



HEXAGON TRANSPORTATION CONSULTANTS, INC.



3315 Sierra Road Residential Development

Transportation Analysis

Prepared for:

Robson Homes

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Executive Summary

This report presents the results of the transportation analysis conducted for the proposed residential development at 3315 Sierra Road in San Jose, California. The 2.29-acre project site (APN 595-10-067) is generally located on the northeast corner of Piedmont Road and Sierra Road and is currently occupied by a commercial building complex (Olivera Egg Ranch), one single-family home, and multiple accessory structures. The project proposes to demolish the existing structures and construct 25 single-family homes and up to 15 accessory dwelling units (ADUs). The project would remove five existing driveways and construct two residential driveways.

This study was conducted for the purpose of identifying the potential transportation impacts related to the proposed residential project. The transportation impacts of the project were evaluated following the standards and methodologies established in the City of San Jose's *Transportation Analysis Handbook* (April 2023). Based on the City of San Jose's Transportation Analysis Policy (Policy 5-1) and the *Transportation Analysis Handbook*, the project includes a California Environmental Quality Act (CEQA) level Transportation Analysis (TA) and a 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 three (3) intersections (one signalized and two unsignalized) in the vicinity of the project site. The LTA also includes an analysis of site access, on-site circulation, vehicle queuing, and effects to transit services and bicycle and pedestrian access. A freeway segment analysis in accordance with the VTA's *Transportation Impact Analysis Guidelines* was not required because the project would generate fewer than 100 new peak hour vehicle trips.

CEQA Transportation Analysis

The project daily VMT estimated by the City's VMT Evaluation Tool is 13.59 per capita. The project VMT, therefore, exceeds the residential threshold of 11.39 daily VMT per capita.

Project Impact

Since the VMT generated by the project would exceed the threshold of significance for residential uses in the area, the project would result in a significant transportation impact on VMT, and mitigation measures are required to reduce the VMT impact to a less-than-significant level.

Project Mitigation

Based on the four VMT reduction strategy tiers included in the VMT Evaluation Tool, it is recommended that the project implement bike access improvements, pedestrian network improvements, traffic calming measures, and transit accessibility improvements (Tier 2 multimodal infrastructure strategies), as well as provide a school carpooling program and implement a voluntary travel behavior change

program (Tier 4 TDM strategies) to mitigate the significant VMT impact. The mitigation measures are listed below.

1. Bike Access Improvements (Tier 2)
2. Pedestrian Network Improvements (Tier 2)
3. Traffic Calming Measures (Tier 2)
4. Transit Accessibility Improvements (Tier 2)
5. School Pool Program (Tier 4)
6. Voluntary Travel Behavior Change Program (Tier 4)

Conclusions of VMT Impact and Mitigation

Based on the City's VMT Evaluation Tool, implementing the multimodal infrastructure improvements and TDM measures described above would lower the project VMT to 11.37 per capita, which would reduce the project impact to a less-than-significant level (below the City's threshold of 11.39 VMT per capita).

Local Transportation Analysis

Project Trip Generation

After applying the ITE trip rates to the proposed residential project and applying the appropriate trip reductions, the project would generate 317 daily vehicle trips, with 23 trips occurring during the AM peak hour and 30 trips occurring during the PM peak hour. Using the inbound/outbound splits contained in the ITE *Trip Generation Manual*, the project would produce 6 inbound and 17 outbound trips during the AM peak hour, and 19 inbound and 11 outbound trips during the PM peak hour. After applying the trip credits associated with the existing use to be removed (Olivera Egg Ranch), the proposed project would generate -68 net daily vehicle trips, with 4 new trips occurring during the AM peak hour and -28 net trips occurring during the PM peak hour. Using the inbound/outbound splits contained in the ITE *Trip Generation Manual*, the project would produce -5 net inbound and 9 new outbound trips during the AM peak hour, and -10 net inbound and -18 net outbound trips during the PM peak hour.

Intersection Traffic Operations

Based on the City of San Jose signalized intersection operations analysis criteria, the signalized study intersection would not be adversely affected by the project.

Other Transportation Issues

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.

Site Plan Recommendations

- Provide stop control signage and markings at the private street/public street interfaces (i.e., project driveways).

1. Introduction

This report presents the results of the transportation analysis conducted for the proposed residential development at 3315 Sierra Road in San Jose, California (see Figure 1). The 2.29-acre project site (APN 595-10-067) is generally located on the northeast corner of Piedmont Road and Sierra Road and is currently occupied by a commercial building complex (Olivera Egg Ranch), one single-family home, and multiple accessory structures. The project proposes to demolish the existing structures and construct 25 single-family homes and up to 15 accessory dwelling units (ADUs). The project would remove five existing driveways and construct two residential driveways. The project site plan is shown on Figure 2.

This study was conducted for the purpose of identifying the potential transportation impacts related to the proposed residential project. The transportation impacts of the project were evaluated following the standards and methodologies established in the City of San Jose's *Transportation Analysis Handbook* (April 2023). Based on the City of San Jose's Transportation Analysis Policy (Policy 5-1) and the *Transportation Analysis Handbook*, the project includes a California Environmental Quality Act (CEQA) level Transportation Analysis (TA) and a Local Transportation Analysis (LTA). A freeway segment analysis in accordance with the VTA's *Transportation Impact Analysis Guidelines* was not required because the project would generate fewer than 100 new peak hour vehicle trips.

Transportation Policies

In adherence with State of California Senate Bill 743 (SB 743) and the City's goals as set forth in the Envision San Jose 2040 General Plan, the City of San Jose adopted Council Policy 5-1. This Transportation Analysis Policy establishes the thresholds for transportation impacts under CEQA based on vehicle miles traveled (VMT) instead of the previous method which was based on intersection level of service (LOS). The intent of this change is to shift the focus of transportation analysis under CEQA from vehicle delay and roadway auto capacity to a reduction in vehicle emissions, and the creation of robust multimodal networks that support integrated land uses. Council Policy 5-1 requires all projects to analyze transportation impacts using the VMT metric.

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);
- 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);

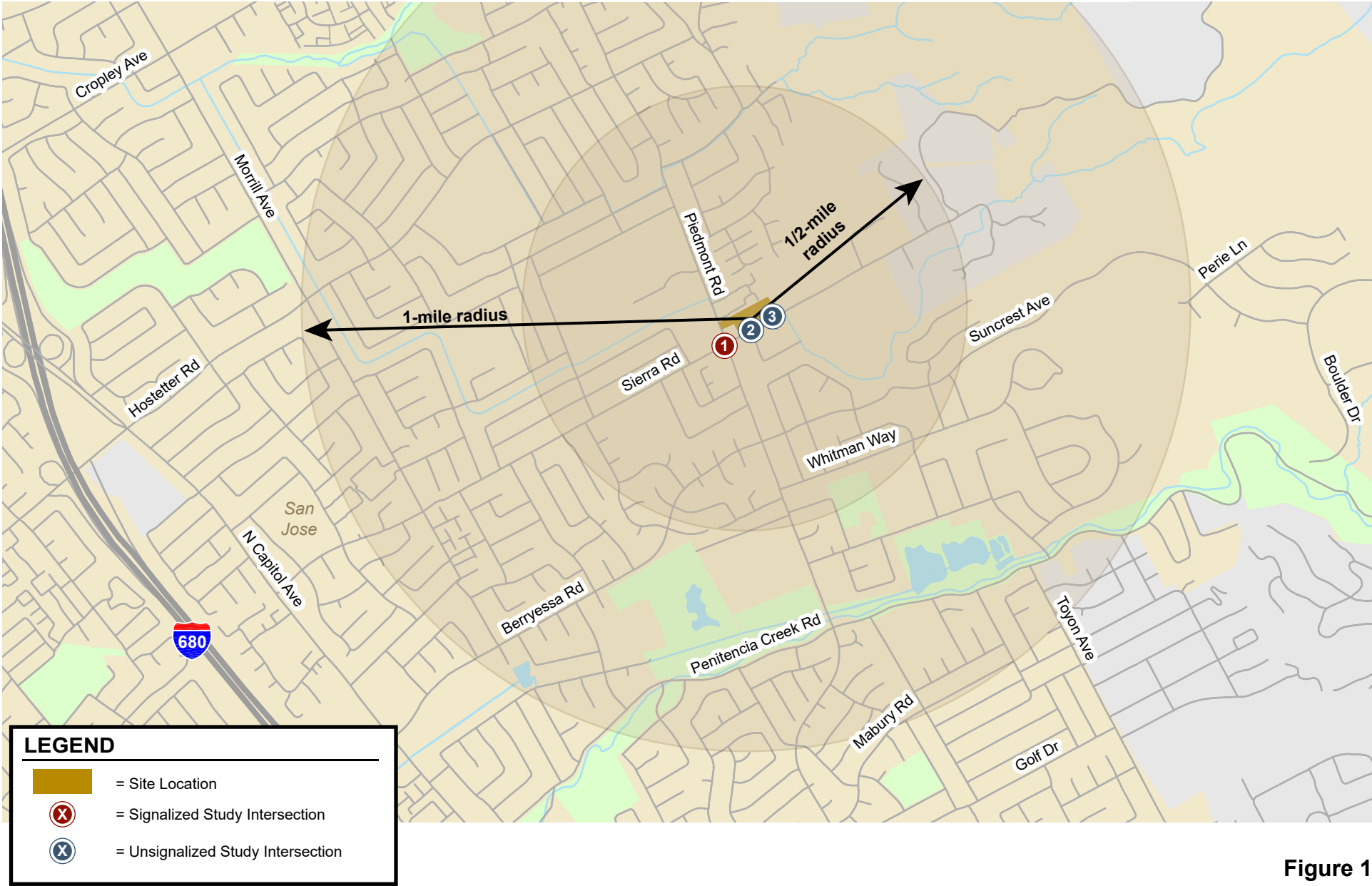




Figure 2
Site Plan

- 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);
- 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);
- 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 (Policy 5-1) establishes procedures for determining project impacts on Vehicle Miles Traveled (VMT) based on the project description, characteristics, and/or location. VMT is the total miles of travel by personal motorized vehicles a project is expected to generate in a day. VMT measures the full distance of personal motorized vehicle-trips with one end within the project. 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.

A project's VMT is compared to the appropriate thresholds of significance based on the project location and type of development. When assessing a residential project, the project's VMT is divided by the number of residents expected to occupy the project to determine the VMT per capita. When assessing an office or industrial project, the project's VMT is divided by the number of employees to determine the VMT per employee. The project's VMT is then compared to the VMT thresholds of significance established based on the average area VMT. A project located in a downtown area is expected to have the project VMT lower than the average area VMT, while a project located in a suburban area is expected to generate project VMT higher than the average area VMT.

To determine whether a project would result in CEQA transportation impacts related to VMT, the City has developed the San Jose VMT Evaluation Tool to streamline the analysis for residential, office, and industrial projects with local traffic. The tool calculates a project's VMT and compares it to the appropriate thresholds of significance based on the project location (i.e., assessor's parcel number) and type of development. The thresholds of significance for development projects, as established in the Transportation Analysis Policy, are based on the existing citywide average VMT level for residential uses and the existing regional average VMT level for employment uses. For non-residential or non-office projects, very large projects or projects that can potentially shift travel patterns, the City's Travel Demand Forecasting Model can be used to determine project VMT.

Figure 3 shows the current VMT levels estimated by the City for residents based on the locations of residences and jobs. Developments in the green-colored areas are estimated to have VMT levels that

are below the corresponding thresholds of significance, while the yellow-colored areas are estimated to have VMT levels at the City average (residential). The orange- and pink-colored areas are estimated to have VMT levels that are above the thresholds of significance. Projects located in areas where the existing VMT is above the established threshold are referred to as being in “high-VMT areas”. Projects in high-VMT areas are required to include a set of VMT reduction measures that would reduce the project VMT to the extent possible.

The CEQA transportation analysis of the project includes a project-level VMT impact analysis using the City’s VMT Evaluation Tool and a cumulative impact analysis that demonstrates the project’s consistency with the Envision San Jose 2040 General Plan.

Screening for VMT Analysis

The City of San Jose’s *Transportation Analysis Handbook, 2023* includes screening criteria for projects that are expected to result in a less-than-significant VMT impact based on the project description, characteristics and/or location. Projects that meet the screening criteria do not require a CEQA transportation analysis but are typically required to provide a Local Transportation Analysis (LTA) to identify potential operational issues that may arise due to the project.

The City’s screening criteria for CEQA transportation analysis for residential projects are described below and shown in Table 1.

Screening Criteria for Residential Projects

- 1. Planned Growth Areas:** Located within a Planned Growth Area as defined in the Envision San Jose 2040 General Plan; and
- 2. High-Quality Transit:** Located within ½ mile of an existing major transit stop or an existing stop along a high-quality transit corridor; and
- 3. Transit-Supporting Project Density:**
 - Minimum of 35 units per acre for residential projects or components;
 - If located in a General Plan Land Use Designation with 35 units per acre, the maximum density allowed in the General Plan Land Use Designation must be met; and
- 4. Active Transportation:** Not negatively impact transit, bike or pedestrian infrastructure.

The residential project would not meet all the screening criteria as demonstrated below:

- Located within a Planned Growth Area = This criterion met;
- Located within ½ mile of high-quality transit (VTA Bus Routes 61 and 71) = This criterion met;
- Residential density of at least 35 DU/AC (project proposes 14 DU/AC) = **This criterion not met**;
- Would not negatively impact transit, bike or ped infrastructure = This criterion met.

As indicated above, the project does not meet all the screening criteria for residential projects because it is proposing a residential development density of less than 35 DU/AC. Therefore, a detailed CEQA transportation analysis is required for the project.

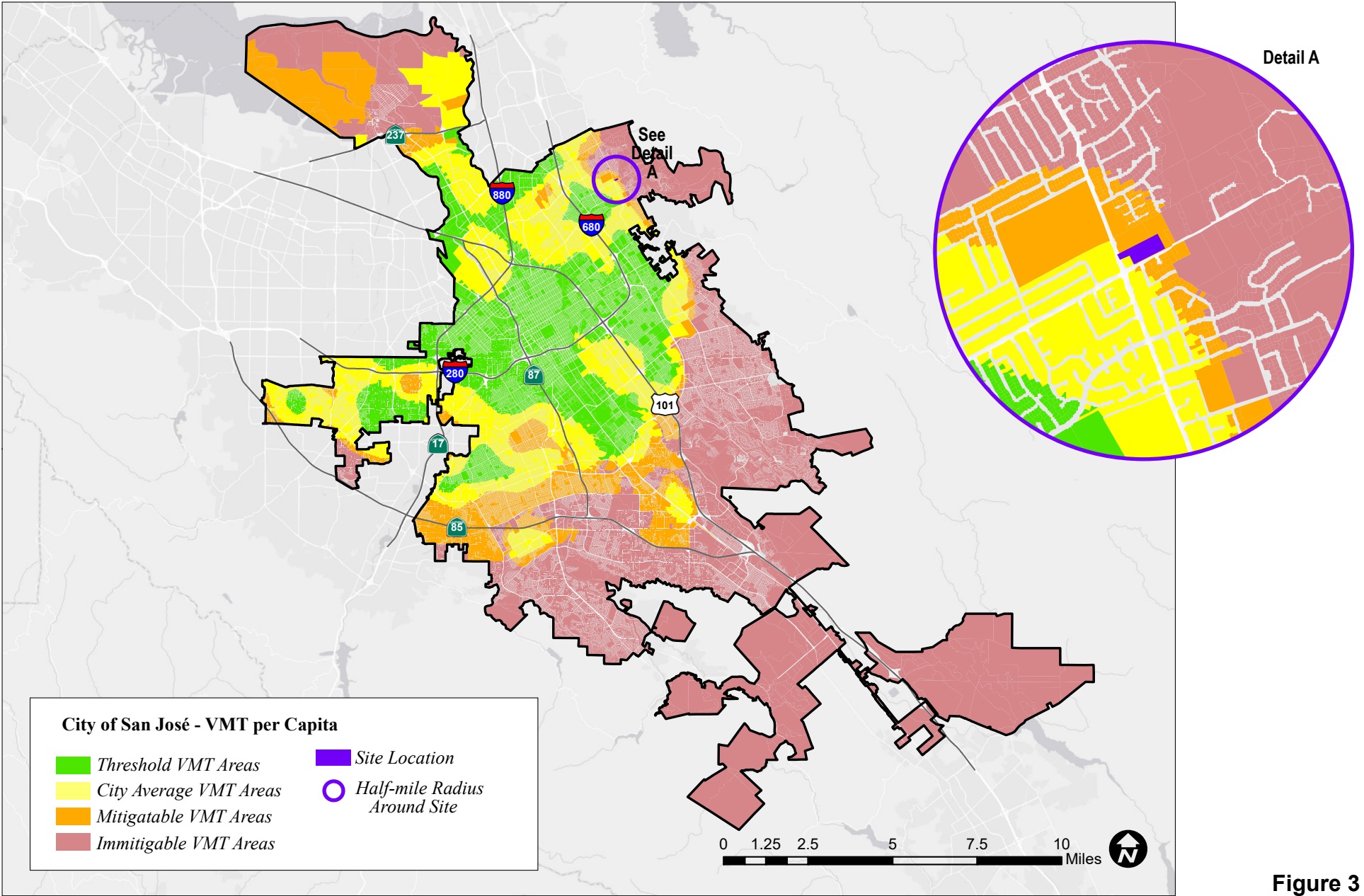


Figure 3
VMT Heat Map for Residents in San Jose

Table 1
VMT Analysis Screening Criteria for Development Projects

Type	Screening Criteria
Small Infill Projects	<ul style="list-style-type: none"> • Single-family detached housing of 15 units or fewer; <u>OR</u> • Single-family attached or multi-family housing of 25 units or fewer; <u>OR</u> • Office of 10,000 square feet of gross floor area or less; <u>OR</u> • Industrial of 30,000 square feet of gross floor area or less; <u>OR</u> • Hotel or Motel of 100 rooms or fewer.
Local-Serving Retail	<ul style="list-style-type: none"> • 100,000 square feet of total gross floor area or less of retail without drive-through operations.
Local-Serving Public Facilities	<ul style="list-style-type: none"> • Branch library, community center, fire station, pumping station, park, police station, or public school projects.
Residential/Office Projects or Components	<ul style="list-style-type: none"> • Planned Growth Areas: Located within a Planned Growth Area as defined in the Envision San José 2040 General Plan; <u>AND</u> • High-Quality Transit: Located within ½ a mile of an existing major transit stop or an existing stop along a high-quality transit corridor; <u>AND</u> • Low VMT: Located in an area in which the per-employee VMT is less than or equal to the threshold of significance for the land use; <u>AND</u> • Transit-Supportive Project Density: <ul style="list-style-type: none"> ◦ Minimum Gross Floor Area Ratio (FAR) of 0.75 for office projects or components; ◦ Minimum of 35 units per acre for residential projects or components; ◦ If located in a General Plan Land Use Designation that has a maximum density below 0.75 FAR or 35 units per acre, the maximum density allowed in the General Plan Land Use Designation must be met; <u>AND</u> • Active Transportation: Not negatively impact transit, bike or pedestrian infrastructure.
Restricted Affordable Residential Projects or Components	<ul style="list-style-type: none"> • 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; <u>AND</u> • High Quality Transit: Located within ½ a mile of an existing major transit stop or an existing stop along a high-quality transit corridor; <u>AND</u> • Transit-Supportive Project Density: <ul style="list-style-type: none"> ◦ Minimum of 35 units per acre for residential projects or components; ◦ If located in a General Plan Land Use Designation that has a maximum density below 35 units per acre, the maximum density allowed in the al Plan Land Use Designation must be met; <u>AND</u> • Active Transportation: Not negatively impact transit, bike or pedestrian infrastructure.

Source: City of San José Transportation Analysis Handbook, April 2023.

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 project study area.

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: 1) any signalized intersection that is located within a half-mile of the project site, or 2) any signalized intersection that is located within one mile of the project site and is operating at LOS D or worse. Note that City of San Jose staff may require LOS analysis at additional signalized intersections at their discretion based on engineering judgement. Unsignalized intersections may also be added; though, unlike signalized intersections, unsignalized intersections are not typically evaluated for level of service.

Based on these criteria, as outlined in the City's *Transportation Analysis Handbook*, the LTA comprises an analysis of AM and PM peak hour traffic conditions for three intersections (as shown on Figure 1). City staff have approved the list of study intersections.

The LTA analyzes AM and PM peak hour traffic conditions for the following three intersections:

Study Intersections:

1. Piedmont Road and Sierra Road – signalized
2. Onslow Way and Sierra Road – unsignalized
3. Fulbar Court and Sierra Road – unsignalized

Traffic conditions at the study intersections were analyzed for the weekday AM and PM peak hours. The weekday AM peak hour is generally between 7:00 and 9:00 AM and the weekday PM peak hour is typically between 4:00 and 6:00 PM. 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.** New 2022 traffic counts were collected for all the study intersections. However, since the current traffic volumes in the study area have not yet returned to pre-Covid pandemic levels, the new counts were not used for the signalized intersection. Instead, existing AM and PM peak hour traffic volumes for the signalized study intersection were obtained from December 2018 counts provided by the City of San Jose. In addition, an annual growth factor of 1% was applied to the 2018 counts at the City's request. The new 2022 counts were used for the unsignalized study intersections, however, since historical count data are not available for unsignalized intersections. New count data are contained in Appendix A.
- **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.** Project conditions reflect projected traffic volumes after completion of the project. 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, and effects to transit, bicycle, and pedestrian facilities.

VMT Analysis Methodology

Methodology

To determine whether a project would result in CEQA transportation impacts related to VMT, the City has developed the San Jose VMT Evaluation Tool to streamline the analysis for residential, office, and industrial projects with local traffic. Because the proposed project is a residential development that would generate local traffic, the VMT Evaluation Tool was used to estimate the project VMT and determine whether the project would result in a significant VMT impact.

Based on the assessor's parcel number (APN) of a project, the evaluation tool identifies the existing average VMT per capita for the area. Based on the project location, type of development, project description, and proposed trip reduction measures, the evaluation tool calculates the project VMT. Projects located in areas where the existing VMT is above the established threshold are referred to as being in "high-VM T areas". Projects in high-VM T areas (such as the proposed project) are required to include a set of VMT reduction measures that would reduce the project VMT to the extent possible.

The VMT Evaluation Tool evaluates a list of selected VMT reduction measures that can be applied to a project to reduce the project VMT. There are four strategy tiers whose effects on VMT can be calculated with the evaluation tool:

1. Project characteristics (e.g., density, diversity of uses, design, and affordability of housing) that encourage walking, biking and transit uses.
2. Multimodal network improvements that increase accessibility for transit users, bicyclists, and pedestrians,
3. Parking measures that discourage personal motorized vehicle-trips, and
4. Transportation demand management (TDM) measures that provide incentives and services to encourage alternatives to personal motorized vehicle-trips.

The first three strategies – land use characteristics, multimodal network improvements, and parking – are physical design strategies that can be incorporated into the project design. TDM includes programmatic measures that aim to reduce VMT by decreasing personal motorized vehicle mode share and by encouraging more walking, biking, and riding transit. TDM measures should be enforced through annual trip monitoring to assess the project's status in meeting the VMT reduction goals.

Thresholds of Significance

Table 2 shows the VMT thresholds of significance for development projects, as established in the Transportation Analysis Policy. The VMT impact threshold is 15 percent below the citywide average for residential developments. Thus, residential projects are said to create a significant adverse impact when the estimated project generated VMT exceeds the existing citywide average VMT per capita minus 15 percent. Currently, the reported citywide average is 13.4 daily VMT per capita. This equates to a significant impact threshold of 11.39 daily VMT per capita.

Projects that trigger a significant VMT impact can implement a variety of the four strategies described above to reduce the impact. A significant impact is said to be satisfactorily mitigated when the strategies and VMT reductions implemented render the VMT impact less than significant.

Table 2
VMT Thresholds of Significance for Development Projects

Type	Significance Criteria	Current Level	Threshold
Residential	Project VMT per capita exceeds existing citywide average VMT per capita minus 15 percent <u>OR</u> existing regional average VMT per capita minus 15 percent, whichever is lower	13.40 VMT per Capita (Citywide Average)	11.39 VMT per Capita
Office, R&D, Assisted Living	Project VMT per employee exceeds existing regional average VMT per employee minus 15 percent	16.53 VMT per Employee (Regional Average)	14.05 VMT per Employee
Industrial, Mini Storage	Project VMT per employee exceeds existing regional average VMT per employee	16.53 VMT per Employee (Regional Average)	16.53 VMT per Employee
Retail, Lodging, Education	Net increase in existing regional total VMT	Regional Total VMT	Net Increase
Public/Quasi-Public	In accordance with the most appropriate type(s) as determined by the Public Works Director	Appropriate Levels Listed Above	Appropriate Thresholds Listed Above
Mixed Uses	Evaluate each land use component of a mixed-use project independently and apply the threshold of significance for each land use type included	Appropriate Levels Listed Above	Appropriate Thresholds Listed Above
Change of Use or Additions to Existing Development	Evaluate the full site with the change of use or additions to existing development and apply the threshold of significance for each project type included	Appropriate Levels Listed Above	Appropriate Thresholds Listed Above
Urban Village Plans, Station Area Plans, Specific Plans, Development Policies, Other Area Plans	Evaluate each land use component of the area plan independently and apply the threshold of significance for each land use type included	Appropriate Levels Listed Above	Appropriate Thresholds Listed Above

Source: City of San José Transportation Analysis Handbook, April 2023.

Intersection Operations Analysis Methodology

This section presents the methods used to determine the traffic conditions at all the study intersections and the potential adverse operational effects at the signalized study intersection 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 signalized intersection operations.

The signalized study intersection is located within the City of San Jose and was evaluated based on the City of San Jose level of service standard.

Data Requirements

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

- existing traffic volumes
- lane configurations
- signal timing and phasing

Analysis Methodologies and Level of Service Standards

Traffic conditions at the signalized study intersection was 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 methods are described below.

Signalized Intersections

Signalized 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. Since TRAFFIX is also the CMP-designated intersections level of service methodology, the City of San Jose methodology employs the CMP defaults values for the analysis parameters. 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 3.

Table 3
Signalized Intersection Level of Service Definitions Based on Average Control Delay

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

Source: Transportation Research Board, *2010 Highway Capacity Manual*, (Washington, D.C., 2010).

Unsignalized Intersections

Two of the study intersections are unsignalized. The City of San Jose has not established a level of service standard for unsignalized intersections. Accordingly, the unsignalized intersections were evaluated for potential operational issues only.

Adverse Intersection Operations Effects

According to the City of San Jose's *Transportation Analysis Handbook, 2023*, an adverse effect on signalized intersection operations would occur if for either peak hour:

1. The level of service at the signalized 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 signalized 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 is typically supplemented with a vehicle queuing analysis at selected intersections when a project would add a substantial number of trips (10 peak hour trips per lane or more) to the turning movements of an intersection. The proposed residential project would add fewer than 10 trips per lane to the turning movements at the signalized study intersection. However, at the City's request, the westbound left-turn and right-turn movements at the signalized study intersection were evaluated for potential queuing issues.

Note that 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 turn movement; (2) the estimated

maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the turn movement. This analysis thus provides a basis for estimating future turn pocket storage requirements at intersections.

For signalized intersections, the 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. Vehicle queuing at unsignalized intersections is evaluated based on the delay experienced at the specific study turn 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 101/Oakland Road interchange is required to participate in the TDP program. The fee for the 101/Oakland/Mabury TDP is based on the number of PM peak hour vehicular trips that a project would add to the interchange. The 2023 TDP traffic impact fee is \$48,226 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 interchange (1.5-mile drive), the site's distance from the US 101/Oakland Road interchange (4-mile drive), and the project trip distribution pattern discussed in Chapter 3, it is reasonable to assume that the project would not add vehicle trips to the US 101/Oakland Road interchange. Therefore, the project would not be required to pay the 101/Oakland/Mabury TDP impact fee.

