Appendix G Local Transportation Analysis









488 St. John Street Residential **Development**



Transportation Analysis

Prepared for:

Wilson Tan



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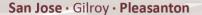
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Executive Summary

This report presents the results of the transportation analysis conducted for the proposed residential development located at 488 St. John Street in San Jose, California. The project site is located within the E. Santa Clara Street Urban Village boundary. The project proposes to demolish 3 single-family homes currently on the site to construct a new 4-story building with up to 46 residential units. 30 percent of the housing units would be allocated to affordable housing. Parking would be provided via an underground garage. Vehicular access to the project site would be via a left-in left-out driveway on N. 11th Street.

The transportation impacts of the project were evaluated following the standards and methodologies established in the City of San Jose's Transportation Analysis Handbook, adopted in April 2018. Based on the City of San Jose's Transportation Analysis Policy (Policy 5-1) and the Transportation Analysis Handbook, the Transportation Analysis report for the project includes a California Environmental Quality Act (CEQA) transportation analysis and a local transportation analysis (LTA).

CEQA Transportation Impacts

Project Vehicle Miles Traveled (VMT) Analysis

The proposed project is a residential development located in a planned growth area (E. Santa Clara Street Urban Village) and within a half-mile of a high-quality transit corridor. Furthermore, based on the VMT evaluation tool and the project's location (APN), the existing VMT for residential uses in the project vicinity is 7.94 per capita, and the current citywide average VMT for residential uses is 10.12 per capita. The VMT levels of existing residential uses in the project vicinity are less than the citywide average VMT levels. Thus, the proposed project meets the screening criteria set forth in the Transportation Analysis Handbook 2018, and the project does not require a detailed CEQA transportation analysis.

CEQA Cumulative Impacts

The project is consistent with the General Plan goals and policies for the following reasons:

- The project site is located 560 feet from a bus stop on E. Santa Clara Street at N. 11th Street.
- The project would slightly increase the housing density in the project area, and the proposed density would be consistent with the General Plan Land Use Designation.
- The project would provide bicycle parking.
- The project would provide affordable housing.



• The project would provide an attractive entrance and other urban design features that create a welcoming, pedestrian-friendly environment.

Therefore, based on the project description, the proposed project would be consistent with *Envision San Jose 2040 General Plan*. The project would be considered as part of the cumulative solution to meet the General Plan's long-range transportation goals and would result in a less-than-significant cumulative impact.

Local Transportation Effects

Project Trip Generation

Based on trip generation rates recommended by the Institute of Transportation Engineers (ITE), it is estimated that the proposed project would generate a net of 185 daily trips, including 12 trips in the AM peak hour and 13 trips in the PM peak hour. The trip estimates account for the trip credits for the existing uses on-site and the trip reduction resulting from the project characteristics and location-based vehicle mode share adjustments.

Intersection Traffic Operations

The results of the intersection level of service analysis (see Table ES-1) show that all four study intersections would operate at an acceptable level of service under existing, background and background plus project conditions.

Intersection Vehicle Queuing Operations

Vehicle queuing was analyzed for both left-turn pockets at the N. 11th Street/E. Santa Clara Street intersection. The eastbound left-turn movement does not have sufficient storage to accommodate the 95th percentile queue under background conditions. The northbound left-turn movement does not have sufficient storage to accommodate the 95th percentile queue under existing and background conditions. The project would add minimal trips in the AM and PM peak hour respectively to the eastbound-left turn movement, and therefore is not anticipated to substantially affect the queue length. The project would not add any trips to the northbound left-turn movement.

Other Transportation Issues

The proposed site plan shows adequate site access and on-site circulation. The project would enhance pedestrian circulation by providing sidewalks along its frontage. The existing transit and bicycle services are sufficient to serve the project.

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

- To ensure the minimum Caltrans stopping sight distance of 150 feet, it is recommended that standard no parking zones of 15 feet be established adjacent to the project driveway to ensure that exiting vehicles can see approaching vehicles and bicycles on the road.
- It is recommended that the City of San Jose guidelines for below grade parking driveways be met. A ramp of less than 65 feet length should be designed with a 16 percent maximum slope. It should have transitions on both ends of 10 feet minimum length and 8 percent maximum slope. Since the sidewalk on N. 11th Street is approximately 11 feet wide, between the ramp transition and the sidewalk, a minimum 8.8 feet wide area of maximum 6



percent slope should be provided. The curb cut in the sidewalk should have a maximum slope of 2 percent.

- Because of dead-end drive-aisles on both levels of the parking garage, parking spaces should be assigned to individuals.
- A passenger loading zone is recommended along the project frontage on N. 11th Street, which could be used for trash pick-up. Signs prohibiting parking/loading during garbage pickup hours should be placed adjacent to the loading zone. The trash bins should also be removed from the public right-of-way immediately after garbage pickup.
- Prior to final design, the applicant should ensure that the project driveways and property line clearance comply with the San Jose Fire Code.
- The project proposes eight bicycle lockers in the garage. They should be moved to the ground floor since the garage ramp is steep and the bicyclists would have to use the elevator.
- Per City guidelines, the project should widen the driveway from 20 feet to 26 feet.



Table ES 1
Intersection Level of Service Summary

			Existing Cor	Existing Conditions Background Conditions						
			No Proj	No Project		ct		wi	th Project	
# Intersection	Peak Hour	Count Date	Avg. Delay (sec)*	LOS	Avg. Delay (sec)*	LOS	Avg. Delay (sec)*	LOS	Incr. in Critical Delay (sec)	Incr. in Critical V/C
1 N. 11th Street and E. Santa Clara Street	AM PM	10/8/19 10/8/19	19.2 15.9	B- B	21.5 17.9	C+ B	21.5 18.0	C+ B	0.1 0.0	0.002 0.003
2 N. 11th Street and E. St. John Street	AM PM	10/8/19 10/8/19	4.2 4.4	A A	4.3 5.2	A A	4.3 5.2	A A	0.0 0.0	0.002 0.001
3 N. 10th Street and E. St. John Street	AM PM	9/15/15 ⁺ 9/15/15 ⁺	14.3 13.9	B B	15.4 15.1	B B	15.5 15.2	B B	0.1 0.1	0.003 0.002
4 N. 10th Street and E. Santa Clara Street	AM PM	9/20/18 9/20/18	17.3 21.1	B C+	17.9 24.9	B C	17.9 24.9	B C	0.1 0.0	0.001 0.001

Note:



^{*} Delays based on average delay for signalized intersections.

⁺ A growth factor of 1% was applied per year from previous existing count date to estimate new count data.

1. Introduction

This report presents the results of the transportation analysis conducted for the proposed residential development located at 488 St. John Street in San Jose, California (see Figure 1). The project site is located within the E. Santa Clara Street Urban Village boundary. The project proposes to demolish 3 single-family homes currently on the site to construct a new 4-story building with up to 46 residential units. 30 percent of the housing units would be allocated to affordable housing. Parking would be provided via an underground garage. Vehicular access to the project site would be via a left-in left-out driveway on N. 11th Street (see Figure 2).

The transportation impacts of the project were evaluated following the standards and methodologies established in the City of San Jose's Transportation Analysis Handbook, adopted in April 2018. Based on the City of San Jose's Transportation Analysis Policy (Policy 5-1) and the Transportation Analysis Handbook, the Transportation Analysis report for the project includes a California Environmental Quality Act (CEQA) transportation analysis and a local transportation analysis (LTA).

Transportation Policies

To align the City of San Jose's transportation analysis guidelines with State of California Senate Bill 743 (SB 743) and the City's goals as set forth in the Envision San Jose 2040 General Plan, the City of San Jose adopted Transportation Analysis Policy 5-1. The policy establishes the thresholds for transportation impacts under the California Environmental Quality Act (CEQA) based on vehicle miles traveled (VMT) instead of intersection level of service (LOS).

The Transportation Analysis Policy aligns with the Envision San Jose 2040 General Plan which seeks to focus new development growth within Planned Growth Areas, bringing together office, residential, and service land uses to internalize trips and reduce VMT. VMT-based policies support dense, mixeduse, infill projects as established in the General Plan's Planned Growth Areas. The Envision San Jose 2040 General Plan contains the following policies to encourage the use of non-automobile transportation modes to minimize vehicle trip generation and reduce VMT:

- Accommodate and encourage the use of non-automobile transportation modes to achieve San Jose's mobility goals and reduce vehicle trip generation and VMT (TR-1.1);
- Consider impacts on overall mobility and all travel modes when evaluating transportation impacts of new developments or infrastructure projects (TR-1.2);
- Increase substantially the proportion of commute travel using modes other than the singleoccupant vehicle in order to meet the City's mode split targets for San Jose residents and workers (TR-1.3);



- Through the entitlement process for new development, projects shall be required to fund or construct needed transportation improvements for all transportation modes, giving first consideration to improvement of bicycling, walking and transit facilities and services that encourage reduced vehicle travel demand (TR-1.4);
- Actively coordinate with regional transportation, land use planning, and transit agencies to develop a transportation network with complementary land uses that encourage travel by bicycling, walking and transit, and ensure that regional greenhouse gas emissions standards are met (TR-1.8);
- Coordinate the planning and implementation of citywide bicycle and pedestrian facilities and supporting infrastructure. Give priority to bicycle and pedestrian safety and access improvements at street crossings and near areas with higher pedestrian concentrations (school, transit, shopping, hospital, and mixed-use areas) (TR-2.1);
- Provide a continuous pedestrian and bicycle system to enhance connectivity throughout the City by completing missing segments. Eliminate or minimize physical obstacles and barriers that impede pedestrian and bicycle movement on City streets. Include consideration of gradeseparated crossings at railroad tracks and freeways. Provide safe bicycle and pedestrian connections to all facilities regularly accessed by the public, including the Mineta San Jose International Airport (TR-2.2);
- Integrate the financing, design and construction of pedestrian and bicycle facilities with street projects. Build pedestrian and bicycle improvements at the same time as improvements for vehicular circulation (TR-2.5);
- Require new development where feasible to provide on-site facilities such as bicycle storage
 and showers, provide connections to existing and planned facilities, dedicate land to expand
 existing facilities or provide new facilities such as sidewalks and/or bicycle lanes/paths, or share
 in the cost of improvements (TR-2.8);
- As part of the development review process, require that new development along existing and
 planned transit facilities consist of land use and development types and intensities that
 contribute towards transit ridership, and require that new development is designed to
 accommodate and provide direct access to transit facilities (TR-3.3);
- Support the development of amenities and land use and development types and intensities that
 increase daily ridership on the VTA, BART, Caltrain, ACE and Amtrak California systems and
 provide positive fiscal, economic, and environmental benefits to the community (TR-4.1);
- Promote transit-oriented development with reduced parking requirements and promote amenities around appropriate transit hubs and stations to facilitate the use of available transit services (TR-8.1);
- Support using parking supply limitations and pricing as strategies to encourage the use of nonautomobile modes (TR-8.3);
- Discourage, as part of the entitlement process, the provision of parking spaces significantly above the number of spaces required by code for a given use (TR-8.4);
- Allow reduced parking requirements for mixed-use developments and for developments providing shared parking or a comprehensive transportation demand management (TDM) program, or developments located near major transit hubs or within Urban Villages and other Growth Areas (TR-8.6);



- Within new development, create and maintain a pedestrian-friendly environment by connecting
 the internal components with safe, convenient, accessible, and pleasant pedestrian facilities and
 by requiring pedestrian connections between building entrances, other site features, and
 adjacent public streets (CD-3.3);
- Create a pedestrian-friendly environment by connecting new residential development with safe, convenient, accessible, and pleasant pedestrian facilities. Provide such connections between new development, its adjoining neighborhood, transit access points, schools, parks, and nearby commercial areas (LU-9.1);
- Facilitate the development of housing close to jobs to provide residents with the opportunity to live and work in the same community (LU-10.5);

The proposed project is located within the E. Santa Clara Street Local Transit Urban Village. As part of the Envision San Jose 2040 General Plan, the City has identified historically underutilized locations within San Jose that will be developed as "Urban Villages." These urban villages will promote the development of active, walkable, bicycle friendly, transit-oriented, mixed-use urban settings for new housing and job growth. The General Plan provides a policy framework to direct new housing and employment projects into these urban villages. Because the project would provide housing within the E. Santa Clara Street Local Transit Urban Village, the project is consistent with the goals and policies set forth in the General Plan. Furthermore, E. Santa Clara Street, located a block away from the project site, is designated as a Grand Boulevard in the Envision San Jose 2040 General Plan. Grand Boulevards are designated as major transportation corridors that connect City neighborhoods. The Valley Transportation Authority (VTA) is working with numerous Santa Clara County cities to upgrade transit service along this corridor. The project contributes to the land use densities proposed in this urban village and supports the anticipated growth along the E. Santa Clara Street Grand Boulevard.



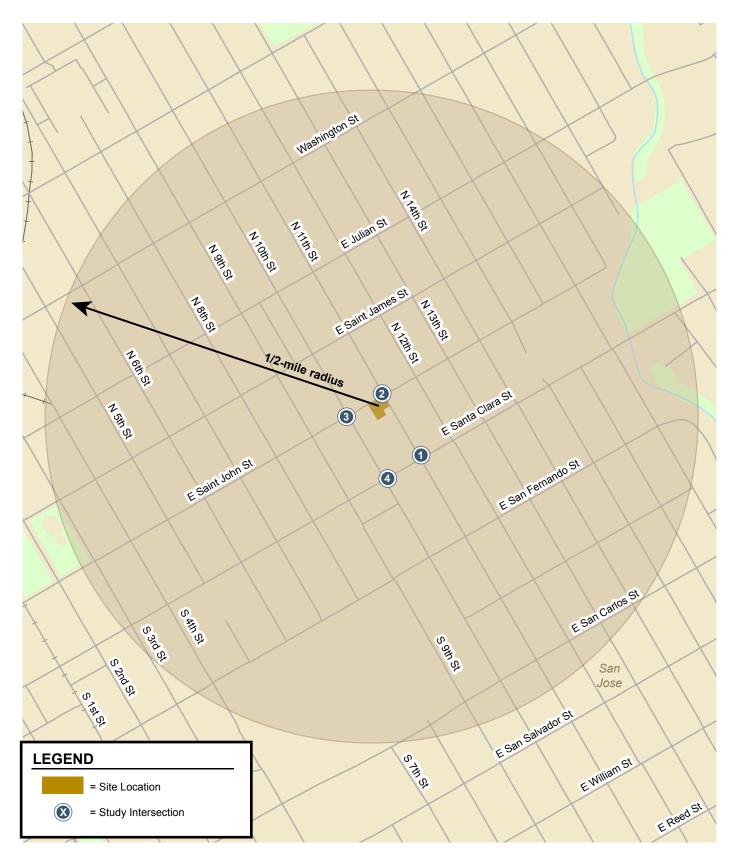
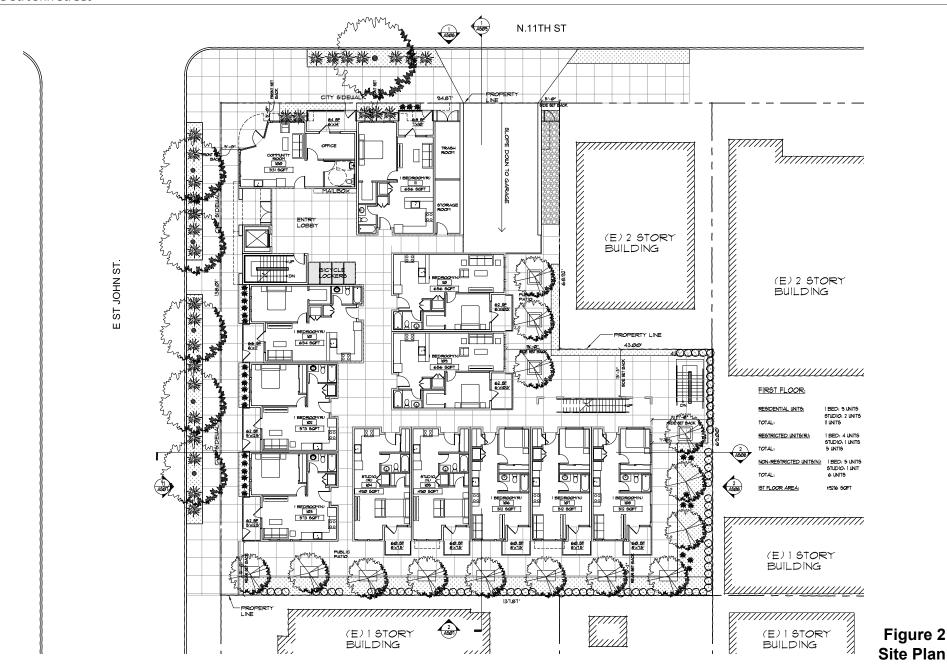


Figure 1 Site Location and Study Intersections











CEQA Transportation Analysis Scope

The CEQA Transportation Analysis includes an evaluation of VMT.

VMT Analysis

The City of San Jose's Transportation Analysis Policy establishes procedures for determining project impacts on VMT based on project description, characteristics, and/or location. The City of San Jose defines VMT as the total miles of travel by personal motorized vehicles a project is expected to generate in a day. VMT is calculated for residential, office, and industrial projects using the Origin-Destination VMT method, which measures the full distance of personal motorized vehicle-trips with one end within the project.

A project's VMT is compared to the appropriate thresholds of significance based on the project location and type of development. When assessing a residential project, the project's VMT is divided by the number of residents expected to occupy the project to determine the VMT per capita. When assessing an office or industrial project, the project's VMT is divided by the number of employees. When assessing a retail, hotel, or school project, the project's total VMT, as opposed to a per-capita or per-employee VMT metric, is measured. The total VMT for the region with and without the project is calculated. The difference between the two scenarios is the net change in total VMT that is attributable to the project. The thresholds of significance for development projects, as established in the Transportation Analysis Policy, are based on the existing citywide average VMT level for residential uses and the existing regional average VMT level for employment uses.

To determine whether a project would result in CEQA transportation impacts related to VMT, the City has developed the San Jose VMT Evaluation Tool to streamline the analysis for residential, office, and industrial projects with local traffic. The tool estimates a project's VMT and compares it to the appropriate thresholds of significance based on the project location (i.e., assessor's parcel number) and type of development. The thresholds of significance for development projects, as established in the Transportation Analysis Policy, are based on the existing citywide average VMT level for residential uses and the existing regional average VMT level for employment uses. Projects located in areas where the existing VMT is above the established threshold are referred to as being in "high-VMT areas". Projects in high-VMT areas are required to include a set of VMT reduction strategies as mitigation that would reduce the project VMT to the extent possible.

Screening for VMT Analysis

The Transportation Analysis Handbook 2018 includes screening criteria for projects that are expected to result in less-than-significant VMT impacts. Projects that meet the screening criteria do not require a CEQA transportation analysis but are still required to provide a Local Transportation Analysis (LTA). Listed below are the City of San Jose screening criteria that the project satisfies for residential projects.

- Planned Growth Area The proposed project is a residential development located in the E.
 Santa Clara Street Urban Village, which is a Planned Growth Area per the Envision San José 2040 General Plan
- High-Quality Transit The proposed project is located within a half-mile of a bus stop on E. Santa Clara Street, which is served by VTA local routes 22 and 23 that have headways of 15 minutes. A high-quality transit corridor is defined as a corridor which has transit service with headways of 15-minutes or less.
- Low VMT Based on the VMT evaluation tool and the project's location (APN), the existing daily VMT for residential uses in the project vicinity is 7.94 per capita, and the current citywide



- average VMT for residential uses is 10.12 per capita (Appendix A). The VMT levels of existing residential uses in the project vicinity are less than the citywide average VMT levels.
- Transit-Supporting Project Density The project meets the minimum FAR and density requirements of the E. Santa Clara Street Urban Village Planned Growth Area. The project density is consistent with the General Plan requirements for this location.
- Parking The project is required to provide a minimum of 58 parking spaces. The project
 proposes to provide fewer parking spaces based on its provision for affordable housing and its
 proximity to transit. Therefore, parking spaces provided by the project do not exceed the
 minimum parking requirement.
- Active Transportation The project does not negatively impact transit, bike, or pedestrian infrastructure.

Therefore, the project would meet the screening criteria for VMT analysis exemption as a residential project in a planned growth area near high-quality transit and with low VMT. No CEQA Transportation Analysis (i.e., VMT analysis) is required for the project.

Cumulative VMT Impact Analysis

Projects must demonstrate consistency with the *Envision San Jose 2040 General Plan* to address cumulative impacts. Consistency with the City's General Plan is based on the project's density, design, and conformance to the General Plan goals and policies. If a project is determined to be inconsistent with the General Plan, a cumulative impact analysis is required as part of the City's *Transportation Analysis Handbook*.

The project is consistent with the General Plan goals and policies for the following reasons:

- The project site is located 560 feet from a bus stop on E. Santa Clara Street at N. 11th Street.
- The project would slightly increase the housing density in the project area, and the proposed density would be consistent with the General Plan Land Use Designation.
- The project would provide bicycle parking.
- The project would provide affordable housing.
- The project would provide an attractive entrance and other urban design features that create a welcoming, pedestrian-friendly environment.

Therefore, based on the project description, the proposed project would be consistent with *Envision San Jose 2040 General Plan*. The project would be considered as part of the cumulative solution to meet the General Plan's long-range transportation goals and would result in a less-than-significant cumulative impact.

Local Transportation Analysis Scope

A local transportation analysis (LTA) identifies transportation operational issues that may arise due to a development project, evaluates the effects of the project on transportation, access, circulation, and related safety elements in the proximate area of the project, and supplements the VMT analysis.

As part of the LTA, a project is required to conduct an intersection operations analysis for any signalized intersections within a half mile of the project and at any signalized intersections currently



operating at LOS D or worse within one mile of the project. However, since the project is not expected to add a measurable number of vehicle-trips to intersections beyond the immediate vicinity of the project site, the AM and PM peak-hour traffic operations conditions were evaluated for the following intersections.

- N. 11th Street and E. Santa Clara Street
- N. 11th Street and E. St. John Street
- N 10th Street and E. St. John Street
- N. 10th Street and E. Santa Clara Street

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 is expected to occur between 7:00 AM and 9:00 AM and the PM peak hour is expected to occur between 4:00 PM and 6:00 PM on a regular weekday. These are the peak commute hours during which most traffic congestion occurs on the roadways.

Intersection operations conditions were evaluated for the following scenarios:

- **Existing Conditions.** Existing traffic volumes at the study intersections were obtained from traffic counts. Due to Covid-19 and regional shelter-in-place orders, new traffic counts could not be collected for the study. Therefore, a growth rate of 1% per year was applied to the traffic counts that are more than two years old to estimate the traffic volumes for existing conditions. The study intersections were evaluated with a level of service analysis using TRAFFIX software in accordance with the 2000 Highway Capacity Manual methodology.
- 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.
- Background Plus Project Conditions. Background plus project conditions reflect projected
 traffic volumes on the planned roadway network with completion of the project and approved
 developments. Background plus project traffic volumes were estimated by adding to background
 traffic volumes the additional traffic generated by the project.

The LTA also includes a vehicle queuing analysis, an evaluation of potential project adverse effects on bicycle, pedestrian, and transit facilities, and a review of site access, on-site circulation, and parking demand.

Intersection Operations Analysis Methodology

This section presents the methods used to determine the traffic operations conditions at the study intersections and the potential adverse operational effects due to the project. It includes descriptions of the data requirements, the analysis methodologies, and the applicable level of service standards for identifying deficiencies.

Data Requirements

The data required for the analysis were obtained from the City of San Jose. The following data were collected from these sources:

- existing traffic volumes
- approved project trips



- existing 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 intersections is the 2000 *Highway Capacity Manual* (HCM) method. This method is applied using the TRAFFIX software. The 2000 HCM operations method evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. The City of San Jose level of service standard for signalized intersections is LOS D or better. The correlation between average control delay and level of service is shown in Table 1.

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

Level of Service	Description	Average Control Delay Per Vehicle (sec.)
А	Signal progression is extremely favorable. Most vehicles arrive during the green phase and do not stop at all. Short cycle lengths may also contribute to the very low vehicle delay.	10.0 or less
B+ B B-	Operations characterized by good signal progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average vehicle delay.	10.1 to 12.0 12.1 to 18.0 18.1 to 20.0
C+ C C-	Higher delays may result from fair signal progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though many still pass through the	20.1 to 23.0 23.1 to 32.0 32.1 to 35.0
D+ D D-	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lengths, or high volume-to-capacity (V/C) ratios. Many vehicles stop and	35.1 to 39.0 39.1 to 51.0 51.1 to 55.0
E+ E E-	This is considered to be the limit of acceptable delay. These high delay values generally indicate poor signal progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Individual cycle failures occur frequently.	55.1 to 60.0 60.1 to 75.0 75.1 to 80.0
F	This level of delay is considered unacceptable by most drivers. This condition often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major-contributing causes of such delay levels.	greater than 80.0
Source:	Fransportation Research Board, Highway Capacity Manual 2000 (Washington, D.C	c., 2000) p10-16.



