Appendix G: Local Transportation Analysis

HEXAGON TRANSPORTATION CONSULTANTS, INC.

1207 N. Capitol Avenue Day Care

Local Transportation Analysis

Prepared for:

David J. Powers & Associates, Inc

November 18, 2022

Hexagon Transportation Consultants, Inc.
Hexagon Office: 100 Century Center Court, Suite 501
San Jose, CA 95112
Hexagon Job Number: 22BJ07
Phone: 408.971.6100
Client Name: David J. Powers & Associates, Inc.

Table of Contents

Appendices

List of Tables

List of Figures

Executive Summary

This report presents the results of the analysis of Vehicle Miles Traveled (VMT) and a Local Transportation Analysis (LTA) for a proposed day care facility at 1207 N. Capitol Avenue in San Jose, California. The project proposes to demolish the existing single-family residence on-site and construct a new 14,379 square-foot (s.f.) day care center. The project would also include a 9,424 s.f. outdoor play area and a total of 37 parking spaces in a surface parking lot. The proposed day care center would serve a maximum of 252 children and would operate between 6:30 AM and 6:30 PM. The day care facility would serve students with ages ranging between six weeks and five years. Access to the project site would be provided via one right-turn in/out driveway on N. Capitol Avenue.

This study was conducted for the purpose of identifying the potential transportation impacts and operational issues related to the proposed day care development. The potential transportation impacts of the project were evaluated following the standards and methodologies established in the City of San Jose's *Transportation Analysis Handbook,* 2020. 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 non-CEQA local transportation analysis (LTA). The LTA supplements the CEQA transportation analysis by identifying transportation operational issues via an evaluation of weekday AM and PM peak-hour traffic conditions for the key study intersections. The LTA also includes an analysis of site access, on-site circulation, parking, and effects to transit, bicycle, and pedestrian facilities.

CEQA Transportation 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's VMT methodology also includes screening criteria that are used to identify types, characteristics, and/or locations of projects that would not exceed the CEQA thresholds of significance. If a project or a component of a mixed-use project meets the screening criteria, it is then presumed that the project or the component would result in a less-than-significant VMT impact and a VMT analysis is not required.

Council Policy 5-1 does not explicitly address day care centers. Therefore, in coordination with San Jose staff, the day care center was treated as being equivalent to a local serving retail project (retail project below 100,000 s.f.) without drive-through operations. These projects tend to redistribute existing trips instead of creating new trips. The proposed project, which is a day care center, would operate similar to local serving retail in that it would redistribute existing trips from surrounding day care centers instead of creating new trips. The equivalent retail square footage of the day care center (based on ITE rates) is approximately 18,900 square feet, which is less than the 100,000 s.f. threshold. This relatively small amount of equivalent retail space meets the screening criteria for local serving retail projects

without drive-through operation. Because the project would meet the City's screening criteria, it is expected to result in a less-than-significant VMT impact.

Project Trip Generation

After applying the ITE trip rates to the proposed project and applying the appropriate trip adjustments, the project would be expected to generate 897 new daily vehicle trips, with 171 new trips (90 inbound and 81 outbound) occurring during the AM peak hour and 173 new trips (82 inbound and 91 outbound) occurring during the PM peak hour.

Intersection Traffic Operations

Intersection levels of service were evaluated against the standards of the City of San Jose. The results of the analysis show that all but one of the study intersections are currently operating at acceptable levels of service during the AM and PM peak hours of traffic and would continue to operate acceptably under background and background plus project conditions. The intersection of N. Capitol Avenue and Berryessa Road currently operates at an unacceptable LOS E during the PM peak hour and would continue to do so under background and background plus project conditions. However, the addition of project trips would not cause the average critical delay to increase by 4 seconds or more. Therefore, the project would not create an adverse effect on intersection operations.

Other Transportation Items

In general, the proposed site plan shows adequate site access and on-site circulation. The project would not have an adverse effect on the existing pedestrian, bicycle, or transit facilities in the study area. Below are recommendations resulting from the site plan review.

Recommendations

- The proposed day care center should frequently monitor the parking availability and on-site queuing during the peak drop-off and pick-up periods. In case of a parking shortage or vehicle queuing that extends back to N. Capitol Avenue, the day care could implement an official staggered student drop-off and pick-up program to ensure sufficient on-site parking is available for parents at all times and eliminate the potential for vehicle queues to affect traffic operations along N. Capitol Avenue.
- The proposed day care center should designate the parking stalls along the drive aisle furthest from the building for teachers/employees. This would ensure the parking stalls along the drive aisle closest to the building would be free for efficient student drop-off/pick-up operations.
- Relocate the ADA accessible parking spaces closer to the entrance to the day care center building to meet the ADA design standards.
- The project should pay a fair-share contribution of $43,200 toward the planned Class IV protected bikeway improvements along N. Capitol Avenue, per the request of the City of San Jose Department of Public Works.
- The project should pay a fair-share contribution of up to $30,000 toward the planned upgrades (e.g., signal cabinet upgrades, PTZ and fiber communication cables, APS upgrades, etc.) at the signalized intersection of N. Capitol Avenue and Ohlone Drive, per the special use permit for the project.

1. Introduction

This report presents the results of the analysis of Vehicle Miles Traveled (VMT) and a Local Transportation Analysis (LTA) for a proposed day care facility at 1207 N. Capitol Avenue in San Jose, California (see Figure 1). The project proposes to demolish the existing single-family residence on-site and construct a new 14,379 square-foot (s.f.) day care center. The project would also include a 9,424 s.f. outdoor play area and a total of 37 parking spaces in a surface parking lot. The proposed day care center would serve a maximum of 252 children and would operate between 6:30 AM and 6:30 PM. The day care facility would serve students with ages ranging between six weeks and five years. Access to the project site would be provided via one right-turn in/out driveway on N. Capitol Avenue. The project site plan is shown on Figure 2.

This study was conducted for the purpose of identifying the potential transportation impacts and operational issues related to the proposed day care development. The potential transportation impacts of the project were evaluated following the standards and methodologies established in the City of San Jose's *Transportation Analysis Handbook,* 2020. 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 (TA) and a local transportation analysis (LTA).

Transportation Policies

As established in Council Policy 5-1, San Jose evaluates transportation impacts under CEQA based on vehicle miles traveled (VMT). All new projects are required to analyze transportation impacts using the VMT metric and conform to Policy 5-1. 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, mixed-use, infill projects as established in the General Plan's Planned Growth Areas.

The project site is located within the N. Capitol Avenue/Berryessa Road Urban Village (i.e., planned growth area), according to the Envision San Jose 2040 General Plan. Urban Villages are walkable, bicycle-friendly, transit-oriented, mixed-use settings that provide high-density housing and promote job growth, thus supporting the General Plan's policies and goals. Projects that are located within an Urban Village boundary are eligible for a 20% parking reduction.

The Envision San Jose 2040 General Plan contains policies to encourage the use of non-automobile transportation modes to minimize vehicle trip generation and reduce VMT, including the following:

- 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);

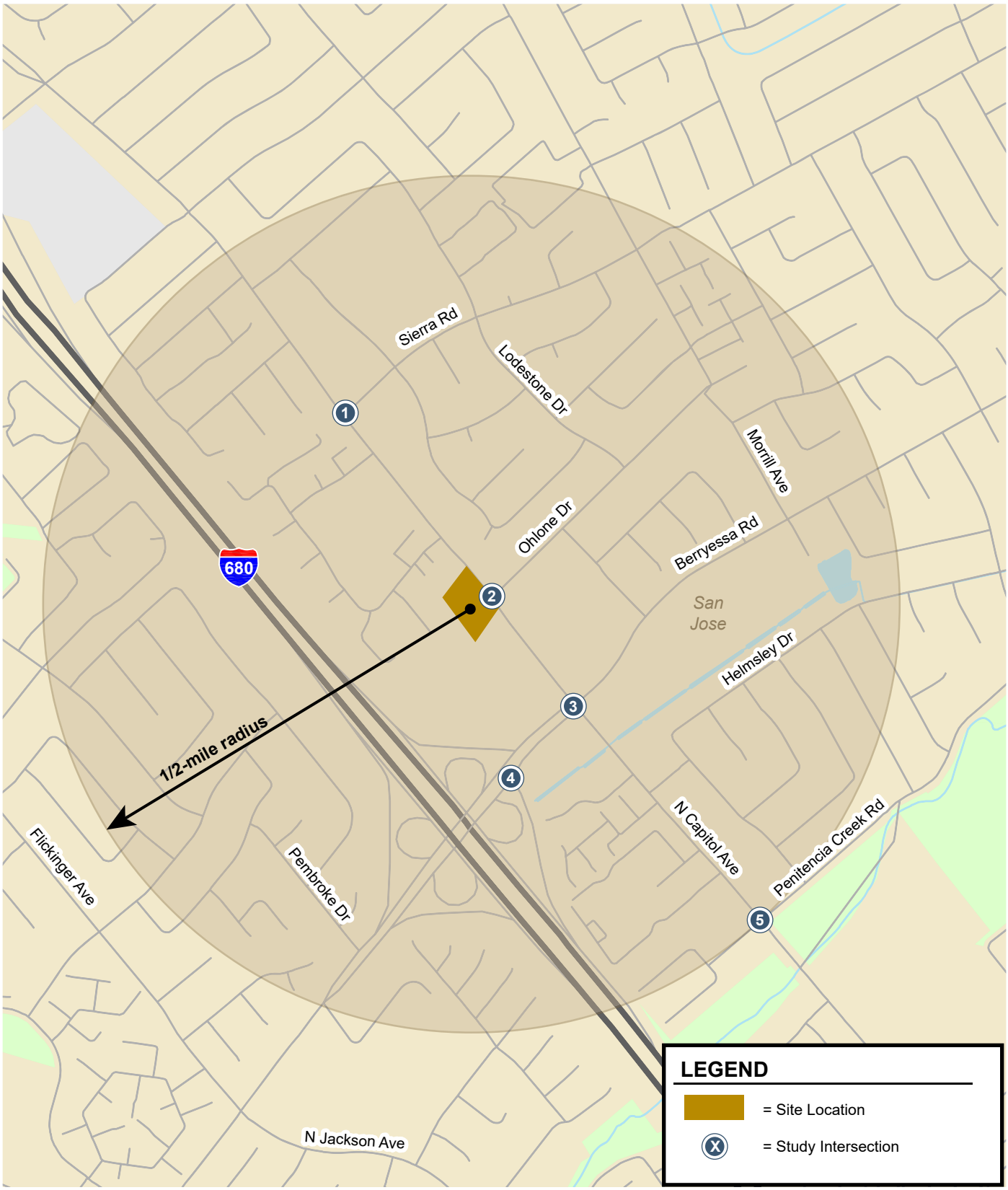


Figure 1
Site Location and Study Intersections

NORTH
Not to Scale

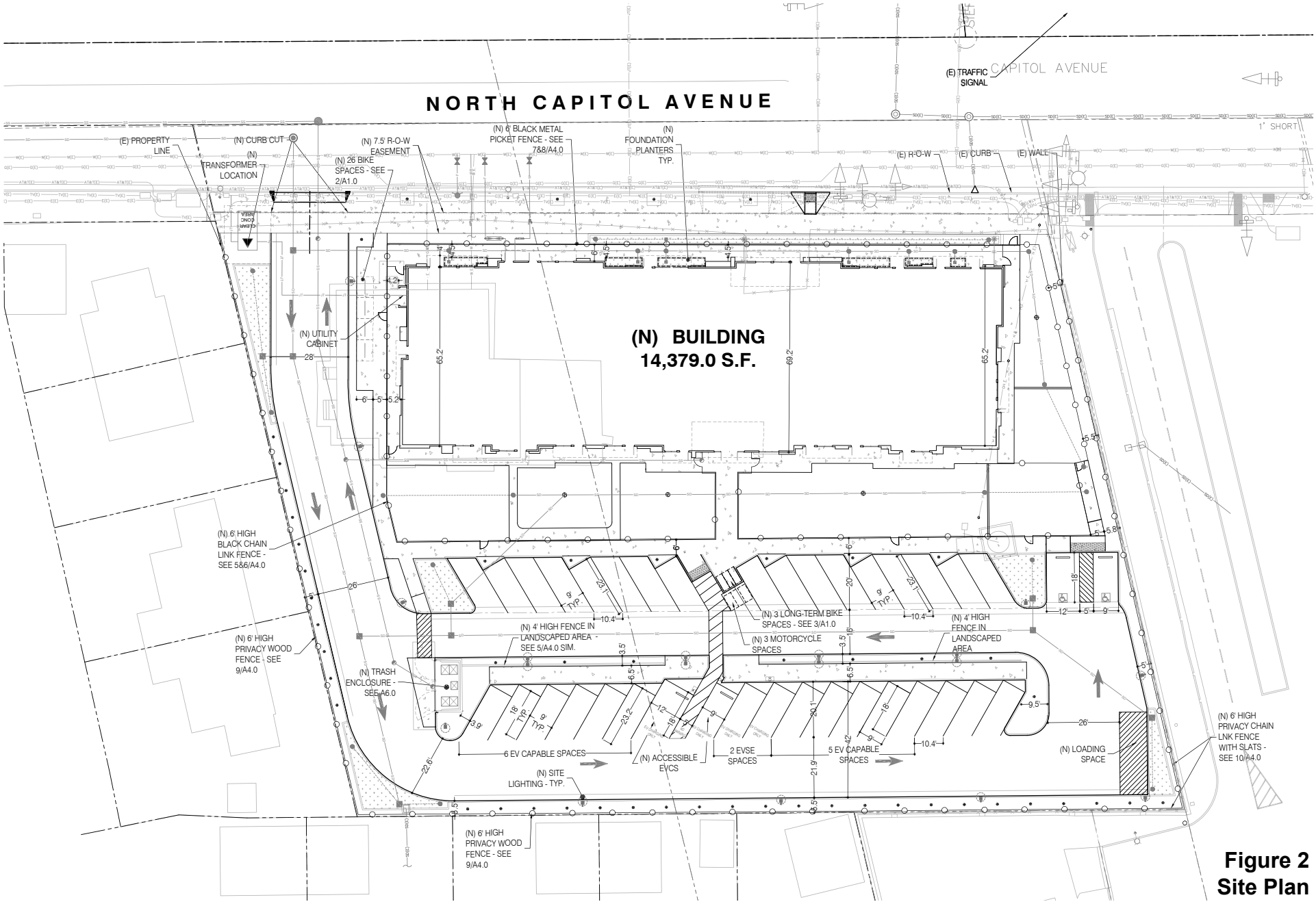


Figure 2
Site Plan

HEXAGON

NORTH
Not to Scale

- 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 single-occupant 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);
- Give priority to the funding of multimodal projects that provide the most benefit to all users. Evaluate new transportation projects to make the most efficient use of transportation resources and capacity (TR-1.9);
- 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 grade-separated 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);
- Coordinate and collaborate with local School Districts to provide enhanced, safer bicycle and pedestrian connections to school facilities throughout San Jose (TR-2.10);
- 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);

- Require large employers to develop and maintain TDM programs to reduce the vehicle trips generated by their employees (TR-7.1);
- 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);
- Balance business viability and land resources by maintaining an adequate supply of parking to serve demand while avoiding excessive parking supply that encourages auto use (TR-8.2);
- Support using parking supply limitations and pricing as strategies to encourage the use of non-automobile 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);
- Encourage all developers to install and maintain trails when new development occurs adjacent to a designated trail location. Use the City's Parkland Dedication Ordinance and Park Impact Ordinance to have residential developers build trails when new residential development occurs adjacent to a designated trail location, consistent with other parkland priorities. Encourage developers or property owners to enter into formal agreements with the City to maintain trails adjacent to their properties (PR-8.5).

CEQA Transportation Analysis Scope

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's VMT methodology also includes screening criteria that are used to identify types, characteristics, and/or locations of projects that would not exceed the CEQA thresholds of significance. If a project or a component of a mixed-use project meets the screening criteria, it is then presumed that the project or the component would result in a less-than-significant VMT impact and a VMT analysis is not required.

Council Policy 5-1 does not explicitly address day care centers. Therefore, in coordination with San Jose staff, the day care center was treated as being equivalent to a local serving retail project (retail project below 100,000 s.f.) without drive-through operations. These projects tend to redistribute existing trips instead of creating new trips. The proposed project, which is a day care center, would operate similar to local serving retail in that it would redistribute existing trips from surrounding day care centers

instead of creating new trips. The equivalent retail square footage of the day care center is less than 100,000 s.f. (described in further detail in Chapter 3), therefore, the proposed project would meet the applicable VMT screening criteria for local serving retail projects without drive-through operation. Thus, the proposed project is anticipated to result in a less-than-significant VMT impact.

Local Transportation Analysis Scope

The Local Transportation Analysis (LTA) supplements the VMT analysis by identifying potential adverse operational effects that may arise due to a new development, as well as evaluating the effects of a new development on site access, circulation, and other safety-related elements in the proximate area of the project.

As part of the LTA, a project is generally required to conduct an intersection operations analysis if the project is expected to add 10 or more vehicle trips per hour per lane to any signalized intersection that is located within one half mile of the project site and is currently operating at LOS D or worse. Based on these criteria, as outlined in the City's *Transportation Analysis Handbook,* a list of study intersections is developed. Note, however, that signalized intersections that do not meet all the criteria may be added to the list of study intersections at the City's discretion. Unsignalized intersections may also be added; though, unlike signalized intersections, unsignalized intersections typically are not evaluated for level of service.

The LTA comprises an analysis of AM and PM peak-hour traffic conditions for the following five signalized intersections:

Study Intersections:

1. N. Capitol Avenue and Sierra Road
2. N. Capitol Avenue and Ohlone Drive
3. N. Capitol Avenue and Berryessa Road
4. I-680 Northbound Off-Ramp and Berryessa Road
5. N. Capitol Avenue and Penitencia Creek Road

Study Freeway Ramps:

1. I-680 Northbound diagonal on-ramp from westbound Berryessa Road
2. I-680 Southbound loop on-ramp from westbound Berryessa Road

The list of study intersections was approved by City of San Jose staff. Traffic conditions at the study intersections were analyzed for both the weekday AM and PM peak hours of adjacent street traffic. The AM peak hour typically occurs between 7:00 AM and 9:00 AM and the PM peak hour typically occurs between 4:00 PM and 6:00 PM on a regular weekday. It is during these periods that the most congested traffic conditions occur on a typical weekday. Traffic conditions were evaluated for the following scenarios:

- ***Existing Conditions.*** Existing AM and PM peak-hour traffic volumes at the study intersections were obtained from previous studies and historical count data provided by the City of San Jose. New counts cannot be conducted when schools are out for summer break; therefore, historical count data were used for this study. Counts that are more than two years old were adjusted by applying a 1 percent (%) compounded annual growth factor to estimate traffic conditions in 2022, as required by the City of San Jose. Note that this is a very conservative approach, since recent traffic count data collected prior to the Summer of 2022 show that traffic volumes in the City of San Jose have not returned to pre-COVID pandemic (2019) levels.

- ***Background Conditions*.** Background traffic volumes were estimated by adding to existing peak-hour volumes the projected volumes from approved but not yet completed developments. The added traffic from approved but not yet completed developments was provided by the City of San Jose in the form of the Approved Trips Inventory (ATI). Background conditions represent the baseline conditions to which project conditions are compared for the purpose of determining potential adverse operational effects of the project. The ATI sheets are contained in Appendix B.
- ***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 an analysis of site access, on-site circulation, vehicle queuing, parking, and effects on transit, bicycle, and pedestrian facilities.

Intersection Operations Analysis Methodology

This section presents the methods used to determine the traffic 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, the applicable intersection level of service standards, and the criteria used to determine adverse effects on intersection operations. All the study intersections are located within the City of San Jose and were evaluated according to the City of San Jose level of service (LOS) standards.

Data Requirements

The data required for the analysis were obtained from the City of San Jose, previous traffic studies, and field observations. The following data were collected from these sources:

- existing traffic volumes
- intersection lane configurations
- signal timing and phasing
- a list of approved and pending projects

Analysis Methodologies and Level of Service Standard

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 analysis method is described below.

Signalized Intersections

The signalized study intersections are subject to the City of San Jose's level of service standards. The City of San Jose level of service methodology is TRAFFIX, which is based on the 2000 *Highway Capacity Manual* (HCM) method for signalized intersections. TRAFFIX evaluates signalized intersections operations on the basis of average delay time for all vehicles at the intersection. The City of San Jose level of service standard for intersections is LOS D or better. The correlation between average delay and level of service is shown in Table 1.

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

Level of Service	Description	Average Control Delay Per Vehicle (sec.)
A	Signal progression is extremely favorable. Most vehicles arrive during the green phase and do not stop at all. Short cycle lengths may also contribute to the very low vehicle delay.	10.0 or less
B	Operations characterized by good signal progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average vehicle delay.	10.1 to 20.0
C	Higher delays may result from fair signal progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though some vehicles may still pass through the intersection without stopping.	20.1 to 35.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lengths, or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	This is considered to be the limit of acceptable delay. These high delay values generally indicate poor signal progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Individual cycle failures occur frequently.	55.1 to 80.0
F	This level of delay is considered unacceptable by most drivers. This condition often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes of such delay levels.	greater than 80.0

Source: Transportation Research Board, *2000 Highway Capacity Manual* (Washington, D.C., 2000), p.10-16.

Adverse Intersection Operations Effects

According to the City of San Jose's *Transportation Analysis Handbook, 2020*, an adverse effect on signalized intersection operations would occur if for either peak hour:

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

The exception to this threshold is when the addition of project traffic reduces the amount of average control delay for critical movements, i.e., the change in average control delay for critical movements are negative. In this case, the threshold is when the project increases the critical v/c value by 0.01 or more.

Adverse effects at signalized intersections can be addressed by one of the following approaches:

- Construct improvements to the subject intersection or other roadway segments of the citywide transportation system to increase overall capacity, or
- Reduce project-generated vehicle trips (e.g., implement a "trip cap") to eliminate the adverse operational effects and restore intersection operations to background conditions. The extent of trip reduction should be set at a level that is realistically attainable through proven methods of reducing trips.

Intersection Vehicle Queuing Analysis

The analysis of intersection operations was supplemented with a vehicle queuing analysis where the project would add a noteworthy number of trips to the left-turn movements. 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 estimated using a Poisson probability distribution, which estimates the probability of "n" vehicles for a vehicle movement using the following formula:

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

Where:

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

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

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). Thus, 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.

US 101/Oakland/Mabury Transportation Development Policy

The City of San Jose has identified operational problems along the Oakland Road corridor at the US 101 interchange, which are due primarily to the capacity constraints of the interchange. As a result, the City has identified two key capital improvement projects: 1) modification of the US 101/Oakland Road interchange, including improvements to the Oakland Road/Commercial Street intersection, and 2) construction of a new US 101/Mabury Road interchange. To fund these interchange improvements, the City has developed the US 101/Oakland/Mabury Transportation Development Policy (TDP).

As part of the Policy, a fee to fund the planned interchange improvements has been adopted. Any project that would add traffic to the US 101/Oakland Road interchange is required to participate in the TDP program. The fee for the US 101/Oakland/Mabury TDP is based on the number of PM peak-hour vehicular trips that a project would add to the interchange. The current TDP traffic impact fee (as of January 2022) is $43,696 per each new PM peak-hour vehicle trip that would be added to the

interchange. This fee is subject to an annual escalation on January 1st per the Engineering News-Record Construction Cost Index for San Francisco.

Based on the project site's proximity to the I-680/Berryessa Road freeway interchange and the project trip distribution patterns discussed in Chapter 3, it is reasonable to assume that the project would not add vehicle trips to the US 101/Oakland Road interchange (a 3-mile drive from the project site). Therefore, the project would not be required to pay the TDP impact fee.

Report Organization

This report has a total of five chapters. Chapter 2 describes existing transportation conditions including the existing roadway network, transit service, and bicycle and pedestrian facilities. Chapter 3 describes the CEQA transportation analysis, including the project VMT impact analysis and cumulative transportation impact assessment (i.e., conformance with the General Plan). Chapter 4 describes the local transportation analysis including operations of the study intersections, the methods used to estimate project-generated traffic, the project's effects on the transportation system, and an analysis of other transportation issues including site access and circulation, parking, transit services, and bicycle and pedestrian facilities. Chapter 5 presents the conclusions of the local transportation analysis.

2. Existing Transportation Conditions

This chapter describes the existing conditions of the transportation system within the study area of the project. It describes transportation facilities in the vicinity of the project site, including the roadway network, transit service, and pedestrian and bicycle facilities. The analysis of existing intersection operations is included as part of the Local Transportation Analysis (see Chapter 4).

Existing Roadway Network

Regional access to the project site is provided via I-680. Local access to the site is provided via N. Capitol Avenue, Berryessa Road, Sierra Road, Ohlone Drive, and Penitencia Creek Road. These facilities are described below.

I-680 is an eight-lane freeway providing regional access between San Ramon Valley and San Jose. It extends in a north-south direction from its junction with I-280 and US 101 near Downtown San Jose through the East Bay to its junction with I-80 in Fairfield. I-680 provides access to and from the project site via its full interchange with Berryessa Road and N. Capitol Avenue.

N. Capitol Avenue is a north-south four-lane Grand Boulevard with an LRT line within the center median in the study area. As defined by the Envision San Jose 2040 General Plan, Grand Boulevards are major transportation corridors that serve as primary routes for LRT, busses, and other public transit vehicles. Although Grand Boulevards accommodate all modes of travel, priority is given to public transit vehicles. N. Capitol Avenue has striped bike lanes on both sides of the street and has a posted speed limit of 40 mph. N. Capitol Avenue has sidewalks on both sides of the street with pedestrian signal heads and push buttons at all signalized intersections. To the north, N. Capitol Avenue transitions into Great Mall Parkway north of Montague Expressway in the City of Milpitas. To the south, N. Capitol Avenue becomes S. Capitol Avenue south of Alum Rock Avenue and then terminates at Capitol Expressway. Being the eastern project site boundary, N. Capitol Avenue would provide direct access to and from the project site via a right-turn only driveway.

Berryessa Road is an east-west City Connector Street that begins where it transitions from Suncrest Avenue at its intersection with Piedmont Road. Berryessa Road is six lanes wide in the vicinity of the project site and narrows to four lanes west of Commercial Street where it becomes Hedding Street after crossing over US 101. Berryessa Road has a posted speed limit of 40 mph and has striped bike lanes and sidewalks on both sides of the street. Berryessa Road provides access to the project site via its intersection with N. Capitol Avenue.

Sierra Road is a four-lane divided east-west Local Connector Street with sidewalks on both sides and a posted speed limit of 35 mph. Sierra Road begins at North Capitol Avenue and extends eastward into

the east foothills north of Alum Rock Park. It has striped bike lanes on both sides of the street. Sierra Road provides access to the project site via its intersection with N. Capitol Avenue.

Ohlone Drive is a two-lane undivided east-west local roadway extending from N. Capitol Avenue eastward to east of Morrill Avenue. In the vicinity of the project, Ohlone Drive has a posted speed limit of 25 mph and sidewalks on both sides of the street. Ohlone Drive provides access to and from the project site via its intersection with N. Capitol Avenue.

Penitencia Creek Road is a two-lane Local connector street with a two-way left-turn lane and striped bike lanes on both sides of the street. It extends from N. Capitol Avenue east to where it terminates at Alum Rock Avenue in the east foothills. Penitencia Creek Road has a sidewalk along the north side of the street and a paved multi-use trail along the south side of the street between N. Capitol Avenue and Viceroy Way. East of Viceroy Way, Penitencia Creek Road has a sidewalk along the south side of the street and a paved multi-use trail along the north side of the street. Penitencia Creek Road has a posted speed limit of 35 mph and provides access to the project site via its intersection with N. Capitol Avenue.

Existing Intersection Lane Configurations

The existing lane configurations at the study intersections were provided by City of San Jose staff and confirmed in the field (see Figure 3).

Existing Pedestrian, Bicycle and Transit Facilities

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

Existing Pedestrian Facilities

Pedestrian facilities in the project area consist of sidewalks along the public streets and crosswalks with pedestrian signal heads at intersections. Sidewalks are found along all previously described local roadways in the study area, with the exception of some segments of Penitencia Creek Road where a paved multi-use trail is provided. The existing network of sidewalks provides good connectivity for pedestrians between the project site and other surrounding land uses and transit stops. Crosswalks with pedestrian signal heads and push buttons are located at all the signalized intersections in the study area. ADA compliant curb ramps are provided at all the signalized intersections along N. Capitol Avenue, although not all the curb ramps at the N. Capitol Avenue/Penitencia Creek Road intersection meet current ADA standards.

Existing Bicycle Facilities

Bicycle facilities are divided into four classes of relative significance. Class I bikeways are bike paths that are physically separated from motor vehicles and offer two-way bicycle travel on a separate paved path. Class II bikeways are striped bike lanes on roadways that are marked by signage and pavement markings. Class III bikeways are bike routes and only have signs and/or Sharrows (bike route shared lane markings) to help guide bicyclists on recommended routes to certain locations. Class IV bikeways are on-street bicycle facilities that incorporate physical barriers (e.g., raised curbs, flexible bollards, vehicle parking, grade separation, etc.) to separate bicycles from the flow of vehicular traffic. There are no existing Class III or Class IV bikeways in the project vicinity.

There are a number of roadways in the project study area that have Class II bike lanes. Striped bike lanes currently exist on the following roadways (see Figure 4):

- Capitol Avenue
- Berryessa Road
- Penitencia Creek Road
- Sierra Road
- Morrill Avenue

The Penitencia Creek multi-use trail system (Class I bikeway) runs alongside Penitencia Creek and separates bicyclists from motor vehicle traffic. Access to the 4-mile multi-use trail is provided via N. Capitol Avenue. This trail system provides access to Penitencia Creek Park and Alum Rock Park.

Existing Transit Services

Existing transit services near the project site are provided by the Santa Clara Valley Transportation Authority (VTA). The Berryessa LRT Station is conveniently located a short distance (about 300 feet) from the project site and is served by the Light Rail Transit (LRT) Orange Line and VTA local bus route 61 (see Figure 5).