Report Organization

This report has a total of five chapters. Chapter 2 describes existing transportation conditions including VMT of the existing land uses in the proximity of the project, 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. Chapter 4 describes the local transportation analysis including operations of 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, transit services, bicycle and pedestrian facilities, and vehicle queuing at intersections. Chapter 5 provides the conclusions of the transportation analysis.

2. Existing Transportation Conditions

This chapter describes the existing conditions of the transportation system within the study area of the project. It presents the vehicle miles traveled (VMT) of the existing land uses in the proximity of the project and 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).

VMT of Existing Land Uses

To determine whether a project would result in CEQA transportation impacts related to VMT, the City has developed the San Jose VMT Evaluation Tool to streamline the analysis for residential, office, and industrial projects. Based on the evaluation tool and the project's APN, the existing VMT for residential uses in the project vicinity (Area VMT) is 13.73 per capita. The current citywide average daily VMT for residential uses is 13.4 per capita (see Table 2 in Chapter 1). Thus, the VMT for existing residential uses in the project area is higher than the citywide average VMT level. Chapter 3 presents the VMT analysis results for the project.

Existing Roadway Network

Regional access to the project site is provided via I-680. Local access to the project site is provided via Piedmont Road, Berryessa Road, and Sierra Road. These facilities are described below.

I-680 is a north-south freeway that begins at US 101 in San Jose, where I-280 transitions to I-680, and ends at I-80 in Solano County. I-680 provides access to the project site via a full interchange at Berryessa Road and partial interchanges at N. Capitol Avenue and Hostetter Road. The section of I-680 in the project vicinity is an eight-lane freeway, with four mixed-flow lanes in both directions.

Piedmont Road is a north-south oriented two-lane Local Connector Street that begins at Penitencia Creek Road and extends northward into Milpitas where it transitions into Evans Road at Calaveras Road. Piedmont Road has sidewalks and striped bike lanes on both sides of the street. Piedmont Road has a posted speed limit of 35 mph and has a two-way shared left-turn lane within the study area. Piedmont Road provides access to the project site via its intersection with Sierra Road.

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 four lanes in the vicinity of the project site, widens to six lanes west of North Jackson Avenue, 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 contains striped bike lanes on both sides of the street. There are sidewalks on both sides of the street. Berryessa Road provides access to the project site via its intersection with Piedmont Road.

Sierra Road is predominantly an east-west oriented Local Connector Street with sidewalks and striped bike lanes on both sides of the street and a posted speed limit of 35 mph. Sierra Road has two lanes with a two-way shared left-turn lane between Piedmont Road and Morrill Avenue. West of Morrill Avenue, Sierra Road is a four-lane divided roadway. East of Piedmont Road (along the project frontage), Sierra Road is a two-lane undivided local street with parking on both sides. Sierra Road provides direct access to the project site and extends into the east foothills where it ultimately becomes a Rural Scenic Corridor.

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

Sidewalks are found along all previously described local roadways in the study area, though sidewalks are intermittent along Sierra Road east of the project site. The existing network of sidewalks provides adequate connectivity for pedestrians between the project site and other surrounding land uses and transit stops. Crosswalks, ADA compliant curb ramps, and pedestrian signal heads and push buttons are located at the nearby signalized intersections of Piedmont Road/Sierra Road and Piedmont Road/Berryessa Road.

Existing Bicycle Facilities

Bicycle facilities are divided into four classes of relative significance. Class I bicycle facilities are bike paths that are physically separated from motor vehicles and offer two-way bicycle travel on a separate path. Class II bicycle facilities are striped bike lanes on roadways that are marked by signage and pavement markings. Piedmont Road, Sierra Road, and Berryessa Road all have Class II bicycle facilities. Class III bicycle facilities are bike routes and only have signs and/or Sharrows (bike route lane markings) to help guide bicyclists on recommended routes to certain locations. Class IV bicycle facilities are on-street bikeways 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 Class IV bicycle facilities in the vicinity of the project site.

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. Piedmont Road, about a half-mile south of the project site. This trail system provides access to Penitencia Creek Park and Alum Rock Park. Figure 4 shows the existing bicycle facilities in the area.

Existing Transit Services

Existing transit services near the project site are provided by the Santa Clara Valley Transportation Authority (VTA). Local bus routes 61 and 71 provide service to the project study area with stops on Piedmont Road and Sierra Road within walking distance of the project site (see Figure 5). These local bus routes are described below.

Local bus route 61 operates along Sierra Road and Berryessa Road with stops on Sierra Road within walking distance of the project site. Route 61 provides frequent bus 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 of the day. Bus route 61 stops along Berryessa Road at N. Capitol Avenue near the Berryessa light rail transit (LRT) station.



Figure 4
Existing Bicycle Facilities

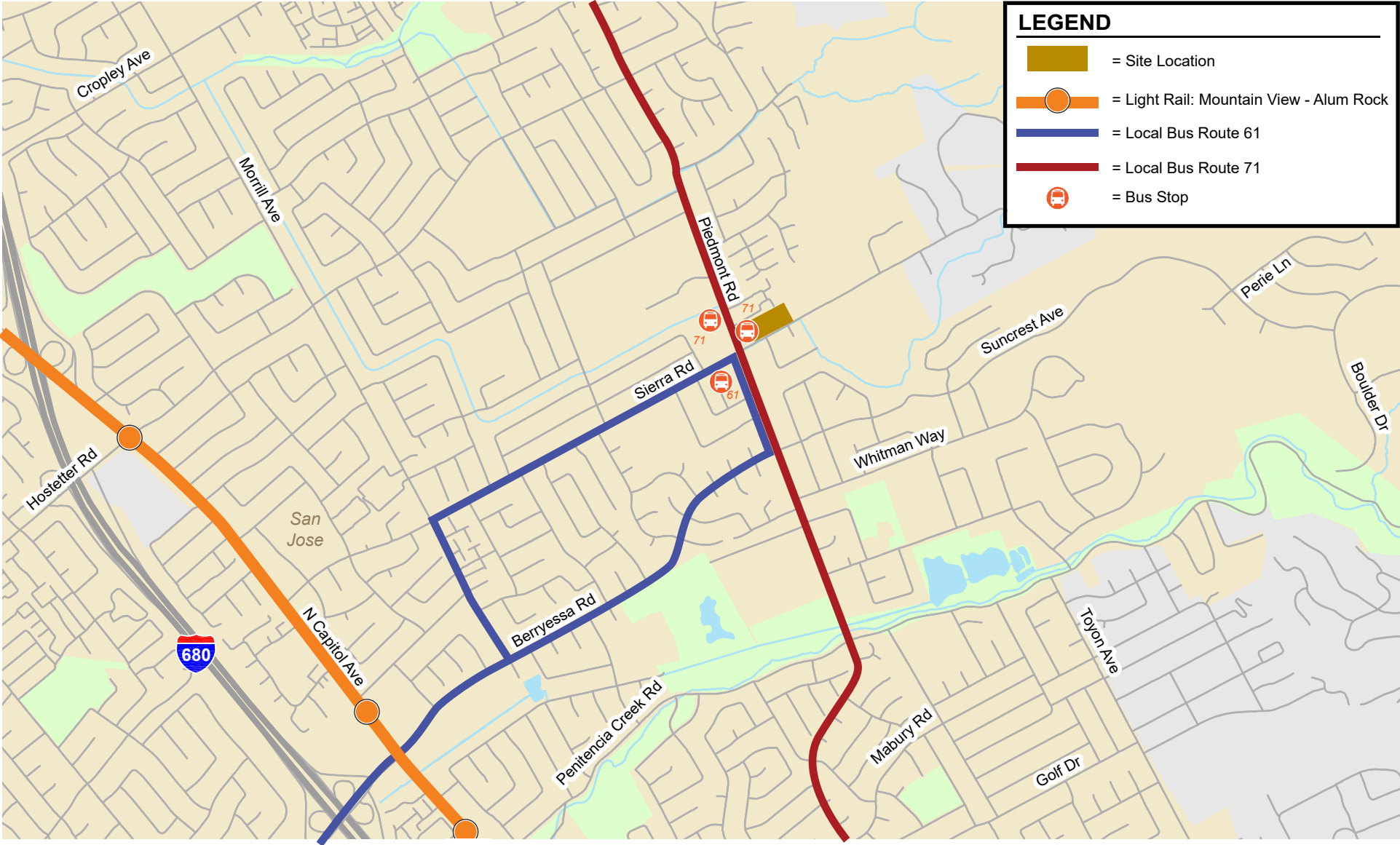


Figure 5
Existing Transit Services

The VTA currently operates the 42.2-mile LRT 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).

Local bus route 71 operates along Piedmont Road with stops located within walking distance of the project site. Route 71 provides service between the Milpitas BART station and Eastridge Mall with 30-minute headways during the weekday AM and PM peak commute periods of the day.

Existing Intersection Lane Configurations

The existing lane configurations at the study intersections were determined by observations in the field and are shown on Figure 6.

Observed Existing Traffic Conditions

Traffic conditions were observed in the field to identify any existing operational deficiencies occurring within an approximately half-mile radius of the project site. Traffic conditions in the study area were observed during the weekday AM (7:00-9:00 AM) and PM (4:00-6:00 PM) peak traffic periods. Overall, the study intersections operated well during both the AM and PM peak commute periods. No noteworthy operational issues were observed during the field observation periods.

Traffic volumes on Piedmont Road are relatively equal in the northbound and southbound directions during the AM commute period. Traffic volumes during the PM commute period are noticeably heavier in the southbound direction of travel on Piedmont Road.

The following minor operational issues were observed during the AM and PM peak hour field observation periods.

Piedmont Road and Sierra Road

During the AM observation period, the northbound vehicle queues on Piedmont Road extended back to Berryessa Road. The long queues often did not clear in one signal cycle. The southbound vehicle queues were also lengthy and did not always clear the intersection in one signal cycle. Southbound vehicles were often impeded by vehicles entering and exiting the Piedmont Hills High School driveways. There were many pedestrians and bicyclists observed north of the intersection and crossing the street at the intersection in the morning due to the high school.

During the PM observation period, the long southbound vehicle queues on Piedmont Road often blocked the southbound left-turn pocket. However, the southbound left-turn movement is a relatively low volume movement so this did not create any issues.



Figure 6
Intersection Lane Configurations

3. CEQA Transportation Analysis

This chapter describes the CEQA transportation analysis, including the VMT threshold of significance, the project-level VMT impact analysis results (significant impacts and mitigation measures), and the cumulative transportation impact analysis used to determine consistency with the City's General Plan.

Project-Level VMT Impact Analysis

The project-level impact analysis under CEQA uses the VMT metric to evaluate a project's transportation impacts by comparing against the VMT thresholds of significance as established in the Transportation Analysis Policy. The City of San Jose's *Transportation Analysis Handbook, 2023* includes screening criteria for projects that are expected to result in less-than-significant VMT impacts based on the project description, characteristics and/or location. As previously described in Chapter 1, the residential project does not meet the screening criteria because the project is not located within a Planned Growth Area according to the City's General Plan, and the project is located in an area in which the per-capita VMT is greater than the City's significance threshold. Therefore, a detailed CEQA transportation analysis (i.e., VMT analysis) was prepared for the residential project.

The San Jose VMT Evaluation Tool was used to estimate the residential project VMT based on the project location (APN), type of development, project description, and proposed trip reduction measures. The threshold of significance for residential uses (see Table 2 in Chapter 1) is used for the VMT analysis. The VMT threshold for residential uses is the existing citywide average daily VMT level (13.40 per capita) minus 15 percent, or 11.39 daily VMT per capita.

Project VMT Impact Analysis Results

The project daily VMT estimated by the City's VMT Evaluation Tool is 13.59 per capita. The project VMT, therefore, exceeds the residential threshold of 11.39 daily VMT per capita.

Project Impact

Since the VMT generated by the project would exceed the threshold of significance for residential uses in the area, the project would result in a significant transportation impact on VMT, and mitigation measures are required to reduce the VMT impact to a less-than-significant level.

Project Mitigation

Based on the four VMT reduction strategy tiers included in the VMT Evaluation Tool, recommended mitigation measures include bike access improvements, pedestrian network improvements, traffic calming measures, and transit accessibility improvements (Tier 2 multimodal infrastructure strategies). Each of these infrastructure improvements would be negotiated and coordinated with the City. Recommended Tier 4 TDM strategies include a school carpooling program and a voluntary travel behavior change program. These mitigation measures are described below.

Bike Access Improvements

Per the City of San Jose Better Bike Plan 2025, a Class IV protected bicycle facility is planned along Piedmont Road between Penitencia Creek Road and Landess Avenue. The developer would construct an approximately 150-foot-long Class II buffered bike lane with new shoulder striping along northbound Piedmont Road between Sierra Road and the existing driveway serving the gas station. Flexible delineators also would be installed north of the driveway adjacent to the proposed biotreatment area of the project site as a transition from the Class II buffered bike lane to the future planned Class IV separated bikeway. These multimodal infrastructure improvements would encourage bicycling for the project and for existing development in the area, resulting in fewer drive-alone commute trips. Providing bike facility improvements would improve bicycle travel and safety along Piedmont Road and promote bicycling as an alternative to driving, thereby reducing VMT.

Pedestrian Network Improvements

The developer would remove the pork-chop island on the northeast corner of the Piedmont Road/Sierra Road intersection and reconstruct/extend the curb line (i.e., square off the corner and remove the westbound right-turn pocket on Sierra Road). The corner would be reconstructed to include new ADA compliant curb ramps with truncated domes. Some restriping would also be necessary. These multimodal infrastructure improvements would enhance off-site pedestrian connectivity, slow down the westbound right-turn vehicle movement, shorten the pedestrian crossing distance on Sierra Road, and make pedestrians more visible to drivers, thereby improving the pedestrian safety at the intersection. Providing these multimodal improvements would create a safer environment and promote walking and biking as alternatives to driving for the project and for existing development in the area. Accordingly, these improvements would reduce drive-alone commute trips and reduce VMT.

Traffic Calming Measures

As stated above, the developer would remove the pork-chop island and reconstruct/square off the northeast corner of the Piedmont Road/Sierra Road intersection. Providing these traffic calming measures would create a safer environment and promote walking and biking as alternatives to driving. Accordingly, these improvements would reduce drive-alone commute trips and reduce VMT for the project and for existing development in the area.

Increase Transit Accessibility

The developer would relocate the VTA bus stop along northbound Piedmont Road closer to the intersection of Piedmont Road/Sierra Road. Removal of the pork-chop island and extension of the curb line on the northeast corner of the intersection (as described above) would make this transit improvement possible. With the bus stop relocation, additional bus stop improvements (e.g., new bus pad, standard metal bench, etc.), if requested, would require coordination with VTA. The bus stop is currently served by VTA bus route 71. Relocating the bus stop closer to the intersection would encourage existing and future residents to utilize transit as an alternative to driving. Accordingly, this multimodal infrastructure improvement would reduce drive-alone commute trips, thereby reducing VMT. Implementation of this improvement would require coordination with the VTA.

School Pool Program

The project will implement a School Pool Program. The purpose of this program will be to match parents of the proposed residential development who transport students to schools without a bussing program, including private schools, charter schools, and neighborhood schools where students cannot walk or bike. The school pool program will be open to all families of the development. School pools are effective at reducing the total number of vehicle trips traveling between homes and schools and are thereby effective at reducing VMT.

School pool program information will be provided to new homeowners in welcome packets. A TDM webpage and/or periodic newsletters with current school pool program information will also be made available for continued reference by homeowners. Residents interested in the program will be able to connect with other interested residents to schedule carpools either directly or through one of the 511.org online services. The developer will be responsible for initially creating a TDM webpage or newsletter for the project and providing a welcome packet to each homeowner upon move-in. The Home Owner's Association (HOA) will be responsible for maintaining the TDM webpage and/or newsletters to ensure the information remains current.

Voluntary Travel Behavior Change Program

The HOA will facilitate a voluntary travel behavior change program that targets individual attitudes and behaviors towards travel and helps individuals analyze and alter their travel choices to encourage the use of shared ride modes, transit, walking, and biking. These programs will include an annual resident travel survey and year-round communications. These programs may also feature mass communication campaigns such as community travel surveys, green trip competitions, and web-based tools that promote cost savings, pro-environmental, and pro-healthy impacts of travel choices (the Voluntary Travel Behavior Change Program).

All homeowners of the proposed development will be provided with the information/tools/access to take full advantage of the Voluntary Travel Behavior Change Program. Accordingly, 100% of the residents would qualify as "participants" in this TDM program. A TDM/Transportation Coordinator, likely an employee of the HOA Management Company, will administer the Voluntary Travel Behavior Change Program.

Mass communication campaigns will keep the homeowners informed of transportation options available to them. Communications may include emails, newsletters, postcards, and/or fliers. Travel surveys are a way to investigate residential travel modes, trip purposes, trip frequency, and perceptions toward alternative travel options, routes, services, and benefits. The results of the residential travel surveys will provide quantitative data (e.g., mode split) and qualitative data (e.g., resident perception of alternative transportation programs). The travel surveys will be conducted annually and will help to determine the effectiveness of the program and whether any changes should be made. Survey data will indicate where to focus ongoing TDM marketing with a goal of maintaining the project's commitment to use alternative transportation.

Conclusions of VMT Impact and Mitigation

Based on the City's VMT Evaluation Tool, implementing the multimodal infrastructure improvements and TDM measures described above would lower the project VMT to 11.37 per capita, which would reduce the project impact to a less-than-significant level (below the City's threshold of 11.39 VMT per capita). The mitigation measures and the resulting reduction in VMT per capita are summarized in Table 4.

The proposed multimodal infrastructure improvement are illustrated in Appendix E. The TDM Plan prepared for the project is contained in Appendix F.

Figures 7 and 8 show the VMT summary reports generated by the City of San Jose's VMT Evaluation Tool without and with implementation of the recommended mitigation measures, respectively. The column chart at the bottom of each figure shows the Area VMT (red column), Project VMT (blue and green columns), and the Impact Threshold for residential uses (bold black line at the top of the chart).

Table 4
Summary of VMT Mitigation Measures and Resulting VMT per Capita

Mitigation Measure	Mitigation Description	Vehicle Miles Traveled (VMT)		
		VMT Per Capita with Single Mitigation Measure	Residential Threshold (VMT / Capita)	Significant VMT Impact Mitigated?
1 - Bike Access Improvements (Tier 2)	Per the City of San Jose Better Bike Plan 2025, a Class IV protected bicycle facility is planned along Piedmont Road between Penitencia Creek Road and Landess Avenue. The developer would construct an approximately 150-foot-long Class II buffered bike lane with new shoulder striping along northbound Piedmont Road between Sierra Road and the existing driveway serving the gas station. Flexible delineators also would be installed north of the driveway adjacent to the proposed biotreatment area of the project site as a transition from the Class II buffered bike lane to the future planned Class IV separated bikeway. These multimodal infrastructure improvements would encourage bicycling for the project and for existing development in the area, resulting in fewer drive-alone commute trips. Providing bike facility improvements would improve bicycle travel and safety along Piedmont Road and promote bicycling as an alternative to driving, thereby reducing VMT.	13.57	11.39	NO
2 - Pedestrian Network Improvements (Tier 2)	The developer would remove the pork-chop island on the northeast corner of the Piedmont Road/Sierra Road intersection and reconstruct/extend the curb line (i.e., square off the corner and remove the westbound right-turn pocket on Sierra Road). The corner would be reconstructed to include new ADA compliant curb ramps with truncated domes. Some restriping would also be necessary. These multimodal infrastructure improvements would enhance off-site pedestrian connectivity, slow down the westbound right-turn vehicle movement, shorten the pedestrian crossing distance on Sierra Road, and make pedestrians more visible to drivers, thereby improving the pedestrian safety at the intersection. Providing these multimodal improvements would create a safer environment and promote walking and biking as alternatives to driving for the project and for existing development in the area. Accordingly, these improvements would reduce drive-alone commute trips and reduce VMT.	13.31	11.39	NO
3 - Traffic Calming Measures (Tier 2)	The developer would remove the pork-chop island and reconstruct/square off the northeast corner of the Piedmont Road/Sierra Road intersection. Providing these traffic calming measures would create a safer environment and promote walking and biking as alternatives to driving. Accordingly, these improvements would reduce drive-alone commute trips and reduce VMT for the project and for existing development in the area.	13.31	11.39	NO
4 - Increase Transit Accessibility (Tier 2)	The developer would relocate the VTA bus stop along NB Piedmont Road closer to the intersection of Piedmont Road/Sierra Road. Removal of the pork-chop island and extension of the curb line on the northeast corner of the intersection (as described above) would make this transit improvement possible. With the bus stop relocation, additional bus stop improvements (e.g., new bus pad, standard metal bench, etc.), if requested, would require coordination with the VTA. The bus stop is currently served by VTA bus route 71. Relocating the bus stop closer to the intersection would encourage existing and future residents to utilize transit as an alternative to driving. Accordingly, this multimodal infrastructure improvement would reduce drive-alone commute trips, thereby reducing VMT. Implementation of this improvement would require coordination with the VTA.	13.17	11.39	NO
5 - School Pool Program (Tier 4)	The project will implement a School Pool Program. The purpose of this program will be to match parents of the residential development who transport students to schools without a bussing program, including private schools, charter schools, and neighborhood schools where students cannot walk or bike. The school pool program will be open to all families of the development. School pools are effective at reducing the total number of vehicle trips traveling between homes and schools and are thereby effective at reducing VMT.	12.75	11.39	NO
6 - Voluntary Travel Behavior Change Program (Tier 4)	The HOA will facilitate a voluntary travel behavior change program that targets individual attitudes and behaviors towards travel and helps individuals analyze and alter their travel choices to encourage the use of shared ride modes, transit, walking, and biking, thereby reducing drive-alone vehicle trips and VMT. These programs will include an annual resident travel survey and year-round communications. These programs may also feature mass communication campaigns such as community travel surveys, green trip competitions, and web-based tools that promote cost savings, pro-environmental, and pro-healthy impacts of travel choices (the Voluntary Travel Behavior Change Program).	13.04	11.39	NO
VMT Per Capita with Implementation of all 6 Mitigation Measures:		11.37	11.39	YES

Figure 7
San Jose VMT Evaluation Tool Summary Report – No Mitigation

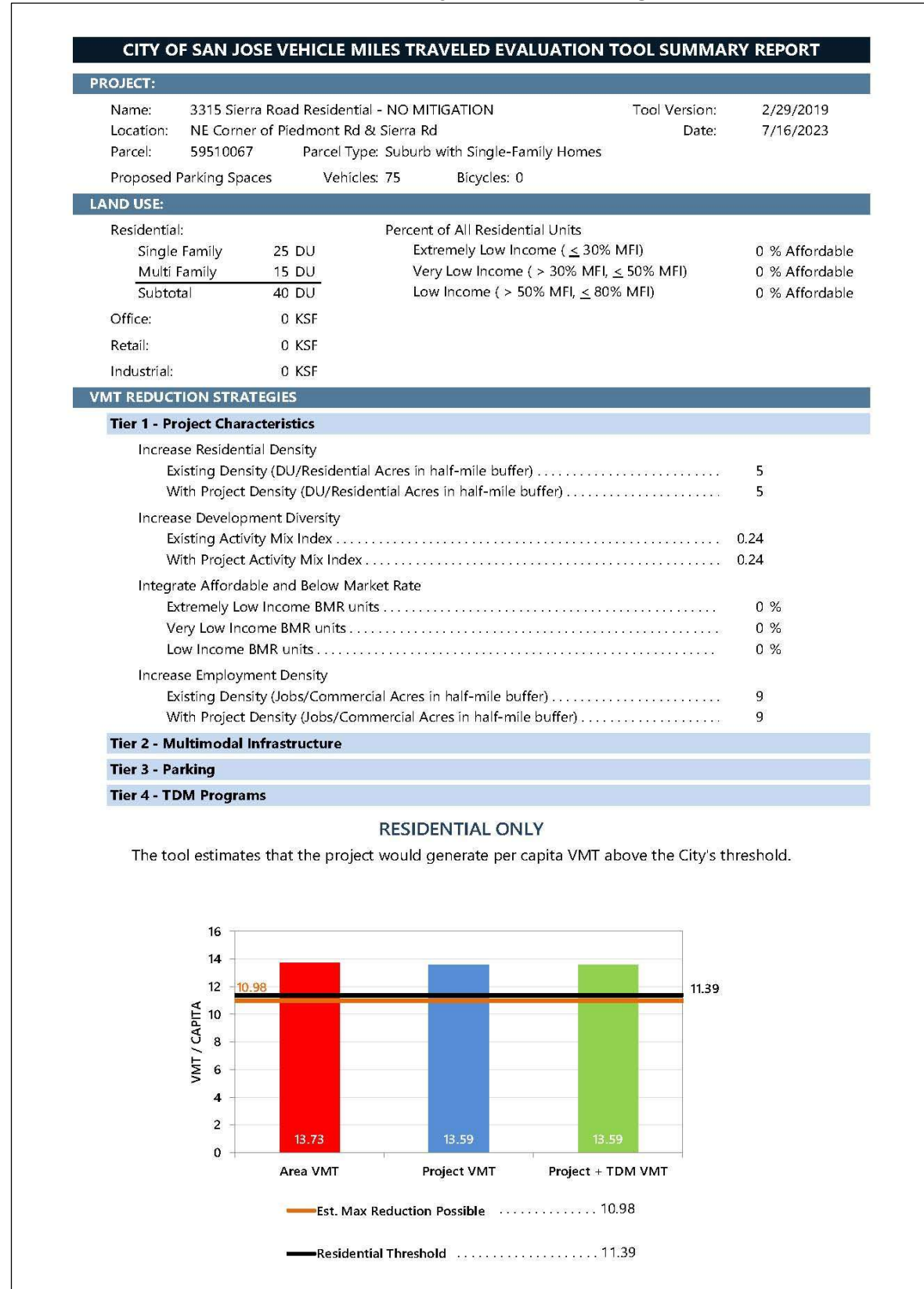
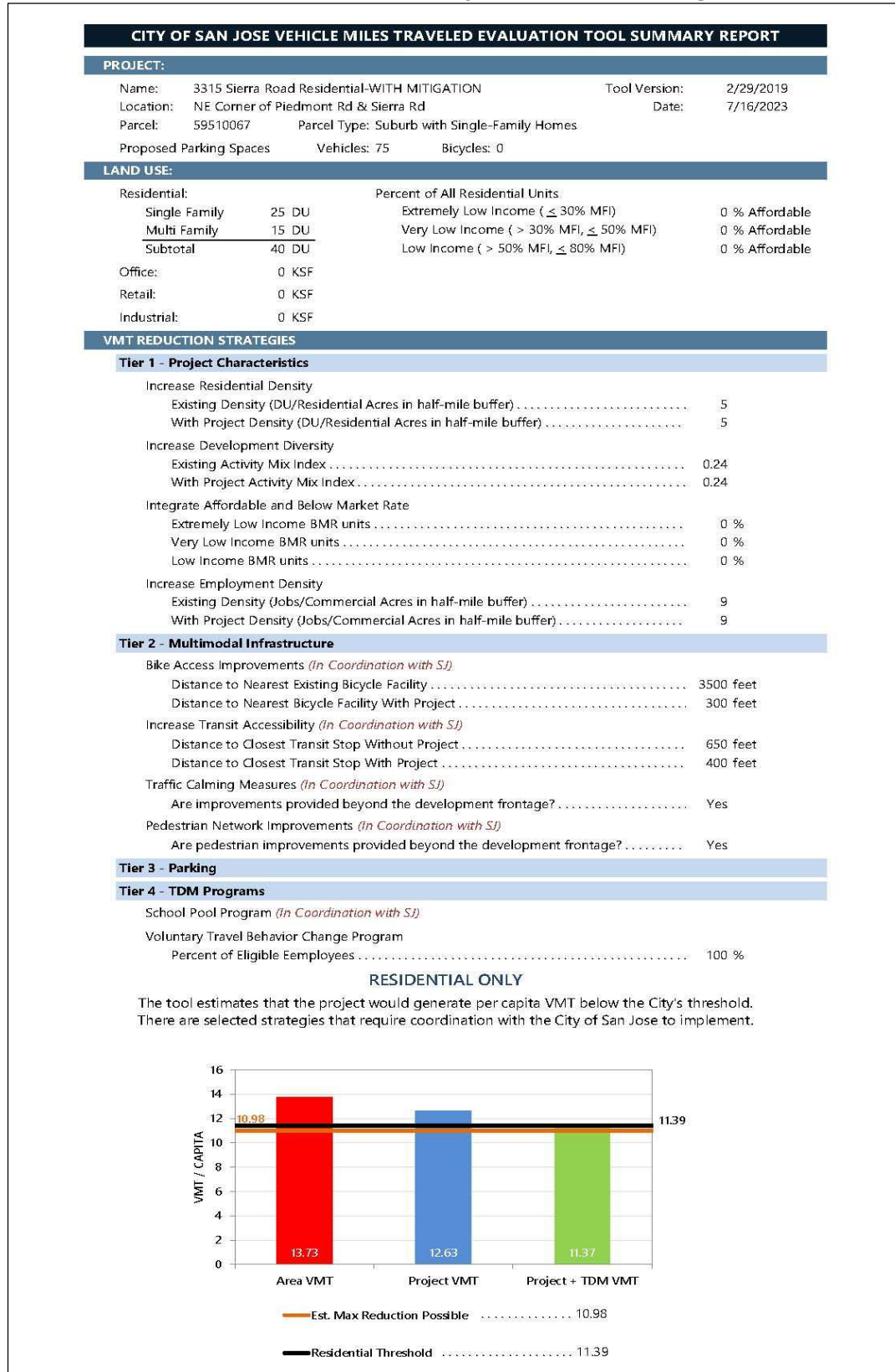


Figure 8
San Jose VMT Evaluation Tool Summary Report – With Mitigation



Cumulative Impact Analysis

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

According to the Envision San Jose 2040 General Plan, the project site is designated *Residential Neighborhood*. This designation is applied broadly throughout the City to encompass most of the established single-family residential neighborhoods. The intent of this designation is to preserve the existing character of these neighborhoods and to strictly limit new development to infill projects that conform to the prevailing character of the neighborhoods. Development within this designation will typically have a density of 8 DU/AC. However, the prevailing residential density of the surrounding neighborhoods is approximately 16 DU/AC.

