calculations based on cycle length for signalized intersections and average delay for unsignalized intersections.

<sup>2</sup>Assumes 25 feet per vehicle queued.



#### Oakland Road and US 101 Northbound Ramps

The queuing analysis indicates that the maximum vehicle queues for the northbound left-turn pocket at the Oakland Road/US 101 Northbound Ramps intersection currently exceed the existing vehicle storage capacity during both the AM and PM peak hours of traffic, and that this condition would continue to occur under existing plus project, background, and background plus project conditions. The northbound left-turn pocket provides about 150 feet of vehicle storage for a capacity of up to approximately 6 vehicles. A maximum vehicle queue length of 800 feet would occur during the AM peak hour under background conditions as a result of approved projects in the area, and the project would increase the vehicle queue by one vehicle length (25 feet). The addition of a second northbound left-turn lane on Old Oakland Road is proposed as mitigation by the San Jose Flea Market project. This improvement would be funded and implemented either with approval of the Flea Market project or via the approved US 101/Oakland/Mabury Transportation Development Policy (TDP).

#### **Oakland Road and Hedding Street**

The 95<sup>th</sup> percentile southbound left-turn vehicle queues at this intersection would exceed the measured storage length under all traffic conditions during both the AM and PM peak hours. The project would not extend the 95<sup>th</sup> percentile vehicle queues when compared to either existing or background conditions. Since the project would not worsen the queuing related issues for the southbound left-turn movement at this intersection, the project would not be required to make any improvements.

#### N 10th Street and Horning Street (Unsignalized)

The queueing analysis for the westbound left-turns at N 10<sup>th</sup> Street and Horning Street was analyzed based on the left-turn only volumes for this movement, as there is adequate room for right-turning vehicles to maneuver around vehicles making the westbound left-turn onto southbound 10<sup>th</sup> Street. Based on the analysis, no queueing issues would occur during either the AM peak hour or PM peak hour under any traffic scenario.

#### Oakland Road and Boardwalk Way (Unsignalized)

Hexagon conducted counts of the southbound left-turn movement, including U-turns, at the Oakland Road and Boardwalk Way intersection in October 2016 (see Appendix A). These counts determined that the peak hours for the southbound left turns occurred from 7:30-8:30 AM and 4:00-5:00 PM. The left-turn/U-turn storage at this intersection was measured to be approximately 200 feet. During the AM peak hour under all traffic scenarios, and the PM peak hour under existing and existing plus project conditions, the southbound left-turn pocket storage would be adequate to store the 95<sup>th</sup> percentile vehicle queues. Under background conditions during the PM peak hour, the 95<sup>th</sup> percentile queue is estimated to be 250 feet long, which would exceed the measured storage by 50 feet, or 2 vehicles. With the addition of PM peak hour project generated traffic, the 95<sup>th</sup> percentile queue would increase by one vehicle, or a queue length of 275 feet. Extending the southbound left-turn pocket 75 feet to accommodate the estimated vehicle queues that would occur under background plus project conditions would require removal/reconstruction of the landscaped median island on Oakland Road, including up to 7 small trees, and re-striping. City staff have indicated that the project will not be required to extend the southbound left-turn pocket.

#### Oakland Road and Horning Street (Unsignalized)

The eastbound right-turn movement at the Oakland Road and Horning Street intersection was evaluated for potential queuing issues. The amount of eastbound right-turn vehicle storage was determined by measuring the distance between the right-turn stop line on Horning Street at Oakland Road and the approximate location of the outbound lane at the proposed project driveway. This distance is approximately 150 feet, which would allow for the storage of only about six vehicles before the queue would prevent vehicles from turning left out of the project driveway. Based on the queuing analysis, no queueing issues would occur during the AM peak hour under any traffic scenario.



During the PM peak hour, queuing issues would occur under every traffic scenario that was evaluated. Based on existing plus project conditions traffic volumes, the eastbound right-turn maximum vehicle queue would extend approximately 200 feet. This equates to a storage inadequacy of two vehicles. Once traffic generated by approved projects in the area is added to Oakland Road, queuing on eastbound Horning Street would be expected to increase significantly due to fewer gaps in the flow of traffic on southbound Oakland Road. The expected increase in queuing is the direct result of the high southbound volumes on Oakland Road that would occur under background conditions during the PM peak hour.

Note that due to this intersection's close proximity to the signalized intersection of Oakland Road/US 101 SB Ramps, the signal helps to meter the flow of southbound traffic on Oakland Road. Thus, in actuality, the traffic signal likely would create more gaps in traffic than what the TRAFFIX software is calculating for background and background plus project conditions. Additionally, the eastbound to southbound right-turn movement from the US 101 southbound off-ramp to Oakland Road is not allowed on red. This no right-turn-on-red restriction would further increase the number of gaps in traffic on southbound Oakland Road.

The future vehicle queues that would occur on eastbound Horning Street during the PM peak hour of traffic would likely block the project driveway, since the driveway's outbound lane would be located only about 150 feet from Oakland Road. The result would be on-site vehicle queuing during the PM peak hour. This operational issue at the project driveway is described in more detail in the next section.

#### **Vehicular Site Access and Circulation**

The site access and circulation evaluation is based on the September 1, 2015 site plan prepared by M. I. Architects (see Figure 12). On-site vehicular circulation was reviewed in accordance with generally accepted traffic engineering standards.

#### **Site Access**

Based on the site plan, project generated traffic would enter the site via a single driveway on Horning Street. The inbound lane would be located approximately 130 feet west of the Oakland Road/Horning Street intersection. The driveway measures 35 feet wide (measured at the throat), as proposed, and would provide access to the primary drive aisle that bisects the site. The inbound movement at the project driveway would be unimpeded and would minimize the potential for backups onto Horning Street. The City of San Jose typically does not allow driveways providing access to commercial development to be greater than 32 feet wide. Accordingly, the proposed driveway width should be reduced to 32 feet.

The driveway design would accommodate an on-site (outbound) vehicle queue of up to 4 average length vehicles. The driveway throat length (distance between Horning Street and the east-west drive aisle on site) is measured to be 90 feet. An outbound queue of more than 4 vehicles in length would block the east-west drive aisle that would provide access to the fast food restaurant (on the west) and the convenience store/gas station/car wash (on the east).

The project-generated trips (excluding the existing use trip credits) that are estimated to occur at the project driveway are 74 inbound trips and 71 outbound trips during the AM peak hour, and 72 inbound trips and 70 outbound trips during the PM peak hour (see Figure 13). Due to limited storage space between the project driveway and Oakland Road, the eastbound vehicle queues at the Oakland Road/Horning Street intersection could make it difficult for vehicles exiting the site towards Oakland Road to turn left onto Horning Street. During most of the day, the low traffic volumes along Horning Street would not create issues related to vehicle queueing at the project driveway. However, due to the relatively high volume of traffic and lack of gaps in the flow of traffic on southbound Oakland Road during the PM peak hour, vehicles may experience additional delay at the project driveway as a result of the eastbound queues that would be expected to occur on Horning Street.



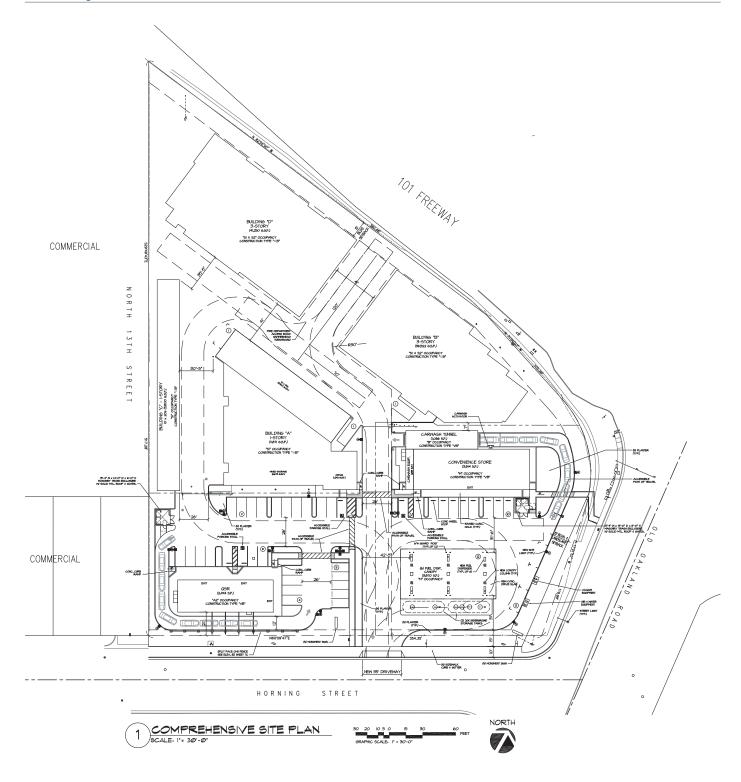
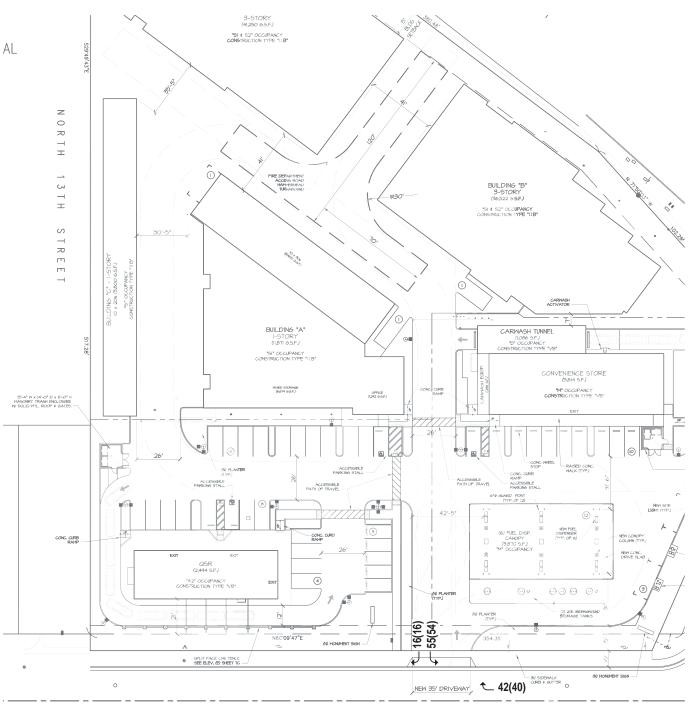


Figure 12 Site Plan







HORNING STREET
32(32) →

**LEGEND** 

XX(XX) = AM(PM) Peak-Hour Trips

Figure 13
Gross Project Trips at the Driveway





#### **Sight Distance**

Based on the site plan provided, the project driveways would be free and clear of obstructions, thereby ensuring that vehicles can see pedestrians on the sidewalk, as well as vehicles and bicycles travelling along Horning Street.

Providing the appropriate sight distance reduces the likelihood of a collision at a driveway or intersection, and provides drivers with the ability to exit a driveway or locate sufficient gaps in traffic. 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 the driveway on Horning Street, which has a posted speed limit of 35 mph, the Caltrans stopping sight distance is 300 feet (based on a design speed of 40 mph. Based on the proposed site plan, the project would meet the Caltrans sight distance to the west of the project driveway. To the east, 150 feet of sight distance would be provided between the project driveway (measured from the outbound lane) and Oakland Road. This sight distance would be adequate, since vehicles would be traveling no more than 20 mph when performing right-turns from Oakland Road onto Horning Street.

The project should ensure that street parking is not permitted on the north side of Horning Street between the project driveway and Oakland Road, as this would create sight distance issues east of the project driveway.

#### **On-Site Circulation**

On-site vehicular circulation was reviewed for the project in accordance with generally accepted traffic engineering standards and the City of San Jose design guidelines for establishments with drive-through uses (Council Policy 6-10). The Policy sets forth criteria (specifically Traffic Criteria A through E) relating to drive-through location, vehicular ingress and egress, and vehicle stacking.

A single driveway would provide access to the primary north-south oriented drive aisle. The primary drive aisle, which would vary from 35 feet to 26 feet, would provide access to all the uses on site: 1) the fast food restaurant with drive-through to the west, 2) the convenience market, gas station and car wash to the east, and 3) the mini-storage facility to the north. The east-west oriented drive aisle would vary in width between 26 feet (fast food restaurant side) and 31 ½ feet (gas station and convenience market side).

#### **Fast Food Restaurant Circulation**

The east-west drive aisle on site would provide access to the fast food restaurant parking area and drive-through lane, located west of the primary north-south drive aisle. As proposed, the 12-foot wide drive-through lane would be located along the western edge of the project site. The east-west drive aisle is shown to be 26 feet wide and would provide access to a total of 28 parking spaces: 19 located in the main parking area and 9 located in a small parking lot on the east side of the restaurant building.

Vehicles would enter the fast food drive-through lane at the western edge of the site and circle the fast food restaurant building in a counterclockwise direction. The drive-through lane would exit onto a short 26-foot wide north-south oriented drive aisle on the east side of the restaurant. This short drive aisle would contain 9 parking spaces (5 on one side, 4 on the other) and would provide access to the main parking area and east-west drive aisle. Vehicles would proceed to the primary north-south drive aisle and ultimately exit the site.

The east-west drive aisle dead-ends at the western boundary of the site where the entrance to the drive-through lane is located. Thus, vehicles intending to park but unable to find a space would need to conduct a three-point maneuver to exit the parking area and continue to look for a space. The site plan shows adequate room would be provided for this maneuver. The situation is similar in the small 9-



space lot, although there is not adequate room for vehicles to turn around. For this reason, vehicles would be forced to back out of the small parking lot if there were no available parking spaces.

#### **Drive-Through Lane Policy for Fast Food Restaurants**

According to Council Policy 6-10, primary ingress and egress to drive-through type parking lots should be from at least a four-lane major street (Traffic Criterion A). Since access to and from the site would be provided via Horning Street, a two-lane minor street, the project would not meet this requirement. The Policy also requires a fast-food restaurant to provide stacking space for at least 8 vehicles within the drive-through lane, assuming 20 feet per vehicle (Traffic Criterion E). The site plan shows the drive-through lane would provide approximately 160 feet of storage, or enough stacking space for 8 vehicles. This drive-through lane capacity would meet the City's minimum requirement. A queue of more than 8 vehicles would spill into the main fast food parking area. There is an additional 160 feet of available stacking space within the fast food parking area (east-west drive aisle) between the drive-through entrance and the primary north-south drive aisle that serves the site, should overflow space be required. Policy 6-10 (Traffic Criterion B) requires overflow stacking capacity to equal 50 percent of the required drive-through stacking space, with overflow restricted to the parking lot. The project would meet this requirement, as well as Traffic Criteria C and D, which are Policy requirements related to drive-through lane ingress and egress. Council Policy 6-10 is included in Appendix E.

#### **Convenience Market, Gas Pumps, and Car Wash Circulation**

Access to the convenience market, gas station, and self-service drive-through car wash would be provided via the east-west drive aisle, approximately 100 feet north of the project entrance. This drive aisle would be 31 ½ feet wide and provide access to the fueling stations, 13 parking spaces serving the convenience market and fueling station, and the car wash entrance along the eastern edge of the project site. An additional drive aisle serving the fueling stations and car wash would be accessed immediately upon entering the site. The car wash lane would exit onto the primary north-south drive aisle, thereby providing efficient egress from the car wash. Vehicle circulation within this eastern portion of the project site would be efficient with no dead-end drive aisles.

#### **Drive-Through Lane Policy for Self-Service Car Wash**

As previously noted, Council Policy 6-10 states that primary ingress and egress to drive-through type parking lots should be from at least a four-lane major street (Traffic Criterion A). Since access to and from the site would be provided via Horning Street, a two-lane minor street, the project would not meet this requirement. The Policy requires a self-service car wash to provide stacking space for at least 5 vehicles within the drive-through lane, assuming 20 feet per vehicle (Traffic Criterion E). The site plan shows an approximately 160-foot car wash drive-through lane with a counterclockwise circulation pattern. This would provide enough stacking space for 8 vehicles, which would exceed the City requirement for self-service car wash drive-through lane capacity. Accordingly, the project would meet Traffic Criterion B (50% overflow stacking capacity) within the drive-through lane itself. The project would also meet the requirements described in Traffic Criteria C and D, which are Policy requirements related to drive-through lane ingress and egress.

#### **Mini-Storage Circulation**

Primary access to the mini-storage warehouse facility on the northern portion of the project site would be provided via the main north-south drive aisle, with secondary access provided near the western boundary of the site via the east-west drive aisle. The primary entrance to the mini-storage facility is shown to be 26 feet wide, and the secondary (west) entrance is also shown to be 26 feet wide. The facility entrance locations and the layout of mini-storage warehouse buildings A, B, C and D would provide for adequate on-site circulation for all types of passenger vehicles and trucks. The drive aisle widths within the mini-storage facility would vary from 30 ½ feet wide to 41 feet wide.



The two mini-storage facility entrances would be gated. The locations of the security gates in relation to the fast food restaurant drive-through lane and car wash drive-through lane would not be ideal. Vehicles arriving at the main gate (via the primary north-south drive aisle) and waiting to enter the ministorage facility would block the carwash exit lane momentarily. Similarly, vehicles arriving at the gated west entrance of the facility would block the fast food restaurant drive-through lane entrance momentarily. However, this situation would occur infrequently during the AM and PM peak hours and would be short-lived. Thus, it would not be expected to result in significant operational issues on site.

#### **Truck Access and Circulation**

The site plan was reviewed for truck access using truck turning-movement templates produced by ITE. Access and on-site circulation was checked for truck types WB-40 and SU-30, which represent semi-trailer trucks (e.g., fuel tanker trucks), emergency vehicles, garbage trucks, and a wide range of moving and delivery vehicles.

#### **Loading Zones**

According to the City of San Jose Zoning Code (Chapter 20.90.410), the project is not required to provide any off-street loading spaces. Below is the City's requirement for off-street loading spaces.

 Any building having a floor area of 10,000 s.f. or more shall provide at a minimum one (1) offstreet loading space, plus one additional loading space for each 20,000 s.f. of floor area.

According to the site plan, the project is not proposing any designated freight loading spaces.

#### **Garbage Trucks**

The site plan shows that two trash enclosures would be provided on site with one located along the western property line immediately south of mini-storage building "C", and one located at the southeastern corner of the convenience store at the car wash drive-through entrance. 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 available to empty the dumpsters over the truck.

Access to the trash enclosures was evaluated using the SU-30 truck turning template, which typically is used for standard (30-foot) garbage trucks. The evaluation determined that garbage trucks would have adequate access to both trash enclosures. However, while the eastern portion of the site provides a continuous loop for efficient circulation, the east-west drive aisle dead-ends at the western boundary of the site adjacent to the trash enclosure and fast food restaurant drive-through entrance. Thus, garbage trucks would likely have to back out along the east-west drive aisle, a distance of approximately 180 feet, to access the primary north-south drive aisle and exit the site. A second project driveway at this location with access to N. 13<sup>th</sup> Street would greatly improve site circulation for garbage trucks. If feasible, the project should consider adding a second driveway on the western boundary of the site.

#### **Large Trucks**

The WB-40 turning template represents the largest vehicles that would enter the site, including large emergency vehicles, semi-trailers serving the gas station, and an occasional large moving truck accessing the mini-storage facility. The turning templates show that WB-40 trucks could adequately circulate throughout the site.

#### **Fuel Tanker Trucks**

The site plan shows two underground gas storage tanks located just east of the primary driveway. Tanker trucks could adequately access these underground tanks to deliver fuel. On-site circulation for tanker trucks would occur in a clockwise pattern.



#### **Moving Trucks**

Although most vehicles accessing the mini-storage warehouse facility would be smaller than the WB-40 truck type, it can be expected that an occasional large semi-trailer truck would need to access the warehouse facility. The evaluation showed that semi-trailer trucks could adequately circulate through the mini-storage warehouse facility to access all buildings and storage units.

#### **Emergency Vehicle Access**

The City of San Jose Fire Department requires that all portions of the buildings are 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 buildings. All the proposed buildings on the site would be within 150 feet of a fire access road, and the project would meet the 6-foot requirement for building clearance on all sides.

#### **Pedestrian, Bicycle and Transit 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.

#### **Pedestrian Access and Circulation**

The project is proposing to retain the existing 5-foot sidewalk along the project frontage on Oakland Road, and construct a new 10-foot sidewalk along the project frontage on Horning Street. The sidewalk improvements along Horning Street assume an ultimate curb-to-curb width of 40 feet. There is currently no sidewalk along the project frontage on N. 13<sup>th</sup> Street, nor is the project proposing to provide pedestrian access from N. 13<sup>th</sup> Street. Note that the project does propose to provide dedication along the project frontage on Oakland Road, as requested by City of San Jose staff.

City staff have indicated that the project would be required to construct a new 10-foot sidewalk along the project frontage on Oakland Road, as well as install a City standard handicap ramp at the northwest corner of Oakland Road/Horning Street. The project applicant should coordinate with City staff regarding these requested pedestrian access improvements.

Pedestrian access to the site would be provided via a walkway from the Oakland Road sidewalk approximately 150 feet north of the Oakland Road/Horning Street intersection. This walkway would provide access to the site and to the on-site marked pedestrian path that would provide a connection between the convenience store and the fast food restaurant. A pedestrian connection from Horning Street also would be provided along the western edge of the project driveway. The project is proposing to install ADA compliant ramps at all necessary locations along the on-site pedestrian pathway. The site plan shows good pedestrian circulation throughout the retail portion (southern half) of the site.