VTA Light Rail Transit (LRT) Service

The VTA currently operates the 42.2-mile light rail line system extending from south San Jose through downtown to the northern areas of San Jose, Santa Clara, Milpitas, Mountain View and Sunnyvale. The service operates nearly 24 hours a day with 15-minute headways during much of the day. The Berryessa LRT Station is served by the Mountain View-Alum Rock LRT Line (Orange Line).

VTA Bus Service

Local bus route 61 operates along Berryessa Road with stops located approximately 0.2 mile south of the project site. Route 61 provides service between Good Samaritan Hospital and the Piedmont Road/Sierra Road intersection with 15-minute headways during the weekday AM and PM peak commute hours.

Observed Existing Traffic Conditions

Due the COVID-19 pandemic situation, traffic volumes are generally lower than under “normal” pre-COVID conditions. However, it is still valuable to observe traffic conditions in the field to identify any existing operational deficiencies. Accordingly, traffic conditions in the study area were observed during the weekday AM (7:00-9:00 AM) peak on August 2, 2022 and PM (4:00-6:00 PM) peak traffic periods on August 3, 2022.

In general, the traffic volumes on N. Capitol Avenue are heaviest in the northbound direction during the AM commute period and in the southbound direction during the PM commute period. AM and PM field observations revealed that the study intersections operate acceptably, and the level of service calculations accurately reflect existing conditions. The minor operational issues that were observed are discussed below.

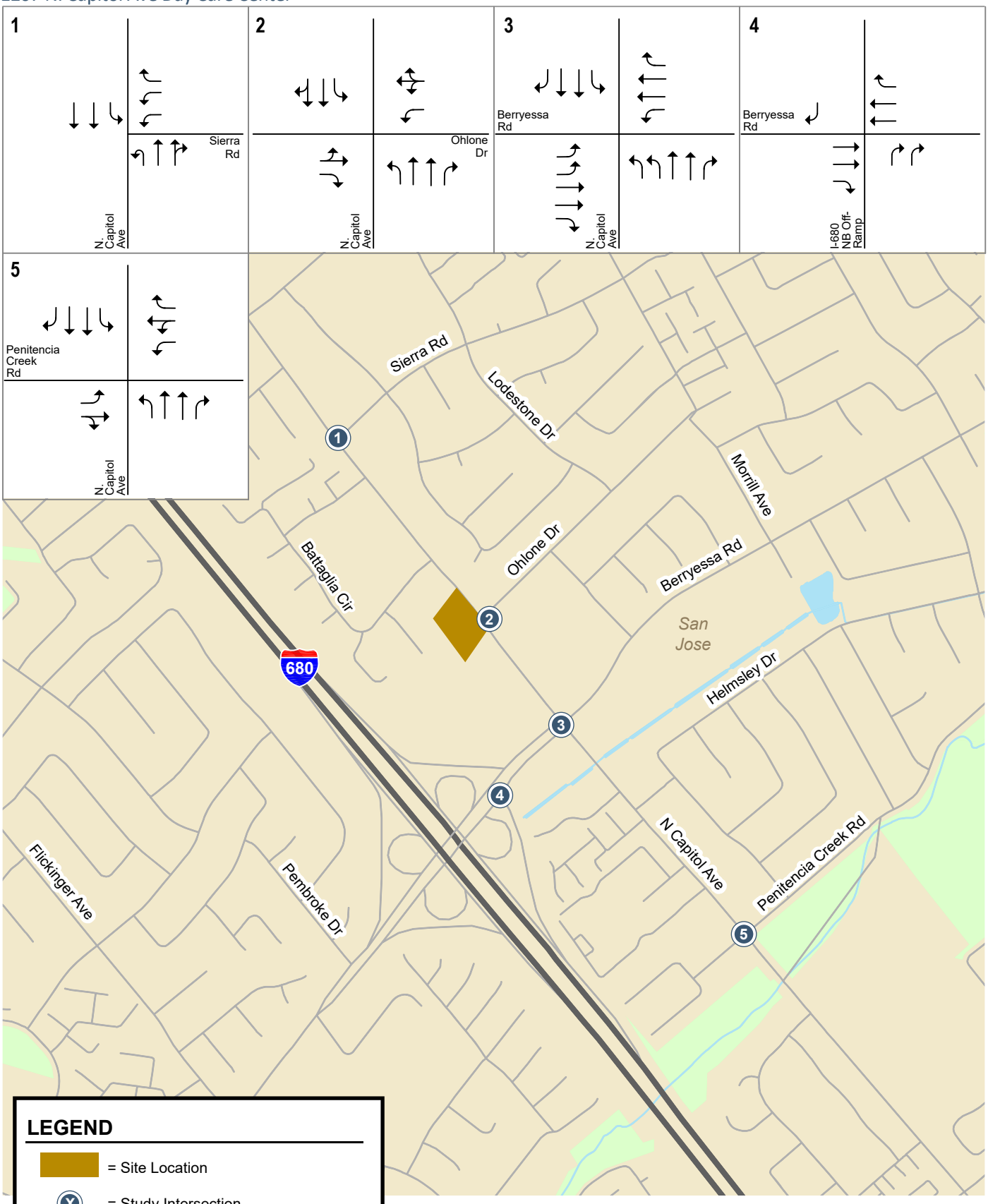


Figure 3
Existing Intersection Lane Configurations

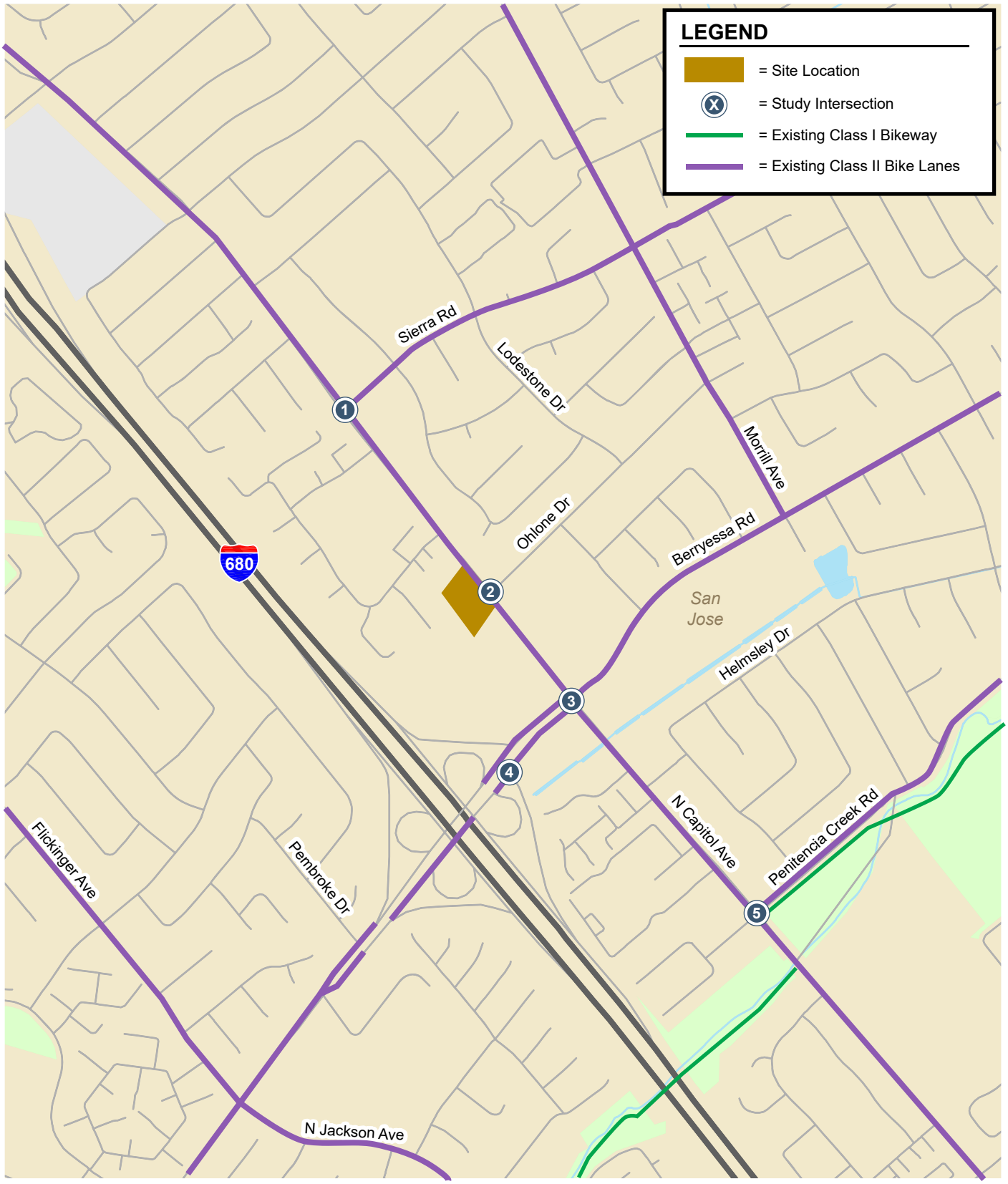


Figure 4
Existing Bicycle Facilities

NORTH
Not to Scale

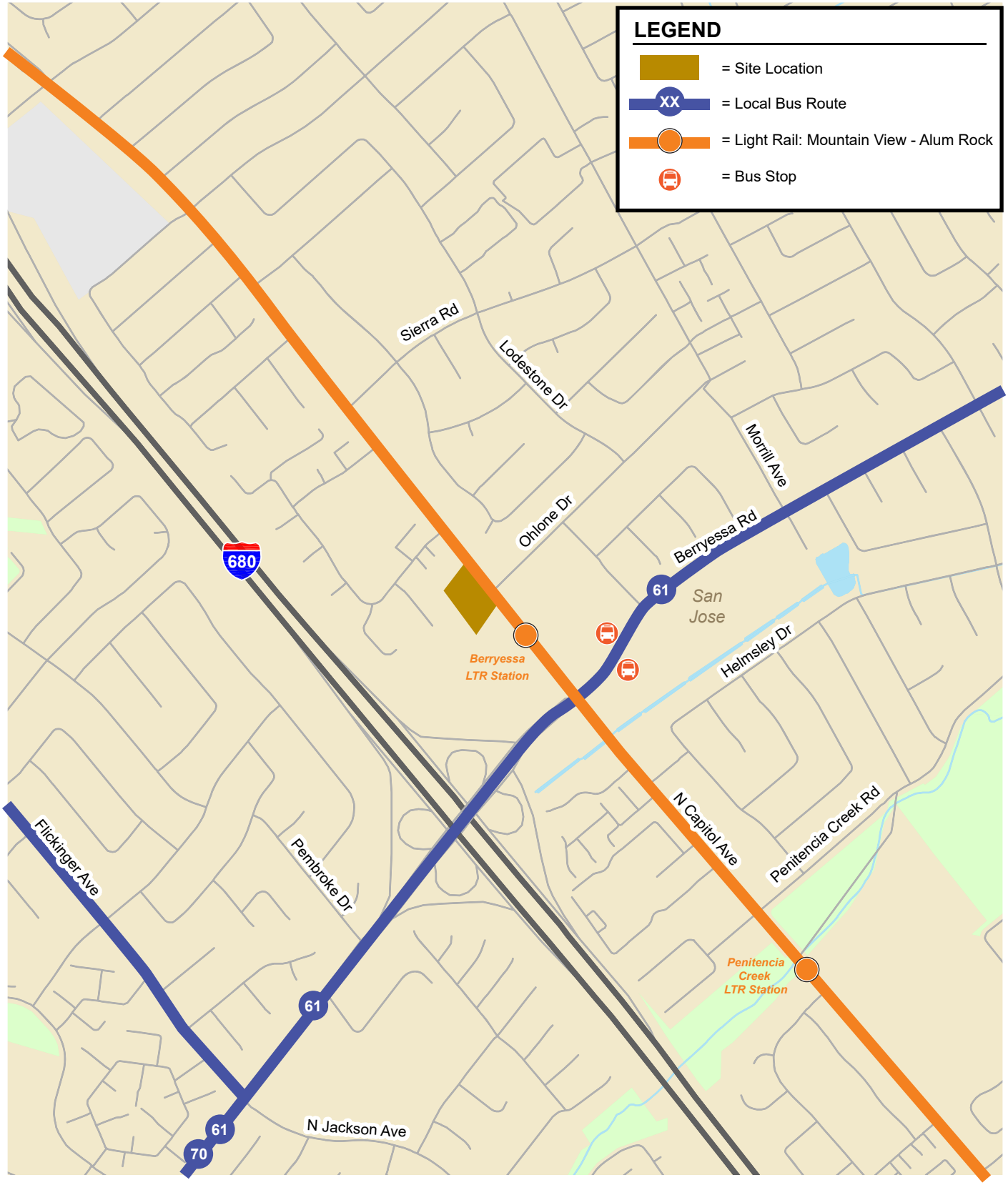


Figure 5
Existing Transit Services

NORTH
Not to Scale

N. Capitol Avenue and Ohlone Drive

The intersection of N. Capitol Avenue and Ohlone Drive was observed to operate without any noteworthy operational issues during the AM peak hour.

During the PM peak hour, the southbound through traffic on N. Capital Avenue was heavy. A lane imbalance was observed in the southbound through lanes in favor of the far-right lane due to the high volume of traffic turning right at the downstream intersection of N. Capitol Avenue and Berryessa Road toward the I-680 on-ramps. This lane imbalance caused longer queues in the right through lane (compared to the adjacent lanes). Occasionally the southbound through traffic in the right through lane extended past Battaglia Circle. However, southbound through traffic was able to clear within one cycle.

N. Capitol Avenue and Berryessa Road

During the AM and PM peak hours, the northbound left-turn movement was heavy. Although the maximum green time provided for the northbound left-turn movement is quite long, two signal cycles were sometimes required for all the queued vehicles to clear the intersection due to the imbalance in lane usage. The majority of vehicles turning left onto westbound Berryessa Road intend to enter northbound I-680, especially during the AM peak hour. Since the freeway on-ramp is so close to the N. Capitol/Berryessa intersection, most vehicles use the outside left-turn lane (No. 2 lane) so they can easily access the I-680 on-ramp. The inside northbound left-turn lane is, therefore, underutilized due to the disproportionate lane usage. Based on field observations, AM and PM peak hour vehicle queues of up to 11 vehicles and 14 vehicles, respectively, were observed in the No. 2 northbound left-turn lane. The No. 1 (inside) left-turn lane consistently had fewer cars with a maximum observed queue of 8 vehicles. The No. 2 (outside) left-turn lane was full when a queue of 14 vehicles occurred.

During the PM peak hour, the eastbound vehicle queues on Berryessa frequently extended past the I-680 off-ramp. As a result, it occasionally took two signal cycles for all the eastbound queued vehicles to clear the N. Capitol Avenue/Berryessa Road intersection.

N. Capitol Avenue and Penitencia Creek Road

The intersection of N. Capitol Avenue and Penitencia Creek Road was observed to operate without any noteworthy operational issues during both the AM and PM peak hours.

I-680 Northbound Off-Ramp and Berryessa Road

During the PM peak hour, the eastbound through vehicle queue on Berryessa Road at North Capitol Avenue was observed to frequently extend past the I-680 northbound off-ramp. As a result, vehicles on the I-680 northbound off-ramp (northbound right-turn movements) were blocked during the beginning of their green phase and had to wait for the eastbound queue to dissipate before proceeding. However, all vehicles on the off-ramp proceeded through the intersection in one signal cycle.

3. CEQA Transportation Analysis

This chapter describes the CEQA transportation analysis, including the VMT analysis methodology and significance criteria, and an evaluation of consistency with the City of San Jose's General Plan.

CEQA Transportation Analysis Screening Criteria

The City of San Jose *Transportation Analysis Handbook* identifies screening criteria that determine whether a CEQA transportation analysis would be required for development projects. The criteria are based on the type of project, characteristics, and/or location. If a project or component of a mixed-use project meets the City's screening criteria, it is presumed that the project would result in a less-than-significant transportation impact and a detailed CEQA VMT analysis is not required. The type of development projects that may meet the screening criteria include the following:

(1) small infill projects
(2) local-serving retail development
(3) local-serving public facilities
(4) projects located in *Planned Growth Areas* with low VMT and *High-Quality Transit*
(5) deed-restricted affordable housing located in *Planned Growth Areas* with *High-Quality Transit*

Table 2 summarizes the screening criteria for each type of development project as identified in the City of San Jose Transportation Analysis Handbook.

Compliance with City Council Policy 5-1

The proposed day care center will meet the City's CEQA transportation analysis screening criteria when considered equivalent to a local-serving retail project as outlined in Table 2 and summarized below. Therefore, the project is expected to result in less-than-significant VMT impact.

VMT Analysis Methodology and Criteria

Per Council Policy 5-1, the effects of the projects on VMT are evaluated using the methodology outlined in the City's *Transportation Analysis Handbook*. 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 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 established thresholds of significance based on the project location and type of development.

Typically, development projects that are farther from other, complementary land uses (such as a business park far from housing) and in areas without transit or active transportation infrastructure (bike lanes, sidewalks, etc.) generate more driving than development near complementary land uses with more robust transportation options. Therefore, developments located in a central business district with

high density and diversity of complementary land uses and frequent transit services are expected to internalize trips and generate shorter and fewer vehicle trips than developments located in a suburban area with low density of residential developments and no transit service in the project vicinity.

Table 2
CEQA VMT Analysis Screening Criteria for Development Projects

Type	Screening Criteria
Small Infill Projects	• Single-family detached housing of 15 units or less; OR • Single-family attached or multi-family housing of 25 units or less; OR • Office of 10,000 square feet of gross floor area or less; OR • Industrial of 30,000 square feet of gross floor area or less
Local-Serving Retail	• 100,000 square feet of total gross floor area or less without drive-through operations
Local-Serving Public Facilities	• Local-serving public facilities
Residential/Office Projects or Components	• **Planned Growth Areas:** Located within a Planned Growth Area as defined in the Envision San José 2040 General Plan; AND • **High-Quality Transit:** Located within ½ a mile of an existing major transit stop or an existing stop along a high-quality transit corridor; AND • **Low VMT:** Located in an area in which the per capita VMT is less than or equal to the CEQA significance threshold for the land use; AND • **Transit-Supporting Project Density**: o Minimum Gross Floor Area Ratio (FAR) of 0.75 for office projects or components; o Minimum of 35 units per acre for residential projects or components; o If located in a Planned Growth Area that has a maximum density below 0.75 FAR or 35 units per acre, the maximum density allowed in the Planned Growth Area must be met; AND • **Parking:** o No more than the minimum number of parking spaces required; o If located in Urban Villages or Downtown, the number of parking spaces must be adjusted to the lowest amount allowed; however, if the parking is shared, publicly available, and/or "unbundled", the number of parking spaces can be up to the zoned minimum; AND • **Active Transportation:** Not negatively impact transit, bike or pedestrian infrastructure.
Restricted Affordable Residential Projects or Components	• **Affordability:** 100% restricted affordable units, excluding unrestricted manager units; affordability must extend for a minimum of 55 years for rental homes or 45 years for for-sale homes; AND • **Planned Growth Areas:** Located within a Planned Growth Area as defined in the Envision San José 2040 General Plan; AND • **High Quality Transit:** Located within ½ a mile of an existing major transit stop or an existing stop along a high quality transit corridor; AND • **Transit-Supportive Project Density**: o Minimum of 35 units per acre for residential projects or components; o If located in a Planned Growth Area that has a maximum density below 35 units per acre, the maximum density allowed in the Planned Growth Area must be met; AND • **Transportation Demand Management (TDM):** If located in an area in which the per capita VMT is higher than the CEQA significance threshold, a robust TDM plan must be included; AND • **Parking:** o No more than the minimum number of parking spaces required; o If located in Urban Villages or Downtown, the number of parking spaces must be adjusted to the lowest amount allowed; however, if the parking is shared, publicly available, and/or "unbundled", the number of parking spaces can be up to the zoned minimum; AND • **Active Transportation:** Not negatively impact transit, bike or pedestrian infrastructure.

Source: City of San José Transportation Analysis Handbook, April 2020.

Screening for VMT Analysis

Since the City of San Jose has not established VMT thresholds of significance for day care facilities, the project cannot be analyzed directly using the City's VMT Evaluation Tool. The evaluation tool is limited to the evaluation of the general land use categories of residential, office, and industrial. Based on direction from City staff, the VMT analysis was conducted by converting vehicle trips generated by the proposed day care center to an equivalent amount of retail square footage, for which the City has established a screening criterion and threshold of significance. Local retail development of less than 100,000 s.f. in size is exempt from preparing a CEQA-level VMT analysis. The City of San Jose Travel Demand Model (TDM) data show that local retail developments less than 100,000 s.f. in size generate VMT below the CEQA threshold of significance for retail uses, resulting in a less-than-significant impact.

This land use conversion is a reasonable approach to VMT analysis for the project since day care centers are typically local serving and exhibit similar trip length characteristics to that of local retail uses (e.g., both uses typically serve nearby residents). It expected that the proposed day care facility would generate mostly localized traffic, and it would redistribute existing trips from surrounding day care centers instead of creating new trips. There are over 20 existing day care facilities within a three-mile radius and more than 50 existing day care facilities within a five-mile radius of the project site. Figure 6 shows other existing day care facilities within a ½-mile, 1-mile, and 5-mile radius of the project site.

The majority of trips generated by the proposed day care would divert trips to the proposed day care from other existing day care facilities and, therefore, would not generate a significant number of new trips in the region. Based on the standard daily trip generation rates contained in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 11th Edition* (2021) for a Day Care Center (Land Use 565), the proposed 252-student day care facility would generate daily trips equivalent to approximately 18,900 s.f. of retail space (see Table 3).

This small amount of equivalent retail space meets the screening criteria set forth in the *City's Transportation Analysis Handbook*, which is defined as local-serving retail of 100,000 s.f. or less without drive-through operations. Because the project would meet the City's screening criteria, it is expected to result in a less-than-significant VMT impact.

Table 3
Conversion of Day Care Center to Retail Land Use

Land Use	Size	Daily Trip Rate	Daily Trips
Proposed Land Use			
Day Care Facility[1]	252 Students	4.09	1,031
Equivalent Land Use			
Retail[2]	18,900 s.f.	54.45	1,031

Source: ITE *Trip Generation Manual*, 11th Edition, 2021.
s.f. = square feet
Notes:
1. Average daily trip rate (in trips per student) for "Day Care Center" (ITE Land Use 565) is used.
2. Average daily trip rate (in trips per 1,000 s.f.) for "Strip Retail Plaza < 40 ksf located in a General Urban/Suburban setting" (ITE Land Use 822) is used.

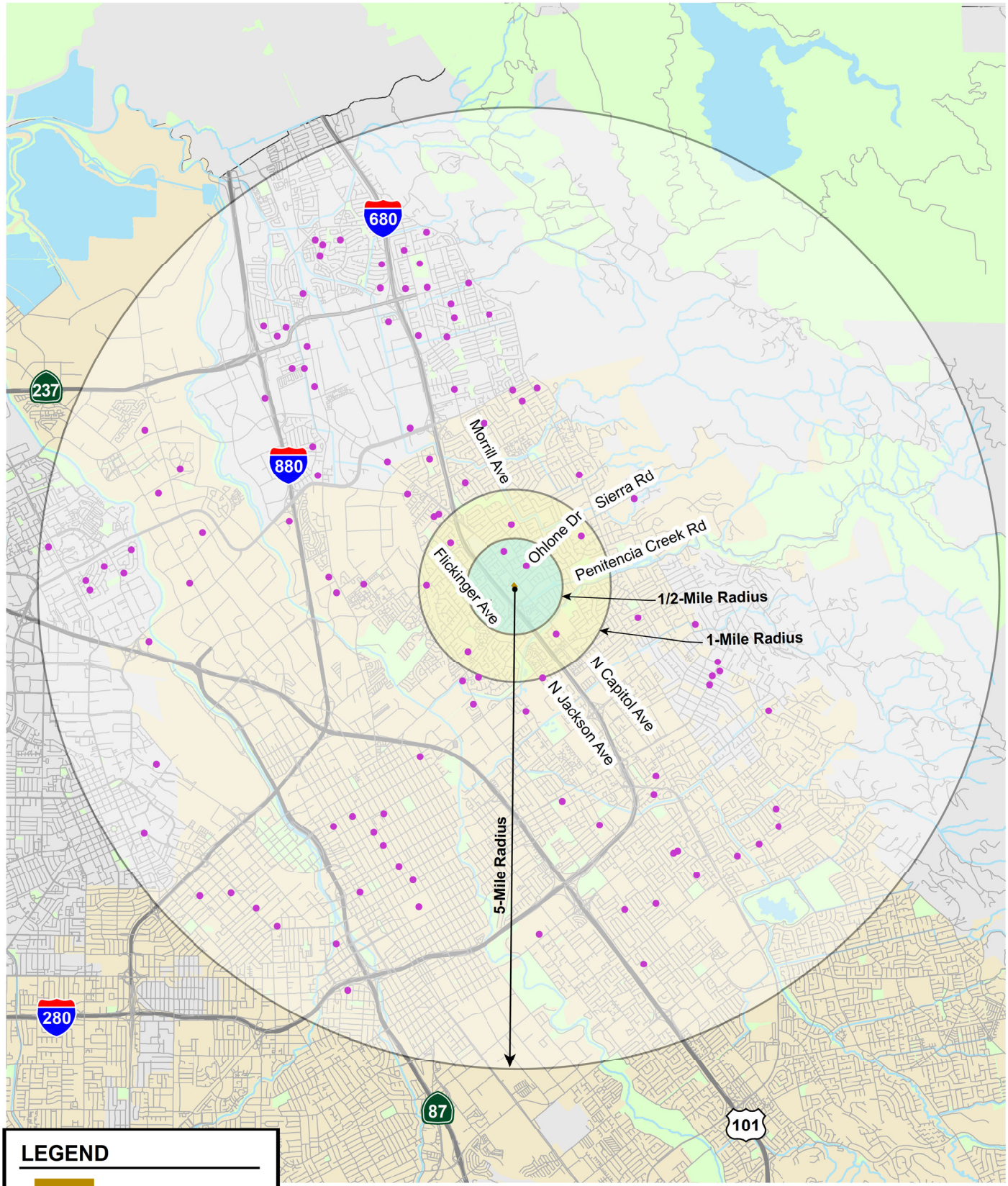


Figure 6
Existing Day Care Facilities in the Project Vicinity

Cumulative (GP Consistency) Evaluation

Projects must demonstrate consistency with the *Envision San José 2040 General Plan* to address potential cumulative VMT 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 per the City's *Transportation Analysis Handbook*.

According to the Envision San Jose 2040 General Plan, the project site is designated as *Neighborhood/Community Commercial (NCC)*. This land use designation supports a very broad range of commercial activity, including commercial uses that serve the communities in neighboring areas, such as neighborhood serving retail and services and commercial/professional office development. Day care centers are consistent with this designation. The project proposes to rezone the site from R-1-8 to CN (Commercial Neighborhood), conforming with the General Plan land use designation. Day care centers are permissible under the CN zoning designation with the issuance of a Special Use Permit. The project would be required to conform with the development standards of the CN zoning district.

The project is consistent with the General Plan goals and policies (previously listed in Chapter 1). Specifically, the project site is located close to the Berryessa Transit Center along N. Capitol Avenue, which 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 these corridors. The project supports the anticipated growth along the Grand Boulevard of Capitol Avenue. In addition, the study area has a complete network of pedestrian and bicycle facilities (e.g., Class I and II bicycle facilities, sidewalks, signalized crosswalks, etc.), which provides an opportunity to achieve a high level of pedestrian and bicycle mode share for the day care facility, particularly if nearby transit (e.g., LRT service) is utilized in combination with bicycle facilities. Note that bicycles are allowed on light rail trains and buses have bike racks.

Based on the project description, the proposed day care facility would be consistent with the *Envision San José 2040 General Plan*. Thus, 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 VMT impact.

4. Local Transportation Analysis

This chapter describes the local transportation analysis (LTA) including existing traffic conditions, the method by which project traffic is estimated, intersection operations analysis for existing, background and background plus project scenarios, any adverse effects to intersection level of service caused by the project, site access and on-site circulation review, effects on bicycle, pedestrian and transit facilities, and parking supply. The transportation network under background and background plus project conditions would be the same as the existing transportation network.

Intersection Operations Analysis

The intersection operations analysis is intended to quantify the operations of the study intersections and to identify potential negative effects due to the addition of project traffic. Information required for the intersection operations analysis related to project trip generation, trip distribution, and trip assignment are presented in this section. The study intersections are located in the City of San Jose and were evaluated based on the City of San Jose's intersection analysis methodology and standards in determining potential adverse operational effects due to the project, as described in Chapter 1.

Project Trip Estimates

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

Trip Generation

Through empirical research, data have been collected that quantify the amount of traffic produced by many types of land uses. This research is compiled in the *Trip Generation Manual, 11th Edition* (2021) published by the Institute of Transportation Engineers (ITE). The magnitude of traffic added to the roadway system by a particular development is estimated by multiplying the applicable trip generation rates by the size of the development.

Vehicle trips that would be generated by the project were estimated using ITE average trip rates for "Day Care Center" (ITE Land Use 565) located in a general urban/suburban setting. ITE defines a day care center as a facility where care for pre-school age children is provided, normally during daytime hours. Furthermore, a day care facility generally includes classrooms, offices, eating areas, and playgrounds. Some day care centers also provide after-school care for school-age children.

Trip Adjustments and Reductions

In accordance with San Jose's *Transportation Analysis Handbook* (April 2020, Section 4.8, "Intersection Operations Analysis"), the project is eligible for adjustments and reductions from the baseline trip generation. Based on the 2020 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 evaluation tool, the project site is located within *an Urban Low-Transit* place type. Therefore, the baseline project trips were adjusted to reflect the mode share associated with this place type.

The City's transportation analysis handbook does not provide a location-based vehicle mode share for day care centers. However, as discussed in Chapter 3, the day care center has similar trip characteristics as local retail. Retail developments located within areas designated *Urban Low-Transit* 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 13% trip reduction is based on the percent mode share for other modes of travel besides automobiles.