The residential project is proposing a development density of approximately 11 DU/AC, based on 25 single-family homes and a net site area of 2.29 acres ($25 \text{ DU} / 2.29 \text{ AC} = 10.92 \text{ DU/AC}$). Since the *Residential Neighborhood* land use designation allows for infill development at a maximum density of 16 DU/AC, the project density is consistent with the current land use designation. The proposed project would not increase the residential density in the area and would be compatible with the surrounding residential neighborhoods along Piedmont Road and Sierra Road.

The project site is located within the Piedmont Road/Sierra Road Urban Village boundaries. Urban Villages are walkable, bicycle-friendly, transit-oriented settings that promote residential development and job growth, thus supporting the General Plan's policies and goals. Urban Villages are designed to provide a vibrant and inviting mixed-use environment to attract pedestrians, bicyclists, and transit users of all ages. Note that the Piedmont Road/Sierra Road Urban Village Plan has not yet been prepared or adopted and the site remains designated Residential Neighborhood.

The project site is currently in the A Agricultural Zoning District, which is not a conforming zoning district of the *Residential Neighborhood* land use designation. However, the project plans to rezone the site to a Planned Development Zoning District with a base zone of R-1-8 Single-Family Residential, which is a conforming zoning district of the *Residential Neighborhood* land use designation.

Since the project plans to rezone the site to a Planned Development Zoning District, it would conform to the 2040 General Plan and a General Plan Amendment (GPA) would not be required. The residential project would be considered part of the cumulative solution to meet the General Plan's long-range transportation goals and would result in a less-than-significant cumulative impact.

4. Local Transportation Analysis

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

Intersection Operations Analysis

The intersection operations analysis is intended to quantify the operations of San Jose 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 are 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. It is assumed in this analysis that the future transportation network with the project would be the same as the existing transportation network.

Project Trip Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear are estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic entering and exiting the site is estimated for the AM and PM peak hours. As part of the project trip distribution, 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.

Trips that would be generated by the residential project were estimated using the ITE average trip rates for “Single-Family Detached Housing” (ITE Land Use 210) and “Multifamily Housing Low-Rise” (ITE Land Use 220) located in a General Urban/Suburban setting. The multifamily housing low-rise trip generation rates were used to estimate trips generated by the proposed Accessory Dwelling Units (ADUs). City of San Jose staff have approved this approach.

Trip Adjustments and Reductions

In accordance with San Jose's *Transportation Analysis Handbook* (April 2023, Section 4.8, "Intersection Operations Analysis"), the project is eligible for adjustments and reductions from the baseline trip generation described above. The applicable trip adjustments and reductions are described below.

Location-Based Trip Adjustment

Based on the 2023 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 tool, the project site is located within the place type "Suburban with Single-Family Homes". Therefore, the baseline project trips were adjusted to reflect the corresponding mode share. Residential developments within this area type have a vehicle mode share of 94% (according to Table 17 of the City's *Transportation Analysis Handbook*). The 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 6% trip reduction is based on the percent mode share for other modes of travel besides automobiles.

Project Trips

After applying the ITE trip rates to the proposed residential project and applying the appropriate trip reductions, the project would generate 317 daily vehicle trips, with 23 trips occurring during the AM peak hour and 30 trips occurring during the PM peak hour. Using the inbound/outbound splits contained in the ITE *Trip Generation Manual*, the project would produce 6 inbound and 17 outbound trips during the AM peak hour, and 19 inbound and 11 outbound trips during the PM peak hour. After applying the trip credits associated with the existing use to be removed (Olivera Egg Ranch), the proposed project would generate -68 net daily vehicle trips, with 4 new trips occurring during the AM peak hour and -28 net trips occurring during the PM peak hour. Using the inbound/outbound splits contained in the ITE *Trip Generation Manual*, the project would produce -5 net inbound and 9 new outbound trips during the AM peak hour, and -10 net inbound and -18 net outbound trips during the PM peak hour (see Table 5).

Table 5
Project Trip Generation Estimates

Land Use	Size	Daily Rate	Daily Trips	AM Peak Hour				PM Peak Hour			
				Pk-Hr Rate	In	Out	Total	Pk-Hr Rate	In	Out	Total
<u>Proposed Uses</u>											
Single-Family Detached Housing ¹	25 DU	9.43	236	0.70	5	13	18	0.94	15	9	24
Accessory Dwelling Unit (ADU) ²	15 DU	6.74	101	0.40	1	5	6	0.51	5	3	8
Location-Based Vehicle Mode Share (6%) ³			(20)		0	(1)	(1)		(1)	(1)	(2)
Project Trips:			317		6	17	23		19	11	30
<u>Existing Uses (To Be Removed)</u>											
Commercial Building ⁴			(385)		(11)	(8)	(19)		(29)	(29)	(58)
Net New Trips:			-68		-5	9	4		-10	-18	-28

Notes:

¹ Project trip generation estimates based on average rates contained in the *ITE Trip Generation Manual, 11th Edition*, for Single-Family Detached Housing (Land Use 210) located in a General Urban/Suburban setting. Rates are expressed in trips per dwelling unit (DU).

² Project trip generation estimates based on average rates contained in the *ITE Trip Generation Manual, 11th Edition*, for Multifamily Housing Low-Rise (Land Use 220) located in a General Urban/Suburban setting. Rates expressed in trips per dwelling unit (DU).

³ A 6% reduction was applied to the residential project based on the location-based vehicle mode share percentage outputs (Table 17 of the TA Handbook) produced from the San Jose Travel Demand Model for the place type: Suburban with Single-Family Homes.

⁴ The AM and PM peak hour trips generated by the existing commercial building (Olivera Egg Ranch) to be removed are based on driveway counts conducted on July 6, 2023. Existing daily trips were estimated (10 x average of AM and PM counts).

Trip Distribution and Assignment

The trip distribution pattern for the residential project was estimated based on existing travel patterns on the surrounding roadway network that reflect typical weekday AM and PM commute patterns, the locations of complementary land uses, and freeway access points. The AM and PM peak hour vehicle trips generated by the project were assigned to the roadway network in accordance with the trip distribution pattern. Figure 9 shows the project trip distribution pattern and trip assignment.

Traffic Volumes Under All Scenarios

Existing Traffic Volumes

New 2022 traffic counts were collected for all the study intersections. However, since the current traffic volumes in the study area have not yet returned to pre-Covid pandemic levels, the new counts were not used for the signalized intersection. Instead, existing AM and PM peak hour traffic volumes for the signalized study intersection were obtained from 2018 counts provided by the City of San Jose. In addition, an annual growth factor of 1% was applied to the 2018 counts at the City's request. The new 2022 counts were used for the unsignalized study intersections, however, since historical count data are not available for unsignalized intersections. The existing peak-hour intersection volumes are shown on Figure 10. New count data are contained in Appendix A.

Background Traffic Volumes

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 background peak-hour intersection volumes are shown on Figure 11. The ATI sheets are 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 12). Traffic volumes for all traffic scenarios are tabulated in Appendix C.

Intersection Traffic Operations

Intersection levels of service were evaluated based on the standards of the City of San Jose. The results of the analysis show that the signalized study intersection is currently operating at an acceptable level of service (LOS C) during both the AM and PM peak hours of traffic and would continue to do so under background and background plus project conditions (see Table 6).

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

Table 6
Intersection Level of Service Analysis Summary

ID	Signalized Intersection	Peak Hour	Count Date	Existing		Background		Background Plus Project			
				Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Incr. In Crit. Delay (sec)	Incr. In Crit. V/C
1	Piedmont Rd & Sierra Rd	AM	12/4/2018	27.1	C	27.5	C	27.7	C	0.0	0.001
		PM	12/4/2018	25.9	C	26.2	C	25.6	C	-0.3	-0.003

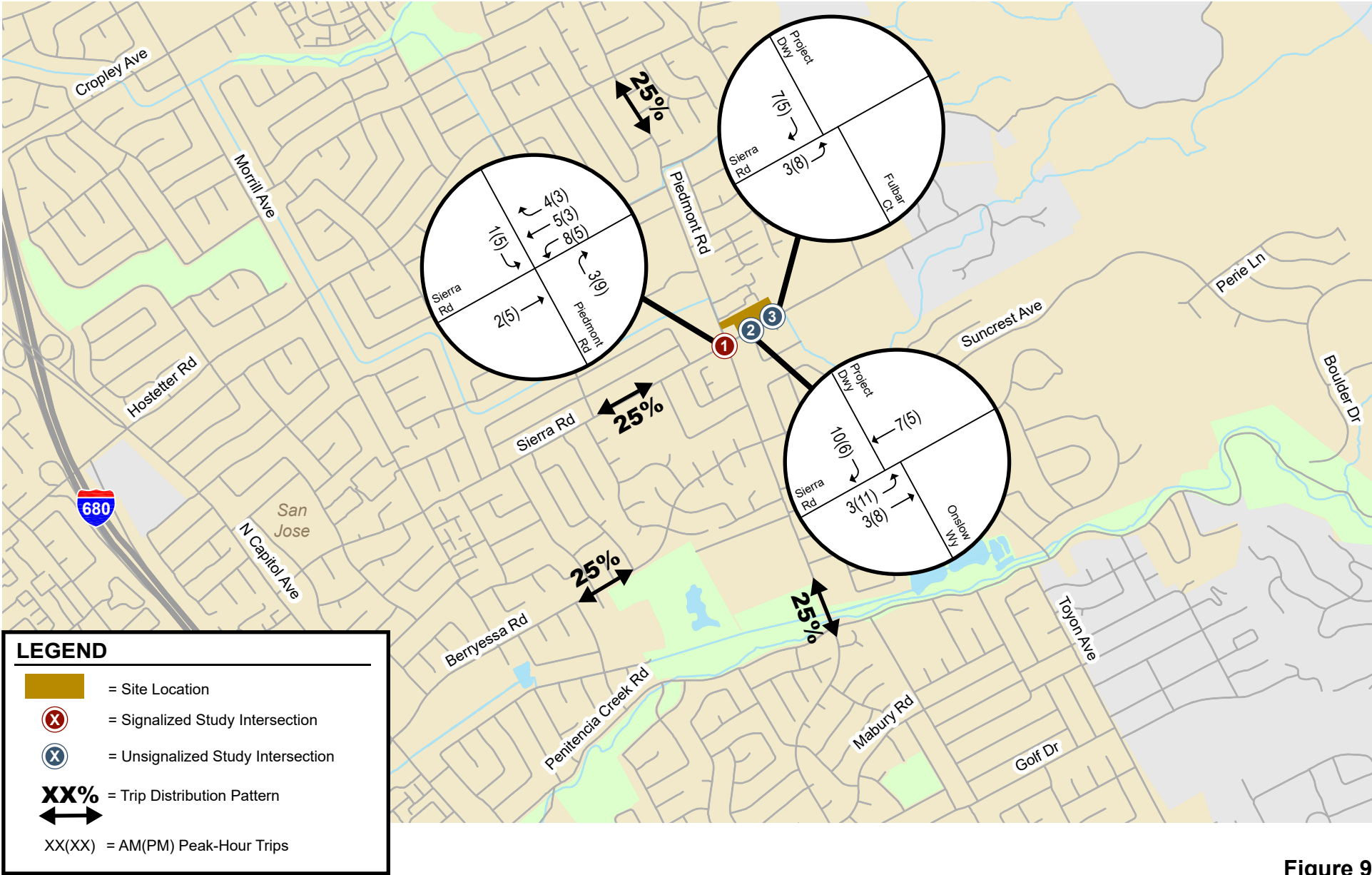


Figure 9
Project Trip Distribution Pattern and Gross Trip Assignment

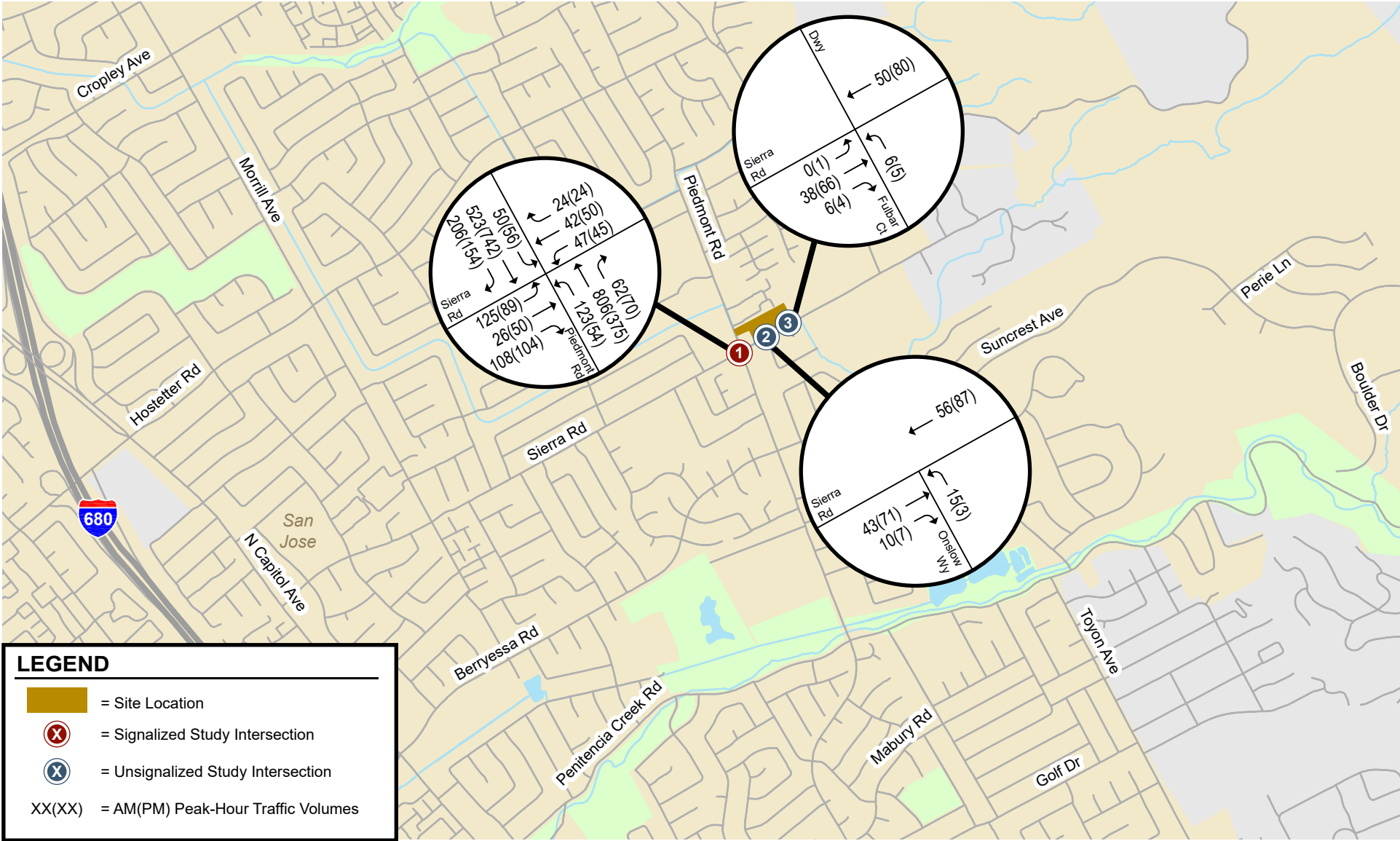


Figure 10
Existing Traffic Volumes

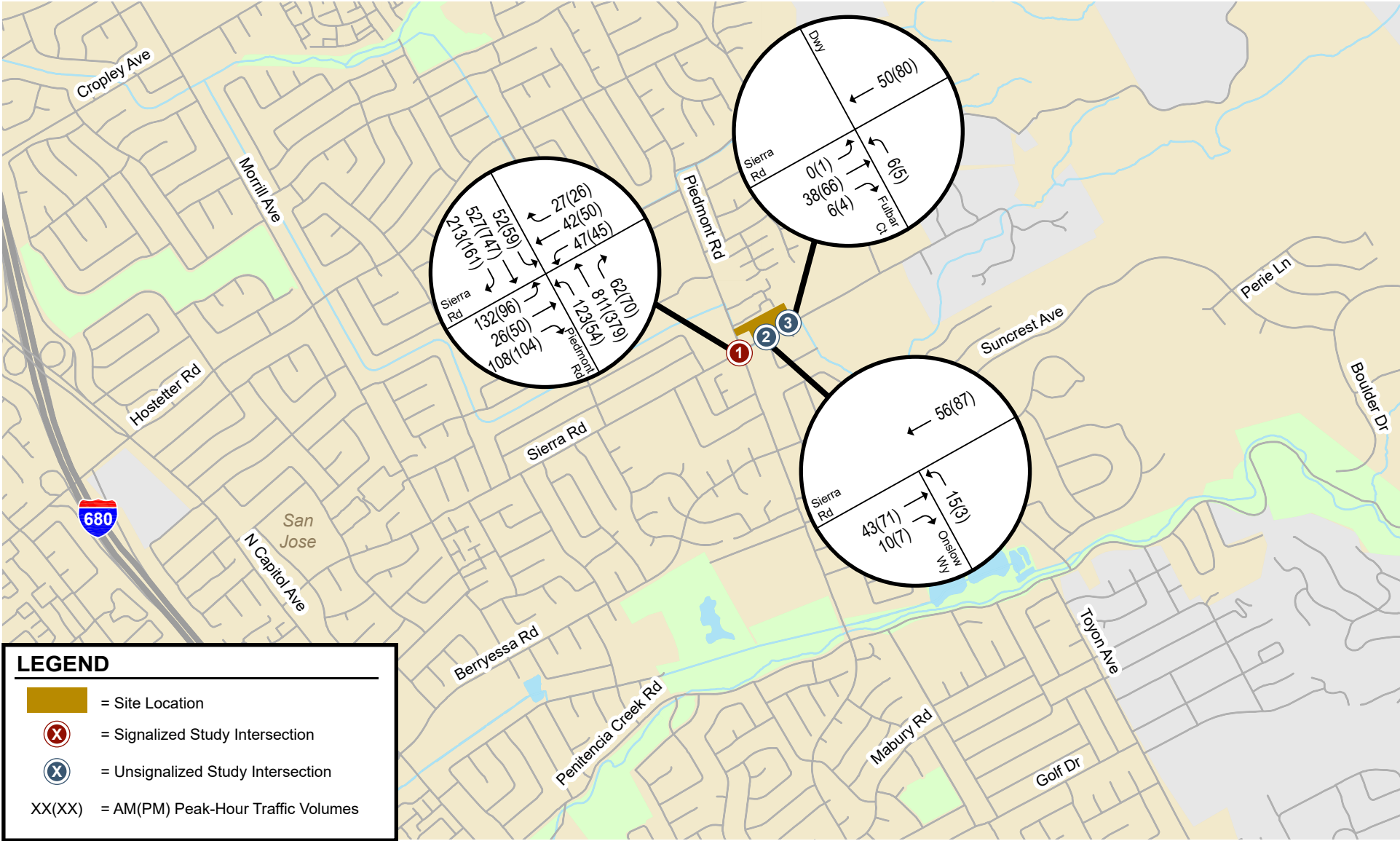


Figure 11
Background Traffic Volumes

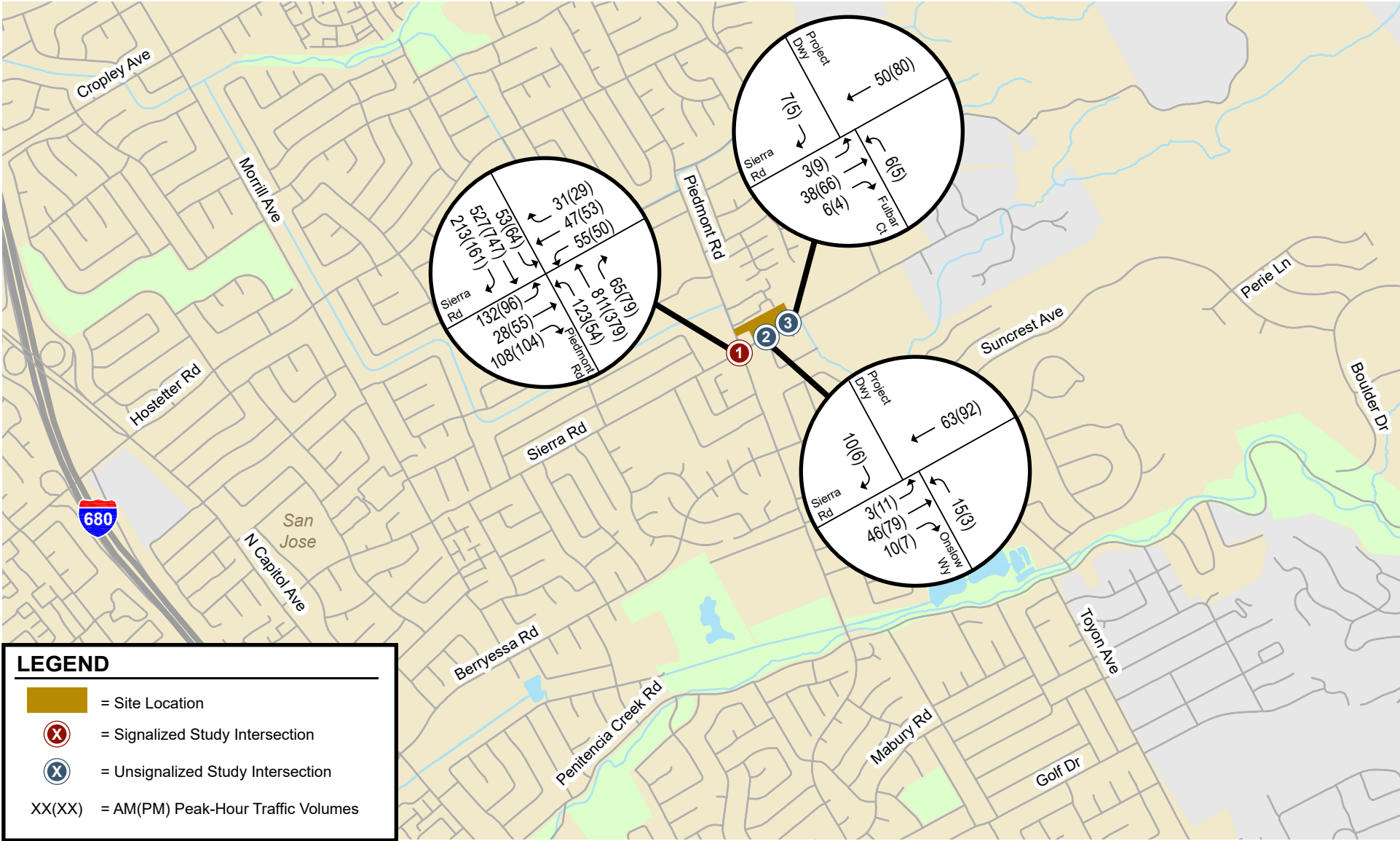


Figure 12
Background Plus Project Traffic Volumes

Intersection Queuing Analysis

The analysis of intersection operations was supplemented with a vehicle queuing analysis at the signalized intersection of Piedmont Road and Sierra Road (see Table 7). At the City's request, the westbound left-turn and right-turn movements at the study intersection were evaluated for potential queuing issues.

Table 7
Intersection Queuing Analysis Summary

Measurement	Piedmont Road & Sierra Road			
	Westbound Left-Turn		Westbound Right-Turn	
	AM	PM	AM	PM
Existing				
Cycle/Delay ¹ (sec)	140	140	140	140
Volume (vphpl)	47	45	24	24
95th %. Queue (veh/ln.)	4	4	3	3
95th %. Queue (ft./ln.) ²	100	100	75	75
Storage (ft./ ln.) ³	175	175	175	175
Adequate (Y/N)	Y	Y	Y	Y
Background				
Cycle/Delay ¹ (sec)	140	140	140	140
Volume (vphpl)	47	45	27	26
95th %. Queue (veh/ln.)	4	4	3	3
95th %. Queue (ft./ln.)	100	100	75	75
Storage (ft./ ln.) ³	175	175	175	175
Adequate (Y/N)	Y	Y	Y	Y
Background Plus Project				
Cycle/Delay ¹ (sec)	140	140	140	140
Volume (vphpl)	52	36	29	21
95th %. Queue (veh/ln.)	5	4	3	2
95th %. Queue (ft./ln.) ²	125	100	75	50
Storage (ft./ ln.) ³	175	175	175	175
Adequate (Y/N)	Y	Y	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 + roadway taper.				

Piedmont Road and Sierra Road

The results of the queuing analysis show that adequate vehicle storage is currently provided and would continue to be provided under background and background plus project conditions to accommodate the maximum vehicle queues that would develop for the westbound left-turn and right-turn movements at the Piedmont Road/Sierra Road intersection.