Based on the types of land uses that are being proposed, the project is not expected to generate a significant number of pedestrian trips. However, due to the project's proximity to residential development across Oakland Road, it would be expected that some of the project trips would be pedestrian generated trips. The closest pedestrian crosswalk on Oakland Road is at the Oakland Road/Hedding Street intersection, approximately 1,000 feet south of the project site. A more convenient pedestrian crosswalk located closer to the project site would help to encourage pedestrian activity to and from the proposed retail uses, and at the same time discourage jaywalking along this segment of Oakland Road. The addition of a controlled mid-block crossing on Oakland Road at or near Boardwalk



Way, if feasible, would facilitate these goals. Should the City of San Jose be interested in pursuing a new mid-block crossing on Oakland Road, it would be appropriate for the project to make a fair share contribution toward this pedestrian improvement.

#### **Bicycle Access and Circulation**

Tenth Street has bike lanes, Hedding Street has bike lanes, Oakland Road has bike lanes north of Commercial Street and south of Horning Street, and N. 13<sup>th</sup> Street has bike lanes south of Hedding Street. There are no bike lanes on Horning Street or on Oakland Road between Commercial Street and Horning Street, and neither the City nor the project plan to add bike lanes along these roadway segments. Thus, bicycle access to the project site would remain somewhat limited. Although the project is not expected to generate many bicycle trips due to the types of uses that are being proposed, having bike lanes on Oakland Road between Commercial Street and Horning Street would benefit the project and the entire area. Hexagon recommends that bike lanes on Oakland Road between Commercial Street and Horning Street be included in the design of the future US 101/Oakland Road interchange reconstruction project.

#### **Transit Services**

The four VTA bus lines that operate within the study area include routes 12, 62, 65, and 66. Local routes 12 and 62 stop at Hedding Street/11<sup>th</sup> Street, local route 66 stops along Oakland Road just south of Horning Street, and community route 65 stops at 13<sup>th</sup> Street/Hedding Street. Three of these bus routes provide service to the Civic Center LRT station, located approximately one mile from the project site. LRT trains stop at this station on 15-minute headways during weekday commute hours, and on 30-minute headways the remainder of the weekday and weekend. The Civic Center LRT station serves the northbound and southbound LRT 901 and LRT 902 trains.

Based on the types of land uses that are being proposed, the project is not expected to generate many transit related trips. It is estimated that the small increase in transit demand generated by the proposed project could be accommodated by the current available ridership capacities of the transit services in the study area, and no project-sponsored transit related improvements would be necessary.

#### **Parking**

Parking provided on the site was evaluated based on the City of San Jose parking standards (*San Jose Municipal Code Chapter 20.90, Table 20-190*). The requirements for each land use include:

- Convenience Store: One parking space per 200 s.f. of sales area.
- **Gas Station**: One parking space per employee, plus one space per air/water pump, plus one space per information parking.
- Fast Food Restaurant: One space per every 2.5 seats.
- **Mini-Storage Warehouse**: One space per each 5,000 s.f. of floor area, plus one per on-site manager.

The project proposes a 3,814 s.f. convenience market with a gas station (12 fueling positions) and an associated car wash, a 2,494 s.f. fast food restaurant with a drive-through (with 40 dining seats), and three mini-storage buildings totaling 93,443 s.f. Based on the requirements listed above, the project should provide 58 total parking spaces, including 19 spaces for the convenience market, 3 spaces for the gas station, 16 spaces for the fast food restaurant, and 20 spaces for the mini-storage warehouse facility (including 1 space for the mini-storage facility manager). The gas station parking calculation assumes 1 space provided for the air-water station, 1 space provided for the vacuum station, and 1 space provided for the information stop. It also assumes the convenience store employees would also serve as the gas station attendants.



The site plan shows 44 parking spaces. Thus, the project would fall short of the City's parking requirement by 14 parking spaces. Based on the parking layout, the project seems to be providing adequate parking to serve the convenience market, gas station, and fast-food restaurant uses. The additional 14 required spaces should be provided at the mini-storage facility. There appears to be adequate room within the mini-storage facility to provide the additional parking spaces.

#### **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 schedule, closures/detours, staging, parking, and truck routes.

Pedestrian volumes along Horning Street and Oakland Road are relatively low. Therefore, any necessary sidewalk closures/pedestrian detours would have very little effect on the overall pedestrian circulation in the area. In addition, there are no bike lanes along Horning Street or along the project frontage on Oakland Road. Thus, no bicycle facilities would be affected.

#### **Driveway Access Alternative**

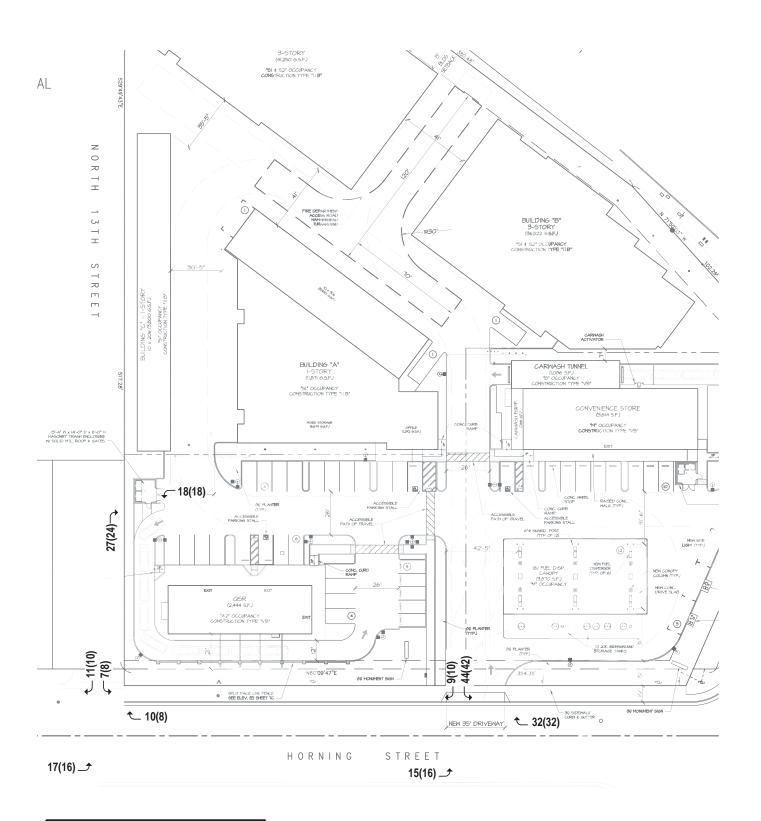
The City of San Jose has requested that site access be evaluated under the assumption that the project provide a second driveway along the western property line (vacated N. 13<sup>th</sup> Street). This access alternative would provide vehicles entering and exiting the site the ability to avoid potential congestion at the main project driveway. The second driveway would likely be used primarily by fast food restaurant drive-through users entering the site, vehicles exiting the project site and travelling west toward 10<sup>th</sup> Street, and inbound and outbound mini-storage facility users. Should a second driveway be constructed, it should be located along the western edge of the property where the east-west drive aisle (fast-food parking area) intersects N. 13<sup>th</sup> Street. Specifically, the driveway should be located near the entrance to the fast-food drive-through lane where the trash enclosure is currently proposed. The project owns half of the vacated N. 13<sup>th</sup> Street. Therefore, an easement would not be required to provide a driveway on N. 13<sup>th</sup> Street.

Note that a second access along Horning Street would not change the overall travel patterns of project-generated trips or traffic volumes at any of the study intersections. Thus, a separate intersection level of service analysis to address the driveway access alternative was not necessary. It would, however, reduce the number of trips at the primary project driveway. It is estimated that a second driveway would reduce the project generated trips at the main Horning Street driveway by approximately 30 percent. Spreading the trips out would reduce the potential for on-site vehicle queuing at the main project driveway. Figure 14 shows the gross project trips that are estimated to occur at the site with the addition of a second driveway.

#### **Large Truck Access**

Analysis using the truck turning templates show that large trucks, including truck type WB-40, could adequately access N. 13<sup>th</sup> Street if traveling from either direction along Horning Street. Furthermore, large trucks would be able to enter and exit the site via a secondary driveway on N. 13<sup>th</sup> Street.





**LEGEND** 

XX(XX) = AM(PM) Peak-Hour Trips

Figure 14
Gross Project Trips at the Site with a Second Driveway





# 7. Conclusions

This study was conducted for the purpose of identifying potential traffic impacts related to the proposed development. The potential impacts of the project were evaluated in accordance with the standards set forth by the City of San Jose. Since the project site is located outside the downtown core area, as defined by the City's General Plan, the project is subject to the City's Transportation Level of Service Policy (Council Policy 5-3). An analysis in accordance with the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program (CMP) requirements was not prepared because the project would generate fewer than 100 net new peak hour vehicle trips. The traffic study includes an analysis of AM and PM peak hour traffic conditions for five signalized intersections and two unsignalized intersections in the vicinity of the project site. Project impacts on other transportation facilities, such as bicycle facilities and transit services, were determined on the basis of engineering judgment.

#### **Project Intersection Level of Service Results**

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

#### **US 101/Oakland/Mabury Transportation Development Policy (TDP)**

As described in Chapter 1 of this traffic report, any project that would add traffic to the US 101/Oakland Road interchange during the PM peak hour is required to participate in the US 101/Oakland/Mabury TDP program. The TDP includes a fee schedule requiring all new developments to pay a "fair share" contribution for using a portion of the interchange capacity that would be created with buildout of the US 101/Oakland Road interchange and construction of a new US 101/Mabury Road interchange. Unlike most Area Development Policies that base their fees on the number of residential units or square footages built, the fee for the US 101/Oakland/Mabury TDP is based on the number of PM peak hour vehicular trips that would be added to the US 101/Oakland Road interchange (including the Oakland Road/Commercial Street intersection).

Since the proposed project would send some PM peak hour vehicle trips through this interchange, the project would be required to pay a fair share contribution toward the planned interchange improvements. Currently, the TDP traffic impact fee is \$36,847 per each new PM peak hour vehicle trip that would be added to the US 101/Oakland Road interchange. The fee is subject to an annual escalation on January 1st per the Engineering News-Record Construction Cost Index for San Francisco. The project would add 26 new trips to the interchange during the PM peak hour.

Estimated TDP Impact Fee: \$36,847 x 26 net PM peak hour trips = \$958,022



#### **Other Transportation Issues**

The site plan shows adequate site access and on-site circulation, and no significant 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 recommended.

Hexagon has provided the following recommendations resulting from the site access and circulation analysis.

#### Recommendations

- Reduce the proposed driveway width from 35 feet to 32 feet, which is the City standard for commercial development.
- Ensure that street parking is not permitted on the north side of Horning Street between the
  project driveway and Oakland Road, as this would create sight distance issues east of the
  project driveway.
- If feasible, the project should consider adding a second driveway on the western boundary of the site at N. 13<sup>th</sup> Street to improve site access.
- City staff have indicated that the project would be required to construct a new 10-foot sidewalk
  along the project frontage on Oakland Road, as well as install a City standard handicap ramp at
  the northwest corner of Oakland Road/Horning Street. The project applicant should coordinate
  with City staff regarding these requested pedestrian access improvements.
- The addition of a controlled mid-block crossing on Oakland Road at or near Boardwalk Way, if feasible, would help to encourage pedestrian activity to and from the proposed retail uses, and at the same time discourage jaywalking along this segment of Oakland Road. Should the City of San Jose be interested in pursuing a new mid-block crossing on Oakland Road, it would be appropriate for the project to make a fair share contribution toward this pedestrian improvement.
- Hexagon recommends that bike lanes on Oakland Road between Commercial Street and Horning Street be included in the design of the future US 101/Oakland Road interchange reconstruction project.
- Provide 14 additional parking spaces within the mini-storage warehouse facility in order to meet the City parking requirement. There appears to be adequate room within the mini-storage facility to provide the additional parking spaces.



# **645 Horning Street TIA Technical Appendices**

# **Appendix A**

**Traffic Counts** 



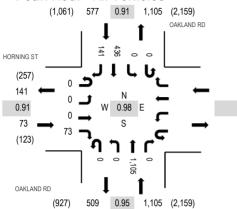
Location: 1 OAKLAND RD & HORNING ST AM

Date and Start Time: Wednesday, October 12, 2016

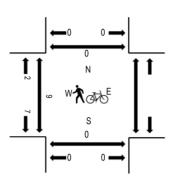
Peak Hour: 07:30 AM - 08:30 AM

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**

	ŀ	HORNI	NG ST				(	DAKLAN	ND RD		(	DAKLA	ND RD							
Interval		Eastb	ound		Westb	ound		Northb	ound			South	oound			Rolling	Ped	lestrair	n Crossir	ngs
Start Time	U-Turn	Left	Thru	Right	U-Turn Left	Thru Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
7:00 AM	0	0	0	13			0	0	235	0	0	0	84	23	355	1,655	0		0	0
7:15 AM	0	0	0	16			0	0	283	0	0	0	81	36	416	1,743	2		0	0
7:30 AM	0	0	0	19			0	0	279	0	0	0	102	38	438	1,755	3		0	0
7:45 AM	0	0	0	18			0	0	296	0	0	0	97	35	446	1,723	1		0	0
8:00 AM	0	0	0	20			0	0	264	0	0	0	120	39	443	1,688	4		0	0
8:15 AM	0	0	0	16			0	0	266	0	0	0	117	29	428		0		0	0
8:30 AM	0	0	0	10			0	0	267	0	0	0	107	22	406		1		0	0
8:45 AM	0	0	0	11			0	0	269	0	0	0	96	35	411		2		0	0

		East	bound			West	bound			North	oound			South	bound		
Vehicle Type	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	1					0	0	15	0	0	0	10	3	29
Lights	0	0	0	63					0	0	1,053	0	0	0	400	136	1,652
Mediums	0	0	0	9					0	0	37	0	0	0	26	2	74
Total	0	0	0	73					0	0	1,105	0	0	0	436	141	1,755



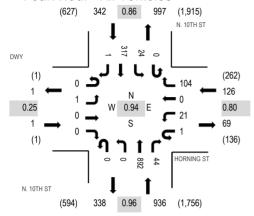
Location: 2 N. 10TH ST & HORNING ST AM

Date and Start Time: Wednesday, October 12, 2016

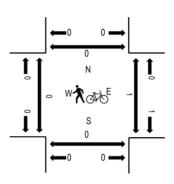
Peak Hour: 07:45 AM - 08:45 AM

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**

			DV	٧Y		Н	ORNIN	IG ST			N. 10T	H ST			N. 10T	H ST							
	Interval		Eastb	ound			Westb	ound			Northb	ound			South	oound			Rolling	Ped	lestrair	n Crossii	ngs
_	Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru I	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
	7:00 AM	0	0	0	0	0	4	0	23	0	0	180	3	0	7	60	0	277	1,277	0	0	0	0
	7:15 AM	0	0	0	0	0	2	0	37	0	0	185	9	0	14	73	0	320	1,361	3	2	0	0
	7:30 AM	0	0	0	0	0	2	0	44	0	0	195	8	0	10	49	0	308	1,375	1	3	0	0
	7:45 AM	0	0	0	0	0	4	0	26	0	0	232	11	0	10	89	0	372	1,405	0	1	0	0
	8:00 AM	0	0	0	0	1	7	0	25	0	0	231	14	0	6	76	1	361	1,369	0	0	0	0
	8:15 AM	0	1	0	0	0	3	0	26	0	0	210	10	0	7	77	0	334		0	0	0	0
	8:30 AM	0	0	0	0	0	7	0	27	0	0	219	9	0	1	75	0	338		0	0	0	0
	8:45 AM	0	0	0	0	0	3	0	21	0	0	233	7	0	9	63	0	336		1	0	0	0

		East	bound			West	ound			Northb	ound			South	bound		
Vehicle Type	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	5	0	0	10	0	0	0	4	0	19
Lights	0	1	0	0	1	19	0	93	0	0	857	43	0	22	295	1	1,332
Mediums	0	0	0	0	0	2	0	6	0	0	25	1	0	2	18	0	54
Total	0	1	0	0	1	21	0	104	0	0	892	44	0	24	317	1	1,405



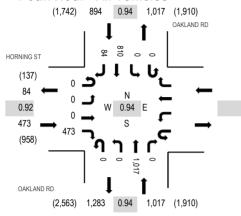
Location: 1 OAKLAND RD & HORNING ST PM

Date and Start Time: Wednesday, October 12, 2016

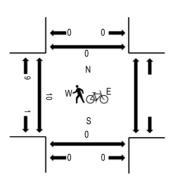
Peak Hour: 04:00 PM - 05:00 PM

**Peak 15-Minutes:** 04:30 PM - 04:45 PM

#### Peak Hour - All Vehicles



#### Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

#### **Traffic Counts**

	ŀ	HORNI	NG ST				(	DAKLAN	ND RD		(	DAKLA	ND RD							
Interval		Eastb	ound		Westb	ound		Northb	ound			South	bound			Rolling	Ped	lestrair	n Crossii	ngs
Start Time	U-Turn	Left	Thru	Right	U-Turn Left	Thru Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
4:00 PM	0	0	0	135			0	0	260	0	0	0	202	18	615	2,384	0		0	0
4:15 PM	0	0	0	96			0	0	230	0	0	0	198	22	546	2,312	3		0	0
4:30 PM	0	0	0	126			0	0	271	0	0	0	218	21	636	2,321	1		0	0
4:45 PM	0	0	0	116			0	0	256	0	0	0	192	23	587	2,236	3		0	0
5:00 PM	0	0	0	126			0	0	227	0	0	0	174	16	543	2,226	2		0	0
5:15 PM	0	0	0	117			0	0	230	0	0	0	196	12	555		2		0	0
5:30 PM	0	0	0	133			0	0	212	0	0	0	193	13	551		3		0	0
5:45 PM	0	0	0	109			0	0	224	0	0	0	232	12	577		0		0	0

		East	bound			West	bound			North	bound			South	bound		
Vehicle Type	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0					0	0	3	0	0	0	5	2	10
Lights	0	0	0	468					0	0	1,000	0	0	0	791	73	2,332
Mediums	0	0	0	5					0	0	14	0	0	0	14	9	42
Total	0	0	0	473					0	0	1 017	0	0	0	810	84	2 384



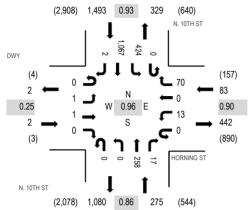
Location: 2 N. 10TH ST & HORNING ST PM

Date and Start Time: Wednesday, October 12, 2016

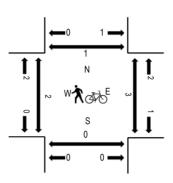
Peak Hour: 04:30 PM - 05:30 PM

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

#### Peak Hour - All Vehicles



#### Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

#### **Traffic Counts**

		DV	/Y		Н	IORNIN	IG ST			N. 10T	H ST			N. 10T	H ST							
Interval		Eastb	ound			Westb	ound			Northb	ound			South	oound			Rolling	Ped	lestrair	n Crossi	ngs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru F	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
4:00 PM	0	0	1	0	0	6	0	20	0	0	69	5	0	116	229	1	447	1,792	2	2	0	0
4:15 PM	0	0	0	0	0	4	0	18	0	0	74	4	0	96	239	0	435	1,807	0	0	0	0
4:30 PM	0	0	0	0	0	5	0	16	0	0	83	5	0	100	261	0	470	1,853	1	0	0	0
4:45 PM	0	0	0	0	0	3	0	22	0	0	60	3	0	96	254	2	440	1,827	0	2	0	1
5:00 PM	0	1	1	0	0	4	0	17	0	0	64	2	0	101	272	0	462	1,820	1	0	0	0
5:15 PM	0	0	0	0	0	1	0	15	0	0	51	7	0	127	280	0	481		0	1	0	0
5:30 PM	0	0	0	0	0	8	0	11	0	0	64	2	0	115	243	1	444		0	1	0	0
5:45 PM	0	0	0	0	0	1	0	6	0	0	49	2	0	107	268	0	433		0	1	0	0

		East	bound			West	ound			Northb	ound			Sout	hbound		
Vehicle Type	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3	0	4
Lights	0	1	1	0	0	12	0	67	0	0	247	17	0	417	1,045	2	1,809
Mediums	0	0	0	0	0	1	0	2	0	0	11	0	0	7	19	0	40
Total	0	1	1	0	0	13	0	70	0	0	258	17	0	424	1,067	2	1,853

# **Appendix B**

**Approved Trips Inventory** 

Intersection of: COMMERCIAL/OAKLAND										Р	age No	o: 1
Traffix Node Number: 3421	M09	M08	M07	M03	M02	M01	M12	M11	M10	M06	M05	M0 4
Permit No. / Description / Location	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR		WBT	
C01-04-050 MARKOVITZ & FOX OAKLAND RD (W/S), S/O BROKAW RD	0	18	0	0	4	0	0	0	0	0	0	0
CP99-057 NELLA OIL COMMERCIAL ST & OLD OAKLAND RD (SE/C)	0	20	0	5	0	0	2	0	0	24	2	0
DOWNTOWN DOWNTOWN STRATEGY PLAN 2000 DOWNTOWN CORE	46	179	42	6	71	18	4	17	19	108	68	22
HO8-044 ASKARI SELF-STORAGE EAST SIDE OF OAKLAND ROAD, 350 FEET SOUTHERLY OF		1	0	0	1	0	0	0	0	0	0	0
H14-020 SUPERMICRO 750 RIDDER PARK DRIVE		12	0	0	4	0	0	0	0	0	0	3
NSJ NORTH SAN JOSE	21	77	13	0	0	0	0	0	0	0	0	0
PDC03-108 OFF BERRYESSA FLEA MKT (OFFICE) BOTH SIDES OF BERRYESSA RD WEST OF UNION PACIFIC	0	0	27	2	2	0	0	2	1	4	0	0
PDC03-108 RES BERRYESSA FLEA MKT (RESIDENTIAL) BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC RR		20	69	9	9	0	0	9	6	150	26	15
PDC03-108 RET BERRYESSA FLEA MKT (RETAIL) BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC RR		0	0	0	0	0	0	0	0	0	0	O
PDC07-015 RES KING AND DOBBIN NE/C OF KING RD AND DOBBIN DR	0	25	0	13	13	0	0	0	0	28	0	25
PDC07-015 RET KING AND DOBBIN NE/C OF KING RD AND DOBBIN DR	0	0	0	0	0	0	0	0	0	0	0	C

