APPENDIX H

TRANSPORTATION ANALYSIS







1073 South Winchester Mixed-Use **Development**



Transportation Analysis

Prepared for:

Visrael 26, LLC.



May 26, 2020











Hexagon Office: 8070 Santa Teresa Boulevard, Suite 230

Gilroy, CA 95020

Hexagon Job Number: 19RD30

Phone: 408.846.7410



www.hextrans.com



Table of Contents

Executive	Summary	
	duction	
	ting Transportation Setting	
	A Transportation Analysis	
	al Transportation Analysis	
5. Con	clusions	62
Append	ices	
Appendix A		
Appendix I		
Appendix (··	
Appendix I	· · · · · · · · · · · · · · · · · · ·	
Appendix I		
Appendix (
Appendix I		
List of 1	ables	
Table 1	CEQA VMT Analysis Screening Criteria for Development Projects	
Table 2	CEQA VMT Analysis Significant Impact Criteria for Development Projects	
Table 3	VMT Mitigation Measures and Resulting VMT	
Table 4	Project Trip Generation Estimates	
Table 5	Signalized Intersection Level of Service Definitions Based on Control Delay	
Table 6	Intersection Level of Service Results	
Table 7	Queuing Analysis Summary	
Table 8 Table 9	Vehicular Parking Requirement Freeway Segment Capacity	
List of F	igures	
Figure 1	Site Location	
Figure 2	Proposed Site Plan	
Figure 3 Figure 4	VMT per Capita Heat Map in San JoseVMT per Job Heat Map in San Jose	
Figure 5	Low VMT per Capita Areas in San Jose	
Figure 6	Low VMT per Job Areas in San Jose	
Figure 7	Existing Bicycle Facilities	
Figure 8	Existing Transit Services	
Figure 9	VMT per Employee Heat Map in Project Area	
Figure 10	VMT per Capita Heat Map in Project Area	21
Figure 11	CEQA Transportation Screening Map for Residential Projects	22
Figure 12	VMT Analysis Summary	
Figure 13	Project Trip Distribution	
Figure 14	Project Trip Assignment	
Figure 15	Existing Lane Configurations	36



Figure 16	Winchester Boulevard Complete Street Improvement	38
Figure 17	Existing Traffic Volumes	41
Figure 18	Background Traffic Volumes	
Figure 19	Background Plus Project Traffic Volumes	
Figure 20	Gross Project Trips at Site Driveways and Ground Level Circulation	
Figure 21	Basement Level Circulation	
Figure 22	Cadillac Residential Parking Program	



Executive Summary

This report presents the results of a Transportation Analysis (TA) for the proposed Winchester Mixed-Use development located at 1073 South Winchester Blvd in the City of San Jose. The project site is located along the west side of Winchester Boulevard, approximately 600 feet south of Williams Road and within a designated Urban Village (Winchester Boulevard). According to the Envision San Jose 2040 General Plan, the Urban Village strategy fosters:

- Mixed residential and employment activities that are attractive to an innovative workforce
- · Revitalization of underutilized properties that have access to existing infrastructure
- Densities that support transit use, bicycling, and walking
- High-quality urban design

As proposed, the development would consist of the replacement of a 9,762-square-foot office building currently on-site with 61 condominium units and 17,970 square feet of office space. A total of 115 parking spaces will be provided on site. Access to and from the project site would be provided via one right-in/right-out driveway along Winchester Boulevard.

Transportation Analysis Scope

The transportation analysis of the project was evaluated following the standards and methodologies set forth in the City of San Jose's Transportation Analysis Policy (Council Policy 5-1), the City of San Jose *Transportation Analysis Handbook 2018*, the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program's *Transportation Impact Guidelines* (October 2014), and by the California Environmental Quality Act (CEQA). Based on the City of San Jose's Transportation Policy and *Transportation Analysis Handbook 2018*, the TA report for the project consists of a CEQA vehicle-miles-traveled (VMT) analysis and a supplemental Local Transportation Analysis (LTA).

CEQA Transportation Analysis Scope

The CEQA transportation analysis for the project consists a project-level VMT impact analysis using the City's VMT tool and a cumulative impact analysis that demonstrates the project's consistency with the Envision San Jose 2040 General Plan.

Local Transportation Analysis Scope

The LTA includes the evaluation of weekday AM and PM peak hour operations at a limited number of intersections for the purpose of identifying operational issues (queuing, signal operations, and potential multi-modal issues) at intersections in the general vicinity of the project site. However, the determination of project impacts per CEQA requirements is based solely on the VMT analysis.



CEQA VMT Analysis

CEQA Transportation Analysis Exemption Criteria

The City of San Jose Transportation Analysis Handbook identifies screening criteria that determines whether a CEQA transportation analysis would be required for development projects. The criteria are based on the type of project, characteristics, and/or location. If a project meets the City's screening criteria, the project is expected to result in less-than-significant VMT impacts and a detailed CEQA VMT analysis is not required.

The project site is located within a planned Growth Area (Winchester Boulevard Urban Village) with low VMT per capita as identified by the San Jose VMT Evaluation Tool. The residential component of the project would meet all of the other applicable screening criteria, as described further in Chapter 3. Therefore, the residential component of the project is screened from the evaluation of VMT and is considered to have a less-than-significant VMT impact. However, the proposed office component of the project will not meet all of the applicable VMT screening criteria. Therefore, a CEQA-level transportation analysis that evaluates the project's effects on VMT is required for the office component of the project and is presented in Chapter 3. A VMT evaluation for the residential component of the project also was completed for informational purposes.

Project-Level VMT Impact Analysis

The results of the VMT evaluation, using the City's VMT Evaluation Tool, indicate that the proposed project is projected to generate VMT per capita (10.02), which is below the established VMT impact threshold. The office component of the project is projected to generate VMT per employee (13.08), which would exceed the established impact threshold. Therefore, the proposed office component of the project would result in an impact on the transportation system based on the City's VMT impact criteria.

Project Impacts and Mitigation Measures

<u>Project Impact</u>: Since the VMT generated by the office component of the project (13.08 per employee) would exceed the threshold of 12.21 VMT per employee, the project would result in a significant transportation impact on VMT, and mitigation measures are required to reduce the VMT impact. According to the *Transportation Analysis Handbook*, projects located in areas where the existing VMT is above the established threshold are referred to as being in "high-VMT areas", and projects in high-VMT areas are required to include a set of VMT reduction measures that would reduce the project VMT to the greatest extent possible.

<u>Mitigation Measures</u>: Based on the four strategy tiers included in the VMT Evaluation Tool, it is recommended that the project implement one of the following mitigation measures to reduce the significant VMT impact.

- <u>Telecommuting and Alternative Work Schedules</u>: Encourage at least 100% of the employees to telecommute, shift work schedules, or commute outside of peak congestion periods on a 9/80 schedule or 9 of 80 hours on alternative work schedule. This measure reduces commute vehicle trips. <u>or</u>
- Operate a Free Direct Shuttle: Provide shuttle service for at least 15% of the project employees that would serve the project site and areas with high concentrations of employed residents. This measure reduces drive-alone commute trips. or
- <u>Provide Ride-Sharing Programs</u>: Organize a program to match individuals interested in carpooling who have similar commutes for at least 15% of the project employees. This measure promotes the use of carpooling and reduces the number of drive-alone trips. <u>or</u>



- 1. Car Sharing Program: Provide subsidies and promotions, as well as dedicated parking spaces, for carsharing services such as ZipCar, Car2Go, and GetAround, etc for 100% of the project employees. Supporting a carsharing program gives people on-demand access to shared fleets of vehicles. Car-sharing reduces personal motorized vehicle dependence, which supports more walking, biking, carpooling, and transit use. Subject to negotiations with the City and possible negotiations with Car Share companies and
- 2. Commute Trip Reduction Marketing/Education: Implement marketing/educational campaigns that promote the use of transit, shared rides, and travel through active modes for 100% of the project employees. Strategies may include incorporation of alternative commute options into new employee orientations, event promotions, and publications. and
- 3. Employee Parking "Cash Out": Require Project employers to offer parking "cash-out" for 60% of the project employees. Providing a "cash-out" incentives gives employees the choice to forgo subsidized/free parking for a cash payment equivalent to the cost that the employer would otherwise pay for the parking space. Providing an alternative to subsidized/free parking encourages commuters to travel by walking, biking, carpooling, and transit.

The implementation of the mitigation measures would reduce the VMT generated by the project by supporting bicycle usage and increasing transit ridership by employees. The implementation of one of the above mitigation measures would reduce the project VMT to below the threshold of 12.21 per employee, which would reduce the project impact to less than significant.

Additionally, the TDM plan (see Appendix H) proposes measures that would reduce the projects parking demand and support a 10 percent parking reduction needed to satisfy the City's parking requirement. The TDM plan includes maintaining an online kiosk of trip-planning resources, providing 100 percent unbundled parking for all residential spaces, providing VTA SmartPasses to residential and commercial tenants, and providing on-site bicycle parking that will exceed the minimum required by the City.

Cumulative (GP Consistency) Evaluation

Projects must demonstrate consistency with the *Envision San José 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 per the City's *Transportation Analysis Handbook*.

The project site is located within the Winchester Boulevard Urban Village. Urban villages are defined as walkable, bicycle-friendly, transit-oriented, mixed use settings that provide both housing and jobs, thus supporting the policies and goals of the General Plan. The project is consistent with the General Plan and Winchester Boulevard Urban Village goals and policies for the following reasons:

- The project frontage along Winchester Boulevard will be improved to be consistent with planned streetscape design features of Grand Boulevards and the Winchester Boulevard Urban Village Plan.
- The project frontage along Winchester Boulevard will be designed to accommodate the planned Winchester Boulevard Complete Street improvements including protected bicycle lanes, wider sidewalks, and other pedestrian safety features.
- The project site is adjacent to bus stops and bicycle lanes on Winchester Boulevard.

Therefore, based on the project description, the proposed project would be consistent with the *Urban Village Planning Concepts* and the *Envision San José 2040 General Plan*. Thus, the project would be



considered as part of the cumulative solution to meet the General Plan's long-range transportation goals and would result in a less-than-significant cumulative impact.

Local Transportation Analysis

The intersection operations analysis is intended to quantify the operations of intersections and to identify potential negative effects due to the addition of project traffic. However, a potential adverse effect on a study intersection operation is not considered a CEQA impact metric.

The LTA includes the analysis of AM and PM peak-hour traffic conditions for two signalized and one unsignalized intersections, following the standards and methodology set forth by the City of San Jose.

Trip Generation

After applying the ITE trip rates, and appropriate trip reductions, it is estimated that the project would generate a total of 437 daily vehicle trips, with 36 trips (20 inbound and 16 outbound) occurring during the AM peak hour and 41 trips (16 inbound and 25 outbound) occurring during the PM peak hour.

Future Intersection Operation Conditions

The operations analysis shows that all of the study intersections are projected to operate at acceptable levels of service, based on the City of San Jose intersection operations standard of LOS D under background conditions and background plus project conditions during both the AM and PM peak hours.

I-280/Winchester Boulevard Interchange Area Transportation Development Policy

The TDP provides partial funding, via a traffic impact fee imposed on proposed development, for the implementation of a new westbound off-ramp from I-280 to Winchester Boulevard to reduce traffic congestion at the I-880/Stevens Creek and Stevens Creek Boulevard corridors. The traffic fee is based on the estimated trips to be added to the new westbound off-ramp from I-280 to Winchester Boulevard by each individual development. It is estimated that the proposed project will result in the addition of three PM peak hour trips to the planned I-280 to Winchester Boulevard ramp.

Recommended Site Access and On-Site Circulation Improvements

<u>Winchester Complete Street Improvements.</u> The Winchester Boulevard Urban Village Plan identifies the following complete street improvements along Winchester Boulevard:

- Protected bike lanes along both sides of Winchester Boulevard. The bike lanes will be physically separated from vehicle travel lanes.
- At least four vehicular travel lanes and two flex lanes for vehicle travel or parking.
- Construction of a raised median with limited breaks including at its intersections with Walgrove Way and Fireside Drive.
- Crosswalks at Walgrove Way and Fireside Drive with potential Rectangular Rapid Flashing Beacons (RRFB) at Walgrove Way.

The City will require that the project provide a fair-share contribution towards the future pedestrian crossing with RRFB improvement at Walgrove Drive.

Adhere to City of San Jose Design Standards and Guidelines. The design of the project site, including but not limited to driveways, sidewalks, corner radii, street width, parking dimensions, and signage, should adhere to City of San Jose design standards and guidelines. Specific site access and on-site circulation recommended improvements are summarized below:

Provide a 20-foot sidewalk along the project frontage.



- The proposed parking space dimensions, while not an unusual design, do not meet City standards and should be reviewed by City staff prior to final design.
- It is recommended that the parking spaces located at the end of the dead-end aisle be assigned parking.
- In lieu of providing off-street loading spaces, it is recommended that the project applicant work with City staff to determine the feasibility of providing a public loading zone on Winchester Boulevard along the project frontage.

Alternatively, the site should be designed to provide a loading area along the north side of the entrance drive aisle and adjacent to the residential lobby.

Parking Supply

Vehicular Parking

Based on the City's standard parking requirements, the project is required to provide a total of 164 off-street parking spaces before any reductions. However, the project is located in the Winchester Urban Village. The Urban Village Overlay automatically allows for a 20 percent reduction in parking. With the 20 percent reduction, the required parking would be reduced to 131 spaces, consisting of 81 spaces for the residential use and 50 spaces for the office use. The project is proposing a total of 115 parking spaces, which would not meet the City's reduced parking requirements.

The proposed number of parking spaces represents a 30% reduction from the standard required number of spaces. With the 20% Urban Village reduction, the project requires an additional 10% reduction in on-site parking spaces. Therefore, the project will need to submit and have approved a TDM plan.

Bicycle Parking

According to the City's Bicycle Parking Standards, the project is required to provide 9 short-term and 11 long-term bicycle parking spaces. The project site plan indicates that bicycle storage areas to accommodate 46 bicycles will be located within the basement level of the parking garage. Therefore, the proposed bicycle parking on-site will exceed the City's requirements and encourage the use of non-auto modes of travel and minimize the demand for on-site parking.

Motorcycle Parking

According to the City's Motorcycle Parking Standards, the project is required to provide 17 motorcycle parking spaces (1 space for the office space and 16 spaces for the residential units). The site plan shows that the project would provide a total of 24 motorcycle parking spaces within the parking garage. Therefore, the number of proposed motorcycle parking spaces would meet the City's requirement.

Pedestrian, Bicycle, and Transit Analysis

Pedestrian Facilities

Existing sidewalks along Winchester Boulevard provide a pedestrian connection between the project site and pedestrian destinations in the project vicinity. Pedestrian traffic primarily would consist of residents and employees of the proposed project walking to and from surrounding retail establishments, as well as bus stops on Winchester Boulevard. Crosswalks with pedestrian signal heads are located at the signalized intersection of Winchester Boulevard and Williams Road. Sidewalks are currently provided on the following major roadway segments in the project vicinity.

- Winchester Boulevard
- Williams Road, west of Winchester Boulevard



- Eden Avenue
- Payne Avenue
- Hamilton Avenue
- Moorpark Avenue

The project will install a 20-foot sidewalk along its frontage on Winchester Boulevard. However, some of the residential streets in the project vicinity do not have sidewalks.

Bicycle Facilities

The bikeways within the vicinity of the project site would remain unchanged under project conditions. Currently, no bike facilities exist on Winchester Boulevard between Payne Avenue and Moorpark Avenue that would provide connections to other bicycle facilities in the project vicinity.

The San Jose Bike Plan 2020 indicates that a variety of bicycle facilities are planned in the study area, some of which would benefit the project and adhere to the goals of the Envision 2040 General Plan. Of the planned facilities, the following are relevant to the project.

Class II bike lanes are planned for:

- Winchester Boulevard, between Payne Avenue and Moorpark Avenue
- Cypress Avenue, between Williams Road and Moorpark Avenue

Class III bike routes are planned for:

- Greenbriar Avenue, between Payne Avenue and Westfield Avenue
- Westfield Avenue, between Greenbriar Avenue and Daniel Way

Transit Services

The project site is adequately served by the existing VTA transit services. The nearest bus stop to the project site are located near the Winchester Boulevard/Williams Road intersection approximately 300 feet from the project site and are served by Route 60. The new transit trips generated by the project are not expected to create demand in excess of the transit service that is currently provided.

As a Grand Boulevard it is envisioned that Winchester Boulevard could potentially be included in the VTA Bus Rapid Transit (BRT) System. However, there are no plans at this time for a BRT line on Winchester Boulevard.

Freeway Segment Evaluation

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



1. Introduction

This report presents the results of a Transportation Analysis (TA) for the proposed Winchester Mixed-Use development located at 1073 South Winchester Blvd in the City of San Jose. The project site is located along the west side of Winchester Boulevard, approximately 600 feet south of Williams Road and within a designated Urban Village (Winchester Boulevard). According to the Envision San Jose 2040 General Plan, the Urban Village strategy fosters:

- Mixed residential and employment activities that are attractive to an innovative workforce
- Revitalization of underutilized properties that have access to existing infrastructure
- Densities that support transit use, bicycling, and walking
- High-quality urban design

As proposed, the development would consist of the replacement of a 9,762-square-foot office building currently on-site with 61 condominium units and 17,970 square feet of office space. A total of 115 parking spaces will be provided on site. Access to and from the project site would be provided via one right-in/right-out driveway along Winchester Boulevard. The project site location, the surrounding study area, and the Winchester Boulevard Urban Village boundary are shown on Figure 1. The project site plan is shown on Figure 2.

The transportation analysis of the project was evaluated following the standards and methodologies set forth in the City of San Jose's Transportation Analysis Policy (Council Policy 5-1), the City of San Jose *Transportation Analysis Handbook 2018*, the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program's *Transportation Impact Guidelines* (October 2014), and by the California Environmental Quality Act (CEQA). Based on the City of San Jose's Transportation Policy and *Transportation Analysis Handbook 2018*, the TA report for the project consists of a CEQA vehicle-miles-traveled (VMT) analysis and a supplemental Local Transportation Analysis (LTA).

Transportation Policies

Historically, transportation analysis has utilized delay and congestion on the roadway system as the primary metric for the identification of traffic impacts and potential roadway improvements to relieve traffic congestion that may result due to proposed/planned growth. However, the State of California has recognized the limitations of measuring and mitigating only vehicle delay at intersections and in 2013 passed Senate Bill (SB) 743, which requires jurisdictions to stop using congestion and delay metrics, such as Level of Service (LOS), as the measurement for CEQA transportation analysis. With the adoption of SB 743 legislation, public agencies are now required to base the determination of transportation impacts on Vehicle Miles Traveled (VMT) rather than level of service.



Figure 1 Site Location

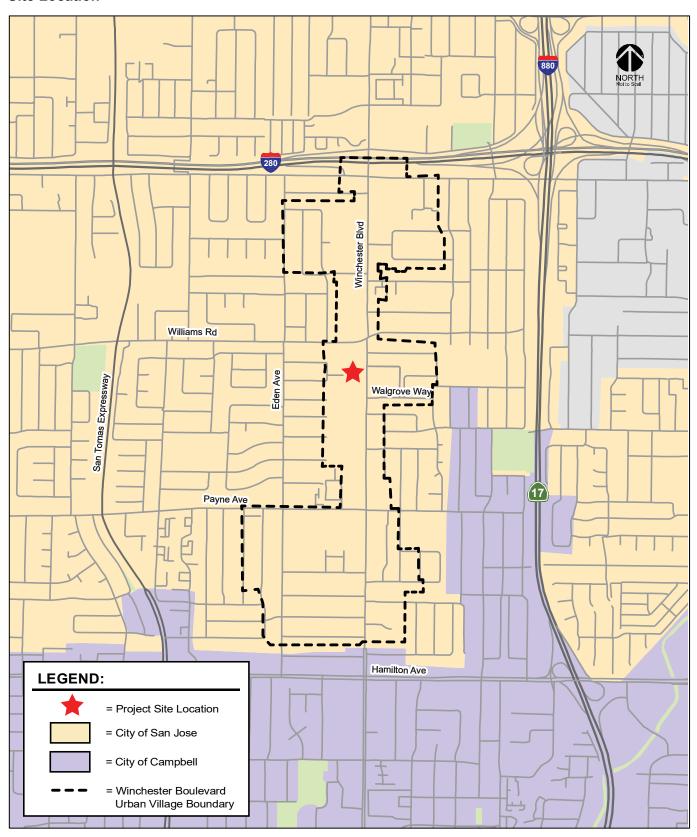
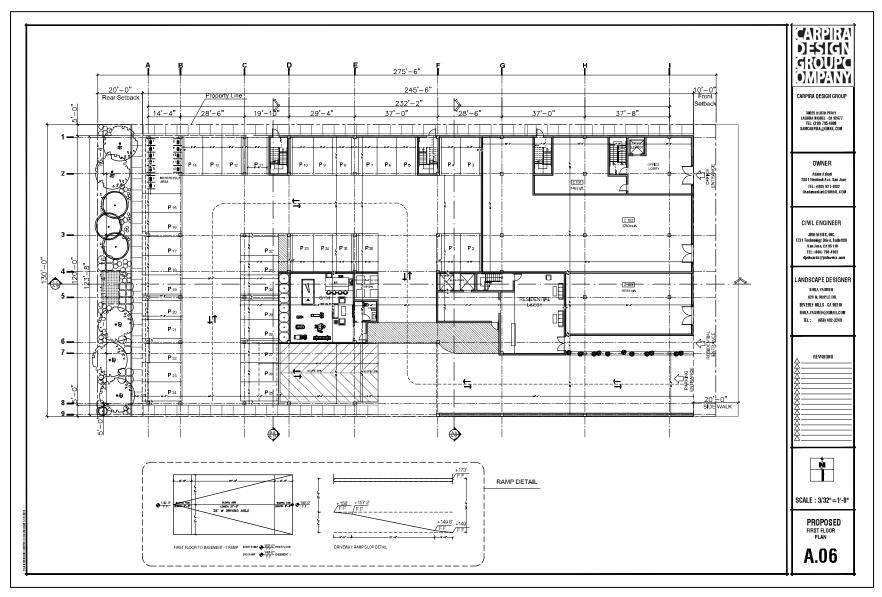




Figure 2 Proposed Site Plan





In adherence to SB 743, the City of San Jose has adopted a new Transportation Analysis Policy, Council Policy 5-1. The policy replaces its predecessor (Policy 5-3) and establishes the thresholds for transportation impacts under the CEQA based on vehicle miles traveled (VMT) instead of levels 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. The new transportation policy aligns with the currently adopted General Plan which seeks to focus new development growth within Planned Growth Areas, bringing together office, residential, and supporting service land uses to internalize trips and reduce VMT. All new development projects are required to analyze transportation impacts using the VMT metric and conform to Council Policy 5-1.

The Circulation Element of the *Envision San José 2040 General Plan* includes a set of balanced, long-range, multi-modal transportation goals and policies that provide for a transportation network that is safe, efficient and sustainable (minimizes environmental, financial, and neighborhood impacts). These transportation goals and policies are intended to improve multi-modal accessibility to all land uses and create a city where people are less reliant on driving to meet their daily needs. The Envision San Jose 2040 General Plan contains the following policies to encourage the use of non-automobile transportation modes to minimize vehicle trip generation and reduce VMT:

- Consider impacts on overall mobility and all travel modes when evaluating transportation impacts of new developments or infrastructure projects (TR-1.2);
- 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 biking, walking and transit facilities and services that encourage reduced vehicle travel demand (TR-1.4);
- Require new development where feasible to provide on-site facilities such as bicycle storage
 and showers, provide connections to existing and planned facilities, dedicate land to expand
 existing facilities or provide new facilities such as sidewalks and/or bicycle lanes/paths, or share
 in the cost of improvements (TR-2.8);
- As part of the development review process, require that new development along existing and
 planned transit facilities consist of land use and development types and intensities that
 contribute towards transit ridership. In addition, require that new development is designed to
 accommodate and to provide direct access to transit facilities (TR-3.3);
- Discourage, as part of the entitlement process, the provision of parking spaces significantly above the number of spaces required by code for a given use (TR-8.4);
- Allow reduced parking requirements for mixed-use developments and for developments
 providing shared parking or a comprehensive transportation demand management (TDM)
 program, or developments located near major transit hubs or within Villages and Corridors and
 other growth areas (TR-8.6);
- Encourage private property owners to share their underutilized parking supplies with the general public and/or other adjacent private developments (TR-8.7);
- 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);
- 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 CEQA transportation analysis for the project consists a project-level VMT impact analysis using the City's VMT tool and a cumulative impact analysis that demonstrates the project's consistency with the Envision San Jose 2040 General Plan.

VMT Analysis

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

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 serve in the project vicinity.

VMT Evaluation Tool

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 development projects. For non-residential or non-office projects, very large projects, or projects that can potentially shift travel patterns, the City's Travel Demand Model can be used to determine project VMT.

Based on the assessor's parcel number (APN) of a project, the VMT evaluation tool identifies the existing average VMT per capita and VMT per employee for the project area. Based on the project location, type of development, project description, and proposed trip reduction measures, the VMT 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-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 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. Figures 3 and 4 show the current VMT levels estimated by the City's travel demand model. Areas are color-coded based on the level of existing VMT:

- Green-filled areas are parcels with existing VMT less than the City's residential and employee
 thresholds of 10.12 VMT per capita and 12.21 per employee. The thresholds are calculated by
 subtracting 15 percent from the citywide average of 11.91 VMT per capita and regional average
 of 14.37 per employee.
- Yellow-filled areas are parcels with existing VMT between the residential and employee thresholds and the city-wide average of 11.91 VMT per capita and regional average 14.37 VMT per employee.
- Orange-filled areas are parcels with existing VMT greater than the residential and employee thresholds. However, a project's VMT impact may be mitigated by implementing VMT-reducing measures.
 - Red-filled areas are parcels with existing VMT greater than the residential and employee threshold. Implementing VMT-reducing measures will not be sufficient to reduce a project's VMT to less than the threshold of significance.

Average per-capita and per-employee VMT for all the existing developments within ½ mile buffer of each parcel in the City serves as the baseline from which a project is evaluated. The VMT in the proposed project site vicinity is presented in further detail in Chapter 3.

Screening for VMT Analysis

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

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

Table 1 summarizes the screening criteria that must be considered for each type of development project as identified in the City of San Jose Transportation Analysis Handbook. Figures 5 and 6 identify areas within the City that currently have low VMT levels estimated by the City for residents and workers, respectively, for which transit supportive development located within a priority growth area would be screened out of the evaluation of VMT.

The project site is located within a planned Growth Area (Winchester Boulevard Urban Village) with low VMT per capita as identified by the San Jose VMT Evaluation Tool. The residential component of the project would meet all of the other applicable screening criteria, as described further in Chapter 3. Therefore, the residential component of the project is screened from the evaluation of VMT and is considered to have a less-than-significant VMT impact. However, the proposed office component of the project will not meet all of the applicable VMT screening criteria. Therefore, a CEQA-level transportation analysis that evaluates the project's effects on VMT is required for the office component of the project and is presented in Chapter 3. A VMT evaluation for the residential component of the project also was completed for informational purposes.



Figure 3 VMT per Capita Heat Map in San Jose

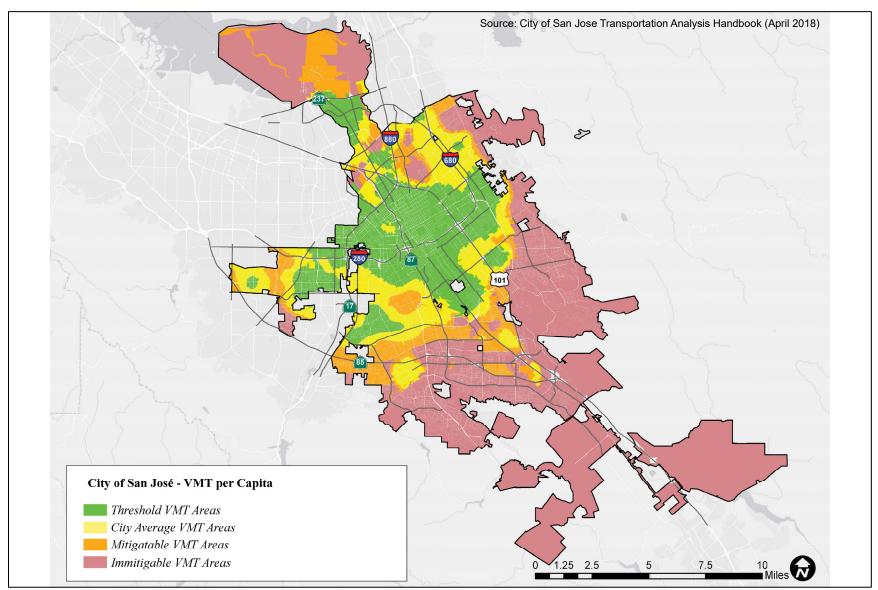




Figure 4 VMT per Job Heat Map in San Jose

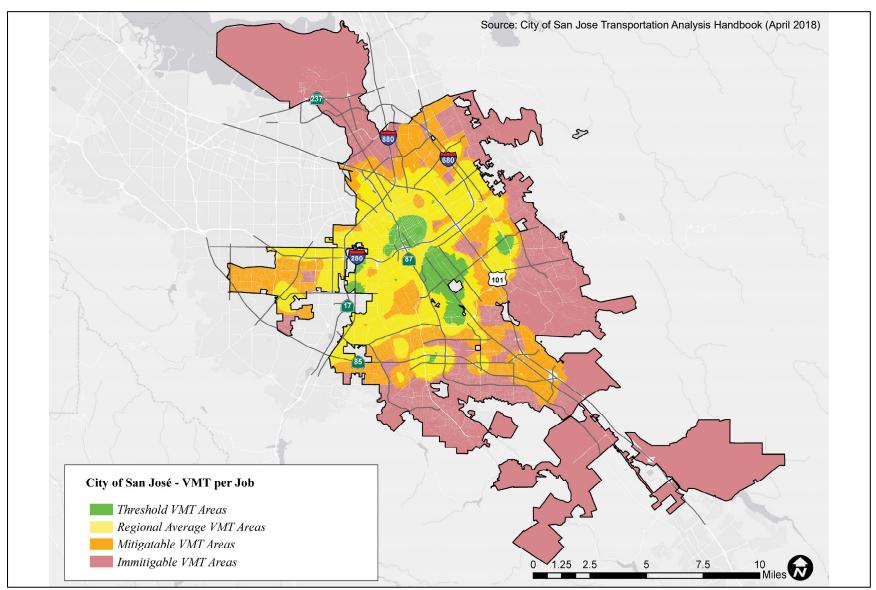




Table 1 CEQA VMT Analysis Screening Criteria for Development Projects

Туре	Screening Criteria
Small Infill Projects	 Single-family detached housing of 15 units or less; <u>OR</u> Single-family attached or multi-family housing of 25 units or less; <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
Local-Serving Retail	100,000 square feet of total gross floor area or less without drive-through operations
Local-Serving Public Facilities	Local-serving public facilities
Residential/Office Projects or Components	 Planned Growth Areas: Located within a Planned Growth Area as defined in the Envision San José 2040 General Plan; AND High-Quality Transit: Located within ½ a mile of an existing major transit stop or an existing stop along a high-quality transit corridor; AND Low VMT: Located in an area in which the per capita VMT is less than or equal to the CEQA significance threshold for the land use; AND Transit-Supporting Project Density: 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 Planned Growth Area that has a maximum density below 0.75 FAR or 35 units per acre, the maximum density allowed in the Planned Growth Area must be met; AND Parking: No more than the minimum number of parking spaces required; If located in Urban Villages or Downtown, the number of parking spaces must be adjusted to the lowest amount allowed; however, if the parking is shared, publicly available, and/or "unbundled", the number of parking spaces can be up to the zoned minimum; AND Active Transportation: Not negatively impact transit, bike or pedestrian infrastructure.
Restricted Affordable Residential Projects or Components	 Affordability: 100% restricted affordable units, excluding unrestricted manager units; affordability must extend for a minimum of 55 years for rental homes or 45 years for for-sale homes; AND Planned Growth Areas: Located within a Planned Growth Area as defined in the Envision San José 2040 General Plan; AND High Quality Transit: Located within ½ a mile of an existing major transit stop or an existing stop along a high quality transit corridor; AND Transit-Supportive Project Density: Minimum of 35 units per acre for residential projects or components; If located in a Planned Growth Area that has a maximum density below 35 units per acre, the maximum density allowed in the Planned Growth Area must be met; AND Transportation Demand Management (TDM): If located in an area in which the per capita VMT is higher than the CEQA significance threshold, a robust TDM plan must be included; AND Parking: No more than the minimum number of parking spaces required; If located in Urban Villages or Downtown, the number of parking spaces must be adjusted to the lowest amount allowed; however, if the parking is shared, publicly available, and/or "unbundled", the number of parking spaces can be up to the zoned minimum; AND Active Transportation: Not negatively impact transit, bike or pedestrian infrastructure.
Source: City of San Jos	sé Transportation Analysis Handbook, April 2018.