Intersection Vehicle Queuing Analysis

For selected high-demand movements at the study intersections, the estimated maximum vehicle queues were compared to the existing or planned storage capacity. The queuing analysis is presented for informational purposes only, since the City of San Jose has not defined a policy related to queuing. Vehicle queues were calculated using a Poisson probability distribution, which estimates the probability of "n" vehicles for a vehicle movement using the following formula:

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

Where:

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

n = number of vehicles in the queue per lane

 λ = average # of vehicles in the queue per lane (vehicles per hr. per lane/signal cycles per hr.)

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

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

Adverse Intersection Operations Effects

The criteria used to determine intersection operations effects on signalized intersections are based on City of San Jose Level of Service standards.

The project is said to create an adverse effect at a signalized intersection in the City of San Jose if for either peak hour:

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

An exception to rule #2 above applies when the addition of project trips reduces the amount of average delay for critical movements (i.e., the change in average delay for critical movements is negative). In this case, a deficiency is identified if there is an increase in the critical V/C value by .01 or more.



Report Organization

This report has a total of four chapters. Chapter 2 describes the existing roadway network, transit service, bicycle, and pedestrian facilities. Chapter 3 describes the local transportation analysis including the method by which project traffic is estimated, intersection operations analysis for background plus project conditions, any adverse intersection traffic effects caused by the project, intersection vehicle queuing analysis, site access and on-site circulation review, effects on bicycle, pedestrian, and transit facilities, and parking. Chapter 4 presents the conclusions of the transportation analysis.



2. **Existing Conditions**

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

Existing Roadway Network

Regional access to the project site is provided via Interstate 280 (I-280) and US 101. Local access to the project site is provided via E. Santa Clara Street, E. St. John Street, N. 10th Street, and N. 11th Street. These facilities are described below.

I-280 is an eight-lane freeway in the vicinity of the site. I-280 extends northward through San Francisco and southward to US 101 in San Jose. East of US 101, it makes a transition into I-680 to Oakland. Access to and from the site is provided via interchanges at N. 10th Street and N. 11th Street.

US 101 is an eight-lane freeway in the vicinity of the site. US 101 extends northward through San Francisco and southward to Los Angeles. Access to and from the site is provided via interchanges at E. Santa Clara Street and Julian Street.

- *E. Santa Clara Street* is a four-lane arterial that runs in an east-west direction in the vicinity of the site. It is designated as a Grand Boulevard. There are left-turn pockets provided at intersections. E. Santa Clara Street extends westward to Stockton Avenue, where it transitions into The Alameda, and eastward to US 101, where it transitions into Alum Rock Avenue. E. Santa Clara Street includes sidewalks on both sides of the street and has a posted speed limit of 25 mph near the project site. Onstreet parking is permitted on both sides of the street, and bike lanes are not present in the project vicinity. E. Santa Clara Street provides access to the project site via its intersection with N. 11th Street.
- *E. St. John Street* is a two-lane east-west local road that extends from the SAP Center in the west to 18th Street in the east. E. St. John Street includes sidewalks on both sides of the street and has a posted speed limit of 25 mph in the project vicinity. On-street parking is permitted on both sides of the street. Bicycle lanes are present between 4th Street and 2nd Street. E. St. John Street provides access to the project site via its intersection with N. 11th Street.
- **N. 10th Street** is a two-lane local street that runs in the north-south direction that transitions from E. Gish Road at Old Bayshore Highway in the north to Tully Road in the south. N. 10th Street is a one-way street in the southbound direction between E. Hedding Street and E. Humboldt Street. N. 10th Street has sidewalks on both sides of the street and has a posted speed limit of 25 mph. On-street parking is



permitted on both sides of the street. N. 10th Street provides access to the project site via its intersections with E. Santa Clara Street and E. St. John Street.

N. 11th Street is a two-lane local street that runs in the north-south direction that transitions from E. Hedding Street in the north to E. Humboldt Street in the south. N. 11th Street is a one-way street in the northbound direction for its whole length. N. 11th Street has sidewalks on both sides of the street and has a posted speed limit of 25 mph. On-street parking is permitted on both sides of the street. N. 11th Street provides direct access to the project site.

Existing Pedestrian and Bicycle Facilities

Existing Pedestrian Facilities

A complete network of sidewalks is present along the streets in the vicinity of the project site, including E. Santa Clara Street, E. St. John Street, N. 10th Street, and N. 11th Street. Marked crosswalks with pedestrian signal heads and push buttons are located at all signalized intersections. The intersection of E. Santa Clara Street and N. 10th Street has bulb-outs on all four corners. The existing curb ramps at some intersections within a ½-mile of the project site and do not comply with Americans with Disabilities Act (ADA) guidelines (see Figure 3). Overall, the existing network of sidewalks and crosswalks has good connectivity and provides pedestrians with safe routes to the project site and transit stops.

Existing Bicycle Facilities

The bicycle facilities that exist within one mile of the project site (see Figure 3) include bike lanes (Class II bikeway), bicycle boulevards, and separated bike lanes (Class IV bike lane). Bike lanes are lanes designated for use by bicycles with special lane marking, pavement legends, and signage. Bike routes are streets shared by bikes and motor vehicles. A bike boulevard is similar to a bike route in that bikes share the road with motor vehicles, but it is a low-speed, low-volume street which has been optimized for bicycle traffic.

Class II bike lanes exist on the following roadways:

- 11th Street between E. Hedding Street and E Humboldt Street
- 10th Street between Old Bayshore Highway and Keyes Street
- 7th Street between San Fernando Street and Empire Street
- 17th Street between Santa Clara Street and Berryessa Road
- 13th Street between E. Santa Clara Street and E. Hedding Street

Class III bike routes exist on the following roadways:

- 17th Street between E. Santa Clara Street and San Salvador Street
- 2nd Street between E. St. John Street and San Carlos Street
- 1st Street between E. St John Street and San Salvador Street
- San Fernando Street between 11th Street and 17th Street
- 16th Street between San Fernando Street and William Street
- E. St. John Street between N. Almaden Boulevard and N. 17th Street (bike boulevard)

Class IV separated bike lanes exist on the following roadways:

- E. San Fernando Street between 10th Street and Cahill Street
- 3rd Street between Jackson Street and E. Virginia Street
- 4th Street between E. St. James Street and Reed St

San Jose is currently in the process of updating its bike plan in the San Jose Better Bike Plan 2025.



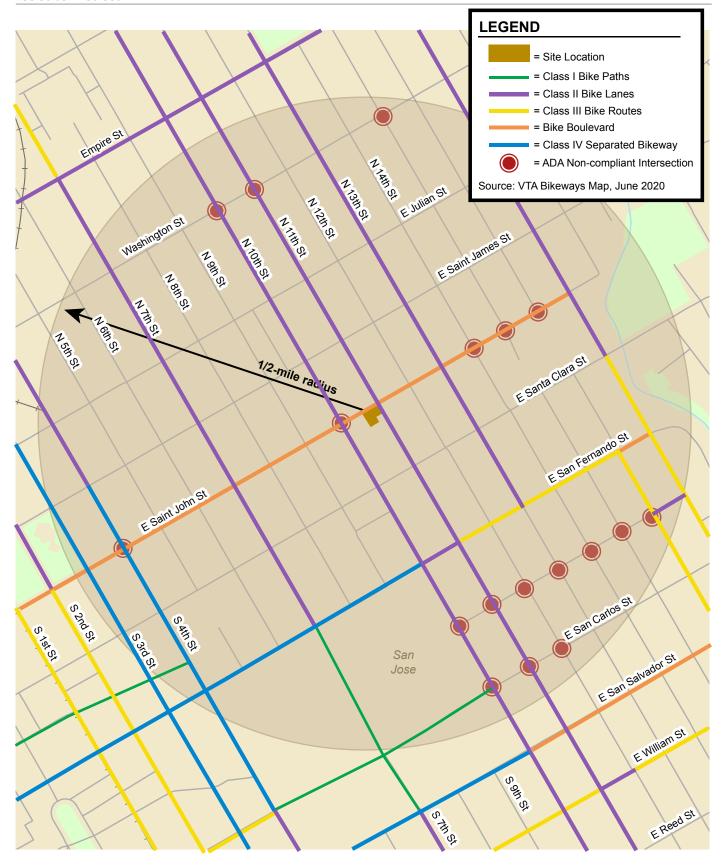


Figure 3 Existing Bicycle Facilities





Existing Transit Services

Existing transit service to the study area is provided by the VTA and Santa Cruz Metro (see Figure 5 and Table 2). Seven local VTA bus routes (Routes 22, 23, 64A, 64B, 66, 72, and 73), three rapid VTA bus routes (Routes 500, 522, and 523), and one Santa Cruz Metro route (Amtrak Highway 17 Express) serve the vicinity of the project area, as described below. The bus stop closest to the project site is located on E. Santa Clara Street at N. 11th Street, approximately 560 feet south of the project site, and is served by VTA bus routes 22 and 23. Transit service near the project site is temporarily reduced due to COVID-19 and shelter-in-place.

Table 2 **Existing Transit Service**

Bus Route	Route Description	Closest Stop and Distance to Project Site	Weekday Hours of Operation ¹	Headway (minutes) ¹
Highway 17 Express	Santa Cruz Metro Lane 2 - E. Santa Clara & 6th St.	E. Santa Clara St & 6th St., 1,700 feet	4: 40AM - 11:40 PM	15-40
Local Bus 22	Palo Alto Transit Center - Eastridge Transit Center	E. Santa Clara St 11th St., 560 feet	5:00 AM - 10:30 PM	15
Local Bus 23	DeAnza College - Alum Transit Rock Center	E. Santa Clara St 11th St., 560 feet	5:30 AM - 10:00 PM	15
Local Bus 64A	Ohlone/Chynoweth Station - McKee/White	E. Julian St & 7th St., 1,990 feet	7:00 AM - 9:30 PM	15-30
Local Bus 64B	Almaden Expressway/Camden - McKee/White	E. Santa Clara St & 7th St., 1,300 feet	8:30 AM - 6:00 PM	60
Local Bus 66	Milpitas/Dixon - Kaiser San Jose	E. Santa Clara St & 6th St., 1,700 feet	5:30 AM - 10:00 PM	20-30
Local Bus 72	Downtown San Jose - Senter/Monterey	E. Santa Clara St & 7th St., 1300 feet	7:30 AM - 9:00 PM	15
Local Bus 73	Downtown San Jose - Senter/Monterey	E. Santa Clara St & 7th St., 1300 feet	5:30 AM - 12:00 AM	30
Rapid Bus 500	Diridon Station - Downtown San Jose (Berryessa Transit Center when BART service starts)	E. Santa Clara St & 6th St., 1,700 feet	4:30 AM - 1:30 AM	15
Rapid Bus 522	Palo Alto Transit Center - Eastridge Transit Center	E. Santa Clara St & 6th St., 1,700 feet	5:00 AM - 11:00 PM	12
Rapid Bus 523	Barryessa BART - Lockheed Martin	E. Santa Clara St & 6th St., 1,700 feet	5:30 AM - 10:30 PM	15



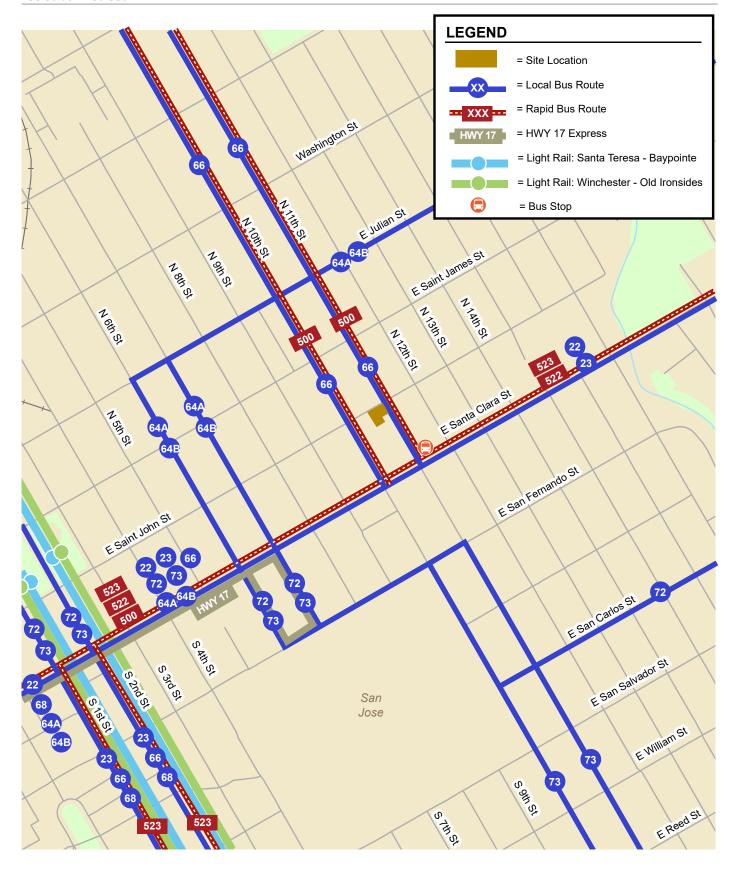


Figure 4 Existing Transit Services





Existing Intersection Lane Configurations

The existing lane configurations at the study intersections are shown on Figure 5.

Existing Traffic Volumes

Existing AM and PM peak hour traffic volumes for three of the study intersections were obtained from existing counts, provided by the City of San Jose, conducted in September 2018 and October 2019. Existing counts from September 2015 were provided for the intersection by the City of San Jose at N. 10th Street and E. St. John Street. A growth factor of 1% was applied per year from the previous count date to estimate the new count data. Additionally, trips were rerouted to reflect a change in intersection geometry since 2015. The existing peak-hour intersection volumes are shown in Figure 6. Intersection turning-movement counts for this analysis are presented in Appendix B.

Existing Intersection Traffic Operations

Signalized intersection levels of service were evaluated against the standards of the City of San Jose. The results of the analysis show that all signalized study intersections are currently operating at acceptable levels of service during the AM and PM peak hours of traffic (see Table 3).

The intersection levels of service calculation sheets are included in Appendix C.

Table 3
Existing Intersection Levels of Service

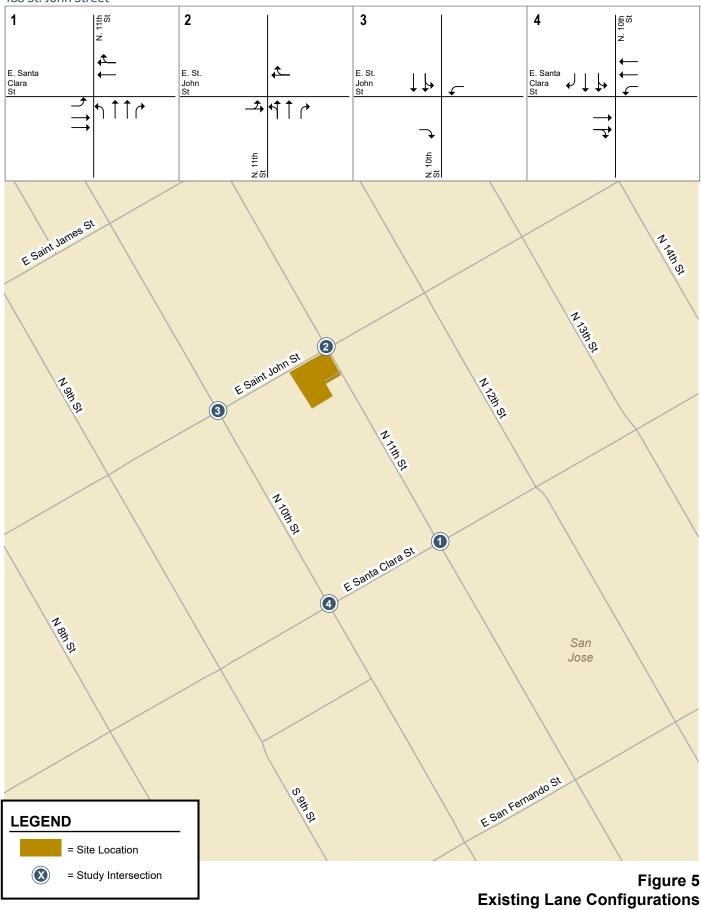
Study Number	Intersection	Peak Hour	Count Date	Existing Cor Avg. Delay (sec)*	ditions LOS
1	N. 11th Street and E. Santa Clara Street	AM	10/08/19	19.2	B-
		PM	10/08/19	15.9	В
2	N. 11th Street and E. St. John Street	AM	10/08/19	4.2	A
		PM	10/08/19	4.4	Α
3	N. 10th Street and E. St. John Street	AM	9/15/15+	14.3	В
	14. Total Officet and E. Ot. Solar Officet	PM	9/15/15+	13.9	В
	N 400 00 1 15 0 1 00 00 1	AM	09/20/18	17.3	В
4	N. 10th Street and E. Santa Clara Street	PM	09/20/18	21.1	C+

Note:



^{*} Delays based on average delay for signalized intersections.

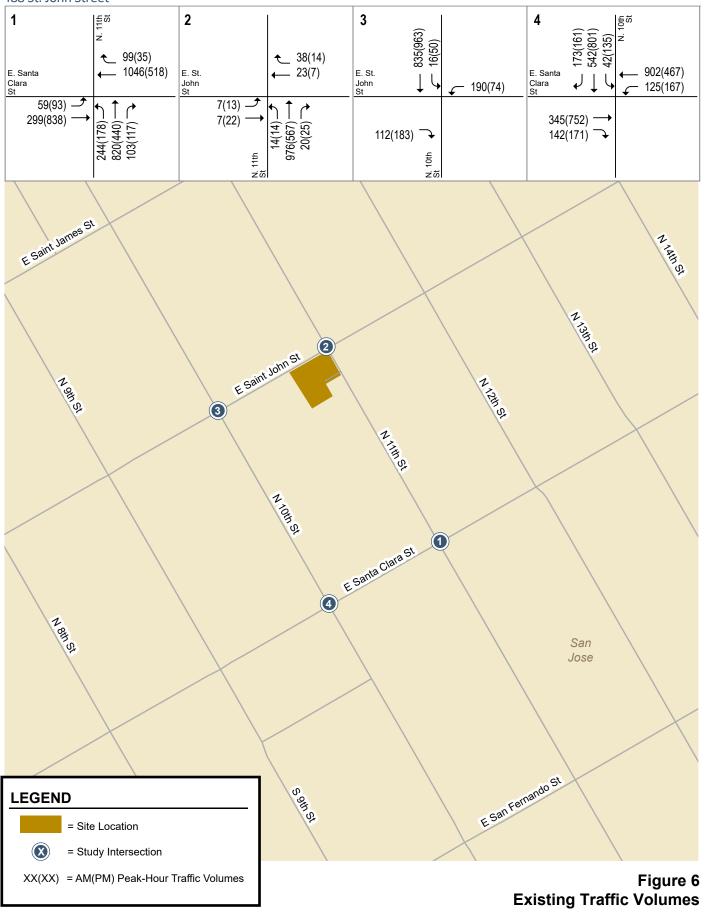
[†] A growth factor of 1% was applied per year from previous existing count date to estimate new count data.







488 St. John Street







3. **Local Transportation Analysis**

This chapter describes the local transportation analysis including the method by which project traffic is estimated, intersection operations analysis for background plus project conditions, any adverse intersection traffic effects caused by the project, intersection vehicle queuing analysis, site access and on-site circulation review, effects on bicycle, pedestrian, and transit facilities.

Intersection Operations Analysis

The San Jose intersection analysis methodology and standards are described in Chapter 1.

Project Trip Estimates

Trip Generation

Vehicle trips generated by the project were estimated using the trip rates published in the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 10th Edition (2017) for "Multifamily Housing Mid-Rise" (Land Use 221) located in a general Urban/Suburban area. As defined by the ITE, "mid-rise" multifamily housing are buildings that have between three and 10 floors. The proposed development is designed to be four stories tall, therefore the ITE, "mid-rise" multifamily housing category was used for the analysis. Table 4 shows that the project would generate 250 daily vehicle trips, including 17 trips (4 inbound and 13 outbound) occurring during the AM peak hour and 20 trips (12 inbound and 18 outbound) occurring during the PM peak hour.

Trip Adjustments and Reductions

In accordance with San Jose's *Transportation Analysis Handbook* (April 2018, Section 4.8, "Intersection Operations Analysis"), the project is eligible for adjustments and reductions to the baseline trip generation. Based on the 2018 San Jose guidelines, the project qualifies for a location-based adjustment. The location-based adjustment reflects the project's vehicle mode share based on the "place type" in which the project is located per the San Jose Travel Demand Model. The project's place type was obtained from the San Jose VMT Evaluation Tool. Based on the VMT Evaluation Tool, the project site is located within a designated Urban Low-Transit place type. Therefore, the baseline project trips were adjusted to reflect an Urban Low-Transit mode share.

Residential developments within Urban Low-Transit areas have a vehicle mode share of 87 percent (according to Table 6 of the City's *Transportation Analysis Handbook*). Thus, a 13 percent reduction was applied to the project trip generation estimates based on the location-based vehicle mode share outputs produced from the San Jose Travel Demand Model.



The project would also increase the density and affordability of housing in the area, which would encourage walking, biking, and transit uses. Therefore, per the City's *Transportation Analysis Handbook*, a 3.5 percent reduction was applied based on the external trip adjustment obtained from the VMT Evaluation Tool. The reduction was applied to the adjusted project trips (with location-based adjustment).

In addition, trip credits were given for the existing single family residential buildings to be removed. The rates published for "Single Family Detached Housing" (ITE Land Use 210) were used to estimate the trips generated by the existing residential buildings. A 13 percent reduction was applied to the existing trip generation estimates based on the location-based vehicle mode share outputs produced from the San Jose Travel Demand Model. Normally, existing trip credit can only be applied with driveway counts, but due to the COVID-19 situation, the project is able to use ITE rates/other reductions.

Net Project Trips

After applying the ITE trip rates to the proposed project and applying the appropriate trip adjustments, it is estimated that the project would generate a net of 185 daily trips, 12 trips (2 inbound and 10 outbound) in the AM peak hour and 13 trips (7 inbound and 6 outbound) in the PM peak hour (See Table 4).

Table 4
Project Trip Generation Estimates

		D-		AM Peak Hour			PM Peak Hour				
Land Use	Size	Rate	rily Trips	Rate	In		Total	Rate	In		Total
Proposed Uses											
Apartments ¹	46.0 DU	5.44	250	0.36	4	13	17	0.44	12	8	20
Location-Based Vehicle I	Mode Share (13%) ²		(33)		0	(2)	(2)		(2)	(1)	(3)
Project-Specific Trip Red	luction (3.5%) ³		(8)		(1)	0	(1)		(1)	0	(1)
	Subtotal Project Trips		209		3	11	14	-	9	7	16
Existing Use											
Single Family Homes ⁴	3.0 DU	9.44	28	0.74	1	1	2	0.99	2	1	3
Location-Based Vehicle I	Mode Share (13%) ²		(4)		0	0	0		0	0	0
	Subtotal Existing Trips		24		1	1	2	•	2	1	3
Net Project Trips			185		2	10	12		7	6	13

Note:

Trip rates for single-family and multifamily housing are from the ITE Trip Generation Manual, 10th Edition, 2017.

- 1. Multifamily Housing (Mid-Rise) (Land Use 221), average rates expressed in trips per dwelling unit (DU) are used.
- 2. The project site is located within an urban low-transit area based on the City of San Jose VMT Evaluation Tool (February 28, 2019). A 13% reduction was applied based on the location-based vehicle mode share percentage outputs from Table 6 of the City of San Jose Transportation Analysis Handbook 2018 (TA Handbook).
- 3 A 3.5% reduction was applied based on the external trip adjustment obtained from the City of San Jose VMT Evaluation Tool.
- 2. Single-Family Detached Housing (Land Use 210), average rates expressed in trips per dwelling unit (DU) are used.