Neighborhood Street Traffic

Average daily traffic (ADT) volume and vehicle speed data were collected along Sierra Road between Piedmont Road and Fulbar Court. Average daily traffic (ADT) volume and vehicle speed data were collected over a one-week period from November 12th to November 18th, 2022. The ADT volume and 85th percentile vehicle speed for the study street segment is summarized in Table 8. The raw daily traffic count data and speed data are presented in Appendix A.

Table 8
Average Daily Traffic Volume and Speed Summary (Sierra Road)

Street	Street Segment	Posted Speed Limit	85th % Speed (Avg. of Both Directions)	Existing ADT ¹	Net Daily Project Trips	% Vol Increase
Sierra Road	Piedmont Rd to Fulbar Ct	35 mph	38 mph	1,410	-68	-5%
<p>Note: ¹ ADT = average daily traffic in vehicles/day (Tue, Wed & Thu only). Daily volume and speed data collected Nov 12-18, 2022.</p>						

The definition of an acceptable amount of traffic on a local street is subjective and depends on many factors such as street width, presence of on-street parking, building setback, number of driveways, presence of bicycle facilities, and whether the local street provides access to major roadways. The City of San Jose has not established thresholds or guidelines that can be applied to determine the level of increase that should be deemed a significant increase, or the level of increase that would have a negative effect on the livability or quality of life for residents.

A typical ADT volume for a neighborhood collector street with a posted speed limit of 35 mph, such as Sierra Road, ranges from 1,000 to 6,000 vehicles per day. As shown in Table 8, the ADT volume for Sierra Road (approximately 1,400 vehicles per day) falls within the typical ADT range for collector streets. Note that since the proposed residential project would replace an existing commercial use, the project would result in a lower ADT volume along Sierra Road.

The average bidirectional 85th percentile vehicle speed along Sierra Road is 38 mph. Therefore, speeding does not appear to be an issue along Sierra Road.

Site Access and On-Site Circulation

The site access and circulation evaluations are based on the March 27, 2024 site plan prepared by Civil Engineering Associates (see Figure 2). Site access was evaluated to determine the adequacy of the site’s driveways with regard to the following: geometric design, traffic volume, and operations. On-site vehicular circulation and parking layout were reviewed in accordance with generally accepted traffic engineering standards and transportation planning principles.

Project Driveways

Vehicular access to the project site would be provided via two full-access driveways on the north side of Sierra Road. The west project driveway would be situated approximately halfway between Onslow Way and the driveway serving the existing gas station to the west. The east project driveway would be offset slightly from Fulbar Court. Both project driveways are shown to be 26 feet wide with standard curb cuts (“dustpan” style), which meets the City of San Jose standard design for residential driveways.

The project would construct 25 single-family detached homes, each with a two-car garage. Up to fifteen of the homes would include an attached or detached accessory dwelling unit (ADU). Access to most two-car garages would be provided via a continuous 20- to 24-foot-wide private street that would connect the two project driveways. Five parallel surface parking spaces and four 90-degree parking space would also be accessed via the private street. Access to the residential garages located in the middle of the site would be provided via a 20-foot wide private alley that would include six 90-degree surface parking spaces situated between the homes and ADUs.

The project site includes a narrow section that connects to Piedmont Road on the north side of the adjacent gas station. The project is proposing to remove the existing driveway and replace with new curb, gutter, and sidewalk to match the existing configuration. The narrow section of the property will be used as a biotreatment area.

Trips at the Project Driveways

The project-generated trips that are estimated to occur at the west driveway are 3 inbound trips and 10 outbound trips during the AM peak hour, and 11 inbound trips and 6 outbound trips during the PM peak hour. The project-generated trips that are estimated to occur at the east driveway are 3 inbound trips and 7 outbound trips during the AM peak hour, and 8 inbound trips and 5 outbound trips during the PM peak hour. All the AM and PM peak hour project trips would travel to and from the west via Piedmont Road/Sierra Road. Due to the low number of project-generated trips at the project driveways and the relatively low traffic volumes on Sierra Road, operational issues related to vehicle queuing and/or delay are not expected to occur at the project driveways.

Sight Distance at the Project Driveways

There are no existing landscaping, roadway curvature, or other visual obstructions along the project frontage that would obscure sight distance at the project driveways. The site plan shows street trees would be added along the project frontage along Sierra Road. The street trees should be planted and maintained so that their canopies are at least 6 feet off the ground so that the vision of exiting drivers is not blocked.

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. Sight distance generally should be provided in accordance with Caltrans standards. The minimum acceptable sight distance is often considered the Caltrans stopping sight distance. Sight distance requirements vary depending on the roadway speeds. For Sierra Road, which has a posted speed limit of 35 mph, the Caltrans stopping sight distance is 300 feet (based on a design speed of 40 mph). This means that a driver must be able to see 300 feet down Sierra Road to locate a sufficient gap to turn out of the project driveways. This also gives drivers traveling along Sierra Road adequate time to react to vehicles exiting the project driveways.

Street parking is currently allowed along the project frontage on Sierra Road and would continue to be permitted with the project. According to the site plan, the project would establish no parking zones (red curb) immediately adjacent to the project driveways on Sierra Road to ensure adequate sight distance is provided. At the east project driveway, the no parking zones would extend 30 feet on both sides of the driveway. At the west project driveway, a 75-foot no parking zone would be provided on the east side of the driveway. Due to the extended/realigned curb line along the project frontage, parking would not be possible on the west side of the west project driveway.

Project Driveway Alignment

The west project driveway would be midway between Onslow Way and the driveway serving the existing gas station to the west, and the east project driveway would be offset slightly from Fulbar

Court. As previously discussed, both project driveways would have low traffic volumes. Sierra Road and the existing courts also have low traffic volumes based on traffic counts collected in November and December of 2022 (see volumes on Figure 10). Due to the low traffic volumes and adequate sight distance that would be provided at the project driveways, the offset conditions are not likely to create any operational or safety issues. However, the outbound movements at the project driveways should be stop-controlled.

Recommendation: Provide stop control signage and markings at the private street/public street interfaces (i.e., project driveways).

On-Site Vehicular Circulation and Parking Layout

On-site vehicular circulation was reviewed in accordance with generally accepted traffic engineering standards and City of San Jose design guidelines. Access to the project would be provided via two full-access driveways on Sierra Road. A continuous 20-foot-wide two-way private loop road with some parallel parking spaces on one side would connect the two driveways and provide access to the residential two-car garages. A total of five parallel parking spaces and four 90-degree parking space would be located along the private street. A 20-foot-wide private alley would serve garages located in the middle of the site, as well as six additional 90-degree parking spaces situated adjacent to the residential garages and ADUs. A total of 15 off-street surface parking spaces would be provided for use by guests and/or ADU residents.

As previously described, street parking is currently allowed along the project frontage on Sierra Road and would continue to be permitted with the project. The street parking is not project-specific and would be available for public use. Note that the on-street parking is subject to removal should additional right-of-way be necessary to implement any future bikeway plans along Sierra Road.

Truck Access and Circulation

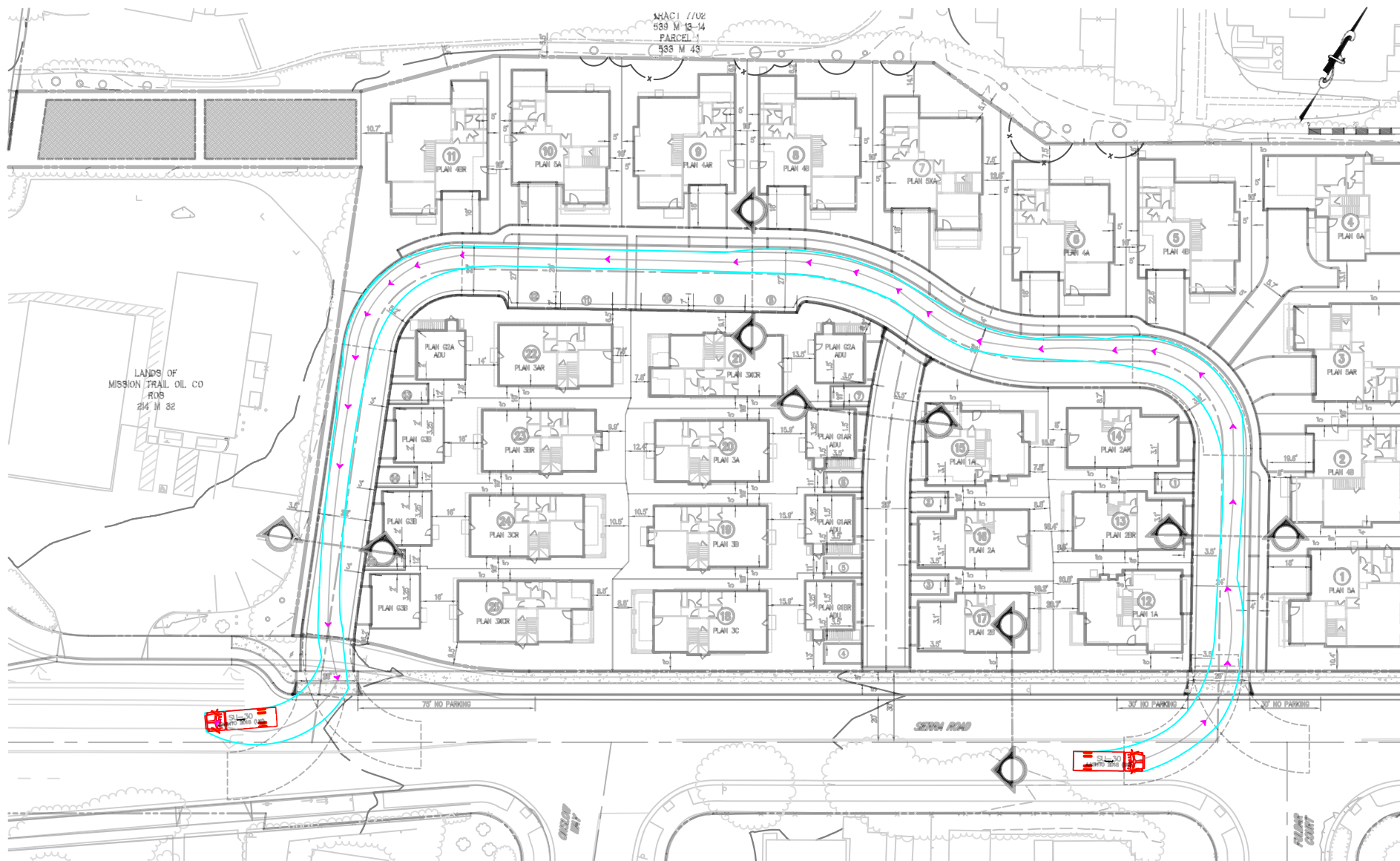
The project site plan was reviewed for truck access including delivery and moving trucks, garbage trucks and emergency vehicles. The turning template (see Figure 13) shows that SU-30 type trucks could adequately enter the site, navigate through the site, and exit the site. The on-site parallel parking spaces along the private street would not interfere with SU-30 truck circulation. Note that although SU-30 trucks would require nearly the full width of the driveways when entering and exiting the site, this situation is common for large trucks at residential driveways.

Garbage Collection

Trash bins would be stored within each individual residential unit. Trash bins would be wheeled to the private street on garbage collection days. Due to the length of the private alley, residents living along the alley would also wheel their trash bins out to the main private street (as shown on the site plan).


Emergency Vehicle Access

The City of San Jose Fire Department requires that all portions of the buildings be within 150 feet of a fire department access road and requires a minimum of 3 feet clearance from the property line along all sides of the building. According to the site plan, the project would meet the fire access requirements.



LEGEND

STATEMENTS AND TABLES

DRAWN ----	SCALE 1" = 50'	 HEXAGON TRANSPORTATION CONSULTANTS, INC. 100 Century Center Court, Suite 501 San Jose, California 95112 Ph: (408) 971-6100 www.hextrans.com	CITY OF SAN JOSE	FIGURE NO.
CHECKED ----	DATE 11/15/2024		3315 SIERRA RD SU-30 TRUCK TURNING TEMPLATE	13

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 multimodal 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

The site plan indicates that the existing sidewalk and curb on Sierra Road would be reconstructed along the entire project frontage. The site plan shows a 10-foot-wide right-of-way area that includes a 5-foot-wide sidewalk and a 5-foot-wide parking strip. The proposed sidewalk and parking strip is consistent with the sidewalk configuration adjacent to the existing residential development along the south side of Sierra Road (directly across the street).

The site plan shows a continuous sidewalk along one side of the private loop road that would provide access to the homes situated on the outside of the loop. The homes situated on the inside of the loop road would be served by paved pedestrian paths. The on-site sidewalk and paved paths would connect directly to the reconstructed sidewalk along Sierra Road. Providing adequate access to each home would help create a pedestrian-friendly and bicycle-friendly environment and encourage walking and bicycling by residents of the project.

Future Bicycle Facilities

The project would not remove any bicycle facilities, nor would it conflict with any adopted plans or policies for new bicycle facilities. The City of San Jose Better Bike Plan 2025 identifies Piedmont Road as having a Class IV separated bikeway. As described in Chapter 3, as part of the VMT mitigation, the project proposes to construct an approximately 150-foot-long Class II buffered bike lane with new shoulder striping along northbound Piedmont Road between Sierra Road and the existing driveway serving the gas station. Flexible delineators also would be installed north of the driveway adjacent to the proposed biotreatment area of the project site as a transition from the Class II buffered bike lane to the future planned Class IV separated bikeway. This multimodal infrastructure improvement would encourage bicycling for the project and for existing development in the area, resulting in fewer drive-alone commute trips.

Pedestrian and Bicycle Access to Schools

The following schools are located within walking and/or biking distance of the project site:

- Piedmont Hills High School – located about 500 feet north of the project site on the west side of Piedmont Road.
- Piedmont Middle School – located approximately ½ mile south of the project site on the west side of Piedmont Road.
- Sierramont Middle School – located approximately ¾ mile northwest of the project site on Kimlee Drive.
- Ruskin Elementary School – located approximately ½ mile west of the project site on Turlock Lane (just west of Piedmont Hills High School).
- Noble Elementary School – located approximately ½ mile south of the project site on Grossmont Drive (east side of Piedmont Road).
- Summerdale Elementary School – located approximately ¾ mile southwest of the project site on Summerdale Drive (south side of Berryessa Road).
- Cherrywood Elementary School – located approximately 1 mile west of the project site on Greengate Drive (north side of Sierra Road).

Safe and direct pedestrian access to all the nearby schools is provided via a continuous network of sidewalks along the streets in the surrounding area. Crosswalks with pedestrian signal heads and push buttons are provided at all the signalized intersections and some unsignalized intersections along the school routes. High visibility crosswalks are provided on Piedmont Road adjacent to Piedmont Hills High School and Piedmont Middle School. Wheelchair ramps are provided at all corners of the intersections in the area.

Safe and direct bicycle access to all the nearby schools is provided via a continuous network of bike lanes along the streets in the surrounding area. Bike lanes are provided on Piedmont Road, Sierra Road, Berryessa Road/Suncrest Avenue, Penitencia Creek Road, and Hostetter Road in the project area. As previously described, Class IV protected bike lanes are planned along Piedmont Road.

Transit Services

Local bus routes 61 and 71 stop at the intersection of Piedmont Road and Sierra Road. Route 61 serves the Berryessa LRT station. Due to the convenient transit stop locations, it is reasonable to assume that some residents would utilize the transit services provided in the area. It is estimated that the increased transit demand generated by the proposed project could be accommodated by the current available ridership capacities of the transit services in the area.

Parking

The project's off-street vehicle parking requirements are based on the City of San Jose parking standards (*Municipal Code Chapter 20.90*) that were in place prior to adoption of the new Parking and TDM Ordinance (which occurred in April of 2023). Accordingly, the project is proposing to provide 2 garage spaces for each single-family home, for a total of 50 garage parking spaces. The project would also provide 9 parking spaces along the private loop road and 6 parking spaces along the centrally located private alley for use by guests and ADU tenants.

5. Conclusions

This report presents the results of the transportation analysis conducted for the proposed residential development at 3315 Sierra Road in San Jose, California. The project site (APN 595-10-067) is generally located on the northeast corner of Piedmont Road and Sierra Road and is currently occupied by a commercial building complex (Olivera Egg Ranch), one single-family home, and multiple accessory structures. The project proposes to demolish the existing structures and construct 25 single-family homes and up to 15 accessory dwelling units (ADUs). The project would remove five existing driveways and construct two residential driveways.

This study was conducted for the purpose of identifying the potential transportation impacts related to the proposed residential project. The transportation impacts of the project were evaluated following the standards and methodologies established in the City of San Jose's *Transportation Analysis Handbook* (April 2023). Based on the City of San Jose's Transportation Analysis Policy (Policy 5-1) and the *Transportation Analysis Handbook*, the project includes a California Environmental Quality Act (CEQA) level Transportation Analysis (TA) and a 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 three (3) intersections (one signalized and two unsignalized) in the vicinity of the project site. The LTA also includes an analysis of site access, on-site circulation, vehicle queuing, and effects to transit services and bicycle and pedestrian access. A freeway segment analysis in accordance with the VTA's *Transportation Impact Analysis Guidelines* was not required because the project would generate fewer than 100 new peak hour vehicle trips.

CEQA Transportation Analysis

The project daily VMT estimated by the City's VMT Evaluation Tool is 13.59 per capita. The project VMT, therefore, exceeds the residential threshold of 11.39 daily VMT per capita.

Project Impact

Since the VMT generated by the project would exceed the threshold of significance for residential uses in the area, the project would result in a significant transportation impact on VMT, and mitigation measures are required to reduce the VMT impact to a less-than-significant level.

Project Mitigation

Based on the four VMT reduction strategy tiers included in the VMT Evaluation Tool, it is recommended that the project implement bike access improvements, pedestrian network improvements, traffic calming measures, and transit accessibility improvements (Tier 2 multimodal infrastructure strategies), as well as provide a school carpooling program and implement a voluntary travel behavior change

program (Tier 4 TDM strategies) to mitigate the significant VMT impact. The mitigation measures are listed below.

1. Bike Access Improvements (Tier 2)
2. Pedestrian Network Improvements (Tier 2)
3. Traffic Calming Measures (Tier 2)
4. Transit Accessibility Improvements (Tier 2)
5. School Pool Program (Tier 4)
6. Voluntary Travel Behavior Change Program (Tier 4)

Conclusions of VMT Impact and Mitigation

Based on the City's VMT Evaluation Tool, implementing the multimodal infrastructure improvements and TDM measures described above would lower the project VMT to 11.37 per capita, which would reduce the project impact to a less-than-significant level (below the City's threshold of 11.39 VMT per capita).

Local Transportation Analysis

Project Trip Generation

After applying the ITE trip rates to the proposed residential project and applying the appropriate trip reductions, the project would generate 317 daily vehicle trips, with 23 trips occurring during the AM peak hour and 30 trips occurring during the PM peak hour. Using the inbound/outbound splits contained in the ITE *Trip Generation Manual*, the project would produce 6 inbound and 17 outbound trips during the AM peak hour, and 19 inbound and 11 outbound trips during the PM peak hour. After applying the trip credits associated with the existing use to be removed (Olivera Egg Ranch), the proposed project would generate -68 net daily vehicle trips, with 4 new trips occurring during the AM peak hour and -28 net trips occurring during the PM peak hour. Using the inbound/outbound splits contained in the ITE *Trip Generation Manual*, the project would produce -5 net inbound and 9 new outbound trips during the AM peak hour, and -10 net inbound and -18 net outbound trips during the PM peak hour.

Intersection Traffic Operations

Based on the City of San Jose signalized intersection operations analysis criteria, the signalized study intersection would not be adversely affected by the project.

Other Transportation Issues

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.

Site Plan Recommendations

- Provide stop control signage and markings at the private street/public street interfaces (i.e., project driveways).

3315 Sierra Road Residential TA
Technical Appendices

Appendix A

New Count Data

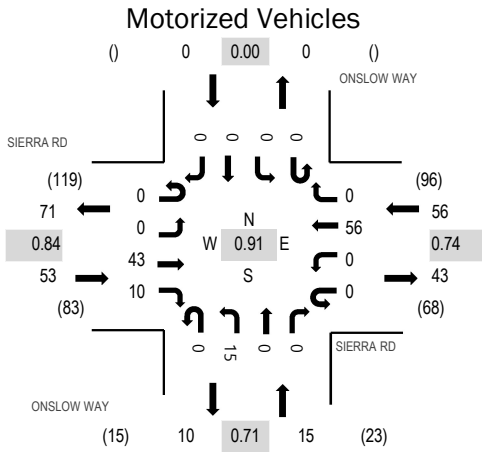
Location: 1 ONSLOW WAY & SIERRA RD AM

Date: Tuesday, December 6, 2022

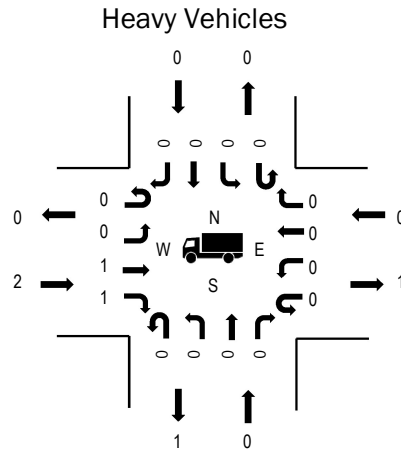
Peak Hour: 07:45 AM - 08:45 AM

Peak 15-Minutes: 07:55 AM - 08:10 AM

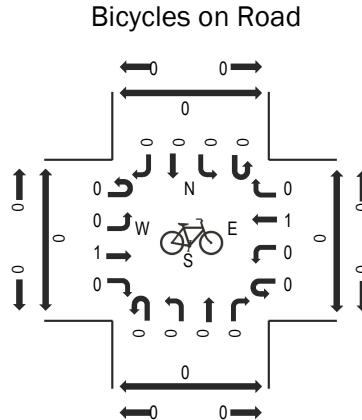
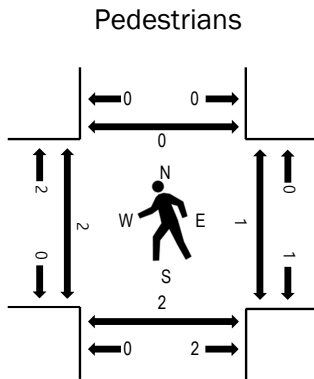
Peak Hour



Note: Total study counts contained in parentheses.



	HV%	PHF
EB	3.8%	0.84
WB	0.0%	0.74
NB	0.0%	0.71
SB	0.0%	0.00
All	1.6%	0.91



Traffic Counts - Motorized Vehicles

Interval Start Time	ONSLow WAY Northbound				SIERRA RD Eastbound				ONSLow WAY Southbound				SIERRA RD Westbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	1	0	0	0	0	2	1	0	0	0	0	0	0	2	0	6	88
7:05 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	98
7:10 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	4	0	7	106
7:15 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	3	0	5	106
7:20 AM	0	1	0	0	0	0	4	0	0	0	0	0	0	0	4	0	9	110
7:25 AM	0	2	0	0	0	0	3	2	0	0	0	0	0	0	4	0	11	110
7:30 AM	0	1	0	0	0	0	2	0	0	0	0	0	0	0	4	0	7	112
7:35 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2	0	4	112
7:40 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	0	5	118
7:45 AM	0	3	0	0	0	0	2	1	0	0	0	0	0	0	12	0	18	124
7:50 AM	0	1	0	0	0	0	2	0	0	0	0	0	0	0	3	0	6	109
7:55 AM	0	1	0	0	0	0	3	0	0	0	0	0	0	0	4	0	8	115
8:00 AM	0	4	0	0	0	0	6	3	0	0	0	0	0	0	3	0	16	114
8:05 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	7	0	10	
8:10 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	4	0	7	
8:15 AM	0	3	0	0	0	0	4	2	0	0	0	0	0	0	0	0	9	
8:20 AM	0	1	0	0	0	0	1	2	0	0	0	0	0	0	5	0	9	
8:25 AM	0	1	0	0	0	0	6	1	0	0	0	0	0	0	5	0	13	
8:30 AM	0	0	0	0	0	0	2	1	0	0	0	0	0	0	4	0	7	
8:35 AM	0	1	0	0	0	0	7	0	0	0	0	0	0	0	2	0	10	
8:40 AM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	7	0	11	
8:45 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	3	
8:50 AM	0	1	0	0	0	0	6	1	0	0	0	0	0	0	4	0	12	
8:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7	
Count Total	0	23	0	0	0	0	68	15	0	0	0	0	0	0	96	0	202	
Peak Hour	0	15	0	0	0	0	43	10	0	0	0	0	0	0	56	0	124	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	NB	EB	SB	WB	Total		NB	EB	SB	WB	Total		NB	EB	SB	WB	Total
7:00 AM	0	1	0	0	1	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	0	0	0	1	1	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	0	0	0	1	1	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	0	1	0	0	1	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	0	1	0	0	1	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	0	0	0	0	0	8:10 AM	0	1	0	1	2	8:10 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0	8:15 AM	0	2	0	0	2
8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	1	1
8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0	8:30 AM	2	0	0	0	2
8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0	8:50 AM	0	2	0	0	2
8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	0	3	0	2	5	Count Total	0	1	0	1	2	Count Total	2	4	0	1	7
Peak Hour	0	2	0	0	2	Peak Hour	0	1	0	1	2	Peak Hour	2	2	0	1	5



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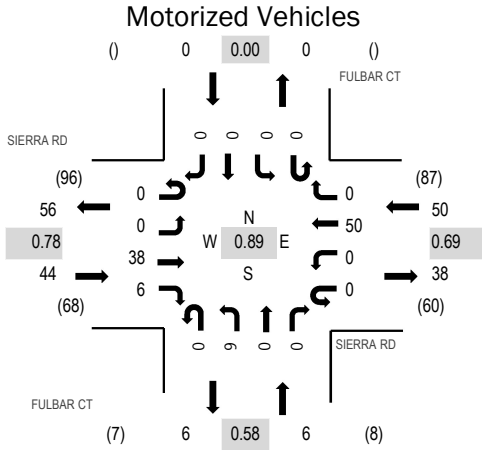
Location: 2 FULBAR CT & SIERRA RD AM

Date: Tuesday, December 6, 2022

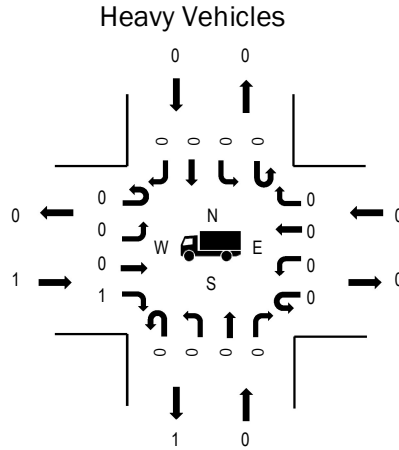
Peak Hour: 07:45 AM - 08:45 AM

Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour

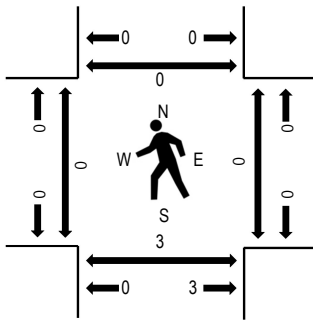


Note: Total study counts contained in parentheses.