Figure 5 Low VMT per Capita Areas in San Jose

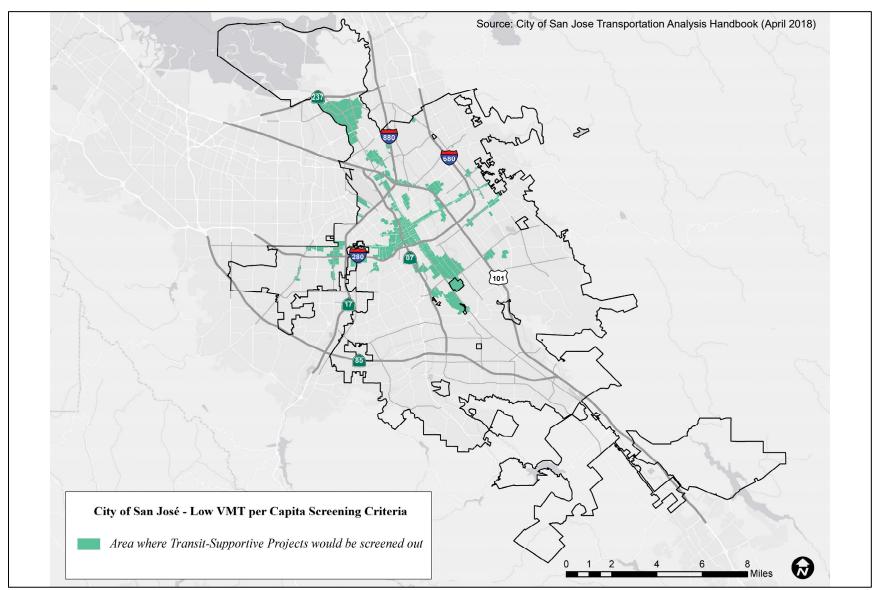
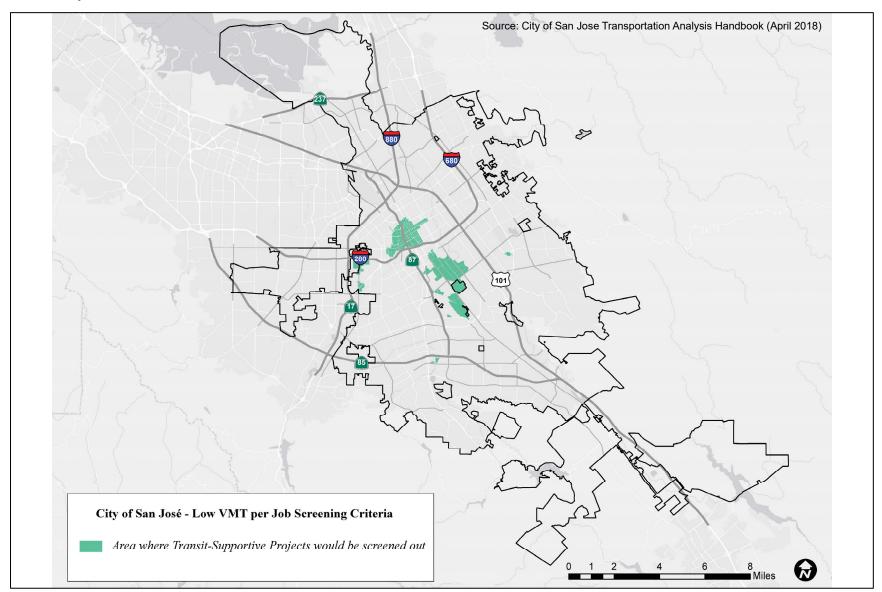




Figure 6 Low VMT per Job Areas in San Jose





Local Transportation Analysis Scope

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

Intersection Operations Analysis

Per Senate Bill (SB) 743 and the updated CEQA Guidelines. (Section 15064.3) Nov 2017, beginning July 1, 2020 the use of intersection level of service as a metric for determining impacts of development growth on the transportation system will no longer be permitted. Therefore, the evaluation of a project's impact on level of service at intersections under the jurisdiction of the City of San Jose is no longer required.

The LTA includes the evaluation of weekday AM and PM peak hour operations at a limited number of intersections for the purpose of identifying operational issues (queuing, signal operations, and potential multi-modal issues) at intersections in the general vicinity of the project site. However, the determination of project impacts per CEQA requirements is based solely on the VMT analysis.

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

Intersection operations conditions were evaluated for the following scenarios:

- **Existing Conditions.** Existing AM and PM peak hour traffic volumes at all study intersections were obtained from new turning-movement counts.
- **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 approved project traffic was provided by the City of San Jose in the form of the Approved Trips Inventory (ATI).
- **Background Plus Project Conditions**. Background plus project conditions reflect projected traffic volumes on the planned roadway network with completion of the project and approved developments. Background traffic volumes with the project were estimated by adding to background traffic volumes the additional traffic generated by the project.

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

Report Organization

The remainder of this report is divided into four chapters. Chapter 2 describes existing transportation system including the existing roadway network, transit service, bicycle and pedestrian facilities. Chapter 3 describes the CEQA transportation analysis, including VMT analysis methodology, baseline and potential project VMT impacts, and potential cumulative transportation impacts. Chapter 4 describes the LTA including the method by which project traffic is estimated, intersection operations analysis methodology, any adverse intersection traffic effects caused by the project, intersection vehicle queuing



analysis, site access and on-site circulation review, effects on bicycle, pedestrian, and transit facilities, and parking. Chapter 5 presents the conclusions of the transportation analysis.



2.

Existing Transportation Setting

This chapter describes the existing conditions of the transportation system within the study area of the project. It describes transportation facilities in the vicinity of the project site, including the roadway network, transit services, and pedestrian and bicycle facilities.

Existing Roadway Network

Regional access to the project site is provided via SR 17 and I-280. These facilities are described below.

SR 17 is a six-lane freeway in the vicinity of the site. It extends from Santa Cruz to I-280 in San Jose, at which point it makes a transition to I-880 to Oakland. Access to the site is provided via its interchange with Hamilton Avenue.

I-280 is an eight-lane freeway in the vicinity of the site. It extends northwest to San Francisco and east to King Road in San Jose, at which point it makes a transition to I-680 to Oakland. North of I-880, I-280 has high occupancy vehicle (HOV) lanes in both directions. Access to and from northbound I-280 to the site is provided via its interchange with Winchester Boulevard and via SR 17 to Hamilton Avenue.

Local access to the site is provided by Winchester Boulevard, Moorpark Avenue, Williams Road, Payne Avenue, Hamilton Avenue, San Tomas Expressway, and Eden Avenue. These roadways are described below.

Winchester Boulevard is a divided six-lane north-south roadway that runs from Los Gatos to Lincoln Street in Santa Clara. In the project vicinity, Winchester Boulevard has a posted speed limit of 35 mph with sidewalks on both sides of the street and on-street bike lanes between I-280 and Stevens Creek Boulevard. Direct access to and from the project site is provided via a right-in/right-out only driveway along Winchester Boulevard.

Moorpark Avenue is a four-lane east-west roadway that runs from Lawrence Expressway to Bascom Avenue. East of Bascom Avenue, Moorpark Avenue makes a transition into a three-lane one-way roadway to Leigh Avenue. Moorpark Avenue provides access to the project site via Winchester Boulevard.

Williams Road is a two-lane east-west roadway in the vicinity of the project site. It extends east from Moorpark Avenue to South Daniel Way, just east of Winchester Boulevard. Williams Road provides access to the project site via Winchester Boulevard.

Payne Avenue is a two-lane east-west roadway in the vicinity of the project site. It extends east from Saratoga Avenue to Almarida Drive, just east of Winchester Boulevard. Payne Avenue provides access to the project site via Winchester Boulevard.



Hamilton Avenue is a six-lane east-west roadway between Marathon Drive and Leigh Avenue. West of Marathon Drive, Hamilton Avenue narrows to a four-lane roadway and extends west to Campbell Avenue. East of Leigh Avenue, Hamilton Avenue narrows to a four-lane roadway and extends west to Meridian Avenue. Hamilton Avenue provides access to the project site via Winchester Boulevard.

San Tomas Expressway is a north-south expressway that begins at its interchange with US 101 and extends southward through Santa Clara and San Jose and into Campbell, where it transitions into Camden Avenue at SR 17. San Tomas Expressway provides access to and from the project site via Williams Road and Payne Avenue.

Eden Avenue is a two-lane north-south roadway in the vicinity of the project site. It extends north from Hamilton Avenue to Moorpark Avenue. Eden Avenue provides access to the project site via Williams Road and Payne Avenue.

Existing Bicycle and Pedestrian Facilities

Class II Bikeway (Bike Lane). Class II bikeways are striped bike lanes on roadways that are marked by signage and pavement markings. Within the vicinity of the project site, striped bike lanes are present on the following roadway segments.

- Winchester Boulevard, between Hamilton Avenue and Payne Avenue
- Winchester Boulevard, between Tisch Way and Stevens Creek Boulevard
- Hamilton Avenue, west of SR 17
- Payne Avenue, west of Winchester Boulevard
- Williams Road, west of Baywood Avenue
- Moopark Avenue, west of Thornton Way
- Monroe Street, between Tisch Way and Stevens Creek Boulevard

Class III Bikeway (Bike Route). Class III bikeways are bike routes and only have signs to help guide bicyclists on recommended routes to certain locations. In the vicinity of the project site, the following roadway segments are designated as bike routes.

- Payne Avenue, between Winchester Boulevard and Greenbriar Avenue
- Eden Avenue, between Impala Drive and Hamilton Avenue
- Milton Avenue, south of Hamilton Avenue
- Darryl Drive, between Hamilton Avenue and Payne Avenue
- Monroe Street, between Moopark Avenue and Williams Road
- Williams Road, between Baywood Avenue and Daniel Way
- Daniel Way, between Williams Road and Westfield Avenue
- Thornton Way, between Moorpark Avenue and Downing Avenue
- Central Avenue, bewteen Hamilton Avenue and Westfield Avenue
- Downing Avenue, east of SR 17

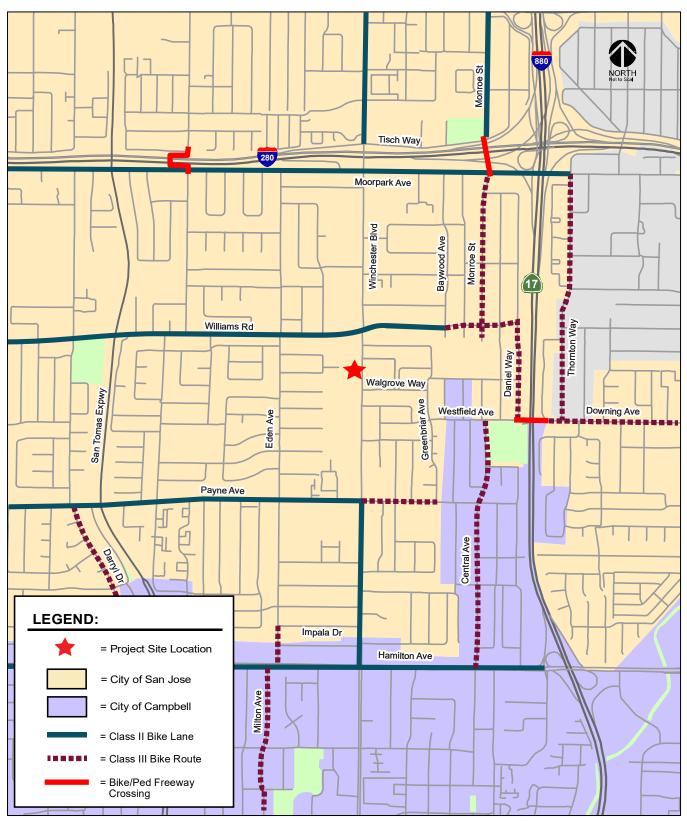
Although none of the residential streets near the project site provide bike lanes or are designated as bike routes, due to their low traffic volumes, many of them are conducive to bicycle usage. The existing bicycle facilities are shown in Figure 7.

The locations of three pedestrian footbridge crossings over freeways in vicinity of the project site are listed below and shown in Figure 7.

- SR 17 pedestrian footbridge connecting Westfield Avenue and Downing Avenue
- I-280 pedestrian footbridge connecting Moorpark Avenue and Cypress Avenue
- I-280 pedestrian footbridge connecting Moopark Avenue and Tisch Way



Figure 7
Existing Bicycle Facilities





Controlled crosswalks across Winchester Boulevard are provided near the project site at the signalized Williams Road and Payne Avenue intersections with Winchester Boulevard. Overall, the existing network of sidewalks and crosswalks provides good connectivity and provides pedestrians with safe routes to transit services and other points of interest in the area.

Existing Transit Services

Existing transit service to the study area is provided by the VTA. The VTA transit services are described below and shown on Figure 8.

VTA Bus Services

The project site is served directly by the following VTA bus routes.

Frequent Route 25 runs from the De Anza College to Alum Rock Transit Center and operates from 5:00 AM to 12:30 AM on weekdays with 15- to 30-minute headways during commute periods. Route 25 operates along Winchester Boulevard and Williams Road in the project area. The closest bus stop is located approximately 600 north of the project site at the intersection of Winchester Boulevard and Williams Road.

Local Route 56 runs from Lockheed Martin to Tamien Station and operates from 5:00 AM to 10:30 PM on weekdays with 30-minute headways during commute periods. The closest bus stop is located approximately 0.9 mile from the project site at the intersection of Winchester Boulevard and Hamilton Avenue.

Frequent Route 60 runs from the BART Station in Milpitas to Winchester Station via SJC Airport and operates from 5:00 AM to 12:30 AM on weekdays with 15-minute headways during commute periods. Route 60 operates along Winchester Boulevard in the project area. The closest southbound and northbound bus stops to the project site are located at most approximately 300 feet away from the project site along Winchester Boulevard.

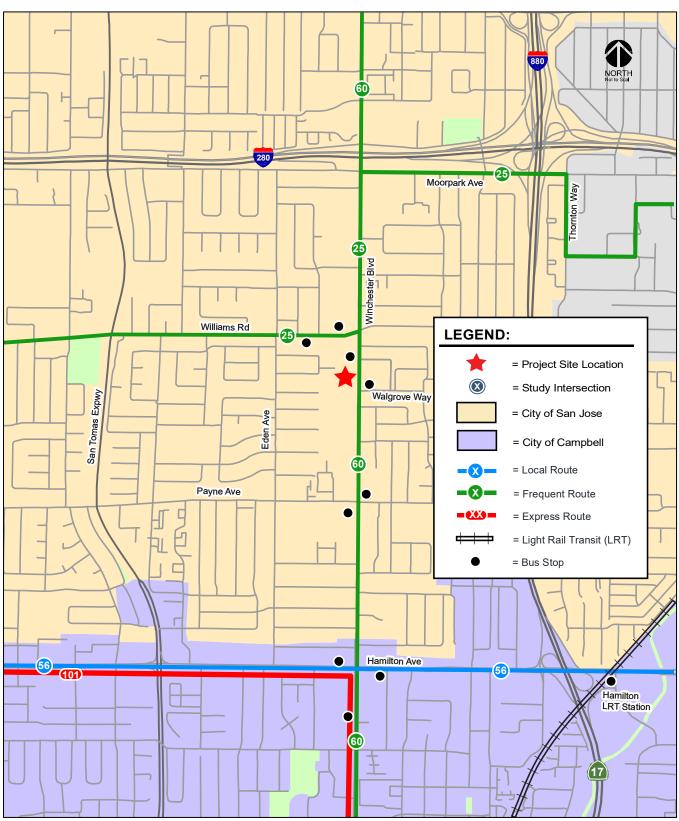
Express Route 101 runs from the Camden Avenue near Highway 85 to Stanford Research Park in Palo Alto and operates two northbound trips during the morning commute period and two southbound trips during the afternoon commute period with 50- to 60-minute headways. The closest bus stop is located approximately 0.9 mile from the project site at the intersection of Winchester Boulevard and Hamilton Avenue.

VTA Light Rail Transit (LRT) Service

LRT Green Line runs from the Winchester Transit Center in Campbell to Old Ironsides in Santa Clara and operates from 5:00 AM to 1:00 AM with 15-minute headways during the peak commute periods. The closest LRT station is located approximately 1.4 miles from the project site at the interchange of SR 17 and Hamilton Avenue.



Figure 8 Existing Transit Services





3. **CEQA Transportation Analysis**

This chapter describes the CEQA transportation analysis, including the VMT analysis methodology and significance criteria, potential project impacts on VMT, mitigation measures recommended to reduce significant impacts, and an evaluation of consistency with the City of San Jose's General Plan.

VMT Analysis Methodology

Per Council Policy 5-1, the effects of the proposed project on VMT was evaluated using the methodology outlined in the City's *Transportation Analysis Handbook*. 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. When the proposed project is relatively small and would not significantly alter existing traffic patterns, the City's VMT evaluation tool is used to estimate the project VMT and determine whether the project would result in a significant VMT impact.

VMT Evaluation Tool

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 development projects. Based on the assessor's parcel number (APN) of a project, the VMT evaluation tool identifies the existing average VMT per employee for the project area. Based on the project location, type of development, project description, and proposed trip reduction measures, the VMT evaluation tool calculates the project VMT. Projects located in areas where the existing VMT is greater than 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. Figures 9 and 10 show the current VMT levels estimated by the City for workers and residents in the immediate project area, respectively. Figure 11 shows the CEQA transportation screening map for residential projects.

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 VMT 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,



Figure 9
VMT per Employee Heat Map in Project Area

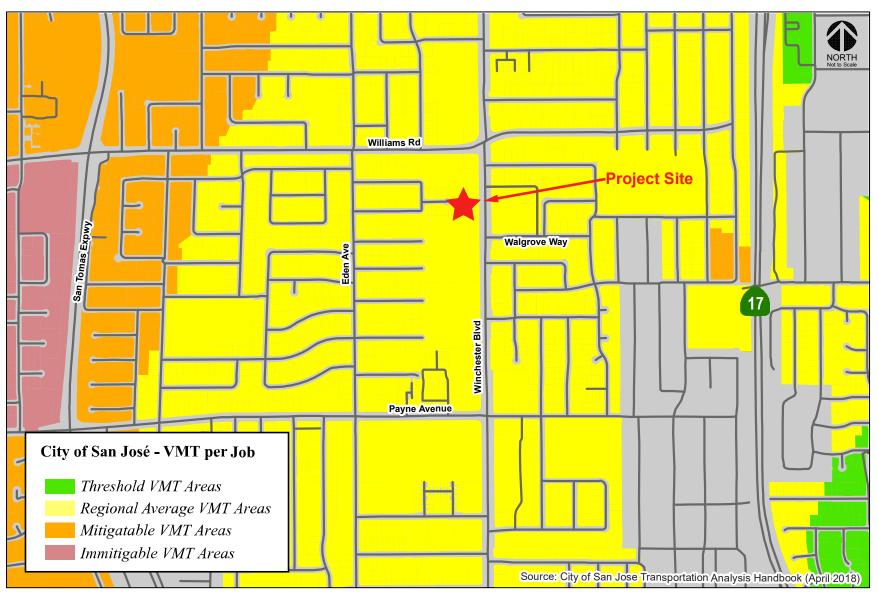




Figure 10 VMT per Capita Heat Map in Project Area

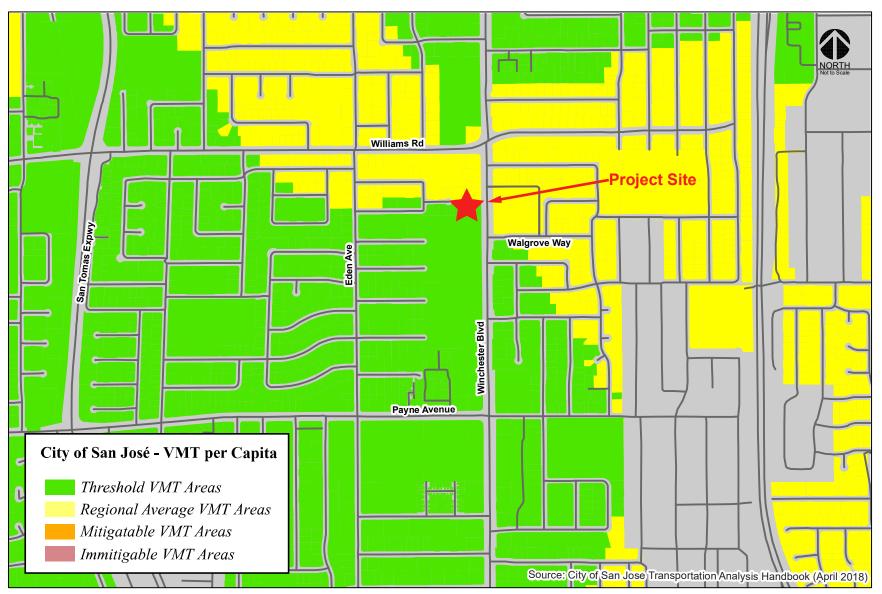
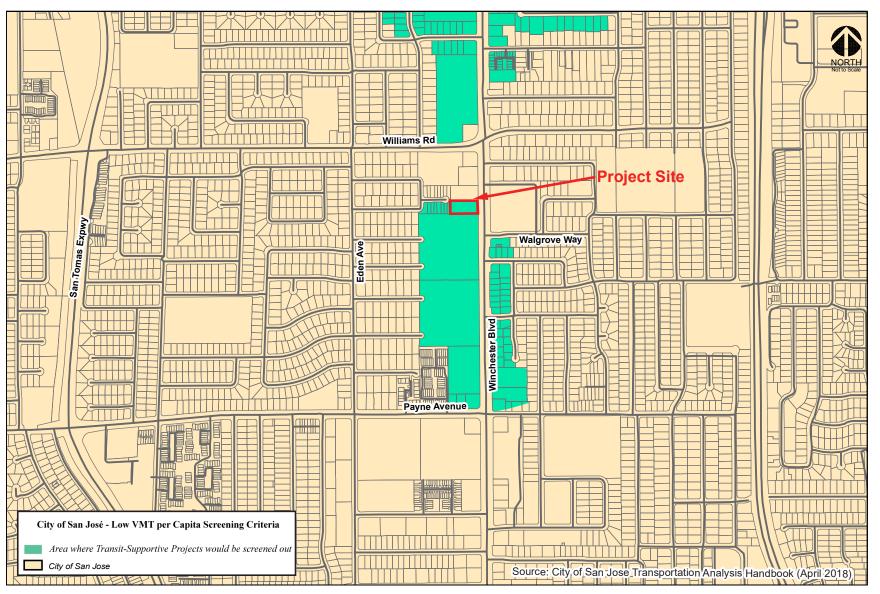




Figure 11 CEQA Transportation Screening Map for Residential Projects





- 1. Parking measures that discourage personal motorized vehicle-trips, and
- 2. 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

If a project is found to have a significant impact on VMT, the impact must be reduced by modifying the project to reduce its VMT to an acceptable level (below the established thresholds of significance applicable to the project) and/or mitigating the impact through multimodal transportation improvements or establishing a Trip Cap. Table 2 shows the VMT thresholds of significance for development projects, as established in the Transportation Analysis Policy.

CEQA Transportation Analysis Exemption Criteria

The City of San Jose Transportation Analysis Handbook identifies screening criteria that determines whether a CEQA transportation analysis would be required for development projects. The criteria are based on the type of project, characteristics, and/or location. If a project meets the City's screening criteria, the project is expected to result in less-than-significant VMT impacts and a detailed CEQA VMT analysis is not required.

The project site is located within a planned Growth Area (Winchester Boulevard Urban Village) with low VMT per capita as identified by the City of San Jose (see Figure 10). Winchester Boulevard, located along the east project frontage, is a high-quality transit corridor with VTA bus service headways of less than 15 minutes during peak commute periods. Therefore, the residential land use component of the project is anticipated to result in less-than-significant VMT impacts and a detailed CEQA transportation analysis that evaluates the residential effects on VMT is not required. However, for informational purposes, a VMT evaluation for the proposed residential was completed and presented below.

The office component of the project is required to complete a VMT analysis because the 17,970 sf of proposed office space would exceed the 10,000 sf office space screening and the existing VMT of 13.09 per employee is greater than the established baseline VMT threshold of 12.21.

Planned Growth Areas

Requirement: Located within a Planned Growth Area as defined in the Envision San José 2040 General Plan.

The project site is located within the Winchester Boulevard Urban Village.

High-Quality Transit

Requirement: Located within ½ a mile of an existing major transit stop or an existing stop along a high-quality transit corridor

The project site is located approximately 200 feet from bus stops serving VTA Frequent Bus Route 60 near the intersection of Williams Road and Winchester Boulevard. Winchester Boulevard is considered a high-quality transit corridor due to Route 60 having headways of 15 minutes or less during peak commute hours.



Table 2
CEQA VMT Analysis Significant Impact Criteria for Development Projects

Туре	Significance Criteria	Current Level	Threshold
Residential Uses	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.	11.91 VMT per capita (Citywide Average)	10.12 VMT per capita
General Employment Uses	Project VMT per employee exceeds existing regional average VMT per employee minus 15 percent	14.37 VMT per employee (Regional Average)	12.21 VMT per employee
ndustrial Employment Uses	Project VMT per employee exceeds existing regional average VMT per employee	14.37 VMT per employee (Regional Average)	14.37 VMT per employee
Retail/ Hotel/ School Uses	Net increase in existing regional total VMT	Regional Total VMT	Net Increase
Public/Quasi-Public Uses	In accordance with the most appropriate type(s) as determined by Public Works Director	Appropriate levels listed above	Appropriate threshold 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 threshold 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 threshold listed above
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 threshold listed above

Low VMT

Requirement: Located in an area in which the per capita VMT is less than or equal to the CEQA significance threshold for the land use.

The project site is located within an Urban Village Area (Winchester Boulevard) with low VMT per capita (10.1 compared to the threshold VMT per capita of 10.12 for residential uses).

Transit-Supporting Project Density

Requirement: Minimum of 35 units per acre for residential projects or components; if located in a Planned Growth Area that has a maximum density below 35 units per acre, the maximum density allowed in the Planned Growth Area must be met.



A total of 61 units are proposed to be constructed on the 0.82-acre project site. The proposed development density will equate to 75 units per acre, exceeding the required minimum of 35 units per acre.

Parking

Requirement: No more than the minimum number of parking spaces required; if located in Urban Villages or Downtown, the number of parking spaces must be adjusted to the lowest amount allowed; however, if the parking is shared, publicly available, and/or "unbundled", the number of parking spaces can be up to the zoned minimum.

The site is within the Winchester Boulevard Urban Village, which is subject to city-wide parking rates. The project proposes a total of 115 parking spaces on-site which is less than the required 131 spaces for residential and commercial uses within an urban village.

Active Transportation

Requirement: Not negatively impact transit, bike or pedestrian infrastructure

No negative impacts to transit, bike or pedestrian infrastructure are anticipated with the proposed development. Potential impacts to transit services, bike and pedestrian facilities within the project study area are discussed in Chapter 3.

VMT of Existing Land Uses

The results of the VMT analysis using the VMT Evaluation Tool indicate that the existing VMT for residential uses in the project vicinity is 10.1 per capita and employment uses is 13.09 per employee. As shown in Table 2, the current citywide average VMT for residential uses is 11.91 per capita and the regional average VMT for employment uses is 14.37 per employee. Therefore, the existing VMT levels of residential and employment uses in the project vicinity are currently less than the average VMT levels. Appendix A presents the VMT Evaluation Tool summary report for the project.

Project-Level VMT Impact Analysis

The City's Transportation Policy identifies an impact threshold of 15% below the citywide average per capita VMT of 11.91 and regional average per employee VMT of 14.37. Thus, the proposed project would result in a significant impact if it results in VMT that exceeds per capita VMT of 10.12 and per employee VMT of 12.21.

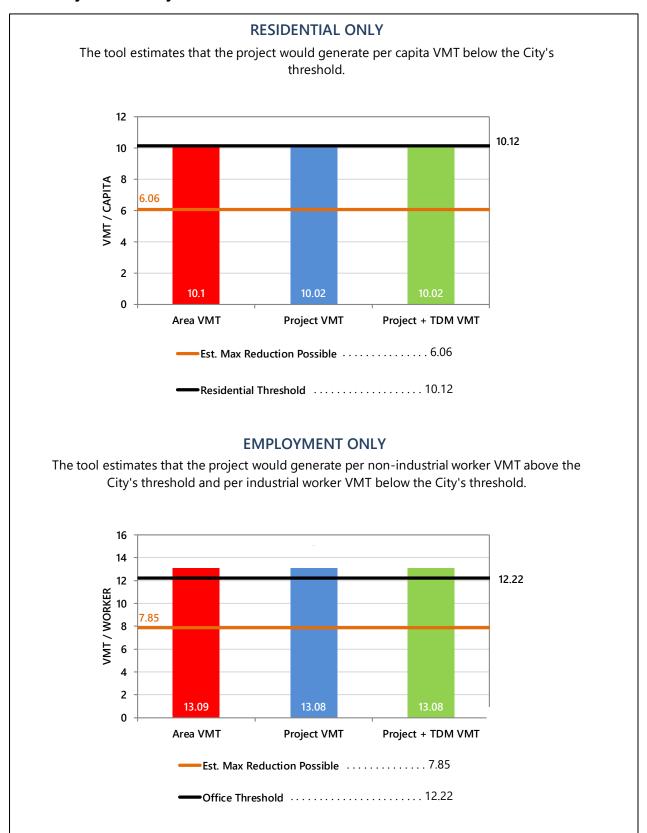
The results of the VMT evaluation, using the City's VMT Evaluation Tool, indicate that the proposed project is projected to generate VMT per capita (10.02), which is below the established VMT impact threshold. The office component of the project is projected to generate VMT per employee (13.08), which would exceed the established impact threshold. Therefore, the proposed office component of the project would result in an impact on the transportation system based on the City's VMT impact criteria. Figure 12 shows the VMT evaluation summary generated by the City of San Jose's VMT Evaluation Tool.