Intersection of: COMMERCIAL/OAKLAND											Р	age No	o: 2
Traffix Node Number: 3421  Permit No. / Description / Location			M08 NBT			M02 SBT			M11 EBT	M10 EBR	M06 WBL	M05 WBT	M0 WB
PDC08-036LW CANNARY PARK NW CORNER E. TENTH ST.		0	0	0	0	0	0	0	0	0	0	0	C
PDC08-036RES CANNERY PARK NW CORNER E. TENTH		0	6	0	0	3	0	0	0	0	0	0	O
PDC08-036REST CANNERY PARK NW CORNER OF E. TENTH		0	0	0	0	0	0	0	0	0	0	0	C
PDC08-036SEN CANNERY PARK NW CORNER E. 10TH ST.		0	1	0	0	0	0	0	0	0	0	0	(
PRE05-430 COMM PEPPER LANE S/W CORNER BERRYESSA RD & JACKSON AVE		0	0	0	0	0	0	0	0	0	0	0	(
PRE05-430 RES PEPPER LANE SW/C OF BERRYESSA AND JACKSON		0	0	0	0	0	0	0	0	0	0	0	C
	TOTAL:	91	359	151	35	107	18	6	28	26	314	96	65
		E.	ORTH AST OUTH EST	LEFT 35 314 91 6	THRU 107 96 359 28	18							

Intersection of: COMMERCIAL/OAKLAND										Р	age No	o: 3
Traffix Node Number: 3421	M09	M08	M07	M03	M02	M01	M12	M11	M10	M06	M05	MO
Permit No. / Description / Location	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WB
C01-04-050 MARKOVITZ & FOX OAKLAND RD (W/S), S/O BROKAW RD	0	2	0	0	18	0	0	0	0	0	0	(
CP99-057 NELLA OIL COMMERCIAL ST & OLD OAKLAND RD (SE/C)	0	24	0	5	0	0	2	0	0	27	2	(
DOWNTOWN DOWNTOWN STRATEGY PLAN 2000 DOWNTOWN CORE	14	43	35	1	80	11	3	25	34	38	11	
HO8-044 ASKARI SELF-STORAGE EAST SIDE OF OAKLAND ROAD, 350 FEET SOUTHERLY OF		2	0	0	2	1	1	0	0	0	0	(
H14-020 SUPERMICRO 750 RIDDER PARK DRIVE		6	0	2	8	0	0	0	0	0	0	
NSJ NORTH SAN JOSE	0	5	4	11	92	1	0	8	13	0	0	(
PDC03-108 OFF BERRYESSA FLEA MKT (OFFICE) BOTH SIDES OF BERRYESSA RD WEST OF UNION PACIFIC	3	2	4	0	0	0	0	0	0	26	3	
PDC03-108 RES BERRYESSA FLEA MKT (RESIDENTIAL) BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC RR		10	125	16	17	0	0	15	11	78	13	
PDC03-108 RET BERRYESSA FLEA MKT (RETAIL) BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC RR		0	0	0	0	0	0	0	0	0	0	(
PDC07-015 RES KING AND DOBBIN NE/C OF KING RD AND DOBBIN DR	0	13	0	24	24	0	0	0	0	15	0	1
PDC07-015 RET KING AND DOBBIN NE/C OF KING RD AND DOBBIN DR	0	0	0	0	0	0	0	0	0	0	0	

Intersection of: COMMERCIAL/OAKLAND										Р	age No	o: 4
Traffix Node Number: 3421  Permit No. / Description / Location	M09 NBL	M08 NBT	M07 NBR		M02 SBT	M01 SBR			M10 EBR		M05 WBT	
PDC08-036LW CANNARY PARK NW CORNER E. TENTH ST.	0	0	0	0	0	0	0	0	0	0	0	0
PDC08-036RES CANNERY PARK NW CORNER E. TENTH	0	3	0	0	6	0	0	0	0	0	0	0
PDC08-036REST CANNERY PARK NW CORNER OF E. TENTH	0	0	0	0	0	0	0	0	0	0	0	0
PDC08-036SEN CANNERY PARK NW CORNER E. 10TH ST.	0	0	0	0	1	0	0	0	0	0	0	0
PRE05-430 COMM PEPPER LANE S/W CORNER BERRYESSA RD & JACKSON AVE	0	0	0	0	0	0	0	0	0	0	0	0
PRE05-430 RES PEPPER LANE SW/C OF BERRYESSA AND JACKSON	0	0	0	0	0	0	0	0	0	0	0	0
TOTA	AL: 29	110	168	59	248	13	6	48	58	184	29	29
			LEFT	THRU	RIGHT							
	E	ORTH AST OUTH	59 184 29		13 29 168							
	_	EST	6		58							

Intersection of: 101/OAKLAND (N)										P	age No	): 1
Traffix Node Number: 3021  Permit No. / Description / Location		M08 NBT	M07 NBR		M02 SBT	M01 SBR	M12 EBL				M05 WBT	
CO1-04-050 MARKOVITZ & FOX OAKLAND RD (W/S), S/O BROKAW RD	0	9	0	0	2	1	0	0	0	0	0	
CP99-057 NELLA OIL COMMERCIAL ST & OLD OAKLAND RD (SE/C)	0	13	0	0	17	5	0	0	0	0	0	
DOWNTOWN DOWNTOWN STRATEGY PLAN 2000 DOWNTOWN CORE		178	0	0	77	124	0	0	0	14	0	74
H14-020 SUPERMICRO 750 RIDDER PARK DRIVE		6	0	0	4	0	0	0	0	0	0	
NSJ NORTH SAN JOSE	28	66	0	0	1	3	0	0	0	2	0	13
PDC03-056 MIXED-USE DEVELOPMENT N 7TH ST, E/O TAYLOR ST SPRR		0	0	0	1	0	0	0	0	0	0	(
PDC03-108 OFF BERRYESSA FLEA MKT (OFFICE) BOTH SIDES OF BERRYESSA RD WEST OF UNION PACIFIC		21	0	0	5	2	0	0	0	12	0	21
PDC03-108 RES BERRYESSA FLEA MKT (RESIDENTIAL) BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC RR		90	0	0	65	101	0	0	0	24	0	42
PDC03-108 RET BERRYESSA FLEA MKT (RETAIL) BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC RR		0	0	0	0	0	0	0	0	0	0	(
PDC07-015 RES KING AND DOBBIN NE/C OF KING RD AND DOBBIN DR		25	0	0	13	28	0	0	0	0	0	(
PDC07-015 RET KING AND DOBBIN NE/C OF KING RD AND DOBBIN DR		0	0	0	0	0	0	0	0	0	0	(

Intersection of: 101/OAKLAND (N)										Р	age No	: 2
Traffix Node Number: 3021	мпа	M08	MO7	MU3	M02	M01	M1.2	M11	M10	MO6	M05	MΩ
Permit No. / Description / Location	NBL		NBR		SBT	SBR		EBT			WBT	
PDC08-010 SEN JAPANTOWN CORP YARD SW CORNER OF NORTH SEVENTH ST AND TAYLOR ST	0	1	0	0	1	0	0	0	0	0	0	0
PDC08-036LW CANNARY PARK NW CORNER E. TENTH ST.	-	0	0	0	0	0	0	0	0	0	0	0
PDC08-036RES CANNERY PARK NW CORNER E. TENTH		6	0	0	3	0	0	0	0	4	0	0
PDC08-036REST CANNERY PARK NW CORNER OF E. TENTH	,	0	0	0	0	0	0	0	0	0	0	0
PDC08-036SEN CANNERY PARK NW CORNER E. 10TH ST.	1	1	0	0	0	0	0	0	0	1	0	O
PDC15-001 (RES) CANNERY PARK 725 NORTH 10TH STREET	12	6	0	0	2	0	0	0	0	1	0	C
PDC15-001 (RET) CANNERY PARK 725 NORTH 10TH STREET	0	0	0	0	0	0	0	0	0	0	0	O
PP14-006 C A S JAPANTOWN CORP YARD 696 N 6TH ST	0	0	0	0	0	0	0	0	0	0	0	O
PP14-006 RES JAPANTOWN CORP YARD 696 N 6TH ST	0	10	0	0	5	0	0	0	0	2	0	O
PP14-006 RET JAPANTOWN CORP YARD 696 N 6TH ST	0	0	0	0	0	0	0	0	0	0	0	O
PRE05-430 COMM PEPPER LANE S/W CORNER BERRYESSA RD & JACKSON AVE		0	0	0	0	0	0	0	0	0	0	O

Intersection of: 101/OAKLAND (N)											P	age No	o: 3
Traffix Node Number: 3021		M09	M08	M07	M03	M02	M01	M12	M11	M10	M06	M05	M0 4
Permit No. / Description / Location		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBI
PRE05-430 RES PEPPER LANE SW/C OF BERRYESSA AND JACKSON		0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL:	332	432	0	0	196	264	0	0	0	60	0	169
				LEFT	THRU	RIGHT							
		NO	DRTH	0	196	264							
		E2	AST	60	0	169							
		SC	NTUC	332	432	0							
		TATE	EST	0	0	0							

Intersection of: 101/OAKLAND (N)										Р	age No	o: 4
Traffix Node Number: 3021	M09	M08	M07	M03	M02	M01	M12	M11	M10	M06	M05	M0 4
Permit No. / Description / Location	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBF
C01-04-050 MARKOVITZ & FOX OAKLAND RD (W/S), S/O BROKAW RD	0	1	0	0	11	7	0	0	0	0	0	1
CP99-057 NELLA OIL COMMERCIAL ST & OLD OAKLAND RD (SE/C)	0	17	0	0	19	6	0	0	0	0	0	5
DOWNTOWN DOWNTOWN STRATEGY PLAN 2000 DOWNTOWN CORE		65	0	0	93	42	0	0	0	11	0	27
H14-020 SUPERMICRO 750 RIDDER PARK DRIVE		3	0	0	8	0	0	0	0	0	0	3
NSJ NORTH SAN JOSE	4	12	0	0	88	40	0	0	0	3	0	7
PDC03-056 MIXED-USE DEVELOPMENT N 7TH ST, E/O TAYLOR ST SPRR		1	0	0	0	0	0	0	0	5	0	0
PDC03-108 OFF BERRYESSA FLEA MKT (OFFICE) BOTH SIDES OF BERRYESSA RD WEST OF UNION PACIFIC	14	6	0	0	12	14	0	0	0	2	0	3
PDC03-108 RES BERRYESSA FLEA MKT (RESIDENTIAL) BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC RR			0	0	54	52	0	0	0	43	0	76
PDC03-108 RET BERRYESSA FLEA MKT (RETAIL) BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC RR	0		0	0	0	0	0	0	0	0	0	0
PDC07-015 RES KING AND DOBBIN NE/C OF KING RD AND DOBBIN DR	53	13	0	0	24	15	0	0	0	0	0	0
PDC07-015 RET KING AND DOBBIN NE/C OF KING RD AND DOBBIN DR		0	0	0	0	0	0	0	0	0	0	0

Intersection of: 101/OAKLAND (N)										P	age No	: 5
Traffix Node Number: 3021  Permit No. / Description / Location		M08 NBT	M07 NBR		M02 SBT	M01 SBR		M11 EBT	M10 EBR		M05 WBT	
PDC08-010 SEN JAPANTOWN CORP YARD SW CORNER OF NORTH SEVENTH ST AND TAYLOR ST	0	1	0	0	1	0	0	0	0	0	0	0
PDC08-036LW CANNARY PARK NW CORNER E. TENTH ST.		0	0	0	0	0	0	0	0	0	0	0
PDC08-036RES CANNERY PARK NW CORNER E. TENTH		3	0	0	6	0	0	0	0	8	0	0
PDC08-036REST CANNERY PARK NW CORNER OF E. TENTH	0	0	0	0	0	0	0	0	0	0	0	0
PDC08-036SEN CANNERY PARK NW CORNER E. 10TH ST.	1	0	0	0	1	0	0	0	0	1	0	0
PDC15-001 (RES) CANNERY PARK 725 NORTH 10TH STREET	6	3	0	0	6	0	0	0	0	4	0	0
PDC15-001 (RET) CANNERY PARK 725 NORTH 10TH STREET	0	0	0	0	0	0	0	0	0	0	0	0
PP14-006 C A S JAPANTOWN CORP YARD 696 N 6TH ST	0	0	0	0	0	0	0	0	0	0	0	0
PP14-006 RES JAPANTOWN CORP YARD 696 N 6TH ST	0	5	0	0	10	0	0	0	0	3	0	0
PP14-006 RET JAPANTOWN CORP YARD 696 N 6TH ST	0	0	0	0	0	0	0	0	0	0	0	0
PRE05-430 COMM PEPPER LANE S/W CORNER BERRYESSA RD & JACKSON AVE		0	0	0	0	0	0	0	0	0	0	0

PM APPROVED TRIPS												10/18/	2016
Intersection of: 101/OAKLAND (N) Traffix Node Number: 3021											P	age No	o: 6
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	MO WB
PRE05-430 RES PEPPER LANE SW/C OF BERRYESSA AND JACKSON		0	0	0	0	0	0	0	0	0	0	0	
	TOTAL:	160	265	0	0	333	176	0	0	0	80	0	12
				LEFT	THRU	RIGHT	1						
			ORTH AST	0	333 0	176 122							
			OUTH EST	160	265 0	0							

Intersection of: 101/OAKLAND (S)										Р	age No	): 1
Traffix Node Number: 3022 Permit No. / Description / Location		M08 NBT			M02 SBT			M11 EBT			M05 WBT	
C01-04-050 MARKOVITZ & FOX OAKLAND RD (W/S), S/O BROKAW RD	0	2	0	2	0	0	7	0	0	0	0	(
CP99-057 NELLA OIL COMMERCIAL ST & OLD OAKLAND RD (SE/C)	0	8	0	5	12	0	5	0	0	0	0	(
DOWNTOWN DOWNTOWN STRATEGY PLAN 2000 DOWNTOWN CORE		40	5	8	7	0	14	0	9	0	0	(
H14-020 SUPERMICRO 750 RIDDER PARK DRIVE		6	0	2	2	0	0	0	0	0	0	C
NSJ NORTH SAN JOSE	0	84	12	2	1	0	11	0	8	0	0	(
PDC03-056 MIXED-USE DEVELOPMENT N 7TH ST, E/O TAYLOR ST SPRR		6	6	0	6	0	6	0	4	0	0	(
PDC03-108 OFF BERRYESSA FLEA MKT (OFFICE) BOTH SIDES OF BERRYESSA RD WEST OF UNION PACIFIC	0	2	3	2	15	0	21	0	12	0	0	(
PDC03-108 RES BERRYESSA FLEA MKT (RESIDENTIAL) BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC RR		122	72	48	39	0	69	0	41	0	0	(
PDC03-108 RET BERRYESSA FLEA MKT (RETAIL) BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC RR		0	0	0	0	0	0	0	0	0	0	(
PDC07-015 RES KING AND DOBBIN NE/C OF KING RD AND DOBBIN DR		125	0	0	13	0	0	0	54	0	0	(
PDC07-015 RET KING AND DOBBIN NE/C OF KING RD AND DOBBIN DR		0	0	0	0	0	0	0	0	0	0	(

Intersection of: 101/OAKLAND (S)										Р	age No	o: 2
Traffix Node Number: 3022	M0.9	M08	M0.7	M03	M02	M01	M12	M11	M10	M0.6	M05	MO.
Permit No. / Description / Location		NBT	NBR		SBT	SBR		EBT	EBR		WBT	
PDC08-010 SEN JAPANTOWN CORP YARD SW CORNER OF NORTH SEVENTH ST AND TAYLOR ST	0	1	0	0	1	0	0	0	0	0	0	C
PDC08-036LW CANNARY PARK NW CORNER E. TENTH ST.	-	0	0	0	0	0	0	0	0	0	0	C
PDC08-036RES CANNERY PARK NW CORNER E. TENTH		17	8	0	8	0	0	0	9	0	0	0
PDC08-036REST CANNERY PARK NW CORNER OF E. TENTH	-	0	0	0	0	0	0	0	0	0	0	O
PDC08-036SEN CANNERY PARK NW CORNER E. 10TH ST.		2	1	0	1	0	0	0	1	0	0	(
PDC15-001 (RES) CANNERY PARK 725 NORTH 10TH STREET	-	18	4	0	3	0	0	0	3	0	0	(
PDC15-001 (RET) CANNERY PARK 725 NORTH 10TH STREET	0	0	0	0	0	0	0	0	0	0	0	(
PP14-006 C A S JAPANTOWN CORP YARD 696 N 6TH ST	0	0	0	0	0	0	0	0	0	0	0	(
PP14-006 RES JAPANTOWN CORP YARD 696 N 6TH ST	0	10	3	0	7	0	0	0	0	0	0	(
PP14-006 RET JAPANTOWN CORP YARD 696 N 6TH ST	0	0	0	0	0	0	0	0	0	0	0	(
PRE05-430 COMM PEPPER LANE S/W CORNER BERRYESSA RD & JACKSON AVE		0	0	0	0	0	0	0	0	0	0	(

AM APPROVED TRIPS												10/18/	2016
Intersection of: 101/OAKLAND (S)											Р	age No	o: 3
Traffix Node Number: 3022													
		M09	80M	M07	M03	M02	M01	M12	M11	M10	M06	M05	M0 -
Permit No. / Description / Location		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBI
PRE05-430 RES		0	0	0	0	0	0	0	0	0	0	0	0
PEPPER LANE													
SW/C OF BERRYESSA AND JACKSON													
	TOTAL:	0	443	114	69	115	0	133	0	141	0	0	0
				LEFT	THRU	RIGHT							
		NO	ORTH	69	115	0							
		E#	AST	0	0	0							
		SC	OUTH	0	443	114							
			EST	133	0	141							

Intersection of: 101/OAKLAND (S)										Р	age No	): 4
Traffix Node Number: 3022	MO 9	MUS	M07	M03	MO2	M 0 1	M1.2	M11	M1.0	M0.6	M05	MO.
Permit No. / Description / Location		NBT			SBT			EBT	EBR		WBT	
CO1-04-050 MARKOVITZ & FOX OAKLAND RD (W/S), S/O BROKAW RD	0	0	0	8	2	0	0	0	0	0	0	0
CP99-057 NELLA OIL COMMERCIAL ST & OLD OAKLAND RD (SE/C)	0	11	0	5	14	0	6	0	0	0	0	0
DOWNTOWN DOWNTOWN STRATEGY PLAN 2000 DOWNTOWN CORE	0	65	49	84	82	0	73	0	72	0	0	0
H14-020 SUPERMICRO 750 RIDDER PARK DRIVE	0	3	0	4	4	0	0	0	0	0	0	0
NSJ NORTH SAN JOSE	0	8	6	65	64	0	21	0	20	0	0	0
PDC03-056 MIXED-USE DEVELOPMENT N 7TH ST, E/O TAYLOR ST SPRR	0	4	5	0	5	0	0	0	5	0	0	0
PDC03-108 OFF BERRYESSA FLEA MKT (OFFICE) BOTH SIDES OF BERRYESSA RD WEST OF UNION PACIFIC	0	16	18	12	3	0	3	0	2	0	0	0
PDC03-108 RES BERRYESSA FLEA MKT (RESIDENTIAL) BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC RR			37	25	72	0	124	0	74	0	0	0
PDC03-108 RET BERRYESSA FLEA MKT (RETAIL) BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC RR			0	0	0	0	0	0	0	0	0	0
PDC07-015 RES KING AND DOBBIN NE/C OF KING RD AND DOBBIN DR		65	0	0	24	0	0	0	101	0	0	0
PDC07-015 RET KING AND DOBBIN NE/C OF KING RD AND DOBBIN DR		0	0	0	0	0	0	0	0	0	0	O

Intersection of: 101/OAKLAND (S)										P	age No	: 5
Traffix Node Number: 3022  Permit No. / Description / Location		M08 NBT		M03 SBL				M11 EBT	M10 EBR		M05 WBT	
PDC08-010 SEN JAPANTOWN CORP YARD SW CORNER OF NORTH SEVENTH ST AND TAYLOR ST	0	1	0	0		0	0	0	0		0	
PDC08-036LW CANNARY PARK NW CORNER E. TENTH ST.	0	0	0	0	0	0	0	0	0	0	0	0
PDC08-036RES CANNERY PARK NW CORNER E. TENTH	0	9	4	0	14	0	0	0	16	0	0	0
PDC08-036REST CANNERY PARK NW CORNER OF E. TENTH		0	0	0	0	0	0	0	0	0	0	0
PDC08-036SEN CANNERY PARK NW CORNER E. 10TH ST.		1	1	0	2	0	0	0	2	0	0	O
PDC15-001 (RES) CANNERY PARK 725 NORTH 10TH STREET		9	2	0	10	0	0	0	11	0	0	C
PDC15-001 (RET) CANNERY PARK 725 NORTH 10TH STREET	0	0	0	0	0	0	0	0	0	0	0	C
PP14-006 C A S JAPANTOWN CORP YARD 696 N 6TH ST	0	0	0	0	0	0	0	0	0	0	0	C
PP14-006 RES JAPANTOWN CORP YARD 696 N 6TH ST		5	2	0	13	0	0	0	0	0	0	O
PP14-006 RET JAPANTOWN CORP YARD 696 N 6TH ST		0	0	0	0	0	0	0	0	0	0	C
PRE05-430 COMM PEPPER LANE S/W CORNER BERRYESSA RD & JACKSON AVE		0	0	0	0	0	0	0	0	0	0	C