Although the proposed project would demolish a single-family residence currently on the site, the trip generation estimates do not include trip credits for the home to be removed since the number of trips generated by one home is relatively insignificant.

Net Project Trips

After applying the ITE trip rates to the proposed project and applying the appropriate trip adjustments, the project would be expected to generate 897 new daily vehicle trips, with 171 new trips (90 inbound and 81 outbound) occurring during the AM peak hour and 173 new trips (82 inbound and 91 outbound) occurring during the PM peak hour (see Table 4).

Table 4
Project Trip Generation Estimates

Land Use	Size	Daily		AM Peak Hour				PM Peak Hour			
		Trip Rate	Trips	Trip Rate	Trips In	Trips Out	Trips Total	Trip Rate	Trips In	Trips Out	Trips Total
Day Care Facility[1]	252 Students	4.09	1,031	0.78	104	93	197	0.79	94	105	199
Location-Based Vehicle Mode Share (13%)[2]			*(134)*		*(14)*	*(12)*	*(26)*		*(12)*	*(14)*	*(26)*
Net Project Trips			**897**		**90**	**81**	**171**		**82**	**91**	**173**
Breakdown of Trips											
Trips by Non-Working Parents[3]			*269*		*27*	*24*	*51*		*25*	*27*	*52*
Trips by Working Parents[3]			*628*		*63*	*57*	*120*		*57*	*64*	*121*

Source: ITE *Trip Generation Manual*, 11th Edition, 2021.
Notes:
1. Average trip rates (in trips per student) for "Day Care Center" (ITE Land Use 565) are used.
2. A 13% reduction was applied based on the location-based vehicle mode share percentage outputs (Table 6 of TA Handbook) produced from the San Jose Travel Demand Model for retail development in an Urban Low-Transit area.
3. It was assumed 30% and 70% of the total trips are generated by non-working and working parents, respectively.

Trip Distribution and Assignment

The directional distribution of site-generated traffic was forecast separately for non-working and working parents based on the locations of nearby residential neighborhoods and the existing weekday AM and PM peak commute travel patterns on the surrounding roadway network. For developing the trip distribution patterns for non-working and working parents, it was assumed that 30% of the students who are driven to school would be dropped off/picked up by a non-working parent and 70% of the students who are driven to school would be dropped off/picked up by a working parent.

For non-working parents, it was assumed that during both the AM and PM peak hours, the origin of the inbound project trip and the destination of the outbound project trip would be the student's home. For working parents, during the AM peak hour, the origin of the inbound trip would be the student's home and the destination of the outbound trip would be the parent's employment location. The trip distribution pattern would reverse during the PM peak hour for working parents, where the inbound trip would originate at the parent's employment location and the outbound trip would terminate at the student's home. Trip distribution patterns to and from places of employment were developed based on existing travel patterns on the surrounding roadway network that reflect typical weekday commute patterns.

Figure 7 shows the two separate trip distribution patterns used for the project: (1) day care trips generated by non-working parents (identical patterns for AM inbound/outbound and PM inbound/ outbound), and (2) trips generated by working parents (different patterns for AM and PM inbound and outbound).

The peak-hour vehicle trips associated with the project were added to the roadway network in accordance with the trip distribution patterns, the roadway network connections, and the project driveway location. Note that because of the median on N. Capitol Avenue, some traffic would need to make U-turns at the intersections of N .Capitol Avenue/Sierra Road and N. Capitol Avenue/Ohlone Drive to access or leave the site. Figures 8 and 9 show the project trip assignments for non-working parents and working parents, respectively. Figure 10 shows the combined project trip assignment.

Traffic Volumes Under All Scenarios

Existing Traffic Volumes

Existing AM and PM peak-hour traffic volumes for the study intersections were obtained from previous studies and historical count data provided by the City of San Jose. New counts cannot be conducted when schools are out for summer break; therefore, historical count data were used for this study. Counts that are more than two years old were adjusted by applying a 1 percent (%) compounded annual growth factor to estimate traffic conditions in 2022, as required by the City of San Jose. Note that this is a very conservative approach, since recent traffic count data collected prior to the Summer of 2022 show that traffic volumes in the City of San Jose have not returned to pre-COVID pandemic (2019) levels. The existing peak-hour intersection volumes are shown in Figure 11.

Background Traffic Volumes

Background AM and PM peak-hour traffic volumes were estimated by adding to existing traffic volumes the trips generated by nearby approved but not yet completed or occupied projects (see Figure 12). The approved projects are listed as part of the Approved Trips Inventory (ATI) contained in Appendix B.

Background Plus Project Traffic Volumes

Project trips were added to background traffic volumes to obtain background plus project traffic volumes (see Figure 13). Traffic volumes for all traffic scenarios are tabulated in Appendix A.

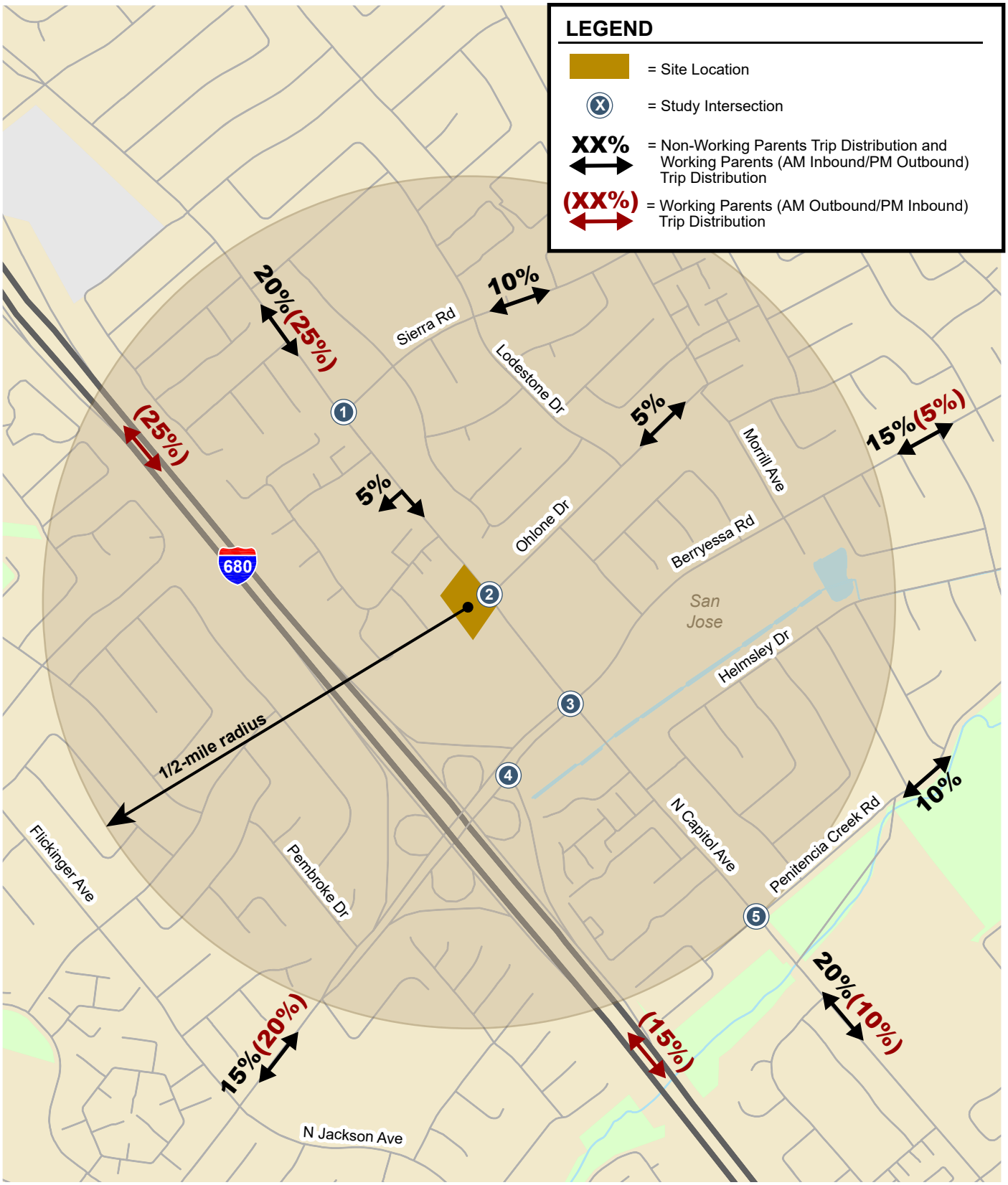


Figure 7
Project Trip Distribution

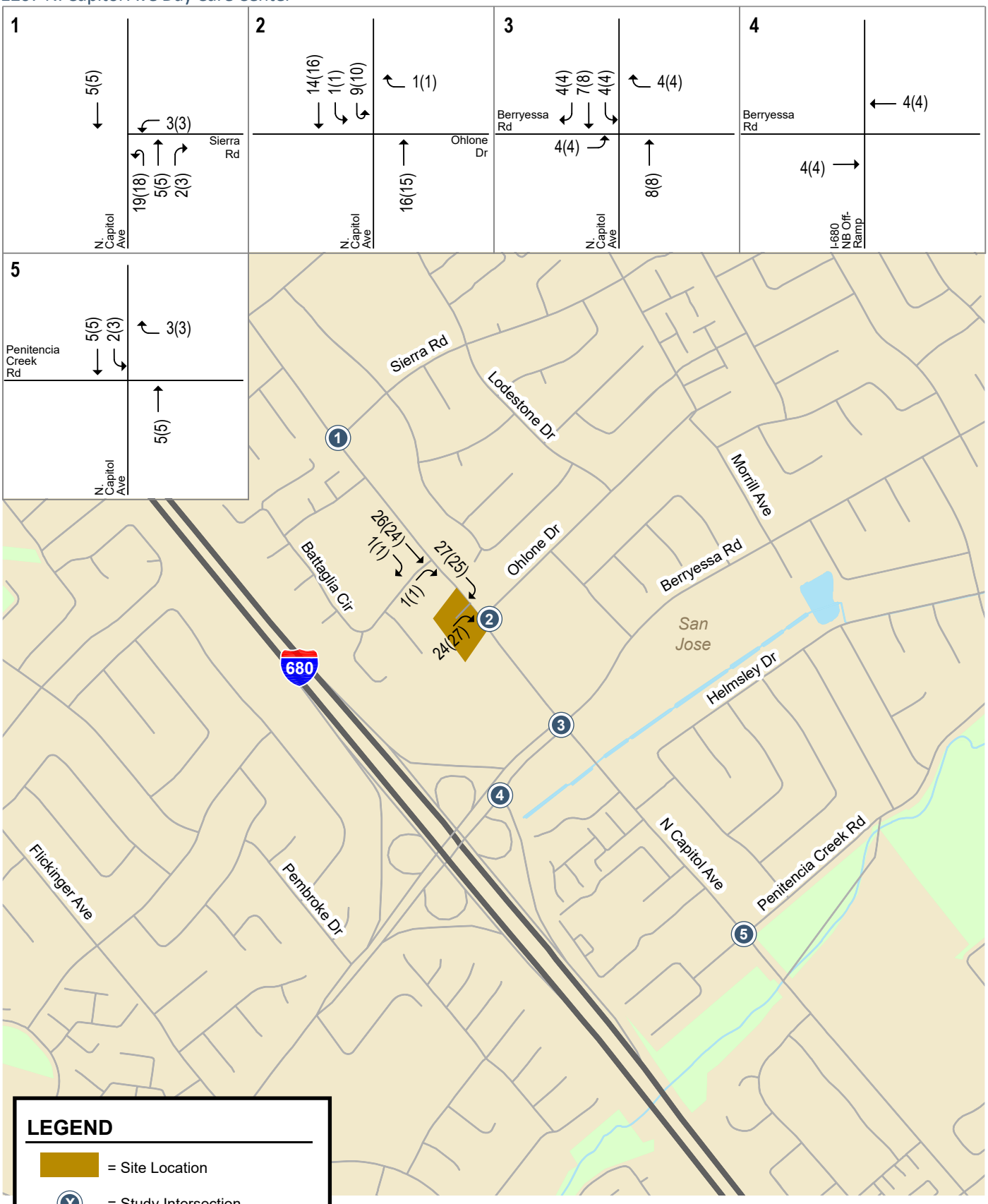


Figure 8
Project Trip Assignment - Non-Working Parents

1207 N. Capitol Ave Day Care Center

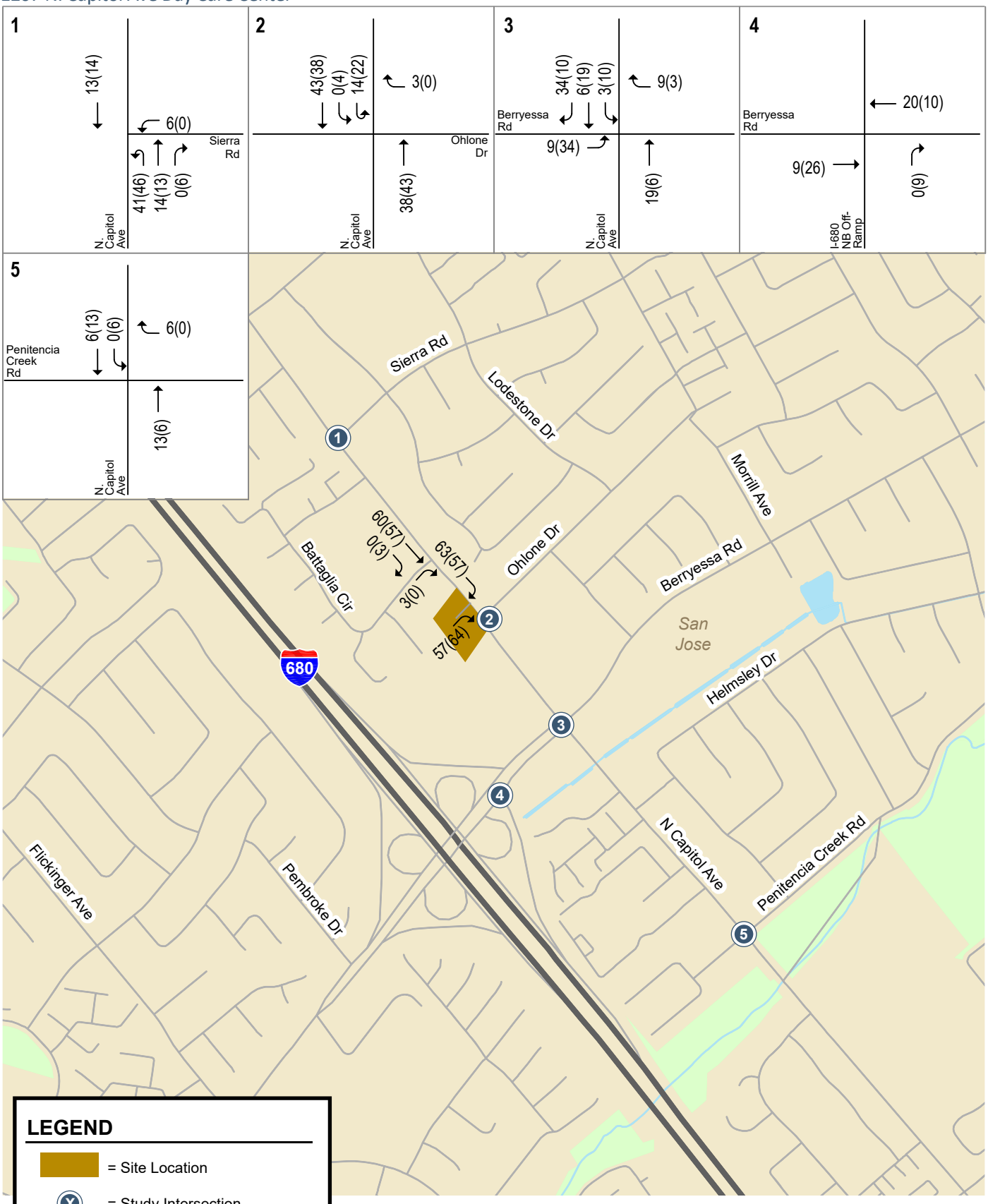


Figure 9
Project Trip Assignment - Working Parents

1207 N. Capitol Ave Day Care Center

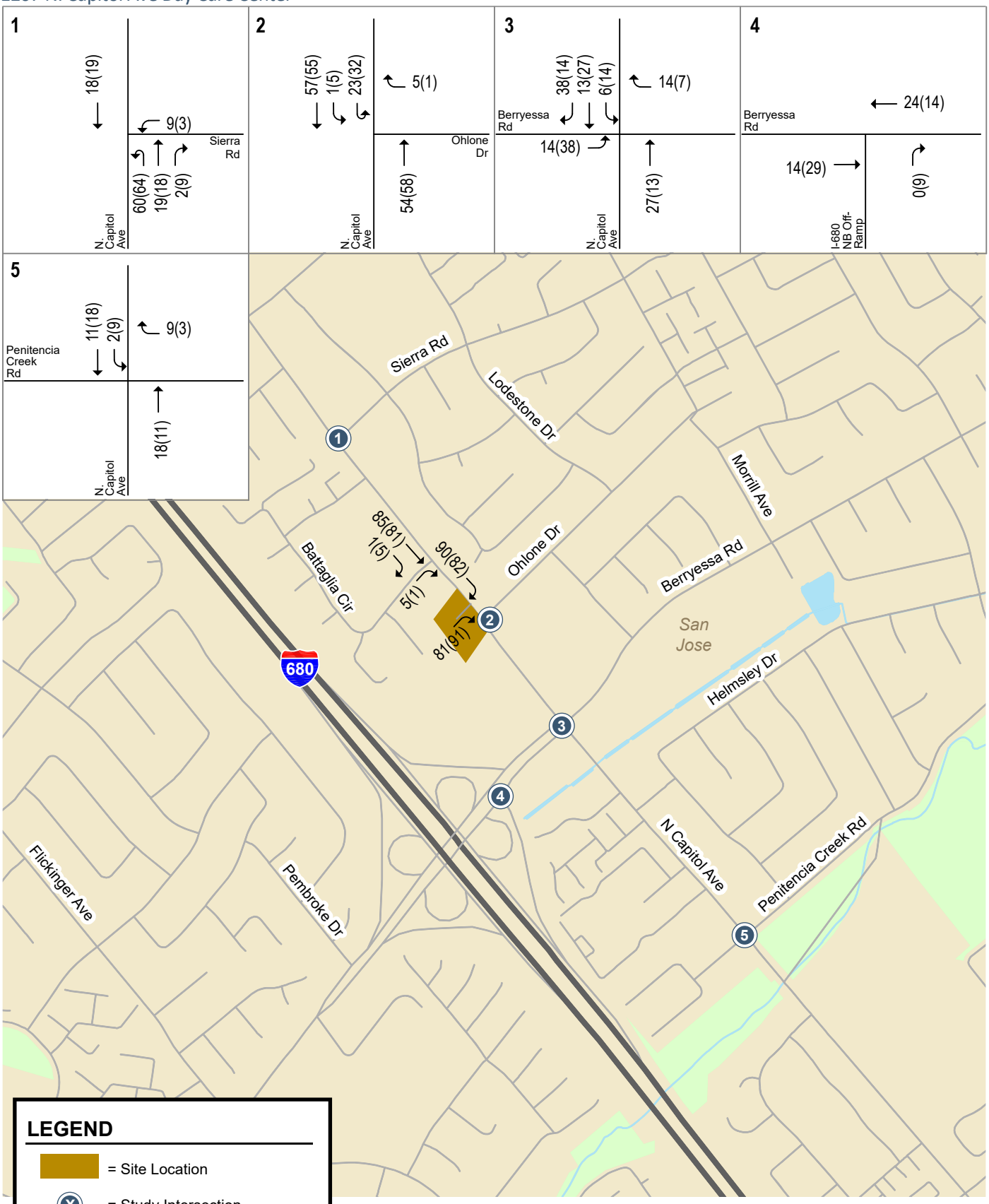


Figure 10
Combined Project Trip Assignment
(Non-Working and Working Parents)

HEXAGON

NORTH
Not to Scale

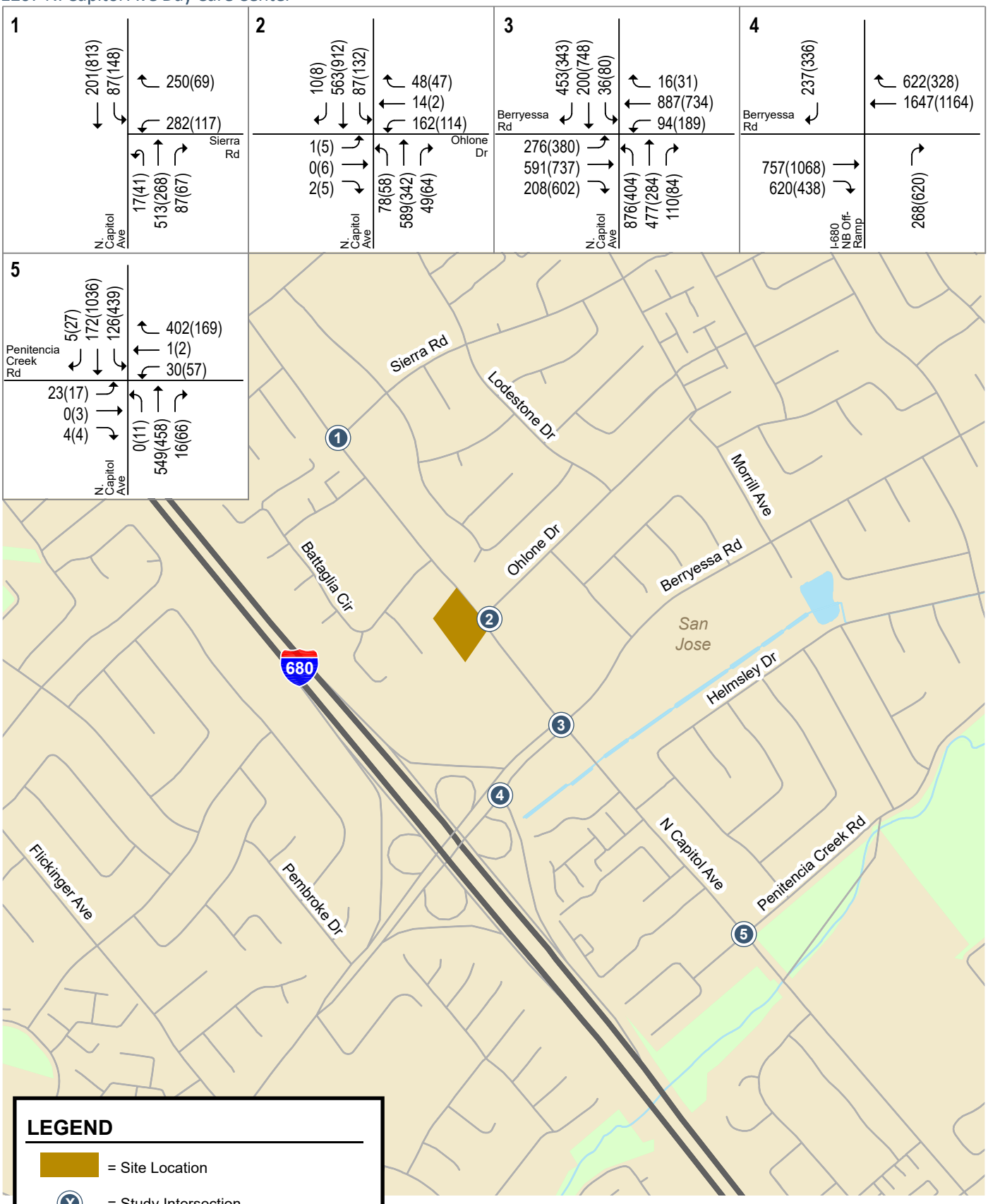


Figure 11
Existing Traffic Volumes

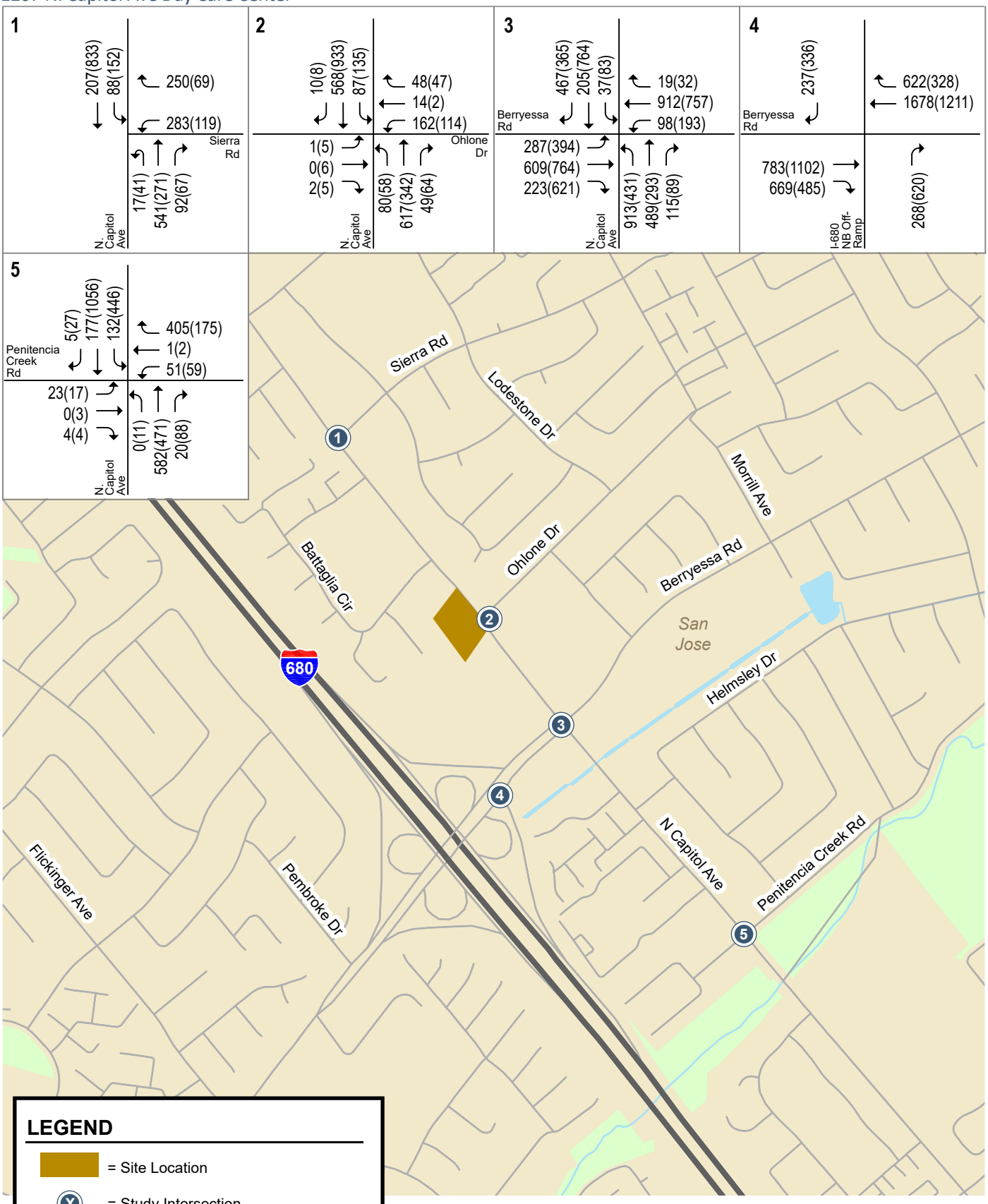


Figure 12
Background Traffic Volumes

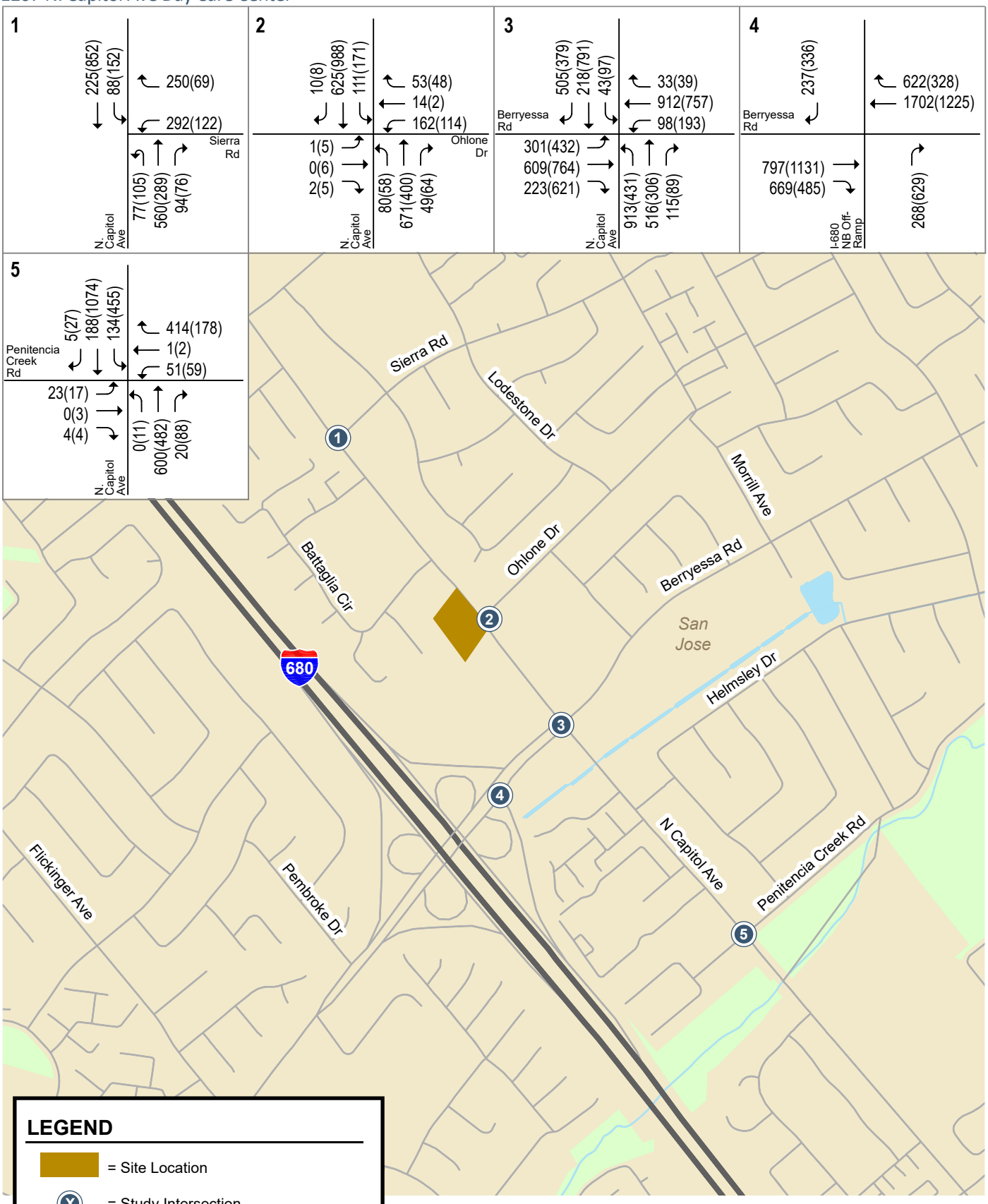


Figure 13
Background Plus Project Traffic Volumes

NORTH
Not to Scale

Intersection Level of Service Analysis

Intersection levels of service were evaluated against the standards of the City of San Jose. The results of the analysis show that all but one of the study intersections are currently operating at acceptable levels of service during the AM and PM peak hours of traffic and would continue to operate acceptably under background and background plus project conditions (see Table 5). The intersection of N. Capitol Avenue and Berryessa Road currently operates at an unacceptable LOS E during the PM peak hour and would continue to do so under background and background plus project conditions. However, the addition of project trips would not cause the average critical delay to increase by 4 seconds or more. Therefore, the project would not create an adverse effect on intersection operations.