Project Impacts and Mitigation Measures

Project Impact: Since the VMT generated by the office component of the project (13.08 per employee) would exceed the threshold of 12.21 VMT per employee, the project would result in a significant transportation impact on VMT, and mitigation measures are required to reduce the VMT impact. According to the *Transportation Analysis Handbook*, projects located in areas where the existing VMT



Figure 12 VMT Analysis Summary





is above the established threshold are referred to as being in "high-VMT areas", and projects in high-VMT areas are required to include a set of VMT reduction measures that would reduce the project VMT to the greatest extent possible.

<u>Mitigation Measures</u>: Based on the four strategy tiers included in the VMT Evaluation Tool, it is recommended that the project implement one of the following mitigation measures to reduce the significant VMT impact. These mitigation measures and the resulting VMT are summarized in Table 3.

- <u>Telecommuting and Alternative Work Schedules</u>: Encourage at least 100% of the employees to telecommute, shift work schedules, or commute outside of peak congestion periods on a 9/80 schedule or 9 of 80 hours on alternative work schedule. This measure reduces commute vehicle trips. <u>or</u>
- Operate a Free Direct Shuttle: Provide shuttle service for at least 15% of the project employees that would serve the project site and areas with high concentrations of employed residents. This measure reduces drive-alone commute trips. **or**
- <u>Provide Ride-Sharing Programs</u>: Organize a program to match individuals interested in carpooling who have similar commutes for at least 15% of the project employees. This measure promotes the use of carpooling and reduces the number of drive-alone trips. <u>or</u>
 - 1. Car Sharing Program: Provide subsidies and promotions, as well as dedicated parking spaces, for carsharing services such as ZipCar, Car2Go, and GetAround, etc for 100% of the project employees. Supporting a carsharing program gives people on-demand access to shared fleets of vehicles. Car-sharing reduces personal motorized vehicle dependence, which supports more walking, biking, carpooling, and transit use. Subject to negotiations with the City and possible negotiations with Car Share companies and
 - 2. Commute Trip Reduction Marketing/Education: Implement marketing/educational campaigns that promote the use of transit, shared rides, and travel through active modes for 100% of the project employees. Strategies may include incorporation of alternative commute options into new employee orientations, event promotions, and publications. and
 - 3. Employee Parking "Cash Out": Require Project employers to offer parking "cash-out" for 60% of the project employees. Providing a "cash-out" incentives gives employees the choice to forgo subsidized/free parking for a cash payment equivalent to the cost that the employer would otherwise pay for the parking space. Providing an alternative to subsidized/free parking encourages commuters to travel by walking, biking, carpooling, and transit.

The implementation of the mitigation measures would reduce the VMT generated by the project by supporting bicycle usage and increasing transit ridership by employees. The implementation of one of the above mitigation measures would reduce the project VMT to below the threshold of 12.21 per employee, which would reduce the project impact to less than significant. Appendix A presents the VMT Evaluation Tool summary report for the project with the mitigation measures.

Additionally, the TDM plan (see Appendix H) proposes measures that would reduce the projects parking demand and support a 10 percent parking reduction needed to satisfy the City's parking requirement. The TDM plan includes maintaining an online kiosk of trip-planning resources, providing 100 percent unbundled parking for all residential spaces, providing VTA SmartPasses to residential and commercial tenants, and providing on-site bicycle parking that will exceed the minimum required by the City.



Table 3
VMT Mitigation Measures and Resulting VMT

Mitigation	Mitigation Description	VTM per Employee	VMT Threshold	VMT Impact?
Project	None	13.08	12.21	Yes
Telecommuting and Alternative Work Schedules	Encourage at least 100% of the employees to telecommute, shift work schedules, or commute outside of peak congestion periods on a 9/80 schedule or 9 of 80 hours on alternative work schedule.	12.16	12.21	No
Operate a Free Direct Shuttle	Provide shuttle service for at least 15% of the project employees that would serve the project site and areas with high concentrations of employed residents.	12.16	12.21	No
Ride-Sharing Programs	Organize a program to match individuals interested in carpooling who have similar commutes for at least 15% of the project employees.	12.01	12.21	No
Car Sharing Program, Commute Trip Reduction Marketing/Education, and Employee Parking "Cash Out"	Car Sharing Program - Provide subsidies and promotions, as well as dedicated parking spaces, for carsharing services for 100% of the project employees. Supporting a carsharing program gives people on-demand access to shared fleets of vehicles. Car-sharing reduces personal motorized vehicle dependence, which supports more walking, biking, carpooling, and transit use for 60% of the project employees. Commute Trip Reduction Marketing/Education - Implement marketing/educational campaigns that promote the use of transit, shared rides, and travel through active modes for 100% of the project employees. Strategies may include incorporation of alternative commute options into new employee orientations, event promotions, and publications.	12.20	12.21	No
	Employee Parking "Cash Out" - Providing an alternative to subsidized/free parking encourages commuters to travel by walking, biking, carpooling, and transit.			

Cumulative (GP Consistency) Evaluation

Projects must demonstrate consistency with the *Envision San José 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 per the City's *Transportation Analysis Handbook*.

The project site is located within the Winchester Boulevard Urban Village, which is generally bounded by I-280 to the north, SR 17 to the east, Hamilton Avenue to the south, and San Tomas Expressway to the west (see Figure 1). Urban villages were developed as one of the major strategies of the *Envision San José 2040 General Plan*. Urban villages are defined as walkable, bicycle-friendly, transit-oriented,



mixed use settings that provide both housing and jobs, thus supporting the policies and goals of the General Plan.

The Winchester Boulevard Urban Village Plan identifies the following goals to improve traffic flow, alternative transportation options, and reduce neighborhood cut-through traffic.

- Improve traffic flow through multimodal data collection and application and signal coordination and timing improvements.
- Reduce congestion from the road by encouraging off-peak travel as well as more travel through sustainable modes, including walking, biking, transit and ridesharing.
- Support robust technology improvements, and appropriately accommodate new technologies, such as autonomous vehicles, in ways that provide net benefit.
- Improve transit options and connections to regional transit facilities by prioritizing transit and by upgrading existing bus stop facilities.
- Improve walkability and bikeability with better connections, wider walkways, improved over/undercrossings, shared bikeway in residential neighborhoods, protected or buffered bike lanes on major streets, and better bike parking.
- Limit cut-through traffic, speeding, and parking overflow in residential neighborhoods by slowing speeds and increasing cut-through travel-times in residential neighborhoods, and by providing enough parking to meet the needs of businesses and residents.
- Improve wayfinding in ways that reinforce and enhance the identity of the Urban Village and its surrounding neighborhood.
- Remain consistent with the community's top priorities for future designs of Winchester Boulevard, which are sufficient vehicular travel lanes and protected bike lanes.

The project is consistent with the General Plan and Winchester Boulevard Urban Village goals and policies for the following reasons:

- The project frontage along Winchester Boulevard will be improved to be consistent with planned streetscape design features of Grand Boulevards and the Winchester Boulevard Urban Village Plan.
- The project frontage along Winchester Boulevard will be designed to accommodate the planned Winchester Boulevard Complete Street improvements including protected bicycle lanes, wider sidewalks, and other pedestrian safety features.
- The project site is adjacent to bus stops and bicycle lanes on Winchester Boulevard.

Therefore, based on the project description, the proposed project would be consistent with the *Urban Village Planning Concepts* and the *Envision San José 2040 General Plan*. Thus, the project would be considered as part of the cumulative solution to meet the General Plan's long-range transportation goals and would result in a less-than-significant cumulative 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 existing, background, and background plus project, any adverse effects on study intersections caused by the project, intersection vehicle queuing analysis, freeway segment capacity, site access and on-site circulation review, effects on bicycle, pedestrian, and transit facilities, and parking.

Project Description

As proposed, the development would consist of the replacement of a 9,762-square-foot office building currently on site with 61 condominium units and 17,970 square feet of office space. A total of 115 parking spaces will be provided on site. Access to and from the project site would be provided via one right-in/right-out driveway along Winchester Boulevard.

The project site is located within a designated Urban Village (Winchester Boulevard) per the Envision San Jose 2040 General Plan. Urban villages are walkable, bicycle-friendly, transit-oriented, mixed-use settings that provide both housing and jobs, thus supporting the General Plan's environmental goals.

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

Proposed Project Trips

Through empirical research, data have been collected that indicate the amount of traffic that can be expected to be generated by common land uses. Project trip generation was estimated by applying to the size and uses of the development the appropriate trip generation rates. The average trip generation rates for Multifamily Housing (Mid-Rise) (Land Use 221) and General Office Building (Land Use 710) as published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition (2017) were applied to the proposed number of condominium units and office space to estimate the project trips. Based on the trip generation rates, it is estimated that the project would generate 43 trips (24



inbound and 19 outbound) during the AM peak-hour and 48 trips (19 inbound and 29 outbound) during the PM peak-hour before any reductions.

Trip Reductions

In accordance with San Jose's *Transportation Analysis Handbook* (April 2018, Section 4.8, "Intersection Operations Analysis"), the project is eligible for adjustments and reductions from the baseline (gross) trip generation described above.

A mixed-use development with complementary land uses such as residential and office, will result in a reduction of external site trips. Thus, the number of vehicle trips generated for each use may be reduced, since a portion of the trips would not require entering or exiting the site. Therefore, based on VTA's recommended mixed-use reduction, a 3 percent trip reduction is applied for the housing/office mixed use, based on the smaller office component. The reduction is applied to the smaller of the two complimentary trip generators and the same number of trips is then subtracted from the larger trip generator.

Based on the 2018 San Jose guidelines, the project qualifies for a location-based adjustment. The location-based adjustment reflects the project's vehicle mode share based on the place type in which the project is located per the San Jose Travel Demand Model. The project's place type was obtained from the San Jose VMT Evaluation Tool. Based on the Tool, the project site is located within a designated urban area with low access to transit. Therefore, the baseline project trips were adjusted to reflect an urban low-transit mode share. Urban low-transit is characterized as an area with good accessibility, low vacancy, and middle-aged housing stock. Residential and office developments within urban low-transit areas have vehicle mode shares of 87% and 91%, respectively. Thus, 13% and 9% reductions were applied to the residential and office trips generated by the proposed project, respectively.

Total Project Trips

After applying the ITE trip rates and appropriate trip reductions, the proposed mixed-use development is estimated to generate a total of 437 daily vehicle trips, with 36 trips (20 inbound and 16 outbound) occurring during the AM peak hour and 41 trips (16 inbound and 25 outbound) occurring during the PM peak hour. The project trip generation estimates are presented in Table 4.

Existing Site Trips

A 17,970-square-foot office building is currently occupying the project site. Field observations revealed that the existing office building generates less than 10 trips during each of the peak hours. Therefore, the LTA utilized a conservative approach and did not take trip credit for the existing office space.

Trip Distribution and Trip Assignment

The trip distribution pattern for the project was developed based on existing travel patterns on the surrounding roadway system and the locations of complementary land uses. The peak-hour vehicle trips generated by the project were assigned to the roadway network in accordance with the trip distribution pattern, with an emphasis on freeway access and project driveway location. Figure 13 shows the trip distribution pattern, and Figure 14 shows the assignment of project traffic on the local transportation network.



Table 4
Project Trip Generation Estimates

							AM Peak Hour								ak Hou	k Hour		
		VIV	IT ³		Da	ily		Sp	olit		Trip			S	olit		Trip	
Land Use	Size	Existing	Project	Reduction %	Rate	Trip	Rate	ln	Out	ln	Out	Total	Rate	ln	Out	ln	Out	Total
Multifamily Housing (Mid-Rise) (ITE LU 221)	61 Dwelling Unit	S			5.440	332	0.360	26%	74%	6	16	22	0.440	61%	39%	16	11	27
Housing and Employment Mixed-Use Reduction	(3%) 1					-5				0	-1	-1				-1	0	-1
Location-Based Reduction (13%) ²						-43				-1	-2	-3				-2	-1	-3
VMT Reduction ³		10.10	10.02	0.79%		-2				0	0	0				0	0	0
General Office Building (ITE LU 710)	17,970 Square Feet				9.740	175	1.160	86%	14%	18	3	21	1.150	16%	84%	3	18	21
Housing and Employment Mixed-Use Reduction	(3%) ¹					-5				-1	0	-1				0	-1	-1
Location-Based Reduction (9%) 2						-15				-2	0	-2				0	-2	-2
VMT Reduction ³		13.09	13.08	0.08%		0				0	0	0				0	0	0
Total Project Trips						437				20	16	36				16	25	41

Source: ITE Trip Generation Manual, 10th Edition 2017

¹As prescribed by the VTA Transportation Impact Analysis Guidelines (October 2014), the maximum trip reduction for a mixed-use development project with housing and employment components is equal to 3% off the smaller trip generator.

²The project site is located within an urban low-transit area based on the City of San Jose VMT Evaluation Tool (February 29, 2019). The location-based vehicle mode shares were obtained from Table 6 of the City of San Jose Transportation Analysis Handbook (April 2018). The trip reductions are based on the percent of mode share for other modes of travel beside vehicle.

³VMT per capita for residential use and VMT per non-industrial worker for office use. Existing and project VMTs were estimated using the City of San Jose Evaluation Tool (February 29, 2019). It is assumed that every percent reduction in VMT per capita or per non-industrial worker is equivalent to one percent reduction in peak-hour vehicle trips.



Figure 13 Project Trip Distribution

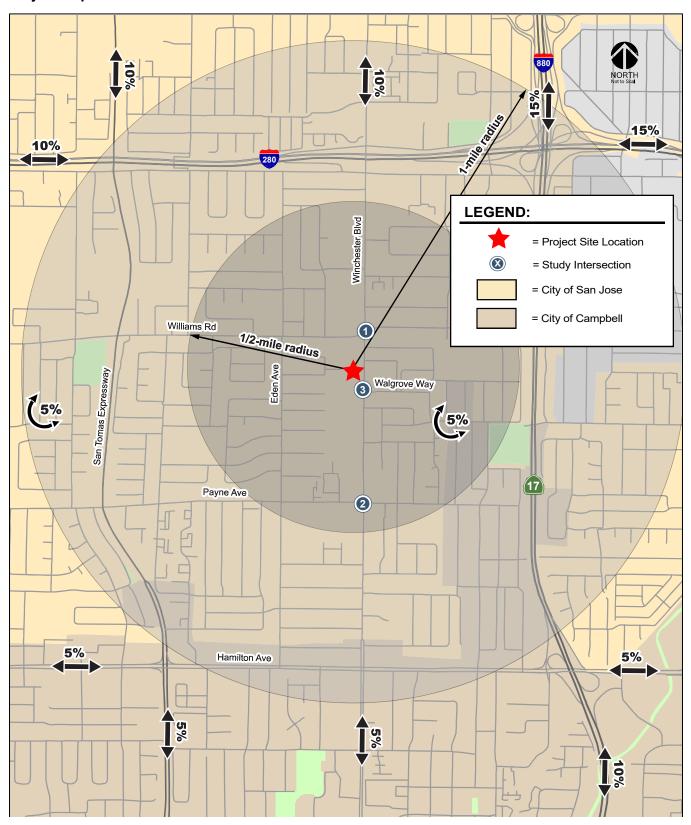
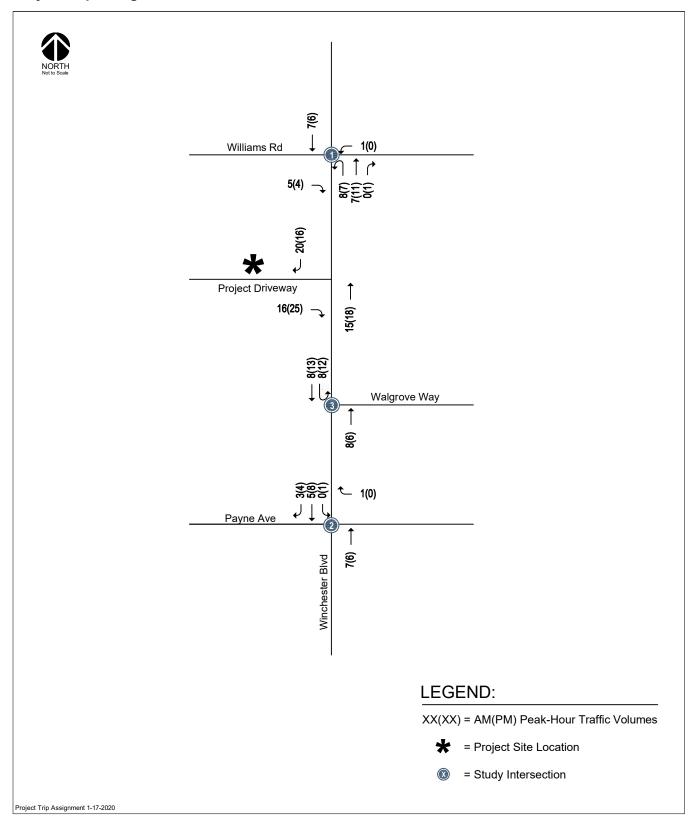




Figure 14 Project Trip Assignment





Intersection Operations Methodology

This section presents the methods used to evaluate traffic operations at the study intersections. It includes descriptions of the data requirements, the analysis methodologies, the applicable level of service standards, and the criteria defining adverse effects at the study intersections.

The intersection operations analysis is intended to quantify the operations of intersections and to identify potential negative effects due to the addition of project traffic. However, a potential adverse effect on a study intersection is not considered a CEQA impact metric.

Study Intersections

The study includes an analysis of AM and PM peak-hour traffic conditions for two signalized intersections and one unsignalized intersection. Intersections were selected for study if the project is expected to add 10 vehicle trips per hour per lane to an intersection that meets one of the following criteria as outlined in the *Transportation Analysis Handbook*.

- Within a ½-mile buffer from the project's property line;
- Outside a ½-mile buffer but within a one-mile buffer from the project AND currently operating at D or worse;
- Designated Congestion Management Program (CMP) facility outside of the City's Infill Opportunity Zones;
- Outside the City limits with the potential to be affected by the project, per the transportation standards of the corresponding external jurisdiction;
- With the potential to be affected by the project, per engineering judgement of Public Works.

The following study intersections are located between a one-half mile and one-mile radii from the project site and were selected based on the above criteria (see Figure 13).

- 1. Winchester Boulevard and Williams Road
- 2. Winchester Boulevard and Payne Avenue
- 3. Winchester Boulevard and Walgrove Way (unsignalized)

Data Requirements

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

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

Lane Configurations

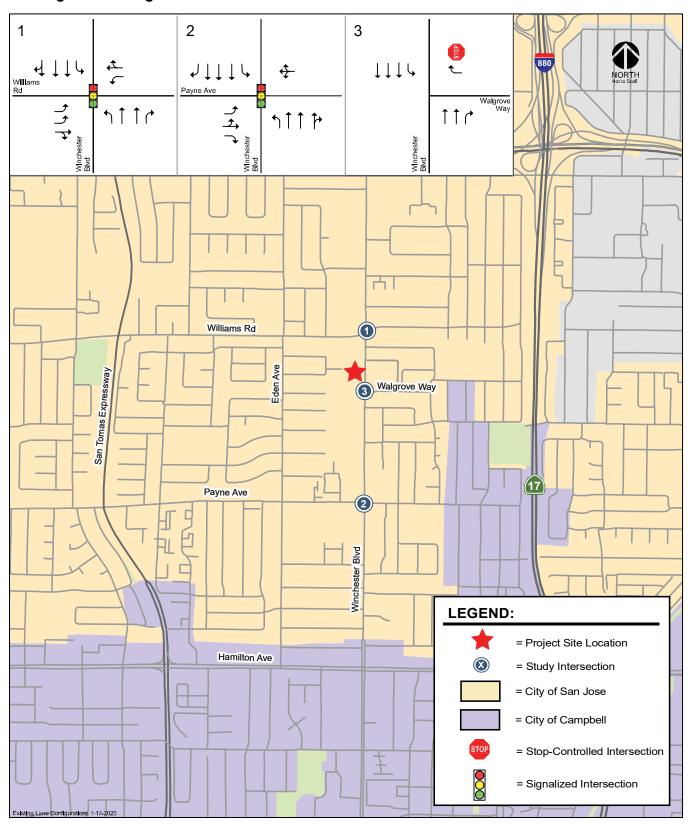
The existing lane configurations at the study intersections were determined by observations in the field and are shown on Figure 15.

It is assumed in this analysis that the transportation network under background and background plus project would be the same as the existing transportation network, with the following exceptions which are planned as part of the Winchester Boulevard Complete Street Improvements.

The Winchester Boulevard Urban Village Plan identifies the improvement of Winchester Boulevard between Hamilton Avenue and I-280 to a complete street. Complete streets are roadways designed to safely accommodate many different users, including people who bike, people who walk, transit riders,



Figure 15
Existing Lane Configurations





motorists, and emergency vehicles. The planned streetscape design for Winchester Boulevard includes features of Grand Boulevards and Complete Streets as defined in San José's General Plan and Complete Streets Design Guidelines (see Figure 16). The Winchester Boulevard Urban Village Plan identifies the following complete street improvements along Winchester Boulevard:

- Protected bike lanes along both sides of Winchester Boulevard. The bike lanes will be physically separated from vehicle travel lanes.
- At least four vehicular travel lanes and two flex lanes for vehicle travel or parking.
- Construction of a raised median with limited breaks including at its intersections with Walgrove Way and Fireside Drive.
- Crosswalks at Walgrove Way and Fireside Drive with potential Rectangular Rapid Flashing Beacons (RRFB) at Walgrove Way.

This study conservatively assumes Winchester Boulevard would have four vehicular travel lanes (two lanes in each direction).

The following improvements to the intersection of Winchester Boulevard and Williams Road have been recently by the Winchester Reserve project.

- Addition of a second eastbound left-turn lane
- Removal of the southwest corner, northwest corner, and northeast corner pork chop islands

Traffic Volumes

Existing Conditions

Existing peak hour traffic volumes at all study intersections were obtained from new turning-movement counts. The existing peak-hour intersection volumes are shown on Figure 17. Intersection turning-movement counts conducted for this analysis are presented in Appendix B. Peak hour intersection turning movement volumes for all intersections and study scenarios are tabulated in Appendix D.

Future Conditions

Background peak hour traffic volumes were estimated by adding to existing volumes the estimated traffic from approved but not yet constructed developments. The added traffic from approved but not yet constructed developments was obtained from the City of San Jose's Approved Trips Inventory (ATI) database. The background traffic scenario predicts a realistic traffic condition that would occur as approved development is built. Background traffic volumes are shown in Figure 18. Project trips were added to background traffic volumes to obtain background plus project traffic volumes (see Figure 19).

The approved project information are included in Appendix C. The approved trips, proposed project trips, and traffic volumes for all components of traffic are tabulated in Appendix D.

Level of Service Standards and Analysis Methodologies

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

All study intersections were evaluated based on the 2000 Highway Capacity Manual (HCM) level of service methodology using the TRAFFIX software. This method evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. TRAFFIX is also the CMP-designated intersection level of service methodology, thus, the City of San Jose employs



Figure 16
Winchester Boulevard Complete Street Improvement

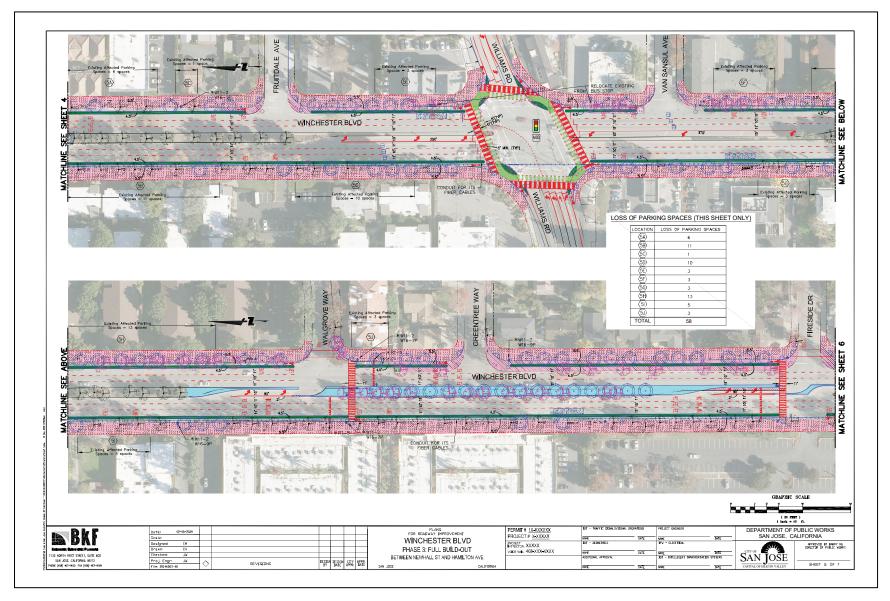




Figure 16 (Continued)
Winchester Boulevard Complete Street Improvement

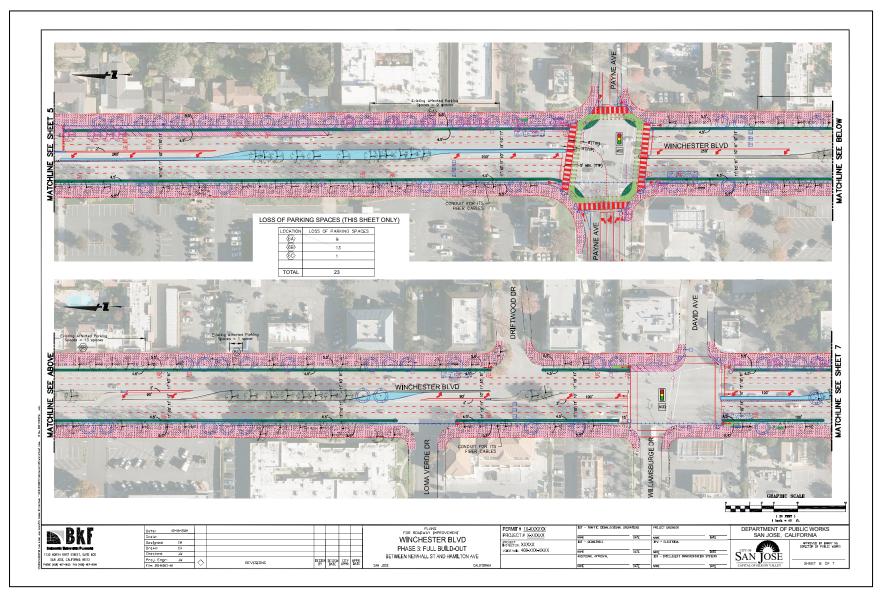




Figure 16 (Continued)
Winchester Boulevard Complete Street Improvement

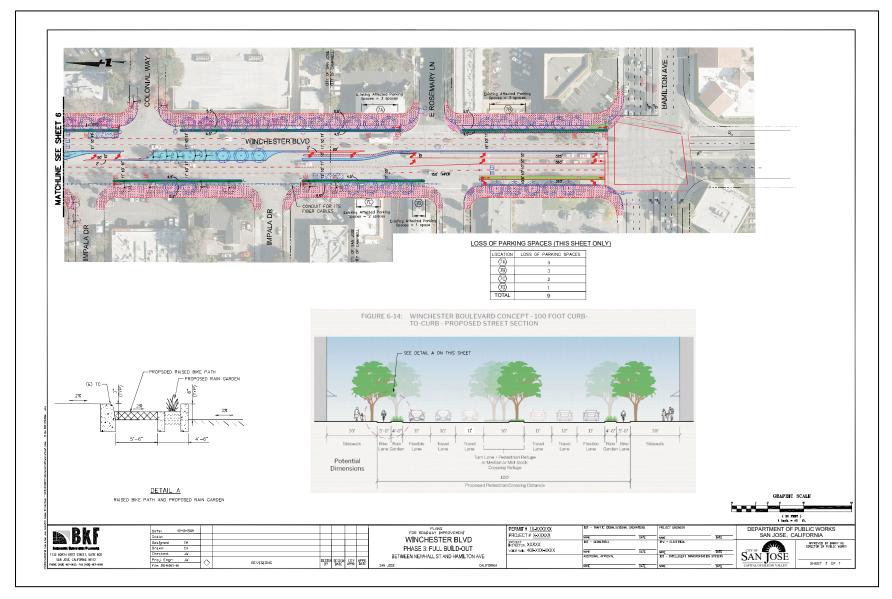




Figure 17
Existing Traffic Volumes

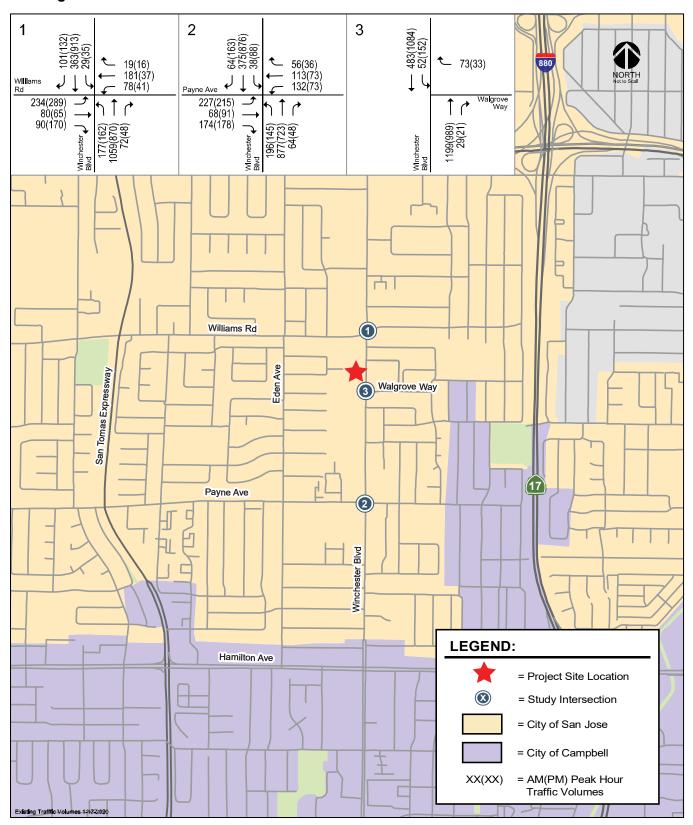


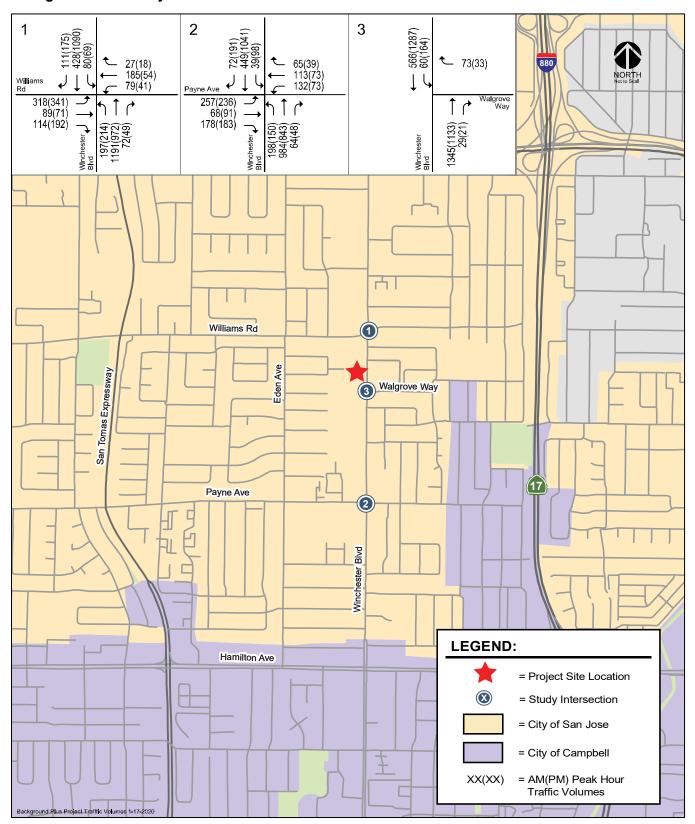


Figure 18 Background Traffic Volumes





Figure 19
Background Plus Project Traffic Volumes





the CMP default values for the analysis parameters. The correlation between average control delay and level of service at signalized intersections is shown in Table 5.