PM APPROVED TRIPS												10/18/	2016
Intersection of: 101/OAKLAND (S)											P	age No	o: 6
Traffix Node Number: 3022		M09	M08	M07	M03	M02	M01	M12	M11	M10	M06	M05	MO
Permit No. / Description / Location		NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBI
PRE05-430 RES PEPPER LANE SW/C OF BERRYESSA AND JACKSON		0	0	0	0	0	0	0	0	0	0	0	C
	TOTAL:	0	260	124	203	310	0	227	0	303	0	0	(
				LEFT	THRU	RIGHT							
		N	ORTH	203	310	0							
		E	AST	0	0	0							
		S	HTUC	0	260	124							
		W1	EST	227	0	303							

Intersection of: HEDDING/OAKLAND										P	age No	o: 1
Traffix Node Number: 3576	M09	M08	M07	M03	M02	M01	M12	M11	M10	M06	M05	MO.
Permit No. / Description / Location	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WB
CP99-057 NELLA OIL COMMERCIAL ST & OLD OAKLAND RD (SE/C)	0	5	0	5	5	2	2	0	0	0	0	1
DOWNTOWN DOWNTOWN STRATEGY PLAN 2000 DOWNTOWN CORE	3	10	0	2	4	1	4	5	0	0	18	2
H14-020 SUPERMICRO 750 RIDDER PARK DRIVE	0	3	0	0	0	0	3	0	0	0	0	0
NSJ NORTH SAN JOSE	16	47	2	3	8	5	17	20	1	0	4	0
PDC03-056 MIXED-USE DEVELOPMENT N 7TH ST, E/O TAYLOR ST SPRR		9	0	0	7	2	3	0	0	1	1	0
PDC03-108 OFF BERRYESSA FLEA MKT (OFFICE) BOTH SIDES OF BERRYESSA RD WEST OF UNION PACIFIC		0	0	22	5	0	0	27	0	0	3	4
PDC03-108 RES BERRYESSA FLEA MKT (RESIDENTIAL) BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC RR	0	37	3	64	16	0	0	63	0	5	99	157
PDC03-108 RET BERRYESSA FLEA MKT (RETAIL) BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC RR	0	0	0	0	0	0	0	3	0	0	1	0
PDC07-015 RES KING AND DOBBIN NE/C OF KING RD AND DOBBIN DR		60	0	50	18	0	0	6	0	0	10	64
PDC07-015 RET KING AND DOBBIN NE/C OF KING RD AND DOBBIN DR	0	0	0	0	0	0	0	0	0	0	0	C
PDC08-010 SEN JAPANTOWN CORP YARD SW CORNER OF NORTH SEVENTH ST AND TAYLOR ST	0	1	0	0	0	0	0	2	0	0	1	O

Intersection of: HEDDING/OAKLAND										Р	age No	o: 2
Traffix Node Number: 3576	M09	M08	M07	M03	M02	M01	M12	M11	M10	M06	M05	M04
Permit No. / Description / Location	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
PDC08-036LW CANNARY PARK NW CORNER E. TENTH ST.	0	0	0	0	0	0	0	0	0	0	0	0
PDC08-036RES CANNERY PARK NW CORNER E. TENTH	0	15	0	0	8	8	9	5	0	0	4	0
PDC08-036REST CANNERY PARK NW CORNER OF E. TENTH	0	0	0	0	0	0	0	0	0	0	0	0
PDC08-036SEN CANNERY PARK NW CORNER E. 10TH ST.	0	2	0	0	1	1	1	1	0	0	1	0
PDC15-001 (RES) CANNERY PARK 725 NORTH 10TH STREET	0	21	1	0	2	3	2	4	0	0	1	0
PDC15-001 (RET) CANNERY PARK 725 NORTH 10TH STREET	0	0	0	0	0	0	0	0	0	0	0	0
PP14-006 C A S JAPANTOWN CORP YARD 696 N 6TH ST	0	1	0	0	2	2	0	0	0	0	0	0
PP14-006 RES JAPANTOWN CORP YARD 696 N 6TH ST		10	1	0	5	2	3	17	0	1	9	0
PP14-006 RET JAPANTOWN CORP YARD 696 N 6TH ST	0	0	0	0	0	0	0	0	0	0	0	0
TOTA	L: 19	221	7	146	81	26	44	153	1	7	152	228
		ORTH	146	THRU 81	26							
		AST OUTH	7 19	152 221	228 7							
		EST	44	153	1							

Intersection of: HEDDING/OAKLAND										Р	age No	o: 3
Traffix Node Number: 3576	M09	M08	M07	M03	M02	M01	M12	M11	M10	M06	M05	MO.
Permit No. / Description / Location	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WB
CP99-057 NELLA OIL COMMERCIAL ST & OLD OAKLAND RD (SE/C)	0	6	0	5	6	3	3	0	0	0	0	2
DOWNTOWN DOWNTOWN STRATEGY PLAN 2000 DOWNTOWN CORE	2	18	2	14	31	11	13	34	3	4	18	3
H14-020 SUPERMICRO 750 RIDDER PARK DRIVE	0	1	0	0	2	2	1	0	0	0	0	0
NSJ NORTH SAN JOSE	0	7	1	21	58	27	2	6	0	4	19	3
PDC03-056 MIXED-USE DEVELOPMENT N 7TH ST, E/O TAYLOR ST SPRR		6	1	0	7	3	2	1	0	0	1	0
PDC03-108 OFF BERRYESSA FLEA MKT (OFFICE) BOTH SIDES OF BERRYESSA RD WEST OF UNION PACIFIC		6	0	3	0	0	0	5	0	0	21	27
PDC03-108 RES BERRYESSA FLEA MKT (RESIDENTIAL) BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC RR	0	19	4	117	29	0	0	116	0	2	51	81
PDC03-108 RET BERRYESSA FLEA MKT (RETAIL) BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC RR	0		0	0	0	0	0	12	0	0	12	0
PDC07-015 RES KING AND DOBBIN NE/C OF KING RD AND DOBBIN DR			0	92	34	0	0	10	0	0	6	34
PDC07-015 RET KING AND DOBBIN NE/C OF KING RD AND DOBBIN DR	0	0	0	0	0	0	0	0	0	0	0	C
PDC08-010 SEN JAPANTOWN CORP YARD SW CORNER OF NORTH SEVENTH ST AND TAYLOR ST	0	0	0	0	1	0	0	1	0	0	2	C

Intersection of: HEDDING/OAKLAND											age No	n: 4
Traffix Node Number: 3576											age IV	J. T
Permit No. / Description / Location		M08 NBT			M02 SBT			M11 EBT	M10 EBR		M05 WBT	
PDC08-036LW CANNARY PARK NW CORNER E. TENTH ST.	0	0	0	0	0	0	0	0	0	0	0	0
PDC08-036RES CANNERY PARK NW CORNER E. TENTH	0	8	0	0	15	15	5	3	0	0	7	0
PDC08-036REST CANNERY PARK NW CORNER OF E. TENTH	0	0	0	0	0	0	0	0	0	0	0	0
PDC08-036SEN CANNERY PARK NW CORNER E. 10TH ST.	0	1	0	0	2	2	1	0	0	0	1	0
PDC08-066 WESTMOUNT SQUARE SE CORNER OF E MISSION ST & N 10TH ST	0	0	0	0	0	0	0	0	0	0	0	0
PDC15-001 (RES) CANNERY PARK 725 NORTH 10TH STREET	0	11	1	0	9	13	1	2	0	1	5	0
PDC15-001 (RET) CANNERY PARK 725 NORTH 10TH STREET	0	0	0	0	0	0	0	0	0	0	0	0
PP14-006 C A S JAPANTOWN CORP YARD 696 N 6TH ST	0	3	0	0	2	2	1	0	0	0	0	0
PP14-006 RES JAPANTOWN CORP YARD 696 N 6TH ST	0	5	1	0	10	3	1	8	0	1	16	0
PP14-006 RET JAPANTOWN CORP YARD 696 N 6TH ST		1	0	0	1	1	0	0	0	0	0	0

NORTH EAST SOUTH WEST	252 12	207 159 123	82 150 10				
EAST SOUTH	12 2	159 123	150 10				
SOUTH	2	123	10				

Intersection of: HEDDING/TENTH										P	age No	o: 1
Traffix Node Number: 3581  Permit No. / Description / Location				M03 SBL		M01 SBR		M11 EBT	M10 EBR		M05 WBT	
DOWNTOWN DOWNTOWN STRATEGY PLAN 2000 DOWNTOWN CORE	0	0	0	1	2	3	3	9	0	2	35	51
NSJ NORTH SAN JOSE	0	0	0	1	5	1	11	31	4	2	25	19
DDC03-056 MIXED-USE DEVELOPMENT N 7TH ST, E/O TAYLOR ST SPRR		0	0	0	0	0	0	3	0	0	3	0
PDC03-108 OFF BERRYESSA FLEA MKT (OFFICE) BOTH SIDES OF BERRYESSA RD WEST OF UNION PACIFIC	0	0	0	0	0	0	0	21	1	0	3	0
PDC03-108 RES BERRYESSA FLEA MKT (RESIDENTIAL) BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC RR	0	0	0	3	3	0	0	48	2	12	76	14
PDC03-108 RET BERRYESSA FLEA MKT (RETAIL) BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC RR	0	0	0	0	0	0	0	3	0	0	1	0
PDC08-010 SEN JAPANTOWN CORP YARD SW CORNER OF NORTH SEVENTH ST AND TAYLOR ST		0	0	0	1	0	0	2	0	0	1	1
PDC08-036LW CANNARY PARK NW CORNER E. TENTH ST.	0	0	0	0	0	0	0	0	0	0	0	1
PDC08-036RES CANNERY PARK NW CORNER E. TENTH	0	0	0	0	11	0	0	0	5	12	0	26
PDC08-036REST CANNERY PARK NW CORNER OF E. TENTH		0	0	0	0	0	0	0	0	0	0	0
PDC08-036SEN CANNERY PARK NW CORNER E. 10TH ST.		0	0	0	2	0	0	0	1	2	0	0

Intersection of: HEDDING/TENTH											F	Page No	o: 2
Traffix Node Number: 3581  Permit No. / Description / Location		M09 NBL	M08 NBT	M07 NBR	M03 SBL		M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL		MO WBI
PDC15-001 (RES) CANNERY PARK 725 NORTH 10TH STREET		0	0	0	0	6	0	0	4	6	5	0	12
PDC15-001 (RET) CANNERY PARK 725 NORTH 10TH STREET		0	0	0	0	0	0	0	0	0	0	0	0
PP14-006 C A S JAPANTOWN CORP YARD 696 N 6TH ST		0	0	0	0	0	0	0	0	0	0	2	0
PP14-006 RES JAPANTOWN CORP YARD 696 N 6TH ST		0	0	0	0	9	0	10	20	0	0	10	0
PP14-006 RET JAPANTOWN CORP YARD 696 N 6TH ST		0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL:	0	0	0	5	39	4	24	141	19	35	156	124
				LEFT	THRU	RIGHT							
		E/ S0	ORTH AST OUTH EST	5 35 0 24	39 156 0 141	4 124 0 19							

Intersection of: HEDDING/TENTH										Р	age No	o: 3
Traffix Node Number: 3581	MOO	MOO	M07	M03	MOO	MO1	M10	M1.1	M10	MOC	M05	MO
Permit No. / Description / Location		NBT			SBT			EBT			WBT	
DOWNTOWN DOWNTOWN STRATEGY PLAN 2000 DOWNTOWN CORE	0	0	0	5	33	41	3	59	7	6	32	31
NSJ NORTH SAN JOSE	0	0	0	9	69	4	0	11	2	13	34	16
PDC03-056 MIXED-USE DEVELOPMENT N 7TH ST, E/O TAYLOR ST SPRR		0	0	0	0	0	0	2	0	0	3	0
PDC03-108 OFF BERRYESSA FLEA MKT (OFFICE) BOTH SIDES OF BERRYESSA RD WEST OF UNION PACIFIC		0	0	0	0	0	0	3	0	3	17	2
PDC03-108 RES BERRYESSA FLEA MKT (RESIDENTIAL) BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC RR		0	0	5	6	0	0	87	3	6	39	7
PDC03-108 RET BERRYESSA FLEA MKT (RETAIL) BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC RR		0	0	0	0	0	0	9	0	1	9	0
PDC06-069 10TH & MISSION RESIDENTIAL N 10TH ST (W/S), BTWN VESTAL AND E MISSION ST	0	0	0	0	0	0	0	0	5	5	0	0
PDC08-010 SEN JAPANTOWN CORP YARD SW CORNER OF NORTH SEVENTH ST AND TAYLOR ST	0	0	0	0	1	0	0	1	0	0	2	1
PDC08-036LW CANNARY PARK NW CORNER E. TENTH ST.	0	0	0	0	0	0	0	0	0	0	0	0
PDC08-036RES CANNERY PARK NW CORNER E. TENTH		0	0	0	20	0	0	0	8	21	0	14
PDC08-036REST CANNERY PARK NW CORNER OF E. TENTH		0	0	0	0	0	0	0	0	0	0	0

Intersection of: HEDDING/TENTH										F	Page No	o: 4
Traffix Node Number: 3581  Permit No. / Description / Location		M08 NBT			M02 SBT		M12 EBL	M11 EBT	M10 EBR		M05 WBT	
PDC08-036SEN CANNERY PARK NW CORNER E. 10TH ST.	0	0	0	0	2	0	0	0	1	3	0	0
PDC08-066 WESTMOUNT SQUARE SE CORNER OF E MISSION ST & N 10TH ST	0	0	0	0	0	0	0	0	0	0	0	0
PDC15-001 (RES) CANNERY PARK 725 NORTH 10TH STREET	0	0	0	0	24	0	0	2	24	18	0	6
PDC15-001 (RET) CANNERY PARK 725 NORTH 10TH STREET	0	0	0	0	0	0	0	0	0	0	0	0
PP14-006 C A S JAPANTOWN CORP YARD 696 N 6TH ST	0	0	0	0	0	0	0	1	0	0	2	0
PP14-006 RES JAPANTOWN CORP YARD 696 N 6TH ST	0	0	0	0	17	0	5	10	0	0	19	0
PP14-006 RET JAPANTOWN CORP YARD 696 N 6TH ST		0	0	0	0	0	0	0	0	0	1	0
•	TOTAL: 0	0	0	19	172	45	8	185	50	76	158	77
	E/SC	,,,,,,,	LEFT 19 76 0 8	172 158 0	RIGHT 45 77 0 50							

# **Appendix C**

**Volume Summary** 

Intersection Number: Traffix Node Number: Intersection Name: Oakland Rd & Commercial St Peak Hour: AM Date of Analysis: 05/10/17 Count Date: 05/19/15 Scenario Convenience Market, Gas Station, Fast Food, Mini-Storage (SJ) Growth Factor: Future Growth % Per Year: (SJ) Number of Months: Number of Years to Buildout: Movements North Approach East Approach South Approach West Approach TH RT RT TH RT TH Scenario: ΙT LT Total Existing Conditions Approved Project Trips CSJ ATI Total Approved Trips Background Conditions Proposed Project Trips Gross Project Trips Existing Trip Credits -6 -3 -3 -12 Net Project Trips Existing + Project Background + Project Bkgrd+Proj check Existing + Project Check Intersection Number: Traffix Node Number: Intersection Name: & US 101 NB Ramps Oakland Rd Peak Hour: AM Date of Analysis: 05/10/17 Count Date: 05/19/15 Scenario: Convenience Market, Gas Station, Fast Food, Mini-Storage (SJ) Growth Factor: Future Growth % Per Year: (SJ) Number of Months: Number of Years to Buildout: Movements North Approach East Approach South Approach West Approach Scenario: TΗ LT LT RT RT TH Total LT **Existing Conditions** Approved Project Trips CSJ ATI Total Approved Trips Background Conditions Proposed Project Trips Gross Project Trips Existing Trip Credits -9 -9 -3 -4 -25 Net Project Trips Existing + Project Background + Project Bkgrd+Proj check Existing + Project Check 

Intersection Number: Traffix Node Number: Intersection Name: Oakland Rd & US 101 SB Ramps Peak Hour: AM Date of Analysis: 05/10/17 Count Date: 05/19/15 Scenario Convenience Market, Gas Station, Fast Food, Mini-Storage (SJ) Growth Factor: Future Growth % Per Year: (SJ) Number of Months: Number of Years to Buildout: Movements West Approach North Approach East Approach South Approach TH RT ΤH RT TH RT TH Scenario: ΙT LT Total ΙT Existing Conditions Approved Project Trips CSJ ATI Total Approved Trips Background Conditions Proposed Project Trips Gross Project Trips Existing Trip Credits -18 -4 -6 -9 -37 Net Project Trips Existing + Project Background + Project Bkgrd+Proj check Existing + Project Check Intersection Number: Traffix Node Number: Intersection Name: Oakland Rd & Horning St Peak Hour: AM Date of Analysis: 05/10/17 Count Date: 10/12/16 Scenario: Convenience Market, Gas Station, Fast Food, Mini-Storage (SJ) Growth Factor: Future Growth % Per Year: (SJ) Number of Months: Number of Years to Buildout: Movements North Approach East Approach South Approach West Approach Scenario: RT TΗ LT LT RT RT TH Total **Existing Conditions** Approved Project Trips CSJ ATI Total Approved Trips Background Conditions Proposed Project Trips Gross Project Trips Existing Trip Credits -27 -10 -18 -55 Net Project Trips n Existing + Project Background + Project Bkgrd+Proj check Existing + Project Check 

Intersection Number: Traffix Node Number: Intersection Name: Oakland Road & Hedding St Peak Hour: AM Date of Analysis: 05/10/17 Count Date: 05/19/15 Scenario Convenience Market, Gas Station, Fast Food, Mini-Storage (SJ) Growth Factor: Future Growth % Per Year: (SJ) Number of Months: Number of Years to Buildout: Movements North Approach East Approach South Approach West Approach TΗ RT RT TH RT TH Scenario: ΙT ΙT LT Total ΙT Existing Conditions Approved Project Trips CSJ ATI Total Approved Trips Background Conditions Proposed Project Trips Gross Project Trips Existing Trip Credits -3 -3 -3 -3 -7 -19 Net Project Trips -1 -3 Existing + Project Background + Project Bkgrd+Proj check Existing + Project Check Intersection Number: Traffix Node Number: Intersection Name: N 10th St & Hedding St Peak Hour: AM Date of Analysis: 05/10/17 Count Date: 05/20/15 Scenario: Convenience Market, Gas Station, Fast Food, Mini-Storage (SJ) Growth Factor: Future Growth % Per Year: (SJ) Number of Months: Number of Years to Buildout: Movements North Approach East Approach South Approach West Approach Scenario: RT TΗ LT LT RT RT TH Total **Existing Conditions** Approved Project Trips CSJ ATI Total Approved Trips Background Conditions Proposed Project Trips Gross Project Trips Existing Trip Credits -3 -3 -18 -3 -12 -39 Net Project Trips -1 n n Existing + Project Background + Project Bkgrd+Proj check Existing + Project Check 

Intersection Number: Traffix Node Number: 7 1002

Intersection Name: N 10th St & Horning St Peak Hour: AM

Count Date: 10/12/16

Convenience Market, Gas Station, Fast Food, Mini-Storage

Scenario:
(SJ) Growth Factor:
(SJ) Number of Months: Future Growth % Per Year: Number of Years to Buildout:

						Move	ements						
	North A	pproach		East A	pproac	h	South A	pproach		West A	Approad	ch	
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Eviatian Canditiana	0	247	24	404	0	20	44	000	0	0	0		7 4 400
Existing Conditions	U	317	24	104	U	22	44	892	U	U	U	0	1403
Approved Project Trips													
CSJ ATI	0	48	0	0	0	0	0	148	0	0	0	0	196
Total Approved Trips	0	48	0	0	0	0	0	148	0	0	0	0	196
Background Conditions	0	365	24	104	0	22	44	1040	0	0	0	0	_ 1599
check	0	365	24	104	0	22	44	1040	0	0	0	0	_
Proposed Project Trips													
Gross Project Trips	0	0	4	4	0	13	28	0	0	0	0	0	49
Existing Trip Credits	0	0	-3	-1	0	-6	-30	0	0	0	0	0	-40
Net Project Trips	0	0	1	2	0	7	-1	0	0	0	0	0	9
Existing + Project	0	317	25	106	0	29	43	892	0	0	0	0	1412
Background + Project	0	365	25	106	0	29	43	1040	0	0	0	0	1608
Bkgrd+Proj check	0	365	25	106	0	29	43	1040	0	0	0	0	_
Existing + Project Check	0	317	25	106	0	29	43	892	0	0	0	0	