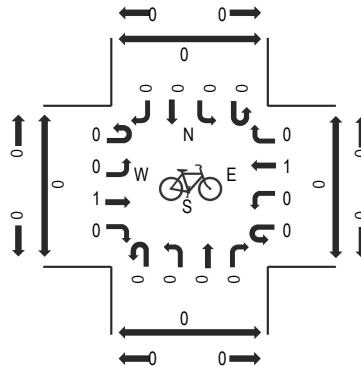


	HV%	PHF
EB	2.3%	0.78
WB	0.0%	0.69
NB	0.0%	0.58
SB	0.0%	0.00
All	1.0%	0.89

Pedestrians



Bicycles on Road



Traffic Counts - Motorized Vehicles

Interval Start Time	FULBAR CT Northbound				SIERRA RD Eastbound				FULBAR CT Southbound				SIERRA RD Westbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	0	0	0	1	0	2	0	0	0	0	0	0	0	2	0	5	71
7:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	75
7:10 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	4	83
7:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0	4	86
7:20 AM	0	1	0	0	0	0	3	0	0	0	0	0	0	0	3	0	7	86
7:25 AM	0	0	0	0	0	0	2	1	0	0	0	0	0	0	4	0	7	85
7:30 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	5	0	7	89
7:35 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	2	88
7:40 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	3	0	5	95
7:45 AM	0	2	0	0	0	0	3	0	0	0	0	0	0	0	11	0	16	100
7:50 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0	5	87
7:55 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	4	0	7	93
8:00 AM	0	1	0	0	0	0	6	0	0	0	0	0	0	0	2	0	9	92
8:05 AM	0	1	0	0	0	0	2	1	0	0	0	0	0	0	6	0	10	
8:10 AM	0	1	0	0	0	0	1	2	0	0	0	0	0	0	3	0	7	
8:15 AM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4	
8:20 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	5	0	6	
8:25 AM	0	0	0	0	0	0	5	1	0	0	0	0	0	0	5	0	11	
8:30 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	4	0	6	
8:35 AM	0	0	0	0	0	0	7	0	0	0	0	0	0	0	2	0	9	
8:40 AM	0	1	0	0	0	0	3	1	0	0	0	0	0	0	5	0	10	
8:45 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	3	
8:50 AM	0	0	0	0	0	0	6	0	0	0	0	0	0	0	5	0	11	
8:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	
Count Total	0	8	0	0	1	0	60	7	0	0	0	0	0	0	87	0	163	
Peak Hour	0	6	0	0	0	0	38	6	0	0	0	0	0	0	50	0	100	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	NB	EB	SB	WB	Total		NB	EB	SB	WB	Total		NB	EB	SB	WB	Total
7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	0	0	0	1	1	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	0	0	0	1	1	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	0	1	0	0	1	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	0	0	0	0	0	8:10 AM	0	1	0	1	2	8:10 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0	8:30 AM	2	0	0	0	2
8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0	8:35 AM	1	0	0	0	1
8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0	8:50 AM	2	0	0	0	2
8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	0	1	0	2	3	Count Total	0	1	0	1	2	Count Total	5	0	0	0	5
Peak Hour	0	1	0	0	1	Peak Hour	0	1	0	1	2	Peak Hour	3	0	0	0	3



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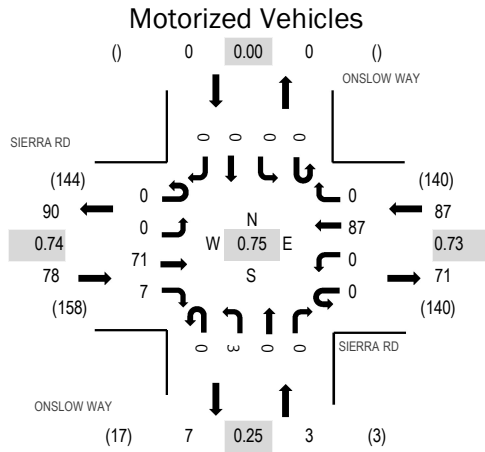
Location: 1 ONSLOW WAY & SIERRA RD PM

Date: Tuesday, December 6, 2022

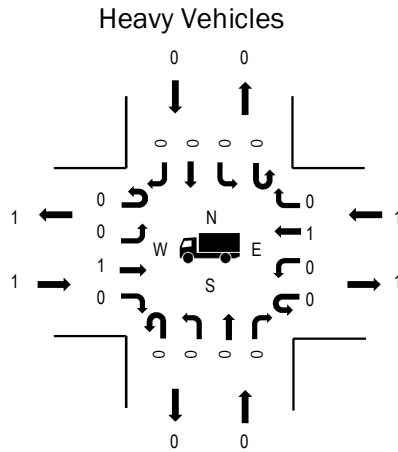
Peak Hour: 05:00 PM - 06:00 PM

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

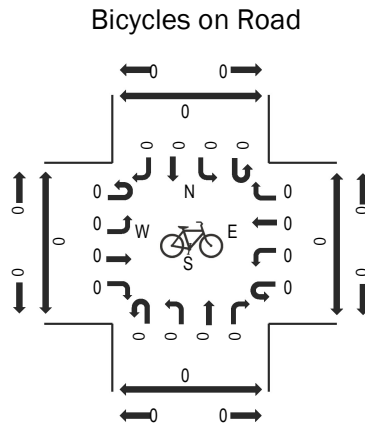
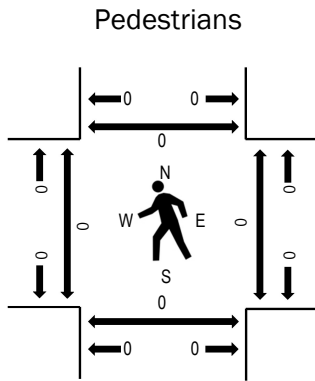
Peak Hour



Note: Total study counts contained in parentheses.



	HV%	PHF
EB	1.3%	0.74
WB	1.1%	0.73
NB	0.0%	0.25
SB	0.0%	0.00
All	1.2%	0.75



Traffic Counts - Motorized Vehicles

Interval Start Time	ONSLow WAY Northbound				SIERRA RD Eastbound				ONSLow WAY Southbound				SIERRA RD Westbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	0	0	0	0	0	8	1	0	0	0	0	0	0	1	0	10	133
4:05 PM	0	0	0	0	0	0	8	2	0	0	0	0	0	0	4	0	14	133
4:10 PM	0	0	0	0	0	0	8	0	0	0	0	0	0	0	4	0	12	135
4:15 PM	0	0	0	0	0	0	4	1	0	0	0	0	0	0	6	0	11	134
4:20 PM	0	0	0	0	0	0	6	1	0	0	0	0	0	0	6	0	13	133
4:25 PM	0	0	0	0	1	0	6	1	0	0	0	0	0	0	2	0	10	132
4:30 PM	0	0	0	0	0	0	5	1	0	0	0	0	0	0	4	0	10	136
4:35 PM	0	0	0	0	0	0	6	1	0	0	0	0	0	0	3	0	10	139
4:40 PM	0	0	0	0	0	0	8	1	0	0	0	0	0	0	4	0	13	150
4:45 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	4	0	7	159
4:50 PM	0	0	0	0	0	0	4	1	0	0	0	0	0	0	7	0	12	162
4:55 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	8	0	11	162
5:00 PM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	6	0	10	168
5:05 PM	0	0	0	0	0	0	7	2	0	0	0	0	0	0	7	0	16	
5:10 PM	0	0	0	0	0	0	5	2	0	0	0	0	0	0	4	0	11	
5:15 PM	0	0	0	0	0	0	4	1	0	0	0	0	0	0	5	0	10	
5:20 PM	0	0	0	0	0	0	6	2	0	0	0	0	0	0	4	0	12	
5:25 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	11	0	14	
5:30 PM	0	0	0	0	0	0	7	0	0	0	0	0	0	0	6	0	13	
5:35 PM	0	0	0	0	0	0	10	0	0	0	0	0	0	0	11	0	21	
5:40 PM	0	0	0	0	0	0	9	0	0	0	0	0	0	0	13	0	22	
5:45 PM	0	1	0	0	0	0	5	0	0	0	0	0	0	0	4	0	10	
5:50 PM	0	0	0	0	0	0	8	0	0	0	0	0	0	0	4	0	12	
5:55 PM	0	2	0	0	0	0	3	0	0	0	0	0	0	0	12	0	17	
Count Total	0	3	0	0	1	0	140	17	0	0	0	0	0	0	140	0	301	
Peak Hour	0	3	0	0	0	0	71	7	0	0	0	0	0	0	87	0	168	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	NB	EB	SB	WB	Total		NB	EB	SB	WB	Total		NB	EB	SB	WB	Total
4:00 PM	0	1	0	0	1	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	1	0	0	1	4:15 PM	0	1	0	0	1	4:15 PM	0	0	0	0	0
4:20 PM	0	0	0	1	1	4:20 PM	0	0	0	0	0	4:20 PM	0	1	0	0	1
4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0	4:25 PM	0	2	0	0	2
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	1	1	4:30 PM	0	0	0	0	0
4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0	4:35 PM	0	1	0	0	1
4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0	4:45 PM	1	0	0	0	1
4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	1	1	4:50 PM	0	0	0	0	0
4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	0	0	1	1	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	1	0	0	1	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	0	3	0	2	5	Count Total	0	1	0	2	3	Count Total	1	4	0	0	5
Peak Hour	0	1	0	1	2	Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	0	0



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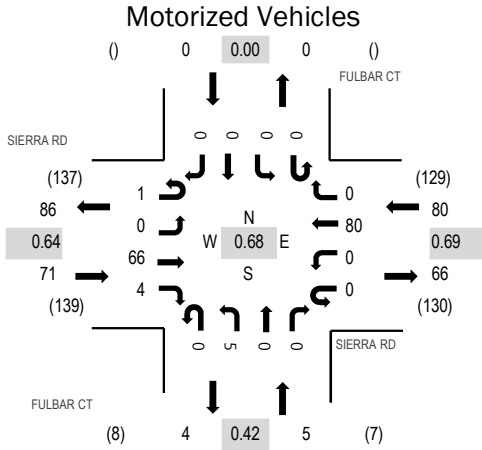
Location: 2 FULBAR CT & SIERRA RD PM

Date: Tuesday, December 6, 2022

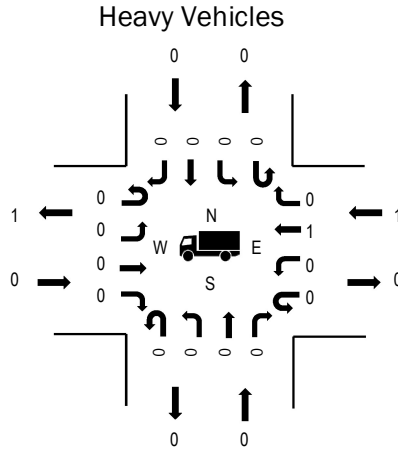
Peak Hour: 05:00 PM - 06:00 PM

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

Peak Hour

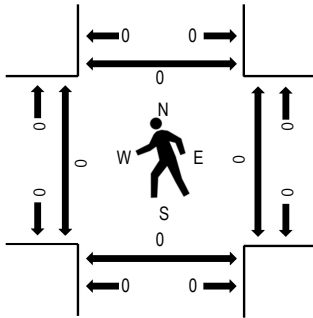


Note: Total study counts contained in parentheses.

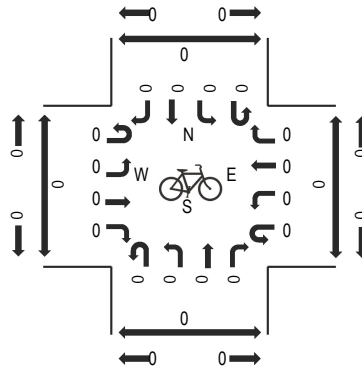


	HV%	PHF
EB	0.0%	0.64
WB	1.3%	0.69
NB	0.0%	0.42
SB	0.0%	0.00
All	0.6%	0.68

Pedestrians



Bicycles on Road



Traffic Counts - Motorized Vehicles

Interval Start Time	FULBAR CT Northbound				SIERRA RD Eastbound				FULBAR CT Southbound				SIERRA RD Westbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	0	0	0	0	0	7	0	0	0	0	0	0	0	2	0	9	119
4:05 PM	0	0	0	0	0	0	8	0	0	0	0	0	0	0	4	0	12	120
4:10 PM	0	1	0	0	0	0	8	1	0	0	0	0	0	0	3	0	13	122
4:15 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	6	0	9	119
4:20 PM	0	0	0	0	0	0	6	1	0	0	0	0	0	0	5	0	12	118
4:25 PM	0	0	0	0	0	0	6	0	0	0	0	0	0	0	2	0	8	116
4:30 PM	0	1	0	0	0	0	4	0	0	0	0	0	0	0	3	0	8	121
4:35 PM	0	0	0	0	0	0	6	0	0	0	0	0	0	0	3	0	9	128
4:40 PM	0	0	0	0	0	0	7	1	0	0	0	0	0	0	4	0	12	138
4:45 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	0	6	149
4:50 PM	0	0	0	0	0	0	3	1	0	0	0	0	0	0	7	0	11	153
4:55 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	7	0	10	152
5:00 PM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	6	0	10	156
5:05 PM	0	3	0	0	0	0	6	1	0	0	0	0	0	0	4	0	14	
5:10 PM	0	0	0	0	0	0	6	0	0	0	0	0	0	0	4	0	10	
5:15 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	5	0	8	
5:20 PM	0	0	0	0	0	0	6	0	0	0	0	0	0	0	4	0	10	
5:25 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	11	0	13	
5:30 PM	0	0	0	0	0	0	8	1	0	0	0	0	0	0	6	0	15	
5:35 PM	0	0	0	0	1	0	8	0	0	0	0	0	0	0	10	0	19	
5:40 PM	0	0	0	0	0	0	10	0	0	0	0	0	0	0	13	0	23	
5:45 PM	0	1	0	0	0	0	5	1	0	0	0	0	0	0	3	0	10	
5:50 PM	0	0	0	0	0	0	6	1	0	0	0	0	0	0	3	0	10	
5:55 PM	0	1	0	0	0	0	2	0	0	0	0	0	0	0	11	0	14	
Count Total	0	7	0	0	1	0	130	8	0	0	0	0	0	0	129	0	275	
Peak Hour	0	5	0	0	1	0	66	4	0	0	0	0	0	0	80	0	156	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	NB	EB	SB	WB	Total		NB	EB	SB	WB	Total		NB	EB	SB	WB	Total
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	1	0	2	3	4:20 PM	0	1	0	0	1	4:20 PM	0	0	0	0	0
4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	1	1	4:30 PM	0	0	0	0	0
4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	1	1	4:40 PM	2	0	0	0	2
4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0	4:45 PM	1	1	0	0	2
4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	1	1	4:50 PM	0	0	0	0	0
4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	0	0	1	1	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0
5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0
Count Total	0	1	0	3	4	Count Total	0	1	0	3	4	Count Total	3	1	0	0	4
Peak Hour	0	0	0	1	1	Peak Hour	0	0	0	0	0	Peak Hour	0	0	0	0	0

Site Code: 1
Sierra Rd W.O Fulbar Ct

Start Time	12-Nov-22 Sat	EB	WB							Total
12:00 AM		15	12							27
01:00		12	10							22
02:00		7	6							13
03:00		4	7							11
04:00		2	6							8
05:00		3	7							10
06:00		16	8							24
07:00		20	26							46
08:00		32	44							76
09:00		39	40							79
10:00		45	49							94
11:00		59	66							125
12:00 PM		79	57							136
01:00		64	68							132
02:00		61	63							124
03:00		64	80							144
04:00		92	81							173
05:00		53	104							157
06:00		34	40							74
07:00		36	28							64
08:00		41	33							74
09:00		42	34							76
10:00		31	24							55
11:00		25	23							48
Total		876	916							1792
Percent		48.9%	51.1%							
AM Peak	-	11:00	11:00	-	-	-	-	-	-	11:00
Vol.	-	59	66	-	-	-	-	-	-	125
PM Peak	-	16:00	17:00	-	-	-	-	-	-	16:00
Vol.	-	92	104	-	-	-	-	-	-	173

Site Code: 1
Sierra Rd W.O Fulbar Ct

Start Time	13-Nov-22 Sun	EB	WB							Total
12:00 AM		9	14							23
01:00		11	10							21
02:00		4	6							10
03:00		3	0							3
04:00		3	6							9
05:00		1	4							5
06:00		8	13							21
07:00		20	18							38
08:00		34	31							65
09:00		76	53							129
10:00		65	51							116
11:00		72	53							125
12:00 PM		54	65							119
01:00		67	63							130
02:00		72	92							164
03:00		65	76							141
04:00		101	89							190
05:00		41	104							145
06:00		32	31							63
07:00		40	32							72
08:00		45	27							72
09:00		32	34							66
10:00		13	17							30
11:00		11	12							23
Total		879	901							1780
Percent		49.4%	50.6%							
AM Peak	-	09:00	09:00	-	-	-	-	-	-	09:00
Vol.	-	76	53	-	-	-	-	-	-	129
PM Peak	-	16:00	17:00	-	-	-	-	-	-	16:00
Vol.	-	101	104	-	-	-	-	-	-	190

Site Code: 1
Sierra Rd W.O Fulbar Ct

Start Time	14-Nov-22 Mon	EB	WB							Total
12:00 AM		9	9							18
01:00		3	5							8
02:00		4	3							7
03:00		4	5							9
04:00		5	8							13
05:00		4	7							11
06:00		11	16							27
07:00		14	34							48
08:00		53	57							110
09:00		41	40							81
10:00		23	41							64
11:00		40	45							85
12:00 PM		38	38							76
01:00		41	43							84
02:00		44	51							95
03:00		51	40							91
04:00		69	42							111
05:00		67	82							149
06:00		38	46							84
07:00		17	22							39
08:00		30	16							46
09:00		26	15							41
10:00		23	12							35
11:00		6	12							18
Total		661	689							1350
Percent		49.0%	51.0%							
AM Peak	-	08:00	08:00	-	-	-	-	-	-	08:00
Vol.	-	53	57	-	-	-	-	-	-	110
PM Peak	-	16:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	69	82	-	-	-	-	-	-	149

Site Code: 1
Sierra Rd W.O Fulbar Ct

Start Time	15-Nov-22 Tue	EB	WB							Total
12:00 AM		5	4							9
01:00		3	5							8
02:00		2	2							4
03:00		0	2							2
04:00		3	5							8
05:00		3	9							12
06:00		11	15							26
07:00		15	40							55
08:00		49	54							103
09:00		37	52							89
10:00		43	53							96
11:00		28	32							60
12:00 PM		35	34							69
01:00		46	58							104
02:00		48	56							104
03:00		59	45							104
04:00		56	45							101
05:00		73	84							157
06:00		36	42							78
07:00		36	21							57
08:00		32	17							49
09:00		25	23							48
10:00		20	15							35
11:00		7	7							14
Total		672	720							1392
Percent		48.3%	51.7%							
AM Peak	-	08:00	08:00	-	-	-	-	-	-	08:00
Vol.	-	49	54	-	-	-	-	-	-	103
PM Peak	-	17:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	73	84	-	-	-	-	-	-	157

Site Code: 1
Sierra Rd W.O Fulbar Ct

Start Time	16-Nov-22 Wed	EB	WB							Total
12:00 AM		5	12							17
01:00		7	8							15
02:00		2	2							4
03:00		2	1							3
04:00		10	8							18
05:00		0	7							7
06:00		5	15							20
07:00		12	34							46
08:00		55	55							110
09:00		41	46							87
10:00		23	40							63
11:00		27	31							58
12:00 PM		43	38							81
01:00		41	57							98
02:00		51	50							101
03:00		50	34							84
04:00		57	51							108
05:00		55	75							130
06:00		33	32							65
07:00		37	23							60
08:00		39	21							60
09:00		36	31							67
10:00		16	16							32
11:00		11	8							19
Total		658	695							1353
Percent		48.6%	51.4%							
AM Peak	-	08:00	08:00	-	-	-	-	-	-	08:00
Vol.	-	55	55	-	-	-	-	-	-	110
PM Peak	-	16:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	57	75	-	-	-	-	-	-	130

Site Code: 1
Sierra Rd W.O Fulbar Ct

Start Time	17-Nov-22 Thu	EB	WB							Total
12:00 AM		4	3							7
01:00		2	2							4
02:00		3	5							8
03:00		2	2							4
04:00		3	7							10
05:00		6	16							22
06:00		6	13							19
07:00		13	34							47
08:00		60	64							124
09:00		36	59							95
10:00		40	48							88
11:00		26	41							67
12:00 PM		34	45							79
01:00		67	53							120
02:00		55	51							106
03:00		48	47							95
04:00		63	43							106
05:00		79	100							179
06:00		40	29							69
07:00		26	23							49
08:00		33	24							57
09:00		34	24							58
10:00		17	19							36
11:00		17	18							35
Total		714	770							1484
Percent		48.1%	51.9%							
AM Peak	-	08:00	08:00	-	-	-	-	-	-	08:00
Vol.	-	60	64	-	-	-	-	-	-	124
PM Peak	-	17:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	79	100	-	-	-	-	-	-	179

All Traffic Data Services, LLC

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Site Code: 1

Sierra Rd W.O Fulbar Ct

Start Time	18-Nov-22	EB	WB							Total
12:00 AM		10	14							24
01:00		5	7							12
02:00		1	1							2
03:00		3	4							7
04:00		3	8							11
05:00		2	6							8
06:00		9	13							22
07:00		14	29							43
08:00		52	53							105
09:00		45	70							115
10:00		35	35							70
11:00		40	38							78
12:00 PM		55	57							112
01:00		36	58							94
02:00		53	58							111
03:00		53	50							103
04:00		70	49							119
05:00		65	97							162
06:00		40	36							76
07:00		33	25							58
08:00		38	24							62
09:00		39	22							61
10:00		26	30							56
11:00		14	13							27
Total		741	797							1538
Percent		48.2%	51.8%							
AM Peak	-	08:00	09:00	-	-	-	-	-	-	09:00
Vol.	-	52	70	-	-	-	-	-	-	115
PM Peak	-	16:00	17:00	-	-	-	-	-	-	17:00
Vol.	-	70	97	-	-	-	-	-	-	162
Grand Total		5201	5488							10689
Percent		48.7%	51.3%							
ADT		ADT 1,527	AADT 1,527							

Site Code: 1
Sierra Rd W.O Fulbar Ct

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
11/12/22	0	0	0	4	5	4	2	0	0	0	0	0	0	0	15	31-40	9
01:00	0	0	1	5	3	1	1	0	0	0	1	0	0	0	12	26-35	8
02:00	0	0	0	1	1	2	1	2	0	0	0	0	0	0	7	41-50	3
03:00	0	0	1	0	2	0	1	0	0	0	0	0	0	0	4	24-33	2
04:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	25-34	2
05:00	0	0	1	0	2	0	0	0	0	0	0	0	0	0	3	24-33	2
06:00	1	0	1	4	6	3	1	0	0	0	0	0	0	0	16	26-35	10
07:00	1	1	0	2	7	6	2	1	0	0	0	0	0	0	20	31-40	13
08:00	2	0	3	4	10	9	2	1	1	0	0	0	0	0	32	31-40	19
09:00	1	2	1	12	14	7	2	0	0	0	0	0	0	0	39	26-35	26
10:00	1	2	7	12	12	10	1	0	0	0	0	0	0	0	45	26-35	24
11:00	1	1	5	13	21	10	7	0	0	0	0	1	0	0	59	26-35	34
12 PM	0	2	14	17	29	14	3	0	0	0	0	0	0	0	79	26-35	46
13:00	5	3	4	13	25	10	4	0	0	0	0	0	0	0	64	26-35	38
14:00	0	2	6	13	22	12	5	1	0	0	0	0	0	0	61	26-35	35
15:00	1	0	6	10	28	14	3	2	0	0	0	0	0	0	64	31-40	42
16:00	0	0	4	14	39	26	7	1	1	0	0	0	0	0	92	31-40	65
17:00	1	0	3	7	17	17	6	1	0	1	0	0	0	0	53	31-40	34
18:00	1	1	5	7	14	4	2	0	0	0	0	0	0	0	34	26-35	21
19:00	0	1	3	3	15	10	3	1	0	0	0	0	0	0	36	31-40	25
20:00	0	0	6	10	19	4	2	0	0	0	0	0	0	0	41	26-35	29
21:00	0	3	2	9	14	11	2	0	1	0	0	0	0	0	42	30-39	25
22:00	1	1	2	4	10	7	4	2	0	0	0	0	0	0	31	31-40	17
23:00	0	1	3	5	11	5	0	0	0	0	0	0	0	0	25	26-35	16
Total	16	20	78	169	328	186	61	12	3	1	1	1	0	0	876		
Percent	1.8%	2.3%	8.9%	19.3%	37.4%	21.2%	7.0%	1.4%	0.3%	0.1%	0.1%	0.1%	0.0%	0.0%			
AM Peak	08:00	09:00	10:00	11:00	11:00	10:00	11:00	02:00	08:00		01:00	11:00			11:00		
Vol.	2	2	7	13	21	10	7	2	1		1	1			59		
PM Peak	13:00	13:00	12:00	12:00	16:00	16:00	16:00	15:00	16:00	17:00					16:00		
Vol.	5	3	14	17	39	26	7	2	1	1					92		

Site Code: 1
Sierra Rd W.O Fulbar Ct

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
11/13/22	0	1	1	2	3	2	0	0	0	0	0	0	0	0	9	31-40	5
01:00	1	0	0	4	3	3	0	0	0	0	0	0	0	0	11	26-35	7
02:00	0	0	0	0	0	3	0	0	0	1	0	0	0	0	4	31-40	3
03:00	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3	25-34	3
04:00	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3	24-33	3
05:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	19-28	1
06:00	0	1	1	1	1	2	2	0	0	0	0	0	0	0	8	34-43	4
07:00	0	0	2	3	7	4	4	0	0	0	0	0	0	0	20	31-40	11
08:00	1	0	2	6	15	5	3	1	1	0	0	0	0	0	34	26-35	21
09:00	4	0	7	23	30	9	2	1	0	0	0	0	0	0	76	26-35	53
10:00	2	3	3	18	22	12	3	1	1	0	0	0	0	0	65	26-35	40
11:00	0	2	4	25	24	11	6	0	0	0	0	0	0	0	72	26-35	49
12 PM	3	1	8	13	11	14	3	1	0	0	0	0	0	0	54	29-38	25
13:00	2	0	5	17	27	8	8	0	0	0	0	0	0	0	67	26-35	44
14:00	1	1	8	14	26	13	6	3	0	0	0	0	0	0	72	26-35	40
15:00	3	0	3	14	20	14	5	5	1	0	0	0	0	0	65	31-40	34
16:00	1	3	7	20	36	28	5	0	1	0	0	0	0	0	101	31-40	64
17:00	0	2	0	11	11	13	3	1	0	0	0	0	0	0	41	31-40	24
18:00	0	1	7	7	9	4	1	3	0	0	0	0	0	0	32	26-35	16
19:00	0	1	2	11	17	4	5	0	0	0	0	0	0	0	40	26-35	28
20:00	1	2	7	10	11	11	3	0	0	0	0	0	0	0	45	31-40	22
21:00	1	0	3	7	12	7	2	0	0	0	0	0	0	0	32	31-40	19
22:00	0	0	1	5	5	1	1	0	0	0	0	0	0	0	13	26-35	10
23:00	0	0	0	3	3	3	2	0	0	0	0	0	0	0	11	31-40	6
Total	20	18	71	218	296	171	64	16	4	1	0	0	0	0	879		
Percent	2.3%	2.0%	8.1%	24.8%	33.7%	19.5%	7.3%	1.8%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	10:00	09:00	11:00	09:00	10:00	11:00	08:00	08:00	09:00	02:00				09:00		
Vol.	4	3	7	25	30	12	6	1	1	1					76		
PM Peak	12:00	16:00	12:00	16:00	16:00	16:00	13:00	15:00	15:00						16:00		
Vol.	3	3	8	20	36	28	8	5	1						101		