Table 5
Signalized Intersection Level of Service Definitions Based on Control Delay

Level of Service	Description	Average Control Delay per Vehicle (sec.)							
А	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	up to 10.0							
В	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0							
С	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							
Sources: Transportation Research Board, 2000 Highway Capacity Manual. Traffic Level of Service Analysis Guidelines, Santa Clara County Transportation Authority Congestion Management Program, June 2003.									

Signalized study intersections are subject to the City of San Jose level of service standards. The City of San Jose has established LOS D as the minimum acceptable intersection operations standard for all signalized intersections unless superseded by an Area Development Policy.

City of San Jose Definition of Adverse Intersection Operations Effects

According to the City of San Jose's *Transportation Analysis Handbook 2018*, an adverse effect on intersection operations occurs if for either peak hour:

- 1. The level of service at the intersection degrades from an acceptable level (LOS D or better) under background conditions to an unacceptable level under background plus project conditions, or
- 2. The level of service at the intersection is an unacceptable level (LOS E or F) under background conditions and the addition of project trips cause both the critical-movement delay at the intersection to increase by four 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.

An adverse intersection operations effect by City of San Jose standards may be addressed by implementing measures that would restore intersection level of service to background conditions or better. The City recommends prioritizing improvements related to alternative transportation modes, parking measures, and/or TDM measures. Improvements that increase vehicle capacity are secondary and must not have unacceptable effects on existing or planned transportation facilities. Unacceptable effects on existing or planned transportation facilities include the following:

- Inconsistent with the General Plan Transportation Network and Street Typologies;
- Reduction of any physical dimension of a transportation facility below the minimum design standards per the San José Complete Streets Design Standards and Guidelines; OR
- Substantial deterioration in the quality of existing or planned transportation facilities, including pedestrian, bicycle, and transit systems and facilities, as determined by the Director of Transportation.

Intersection Operations Analysis Results

The intersection level of service analysis is summarized in Table 6.

Existing Intersection Operation Conditions

Intersection levels of service were evaluated against the City of San Jose intersection operations standards. The results of the level of service analysis show that each of the signalized study intersections currently operate at an acceptable LOS D or better during both the AM and PM peak hours, based on the City of San Jose intersection operations standard of LOS D. The level of service calculation sheets are included in Appendix E.

Observed Existing Traffic Conditions

Traffic conditions in the field were observed in order to identify existing operational deficiencies and to confirm the accuracy of calculated levels of service. The purpose of this effort was (1) to identify any existing traffic problems that may not be directly related to intersection level of service, and (2) to identify any locations where the level of service calculation does not accurately reflect level of service in the field. Field observations did not reveal any operational problem at the two signalized study intersections.

Future Intersection Operation Conditions

The operations analysis shows that all of the study intersections are projected to operate at acceptable levels of service, based on the City of San Jose intersection operations standard of LOS D under background conditions and background plus project conditions during both the AM and PM peak hours. The intersection level of service calculation sheets are included in Appendix E.

I-280/Winchester Boulevard Interchange Area Transportation Development Policy

The I-280/Winchester Boulevard interchange area Transportation Development Policy (TDP) provides for additional capacity in the immediate area of the I-880/Stevens Creek Boulevard and I-280/Winchester Boulevard interchanges. The TDP was completed for the purpose of managing existing traffic congestion in the I-880/Stevens Creek and I-280/Winchester interchange areas as well as provide additional traffic capacity to accommodate future development such as the proposed project. The I-880/Stevens Creek and I-280/Winchester interchanges serve as the primary access points to



Table 6
Intersection Level of Service Results

						Existing		Background		Background Plus Project			
Int.			LOS	Peak	Count	Avg.		Avg.		Avg.		Incr. In	Incr. In
#	Intersection	Jurisdiction	Standard	Hour	Date	Delay	LOS	Delay	LOS	Delay	LOS	Crit. Delay	Crit. V/C
1	Winchester Boulevard and Williams Road	San Jose	D	AM	11/19/19	32.9	С	35.9	D	36.0	D	0.0	0.002
				PM	11/19/19	34.7	С	35.5	D	35.7	D	0.6	0.009
2	Winchester Boulevard and Payne Avenue	San Jose	D	AM	11/19/19	38.0	D	37.5	D	37.5	D	0.0	0.003
				PM	11/19/19	39.2	D	37.5	D	37.5	D	0.0	0.004



regional freeway facilities in the project area. As such, the Stevens Creek Boulevard and Winchester Boulevard corridors that serve the I-880/Stevens Creek and I-280/Winchester interchanges currently experience traffic congestion during the peak commute hours. The corridors include two Protected Intersections that are currently and projected to continue to operate well below the City's standard Level of Service Policy. There are no further vehicular capacity improvements available at the intersections.

The TDP provides partial funding, via a traffic impact fee imposed on proposed development, for the implementation of a new westbound off-ramp from I-280 to Winchester Boulevard to reduce traffic congestion at the I-880/Stevens Creek and Stevens Creek Boulevard corridors. The traffic fee is based on the estimated trips to be added to the new westbound off-ramp from I-280 to Winchester Boulevard by each individual development. It is estimated that the proposed project will result in the addition of three PM peak hour trips to the planned I-280 to Winchester Boulevard ramp.

Intersection Queuing Analysis

The analysis of intersection operations was supplemented with a vehicle queuing analysis at intersections where the project would add a substantial number of trips to the left-turn movements. The queuing analysis is presented for informational purposes only, since the City of San Jose has not defined a policy related to queuing. Vehicle queues were estimated using a Poisson probability distribution, which estimates the probability of "n" vehicles for a vehicle movement using the following formula:

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

Where:

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

n = number of vehicles in the queue per lane

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

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

A vehicle queuing analysis was conducted for high demand turn movements at the intersections of Winchester Boulevard/Williams Road and Winchester Boulevard/Walgrove Way (see Table 7). The analysis indicates that, with the addition of project traffic, the 95th percentile vehicle queues could be accommodated by the existing storage provided at all study locations. The queue length calculations are included in Appendix F.



Table 7 Queuing Analysis Summary

		Boulevard and as Road	Winchester Boulevard and Walgrove Way				
	Northbo	ound Left	Southbound Left				
Measurement	AM	PM	AM	PM			
Existing Conditions							
Cycle Length/Control Delay (sec) ¹	126	140	11.9	11.6			
Lanes	1	1	11	1			
Volume (vph)	177	162	52	152			
Volume (vphpl)	177	162	52	152			
95 th %. Queue (veh/ln.)	11	11	1	2			
95 th %. Queue (ft./ln) ²	275	275	25	50			
Storage (ft./ ln.)	325	325	100	100			
Adequate (Y/N)	YES	YES	YES	YES			
Background Conditions							
Cycle Length/Control Delay (sec) ¹	126	140	12.9	12.7			
Lanes	1	1	1	1			
Volume (vph)	189	207	52	152			
Volume (vphpl)	189	207	52	152			
Avg. Queue (veh/ln.)	6.6	8.1	0.2	0.5			
Avg. Queue ¹ (ft./ln)	165	201	5	13			
95 th %. Queue (veh/ln.)	11	13	1	2			
95 th %. Queue (ft./ln) ²	275	325	25	50			
Storage (ft./ ln.)	325	325	100	100			
Adequate (Y/N)	YES	YES	YES	YES			
Background Plus Project Conditions	S						
Cycle Length/Control Delay (sec) ¹	126	140	13.1	13.0			
Lanes	1	1	1	1			
Volume (vph)	197	214	60	164			
Volume (vphpl)	197	214	60	164			
95 th %. Queue (veh/ln.)	11	13	1	2			
95 th %. Queue (ft./ln) ²	275	325	25	50			
Storage (ft./ ln.)	325	325	100	100			
Adequate (Y/N)	YES	YES	YES	YES			

Notes:

² Assumes 25 feet per vehicle queued



¹ Cycle length for signalized intersection and control delay for unsignalized intersection

Signal Warrant Analysis

The need for signalization of an unsignalized intersection is assessed based on the Peak Hour Volume Warrant (Warrant 3) described in the *California Manual on Uniform Traffic Control Devices for Streets and Highways (CA MUTCD)*, Part 4, Highway Traffic Signals, 2014. This method makes no evaluation of intersection level of service, but simply provides an indication whether vehicular peak hour traffic volumes are, or would be, sufficient to justify installation of a traffic signal. Intersections that meet the peak hour warrant are subject to further analysis before determining that a traffic signal is necessary. Additional analysis may include unsignalized level of service analysis and/or operational analysis such as evaluating vehicle queuing and delay. Other options such as traffic control devices, signage, or geometric changes may be preferable based on existing field conditions.

A peak-hour traffic signal warrant check was conducted for the unsignalized intersection of Winchester Boulevard and Walgrove Way. The results indicate that the projected traffic volumes at the intersection would fall below the thresholds that warrant signalization under all study scenarios during the AM and PM peak hours. The traffic signal warrant calculations are included in Appendix G.

Site Access and On-Site Circulation

The evaluation of site access and circulation is based on the December 31, 2019 site plan prepared by the Carpira Design Group. Site access was evaluated to determine the adequacy of the site's access points with regard to the following: traffic volume, delays, vehicle queues, geometric design, and corner sight distance. On-site vehicular circulation was reviewed in accordance with generally accepted traffic engineering standards and transportation planning principles.

Site Access

Vehicular access to the project site at its proposed driveway would be restricted to right-in/right-out turn movements only due to the existing median along Winchester Boulevard. Therefore, inbound project traffic from northbound Winchester Boulevard would be required to proceed past the project site and make a U-turn at the Williams Road. Similarly, outbound project traffic that is bound for northbound Winchester Boulevard would be required to exit the project driveway and proceed south along Winchester Boulevard to make a U-turn at Walgrove Way. It is anticipated that the project driveway would serve approximately 36 AM peak hour trips (20 inbound and 16 outbound) and 41 PM peak hour trips (16 inbound and 25 outbound). The estimated gross project trips at the site driveway are shown on Figure 20.

According to the City of San Jose municipal code, on-site two-way drive aisles must be a minimum of 26 feet wide and driveway widths should match the 26 feet wide drive aisles. The widths of the proposed driveway and on-site drive aisle are shown to be 26 feet, which satisfy the City's driveway design requirement. The driveway has a clear throat of approximately 150 feet (measured between the driveway face of curb and the pedestrian walkway between the gym and residential lobby), which can accommodate six vehicles. It is estimated that there would be at most 20 vehicles entering the project site during the AM peak hour or one vehicle every three minutes on average. Therefore, vehicle queuing issues are not expected to occur at the parking garage entrance based on the relatively low number of project trips.



Figure 20 Gross Project Trips at Site Driveways and Ground Level Circulation

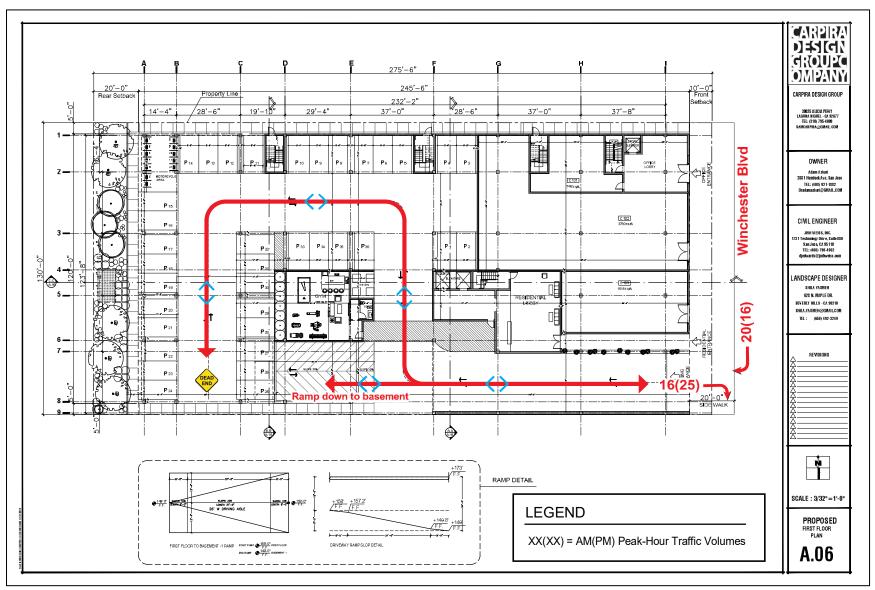
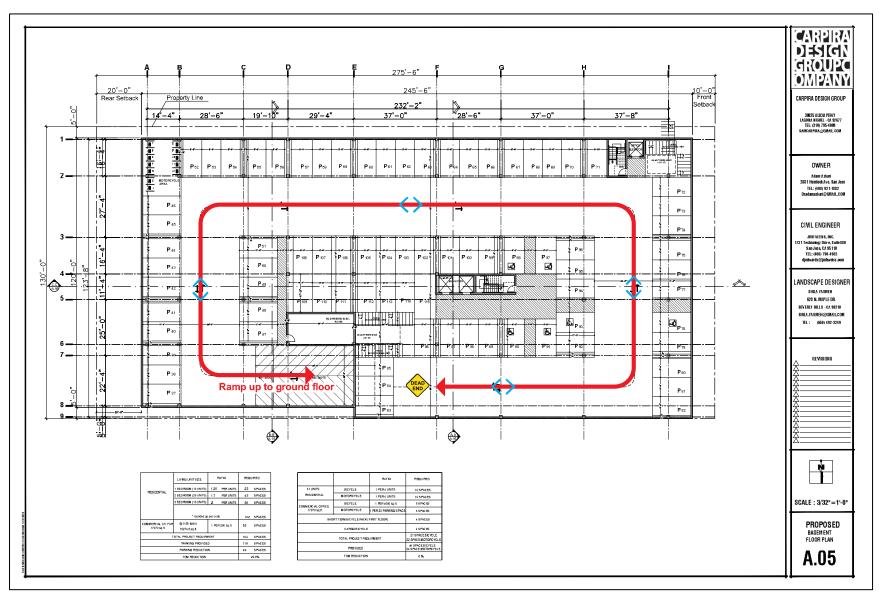




Figure 21
Basement Level Circulation





Sight Distance

Adequate sight distance will be required at the project driveway along Winchester Boulevard. The project driveway should be free and clear of any obstructions to provide adequate sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles traveling on Winchester Boulevard. Any landscaping and signage should be located in such a way to ensure an unobstructed view for drivers exiting the site.

Adequate sight distance (sight distance triangles) should be provided at the project driveway in accordance with the *American Association of State Highway Transportation Officials* (AASHTO) standards. Sight distance triangles should be measured approximately 10 feet back from the traveled way. Providing the appropriate sight distance reduces the likelihood of a collision at a driveway or intersection and provides drivers with the ability to exit a driveway and locate sufficient gaps in traffic. The minimum acceptable sight distance is often considered the AASHTO stopping sight distance. Sight distance requirements vary depending on the roadway speeds. Winchester Boulevard has a posted speed limit of 40 miles per hour (mph). The AASHTO stopping sight distance for a facility with a posted speed limit of 40 mph is 305 feet. Thus, a driver exiting the proposed project driveway on Winchester Boulevard must be able to see 305 feet to the north along Winchester Boulevard.

Based on the project site plan and observations in the field, vehicles exiting the project site driveway on Winchester Boulevard would be able to see approaching traffic on southbound Winchester Boulevard at least to Williams Road located approximately 600 feet to the north of the project site. Therefore, it can be concluded that the project driveway on Winchester Boulevard would meet the AASHTO minimum stopping sight distance standards.

On-Site Circulation

On-site vehicular circulation was reviewed in accordance with the City of San Jose Zoning Code and generally accepted traffic engineering standards. The ground floor level of the parking garage would provide 36 parking spaces and access to a ramp serving the basement parking level. The basement parking level would provide 79 parking spaces including 7 tandem parking spaces. In order to guarantee effective use of the tandem parking spaces, all of the tandem spaces should be assigned parking. If assigned, the tandem spaces would not be expected to create any parking related issues. The parking garage follows a standard 90-degree parking layout. The parking drive aisles are 26 feet wide, which meets the City's standard for 90-degree parking. The widths of the garage entrance and the ramp are shown to be 26 feet on the site plan, which also meets the City's standard. The dimensions of the regular parking spaces are 8.6 feet by 17 feet, which do not meet the minimum City standards of 8.5 feet by 18 feet for full-size car spaces.

Recommendation: The proposed parking space dimensions, while not an unusual design, do not meet City standards and should be reviewed by City staff prior to final design.

Upon entering the garage from Winchester Boulevard, vehicles can either proceed straight down the ramp to the basement parking level or make a right turn to access the parking spaces on the ground floor parking level. Vehicles would then circulate in a clockwise direction in the basement level. Overall, the parking layout would provide for adequate vehicular circulation within the parking garage. The parking garage circulations for the ground floor and basement levels are shown in Figures 20 and 21.

Typical engineering standards require garage ramps to have no greater than a 20 percent grade, and slopes over 10% require transition slopes so that vehicles do not "bottom out". The project site plan indicates the slope of the ramp within the parking garage to be at most 20%. Therefore, the proposed ramp design is adequate, based on typical engineering standards. Ultimately, City staff will determine if the proposed ramp design is adequate.



Dead-end aisles would exist at the end of the drive aisle on both levels of the parking garage. Deadend aisles are undesirable because drivers will enter the aisle and upon discovering that there is no available parking, must back out or conduct three-point turns. In areas where parking spaces are designated for specific individuals, dead end aisles are less problematic.

Recommendation: It is recommended that the parking spaces located at the end of the dead-end aisle be assigned parking.

Bike and Pedestrian On-Site Circulation

Pedestrian access to the project site would be provided via two entrances – one for the residential units and the second for the office space – along the building frontage on Winchester Boulevard. The main pedestrian entrance would be connected to the proposed 20-foot sidewalk along the project frontage on Winchester Boulevard. Pedestrian circulation within the site appears to provide adequate connectivity between vehicle parking, off-site pedestrian facilities, and on-site amenities.

Recommendation: It is recommended that appropriate visible and/or audible warning signals and convex mirrors should be provided at the pedestrian walkway to alert pedestrians of vehicles and entering and exiting the parking garages and to assist drivers with blind turns while turning around corners.

Truck Access

The site plan does not indicate that a loading space will be provided on-site.

Recommendation: In lieu of providing off-street loading spaces, it is recommended that the project applicant work with City staff to determine the feasibility of providing a public loading zone on Winchester Boulevard along the project frontage.

A designated trash collection area is shown on the ground floor level adjacent the gym area. Because garbage trucks would not be able to access near the trash collection area, trash bins would have to be wheeled out to the trash staging area along the Winchester Boulevard project frontage, where garbage trucks would perform their operations outside of the development at the curb.

Alternatively, the site should be designed to provide a loading area along the north side of the entrance drive aisle and adjacent to the residential lobby.

Recommended Site Access and On-Site Circulation Improvements

<u>Winchester Complete Street Improvements.</u> The Winchester Boulevard Urban Village Plan identifies the following complete street improvements along Winchester Boulevard:

- Protected bike lanes along both sides of Winchester Boulevard. The bike lanes will be physically separated from vehicle travel lanes.
- At least four vehicular travel lanes and two flex lanes for vehicle travel or parking.
- Construction of a raised median with limited breaks.

Adhere to City of San Jose Design Standards and Guidelines. The design of the project site, including but not limited to driveways, sidewalks, corner radii, street width, parking dimensions, and signage, should adhere to City of San Jose design standards and guidelines. Specific site access and on-site circulation recommended improvements are summarized below:

- Provide a 20-foot sidewalk along the project frontage.
- The proposed parking space dimensions, while not an unusual design, do not meet City standards and should be reviewed by City staff prior to final design.



- It is recommended that the parking spaces located at the end of the dead-end aisle be assigned parking.
- In lieu of providing off-street loading spaces, it is recommended that the project applicant work with City staff to determine the feasibility of providing a public loading zone on Winchester Boulevard along the project frontage.
- Alternatively, the site should be designed to provide a loading area along the north side of the entrance drive aisle and adjacent to the residential lobby.

Parking Supply

The City of San Jose Zoning Code (Section 20.90.060) states that office uses are required to provide one parking space per 250 square feet of floor area. The required parking spaces for multi-family residential units is dependent on the living unit size. The project as proposed would construct 17,970 gross square feet of office space and 61 multi-family residential units. According to the City's Zoning Code, "Floor area" is defined as 85 percent of the "total gross floor area" of the building. Based on the City's parking requirements and the current project description, the project would be required to provide 62 parking spaces for the office space and 102 parking spaces for the residential units for a total of 164 parking spaces. The project is proposing to provide a total of 115 parking spaces on-site, which is 49 parking spaces or 30 percent less than the City's standard parking requirement.

A 20 percent reduction in required off-street vehicle parking spaces is allowed with a development permit or a development exception if no development permit is required for developments that meet the following conditions (Section 20.90.220.A.1):

- 1. The structure or use is located within two thousand feet of a proposed or an existing rail station or bus rapid transit station, or an area designated as a neighborhood business district, or as an urban village, or as an area subject to an area development policy in the city's general plan or the use is listed in Section 20.90.220.G; and
- 2. The structure or use provides bicycle parking spaces in conformance with the City's Zoning Code requirements.

The project site is within the Winchester Boulevard Urban Village. Therefore, the vehicle parking requirement would be reduced to 50 parking spaces for the office space and 81 parking spaces for the residential units for a total of 131 parking spaces.

With the 20% Urban Village reduction, the project requires an additional 10% reduction in on-site parking spaces. In accordance with Section 20.90.220 of the San Jose Code of Ordinances, the additional 10 percent reduction could be allowed with the implementation and maintenance of a TDM plan included in Appendix H. The vehicle parking requirement is shown in Table 8.

Per the 2016 California Building Code (CBC) Table 11B-208.2, five ADA accessible parking spaces are required for projects with providing 101 to 150 parking spaces. Of the required accessible parking spaces, one van accessible space is required. The plans show a total of five van accessible spaces in the basement level of the garage. Therefore, the proposed parking complies with ADA requirements.

Bicycle Parking

According to the City's Bicycle Parking Standards (Chapter 20.90, Table 20-210), the project is required to provide bicycle parking for the office building at a rate of one bicycle parking space per 4,000 square feet of office space and one bicycle parking space per four residential units. This equates to a total requirement of 20 bicycle parking spaces, of which 4 bicycle parking spaces would serve the office component and 16 bicycle parking spaces would serve the residential units. Of the required bicycle



Table 8 Vehicular Parking Requirement

Proposed Project		City of San	Requi	ired Parking	
Land Use	Size	Land Use	Parking Ratio	General	Urban Village ²
Residential Residential Residential	18 units 25 units 18 units 61 units	Multiple dwelling residential Multiple dwelling residential Multiple dwelling residential	1.25 spaces per one-bedroom unit1.70 spaces per two-bedroom unit2.00 spaces per three-bedroom unitTotal Required Residential Parking	23 43 36 102	18 34 81
Office	17,970 s.f.	Offices, business and admin	1.00 space per 250 s.f. of floor area ³ Total Required Parking	62 164	50 131

Notes:



¹City of San Jose Zoning Ordinance: Parking Spaces Required by Land Use

²Includes 20% allowable reduction of parking requirement in an Urban Village.

³According to the City's Zoning Code, "Floor area" is defined as 85 percent of the "total gross floor area" of the building.

parking, City standards require that 80 and 40 percent be short-term bicycle spaces with 20 and 60 percent be secured long-term bicycle spaces for office and residential uses, respectively. Based on these requirements, the project would need to provide 9 short-term and 11 long-term bicycle parking spaces.

The project site plan indicates that bicycle storage areas to accommodate 46 bicycles will be located within the basement level of the parking garage. Therefore, the proposed bicycle parking on-site will exceed the City's requirements and encourage the use of non-auto modes of travel and minimize the demand for on-site parking.

Motorcycle Parking

According to the City's Motorcycle Parking Standards (Chapter 20.90, Table 20-250), the project is required to provide 1 motorcycle parking space per 50 code-required vehicle spaces for the office component and 1 motorcycle parking space for every four residential units. Based the current project description, the project is required to provide 17 motorcycle parking spaces (1 space for the office space and 16 spaces for the residential units).

The site plan shows that the project would provide a total of 24 motorcycle parking spaces within the parking garage. Therefore, the number of proposed motorcycle parking spaces would meet the City's requirement.

Surrounding On-Street Parking

The project site is located just outside the perimeter of the Cadillac Residential Parking Program (RPP) zone, where a permit is required to use on-street parking from 10:00 PM to 6:00 AM every day except on holidays. In order to obtain a parking permit, the applicant must live in or own a residential property or operate a business in a parking permit zone. Generally, this means that the residence or business must be located on the same side of the street and block face where permit parking signs are posted. The locations of on-street parking, where an RPP permit is required, are shown on Figure 22.

With the implementation of the required TDM plan, the project will provide adequate parking spaces onsite to satisfy its parking demand and will not have an effect on the Cadillac RPP.

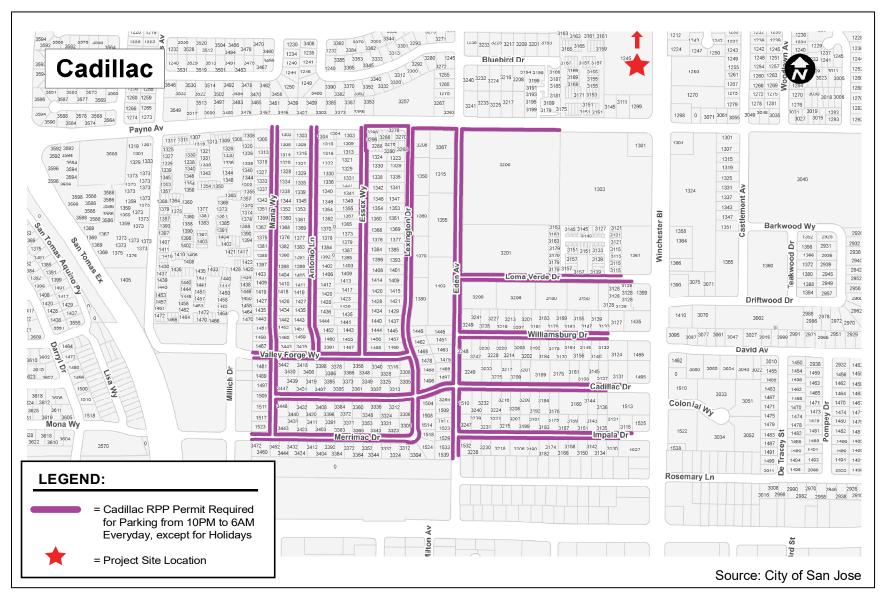
Pedestrian, Bicycle, and Transit Analysis

Existing sidewalks along Winchester Boulevard provide a pedestrian connection between the project site and pedestrian destinations in the project vicinity. Pedestrian traffic primarily would consist of residents and employees of the proposed project walking to and from surrounding retail establishments, as well as bus stops on Winchester Boulevard. Crosswalks with pedestrian signal heads are located at the signalized intersection of Winchester Boulevard and Williams Road. Sidewalks are currently provided on the following major roadway segments in the project vicinity.

- Winchester Boulevard
- · Williams Road, west of Winchester Boulevard
- Eden Avenue
- Payne Avenue
- Hamilton Avenue
- Moorpark Avenue



Figure 22
Cadillac Residential Parking Program





The project will install a 20-foot sidewalk along its frontage on Winchester Boulevard. However, some of the residential streets in the project vicinity do not have sidewalks.

The bikeways within the vicinity of the project site would remain unchanged under project conditions. Currently, no bike facilities exist on Winchester Boulevard between Payne Avenue and Moorpark Avenue that would provide connections to other bicycle facilities in the project vicinity. The San Jose Bike Plan 2020 and Envision 2040 General Plan, as described below, identify planned improvements to the bicycle network within the City and provide policies and goals that are intended to promote and encourage the use of multi-modal travel options and reduce the identified project impacts to the roadway system. The planned improvements to the bicycle network will provide the project site with improved connections to surrounding pedestrian/bike and transit facilities and a balanced transportation system as outlined in the Envision 2040 General Plan goals and policies. The project site is served directly by VTA frequent bus line 60, which operates along Winchester Boulevard. The southbound and northbound bus stops for line 60 are located at the intersection of Winchester Boulevard and Williams Road. It can be assumed that some residents and employees of the proposed project would utilize the existing transit services. Applying an estimated three percent transit mode share, which is probably the highest that could be expected for the project, equates to approximately one new transit rider during each of the AM and PM peak hours. VTA operations reports indicate that the 60-bus line as well as several other bus lines in the project area serve less than ideal ridership. Therefore, the new riders due to the proposed project could be accommodated by the current available capacity of the bus service in the study area and improvement of the existing transit service would not be necessary with the project.