Date of Analysis: 05/10/17

Intersection Number: Traffix Node Number: Intersection Name: Oakland Rd & Commercial St Peak Hour: PM Date of Analysis: 05/10/17 Count Date: 05/19/15 Scenario Convenience Market, Gas Station, Fast Food, Mini-Storage (SJ) Growth Factor: Future Growth % Per Year: (SJ) Number of Months: Number of Years to Buildout: Movements North Approach East Approach South Approach West Approach Scenario: RT TH RT TΗ RT TH RT TH Total **Existing Conditions** Approved Project Trips CSJ ATI Total Approved Trips Background Conditions Proposed Project Trips Gross Project Trips Existing Trip Credits -5 -2 -7 -14 Net Project Trips n Existing + Project Background + Project Bkgrd+Proj check Existing + Project Check Intersection Number: Traffix Node Number: Intersection Name: Oakland Rd & US 101 NB Ramps Peak Hour: Date of Analysis: 05/10/17 PM Count Date: 09/09/14 Scenario: Convenience Market, Gas Station, Fast Food, Mini-Storage (SJ) Growth Factor: Future Growth % Per Year: (SJ) Number of Months: Number of Years to Buildout: Movements North Approach East Approach South Approach West Approach Total Scenario: TH ΙT RT TH LT TH ΙT RT TH LT Existing Conditions Approved Project Trips **CSJ ATI** Total Approved Trips Background Conditions Proposed Project Trips Gross Project Trips Existing Trip Credits -7 -7 -7 -11 -32 Net Project Trips Existing + Project Background + Project Bkgrd+Proj check Existing + Project Check 

Intersection Number: Traffix Node Number: Intersection Name: Oakland Rd & US 101 SB Ramps Peak Hour: PM Date of Analysis: 05/10/17 Count Date: 09/09/14 Scenario Convenience Market, Gas Station, Fast Food, Mini-Storage (SJ) Growth Factor: Future Growth % Per Year: (SJ) Number of Months: Number of Years to Buildout: Movements North Approach East Approach South Approach West Approach Scenario: RT TH RT TΗ RT TH RT TH Total **Existing Conditions** Approved Project Trips CSJ ATI Total Approved Trips Background Conditions Proposed Project Trips Gross Project Trips Existing Trip Credits -14 -11 -18 -7 -50 Net Project Trips Existing + Project Background + Project Bkgrd+Proj check Existing + Project Check Intersection Number: Traffix Node Number: Intersection Name: Oakland Rd & Horning St Peak Hour: Date of Analysis: 05/10/17 PM Count Date: 10/12/16 Scenario: Convenience Market, Gas Station, Fast Food, Mini-Storage (SJ) Growth Factor: Future Growth % Per Year: (SJ) Number of Months: Number of Years to Buildout: Movements North Approach East Approach South Approach West Approach LT Total Scenario: TH ΙT RT TH LT RT TH ΙT RT TH Existing Conditions Approved Project Trips **CSJ ATI** Total Approved Trips Background Conditions Proposed Project Trips Gross Project Trips -100 Existing Trip Credits -21 -28 -51 Net Project Trips Existing + Project Background + Project Bkgrd+Proj check Existing + Project Check 

Intersection Number: Traffix Node Number: Intersection Name: Oakland Road & Hedding St Peak Hour: PM Date of Analysis: 05/10/17 Count Date: 05/19/15 Scenario Convenience Market, Gas Station, Fast Food, Mini-Storage (SJ) Growth Factor: Future Growth % Per Year: (SJ) Number of Months: Number of Years to Buildout: Movements North Approach East Approach South Approach West Approach Scenario: RT TH RT TΗ RT TH RT TH Total **Existing Conditions** Approved Project Trips CSJ ATI Total Approved Trips Background Conditions Proposed Project Trips Gross Project Trips Existing Trip Credits -7 -9 -2 -6 -31 Net Project Trips -1 -1 -1 -1 n -4 Existing + Project Background + Project Bkgrd+Proj check Existing + Project Check Intersection Number: Traffix Node Number: Intersection Name: N 10th St & Hedding St Peak Hour: Date of Analysis: 05/10/17 PM Count Date: 05/19/15 Scenario: Convenience Market, Gas Station, Fast Food, Mini-Storage (SJ) Growth Factor: Future Growth % Per Year: (SJ) Number of Months: Number of Years to Buildout: Movements North Approach East Approach South Approach West Approach Total Scenario: TH ΙT RT TH LT TH ΙT RT TH LT Existing Conditions Approved Project Trips **CSJ ATI** Total Approved Trips Background Conditions Proposed Project Trips Gross Project Trips Existing Trip Credits -7 -9 -14 -7 -9 -46 Net Project Trips -1 -1 -1 Existing + Project Background + Project Bkgrd+Proj check Existing + Project Check 

7 1002 Intersection Number: Traffix Node Number:

Intersection Name: N 10th St

& Horning St

Peak Hour: PM Count Date: 10/12/16

Convenience Market, Gas Station, Fast Food, Mini-Storage

Scenario:
(SJ) Growth Factor:

Future Growth % Per Year:

Date of Analysis: 05/10/17

(SJ) Number of Months:								Numb	er of Y	ears to Bu	uildout:	<u>:</u>	
						Move	ments						
-	North Ap	proach		East A	pproac	:h	South A	Approacl	h	West A	Approa	ch	_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	0	1067	424	70	0	13	17	256	0	0	0	0	1847
Approved Project Trips													_
CSJ ATI	0	236	0	0	0	0	0	85	0	0	0	0	321
Total Approved Trips	0	236	0	0	0	0	0	85	0	0	0	0	321
Background Conditions	0	1303	424	70	0	13	17	341	0	0	0	0	_ 2168
check	0	1303	424	70	0	13	17	341	0	0	0	0	_
Proposed Project Trips													
Gross Project Trips	0	0	4	4	0	13	28	0	0	0	0	0	49
Existing Trip Credits	0	0	-2	-4	0	-16	-23	0	0	0	0	0	-45
Net Project Trips	0	0	1	0	0	-3	5	0	0	0	0	0	3
Existing + Project	0	1067	425	70	0	10	22	256	0	0	0	0	1850
Background + Project	0	1303	425	70	0	10	22	341	0	0	0	0	2171
Bkgrd+Proj check	0	1303	425	70	0	10	22	341	0	0	0	0	_
Existing + Project Check	0	1067	425	70	0	10	22	256	0	0	0	0	

# **Appendix D**

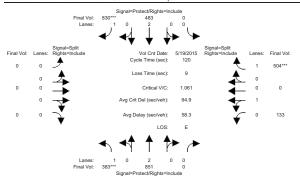
**Level of Service Calculations** 

645 Horning Stree Shopping Center

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

Intersection #3021: Oakland Rd and US 101 North Ramps

Traffix 8.0.0715



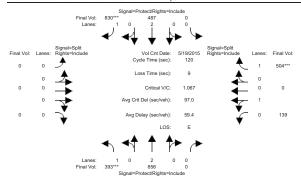
Approach:	No	rth Bo	und	So	uth Bo	ound	Εa	ast Bo	ound	We	est Bo	ound
Movement:												
Min. Green:												
Y+R:						4.0						
Volume Modul												
		851				830				122	0	504
Growth Adi:											1.00	
Initial Bse:				0			0			133		504
			0	0	403	0.50	0	0		133		0
Added Vol: PasserByVol:	0	0	0	0	0	0	0	0	0	0		0
Initial Fut:	383	851	0	0	483	830	0	0	0	133	0	504
User Adj:	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1.00
PHF Adj:									1.00			
PHF Volume:			0						0			504
Reduct Vol:						0						0
Reduced Vol:						830						
PCE Adj:												
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:												
Saturation F	low Mo	odule:										
Sat/Lane:											1900	1900
Adjustment:											0.95	
Lanes:											0.00	
Final Sat.:											0	
Capacity Ana	lysis	Modul	e:									
Vol/Sat:				0.00	0.13	0.47	0.00	0.00	0.00	0.07	0.00	
Crit Moves:												****
Green Time:											0.0	
Volume/Cap:											0.00	
Delay/Veh:												102.0
User DelAdj:												1.00
AdjDel/Veh:									0.0			102.0
LOS by Move: HCM2kAvgQ:						44			A 0			
Note: Queue					-				U	4	U	29
Note: Queue	report	Lea IS	cne n	umper	OI Ca	ııs per	ıane					

 COMPARE
 Tue Jan 17 18:27:09 2017
 Page 3-20

645 Horning Street Shopping Center San Jose, CA

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

Intersection #3021: Oakland Rd and US 101 North Ramps



Approach: Movement:												
Movement:												
Min. Green:			0							10		
Y+R:			4.0						4.0		4.0	
Volume Module												
Base Vol:			0				0	0	0		0	
Growth Adj:			1.00			1.00			1.00	1.00		1.00
Initial Bse:			0		483		0	0	0	133	0	504
Added Vol:			0		4		0	-	0	6	-	0
PasserByVol:			0		0				-	0		0
Initial Fut:			0				0					
User Adj:	1.00	1.00				1.00			1.00		1.00	1.00
PHF Adj:	1.00	1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:				0	487		0	0	0	139	0	504
Reduct Vol:	0		0		0	0	0	0	0	0	0	0
Reduced Vol:	393	856	0	0	487	830	0	0	0	139	0	504
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:							0	0	0	139		504
Saturation F												
Sat/Lane:												
Adjustment:						0.92					0.95	0.92
						1.00						
Final Sat.:									0		0	
Capacity Ana.												
Vol/Sat:		0.23	0.00	0.00	0.13		0.00	0.00	0.00	0.08	0.00	
Crit Moves:						****						****
Green Time:									0.0			
Volume/Cap:						1.07			0.00			
Delay/Veh:			0.0				0.0		0.0			104.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
AdjDel/Veh:			0.0				0.0	0.0	0.0	35.0	0.0	104.2
LOS by Move:	F	A	A	A		F	A	A	A	C	A	F
HCM2kAvgQ:	21	7	0	0	6	45	0	0	0	4	0	29
Note: Queue :	report	ted is	the n	umber	of ca	ars per	lane					

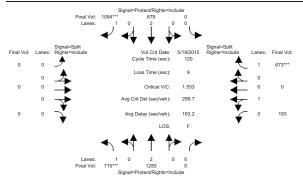
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645 Horning Stree Shopping Center

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

Intersection #3021: Oakland Rd and US 101 North Ramps

Traffix 8.0.0715



Approach: I	- T	- R	L	- T	- R	L	- T	- R	L ·	- T	- R
	7 10										
	0 4.0							4.0			
Volume Module:											
	3 851				830		0		133	0	504
Growth Adj: 1.0		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse: 3	83 851	0	0	483	830	0	0	0	133	0	504
Added Vol:	0 0	0	0	0	0	0	0	0	0	0	0
ATI: 3	32 432	0	0	196	264	0	0	0	60	0	169
Initial Fut: 7		0	0	679	1094	0	0	0	193	0	673
User Adj: 1.0	0 1.00	1.00		1.00			1.00			1.00	1.00
PHF Adj: 1.0		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume: 7		0	0	679	1094	0	0	0	193	0	673
Reduct Vol:		0	0	-		0		0	0		0
Reduced Vol: 7			0			0	-				673
PCE Adj: 1.0			1.00				1.00			1.00	
MLF Adj: 1.0			1.00				1.00			1.00	1.00
FinalVolume: 7			0				0			0	673
Saturation Flow											
Sat/Lane: 19							1900			1900	
Adjustment: 0.					0.92		1.00			0.95	
Lanes: 1.0					1.00		0.00			0.00	
Final Sat.: 175								0		0	
Capacity Analys											
Vol/Sat: 0.			0 00	0 10	0.63	0 00	0 00	0.00	0 11	0 00	0.38
Crit Moves: **		0.00	0.00	0.10	****	0.00	0.00	0.00	0.11	0.00	****
Green Time: 32		0 0	0 0	10 Q	48.9	0.0	0 0	0.0	20 1	0.0	
Volume/Cap: 1.					1.53		0.00			0.00	1.53
Delay/Veh: 294					282.6	0.0	0.0	0.0			296.2
User DelAdj: 1.0					1.00		1.00	1.00		1.00	1.00
AdiDel/Veh: 294					282.6	0.0		0.0			296.2
LOS by Move:						Α.			D		F
HCM2kAvqQ:		0	0		94	0		0	6	0	59
Note: Queue repo		the n	umber	of c	ars per	lane					

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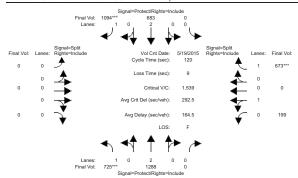
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645 Horning Street Shopping Center

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgrnd + Proj AM

Intersection #3021: Oakland Rd and US 101 North Ramps



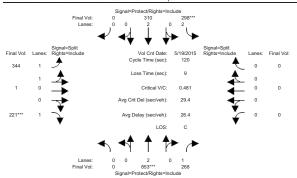
Approach:											
Movement:					- R						
					10						
Y+R:					4.0						4.
Volume Module											
Base Vol:									133		
Growth Adj:					1.00						
Initial Bse:						0	0	0	133	-	50
Added Vol:					0			0	6		
ATI:		0						0			
Initial Fut:					1094						
User Adj:					1.00						
PHF Adj:		1.00				1.00		1.00			
PHF Volume:		0				0			199		
Reduct Vol:					0		0		0		
Reduced Vol:		0				-	-	0		-	
PCE Adj:					1.00						
MLF Adj:					1.00						
FinalVolume:					1094						
Saturation F: Sat/Lane:			1000	1000	1000	1000	1000	1000	1000	1000	190
Adjustment:											
Adjustment: Lanes:					1.00						
Lanes: Final Sat.:					1750						
Capacity Anal						1			1		
Vol/Sat:			0.00	0.18	0.63	0.00	0.00	0.00	0.11	0.00	0.3
Crit Moves:					****						***
Green Time:	81.0	0.0	0.0	48.7	48.7	0.0	0.0	0.0	30.0	0.0	30.
Volume/Cap:					1.54			0.00		0.00	
Delay/Veh: 2		0.0				0.0	0.0	0.0		0.0	
User DelAdi:					1.00			1.00	1.00		1.0
AdjDel/Veh: 2						0.0		0.0	38.7		299.
LOS by Move:		A				A	A	A	D	A	
HCM2kAvqQ:		0			94	0	0	0	7	0	5
Note: Queue			-	-		-	-	-		-	-

### 645 Horning Stree Shopping Center

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

Intersection #3022: Oakland Rd and US 101 South Ramps

Traffix 8.0.0715



Approach:								ast Bo	ound	W∈	est Bo	ound
Movement:						- R			- R		- T	
Min. Green:	0	10	10	7	10	0	10	10	10	0	0	0
Y+R:											4.0	
Volume Module	e: >>	Count	Date:	19 Ma	ay 201	.5 << 7	:15 -	8:15	AM			
Base Vol:	0		268		310		344	1	221	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	853	268					1	221	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol: Initial Fut:	0	0	0	0	0	0	Δ.	0	0		0	0
			268			0		1		0	0	-
User Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:			1.00					1.00	1.00	1.00	1.00	1.00
	0					0		1		0	0	0
Reduct Vol:									0	-	0	0
Reduced Vol:						0				0	0	-
PCE Adj:	1.00								1.00	1.00	1.00	1.00
MLF Adj:						1.00				1.00		1.00
FinalVolume:												0
Saturation F												
Sat/Lane:												
Adjustment:									0.92			
Lanes:										0.00		0.00
Final Sat.:										0		0
Capacity Ana												
Vol/Sat:					0.08	0.00	0.10	0.10		0.00	0.00	0.00
				****					****			
			55.9			0.0		31.5		0.0	0.0	0.0
Volume/Cap:			0.33		0.12			0.37		0.00		0.00
Delay/Veh:			20.4		7.5			36.4		0.0	0.0	0.0
User DelAdj:			1.00			1.00		1.00				1.00
AdjDel/Veh:						0.0		36.4		0.0		0.0
LOS by Move:								_	_			A
HCM2kAvgQ:			6			-	6	-	8	0	0	0
Note: Queue :	report	ted is	the n	umber	of ca	irs per	lane					

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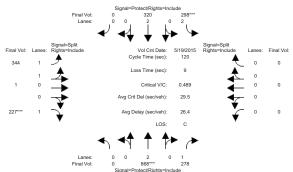
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#### 645 Horning Stre Shopping Center San Jose CA

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

Intersection #3022: Oakland Rd and US 101 South Ramps

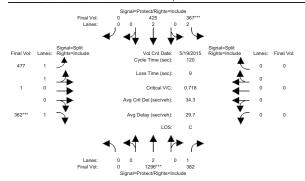


			Signal=F	Protect/Rig	nis-include	9						
Approach:	No:	rth Bo	und	So	ıth Bo	und	Ea	ast Bo	ound	We	est Bo	und
Movement:												
Min. Green:												
Y+R:						4.0					4.0	
Volume Module												
Base Vol:										0	0	C
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:			268	298	310	0	344	1	221	0	0	C
Added Vol:	0	15	10	0	10	0	0	0	6	0	0	C
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	(
Initial Fut:	0	868	278	298	320	0	344	1	227	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
PHF Volume:			278	298	320	0	344	1	227	0	0	(
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	(
Reduced Vol:	0	868	278	298	320	0	344	1	227	0	0	(
PCE Adj:						1.00					1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:												
 Saturation Fl												
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:											1.00	
Lanes:												
Final Sat.:	0	3800	1750	3150	3800	0	3540	10	1750	0	0	(
Capacity Anal Vol/Sat:				0 00	0 00	0 00	0 10	0 10	0 13	0 00	0 00	0.00
		****		****	0.08	0.00	0.10	0.10	****	0.00	0.00	0.00
Green Time:					70 0	0.0	21 0	21 0		0.0	0 0	0.0
Volume/Cap:												
		22.3									1.00	
Delay/Veh:		1 00	1 00									
Delay/Veh: User DelAdj:	1.00		1.00									
Delay/Veh: User DelAdj: AdjDel/Veh:	1.00	22.3	20.5	43.7	7.6	0.0	36.1	36.1	38.1	0.0	0.0	0.
Delay/Veh:	1.00 0.0 A	22.3 C	20.5	43.7 D	7.6		36.1	36.1 D		0.0 A	0.0 A	0.0

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

Intersection #3022: Oakland Rd and US 101 South Ramps

Traffix 8.0.0715



Approach: Movement:												
Min. Green:	0	10	10	7	10	0	10	10	10	0	0	0
Y+R:						4.0						
Volume Module												
Base Vol:		853		298		0				0	0	0
Growth Adj:					1.00						1.00	
Initial Bse:				298			344		221	1.00	1.00	1.00
Added Vol:				0		0		_	0	-	-	0
ATI:		443		69		0					0	-
Initial Fut:				367		0	477	1			0	-
User Adj:					1.00				1.00		-	-
PHF Adj:	1.00	1.00	1.00	1.00		1.00		1.00			1.00	1.00
PHF Volume:				367					362	0	0	0
Reduct Vol:			0	0	0				0	0	0	0
Reduced Vol:				367	425	0	477	1	362	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1296	382	367		0						0
Saturation F.												
Sat/Lane:									1900			
Adjustment:						0.92			0.92			
Lanes:												
Final Sat.:						0			1750			
Capacity Ana				0 10	0 11	0 00	0 10	0 10	0 01		0 00	0 00
Vol/Sat:				0.12	0.11	0.00	0.13	0.13	0.21	0.00	0.00	0.00
Crit Moves:					76.4	0 0	24.6	0.4.6			0 0	0 0
Green Time: Volume/Cap:						0.0		34.6			0.0	0.0
Delay/Veh:				0.72 52.6		0.00		0.47		0.00		0.00
User DelAdi:				1.00		0.0		1.00			1.00	
AdiDel/Veh:				52.6		0.0			43.3		0.0	0.0
LOS by Move:						0.0 A			43.3 D			
HCM2kAvqQ:			9						14		0	0
Note: Queue :					-	-			14	U	U	U
Mocc. Queue	rcbor	ccu 15	CITE II	anwer	01 00	ira ber	Talle	•				

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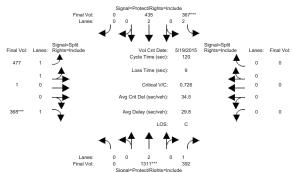
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## 645 Horning Street Shopping Center San Jose, CA

## Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgrnd + Proj AM

Intersection #3022: Oakland Rd and US 101 South Ramps



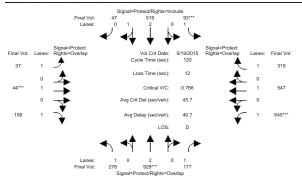
			Signal=F	Protect/Rig	hts=Include	9						
Approach:	No:	rth Bo	und	So	uth Bo	und	Ea	ast Bo	ound	We	est Bo	und
Movement:												
Min. Green:												
Y+R:						4.0					4.0	
Volume Module												
Base Vol:										0	0	C
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:			268	298	310	0	344	1	221	0	0	C
Added Vol:	0	15	10	0	10	0	0	0	6	0	0	C
ATI:			114	69	115	0	133	0	141			C
Initial Fut:						0					0	(
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:										0		(
Reduct Vol:			0				0		0			(
Reduced Vol:	0	1311	392	367	435	0	477	1	368	0	0	(
PCE Adj:												
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:												
Saturation F												
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:												
Lanes:												
Final Sat.:												
Capacity Ana. Vol/Sat:				0 10	0 11	0 00	0 10	0 10	0 01	0 00	0 00	0 0
				****	0.11	0.00	0.13	0.13	****	0.00	0.00	0.0
Crit Moves:					7.6	0 0	04.7	0.4		0 0	0 0	
Green Time: Volume/Cap:						0.0						0.0
Volume/Cap: Delay/Veh:						0.00						
Delay/ven: User DelAdi:												
						1.00					1.00	
AdjDel/Veh:						0.0				0.0		0.
LOS by Move:					A 3	A 0						
HCM2kAvgQ:			10						14	0	0	
Note: Queue	repor	tea 1s	tne n	umper	or ca	ırs per	ıane					