Trip Distribution and Assignment

The trip distribution pattern for the project was estimated based on existing travel patterns on the surrounding roadway system and the locations of complementary land uses. The peak-hour vehicle



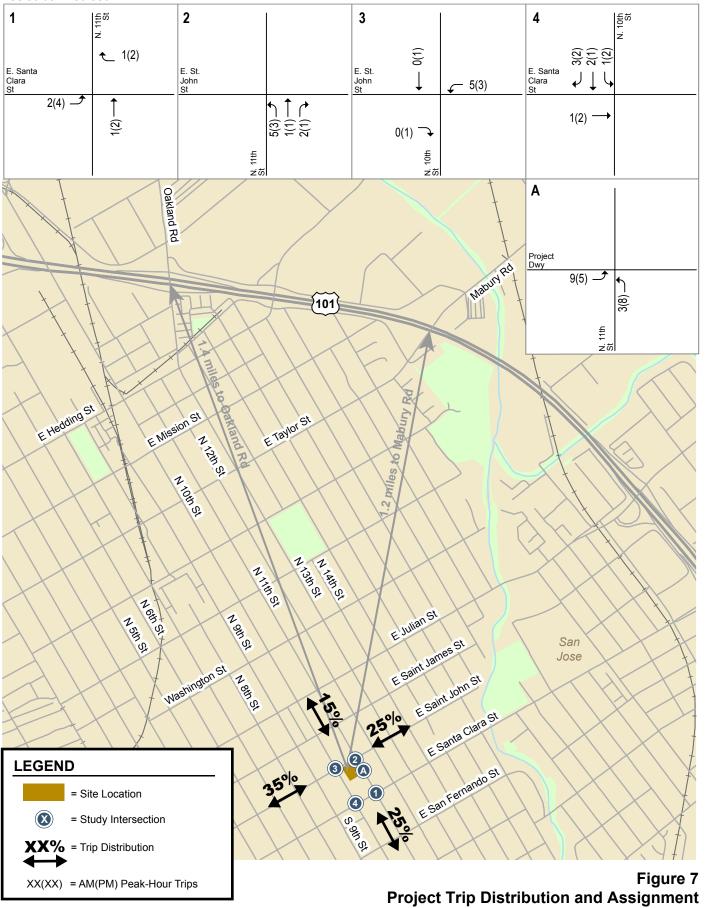
trips associated with the project were added to the roadway network in accordance with the trip distribution pattern, the roadway network connections, and the locations of the project driveway. All project trips would enter and exit the project site via a driveway on N. 11th Street, which is a one-way northbound street. All trips to the project site would turn left into the project driveway and turn left to exit out of the project driveway. Trip distribution and trip assignment are shown on Figure 7.

<u>US-101/Oakland/Mabury Transportation Development Policy (TDP)</u>

The project site is near the City's US-101/Oakland/Mabury Transportation Development Policy (TDP) area. The US-101/Oakland/Mabury TDP requires new residential and commercial developments that generate vehicular trips at either the US-101/Oakland interchange or the US-101/Mabury overcrossing to pay a Traffic Impact Fee (TIF) towards the upgrade of the US-101/Oakland interchange and construction of the US-101/Mabury interchange. The US-101/Mabury interchange is located approximately 1.2 miles west of the project, and the US-101/Oakland interchange is located approximately 1.4 miles north of the project. Since the project would generate fewer than 15 trips in either peak hour, and most of those trips would take other routes, the project is not anticipated to generate vehicular trips using either the US-101/Oakland interchange or the US-101/Mabury overcrossing.



488 St. John Street







Roadway Network under Background and Project

The roadway network under background conditions and background plus project conditions would be the same as the existing roadway network because: 1) there are no approved projects in the area that would alter the existing roadway network, and 2) the project would not alter the existing roadway network.

Traffic Volumes under Background and Project Conditions

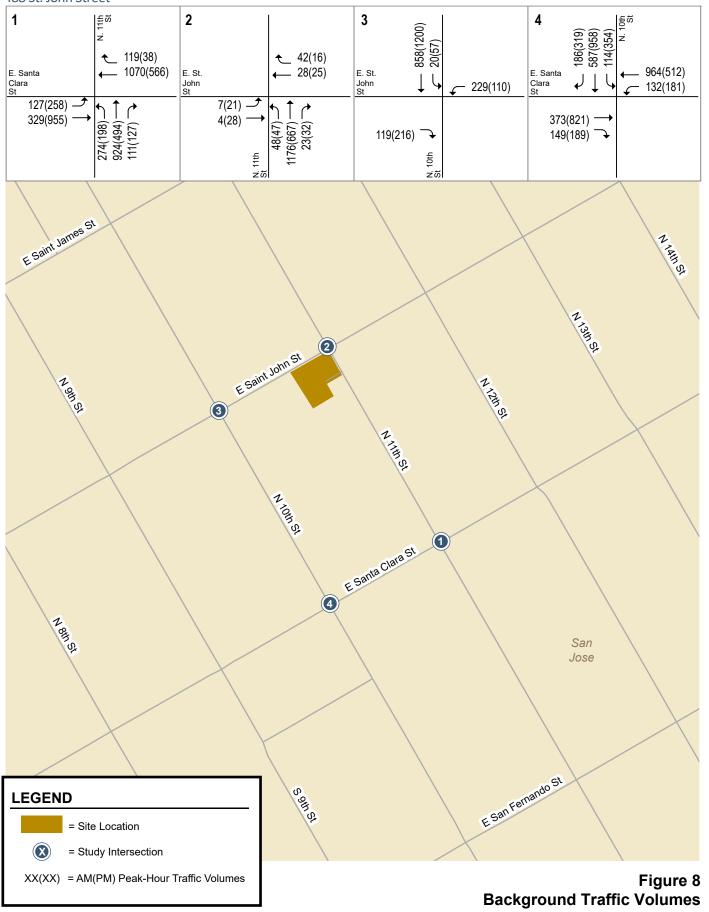
Background peak hour traffic volumes were estimated by adding to existing volumes the estimated traffic from approved but not yet constructed developments. The approved but not yet constructed trips are included in Appendix D. The added traffic from approved but not yet constructed developments was obtained from the City of San Jose. Background traffic volumes are shown on Figure 8.

The approved project trips for the Downtown Strategy Plan 2000 assumed the conversion of N. 10th Street and N. 11th Street to two-way streets. Since that conversion will not occur in the near future, the trips were rerouted to reflect one-way operations on N. 10th Street and N. 11th Street. Additionally, the ATI uses the outdated geometry at N. 10th Street and E. St. John Street. Those trips were rerouted to reflect the updated intersection geometry.

Project trips were added to background traffic volumes to obtain background plus project traffic volumes (see Figure 9).



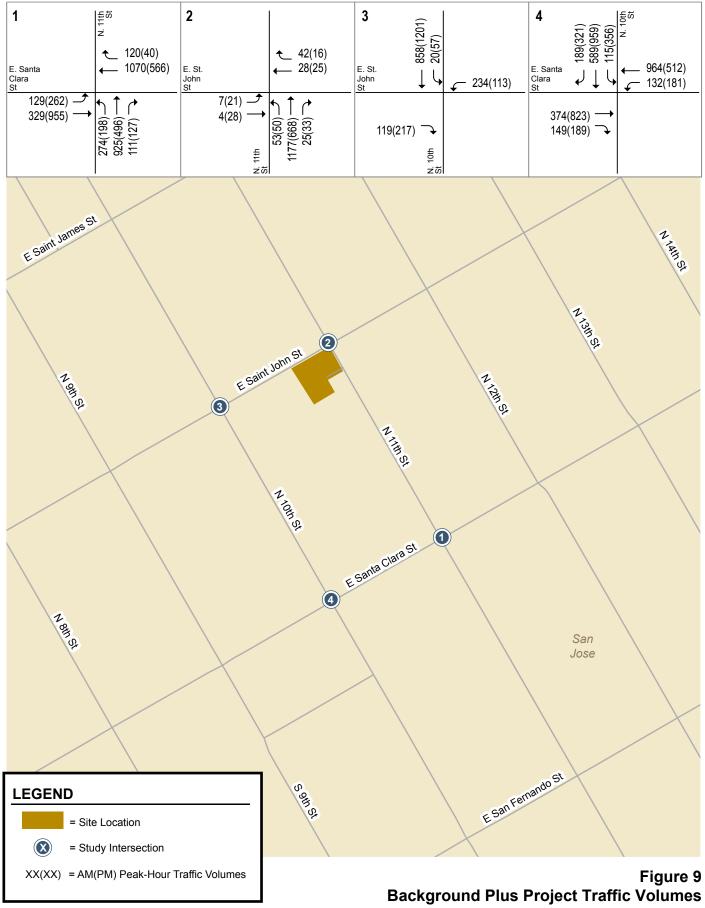
488 St. John Street







488 St. John Street







Intersection Traffic Operations under Background and Project Conditions

Intersection traffic operations at the study intersections were evaluated against the City of San Jose level of service standard (LOS D). The results of the intersection level of service analysis (see Table 5) show that all of the signalized intersections would operate at an acceptable level of service, LOS D or better, during the AM and PM peak hours under background and background plus project conditions.

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

Table 5
Background Plus Project Intersection Levels of Service

					Backgrour	Note						
			No Pro	oject		Wit	h Project					
Study Number	Intersection	Peak Hour	Avg. Delay (sec)*	LOS	Avg. Delay (sec)*	LOS	Critical	Crit.				
1	N. 11th Street and E. Santa Clara Street	AM	21.5	C+	21.5	C+	0.1	0.002				
1	N. Titil Street and E. Santa Glara Street	PM	17.9	В	18.0	В	0.0	0.003				
2	N. 11th Street and E. St. John Street	AM	4.3	Α	4.3	Α	0.0	0.002				
2	N. THII Street and E. St. John Street	PM	5.2	Α	5.2	Α	0.0	0.001				
3	N. 10th Street and E. St. John Street	AM	15.4	В	15.5	В	0.1	0.003				
3	N. Toth Street and E. St. John Street	PM	15.1	В	15.2	В	0.1	0.002				
4	N. 40th Ctreet and E. Conta Clara Ctreet	AM	17.9	В	17.9	В	0.1	0.001				
4	N. 10th Street and E. Santa Clara Street	PM	24.9	С	24.9	С	0.0	0.001				

Delays based on average delay for signalized intersections.

Vehicle Queuing Analysis

Vehicle queuing was analyzed for both left-turn pockets at the N. 11th Street/E. Santa Clara Street intersection (see Table 6). The estimated queue lengths based on the Poisson numerical calculations show that the eastbound left-turn movement does not have sufficient storage to accommodate the 95th percentile queue under background conditions. The northbound left-turn movement does not have sufficient storage to accommodate the 95th percentile queue under existing and background conditions. The project would add only 2 trips and 4 trips in the AM and PM peak hours, respectively, to the eastbound-left turn movement, and therefore is not anticipated to substantially affect the queue length. The left turn pocket length cannot be extended because it is back-to-back with the left turn pocket on westbound E. Santa Clara Street at N. 10th Street. The project would not add any trips to the northbound left-turn movement.



Table 6
Intersection Vehicle Queuing Analysis Results

	N. 11th Street and E. Santa Clara Street							
	NI	3L	EE	3L				
Measurement	AM	PM	AM	PM				
Existing								
Cycle/Delay 1 (sec)	80	80	80	80				
Volume (vphpl)	244	178	59	93				
Total 95th %. Queue (veh.)	9	7	3	5				
Total 95th %. Queue (ft.) 2	225	175	75	125				
Total Storage	100	100	125	125				
Adequate (Y/N)	N	N	Υ	Υ				
Background								
Cycle/Delay 1 (sec)	80	80	80	80				
Volume (vphpl)	274	198	127	258				
Total 95th %. Queue (veh.)	10	8	6	10				
Total 95th %. Queue (ft.) 2	250	200	150	250				
Total Storage	100	100	125	125				
Adequate (Y/N)	N	N	N	N				
Background Plus Project								
Cycle/Delay 1 (sec)	80	80	80	80				
Volume (vphpl)	274	198	129	262				
Total 95th %. Queue (veh.)	10	8	6	10				
Total 95th %. Queue (ft.) 2	250	200	150	250				
Total Storage	100	100	125	125				
Adequate (Y/N)	N	N	N	N				

Notes:

NBL = northbound left movement; EBL = eastbound left movement

Vehicular Access and Circulation

The site access and circulation evaluation is based on the June 19, 2020 site plan prepared by Ko Architects. Site access and on-site vehicular circulation were reviewed in accordance with generally accepted traffic engineering standards.

Site Access

The project generated traffic would access the site via a left-in left-out driveway on N. 11th Street that leads to the underground parking garage (see Figure 10). Currently, the project site has one full-access



Vehicle queue calculations are based on cycle length for signalized intersections.

² Assumes 25 Feet Per Vehicle Queued.

driveway on E. St. John Street that provides access to the three single family homes on the site. With the project, the driveway along St. John Street would be closed.

Project Driveway Design

According to the site plan, the driveway is shown to be 20 feet wide, which is less than the 26-foot maximum width identified by City guidelines. The project should widen the driveway from 20 feet to 26 feet.

The project driveway must provide adequate access and stacking space for vehicles entering the site to avoid backups onto the sidewalks and streets. The project driveway should provide enough stacking space for approximately two inbound vehicles. Typically, a minimum distance of 50 feet, the equivalent of two vehicles, measured from the face of the curb provides adequate stacking space at driveways. The site plan shows a gate internal to the garage at the bottom of the ramp, and there is adequate space between the sidewalk and the gate for stacking of at least two vehicles. Therefore, the project driveway design is adequate.

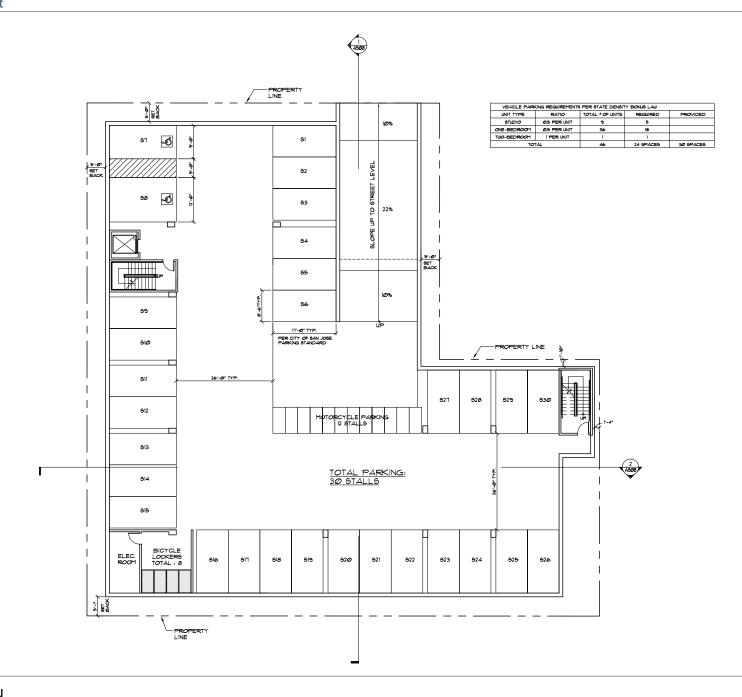
Sight Distance at Project Driveways

The proposed driveway location was evaluated to determine if the sight distance at the driveway would be adequate. The project driveway should be free and clear of any obstructions to optimize sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles traveling on adjacent roadways. Any landscaping and signage should be located in such a way as to ensure an unobstructed view for drivers entering and exiting the site. Adequate sight distance reduces the likelihood of a collision at driveways and provides drivers with the ability to locate sufficient gaps in traffic to exit a driveway. Sight distance of a driveway is evaluated based on the stopping sight distance recommended by Caltrans for a given design speed. For the driveway on N. 11th Street, which has a posted speed limit of 25 mph, the Caltrans stopping sight distance is 150 feet. Since N. 11th Street is a one-way northbound street, a driver must be able to see 150 feet to the south to locate a sufficient gap to turn out of the driveway. As shown on the site plan, the project proposes no tall vegetation or objects that would block a driver's ability to see 150 feet down the street on N. 11th Street. There is on-street parking along the project frontage on N. 11th Street south of the driveway that could limit the sight distance. It is recommended that 15 feet of red curb be painted adjacent to the project driveway to ensure that exiting vehicles can see approaching vehicles and bicycles on the road.

Since the project traffic is minor and N. 11th Street is a one-way road, vehicles are not expected to experience any issues entering or exiting the driveway.

The parking garage access ramp would be less than 65 feet long. The slope of the parking garage access ramp would be 20 percent with 10 percent transition slopes at either end. The site plan indicates that the 10 percent transition slope part of the ramp would meet the back of the sidewalk. Per the City of San Jose guidelines for below grade parking driveways, a ramp of less than 65 feet length should be designed with a 16 percent maximum slope. It should have transitions on both ends of 10 feet minimum length and 8 percent maximum slope. Since the sidewalk on N. 11th Street is approximately 11 feet wide, between the ramp transition and the sidewalk, a minimum 8.8 feet wide area of maximum 6 percent slope should be provided. The curb cut in the sidewalk should have a maximum slope of 2 percent.









On-Site Circulation

On-site vehicular circulation was reviewed in accordance with generally accepted traffic engineering standards. The project would have a two-way driveway on N. 11th Street that provides access to the underground parking garage. In the parking garage, there would be a drive aisle that leads to the parking spaces. The site plan (see Figures 2) shows two dead-end aisles in the parking garage. Dead-end aisles are generally to be avoided because vehicles unable to find a space would need to back out. No turn around space is shown on the site plan. This problem can be mitigated by having the spaces assigned to individuals. Therefore, it is recommended that the parking spaces be assigned to individuals.

The project would provide 90-degree parking within the proposed parking garage. The City's standard minimum width for two-way drive aisles is 26 feet wide where 90-degree parking is provided. This allows sufficient room for vehicles to back out of the parking spaces. According to the site plan, the drive aisles throughout the parking garage measure 26 feet wide. Thus, adequate access to all parking stalls would be provided throughout the site.

Parking Stall Dimensions

The City of San Jose Off-Street Parking Design Standards require that standard 90-degree parking stalls be a minimum of 8.5 feet wide by 17 feet long and full-size parking stalls be 9 feet wide by 18 feet long. The site plan shows the standard parking stalls would be 8.5 feet wide and 17 feet long and the ADA and van accessible parking spaces would be between 9 feet and 12 feet wide to 18 feet long meeting the City of San Jose's requirements.

Garbage Collection

The site plan shows the trash enclosure area to be located on the ground floor of the building with access from N. 11th Street (see Figure 10). Garbage collection activities for the project are expected to occur off-site with the trash bins rolled to the curb along the project frontage. A passenger loading zone is recommended along the project frontage on N. 11th Street, which could be used for trash pick-up. The current 11th Street frontage is marked as a fire lane with red curb. Signs prohibiting parking/loading during garbage pickup hours should be placed adjacent to the recommended loading zone. The trash bins should be removed from the loading zone immediately after garbage pickup. The loading zone can also be used by delivery trucks, mail services, and other moving trucks to temporarily park and access the project site.

11th Street Redesign

The City has prepared plans to redesign 11th Street for better bicycle protection (See Appendix E). Near the project site, the 11th Street redesign plans include an 8-foot wide shoulder along the project frontage for on-street parking, two 10-foot wide travel lanes, a 2-foot wide vertical separation device, and a 20-foot wide service lane for vehicles to park/use driveways and for bicycles. The project driveway and proposed passenger loading zone along the project frontage are compatible with the 11th Street redesign.

Emergency Vehicle Access

The project site plan does not designate Emergency Vehicle Access (EVA). The City of San Jose Fire Code requires driveways to provide at least 20 feet for fire access. The project driveways and drive aisle would measure approximately 20 feet wide and 26 feet wide, respectively. The City of San Jose Fire Department requires that all portions of the buildings be within 150 feet of a fire department access road and requires a minimum of 6 feet clearance from the property line along all sides of the buildings. The project provides a 5-foot front setback and side setback from the property line. Prior to final design,



the applicant should ensure that the project driveways and property line clearance comply with the San Jose Fire Code.

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 and Bicycle Facilities

The project would close the existing driveway on E. St. John Street, which would reduce pedestrian obstructions. Also, the project would provide a 5-foot detached sidewalk along the project frontage, which does not exist today. The project would provide an attractive main building entrance and individual unit entrances, and other urban design features that create a pedestrian-friendly environment. In summary, the project would improve existing pedestrian conditions.

The project site is adjacent to bike lanes on N. 10th Street and N. 11th Street. The existing network of bicycle facilities exhibits good connectivity to the residential neighborhoods and the retail on E. Santa Clara Street. The site plan indicates that the project would provide bicycle parking. The project would not remove any existing bicycle facilities, nor would it conflict with any adopted plans or policies for new bicycle facilities.

Pedestrian and Bicycle Access to Schools

Horace Mann Elementary School and San Jose High School are located within a 0.5-mile walking distance from the project site. Safe and direct pedestrian access to the school is provided via a continuous network of sidewalks in the surrounding area. Crosswalks are provided at all signalized intersections and at many unsignalized intersections, and wheelchair ramps are provided at all corners of the intersections, though some do not meet the current ADA design standards. Safe bicycling access to both schools is provided via E. St. John Street, which is a bicycle boulevard and features a speed limit of 20 mph, painted bike lanes, and diagonal parking.

Transit Service

The VTA Local Routes 22, 23, and 66, and Rapid Routes 500, 522, and 523 serve the immediate vicinity of the project area with approximately 15 to 25-minute headways during the AM and PM peak commute hours. Bus stops are within a typical walking distance (one-quarter mile or 5 minutes) of the project site. The project is expected to generate a small increase in transit demand, which could be accommodated by the available capacity of the VTA bus service.

A transit delay analysis was conducted for the buses serving in the immediate vicinity of the project site. The project is expected to have a minimal impact on transit delay (see Table 7).



Table 7
Transit Delay Analysis

Route	Direction	Peak Hour	Existing Travel Time (min) ¹	Existing Travel Time ¹ (sec)	Increase in Delay ² (sec)	Increase in Transit Delay (%)
22	Eastbound	AM	15	900	0.0	0.00%
		PM	15	900	0.0	0.00%
	Westbound	AM	15	900	0.1	0.01%
		PM	15	900	0.1	0.01%
23	Eastbound	AM	15	900	0.0	0.00%
		PM	15	900	0.0	0.00%
	Westbound	AM	15	900	0.1	0.01%
		PM	15	900	0.1	0.01%
66	Southbound	AM	25	1,500	0.1	0.01%
		PM	25	1,500	0.2	0.01%
	Northbound	AM	25	1,500	0.0	0.00%
		PM	25	1,500	0.1	0.01%
500	Southbound	AM	15	900	0.1	0.01%
		PM	15	900	0.2	0.02%
	Northbound	AM	15	900	0.0	0.00%
		PM	15	900	0.1	0.01%
522	Eastbound	AM	12	720	0.0	0.00%
		PM	12	720	0.0	0.00%
	Westbound	AM	12	720	0.1	0.01%
		PM	12	720	0.1	0.01%
523	Eastbound	AM	15	900	0.0	0.00%
		PM	15	900	0.0	0.00%
	Westbound	AM	15	900	0.1	0.01%
		PM	15	900	0.1	0.01%

Note:

- 1. Travel time is based on the VTA's average headways in April 2020.
- Increase in transit delay/travel time from background conditions to background+project conditions. The transit delay is calculated by adding together the delay of all relevant movements at the study intersections.

Construction Activities

Typical activities related to the construction of any development could include lane narrowing and/or lane closures and sidewalk closures. In the event of any type of street 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.

Parking

Vehicular 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 20-210). Per the Zoning Code, the required number of parking spaces is 1.25 spaces per studio and one-bedroom unit, and 1.7 spaces per two-bedroom unit for a total of 58 spaces. Since the project would allocate 30 percent of the residential units for affordable housing, it qualifies for a density bonus and is subject to a lower parking requirement of 1 space per studio and one-bedroom unit and 2 spaces per two-bedroom unit applicable to both the market rate and



affordable units for a total 47 parking spaces. Per subdivision (p) of the State Density Bonus Law, the project also qualifies for additional reduced parking since it is located within a ½-mile of a major transit stop. The bus stop closest to the project site is located on E. Santa Clara Street at N. 11th Street, approximately 560 feet south of the project site, served by VTA bus routes 22 and 23, which have headways of 15 minutes. Based on the above reduced parking requirements, the project is required to provide 0.5 spaces per studio and one-bedroom unit, and 1 space per two-bedroom unit. As shown in Table 8, the project is required to provide 24 parking spaces. The project proposes 30 parking spaces, meeting the City's parking requirement.

The project is also located within the Horace Mann Residential parking zone. Residents in this zone can apply for a yearly permit for on-street parking. Therefore, on-street parking could supplement the on-site parking provided by the project.