Public Transit/Pedestrian/Bike Improvements

The proposed project site is located within the Winchester Boulevard Urban Village Boundary and fronts Winchester Boulevard, which has been designated as a Grand Boulevard by the Envision San José 2040 General Plan. Sites within an Urban Village and located along a Grand Boulevard must incorporate additional urban design and architectural elements that will facilitate a building with pedestrian orientated design and activate the pedestrian public right-of-way.

- The Envision 2040 General Plan identifies goals and policies that are dedicated to the enhancement of the transportation infrastructure, including public transit and pedestrian/bike facilities. The Transportation Policies contained in the General Plan create incentives for non-auto modes of travel while reducing the use of single-occupant automobile travel as generally described below:Through the entitlement process for new development, fund needed transportation improvements for all transportation modes, giving first consideration to improvement of bicycling walking, and transit facilities.
- Give priority to the funding of multimodal projects to provide the most benefit to all users of the transportation system.
- Encourage the use of non-automobile travel modes to reduce vehicle miles traveled (VMT)
- Consider the impact on the overall transportation system when evaluating the impacts of new developments.
- Increase substantially the proportion of travel modes other than single-occupant vehicles.

The planned improvements discussed below are intended to provide for a balanced transportation system as outlined in the Envision 2040 General Plan goals and policies. However, the full implementation of the improvements is beyond the means of the proposed project given that they may require right-of-way from adjacent properties. The project could be required to make a fair-share contribution towards the cost of the improvements since the identified improvements would be of benefit to the project.



Bicycle and Pedestrian Facility Improvements

The Envision 2040 General Plan identifies the following goals in regard to bicycling and pedestrians:

- Provide a continuous pedestrian and bicycle system to enhance connectivity throughout the City by completing missing segments.
- Build pedestrian and bicycle improvements at the same time as improvements for vehicular circulation.
- Give priority to pedestrian improvement projects that improve pedestrian safety, improve pedestrian access to and within the Urban Villages and other growth areas.

The San Jose Bike Plan 2020 indicates that a variety of bicycle facilities are planned in the study area, some of which would benefit the project and adhere to the goals of the Envision 2040 General Plan. Of the planned facilities, the following are relevant to the project.

Class II bike lanes are planned for:

- Winchester Boulevard, between Payne Avenue and Moorpark Avenue
- Cypress Avenue, between Williams Road and Moorpark Avenue

Class III bike routes are planned for:

- Greenbriar Avenue, between Payne Avenue and Westfield Avenue
- Westfield Avenue, between Greenbriar Avenue and Daniel Way

The Winchester Boulevard Urban Village Plan identifies the improvement of Winchester Boulevard between Moorpark Avenue and Payne Avenue to a complete street. The complete street improvements will include protected bike lanes along both sides of Winchester Boulevard as well as a crosswalks at Walgrove Way and Fireside Drive with potential Rectangular Rapid Flashing Beacons (RRFB) at Walgrove Way. The City will require that the project provide a fair-share contribution towards the future pedestrian crossing with RRFB improvement at Walgrove Drive.

Transit Facility Improvements

The Envision 2040 General Plan identifies the following goals in regard to public transit:

- Pursue development of BRT, bus, shuttle, and fixed guideway services on designated streets and connections to major destinations.
- Ensure that roadways designated as Grand Boulevards adequately accommodate transit vehicle circulation and transit stops. Prioritize bus mobility along Stevens Creek Boulevard.

Winchester Boulevard between Moorpark Avenue and Impala Drive has been designated as a Grand Boulevard within the Envision 2040 General Plan. Grand Boulevards are intended to serve as major transportation corridors with priority given to public transit. Given that the project fronts Winchester Boulevard, the project shall be required to implement the following Grand Boulevard design principles:

- Provide a minimum 15 feet sidewalk width along its frontage on Winchester Boulevard
- Minimize driveway cuts to minimize transit delay
- Provide enhanced shelters for transit services

In addition, as a Grand Boulevard it is envisioned that Winchester Boulevard could potentially be included in the VTA Bus Rapid Transit (BRT) System. However, there are no plans at this time for a BRT line on Winchester Boulevard.



Freeway Segment Evaluation

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

Per CMP technical guidelines, freeway segment level of service analysis shall be conducted on all segments to which the project is projected to add one percent or more to the segment capacity. Since the project is not projected to add one percent or higher to any freeway segments in the area, freeway analysis for the CMP was not required. The percentage of traffic projected to be added by the project to freeway segments in the project area is summarized in Table 9.



Table 9 Freeway Segment Capacity

							Capacity		Project Trips				
					Mixed-Flow Lane		HOV Lane		Mixed-Flow Lane		HOV	/ Lane	
				Peak	# of	Capacity	# of	Capacity		% of		% of	
#	Freeway	Segment	Direction	Hour	Lanes	(vph)	Lanes	(vph)	Volume	Capacity	Volume	Capacity	
1	SR 17	from San Tomas Expressway/Camden Avenue to Hamilton Avenue	NB	AM	3	6,900			2	0.03			
			NB	PM	3	6,900	-		2	0.03			
2	SR 17	from Hamilton Avenue to I-280	NB	AM	3	6,900	-		1	0.01			
			NB	PM	3	6,900	_		2	0.03			
3	I-880	from I-280 to Stevens Creek Boulevard	NB	AM	3	6,900	-		2	0.03			
			NB	PM	3	6,900	-		4	0.06			
4	I-280	from Saratoga Avenue to Winchester Boulevard	EB	AM	3	6,900	1	1,650	2	0.03	0	0.00	
			EB	PM	3	6,900	1	1,650	1	0.01	1	0.06	
5	I-280	from Winchester Boulevard to I-880	EB	AM	3	6,900	1	1,650	0	0.00	0	0.00	
			EB	PM	3	6,900	1	1,650	0	0.00	0	0.00	
6	I-280	from I-880 to Meridian Avenue	EB	AM	3	6,900	1	1,650	2	0.03	0	0.00	
			EB	PM	3	6,900	1	1,650	2	0.03	2	0.12	
7	I-280	from Meridian Avenue to I-880	WB	AM	3	6,900	1	1,650	2	0.03	1	0.06	
			WB	PM	3	6,900	1	1,650	2	0.03	0	0.00	
8	I-280	from I-880 to Winchester Boulevard	WB	AM	3	6,900	1	1,650	0	0.00	0	0.00	
			WB	PM	3	6,900	1	1,650	0	0.00	0	0.00	
9	I-280	from Winchester Boulevard to Saratoga Avenue	WB	AM	3	6,900	1	1,650	1	0.01	1	0.06	
			WB	PM	3	6,900	1	1,650	3	0.04	0	0.00	
10	I-880	from Stevens Creek Boulevard to I-280	SB	AM	3	6,900	-		3	0.04			
			SB	PM	3	6,900	-		2	0.03	-	-	
11	SR 17	from I-280 to Hamilton Avenue	SB	AM	3	6,900	-		3	0.04			
			SB	PM	3	6,900	-		2	0.03			
12	SR 17	from Hamilton Avenue to San Tomas Expressway/Camden Avenue	SB	AM	3	6,900	-		2	0.03	-	-	
			SB	PM	3	6,900	_		3	0.04			



5. Conclusions

The potential impacts of the project were evaluated in accordance with the standards set forth by the City of San Jose, the Congestion Management Program (CMP) of Santa Clara County, and by the California Environmental Quality Act (CEQA). The study included the analysis of AM and PM peak hour traffic conditions for two signalized intersections and one unsignalized intersection. Project impacts on other transportation facilities, such as bicycle facilities and transit service, were determined on the basis of engineering judgment.

CEQA VMT Analysis

CEQA Transportation Analysis Exemption Criteria

The City of San Jose Transportation Analysis Handbook identifies screening criteria that determines whether a CEQA transportation analysis would be required for development projects. The criteria are based on the type of project, characteristics, and/or location. If a project meets the City's screening criteria, the project is expected to result in less-than-significant VMT impacts and a detailed CEQA VMT analysis is not required.

The project site is located within a planned Growth Area (Winchester Boulevard Urban Village) with low VMT per capita as identified by the San Jose VMT Evaluation Tool. The residential component of the project would meet all of the other applicable screening criteria, as described further in Chapter 3. Therefore, the residential component of the project is screened from the evaluation of VMT and is considered to have a less-than-significant VMT impact. However, the proposed office component of the project will not meet all of the applicable VMT screening criteria. Therefore, a CEQA-level transportation analysis that evaluates the project's effects on VMT is required for the office component of the project and is presented in Chapter 3. A VMT evaluation for the residential component of the project also was completed for informational purposes.

Project-Level VMT Impact Analysis

The results of the VMT evaluation, using the City's VMT Evaluation Tool, indicate that the proposed project is projected to generate VMT per capita (10.02), which is below the established VMT impact threshold. The office component of the project is projected to generate VMT per employee (13.08), which would exceed the established impact threshold. Therefore, the proposed office component of the project would result in an impact on the transportation system based on the City's VMT impact criteria.



Project Impacts and Mitigation Measures

Project Impact: Since the VMT generated by the office component of the project (13.08 per employee) would exceed the threshold of 12.21 VMT per employee, the project would result in a significant transportation impact on VMT, and mitigation measures are required to reduce the VMT impact. According to the *Transportation Analysis Handbook*, projects located in areas where the existing VMT is above the established threshold are referred to as being in "high-VMT areas", and projects in high-VMT areas are required to include a set of VMT reduction measures that would reduce the project VMT to the greatest extent possible.

<u>Mitigation Measures</u>: Based on the four strategy tiers included in the VMT Evaluation Tool, it is recommended that the project implement one of the following mitigation measures to reduce the significant VMT impact.

- <u>Telecommuting and Alternative Work Schedules</u>: Encourage at least 100% of the employees to telecommute, shift work schedules, or commute outside of peak congestion periods on a 9/80 schedule or 9 of 80 hours on alternative work schedule. This measure reduces commute vehicle trips. or
- Operate a Free Direct Shuttle: Provide shuttle service for at least 15% of the project employees that would serve the project site and areas with high concentrations of employed residents. This measure reduces drive-alone commute trips. **or**
- <u>Provide Ride-Sharing Programs</u>: Organize a program to match individuals interested in carpooling who have similar commutes for at least 15% of the project employees. This measure promotes the use of carpooling and reduces the number of drive-alone trips. **or**
 - 1. <u>Car Sharing Program</u>: Provide subsidies and promotions, as well as dedicated parking spaces, for carsharing services such as ZipCar, Car2Go, and GetAround, etc for 100% of the project employees. Supporting a carsharing program gives people on-demand access to shared fleets of vehicles. Car-sharing reduces personal motorized vehicle dependence, which supports more walking, biking, carpooling, and transit use. Subject to negotiations with the City and possible negotiations with Car Share companies <u>and</u>
 - 2. Commute Trip Reduction Marketing/Education: Implement marketing/educational campaigns that promote the use of transit, shared rides, and travel through active modes for 100% of the project employees. Strategies may include incorporation of alternative commute options into new employee orientations, event promotions, and publications. and
 - 3. Employee Parking "Cash Out": Require Project employers to offer parking "cash-out" for 60% of the project employees. Providing a "cash-out" incentives gives employees the choice to forgo subsidized/free parking for a cash payment equivalent to the cost that the employer would otherwise pay for the parking space. Providing an alternative to subsidized/free parking encourages commuters to travel by walking, biking, carpooling, and transit.

The implementation of the mitigation measures would reduce the VMT generated by the project by supporting bicycle usage and increasing transit ridership by employees. The implementation of one of the above mitigation measures would reduce the project VMT to below the threshold of 12.21 per employee, which would reduce the project impact to less than significant.

Additionally, the TDM plan (see Appendix H) proposes measures that would reduce the projects parking demand and support a 10 percent parking reduction needed to satisfy the City's parking requirement. The TDM plan includes maintaining an online kiosk of trip-planning resources, providing 100 percent unbundled parking for all residential spaces, providing VTA SmartPasses to residential and commercial tenants, and providing on-site bicycle parking that will exceed the minimum required by the City.



Cumulative (GP Consistency) Evaluation

Projects must demonstrate consistency with the *Envision San José 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 per the City's *Transportation Analysis Handbook*.

The project site is located within the Winchester Boulevard Urban Village. Urban villages are defined as walkable, bicycle-friendly, transit-oriented, mixed use settings that provide both housing and jobs, thus supporting the policies and goals of the General Plan. The project is consistent with the General Plan and Winchester Boulevard Urban Village goals and policies for the following reasons:

- The project frontage along Winchester Boulevard will be improved to be consistent with planned streetscape design features of Grand Boulevards and the Winchester Boulevard Urban Village Plan.
- The project frontage along Winchester Boulevard will be designed to accommodate the planned Winchester Boulevard Complete Street improvements including protected bicycle lanes, wider sidewalks, and other pedestrian safety features.
- The project site is adjacent to bus stops and bicycle lanes on Winchester Boulevard.

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

Local Transportation Analysis

The intersection operations analysis is intended to quantify the operations of intersections and to identify potential negative effects due to the addition of project traffic. However, a potential adverse effect on a study intersection operation is not considered a CEQA impact metric.

The LTA includes the analysis of AM and PM peak-hour traffic conditions for two signalized and one unsignalized intersections, following the standards and methodology set forth by the City of San Jose.

Trip Generation

After applying the ITE trip rates, and appropriate trip reductions, it is estimated that the project would generate a total of 437 daily vehicle trips, with 36 trips (20 inbound and 16 outbound) occurring during the AM peak hour and 41 trips (16 inbound and 25 outbound) occurring during the PM peak hour.

Future Intersection Operation Conditions

The operations analysis shows that all of the study intersections are projected to operate at acceptable levels of service, based on the City of San Jose intersection operations standard of LOS D under background conditions and background plus project conditions during both the AM and PM peak hours.

I-280/Winchester Boulevard Interchange Area Transportation Development Policy

The TDP provides partial funding, via a traffic impact fee imposed on proposed development, for the implementation of a new westbound off-ramp from I-280 to Winchester Boulevard to reduce traffic congestion at the I-880/Stevens Creek and Stevens Creek Boulevard corridors. The traffic fee is based on the estimated trips to be added to the new westbound off-ramp from I-280 to Winchester Boulevard



by each individual development. It is estimated that the proposed project will result in the addition of three peak hour trips to the planned I-280 to Winchester Boulevard ramp.

Recommended Site Access and On-Site Circulation Improvements

<u>Winchester Complete Street Improvements.</u> The Winchester Boulevard Urban Village Plan identifies the following complete street improvements along Winchester Boulevard:

- Protected bike lanes along both sides of Winchester Boulevard. The bike lanes will be physically separated from vehicle travel lanes.
- At least four vehicular travel lanes and two flex lanes for vehicle travel or parking.
- Construction of a raised median with limited breaks including at its intersections with Walgrove Way and Fireside Drive.
- Crosswalks at Walgrove Way and Fireside Drive with potential Rectangular Rapid Flashing Beacons (RRFB) at Walgrove Way.

The City will require that the project provide a fair-share contribution towards the future pedestrian crossing with RRFB improvement at Walgrove Drive.

Adhere to City of San Jose Design Standards and Guidelines. The design of the project site, including but not limited to driveways, sidewalks, corner radii, street width, parking dimensions, and signage, should adhere to City of San Jose design standards and guidelines. Specific site access and on-site circulation recommended improvements are summarized below:

- Provide a 20-foot sidewalk along the project frontage.
- The proposed parking space dimensions, while not an unusual design, do not meet City standards and should be reviewed by City staff prior to final design.
- It is recommended that the parking spaces located at the end of the dead-end aisle be assigned parking.
- In lieu of providing off-street loading spaces, it is recommended that the project applicant work with City staff to determine the feasibility of providing a public loading zone on Winchester Boulevard along the project frontage.

Alternatively, the site should be designed to provide a loading area along the north side of the entrance drive aisle and adjacent to the residential lobby.

Parking Supply

Vehicular Parking

Based on the City's standard parking requirements, the project is required to provide a total of 164 off-street parking spaces before any reductions. However, the project is located in the Winchester Urban Village. The Urban Village Overlay automatically allows for a 20 percent reduction in parking. With the 20 percent reduction, the required parking would be reduced to 131 spaces, consisting of 81 spaces for the residential use and 50 spaces for the office use. The project is proposing a total of 115 parking spaces, which would not meet the City's reduced parking requirements.

The proposed number of parking spaces represents a 30% reduction from the standard required number of spaces. With the 20% Urban Village reduction, the project requires an additional 10% reduction in on-site parking spaces. Therefore, the project will need to submit and have approved a TDM plan.

Bicycle Parking

According to the City's Bicycle Parking Standards, the project is required to provide 9 short-term and 11 long-term bicycle parking spaces. The project site plan indicates that bicycle storage areas to



accommodate 46 bicycles will be located within the basement level of the parking garage. Therefore, the proposed bicycle parking on-site will exceed the City's requirements and encourage the use of non-auto modes of travel and minimize the demand for on-site parking.

Motorcycle Parking

According to the City's Motorcycle Parking Standards, the project is required to provide 17 motorcycle parking spaces (1 space for the office space and 16 spaces for the residential units). The site plan shows that the project would provide a total of 24 motorcycle parking spaces within the parking garage. Therefore, the number of proposed motorcycle parking spaces would meet the City's requirement.

Pedestrian, Bicycle, and Transit Analysis

Pedestrian Facilities

Existing sidewalks along Winchester Boulevard provide a pedestrian connection between the project site and pedestrian destinations in the project vicinity. Pedestrian traffic primarily would consist of residents and employees of the proposed project walking to and from surrounding retail establishments, as well as bus stops on Winchester Boulevard. Crosswalks with pedestrian signal heads are located at the signalized intersection of Winchester Boulevard and Williams Road. Sidewalks are currently provided on the following major roadway segments in the project vicinity.

- Winchester Boulevard
- Williams Road, west of Winchester Boulevard
- Eden Avenue
- Payne Avenue
- Hamilton Avenue
- Moorpark Avenue

The project will install a 20-foot sidewalk along its frontage on Winchester Boulevard. However, some of the residential streets in the project vicinity do not have sidewalks.

Bicycle Facilities

The bikeways within the vicinity of the project site would remain unchanged under project conditions. Currently, no bike facilities exist on Winchester Boulevard between Payne Avenue and Moorpark Avenue that would provide connections to other bicycle facilities in the project vicinity.

The San Jose Bike Plan 2020 indicates that a variety of bicycle facilities are planned in the study area, some of which would benefit the project and adhere to the goals of the Envision 2040 General Plan. Of the planned facilities, the following are relevant to the project.

Class II bike lanes are planned for:

- Winchester Boulevard, between Payne Avenue and Moorpark Avenue
- Cypress Avenue, between Williams Road and Moorpark Avenue

Class III bike routes are planned for:

- Greenbriar Avenue, between Payne Avenue and Westfield Avenue
- Westfield Avenue, between Greenbriar Avenue and Daniel Way

Transit Services

The project site is adequately served by the existing VTA transit services. The nearest bus stop to the project site are located near the Winchester Boulevard/Williams Road intersection approximately 300



feet from the project site and are served by Route 60. The new transit trips generated by the project are not expected to create demand in excess of the transit service that is currently provided.

As a Grand Boulevard it is envisioned that Winchester Boulevard could potentially be included in the VTA Bus Rapid Transit (BRT) System. However, there are no plans at this time for a BRT line on Winchester Boulevard.

Freeway Segment Evaluation

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



1073 South Winchester Mixed-Use Development TA Technical Appendices

Appendix ASan Jose VMT Evaluation Tool Output Sheet

PROJECT:

Name: 1073 Winchester Mixed-Use Tool Version: 2/29/2019
Location: 1073 South Winchester Boulevard Date: 5/18/2020

Parcel: 29925038 Parcel Type: Urban Low Transit
Proposed Parking Spaces Vehicles: 115 Bicycles: 46

LAND USE:

Residential: Percent of All Residential Units

Single Family 0 DU Extremely Low Income (\leq 30% MFI) 0 % Affordable Multi Family 61 DU Very Low Income (> 30% MFI, \leq 50% MFI) 0 % Affordable Subtotal 61 DU Low Income (> 50% MFI, \leq 80% MFI) 0 % Affordable

Office: 17.97 KSF
Retail: 0 KSF
Industrial: 0 KSF

VMT REDUCTION STRATEGIES

Tier 1 - Project Characteristics

Increase	Residential	Density
IIICIEase	residential	DELISITA

Increase Development Diversity

Integrate Affordable and Below Market Rate

Increase Employment Density

Tier 2 - Multimodal Infrastructure

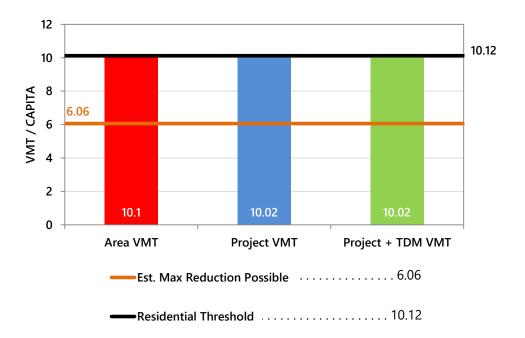
Tier 3 - Parking

Limit Parking Supply

Tier 4 - TDM Programs

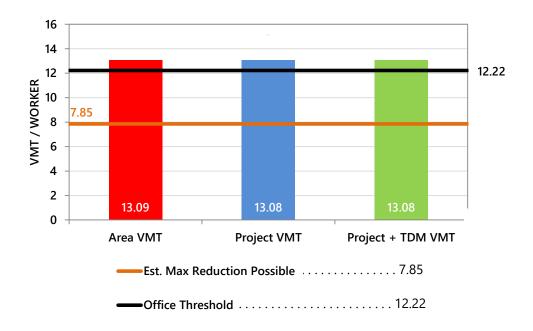
RESIDENTIAL ONLY

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



EMPLOYMENT ONLY

The tool estimates that the project would generate per non-industrial worker VMT above the City's threshold and per industrial worker VMT below the City's threshold.



PROJECT:

Name: 1073 Winchester Mixed-Use Tool Version: 2/29/2019
Location: 1073 South Winchester Boulevard Date: 5/18/2020

Parcel: 29925038 Parcel Type: Urban Low Transit
Proposed Parking Spaces Vehicles: 115 Bicycles: 46

LAND USE:

Residential: Percent of All Residential Units

Single Family0 DUExtremely Low Income (\leq 30% MFI)0 % AffordableMulti Family61 DUVery Low Income (> 30% MFI, \leq 50% MFI)0 % AffordableSubtotal61 DULow Income (> 50% MFI)0 % Affordable

Office: 17.97 KSF
Retail: 0 KSF
Industrial: 0 KSF

VMT REDUCTION STRATEGIES

Tier 1 - Project Characteristics

Increase Residential Density

Increase Development Diversity

Integrate Affordable and Below Market Rate

Increase Employment Density

Tier 2 - Multimodal Infrastructure

Tier 3 - Parking

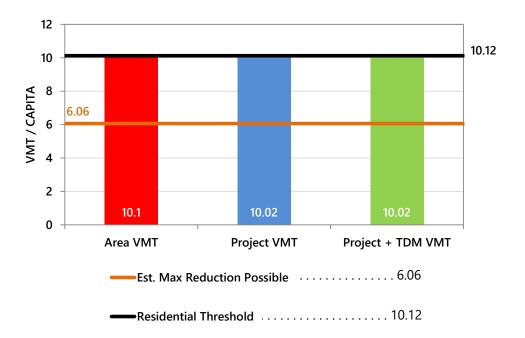
Limit Parking Supply

Tier 4 - TDM Programs

Telecommuting and Alternative Work Schedule Program

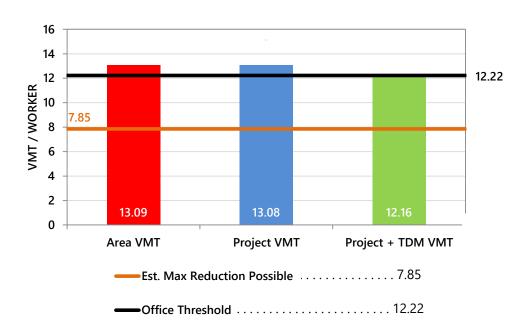
RESIDENTIAL ONLY

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



EMPLOYMENT ONLY

The tool estimates that the project would generate per non-industrial worker VMT below the City's threshold.



D	D	O.	П	<u>_</u>	т.
	\mathbf{r}	U.	15	U	ι.

Name: 1073 Winchester Mixed-Use Tool Version: 2/29/2019
Location: 1073 South Winchester Boulevard Date: 5/18/2020

Parcel: 29925038 Parcel Type: Urban Low Transit
Proposed Parking Spaces Vehicles: 115 Bicycles: 46

LAND USE:

Residential: Percent of All Residential Units Extremely Low Income (< 30% MFI) 0 % Affordable 0 DU Single Family Very Low Income (> 30% MFI, < 50% MFI) 0 % Affordable Multi Family 61 DU Low Income (> 50% MFI, < 80% MFI) Subtotal 61 DU 0 % Affordable Office: 17.97 KSF Retail: 0 KSF Industrial: 0 KSF

VMT REDUCTION STRATEGIES

Tier 1 - Project Characteristics

Increase Residential Density	
Existing Density (DU/Residential Acres in half-mile buffer)	8
With Project Density (DU/Residential Acres in half-mile buffer)	8
Increase Development Diversity	
Existing Activity Mix Index	0.45
With Project Activity Mix Index	0.45
Integrate Affordable and Below Market Rate	
Extremely Low Income BMR units	0 %
Very Low Income BMR units	0 %
Low Income BMR units	0 %
Increase Employment Density	
Existing Density (Jobs/Commercial Acres in half-mile buffer)	25
With Project Density (Jobs/Commercial Acres in half-mile buffer)	25

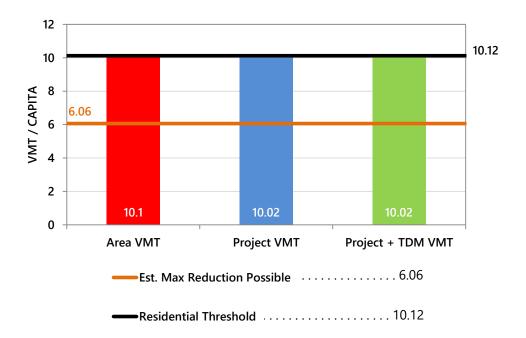
Tier 2 - Multimodal Infrastructure

Tier 3 - Parking

Tier 4 - TDM Programs

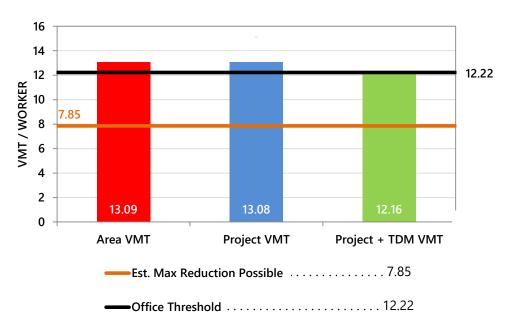
RESIDENTIAL ONLY

The tool estimates that the project would generate per capita VMT below the City's threshold. There are selected strategies that require coordination with the City of San Jose to implement.



EMPLOYMENT ONLY

The tool estimates that the project would generate per non-industrial worker VMT below the City's threshold. There are selected strategies that require coordination with the City of San Jose to implement.



	ь	\sim 1			
Р	ĸ	OJ	В	u l	1:

Name: 1073 Winchester Mixed-Use Tool Version: 2/29/2019
Location: 1073 South Winchester Boulevard Date: 5/18/2020

Parcel: 29925038 Parcel Type: Urban Low Transit
Proposed Parking Spaces Vehicles: 115 Bicycles: 46

LAND USE:

Residential:		Percent of All Residential Units	
Single Family	0 DU	Extremely Low Income (≤ 30% MFI)	0 % Affordable
Multi Family	61 DU	Very Low Income (> 30% MFI, ≤ 50% MFI)	0 % Affordable
Subtotal	61 DU	Low Income (> 50% MFI, < 80% MFI)	0 % Affordable
Office:	17.97 KSF		
Retail:	0 KSF		
Industrial:	0 KSF		

VMT REDUCTION STRATEGIES

Tier 1 - Project Characteristics

Increase Residential Density	
Existing Density (DU/Residential Acres in half-mile buffer)	8
With Project Density (DU/Residential Acres in half-mile buffer)	8
Increase Development Diversity	
Existing Activity Mix Index	0.45
With Project Activity Mix Index	0.45
Integrate Affordable and Below Market Rate	
Extremely Low Income BMR units	0 %
Very Low Income BMR units	0 %
Low Income BMR units	0 %
Increase Employment Density	
Existing Density (Jobs/Commercial Acres in half-mile buffer)	25
With Project Density (Jobs/Commercial Acres in half-mile buffer)	25

Tier 2 - Multimodal Infrastructure

Tier 3 - Parking

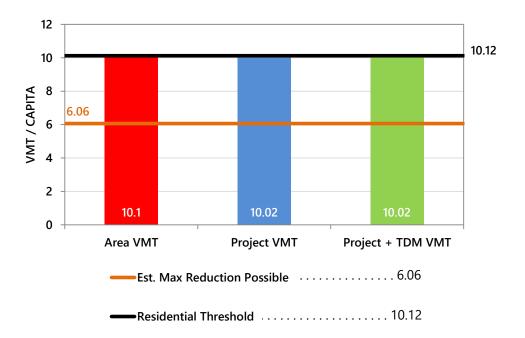
Limit Parking Supply	
Minimum Parking Required by Municipal Code	131 spaces
Total Parking Spaces Available to Employees	115 spaces
Does the surrounding street parking have RPP, meters, or time limits?	No

Tier 4 - TDM Programs

Ride-Sharing Programs	
Percent of Eligible Eemployees	15 %

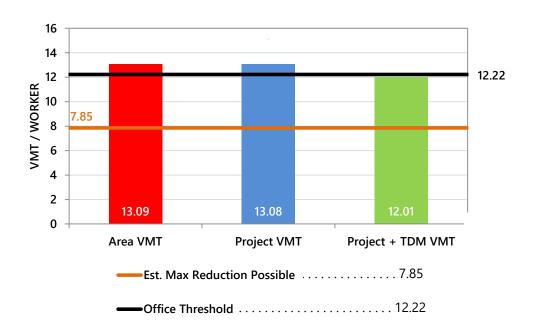
RESIDENTIAL ONLY

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



EMPLOYMENT ONLY

The tool estimates that the project would generate per non-industrial worker VMT below the City's threshold.