### 645 Horning Stree Shopping Center

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

Intersection #3421: Oakland Rd and Commercial St

Traffix 8.0.0715



Approach:												
Movement:												
						10						
Y+R:		4.0				4.0						4.0
Volume Modul												
Base Vol:		928	177	93		47			158	645	547	319
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	278	928	177	93	519	47	37	44	158	645	547	319
Added Vol:	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:	278	928	177	93	519	47	37	44	158	645	547	319
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:		928	177	93		47	37			645	547	319
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	278	928	177	93	519	47	37	44	158	645	547	319
PCE Adj:			1.00		1.00	1.00		1.00			1.00	1.00
MLF Adj:			1.00		1.00	1.00			1.00			1.00
FinalVolume:				93					158			
Saturation F												
Sat/Lane:								1900		1900		
Adjustment:				0.92				1.00			1.00	
			1.00	1.00				1.00			1.00	
Final Sat.:						465			1750		1900	
Capacity Ana Vol/Sat:				0 05	0 10	0 10	0 00	0.02	0 00	0 27	0 00	0.18
Crit Moves:				****					0.09	****	0.29	0.18
Green Time:								10.0			53.4	C1 0
Volume/Cap:								0.28			0.65	
Delay/Veh:								55.9			29.7	
User DelAdi:								1.00			1.00	
AdiDel/Veh:						54.6		55.9			29.7	18.7
LOS by Move:			4.3 A		54.6 D	54.6 D		55.9 E		37.6 D	29.7 C	18.7 B
HCM2kAvqQ:			2	6	8	8	2		5			7
Note: Queue									3	24	Τ.0	,
More. Anene	rebor	ccu is	cire I	rannet	OT Co	rra her	-4116					

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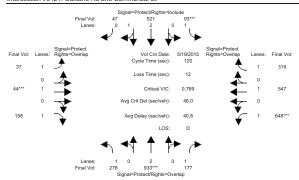
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### 645 Horning Street Shopping Center San Jose, CA

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

Intersection #3421: Oakland Rd and Commercial St

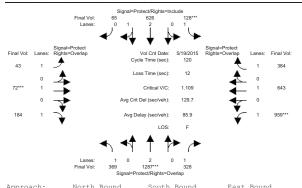


Approach: Movement:									ound - R			
movement:												
Min. Green:									10			
Y+R:		4.0				4.0			4.0		4.0	
Volume Module												
Base Vol:		928				47			158			
Growth Adj:			1.00			1.00			1.00		1.00	1.00
Initial Bse:			177	93			37		158		547	319
Added Vol:			0	0		0	0			3	0	0
PasserByVol:				0			0			0	0	0
Initial Fut:				93		47			158	648		319
User Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00			1.00		1.00	1.00	1.00	1.00	1.00
PHF Volume:		933	177	93		47	37		158	648	547	319
Reduct Vol:	0	0	0	0		0	0		0	0	0	0
Reduced Vol:	278	933	177	93	521	47	37	44	158	648	547	319
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			177						158		547	319
Saturation F												
Sat/Lane:											1900	
Adjustment:								1.00			1.00	
Lanes:						0.26			1.00		1.00	
Final Sat.:						463			1750		1900	
Capacity Ana												
Vol/Sat:				0.05	0 10	0 10	0 02	0 02	0.09	0 37	0.29	0.18
Crit Moves:			0.10	****		0.10	0.02	****		****	0.23	0.10
Green Time:			90 2			17 1	10 0	10.0			53.4	61.2
Volume/Cap:						0.71		0.28			0.65	
Delay/Veh:						54.6		55.9			29.7	
User DelAdi:			1.00	1.00		1.00		1.00			1.00	
AdiDel/Veh:				101.3		54.6		55.9			29.7	18.7
LOS by Move:			4.3 A			54.6 D					29.7 C	10.7
HCM2kAvqQ:			2	6	8	8		2		24		7
Note: Queue					-	-	_	_	3	24	1.0	,
Note: Queue	rebor	Leu 1S	rue i	lumber	от са	ıs per	Tane					

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

Intersection #3421: Oakland Rd and Commercial St

Traffix 8.0.0715



Approach:												
Movement:												
Min. Green:												
Y+R:						4.0						4.0
1 T.K.												
Volume Module												'
	278		177			47				645	547	319
Growth Adi:			1.00		1.00	1.00				1.00		1.00
Initial Bse:			177	93		47			158		547	319
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:			151	35			6	28	26	314	96	65
Initial Fut:	369	1287	328	128	626	65	43	72	184	959	643	384
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	369	1287	328	128	626	65	43	72	184	959	643	384
Reduct Vol:	0	0	0	0	0	0	0		0	0	0	0
Reduced Vol:	369	1287	328	128	626	65	43	72	184	959	643	384
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:						65						
Saturation F												
Sat/Lane:										1900		
Adjustment:										0.92		
Lanes:						0.29				1.00		
Final Sat.:						527			1750		1900	
Capacity Ana												
Vol/Sat:											0.34	0.22
Crit Moves:												
Green Time:										56.0		
Volume/Cap:						0.95				1.18		0.41
Delay/Veh:								61.5		123.6		
User DelAdj:								1.00		1.00		1.00
AdjDel/Veh:						75.8				123.6		18.3
LOS by Move:			A 4		E 13	E 13		E			C	B 9
HCM2kAvgQ:									б	59	20	9
Note: Queue	repor	tea is	tne r	numper	OI Ca	ırs per	ıane					

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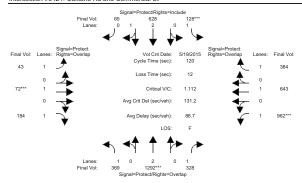
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## 645 Horning Street Shopping Center San Jose, CA

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## Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgrnd + Proj AM

Intersection #3421: Oakland Rd and Commercial St

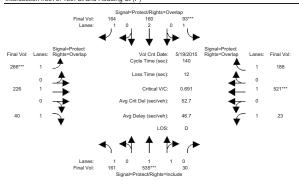


Approach:												
Movement:												
						10						
Min. Green: Y+R:						4.0						10
Y+K:												
Volume Modul												
Base Vol:	278	928	177	93	519	47	37	44	158	645	547	319
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	278	928	177	93	519	47	37	44	158	645	547	319
Added Vol:	0	5	0	0	2	0	0	0	0	3	0	0
ATI:		359	151	35	107	18	6	28	26		96	65
Initial Fut:	369	1292	328	128	628	65	43	72	184	962	643	384
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:									184		643	384
Reduct Vol:									0			0
Reduced Vol:	369	1292	328	128	628	65	43	72	184	962	643	384
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	369	1292	328	128	628	65	43	72	184	962	643	384
Saturation F	low Mo	odule:										
Sat/Lane:												
Adjustment:	0.92	1.00	0.92	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:												
Final Sat.:												
Capacity Ana												
Vol/Sat:					0.12	0.12						0.22
Crit Moves:				****						****		
Green Time:												
Volume/Cap:												
Delay/Veh:												
User DelAdj:						1.00						
AdjDel/Veh:												
LOS by Move:												
HCM2kAvgQ:						13			6	60	20	9
Note: Queue	report	ed is	the n	umber	of c	ars per	lane					

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

Intersection #3576: 13th St and Hedding St (P)

Traffix 8.0.0715



	North Bound L - T - R											
Min. Green:						10						
Y+R:		4.0				4.0						4.0
Volume Modul	e: >>	Count	Date:	19 M	ay 201	15 << 7	:30-8	:30AM				
Base Vol:		535	30		160	164			40		521	188
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	161	535	30	93	160	164	266	226	40	23	521	188
Added Vol:			0	0		0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	161	535	30	93	160	164	266	226	40	23	521	188
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	161	535	30	93	160	164	266	226	40	23	521	188
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	161	535	30	93	160	164	266	226	40	23	521	188
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:				93		164			40		521	188
Saturation F												
Sat/Lane:								1900				
Adjustment:					1.00			1.00			1.00	
		1.89			2.00			1.00			1.00	
Final Sat.:					3800			1900			1900	
~												
Capacity Ana Vol/Sat:				0 05	0 04	0 00	0 15	0 10	0.02	0 01	0 07	0 11
Crit Moves:			0.15		0.04	0.09	****	0.12	0.02	0.01	****	0.11
						40.0			04.0	05.5		
Green Time:						49.0		60.8			55.5	
Volume/Cap:					0.32			0.27				
Delay/Veh: User DelAdi:				88.3		33.7		26.3			40.3	22.4
AdiDel/Veh:				88.3				26.3			40.3	
				88.3 F		33.7						22.4
LOS by Move:			D 12	F.	E 3	C 5	E 12		_	D 1		C 5
HCM2kAvgQ:				-	-	-			1	Τ	19	5
Note: Queue	repor	tea is	tne n	umper	OI Ca	ırs per	ıane					

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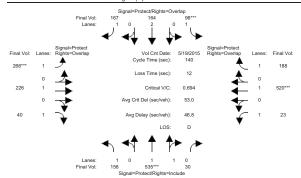
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## 645 Horning Street Shopping Center San Jose, CA

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

Intersection #3576: 13th St and Hedding St (P)

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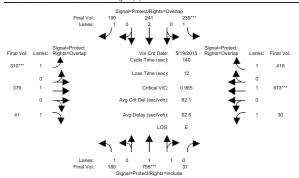
Approach:												
Movement:												
						10						
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module												
Base Vol:			30			164			40	23	521	188
Growth Adi:											1.00	
Initial Bse:						164				23		188
Added Vol:										0		0
PaccarBuVol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol: Initial Fut:	158	535	30	98	164	167	266	226	40			
User Adj:						1.00				1.00		1.00
PHF Adi:	1 00	1 00				1.00					1.00	1.00
PHF Volume:						167			40	23		188
Reduct Vol:						0				0		
Reduced Vol:												188
PCE Adj:												1.00
MLF Adj:												
FinalVolume:	158	535	30	98	164	167	266	226	40	23	520	188
Saturation F												
Saturation F. Sat/Lane:				1000	1000	1000	1000	1000	1000	1000	1000	1000
Adiustment:										0.92		
Adjustment: Lanes:										1.00		
Final Sat.:												1750
FINAL SAL.:												
Capacity Ana						'				1		
Vol/Sat:				0.06	0.04	0.10	0.15	0.12	0.02	0.01	0.27	0.11
				****			****				****	
Green Time:	23.5	30.8	30.8	11.3	18.6	49.3	30.7	60.5	84.0	25.4	55.2	66.5
Volume/Cap:										0.07	0.69	
Delay/Veh:										48.0	40.6	22.2
User DelAdi:										1.00		1.00
AdjDel/Veh:										48.0		22.2
LOS by Morre.												
	E	E	E	F	E	C	E	C	В	D	D	C.
LOS by Move: HCM2kAvgQ:	E 7	E 12	E 12	F 6	E 3	C 5	12	6	В 1	1	19	5

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

Intersection #3576: 13th St and Hedding St (P)

Traffix 8.0.0715



Approach: Movement:	L	- T	- R	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R
Min. Green:						10						
Y+R:		4.0				4.0			4.0			4.0
Volume Module												
Base Vol:	161	535	30	93	160	164	266	226	40	23	521	188
Growth Adj:			1.00		1.00	1.00					1.00	1.00
Initial Bse:	161	535	30	93		164	266		40	23	521	188
	0		0	0		0	0		0	0	0	0
ATI:	19		7	146		26	44		1			228
Initial Fut:			37	239		190					673	416
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00			1.00	1.00
PHF Adj:			1.00	1.00		1.00		1.00			1.00	1.00
PHF Volume:		756	37	239		190	310	379	41	30	673	416
Reduct Vol:	0	0	0	0	0	0	0	-	0	0	0	0
Reduced Vol:			37	239		190	310		41		673	416
PCE Adj:					1.00	1.00		1.00			1.00	1.00
MLF Adj:					1.00	1.00		1.00			1.00	1.00
FinalVolume:				239		190					673	416
Saturation F												
Sat/Lane:								1900		1900		
Adjustment:				0.92				1.00			1.00	
			0.10	1.00				1.00			1.00	
Final Sat.:					3800				1750		1900	
Capacity Ana				0 1 4	0 00	0 11	0 10	0 00	0.02	0 00	0 25	0 04
Vol/Sat: Crit Moves:				****			****	0.20	0.02	0.02	****	0.24
									01 7			71.0
Green Time:						46.6		61.6			51.4	
Volume/Cap:				0.96				0.45			0.96	
Delay/Veh:									8.6		69.9	
User DelAdj:				1.00				1.00			1.00	1.00
AdjDel/Veh:				108.6		36.5		29.2	8.6			23.9
LOS by Move:			E	F	E	D	F			E	E	C
HCM2kAvgQ:			22	15	5	6	18		1	1	33	12
Note: Queue	repor	ted is	the i	number	OI Ca	ars per	ıane					

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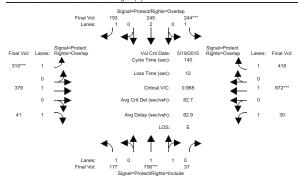
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## 645 Horning Street Shopping Center San Jose, CA

## Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgrnd + Proj AM

Intersection #3576: 13th St and Hedding St (P)

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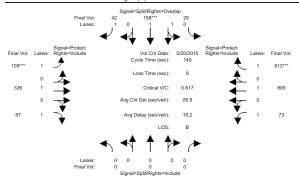
Approach: Movement:	North Bound L - T - R			Soi L ·	ith Bo	und - R	E e	ast Bo	ound - R	We L -	est Bo	und - R
Min. Green:												
						4.0						
Volume Module												
Base Vol:										23	521	188
Growth Adi:						1.00					1.00	
Initial Bse:			30	93		164			40	23		188
Added Vol:						3				0		0
ATI:				146		26				7		228
Initial Fut:											672	416
User Adj:								1.00			1.00	
PHF Adj:				1.00		1.00		1.00			1.00	
PHF Volume:	177	756	37	244			310		41		672	416
Reduct Vol:	0	0				0				0	0	
Reduced Vol:			37	244	245	193	310	379	41		672	
PCE Adi:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	177	756	37	244	245	193	310	379	41	30	672	416
Saturation F	low Mo	odule:										
Sat/Lane:											1900	1900
Adjustment:											1.00	0.92
Lanes:											1.00	
Final Sat.:						1750						1750
Capacity Ana.												
Vol/Sat:									0.02	0.02		
Crit Moves:				****							****	
Green Time:									91.4		51.2	
Volume/Cap:											0.97	
Delay/Veh:									8.7		70.7	
User DelAdj:									1.00		1.00	
AdjDel/Veh:				108.5 F	56.2 E		99.5 F		8.7		70.7 E	
LOS by Move: HCM2kAvgO:			22	1.5		D 7						C 12
					-				1	1	34	12
Note: Queue	repor	ea is	tne i	numper	or ca	ırs per	ıane					

### 645 Horning Stree Shopping Center

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

Intersection #3581: Tenth St and Hedding St (P)

Traffix 8.0.0715



Approach: No Movement: L	rth Bound	South Bound	East Bound	West Bound
Movement: L	- T - R	L - T - R	L - T - R	L - T - R
Min. Green: 0				
			4.0 4.0 4.0	
Volume Module: >>				
Base Vol: 0				73 809 813
Growth Adj: 1.00	1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse: 0			109 326 87	73 809 813
Added Vol: 0	0 0	0 0 0	0 0 0	0 0 0
PasserByVol: 0	0 0	0 0 0	0 0 0	0 0 0
Initial Fut: 0	0 0	29 158 42	109 326 87	73 809 813
User Adj: 1.00		1.00 1.00 1.00	1.00 1.00 1.00	
PHF Adj: 1.00		1.00 1.00 1.00		1.00 1.00 1.00
PHF Volume: 0	0 0	29 158 42	109 326 87	73 809 813
Reduct Vol: 0	0 0	0 0 0	0 0 0	0 0 0
Reduced Vol: 0				
PCE Adj: 1.00				
MLF Adj: 1.00				
FinalVolume: 0				
Saturation Flow M				
Sat/Lane: 1900				
Adjustment: 0.92				
Lanes: 0.00				
Final Sat.: 0				
Capacity Analysis				
Vol/Sat: 0.00		0.05.0.05.0.02	0 06 0 17 0 05	0.04 0.43 0.46
Crit Moves:	0.00 0.00	****	****	****
Green Time: 0.0	0 0 0 0	11.5 11.5 25.6		
Volume/Cap: 0.00		0.62 0.62 0.13		
Delay/Veh: 0.0	0.00 0.00	71.2 71.2 48.7		
User DelAdi: 1.00		1.00 1.00 1.00		
AdiDel/Veh: 0.0		71.2 71.2 48.7		
LOS by Move: A				
HCM2kAvqQ: 0				3 16 19
Note: Queue repor				
- 1		- 1		

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#### 645 Horning Street Shopping Center

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

Intersection #3581: Tenth St and Hedding St (P)



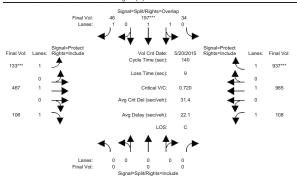
Approach:												
Movement:						- R						
Min. Green:										7		
Y+R:						4.0				4.0	4.0	4.
Volume Module	e: >>	Count	Date:	20 Ma	ay 201	15 << 7	:15 -	8:15	AM			
Base Vol:	0	0	0	29	158	42	109	326	87	73	809	81
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
Initial Bse:	0	0	0	29	158	42	109	326	87	73	809	81
Added Vol:	0					3			0	0	3	-
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	0	0	0	29	162	45	109	326	87	73	812	81
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
			0		162		109		87	73		81
Reduct Vol:					0	0				0		
Reduced Vol:	0	0	0	29	162	45	109	326	87	73	812	81
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
FinalVolume:			0			45						
Saturation F												
Sat/Lane:												
Adjustment:											1.00	
Lanes:						1.00						
Final Sat.:												
Capacity Ana												
Vol/Sat:	0.00	0.00	0.00	0.05				0.17	0.05	0.04	0.43	
Crit Moves:							****					***
			0.0						92.4		105	
Volume/Cap:			0.00					0.26	0.08		0.57	
Delay/Veh:			0.0			48.7		10.3	8.7			
User DelAdj:			1.00						1.00		1.00	
AdjDel/Veh:			0.0						8.7			
LOS by Move:	A	A				D					A	
HCM2kAvgQ:			0		5	2	6	-	1	3	16	-
Note: Queue	report	ted is	the n	umber	of ca	ars per	lane					

### 645 Horning Street Shopping Center

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

Intersection #3581: Tenth St and Hedding St (P)

Traffix 8.0.0715



4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
e: >>	Count	Date:	20 M	ay 201	15 << 7	:15 -	8:15	AM			
									73	809	813
1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00	1.00
0	0	0	29	158	42		326	87	73	809	813
0	0	0	0	0	0	0	0	0	0	0	0
				39	4	24	141	19	35	156	124
0	0	0	34	197	46	133	467	106	108	965	937
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
0	0	0	34	197	46	133	467	106	108	965	937
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	34	197	46	133	467	106	108	965	937
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
0.00	0.00	0.00					0.25	0.06	0.06	0.51	
											****
			-	-				2	4	23	26
report	ted is	the n	umber	of ca	ars per	lane					
	L	L - T - 0 0 0 4.0 4.0 4.0 1.00 1.00 1.00 0 0 0 0 0 0 0 0 0 0 0	L - T - R	L - T - R L 0 0 0 0 10 4.0 4.0 4.0 4.0 4.0 0 0 0 29 1.00 1.00 1.00 1.00 0 0 0 29 0 0 0 0 0 34 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	L - T - R L - T 0 0 0 0 10 10 10 4.0 4.0 4.0 4.0 4.0 4.0 10 10 10 10 2: >> Count Date: 20 May 201 0 0 0 29 158 1.00 1.00 1.00 1.00 1.00 1.00 0 0 0 29 158 0 0 0 0 29 158 0 0 0 0 34 197 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	L - T - R   L - T - R	L - T - R   L - T - R   L - T - R   L - T - R   L - T - T - R   L - T - T - T   R   L - T - T - T   R   L - T - T - T   R   L - T - T - T   R   L - T - T - T   R   L - T - T - T   R   L - T - T - T   R   L - T - T - T   R   L - T - T - T   R   L - T - T - T   R   L - T - T - T   R   L - T - T   R   L - T - T   R   L - T - T   R   L - T - T   R   L - T - T   R   L - T - T   R   L - T - T   R   L - T - T   R   L - T   R   R   L - T   R   R   L - T   R   R   L - T   R   R   L - T   R   R   L - T   R   R   L - T   R   R   L - T   R   R   L - T   R   R   L - T   R   R   L - T   R   R   L - T   R   R   L - T   R   R   L - T   R   R   R   R   R   R   R   R   R	L - T - R   L - T - R   L - T	L - T - R   L - T   L - L   L   L   L   L   L   L   L   L	L - T - R L - T - T - R L L - T - T - R L - T - T - R L L - T - T - R L L - T - T - R L L - T - T - R L L - T - T - R L L - T - T - R L L - T - T - R L L - T - T - R L L - T - T - R L L - T - T - R L L - T - T - R L L - T - T - R L L - T - T - R L L - T - T - R L L - T - T - R L L - T - T - R L L - T - T - R L L - T - R L L - T - R L L - T - T - R L L - T - R L L - T - T - T - R L L - T - T - T - R L L -	

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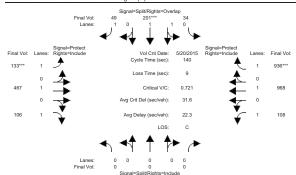
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#### 645 Horning Stree Shopping Center

### Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgrnd + Proj AM

Intersection #3581: Tenth St and Hedding St (P)



Approach:	No:	rth Bo	und	So	uth Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:												
Min. Green:												
						4.0						
Volume Module												
Base Vol:												
Growth Adj:												
Initial Bse:	U	0	U	29	158	42	109	326	8 /	/3	809	813
Added Vol:	U	0	0	0	4	3	0		0	0	3	-1
Added Vol: ATI: Initial Fut:	0	0	0	5	39	4	24	141	19	35	156	124
Initial Fut:				34	201	49	133	467	106	108		
User Adj: PHF Adi:	1.00	1.00										
						1.00						
PHF Volume:						49						
Reduct Vol:												
Reduced Vol:												
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:												
FinalVolume:												
Saturation F.												
Saturation r. Sat/Lane:				1000	1000	1000	1000	1000	1000	1000	1000	1000
Adiustment:												
Lanes:												
Final Sat.:	0.00	0.00	0.00	0.30	2164	1750	1750	1.00	1750	1750	1.00	1750
Capacity Ana										1		
Vol/Sat:				0 06	0 06	0 03	0 08	0 25	0 06	0 06	0.51	0.53
Crit Moves:	0.00	0.00	0.00	0.00		0.05		0.23	0.00	0.00	0.51	****
Green Time:	0 0	0 0	0 0	12 3				9/1 8	94.8	23 8	104	103 9
Volume/Cap:						0.14						0.72
Delay/Veh:						47.7						13.5
User DelAdj:												1.00
AdiDel/Veh.	0 0	0 0	0 0	75 1	75 1	47 7	82 1	10 4	7 9	54 8		
LOS by Move.	D. 0	0.0 A	Δ. Δ	7.5.I	7.5.I	7 / · /	52.I	10.9 R	, S	D-1.0	-2.2 R	13.3 B
AdjDel/Veh: LOS by Move: HCM2kAvgQ:	n	0	0	7	7	2	7	8	2	4	23	26
Note: Queue :									-		23	2.0
gacac .	POT		11			P		-				

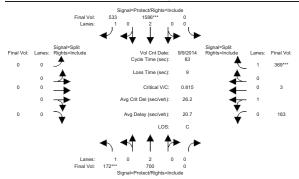
Shopping Center

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

Intersection #3021: Oakland Rd and US 101 North Ramps

North Bound

Annroach.