Table 8 Vehicle Parking Requirements

Unit Type	Parking Ratio	Total Number of Units	Required Parking
Studio	0.5	9	5
1-Bedroom	0.5	36	18
2-Bedroom	1.0	1	1
	Total	46	24
Source: San Jose	e Municipal Code	e Chapter 20.90. 1	Table 20-210

Bicycle Parking

The project is required to provide one bicycle space per 4 units with at least 60 percent of the bicycle parking dedicated to long-term parking according to the City of San Jose parking standards (San Jose Municipal Code Chapter 20.90, Table 20-210). The proposed 46 residential units require 11 bicycle parking spaces. Per the plans, twelve bicycle lockers are proposed. The number of proposed bicycle lockers meets the City's parking requirement.

Eight of the proposed bicycle lockers are shown to be in the garage, and four are shown to be on the ground floor of the project. It is recommended that the bike storage in the garage be moved to the ground level since the garage ramp is steep and the bicyclists would have to use the elevator.

Motorcycle Parking

The project is required to provide one motorcycle space per 4 units according to the City of San Jose parking standards (San Jose Municipal Code Chapter 20.90, Table 20-250). The residential use requires 11 motorcycle parking spaces. The project proposes to provide 12 motorcycle parking spaces meeting the City's requirement.



4. Conclusions

This study was conducted for the purpose of identifying the potential transportation impacts related to the proposed development. The transportation impacts of the project were evaluated following the standards and methodologies established in the City of San Jose's *Transportation Analysis Handbook*. Based on the City of San Jose's Transportation Analysis Policy and *Transportation Analysis Handbook*, the TA report for the project includes a CEQA transportation analysis and a local transportation analysis (LTA).

CEQA Transportation Impacts

Project Vehicle Miles Traveled (VMT) Analysis

The proposed project is a residential development located in a planned growth area (E. Santa Clara Street Urban Village) and within a half-mile of a high-quality transit corridor. Furthermore, based on the VMT evaluation tool and the project's location (APN), the existing VMT for residential uses in the project vicinity is 7.94 per capita, and the current citywide average VMT for residential uses is 10.12 per capita. The VMT levels of existing residential uses in the project vicinity are less than the citywide average VMT levels. Thus, the proposed project meets the screening criteria set forth in the Transportation Analysis Handbook 2018, and the project does not require a detailed CEQA transportation analysis.

CEQA Cumulative Impacts

The project is consistent with the General Plan goals and policies for the following reasons:

- The project site is located 560 feet from a bus stop on E. Santa Clara Street at N. 11th Street.
- The project would slightly increase the housing density in the project area and the proposed density would be consistent with the General Plan Land Use Designation.
- The project would provide bicycle parking.
- The project would provide affordable housing.
- The project would provide an attractive entrance and other urban design features that create a welcoming, pedestrian-friendly environment.



Therefore, based on the project description, the proposed project would be consistent with *Envision San Jose 2040 General Plan*. The project would be considered as part of the cumulative solution to meet the General Plan's long-range transportation goals and would result in a less-than-significant cumulative impact.

Local Transportation Effects

Project Trip Generation

Based on trip generation rates recommended by the Institute of Transportation Engineers (ITE), it is estimated that the proposed project would generate a net of 185 daily trips, including 12 trips in the AM peak hour, and 13 trips in the PM peak hour. The trip estimates account for the trip credits for the existing uses on-site and the trip reduction resulting from the project characteristics and location-based vehicle mode share adjustments.

Intersection Traffic Operations

The results of the intersection level of service analysis (see Table ES-1) show that all four study intersections would operate at an acceptable level of service under existing, background and background plus project conditions.

Intersection Vehicle Queuing Operations

Vehicle queuing was analyzed for both left-turn pockets at the N. 11th Street/E. Santa Clara Street intersection. The eastbound left-turn movement does not have sufficient storage to accommodate the 95th percentile queue under background conditions. The northbound left-turn movement does not have sufficient storage to accommodate the 95th percentile queue under existing and background conditions. The project would add minimal trips in the AM and PM peak hour respectively to the eastbound-left turn movement, and therefore is not anticipated to substantially affect the queue length. The project would not add any trips to the northbound left-turn movement.

Other Transportation Issues

The proposed site plan shows adequate site access and on-site circulation. The project would enhance pedestrian circulation by providing sidewalks along its frontage. The existing transit and bicycle services are sufficient to serve the project.

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

- To ensure the minimum Caltrans stopping sight distance of 150 feet, it is recommended that standard no parking zones of 15 feet be established adjacent to the project driveway to ensure that exiting vehicles can see approaching vehicles and bicycles on the road.
- It is recommended that the City of San Jose guidelines for below grade parking driveways be met. A ramp of less than 65 feet length should be designed with a 16 percent maximum slope. It should have transitions on both ends of 10 feet minimum length and 8 percent maximum slope. Since the sidewalk on N. 11th Street is approximately 11 feet wide, between the ramp transition and the sidewalk, a minimum 8.8 feet wide area of maximum 6 percent slope should be provided. The curb cut in the sidewalk should have a maximum slope of 2 percent.



- Because of dead-end drive-aisles on both levels of the parking garage, parking spaces should be assigned to individuals.
- A passenger loading zone is recommended along the project frontage on N. 11th Street, which could be used for trash pick-up. Signs prohibiting parking/loading during garbage pickup hours should be placed adjacent to the proposed loading area. The trash bins should also be removed from the public right-of-way immediately after garbage pickup.
- Prior to final design, the applicant should ensure that the project driveways and property line clearance comply with the San Jose Fire Code.
- The project proposes eight bicycle lockers in the garage. They should be moved to the ground floor since the garage ramp is steep and the bicyclists would have to use the elevator.
- Per City guidelines, the project should widen the driveway from 20 feet to 26 feet.



488 St. John Street LTA Technical Appendices

January 26, 2021



Appendix A VMT Analysis



CITY OF SAN JOSE VEHICLE MILES TRAVELED EVALUATION TOOL SUMMARY REPORT

PROJECT:

Name: 488 St. John Street Residential Tool Version: 2/29/2019
Location: 488 St. John Street Date: 10/7/2020

Parcel: 46717026 Parcel Type: Urban Low Transit
Proposed Parking Spaces Vehicles: 30 Bicycles: 12

LAND USE:

Residential:		Percent of All Residential Units	
Single Family	0 DU	Extremely Low Income (< 30% MFI)	0 % Affordable
Multi Family	46 DU	Very Low Income (> 30% MFI, ≤ 50% MFI)	0 % Affordable
Subtotal	46 DU	Low Income (> 50% MFI, \leq 80% MFI)	30 % Affordable
Office:	0 KSF		
Retail:	0 KSF		
Industrial:	0 KSF		

VMT REDUCTION STRATEGIES

Tier 1 - Project Characteristics

Increase Residential Density	
Existing Density (DU/Residential Acres in half-mile buffer)	13
With Project Density (DU/Residential Acres in half-mile buffer)	13
Increase Development Diversity	
Existing Activity Mix Index	0.67
With Project Activity Mix Index	0.66
Integrate Affordable and Below Market Rate	
Extremely Low Income BMR units	0 %
Very Low Income BMR units	0 %
Low Income BMR units	30 %
Increase Employment Density	
Existing Density (Jobs/Commercial Acres in half-mile buffer)	47
With Project Density (Jobs/Commercial Acres in half-mile buffer)	47

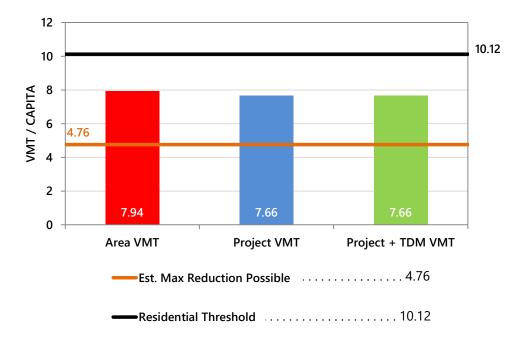
Tier 2 - Multimodal Infrastructure

Tier 3 - Parking

Tier 4 - TDM Programs

RESIDENTIAL ONLY

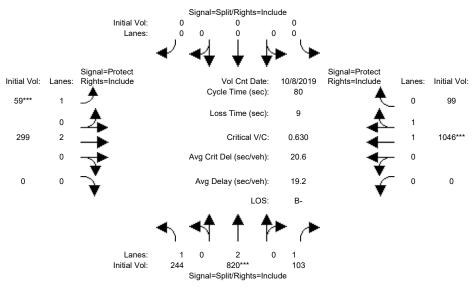
The tool estimates that the project would generate per capita VMT below the City's threshold.



Appendix B Traffic Counts

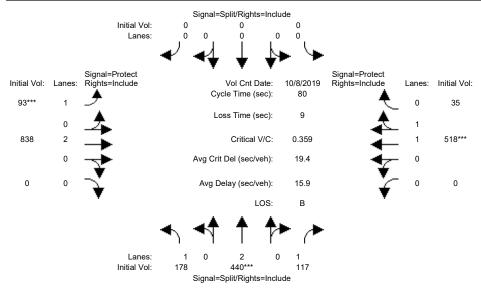


Level Of Service Computation Report 2000 HCM Operations (Base Volume Alternative) Existing (AM)



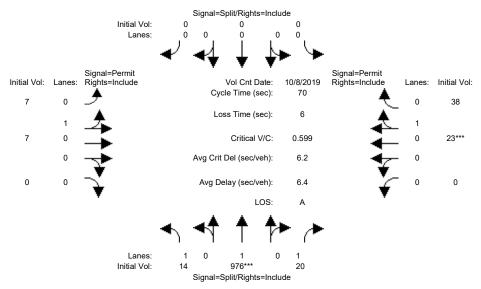
Approach:	No	rth Bo	und	South Bound				ast Bo	und	West Bound		
Movement:		- T -			- T			- T	- R	L -	_	- R
Min. Green:	10			1	0	0	1	10	0	0		10
Y+R:	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0
Volume Modul	1			1					 r			
Base Vol:	244		103	0	0	0	59	299	0	Λ	1046	99
Growth Adj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00
Initial Bse:		820	103	0	0	0	59	299	0		1046	99
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	1.00		1.00
PHF Volume:		820	103	0	0	0	59	299	0		1046	99
Reduct Vol:	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:		-	103	0	0	0	59	299	0	-	1046	99
PCE Adj:		1.00	1.00	1.00	-	1.00	1.00		1.00		1.00	1.00
MLF Adj:		1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00
FinalVolume:			103	0	0	0		299	0		1046	99
									·			
Saturation F	low M	odule:	'						'	'		
Sat/Lane:		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:		2.00	1.00	0.00	0.00	0.00		2.00	0.00	0.00	1.82	0.18
Final Sat.:			1750	0		0		3800	0		3380	320
Capacity Ana	lysis	Module	e:									
Vol/Sat:	0.14	0.22	0.06	0.00	0.00	0.00	0.03	0.08	0.00	0.00	0.31	0.31
Crit Moves:		****					****				****	
Green Time:	26.3	26.3	26.3	0.0	0.0	0.0	7.0	44.7	0.0	0.0	37.7	37.7
Volume/Cap:	0.42	0.66	0.18	0.00	0.00	0.00	0.39	0.14	0.00	0.00	0.66	0.66
Delay/Veh:	21.5	24.3	19.3	0.0	0.0	0.0	36.1	8.5	0.0	0.0	17.1	17.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.5	24.3	19.3	0.0	0.0	0.0	36.1	8.5	0.0	0.0	17.1	17.1
LOS by Move:	C+	С	B-	A	A	A	D+	A	A	A	В	В
HCM2kAvgQ:	5	10	2	0	0	0	2	2	0	0	12	12
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane					

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



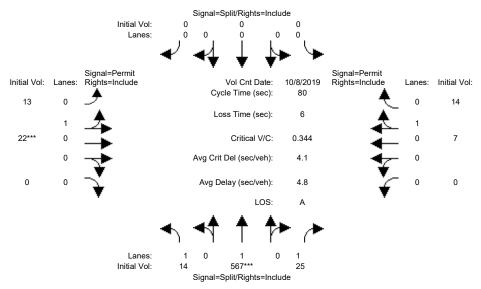
Approach:												
Movement:		- T				- R					- T	
		10			0			10	0	•	10	10
Y+R:		4.0				4.0			4.0			4.0
Volume Modul				8 Oct	2019		:00-1	3:00PM				
Base Vol:	178		117	0	0	0	93		0		518	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	178	440	117	0	0	0	93	838	0	0	518	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	178	440	117	0	0	0	93	838	0	0	518	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	178	440	117	0	0	0	93	838	0	0	518	35
PCE Adj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	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		838	0		518	35
Saturation F												
Sat/Lane:		1900		1900		1900		1900	1900		1900	1900
_	0.92		0.92		1.00	0.92		1.00	0.92	0.92		0.95
		2.00	1.00		0.00	0.00		2.00	0.00		1.87	0.13
Final Sat.:				. 0		0				. 0		234
Capacity Ana	-			0 00	0 00	0 00	0 0 5	0 00	0 00	0 00	0 1 5	0 15
Vol/Sat: Crit Moves:	0.10	0.12	0.07	0.00	0.00	0.00	0.05 ****	0.22	0.00	0.00	0.15 ****	0.15
Green Time:	25.8		25.8	0.0	0.0	0.0		45.2	0.0	0.0		33.3
Volume/Cap:			0.21		0.00	0.00		0.39	0.00	0.00		0.36
Delay/Veh:			19.8	0.0	0.00	0.0	31.5	9.8	0.0		16.1	16.1
User DelAdi:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
_				0.0		0.0	31.5		0.0		16.1	16.1
AdjDel/Veh:				0.0 A			31.5			0.0 A		
LOS by Move: HCM2kAvqQ:	4		в - 2	A 0	A 0				A 0	A 0		B 5
- 5~:				-	•				U	U	3	3
Note: Queue	rebor.	rea is	the n	unber	or ca:	rs ber	Tane	•				

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



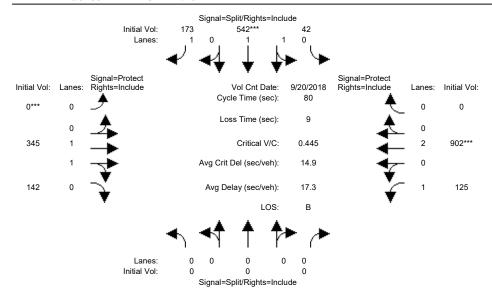
Approach:												
Movement:												
Min. Green:		10			0			10			10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Modul												
Base Vol:		976	20	0	0	0		7 . Z OAN		0	23	38
Growth Adj:		1.00	1.00		1.00	-		1.00	1.00		1.00	1.00
Initial Bse:			20	0	0	0		7	0	0	23	38
User Adi:		1.00			1.00			1.00	1.00		1.00	1.00
PHF Adj:					1.00				1.00	1.00		1.00
PHF Volume:			20	0		0	7		0	0	23	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			20	0	0	0	7	7	0	0	23	38
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	976	20	0	0	0	7	7	0	0	23	38
	1											
Saturation F												
Sat/Lane:		1900		1900		1900		1900	1900		1900	1900
Adjustment:			0.92		1.00	0.92		0.95	0.92	0.92		0.95
Lanes:			1.00		0.00	0.00		0.50	0.00	0.00		0.62
Final Sat.:				. 0	-	0		900	-	. 0		1121
	1											
Capacity Ana	4			0 00	0 00	0 00	0 01	0 01	0 00	0 00	0 00	0 00
Vol/Sat:	0.01	0.51	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00	U.U3 ****	0.03
Crit Moves:	E4 0		54.0	0.0	0 0	0.0	10 0	10.0	0 0	0.0		10.0
Green Time:			0.01		0.0	0.00		0.05	0.0		0.24	0.24
Volume/Cap:												27.1
Delay/Veh:			1.9	0.0	0.0	0.0		26.0	0.0	1.00	27.1	1.00
User DelAdj:			1.00	0.0	1.00	1.00		1.00	1.00		27.1	27.1
AdjDel/Veh: LOS by Move:				U.U		0.0 A	26.U		0.0 A	0.0 A		27.1 C
HCM2kAvqQ:			A 0	A 0	A 0	A 0	0	C 0		A 0		1
Note: Queue			-	-	-	-	-	-	U	U	1	Τ
Mote. Queue	rehor	teu IS	che II	anmer	OI Ca	ra her	тапе	•				

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



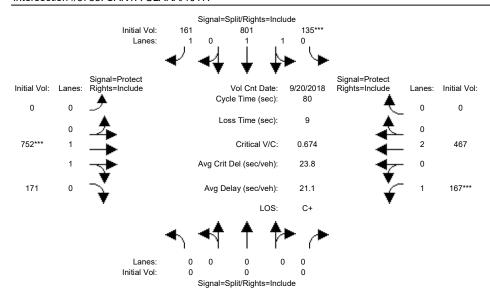
Approach:												
Movement:												
Min. Green:		10			0			10			10	10
Y+R:		4.0				4.0					4.0	
Volume Module	•											
Base Vol:		567	25	0	0	0	13	22	. 0	0	7	14
Growth Adj:		1.00			1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:			25	0	0	0	13	22	0	0	7	14
User Adi:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:			25	0	0	0	13	22	0	0	7	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	567	25	0	0	0	13	22	0	0	7	14
PCE Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	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		22	0	0	7	14
Saturation F												
Sat/Lane:					1900			1900	1900		1900	1900
Adjustment:			0.92		1.00	0.92		0.95	0.92	0.92		0.95
Lanes:			1.00		0.00	0.00		0.63	0.00	0.00		0.67
Final Sat.:				0	-	0			-	0		1200
Capacity Anal	1											
Vol/Sat:	4	0.30	0.01	0 00	0.00	0 00	0 02	0.02	0 00	0.00	0 01	0 01
Crit Moves:	0.01	****	0.01	0.00	0.00	0.00	0.02	****	0.00	0.00	0.01	0.01
Green Time:	64 0	64 0	64.0	0.0	0.0	0.0	10 0	10.0	0.0	0.0	10 0	10.0
Volume/Cap:			0.02	0.00		0.00		0.16	0.00		0.09	0.09
Delay/Veh:			1.6	0.0	0.0	0.0		31.6	0.0		31.2	31.2
User DelAdi:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:				0.0		0.0		31.6	0.0		31.2	31.2
LOS by Move:			A			A	C	C	А	А		C
HCM2kAvgQ:			0	0	0	0	1	1		0	1	1
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	-				

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



Approach: Movement:												
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												
						173						
Growth Adj:								1.00	1.00			1.00
Initial Bse:							0			125		0
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	42	542	173	0	345		125		0
Reduct Vol: Reduced Vol:	0	0	0	0	0	0	0	0	0			0
Reduced Vol:	0	0	0	42	542	173			142			0
PCE Adj:							1.00		1.00		1.00	
MLF Adj:	1.00	1.00	1.00				1.00		1.00		1.00	
FinalVolume:				42			. 0			125		0
Saturation Fi												
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:							0.92		0.95		1.00	
Lanes:									0.60		2.00	
Final Sat.:							0		1079		3800	0
Capacity Anal	lysis	Modul	e:									
Vol/Sat:												0.00
Crit Moves:					****		****				****	
Green Time:			0.0	28.4	28.4	28.4	0.0	25.6	25.6	17.0	42.6	0.0
Volume/Cap:	0.00	0.00	0.00	0.45	0.45	0.28		0.41	0.41	0.34	0.45	0.00
Delay/Veh:				20.0	20.0	18.7	0.0	21.5	21.5	27.2	11.6	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	20.0	20.0	18.7	0.0	21.5	21.5	27.2		0.0
LOS by Move:	A	A	A	C+	C+	B-	A	C+		С		A
HCM2kAvgQ:	0	0	0	6	6	3			5	3	7	0
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•				

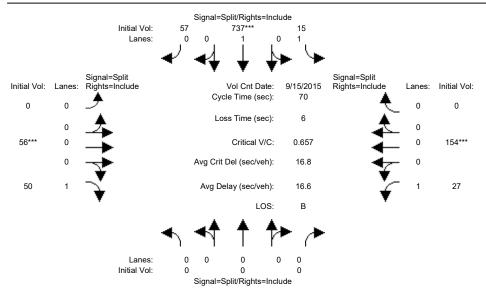
Level Of Service Computation Report 2000 HCM Operations (Base Volume Alternative) Existing (PM)



Approach:	No	rth Bo	und	Soi	ath Bo	und	Εā	ast Bo	und	We	est Bo	und
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 Module		Count 0					:50-5	750	171	1 (7	1.67	0
Growth Adj:								1.00	1.00			1.00
Initial Bse:						161	0			167		0
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		1.00	1.00
				135	801	161	0	752	171	167	467	0
Reduct Vol:	0	0	0	0	0	0			0			0
Reduced Vol:	U	Ü	Ü	135	80T	161			171			
PCE Adj:	1.00	1.00	1.00	1.00	1.00		1.00		1.00		1.00	
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:				135			0		171			0
Saturation Fl												
Sat/Lane:									1900			
Adjustment:									0.95			
Lanes:									0.38		2.00	
Final Sat.:									685		3800	
Capacity Anal	-											
Vol/Sat:	0.00	0.00	0.00	0.25	0.25	0.09	0.00	0.25	0.25	0.10	0.12	0.00
Crit Moves:	0 0	0 0	0 0		20 0	20.0	0 0				41 0	0 0
Green Time:							0.0		29.6		41.0	
Volume/Cap:	0.00	0.00	0.00	0.67		0.24		0.67	0.67		0.24	0.00
Delay/Veh:	0.0	0.0	0.0	22.2			0.0		22.5		10.9	0.0
User DelAdj:						1.00	1.00		1.00		1.00	1.00
AdjDel/Veh:							0.0		22.5		10.9	0.0
LOS by Move:	A	A	A	C+	C+		A		C+	D		A
HCM2kAvgQ:							0		11	6	3	0
Note: Queue 1	repor	ted is	the n	umber	of ca	rs per	lane	•				

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

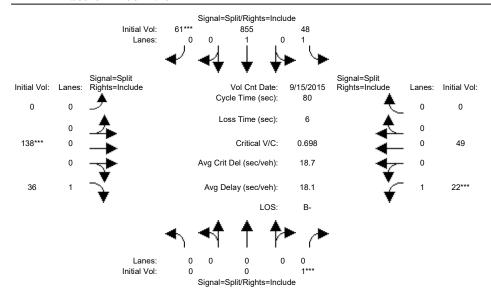
Intersection #3813: ST. JOHN/10TH



										West Bound L - T - R		
Min. Green:	0	0	0	10	10	10	0	10	10	10	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module												_
			0						50		154	
Growth Adj:									1.00		1.00	1.00
Initial Bse:							0		50		154	0
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	1.00
PHF Volume:	0	0	0	15	737	57	0	56	50	27	154	0
Reduct Vol: Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	U	U	U	15	737	57						
PCE Adj:									1.00			
MLF Adj:	1.00	1.00	1.00			1.00	1.00		1.00			
FinalVolume:				15		57	0			27		0
Saturation Fi												
Sat/Lane:			1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.95	0.95	0.92	0.95	0.95	0.95	0.95	0.92
Lanes:	0.00	0.00	0.00	1.00	0.93	0.07	0.00	0.53	0.47	0.15	0.85	0.00
Final Sat.:							0		849	269	1531	0
Capacity Ana	-											
Vol/Sat: Crit Moves:	0.00	0.00	0.00			0.44			0.06			0.00
Green Time:	0 0	0 0	0 0				0.0		10.0		10.0	0.0
Volume/Cap:					0.70			0.41	0.41		0.70	0.00
Delay/Veh:	0.00	0.00		4.9		10.7	0.0		28.4		37.0	0.0
User DelAdj:				1.00		1.00	1.00		1.00		1.00	1.00
AdjDel/Veh:							0.0		28.4		37.0	0.0
LOS by Move:	Δ. Δ	Δ. Δ	Δ. Δ	Δ.	B+		Α	20.1		D+		Α
HCM2kAvgQ:	0	0	0	0	13		0	3	3			0
Note: Queue									3	· ·		,