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

Table 5
Intersection Level of Service Summary

					Existing		Background		Background+Project			
ID	Intersection	LOS Standard	Peak Hour	Count Date [1]	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Incr. In Crit. Del.	Incr. In Crit. V/C
1	N. Capitol Av and Sierra Rd	D	AM	01/18/18	23.2	C	23.1	C	23.4	C	-0.1	0.009
			PM	01/18/18	15.3	B	15.2	B	17.9	B	4.5	0.046
2	N. Capitol Av and Ohlone Dr	D	AM	10/23/14	33.2	C	33.2	C	32.9	C	1.3	0.044
			PM	10/23/14	28.0	C	27.8	C	28.1	C	-0.6	0.017
3	N. Capitol Av and Berryessa Rd	D	AM	01/23/19	47.3	D	49.0	D	50.7	D	3.1	0.024
			PM	01/23/19	**55.5**	**E**	**56.4**	**E**	**56.8**	**E**	1.0	0.021
4	I-680 NB Off-Ramp and Berryessa Rd	D	AM	01/23/19	7.3	A	7.2	A	7.2	A	0.0	0.007
			PM	01/23/19	15.3	B	14.4	B	14.5	B	0.1	0.007
5	N. Capitol Av and Penitencia Creek Rd	D	AM	04/04/18	24.9	C	24.8	C	24.9	C	0.1	0.011
			PM	04/04/18	17.5	B	17.7	B	17.8	B	0.1	0.009

Notes:
[1] Historical count data and counts that are more than two years old were adjusted by applying a 1 percent (%) compounded annual growth factor to estimate traffic conditions in 2022, as recommended by the City of San Jose.
Bold indicates a substandard level of service.

Intersection Queuing and U-Turn Analysis

The queuing analysis (see Table 6) is based on vehicle queuing for left-turn and U-turn movements at intersections where the project would add more than 10 trips per lane during either the AM or PM peak hour. Based on the project trip generation and trip distribution patterns, the following left-turn/U-turn movements were examined as part of the queuing and storage analysis for this project:

- Northbound left-turn movement at N. Capitol Avenue and Sierra Road
- Southbound left-turn movement at N. Capitol Avenue and Ohlone Drive
- Eastbound left-turn movement at N. Capitol Avenue and Berryessa Road
- Southbound left-turn movement at N. Capitol Avenue and Berryessa Road

Northbound Left-Turn/U-turn at N. Capitol Avenue and Sierra Road

Under all scenarios, the northbound left-turn/U-turn queues on N. Capitol Avenue at Sierra Road are projected to be less than the available storage capacity during the AM and PM peak hours.

Table 6
Intersection Queuing Analysis

	N. Capitol Avenue & Sierra Road		N. Capitol Avenue & Ohlone Drive		N. Capitol Avenue & Berryessa Road			
	NBL		SBL		EBL		SBL	
Measurement	AM	PM	AM	PM	AM	PM	AM	PM
Existing								
Cycle/Delay [1] (sec)	110	110	160	160	136	180	136	180
Volume (vphpl)	17	41	87	132	138	190	36	80
95th %. Queue (veh/ln.)	2	3	7	10	9	15	3	8
95th %. Queue (ft./ln) [2]	50	75	175	250	225	375	75	200
Storage (ft./ ln.) [3]	200	200	300	300	300	300	225	225
Adequate (Y/N)	Y	Y	Y	Y	Y	**N**	Y	Y
Background								
Cycle/Delay [1] (sec)	110	110	160	160	136	180	136	180
Volume (vphpl)	17	41	87	135	144	197	37	83
Avg. Queue (veh/ln.)	0.5	1.3	3.9	6.0	5.4	9.9	1.4	4.2
Avg. Queue [2] (ft./ln)	13	31	97	150	136	246	35	104
95th %. Queue (veh/ln.)	2	3	7	10	9	15	4	8
95th %. Queue (ft./ln)	50	75	175	250	225	375	100	200
Storage (ft./ ln.) [3]	200	200	300	300	300	300	225	225
Adequate (Y/N)	Y	Y	Y	Y	Y	**N**	Y	Y
Background Plus Project								
Cycle/Delay [1] (sec)	110	110	160	160	136	180	136	180
Volume (vphpl)	77	105	111	171	151	216	43	97
95th %. Queue (veh/ln.)	5	6	9	12	10	16	4	9
95th %. Queue (ft./ln) [2]	125	150	225	300	250	400	100	225
Storage (ft./ ln.) [3]	200	200	300	300	300	300	225	225
Adequate (Y/N)	Y	Y	Y	Y	Y	**N**	Y	Y

Notes:
[1] Vehicle queue calculations based on cycle length.
[2] Assumes 25 Feet Per Vehicle Queued.
[3] Storage Length represents the length of turn pocket + taper.

Southbound Left-Turn/U-turn at N. Capitol Avenue and Ohlone Drive

The left-turn pocket on southbound N. Capitol Avenue provides about 300 feet of queuing space, or room for about twelve vehicles. The queuing analysis indicates that during the AM peak hour, the storage length is sufficient for the southbound left turn movement under existing, background, and background plus project conditions.

During the PM peak hour, the southbound left-turn vehicle queue under existing and background conditions would equal 250 feet, which is less than the available storage capacity. The project would add 36 PM peak hour trips to this left-turn movement; however, the project would not cause a significant increase in the queue length for this movement. As shown in Table 6, the 95th percentile queue length would increase by two vehicles (from 10 vehicles to 12 vehicles), which could be

accommodated by the available storage capacity. It should be noted that the vehicle queues were calculated using the adjusted historical count data (2014 PM peak hour count plus 1% annual growth rate) as the baseline volume for this intersection. Accordingly, the calculated existing 95th percentile queue length for this intersection of 10 vehicles is twice as long as the maximum southbound left-turn queue length of 5 vehicles that was observed in field (August 3, 2022). Thus, the calculated vehicle queue length is a conservative estimate.

Eastbound left-turn at N. Capitol Avenue and Berryessa Road

The dual eastbound left-turn pocket currently provides approximately 300 feet of vehicle storage capacity per lane (or approximately 12 vehicles per lane). During the AM peak hour, the eastbound left-turn queue is less than the storage capacity at the intersection under all scenarios.

During the PM peak hour, the calculated 95th percentile vehicle queue length for this movement is approximately 15 vehicles per lane under existing and background conditions, exceeding the existing left-turn pocket storage capacity by approximately 3 vehicles per lane. The addition of project trips would increase the 95th percentile queue length by one vehicle per lane.

The eastbound left-turn pocket could be lengthened to provide a total of 400 feet of vehicle storage per lane. Lengthening the turn pocket would require reconstruction of the raised median island, removal of 8 trees, restriping, and removing/relocating some utilities associated with irrigation and a drain.

Southbound Left-Turn at N. Capitol Avenue and Berryessa Road

Under all scenarios, the southbound left-turn queues on N. Capitol Avenue at Berryessa Road are projected to be less than the available storage capacity during the AM and PM peak hours.

Freeway Segment Evaluation

The City is required to conform to the requirements of the Valley Transit Authority (VTA) which establishes a uniform program for evaluating the transportation impacts of land use decisions on the designated CMP Roadway System. The VTA's Congestion Management Program (CMP) has yet to adopt and implement guidelines and standards for the evaluation of the CMP freeway system using VMT. Therefore, the effects of the proposed project on freeway segments in the vicinity of the project area following the current methodologies as outlined in the *VTA Transportation Impact Analysis Guidelines*, was completed.

Per CMP technical guidelines, freeway segment level of service analysis shall be conducted on all segments to which the project is projected to add one percent or more to the segment capacity. Since the project is not projected to add one percent to any freeway segments in the area, freeway analysis for the CMP was not required. The percentage of traffic projected to be added by the project to freeway segments in the project area is summarized in Table 7.

Freeway On-Ramp Meter Evaluation

An evaluation of the metered I-680 on-ramps that provide access to the project site was performed to identify the effect of the addition of project traffic on the queues at these on-ramps. It should be noted that the City has not adopted methodologies or impact criteria for the analysis of freeway ramps.

The project is estimated to add peak-hour trips to the following freeway on-ramps during the AM peak hour only in the project vicinity:

- I-680 northbound diagonal on-ramp from westbound Berryessa Road
- I-680 southbound loop on-ramp from westbound Berryessa Road

Field observations conducted in August 2nd, 2022, revealed that during the AM peak-hour, meters at both on-ramps were inactive, and there were no operational issues related to vehicle queuing or delay currently occur on the on-ramp.

The proposed project is projected to add 14 vehicle trips to the I-680 northbound diagonal on-ramp and 9 vehicle trips to the I-680 southbound loop on-ramp during the AM peak-hour. Since the existing I-680 freeway on-ramps at Berryessa Road are currently underutilized and meters are inactive, the addition of project traffic to these on-ramps is not anticipated to cause any operational issue at the on-ramps.

Table 7
Freeway Segment Capacity

#	Freeway	Segment	Direction	Peak Hour	Capacity # of Lanes[1]	Capacity (vph)	Project Trips Volume	Project Trips % of Capacity
1	I-680	from McKee Road to Berryessa Road	NB	AM	4	9,200	0	0.00
			NB	PM	4	9,200	9	0.10
2	I-680	from Berryessa Road to Hostetter Road	NB	AM	4	9,200	14	0.15
			NB	PM	4	9,200	0	0.00
3	I-680	from Hostetter Road to Berryessa Road	SB	AM	4	9,200	0	0.00
			SB	PM	4	9,200	14	0.15
4	I-680	from Berryessa Road to McKee Road	SB	AM	4	9,200	9	0.10
			SB	PM	4	9,200	0	0.00

[1] Source: Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2018.

Vehicular Site Access and On-Site Circulation

The site access and circulation evaluations are based on the site plan prepared by Greenberg Farrow architects (see Figure 2 in Chapter 1) dated November 10, 2022. Site access was evaluated to determine the adequacy of the site's driveway with regard to the following: traffic volume, vehicle queuing, geometric design, and stopping sight distance. On-site vehicular circulation and parking layout were reviewed in accordance with generally accepted traffic engineering standards and transportation planning principles.

Site Access

The project site can be accessed by one right-turn in/out driveway on N. Capitol Avenue. The driveway is shown to be 26 feet wide at the throat, meeting the City's standard width requirement for a two-way driveway according to the City of San Jose Department of Transportation (DOT) Geometric Design Guidelines.

Driveway Operations

Vehicular access to the project site would be provided via one right-turn in/out driveway on N. Capitol Avenue. The proposed day care is estimated to generate 171 vehicle trips (90 inbound and 81 outbound) during the AM peak hour and 173 vehicles trips (82 inbound and 91 outbound) during the PM peak hour. On average, there would be fewer than two vehicles per minute entering and exiting the site from this driveway during either the AM or PM peak hour.

The proposed driveway is located approximately 150 feet north of Ohlone Drive. As observed in the field, during the PM peak hour, the southbound through traffic on N. Capital Avenue was heavy. A lane imbalance was observed in the southbound through lanes in favor of the far-right lane due to the high

volume of traffic turning right at the downstream intersection at N. Capitol Avenue and Berryessa Road onto the I-680 on-ramps. This lane imbalance caused longer queues in the right lane/curb lane (compared to the adjacent lanes). Occasionally the southbound through traffic in the rightmost through lane extended past Battaglia Circle, which would block the project driveway. The analysis of driveway operations indicates that vehicles exiting the project driveway would experience average delays of approximately 10 seconds per vehicle during the AM peak hour and about 25 seconds per vehicle during the PM peak hour under background plus project conditions. Most drivers would find these delays acceptable.

The City typically requires developments to provide adequate on-site stacking space for two inbound vehicles (approximately 50 feet) between the sidewalk and any entry gates or on-site drive aisles or parking spaces. This driveway throat prevents vehicles from queuing onto the sidewalk or the street. The site plan shows that the driveway would lead to a drive aisle running along the north edge of the project site. The length of the drive aisle between the sidewalk on N. Capitol Avenue and the north-south intersecting drive aisle would be approximately 150 feet (would exceed the City's requirement). Due to the right-turn only restriction and because there would be fewer than two vehicles entering the site per minute at the driveway, the inbound stacking space at the project driveway is expected to be adequate.

Sight Distance at the Driveway

The project driveway should be free and clear of any obstructions to provide adequate sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and vehicles and bicycles traveling on N. Capitol Avenue. Any landscaping and signage should be located in such a way to ensure an unobstructed view for drivers exiting the site. Providing the appropriate sight distance reduces the likelihood of a collision at a driveway or intersection and provides drivers with the ability to locate sufficient gaps in traffic to exit a driveway. The minimum acceptable sight distance is considered the Caltrans stopping sight distance. Sight distance requirements vary depending on roadway speeds. N. Capitol Avenue has a posted speed limit of 40 mph, so the Caltrans stopping sight distance is 360 feet (based on a design speed of 45 mph). Accordingly, a driver must be able to see 360 feet along N. Capitol Avenue in order to stop and avoid a collision. On-street parking is not allowed on N. Capitol Avenue near the proposed project driveway. There are no roadway curves or tall structures that would obstruct a driver's ability to see 360 feet to the north on N. Capitol Avenue. Thus, the sight distance looking north on N. Capitol Avenue is adequate.

Drop-off and Pick-up

The proposed preschool program is scheduled to start at 6:30 AM and end at 6:30 PM. Parents would drop off students anytime between 7:00 AM and 9:30 AM and would pick up students anytime between 12:00 PM and 6:30 PM. Since the drop-off and pick-up times would be spread out over many hours, there would not be typical AM peak drop-off periods and PM peak pick-up periods like schools. The AM drop-offs would occur at random over a 2.5-hour period, some of which would overlap with the regular AM peak hour of adjacent street traffic. The PM pick-ups would occur at random over a 6.5-hour period, some of which would overlap with the regular PM peak hour of adjacent street traffic.

Since the proposed project would serve students with ages ranging between six weeks and five years, it is assumed that all parents would park on-site and walk their student to and from the proposed facility. It is estimated that on average each vehicle would be parked on site for approximately 5 minutes for each drop-off and pick-up. As discussed in the parking evaluation below, the parking lot behind the proposed building contains 37 vehicle spaces (including 2 accessible spaces). It is estimated that the proposed day care would have 34 full- and part-time employees on different shifts. To be conservative, it is assumed that half of the staff (17 staff members) would drive-alone and arrive at the site before 7:00 AM. Thus, 17 spaces would be occupied by the staff and 20 spaces would be

available for parents to park their vehicles. Assuming each vehicle would occupy one parking space for 5 minutes on average, each parking space would accommodate 12 vehicles over a one-hour period. In total, the 20 available spaces would accommodate 240 vehicles during the AM peak hour period, which is much greater than the 90 inbound vehicle trips that the project would generate. Therefore, queueing issues would not be expected to occur on the project site, and vehicle queues would not be expected to back up and affect traffic operations along N. Capitol Avenue.

> **Recommendation:** The proposed day care center should frequently monitor the parking availability and on-site queuing during the peak drop-off and pick-up periods. In case of a parking shortage or vehicle queuing that extends back to N. Capitol Avenue, the day care could implement an official staggered student drop-off and pick-up program to ensure sufficient on-site parking is available for parents at all times and eliminate the potential for vehicle queues to affect traffic operations along N. Capitol Avenue.

> **Recommendation:** The proposed day care center should designate the parking stalls along the drive aisle furthest from the building for teachers/employees. This would ensure the parking stalls along the drive aisle closest to the building would be free for efficient student drop-off/pick-up operations.

On-Site Vehicular Circulation and Parking Layout

On-site vehicular circulation was reviewed for the project in accordance with generally accepted traffic engineering standards and City of San Jose design guidelines.

The current site plan shows that parking would be provided via a surface parking lot located behind the proposed day care building. The 26-foot-wide project driveway would lead to an L-shaped one-way southbound drive aisle running along the north edge and west edge of the project site, with angled parking spaces along the east side of the drive aisle. The width of the L-shaped one-way southbound drive aisle is shown to be 21.9 feet, which would be adequate for one-way vehicular circulation and would provide sufficient room for vehicles to back out of the angled parking spaces. At the south end of the parking lot, the drive aisle continues in a counterclockwise direction and ultimately transitions into a one-way northbound drive aisle with diagonal parking spaces along the east side (building side) of the drive aisle. The one-way northbound drive aisle measures 16 feet wide, which meets the City's standard minimum width for one-way drive aisles. The site plan shows efficient on-site circulation with no dead-end drive aisles.

The site plan shows two ADA accessible parking spaces in the southeast corner of the parking lot. The two accessible ADA spaces measure 9 feet wide by 18 feet long and 12 feet wide by 18 feet long and include an access aisle of 5 feet for van accessibility. Adequate space would be provided to allow drivers to back out of the ADA parking stalls at the currently proposed location. However, according to the Design Standards for Accessible Parking Spaces, ADA parking spaces must be located on the shortest accessible route of travel from the parking to an accessible building entrance.

> **Recommendation:** Relocate the ADA accessible parking spaces closer to the entrance to the day care center building to meet the ADA design standards.

Parking Stall Dimensions

Per the City's off-street parking design standard, all parking spaces shall be standard size spaces as set forth in Section 20.90.100. Alternatively, a development permit may:

1. Authorize all off-street parking spaces to be uniform-size car spaces, as set forth in Section 20.90.100; or

2. Allow up to forty (40) percent of the off-street parking spaces to be small car spaces as set forth in Section 20.90.100. The remainder of the required off-street parking spaces shall be standard car space as defined in Section 20.90.100.

The City's off-street parking design standard for uniform car spaces (90-degree and diagonal stalls) is 8.5 feet wide by 17 feet long, and 8.5 feet wide by 18 feet long for full-size car spaces (90-degree and diagonal stalls). The angled parking stalls shown on the site plan measure 9.0 feet wide by 18 feet long (some longer), which meets the City requirement for full-size car spaces. The accessible ADA stalls measure 9 feet wide by 18 feet long and include access aisles of 5 feet for van accessibility. These stall dimensions would meet ADA standards. Although not shown on the site plan, all the parking spaces should include parking stop blocks.

Emergency Vehicles, Truck Access and Circulation

The site plan shows a trash enclosure at the northwest corner of the surface parking lot and one loading space at the southwest corner of the project site. The project site plan was reviewed for single-unit (SU-30) truck access including delivery trucks and vans, garbage trucks, and emergency vehicles. The results show that SU-30 trucks could enter the project driveway, circulate through the surface parking lot, access the trash enclosure and loading space, and exit the driveway without operational issues. Figures 14 and 15 show the SU-30 truck turning templates for inbound and outbound movements, respectively, created using AutoTurn software.

Construction Activities

Typical activities related to the construction of any development could include lane narrowing and/or lane closures, sidewalk and pedestrian crosswalk closures, and bike lane closures. In the event of any type of closure, clear signage (e.g., closure and detour signs) must be provided to ensure vehicles, pedestrians and bicyclists are able to adequately reach their intended destinations safely. Per City standard practice, the project would be required to submit a construction management plan for City approval that addresses the construction schedule, street closures and/or detours, construction staging areas and parking, and the planned truck routes.

Pedestrian, Bicycle, and Transit Facilities

All new development projects in San Jose should encourage multi-modal travel, consistent with the goals and policies 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 many 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

Pedestrian facilities consist mostly of sidewalks along the streets in the immediate vicinity of the project site. Crosswalks with pedestrian signal heads and push buttons are located at the signalized intersection adjacent to the project site. Many roadways in the study area have bicycle lanes.

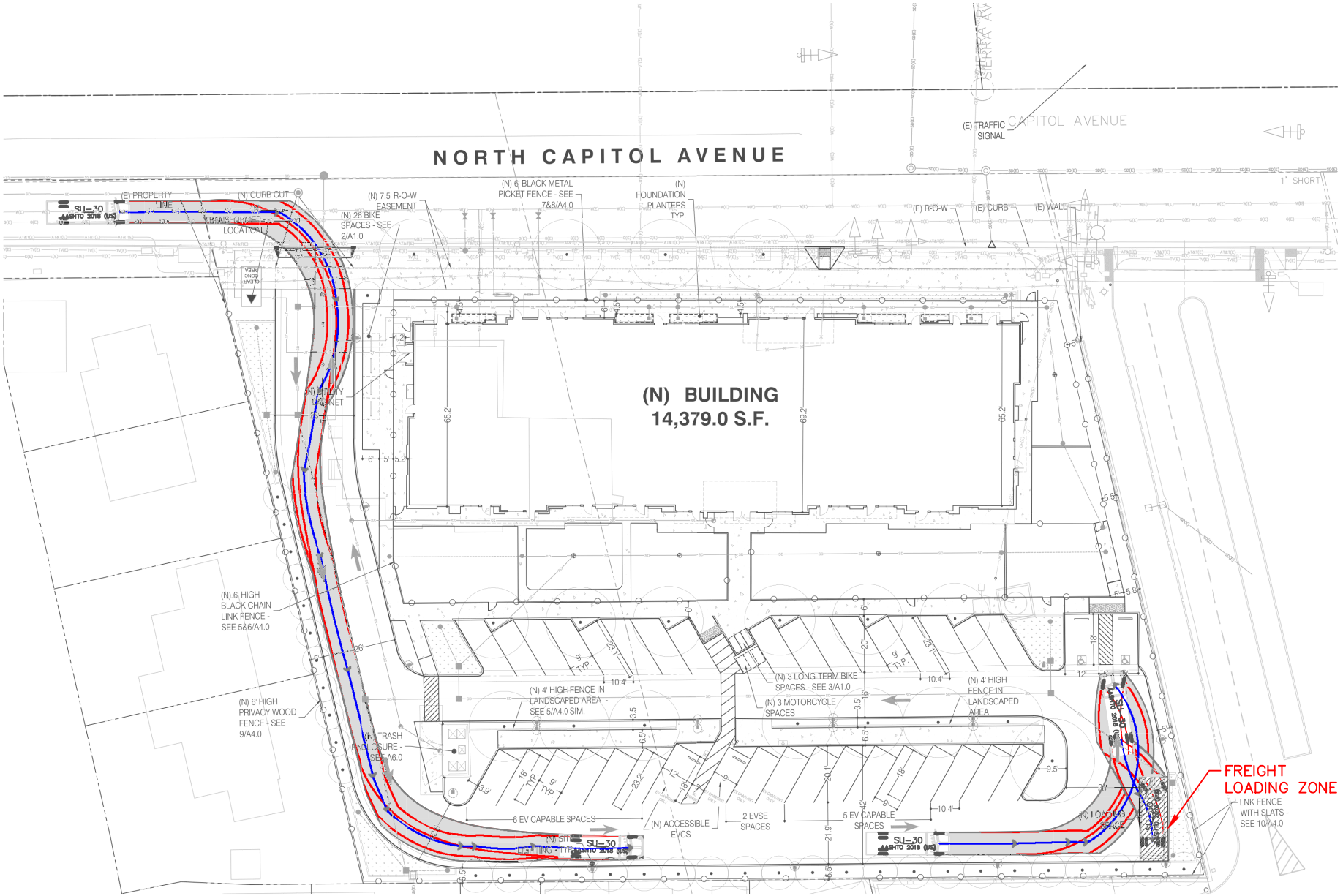


Figure 14
Turning Movement Templates for Inbound Truck (SU-30) Traffic

NORTH
Not to Scale

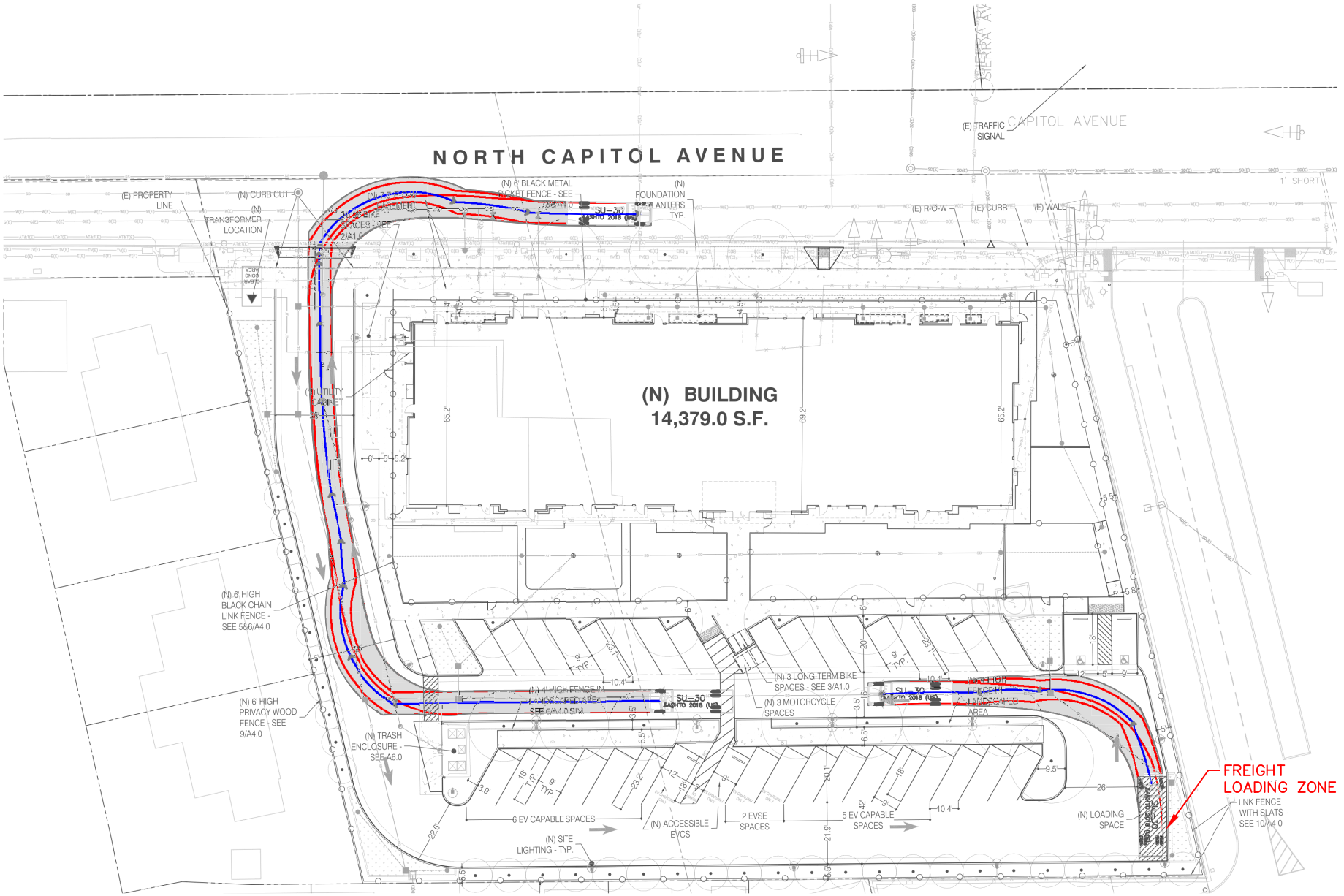


Figure 15
Turning Movement Templates for Outbound Truck (SU-30) Traffic

NORTH
Not to Scale

Sidewalks are found along all local roadways in the study area. The existing network of sidewalks provides good connectivity for pedestrians between the project site and other surrounding land uses and transit stops. The existing streets provide facilities for bicyclists to ride and pedestrians to walk between the nearby residential uses and the project site. Overall, the network of sidewalks and bike lanes exhibits good connectivity and would provide employees of the day care center and parents/ students with safe routes to transit stops, residential neighborhoods, and other points of interest in the area. The site plan shows a 15-foot-wide attached sidewalk with tree wells along the project frontage on N. Capitol Avenue, which meets the Urban Village requirement.

The project should consider implementing a Safe Routes to Schools program, since many students attending the day care center would likely reside nearby. Safe Routes to Schools is designed to decrease traffic and pollution and increase the health of children and the community as a whole. The program promotes walking and biking to school through education and incentives. The program also addresses the safety concerns of parents by encouraging greater enforcement of traffic laws, educating the public, and exploring ways to create safer streets. A comprehensive Safe Routes to Schools program should identify a focused area surrounding the school, provide a map with the routes that children and their parents can take to and from school, and recommend improvements to routes if necessary. It should address such pedestrian safety issues as dangerous intersections and missing or ineffective crosswalks and sidewalks.