Site Code: 1
Sierra Rd W.O Fulbar Ct

EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
11/14/22	0	0	0	1	5	1	2	0	0	0	0	0	0	0	9	29-38	6
01:00	0	0	0	0	2	1	0	0	0	0	0	0	0	0	3	29-38	3
02:00	0	0	0	1	2	1	0	0	0	0	0	0	0	0	4	25-34	3
03:00	0	0	0	0	2	1	0	1	0	0	0	0	0	0	4	29-38	3
04:00	0	0	0	1	2	2	0	0	0	0	0	0	0	0	5	29-38	4
05:00	0	0	0	0	1	2	1	0	0	0	0	0	0	0	4	30-39	3
06:00	2	0	1	1	4	2	1	0	0	0	0	0	0	0	11	31-40	6
07:00	0	0	3	2	6	3	0	0	0	0	0	0	0	0	14	29-38	9
08:00	0	4	6	10	20	11	2	0	0	0	0	0	0	0	53	29-38	31
09:00	1	3	0	8	20	7	2	0	0	0	0	0	0	0	41	26-35	28
10:00	0	0	3	3	8	8	1	0	0	0	0	0	0	0	23	31-40	16
11:00	1	0	6	11	6	12	3	0	0	0	1	0	0	0	40	29-38	18
12 PM	2	1	4	8	10	8	2	3	0	0	0	0	0	0	38	26-35	18
13:00	1	1	3	8	14	8	5	1	0	0	0	0	0	0	41	31-40	22
14:00	2	2	4	10	12	12	2	0	0	0	0	0	0	0	44	30-39	24
15:00	2	1	4	7	19	11	5	1	1	0	0	0	0	0	51	31-40	30
16:00	1	1	4	14	23	20	5	0	0	1	0	0	0	0	69	31-40	43
17:00	2	2	11	22	17	12	1	0	0	0	0	0	0	0	67	26-35	39
18:00	0	1	1	10	13	7	4	2	0	0	0	0	0	0	38	26-35	23
19:00	0	0	4	2	6	3	2	0	0	0	0	0	0	0	17	29-38	9
20:00	0	0	2	8	10	9	0	1	0	0	0	0	0	0	30	29-38	19
21:00	0	1	1	8	8	6	2	0	0	0	0	0	0	0	26	26-35	16
22:00	1	0	3	5	9	3	2	0	0	0	0	0	0	0	23	26-35	14
23:00	0	0	1	1	0	2	2	0	0	0	0	0	0	0	6	35-44	4
Total	15	17	61	141	219	152	44	9	1	1	1	0	0	0	661		
Percent	2.3%	2.6%	9.2%	21.3%	33.1%	23.0%	6.7%	1.4%	0.2%	0.2%	0.2%	0.0%	0.0%	0.0%			
AM Peak	06:00	08:00	08:00	11:00	08:00	11:00	11:00	03:00			11:00				08:00		
Vol.	2	4	6	11	20	12	3	1			1				53		
PM Peak	12:00	14:00	17:00	17:00	16:00	16:00	13:00	12:00	15:00	16:00					16:00		
Vol.	2	2	11	22	23	20	5	3	1	1					69		

Site Code: 1
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EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
11/15/22	0	0	0	1	2	0	2	0	0	0	0	0	0	0	5	25-34	3
01:00	0	0	0	0	2	0	0	1	0	0	0	0	0	0	3	25-34	2
02:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	24-33	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	2	0	0	1	0	0	0	0	0	0	0	0	0	3	10-19	2
05:00	0	0	0	1	1	0	1	0	0	0	0	0	0	0	3	24-33	2
06:00	0	0	1	1	6	3	0	0	0	0	0	0	0	0	11	30-39	9
07:00	1	0	2	1	4	2	5	0	0	0	0	0	0	0	15	36-45	7
08:00	0	2	5	6	13	16	6	1	0	0	0	0	0	0	49	31-40	29
09:00	1	1	5	3	10	14	3	0	0	0	0	0	0	0	37	31-40	24
10:00	4	1	7	6	16	8	1	0	0	0	0	0	0	0	43	31-40	24
11:00	1	1	4	7	6	2	4	3	0	0	0	0	0	0	28	25-34	13
12 PM	1	5	3	5	12	6	1	1	0	1	0	0	0	0	35	29-38	18
13:00	2	5	3	9	15	9	3	0	0	0	0	0	0	0	46	31-40	24
14:00	2	0	3	8	15	13	7	0	0	0	0	0	0	0	48	31-40	28
15:00	2	3	5	8	17	18	3	1	2	0	0	0	0	0	59	31-40	35
16:00	0	1	1	9	21	13	9	2	0	0	0	0	0	0	56	31-40	34
17:00	1	2	2	22	26	10	7	3	0	0	0	0	0	0	73	26-35	48
18:00	0	1	6	8	4	13	4	0	0	0	0	0	0	0	36	31-40	17
19:00	0	0	4	9	12	9	2	0	0	0	0	0	0	0	36	26-35	21
20:00	0	0	4	8	9	8	3	0	0	0	0	0	0	0	32	26-35	17
21:00	0	3	4	3	6	7	1	0	1	0	0	0	0	0	25	31-40	13
22:00	0	0	1	2	7	8	1	1	0	0	0	0	0	0	20	31-40	15
23:00	0	0	1	1	1	2	1	0	1	0	0	0	0	0	7	36-45	3
Total	15	27	61	119	207	161	64	13	4	1	0	0	0	0	672		
Percent	2.2%	4.0%	9.1%	17.7%	30.8%	24.0%	9.5%	1.9%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	04:00	10:00	11:00	10:00	08:00	08:00	11:00							08:00		
Vol.	4	2	7	7	16	16	6	3							49		
PM Peak	13:00	12:00	18:00	17:00	17:00	15:00	16:00	17:00	15:00	12:00					17:00		
Vol.	2	5	6	22	26	18	9	3	2	1					73		

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EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
11/16/22	0	0	0	2	1	1	1	0	0	0	0	0	0	0	5	26-35	3
01:00	0	1	0	1	2	2	1	0	0	0	0	0	0	0	7	31-40	4
02:00	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2	34-43	2
03:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	29-38	2
04:00	0	0	0	1	4	1	4	0	0	0	0	0	0	0	10	35-44	5
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	0	0	2	2	1	0	0	0	0	0	0	0	5	31-40	4
07:00	0	0	1	2	3	4	2	0	0	0	0	0	0	0	12	31-40	7
08:00	0	4	6	10	17	12	6	0	0	0	0	0	0	0	55	30-39	29
09:00	1	0	5	8	18	8	1	0	0	0	0	0	0	0	41	31-40	26
10:00	0	0	3	4	4	11	1	0	0	0	0	0	0	0	23	31-40	15
11:00	0	0	1	4	11	10	1	0	0	0	0	0	0	0	27	31-40	21
12 PM	1	4	4	9	6	13	4	2	0	0	0	0	0	0	43	31-40	19
13:00	3	6	2	5	12	9	1	2	0	1	0	0	0	0	41	31-40	21
14:00	1	2	11	11	14	9	1	2	0	0	0	0	0	0	51	26-35	25
15:00	4	2	6	11	15	11	1	0	0	0	0	0	0	0	50	26-35	26
16:00	0	2	6	12	20	12	5	0	0	0	0	0	0	0	57	26-35	32
17:00	1	2	2	13	23	5	9	0	0	0	0	0	0	0	55	26-35	36
18:00	0	2	2	6	11	10	1	0	0	1	0	0	0	0	33	31-40	21
19:00	0	2	3	8	12	10	2	0	0	0	0	0	0	0	37	30-39	22
20:00	1	3	4	9	11	8	3	0	0	0	0	0	0	0	39	26-35	20
21:00	0	1	2	7	15	8	3	0	0	0	0	0	0	0	36	31-40	23
22:00	0	1	3	3	7	1	1	0	0	0	0	0	0	0	16	26-35	10
23:00	0	0	1	3	4	3	0	0	0	0	0	0	0	0	11	26-35	7
Total	12	32	62	129	213	152	50	6	0	2	0	0	0	0	658		
Percent	1.8%	4.9%	9.4%	19.6%	32.4%	23.1%	7.6%	0.9%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%			
AM Peak	09:00	08:00	08:00	08:00	09:00	08:00	08:00								08:00		
Vol.	1	4	6	10	18	12	6								55		
PM Peak	15:00	13:00	14:00	17:00	17:00	12:00	17:00	12:00		13:00					16:00		
Vol.	4	6	11	13	23	13	9	2		1					57		

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EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
11/17/22	0	0	1	1	0	0	1	1	0	0	0	0	0	0	4	19-28	2
01:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15-24	2
02:00	0	0	1	1	1	0	0	0	0	0	0	0	0	0	3	19-28	2
03:00	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	24-33	1
04:00	0	0	0	0	1	0	2	0	0	0	0	0	0	0	3	34-43	2
05:00	0	0	0	0	2	3	1	0	0	0	0	0	0	0	6	31-40	5
06:00	1	0	0	1	4	0	0	0	0	0	0	0	0	0	6	26-35	5
07:00	1	2	1	3	4	1	1	0	0	0	0	0	0	0	13	26-35	7
08:00	1	2	4	17	21	10	4	0	1	0	0	0	0	0	60	26-35	38
09:00	0	2	3	11	13	4	2	1	0	0	0	0	0	0	36	26-35	24
10:00	0	3	2	6	21	6	0	2	0	0	0	0	0	0	40	26-35	27
11:00	1	2	2	8	6	3	4	0	0	0	0	0	0	0	26	26-35	14
12 PM	3	5	2	4	5	11	2	2	0	0	0	0	0	0	34	31-40	16
13:00	1	2	7	6	26	18	6	1	0	0	0	0	0	0	67	31-40	44
14:00	3	1	7	14	18	10	2	0	0	0	0	0	0	0	55	26-35	32
15:00	2	0	7	8	17	10	3	0	1	0	0	0	0	0	48	31-40	27
16:00	0	0	7	10	24	14	7	1	0	0	0	0	0	0	63	31-40	38
17:00	2	2	8	19	30	15	2	1	0	0	0	0	0	0	79	26-35	49
18:00	0	2	5	11	12	8	2	0	0	0	0	0	0	0	40	26-35	23
19:00	0	1	2	3	13	4	1	1	1	0	0	0	0	0	26	29-38	17
20:00	1	1	3	7	7	9	5	0	0	0	0	0	0	0	33	31-40	16
21:00	0	1	3	10	12	7	0	1	0	0	0	0	0	0	34	26-35	22
22:00	0	0	1	3	7	6	0	0	0	0	0	0	0	0	17	31-40	13
23:00	0	1	2	3	5	4	2	0	0	0	0	0	0	0	17	31-40	9
Total	16	27	70	146	250	143	47	12	3	0	0	0	0	0	714		
Percent	2.2%	3.8%	9.8%	20.4%	35.0%	20.0%	6.6%	1.7%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	06:00	10:00	08:00	08:00	08:00	08:00	08:00	10:00	08:00						08:00		
Vol.	1	3	4	17	21	10	4	2	1						60		
PM Peak	12:00	12:00	17:00	17:00	17:00	13:00	16:00	12:00	15:00						17:00		
Vol.	3	5	8	19	30	18	7	2	1						79		

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EB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
11/18/22	0	0	4	2	2	1	0	1	0	0	0	0	0	0	10	21-30	6
01:00	0	1	1	2	1	0	0	0	0	0	0	0	0	0	5	26-35	3
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14-23	1
03:00	0	0	0	0	2	0	1	0	0	0	0	0	0	0	3	25-34	2
04:00	0	1	0	1	0	0	1	0	0	0	0	0	0	0	3	9-18	1
05:00	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2	9-18	1
06:00	1	0	1	0	2	4	1	0	0	0	0	0	0	0	9	31-40	6
07:00	0	0	1	4	6	3	0	0	0	0	0	0	0	0	14	26-35	10
08:00	0	6	6	9	16	10	4	0	1	0	0	0	0	0	52	29-38	26
09:00	1	6	0	8	18	10	2	0	0	0	0	0	0	0	45	30-39	28
10:00	0	0	4	5	10	11	5	0	0	0	0	0	0	0	35	31-40	21
11:00	1	1	5	8	15	9	0	1	0	0	0	0	0	0	40	29-38	24
12 PM	2	5	4	8	12	12	9	2	1	0	0	0	0	0	55	31-40	24
13:00	0	0	6	5	12	7	6	0	0	0	0	0	0	0	36	30-39	19
14:00	2	1	3	12	15	11	4	5	0	0	0	0	0	0	53	26-35	27
15:00	2	2	8	11	18	6	5	0	1	0	0	0	0	0	53	26-35	29
16:00	1	1	2	14	21	23	6	1	0	0	1	0	0	0	70	31-40	44
17:00	0	2	8	20	26	8	1	0	0	0	0	0	0	0	65	26-35	46
18:00	1	0	3	11	15	6	4	0	0	0	0	0	0	0	40	26-35	26
19:00	1	2	5	7	14	3	0	0	1	0	0	0	0	0	33	26-35	21
20:00	0	3	4	9	11	8	2	1	0	0	0	0	0	0	38	26-35	20
21:00	1	1	5	10	9	7	5	0	0	0	0	0	1	0	39	26-35	19
22:00	0	1	5	8	5	4	1	1	0	1	0	0	0	0	26	21-30	13
23:00	0	0	1	7	1	3	2	0	0	0	0	0	0	0	14	22-31	8
Total	13	34	77	161	231	146	60	12	4	1	1	0	1	0	741		
Percent	1.8%	4.6%	10.4%	21.7%	31.2%	19.7%	8.1%	1.6%	0.5%	0.1%	0.1%	0.0%	0.1%	0.0%			
AM Peak	06:00	08:00	08:00	08:00	09:00	10:00	10:00	10:00	00:00	08:00					08:00		
Vol.	1	6	6	9	18	11	5	1	1						52		
PM Peak	12:00	12:00	15:00	17:00	17:00	16:00	12:00	14:00	12:00	22:00	16:00		21:00		16:00		
Vol.	2	5	8	20	26	23	9	5	1	1	1		1		70		
Total	107	175	480	1083	1744	1111	390	80	19	7	3	1	1	0	5201		
Percent	2.1%	3.4%	9.2%	20.8%	33.5%	21.4%	7.5%	1.5%	0.4%	0.1%	0.1%	0.0%	0.0%	0.0%			

15th Percentile : 25 MPH
50th Percentile : 32 MPH
85th Percentile : 38 MPH
95th Percentile : 43 MPH

Stats
10 MPH Pace Speed : 31-40 MPH
Number in Pace : 2855
Percent in Pace : 54.9%
Number of Vehicles > 35 MPH : 1612
Percent of Vehicles > 35 MPH : 31.0%
Mean Speed(Average) : 32 MPH

Site Code: 1
Sierra Rd W.O Fulbar Ct

WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
11/12/22	1	0	1	6	2	2	0	0	0	0	0	0	0	0	12	26-35	8
01:00	0	0	1	4	4	0	1	0	0	0	0	0	0	0	10	26-35	8
02:00	0	0	1	0	3	0	1	1	0	0	0	0	0	0	6	31-40	3
03:00	1	1	0	0	0	3	1	0	1	0	0	0	0	0	7	36-45	4
04:00	0	1	0	1	2	1	0	0	1	0	0	0	0	0	6	31-40	3
05:00	0	0	2	0	2	1	0	1	1	0	0	0	0	0	7	31-40	3
06:00	0	0	1	3	1	2	1	0	0	0	0	0	0	0	8	26-35	4
07:00	0	3	0	5	7	6	2	3	0	0	0	0	0	0	26	29-38	13
08:00	0	4	6	9	13	9	3	0	0	0	0	0	0	0	44	31-40	22
09:00	0	2	10	11	7	6	4	0	0	0	0	0	0	0	40	21-30	21
10:00	0	8	5	11	14	7	3	1	0	0	0	0	0	0	49	26-35	25
11:00	1	1	10	23	16	10	4	1	0	0	0	0	0	0	66	26-35	39
12 PM	2	3	12	11	19	5	3	0	2	0	0	0	0	0	57	26-35	30
13:00	2	3	12	21	17	6	6	1	0	0	0	0	0	0	68	26-35	38
14:00	2	1	11	17	20	5	3	4	0	0	0	0	0	0	63	26-35	37
15:00	1	8	13	24	22	7	5	0	0	0	0	0	0	0	80	26-35	46
16:00	1	0	13	26	26	13	2	0	0	0	0	0	0	0	81	26-35	52
17:00	0	5	23	35	33	7	0	0	1	0	0	0	0	0	104	26-35	68
18:00	0	0	5	9	12	10	2	1	0	1	0	0	0	0	40	29-38	22
19:00	0	2	3	7	8	4	4	0	0	0	0	0	0	0	28	26-35	15
20:00	0	2	4	8	8	9	1	0	1	0	0	0	0	0	33	29-38	17
21:00	0	0	3	3	14	12	2	0	0	0	0	0	0	0	34	31-40	26
22:00	0	1	3	8	5	3	3	0	1	0	0	0	0	0	24	25-34	13
23:00	0	2	0	4	7	5	2	2	1	0	0	0	0	0	23	29-38	12
Total	11	47	139	246	262	133	53	15	9	1	0	0	0	0	916		
Percent	1.2%	5.1%	15.2%	26.9%	28.6%	14.5%	5.8%	1.6%	1.0%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	00:00	10:00	09:00	11:00	11:00	11:00	09:00	07:00	03:00						11:00		
Vol.	1	8	10	23	16	10	4	3	1						66		
PM Peak	12:00	15:00	17:00	17:00	17:00	16:00	13:00	14:00	12:00	18:00					17:00		
Vol.	2	8	23	35	33	13	6	4	2	1					104		

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WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
11/13/22	0	1	0	1	5	5	1	1	0	0	0	0	0	0	14	31-40	10
01:00	0	0	2	2	3	2	1	0	0	0	0	0	0	0	10	31-40	5
02:00	0	1	0	2	1	0	1	0	0	1	0	0	0	0	6	26-35	3
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	2	2	2	0	0	0	0	0	0	0	0	0	6	20-29	4
05:00	0	1	0	1	1	0	1	0	0	0	0	0	0	0	4	24-33	2
06:00	0	2	0	1	7	2	1	0	0	0	0	0	0	0	13	31-40	9
07:00	0	0	3	6	3	3	1	1	1	0	0	0	0	0	18	21-30	9
08:00	0	2	2	7	7	9	4	0	0	0	0	0	0	0	31	31-40	16
09:00	0	0	11	8	16	12	6	0	0	0	0	0	0	0	53	31-40	28
10:00	0	8	7	10	11	8	6	0	1	0	0	0	0	0	51	26-35	21
11:00	0	3	6	14	14	11	3	2	0	0	0	0	0	0	53	26-35	28
12 PM	1	4	8	12	18	13	7	1	1	0	0	0	0	0	65	31-40	31
13:00	4	4	7	16	17	9	3	3	0	0	0	0	0	0	63	26-35	33
14:00	2	6	28	21	21	8	5	1	0	0	0	0	0	0	92	21-30	49
15:00	2	5	11	21	20	10	4	3	0	0	0	0	0	0	76	26-35	41
16:00	0	5	24	31	14	14	1	0	0	0	0	0	0	0	89	21-30	55
17:00	1	2	14	43	32	10	2	0	0	0	0	0	0	0	104	26-35	75
18:00	2	1	3	6	9	7	1	1	1	0	0	0	0	0	31	29-38	16
19:00	0	0	5	9	4	8	4	1	0	1	0	0	0	0	32	21-30	14
20:00	0	0	8	8	4	6	1	0	0	0	0	0	0	0	27	21-30	16
21:00	1	0	4	8	10	7	3	0	0	0	1	0	0	0	34	26-35	18
22:00	0	0	4	6	5	1	0	1	0	0	0	0	0	0	17	24-33	11
23:00	1	0	0	2	2	5	1	0	0	1	0	0	0	0	12	31-40	7
Total	14	45	149	237	226	150	57	15	4	3	1	0	0	0	901		
Percent	1.6%	5.0%	16.5%	26.3%	25.1%	16.6%	6.3%	1.7%	0.4%	0.3%	0.1%	0.0%	0.0%	0.0%			
AM Peak		10:00	09:00	11:00	09:00	09:00	09:00	11:00	07:00	02:00					09:00		
Vol.		8	11	14	16	12	6	2	1	1					53		
PM Peak	13:00	14:00	14:00	17:00	17:00	16:00	12:00	13:00	12:00	19:00	21:00				17:00		
Vol.	4	6	28	43	32	14	7	3	1	1	1				104		

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WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
11/14/22	0	1	0	1	5	2	0	0	0	0	0	0	0	0	9	31-40	7
01:00	1	0	0	1	2	0	0	0	1	0	0	0	0	0	5	26-35	3
02:00	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3	21-30	3
03:00	1	1	1	1	0	1	0	0	0	0	0	0	0	0	5	21-30	2
04:00	0	0	1	0	3	2	2	0	0	0	0	0	0	0	8	30-39	5
05:00	0	0	1	0	4	2	0	0	0	0	0	0	0	0	7	30-39	6
06:00	1	2	1	2	5	3	1	1	0	0	0	0	0	0	16	29-38	8
07:00	1	1	4	8	8	6	4	1	1	0	0	0	0	0	34	26-35	16
08:00	1	3	2	16	16	9	9	1	0	0	0	0	0	0	57	26-35	32
09:00	1	3	3	7	13	11	0	1	0	1	0	0	0	0	40	31-40	24
10:00	0	2	1	8	19	9	2	0	0	0	0	0	0	0	41	29-38	28
11:00	2	7	4	9	11	10	2	0	0	0	0	0	0	0	45	29-38	21
12 PM	1	4	6	8	10	4	3	2	0	0	0	0	0	0	38	26-35	18
13:00	0	6	6	11	13	5	2	0	0	0	0	0	0	0	43	26-35	24
14:00	0	1	8	18	9	9	5	1	0	0	0	0	0	0	51	24-33	27
15:00	0	3	4	10	11	7	3	2	0	0	0	0	0	0	40	26-35	21
16:00	0	0	6	6	17	11	2	0	0	0	0	0	0	0	42	31-40	28
17:00	2	1	18	29	16	11	4	1	0	0	0	0	0	0	82	21-30	47
18:00	2	5	3	11	11	10	3	1	0	0	0	0	0	0	46	26-35	22
19:00	1	0	2	2	12	4	0	1	0	0	0	0	0	0	22	30-39	16
20:00	0	0	1	2	6	4	2	1	0	0	0	0	0	0	16	31-40	10
21:00	0	0	4	3	4	0	3	0	1	0	0	0	0	0	15	21-30	7
22:00	4	2	0	1	2	1	1	0	0	1	0	0	0	0	12	31-40	3
23:00	0	0	0	2	3	4	3	0	0	0	0	0	0	0	12	30-39	7
Total	18	42	76	159	200	125	51	13	3	2	0	0	0	0	689		
Percent	2.6%	6.1%	11.0%	23.1%	29.0%	18.1%	7.4%	1.9%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	11:00	07:00	08:00	10:00	09:00	08:00	06:00	01:00	09:00					08:00		
Vol.	2	7	4	16	19	11	9	1	1	1					57		
PM Peak	22:00	13:00	17:00	17:00	16:00	16:00	14:00	12:00	21:00	22:00					17:00		
Vol.	4	6	18	29	17	11	5	2	1	1					82		

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Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
11/15/22	0	0	0	0	2	2	0	0	0	0	0	0	0	0	4	30-39	4
01:00	0	0	0	0	2	1	0	1	0	1	0	0	0	0	5	31-40	3
02:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	20-29	2
03:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	24-33	2
04:00	0	0	0	4	0	1	0	0	0	0	0	0	0	0	5	26-35	4
05:00	2	0	0	2	2	2	1	0	0	0	0	0	0	0	9	31-40	4
06:00	0	0	2	4	4	2	2	0	1	0	0	0	0	0	15	26-35	8
07:00	0	3	3	9	4	13	4	4	0	0	0	0	0	0	40	36-45	17
08:00	0	1	5	9	15	13	7	2	2	0	0	0	0	0	54	31-40	28
09:00	1	6	5	13	10	10	7	0	0	0	0	0	0	0	52	26-35	23
10:00	2	7	8	12	10	12	2	0	0	0	0	0	0	0	53	25-34	22
11:00	0	3	3	4	11	8	3	0	0	0	0	0	0	0	32	31-40	19
12 PM	8	4	4	7	5	6	0	0	0	0	0	0	0	0	34	24-33	12
13:00	2	4	4	12	22	5	5	4	0	0	0	0	0	0	58	26-35	34
14:00	2	4	7	15	12	10	5	0	1	0	0	0	0	0	56	26-35	27
15:00	2	5	5	8	5	16	2	2	0	0	0	0	0	0	45	31-40	21
16:00	0	1	4	7	14	11	6	1	0	0	0	1	0	0	45	31-40	25
17:00	0	3	18	27	21	7	7	1	0	0	0	0	0	0	84	26-35	48
18:00	0	5	2	7	11	8	7	2	0	0	0	0	0	0	42	29-38	19
19:00	0	0	2	8	3	3	2	2	1	0	0	0	0	0	21	24-33	11
20:00	0	0	5	3	5	3	1	0	0	0	0	0	0	0	17	21-30	8
21:00	0	0	4	5	8	4	0	2	0	0	0	0	0	0	23	26-35	13
22:00	0	1	3	6	2	0	3	0	0	0	0	0	0	0	15	21-30	9
23:00	0	0	0	2	2	2	1	0	0	0	0	0	0	0	7	31-40	4
Total	19	47	84	167	171	139	65	21	5	1	0	1	0	0	720		
Percent	2.6%	6.5%	11.7%	23.2%	23.8%	19.3%	9.0%	2.9%	0.7%	0.1%	0.0%	0.1%	0.0%	0.0%			
AM Peak	05:00	10:00	10:00	09:00	08:00	07:00	08:00	07:00	08:00	01:00					08:00		
Vol.	2	7	8	13	15	13	7	4	2	1					54		
PM Peak	12:00	15:00	17:00	17:00	13:00	15:00	17:00	13:00	14:00			16:00			17:00		
Vol.	8	5	18	27	22	16	7	4	1			1			84		