South Bound

Fact Bound

West Bound

	North Bound											
Movement:												
Min. Green:												
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Modul	e: >>	Count	Date:	9 Sej	2014	<< 4:	15-5:	15PM				
Base Vol:												
Growth Adj:												
Initial Bse:												
Added Vol:												0
PasserByVol:												
Initial Fut:												
User Adj:												
PHF Adj:									1.00			
PHF Volume:	172	700	0	0	1586	533	0	0	0	183	3	369
Reduct Vol: Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	172	700	0	0	1586	533	0	0	0	183	3	369
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:												
Saturation F												
Sat/Lane:												
Adjustment:												
Lanes:												
Final Sat.:												1750
Capacity Ana												
Vol/Sat:				0 00	0 42	0 20	0 00	0 00	0 00	0 10	0 10	0.21
Crit Moves:						0.30	0.00	0.00	0.00	0.10	0.10	****
Green Time:	10 0	E2 E	0 0	0 0	40 =	40 E	0 0	0 0	0 0	21 5	21 5	
Volume/Cap:												
Delay/Veh:												
User DelAdi:											1.00	
AdiDel/Veh:												
LOS by Move:												
HCM2kAvgQ:									0			
Note: Queue									U	4	4	12
More. Queue	rebor	Leu 15	the II	umer	OI Cd	re ber	ralle					

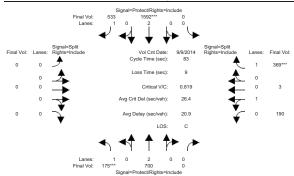
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Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj PM

Intersection #3021: Oakland Rd and US 101 North Ramps

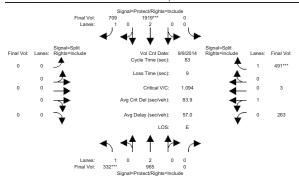


Approach:												
Movement:												
Min. Green:												
Y+R:									4.0			
Volume Module Base Vol:			Date:						0	100	2	36
Growth Adi:									1.00			1.0
Initial Bse:			0.00							183		36
Added Vol:						0				7		50
PasserByVol:			0							0	0	
Initial Fut:									0	190	3	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
PHF Volume:	175	700	0	0	1592				0			
Reduct Vol:	0		0	0	0	0		0		0		
Reduced Vol:			0				0		0		3	36
PCE Adj:									1.00		1.00	
MLF Adj:									1.00		1.00	
FinalVolume:									0			
 Saturation Fl												
Saturation Fi Sat/Lane:				1 0 0 0	1 000	1 0 0 0	1900	1 9 0 0	1000	1000	1000	190
Adjustment:											0.95	
Lanes:									0.00		0.02	
Final Sat.:									0.00			
Capacity Anal												
Vol/Sat:						0.30	0.00	0.00	0.00	0.11	0.11	
Crit Moves:					****							***
			0.0						0.0		21.4	
Volume/Cap:			0.00				0.00		0.00		0.42	0.8
Delay/Veh:			0.0				0.0		0.0		26.2	40.
User DelAdj:			1.00				1.00		1.00		1.00	
AdjDel/Veh:			0.0						0.0 A		26.2	
LOS by Move: HCM2kAvgO:	E			A 0		11	A 0			5		

645 Horning Street Shopping Center

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

Intersection #3021: Oakland Rd and US 101 North Ramps



Approach: Movement:												
Movement:												
Min. Green:												
Y+R:									4.0			
Volume Modul	e: >>	Count	Date:	9 Se	2014	<< 4:	15-5:	15PM				
Base Vol:	172	700	0	0	1586	533	0	0	0	183	3	369
Growth Adj:	1.00	1.00							1.00	1.00	1.00	1.00
Initial Bse:		700		0	1586	533	0	0	0	183	3	
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:		265	0	0	333	176	0	0	0	80		
Initial Fut:			0	0	1919	709	0	0	0			491
User Adj:	1.00	1.00		1.00					1.00		1.00	
PHF Adj:				1.00		1.00		1.00			1.00	
PHF Volume:			-				0		0	263	3	
Reduct Vol:			-	-	-	-	-	-	-	0	-	-
Reduced Vol:									0		3	
PCE Adj:											1.00	
MLF Adj:									1.00		1.00	
FinalVolume:												
Saturation F												
Sat/Lane:											1900	
Adjustment:								1.00			0.95	
Lanes:									0.00		0.01	
Final Sat.:											20	
~												
Capacity Ana Vol/Sat:				0 00	0 51	0 41	0 00	0 00	0 00	0 1 5	0 15	0 00
Crit Moves:					****	0.41	0.00	0.00	0.00	0.15	0.15	****
Green Time:						20.2	0 0	0 0	0.0	01 0	21.3	
Volume/Cap:						0.88		0.00				1.09
Delay/Veh:				0.0		31.0						101.2
User DelAdi:				1.00		1.00						1.00
AdiDel/Veh:						31.0		0.0				101.2
LOS by Move:						31.U			0.0 A		28.7 C	
HCM2kAvqQ:			A 0	A 0		21				7		
Note: Queue									0	/	/	24
More: Anene	rehor.	Lea IS	the n	unber	or ca	rs her	тапе					

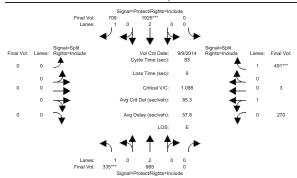
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645 Horning Stree Shopping Center San Jose CA

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgrnd + Proj PM

Intersection #3021: Oakland Rd and US 101 North Ramps



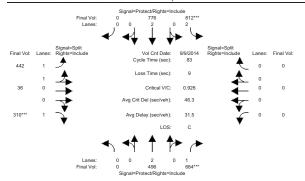
Initial Fut: 3 User Adj: 1.	7 4.0  >> 172 .00 172 3 160	10 4.0 Count 700 1.00 700	0 4.0   Date: 0 1.00	0 4.0   9 Seg 0	10 4.0 2014	10 4.0   << 4:	4.0	0 4.0	0 4.0	10 4.0	10 4.0	10
Y+R: Volume Module: Base Vol: Growth Adj: 1. Initial Bse: Added Vol: ATI: Initial Fut: User Adj: 1.	4.0  >> 172 .00 172 3	4.0 Count 700 1.00 700 0	4.0   Date: 0 1.00	4.0   9 Ser 0	4.0	4.0   << 4:	4.0	4.0	4.0	4.0	4.0	
Volume Module: Base Vol: Growth Adj: 1 Initial Bse: Added Vol: ATI: Initial Fut: User Adj: 1	>> 172 .00 172 3	Count 700 1.00 700 0	Date: 0 1.00	9 Seg 0	2014	 << 4:						4.0
Volume Module: Base Vol: Growth Adj: 1 Initial Bse: 1 Added Vol: ATI: Initial Fut: 1 User Adj: 1	>> 172 .00 172 3	700 1.00 700 0	Date: 0 1.00 0	9 Ser 0	2014	<< 4:						
Base Vol: Growth Adj: 1 Initial Bse: 1 Added Vol: ATI: Initial Fut: 3 User Adj: 1	172 .00 172 3	700 1.00 700 0	0 1.00 0	0				15 DM		1		
Growth Adj: 1. Initial Bse: 1. Added Vol: ATI: 1. Initial Fut: 1. User Adj: 1.	.00 172 3 160	1.00 700 0	1.00			533			Λ	183	3	369
Initial Bse: 1 Added Vol: ATI: 1 Initial Fut: 3 User Adj: 1	172 3 160	700 0	0		1 00							
Added Vol: ATI: Initial Fut: 3 User Adj: 1.	3 160	0		0						183		369
Initial Fut: 3 User Adj: 1.			0				0	0	0	7	0	0
User Adj: 1.	335	265	0	0	333	176	0	0	0	80	0	122
		965	0	0	1925	709	0	0	0	270	3	491
	.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj: 1.			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume: 3	335	965				709			0			
Reduct Vol:	0								0			
Reduced Vol: 3	335	965	0	0	1925	709	0	0	0	270	3	491
PCE Adj: 1.	.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj: 1.	.00								1.00			
FinalVolume: 3									0			
Saturation Flow												
Sat/Lane: 19												
Adjustment: 0.											0.95	
Lanes: 1.												
Final Sat.: 17												
Capacity Analys Vol/Sat: 0.				0 00	0 51	0 41	0 00	0 00	0 00	0.15	0 15	0 20
Crit Moves: *					****	0.41	0.00	0.00	0.00	0.13	0.13	****
Green Time: 14						20 2	0 0	0 0	0 0	21 2	21 2	
Volume/Cap: 1.									0.00			1.10
Delay/Veh: 114			0.0				0.00		0.0			102.5
User DelAdi: 1.									1.00			1.00
AdiDel/Veh: 114			0.0						0.0			102.5
LOS by Move:									0.0 A			
HCM2kAvqQ:			0	0			0		0			
Note: Queue rem									0	,	,	2.3

### 645 Horning Street Shopping Center

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

Intersection #3022: Oakland Rd and US 101 South Ramps

Traffix 8.0.0715



Approach: Movement:												
	0	10	10	7	10	0	10	10	10	0	0	0
Y+R:		4.0							4.0			
Volume Module												
Base Vol:		496							310	0	0	0
Growth Adj:				1.00		1.00		1.00			1.00	
Initial Bse:		496		812		0.00	442		310	1.00	1.00	1.00
Added Vol:	-	0		0		0			0	0	0	0
PasserByVol:				0		0	0		-	-	0	0
Initial Fut:	0	496		812	776	0					0	-
User Adj:				1.00		1.00		1.00			1.00	-
PHF Adj:	1 00	1 00	1.00	1.00		1.00		1.00			1.00	1.00
PHF Volume:			684	812	776		442		310	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	496	684	812	776	0	442	36	310	0	0	0
PCE Adi:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			684	812	776	0	442	36	310	0	0	0
Saturation F.												
Sat/Lane:	1900	1900	1900	1900	1900	1900		1900		1900	1900	1900
Adjustment:			0.92	0.83	1.00	0.92	0.93	0.95	0.92	0.92	1.00	0.92
Lanes:				2.00		0.00		0.15			0.00	
Final Sat.:						0		267		0		0
Capacity Ana												
Vol/Sat:					0.20	0.00	0.13	0.13		0.00	0.00	0.00
Crit Moves:			****	****					****			
Green Time:				23.1		0.0		15.9			0.0	0.0
Volume/Cap:				0.93		0.00		0.70			0.00	0.00
Delay/Veh:				44.6		0.0		34.7			0.0	0.0
User DelAdj:				1.00		1.00		1.00			1.00	1.00
AdjDel/Veh:				44.6		0.0		34.7			0.0	0.0
LOS by Move:				D		A	C					A
HCM2kAvgQ:				13	4	0		8	13	0	0	0
Note: Queue	repor	tea is	tne n	umper	or ca	rs per	ıane					

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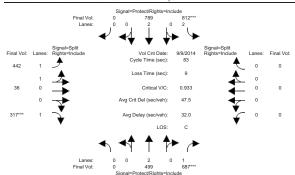
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#### 645 Horning Stre Shopping Center San Jose CA

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

Intersection #3022: Oakland Rd and US 101 South Ramps



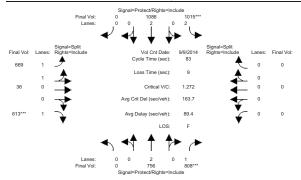
Approach: Movement:						und - R			ound - R			
Min. Green:						0				0	0	0
Y+R:						4.0			4.0		4.0	
Volume Module												
Base Vol:									310			
Growth Adj:			1.00						1.00			1.00
Initial Bse:			684				442		310	0	0	0
Added Vol:			3	-			0	0	7	0		0
PasserByVol:			0			0			0	0		0
Initial Fut:						0				0		
User Adj:						1.00		1.00			1.00	
PHF Adj:			1.00						1.00		1.00	1.00
PHF Volume:				812			442		317	0	0	0
Reduct Vol:					0		0		0	0		0
Reduced Vol:	0	499	687	812	789	0	442	36	317	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
FinalVolume:									317			0
Saturation F	low Mo	odule:										
Sat/Lane:											1900	1900
Adjustment:	0.92	1.00	0.92	0.83	1.00	0.92	0.93	0.95	0.92	0.92	1.00	0.92
									1.00			
Final Sat.:									1750			
Capacity Ana	lysis	Modul	e:									
Vol/Sat:	0.00	0.13			0.21	0.00	0.13	0.13		0.00	0.00	0.00
Crit Moves:			****	****					****			
Green Time:	0.0	34.9	34.9	22.9	57.9	0.0	16.1	16.1	16.1	0.0	0.0	0.0
Volume/Cap:	0.00	0.31	0.93	0.93	0.30	0.00	0.69	0.69	0.93	0.00	0.00	0.00
Delay/Veh:	0.0	16.1	41.6	45.8	4.9	0.0	34.2	34.2	64.8	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	16.1	41.6	45.8	4.9	0.0	34.2	34.2	64.8	0.0	0.0	0.0
LOS by Move:	A	В	D	D	A	A	C	C	E	A	A	A
HCM2kAvqQ:			20	13	4	0	7	7	13	0	0	0
Note: Queue :	report	ted is	the n	umber	of ca	rs per	lane					
	-											

645 Horning Stree Shopping Center

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

Intersection #3022: Oakland Rd and US 101 South Ramps

Traffix 8.0.0715



Approach: No						ast Bo	ound	W∈	est Bo	und	
	- T - R						- R		- T		
Min. Green: 0	10 10	7	10	0	10	10	10	0	0	0	
	4.0 4.0										
Volume Module: >>	Count Date	: 9 Sep	2014	<< 4:3	35-5:3	35PM					
Base Vol: 0	496 684	812	776	0	442	36	310	0	0	0	
Growth Adj: 1.00							1.00	1.00	1.00	1.00	
Initial Bse: 0	496 684	812	776	0	442	36	310	0	0	0	
Added Vol: 0	0 0	0	0	0	0	0	0	0		0	
ATI: 0 Initial Fut: 0	260 124	203	310	0	227	0	303 613	0	0	0	
			1086	0	669	36		0	0	0	
User Adj: 1.00	1.00 1.00	1.00 1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj: 1.00				1.00				1.00	1.00	1.00	
PHF Volume: 0				0			613	0	-	0	
Reduct Vol: 0								0	0	0	
Reduced Vol: 0			1086	0	669	36	613	0	0	0	
PCE Adj: 1.00							1.00			1.00	
MLF Adj: 1.00							1.00			1.00	
FinalVolume: 0							613			0	
Saturation Flow M											
Sat/Lane: 1900											
Adjustment: 0.92							0.92			0.92	
Lanes: 0.00										0.00	
Final Sat.: 0								0		0	
Capacity Analysis											
Vol/Sat: 0.00			0.29	0.00	0.20	0.20		0.00	0.00	0.00	
Crit Moves:							****				
Green Time: 0.0						22.9		0.0		0.0	
Volume/Cap: 0.00				0.00		0.72			0.00	0.00	
Delay/Veh: 0.0				0.0			168.0		0.0	0.0	
User DelAdj: 1.00				1.00			1.00		1.00	1.00	
AdjDel/Veh: 0.0				0.0				0.0		0.0	
LOS by Move: A								A		A	
HCM2kAvgQ: 0		31		0			37	0	0	0	
Note: Queue repor	ted is the	number o	of car	s per	lane.						

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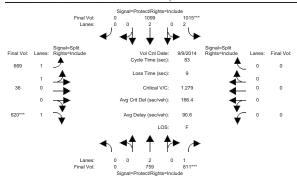
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645 Horning Stree Shopping Center

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgrnd + Proj PM

Intersection #3022: Oakland Rd and US 101 South Ramps



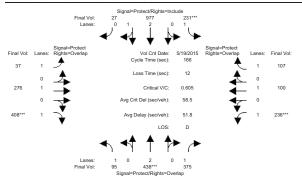
Approach:												
Movement:												
Min. Green: Y+R:												
Y+R:												
Volume Module												
Base Vol:	0	496	684	812	776	0	442	36	310	0	0	
Growth Adj:												
Initial Bse:	0	496	684	812	776	0	442	36	310	0	0	
Initial Bse: Added Vol: ATI:	0	3	3	0	13	0	0	0	7	0	0	
ATI:	0	260	124	203	310	0	227	0	303	0	0	
Initial Fut:	0	759	811	1015	1099	0	669	36	620	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.
PHF Adj:	1.00	1.00	1.00						1.00		1.00	
PHF Volume: Reduct Vol:	0	759	811	1015	1099	0	669	36	620	0	0	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	0	759	811	1015	1099	0	669	36	620	0	0	
PCE Adj:												
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.
FinalVolume:	0	759	811	1015	1099	0	669	36	620	0	0	
Saturation Fi												
Sat/Lane:												
Adjustment:												
Lanes:												
Final Sat.:												
Capacity Ana: Vol/Sat:				0 00	0 00	0 00	0 00		0 05	0 00	0 00	
Vol/Sat: Crit Moves:					0.29	0.00	0.20	0.20	0.35	0.00	0.00	0.
					F 1 0	0 0	00.0	00.0		0 0	0 0	
Green Time:												
Volume/Cap:												
Delay/Veh:												
User DelAdj:												
AdjDel/Veh:												
LOS by Move: HCM2kAvgQ:												
	(1	- /	4.5	31	-/	()	10	1.0	38	()	()	

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

Intersection #3421: Oakland Rd and Commercial St

Traffix 8.0.0715



Approach: Movement:	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R	L -	- T	- R
Min Constant						10						
Min. Green: Y+R:		4.0				4.0			4.0			4.0
Volume Module	e: >>	Count	Date:	19 Ma	ay 201	15 << 5	:00 -	6:00	PM .			
Base Vol:	95	438	375	231	977	27	37	276	408	236	100	107
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	95	438	375	231	977	27	37	276	408	236	100	107
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95	438	375	231	977	27	37	276	408	236	100	107
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00	1.00
PHF Adj:			1.00	1.00		1.00		1.00			1.00	1.00
PHF Volume:		438	375	231	977	27	37		408	236	100	107
Reduct Vol:			0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	438	375	231	977	27	37	276	408	236	100	107
PCE Adj:			1.00		1.00	1.00		1.00			1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00				1.00
FinalVolume:			375		977		37				100	107
Saturation F.												
Sat/Lane:								1900				
Adjustment:				0.92				1.00			1.00	
Lanes:				1.00		0.08		1.00			1.00	
Final Sat.:						151		1900			1900	
Capacity Ana				0 10	0 10	0 10	0 00	0.15	0 00	0 10	0 05	0.00
Vol/Sat:			0.21	****	0.18	0.18	0.02	0.15	****	0.13	0.05	0.06
Crit Moves:							05.5	40.				0.5.0
Green Time:				36.2		52.1		49.1			50.7	
Volume/Cap:				0.60		0.57		0.49			0.17	0.12
Delay/Veh:				65.4		49.0		51.2			42.9	
User DelAdj: AdiDel/Veh:			1.00	1.00		1.00		1.00			1.00	1.00
				65.4		49.0		51.2				20.3
LOS by Move:			D 15	E 12	D 14	D 14	D 2	D 11	D 18	E 12	D 4	C 3
HCM2kAvgQ:									18	12	4	3
Note: Queue	repor	LEG IS	ine n	unper	OI CS	ııs per	ıane					

Thu May 11 16:40:58 2017

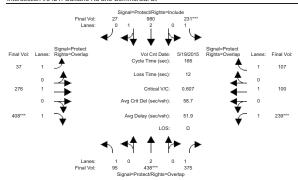
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## 645 Horning Street Shopping Center San Jose, CA