The project would not remove any bicycle facilities, nor would it conflict with any adopted plans or policies for new bicycle facilities. The site plan shows 26 short-term (bike rack) bicycle parking spaces north of the building near the project driveway and 3 long-term bicycle parking spaces near the day care playgrounds. Providing adequate and convenient on-site bike parking would help to create a bicycle-friendly environment and encourage bicycling by employees of the project.

The City of San Jose Better Bike Plan 2025 sets forth a plan to improve the existing class II bike lanes along N. Capitol Avenue to Class IV protected bike lanes. Planned on-street bicycle facilities are usually implemented during scheduled street paving projects. The day care project would be required to make a fair-share monetary contribution toward the Class IV protected bike lanes that are planned along the project frontage on N. Capitol Avenue. Based on a current cost of $144 per linear foot (source: City of San Jose Department of Public Works), the project's total fair-share contribution would equate to $43,200 ($144 x 300 feet of frontage = $43,200).

> **Recommendation:** The project should pay a fair-share contribution of $43,200 toward the planned Class IV protected bikeway improvements along N. Capitol Avenue, per the request of the City of San Jose Department of Public Works.

Additional Project Improvements

Per the special use permit for the project, the City of San Jose will require the project to make a fair-share monetary contribution for a signal cabinet upgrade, PTZ and fiber communication cables installation, and Accessible Pedestrian Signal (APS) upgrades at the N. Capitol Avenue and Ohlone Drive signalized intersection. These intersection improvements are intended to accommodate the additional vehicular and pedestrian traffic that would be generated by the project. The project's fair-share contribution will total no more than $30,000.

> **Recommendation:** The project should pay a fair-share contribution of up to $30,000 toward the planned upgrades (e.g., signal cabinet upgrades, PTZ and fiber communication cables, APS upgrades, etc.) at the signalized intersection of N. Capitol Avenue and Ohlone Drive, per the special use permit for the project.

Transit Facilities

As described earlier, N. Capitol Avenue is designated as a Grand Boulevard in the Envision San Jose 2040 General Plan and has an LRT line within the center median in the study area. Grand Boulevards are major transportation corridors that serve as primary routes for LRT, busses, and other public transit vehicles. Although Grand Boulevards accommodate all modes of travel, priority is given to public transit vehicles. The Berryessa LRT Station, located a short walk (about 300 feet) from the project site, is served by frequent LRT trains and VTA local bus route 61. Due to the convenient location of the LRT Station, it is reasonable to assume that some employees would utilize the transit services provided. The City's General Plan identifies a transit commute mode split target of 20 percent or more for the year 2040. This level of transit ridership is a reasonable goal for employees of a project such as this that is located within walking distance of an LRT station. It is estimated that the increased transit demand generated by the proposed project could be accommodated by the current available ridership capacities of the VTA transit services in the study area.

Parking

Vehicular Parking

According to the City of San Jose's off-street parking requirements (Chapter 20.90, Table 20-190 of the City's Zoning Code), the vehicle parking requirement for a day care center is 1 space per 6 children, up to 5 spaces and thereafter 1 space per 10 children. This includes employee parking. The day care center would serve up to 252 children; therefore, the project would be required to provide 28 vehicle parking spaces. The project proposes to provide a total of 37 parking spaces, which meets the City's minimum parking requirement.

Bicycle Parking

According to the City of San Jose's off-street parking requirements (Chapter 20.90, Table 20-190 of the City's Zoning Code), the bicycle parking requirements for a day care center is 1 per 10 full-time employees and children. This equates to 29 bicycle parking spaces required. Furthermore, based on the City's code, at least eighty percent of the bicycle parking spaces (29 x 80% = 24 spaced) shall be provided in short-term bicycle parking facilities and at most twenty percent (5 spaces) shall be provided in long-term bicycle facilities. According to the site plan, the project is proposing to provide 26 short-term bicycle parking spaces and 3 long-term bicycle parking spaces (bike lockers), which meets the City's bicycle parking requirement.

5. Conclusions

This report presents the results of the analysis of Vehicle Miles Traveled (VMT) and a Local Transportation Analysis (LTA) for a proposed day care facility at 1207 N. Capitol Avenue in San Jose, California. The proposed day care center would serve a maximum of 252 children and would operate between 6:30 AM and 6:30 PM. Access to the project site would be provided via one right-turn in/out driveway on N. Capitol Avenue.

The potential transportation impacts of the project were evaluated following the standards and methodologies established in the City of San Jose's *Transportation Analysis Handbook,* 2020. 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 (TA) and a non-CEQA local transportation analysis (LTA). The LTA supplements the CEQA transportation analysis by identifying transportation operational issues via an evaluation of weekday AM and PM peak-hour traffic conditions for the key study intersections. The LTA also includes an analysis of site access, on-site circulation, parking, and effects to transit, bicycle, and pedestrian facilities.

CEQA Transportation 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's VMT methodology also includes screening criteria that are used to identify types, characteristics, and/or locations of projects that would not exceed the CEQA thresholds of significance. If a project or a component of a mixed-use project meets the screening criteria, it is then presumed that the project or the component would result in a less-than-significant VMT impact and a VMT analysis is not required.

Council Policy 5-1 does not explicitly address day care centers. Therefore, in coordination with San Jose staff, the day care center was treated as being equivalent to a local serving retail project (retail project below 100,000 s.f.) without drive-through operations. These projects tend to redistribute existing trips instead of creating new trips. The proposed project, which is a day care center, would operate similar to local serving retail in that it would redistribute existing trips from surrounding day care centers instead of creating new trips. The equivalent retail square footage of the day care center (based on ITE rates) is approximately 18,900 square feet, which is less than the 100,000 s.f. threshold. This relatively small amount of equivalent retail space meets the screening criteria for local serving retail projects without drive-through operation. Because the project would meet the City's screening criteria, it is expected to result in a less-than-significant VMT impact.

Project Trip Generation

After applying the ITE trip rates to the proposed project and applying the appropriate trip adjustments, the project would be expected to generate 897 new daily vehicle trips, with 171 new trips (90 inbound and 81 outbound) occurring during the AM peak hour and 173 new trips (82 inbound and 91 outbound) occurring during the PM peak hour.

Intersection Traffic Operations

Intersection levels of service were evaluated against the standards of the City of San Jose. The results of the analysis show that all but one of the study intersections are currently operating at acceptable levels of service during the AM and PM peak hours of traffic and would continue to operate acceptably under background and background plus project conditions. The intersection of N. Capitol Avenue and Berryessa Road currently operates at an unacceptable LOS E during the PM peak hour and would continue to do so under background and background plus project conditions. However, the addition of project trips would not cause the average critical delay to increase by 4 seconds or more. Therefore, the project would not create an adverse effect on intersection operations.

Other Transportation Items

In general, the proposed site plan shows adequate site access and on-site circulation. The project would not have an adverse effect on the existing pedestrian, bicycle, or transit facilities in the study area. Below are recommendations resulting from the site plan review.

Recommendations

- The proposed day care center should frequently monitor the parking availability and on-site queuing during the peak drop-off and pick-up periods. In case of a parking shortage or vehicle queuing that extends back to N. Capitol Avenue, the day care could implement an official staggered student drop-off and pick-up program to ensure sufficient on-site parking is available for parents at all times and eliminate the potential for vehicle queues to affect traffic operations along N. Capitol Avenue.
- The proposed day care center should designate the parking stalls along the drive aisle furthest from the building for teachers/employees. This would ensure the parking stalls along the drive aisle closest to the building would be free for efficient student drop-off/pick-up operations.
- Relocate the ADA accessible parking spaces closer to the entrance to the day care center building to meet the ADA design standards.
- The project should pay a fair-share contribution of $43,200 toward the planned Class IV protected bikeway improvements along N. Capitol Avenue, per the request of the City of San Jose Department of Public Works.
- The project should pay a fair-share contribution of up to $30,000 toward the planned upgrades (e.g., signal cabinet upgrades, PTZ and fiber communication cables, APS upgrades, etc.) at the intersection of N. Capitol Avenue and Ohlone Drive, per the special use permit for the project.

1207 N. Capitol Avenue Day Care LTA

Technical Appendices

Appendix A
Volume Summary Tables

Intersection Number: 1
Traffix Node Number: 3390
Intersection Name: N. Capitol Avenue and Sierra Road
Peak Hour: AM
Count Date: 01/18/18

Date of Analysis: 07/13/22

Scenario	Movements												
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	0	201	87	250	0	282	87	513	17	0	0	0	*1437*
Approved Project Trips													
CSJ ATI	0	6	1	0	0	1	5	28	0	0	0	0	*41*
Background Conditions	0	207	88	250	0	283	92	541	17	0	0	0	*1478*
Proposed Project Trips	*0*	*18*	*0*	*0*	*0*	*9*	*2*	*19*	*60*	*0*	*0*	*0*	*108*
Background + Project Conditions	0	225	88	250	0	292	94	560	77	0	0	0	*1586*

Intersection Number: 2
Traffix Node Number: 3387
Intersection Name: N. Capitol Avenue and Ohlone Drive
Peak Hour: AM
Count Date: 10/23/14

Date of Analysis: 07/13/22

Scenario	Movements												
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	10	563	87	48	14	162	49	589	78	2	0	1	*1603*
Approved Project Trips													
CSJ ATI	0	5	0	0	0	0	0	28	2	0	0	0	*35*
Background Conditions	10	568	87	48	14	162	49	617	80	2	0	1	*1638*
Proposed Project Trips	*0*	*57*	*24*	*5*	*0*	*0*	*0*	*54*	*0*	*0*	*0*	*0*	*140*
Background + Project Conditions	10	625	111	53	14	162	49	671	80	2	0	1	*1778*

Intersection Number: 3
Traffix Node Number: 3293
Intersection Name: N. Capitol Avenue and Berryessa Road
Peak Hour: AM
Count Date: 01/23/19

Date of Analysis: 07/13/22

Scenario	Movements												
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	453	200	36	16	887	94	110	477	876	208	591	276	*4224*
Approved Project Trips													
CSJ ATI	14	5	1	3	25	4	5	12	37	15	18	11	*150*
Background Conditions	467	205	37	19	912	98	115	489	913	223	609	287	*4374*
Proposed Project Trips	*38*	*13*	*6*	*14*	*0*	*0*	*0*	*27*	*0*	*0*	*0*	*14*	*112*
Background + Project Conditions	505	218	43	33	912	98	115	516	913	223	609	301	*4486*

Intersection Number: 4
Traffix Node Number: 3948
Intersection Name: I-680 Northbound Off-Ramp and Berryessa Road
Peak Hour: AM
Date of Analysis: 07/13/22
Count Date: 01/23/19

Scenario	Movements												
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	237	0	0	622	1647	0	268	0	0	620	757	0	*4151*
Approved Project Trips													
CSJ ATI	0	0	0	0	31	0	0	0	0	49	26	0	*106*
Background Conditions	237	0	0	622	1678	0	268	0	0	669	783	0	*4257*
Proposed Project Trips	*0*	*0*	*0*	*0*	*24*	*0*	*0*	*0*	*0*	*0*	*14*	*0*	*38*
Background + Project Conditions	237	0	0	622	1702	0	268	0	0	669	797	0	*4295*

Intersection Number: 5
Traffix Node Number: 3388
Intersection Name: N. Capitol Avenue and Penitencia Creek Road
Peak Hour: AM
Date of Analysis: 07/13/22
Count Date: 04/04/18

Scenario	Movements												
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	5	172	126	402	1	30	16	549	0	4	0	23	*1328*
Approved Project Trips													
CSJ ATI	0	5	6	3	0	21	4	33	0	0	0	0	*72*
Background Conditions	5	177	132	405	1	51	20	582	0	4	0	23	*1400*
Proposed Project Trips	*0*	*11*	*2*	*9*	*0*	*0*	*0*	*18*	*0*	*0*	*0*	*0*	*40*
Background + Project Conditions	5	188	134	414	1	51	20	600	0	4	0	23	*1440*

Intersection Number: 1
Traffix Node Number: 3390
Intersection Name: N. Capitol Avenue and Sierra Road
Peak Hour: PM
Count Date: 01/18/18

Date of Analysis: 07/13/22

Scenario	Movements												
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	0	813	148	69	0	117	67	268	41	0	0	0	*1523*
Approved Project Trips													
CSJ ATI	0	20	4	0	0	2	0	3	0	0	0	0	*29*
Background Conditions	0	833	152	69	0	119	67	271	41	0	0	0	*1552*
Proposed Project Trips	*0*	*19*	*0*	*0*	*0*	*3*	*9*	*18*	*64*	*0*	*0*	*0*	*113*
Background + Project Conditions	0	852	152	69	0	122	76	289	105	0	0	0	*1665*

Intersection Number: 2
Traffix Node Number: 3387
Intersection Name: N. Capitol Avenue and Ohlone Drive
Peak Hour: PM
Count Date: 10/23/14

Date of Analysis: 07/13/22

Scenario	Movements												
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	8	912	132	47	2	114	64	342	58	5	6	5	*1695*
Approved Project Trips													
CSJ ATI	0	21	3	0	0	0	0	0	0	0	0	0	*24*
Background Conditions	8	933	135	47	2	114	64	342	58	5	6	5	*1719*
Proposed Project Trips	*0*	*55*	*36*	*1*	*0*	*0*	*0*	*58*	*0*	*0*	*0*	*0*	*150*
Background + Project Conditions	8	988	171	48	2	114	64	400	58	5	6	5	*1869*

Intersection Number: 3
Traffix Node Number: 3293
Intersection Name: N. Capitol Avenue and Berryessa Road
Peak Hour: PM
Count Date: 01/23/19

Date of Analysis: 07/13/22

Scenario	Movements												
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	343	748	80	31	734	189	84	284	404	602	737	380	*4616*
Approved Project Trips													
CSJ ATI	22	16	3	1	23	4	5	9	27	19	27	14	*170*
Background Conditions	365	764	83	32	757	193	89	293	431	621	764	394	*4786*
Proposed Project Trips	*14*	*27*	*14*	*7*	*0*	*0*	*0*	*13*	*0*	*0*	*0*	*38*	*113*
Background + Project Conditions	379	791	97	39	757	193	89	306	431	621	764	432	*4899*

Intersection Number: 4
Traffix Node Number: 3948
Intersection Name: I-680 Northbound Off-Ramp and Berryessa Road
Peak Hour: PM
Date of Analysis: 07/13/22
Count Date: 01/23/19

Scenario	Movements												
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	336	0	0	328	1164	0	620	0	0	438	1068	0	*3954*
Approved Project Trips CSJ ATI	0	0	0	0	47	0	0	0	0	47	34	0	*128*
Background Conditions	336	0	0	328	1211	0	620	0	0	485	1102	0	*4082*
Proposed Project Trips	*0*	*0*	*0*	*0*	*14*	*0*	*9*	*0*	*0*	*0*	*29*	*0*	*52*
Background + Project Conditions	336	0	0	328	1225	0	629	0	0	485	1131	0	*4134*

5

Intersection Number: 5
Traffix Node Number: 3388
Intersection Name: N. Capitol Avenue and Penitencia Creek Road
Peak Hour: PM
Date of Analysis: 07/13/22
Count Date: 04/04/18

Scenario	Movements												
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	*Total*
Existing Conditions	27	1036	439	169	2	57	66	458	11	4	3	17	*2289*
Approved Project Trips CSJ ATI	0	20	7	6	0	2	22	13	0	0	0	0	*70*
Background Conditions	27	1056	446	175	2	59	88	471	11	4	3	17	*2359*
Proposed Project Trips	*0*	*18*	*9*	*3*	*0*	*0*	*0*	*11*	*0*	*0*	*0*	*0*	*41*
Background + Project Conditions	27	1074	455	178	2	59	88	482	11	4	3	17	*2400*

Appendix B
Approved Trips Inventory (ATI)

AM PROJECT TRIPS

06/08/2022

Intersection of : Berryessa Rd & N Capitol Av

Traffix Node Number : 3293

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
NSJ LEGACY NORTH SAN JOSE	22	10	3	0	1	3	2	5	1	1	11	2
PDC03-093 (3-03081) Retail/Commercial MCKEE RD AND N JACKSON AV SJ REGIONAL MEDICAL CENTER	0	1	2	0	2	2	1	2	0	3	3	0
PDC03-108 OFF (3-16680) Retail/Commercial BOTH SIDES OF BERRYESSA RD WEST OF UNION PACIFI BERRYESSA FLEA MKT (OFFICE)	3	0	0	0	0	1	0	1	0	0	5	0
PDC03-108 RES (3-16680) Residential BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC BERRYESSA FLEA MKT (RESIDENTIAL)	2	0	0	0	0	0	1	6	3	0	3	0
PDC03-108 RET (3-16680) Retail/Commercial BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC BERRYESSA FLEA MKT (RETAIL)	0	0	0	0	0	0	0	0	0	0	0	0
PDC04-017 (3-16693) Residential CAPITOL AVE/PENITENCIA CRK CREEKSIDE STATION (YONEDA)	0	0	0	0	0	0	0	0	0	0	0	0
PDC89-08-110 (3-04915) Residential DOREL(S/S & E/O), 200' N/O OTTO 31 SFD	2	1	0	1	2	0	0	4	4	0	3	1

AM PROJECT TRIPS

06/08/2022

Intersection of : Berryessa Rd & N Capitol Av

Traffix Node Number : 3293

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
PRE05-430 COMM (3-12552) Retail/Commercial PEPPER LANE	8	0	0	0	0	8	7	0	7	0	0	0
TOTAL:	**37**	**12**	**5**	**1**	**5**	**14**	**11**	**18**	**15**	**4**	**25**	**3**

	LEFT	THRU	RIGHT
NORTH	1	5	14
EAST	4	25	3
SOUTH	37	12	5
WEST	11	18	15

PM PROJECT TRIPS

06/08/2022

Intersection of : Berryessa Rd & N Capitol Av

Traffix Node Number : 3293

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
NSJ LEGACY NORTH SAN JOSE	6	5	2	2	14	7	3	6	5	3	8	0
PDC03-093 (3-03081) Retail/Commercial MCKEE RD AND N JACKSON AV SJ REGIONAL MEDICAL CENTER	0	2	3	0	1	1	2	4	0	1	1	0
PDC03-108 OFF (3-16680) Retail/Commercial BOTH SIDES OF BERRYESSA RD WEST OF UNION PACIFI BERRYESSA FLEA MKT (OFFICE)	1	0	0	0	0	0	1	5	3	0	1	0
PDC03-108 RES (3-16680) Residential BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC BERRYESSA FLEA MKT (RESIDENTIAL)	3	0	0	0	0	1	0	3	1	0	6	0
PDC03-108 RET (3-16680) Retail/Commercial BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC BERRYESSA FLEA MKT (RETAIL)	0	0	0	0	0	0	0	6	0	0	3	0
PDC04-017 (3-16693) Residential CAPITOL AVE/PENITENCIA CRK CREEKSIDE STATION (YONEDA)	0	0	0	0	0	0	0	0	0	0	0	0
PDC89-08-110 (3-04915) Residential DOREL(S/S & E/O), 200' N/O OTTO 31 SFD	4	2	0	1	1	0	0	3	2	0	4	1

PM PROJECT TRIPS

06/08/2022

Intersection of : Berryessa Rd & N Capitol Av

Traffix Node Number : 3293

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
PRE05-430 COMM (3-12552) Retail/Commercial PEPPER LANE	13	0	0	0	0	13	8	0	8	0	0	0
TOTAL:	**27**	**9**	**5**	**3**	**16**	**22**	**14**	**27**	**19**	**4**	**23**	**1**

	LEFT	THRU	RIGHT
NORTH	3	16	22
EAST	4	23	1
SOUTH	27	9	5
WEST	14	27	19

AM PROJECT TRIPS

06/08/2022

Intersection of : N Capitol Av & Ohlone Dr

Traffix Node Number : 3387

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
NSJ LEGACY NORTH SAN JOSE	2	28	0	0	5	0	0	0	0	0	0	0
PDC04-017 (3-16693) Residential CAPITOL AVE/PENITENCIA CRK CREEKSIDE STATION (YONEDA)	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL:	**2**	**28**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

	LEFT	THRU	RIGHT
NORTH	0	5	0
EAST	0	0	0
SOUTH	2	28	0
WEST	0	0	0

PM PROJECT TRIPS

06/08/2022

Intersection of : N Capitol Av & Ohlone Dr

Traffix Node Number : 3387

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
NSJ LEGACY NORTH SAN JOSE	0	0	0	3	21	0	0	0	0	0	0	0
PDC04-017 (3-16693) Residential CAPITOL AVE/PENITENCIA CRK CREEKSIDE STATION (YONEDA)	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL:	**0**	**0**	**0**	**3**	**21**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

	LEFT	THRU	RIGHT
NORTH	3	21	0
EAST	0	0	0
SOUTH	0	0	0
WEST	0	0	0

AM PROJECT TRIPS

06/08/2022

Intersection of : N Capitol Av & Penitencia Creek Rd

Traffix Node Number : 3388

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
NSJ LEGACY NORTH SAN JOSE	0	33	2	0	5	0	0	0	0	0	0	0
PDC04-017 (3-16693) Residential CAPITOL AVE/PENITENCIA CRK CREEKSIDE STATION (YONEDA)	0	0	0	0	0	0	0	0	0	0	0	0
PDC89-08-110 (3-04915) Residential DOREL(S/S & E/O), 200' N/O OTTO 31 SFD	0	0	2	6	0	0	0	0	0	21	0	3
TOTAL:	**0**	**33**	**4**	**6**	**5**	**0**	**0**	**0**	**0**	**21**	**0**	**3**

	LEFT	THRU	RIGHT
NORTH	6	5	0
EAST	21	0	3
SOUTH	0	33	4
WEST	0	0	0

PM PROJECT TRIPS

06/08/2022

Intersection of : N Capitol Av & Penitencia Creek Rd

Traffix Node Number : 3388

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
NSJ LEGACY NORTH SAN JOSE	0	13	1	4	20	0	0	0	0	0	0	0
PDC04-017 (3-16693) Residential CAPITOL AVE/PENITENCIA CRK CREEKSIDE STATION (YONEDA)	0	0	0	0	0	0	0	0	0	0	0	0
PDC89-08-110 (3-04915) Residential DOREL(S/S & E/O), 200' N/O OTTO 31 SFD	0	0	21	3	0	0	0	0	0	2	0	6
TOTAL:	**0**	**13**	**22**	**7**	**20**	**0**	**0**	**0**	**0**	**2**	**0**	**6**

	LEFT	THRU	RIGHT
NORTH	7	20	0
EAST	2	0	6
SOUTH	0	13	22
WEST	0	0	0

AM PROJECT TRIPS

06/08/2022

Intersection of : N Capitol Av & Sierra Rd

Traffix Node Number : 3390

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
NSJ LEGACY NORTH SAN JOSE	0	26	5	1	3	0	0	0	0	1	0	0
PDC89-08-110 (3-04915) Residential DOREL(S/S & E/O), 200' N/O OTTO 31 SFD	0	2	0	0	3	0	0	0	0	0	0	0
TOTAL:	**0**	**28**	**5**	**1**	**6**	**0**	**0**	**0**	**0**	**1**	**0**	**0**

	LEFT	THRU	RIGHT
NORTH	1	6	0
EAST	1	0	0
SOUTH	0	28	5
WEST	0	0	0

PM PROJECT TRIPS

06/08/2022

Intersection of : N Capitol Av & Sierra Rd

Traffix Node Number : 3390

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
NSJ LEGACY NORTH SAN JOSE	0	0	0	4	18	0	0	0	0	2	0	0
PDC89-08-110 (3-04915) Residential DOREL(S/S & E/O), 200' N/O OTTO 31 SFD	0	3	0	0	2	0	0	0	0	0	0	0
TOTAL:	**0**	**3**	**0**	**4**	**20**	**0**	**0**	**0**	**0**	**2**	**0**	**0**

	LEFT	THRU	RIGHT
NORTH	4	20	0
EAST	2	0	0
SOUTH	0	3	0
WEST	0	0	0

AM PROJECT TRIPS

06/08/2022

Intersection of : Berryessa Rd & NB 680 To Berryessa Rp

Traffix Node Number : 3948

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
NSJ LEGACY NORTH SAN JOSE	0	0	0	0	0	0	0	0	0	0	0	0
PDC03-108 OFF (3-16680) Retail/Commercial BOTH SIDES OF BERRYESSA RD WEST OF UNION PACIFI BERRYESSA FLEA MKT (OFFICE)	0	0	0	0	0	0	0	1	3	0	10	0
PDC03-108 RES (3-16680) Residential BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC BERRYESSA FLEA MKT (RESIDENTIAL)	0	0	0	0	0	0	0	11	46	0	6	0
PDC03-108 RET (3-16680) Retail/Commercial BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC BERRYESSA FLEA MKT (RETAIL)	0	0	0	0	0	0	0	0	0	0	0	0
PDC04-017 (3-16693) Residential CAPITOL AVE/PENITENCIA CRK CREEKSIDE STATION (YONEDA)	0	0	0	0	0	0	0	0	0	0	0	0
PRE05-430 COMM (3-12552) Retail/Commercial PEPPER LANE	0	0	0	0	0	0	0	14	0	0	15	0

TOTAL:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**26**	**49**	**0**	**31**	**0**

	LEFT	THRU	RIGHT
NORTH	0	0	0
EAST	0	31	0
SOUTH	0	0	0
WEST	0	26	49

PM PROJECT TRIPS

06/08/2022

Intersection of : Berryessa Rd & NB 680 To Berryessa Rp

Traffix Node Number : 3948

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
NSJ LEGACY NORTH SAN JOSE	0	0	0	0	0	0	0	0	0	0	0	0
PDC03-108 OFF (3-16680) Retail/Commercial BOTH SIDES OF BERRYESSA RD WEST OF UNION PACIFI BERRYESSA FLEA MKT (OFFICE)	0	0	0	0	0	0	0	9	21	0	2	0
PDC03-108 RES (3-16680) Residential BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC BERRYESSA FLEA MKT (RESIDENTIAL)	0	0	0	0	0	0	0	5	24	0	11	0
PDC03-108 RET (3-16680) Retail/Commercial BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC BERRYESSA FLEA MKT (RETAIL)	5	0	0	0	0	0	0	4	2	0	8	0
PDC04-017 (3-16693) Residential CAPITOL AVE/PENITENCIA CRK CREEKSIDE STATION (YONEDA)	0	0	0	0	0	0	0	0	0	0	0	0
PRE05-430 COMM (3-12552) Retail/Commercial PEPPER LANE	0	0	0	0	0	0	0	16	0	0	26	0

TOTAL:	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**34**	**47**	**0**	**47**	**0**

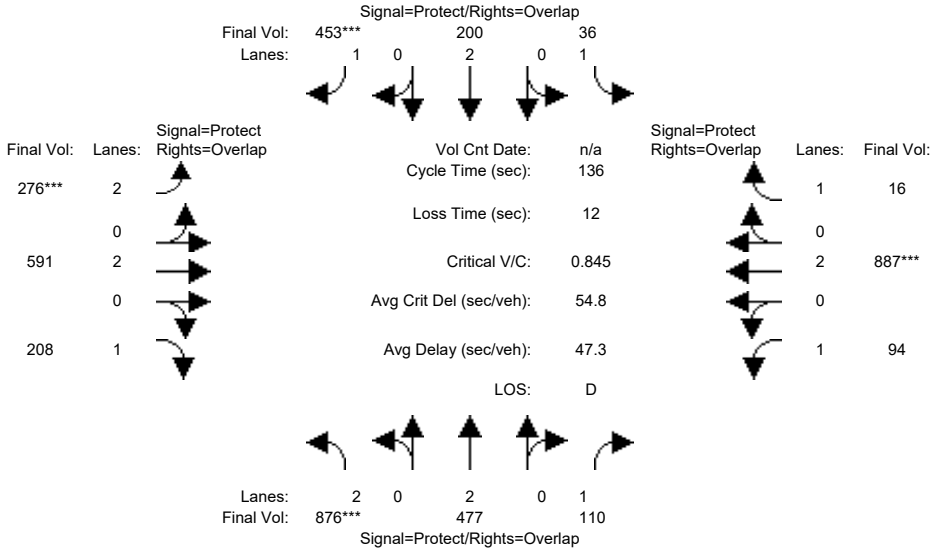
	LEFT	THRU	RIGHT
NORTH	0	0	0
EAST	0	47	0
SOUTH	5	0	0
WEST	0	34	47

Appendix C
Intersection Level of Service Calculations

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3293: N. Capitol Avenue & Berryessa Road