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

Intersection #3813: ST. JOHN/10TH

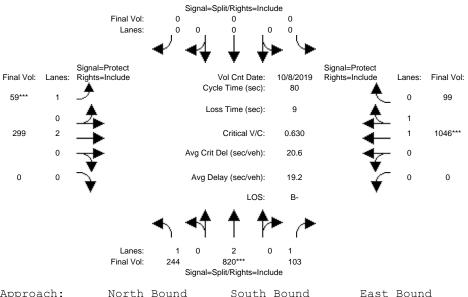


Approach: Movement:												
			0									
Y+R:			4.0									
Volume Module	e: >>	Count	Date:	15 S	ep 201	.5 << 5	:00-6	:00				
			1									
Growth Adj:								1.00	1.00		1.00	1.00
Initial Bse:							0			22		0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00
PHF Volume:	0	0	1	48	855	61	0	138	36	22	49	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	1	48	855	61						
PCE Adj:							1.00		1.00			
MLF Adj:							1.00		1.00			
FinalVolume:							. 0		36			0
Saturation Fi												
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:					0.95		0.92		0.95			
Lanes:						0.07			0.21			
Final Sat.:						120			372			0
Capacity Ana	lysis	Modul	Le:									
Vol/Sat:				0.03	0.51		0.00		0.10		0.04	0.00
Crit Moves:								****		****		
Green Time:							0.0		10.2		10.0	0.0
Volume/Cap:						0.76		0.76	0.76		0.32	0.00
Delay/Veh:						11.6	0.0	47.2	47.2		32.7	0.0
User DelAdj:							1.00		1.00		1.00	1.00
AdjDel/Veh:	0.0	0.0	525.4	4.4	11.6	11.6			47.2		32.7	0.0
LOS by Move:	A	A	F	A	B+	B+	A	D	D	C-	C-	A
HCM2KAVGQ:	U	U	U	U	Ι/	Ι/			6	2	2	0
Note: Queue	repor	ted is	s the n	umber	of ca	rs per	lane	•				

Appendix C Level of Service Calculations

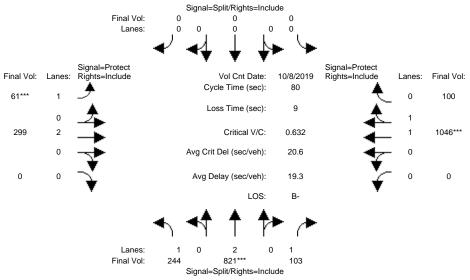


Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing AM



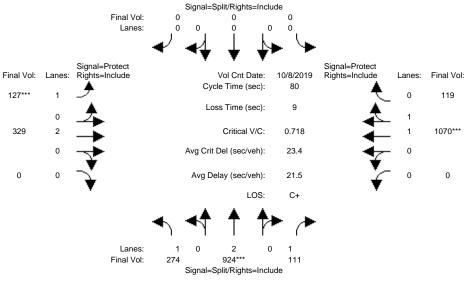
Approach: Movement:	L -	Bound T - R	L .	- T	- R	L -	- T	- R	L -	- Т	- R
Min. Green: Y+R:	10 4.0 4	10 10 1.0 4.0	0 4.0	0 4.0	0 4.0	7 4.0	10 4.0	0 4.0	0 4.0	10 4.0	10 4.0
Volume Module Base Vol: Growth Adj: Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj: PHF Adj: PHF Volume:	e: >> Cc 244 8 1.00 1. 244 8 0 0 244 8 1.00 1. 1.00 1. 244 8 1.00 1. 1.00 1.	Sunt Date: 320 103 00 1.00 320 103 0 0 0 0 320 103 00 1.00 320 103 0 0 320 103 0 1.00 0 1.00 0 1.00	8 Oct 0 1.00 0 0 0 1.00 1.00 0 0 1.00 0	1.00 0 0 0 0 0 0 0 1.00 1.00 0 0 0 1.00		30 - { 59 1.00 59 0 0 59 1.00 1.00 59 1.00 59 1.00	3:30 299 1.00 299 0 0 299 1.00 1.00 299 0 299 1.00 1.00	0 1.00 0 0 0 0 1.00 1.00 0 0 0	0 1.00 0 0 0 0 1.00 1.00 0 0 0	1046 1.00 1046 0	99 1.00 99 0 0 99 1.00 1.00 99 1.00 1.00
Saturation F. Sat/Lane: Adjustment: Lanes: Final Sat.:	low Modu 1900 19 0.92 1. 1.00 2. 1750 38	ale: 900 1900 00 0.92 00 1.00 800 1750	1900 0.92 0.00	1900 1.00 0.00	1900 0.92 0.00	1900 0.92 1.00 1750	1900 1.00 2.00 3800	1900 0.92 0.00	1900 0.92 0.00	1900 0.98 1.82 3380	1900 0.95 0.18 320
Capacity Ana. Vol/Sat: Crit Moves: Green Time: Volume/Cap: Uniform Del: IncremntDel: InitQueuDel: Delay Adj: Delay/Veh: User DelAdj: AdjDel/Veh: LOS by Move: HCM2kAvgQ: Note: Queue	1ysis Mc 0.14 0. 26.3 26 0.42 0. 20.9 23 0.5 1 0.0 0 1.00 1. 21.5 24 1.00 1. 21.5 24 C+ 5	dule: 22 0.06 ** 5.3 26.3 66 0.18 8.0 19.2 .3 0.2 0.0 0.0 00 1.00 1.3 19.3 00 1.00 1.3 19.3 C B- 10 2	0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.00 0.0	0.00 0.00 0.00 0.0 0.00 0.00 0.00 1.00 0.0 A	0.00 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.03 **** 7.0 0.39 34.5 1.6 0.0 1.00 36.1 1.00 36.1 D+	0.08 44.7 0.14 8.4 0.0 0.0 1.00 8.5 1.00 8.5 A	0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.00 0.0	0.00 0.0 0.00 0.0 0.0 0.0 0.00 0.00 1.00	0.31 **** 37.7 0.66 16.2 0.9 0.0 1.00 17.1 1.00 17.1 B	

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



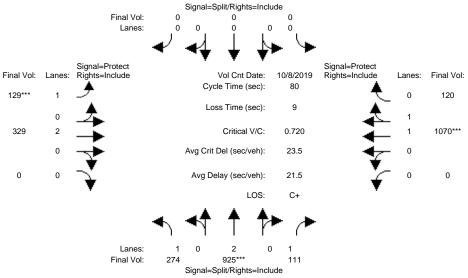
									ound_			
Movement:		- T		' L .	- T	- R	' L .	- T	- R	ь.	- T	- R
Min. Green:		10			0						10	
Y+R:		4.0	4.0		4.0			4.0			4.0	4.0
Volume Modul	e: >>	Count	Date:	8 Oct	t 2019	<< 7:	30 -	8:30				
Base Vol:		820	103	0		0	59	299	0	0	1046	99
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:			103	0	0	0	59		0	0	1046	99
Added Vol:	0	1	0	0		0	2		0	0		1
PasserByVol:	0	0	0	0	0	0	0		0	0	0	0
Initial Fut:			103	0		0	61		0	0		100
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	1.00	1.00	1.00	1.00	1.00
PHF Volume:		821	103	0	0	0	61	299	0	0	1046	100
Reduct Vol:			0	0	-	0	0		0	0	-	0
Reduced Vol:			103	0	0	0	61	299	0		1046	100
PCE Adj:		1.00	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:				0	-		61		•		1046	100
Saturation F				1 0 0 0	1000	1 0 0 0	1000	1000	1000	1 0 0 0	1 0 0 0	1000
Sat/Lane: Adjustment:			1900					1900	1900		1900	1900
_									0.92		0.98	0.95
Lanes:				0.00	0.00	0.00			0.00	0.00	1.82	0.18
Final Sat.:												
Capacity Ana												
Vol/Sat:			0.06	0 00	0 00	0 00	0 03	0 08	0.00	0 00	0 31	0.31
	0.11	****	0.00	0.00	0.00	0.00	****	0.00	0.00	0.00	****	0.51
Green Time:	26.3	26.3	26.3	0.0	0.0	0.0	7.0	44.7	0.0	0.0	37.7	37.7
Volume/Cap:			0.18		0.00	0.00		0.14	0.00		0.66	0.66
Uniform Del:			19.2	0.0	0.0	0.0	34.5		0.0		16.2	16.2
IncremntDel:			0.2	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.9	0.9
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:			1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:			19.3	0.0	0.0	0.0	36.2		0.0		17.1	17.1
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:				0.0		0.0	36.2		0.0		17.1	17.1
LOS by Move:			B-	А		А	D+	А	А	А		В
	5		2	0	0	0	2	2	0	0	12	12
Note: Queue			the n	umber	of ca	rs per	lane					
	-					_						

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



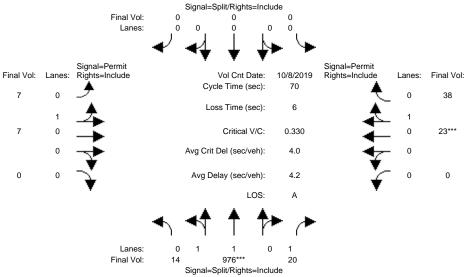
									und			
Movement:		- T		Г .	- T	- R	Г	– T	- R	Г	- T	– K
Min. Green:		10				0					10	
Y+R:		4.0	4.0		4.0			4.0			4.0	4.0
Volume Modul	e: >>	Count	Date:	8 Oct	t 2019	<< 7:	30 -	8:30				
Base Vol:	274	924	111	0	0	0	127	329	0	0	1070	119
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:			111	0	0	0	127		0	0	1070	119
Added Vol:	0	0	0	0		0	0		0	0		0
PasserByVol:			0	0		0	0	0	0	0	-	0
Initial Fut:			111	0	-	0	127		0	0		119
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	1.00
PHF Volume:		924	111	0	0	0	127	329	0		1070	119
Reduct Vol:			0 111	0	0	0	0 127		0	0	0 1070	0 119
Reduced Vol: PCE Adi:		1.00		1 00	1.00			1.00	0 1.00		1.00	1.00
MLF Adj:					1.00		1.00		1.00		1.00	1.00
FinalVolume:				0			127				1070	119
Saturation F				1		'	1		'	1		'
Sat/Lane:		1900		1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	1.00	2.00	1.00	0.00	0.00	0.00	1.00	2.00	0.00	0.00	1.79	0.21
Final Sat.:	1750	3800			0					0		370
Capacity Ana	_											
Vol/Sat:			0.06	0.00	0.00	0.00		0.09	0.00	0.00		0.32
Crit Moves:							****				****	
Green Time:			27.1	0.0	0.0	0.0		43.9	0.0		35.8	35.8
Volume/Cap:			0.19		0.00	0.00		0.16	0.00		0.72	0.72
Uniform Del:			18.7	0.0	0.0	0.0	34.9		0.0		18.0	18.0
IncremntDel:			0.2	0.0	0.0	0.0	13.2		0.0	0.0		1.5
InitQueuDel:			0.0		0.00	0.0	0.0	1.00	0.0	0.0	1.00	1.00
Delay Adj: Delay/Veh:			18.8	0.0	0.0	0.0	48.1	9.0	0.00		19.5	19.5
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdiDel/Veh:				0.0		0.0	48.1		0.0		19.5	19.5
LOS by Move:			B-	0.0 A		0.0 A	40.1 D		0.0 A	0.0 A		B-
-	6		2	0		0			0	0		13
Note: Queue									-	,		
~	1 -	_				1	_					

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



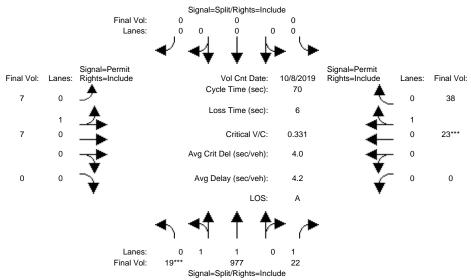
			Oigilai-	-opiii ragiii	.o=moidac							
									und			
	L -			Г -	- T	- R	Γ -	- T	- R	Г -	- T	
Min. Green:					0			10			10	10
Y+R:	4.0	4.0	4.0		4.0			4.0	4.0	4.0		4.0
Volume Module												
	274		111	0	0	0	127		0	0	1070	119
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		924	111	0	0	0	127	329	0		1070	119
Added Vol:	0	1	0	0	0	0	2		0	0	0	1
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		925		0	0	0	129		0	-	1070	120
	1.00		1.00			1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
_	274	925	111	0	0	0	129	329	0		1070	120
Reduct Vol:		0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:		925	111	0	0	0	129	329	0		1070	120
PCE Adi:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	
FinalVolume:				0		0		329	0		1070	120
Saturation F.	low Mo	dule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	1.00	2.00	1.00	0.00	0.00	0.00	1.00	2.00	0.00	0.00	1.79	0.21
Final Sat.:					0				•		3327	373
Capacity Ana	_											
Vol/Sat:			0.06	0.00	0.00	0.00		0.09	0.00	0.00	0.32	0.32
0220 110.00.		***					****				****	
Green Time:			27.1	0.0	0.0	0.0	8.2		0.0		35.8	35.8
Volume/Cap:			0.19	0.00		0.00		0.16	0.00		0.72	0.72
Uniform Del:			18.7	0.0	0.0	0.0	34.8	8.9	0.0		18.0	18.0
IncremntDel:		2.0	0.2	0.0	0.0	0.0	13.3		0.0	0.0		1.6
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Delay Adj:			1.00	0.00		0.00		1.00	0.00		1.00	1.00
Delay/Veh:			18.9	0.0	0.0	0.0	48.0	8.9	0.0		19.6	19.6
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:				0.0		0.0	48.0	8.9	0.0		19.6	19.6
LOS by Move:		C	B-	A		A	D	A	A	A	B-	B-
HCM2kAvgQ:	6	11	2	0	0	0	4		0	0	13	13
Note: Queue	report	ea 1S	the n	umper	or ca:	rs per	ıane	•				

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



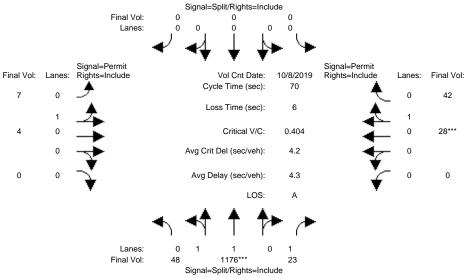
Signal=Split/Rights=Include												
Approach:	No	rth Bo	und	Soi	ıth Bo	und	E	ast Bo	und	We	est Bo	und
Movement:	L ·	- T	- R	L -	- T	- R	L ·	- T	- R	L ·	- T	- R
Min. Green:	10	10	10	0	0	0	10	10	0	0	10	10
Y+R:		4.0	4.0	4.0				4.0	4.0	4.0		4.0
							•					
Volume Modul												
Base Vol:	14	976	20	0	0	0	7	7	0	0		38
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		976	20	0	0	0	7	7	0	0	23	38
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			20	0	0	0	7	7	0	0		38
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	1.00	1.00	1.00	1.00
PHF Volume:	14	976	20	0	0	0	7	7	0	0	23	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	976	20	0	0	0	7	7	0	0	23	38
PCE Adj:		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			20	0	0	0	7		0	0	23	38
Saturation F			1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:		0.97		0.92		0.92		0.95	0.92		0.95	0.95
Lanes:		1.97		0.00		0.00		0.50	0.00		0.38	0.62
Final Sat.:		3648	1750	0	0	0	900	900	0	-	679	1121
Capacity Ana			,									
Vol/Sat:		0.27	0.01	0 00	0.00	0.00	0 01	0.01	0.00	0 00	0.03	0.03
Crit Moves:	0.27	****	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00	****	0.03
Green Time:	54 0	54.0	54.0	0.0	0.0	0.0	10 0	10.0	0.0	0 0	10.0	10.0
Volume/Cap:			0.01		0.00	0.00		0.05	0.00		0.24	0.24
Uniform Del:		2.5	1.8	0.0	0.0	0.0		25.9	0.0		26.6	26.6
IncremntDel:		0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0		0.5
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.00		1.00		0.00	0.00		1.00	0.00		1.00	1.00
Delay/Veh:			1.9	0.0	0.0	0.0		26.0	0.0		27.1	27.1
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			1.00	0.0	0.0	0.0		26.0	0.0		27.1	27.1
LOS by Move:			1.9 A	0.0 A	0.0 A	0.0 A	20.0 C	20.0 C	0.0 A	0.0 A		27.1 C
HCM2kAvgQ:		4	0	0	0	0	0		0	0		1
Note: Queue									U	U	1	1
Note. Queue	rebor	cea 12	CIIC II	anmer	OI Ca	ra her	Tane	•				

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



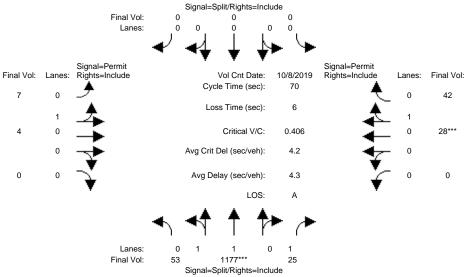
		Olgilai	-opiler (igir	to-molado						
									West B	ound
	L - T		L ·	- T	- R	L ·	- T	- R	L - T	
Min. Green:	10 1	0 10	0	0	0			0	0 10	10
Y+R:	4.0 4.			4.0			4.0	4.0	4.0 4.0	
Volume Module										
Base Vol:	14 97		0	0	0	7		0	0 23	38
Growth Adj:			1.00	1.00	1.00		1.00	1.00	1.00 1.00	
Initial Bse:	14 97		0	0	0	7	7	0	0 23	38
Added Vol:	5	1 2	0		0	0	0	0	0 0	
PasserByVol:	0	0 0	0	-	0	0	-	0	0 0	0
Initial Fut:			0	0	0	7	7	0	0 23	38
User Adj:	1.00 1.0	0 1.00	1.00	1.00	1.00		1.00	1.00	1.00 1.00	1.00
PHF Adj:	1.00 1.0	0 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00
PHF Volume:	19 97		0	0	0	7	7	0	0 23	38
Reduct Vol:	0	0 0	0	0	0	0	0	0	0 0	0
Reduced Vol:		7 22	0	0	0	7	7	0	0 23	38
PCE Adj:	1.00 1.0	0 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00
MLF Adj:	1.00 1.0	0 1.00	1.00	1.00	1.00		1.00	1.00	1.00 1.00	1.00
FinalVolume:			0		0		7		0 23	38
		I								
Saturation F.	low Modul	e:								
Sat/Lane:	1900 190	0 1900	1900	1900	1900	1900	1900	1900	1900 1900	1900
Adjustment:	0.95 0.9	7 0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.92 0.95	0.95
Lanes:	0.04 1.9	6 1.00	0.00	0.00	0.00	0.50	0.50	0.00	0.00 0.38	0.62
Final Sat.:				0			900		0 679	
Capacity Ana	_									
Vol/Sat:		7 0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00 0.03	
Crit Moves:	* * * *								***	
Green Time:			0.0		0.0		10.0	0.0	0.0 10.0	
Volume/Cap:	0.35 0.3	5 0.02	0.00	0.00	0.00	0.05	0.05	0.00	0.00 0.24	0.24
Uniform Del:	2.5 2.		0.0	0.0	0.0	25.9	25.9	0.0	0.0 26.6	26.6
<pre>IncremntDel:</pre>		1 0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0 0.5	
InitQueuDel:			0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0	0.0
Delay Adj:	1.00 1.0	0 1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00 1.00	1.00
Delay/Veh:			0.0	0.0	0.0	26.0	26.0	0.0	0.0 27.1	27.1
User DelAdj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00
AdjDel/Veh:			0.0	0.0	0.0	26.0	26.0	0.0	0.0 27.1	27.1
LOS by Move:			A		A	С		A	A C	
HCM2kAvgQ:	4	4 0	0	0	0	0	0	0	0 1	1
Note: Queue	reported	is the n	umber	of ca	rs per	lane				

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



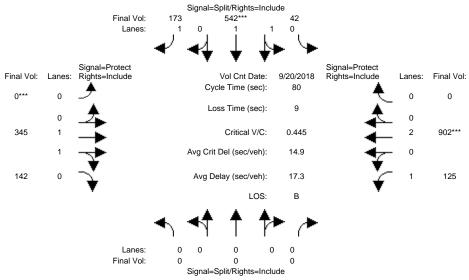
Signal=Split/Rights=Include												
Approach:	No	rth Bo	und	Soi	ıth Bo	und	E	ast Bo	und	We	est Bo	und
Movement:	L	- Т	- R	L -	- T	- R	L ·	- T	- R	L ·	- Т	- R
Min. Green:	10	10	10	0	0	0	10	10	0	0	10	10
Y+R:		4.0	4.0	4.0				4.0	4.0	4.0		4.0
Volume Modul												
Base Vol:		1176	23	0	0	0	7		0	0	28	42
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	48	1176	23	0	0	0	7	4	0	0	28	42
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
Initial Fut:			23	0	0	0	7	4	0	0		42
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		1.00	1.00
PHF Volume:		1176	23	0	0	0	7	4	0	0	28	42
Reduct Vol:	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:		1176	23	0	0	0	7	4	0	0	28	42
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:		1176	23	. 0	0	0	. 7	_	0	. 0	28	42
Saturation F. Sat/Lane:		1900	1900	1000	1900	1900	1000	1900	1900	1000	1900	1900
Adjustment:		0.97		0.92		0.92		0.95	0.92		0.95	0.95
Lanes:		1.92		0.00		0.00		0.36	0.00		0.40	0.60
Final Sat.:		3555	1.00 1750	0.00	0.00	0.00	1145		0.00	0.00		1080
rillai sat					-	-			1	-		1
Capacity Ana			,	1		1	1		1	1		1
Vol/Sat:		0.33	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.04	0.04
Crit Moves:		****									****	
Green Time:	54.0	54.0	54.0	0.0	0.0	0.0	10.0	10.0	0.0	0.0	10.0	10.0
Volume/Cap:			0.02	0.00	0.00	0.00		0.04	0.00	0.00	0.27	0.27
Uniform Del:			1.9	0.0	0.0	0.0		25.9	0.0		26.8	26.8
IncremntDel:	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.6	0.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:			1.9	0.0	0.0	0.0	25.9	25.9	0.0	0.0	27.3	27.3
User DelAdj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	2.8	2.8	1.9	0.0	0.0	0.0	25.9	25.9	0.0	0.0	27.3	27.3
LOS by Move:			A	A	A	A	С	С	A	A	С	С
HCM2kAvgQ:	5	5	0	0	0	0	0	0	0	0	2	2
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•				

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



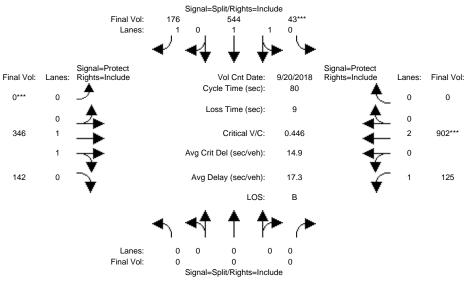
Signal=Split/Rights=Include												
Approach:	No	rth Bo	und	Soi	ıth Boı	und	Εā	ast Bo	und	W∈	est Bo	und
Movement:	L ·	- T	- R	L -	- T ·	- R	L ·	- T	- R	L -	- T	- R
Min. Green:	10		10		0	0		10	0	0		10
Y+R:	4.0		4.0		4.0			4.0	4.0	4.0		4.0
Volume Module												
Base Vol:		1176	23	0	0	0	7		0	0	28	42
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	48	1176	23	0	0	0	7	4	0	0	28	42
Added Vol:	5	1	2	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	53	1177	25	0	0	0	7	4	0	0	28	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:		1177	25	0	0	0	7	4	0	0	28	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	1177	25	0	0	0	7	4	0	0	28	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	53	1177	25	0	0	0	7	4	0	0	28	42
Saturation Fl	Low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.97	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.95	0.95
Lanes:	0.09	1.91	1.00	0.00	0.00	0.00	0.64	0.36	0.00	0.00	0.40	0.60
Final Sat.:	159	3540	1750	0	0	0	1145	655	0	0	720	1080
Capacity Anal	Lysis	Modul	e:									
Vol/Sat:	0.33	0.33	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.04	0.04
Crit Moves:		****									****	
Green Time:	54.0	54.0	54.0	0.0	0.0	0.0	10.0	10.0	0.0	0.0	10.0	10.0
Volume/Cap:	0.43	0.43	0.02	0.00	0.00	0.00	0.04	0.04	0.00	0.00	0.27	0.27
Uniform Del:	2.7	2.7	1.9	0.0	0.0	0.0	25.9	25.9	0.0	0.0	26.8	26.8
IncremntDel:	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.6	0.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:		2.8	1.9	0.0	0.0	0.0	25.9	25.9	0.0	0.0	27.3	27.3
User DelAdi:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:			1.9	0.0	0.0	0.0		25.9	0.0	0.0	27.3	27.3
LOS by Move:			A	А		A	C		А	A		C
-	5		0	0	0	0	0		0	0	2	2
Note: Queue							-	-	-	,	_	_
20000	-1-07					- 1001		-				