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WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
11/16/22	0	0	0	2	6	1	2	1	0	0	0	0	0	0	12	26-35	8
01:00	0	0	4	1	0	1	0	1	1	0	0	0	0	0	8	21-30	5
02:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	*	1
03:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	19-28	1
04:00	0	0	1	1	2	3	1	0	0	0	0	0	0	0	8	31-40	5
05:00	0	1	0	1	2	1	2	0	0	0	0	0	0	0	7	36-45	3
06:00	0	2	1	2	3	3	2	1	1	0	0	0	0	0	15	31-40	6
07:00	0	0	4	5	7	9	5	4	0	0	0	0	0	0	34	31-40	16
08:00	0	3	8	11	16	7	8	2	0	0	0	0	0	0	55	26-35	27
09:00	0	5	5	8	10	11	7	0	0	0	0	0	0	0	46	31-40	21
10:00	1	6	3	11	7	9	2	1	0	0	0	0	0	0	40	26-35	18
11:00	0	2	5	6	7	8	3	0	0	0	0	0	0	0	31	30-39	15
12 PM	0	1	3	6	11	10	7	0	0	0	0	0	0	0	38	31-40	21
13:00	1	6	6	15	13	11	2	3	0	0	0	0	0	0	57	26-35	28
14:00	2	1	13	15	5	9	4	1	0	0	0	0	0	0	50	21-30	28
15:00	0	1	8	9	9	3	3	1	0	0	0	0	0	0	34	24-33	18
16:00	0	5	6	8	15	12	4	1	0	0	0	0	0	0	51	31-40	27
17:00	0	1	5	29	21	11	6	0	2	0	0	0	0	0	75	26-35	50
18:00	0	1	4	1	12	11	2	1	0	0	0	0	0	0	32	31-40	23
19:00	0	1	6	2	8	6	0	0	0	0	0	0	0	0	23	31-40	14
20:00	0	2	1	6	7	2	3	0	0	0	0	0	0	0	21	26-35	13
21:00	0	4	5	7	6	6	3	0	0	0	0	0	0	0	31	24-33	13
22:00	0	1	3	4	4	3	0	0	0	1	0	0	0	0	16	24-33	8
23:00	0	0	2	3	0	2	0	0	0	0	0	1	0	0	8	21-30	5
Total	5	43	93	154	172	139	66	17	4	1	0	1	0	0	695		
Percent	0.7%	6.2%	13.4%	22.2%	24.7%	20.0%	9.5%	2.4%	0.6%	0.1%	0.0%	0.1%	0.0%	0.0%			
AM Peak	02:00	10:00	08:00	08:00	08:00	09:00	08:00	07:00	01:00						08:00		
Vol.	1	6	8	11	16	11	8	4	1						55		
PM Peak	14:00	13:00	14:00	17:00	17:00	16:00	12:00	13:00	17:00	22:00		23:00			17:00		
Vol.	2	6	13	29	21	12	7	3	2	1		1			75		

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WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
11/17/22	0	0	0	1	0	2	0	0	0	0	0	0	0	0	3	29-38	2
01:00	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	14-23	1
02:00	0	1	3	0	0	1	0	0	0	0	0	0	0	0	5	16-25	4
03:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2	14-23	2
04:00	0	2	0	1	2	1	0	0	1	0	0	0	0	0	7	31-40	3
05:00	2	0	0	5	4	3	2	0	0	0	0	0	0	0	16	26-35	9
06:00	0	2	2	1	5	0	1	2	0	0	0	0	0	0	13	26-35	6
07:00	1	4	4	2	15	3	3	2	0	0	0	0	0	0	34	29-38	18
08:00	0	2	6	16	20	11	6	2	1	0	0	0	0	0	64	26-35	36
09:00	1	8	11	9	18	11	1	0	0	0	0	0	0	0	59	31-40	29
10:00	2	3	6	12	14	8	1	2	0	0	0	0	0	0	48	26-35	26
11:00	2	6	6	6	10	10	1	0	0	0	0	0	0	0	41	31-40	20
12 PM	1	4	16	4	9	9	1	1	0	0	0	0	0	0	45	18-27	20
13:00	0	4	11	9	13	7	5	2	2	0	0	0	0	0	53	25-34	22
14:00	0	5	12	11	13	4	6	0	0	0	0	0	0	0	51	26-35	24
15:00	2	6	4	11	12	9	2	0	0	1	0	0	0	0	47	26-35	23
16:00	0	1	8	13	13	4	2	1	1	0	0	0	0	0	43	26-35	26
17:00	0	6	20	38	17	15	4	0	0	0	0	0	0	0	100	21-30	58
18:00	0	1	3	6	12	5	2	0	0	0	0	0	0	0	29	26-35	18
19:00	0	0	1	4	12	3	3	0	0	0	0	0	0	0	23	26-35	16
20:00	0	1	2	9	2	6	3	1	0	0	0	0	0	0	24	21-30	11
21:00	0	1	2	7	5	3	2	3	1	0	0	0	0	0	24	26-35	12
22:00	0	1	1	3	6	6	2	0	0	0	0	0	0	0	19	31-40	12
23:00	0	1	3	3	6	3	0	1	1	0	0	0	0	0	18	26-35	9
Total	11	60	123	171	208	124	48	17	7	1	0	0	0	0	770		
Percent	1.4%	7.8%	16.0%	22.2%	27.0%	16.1%	6.2%	2.2%	0.9%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	05:00	09:00	09:00	08:00	08:00	08:00	08:00	06:00	04:00						08:00		
Vol.	2	8	11	16	20	11	6	2	1						64		
PM Peak	15:00	15:00	17:00	17:00	17:00	17:00	14:00	21:00	13:00	15:00					17:00		
Vol.	2	6	20	38	17	15	6	3	2	1					100		

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WB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total	Pace Speed	Number in Pace
11/18/22	0	0	3	4	5	1	1	0	0	0	0	0	0	0	14	26-35	9
01:00	0	0	2	3	1	1	0	0	0	0	0	0	0	0	7	21-30	5
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	14-23	1
03:00	1	0	1	1	0	0	0	0	0	1	0	0	0	0	4	19-28	2
04:00	2	0	0	2	3	1	0	0	0	0	0	0	0	0	8	26-35	5
05:00	2	0	0	0	1	2	1	0	0	0	0	0	0	0	6	36-45	3
06:00	0	3	0	0	6	1	1	1	0	0	0	0	0	0	13	31-40	7
07:00	1	2	2	7	7	7	3	0	0	0	0	0	0	0	29	26-35	14
08:00	2	3	10	11	15	11	0	0	0	1	0	0	0	0	53	26-35	26
09:00	5	4	12	12	18	13	5	1	0	0	0	0	0	0	70	31-40	31
10:00	1	1	4	8	11	5	3	2	0	0	0	0	0	0	35	26-35	19
11:00	0	5	3	6	12	8	2	1	1	0	0	0	0	0	38	30-39	20
12 PM	4	2	9	11	18	9	3	1	0	0	0	0	0	0	57	26-35	29
13:00	4	3	11	14	11	9	3	2	0	0	1	0	0	0	58	26-35	25
14:00	0	4	5	12	7	15	7	5	2	0	1	0	0	0	58	31-40	22
15:00	2	3	7	8	13	11	4	2	0	0	0	0	0	0	50	31-40	24
16:00	2	2	5	13	15	9	2	1	0	0	0	0	0	0	49	26-35	28
17:00	1	4	14	25	26	21	3	2	1	0	0	0	0	0	97	26-35	51
18:00	0	1	6	7	12	6	3	1	0	0	0	0	0	0	36	26-35	19
19:00	0	1	2	8	8	4	1	1	0	0	0	0	0	0	25	26-35	16
20:00	0	2	5	9	3	5	0	0	0	0	0	0	0	0	24	21-30	14
21:00	0	1	6	3	3	2	4	0	2	0	0	0	1	0	22	20-29	9
22:00	2	2	5	9	8	2	2	0	0	0	0	0	0	0	30	26-35	17
23:00	0	0	4	3	2	2	1	0	0	0	0	0	1	0	13	21-30	7
Total	29	43	117	176	205	145	49	20	7	2	2	0	2	0	797		
Percent	3.6%	5.4%	14.7%	22.1%	25.7%	18.2%	6.1%	2.5%	0.9%	0.3%	0.3%	0.0%	0.3%	0.0%			
AM Peak	09:00	11:00	09:00	09:00	09:00	09:00	09:00	10:00	06:00	03:00					09:00		
Vol.	5	5	12	12	18	13	5	2	1	1					70		
PM Peak	12:00	14:00	17:00	17:00	17:00	17:00	14:00	14:00	14:00		13:00		21:00		17:00		
Vol.	4	4	14	25	26	21	7	5	2		1		1		97		
Total	107	327	781	1310	1444	955	389	118	39	11	3	2	2	0	5488		
Percent	1.9%	6.0%	14.2%	23.9%	26.3%	17.4%	7.1%	2.2%	0.7%	0.2%	0.1%	0.0%	0.0%	0.0%			

15th Percentile : 22 MPH
50th Percentile : 30 MPH
85th Percentile : 38 MPH
95th Percentile : 43 MPH

Stats 10 MPH Pace Speed : 26-35 MPH
 Number in Pace : 2754
 Percent in Pace : 50.2%
Number of Vehicles > 35 MPH : 1519
Percent of Vehicles > 35 MPH : 27.7%
Mean Speed(Average) : 31 MPH

Peak Hour Driveway Count- 22BJ10(San Jose)

Date: 7/6/2023
 Counters: Jo, Jana
 Location: Olivera Egg Ranch
 Weather: Fair

AUTO CENSUS Traffic Monitoring and Analysis

Combined Totals				Combined Totals			
Time	IN	OUT		Time	IN	OUT	
7:00am	0	0	0	4:00pm	0	0	0
7:15am	0	0	0	4:15pm	7	5	12
7:30am	0	0	0	4:30pm	20	10	30
7:45am	0	0	0	4:45pm	24	14	38
8:00am	5	1	6	5:00pm	34	19	53
8:15am	7	5	12	5:15pm	38	23	61
8:30am	9	6	15	5:30pm	47	32	79
8:45am	11	8	19	5:45pm	53	43	96
9:00am	13	9	22	6:00pm	56	47	103

Peak Hour	IN	OUT	Hourly Totals	Peak Hour	IN	OUT	Hourly Totals
7:00 - 8:00	5	1	6	4:00 - 5:00	34	19	53
7:15 - 8:15	7	5	12	4:15 - 5:15	31	18	49
7:30 - 8:30	9	6	15	4:30 - 5:30	27	22	49
7:45 - 8:45	11	8	19	4:45 - 5:45	29	29	58
8:00 - 9:00	8	8	16	5:00 - 6:00	22	28	50

Peak Volumes: 11 8 19 29 29 58

Appendix B

ATI Sheets

AM PROJECT TRIPS

10/28/2022

Intersection of : Piedmont Rd & Sierra Rd**Traffic Node Number :** 3741

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
18-138741 TA (3-24190) Retail/Commercial 3315 Sierra Road Residential	0	1	0	2	0	7	7	0	0	0	0	3
PDC88-08-097 (3-06700) Residential CROPLEY & OLD PIEDMONT BRANCATO - 39 UNITS	0	3	0	0	2	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	1	0	0	2	0	0	0	0	0	0	0
TOTAL:	0	5	0	2	4	7	7	0	0	0	0	3

	LEFT	THRU	RIGHT
NORTH	2	4	7
EAST	0	0	3
SOUTH	0	5	0
WEST	7	0	0

PM PROJECT TRIPS

10/28/2022

Intersection of : Piedmont Rd & Sierra Rd**Traffic Node Number :** 3741

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
18-138741 TA (3-24190) Retail/Commercial 3315 Sierra Road Residential	0	0	0	3	1	7	7	0	0	0	0	2
PDC88-08-097 (3-06700) Residential CROPLEY & OLD PIEDMONT BRANCATO - 39 UNITS	0	2	0	0	3	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	2	0	0	1	0	0	0	0	0	0	0
TOTAL:	0	4	0	3	5	7	7	0	0	0	0	2

	LEFT	THRU	RIGHT
NORTH	3	5	7
EAST	0	0	2
SOUTH	0	4	0
WEST	7	0	0

Appendix C

Volume Spreadsheets

Intersection Number:	1	3354 Keaton Loop Mixed-Use											
Traffic Node Number:	3741												
Intersection Name:	Piedmont Road	& Sierra Road											
Peak Hour:	AM	Date of Analysis: 07/19/23											
Count Date:	12/04/18												
Scenario:	25 Single-Family Homes + up to 15 ADUs												
SJ Growth Factor (% Per Year): 0.01													
Number of Years: 4.00													
Scenario:	Movements												
	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Count	198	503	48	23	40	45	60	775	118	104	25	120	2059
1% Annual Growth (SJ Count Adjustment)	8	20	2	1	2	2	2	31	5	4	1	5	82
Existing Conditions	206	523	50	24	42	47	62	806	123	108	26	125	2141
Approved Project Trips													
San Jose ATI	7	4	2	3	0	0	0	5	0	0	0	7	28
Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	7	4	2	3	0	0	0	5	0	0	0	7	28
Background Conditions	213	527	52	27	42	47	62	811	123	108	26	132	2169
Bkgrd check	213	527	52	27	42	47	62	811	123	108	26	132	
Project Trips													
Project Trips	0	0	1	4	5	8	3	0	0	0	2	0	23
Existing Trip Credits (Olivera Egg Ranch)	0	0	-3	-2	-2	-4	-5	0	0	0	-3	0	-19
Trip Credits 2	0	0	0	0	0	0	0	0	0	0	0	0	0
TRAFFIX Rounding Adjustment	0	0	1	0	-1	1	-1	0	0	0	0	0	0
Net Project Trips	0	0	-1	2	2	5	-3	0	0	0	-1	0	4
Background + Project Conditions	213	527	51	29	44	52	59	811	123	108	25	132	2173
Bkgrd+Proj check	213	527	51	29	44	52	59	811	123	108	25	132	

Intersection Number:	2	Onslow Way & Sierra Road (unsignalized)											
Traffic Node Number:	2												
Intersection Name:	Onslow Way	& Sierra Road (unsignalized)											
Peak Hour:	AM	Date of Analysis: 07/19/23											
Count Date:	12/06/22												
Scenario:	25 Single-Family Homes + up to 15 ADUs												
SJ Growth Factor (% Per Year): 0.00													
Number of Years: 0.00													
Scenario:	Movements												
	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Count	0	0	0	0	56	0	0	0	15	10	43	0	124
1% Annual Growth (SJ Count Adjustment)	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Conditions	0	0	0	0	56	0	0	0	15	10	43	0	124
Approved Project Trips													
San Jose ATI	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Conditions	0	0	0	0	56	0	0	0	15	10	43	0	124
Bkgrd check	0	0	0	0	56	0	0	0	15	10	43	0	
Project Trips													
Project Trips	10	0	0	0	7	0	0	0	0	0	3	3	23
Existing Trip Credits (Olivera Egg Ranch)	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Credits 2	0	0	0	0	0	0	0	0	0	0	0	0	0
TRAFFIX Rounding Adjustment	0	0	0	0	-1	0	0	0	0	0	-1	0	-2
Net Project Trips	10	0	0	0	6	0	0	0	0	0	2	3	21
Background + Project Conditions	10	0	0	0	62	0	0	0	15	10	45	3	145
Bkgrd+Proj check	10	0	0	0	62	0	0	0	15	10	45	3	

Intersection Number:	3	Fulbar Court & Sierra Road (unsignalized)											
Traffic Node Number:	3												
Intersection Name:	Fulbar Court	& Sierra Road (unsignalized)											
Peak Hour:	AM	Date of Analysis: 07/19/23											
Count Date:	12/06/22												
Scenario:	25 Single-Family Homes + up to 15 ADUs												
SJ Growth Factor (% Per Year): 0.00													
Number of Years: 0.00													
Scenario:	Movements												
	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Count	0	0	0	0	50	0	0	0	6	6	38	0	100
1% Annual Growth (SJ Count Adjustment)	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Conditions	0	0	0	0	50	0	0	0	6	6	38	0	100
Approved Project Trips													
San Jose ATI	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Conditions	0	0	0	0	50	0	0	0	6	6	38	0	100
Bkgrd check	0	0	0	0	50	0	0	0	6	6	38	0	
Project Trips													
Project Trips	7	0	0	0	0	0	0	0	0	0	0	3	10
Existing Trip Credits (Olivera Egg Ranch)	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Credits 2	0	0	0	0	0	0	0	0	0	0	0	0	0
TRAFFIX Rounding Adjustment	-1	0	0	0	0	0	0	0	0	0	0	-1	-2
Net Project Trips	6	0	0	0	0	0	0	0	0	0	0	2	8
Background + Project Conditions	6	0	0	0	50	0	0	0	6	6	38	2	108
Bkgrd+Proj check	6	0	0	0	50	0	0	0	6	6	38	2	

Intersection Number:	1	3354 Keaton Loop Mixed-Use											
Traffic Node Number:	3741												
Intersection Name:	Piedmont Road	& Sierra Road											
Peak Hour:	PM	Date of Analysis: 07/19/23											
Count Date:	12/04/18												
Scenario:	25 Single-Family Homes + up to 15 ADUs												
SJ Growth Factor (% Per Year): 0.01													
Number of Years: 4.00													
Scenario:	Movements												
	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Count	148	713	54	23	48	43	67	361	52	100	48	86	1743
1% Annual Growth (SJ Count Adjustment)	6	29	2	1	2	2	3	14	2	4	2	3	70
Existing Conditions	154	742	56	24	50	45	70	375	54	104	50	89	1813
Approved Project Trips													
San Jose ATI	7	5	3	2	0	0	0	4	0	0	0	7	28
Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	7	5	3	2	0	0	0	4	0	0	0	7	28
Background Conditions	161	747	59	26	50	45	70	379	54	104	50	96	1841
Bkgrd check	161	747	59	26	50	45	70	379	54	104	50	96	
Project Trips													
Project Trips	0	0	5	3	3	5	9	0	0	0	5	0	30
Existing Trip Credits (Olivera Egg Ranch)	0	0	-7	-7	-7	-15	-15	0	0	0	-7	0	-58
Trip Credits 2	0	0	0	0	0	0	0	0	0	0	0	0	0
TRAFFIX Rounding Adjustment	0	0	-1	-1	-1	1	1	0	0	0	-1	0	-2
Net Project Trips	0	0	-3	-5	-5	-9	-5	0	0	0	-3	0	-30
Background + Project Conditions	161	747	56	21	45	36	65	379	54	104	47	96	1811
Bkgrd+Proj check	161	747	56	21	45	36	65	379	54	104	47	96	

Intersection Number:	2	Onslow Way & Sierra Road (unsignalized)											
Traffic Node Number:	2												
Intersection Name:	Onslow Way	& Sierra Road (unsignalized)											
Peak Hour:	PM	Date of Analysis: 07/19/23											
Count Date:	12/06/22												
Scenario:	25 Single-Family Homes + up to 15 ADUs												
SJ Growth Factor (% Per Year): 0.00													
Number of Years: 0.00													
Scenario:	Movements												
	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Count	0	0	0	0	87	0	0	0	3	7	71	0	168
1% Annual Growth (SJ Count Adjustment)	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Conditions	0	0	0	0	87	0	0	0	3	7	71	0	168
Approved Project Trips													
San Jose ATI	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Conditions	0	0	0	0	87	0	0	0	3	7	71	0	168
Bkgrd check	0	0	0	0	87	0	0	0	3	7	71	0	
Project Trips													
Project Trips	6	0	0	0	5	0	0	0	0	0	8	11	30
Existing Trip Credits (Olivera Egg Ranch)	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Credits 2	0	0	0	0	0	0	0	0	0	0	0	0	0
TRAFFIX Rounding Adjustment	0	0	0	0	-1	0	0	0	0	0	-1	0	-2
Net Project Trips	6	0	0	0	4	0	0	0	0	0	7	11	28
Background + Project Conditions	6	0	0	0	91	0	0	0	3	7	78	11	196
Bkgrd+Proj check	6	0	0	0	91	0	0	0	3	7	78	11	

Intersection Number:	3	Fulbar Court & Sierra Road (unsignalized)											
Traffic Node Number:	3												
Intersection Name:	Fulbar Court	& Sierra Road (unsignalized)											
Peak Hour:	PM	Date of Analysis: 07/19/23											
Count Date:	12/06/22												
Scenario:	25 Single-Family Homes + up to 15 ADUs												
SJ Growth Factor (% Per Year): 0.00													
Number of Years: 0.00													
Scenario:	Movements												
	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Count	0	0	0	0	80	0	0	0	5	4	66	1	156
1% Annual Growth (SJ Count Adjustment)	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Conditions	0	0	0	0	80	0	0	0	5	4	66	1	156
Approved Project Trips													
San Jose ATI	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Conditions	0	0	0	0	80	0	0	0	5	4	66	1	156
Bkgrd check	0	0	0	0	80	0	0	0	5	4	66	1	
Project Trips													
Project Trips	5	0	0	0	0	0	0	0	0	0	0	8	13
Existing Trip Credits (Olivera Egg Ranch)	0	0	0	0	0	0	0	0	0	0	0	0	0
Trip Credits 2	0	0	0	0	0	0	0	0	0	0	0	0	0
TRAFFIX Rounding Adjustment	-1	0	0	0	0	0	0	0	0	0	0	-1	-2
Net Project Trips	4	0	0	0	0	0	0	0	0	0	0	7	11
Background + Project Conditions	4	0	0	0	80	0	0	0	5	4	66	8	167
Bkgrd+Proj check	4	0	0	0	80	0	0	0	5	4	66	8	

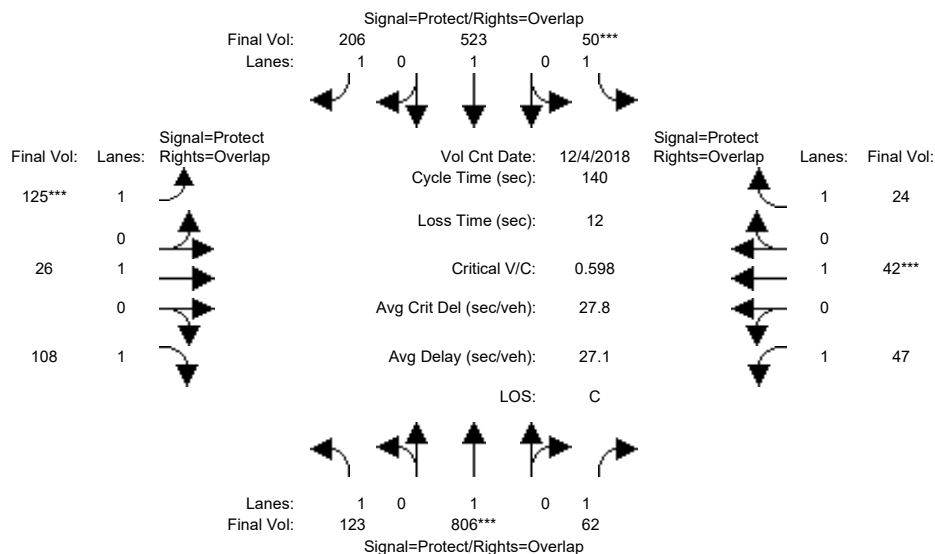
Appendix D

Level of Service Calculations

3315 Sierra Road Residential
25 SF DUs + 15 ADUs
San Jose, CA

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

Intersection #3741: Piedmont Rd & Sierra Rd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module: >> Count Date: 4 Dec 2018 << 7:30-8:30AM												
Base Vol:	123	806	62	50	523	206	125	26	108	47	42	24
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:	123	806	62	50	523	206	125	26	108	47	42	24
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	123	806	62	50	523	206	125	26	108	47	42	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	123	806	62	50	523	206	125	26	108	47	42	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	806	62	50	523	206	125	26	108	47	42	24
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	123	806	62	50	523	206	125	26	108	47	42	24

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:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750

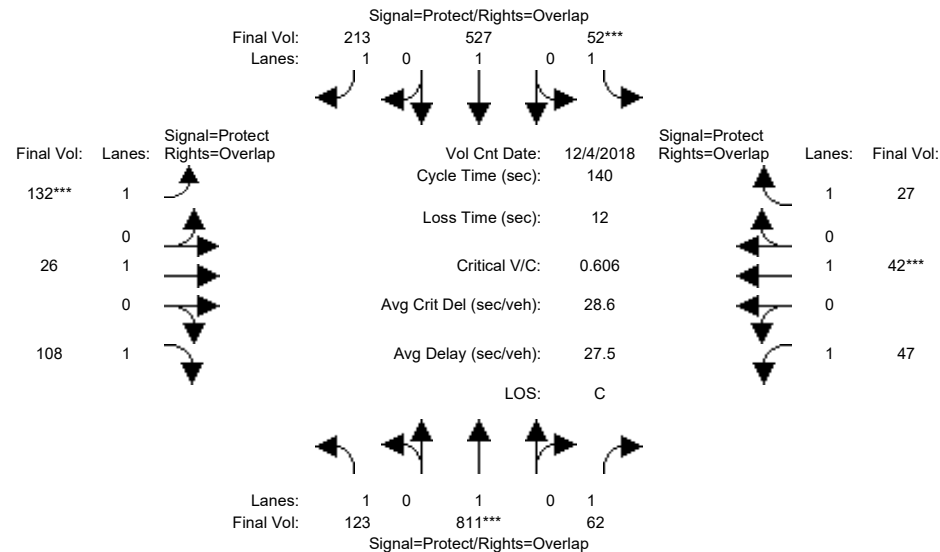
Capacity Analysis Module:												
Vol/Sat:	0.07	0.42	0.04	0.03	0.28	0.12	0.07	0.01	0.06	0.03	0.02	0.01
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	20.7	95.0	105.7	7.0	81.3	97.3	16.0	15.3	36.0	10.7	10.0	17.0
Volume/Cap:	0.47	0.63	0.05	0.57	0.47	0.17	0.63	0.13	0.24	0.35	0.31	0.11
Delay/Veh:	60.7	14.9	4.4	89.4	18.5	7.7	73.0	57.6	42.4	68.5	67.6	55.9
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:	60.7	14.9	4.4	89.4	18.5	7.7	73.0	57.6	42.4	68.5	67.6	55.9
LOS by Move:	E	B	A	F	B	A	E	E	D	E	E	E
HCM2k95thQ:	10	33	2	7	21	7	12	3	8	5	5	2

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

3315 Sierra Road Residential
25 SF DUs + 15 ADUs
San Jose, CA

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

Intersection #3741: Piedmont Rd & Sierra Rd



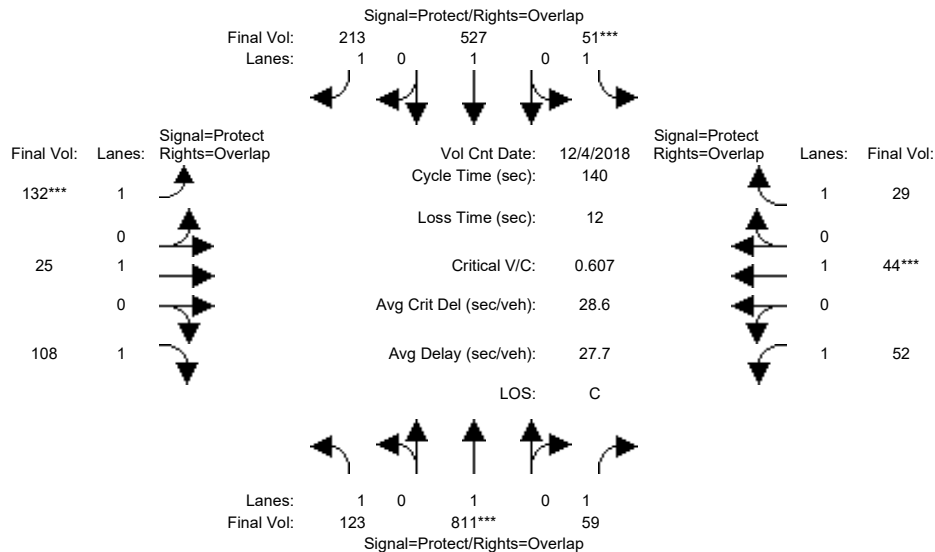
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 4 Dec 2018 << 7:30-8:30AM												
Base Vol:	123	806	62	50	523	206	125	26	108	47	42	24
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:	123	806	62	50	523	206	125	26	108	47	42	24
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	5	0	2	4	7	7	0	0	0	0	3
Initial Fut:	123	811	62	52	527	213	132	26	108	47	42	27
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:	123	811	62	52	527	213	132	26	108	47	42	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	811	62	52	527	213	132	26	108	47	42	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	123	811	62	52	527	213	132	26	108	47	42	27
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:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.43	0.04	0.03	0.28	0.12	0.08	0.01	0.06	0.03	0.02	0.02
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	20.5	94.3	105.3	7.0	80.8	97.5	16.7	15.7	36.2	11.0	10.0	17.0
Volume/Cap:	0.48	0.63	0.05	0.59	0.48	0.17	0.63	0.12	0.24	0.34	0.31	0.13
Delay/Veh:	61.2	15.4	4.5	91.4	18.8	7.7	72.5	57.1	42.3	67.8	67.6	56.1
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:	61.2	15.4	4.5	91.4	18.8	7.7	72.5	57.1	42.3	67.8	67.6	56.1
LOS by Move:	E	B	A	F	B	A	E	E	D	E	E	E
HCM2k95thQ:	10	34	2	7	22	7	13	3	8	5	5	3