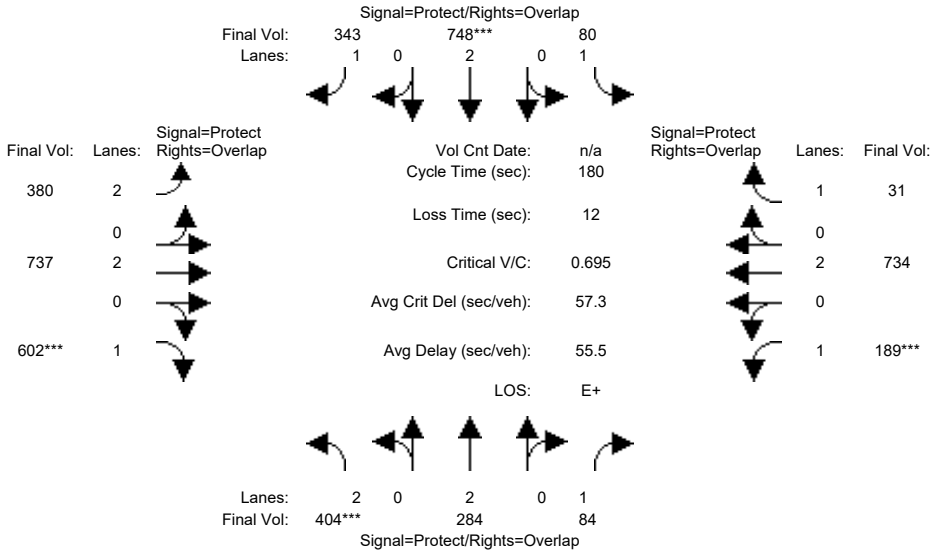
Street Name:	N. Capitol Avenue						Berryessa Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	876	477	110	36	200	453	276	591	208	94	887	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:	876	477	110	36	200	453	276	591	208	94	887	16
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	876	477	110	36	200	453	276	591	208	94	887	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	876	477	110	36	200	453	276	591	208	94	887	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	876	477	110	36	200	453	276	591	208	94	887	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	876	477	110	36	200	453	276	591	208	94	887	16
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	3800	1750	1750	3800	1750	3150	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.28	0.13	0.06	0.02	0.05	0.26	0.09	0.16	0.12	0.05	0.23	0.01
Crit Moves:	****					****	****				****	
Green Time:	44.8	45.6	58.9	26.7	27.6	41.7	14.1	38.4	83.2	13.3	37.6	64.3
Volume/Cap:	0.84	0.37	0.15	0.10	0.26	0.84	0.84	0.55	0.19	0.55	0.84	0.02
Delay/Veh:	48.9	34.5	23.4	45.0	45.8	55.9	77.8	42.1	11.7	62.3	52.9	19.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	48.9	34.5	23.4	45.0	45.8	55.9	77.8	42.1	11.7	62.3	52.9	19.1
LOS by Move:	D	C-	C	D	D	E+	E-	D	B+	E	D-	B-
HCM2k95thQ:	36	14	6	3	7	34	17	20	8	8	32	1

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3293: N. Capitol Avenue & Berryessa Road



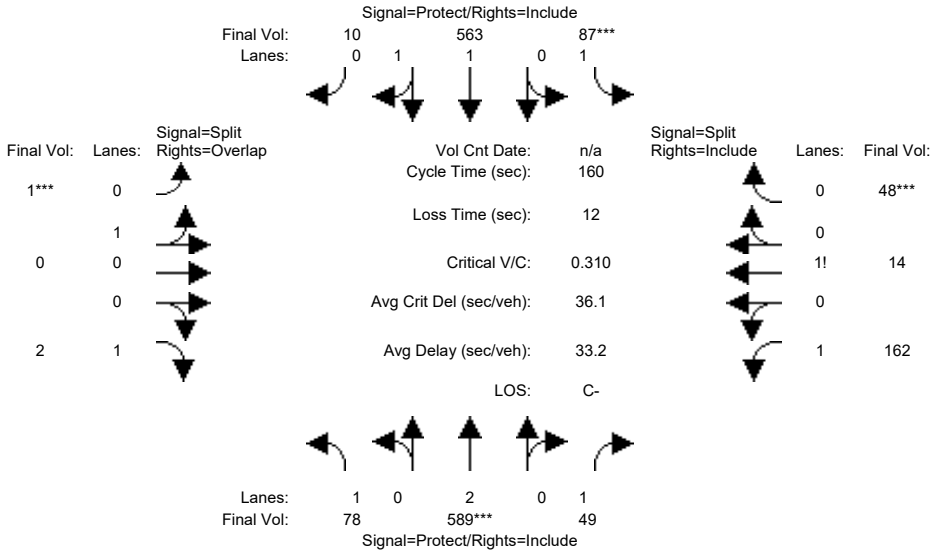
Street Name:	N. Capitol Avenue						Berryessa Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	404	284	84	80	748	343	380	737	602	189	734	31
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	404	284	84	80	748	343	380	737	602	189	734	31
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	404	284	84	80	748	343	380	737	602	189	734	31
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	404	284	84	80	748	343	380	737	602	189	734	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	404	284	84	80	748	343	380	737	602	189	734	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	404	284	84	80	748	343	380	737	602	189	734	31
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	3800	1750	1750	3800	1750	3150	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.13	0.07	0.05	0.05	0.20	0.20	0.12	0.19	0.34	0.11	0.19	0.02
Crit Moves:	****				****				****	****		
Green Time:	33.2	48.3	76.2	35.9	51.0	83.2	32.2	55.9	89.1	28.0	51.6	87.5
Volume/Cap:	0.70	0.28	0.11	0.23	0.70	0.42	0.67	0.62	0.70	0.70	0.67	0.04
Delay/Veh:	72.3	52.2	31.5	60.8	59.6	32.7	72.2	54.2	37.5	79.6	58.4	24.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	72.3	52.2	31.5	60.8	59.6	32.7	72.2	54.2	37.5	79.6	58.4	24.2
LOS by Move:	E	D-	C	E	E+	C-	E	D-	D+	E-	E+	C
HCM2k95thQ:	22	11	6	8	31	23	23	30	45	20	30	2

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3387: N. Capitol Avenue & Ohlone Drive



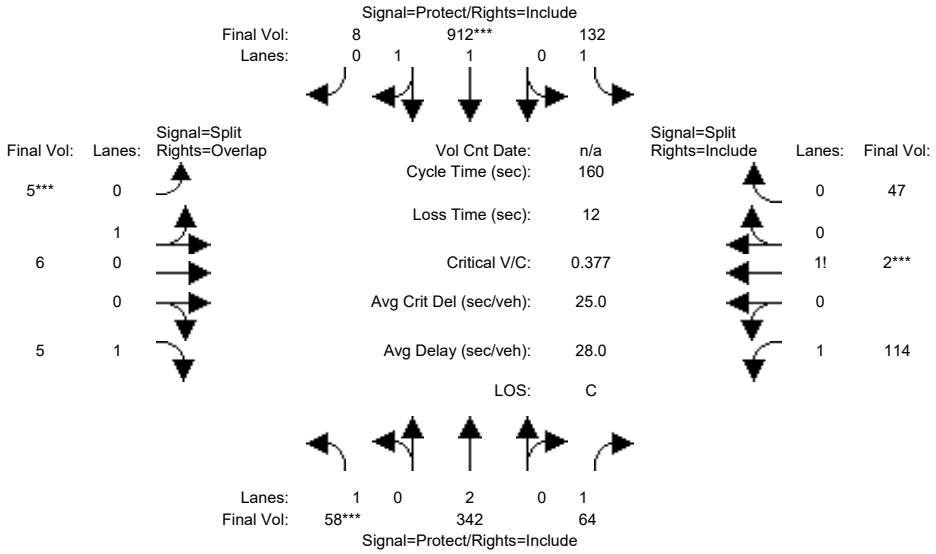
Street Name:	N. Capitol Avenue						Ohlone Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	78	589	49	87	563	10	1	0	2	162	14	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	78	589	49	87	563	10	1	0	2	162	14	48
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	78	589	49	87	563	10	1	0	2	162	14	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	78	589	49	87	563	10	1	0	2	162	14	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	589	49	87	563	10	1	0	2	162	14	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	589	49	87	563	10	1	0	2	162	14	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.97	0.95	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	2.00	1.00	1.00	1.96	0.04	1.00	0.00	1.00	1.57	0.10	0.33
Final Sat.:	1750	3800	1750	1750	3635	65	1800	0	1750	2741	171	587
Capacity Analysis Module:												
Vol/Sat:	0.04	0.16	0.03	0.05	0.15	0.15	0.00	0.00	0.00	0.06	0.08	0.08
Crit Moves:		****		****			****					****
Green Time:	22.0	74.7	74.7	24.0	76.6	76.6	10.0	0.0	32.0	39.4	39.4	39.4
Volume/Cap:	0.32	0.33	0.06	0.33	0.32	0.32	0.01	0.00	0.01	0.24	0.33	0.33
Delay/Veh:	63.0	27.0	23.4	61.6	25.8	25.8	70.4	0.0	51.2	48.5	49.8	49.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	63.0	27.0	23.4	61.6	25.8	25.8	70.4	0.0	51.2	48.5	49.8	49.8
LOS by Move:	E	C	C	E	C	C	E	A	D-	D	D	D
HCM2k95thQ:	7	16	3	8	16	16	0	0	0	9	12	12

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3387: N. Capitol Avenue & Ohlone Drive



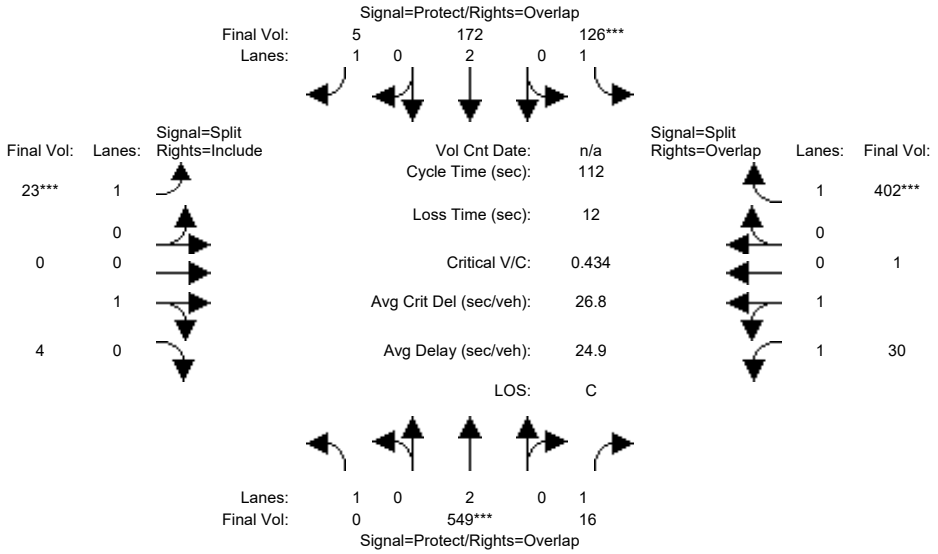
Street Name:	N. Capitol Avenue						Ohlone Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	58	342	64	132	912	8	5	6	5	114	2	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	342	64	132	912	8	5	6	5	114	2	47
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	342	64	132	912	8	5	6	5	114	2	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	58	342	64	132	912	8	5	6	5	114	2	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	342	64	132	912	8	5	6	5	114	2	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	58	342	64	132	912	8	5	6	5	114	2	47
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.97	0.95	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	2.00	1.00	1.00	1.98	0.02	0.45	0.55	1.00	1.54	0.02	0.44
Final Sat.:	1750	3800	1750	1750	3668	32	818	982	1750	2691	33	776
Capacity Analysis Module:												
Vol/Sat:	0.03	0.09	0.04	0.08	0.25	0.25	0.01	0.01	0.00	0.04	0.06	0.06
Crit Moves:	****				****		****				****	
Green Time:	13.4	61.8	61.8	51.8	100	100.2	10.0	10.0	23.4	24.4	24.4	24.4
Volume/Cap:	0.40	0.23	0.09	0.23	0.40	0.40	0.10	0.10	0.02	0.28	0.40	0.40
Delay/Veh:	71.3	33.2	31.3	39.8	15.0	15.0	71.1	71.1	58.5	60.2	61.8	61.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	71.3	33.2	31.3	39.8	15.0	15.0	71.1	71.1	58.5	60.2	61.8	61.8
LOS by Move:	E	C-	C	D	B	B	E	E	E+	E	E	E
HCM2k95thQ:	6	10	4	10	20	20	1	1	0	7	10	10

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3388: N. Capitol Avenue & Penitencia Creek Road



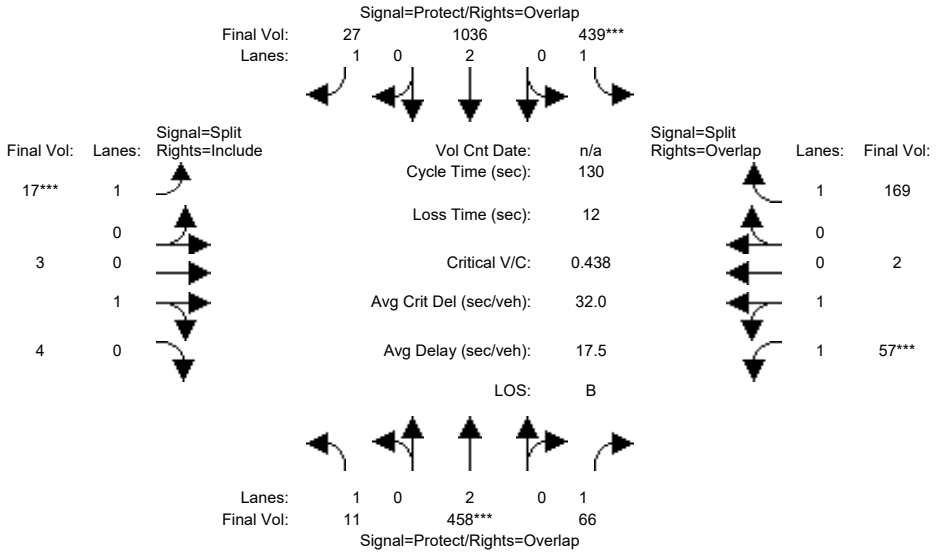
Street Name:	N. Capitol Avenue						Penitencia Creek Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	0	0	0	10	0	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	549	16	126	172	5	23	0	4	30	1	402
Growth Adj:	1.00	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	549	16	126	172	5	23	0	4	30	1	402
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	549	16	126	172	5	23	0	4	30	1	402
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	549	16	126	172	5	23	0	4	30	1	402
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	549	16	126	172	5	23	0	4	30	1	402
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	549	16	126	172	5	23	0	4	30	1	402
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.95	0.93	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.00	1.00	1.94	0.06	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	0	1800	3435	115	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.01	0.07	0.05	0.00	0.01	0.00	0.00	0.01	0.01	0.23
Crit Moves:		****		****			****					****
Green Time:	0.0	37.3	78.0	18.6	55.9	59.3	3.4	0.0	3.4	40.7	40.7	59.3
Volume/Cap:	0.00	0.43	0.01	0.43	0.09	0.01	0.43	0.00	0.07	0.02	0.02	0.43
Delay/Veh:	0.0	29.4	5.2	43.0	14.7	12.4	59.0	0.0	53.3	22.9	22.9	16.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	29.4	5.2	43.0	14.7	12.4	59.0	0.0	53.3	22.9	22.9	16.4
LOS by Move:	A	C	A	D	B	B	E+	A	D-	C+	C+	B
HCM2k95thQ:	0	14	0	8	3	0	3	0	0	1	1	17

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3388: N. Capitol Avenue & Penitencia Creek Road



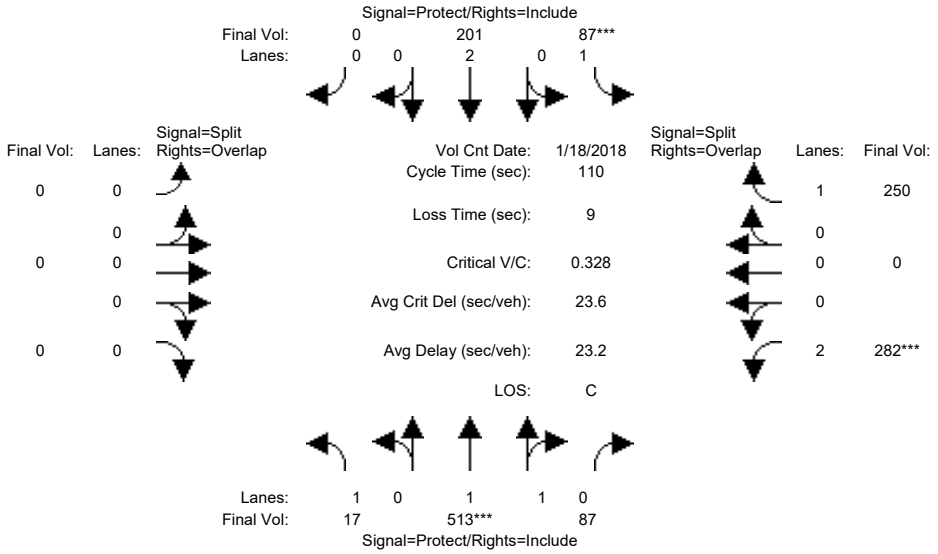
Street Name:	N. Capitol Avenue						Penitencia Creek Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	0	10	10	7	10	0	0	0	0	10	0	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	11	458	66	439	1036	27	17	3	4	57	2	169
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	458	66	439	1036	27	17	3	4	57	2	169
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	458	66	439	1036	27	17	3	4	57	2	169
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	458	66	439	1036	27	17	3	4	57	2	169
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	458	66	439	1036	27	17	3	4	57	2	169
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	458	66	439	1036	27	17	3	4	57	2	169
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.95	0.93	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.43	0.57	1.93	0.07	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	771	1029	3430	120	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.12	0.04	0.25	0.27	0.02	0.01	0.00	0.00	0.02	0.02	0.10
Crit Moves:		****		****			****			****		
Green Time:	2.4	34.2	44.2	71.1	103	105.6	2.8	2.8	2.8	10.0	10.0	81.1
Volume/Cap:	0.34	0.46	0.11	0.46	0.34	0.02	0.46	0.18	0.18	0.22	0.22	0.15
Delay/Veh:	69.4	40.5	29.5	18.2	4.0	2.3	71.6	64.8	64.8	56.7	56.7	10.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	69.4	40.5	29.5	18.2	4.0	2.3	71.6	64.8	64.8	56.7	56.7	10.3
LOS by Move:	E	D	C	B-	A	A	E	E	E	E+	E+	B+
HCM2k95thQ:	2	15	4	20	11	0	3	1	1	3	3	6

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3390: N. Capitol Avenue & Sierra Road



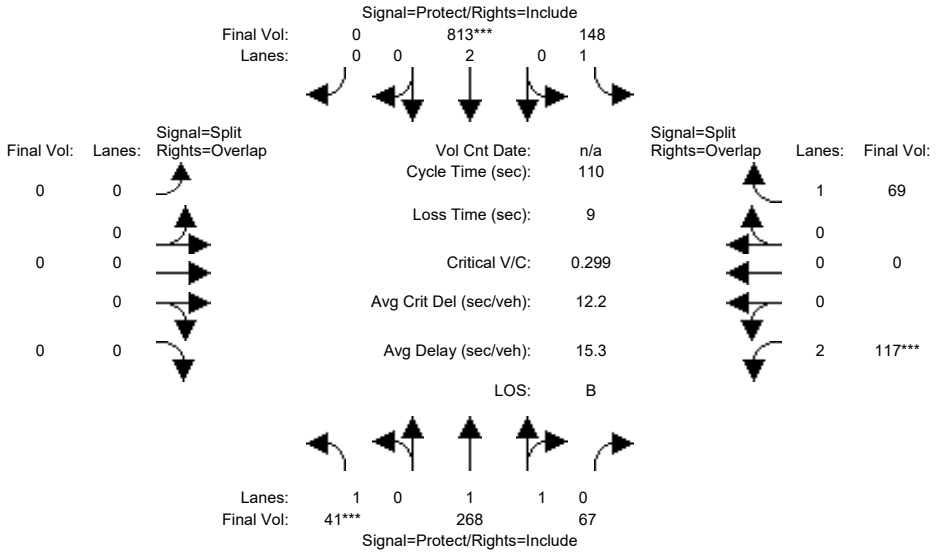
Street Name:	N. Capitol Avenue						Sierra Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	0	0	0	0	10	0	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 18 Jan 2018 <<												
Base Vol:	17	513	87	87	201	0	0	0	0	282	0	250
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	513	87	87	201	0	0	0	0	282	0	250
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	513	87	87	201	0	0	0	0	282	0	250
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	513	87	87	201	0	0	0	0	282	0	250
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	513	87	87	201	0	0	0	0	282	0	250
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	17	513	87	87	201	0	0	0	0	282	0	250
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	1.70	0.30	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	1750	3163	536	1750	3800	0	0	0	0	3150	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.16	0.16	0.05	0.05	0.00	0.00	0.00	0.00	0.09	0.00	0.14
Crit Moves:		****		****						****		
Green Time:	29.2	54.3	54.3	16.7	41.8	0.0	0.0	0.0	0.0	30.0	0.0	46.7
Volume/Cap:	0.04	0.33	0.33	0.33	0.14	0.00	0.00	0.00	0.00	0.33	0.00	0.34
Delay/Veh:	30.0	16.9	16.9	42.4	22.4	0.0	0.0	0.0	0.0	32.2	0.0	21.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.0	16.9	16.9	42.4	22.4	0.0	0.0	0.0	0.0	32.2	0.0	21.5
LOS by Move:	C	B	B	D	C+	A	A	A	A	C-	A	C+
HCM2k95thQ:	1	12	12	6	4	0	0	0	0	9	0	12

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3390: N. Capitol Avenue & Sierra Road



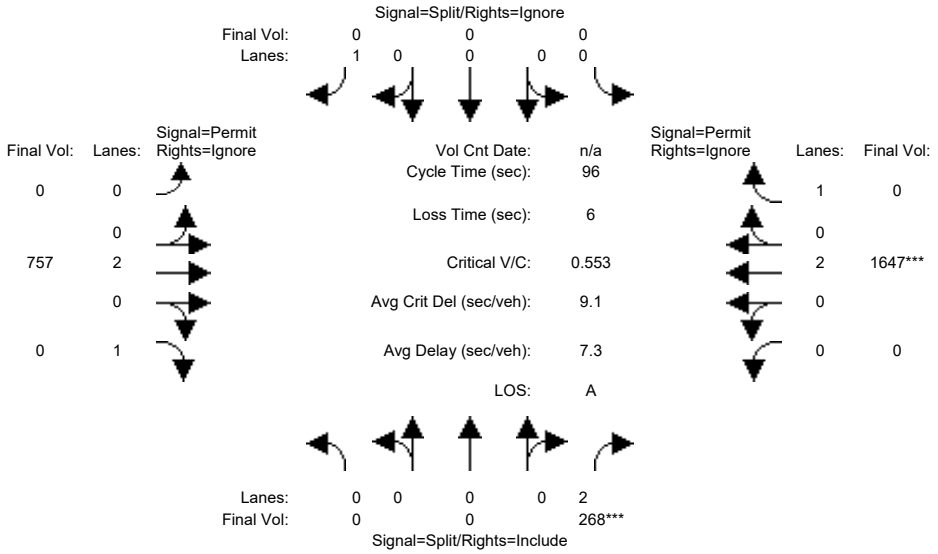
Street Name:	N. Capitol Avenue						Sierra Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	0	0	0	0	10	0	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	41	268	67	148	813	0	0	0	0	117	0	69
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	268	67	148	813	0	0	0	0	117	0	69
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	268	67	148	813	0	0	0	0	117	0	69
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	41	268	67	148	813	0	0	0	0	117	0	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	268	67	148	813	0	0	0	0	117	0	69
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	41	268	67	148	813	0	0	0	0	117	0	69
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	1.59	0.41	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	1750	2959	740	1750	3800	0	0	0	0	3150	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.09	0.09	0.08	0.21	0.00	0.00	0.00	0.00	0.04	0.00	0.04
Crit Moves:	****				****					****		
Green Time:	8.6	45.2	45.2	42.1	78.7	0.0	0.0	0.0	0.0	13.7	0.0	55.8
Volume/Cap:	0.30	0.22	0.22	0.22	0.30	0.00	0.00	0.00	0.00	0.30	0.00	0.08
Delay/Veh:	49.1	21.0	21.0	23.1	5.7	0.0	0.0	0.0	0.0	44.2	0.0	14.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.1	21.0	21.0	23.1	5.7	0.0	0.0	0.0	0.0	44.2	0.0	14.0
LOS by Move:	D	C+	C+	C	A	A	A	A	A	D	A	B
HCM2k95thQ:	3	7	7	7	10	0	0	0	0	5	0	3

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3948: I-680 Northbound Off-Ramp and Berryessa Road



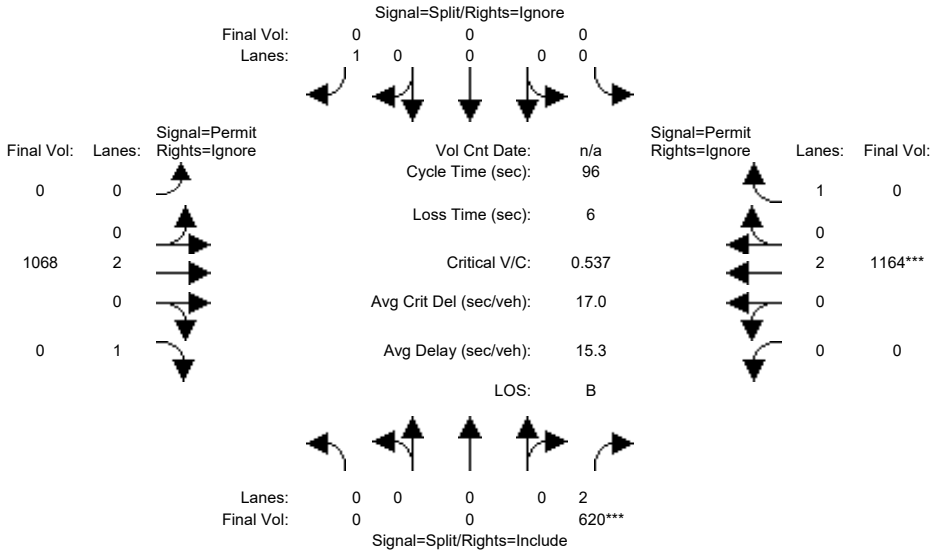
Street Name:	I-680 Northbound Off-Ramp						Berryessa Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	0	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	268	0	0	237	0	757	620	0	1647	622
Growth Adj:	1.00	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	268	0	0	237	0	757	620	0	1647	622
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	268	0	0	237	0	757	620	0	1647	622
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	268	0	0	0	0	757	0	0	1647	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	268	0	0	0	0	757	0	0	1647	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	268	0	0	0	0	757	0	0	1647	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.83	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	2.00	0.00	0.00	1.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	0	0	3150	0	0	1750	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.43	0.00
Crit Moves:			****								****	
Green Time:	0.0	0.0	14.8	0.0	0.0	0.0	0.0	75.2	0.0	0.0	75.2	0.0
Volume/Cap:	0.00	0.00	0.55	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.55	0.00
Delay/Veh:	0.0	0.0	39.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	4.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	39.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	4.2	0.0
LOS by Move:	A	A	D+	A	A	A	A	A	A	A	A	A
HCM2k95thQ:	0	0	10	0	0	0	0	6	0	0	18	0

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3948: I-680 Northbound Off-Ramp and Berryessa Road



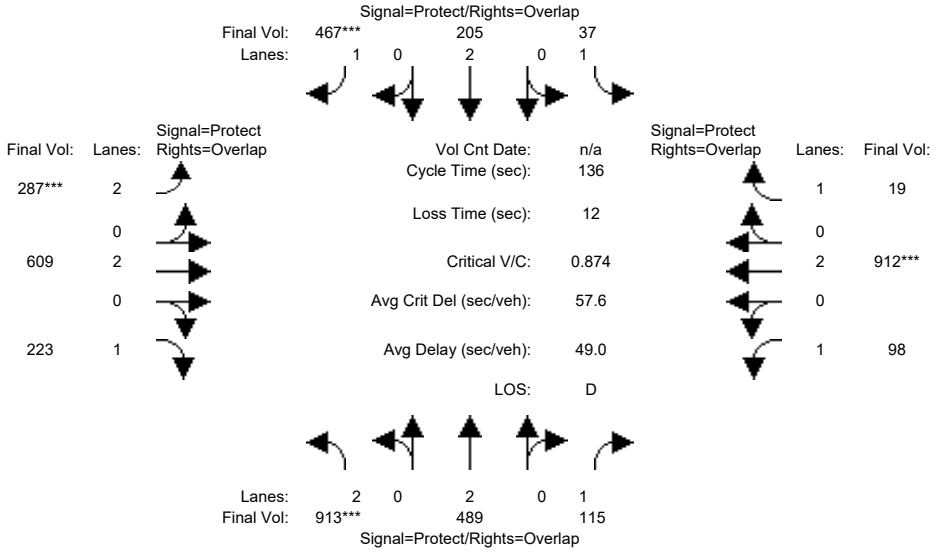
Street Name:	I-680 Northbound Off-Ramp						Berryessa Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	0	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	620	0	0	336	0	1068	438	0	1164	328
Growth Adj:	1.00	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	620	0	0	336	0	1068	438	0	1164	328
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	620	0	0	336	0	1068	438	0	1164	328
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	620	0	0	0	0	1068	0	0	1164	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	620	0	0	0	0	1068	0	0	1164	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	620	0	0	0	0	1068	0	0	1164	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.83	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	2.00	0.00	0.00	1.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	0	0	3150	0	0	1750	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.31	0.00
Crit Moves:			****								****	
Green Time:	0.0	0.0	35.2	0.0	0.0	0.0	0.0	54.8	0.0	0.0	54.8	0.0
Volume/Cap:	0.00	0.00	0.54	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.54	0.00
Delay/Veh:	0.0	0.0	24.5	0.0	0.0	0.0	0.0	12.5	0.0	0.0	13.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	24.5	0.0	0.0	0.0	0.0	12.5	0.0	0.0	13.0	0.0
LOS by Move:	A	A	C	A	A	A	A	B	A	A	B	A
HCM2k95thQ:	0	0	17	0	0	0	0	18	0	0	20	0

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3293: N. Capitol Avenue & Berryessa Road