PROJECT:				
Name:	1073 Winchest	ter Mixed-Use	Tool Version:	2/29/2019
Location:	1073 South W	inchester Boulevard	Date:	5/18/2020
Parcel:	29925038	Parcel Type: Urban Low Transit		

Vehicles: 115

LAND USE:

Residential:		Percent of All Residential Units	
Single Family	0 DU	Extremely Low Income (< 30% MFI)	0 % Affordable
Multi Family	61 DU	Very Low Income (> 30% MFI, ≤ 50% MFI)	0 % Affordable
Subtotal	61 DU	Low Income (> 50% MFI, < 80% MFI)	0 % Affordable
Office:	17.97 KSF		
Retail:	0 KSF		
Industrial:	0 KSF		

Bicycles: 46

VMT REDUCTION STRATEGIES

Proposed Parking Spaces

Tier 1 - Project Characteristics

	ncrease Residential Density		
	Existing Density (DU/Residential Acres in half-mile buffer)	8	
	With Project Density (DU/Residential Acres in half-mile buffer)	8	
1	ncrease Development Diversity		
	Existing Activity Mix Index	0.45	
	With Project Activity Mix Index	0.45	
1	ntegrate Affordable and Below Market Rate		
	Extremely Low Income BMR units	0 %	
	Very Low Income BMR units	0 %	
	Low Income BMR units	0 %	
	ncrease Employment Density		
	Existing Density (Jobs/Commercial Acres in half-mile buffer)	25	
	With Project Density (Jobs/Commercial Acres in half-mile buffer)	25	
er	2 - Multimodal Infrastructure		

Tier 2 - Multimodal Infrastructure

Limit Parking Supply

Tier 3 - Parking

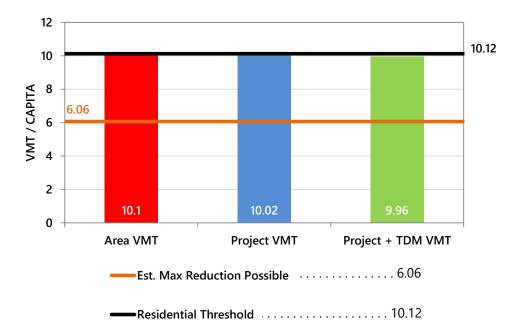
Minimum Parking Required by Municipal Code	131 spaces
Total Parking Spaces Available to Employees	•
Does the surrounding street parking have RPP, meters, or time limits?	-
—————	140

Tier 4 - TDM Programs

Car Sharing Program (In Coordination with SJ)	
Percent of Eligible Residents/Employees	100 %
Commute Trip Reduction Marketing/ Education Percent of Eligible Employees	100 %
Employee Parking "Cash-Out" (On Site Parking) Percent of Eligible Eemployees	60 %

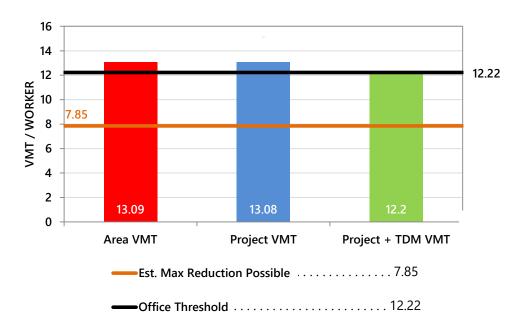
RESIDENTIAL ONLY

The tool estimates that the project would generate per capita VMT below the City's threshold. There are selected strategies that require coordination with the City of San Jose to implement.



EMPLOYMENT ONLY

The tool estimates that the project would generate per non-industrial worker VMT below the City's threshold. There are selected strategies that require coordination with the City of San Jose to implement.



Appendix B Traffic Counts

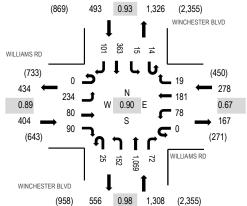


Location: 1 WINCHESTER BLVD & WILLIAMS RD AM

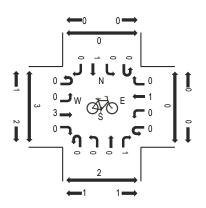
Date: Tuesday, November 19, 2019 Peak Hour: 07:45 AM - 08:45 AM

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

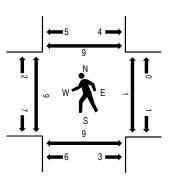




Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

	V	VILLIA	MS RD	1	W	/ILLIAN	/IS RD		WIN	CHEST	ER BL	VD	WIN	CHEST	TER BL	.VD						
Interval		Eastb	ound			Westb	ound			Northb	ound			South	ound			Rolling	Ped	destriar	n Crossi	ngs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
7:00 AM	0	25	9	8	0	3	15	2	8	20	187	4	2	4	48	22	357	2,030	0	0	1	1
7:15 AM	0	31	8	14	0	13	28	3	6	34	216	12	2	2	61	22	452	2,301	0	0	1	1
7:30 AM	0	34	30	17	0	24	43	12	7	32	215	18	2	6	74	20	534	2,439	6	0	1	4
7:45 AM	0	43	42	20	0	29	90	6	5	44	235	41	3	5	99	25	687	2,483	3	0	0	4
8:00 AM	0	50	9	31	0	31	47	10	8	44	267	13	2	3	93	20	628	2,287	4	0	2	2
8:15 AM	0	58	17	20	0	9	22	3	4	39	277	8	4	4	96	29	590		1	1	2	2
8:30 AM	0	83	12	19	0	9	22	0	8	25	280	10	5	3	75	27	578		1	0	5	1
8:45 AM	0	42	5	16	0	13	12	4	4	28	250	6	2	0	86	23	491		1	0	1	1

		East	bound			Westk	oound			North	oound			South	bound		
Vehicle Type	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	5	6
Lights	0	228	80	90	0	78	180	19	25	147	1,032	71	11	14	353	93	2,421
Mediums	0	6	0	0	0	0	1	0	0	5	27	1	2	1	10	3	56
Total	0	234	80	90	0	78	181	19	25	152	1,059	72	14	15	363	101	2,483

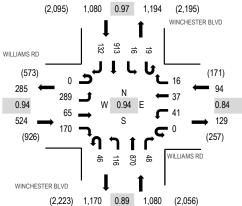


Location: 1 WINCHESTER BLVD & WILLIAMS RD PM

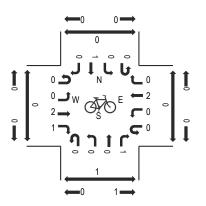
Date: Tuesday, November 19, 2019 Peak Hour: 05:00 PM - 06:00 PM

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

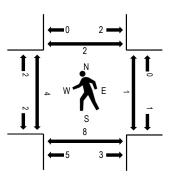
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

	V	VILLIA	MS RD)	W	ILLIAN	IS RD		WIN	CHEST	ER BL	.VD	WIN	CHES'	TER BL	.VD						
Interval		Eastb	ound			Westb	ound			Northb	ound			South	bound			Rolling	Ped	lestriar	n Crossi	ngs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
4:00 PM	0	44	12	38	0	1	7	0	11	20	179	12	2	1	214	41	582	2,470	3	2	3	0
4:15 PM	0	41	17	28	0	9	7	1	6	20	235	8	4	1	206	34	617	2,554	1	0	1	3
4:30 PM	0	60	19	34	0	6	10	4	8	31	174	12	7	5	187	31	588	2,624	0	0	9	5
4:45 PM	0	42	23	44	0	15	14	3	17	34	197	12	8	6	229	39	683	2,771	4	4	0	4
5:00 PM	0	66	15	42	0	11	11	6	9	27	197	11	6	3	229	33	666	2,778	3	1	3	1
5:15 PM	0	68	16	42	0	9	14	2	5	29	216	15	5	5	238	23	687		0	0	2	1
5:30 PM	0	74	21	41	0	12	4	6	15	34	240	13	5	5	226	39	735		1	0	0	0
5:45 PM	0	81	13	45	0	9	8	2	17	26	217	9	3	3	220	37	690		0	0	3	0

		East	bound			West	oound			Northb	ound			South	bound		
Vehicle Type	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	285	65	169	0	41	36	16	46	115	862	47	19	16	905	130	2,752
Mediums	0	4	0	1	0	0	1	0	0	1	8	1	0	0	8	2	26
Total	0	289	65	170	0	41	37	16	46	116	870	48	19	16	913	132	2,778



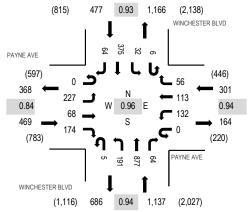
Location: 4 WINCHESTER BLVD & PAYNE AVE AM

Date: Tuesday, November 19, 2019

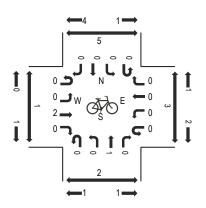
Peak Hour: 07:30 AM - 08:30 AM

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

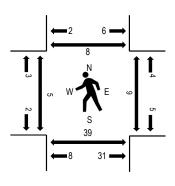
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

			PAYNE	E AVE		F	PAYNE	AVE		WIN	CHEST	ER BL	VD	WIN	CHEST	TER BL	.VD						
	Interval		Eastb	ound			Westb	ound			Northb	ound			South	ound			Rolling	Ped	lestriar	n Crossi	ngs
	Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
_	7:00 AM	0	24	4	26	0	8	14	10	0	17	132	1	3	3	45	12	299	1,851	1	4	4	0
	7:15 AM	0	41	6	28	0	8	16	13	1	38	168	3	0	4	61	14	401	2,171	2	0	3	1
	7:30 AM	0	54	10	48	0	34	28	8	1	41	194	13	0	5	87	20	543	2,384	0	2	5	2
	7:45 AM	0	71	20	48	0	35	27	18	2	40	222	13	0	2	97	13	608	2,374	2	2	7	4
	8:00 AM	0	58	23	37	0	29	32	17	2	46	229	18	4	19	89	16	619	2,220	2	4	15	1
	8:15 AM	0	44	15	41	0	34	26	13	0	64	232	20	2	6	102	15	614		1	1	12	1
	8:30 AM	0	51	9	45	0	13	20	13	0	34	255	6	4	2	59	22	533		3	3	6	0
	8:45 AM	0	40	10	30	0	10	8	12	6	19	204	6	2	2	90	15	454		6	1	1	2

		East	bound			Westk	ound			Northb	ound			South	bound		
Vehicle Type	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Lights	0	226	67	173	0	132	112	55	5	188	856	63	6	31	365	63	2,342
Mediums	0	1	1	1	0	0	1	1	0	3	21	1	0	1	10	0	41
Total	0	227	68	174	0	132	113	56	5	191	877	64	6	32	375	64	2,384

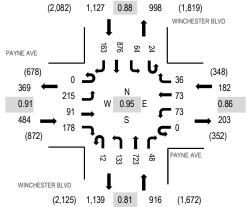


Location: 4 WINCHESTER BLVD & PAYNE AVE PM

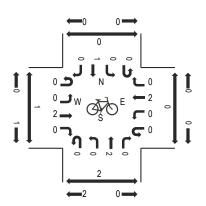
Date: Tuesday, November 19, 2019
Peak Hour: 05:00 PM - 06:00 PM

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

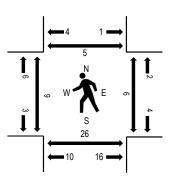
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

		PAYNI	E AVE		F	PAYNE	AVE		WIN	CHEST	ER BL	VD	WIN	CHES ⁻	TER BL	.VD						
Interval		Eastb	ound			Westb	ound			Northb	ound			Southl	ound			Rolling	Ped	destriar	n Crossi	ngs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
4:00 PM	0	23	16	37	0	21	16	12	2	20	133	5	5	8	186	51	535	2,265	1	1	6	1
4:15 PM	0	51	16	48	0	12	9	10	3	29	172	9	4	11	188	28	590	2,411	2	6	5	2
4:30 PM	0	40	18	33	0	14	14	17	2	33	145	11	5	13	193	28	566	2,458	6	2	1	4
4:45 PM	0	40	23	43	0	18	13	10	6	32	145	9	9	10	180	36	574	2,608	7	2	6	1
5:00 PM	0	44	25	40	0	19	16	9	4	31	162	9	9	19	246	48	681	2,709	6	3	7	0
5:15 PM	0	47	26	57	0	18	16	4	2	26	175	7	5	14	199	41	637		2	1	4	2
5:30 PM	0	57	19	36	0	18	22	13	2	41	221	18	6	13	217	33	716		1	2	9	2
5:45 PM	0	67	21	45	0	18	19	10	4	35	165	14	4	18	214	41	675		0	0	6	1

		East	bound			West	oound			Northb	ound			South	bound		
Vehicle Type	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	213	91	178	0	73	73	36	11	133	712	47	24	64	866	161	2,682
Mediums	0	2	0	0	0	0	0	0	1	0	11	1	0	0	10	2	27
Total	0	215	91	178	0	73	73	36	12	133	723	48	24	64	876	163	2,709



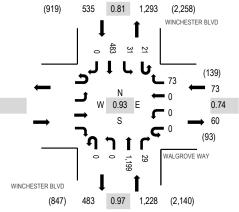
Location: 2 WINCHESTER BLVD & WALGROVE WAY AM

Date: Tuesday, November 19, 2019

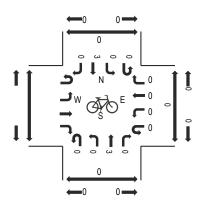
Peak Hour: 07:45 AM - 08:45 AM

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

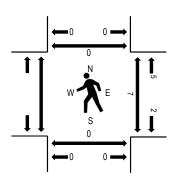
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

					WAL	_GRO	VE WA	Υ	WIN	CHEST	ER BL	VD	WIN	CHES ⁻	ΓER BL	.VD						
Interval		Eastb	ound		,	Westb	ound			Northb	ound			South	oound			Rolling	Ped	destriar	Crossi	ngs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
7:00 AM					0	0	0	21	0	0	168	1	2	1	57	0	250	1,455		1	0	0
7:15 AM					0	0	0	19	0	0	233	5	1	7	85	0	350	1,697		2	0	0
7:30 AM					0	0	0	17	0	0	245	14	3	3	108	0	390	1,794		0	0	0
7:45 AM					0	0	0	29	0	0	273	19	3	10	131	0	465	1,836		2	0	0
8:00 AM					0	0	0	16	0	0	302	5	7	10	152	0	492	1,743		0	0	0
8:15 AM					0	0	0	15	0	0	310	3	6	7	106	0	447			4	0	0
8:30 AM					0	0	0	13	0	0	314	2	5	4	94	0	432			1	0	0
8:45 AM					0	0	0	9	0	0	246	0	1	2	114	0	372			0	1	0

	East	bound			Westb	ound			North	oound			South	bound		
Vehicle Type	U-Turn Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks				0	0	0	0	0	0	2	0	0	0	1	0	3
Lights				0	0	0	69	0	0	1,175	28	21	31	473	0	1,797
Mediums				0	0	0	4	0	0	22	1	0	0	9	0	36
Total				0	0	0	73	0	0	1,199	29	21	31	483	0	1,836

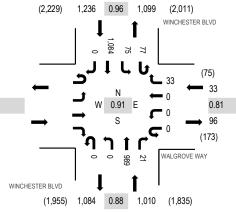


Location: 2 WINCHESTER BLVD & WALGROVE WAY PM

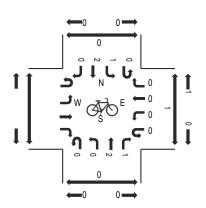
Date: Tuesday, November 19, 2019 **Peak Hour:** 05:00 PM - 06:00 PM

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

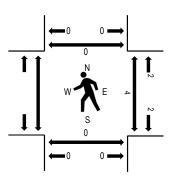
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

					WAI	_GRO\	/E WA	·Υ	WIN	CHEST	ER BL	VD	WIN	CHEST	ΓER BL	.VD						
Interval		Eastb	ound			Westb	ound			Northb	ound			South	oound			Rolling	Ped	lestriar	Crossi	ngs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
4:00 PM					0	0	0	11	0	0	178	6	19	15	205	0	434	1,860		0	0	0
4:15 PM					0	0	0	10	0	0	222	5	18	8	218	0	481	1,976		0	0	0
4:30 PM					0	0	0	8	0	0	208	8	10	10	213	0	457	2,029		2	0	0
4:45 PM					0	0	0	13	0	0	192	6	23	19	235	0	488	2,195		5	1	0
5:00 PM					0	0	0	7	0	0	223	4	21	18	277	0	550	2,279		2	0	0
5:15 PM					0	0	0	9	0	0	238	7	15	17	248	0	534			2	0	0
5:30 PM					0	0	0	13	0	0	283	5	16	24	282	0	623			0	0	0
5:45 PM					0	0	0	4	0	0	245	5	25	16	277	0	572			0	0	0

	Eas	tbound			Westk	oound			Northb	ound			South	nbound		
Vehicle Type	U-Turn Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks				0	0	0	0	0	0	0	0	0	0	0	0	0
Lights				0	0	0	33	0	0	976	21	76	75	1,072	0	2,253
Mediums				0	0	0	0	0	0	13	0	1	0	12	0	26
Total				0	0	0	33	0	0	989	21	77	75	1,084	0	2,279

Existing Reassignment Due to Winchester Boulevard Improvement



Location: 1 WINCHESTER BLVD & COLONIAL WAY AM

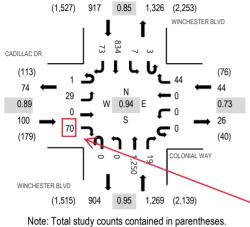
Date and Start Time: Tuesday, April 24, 2018

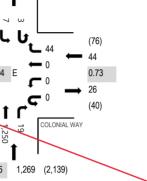
Peak Hour: 07:45 AM - 08:45 AM

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

Peak Hour - All Vehicles

Peak Hour - Pedestrians/Bicycles in Crosswalk





Only 15 of 70 vehicles make a U-turn and go NB on Winchester

Traffic Counts																						
	C	CADILL	AC DF	?	C	OLONIA	L WAY		WIN	CHEST	ER BL	VD	WIN	CHES'	TER BL	.VD						
Interval		Eastb	ound			Westb	ound			Northb	ound			South	bound			Rolling	Ped	destrair	n Crossii	ngs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru F	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
7:00 AM	0	6	0	12	0	0	0	7	0	0	195	1	0	1	99	14	335	1,792	8	1	0	1
7:15 AM	0	7	0	20	0	0	0	6	0	0	223	2	0	2	135	13	408	2,076	4	3	1	0
7:30 AM	0	10	0	10	0	0	0	8	0	0	226	1	1	0	183	4	443	2,259	10	5	1	2
7:45 AM	0	11	0	19	0	0	0	8	0	0	288	5	0	4	246	25	606	2,330	5	1	0	1
8:00 AM	0	6	0	24	0	0	0	16	0	0	323	6	3	1	224	16	619	2,129	10	1	0	1
8:15 AM	0	4	0	17	0	0	0	9	0	0	332	3	0	1	211	14	591		8	3	0	0
8:30 AM	1	8	0	10	0	0	0	11	0	0	307	5	0	1	153	18	514		4	3	0	1
8:45 AM	0	10	0	4	0	0	0	11	0	0	217	5	0	2	148	8	405		7	2	0	0

		East	bound			West	oound			North	bound			South	bound		
Vehicle Type	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Lights	1	28	0	68	0	0	0	44	0	0	1,226	19	3	7	817	71	2,284
Mediums	0	1	0	2	0	0	0	0	0	0	23	0	0	0	17	2	45
Total	1	29	0	70	0	0	0	44	0	0	1,250	19	3	7	834	73	2,330



Location: 1 WINCHESTER BLVD & COLONIAL WAY PM

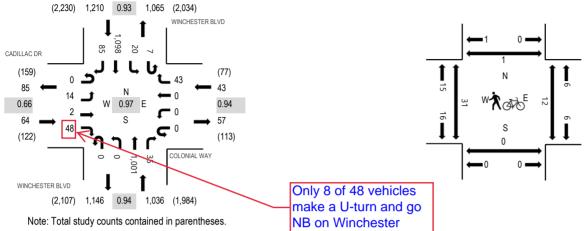
Date and Start Time: Tuesday, April 24, 2018

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

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

Peak Hour - All Vehicles

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

		CADILL	AC DF	?	CC	DLONIA	L WAY		WIN	CHEST	ER BL	VD	WIN	CHES'	TER BL	.VD						
Interval		Eastb	ound			Westb	ound			Northb	ound			South	bound			Rolling	Ped	estrair	n Crossii	ngs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru F	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
4:00 PM	0	2	1	6	0	0	0	4	0	0	244	7	2	2	255	17	540	2,156	6	3	0	0
4:15 PM	0	7	0	5	0	0	0	9	0	0	211	14	2	6	216	25	495	2,222	13	4	0	0
4:30 PM	0	6	1	18	0	0	0	12	0	0	240	9	0	8	218	17	529	2,302	8	1	0	0
4:45 PM	0	5	1	14	0	0	0	12	0	0	223	11	1	3	307	15	592	2,353	7	3	0	0
5:00 PM	0	2	0	6	0	0	0	11	0	0	269	4	3	4	284	23	606	2,257	9	4	0	0
5:15 PM	0	0	0	11	0	0	0	10	0	0	264	12	3	7	248	20	575		0	2	0	0
5:30 PM	0	7	1	17	0	0	0	10	0	0	245	8	0	6	259	27	580		12	1	0	1
5:45 PM	0	2	0	10	0	0	0	9	0	0	218	5	1	3	233	15	496		10	0	0	0

		East	bound			Westh	oound			North	bound			Sout	hbound		
Vehicle Type	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Lights	0	14	2	48	0	0	0	42	0	0	994	34	7	20	1,087	85	2,333
Mediums	0	0	0	0	0	0	0	1	0	0	7	1	0	0	10	0	19
Total	0	14	2	48	0	0	0	43	0	0	1,001	35	7	20	1,098	85	2,353

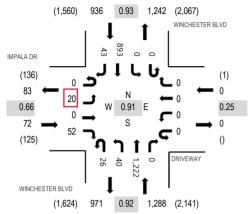


Location: 2 WINCHESTER BLVD & DRIVEWAY AM **Date and Start Time:** Tuesday, April 24, 2018

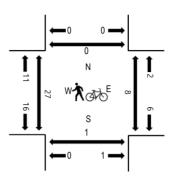
Peak Hour: 07:45 AM - 08:45 AM

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

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

		IMPAL	A DR		1	DRIVE	WAY		WIN	CHEST	ER BL	VD	WIN	CHEST	TER BL	VD						
Interval		Eastb	ound			Westb	ound			Northb	ound			South	ound			Rolling	Ped	destrair	n Crossir	ngs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
7:00 AM	0	4	0	3	0	0	0	1	3	7	150	0	0	0	113	3	284	1,679	7	3	0	0
7:15 AM	0	4	0	10	0	0	0	0	5	8	222	0	0	0	145	5	399	2,023	4	1	0	0
7:30 AM	0	7	0	10	0	0	0	0	5	8	218	0	0	0	190	6	444	2,221	7	5	0	0
7:45 AM	0	10	0	19	0	0	0	0	10	5	251	0	0	0	242	15	552	2,296	6	3	0	0
8:00 AM	0	5	0	12	0	0	0	0	7	8	334	0	0	0	255	7	628	2,148	6	2	0	0
8:15 AM	0	3	0	7	0	0	0	0	5	13	309	0	0	0	248	12	597		7	3	1	0
8:30 AM	0	2	0	14	0	0	0	0	4	14	328	0	0	0	148	9	519		7	0	0	0
8:45 AM	0	6	0	9	0	0	0	0	9	5	213	0	0	0	151	11	404		4	1	1	0

		East	bound			Westh	oound			North	bound			South	bound		
Vehicle Type	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4
Lights	0	20	0	52	0	0	0	0	26	39	1,200	0	0	0	875	41	2,253
Mediums	0	0	0	0	0	0	0	0	0	1	21	0	0	0	15	2	39
Total	0	20	0	52	0	0	0	0	26	40	1,222	0	0	0	893	43	2,296

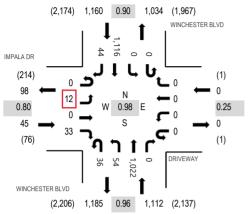


Location: 2 WINCHESTER BLVD & DRIVEWAY PM Date and Start Time: Tuesday, April 24, 2018

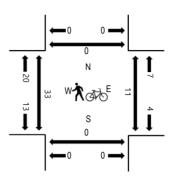
Peak Hour: 04:45 PM - 05:45 PM

Peak 15-Minutes: 04:45 PM - 05:00 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

		IMPAL	A DR			DRIVE	WAY		WIN	CHEST	ER BL	VD	WIN	CHES ⁻	TER BL	.VD						
Interval		Eastb	ound			Westb	ound			Northb	ound			South	oound			Rolling	Ped	lestrair	n Crossi	ngs
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
 4:00 PM	0	0	0	6	0	0	0	0	9	18	228	0	0	0	272	16	549	2,128	3	3	0	0
4:15 PM	0	2	0	3	0	0	0	1	4	15	210	0	1	1	203	9	449	2,167	10	1	0	0
4:30 PM	0	1	0	8	0	0	0	0	8	20	259	0	0	0	230	11	537	2,307	6	4	0	0
4:45 PM	0	3	0	8	0	0	0	0	6	19	234	0	0	0	304	19	593	2,317	7	4	0	0
5:00 PM	0	2	0	12	0	0	0	0	14	15	256	0	0	0	283	6	588	2,260	12	0	0	0
5:15 PM	0	3	0	7	0	0	0	0	8	9	262	0	0	0	290	10	589		5	5	0	0
5:30 PM	0	4	0	6	0	0	0	0	8	11	270	0	0	0	239	9	547		5	2	0	0
5:45 PM	0	2	0	9	0	0	0	0	8	17	229	0	0	0	261	10	536		17	0	1	0

		East	bound			Westh	oound			North	bound			South	nbound		
Vehicle Type	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Lights	0	12	0	33	0	0	0	0	36	54	1,014	0	0	0	1,103	44	2,296
Mediums	0	0	0	0	0	0	0	0	0	0	8	0	0	0	12	0	20
Total	0	12	0	33	0	0	0	0	36	54	1,022	0	0	0	1,116	44	2,317



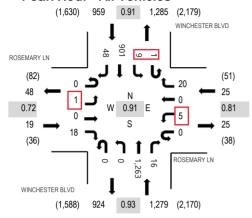
Location: 3 WINCHESTER BLVD & ROSEMARY LN AM

Date and Start Time: Tuesday, April 24, 2018

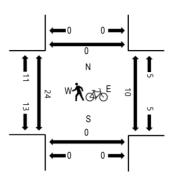
Peak Hour: 07:45 AM - 08:45 AM

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

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

		R	OSEM	ARY LI	N	RC	SEMA	RY LN		WIN	CHEST	ER BL	٧D	WIN	CHES ⁻	TER BL	.VD						
	Interval		Eastb	ound			Westb	ound			Northb	ound			South	oound			Rolling	Ped	destrair	n Crossi	ngs
	Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru R	ight	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
-	7:00 AM	1	0	0	3	0	6	0	1	0	0	169	2	0	1	111	3	297	1,748	3	0	0	0
	7:15 AM	0	0	0	5	0	3	0	5	0	0	243	2	0	0	157	8	423	2,078	7	1	0	0
	7:30 AM	0	0	0	5	0	1	0	2	0	0	226	4	0	2	209	15	464	2,237	4	0	0	1
	7:45 AM	0	0	0	5	0	2	0	2	0	0	271	5	0	1	254	24	564	2,282	4	2	0	0
	8:00 AM	0	0	0	8	0	0	0	7	0	0	343	1	0	3	252	13	627	2,139	7	1	0	0
	8:15 AM	0	1	0	3	0	1	0	8	0	0	327	2	0	3	234	3	582		3	3	0	0
	8:30 AM	0	0	0	2	0	2	0	3	0	0	322	8	1	2	161	8	509		6	1	0	0
	8:45 AM	0	0	0	3	0	4	0	4	0	0	244	1	0	1	157	7	421		2	1	0	0

		East	bound			Westh	oound			North	bound			South	bound		
Vehicle Type	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3
Lights	0	0	0	18	0	5	0	20	0	0	1,239	16	1	9	880	48	2,236
Mediums	0	1	0	0	0	0	0	0	0	0	23	0	0	0	19	0	43
Total	0	1	0	18	0	5	0	20	0	0	1,263	16	1	9	901	48	2,282



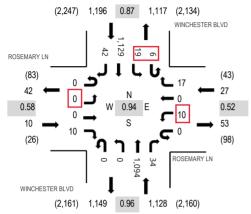
Location: 3 WINCHESTER BLVD & ROSEMARY LN PM

Date and Start Time: Tuesday, April 24, 2018

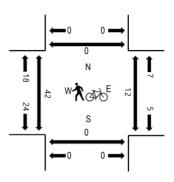
Peak Hour: 04:45 PM - 05:45 PM

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

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk

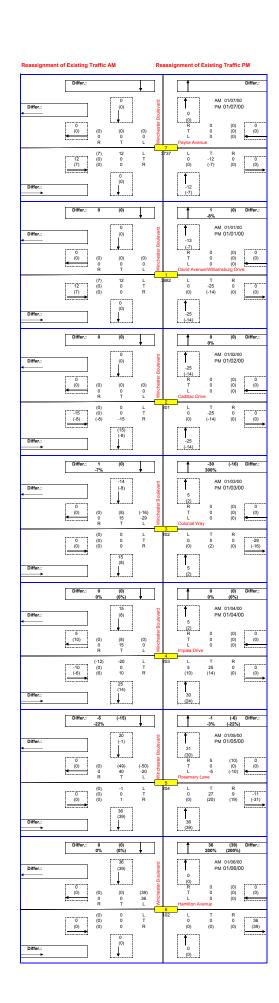


Note: Total study counts contained in parentheses.