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



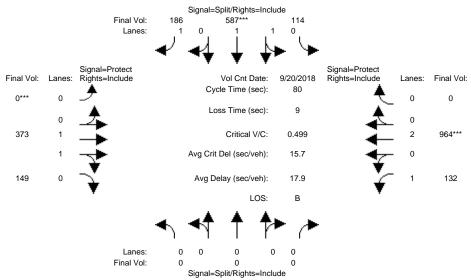
			Olgilai	-opiiti (igiii	io-moiaac						
Approach:											
Movement:	L ·	– T	- R	L -	- T	- R	L ·	- T	- R	L - T	- R
						10				7 10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0 4.0	4.0
Volume Modul			Date:		_				1.40	105 000	0
						173			142	125 902	1 00
Growth Adj:						173		345	1.00 142	1.00 1.00 125 902	1.00
Initial Bse:	0		0						142 0	0 0	0
Added Vol:	0		0	0	0	0	0	0	0		0
PasserByVol: Initial Fut:	0		0	4.2	0 542	0 173	0	345	142	0 0 125 902	0
						1.00					
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:				42		173	0		142	125 902	0
Reduct Vol:			0	0	0	0		0	0	0 0	0
Reduced Vol:			0			173	0		142	125 902	0
PCE Adj:								1.00	1.00	1.00 1.00	
MLF Adj:									1.00		
FinalVolume:	. 0	0	0	42	542					125 902	0
Saturation F											
Saturation F Sat/Lane:				1000	1000	1000	1000	1900	1900	1900 1900	1900
Adjustment:									0.95		
Lanes:									0.60		
Final Sat.:									1079		0.00
rillai Sat	1			200	3434	1730	1	2020	1079	1730 3800	
Capacity Ana				1		1	1		1	ı	'
Vol/Sat:	_			0 16	0 16	0 10	0 00	0 13	0 13	0 07 0 24	0.00
Crit Moves:	0.00	0.00	0.00	0.10	****	0.10	****	0.10	0.10	****	0.00
Green Time:	0.0	0.0	0.0	28.4	28.4	28.4	0.0	25.6	25.6	17.0 42.6	0.0
Volume/Cap:				0.45		0.28			0.41		
Uniform Del:			0.0		19.8		0.0		21.3	26.7 11.4	0.0
IncremntDel:				0.2		0.2		0.2	0.2	0.5 0.2	0.0
InitQueuDel:				0.0		0.0	0.0		0.0	0.0 0.0	0.0
Delay Adj:				1.00		1.00		1.00	1.00	1.00 1.00	0.00
Delay/Veh:			0.0		20.0	18.7		21.5	21.5	27.2 11.6	0.0
User DelAdj:				1.00		1.00		1.00	1.00	1.00 1.00	1.00
AdjDel/Veh:			0.0				0.0		21.5	27.2 11.6	0.0
LOS by Move:			A				Α		C+	C B+	0.0 A
		0	0		5	3		5	5	3 7	
Note: Queue									J	Č ,	Ü
		10	0.1.0 11		01 00	PCI		-			

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



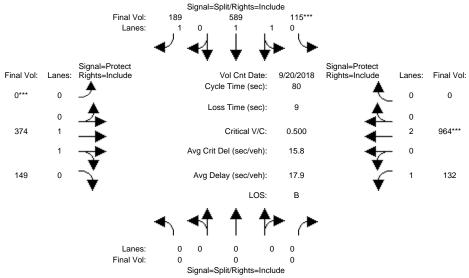
			Signal	=Spiii/Rigni	s=include							
Approach:	No	rth Bo	und	Soi	ıth Bo	und	E	ast Bo	und	We	est Bo	und
Movement:											- T	
						10				. 7		0
Y+R:		4.0				4.0		4.0			4.0	4.0
Volume Modul										'		'
Base Vol:	0	0	0		542	173		345	142	125	902	0
Growth Adj:		1.00							1.00		1.00	1.00
Initial Bse:			0			173	0		142	125	902	0
Added Vol:		0		1		3		1	0	0		0
PasserByVol:			0	0	0	0		0	0	0		0
Initial Fut:	0	0		43		176	0		142	125	902	0
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
PHF Volume:				43	544	176	0		142	125	902	0
Reduct Vol:						0		0	0	123		0
Reduced Vol:			0	0 43	544		0		142	125		0
PCE Adj:		1.00					-	1.00	1.00		1.00	1.00
							1.00		1.00		1.00	1.00
MLF Adj: FinalVolume:	1.00	1.00	1.00									0.00
rinalvolume:	, 0	U	U	4.3	544	1/6			142			
Saturation F				1000	1 0 0 0	1000	1 0 0 0	1000	1000	1 0 0 0	1 0 0 0	1000
Sat/Lane:								1900	1900		1900	1900
Adjustment:									0.95		1.00	0.92
Lanes:									0.60		2.00	0.00
Final Sat.:	. 0	0	0	2/1	3429	1/50			1076		3800	0
Capacity Ana	-			0 16	0 16	0 10	0 00	0 10	0 10	0 0 0	0 0 4	0 00
Vol/Sat:	0.00	0.00	0.00			0.10				0.07		0.00
Crit Moves:				****			****				****	
Green Time:			0.0		28.4				25.6		42.6	0.0
Volume/Cap:				0.45		0.28			0.41		0.45	0.00
Uniform Del:		0.0	0.0		19.7	18.5	0.0		21.3		11.5	0.0
<pre>IncremntDel:</pre>		0.0		0.2		0.3		0.2	0.2	0.5		0.0
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:			0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:			0.0	20.0	20.0	18.7	0.0	21.6	21.6	27.3	11.6	0.0
User DelAdj:				1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	20.0	20.0	18.7	0.0	21.6	21.6	27.3	11.6	0.0
LOS by Move:	A	A	A	B-	B-	B-	A	C+	C+	С	B+	A
HCM2kAvgQ:		0	0	5	5	3	0	5	5	3	7	0
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane					
	=					=						

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



			Olgilai	-opiler (igh	io-moiaac						
Approach:											
Movement:	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R	L - T	- R
						10				7 10	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0 4.0	4.0
Volume Modul									1.10	100 064	
			0							132 964	
Growth Adj:										1.00 1.00	
Initial Bse:				114	587	186	0		149	132 964	0
Added Vol:	0	0	0	0	0	0	0	0	0	0 0	0
PasserByVol:	0	0	0						0	0 0	0
Initial Fut:			0				0		149	132 964	0
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	1.00
PHF Volume:				114	587	186	0		149	132 964	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0 0	0
Reduced Vol:			0			186	0		149		0
PCE Adj:								1.00	1.00		
MLF Adj:							1.00	1.00	1.00	1.00 1.00	1.00
FinalVolume:	0	0	0	114	587	186				132 964	0
Saturation F											
Sat/Lane:								1900	1900	1900 1900	
Adjustment:									0.95		
Lanes:									0.59		
Final Sat.:	0	0	0	602	3098	1750			1056		
Capacity Ana											
Vol/Sat:	0.00	0.00	0.00	0.19					0.14		0.00
Crit Moves:							****			***	
Green Time:			0.0		30.4				25.1		
Volume/Cap:				0.50		0.28			0.45	0.39 0.50	
Uniform Del:		0.0	0.0		19.0		0.0		21.9	28.1 13.0	0.0
IncremntDel:		0.0		0.3		0.2	0.0		0.3	0.7 0.2	0.0
InitQueuDel:		0.0		0.0		0.0	0.0		0.0	0.0 0.0	0.0
Delay Adj:		0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00 1.00	0.00
Delay/Veh:		0.0	0.0	19.3	19.3	17.5		22.2	22.2	28.8 13.2	0.0
User DelAdj:				1.00		1.00		1.00	1.00	1.00 1.00	
AdjDel/Veh:			0.0	19.3	19.3	17.5	0.0		22.2	28.8 13.2	0.0
LOS by Move:	A	A	A			В			C+	СВ	A
HCM2kAvgQ:	0	0	0	7	7	3	0	6	6	3 7	0
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane				

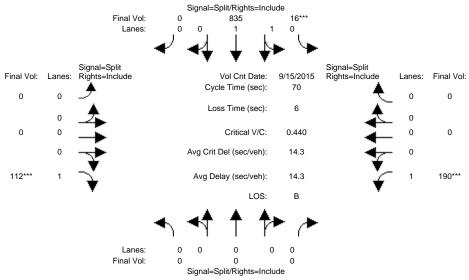
Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Background + Project AM



			Signal	=Spiii/Rigni	s=include							
Approach:	No	rth Bo	und	Soi	ıth Bo	und	E	ast Bo	und	We	est Bo	und
Movement:											- T	
						10				. 7		0
Y+R:						4.0			4.0		4.0	4.0
Volume Modul										'		'
Base Vol:	0			114		186		373	149	132	964	0
Growth Adj:									1.00		1.00	1.00
Initial Bse:				114		186		373	149	132		0
Added Vol:		0		1		3		1	0	0		0
PasserByVol:						0		0	0	0		0
Initial Fut:	0	0		115			0	374	149	132		0
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:				115	589	189	0		149	132	964	0
Reduct Vol:				0		0		0	0	0		0
Reduced Vol:						189	0		149	132		0
PCE Adj:		1.00					-	1.00	1.00		1.00	1.00
MLF Adj:							1.00		1.00		1.00	1.00
												0.00
FinalVolume:									149			
Saturation F				1 0 0 0	1 0 0 0	1000	1 0 0 0	1000	1000	1 0 0 0	1 0 0 0	1000
Sat/Lane:								1900	1900		1900	1900
Adjustment:									0.95		1.00	0.92
Lanes:									0.59		2.00	0.00
Final Sat.:	. 0	0	0	604	3095	1/50			1054		3800	0
Capacity Ana	-			0 10	0 10	0 11	0 00	0 1 4	0 1 4	0 00	0 0 5	0 00
Vol/Sat:	0.00	0.00	0.00									0.00
Crit Moves:				****							****	
Green Time:			0.0		30.4				25.1		40.6	0.0
Volume/Cap:				0.50		0.28		0.45	0.45		0.50	0.00
Uniform Del:		0.0	0.0		19.0	17.2	0.0		22.0		13.0	0.0
<pre>IncremntDel:</pre>				0.3		0.2		0.3	0.3	0.7		0.0
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:			0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:			0.0	19.2	19.2	17.5	0.0	22.3	22.3	28.9	13.2	0.0
User DelAdj:				1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	19.2	19.2	17.5	0.0	22.3	22.3	28.9	13.2	0.0
LOS by Move:	A	A	A	B-	B-	В	A	C+	C+	С	В	A
HCM2kAvgQ:		0	0	7	7	3	0	6	6	3	7	0
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane					
	=					=						

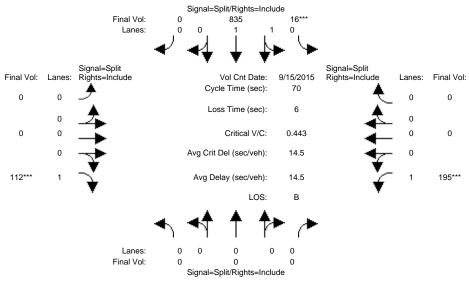
Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing AM

Intersection #3813: ST. JOHN/10TH



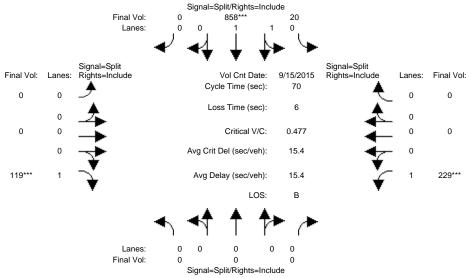
Signal=Split/Rights=Include												
Approach:	No	rth Bo	und	South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	0	0	0	10	10	10	0	10	10	10	10	0
Y+R:		4.0			4.0	4.0		4.0	4.0	4.0		4.0
Volume Module	e: >>	Count	Date:		ep 201	5 << 7	:45-8	:45				
Base Vol:	0	0	0	16	835	0	0	0	112	190	0	0
Growth Adj:	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	16	835	0	0	0	112	190	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			0	16		0	0	0	112	190	0	0
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	1.00		1.00
PHF Volume:	0	0	0	16	835	0	0	0	112	190	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:		0	0	16	835	0	0	0	112	190	0	0
_		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
FinalVolume:		0	0		835	0	. 0	0	112	190	0	0
Saturation F.			1000	1000	1 0 0 0	1000	1000	1000	1000	1 0 0 0	1000	1000
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:				0.95		0.92		1.00	0.92		1.00	0.92
Lanes: Final Sat.:		0.00	0.00	0.04	3630	0.00	0.00	0.00	1.00 1750	1750	0.00	0.00
Final Sat.:							-	-	1/30		-	-
Capacity Ana	,			1		1	1		'	1		ı
		0.00		0 23	0.23	0.00	0 00	0.00	0.06	0 11	0.00	0.00
Crit Moves:	0.00	0.00	••••	****	0.20	0.00	0.00	0.00	****	****	••••	••••
	0.0	0.0	0.0	36.6	36.6	0.0	0.0	0.0	10.2	17.3	0.0	0.0
Volume/Cap:			0.00		0.44	0.00		0.00	0.44	0.44		0.00
Uniform Del:		0.0	0.0		10.4	0.0	0.0	0.0	27.3	22.3	0.0	0.0
IncremntDel:	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	1.2	0.7	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
Delay/Veh:		0.0	0.0	10.5	10.5	0.0	0.0	0.0	28.5	23.0	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	0.0	0.0	10.5	10.5	0.0	0.0	0.0	28.5	23.0	0.0	0.0
LOS by Move:	A	A	A	B+	B+	A	A	A	С	С	A	A
HCM2kAvgQ:	0	0	0	6	6	0	0	0	3	4	0	0
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•				

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



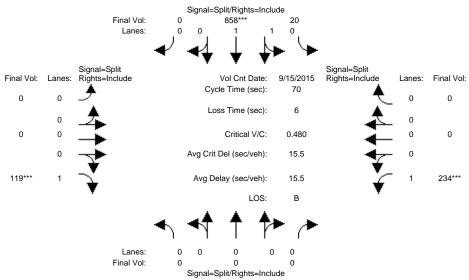
			Signal=	=Split/Right	s=Include							
Approach:	No	rth Bo	und	Soi	ıth Bo	und	Εa	ast Bo	ound	₩e	est Bo	und
Movement:	L ·	- T ·	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Min. Green:		0				10						0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module												
	0		0			0		0	112	190	0	0
Growth Adj:	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	16	835	0	0	0	112	190	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	5	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	16	835	0	0	0	112	195	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
PHF Volume: Reduct Vol:	0	0	0	16	835	0	0	0	112	195	0	0
			0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	16	835	0	0	0	112	195	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:	0			16		0	0	0	112	195	0	0
			-									
Saturation Fl				1000	1000	1000	1000	1000	1000	1000	1000	1000
		1900		1900		1900		1900	1900		1900	1900
Adjustment:						0.92		1.00	0.92		1.00	
Lanes:								0.00			0.00	
Final Sat.:				70			0		1750	1750		0
Capacity Anal												
Vol/Sat:				0.23	0.23	0.00	0.00	0.00	0.06	0.11	0.00	0.00
Crit Moves:				****					****	****		
Green Time:	0.0	0.0	0.0	36.3	36.3	0.0	0.0	0.0	10.1	17.6	0.0	0.0
Volume/Cap:			0.00	0.44	0.44	0.00	0.00	0.00	0.44	0.44	0.00	0.00
Uniform Del:			0.0	10.5	10.5	0.0	0.0	0.0	27.4	22.1	0.0	0.0
IncremntDel:	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	1.2	0.7	0.0	0.0
InitOueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
Delay/Veh:			0.0	10.7	10.7	0.0	0.0	0.0	28.6	22.8	0.0	0.0
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:			0.0	10.7			0.0		28.6	22.8		0.0
LOS by Move:			А	B+	B+		А			C+		А
HCM2kAvqQ:			0	6	6	0	0		3			0
Note: Queue			the n		of ca	rs per	lane					
	_					-						

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



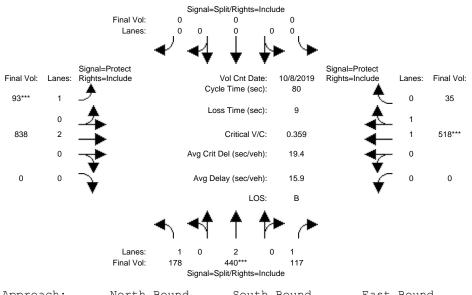
			Signal=	=Split/Right	s=Include							
Approach:	No	rth Bo	und	Soi	ıth Bo	und	Εa	ast Bo	ound	W∈	st Bo	und
Movement:	L ·	- T	- R	L -	- T	- R	L -	- T	- R	L -	Т	- R
		0				10						0
Y+R:	4.0	4.0	4.0			4.0			4.0			
Volume Module												
Base Vol:	0		0	20		0			119	229	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:		0	0	20	858	0	0	0	119	229	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	20	858	0	0	0	119	229	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	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume: Reduct Vol: Reduced Vol:	0	0	0	20	858	0	0	0	119	229	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
	-	-		20	858	0	0	0	119	229	0	0
PCE Adj:	1.00	1.00	1.00	1.00				1.00	1.00		1.00	
MLF Adj:						1.00		1.00			1.00	
FinalVolume:			0			0	. 0	0	119	229	0	0
Saturation Fl			•									
Saturation Fi		1900		1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:						0.92		1.00	0.92		1.00	
Lanes:								0.00	1.00		0.00	
Final Sat.:					3616		0		1750		0	0
Capacity Anal	lysis	Modul	e:									
Vol/Sat:	0.00	0.00	0.00	0.24	0.24	0.00	0.00	0.00	0.07	0.13	0.00	0.00
Crit Moves:					****				****	****		
Green Time:	0.0	0.0	0.0	34.8	34.8	0.0	0.0	0.0	10.0	19.2	0.0	0.0
Volume/Cap:	0.00	0.00	0.00	0.48	0.48	0.00	0.00	0.00	0.48	0.48	0.00	0.00
Uniform Del:	0.0	0.0	0.0	11.6		0.0	0.0	0.0	27.6	21.2	0.0	0.0
<pre>IncremntDel:</pre>		0.0	0.0	0.2		0.0	0.0	0.0	1.4	0.8	0.0	0.0
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:			0.00	1.00		0.00		0.00	1.00	1.00		0.00
Delay/Veh:			0.0	11.8		0.0	0.0	0.0	29.0	22.0	0.0	0.0
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:			0.0	11.8		0.0	0.0	0.0	29.0	22.0		0.0
LOS by Move:			A	B+	B+	A	A			C+	A	A
J	0		0		7 of an	0	0	-	3	4	0	0
Note: Queue	rehor	teu IS	the n	unwer	or ca	ıs per	Talle	•				

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



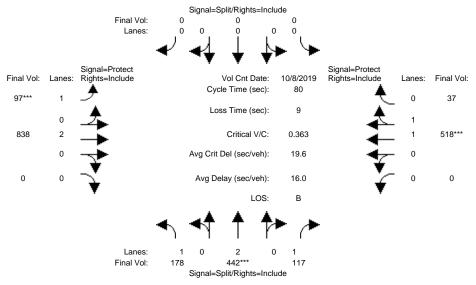
	Signal=Split/Rights=Include												
Approach:	No	rth Bo	und	Soi	uth Bo	und	E	ast Bo	und	We	est Bo	und	
Movement:	L	- T	- R	L ·	- T	- R	L ·	- T	- R	L -	- T	- R	
Min Croon.										10			
Min. Green: Y+R:	4 0	4.0	4 0	4 0	4 0	10 4.0	4 0	4 0	4.0		4.0	0 4.0	
Volume Module				15 Se	ep 201								
Base Vol:	0			20		0	0		119	229	0	0	
Growth Adj:				1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	0	0	0	20	858	0	0	0	119	229	0	0	
Added Vol:		0	0		-	0	0	-	0	5	0	0	
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	0	0	0	20	858	0	0	0	119	234	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	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume: Reduct Vol: Reduced Vol:	0	0	0	20	858	0	0	0	119	234	0	0	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	0	0	0	20	858	0	0	0	119	234	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:					858	0	0	0	119	234	0	0	
Saturation F													
Saturation F. Sat/Lane:		1900	1900	1 0 0 0	1900	1900	1 9 0 0	1900	1900	1 9 0 0	1900	1900	
Adjustment:									0.92		1.00	0.92	
Lanes:									1.00		0.00	0.00	
Final Sat.:									1750	1750		0.00	
rinai sat													
Capacity Anal				1		'	•		,	'		,	
Vol/Sat:	0.00	0.00	0.00	0.24	0.24	0.00	0.00	0.00	0.07	0.13	0.00	0.00	
Crit Moves:					****				***	****			
Green Time:	0.0	0.0	0.0	34.5	34.5	0.0	0.0	0.0	10.0	19.5	0.0	0.0	
Volume/Cap:	0.00	0.00	0.00	0.48	0.48	0.00	0.00	0.00	0.48	0.48	0.00	0.00	
Uniform Del:	0.0	0.0	0.0	11.8	11.8	0.0	0.0	0.0	27.6	21.1	0.0	0.0	
<pre>IncremntDel:</pre>	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	1.4	0.8	0.0	0.0	
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Delay Adj:	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	
Delay/Veh:	0.0	0.0	0.0	12.0	12.0	0.0	0.0	0.0	29.0	21.8	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	
AdjDel/Veh:			0.0		12.0	0.0	0.0		29.0	21.8		0.0	
LOS by Move:			A	B+		А	А	А	С	C+		А	
	0		0	7		0			3			0	
Note: Queue	repor	ted is	the n	umber	of ca	ırs per	lane	•					
	-					-							

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



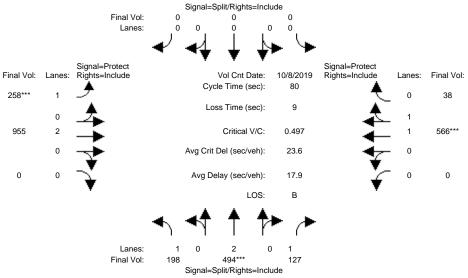
Approach: Movement:	North E	- R	L -	Т	- R	L -	- Т	- R	L -	- Т	- R
Min. Green: Y+R:	10 10 4.0 4.0	10	0 4.0	0 4.0	0 4.0	7 4.0	10 4.0	0 4.0	0 4.0	10 4.0	10
Volume Module Base Vol: Growth Adj: Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj: PHF Adj: PHF Volume:	e: >> Coun 178	t Date: 117 1.00 117 0 0 117 1.00 1.00 1.7 1.00 1.00	8 Oct 0 1.00 0 0 0 1.00 1.00 1.00 0 1.00 1.0	2019 0 1.00 0 0 0 1.00 1.00 0 0 0 1.00 1.00		00-6:(93 1.00 93 0 0 93 1.00 1.00 93 1.00		0 1.00 0 0 0 0 1.00 1.00 0 0 1.00	0 1.00 0 0 0 0 1.00 1.00 0 0	518 1.00 518 0 0 518 1.00 1.00 518 0 518 1.00	35 1.00 35 0 0 35 1.00 1.00 35 1.00 1.00 35
Saturation F Sat/Lane: Adjustment: Lanes: Final Sat.:	low Module 1900 1900 0.92 1.00 1.00 2.00 1750 3800	: 1900 0.92 1.00 1750	1900 0.92 0.00	1900 1.00 0.00	1900 0.92 0.00	1900 0.92 1.00 1750	1900 1.00 2.00 3800	1900 0.92 0.00 0	1900 0.92 0.00 0	1900 0.98 1.87 3466	1900 0.95 0.13 234
Capacity Anal	lysis Modu 0.10 0.12 **** 25.8 25.8 0.32 0.36 20.4 20.7 0.3 0.2 0.0 0.0 1.00 1.00 20.7 20.9 1.00 1.00 20.7 20.9 C+ C+ 4	le: 0.07 25.8 0.21 19.7 0.2 0.0 1.00 19.8 1.00 19.8 B- 2	0.00 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.00 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.00 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.05 **** 11.9 0.36 30.7 0.9 0.0 1.00 31.5 1.00 31.5	0.22 45.2 0.39 9.7 0.1 0.0 1.00 9.8 1.00 9.8 5	0.00 0.00 0.00 0.0 0.0 0.0 0.00 0.0 1.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.00	0.15 **** 33.3 0.36 16.0 0.1 0.00 1.00 16.1 1.00 16.1 5	,