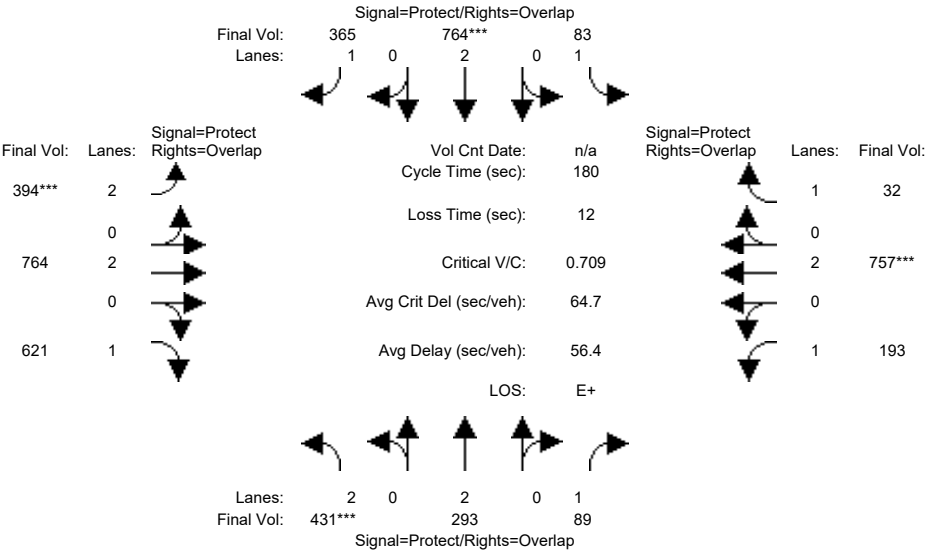
Street Name:	N. Capitol Avenue						Berryessa Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	913	489	115	37	205	467	287	609	223	98	912	19
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	913	489	115	37	205	467	287	609	223	98	912	19
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	913	489	115	37	205	467	287	609	223	98	912	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	913	489	115	37	205	467	287	609	223	98	912	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	913	489	115	37	205	467	287	609	223	98	912	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	913	489	115	37	205	467	287	609	223	98	912	19
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	3800	1750	1750	3800	1750	3150	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.29	0.13	0.07	0.02	0.05	0.27	0.09	0.16	0.13	0.06	0.24	0.01
Crit Moves:	****					****	****				****	
Green Time:	45.1	46.1	59.5	26.3	27.4	41.5	14.2	38.2	83.3	13.3	37.4	63.7
Volume/Cap:	0.87	0.38	0.15	0.11	0.27	0.87	0.87	0.57	0.21	0.57	0.87	0.02
Delay/Veh:	51.1	34.3	23.1	45.3	46.1	59.5	81.9	42.6	11.8	63.1	55.4	19.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.1	34.3	23.1	45.3	46.1	59.5	81.9	42.6	11.8	63.1	55.4	19.4
LOS by Move:	D-	C-	C	D	D	E+	F	D	B+	E	E+	B-
HCM2kAvgQ:	23	7	3	1	3	21	10	11	4	4	19	0

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3293: N. Capitol Avenue & Berryessa Road



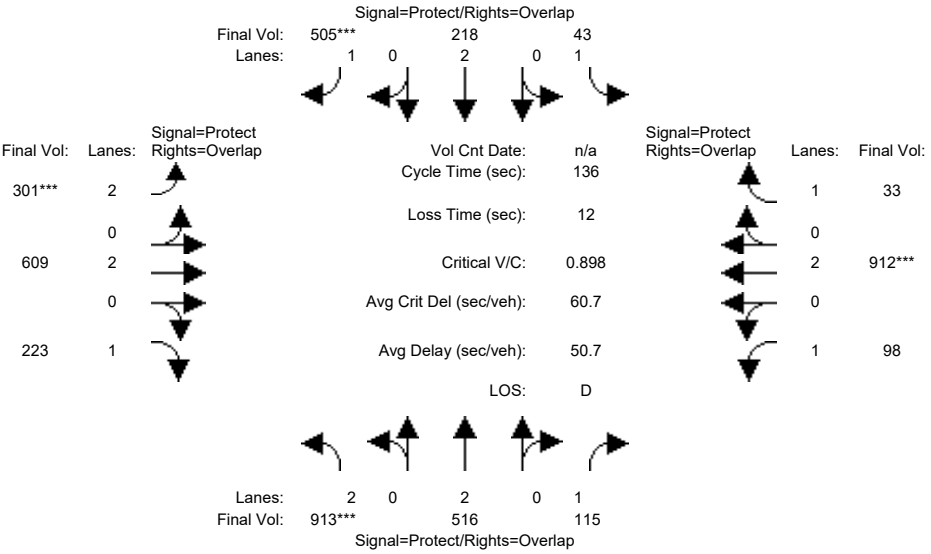
Street Name:	N. Capitol Avenue						Berryessa Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	431	293	89	83	764	365	394	764	621	193	757	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	431	293	89	83	764	365	394	764	621	193	757	32
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	431	293	89	83	764	365	394	764	621	193	757	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	431	293	89	83	764	365	394	764	621	193	757	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	431	293	89	83	764	365	394	764	621	193	757	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	431	293	89	83	764	365	394	764	621	193	757	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	3800	1750	1750	3800	1750	3150	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.14	0.08	0.05	0.05	0.20	0.21	0.13	0.20	0.35	0.11	0.20	0.02
Crit Moves:	****				****		****				****	
Green Time:	34.7	49.8	77.5	35.9	51.0	82.7	31.7	54.6	89.4	27.6	50.5	86.4
Volume/Cap:	0.71	0.28	0.12	0.24	0.71	0.45	0.71	0.66	0.71	0.72	0.71	0.04
Delay/Veh:	71.8	51.1	30.8	60.9	60.1	33.6	74.0	56.1	38.2	81.5	60.4	24.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	71.8	51.1	30.8	60.9	60.1	33.6	74.0	56.1	38.2	81.5	60.4	24.8
LOS by Move:	E	D-	C	E	E	C-	E	E+	D+	F	E	C
HCM2kAvgQ:	13	6	3	4	19	14	13	18	29	11	19	1

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3293: N. Capitol Avenue & Berryessa Road



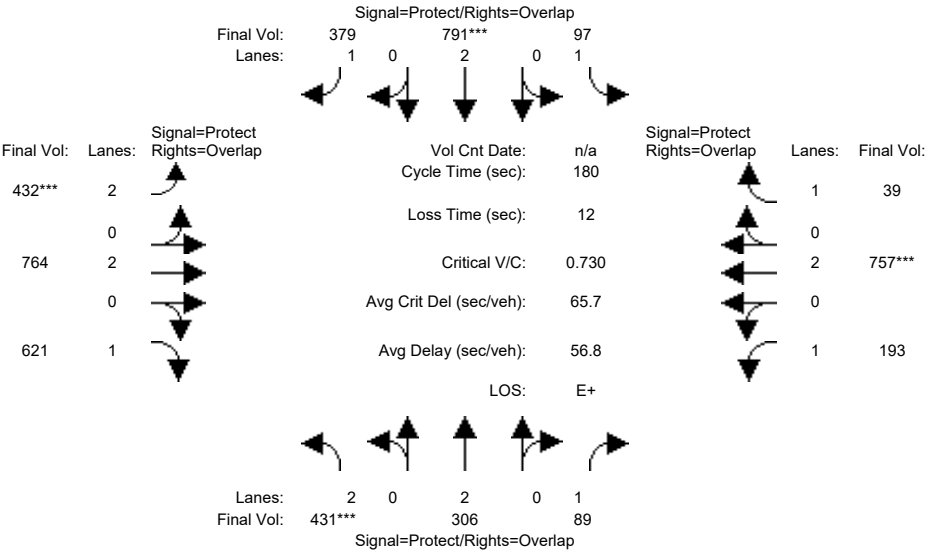
Street Name:	N. Capitol Avenue						Berryessa Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	913	489	115	37	205	467	287	609	223	98	912	19
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	913	489	115	37	205	467	287	609	223	98	912	19
Added Vol:	0	27	0	6	13	38	14	0	0	0	0	14
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	913	516	115	43	218	505	301	609	223	98	912	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	913	516	115	43	218	505	301	609	223	98	912	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	913	516	115	43	218	505	301	609	223	98	912	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	913	516	115	43	218	505	301	609	223	98	912	33
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	3800	1750	1750	3800	1750	3150	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.29	0.14	0.07	0.02	0.06	0.29	0.10	0.16	0.13	0.06	0.24	0.02
Crit Moves:	****					****	****				****	
Green Time:	43.9	47.5	60.6	25.7	29.2	43.7	14.5	37.7	81.6	13.2	36.4	62.1
Volume/Cap:	0.90	0.39	0.15	0.13	0.27	0.90	0.90	0.58	0.21	0.58	0.90	0.04
Delay/Veh:	54.5	33.5	22.4	46.0	44.6	61.1	85.4	43.1	12.6	63.7	58.6	20.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	54.5	33.5	22.4	46.0	44.6	61.1	85.4	43.1	12.6	63.7	58.6	20.5
LOS by Move:	D-	C-	C+	D	D	E	F	D	B	E	E+	C+
HCM2k95thQ:	39	15	6	3	7	39	19	20	9	8	34	2

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3293: N. Capitol Avenue & Berryessa Road



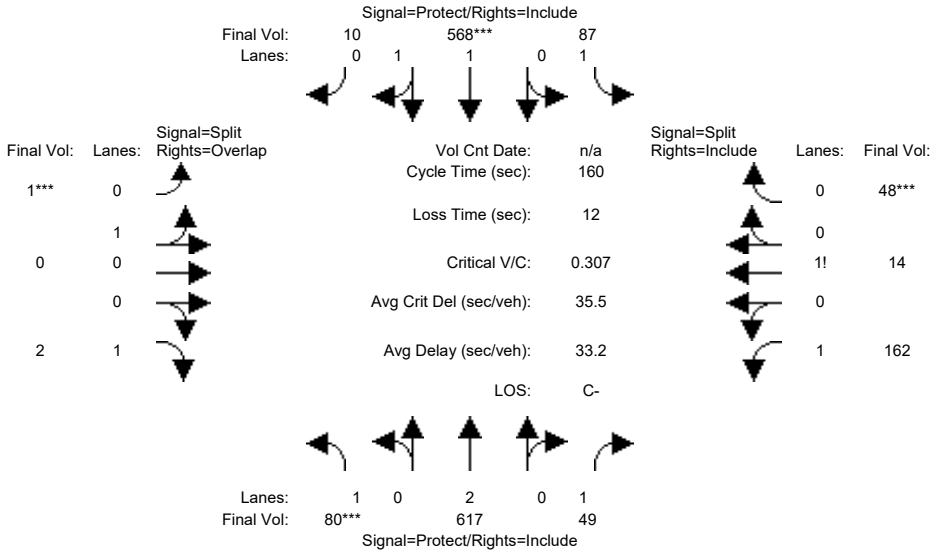
Street Name:	N. Capitol Avenue						Berryessa Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	431	293	89	83	764	365	394	764	621	193	757	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	431	293	89	83	764	365	394	764	621	193	757	32
Added Vol:	0	13	0	14	27	14	38	0	0	0	0	7
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	431	306	89	97	791	379	432	764	621	193	757	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	431	306	89	97	791	379	432	764	621	193	757	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	431	306	89	97	791	379	432	764	621	193	757	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	431	306	89	97	791	379	432	764	621	193	757	39
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	3800	1750	1750	3800	1750	3150	3800	1750	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.14	0.08	0.05	0.06	0.21	0.22	0.14	0.20	0.35	0.11	0.20	0.02
Crit Moves:	****				****		****				****	
Green Time:	33.7	50.3	78.2	34.7	51.3	85.1	33.8	55.1	88.8	27.9	49.1	83.8
Volume/Cap:	0.73	0.29	0.12	0.29	0.73	0.46	0.73	0.66	0.72	0.71	0.73	0.05
Delay/Veh:	73.5	50.9	30.4	62.5	60.6	32.3	73.4	55.6	38.8	80.9	62.1	26.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	73.5	50.9	30.4	62.5	60.6	32.3	73.4	55.6	38.8	80.9	62.1	26.3
LOS by Move:	E	D	C	E	E	C-	E	E+	D+	F	E	C
HCM2k95thQ:	24	12	6	9	33	26	26	32	47	20	32	2

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3387: N. Capitol Avenue & Ohlone Drive



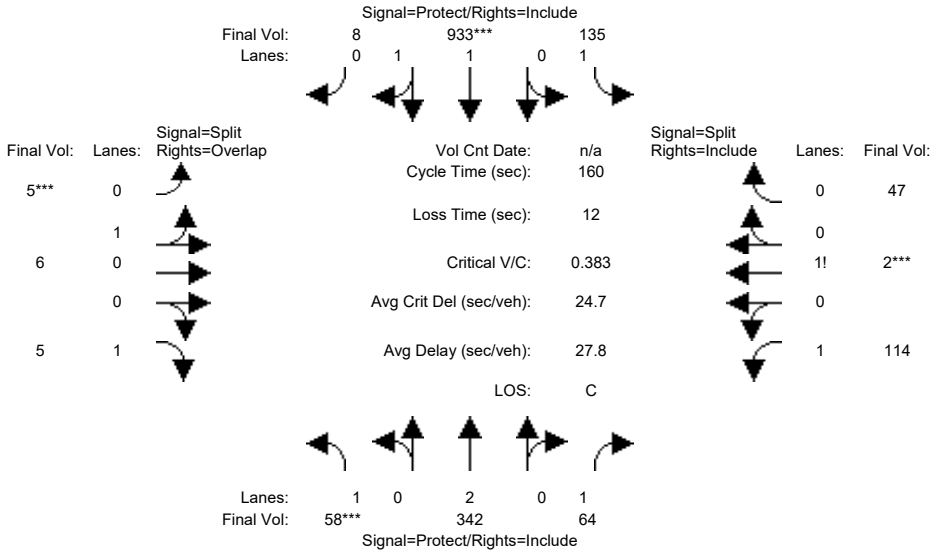
Street Name:	N. Capitol Avenue						Ohlone Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	80	617	49	87	568	10	1	0	2	162	14	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	617	49	87	568	10	1	0	2	162	14	48
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	617	49	87	568	10	1	0	2	162	14	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	617	49	87	568	10	1	0	2	162	14	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	617	49	87	568	10	1	0	2	162	14	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	617	49	87	568	10	1	0	2	162	14	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.97	0.95	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	2.00	1.00	1.00	1.96	0.04	1.00	0.00	1.00	1.57	0.10	0.33
Final Sat.:	1750	3800	1750	1750	3636	64	1800	0	1750	2741	171	587
Capacity Analysis Module:												
Vol/Sat:	0.05	0.16	0.03	0.05	0.16	0.16	0.00	0.00	0.00	0.06	0.08	0.08
Crit Moves:	****				****		****					****
Green Time:	22.2	75.2	75.2	23.0	76.0	76.0	10.0	0.0	32.2	39.8	39.8	39.8
Volume/Cap:	0.33	0.35	0.06	0.35	0.33	0.33	0.01	0.00	0.01	0.24	0.33	0.33
Delay/Veh:	62.9	26.9	23.1	62.5	26.2	26.2	70.4	0.0	51.1	48.2	49.5	49.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	62.9	26.9	23.1	62.5	26.2	26.2	70.4	0.0	51.1	48.2	49.5	49.5
LOS by Move:	E	C	C	E	C	C	E	A	D-	D	D	D
HCM2kAvgQ:	4	9	1	4	9	9	0	0	0	4	6	6

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3387: N. Capitol Avenue & Ohlone Drive



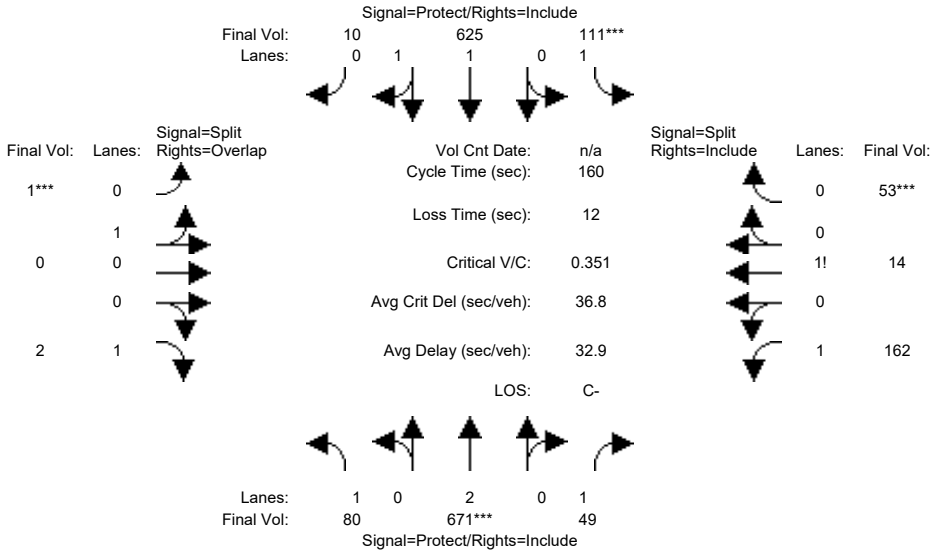
Street Name:	N. Capitol Avenue						Ohlone Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	58	342	64	135	933	8	5	6	5	114	2	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	342	64	135	933	8	5	6	5	114	2	47
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	342	64	135	933	8	5	6	5	114	2	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	58	342	64	135	933	8	5	6	5	114	2	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	342	64	135	933	8	5	6	5	114	2	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	58	342	64	135	933	8	5	6	5	114	2	47
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.97	0.95	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	2.00	1.00	1.00	1.98	0.02	0.45	0.55	1.00	1.54	0.02	0.44
Final Sat.:	1750	3800	1750	1750	3669	31	818	982	1750	2691	33	776
Capacity Analysis Module:												
Vol/Sat:	0.03	0.09	0.04	0.08	0.25	0.25	0.01	0.01	0.00	0.04	0.06	0.06
Crit Moves:	****				****		****				****	
Green Time:	13.1	61.4	61.4	52.6	101	100.8	10.0	10.0	23.1	24.0	24.0	24.0
Volume/Cap:	0.40	0.23	0.10	0.23	0.40	0.40	0.10	0.10	0.02	0.28	0.40	0.40
Delay/Veh:	71.6	33.5	31.6	39.3	14.8	14.8	71.1	71.1	58.7	60.6	62.2	62.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	71.6	33.5	31.6	39.3	14.8	14.8	71.1	71.1	58.7	60.6	62.2	62.2
LOS by Move:	E	C-	C	D	B	B	E	E	E+	E	E	E
HCM2kAvgQ:	3	5	2	5	11	11	1	1	0	4	5	5

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3387: N. Capitol Avenue & Ohlone Drive



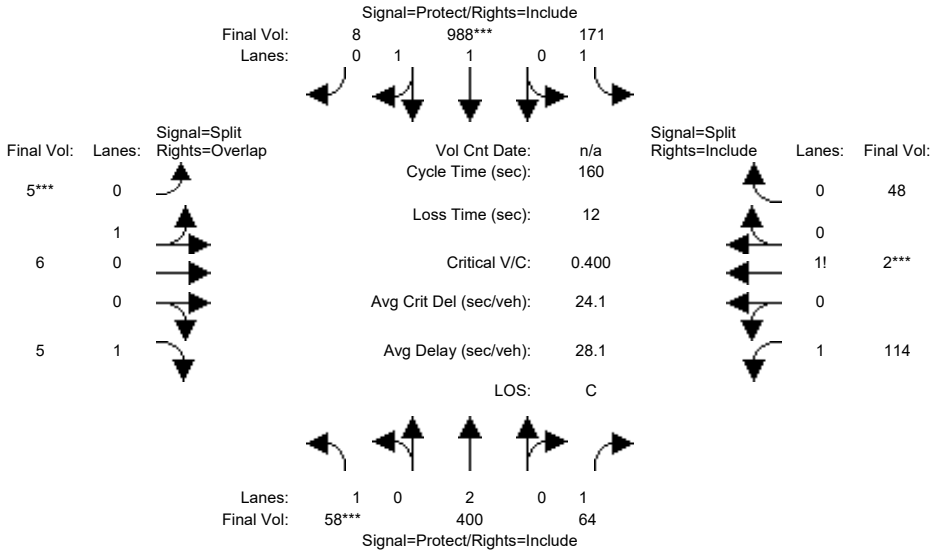
Street Name:	N. Capitol Avenue						Ohlone Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	80	617	49	87	568	10	1	0	2	162	14	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	617	49	87	568	10	1	0	2	162	14	48
Added Vol:	0	54	0	24	57	0	0	0	0	0	0	5
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	671	49	111	625	10	1	0	2	162	14	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	671	49	111	625	10	1	0	2	162	14	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	671	49	111	625	10	1	0	2	162	14	53
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	671	49	111	625	10	1	0	2	162	14	53
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.97	0.95	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	2.00	1.00	1.00	1.97	0.03	1.00	0.00	1.00	1.55	0.09	0.36
Final Sat.:	1750	3800	1750	1750	3642	58	1800	0	1750	2708	166	627
Capacity Analysis Module:												
Vol/Sat:	0.05	0.18	0.03	0.06	0.17	0.17	0.00	0.00	0.00	0.06	0.08	0.08
Crit Moves:		****		****			****					****
Green Time:	21.5	75.1	75.1	27.0	80.6	80.6	10.0	0.0	31.5	36.0	36.0	36.0
Volume/Cap:	0.34	0.38	0.06	0.38	0.34	0.34	0.01	0.00	0.01	0.27	0.38	0.38
Delay/Veh:	63.7	27.5	23.2	59.9	23.9	23.9	70.4	0.0	51.7	51.3	52.9	52.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	63.7	27.5	23.2	59.9	23.9	23.9	70.4	0.0	51.7	51.3	52.9	52.9
LOS by Move:	E	C	C	E+	C	C	E	A	D-	D-	D-	D-
HCM2k95thQ:	7	19	3	10	17	17	0	0	0	9	13	13

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3387: N. Capitol Avenue & Ohlone Drive



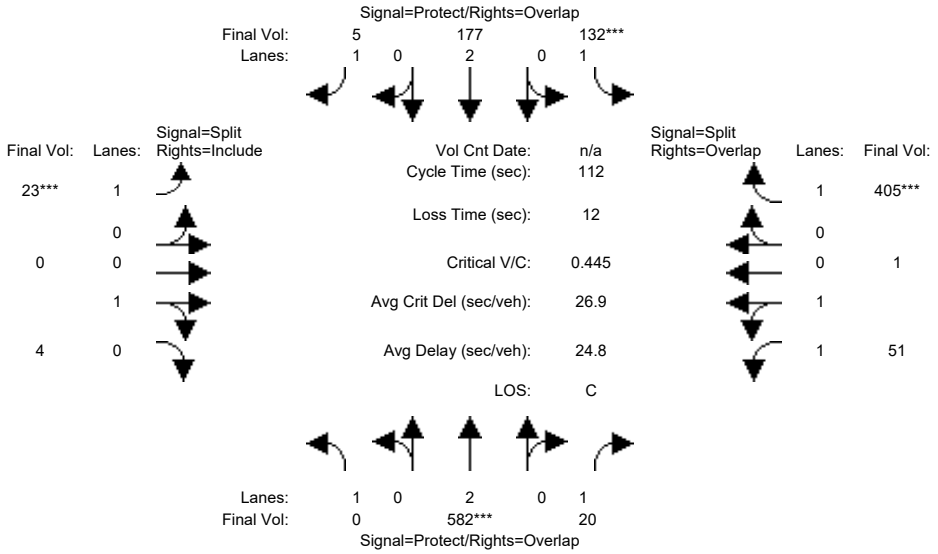
Street Name:	N. Capitol Avenue						Ohlone Drive					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	58	342	64	135	933	8	5	6	5	114	2	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	342	64	135	933	8	5	6	5	114	2	47
Added Vol:	0	58	0	36	55	0	0	0	0	0	0	1
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	400	64	171	988	8	5	6	5	114	2	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	58	400	64	171	988	8	5	6	5	114	2	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	400	64	171	988	8	5	6	5	114	2	48
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	58	400	64	171	988	8	5	6	5	114	2	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.97	0.95	0.95	0.95	0.92	0.92	0.92	0.92
Lanes:	1.00	2.00	1.00	1.00	1.98	0.02	0.45	0.55	1.00	1.53	0.02	0.45
Final Sat.:	1750	3800	1750	1750	3670	30	818	982	1750	2682	33	785
Capacity Analysis Module:												
Vol/Sat:	0.03	0.11	0.04	0.10	0.27	0.27	0.01	0.01	0.00	0.04	0.06	0.06
Crit Moves:	****				****		****				****	
Green Time:	12.6	59.5	59.5	55.3	102	102.2	10.0	10.0	22.6	23.2	23.2	23.2
Volume/Cap:	0.42	0.28	0.10	0.28	0.42	0.42	0.10	0.10	0.02	0.29	0.42	0.42
Delay/Veh:	72.3	35.4	32.8	38.3	14.4	14.4	71.1	71.1	59.2	61.4	63.0	63.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	72.3	35.4	32.8	38.3	14.4	14.4	71.1	71.1	59.2	61.4	63.0	63.0
LOS by Move:	E	D+	C-	D+	B	B	E	E	E+	E	E	E
HCM2k95thQ:	6	13	4	12	22	22	1	1	0	7	11	11

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3388: N. Capitol Avenue & Penitencia Creek Road



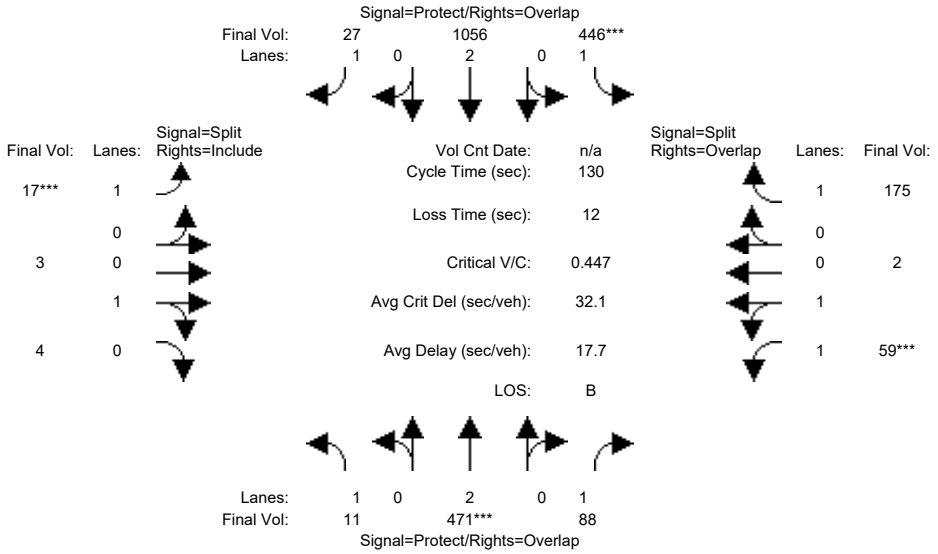
Street Name:	N. Capitol Avenue						Penitencia Creek Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	0	10	10	7	10	0	0	0	0	10	0	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	582	20	132	177	5	23	0	4	51	1	405
Growth Adj:	1.00	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	582	20	132	177	5	23	0	4	51	1	405
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	582	20	132	177	5	23	0	4	51	1	405
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	582	20	132	177	5	23	0	4	51	1	405
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	582	20	132	177	5	23	0	4	51	1	405
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	582	20	132	177	5	23	0	4	51	1	405
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.95	0.93	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.00	1.00	1.96	0.04	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	0	1800	3482	68	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.01	0.08	0.05	0.00	0.01	0.00	0.00	0.01	0.01	0.23
Crit Moves:		****		****			****					****
Green Time:	0.0	38.5	77.7	19.0	57.5	60.8	3.3	0.0	3.3	39.2	39.2	58.2
Volume/Cap:	0.00	0.45	0.02	0.45	0.09	0.01	0.45	0.00	0.08	0.04	0.04	0.45
Delay/Veh:	0.0	28.7	5.3	42.9	13.9	11.7	59.5	0.0	53.5	24.0	24.0	17.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	28.7	5.3	42.9	13.9	11.7	59.5	0.0	53.5	24.0	24.0	17.2
LOS by Move:	A	C	A	D	B	B+	E+	A	D-	C	C	B
HCM2kAvgQ:	0	8	0	4	1	0	1	0	0	1	1	9

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3388: N. Capitol Avenue & Penitencia Creek Road



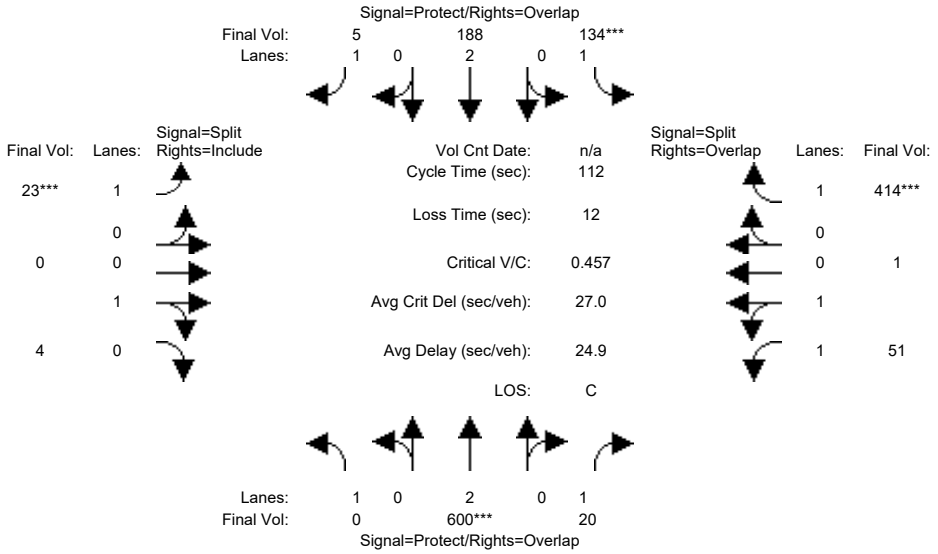
Street Name:	N. Capitol Avenue						Penitencia Creek Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	0	10	10	7	10	0	0	0	0	10	0	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	11	471	88	446	1056	27	17	3	4	59	2	175
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	471	88	446	1056	27	17	3	4	59	2	175
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	471	88	446	1056	27	17	3	4	59	2	175
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	471	88	446	1056	27	17	3	4	59	2	175
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	471	88	446	1056	27	17	3	4	59	2	175
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	471	88	446	1056	27	17	3	4	59	2	175
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.95	0.93	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.43	0.57	1.94	0.06	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	771	1029	3434	116	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.12	0.05	0.25	0.28	0.02	0.01	0.00	0.00	0.02	0.02	0.10
Crit Moves:		****		****			****			****		
Green Time:	2.3	34.5	44.5	70.8	103	105.7	2.7	2.7	2.7	10.0	10.0	80.8
Volume/Cap:	0.35	0.47	0.15	0.47	0.35	0.02	0.47	0.19	0.19	0.22	0.22	0.16
Delay/Veh:	69.8	40.4	29.8	18.4	4.0	2.3	72.2	65.0	65.0	56.8	56.8	10.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	69.8	40.4	29.8	18.4	4.0	2.3	72.2	65.0	65.0	56.8	56.8	10.4
LOS by Move:	E	D	C	B-	A	A	E	E	E	E+	E+	B+
HCM2kAvgQ:	1	8	3	11	6	0	1	0	0	1	1	3