Traffic Counts

	R	OSEM.	ARY LI	V	RO)SEMA	ARY LN	l	WIN	CHEST	ER BL	VD	WIN	CHES'	TER BL	.VD						
Interval		Eastb	ound			Westb	ound			Northb	ound			South	bound			Rolling	Ped	lestrair	n Crossi	ings
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	Hour	West	East	South	North
4:00 PM	0	0	0	5	0	0	0	3	0	0	245	8	0	4	270	11	546	2,155	3	3	0	1
4:15 PM	0	0	0	2	0	2	0	4	0	0	241	10	0	4	197	9	469	2,238	6	0	0	0
4:30 PM	0	0	0	3	0	0	0	1	0	0	272	5	1	2	259	7	550	2,356	2	6	0	0
4:45 PM	0	0	0	2	0	1	0	3	0	0	269	8	2	3	296	6	590	2,361	10	4	0	0
5:00 PM	0	0	0	1	0	5	0	9	0	0	263	6	3	7	319	16	629	2,321	12	1	0	0
5:15 PM	0	0	0	4	0	2	0	4	0	0	289	6	0	6	268	8	587		3	5	0	0
5:30 PM	0	0	0	3	0	2	0	1	0	0	273	14	1	3	246	12	555		10	2	0	0
5:45 PM	0	1	0	5	0	2	0	4	0	0	245	6	0	6	267	14	550		16	0	0	0

		East	bound			Westh	oound			North	bound			Sout	hbound		
Vehicle Type	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	10	0	9	0	17	0	0	1,086	34	6	18	1,117	42	2,339
Mediums	0	0	0	0	0	1	0	0	0	0	8	0	0	1	12	0	22
Total	0	0	0	10	0	10	0	17	0	0	1,094	34	6	19	1,129	42	2,361



Appendix C Approved Trips Inventory

AM PROJECT TRIPS

Intersection of : Payne Av & S Wir	nchester Bl												
Traffix Node Number : 3737													
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
PDC12-009 (3-06815) Retail/Commercial STEVENS CREEK & WINCHESTER (SE/C) SANTANA ROW		0	16	0	0	3	1	3	0	0	0	0	2
PDC14-040 (3-01388) LEGACY 863-917 WINCHESTER BLVD WINCHESTER RESERVE		0	10	0	0	35	0	0	0	0	0	0	0
PDC14-068 (3-10478) Retail/Commercial 3161 OLSEN DRIVE SANTANA WEST		0	62	0	1	7	2	13	0	0	0	0	6
PDC97-036 RET (3-06815) Retail/Commercial STEVENS CREEK & WINCHESTER (SE/C) SANTANA ROW		0	1	0	0	0	0	0	0	0	0	0	0
	TOTAL:	0	89	0	1	45	3	16	0	0	0	0	8

	LEFT	THRU	RIGHT
NORTH	1	45	3
EAST	0	0	8
SOUTH	0	89	0
WEST	16	0	0

PM PROJECT TRIPS

Intersection of : Payne Av & S Win	chester Bl												
Traffix Node Number: 3737													
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
PDC12-009 (3-06815) Retail/Commercial STEVENS CREEK & WINCHESTER (SE/C) SANTANA ROW		0	9	0	2	15	3	2	0	0	0	0	1
PDC14-040 (3-01388) LEGACY 863-917 WINCHESTER BLVD WINCHESTER RESERVE		0	40	0	1	23	1	1	0	0	0	0	1
PDC14-068 (3-10478) Retail/Commercial 3161 OLSEN DRIVE SANTANA WEST		0	11	0	6	55	11	3	0	0	0	0	1
PDC97-036 RET (3-06815) Retail/Commercial STEVENS CREEK & WINCHESTER (SE/C) SANTANA ROW		0	3	0	0	3	1	1	0	0	0	0	0
	TOTAL:	0	63	0	9	96	16	7	0	0	0	0	3

	LEFT	THRU	RIGHT
NORTH	9	96	16
EAST	0	0	3
SOUTH	0	63	0
WEST	7	0	0

AM PROJECT TRIPS

Intersection of : Williams Rd & S	Winchester	Bl											
Traffix Node Number : 3836													
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
PDC12-009 (3-06815) Retail/Commercial STEVENS CREEK & WINCHESTER (SE/C) SANTANA ROW		0	21	0	0	4	1	3	0	0	0	0	2
PDC14-040 (3-01388) LEGACY 863-917 WINCHESTER BLVD WINCHESTER RESERVE		10	0	0	50	20	5	65	9	16	0	4	0
PDC14-068 (3-10478) Retail/Commercial 3161 OLSEN DRIVE SANTANA WEST		0	80	0	1	10	2	13	0	0	0	0	6
PDC97-036 RET (3-06815) Retail/Commercial STEVENS CREEK & WINCHESTER (SE/C) SANTANA ROW		0	1	0	0	1	0	0	0	0	0	0	0
	TOTAL:	10	102	0	51	35	8	81	9	16	0	4	8

	LEFT	THRU	RIGHT
NORTH	51	35	8
EAST	0	4	8
SOUTH	10	102	0
WEST	81	9	16

PM PROJECT TRIPS 12/13/2019

Intersection of : Williams Rd & S	Winchester	Bl											
Traffix Node Number : 3836													
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
PDC12-009 (3-06815) Retail/Commercial STEVENS CREEK & WINCHESTER (SE/C) SANTANA ROW		0	12	0	2	20	3	2	0	0	0	0	1
PDC14-040 (3-01388) LEGACY 863-917 WINCHESTER BLVD WINCHESTER RESERVE		41	0	0	26	10	19	38	6	14	0	17	0
PDC14-068 (3-10478) Retail/Commercial 3161 OLSEN DRIVE SANTANA WEST		0	14	0	6	72	11	3	0	0	0	0	1
PDC97-036 RET (3-06815) Retail/Commercial STEVENS CREEK & WINCHESTER (SE/C) SANTANA ROW		0	4	0	0	4	1	1	0	0	0	0	0
	TOTAL:	41	30	0	34	106	34	44	6	14	0	17	2

	LEFT	THRU	RIGHT
NORTH	34	106	34
EAST	0	17	2
SOUTH	41	30	0
WEST	44	6	14

City of Campbell Approved Projects (Provided by the City of Campbell on December 3, 2019)

#	Project Name	Location	Project Description
1	95 East Hamilton Avenue	95 East Hamilton Avenue	5,800 s.f. office building
2	Creekside Center	675/705 Creekside Way	172,000 s.f. of office space (office use is under construction;
			hotel use is already occupied)
3	Pruneyard Expansion	1875/1901 South Bascom Avenue	100,000 s.f. office building and 23,000 sf of retail space
			(Phase 2 - Building 'R5' (5,000 s.f. has been completed. Most of the center is occupied.
4	Opa Expansion	276 East Campbell Avenue	10,819 s.f. of commercial and office
5	Springbridge	1625 West Campbell Avenue	commerical day care center capacity increase from 60 to 100 children
6	Cresleigh Homes	540/558/566 East Campell Ave and 24/34 Dillon Avenue	6,512 s.f. of ground level commercial space and 59 condos.
7	Trojan Storage	750 East McGlincy Lane	156,000 s.f. self-storage facility
8	Chick-fil-A	2060 South Bascom Avenue	5,000 s.f. of fast-food with driveway-through window

Appendix D Volume Summary

Intersection Number: 1
Traffix Node Number: 3836

Intersection Name: Winchester Boulevard and Williams Road

Peak Hour: AM
Count Date: 11/19/19

					Мс	vemen	nts						
_	Nor	th Appro	oach	Eas	t Appro	oach	Sou	th Appr	oach	Wes	t Appr	oach	
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	101	363	29	19	181	78	72	1059	177	90	80	234	2483
San Jose Approved Trips													
ATI	8	35	51	8	4	0	0	102	10	16	9	81	324
Valley Fair Expansion	2	10	0	0	0	0	0	16	0	0	0	3	31
Campbell Approved Trips	0	13	0	0	0	0	0	7	2	3	0	0	25
Total Approved Trips	10	58	51	8	4	0	0	125	12	19	9	84	380
Reassignment of Existing Traffic due to Winchester Blvd Improvements	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Conditions	111	421	80	27	185	78	72	1184	189	109	89	318	2863
Project Trips	0	7	0	0	0	1	0	7	8	5	0	0	28
Background Plus Project Conditions	111	428	80	27	185	79	72	1191	197	114	89	318	2891

Intersection Number: 2
Traffix Node Number: 3737

Intersection Name: Winchester Boulevard and Payne Avenue

Peak Hour: AM
Count Date: 11/19/19

					М	ovement	S						
_	No	rth Appr	oach	Eas	t Appro	oach	Sou	th Appı	oach	Wes	t Appı	roach	
Scenario:	RT	TH	LT	RT	ŤĤ	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	64	375	38	56	113	132	64	877	196	174	68	227	2384
San Jose Approved Trips													
ATI	3	45	1	8	0	0	0	89	0	0	0	16	162
Valley Fair Expansion	2	8	0	0	0	0	0	14	0	0	0	2	26
Campbell Approved Trips	0	16	0	0	0	0	0	9	2	4	0	0	31
Total Approved Trips	5	69	1	8	0	0	0	112	2	4	0	18	219
Reassignment of Existing Traffic due to Winchester Blvd Improvements	0	0	0	0	0	0	0	-12	0	0	0	12	0
Background Conditions	69	444	39	64	113	132	64	977	198	178	68	257	2603
Project Trips	3	5	0	1	0	0	0	7	0	0	0	0	16
Background Plus Project Conditions	72	449	39	65	113	132	64	984	198	178	68	257	2619

Intersection Number: 3
Traffix Node Number: 4034

Intersection Name: Winchester Boulevard and Walgrove Way

Peak Hour: AM
Count Date: 11/19/19

					Мс	vemen	ts						
_	No	rth Appr	oach	East	t Appro	oach	Sou	th Appro	oach	Wes	t Appr	oach	
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	0	483	52	73	0	0	29	1199	0	0	0	0	1836
San Jose Approved Trips													
ATI	0	49	0	0	0	0	0	113	0	0	0	0	162
Valley Fair Expansion	0	10	0	0	0	0	0	16	0	0	0	0	26
Campbell Approved Trips	0	16	0	0	0	0	0	9	0	0	0	0	25
Total Approved Trips	0	75	0	0	0	0	0	138	0	0	0	0	213
Reassignment of Existing Traffic due to Winchester Blvd Improvements	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Conditions	0	558	52	73	0	0	29	1337	0	0	0	0	2049
Project Trips	0	8	8	0	0	0	0	8	0	0	0	0	24
Background Plus Project Conditions	0	566	60	73	0	0	29	1345	0	0	0	0	2073

Intersection Number: 1
Traffix Node Number: 3836

Intersection Name: Winchester Boulevard and Williams Road

Peak Hour: PM
Count Date: 11/19/19

					Мо	vement	is						
_	Noi	rth Appro	oach	Eas	t Appro	oach	Sou	th Appi	roach	Wes	t Appı	roach	
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	132	913	35	16	37	41	48	870	162	170	65	289	2778
San Jose Approved Trips													
ATI	34	106	34	2	17	0	0	30	41	14	6	44	328
Valley Fair Expansion	9	50	0	0	0	0	0	46	0	0	0	8	113
Campbell Approved Trips	0	15	0	0	0	0	0	15	4	4	0	0	38
Total Approved Trips	43	171	34	2	17	0	0	91	45	18	6	52	479
Reassignment of Existing Traffic due to Winchester Blvd Improvements	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Conditions	175	1084	69	18	54	41	48	961	207	188	71	341	3257
Project Trips	0	6	0	0	0	0	1	11	7	4	0	0	29
Background Plus Project Conditions	175	1090	69	18	54	41	49	972	214	192	71	341	3286

Intersection Number: 2
Traffix Node Number: 3737

Intersection Name: Winchester Boulevard and Payne Avenue

Peak Hour: PM Count Date: 11/19/19

					Мо	ovement	is						
_	Noi	rth Appro	oach	Eas	t Appro	oach	Sou	th Appı	roach	Wes	t Appı	roach	
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	163	876	88	36	73	73	48	723	145	178	91	215	2709
San Jose Approved Trips													
ATI	16	96	9	3	0	0	0	63	0	0	0	7	194
Valley Fair Expansion	8	42	0	0	0	0	0	39	0	0	0	7	96
Campbell Approved Trips	0	19	0	0	0	0	0	19	5	5	0	0	48
Total Approved Trips	24	157	9	3	0	0	0	121	5	5	0	14	338
Reassignment of Existing Traffic due to Winchester Blvd Improvements	0	0	0	0	0	0	0	-7	0	0	0	7	0
Background Conditions	187	1033	97	39	73	73	48	837	150	183	91	236	3047
Project Trips	4	8	1	0	0	0	0	6	0	0	0	0	19
Background Plus Project Conditions	191	1041	98	39	73	73	48	843	150	183	91	236	3066

Intersection Number: 3
Traffix Node Number: 4034

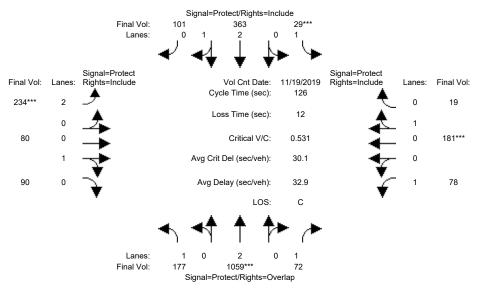
Intersection Name: Winchester Boulevard and Walgrove Way

Peak Hour: PM
Count Date: 11/19/19

					Мс	vement	ts						
_	No	rth Appr	oach	Eas	t Appro	oach	Sou	th Appro	oach	Wes	t Appr	oach	
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	0	1084	152	33	0	0	21	989	0	0	0	0	2279
San Jose Approved Trips													
ATI	0	121	0	0	0	0	0	73	0	0	0	0	194
Valley Fair Expansion	0	50	0	0	0	0	0	46	0	0	0	0	96
Campbell Approved Trips	0	19	0	0	0	0	0	19	0	0	0	0	38
Total Approved Trips	0	190	0	0	0	0	0	138	0	0	0	0	328
Reassignment of Existing Traffic due to Winchester Blvd Improvements	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Conditions	0	1274	152	33	0	0	21	1127	0	0	0	0	2607
Project Trips	0	13	12	0	0	0	0	6	0	0	0	0	31
Background Plus Project Conditions	0	1287	164	33	0	0	21	1133	0	0	0	0	2638

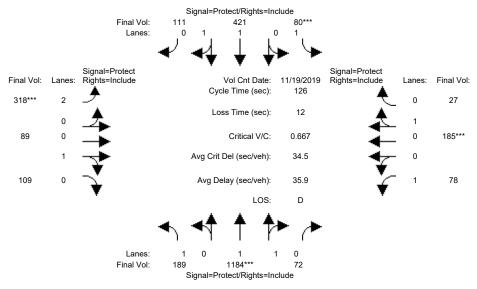
Appendix EIntersection Level of Service Calculations

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



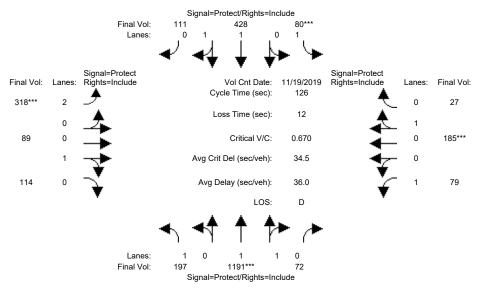
Approach:	No	rth Bo	und	Sot	uth Bo	ound	E	ast Bo	und			
Movement:										L -		
		10			10			10		7		
Y+R:		4.0				4.0			4.0			4.0
Volume Module	e: >>	Count	Date:	19 No	ov 201	.9 <<						
Base Vol:		1059	72	29	363	101	234	80	90	78	181	19
Growth Adj:				1.00		1.00		1.00	1.00	1.00		1.00
Initial Bse:			. –	29		101	234	80	90	78	181	19
Added Vol:		0	0	0		0	0	0	0	0	0	0
ATI:	-			0		0	0		0	0	0	0
Initial Fut:				29		101	234		90	78		19
User Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:			72	29	363	101	234	80	90	78	181	19
	0	0	0	0		0	0	-	0		0	0
Reduced Vol:			72	29		101	234		90	78		19
PCE Adj: MLF Adj:	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00
				1.00				1.00	1.00			1.00
FinalVolume:				29		101				78		19
Saturation F												
		1900		1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:				0.92		0.95		0.95	0.95	0.92		0.95
Lanes:				1.00		0.68		0.47	0.53	1.00		0.09
Final Sat.:						1219			953	1750		171
Capacity Anal	lysis	Modul	e:									
Vol/Sat:			0.04					0.09	0.09	0.04	0.11	0.11
Crit Moves:		****		****			***				***	
Green Time:	39.2	64.3	80.1	7.0	32.1	32.1	17.1	26.9	26.9	15.8	25.6	25.6
Volume/Cap:			0.06	0.30	0.33	0.33	0.55	0.44	0.44	0.35	0.55	0.55
Delay/Veh:			8.7	58.9		38.3		43.8	43.8	51.4		46.7
User DelAdj:				1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:								43.8	43.8	51.4		46.7
LOS by Move:			A				D			D		D
HCM2k95thQ:				2		9			12	6	15	15
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•				

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



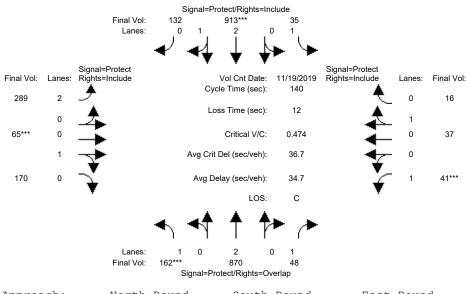
Approach: North Bo	- R L	- T -	R	L -	- T	- R	L -	Т	- R
Min. Green: 7 10		10			10			10	
	4.0 4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count	Date: 19 N	ov 2019	<<						
Base Vol: 177 1059	72 29	363	101	234	80	90	78	181	19
Growth Adj: 1.00 1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse: 177 1059	72 29		101	234	80	90	78	181	19
Added Vol: 0 0	0 0			0	0	0	0	0	0
	0 51			84				4	8
	72 80		111	318	89	109	78	185	27
User Adj: 1.00 1.00			1.00	1.00		1.00	1.00		1.00
PHF Adj: 1.00 1.00			1.00	1.00		1.00	1.00		1.00
PHF Volume: 189 1184	72 80		111	318	89	109	78	185	27
Reduct Vol: 0 0		-	0	0	0	0	-	0	0
Reduced Vol: 189 1184	72 80		111	318	89	109	78	185	27
			1.00		1.00	1.00	1.00		1.00
MLF Adj: 1.00 1.00				1.00		1.00			1.00
FinalVolume: 189 1184		421		318			78		27
	1 1								
Saturation Flow Module:		1000	1000	1000	1000	1000	1000	1000	1000
			1900		1900	1900	1900		1900
2			0.95		0.95	0.95	0.92		0.95
			0.43	2.00		0.55	1.00		
Final Sat.: 1750 3488		2927				991	1750		229
Capacity Analysis Modul									
Vol/Sat: 0.11 0.34		0 1/	0 1/	0 10	0 11	0 11	0.04	0 12	0.12
	****			****	0.11	0.11		****	0.12
Green Time: 31.2 64.1		41.5		10 1	27.4	27.4	13.9		22.2
Volume/Cap: 0.44 0.67			0.44		0.51	0.51	0.41		0.67
Delay/Veh: 40.7 24.0			33.3		44.4	44.4	53.6		53.8
2			1.00	1.00		1.00	1.00		1.00
			33.3	54.1		44.4	53.6		53.8
LOS by Move: D C				D			D D		D
HCM2k95thQ: 13 32	32 7	15	15	15			7	17	17
Note: Queue reported is						_			

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



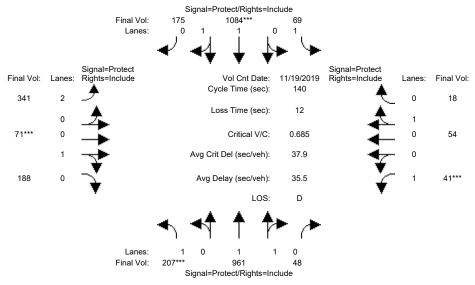
Approach: Movement:												
		10			10			10		7		
Y+R:		4.0				4.0					4.0	
Volume Module				•								
Base Vol:	177	1059	72	29	363	101	234	80	90	78	181	19
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	177	1059	72	29	363	101	234	80	90	78	181	19
Added Vol:	8	7	0	0	7	0	0	0	5	1	0	0
ATI:	12		0	51	58	10	84	9	19	0	4	8
Initial Fut:	197	1191	72	80	428	111	318	89	114	79	185	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
PHF Volume:	197		72	80	428	111	318	89	114	79	185	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	197	1191	72	80	428	111	318	89	114	79	185	27
PCE Adj:	1.00	1.00	1.00	1.00		1.00		1.00	1.00			1.00
MLF Adj:					1.00		1.00		1.00		1.00	
FinalVolume:					428					79		27
Saturation F												
Sat/Lane:		1900		1900		1900		1900	1900		1900	
Adjustment:				0.92		0.95		0.95	0.95	0.92		0.95
Lanes:			0.12			0.42		0.44	0.56		0.87	
Final Sat.:						762		789	1011			229
Capacity Anal Vol/Sat:				0 0 5	0 1E	0.15	0 10	A 11	0.11	0 0 5	0.12	0.12
Crit Moves:					0.13		****	0.11	0.11	0.05	****	0.12
Green Time:				8.6		41.1		27.6	27.6	13.6		22.2
Volume/Cap:				0.67		0.45		0.52	0.52	0.42		0.67
Delay/Veh:				71.0		33.8		44.5	44.5	54.0		54.0
User DelAdi:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:				71.0		33.8		44.5	44.5	54.0		54.0
LOS by Move:				71.0 E			J4.2		D	D		D D
HCM2k95thQ:				7		15	15			7		17
Note: Queue									-1	,	± '	± /
	-1					, I- 2T		-				

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



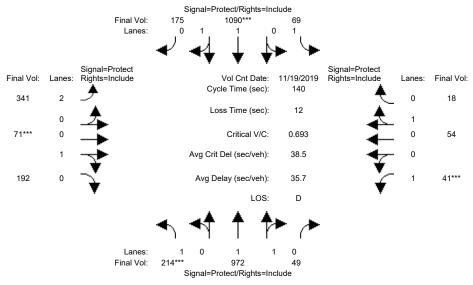
Approach: Movement:		North Bound L - T - R							und - R		est Bo	
Min Coope										•		
Min. Green: Y+R:	4.0	10 4.0	4.0		10 4.0	4.0		10 4.0		4.0	10 4.0	10 4.0
Volume Module												
Base Vol:	162	870	48	35	913	132	289		170	41	37	16
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:		870	48	35	913	132	289	65	170	41	37	16
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0		0	0	0	0	0	0	0	0	0	0
Initial Fut:			48	35	913	132	289	65	170	41	37	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	162	870	48	35	913	132	289	65	170	41	37	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	162	870	48	35	913	132	289	65	170	41	37	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	162	870	48	35	913	132	289	65	170	41	37	16
Saturation F	low M	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.99	0.95	0.83	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	2.61	0.39	2.00	0.28	0.72	1.00	0.70	0.30
Final Sat.:	1750	3800	1750	1750	4892	707	3150	498	1302	1750	1257	543
Capacity Anal	lysis	Modul	e:									
Vol/Sat:	0.09	0.23	0.03	0.02	0.19	0.19	0.09	0.13	0.13	0.02	0.03	0.03
Crit Moves:	****				****			****		****		
Green Time:	27.3	67.7	74.7	14.8	55.1	55.1	25.6	38.6	38.6	7.0	19.9	19.9
Volume/Cap:	0.47	0.47	0.05	0.19	0.47	0.47	0.50	0.47	0.47	0.47	0.21	0.21
Delay/Veh:	51.0	24.4	15.7	57.6	31.8	31.8	52.1	43.0	43.0	68.6	53.4	53.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	51.0	24.4	15.7	57.6	31.8	31.8	52.1	43.0	43.0	68.6	53.4	53.4
LOS by Move:	D	С	В	E	С	С	D	D	D	E	D	D
HCM2k95thQ:	13		2	3	20	20	13	17	17	5	4	4
Note: Queue			the n	umber		rs per	lane					
~	-	_				-						

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



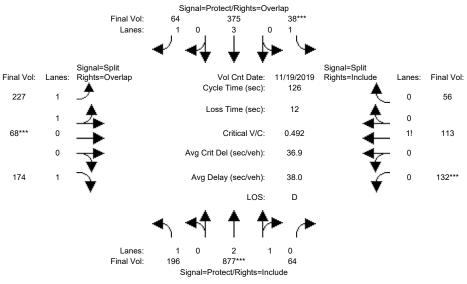
Approach:	No	rth Bo	und	Soi	ath Bo	und	Ea	ast Bo	und	W∈	est Bo	und
Movement:												
Min. Green:		10								7		
Y+R:		4.0				4.0						4.0
Volume Module	e: >>	Count	Date:	19 No	ov 201	.9 <<						
Base Vol:	162	870	48	35	913	132	289	65	170	41	37	16
Growth Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:			48	35	913	132	289	65	170	41	37	16
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	45	91	0	34	171	43	52	6	18	0	17	2
Initial Fut:	207	961	48	69	1084	175	341	71	188	41	54	18
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
PHF Volume:	207	961		69	1084	175	341	71	188	41	54	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	207	961	48	69	1084	175	341	71	188	41	54	18
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:										41		18
Saturation F												
		1900	1900		1900			1900	1900			1900
Adjustment:				0.92			0.83		0.95	0.92		0.95
Lanes:							2.00		0.73			0.25
Final Sat.:						514		493	1307	1750		450
Capacity Ana												
Vol/Sat:				0.04	0.34 ****	0.34	0.11		0.14	0.02	0.04	0.04
Crit Moves:												
Green Time:			77.8		68.3			28.9	28.9	7.0		14.3
Volume/Cap:			0.49	0.39		0.70		0.70	0.70	0.47		0.39
Delay/Veh:			19.2	60.2		29.0		57.2	57.2	68.6		60.2
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:				60.2		29.0		57.2	57.2	68.6		60.2
LOS by Move:			В				E		E	E		E
HCM2k95thQ:			24	. 6		36	18		22	5	7	7
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane					

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



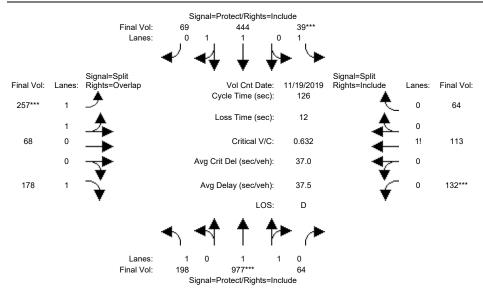
Approach:	No	rth Bo	und	Sot	ath Bo	und	Εa	ast Bo	und	W∈	est Bo	und
Movement:												
Min. Green:		10								7		
Y+R:						4.0						4.0
Volume Module				•			1		1	ı		I
Base Vol:	162		48	35	913		289	65	170	41	37	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:			48	35	913	132	289	65	170	41	37	16
Added Vol:	7	11	1	0	6	0	0	0	4	0	0	0
ATI:	45	91	0	34	171	43	52	6	18	0	17	2
Initial Fut:	214	972	49	69	1090	175	341	71	192	41	54	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:				69		175	341	71	192	41	54	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	214	972	49	69	1090	175	341		192	41	54	18
PCE Adj:	1.00	1.00		1.00			1.00		1.00			1.00
MLF Adj:			1.00				1.00		1.00			1.00
FinalVolume:										41		18
Saturation Fi				1000	1000	1000	1000	1000	1000	1000	1000	1000
			1900					1900	1900	1900		1900
Adjustment:				0.92			0.83		0.95	0.92		0.95
Lanes:							2.00		0.73	1.00		0.25
Final Sat.:						512		486	1314	1750		450
Capacity Anal												
Vol/Sat:				0 04	0 34	0 34	0 11	0 15	0.15	0 02	0.04	0.04
Crit Moves:		0.20				0.01	0.11	****	0.10	****	0.01	0.01
Green Time:		77.9	77.9	14.1	67.8	67.8	21.7	29.0	29.0	7.0	14.3	14.3
Volume/Cap:			0.50		0.71	0.71		0.71	0.71	0.47		0.39
Delay/Veh:				60.4		29.6		57.7	57.7	68.6		60.2
User DelAdj:				1.00		1.00	1.00	1.00	1.00	1.00		1.00
AdjDel/Veh:	61.9	19.2	19.2	60.4	29.6	29.6	60.6	57.7	57.7	68.6	60.2	60.2
LOS by Move:			В	E	С	С	E	E	E	E	E	E
HCM2k95thQ:	19	24	24	6	36	36	18	22	22	5	7	7
Note: Queue	repor	ted is	the n	umber	of ca	ırs per	lane	•				

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



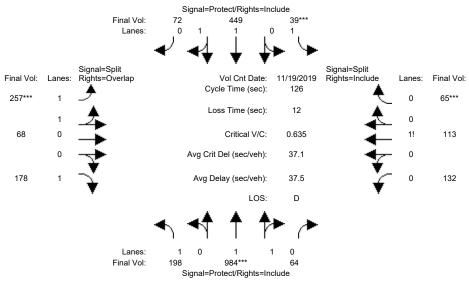
	North Bound L - T - R										
Movement:						- R			- R	L - T	
		10			10			 10		10 10	
Y+R:		4.0			4.0		4.0	4.0	4.0	4.0 4.0	
Volume Module											
Base Vol:	196	877	64	38	375	64	227	68	174	132 113	56
Growth Adi:			1.00		1.00	1.00		1.00	1.00	1.00 1.00	
Initial Bse:		877	64	38		64	227	68	174	132 113	
Added Vol:		0	0	0	0	0	0	0	0	0 0	
ATI:	0	0	0	0	0	0	0	0	0	0 0	0
Initial Fut:	196	877	64	38	375	64	227	68	174	132 113	56
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
	196	877	64	38	375	64	227	68	174	132 113	
Reduct Vol:		0	0	0	-		0		0	0 0	-
Reduced Vol:			64	38		64	227		174	132 113	
PCE Adj:			1.00	1.00		1.00		1.00	1.00	1.00 1.00	
MLF Adj:			1.00	1.00		1.00		1.00	1.00	1.00 1.00	
FinalVolume:						64			174	132 113	
Saturation Fl											
		1900		1900	1900	1900	1900	1900	1900	1900 1900	1900
Adjustment:				0.92		0.92		0.95	0.92	0.92 0.92	
Lanes:			0.21	1.00		1.00		0.45	1.00	0.44 0.37	
Final Sat.:					5700			818	1750	767 657	
Capacity Anal	lysis	Modul	e:								
Vol/Sat:	0.11	0.17	0.17		0.07	0.04	0.08	0.08	0.10	0.17 0.17	0.17
				****				****		***	
Green Time:				7.0		41.5		21.0	50.0	43.5 43.5	
Volume/Cap:						0.11		0.50	0.25	0.50 0.50	
Delay/Veh:			33.5	60.0		29.5		48.4	25.7	33.3 33.3	
User DelAdj:			1.00			1.00		1.00	1.00	1.00 1.00	
AdjDel/Veh:				60.0		29.5		48.4	25.7	33.3 33.3	
LOS by Move:			C 18	E 4		C 4	D 12	D 12	C 9	C C	
<pre>HCM2k95thQ: Note: Queue 1</pre>				_	-	-			9	10 18	Τ 0
Note. Queue 1	rebor	ceu is	CIIC II	mimer	OI Ca	ro her	Tane	•			