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

3315 Sierra Road Residential
25 SF DUs + 15 ADUs
San Jose, CA

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

Intersection #3741: Piedmont Rd & Sierra Rd



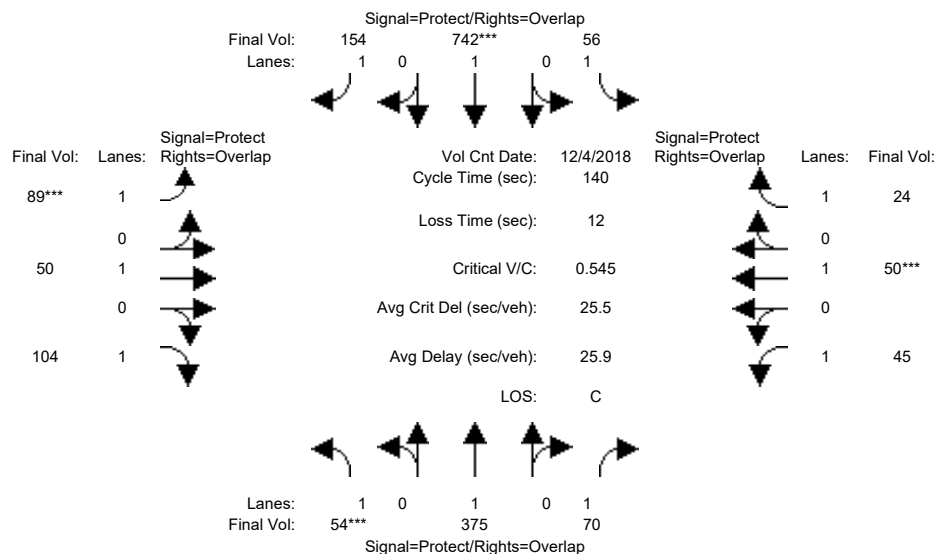
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 4 Dec 2018 << 7:30-8:30AM												
Base Vol:	123	806	62	50	523	206	125	26	108	47	42	24
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:	123	806	62	50	523	206	125	26	108	47	42	24
Added Vol:	0	0	-3	-1	0	0	0	-1	0	5	2	2
ATI:	0	5	0	2	4	7	7	0	0	0	0	3
Initial Fut:	123	811	59	51	527	213	132	25	108	52	44	29
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:	123	811	59	51	527	213	132	25	108	52	44	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	811	59	51	527	213	132	25	108	52	44	29
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	123	811	59	51	527	213	132	25	108	52	44	29
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:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.43	0.03	0.03	0.28	0.12	0.08	0.01	0.06	0.03	0.02	0.02
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	20.5	94.3	105.3	7.0	80.8	97.5	16.7	15.7	36.2	11.0	10.0	17.0
Volume/Cap:	0.48	0.63	0.04	0.58	0.48	0.17	0.63	0.12	0.24	0.38	0.32	0.14
Delay/Veh:	61.2	15.4	4.5	90.4	18.8	7.7	72.5	57.0	42.3	69.0	68.0	56.3
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:	61.2	15.4	4.5	90.4	18.8	7.7	72.5	57.0	42.3	69.0	68.0	56.3
LOS by Move:	E	B	A	F	B	A	E	E	D	E	E	E
HCM2k95thQ:	10	34	2	7	22	7	13	2	8	6	5	3

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

3315 Sierra Road Residential
25 SF DUs + 15 ADUs
San Jose, CA

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

Intersection #3741: Piedmont Rd & Sierra Rd



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module: >> Count Date: 4 Dec 2018 << 4:15-5:15PM												
Base Vol:	54	375	70	56	742	154	89	50	104	45	50	24
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:	54	375	70	56	742	154	89	50	104	45	50	24
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	54	375	70	56	742	154	89	50	104	45	50	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	54	375	70	56	742	154	89	50	104	45	50	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	375	70	56	742	154	89	50	104	45	50	24
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	54	375	70	56	742	154	89	50	104	45	50	24

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:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750

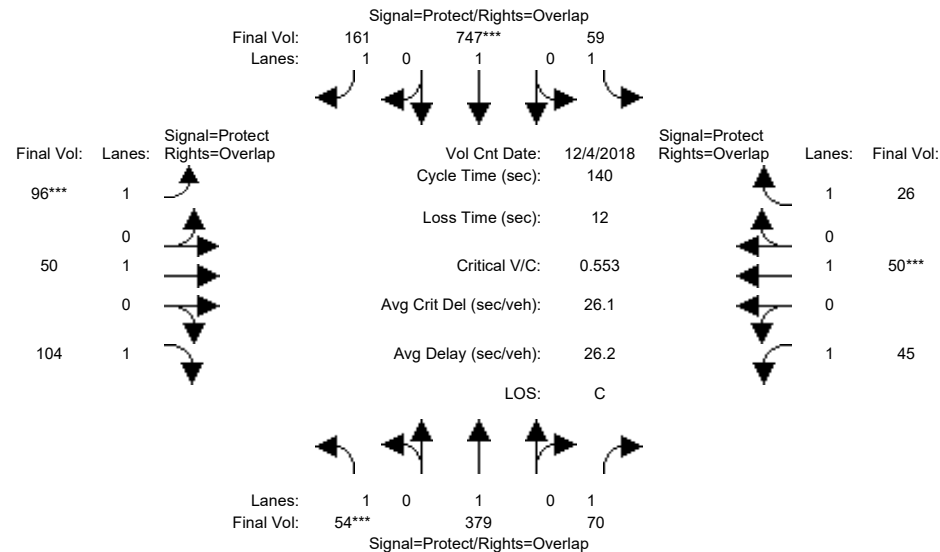
Capacity Analysis Module:												
Vol/Sat:	0.03	0.20	0.04	0.03	0.39	0.09	0.05	0.03	0.06	0.03	0.03	0.01
Crit Moves:	****			****			****			****		
Green Time:	7.7	84.0	93.4	21.3	97.6	110.3	12.7	13.4	21.1	9.4	10.0	31.3
Volume/Cap:	0.56	0.33	0.06	0.21	0.56	0.11	0.56	0.28	0.39	0.39	0.37	0.06
Delay/Veh:	86.0	14.7	8.2	53.8	12.3	3.6	74.5	62.6	58.1	71.9	69.5	43.1
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:	86.0	14.7	8.2	53.8	12.3	3.6	74.5	62.6	58.1	71.9	69.5	43.1
LOS by Move:	F	B	A	D	B	A	E	E	E	E	E	D
HCM2k95thQ:	6	15	3	5	26	4	9	5	9	5	5	2

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

3315 Sierra Road Residential
25 SF DUs + 15 ADUs
San Jose, CA

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

Intersection #3741: Piedmont Rd & Sierra Rd



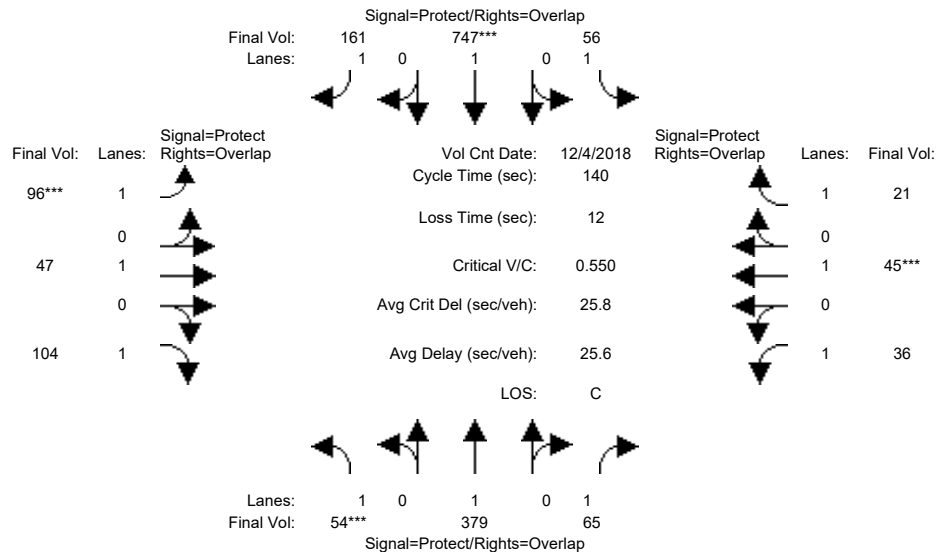
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 4 Dec 2018 << 4:15-5:15PM												
Base Vol:	54	375	70	56	742	154	89	50	104	45	50	24
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:	54	375	70	56	742	154	89	50	104	45	50	24
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	4	0	3	5	7	7	0	0	0	0	2
Initial Fut:	54	379	70	59	747	161	96	50	104	45	50	26
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:	54	379	70	59	747	161	96	50	104	45	50	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	379	70	59	747	161	96	50	104	45	50	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	54	379	70	59	747	161	96	50	104	45	50	26
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:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.20	0.04	0.03	0.39	0.09	0.05	0.03	0.06	0.03	0.03	0.01
Crit Moves:	****			****			****			****		
Green Time:	7.6	83.5	93.2	20.9	96.9	110.4	13.5	13.8	21.4	9.7	10.0	30.9
Volume/Cap:	0.57	0.33	0.06	0.23	0.57	0.12	0.57	0.27	0.39	0.37	0.37	0.07
Delay/Veh:	86.9	15.0	8.2	54.4	12.7	3.6	73.6	61.8	57.6	70.8	69.5	43.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	86.9	15.0	8.2	54.4	12.7	3.6	73.6	61.8	57.6	70.8	69.5	43.5
LOS by Move:	F	B	A	D	B	A	E	E	E	E	E	D
HCM2k95thQ:	6	15	3	5	26	4	10	5	9	5	5	2

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

3315 Sierra Road Residential
25 SF DUs + 15 ADUs
San Jose, CA

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

Intersection #3741: Piedmont Rd & Sierra Rd

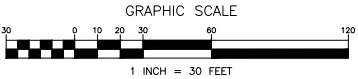
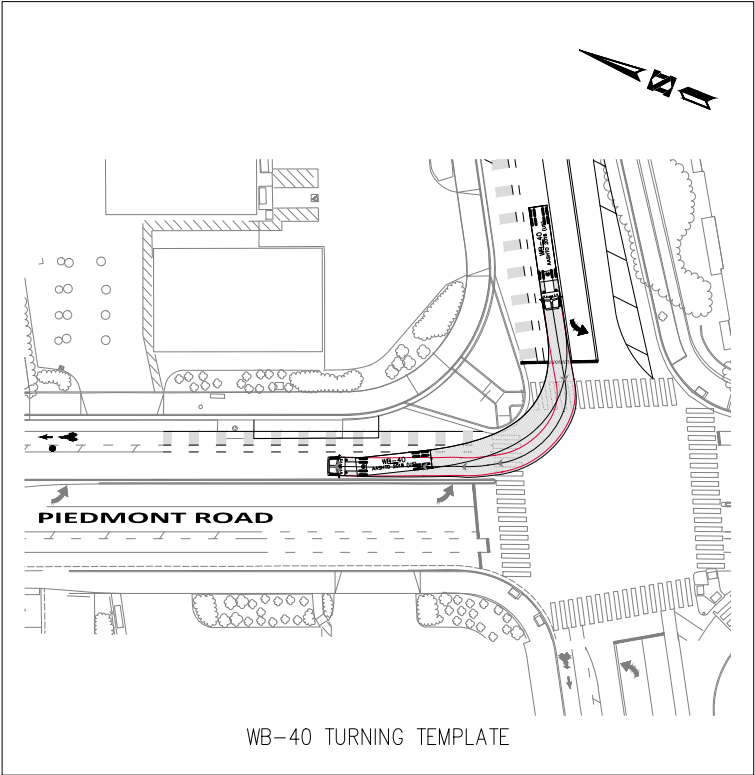
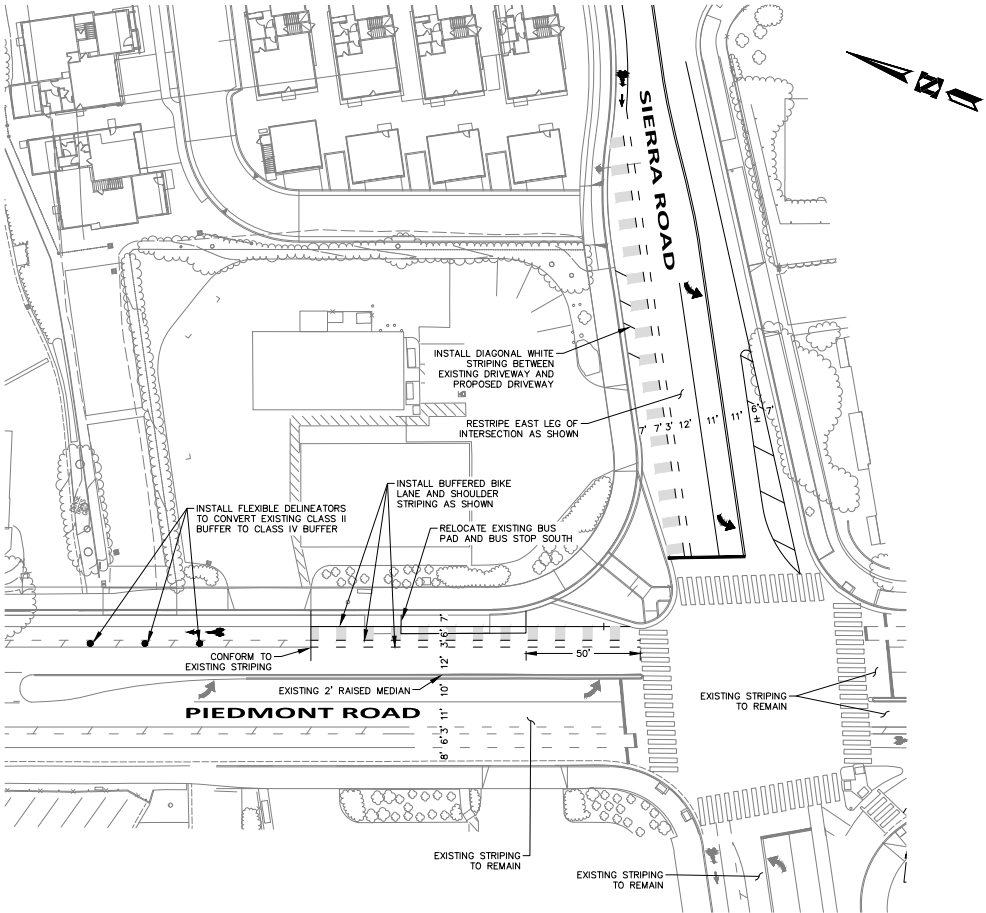


Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 4 Dec 2018 << 4:15-5:15PM												
Base Vol:	54	375	70	56	742	154	89	50	104	45	50	24
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:	54	375	70	56	742	154	89	50	104	45	50	24
Added Vol:	0	0	-5	-3	0	0	0	-3	0	-9	-5	-5
ATI:	0	4	0	3	5	7	7	0	0	0	0	2
Initial Fut:	54	379	65	56	747	161	96	47	104	36	45	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	54	379	65	56	747	161	96	47	104	36	45	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	379	65	56	747	161	96	47	104	36	45	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	54	379	65	56	747	161	96	47	104	36	45	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	1900	1750	1750	1900	1750	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.03	0.20	0.04	0.03	0.39	0.09	0.05	0.02	0.06	0.02	0.02	0.01
Crit Moves:	****			****			****			****		
Green Time:	7.6	83.5	93.2	20.9	96.9	110.4	13.5	13.8	21.4	9.7	10.0	30.9
Volume/Cap:	0.57	0.33	0.06	0.21	0.57	0.12	0.57	0.25	0.39	0.30	0.33	0.05
Delay/Veh:	86.9	15.0	8.2	54.2	12.7	3.6	73.6	61.5	57.6	68.1	68.3	43.3
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:	86.9	15.0	8.2	54.2	12.7	3.6	73.6	61.5	57.6	68.1	68.3	43.3
LOS by Move:	F	B	A	D	B	A	E	E	E	E	E	D
HCM2k95thQ:	6	15	3	5	26	4	10	5	9	4	5	2

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

Appendix E

Conceptual Multimodal Infrastructure Improvements



Conceptual Multimodal Infrastructure Improvements

Appendix F

TDM Plan



HEXAGON TRANSPORTATION CONSULTANTS, INC.

3315 Sierra Road Residential Development

Draft Transportation Demand Management Plan

Prepared for:

Robson Homes

November 20, 2024

Hexagon Transportation Consultants, Inc.

Hexagon Office: 100 Century Center Court, Suite 501

San Jose, CA 95112

Hexagon Job Number: 22BJ10

Phone: 408.971.6100

Client Name: Robson Homes

San Jose • Gilroy • Pleasanton

www.hextrans.com

Areawide Circulation Plans Corridor Studies Pavement Delineation Plans Traffic Handling Plans Impact Fees Interchange Analysis Parking
Transportation Planning Traffic Calming Traffic Control Plans Traffic Simulation Traffic Impact Analysis Traffic Signal Design Travel Demand Forecasting



Transportation Demand Management Plan

Transportation Demand Management (TDM) is a combination of services, incentives, facilities, and actions that reduce single-occupant vehicle (SOV) trips to help relieve traffic congestion, parking demand, and air pollution problems. The purposes of TDM are to (1) reduce the amount of traffic generated by new development; (2) promote more efficient utilization of existing transportation facilities and ensure that new developments are designed to maximize the potential for alternative transportation usage; (3) reduce the parking demand generated by new development and allow for a reduction in parking supply; and (4) establish an ongoing monitoring and enforcement program to guarantee the desired trip and/or parking reductions are achieved.

This TDM Plan was prepared for the proposed residential development at 3315 Sierra Road in San Jose, California. The 2.29-acre project site (APN 595-10-067) is generally located on the northeast corner of Piedmont Road and Sierra Road and is currently occupied by a commercial building complex (Olivera Egg Ranch), one single-family home, and multiple accessory structures. The project proposes to demolish the existing structures and construct 25 single-family homes and up to 15 accessory dwelling units (ADUs). The project would remove five existing driveways and construct two residential driveways.

Project VMT Impact


The project vehicle-miles-traveled (VMT) estimated by the City of San Jose's VMT Evaluation Tool for the residential project is 13.59 per capita. The project VMT, therefore, exceeds the residential threshold of 11.39 VMT per capita. Since the project would result in a significant transportation impact on VMT, mitigation measures are required to reduce the VMT impact to a less-than-significant level.


The TDM Plan is intended to assist with mitigating the significant transportation impact on VMT associated with the residential project that was identified in the September 5, 2024 Transportation Analysis (TA) prepared for the project. According to the *Transportation Analysis Handbook (2003)*, projects located in high VMT areas where the existing VMT is above the established threshold of significance are required to include VMT reduction measures (i.e., mitigation measures) that would reduce the VMT impact to a less-than-significant level.

Project Mitigation (TDM Plan)

The City's VMT Evaluation Tool is used to determine the mitigation measures (including TDM measures) necessary to mitigate the VMT impact. The tool includes the following four "tiers" of VMT reduction strategies:


- Tier 1 Strategies – Project Characteristics (e.g., Increase Residential and Employment Density, Increase Development Diversity, and Integrate Affordable Housing);

- 
- Tier 2 Strategies – Multimodal Infrastructure Improvements (e.g., bike, pedestrian and transit improvements);
 - Tier 3 Strategies – Parking (e.g., end of trip bike facilities); and
 - Tier 4 Strategies – Programmatic TDM Measures (e.g., unbundled parking, car-sharing program, and voluntary travel behavior change program).



Based on the four VMT reduction strategy tiers included in the VMT Evaluation Tool, the project plans to implement the following Tier 2 multimodal infrastructure improvements to mitigate the significant VMT impact (as described in the TA prepared for the project):

- Bike access improvements
- Pedestrian network improvements
- Traffic calming measures
- Transit accessibility improvements




The following two programmatic TDM measures (Tier 4 VMT reduction strategies) will be implemented as part of the comprehensive TDM Plan to reduce the project VMT to a less-than-significant level:


1. School Carpooling Program
2. Voluntary Travel Behavior Change Program




School Carpooling Program



The project will implement a School Pool Program. The purpose of this program will be to match parents of the proposed residential development who transport students to schools without a bussing program, including private schools, charter schools, and neighborhood schools where students cannot walk or bike. The school pool program will be open to all families of the development. School pools are effective at reducing the total number of vehicle trips traveling between homes and schools and are thereby effective at reducing VMT.




School pool program information will be provided to new homeowners in welcome packets. A TDM webpage and/or periodic newsletters with current school pool program information will also be made available for continued reference by homeowners. Residents interested in the program will be able to connect with other interested residents to schedule carpools either directly or through one of the 511.org online services. The developer will be responsible for initially creating a TDM webpage or newsletter for the project and providing a welcome packet to each homeowner upon move-in. The Home Owner's Association (HOA) will be responsible for maintaining the TDM webpage and/or newsletters to ensure the information remains current.




Proof of Implementation: The HOA must submit a summary of school pool program results including utilization of car-sharing, school bus ridership, and/or active enrollment with a ride matching platform. The HOA must also provide copies of informational materials distributed to homeowners that describe the school pool program as attachments to their annual TDM Plan Compliance Forms.




Voluntary Travel Behavior Change Program




The HOA will facilitate a voluntary travel behavior change program that targets individual attitudes and behaviors towards travel and helps individuals analyze and alter their travel choices to encourage the use of shared ride modes, transit, walking, and biking. These programs will include an annual resident travel survey and year-round communications. These programs may also feature mass communication campaigns such as community travel surveys, green trip competitions, and web-based tools that promote cost savings, pro-environmental, and pro-healthy impacts of travel choices (the Voluntary Travel Behavior Change Program).



All homeowners of the proposed development will be provided with the information/tools/access to take full advantage of the Voluntary Travel Behavior Change Program. Accordingly, 100% of the residents would qualify as “participants” in this TDM program. A TDM/Transportation Coordinator, likely an employee of the HOA Management Company, will administer the Voluntary Travel Behavior Change Program.




Mass communication campaigns will keep the homeowners informed of transportation options available to them. Communications may include emails, newsletters, postcards, and/or fliers. Travel surveys are a way to investigate residential travel modes, trip purposes, trip frequency, and perceptions toward alternative travel options, routes, services, and benefits. The results of the residential travel surveys will provide quantitative data (e.g., mode split) and qualitative data (e.g., resident perception of alternative transportation programs). The travel surveys will be conducted annually and will help to determine the effectiveness of the program and whether any changes should be made. Survey data will indicate where to focus ongoing TDM marketing with a goal of maintaining the project's commitment to use alternative transportation.






Proof of Implementation: The HOA must submit the annual survey and copies of invoices for all service-cost expenses and any informational materials distributed to their residents that describe the program as attachments to their annual TDM Plan Compliance Forms.

On-Site TDM Administration and Services




The project developer will serve as the initial transportation coordinator and transition this responsibility to the HOA manager upon commencement of the HOA's operations. The designated transportation coordinator will be responsible for administering the two programmatic TDM measures set forth above. The transportation coordinator will be a point of contact for homeowners and City staff. The City will receive the coordinator's contact information (including when a new coordinator is named). The transportation coordinator will provide the following services and functions:

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- Following the initial sale and resale of a home, the HOA transportation coordinator will provide homeowners with welcome brochures at the time of move-in. The welcome brochures will include information about public transit services, transit passes, bicycle maps, rideshare/carpool program, and ride-matching services.
 - Assist with rideshare/carpool matching. The transportation coordinator will help match residents interested in carpooling as part of the school pool program.
 - Provide mass communication campaigns to promote alternative transportation.
 - Submit the annual travel survey and TDM compliance forms required by the City.
 - Be available to answer simple questions residents may have regarding the TDM Program.
 - Administer and HOA TDM webpage and/or periodic newsletter with information regarding non-auto transportation alternatives.



The developer will be responsible for distributing the welcome brochures and providing the webpage/newsletter and annual survey template to be utilized by HOA management company. As the program evolves, more specific information may be added to reflect programs specific to certain homeowners. The HOA transportation coordinator will be responsible for adding new information to the webpage and/or monthly newsletters and mass communication campaigns to ensure the information is current and informative.

Bicycle Resources



As part of the information available on the TDM webpage discussed above, resources useful to cyclists will be included. For example, the local bikeways map could be posted for easy reference.

The following resources are available to bicycle commuters through 511.org. These resources will be noted on the project's online information center to make residents aware of them.

- Free Bike Buddy matching
- Bicycle maps
- Bicycle safety tips
- Information about taking bikes on public transit
- Location and use of bike parking at transit stations
- Information on Bike-to-Work Day
- Tips on selecting a bike, commuter gear, and clothing
- Links to bicycle organizations

Implementation and Compliance

A copy of the TDM Plan will be submitted to City of San Jose Department of Transportation staff prior to issuance of a building permit. The developer will be responsible for ensuring that the TDM strategies are initially incorporated into the project. Upon the first closing of a home at the project and the commencement of the HOA's operations, the HOA management company will assume responsibility. The transportation coordinator, who will be an employee or consultant of the HOA management company, will thereafter be responsible for administering the ongoing TDM program and the developer shall have no further responsibility. The transportation coordinator will be the main contact person to help ensure that transportation-related questions from residents are responded to promptly. If the transportation coordinator changes for any reason, City staff and homeowners shall be notified of the name and contact information of the newly designated transportation coordinator.

According to the *City of San Jose Transportation Analysis Handbook* (April 2023), the project meets the definition of a Level 1 residential project (residential developments of 16 to 299 dwelling units). Based on the City of San Jose's requirements, Level 1 projects that are providing at least one (1) programmatic TDM measure (such as the proposed project) are subject to annual compliance reporting but are not required to provide annual monitoring reports.

Annual TDM Compliance Documentation

After the project is completed, the HOA management company is required annually to verify that its programmatic TDM measures continue to be implemented. Every year, the HOA management company must submit a completed TDM Compliance Form and associated administrative fees to the City Department of Transportation, not to exceed \$ TBD . Fee increases shall not exceed the CPI annual adjustment. A TDM Compliance Form must include a summary of the following information about the project:

- **Project Size:** Provide the number of for-sale/for-rent, market-rate/affordable, on-site/off-site units and the number of bundled/unbundled/shared parking spaces.
- **Point of Contact:** Provide the HOA transportation coordinator name and contact information.
- **Documentation of Existing TDM Measures:** Report all ongoing programmatic TDM measures, proof of implementation, and any changes from the original TDM Plan or past years.

The first submission of the TDM Compliance Form is due within 30 calendar days of the 18-month anniversary of the last home sale closing. For example, if the last home sale closes in January of 2027, the first submission of the TDM Compliance Form is due by July 31, 2028. Subsequent annual submissions are also due annually by that same date. Upon five consecutive years of satisfactory submittals of the TDM Compliance Forms, the submittal requirement shifts to every three years or may be waived at the discretion of the City. If, at any time, the project fails to demonstrate satisfactory compliance, the timeline will revert to the annual submittal schedule until the project again demonstrates five consecutive years of satisfactory compliance.