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3388: N. Capitol Avenue & Penitencia Creek Road



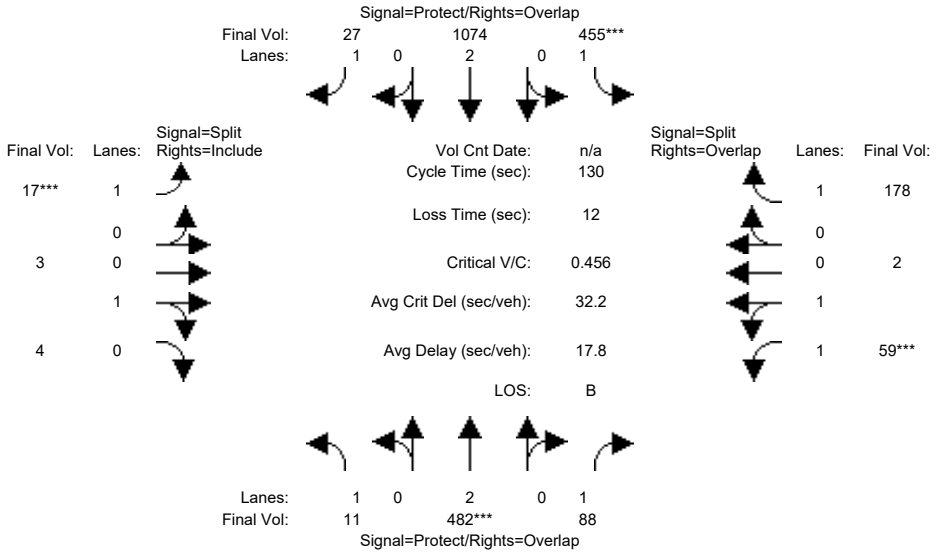
Street Name:	N. Capitol Avenue						Penitencia Creek Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	0	10	10	7	10	0	0	0	0	10	0	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	582	20	132	177	5	23	0	4	51	1	405
Growth Adj:	1.00	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	582	20	132	177	5	23	0	4	51	1	405
Added Vol:	0	18	0	2	11	0	0	0	0	0	0	9
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	600	20	134	188	5	23	0	4	51	1	414
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	600	20	134	188	5	23	0	4	51	1	414
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	600	20	134	188	5	23	0	4	51	1	414
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	600	20	134	188	5	23	0	4	51	1	414
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.95	0.93	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.00	1.00	1.96	0.04	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	0	1800	3482	68	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.16	0.01	0.08	0.05	0.00	0.01	0.00	0.00	0.01	0.01	0.24
Crit Moves:		****		****			****					****
Green Time:	0.0	38.7	78.0	18.8	57.5	60.7	3.2	0.0	3.2	39.3	39.3	58.0
Volume/Cap:	0.00	0.46	0.02	0.46	0.10	0.01	0.46	0.00	0.08	0.04	0.04	0.46
Delay/Veh:	0.0	28.7	5.2	43.1	14.0	11.8	60.0	0.0	53.6	24.0	24.0	17.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	28.7	5.2	43.1	14.0	11.8	60.0	0.0	53.6	24.0	24.0	17.4
LOS by Move:	A	C	A	D	B	B+	E+	A	D-	C	C	B
HCM2k95thQ:	0	15	0	9	3	0	3	0	0	1	1	18

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3388: N. Capitol Avenue & Penitencia Creek Road



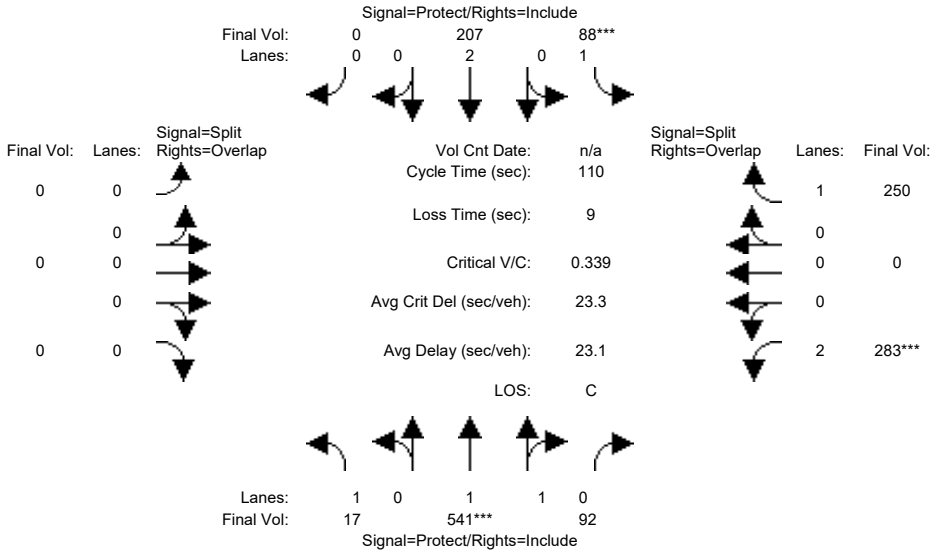
Street Name:	N. Capitol Avenue						Penitencia Creek Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	10	10	7	10	0	0	0	0	10	0	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	11	471	88	446	1056	27	17	3	4	59	2	175
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	471	88	446	1056	27	17	3	4	59	2	175
Added Vol:	0	11	0	9	18	0	0	0	0	0	0	3
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	482	88	455	1074	27	17	3	4	59	2	178
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	482	88	455	1074	27	17	3	4	59	2	178
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	482	88	455	1074	27	17	3	4	59	2	178
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	482	88	455	1074	27	17	3	4	59	2	178
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.95	0.93	0.95	0.92
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.43	0.57	1.94	0.06	1.00
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	771	1029	3434	116	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.13	0.05	0.26	0.28	0.02	0.01	0.00	0.00	0.02	0.02	0.10
Crit Moves:		****		****			****			****		
Green Time:	2.3	34.5	44.5	70.8	103	105.7	2.6	2.6	2.6	10.0	10.0	80.8
Volume/Cap:	0.36	0.48	0.15	0.48	0.36	0.02	0.48	0.19	0.19	0.22	0.22	0.16
Delay/Veh:	70.1	40.5	29.7	18.6	4.0	2.3	72.7	65.2	65.2	56.8	56.8	10.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	70.1	40.5	29.7	18.6	4.0	2.3	72.7	65.2	65.2	56.8	56.8	10.4
LOS by Move:	E	D	C	B-	A	A	E	E	E	E+	E+	B+
HCM2k95thQ:	2	15	5	21	12	0	3	1	1	3	3	6

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3390: N. Capitol Avenue & Sierra Road



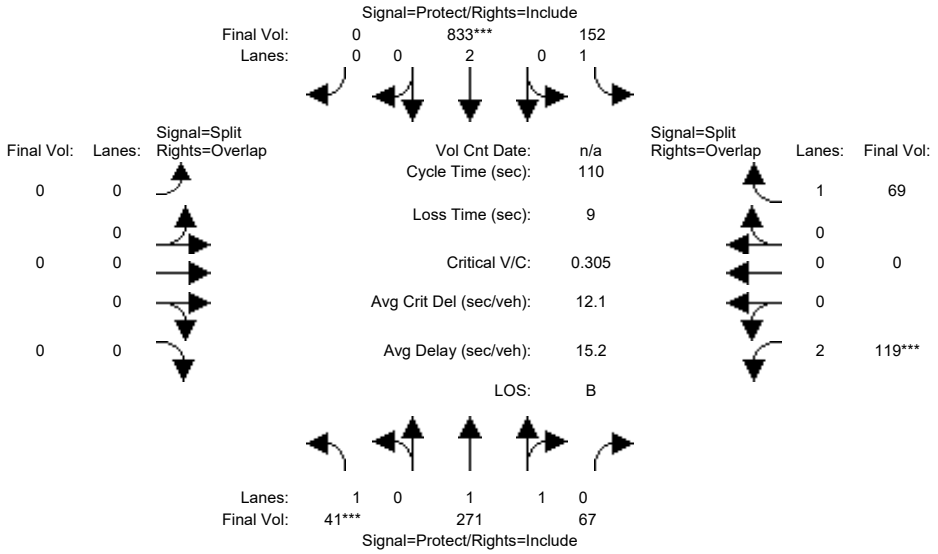
Street Name:	N. Capitol Avenue						Sierra Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	0	0	0	0	10	0	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	17	541	92	88	207	0	0	0	0	283	0	250
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	541	92	88	207	0	0	0	0	283	0	250
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	541	92	88	207	0	0	0	0	283	0	250
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	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	541	92	88	207	0	0	0	0	283	0	250
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	541	92	88	207	0	0	0	0	283	0	250
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	17	541	92	88	207	0	0	0	0	283	0	250
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	1.70	0.30	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	1750	3162	538	1750	3800	0	0	0	0	3150	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.01	0.17	0.17	0.05	0.05	0.00	0.00	0.00	0.00	0.09	0.00	0.14
Crit Moves:		****		****						****		
Green Time:	29.6	55.5	55.5	16.3	42.3	0.0	0.0	0.0	0.0	29.2	0.0	45.5
Volume/Cap:	0.04	0.34	0.34	0.34	0.14	0.00	0.00	0.00	0.00	0.34	0.00	0.35
Delay/Veh:	29.7	16.4	16.4	42.8	22.1	0.0	0.0	0.0	0.0	32.9	0.0	22.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.7	16.4	16.4	42.8	22.1	0.0	0.0	0.0	0.0	32.9	0.0	22.4
LOS by Move:	C	B	B	D	C+	A	A	A	A	C-	A	C+
HCM2kAvgQ:	0	6	6	3	2	0	0	0	0	5	0	6

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3390: N. Capitol Avenue & Sierra Road



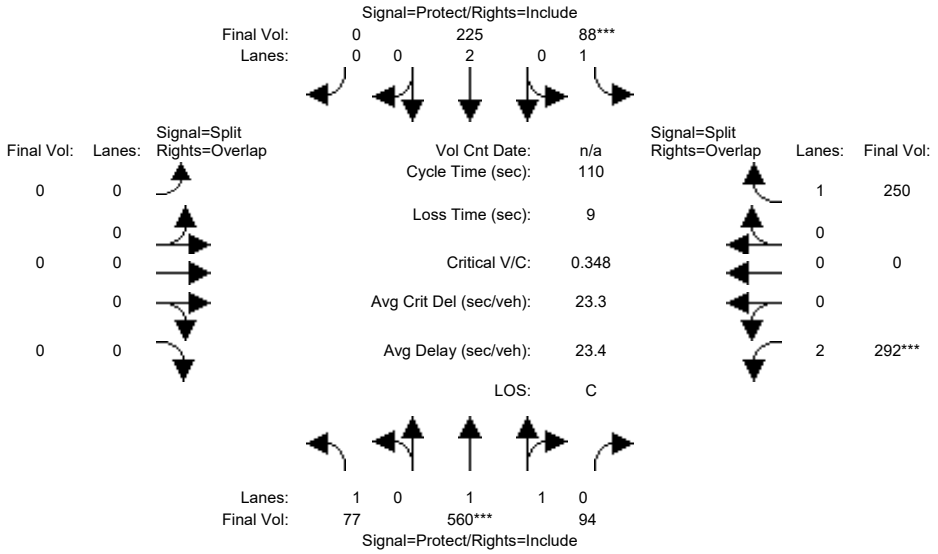
Street Name:	N. Capitol Avenue						Sierra Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	0	0	0	0	10	0	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	41	271	67	152	833	0	0	0	0	119	0	69
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	271	67	152	833	0	0	0	0	119	0	69
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	271	67	152	833	0	0	0	0	119	0	69
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	41	271	67	152	833	0	0	0	0	119	0	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	271	67	152	833	0	0	0	0	119	0	69
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	41	271	67	152	833	0	0	0	0	119	0	69
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	1.59	0.41	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	1750	2966	733	1750	3800	0	0	0	0	3150	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.02	0.09	0.09	0.09	0.22	0.00	0.00	0.00	0.00	0.04	0.00	0.04
Crit Moves:	****				****					****		
Green Time:	8.4	44.8	44.8	42.6	79.0	0.0	0.0	0.0	0.0	13.6	0.0	56.2
Volume/Cap:	0.31	0.22	0.22	0.22	0.31	0.00	0.00	0.00	0.00	0.31	0.00	0.08
Delay/Veh:	49.3	21.3	21.3	22.8	5.7	0.0	0.0	0.0	0.0	44.3	0.0	13.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.3	21.3	21.3	22.8	5.7	0.0	0.0	0.0	0.0	44.3	0.0	13.7
LOS by Move:	D	C+	C+	C+	A	A	A	A	A	D	A	B
HCM2kAvgQ:	2	4	4	4	5	0	0	0	0	2	0	1

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3390: N. Capitol Avenue & Sierra Road



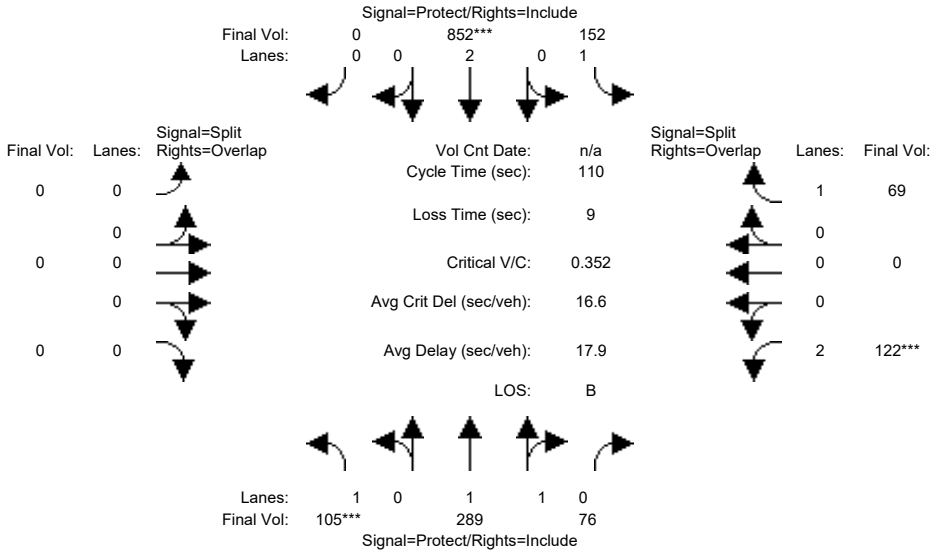
Street Name:	N. Capitol Avenue						Sierra Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	0	0	0	0	10	0	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	17	541	92	88	207	0	0	0	0	283	0	250
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	541	92	88	207	0	0	0	0	283	0	250
Added Vol:	60	19	2	0	18	0	0	0	0	9	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	77	560	94	88	225	0	0	0	0	292	0	250
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	77	560	94	88	225	0	0	0	0	292	0	250
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	77	560	94	88	225	0	0	0	0	292	0	250
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	77	560	94	88	225	0	0	0	0	292	0	250
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	1.70	0.30	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	1750	3168	532	1750	3800	0	0	0	0	3150	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.18	0.18	0.05	0.06	0.00	0.00	0.00	0.00	0.09	0.00	0.14
Crit Moves:		****		****						****		
Green Time:	29.5	55.8	55.8	15.9	42.2	0.0	0.0	0.0	0.0	29.3	0.0	45.2
Volume/Cap:	0.16	0.35	0.35	0.35	0.15	0.00	0.00	0.00	0.00	0.35	0.00	0.35
Delay/Veh:	31.0	16.3	16.3	43.2	22.3	0.0	0.0	0.0	0.0	32.9	0.0	22.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.0	16.3	16.3	43.2	22.3	0.0	0.0	0.0	0.0	32.9	0.0	22.6
LOS by Move:	C	B	B	D	C+	A	A	A	A	C-	A	C+
HCM2k95thQ:	4	13	13	6	5	0	0	0	0	10	0	12

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3390: N. Capitol Avenue & Sierra Road



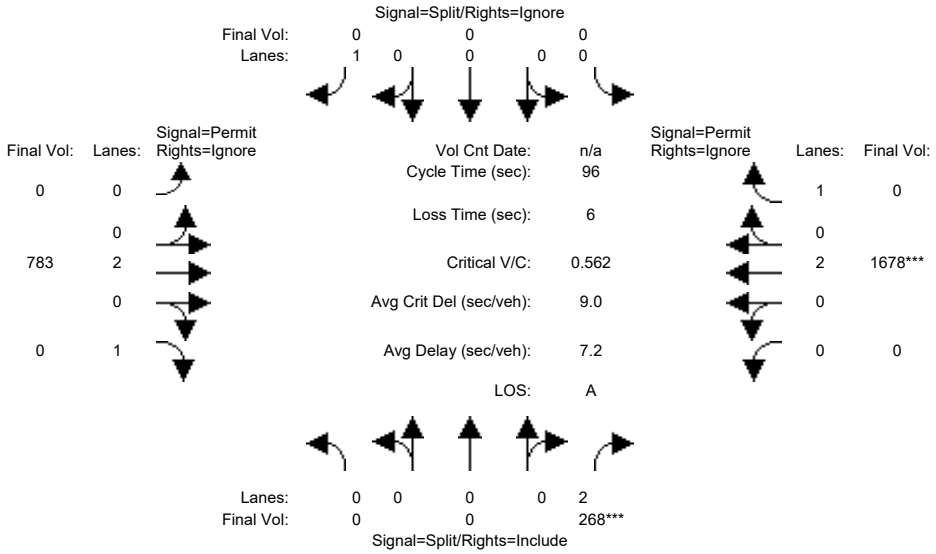
Street Name:	N. Capitol Avenue						Sierra Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	0	0	0	0	10	0	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	41	271	67	152	833	0	0	0	0	119	0	69
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	271	67	152	833	0	0	0	0	119	0	69
Added Vol:	64	18	9	0	19	0	0	0	0	3	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	105	289	76	152	852	0	0	0	0	122	0	69
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	105	289	76	152	852	0	0	0	0	122	0	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	105	289	76	152	852	0	0	0	0	122	0	69
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	105	289	76	152	852	0	0	0	0	122	0	69
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92
Lanes:	1.00	1.57	0.43	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	1750	2929	770	1750	3800	0	0	0	0	3150	0	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.10	0.10	0.09	0.22	0.00	0.00	0.00	0.00	0.04	0.00	0.04
Crit Moves:	****				****					****		
Green Time:	18.8	47.3	47.3	41.6	70.1	0.0	0.0	0.0	0.0	12.1	0.0	53.7
Volume/Cap:	0.35	0.23	0.23	0.23	0.35	0.00	0.00	0.00	0.00	0.35	0.00	0.08
Delay/Veh:	41.0	19.9	19.9	23.5	9.4	0.0	0.0	0.0	0.0	45.9	0.0	15.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.0	19.9	19.9	23.5	9.4	0.0	0.0	0.0	0.0	45.9	0.0	15.0
LOS by Move:	D	B-	B-	C	A	A	A	A	A	D	A	B
HCM2k95thQ:	7	8	8	7	13	0	0	0	0	5	0	3

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3948: I-680 Northbound Off-Ramp and Berryessa Road



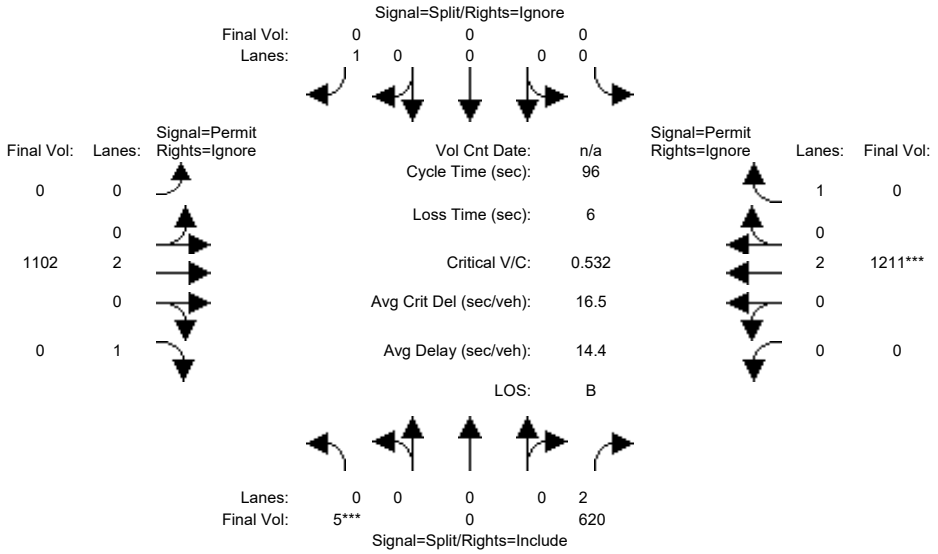
Street Name:	I-680 Northbound Off-Ramp						Berryessa Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	0	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	268	0	0	237	0	783	669	0	1678	622
Growth Adj:	1.00	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	268	0	0	237	0	783	669	0	1678	622
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	268	0	0	237	0	783	669	0	1678	622
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	268	0	0	0	0	783	0	0	1678	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	268	0	0	0	0	783	0	0	1678	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	268	0	0	0	0	783	0	0	1678	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.83	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	2.00	0.00	0.00	1.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	0	0	3150	0	0	1750	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.44	0.00
Crit Moves:			****								****	
Green Time:	0.0	0.0	14.5	0.0	0.0	0.0	0.0	75.5	0.0	0.0	75.5	0.0
Volume/Cap:	0.00	0.00	0.56	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.56	0.00
Delay/Veh:	0.0	0.0	39.3	0.0	0.0	0.0	0.0	2.8	0.0	0.0	4.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	39.3	0.0	0.0	0.0	0.0	2.8	0.0	0.0	4.2	0.0
LOS by Move:	A	A	D	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	5	0	0	0	0	3	0	0	10	0

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3948: I-680 Northbound Off-Ramp and Berryessa Road



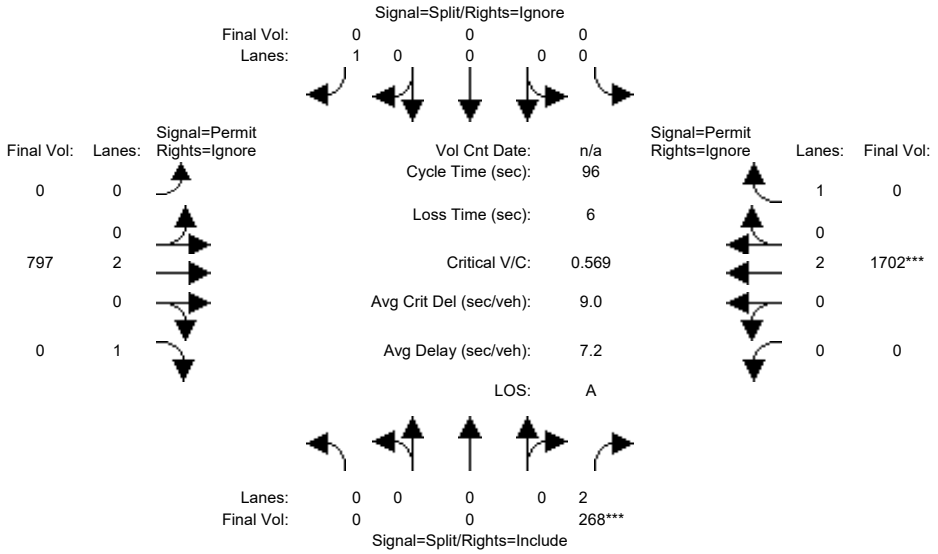
Street Name:	I-680 Northbound Off-Ramp						Berryessa Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	0	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	5	0	620	0	0	336	0	1102	485	0	1211	328
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	0	620	0	0	336	0	1102	485	0	1211	328
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	0	620	0	0	336	0	1102	485	0	1211	328
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	5	0	620	0	0	0	0	1102	0	0	1211	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	0	620	0	0	0	0	1102	0	0	1211	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	5	0	620	0	0	0	0	1102	0	0	1211	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.02	0.00	1.98	0.00	0.00	1.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	28	0	3472	0	0	1750	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.18	0.00	0.18	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.32	0.00
Crit Moves:	****										****	
Green Time:	32.5	0.0	32.5	0.0	0.0	0.0	0.0	57.5	0.0	0.0	57.5	0.0
Volume/Cap:	0.53	0.00	0.53	0.00	0.00	0.00	0.00	0.48	0.00	0.00	0.53	0.00
Delay/Veh:	26.1	0.0	26.0	0.0	0.0	0.0	0.0	11.0	0.0	0.0	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:	26.1	0.0	26.0	0.0	0.0	0.0	0.0	11.0	0.0	0.0	11.6	0.0
LOS by Move:	C	A	C	A	A	A	A	B+	A	A	B+	A
HCM2kAvgQ:	8	0	8	0	0	0	0	9	0	0	11	0

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3948: I-680 Northbound Off-Ramp and Berryessa Road



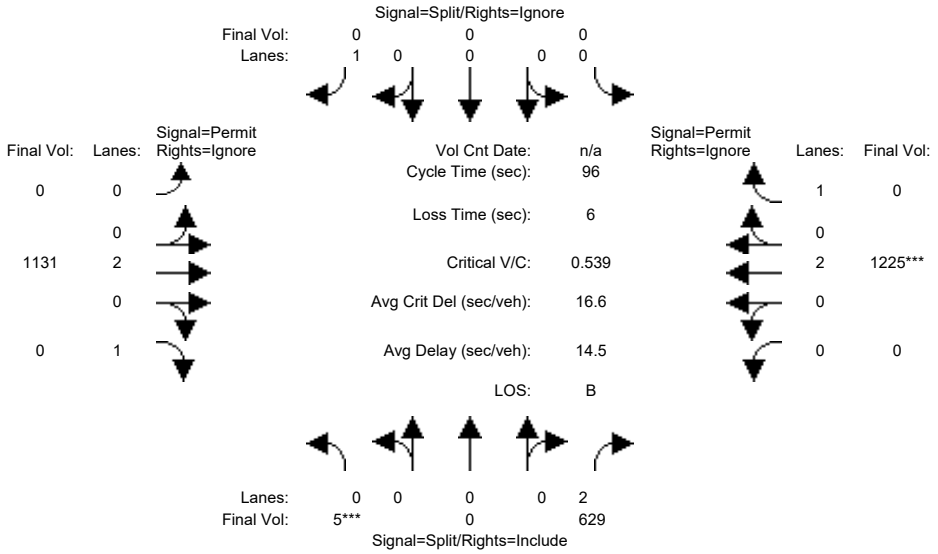
Street Name:	I-680 Northbound Off-Ramp						Berryessa Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	0	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	268	0	0	237	0	783	669	0	1678	622
Growth Adj:	1.00	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	268	0	0	237	0	783	669	0	1678	622
Added Vol:	0	0	0	0	0	0	0	14	0	0	24	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	268	0	0	237	0	797	669	0	1702	622
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	0	0	268	0	0	0	0	797	0	0	1702	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	268	0	0	0	0	797	0	0	1702	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	0	0	268	0	0	0	0	797	0	0	1702	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.83	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.00	0.00	2.00	0.00	0.00	1.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	0	0	3150	0	0	1750	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.45	0.00
Crit Moves:			****								****	
Green Time:	0.0	0.0	14.4	0.0	0.0	0.0	0.0	75.6	0.0	0.0	75.6	0.0
Volume/Cap:	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.57	0.00
Delay/Veh:	0.0	0.0	39.6	0.0	0.0	0.0	0.0	2.8	0.0	0.0	4.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	39.6	0.0	0.0	0.0	0.0	2.8	0.0	0.0	4.2	0.0
LOS by Move:	A	A	D	A	A	A	A	A	A	A	A	A
HCM2k95thQ:	0	0	10	0	0	0	0	6	0	0	18	0

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

City of San Jose
Citywide Traffix Database
(updated December 1, 2016)

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

Intersection #3948: I-680 Northbound Off-Ramp and Berryessa Road



Street Name:	I-680 Northbound Off-Ramp						Berryessa Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	0	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	5	0	620	0	0	336	0	1102	485	0	1211	328
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	0	620	0	0	336	0	1102	485	0	1211	328
Added Vol:	0	0	9	0	0	0	0	29	0	0	14	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	0	629	0	0	336	0	1131	485	0	1225	328
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	5	0	629	0	0	0	0	1131	0	0	1225	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	0	629	0	0	0	0	1131	0	0	1225	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	5	0	629	0	0	0	0	1131	0	0	1225	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.02	0.00	1.98	0.00	0.00	1.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	27	0	3473	0	0	1750	0	3800	1750	0	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.18	0.00	0.18	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.32	0.00
Crit Moves:	****										****	
Green Time:	32.5	0.0	32.5	0.0	0.0	0.0	0.0	57.5	0.0	0.0	57.5	0.0
Volume/Cap:	0.54	0.00	0.53	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.54	0.00
Delay/Veh:	26.2	0.0	26.1	0.0	0.0	0.0	0.0	11.2	0.0	0.0	11.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.2	0.0	26.1	0.0	0.0	0.0	0.0	11.2	0.0	0.0	11.7	0.0
LOS by Move:	C	A	C	A	A	A	A	B+	A	A	B+	A
HCM2k95thQ:	16	0	16	0	0	0	0	18	0	0	20	0

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