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

Intersection #3421: Oakland Rd and Commercial St

COMPARE



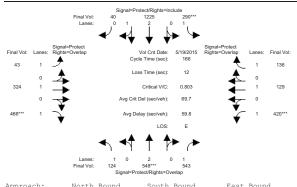
Approach:												
Movement:												
		10				10					10	
Y+R:		4.0				4.0			4.0			
Volume Module												
Base Vol:		438			977				408		100	107
Growth Adj:				1.00		1.00		1.00			1.00	1.00
Initial Bse:		438	375		977	27		276	408	236	100	107
Added Vol:			-	0		0	0	0	-	3	0	0
PasserByVol:				0		0	0			0	0	0
Initial Fut:			375						408		100	107
User Adj:			1.00			1.00		1.00			1.00	1.00
PHF Adj:			1.00	1.00		1.00		1.00			1.00	1.00
PHF Volume:			375	231	980	27	37		408	239	100	107
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	438	375	231	980	27	37	276	408	239	100	107
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			375			27			408		100	107
Saturation F:												
Sat/Lane:											1900	
Adjustment:								1.00			1.00	
Lanes:								1.00			1.00	
Final Sat.:						150			1750		1900	
Capacity Ana												
Vol/Sat:			0.21		0.18	0.18	0.02	0.15			0.05	0.06
Crit Moves:				****					****	****		
Green Time:						52.0		49.0			50.8	
Volume/Cap:						0.57		0.49			0.17	
Delay/Veh:						49.1		51.4			42.8	
User DelAdj:				1.00		1.00		1.00			1.00	
AdjDel/Veh:				65.5		49.1		51.4			42.8	20.3
LOS by Move:				E	D	D	D	_	_	E		С
		11	15	12	14	14	2		18	12	4	3
Note: Queue	report	ed is	the n	umber	of ca	rs per	lane					

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

Intersection #3421: Oakland Rd and Commercial St

Traffix 8.0.0715



Approach: Nor Movement: L -	th Bound	South	Bound	Eas	st Bour	nd T	West Bo	und
Movement: L -								
Min. Green: 7								
	4.0 4.0							
Volume Module: >>								
Base Vol: 95							36 100	107
Growth Adj: 1.00	1.00 1.00	1.00 1.	00 1.00	1.00 1	1.00 1	.00 1.	00 1.00	1.00
Initial Bse: 95		231 9	77 27	37	276	408 2	36 100	107
Added Vol: 0	0 0	0	0 0	0	0	0	0 0	0
ATI: 29	110 168	59 2	248 13	6	48	58 1	84 29	29
Initial Fut: 124	548 543	290 12	25 40	43	324	466 4	20 129	136
User Adj: 1.00	1.00 1.00	1.00 1.	00 1.00	1.00 1	1.00 1	.00 1.	00 1.00	1.00
PHF Adj: 1.00		1.00 1.		1.00 1			00 1.00	1.00
PHF Volume: 124		290 12	25 40	43			20 129	136
Reduct Vol: 0		0	0 0	0	0		0 0	0
Reduced Vol: 124		290 12					20 129	136
PCE Adj: 1.00		1.00 1.		1.00 1			00 1.00	1.00
MLF Adj: 1.00		1.00 1.			1.00 1		00 1.00	1.00
FinalVolume: 124			25 40				20 129	136
Saturation Flow Mo								
Sat/Lane: 1900							00 1900	1900
Adjustment: 0.92		0.92 0.		0.92 1			92 1.00	0.92
Lanes: 1.00		1.00 2.		1.00 1			00 1.00	1.00
Final Sat.: 1750			123 177		1900 1		50 1900	1750
Capacity Analysis Vol/Sat: 0.07		0 17 0	22 0 22	0.02	17 (	0.27 0.	24 0.07	0.08
Crit Moves:		****	23 0.23	0.02		/. Z / U.		0.00
Green Time: 15.3		34.2 48	3.7 48.7	34.5 4			.6 55.5	89.7
Volume/Cap: 0.77		0.80 0.		0.12			80 0.20	0.14
Delay/Veh: 102.7		79.8 57		54.1 6			.1 40.2	19.3
User DelAdj: 1.00		1.00 1.		1.00 1			00 1.00	1.00
AdiDel/Veh: 102.7		79.8 57		54.1 6			.1 40.2	19.3
LOS by Move: F			E E	D D			E D	В
HCM2kAvqQ: 8			21 21	2			23 5	4
Note: Queue report				_			. 0	-
2			> F					

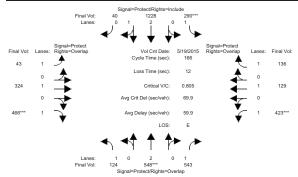
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## Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgrnd + Proj PM

Intersection #3421: Oakland Rd and Commercial St



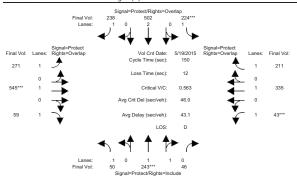
Approach:												
Movement:												
Min. Green:												
Y+R:												
Volume Modul												
		438				27				236	100	10
Growth Adj:												
Initial Bse:							37		408		100	
Added Vol:	9.0	430	373	231	3//	27	37	2/0	0	230	100	10
ATI:			168	5.9	248	13	6	48	58	184	29	2
Initial Fut:												
User Adj:						1.00		1.00			1.00	
PHF Adj:						1.00		1.00			1.00	
PHF Volume:	124	548										
PHF Volume: Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	124	548	543	290	1228	40	43	324	466	423	129	13
PCE Adi:											1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
FinalVolume:	124	548	543	290	1228	40	43	324	466	423	129	13
Saturation F												
Sat/Lane:											1900	
Adjustment:											1.00	
Lanes:											1.00	
Final Sat.:											1900	
Capacity Ana Vol/Sat:				0 17	0 00	0 00	0 00	0 17	0.27	0 04	0.07	0 0
Voi/Sat: Crit Moves:					0.23	0.23	0.02	0.1/	****		0.07	0.0
Green Time:					40.7	40 7	24 5	40.3			55.6	89.
Volume/Cap:											0.20	
Delay/Veh:								66.1			40.1	
User DelAdj:											1.00	
AdiDel/Veh:											40.1	
LOS by Move:												
HCM2kAvqQ:						21	2		24			
						rs per					- 4	

### 645 Horning Stree Shopping Center

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

Intersection #3576: 13th St and Hedding St (P)

Traffix 8.0.0715



						und						
Movement:									- R		- T	
Min. Green:		10				10				7		
Y+R:		4.0				4.0					4.0	
Volume Module										'		
Base Vol:	50	243	46	224		238	271			43	335	211
Growth Adi:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	243	46	224	502	238	271	545	59	43	335	211
Added Vol:		0		0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	50	243	46	224	502	238	271	545	59	43	335	211
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	50	243	46	224	502	238	271	545	59	43	335	211
	0	0	0	-	0	-	0	-	0	0	0	0
Reduced Vol:		243	46	224	502	238	271	545		43	335	211
PCE Adj:			1.00		1.00	1.00		1.00		1.00		
MLF Adj:			1.00		1.00				1.00			1.00
FinalVolume:						238					335	211
Saturation Fl												
Sat/Lane:					1900			1900		1900		
Adjustment:					1.00				0.92		1.00	
Lanes: Final Sat.:					2.00			1.00	1.00	1.00	1.00	1.00
rinai Sat.:												1750
Capacity Anal												
Vol/Sat:			0.08	0 13	0 13	0.14	0 15	0.29	0.03	0.02	0 18	0.12
Crit Moves:			0.00	****		0.14	0.15	****		****	0.10	0.12
Green Time:			20 8		40.5	79.4	38 9	76.2	90.5	7.0	44.3	78.3
Volume/Cap:			0.56		0.49	0.26		0.56				0.23
Delay/Veh:					47.7			27.8			49.8	20.1
User DelAdj:					1.00	1.00		1.00			1.00	1.00
AdjDel/Veh:					47.7	19.9		27.8			49.8	20.1
LOS by Move:				E	D	В	D	C	В	F	D	C
HCM2kAvgQ:	3	7	7	10	10	6	12	18	1	3	13	5
Note: Queue r	eport	ted is	the n	umber	of ca	rs per	lane					

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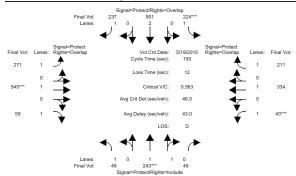
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### 645 Horning Street Shopping Center San Jose, CA

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

Intersection #3576: 13th St and Hedding St (P)



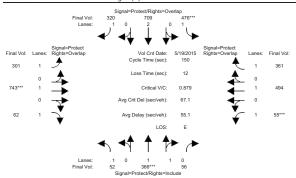
			Olgi lai-i	riotecurtig	ilis-ilicidde							
Approach:	No:	rth Bo	und	Soi	ıth Bo	und	E	ast Bo	ound	We	est Bo	ound
Movement:												
Min. Green:												
Y+R:												
Volume Modul												
Base Vol:										43	335	211
Growth Adj:												
Initial Bse:												
Added Vol:	-1	0	0	0	-1	-1	0	0	0	0	-1	(
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	(
Initial Fut:									59			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:			46			237	271	545	59	43	334	213
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	(
Reduced Vol:											334	213
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:												
FinalVolume:												
Saturation F												
Saturation F. Sat/Lane:				1000	1000	1000	1000	1000	1000	1000	1900	1000
Adjustment:											1.00	
Lanes:												
Final Sat.:												
Capacity Ana												
Vol/Sat:											0.18	0.12
Crit Moves:										****		
Green Time:												
Volume/Cap:											0.60	
Delay/Veh:											49.8	
User DelAdj:											1.00	
AdjDel/Veh:											49.8	
LOS by Move:												
HCM2kAvgQ:						6			1	3	13	
Note: Queue	report	ted is	the n	umber	oi ca	rs per	lane					

#### 645 Horning Stree Shopping Center

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

Intersection #3576: 13th St and Hedding St (P)

Traffix 8.0.0715



						und						
Movement:											- T	
		10				10				7		
Y+R:		4.0				4.0			4.0			4.0
Volume Module	e: >>	Count	Date:	19 M	ay 201	5 << 4	:30 -	5:30	PM			
Base Vol:	50	243	46	224	502	238	271	545	59	43	335	211
Growth Adj:			1.00		1.00	1.00		1.00		1.00	1.00	1.00
Initial Bse:			46	224	502	238	271	545	59	43	335	211
Added Vol:		0	0	0		0	0	0	0	0	0	0
ATI:	2		10	252			30					150
Initial Fut:			56	476		320	301			55	494	361
User Adj:			1.00		1.00	1.00		1.00			1.00	1.00
PHF Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:	52	366	56	476	709	320	301	743	62	55	494	361
Reduct Vol:	0	0	0	0	0	0	0	0	-	0	0	0
Reduced Vol:				476	709	320	301		62		494	361
PCE Adj:					1.00	1.00		1.00			1.00	1.00
MLF Adj:					1.00	1.00			1.00		1.00	1.00
FinalVolume:						320					494	361
Saturation F.												
Sat/Lane:			1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:					1.00	0.92		1.00			1.00	0.92
Lanes:					2.00	1.00		1.00			1.00	1.00
Final Sat.:						1750		1900			1900	1750
Capacity Ana												
Vol/Sat:				0.27	0.19	0.18	0.17	0.39		0.03	0.26	0.21
Crit Moves:		****		****				****		****		
Green Time:	13.0	19.2	19.2	45.9	52.1	81.1	29.0	65.9	78.9	7.0	43.9	89.7
Volume/Cap:				0.89		0.34		0.89			0.89	0.34
Delay/Veh:					40.9	20.3		52.3		106.8		16.2
User DelAdj:			1.00	1.00		1.00		1.00		1.00		1.00
AdjDel/Veh:					40.9	20.3		52.3		106.8	69.5	16.2
LOS by Move:			F	E	D	C	F	D	В	F	E	В
HCM2kAvgQ:			13	26		9	17		1	4	25	9
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane					

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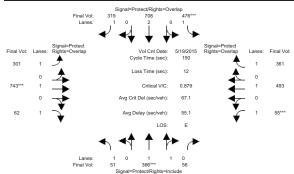
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#### 645 Horning Stree Shopping Center San Jose CA

### Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgrnd + Proj PM

Intersection #3576: 13th St and Hedding St (P)



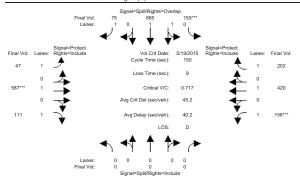
			Signai=i	Protect/Rig	nts=include	9							
Approach:	No:	rth_Bo	und_	Sot	uth_Bo	und	E	ast_Bo	ound	West Bound			
Movement:	. L .	- T	- R	. L ·	- T	- R	ь.	- T	- R	ь .	- T	- R	
Min. Green:													
Y+R:													
Volume Modul													
Base Vol:											335	211	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	50	243	46	224	502	238	271	545	59	43	335	211	
Added Vol:	-1	0	0	0	-1	-1	0	0	0	0	-1	(	
ATI:													
Initial Fut:													
User Adj: PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:						319						363	
Reduct Vol:													
Reduced Vol:													
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:													
FinalVolume:													
Saturation F.													
Sat/Lane:				1000	1000	1000	1000	1000	1000	1000	1000	1000	
Adjustment:											1.00		
Lanes:													
Final Sat.:													
Capacity Ana													
Vol/Sat:				0.27	0.19	0.18	0.17	0.39	0.04	0.03	0.26	0.21	
Crit Moves:		****		****				****		***			
Green Time:				45.9	52.0	81.1	29.1	65.9	79.0	7.0	43.9	89.	
Volume/Cap:	0.34	0.89	0.89	0.89	0.54	0.34	0.89	0.89	0.07	0.67	0.89	0.34	
Delay/Veh:										106.8	69.4	16.2	
User DelAdj:										1.00			
AdjDel/Veh:													
LOS by Move:													
HCM2kAvgQ:									1	4	24	9	
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane						
						-							

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

Intersection #3581: Tenth St and Hedding St (P)

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Approach:	No:	rth Bo	und	So	uth Bo	und	Εa	ast Bo	ound	We	est Bo	ound
Movement:												
Min. Green:												
Y+R:						4.0						
Volume Module												
		0				75						202
Growth Adj:											1.00	1.00
Initial Bse:	0	0	0	155	865	75	47	587			420	202
Added Vol:	0	0	0	0	0	0	0	0	0	-	0	0
Added Vol: PasserByVol: Initial Fut:	0	0	0	0	0	0	0	0	0	0		0
Initial Fut:	0	0	0	155	865	75	47	587	111		420	202
User Adj:											1.00	1.00
PHF Adj:							1.00				1.00	1.00
PHF Volume:				155			47			156		202
Reduct Vol:									0	0		0
Reduced Vol:									111	156		202
PCE Adj:											1.00	1.00
MLF Adj:											1.00	1.00
FinalVolume:												202
Saturation F												
Sat/Lane:												
Adjustment:											1.00	0.92
Lanes:											1.00	1.00
Final Sat.:											1900	
Capacity Ana												
Vol/Sat:	0.00	0.00	0.00								0.22	0.12
Crit Moves:										****		
Green Time:									64.7		68.8	68.8
Volume/Cap:									0.15		0.48	0.25
Delay/Veh:								40.5			30.1	25.6
User DelAdj:								1.00			1.00	1.00
AdjDel/Veh:								40.5		81.4		25.6
LOS by Move:						С						C
HCM2kAvgQ:			0				2		3	8	13	6
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane					

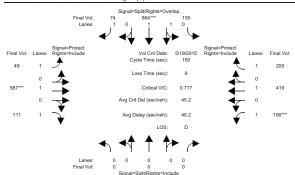
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## Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj PM

Intersection #3581: Tenth St and Hedding St (P)

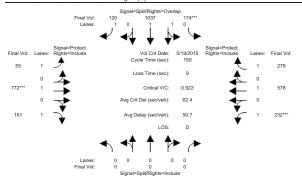


			Olgi lai-	-opiiurtigii	is-illicidade							
Approach:	No:	rth Bo	und	So	ıth Bo	ound	Ea	ast Bo	und	We	est Bo	und
Movement:	L ·	- T	- R	L	- T	- R	L -	- T	- R	L -	- T	- R
Min. Green:												
Y+R:												
Volume Module												
Base Vol:										156	420	202
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:												
Added Vol:												
PasserByVol:												0
Initial Fut:	0	0	0	155	864	74	49	587	111	156	419	205
User Adj:											1.00	1.00
PHF Adj:												1.00
PHF Volume:									111			205
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:												
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:												
FinalVolume:												
Saturation Fl Sat/Lane:				1000	1000	1000	1000	1000	1000	1000	1000	1000
Adjustment:												
Adjustment: Lanes:												
Lanes: Final Sat.:												
Capacity Anal	lvsis	Modul	e: '									
Vol/Sat:				0.28	0.28	0.04	0.03	0.31	0.06	0.09	0.22	0.12
Crit Moves:					****			****		****		
Green Time:	0.0	0.0	0.0	57.7	57.7	72.2	14.6	64.7	64.7	18.7	68.8	68.8
Volume/Cap:	0.00	0.00	0.00	0.72	0.72	0.09	0.29	0.72	0.15	0.72	0.48	0.26
Delay/Veh:	0.0	0.0	0.0	42.3	42.3	21.3	67.2	40.4	26.3	81.4	30.1	25.7
User DelAdj:												1.00
AdjDel/Veh:												
LOS by Move:												
HCM2kAvgQ:						2			3	8	13	6
Note: Queue	report	ted is	the n	umber	of ca	ars per	lane					

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

Intersection #3581: Tenth St and Hedding St (P)



Approach: No:	rth Bound	Sou L -	th Bo	und - R	Ea	ast Bo	ound - R	We T.	est Bo	ound - R
Min. Green: 0	0 0	10	10	10	7	10	10	7	10	10
Y+R: 4.0	4.0 4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >>	Count Date:	19 Ma	y 201	5 << 4	:45-5	:45PM				
Base Vol: 0	0 0	155	865	75	47	587	111	156	420	202
Growth Adj: 1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse: 0 Added Vol: 0 ATI: 0	0 0	155	865	75	47	587	111	156	420	202
Added Vol: 0	0 0	0	0	0	0	0	0	0	0	0
ATI: 0	0 0	19	172	45	8	185	50	76	158	77
Initial Fut: 0	0 0	174	1037	120	55	772	161	232	578	279
User Adj: 1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj: 1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume: 0	0 0	174	1037	120	55	772	161	232	578	279
Reduct Vol: 0	0 0	0	0	0	0	0	0	0	0	0
Reduced Vol: 0	0 0	174	1037	120	55	772	161	232	578	279
PCE Adj: 1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj: 1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume: 0	0 0	174	1037	120	55	772	161	232	578	279
Saturation Flow Mo	odule:									
Sat/Lane: 1900	1900 1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment: 0.92										
Lanes: 0.00										
Final Sat.: 0										
Capacity Analysis	Module:									
Vol/Sat: 0.00	0.00 0.00								0.30	0.16
Crit Moves:						****		****		
Green Time: 0.0	0.0 0.0	53.3	53.3	64.9	11.7	66.1	66.1	21.6	76.1	76.1
Volume/Cap: 0.00		0.92	0.92	0.16	0.40	0.92	0.21	0.92	0.60	0.31
Delay/Veh: 0.0	0.0 0.0	58.4	58.4	26.3	74.5	56.5	26.4	103.0	29.0	22.6
User DelAdj: 1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh: 0.0	0.0 0.0	58.4	58.4	26.3	74.5	56.5	26.4	103.0	29.0	22.6
LOS by Move: A										
HCM2kAvgQ: 0	0 0	31	31	3	3	37	5	14	19	8
Note: Queue report	ted is the n	umber	of ca	rs per	lane					

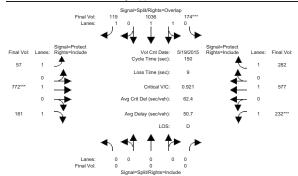
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## Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgrnd + Proj PM

Intersection #3581: Tenth St and Hedding St (P)



			Olgital	-opiiurtigii	is-ilicidade							
Approach:	No:	rth Bo	und	So	uth Bo	ound	Ea	ast Bo	und	We	est Bo	und
Movement:												
Min. Green:												
Y+R:												
Volume Module										11		
Base Vol:										156	420	202
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	155	865	75	47	587	111	156	420	202
Added Vol:	0	0	0	0	-1	-1	2	0	0	0	-1	3
ATI:	0	0	0	19	172	45	8	185	50	76	158	77
Initial Fut:	0	0	0	174	1036	119	57	772	161	232	577	282
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:							57			232		282
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:												282
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:												
FinalVolume:												
Saturation F: Sat/Lane:				1000	1000	1000	1000	1000	1000	1000	1000	1900
Adjustment:												
Lanes:												
Lanes: Final Sat.:	0.00	0.00	0.00	0.30	21.70	1750	1750	1.00	1750	1750	1.00	1750
Capacity Ana						'						
Vol/Sat:				0.33	0.33	0.07	0.03	0.41	0.09	0.13	0.30	0.16
Green Time:	0.0	0.0	0.0	53.3	53.3	64.9	11.7	66.2	66.2	21.6	76.1	76.1
Volume/Cap:	0.00	0.00	0.00	0.92	0.92	0.16	0.42	0.92	0.21	0.92	0.60	0.32
Delay/Veh:			0.0	58.3	58.3	26.3	75.1	56.5	26.4	102.9	28.9	22.7
User DelAdj:												
AdjDel/Veh:												
LOS by Move:	A	A	A	E	E	C	E	E	C	F	С	C
HCM2kAvgQ:	0	0	0	31	31	3	3	37	5	14	19	8
Note: Queue :	report	ted is	the n	umber	of ca	ars per	lane					

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