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



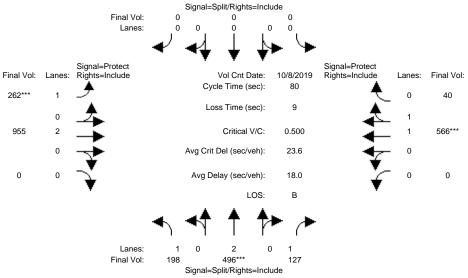
Approach: Movement:	L ·	- т	- R	L ·	- T	- R	L ·	- T	- R		- Т	- R
	10 4.0	10 4.0	10 4.0	0 4.0	0 4.0	0 4.0	7 4.0	10 4.0	0 4.0	0 4.0	10 4.0	10 4.0
Volume Module									1	ı		ı
Base Vol:	178	440	117	0	0	0	93	838	0	0	518	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	178	440	117	0	0	0	93	838	0	0	518	35
Added Vol:	0	2	0	0	0	0	4	0	0	0	0	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		442	117	0	0	0	97	838	0	0	518	37
		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	178	442	117	0	0	0	97	838	0	0	518	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	178	442	117	0	0	0	97	838	0	0	518	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:				0	-	0		838		0		37
Saturation F												
Sat/Lane:			1900					1900	1900	1900		1900
Adjustment:				0.92		0.92		1.00	0.92	0.92		0.95
Lanes:				0.00		0.00		2.00	0.00	0.00		0.14
Final Sat.:				. 0		0		3800		. 0		247
Capacity Ana												
Vol/Sat:	-	0.12		0 00	0.00	0 00	0 06	0 22	0 00	0.00	0 15	0.15
	0.10	****	0.07	0.00	0.00	0.00	****	0.22	0.00	0.00	****	0.13
Green Time:		25 7	25.7	0.0	0.0	0.0	12 2	45.3	0.0	0 0	33.1	33.1
Volume/Cap:			0.21		0.00	0.00		0.39	0.00	0.00		0.36
Uniform Del:			19.8	0.0	0.0	0.0	30.4		0.0		16.2	16.2
IncremntDel:		0.2	0.2	0.0	0.0	0.0	0.8	0.1	0.0		0.1	0.1
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:			1.00		0.00	0.00		1.00	0.00	0.00		1.00
Delay/Veh:			20.0	0.0	0.0	0.0	31.2		0.0		16.3	16.3
User DelAdi:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
AdiDel/Veh:				0.0	0.0	0.0	31.2		0.0		16.3	16.3
LOS by Move:				A		A		э . б	A	A	В	В
	4		2	0	0	0	2				5	5
Note: Queue				umber	of ca	rs per	lane		•	•		-
~	-					1						

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



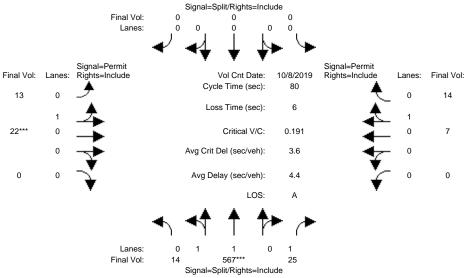
			Olgital	-op.ii.g.tig.ii	io-iniciaac							
Approach:											t Bo	und
Movement:	L	- T	- R	L ·	- T	- R	L ·	- T	- R	L -		
Min. Green:		10	10	0	0	0	7	10	0	0	10	10
Y+R:		4.0	4.0			4.0		4.0				4.0
Volume Modul												
		494		0		0		955	0		566	38
Growth Adj:			1.00		1.00				1.00	1.00 1		1.00
Initial Bse:			127	0	0	0	258		0		566	38
Added Vol:	0		0	0		0	0		0	-	0	0
PasserByVol:			0	0		0	0		0	0	0	0
Initial Fut:			127	0	0	0	258	955	0	0	566	38
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1	.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1	.00	1.00
PHF Volume:	198	494	127	0	0	0	258	955	0	0	566	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	198	494	127	0	0	0	258	955	0	0	566	38
PCE Adj:		1.00			1.00		1.00	1.00	1.00	1.00 1	.00	1.00
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:				0			258		•	0		38
Saturation F												
Sat/Lane:							1900	1900	1900	1900 1	900	1900
Adjustment:							0.92		0.92			0.95
Lanes:					0.00				0.00	0.00 1	.87	0.13
Final Sat.:						0				0 3		233
Capacity Ana	_											
Vol/Sat:			0.07	0.00	0.00	0.00		0.25	0.00			0.16
Crit Moves:		****					****				***	
Green Time:			20.9	0.0	0.0	0.0		50.1	0.0	0.0 2		26.3
Volume/Cap:			0.28		0.00	0.00		0.40	0.00	0.00 0		0.50
Uniform Del:			23.5	0.0	0.0	0.0	23.2		0.0	0.0 2		21.5
IncremntDel:			0.3	0.0	0.0	0.0	0.7		0.0		0.3	0.3
InitQueuDel:			0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Delay Adj:			1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00 1	.00	1.00
Delay/Veh:			23.8	0.0	0.0	0.0	23.9	7.6	0.0	0.0 2	1.9	21.9
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00 1		1.00
AdjDel/Veh:			23.8	0.0	0.0	0.0	23.9		0.0	0.0 2		21.9
LOS by Move:			С			A	С		А	A	C+	C+
HCM2kAvgQ:		6	3	0		0	5		0	0	6	6
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane					

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



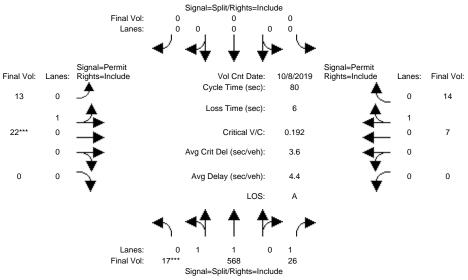
			Olgilai	-opilit ragin	io-iniciaac						
Approach:											Bound
Movement:	L	- T	- R	L .	- T	- R	L .	- T	- R	L -	T - R
										*	
Min. Green:		10				0				0	10 10
Y+R:		4.0	4.0			4.0		4.0			
Volume Modul											
		494		0		0		955		0 5	
Growth Adj:			1.00		1.00				1.00	1.00 1.	
Initial Bse:	198	494	127	0	0	0	258		0		666 38
Added Vol:	0	2	0	0		0	4		0	-	0 2
PasserByVol:			0	0		0	0		0	ŭ	0 0
Initial Fut:				0		0	262		0		666 40
User Adj:	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	1.00	1.00	1.00	1.00	1.00 1.	00 1.00
PHF Volume:	198	496	127	0	0	0	262	955	0	0 5	666 40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0 0
Reduced Vol:			127	0	0	0	262	955	0	0 5	666 40
PCE Adj:		1.00			1.00		1.00	1.00	1.00	1.00 1.	00 1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.	00 1.00
FinalVolume:				0			262		_	0 5	
Saturation F											
Sat/Lane:							1900	1900	1900	1900 19	1900
Adjustment:							0.92		0.92		
Lanes:			1.00						0.00	0.00 1.	86 0.14
Final Sat.:						0				0 34	
Capacity Ana	_										
Vol/Sat:			0.07	0.00	0.00	0.00		0.25	0.00	0.00 0.	
Crit Moves:		****					****				**
Green Time:			20.9	0.0	0.0	0.0		50.1	0.0	0.0 26	
Volume/Cap:			0.28		0.00	0.00		0.40	0.00	0.00 0.	
Uniform Del:			23.6	0.0	0.0	0.0		7.4	0.0	0.0 21	
IncremntDel:			0.3	0.0	0.0	0.0	0.8	0.1	0.0	0.0	0.3
InitQueuDel:			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00 1.	
Delay/Veh:			23.9	0.0	0.0	0.0	23.9	7.6	0.0	0.0 22	2.0 22.0
User DelAdj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.	00 1.00
AdjDel/Veh:	25.3	25.5	23.9	0.0	0.0	0.0	23.9	7.6	0.0	0.0 22	2.0 22.0
LOS by Move:			C			A	С		A		C+ C+
HCM2kAvgQ:	5	6	3	0	0	0	5	6	0	0	7 7
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•			

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



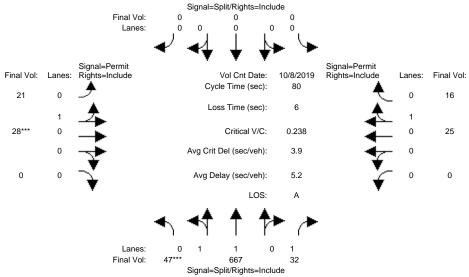
			Oigiliai-	-opiii rtigiii	io-moiade							
	Nort											
	L -		- R	L -	- T	- R	L -	- T	- R	L -	T	
Min. Green:						0				0		10
Y+R:		4.0	4.0		4.0			4.0	4.0	4.0		4.0
Volume Module												
Base Vol:		567	25	0	0	0	23 13	22	0	0	7	1.4
Growth Adj:				1.00		1.00		1.00	1.00	1.00		1.00
Initial Bse:		567	25	0	0	0	13	22	0	0	7	1.00
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
Initial Fut:	1 4	567		0		0	13	22	0	-	7	14
	1.00 1		1.00			1.00		1.00	1.00	1.00		1.00
PHF Adj:			1.00			1.00		1.00	1.00	1.00		1.00
-		567	25	0	0	0	13	22	0	0	7	14
Reduct Vol:		0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	567	25	0	0	0	13	22	0	0	7	14
PCE Adi:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00 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	13		0	0	7	14
Saturation F	low Mod	dule:										
Sat/Lane:	1900 1	900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95 0	.97	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.95	0.95
Lanes:	0.05 1	.95	1.00	0.00	0.00	0.00	0.37	0.63	0.00	0.00	0.33	0.67
Final Sat.:					0			1131		0		1200
Capacity Ana	_											
Vol/Sat:			0.01	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.01	0.01
		***						****				
Green Time:			64.0	0.0	0.0	0.0		10.0	0.0	0.0		10.0
Volume/Cap:			0.02		0.00	0.00		0.16	0.00	0.00		0.09
Uniform Del:		1.9	1.6	0.0	0.0	0.0		31.2	0.0	0.0		31.0
IncremntDel:		0.0	0.0	0.0	0.0	0.0	0.3		0.0		0.2	0.2
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:			1.00		0.00	0.00		1.00	0.00	0.00		1.00
Delay/Veh:			1.6	0.0	0.0	0.0		31.6	0.0	0.0		31.2
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:				0.0		0.0		31.6	0.0	0.0		31.2
LOS by Move: HCM2kAvqQ:	A 2	A 2	A 0	A 0	A 0	A 0	C 1	C 1	A 0	A 0	C 1	C 1
Note: Queue :					-				U	U	Т	1
Note. Queue .	reborce	.u 15	CIIE II	aimet	OI Ca	ro her	Tane	•				

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



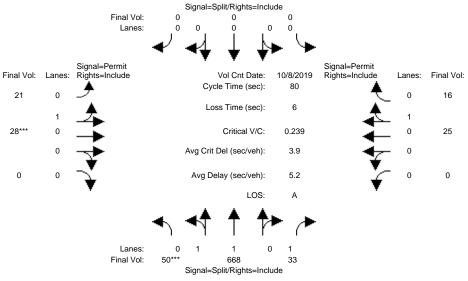
		rth Bo				und – R			und - R		est Bo - T	
Movement:	. ———.	- ı	- K	т.	_ 1	- K	т.				- ı	- K
Min. Green:		10				0					10	10
Y+R:		4.0	4.0	4 0	4.0	4 0		4.0			4.0	4.0
Volume Module										'		
Base Vol:	14	567	25	0	0	0	13	22	0	0	7	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	567	25	0	0	0	13	22	0	0	7	14
Added Vol:	3	1	1	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	568	26	0	0	0	13	22	0	0	7	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17	568	26	0	0	0	13	22	0	0	7	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			26	0	0	0	13	22	0	0	7	14
PCE Adj:	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	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		22	0	0	7	14
Saturation F												
Sat/Lane:			1900					1900	1900		1900	1900
Adjustment:							0.95		0.92		0.95	0.95
Lanes:				0.00		0.00		0.63			0.33	0.67
Final Sat.:				. 0		0			•		600	1200
Capacity Ana				0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 01	0 01
Vol/Sat:		0.16	0.01	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.01	0.01
Crit Moves:		C1 0	C 1 0	0 0	0 0	0 0	100		0 0	0 0	100	100
Green Time:			64.0	0.0	0.0	0.0		10.0	0.0	0.0		10.0
Volume/Cap:			0.02	0.0	0.00	0.00		0.16	0.00		0.09	0.09
Uniform Del:			1.6		0.0	0.0		31.2	0.0	0.0	31.0	31.0
<pre>IncremntDel: InitOueuDel:</pre>		0.0	0.0	0.0	0.0	0.0	0.3		0.0	0.0		0.2
~			1.00			0.00			0.00			
Delay Adj:					0.00			1.00			1.00	1.00 31.2
Delay/Veh:			1.6	0.0	0.0	0.0		31.6 1.00	0.0		31.2	
User DelAdj: AdjDel/Veh:			1.00	0.0	1.00	1.00		31.6	1.00		31.2	1.00 31.2
LOS by Move:			1.6 A	0.0 A		0.0 A	31.6 C		0.0 A	0.0 A		31.2 C
	A 2		A 0	A 0		A 0	1		0	A 0		1
Note: Queue							_		U	U	1	1
Note, Queue .	rehot	ceu IS	CITE II	.uiiiDE1	or ca	ra her	Talle	•				

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



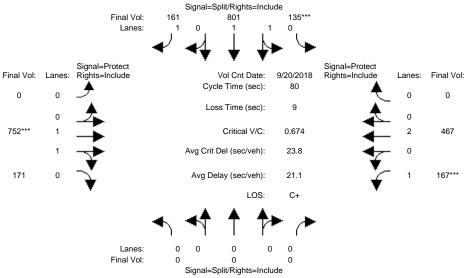
Signal=Split/Rights=Include												
Approach:	No	rth Bo	und	Soi	ıth Bo	und	Εć	ast Bo	und	We	est Bo	und
Movement:	L	- т	- R	L -	- T	- R	L ·	- T	- R	L -	- T	- R
Min. Green:	10	10	10	0	0	0	10	10	0	0	10	10
Y+R:		4.0	4.0	4.0				4.0	4.0	4.0		4.0
Volume Modul												
Base Vol:	47		32	0	0	0	21	28	0	0	25	16
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:			32	0	0	0	21	28	0	0	25	16
Added Vol:	0		0	0	0	0	0	0	0	0	0	0
PasserByVol:			0	0	0	0	0	0	0	0	0	0
Initial Fut:			32	0	0	0	21	28	0	0	25	16
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		1.00	1.00
PHF Volume:	47		32	0	0	0	21	28	0	0	25	16
Reduct Vol:	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:			32	0	0	0	21	28	0	0	25	16
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:		667	32	. 0	0	0	21	28	0	. 0	25	16
Saturation F												
Saturation F		1900	1900	1000	1900	1900	1000	1900	1900	1000	1900	1900
Adjustment:		0.98		0.92		0.92		0.95	0.92		0.95	0.95
Lanes:		1.86		0.00		0.00			0.00		0.61	0.39
Final Sat.:		3456	1750	0.00	0.00	0.00		1029	0.00		1098	702
					-				1			1
Capacity Ana				1		ļ	1		'	1		'
Vol/Sat:		0.19	0.02	0.00	0.00	0.00	0.03	0.03	0.00	0.00	0.02	0.02
Crit Moves:	***							****				
Green Time:	64.0	64.0	64.0	0.0	0.0	0.0	10.0	10.0	0.0	0.0	10.0	10.0
Volume/Cap:		0.24	0.02	0.00	0.00	0.00	0.22	0.22	0.00		0.18	0.18
Uniform Del:			1.6	0.0	0.0	0.0		31.5	0.0		31.3	31.3
IncremntDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.5		0.0	0.0	0.4	0.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:		2.0	1.6	0.0	0.0	0.0	32.0	32.0	0.0	0.0	31.7	31.7
User DelAdj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	2.0	2.0	1.6	0.0	0.0	0.0	32.0	32.0	0.0	0.0	31.7	31.7
LOS by Move:			A	A	A	A	С	С	A	A	С	С
HCM2kAvgQ:	2	2	0	0	0	0	1	1	0	0	1	1
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•				

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



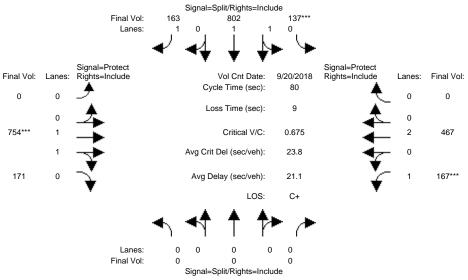
		rth Bo							und - R			
Movement:						- R				Т .	- T	- K
Min. Green:		10				0					10	10
Y+R:		4.0	4.0	4.0	4.0	4.0		4.0			4.0	4.0
Volume Module	e: >>	Count	Date:	8 Oct	t 2019	<< 4:	25 - !	5:25				
Base Vol:	47	667	32	0	0	0	21	28	0	0	25	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	47	667	32	0	0	0	21	28	0	0	25	16
Added Vol:	3	1	1	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	668	33	0	0	0	21	28	0	0	25	16
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	1.00	1.00
PHF Volume:			33	0	0	0	21	28	0	0	25	16
Reduct Vol:	0	0	0	0	0	0	0		0	0	-	0
Reduced Vol:	50	668	33	0	0	0	21	28	0	0	25	16
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		1.00		1.00	1.00
FinalVolume:				0		0			0	-	25	16
Saturation Fi												
Sat/Lane:			1900					1900	1900		1900	1900
Adjustment:							0.95		0.92		0.95	0.95
Lanes:				0.00		0.00	0.43		0.00		0.61	0.39
Final Sat.:				0			771		•		1098	702
Capacity Anal				0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
Vol/Sat:		0.19	0.02	0.00	0.00	0.00	0.03	U.U3 ****	0.00	0.00	0.02	0.02
Crit Moves:		C1 0	C 1 0	0 0	0 0	0 0	100		0 0	0 0	100	100
Green Time:		64.0	64.0	0.0	0.0	0.0		10.0	0.0	0.0		10.0
Volume/Cap:			0.02	0.0	0.00	0.00		0.22	0.00		0.18	0.18
Uniform Del:		2.0	1.6		0.0	0.0		31.5	0.0		31.3	31.3
IncremntDel:		0.0	0.0	0.0	0.0	0.0	0.5		0.0	0.0		0.4
InitQueuDel:		0.0	0.0		0.0	0.0			0.0	0.0		0.0
Delay Adj:			1.00		0.00	0.00		1.00	0.00		1.00	1.00
Delay/Veh:			1.6	0.0	0.0	0.0		32.0	0.0		31.7	31.7
User DelAdj: AdjDel/Veh:			1.00	0.0	1.00	1.00		1.00	1.00		1.00	1.00 31.7
-												
LOS by Move: HCM2kAvqQ:	A 2		A 0	A 0		A 0	C 1		A 0	A 0		C 1
Note: Queue							_		U	U	1	1
Note, Queue .	rehot	ceu IS	CITE II	annet	or ca	ra her	Talle	•				

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



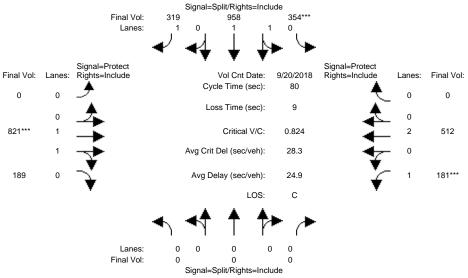
			Oigilai	-opiii(rtigiii	io-inloidad						
Approach:											
Movement:											
										•	
		0						10		7 10	
Y+R:	4.0	4.0	4.0		4.0			4.0	4.0	4.0 4.0	
Volume Module											
	e: // 0	0		135		161		752	171	167 467	0
Growth Adj:				1.00		1.00		1.00	1.00	1.00 1.00	
Initial Bse:		0	0	135	801	161	0		171	167 467	0
Added Vol:	0			0		0			0	0 0	-
PasserByVol:		0 0	0	0		0	0	0	0	0 0	
Initial Fut:	0	0		135		161	0		171	167 467	
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	
-	0	0	0	135	801	161	0		171	167 467	0
Reduct Vol:		0	0	0		0	0		0	0 0	
Reduced Vol:		0		135	801	161	0		171	167 467	-
PCE Adj:				1.00		1.00		1.00	1.00		
MLF Adj:				1.00		1.00		1.00	1.00		
FinalVolume:				135						167 467	
Saturation F											
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900 1900	1900
Adjustment:	0.92	1.00	0.92	0.95	0.98	0.92	0.92	0.98	0.95	0.92 1.00	0.92
Lanes:	0.00	0.00	0.00	0.30	1.70	1.00	0.00	1.62	0.38	1.00 2.00	0.00
Final Sat.:					3166				685	1750 3800	
Capacity Ana	lysis	Modul	e:								
Vol/Sat:	0.00	0.00	0.00	0.25	0.25	0.09	0.00	0.25	0.25		0.00
Crit Moves:				****				****		***	
Green Time:	0.0	0.0	0.0	30.0	30.0	30.0	0.0	29.6	29.6	11.3 41.0	0.0
Volume/Cap:	0.00	0.00	0.00	0.67	0.67	0.24	0.00	0.67	0.67	0.67 0.24	0.00
Uniform Del:	0.0	0.0	0.0	20.9	20.9	17.2	0.0	21.1	21.1	32.6 10.9	0.0
<pre>IncremntDel:</pre>		0.0	0.0	1.3	1.3	0.2	0.0	1.3	1.3	7.1 0.1	0.0
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0	0.0
Delay Adj:		0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00 1.00	0.00
Delay/Veh:		0.0	0.0		22.2	17.4		22.5	22.5	39.7 10.9	
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00 1.00	
AdjDel/Veh:				22.2		17.4	0.0		22.5	39.7 10.9	0.0
LOS by Move:			A	C+		В	A		C+	D B+	A
- J ~ ·	0		0	10		3		11	11	4 3	0
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•			

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



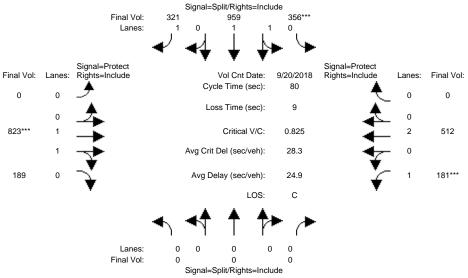
Approach:				Sot	uth Bo	und	E	ast Bo	und	We		
Movement:	L	– T	- R	L -	- T	- R	L -	- T	- R	L -	– T	- R
Min. Green:						10				7		0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module												
Base Vol:								752			467	0
Growth Adj:								1.00	1.00		1.00	1.00
Initial Bse:				135		161	0		171	167		0
Added Vol:	0	0	0	2	1	2	0	2	0	0		0
PasserByVol:	0	0	0			0	0		0	0		0
Initial Fut:			0			163	0		171	167		0
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	1.00		1.00	1.00
PHF Volume:	0		0	137	802	163	0		171	167		0
Reduct Vol:	0			0		0	0		0	0		0
Reduced Vol:	0		0			163	0		171		467	0
PCE Adj:				1.00		1.00		1.00	1.00		1.00	1.00
MLF Adj:						1.00			1.00		1.00	1.00
FinalVolume:	0	0	0	137	802				171			0
Catavatian R												
Saturation F. Sat/Lane:			1900	1000	1000	1900	1000	1900	1900	1000	1900	1900
Adjustment:									0.95		1.00	0.92
_												
Lanes: Final Sat.:									0.38 684		2.00	0.00
rinai Sat.:											3800	
Capacity Ana				1		ı	ı			ı		ı
Vol/Sat:				0.25	0.25	0.09	0.00	0.25	0.25	0.10	0.12	0.00
Crit Moves:				****				****		****		
Green Time:	0.0	0.0	0.0	30.1	30.1	30.1	0.0	29.6	29.6	11.3	40.9	0.0
Volume/Cap:			0.00		0.68	0.25	0.00	0.68	0.68		0.24	0.00
Uniform Del:		0.0	0.0		20.9	17.2	0.0		21.1		10.9	0.0
IncremntDel:		0.0	0.0	1.3		0.2	0.0		1.4	7.2		0.0
InitOueuDel:		0.0	0.0	0.0		0.0	0.0		0.0	0.0		0.0
Delay Adj:			0.00		1.00	1.00		1.00	1.00		1.00	0.00
Delay/Veh:			0.0		22.2	17.4		22.5	22.5		10.9	0.0
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			0.0		22.2		0.0		22.5		10.9	0.0
LOS by Move:			0.0 A	C+		В		C+	C+	D D		0.0 A
-	0		0	10		3	0		11	4		0
Note: Queue										7	J	O
Note, gueue .	rcbor	ccu is	CIIC II	. WILLDEL	OI C	rra ber	1 and	•				

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



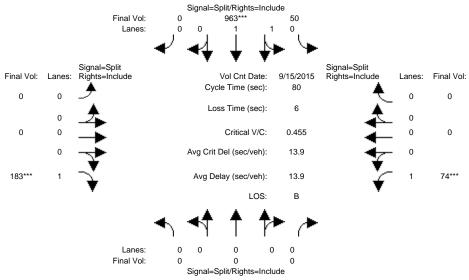
			Olgilai	-opiii, ragiii	.o=ii1oiaac						
Approach:											
Movement:	L	- T	- R	L ·	- T	- R	L ·	- T	- R	L - T	- R
Min. Green:						10				7 10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0 4.0	4.0
Volume Modul	e: >>	Count	Date:	20 S	ep 201	8 << 4					
			0						189	181 512	
Growth Adj:									1.00	1.00 1.00	
Initial Bse:	0	0		354		319	0		189	181 512	
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	
Initial Fut:			0	354	958	319	0	821	189	181 512	0
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	1.00	1.00	1.00	1.00 1.00	1.00
PHF Volume:	0	0		354	958	319	0	821	189	181 512	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0 0	0
Reduced Vol:			0		958	319	0	821	189	181 512	0
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	1.00	1.00	1.00	1.00	1.00 1.00	1.00
FinalVolume:	0	0	0	354	958	319			189		
Saturation F											
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900 1900	1900
Adjustment:							0.92	0.98	0.95	0.92 1.00	0.92
Lanes:	0.00	0.00	0.00	0.55	1.45	1.00	0.00	1.62	0.38	1.00 2.00	0.00
Final Sat.:	0	0	0	998	2701	1750	0	3007	692	1750 3800	0
Capacity Ana											
Vol/Sat:	0.00	0.00	0.00		0.35	0.18	0.00				0.00
Crit Moves:				****						* * * *	
Green Time:			0.0		34.4		0.0		26.5	10.0 36.6	
Volume/Cap:	0.00	0.00	0.00	0.82	0.82	0.42	0.00	0.82	0.82	0.82 0.29	0.00
Uniform Del:			0.0	20.1	20.1		0.0		24.6	34.1 13.6	0.0
<pre>IncremntDel:</pre>			0.0	3.6	3.6	0.4	0.0	4.7	4.7	21.6 0.1	0.0
InitQueuDel:			0.0	0.0	0.0	0.0	0.0		0.0	0.0 0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00 1.00	0.00
Delay/Veh:			0.0	23.7		16.2	0.0	29.3	29.3	55.7 13.7	0.0
User DelAdj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00
AdjDel/Veh:			0.0				0.0		29.3	55.7 13.7	0.0
LOS by Move:	A	A	A			В	A	С	С	E+ B	A
HCM2kAvgQ:	0	0	0	15	15	6	0	14	14	5 4	0
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane				
						-					

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



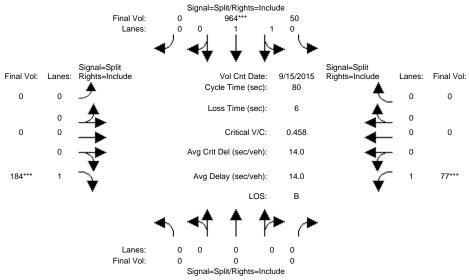
			Oigiliai-	-opiii ragiii	.o=moiaac						
Approach:											
Movement:											
										·	
Min. Green:	0	0						10		7 10	0
Y+R:	4.0	4.0	4.0		4.0				4.0		
Volume Module											
		0		354		319			189	181 512	0
Growth Adj:				1.00		1.00		1.00	1.00	1.00 1.00	
Initial Bse:	0	0		354		319	0		189	181 512	
Added Vol:	0	0 0	0	2	1	2	0	2	0	0 0	-
PasserByVol:	0	0	0	0	0	0			0	0 0	
Initial Fut:				356	959	321	0		189	181 512	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00
PHF Adj:	1.00	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	356	959	321	0	823	189	181 512	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0 0	0
Reduced Vol:	0	0	0	356	959	321	0	823		181 512	0
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	1.00	1.00	1.00	1.00	1.00 1.00	1.00
FinalVolume:					959		0			181 512	
Saturation F											
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900 1900	1900
Adjustment:				0.95		0.92		0.98	0.95	0.92 1.00	0.92
Lanes:				0.56	1.44				0.38		0.00
Final Sat.:					2698				691		
Capacity Ana											
Vol/Sat:	0.00	0.00	0.00		0.36	0.18	0.00		0.27		0.00
Crit Moves:				****				****		***	
Green Time:			0.0		34.5		0.0		26.5	10.0 36.5	
Volume/Cap:			0.00			0.43		0.83	0.83	0.83 0.29	
Uniform Del:		0.0	0.0		20.1	15.9		24.6	24.6	34.1 13.6	
IncremntDel:			0.0	3.7		0.4	0.0		4.7	21.9 0.1	
InitQueuDel:			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00 1.00	0.00
Delay/Veh:			0.0	23.8	23.8	16.3	0.0	29.3	29.3	56.0 13.7	0.0
User DelAdj:			1.00	1.00		1.00	1.00	1.00	1.00	1.00 1.00	
AdjDel/Veh:				23.8	23.8	16.3	0.0	29.3	29.3	56.0 13.7	0.0
LOS by Move:	A	А		С	С	В	A		C	E+ B	
HCM2kAvgQ:	0	0	0	15	15	6	0	14	14	5 4	0
Note: Queue	report	ed is	the n	umber	of ca	rs per	lane				

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



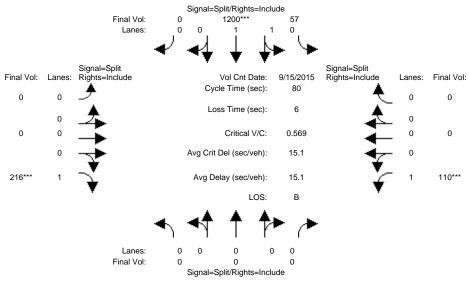
			Signal:	=Split/Right	s=Include									
Approach:	No	rth Bo	und	Soi	ıth Bo	und	E	ast Bo	und	We	10.0 0.0 0.0 0.34 0.00 0.00 32.0 0.0 0.0 0.9 0.0 0.0 0.0 0.0 0.0 1.00 0.00 0.00			
Movement:	L ·	- T	- R	L -	- Т	- R	L ·	- T	- R	L -	- T	- R		
Min. Green:	0	0	0	10	10	10	0	10	10	10	10	0		
Y+R:		4.0	4.0		4.0	4.0		4.0	4.0					
							•							
Volume Modul					_									
Base Vol:	0	0	0	50	963	0	0	0	183					
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00					
Initial Bse:		0	0	50	963	0	0	0	183		-	-		
Added Vol:	0	0	0	0	0	0	0	0	0	-	-	-		
PasserByVol:		0	0	0	0	0	0	0	0	-	-	-		
Initial Fut:		0	0	50	963	0	0	0	183			-		
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					
PHF Volume:	0	0	0	50	963	0	0	0	183		-	-		
Reduct Vol:	0	0	0	0	0	0	0	0	0					
Reduced Vol:		0	0	50	963	0	0	0	183		-	-		
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:		0	0	50	963	0	0	0	183		-	-		
Saturation F														
Saturation F. Sat/Lane:		1900	1900	1000	1900	1900	1000	1900	1900	1000	1000	1000		
Adjustment:		1.00		0.95		0.92		1.00	0.92					
Lanes:		0.00		0.10		0.00		0.00	1.00					
Final Sat.:	0.00	0.00	0.00		3517	0.00	0.00	0.00	1750					
		-	-			-	-	-	1			-		
Capacity Ana				1		'	1		'	ı		'		
Vol/Sat:	-	0.00	0.00	0.27	0.27	0.00	0.00	0.00	0.10	0.04	0.00	0.00		
Crit Moves:					***				****	***				
Green Time:	0.0	0.0	0.0	46.3	46.3	0.0	0.0	0.0	17.7	10.0	0.0	0.0		
Volume/Cap:	0.00	0.00	0.00	0.47	0.47	0.00		0.00	0.47	0.34	0.00	0.00		
Uniform Del:		0.0	0.0	9.8	9.8	0.0	0.0	0.0	27.1	32.0	0.0	0.0		
IncremntDel:	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.9	0.9	0.0	0.0		
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Delay Adj:	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00		
Delay/Veh:	0.0	0.0	0.0	9.9	9.9	0.0	0.0	0.0	28.0	32.9	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	0.0	0.0	9.9	9.9	0.0	0.0	0.0	28.0	32.9	0.0	0.0		
LOS by Move:	A	A	A	A	A	A	A	А	С	C-	A	A		
HCM2kAvgQ:	0	0	0	8	8	0	0	0	5	2	0	0		
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane							

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



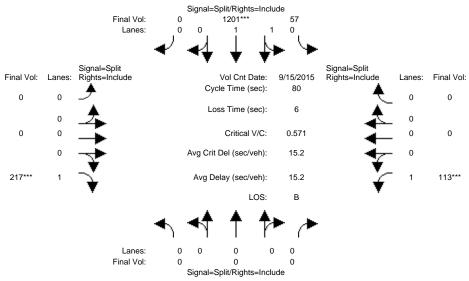
			Signal:	=Split/Right	ts=Include								
Approach:	No	rth Bo	und	Soi	ıth Bo	und	E	ast Bo	und	We	1900 1900 1900 0.92 1.00 0.92 1.00 0.00 0.00 1750 0 0 		
Movement:	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R	L -	- T	- R	
Min. Green:	0	0	0	10	10	10	0	10	10	10	10	0	
Y+R:		4.0	4.0		4.0	4.0		4.0	4.0				
							•						
Volume Modul					_								
Base Vol:	0	0	0	50	963	0	0	0	183				
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00				
Initial Bse:		0	0	50	963	0	0	0	183		-	-	
Added Vol:	0		0	0	1	0	0	0	1		-		
PasserByVol:	0		0	0	0	0	0	0	0		-	-	
Initial Fut:			0	50	964	0	0	0	184			-	
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				
PHF Volume:	0		0	50	964	0	0	0	184		-	-	
Reduct Vol:	0		0	0	0	0	0	0	0				
Reduced Vol:			0	50	964	0	0	0	184		-	-	
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:		0	0	50	964	0	0	0	184		-	-	
Saturation F													
Saturation F. Sat/Lane:		1900	1900	1 9 0 0	1900	1900	1 9 0 0	1900	1900	1 9 0 0	1 9 0 0	1 9 0 0	
Adjustment:		1.00		0.95		0.92		1.00	0.92				
Lanes:		0.00		0.10		0.00		0.00	1.00				
Final Sat.:	0.00		0.00		3517	0.00	0.00	0.00	1750				
		-	-			-	-	-	1			-	
Capacity Ana				'		'	'		'	'		'	
Vol/Sat:	-	0.00	0.00	0.27	0.27	0.00	0.00	0.00	0.11	0.04	0.00	0.00	
Crit Moves:					***				****	****			
Green Time:	0.0	0.0	0.0	46.3	46.3	0.0	0.0	0.0	17.7	10.0	0.0	0.0	
Volume/Cap:	0.00	0.00	0.00	0.47	0.47	0.00	0.00	0.00	0.47	0.35	0.00	0.00	
Uniform Del:		0.0	0.0	9.8	9.8	0.0	0.0	0.0	27.1	32.0	0.0	0.0	
IncremntDel:	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.9	1.0	0.0	0.0	
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Delay Adj:	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	
Delay/Veh:	0.0	0.0	0.0	10.0	10.0	0.0	0.0	0.0	28.0	33.0	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	0.0	0.0	10.0	10.0	0.0	0.0	0.0	28.0	33.0	0.0	0.0	
LOS by Move:	A	A	A	A	A	A	A	A	С	C-	A	A	
HCM2kAvgQ:	0		0	8	8	0	0	-	5	2	0	0	
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•					

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



			Signal:	=Split/Right	s=Include									
Approach:	proach: North Bound South							ast Bo	und	We	L - T - R			
Movement:	L ·	- T	- R	L -	- T	- R	L ·	- T	- R	L -	- T	- R		
Min. Green:	0	0	0	10	10	10	0	10	10	10	10	0		
Y+R:		4.0			4.0	4.0		4.0	4.0					
							•							
Volume Modul					_									
Base Vol:	0	0	0		1200	0	0	0	216					
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00					
Initial Bse:		0	0		1200	0	0	0	216		-	-		
Added Vol:	0	0	0	0	0	0	0	0	0	-	-			
PasserByVol:		0	0	0	0	0	0	0	0	-	-	-		
Initial Fut:		0	0		1200	0	0	0	216			-		
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					
PHF Volume:	0	0	0		1200	0	0	0	216		-	-		
Reduct Vol:	0	0	0	0	0	0	0	0	0					
Reduced Vol:		0	0		1200	0	0	0	216			-		
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:		0	0		1200	0	0	0	216		-	-		
Saturation F														
Saturation F		1900	1900	1000	1900	1900	1000	1900	1900	1000	1000	1000		
	0.92			0.95		0.92			0.92					
Lanes:		0.00		0.09		0.00		0.00	1.00					
Final Sat.:	0.00	0.00	0.00		3532	0.00	0.00	0.00	1750					
		-	-				-	-				-		
Capacity Ana				1		'	1		'	ı		'		
Vol/Sat:	-	0.00		0.34	0.34	0.00	0.00	0.00	0.12	0.06	0.00	0.00		
Crit Moves:					****				****	****				
Green Time:	0.0	0.0	0.0	46.9	46.9	0.0	0.0	0.0	17.1	10.0	0.0	0.0		
Volume/Cap:			0.00	0.58	0.58	0.00		0.00	0.58	0.50	0.00			
Uniform Del:		0.0	0.0		10.3	0.0	0.0	0.0	28.2	32.7				
IncremntDel:	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.0	2.3	1.9	0.0	0.0		
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Delay Adj:	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00		
Delay/Veh:		0.0	0.0	10.7	10.7	0.0	0.0	0.0	30.5	34.5	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	0.0	0.0	10.7	10.7	0.0	0.0	0.0	30.5	34.5	0.0	0.0		
LOS by Move:	A	A	A	B+	B+	A	A	А	С	C-	A	A		
HCM2kAvgQ:	0	0	0	10	10	0	0	0	6	3	0	0		
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane							

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



			Signal:	=Split/Right	s=Include							
Approach:	No	rth Bo	und	Soi	ıth Bo	und	E	ast Bo	und	W∈	est Bo	und
Movement:	L ·	- T	- R	L -	- Т	- R	L ·	- T	- R	L -	- T	- R
Min. Green:	0	0	0	10	10	10	0	10	10	10	10	0
Y+R:		4.0			4.0	4.0		4.0	4.0	4.0		4.0
							•					
Volume Modul					_							
Base Vol:	0	0	0		1200	0	0	0	216	110	0	0
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:			0		1200	0	0	0	216	110	0	0
Added Vol:	0		0	0	1	0	0	0	1	3	0	0
PasserByVol:	0		0	0	0	0	0	0	0	0	0	0
Initial Fut:			0		1201	0	0	0	217	113	0	0
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		1.00	1.00
PHF Volume:	0		0		1201	0	0	0	217	113	0	0
Reduct Vol:	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:			0		1201	0	0	0	217	113	0	0
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:		1.00		1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:		0	0		1201	0	0	0	217	113	0	0
Saturation F												
Saturation F. Sat/Lane:		1900	1900	1000	1900	1900	1 9 0 0	1900	1900	1 9 0 0	1900	1900
		1.00		0.95		0.92		1.00	0.92		1.00	0.92
Lanes:		0.00		0.09		0.00		0.00	1.00		0.00	0.00
Final Sat.:	0.00		0.00		3532	0.00	0.00	0.00	1750	1750	0.00	0.00
		-	-			-	-	-	1			-
Capacity Ana				'		'	'		'	'		'
Vol/Sat:		0.00		0.34	0.34	0.00	0.00	0.00	0.12	0.06	0.00	0.00
Crit Moves:					***				****	****		
Green Time:	0.0	0.0	0.0	46.9	46.9	0.0	0.0	0.0	17.1	10.0	0.0	0.0
Volume/Cap:	0.00	0.00	0.00	0.58	0.58	0.00	0.00	0.00	0.58	0.52	0.00	0.00
Uniform Del:		0.0	0.0	10.4	10.4	0.0	0.0	0.0	28.2	32.7	0.0	0.0
IncremntDel:	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.0	2.3	2.1	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	10.8	10.8	0.0	0.0	0.0	30.5	34.9	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	0.0	0.0	10.8	10.8	0.0	0.0	0.0	30.5	34.9	0.0	0.0
LOS by Move:	A	A	A	B+	B+	A	A	A	С	C-	A	A
HCM2kAvgQ:	0		0	10	10	0	0		6	3	0	0
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•				

Appendix DSan Jose Approved Trips Inventory



AM PROJECT TRIPS

<pre>Intersection of : N 11th St / S</pre>	S 11th St & E	Santa	Clara	St									
Traffix Node Number : 3477													
Permit No./Proposed Land Use/Description/Location		M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
DOWNTOWN LEGACY DOWNTOWN CORE DOWNTOWN STRATEGY PLAN 2000		18	26	3	4	0	1	1	9	0	0	23	1
NSJ LEGACY		12	64	5	0	0	0	3	11	0	0	2	0
NORTH SAN JOSE													
PDC15-049 (3-22010) Residential 505 E SANTA CLARA SPARTA STUDENT HOUSING		0	14	0	0	0	0	2	0	0	0	0	1
PDC84-07-059 (3-05912) Retail/Commercial PARK & WOZ (SE/C) RIVER PARK II		0	0	0	0	0	0	0	0	0	0	0	0
RH00-05-005 (3-14920) Retail/Commercial ALMADEN BLVD/WOZ WAY (NW/C) BOSTON PROP		0	0	0	0	0	0	0	1	0	0	17	0
	TOTAL:	30	104	8	4	0	1	6	21	0	0	42	2

	LEFT	THRU	RIGHT
NORTH	4	0	1
EAST	0	42	2
SOUTH	30	104	8
WEST	6	21	0

PM PROJECT TRIPS

<pre>Intersection of : N 11th St / S</pre>	11th St & E	Santa	Clara	St									
Traffix Node Number : 3477													
Permit No./Proposed Land Use/Description/Location		M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
DOWNTOWN LEGACY DOWNTOWN CORE DOWNTOWN STRATEGY PLAN 2000		20	18	10	27	0	5	2	51	0	0	38	1
NSJ LEGACY		0	2	0	0	0	0	0	1	0	0	9	0
NORTH SAN JOSE													
PDC15-049 (3-22010) Residential 505 E SANTA CLARA SPARTA STUDENT HOUSING		0	34	0	0	0	0	4	0	0	0	0	1
PDC84-07-059 (3-05912) Retail/Commercial PARK & WOZ (SE/C) RIVER PARK II		0	0	0	0	0	0	0	0	0	0	0	0
RH00-05-005 (3-14920) Retail/Commercial ALMADEN BLVD/WOZ WAY (NW/C) BOSTON PROP		0	0	0	0	0	0	0	16	0	0	2	0
	TOTAL:	20	54	10	27	0	5	6	68	0	0	49	2

	LEFT	THRU	RIGHT
NORTH	27	0	5
EAST	0	49	2
SOUTH	20	54	10
WEST	6	68	0

AM PROJECT TRIPS

Intersection of	:	Ν	11th	St	&	Ε	St	John	St	
-----------------	---	---	------	----	---	---	----	------	----	--

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
DOWNTOWN LEGACY DOWNTOWN CORE DOWNTOWN STRATEGY PLAN 2000	0	44	0	1	8	0	0	1	1	0	2	1
NSJ LEGACY	1	80	1	0	0	0	0	0	0	0	3	2
NORTH SAN JOSE												
PDC15-049 (3-22010) Residential 505 E SANTA CLARA SPARTA STUDENT HOUSING	33	2	1	0	0	0	0	0	0	0	0	0

34 126 2 1 8 0 0 1 1 0 5 3

	TIEL I	Inko	KIGHI
NORTH	1	8	0
EAST	0	5	3
SOUTH	34	126	2
WEST	0	1	1

TOTAL:

18

1

PM PROJECT TRIPS

Intersection of : N 11th St & E St John St												
Traffix Node Number : 3479												
Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
DOWNTOWN LEGACY DOWNTOWN CORE DOWNTOWN STRATEGY PLAN 2000	7	63	4	5	153	2	8	23	9	5	15	1
NSJ LEGACY	0	4	0	0	0	0	0	3	0	0	3	0

Residential 505 E SANTA CLARA SPARTA STUDENT HOUSING

5 5

69

26 2 1 0 0 0 0 0 0 0

2 8

26

153

	LEFT	THRU	RIGHT
NORTH	5	153	2
EAST	5	18	1
SOUTH	33	69	5
WEST	8	2.6	9

33

TOTAL:

NORTH SAN JOSE

PDC15-049 (3-22010)

AM PROJECT TRIPS

												,
Intersection of : N 10th St / S 10t	h St & E Santa	Clara	St									
Traffix Node Number: 3785												
Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
DOWNTOWN LEGACY DOWNTOWN CORE DOWNTOWN STRATEGY PLAN 2000	0	0	0	1	11	0	1	14	4	6	40	18
NSJ LEGACY	0	0	0	0	2	0	0	11	3	1	5	0
NORTH SAN JOSE												
PDC15-049 (3-22010) Residential 505 E SANTA CLARA SPARTA STUDENT HOUSING	0	0	0	1	31	1	0	1	0	0	0	0
PDC84-07-059 (3-05912) Retail/Commercial PARK & WOZ (SE/C) RIVER PARK II	0	0	0	0	0	0	0	0	0	0	0	0
RH00-05-005 (3-14920) Retail/Commercial ALMADEN BLVD/WOZ WAY (NW/C) BOSTON PROP	0	0	0	0	0	0	0	1	0	0	17	0

	LEFT	THRU	RIGHT
NORTH	2	44	1
EAST	7	62	18
SOUTH	0	0	0
WEST	1	27	7

TOTAL:

PM PROJECT TRIPS

											03/19	9/2020
Intersection of : N 10th St / S 10th	n St & E Santa	Clara	St									
Traffix Node Number: 3785												
Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
DOWNTOWN LEGACY DOWNTOWN CORE DOWNTOWN STRATEGY PLAN 2000	0	0	0	2	48	2	2	47	18	12	36	1
NSJ LEGACY	0	0	0	9	84	5	0	2	0	2	7	0
NORTH SAN JOSE												
PDC15-049 (3-22010) Residential 505 E SANTA CLARA SPARTA STUDENT HOUSING	0	0	0	2	24	1	0	2	0	0	0	0
PDC84-07-059 (3-05912) Retail/Commercial PARK & WOZ (SE/C) RIVER PARK II	0	0	0	0	0	0	0	0	0	0	0	0
RH00-05-005 (3-14920) Retail/Commercial ALMADEN BLVD/WOZ WAY (NW/C) BOSTON PROP	0	0	0	0	0	0	0	16	0	0	2	0

	LEFT	THRU	RIGHT
NORTH	13	156	8
EAST	14	45	1
SOUTH	0	0	0
WEST	2	67	18

TOTAL:

6

1

AM PROJECT TRIPS

Intersection of : N 10th St & E St John St

Traffix Node Number : 3813

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
DOWNTOWN LEGACY DOWNTOWN CORE DOWNTOWN STRATEGY PLAN 2000	1	75	1	3	14	0	0	4	2	1	5	1
PDC15-049 (3-22010) Residential 505 E SANTA CLARA SPARTA STUDENT HOUSING	0	0	0	0	1	0	0	0	0	32	1	0

TOTAL:	1	75	1	3	15	0	0	4	2	33	

	LEFT	THRU	RIGHT
NORTH	3	15	0
EAST	33	6	1
SOUTH	1	75	1
WEST	0	4	2

PM PROJECT TRIPS

Intersection of : N 10th St & E St John St

Traffix Node Number : 3813

Permit No./Proposed Land Use/Description/Location DOWNTOWN	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
LEGACY DOWNTOWN CORE DOWNTOWN STRATEGY PLAN 2000												
PDC15-049 (3-22010) Residential 505 E SANTA CLARA SPARTA STUDENT HOUSING	0	0	0	0	2	0	0	0	0	25	1	0

TOTAL:	3	32	2	2	81	1	4	20	4	27	9	1
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	LEFT	THRU	RIGHT
NORTH	2	81	1
EAST	27	9	1
SOUTH	3	32	2
WEST	4	20	4

Appendix E 11th Street Redesign