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



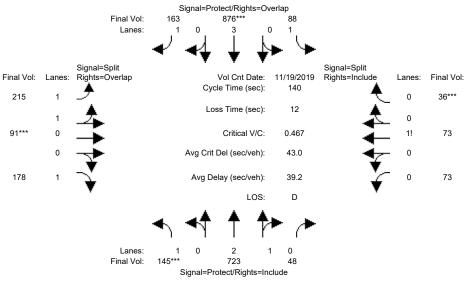
Approach: Movement:	L ·	- T	- R	L -	- T	- R	L -	- Т	- R	L -	- T	- R
Min. Green:		10			10			10			10	
Y+R:		4.0	4.0		4.0				4.0		4.0	
Volume Module												
Base Vol:	196		Date:	19 NG	375	64	227	68	174	132	113	56
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:		877	64	38	375	64	227	68	174	132	113	56
	190	0		0	0	0	0	0	0	132	113	0
ATI:	2			1		5	30	-		0	0	8
Initial Fut:	_		64	39		69	257	68	178	132	113	64
User Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
	198	977	64	39	444	69	257	68	178	132	113	64
	100		0	0		0	207	0	0	0	0	0
Reduced Vol:	-	-	64	39	-	69	257	68	178	132	113	64
PCE Adj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
MLF Adj:	1 00	1 00	1.00	1.00		1.00		1.00	1.00	1.00		1.00
FinalVolume:						69	257			132		64
Saturation Fl				1		ı	ı		1	1		'
Sat/Lane:		1900		1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:			0.95	0.92		0.95		0.95	0.92	0.92		0.92
_	1.00		0.13	1.00		0.28		0.41	1.00	0.43		0.21
Final Sat.:			227			498		743		748		362
Capacity Anal	lysis	Module	e:									
Vol/Sat:	0.11	0.28	0.28	0.02	0.14	0.14	0.09	0.09	0.10	0.18	0.18	0.18
Crit Moves:		****		****			****			****		
Green Time:	27.8	54.8	54.8	7.0	34.0	34.0	17.8	17.8	45.6	34.4	34.4	34.4
Volume/Cap:	0.51	0.65	0.65	0.40	0.51	0.51	0.65	0.65	0.28	0.65	0.65	0.65
Delay/Veh:	44.4	28.9	28.9	60.2	39.4	39.4	54.1	54.1	28.8	43.5	43.5	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:	44.4	28.9	28.9	60.2	39.4	39.4	54.1	54.1	28.8	43.5	43.5	43.5
LOS by Move:	D	С	С	E	D	D	D	D	С	D	D	D
HCM2k95thQ:			28	4	17	17	14	14	10	22	22	22
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane					

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



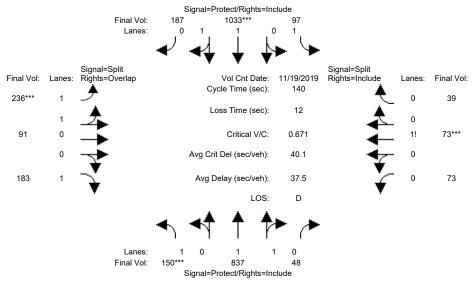
	North Bound L - T - R										est Bo - T	
Movement:												
		10				10				10		
Y+R:		4.0				4.0				4.0	4.0	4.0
Volume Module	e: >>	Count	Date:	19 No	ov 201	9 <<						
Base Vol:	196	877	64	38	375	64	227	68	174	132	113	56
Growth Adj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:		0 , ,	64	38	0,0	64	227	68		132	113	56
Added Vol:			0	0	5	3	0	0	0	0	0	1
ATI:			0	1			30	0	4	0	0	8
Initial Fut:			64	39	449		257	68	178	132	113	65
User Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Volume:		984	64	39	449	72	257	68	178	132	113	65
Reduct Vol:				0	0	0	0	0	0	0	0	0
Reduced Vol:			64	39		72	257			132		65
PCE Adj:	1.00	1.00	1.00		1.00			1.00	1.00		1.00	1.00
MLF Adj:			1.00					1.00	1.00			1.00
FinalVolume:					449					132		65
Saturation Fi				1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane:		1900		1900		1900		1900	1900		1900	
Adjustment:				0.92		0.95		0.95	0.92		0.92	0.92
Lanes:	1.00	1.8/	0.13		1.72			0.41	1.00		0.36	0.21
Final Sat.:						511		743		745		367
Capacity Anal												
Vol/Sat:				0 02	0 1/	0.14	n na	n na	0.10	0 10	0.18	0.18
Crit Moves:					0.14		****	0.09	0.10	0.10	0.10	****
Green Time:					34.3		17.7	17.7	45.3	34.3	34.3	34.3
Volume/Cap:			0.65	0.40		0.52		0.65	0.28	0.65		0.65
Delay/Veh:			28.9	60.2		39.3		54.2	29.0		43.7	43.7
User DelAdi:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:					39.3			54.2	29.0	43.7		43.7
LOS by Move:				E			D	D	C	D		D
HCM2k95thQ:				4		17	14			22		22
Note: Queue				umber								

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



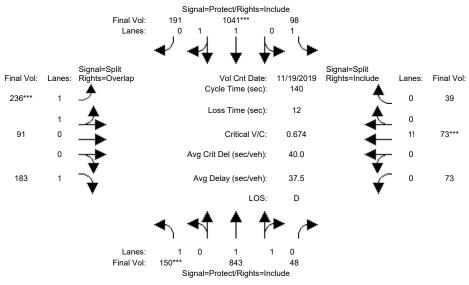
	L .	- T ·	- R	L -	- T	und - R	L .	- Т	- R	L -	- T	- R
Min. Green: Y+R:	7	10 4.0		7	10 4.0	10	10	10 4.0	10	10	10 4.0	10
Volume Module	e: >>	Count	Date:	19 No	ov 201	9 << .			·			·
Base Vol:	145	723	48	88	876	163	215	91	178	73	73	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	145	723	48	88	876	163	215	91	178	73	73	36
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	145	723	48	88	876	163	215	91	178	73	73	36
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00		1.00	1.00			1.00		1.00	1.00
	145	723	48	88	876	163	215	91	178	73	73	36
Reduct Vol:		0	0	0	-	0	0	0	0	0	0	0
Reduced Vol:			48	88	876	163	215	91	178	73	73	36
PCE Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:			48			163	215		178	. 73		36
Saturation F.	1											
Saturation F. Sat/Lane:		1900	1000	1900	1000	1900	1000	1900	1900	1000	1900	1900
Adjustment:				0.92		0.92		0.95	0.92		0.92	0.92
-	1.00		0.19			1.00		0.59	1.00		0.40	0.20
Final Sat.:			349			1750		1056		702		346
Capacity Ana						'			'	'		'
Vol/Sat:	-			0.05	0.15	0.09	0.09	0.09	0.10	0.10	0.10	0.10
Crit Moves:	****				****			****				****
Green Time:	24.9	52.0	52.0	19.0	46.1	72.0	25.9	25.9	50.7	31.2	31.2	31.2
Volume/Cap:	0.47	0.37	0.37	0.37	0.47	0.18	0.47	0.47	0.28	0.47	0.47	0.47
Delay/Veh:	52.7	35.8	35.8	56.1	37.4	18.3	51.4	51.4	31.9	48.1	48.1	48.1
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:	52.7	35.8	35.8	56.1	37.4	18.3	51.4	51.4	31.9	48.1	48.1	48.1
LOS by Move:			D	E		_	D	D	C	D	D	D
HCM2k95thQ:		16	16	8	18	8	13		11	14	14	14
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•				

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



	North Bound L - T - R										st Bo	
Movement:												
		10			10			10			10	
Y+R:		4.0				4.0					4.0	
Volume Module	e: >>	Count	Date:	19 No	ov 201	9 <<						
Base Vol:	145	723	48	88	876	163	215	91	178	73	73	36
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:			48	88	876	163	215	91	178	73	73	36
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	5	114	0	9	157	24	21	0	5	0	0	3
Initial Fut:			48	97	1033	187	236	91	183	73	73	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:			1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	150	837	48		1033	187	236	91	183	73	73	39
Reduct Vol:			0	0	0	0	0	-	0	0	0	0
Reduced Vol:				97		187	236	91	183	73	73	39
PCE Adj:	1.00	1.00	1.00	1.00		1.00		1.00	1.00			1.00
MLF Adj:					1.00		1.00		1.00		1.00	
FinalVolume:					1033		236			73		39
Saturation Fi												
Sat/Lane:		1900		1900		1900		1900	1900		1900	1900
Adjustment:				0.92		0.95		0.95	0.92	0.92		0.92
Lanes:			0.11			0.32		0.55	1.00	0.40		0.21
Final Sat.:						567		988	1750	691		369
Capacity Anal												
Vol/Sat:				0 06	0 33	0 33	0 00	0.09	0.10	0.11	0 11	0.11
	****	0.24	0.24	0.00		0.55	****	0.09	0.10		****	0.11
	17.9	70.4	70.4	16.3	68.8	68.8	19.2	19.2	37.1	22.1	22.1	22.1
Volume/Cap:	0.67	0.48	0.48	0.48	0.67	0.67	0.67	0.67	0.39	0.67	0.67	0.67
Delay/Veh:	65.9	28.5	28.5	59.6	28.0	28.0	61.0	61.0	42.8	61.8	61.8	61.8
User DelAdj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:			28.5	59.6	28.0	28.0	61.0	61.0	42.8	61.8	61.8	61.8
LOS by Move:			С	E	С	С	E	E	D	E	E	E
HCM2k95thQ:			26	9	35	35	15	15	13	17	17	17
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane					

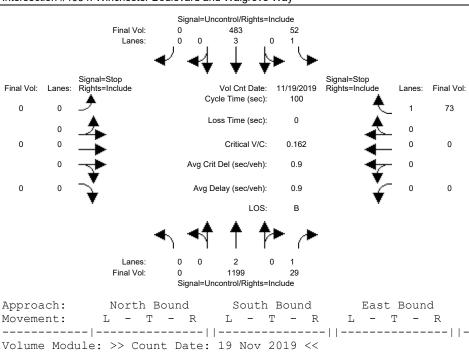
Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Background+Project (PM)



	North Bound L - T - R										est Bo - T	
Movement:												
		10			10			10		10		
Y+R:		4.0				4.0					4.0	
Volume Module	e: >>	Count	Date:	19 No	ov 201	9 <<						
Base Vol:	145	723	48	88	876	163	215	91	178	73	73	36
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:	145	723	48	88	876	163	215	91	178	73	73	36
Added Vol:			0	1	8	4	0	0	0	0	0	0
ATI:	5		0	9	157		21	0	5	0	0	3
Initial Fut:				98	1041	191	236	91	183	73	73	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:			1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:		843	48		1041	191	236	91	183	73	73	39
Reduct Vol:			0	0	0	0	0		0	0	0	0
Reduced Vol:				98			236	91	183	73		39
PCE Adj:	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	
FinalVolume:					1041		236			73		39
Saturation Fi												
Sat/Lane:		1900		1900		1900		1900	1900		1900	
Adjustment:				0.92		0.95		0.95	0.92	0.92		0.92
Lanes:						0.32		0.55	1.00		0.39	
Final Sat.:						574		988	1750	691		369
Capacity Anal												
Vol/Sat:				0 06	0 22	0 22	0 00	0.09	0.10	0 11	0.11	0.11
	****		0.24			0.33		0.09	0.10	0.11	****	0.11
	17.8	70.5		16.4	69.1	69.1		19.1	36.9	21.9	21.9	21.9
Volume/Cap:			0.48	0.48		0.67		0.67	0.40	0.67		0.67
Delay/Veh:			28.5	59.6		27.9		61.2	42.9	62.2		62.2
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:				59.6		27.9		61.2	42.9	62.2		62.2
LOS by Move:				E			E		D	E		E
HCM2k95thQ:				9		35	15		13			17
Note: Queue				umber					-			

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

Intersection #4034: Winchester Boulevard and Walgrove Way

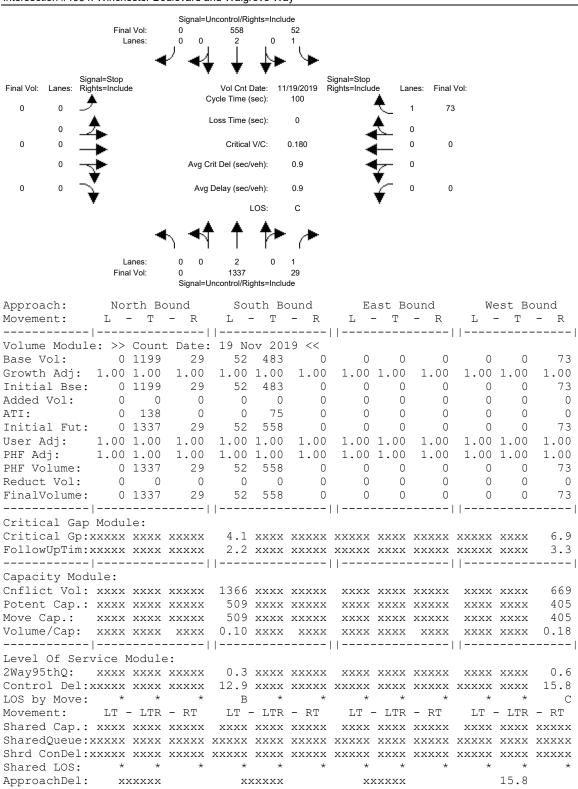


Approach: No	Approach: North Bound				Εá	ast Bo	ound	We	est Bo	ound
Movement: L										
Volume Module: >>										
Base Vol: (1199	29 52	483	0	0	0	0	-	0	73
Growth Adj: 1.00	1.00 1		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse: (1199	29 52	483	0	0	0	0	0	0	73
Added Vol: (0	0 0	0	0	0	0	0	0	0	0
ATI:	0	0 0	0	0	0	0	0	0	0	0
Initial Fut: (1199	29 52	483	0	0	0	0	0	0	73
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: (1199	29 52	483	0	0	0	0	0	0	73
Reduct Vol: (0	0 0	0	0	0	0	0	0	0	0
FinalVolume: (1199	29 52	483	0	0	0	0	0	0	73
Critical Gap Modu	ıle:									
Critical Gp:xxxxx	XXXXX XX	xxx 4.1	XXXX	XXXXX	XXXXX	XXXX	XXXXX	XXXXX	XXXX	6.9
FollowUpTim:xxxxx										3.3
Capacity Module:										
Cnflict Vol: xxxx	XXXXX XX	xxx 1228	XXXX	XXXXX	XXXX	XXXX	XXXXX	XXXX	XXXX	600
Potent Cap.: xxxx	XXXXX XX	xxx 575	XXXX	XXXXX	XXXX	XXXX	XXXXX	XXXX	XXXX	449
Move Cap.: xxxx	XXXXX XX	xxx 575	XXXX	XXXXX	XXXX	XXXX	XXXXX	XXXX	XXXX	449
Volume/Cap: xxxx	XXXX X	xxx 0.09	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	0.16
Level Of Service	Module:									
2Way95thQ: xxxx	XXXXX XX	xxx 0.3	XXXX	XXXXX	XXXX	XXXX	XXXXX	XXXX	XXXX	0.6
Control Del:xxxxx							XXXXX			14.6
LOS by Move:	*	* B	*	*	*	*	*	*	*	В
Movement: LT	- LTR -	RT LT	- LTR	- RT	LT -	- LTR	- RT	LT -	- LTR	- RT
Shared Cap.: xxxx	xxxx xx	xxxx xxxx	XXXX	XXXXX	XXXX	XXXX	XXXXX	XXXX	XXXX	XXXXX
SharedQueue:xxxxx	xxxx xx	XXXX XXXX	XXXX	XXXXX	XXXXX	XXXX	XXXXX	XXXXX	XXXX	XXXXX
Shrd ConDel:xxxxx										
Shared LOS: 7	*	* *	*	*	*	*	*	*	*	*
ApproachDel: >	XXXXX	X	XXXXX		XX	XXXX			14.6	
ApproachLOS:	*		*			*			В	
Note: Queue repor	ted is t	he number	of ca	ars pei	r lane					

City of San Jose

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

Intersection #4034: Winchester Boulevard and Walgrove Way

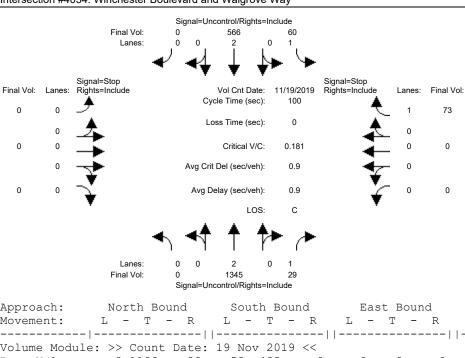


ApproachLOS:

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

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

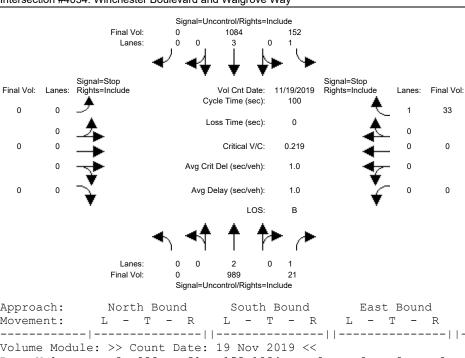
Intersection #4034: Winchester Boulevard and Walgrove Way



Approach: No									est Bo	
Movement: L										
Volume Module: >>					_	_	_		_	
		9 52		0		0			0	73
Growth Adj: 1.00			1.00	1.00		1.00			1.00	1.00
		9 52		0	0	0	0	0	0	73
	-		8	0	0	0	0	0	0	0
		0 0		0	0	0	0	0	0	0
Initial Fut: (9 60		0	0	0	0	0	0	73
User Adj: 1.00			1.00	1.00		1.00	1.00		1.00	1.00
_	1.00 1.0		1.00	1.00	1.00	1.00	1.00		1.00	1.00
	1345 2			0	0	0	0	0	0	73
	0			-	-	0	0	0	0	0
		9 60			-	0	0	0	0	73
		-								
Critical Gap Modu										
Critical Gp:xxxxx										
FollowUpTim:xxxxx										3.3
		-								
Capacity Module:		1054								600
Cnflict Vol: xxxx									XXXX	673
Potent Cap.: xxxx									XXXX	403
Move Cap.: xxxx				XXXXX					XXXX	403
Volume/Cap: xxxx				XXXX			XXXX		XXXX	0.18
		-								
Level Of Service										
2Way95thQ: xxxx										
Control Del:xxxxx				XXXXX						15.9
LOS by Move:							*			С
Movement: LT										
Shared Cap.: xxxx										XXXXX
SharedQueue:xxxxx	XXXX XXXX	X XXXXX	XXXX	XXXXX	XXXXX	XXXX	XXXXX	XXXXX	XXXX	XXXXX
Shrd ConDel:xxxxx										
Shared LOS: *	*	* *	*	*	*	*	*	*	*	*
ApproachDel: x	XXXXX	X			X	XXXXX			15.9	
ApproachLOS:	*		*			*			С	
Note: Queue repor	ted is the	number	of c	ars pe	r lane	•				

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

Intersection #4034: Winchester Boulevard and Walgrove Way

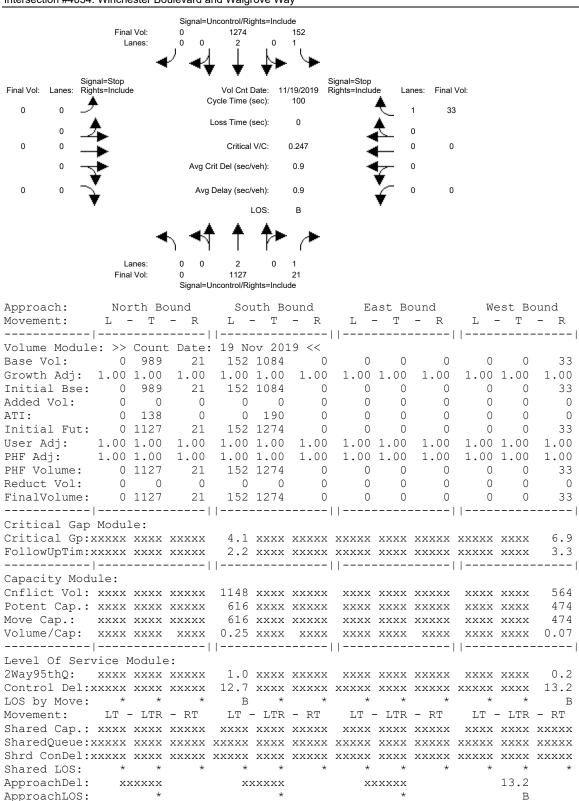


11		South B						est Bo	
Movement: L									
		1.1							
Volume Module: >>									
Base Vol: 0				0		0		0	33
Growth Adj: 1.00				1.00 1		1.00			1.00
Initial Bse: 0				0	0	0	0	0	33
Added Vol: 0				0	0	0	0	0	0
ATI: 0			•	0	0	0	0	0	0
Initial Fut: 0				0	0	0	0	0	33
User Adj: 1.00				1.00 1		1.00	1.00		1.00
_	1.00 1.00				1.00	1.00	1.00		1.00
PHF Volume: 0				0	0	0	0	0	33
Reduct Vol: 0	0 0		-	ŭ	0	0	0	0	0
	989 21			-	0	0	0	0	33
Critical Gap Modu									
Critical Gp:xxxxx									6.9
FollowUpTim:xxxxx									3.3
Consolitor Madella									
Capacity Module:		1010							405
Cnflict Vol: xxxx								XXXX	495
Potent Cap.: xxxx								XXXX	526
Move Cap.: xxxx									526
Volume/Cap: xxxx								XXXX	0.06
Level Of Service		0 0							0 0
2Way95thQ: xxxx									
Control Del:xxxxx			XXXXX	XXXXX X					12.3
LOS by Move: *							*		В
Movement: LT									
Shared Cap.: xxxx									XXXXX
SharedQueue:xxxxx									
Shrd ConDel:xxxxx									
Shared LOS: *		* *			*	*	*		*
ApproachDel: x		XXXXXX		XXX				12.3	
ApproachLOS:		*			*			В	
Note: Queue repor	ted is the	number of c	ars pe	r lane.					

City of San Jose

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

Intersection #4034: Winchester Boulevard and Walgrove Way

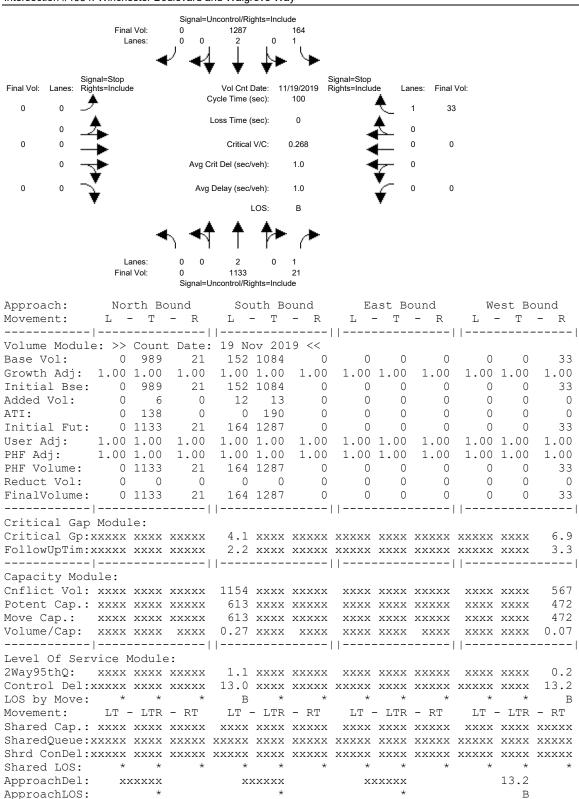


Note: Queue reported is the number of cars per lane.

City of San Jose

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

Intersection #4034: Winchester Boulevard and Walgrove Way



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

Appendix F Queue Length Calculations

Winchester/WilliamsWinchester/WilliamsWinchester/WilliamsNBLNBLNBLAMAMAM

Existing Conditions

Avg. Queue Per Lane in Veh=
Percentile = 95%

Background Conditions

Background Plus Project Conditions

Background Plus Project Conditions

Avg. Queue Per Lane in Veh=
6.6

Avg. Queue Per Lane in Veh=
6.9

Percentile = 95%

11

Percentile = 95%

11

Percentile = 95%

11

		Number of			Number of	ľ			Number of
Individual	Cumulative	Queued	Individual	Cumulative	Queued		Individual	Cumulative	Queued
Probability	Probability	Vehicles	Probability	Probability	Vehicles		Probability	Probability	Vehicles
0.0020	0.0020	0	0.0013	0.0013	0		0.0010	0.0010	0
0.0126	0.0147	1	0.0089	0.0102	1		0.0070	0.0080	1
0.0391	0.0538	2	0.0293	0.0395	2		0.0241	0.0321	2
0.0808	0.1346	3	0.0647	0.1042	3		0.0553	0.0874	3
0.1252	0.1540	4	0.1069	0.2111	4		0.0954	0.1828	4
0.1252	0.4149	5	0.1415	0.3525	5		0.1315	0.3143	5
0.1601		6		0.5085	6				6
	0.5750	7	0.1560		7		0.1512	0.4655	7
0.1417	0.7167		0.1474	0.6559			0.1489	0.6144	
0.1097	0.8265	8	0.1219	0.7777	8		0.1283	0.7427	8
0.0755	0.9020	9	0.0896	0.8673	9		0.0983	0.8410	9
0.0468	0.9488	10	0.0592	0.9265	10		0.0678	0.9088	10
0.0264	0.9751	11	0.0356	0.9622	11		0.0425	0.9513	11
0.0136	0.9888	12	0.0196	0.9818	12		0.0244	0.9757	12
0.0065	0.9952	13	0.0100	0.9918	13		0.0129	0.9886	13
0.0029	0.9981	14	0.0047	0.9965	14		0.0064	0.9950	14
0.0012	0.9993	15	0.0021	0.9986	15		0.0029	0.9979	15
0.0005	0.9997	16	0.0009	0.9995	16		0.0013	0.9992	16
0.0002	0.9999	17	0.0003	0.9998	17		0.0005	0.9997	17
0.0001	1.0000	18	0.0001	0.9999	18		0.0002	0.9999	18
0.0000	1.0000	19	0.0000	1.0000	19		0.0001	1.0000	19
0.0000	1.0000	20	0.0000	1.0000	20		0.0000	1.0000	20
0.0000	1.0000	21	0.0000	1.0000	21		0.0000	1.0000	21
0.0000	1.0000	22	0.0000	1.0000	22		0.0000	1.0000	22
0.0000	1.0000	23	0.0000	1.0000	23		0.0000	1.0000	23
0.0000	1.0000	24	0.0000	1.0000	24		0.0000	1.0000	24
0.0000	1.0000	25	0.0000	1.0000	25		0.0000	1.0000	25
0.0000	1.0000	26	0.0000	1.0000	26		0.0000	1.0000	26
0.0000	1.0000	27	0.0000	1.0000	27		0.0000	1.0000	27
0.0000	1.0000	28	0.0000	1.0000	28		0.0000	1.0000	28
0.0000	1.0000	29	0.0000	1.0000	29		0.0000	1.0000	29
0.0000	1.0000	30	0.0000	1.0000	30		0.0000	1.0000	30
0.0000	1.0000	31	0.0000	1.0000	31		0.0000	1.0000	31
0.0000	1.0000	32	0.0000	1.0000	32		0.0000	1.0000	32
0.0000	1.0000	33	0.0000	1.0000	33		0.0000	1.0000	33
0.0000	1.0000	34	0.0000	1.0000	34		0.0000	1.0000	34
0.0000	1.0000	35	0.0000	1.0000	35		0.0000	1.0000	35
0.0000	1.0000	36	0.0000	1.0000	36		0.0000	1.0000	36
0.0000	1.0000	37	0.0000	1.0000	37		0.0000	1.0000	37
0.0000	1.0000	38	0.0000	1.0000	38		0.0000	1.0000	38
0.0000	1.0000	39	0.0000	1.0000	39		0.0000	1.0000	39
0.0000	1.0000	40	0.0000	1.0000	40		0.0000	1.0000	40
0.0000	1.0000	41	0.0000	1.0000	41		0.0000	1.0000	41
0.0000	1.0000	42	0.0000	1.0000	42		0.0000	1.0000	42
0.0000	1.0000	43	0.0000	1.0000	43		0.0000	1.0000	43
0.0000	1.0000	43 44	0.0000	1.0000	43 44		0.0000	1.0000	43
0.0000	1.0000	44 45	0.0000	1.0000	44 45		0.0000	1.0000	44 45
0.0000	1.0000	46 46	0.0000	1.0000	46 46		0.0000	1.0000	46
0.0000	1.0000	46 47	0.0000	1.0000	46 47		0.0000	1.0000	46 47
0.0000	1.0000	48	0.0000	1.0000	48		0.0000	1.0000	48
0.0000	1.0000		0.0000	1.0000			0.0000	1.0000	
		49 50			49 50				49 50
0.0000	1.0000	50 51	0.0000	1.0000	50 51		0.0000	1.0000	50 51
0.0000	1.0000	51 52	0.0000	1.0000	51 52		0.0000	1.0000	51 52
0.0000	1.0000	52 53	0.0000	1.0000	52 53		0.0000	1.0000	52 53
0.0000	1.0000	53	0.0000	1.0000	53		0.0000	1.0000	53
0.0000	1.0000	54	0.0000	1.0000	54		0.0000	1.0000	54 55
0.0000	1.0000	55 50	0.0000	1.0000	55 50		0.0000	1.0000	55 50
0.0000	1.0000	56	0.0000	1.0000	56		0.0000	1.0000	56
0.0000	1.0000	57	0.0000	1.0000	57		0.0000	1.0000	57
0.0000	1.0000	58	0.0000	1.0000	58		0.0000	1.0000	58
0.0000	1.0000	59	0.0000	1.0000	59		0.0000	1.0000	59
0.0000	1.0000	60	0.0000	1.0000	60		0.0000	1.0000	60
0.0000	1.0000	61	0.0000	1.0000	61		0.0000	1.0000	61
0.0000	1.0000	62	0.0000	1.0000	62		0.0000	1.0000	62
0.0000	1.0000	63	0.0000	1.0000	63		0.0000	1.0000	63
0.0000	1.0000	64	0.0000	1.0000	64		0.0000	1.0000	64
0.0000	1.0000	65	0.0000	1.0000	65		0.0000	1.0000	65

Winchester/WilliamsWinchester/WilliamsWinchester/WilliamsNBLNBLNBLPMPMPM

Existing Conditions

Avg. Queue Per Lane in Veh=
Percentile = 95%

Background Conditions

Background Plus Project Conditions

Avg. Queue Per Lane in Veh=
8.1

Avg. Queue Per Lane in Veh=
Percentile = 95%

13

Percentile = 95%

		Number of			Number of	ľ			Number of
Individual	Cumulative	Queued	Individual	Cumulative	Queued		Individual	Cumulative	Queued
Probability	Probability	Vehicles	Probability	Probability	Vehicles		Probability	Probability	Vehicles
0.0018	0.0018	0	0.0003	0.0003	0		0.0002	0.0002	0
0.0116	0.0134	1	0.0026	0.0029	1		0.0020	0.0023	1
0.0364	0.0498	2	0.0103	0.0132	2		0.0084	0.0107	2
0.0765	0.1264	3	0.0277	0.0410	3		0.0233	0.0340	3
0.1205	0.2469	4	0.0558	0.0968	4		0.0486	0.0826	4
0.1519	0.3988	5	0.0899	0.1867	5		0.0809	0.1635	5
0.1595	0.5582	6	0.1206	0.3073	6		0.1122	0.2756	6
0.1435	0.7017	7	0.1387	0.4460	7		0.1333	0.4090	7
0.1130	0.8148	8	0.1396	0.5856	8		0.1387	0.5477	8
0.0791	0.8939	9	0.1248	0.7104	9		0.1283	0.6759	9
0.0498	0.9437	10	0.1005	0.8109	10		0.1067	0.7827	10
0.0285	0.9723	11	0.0735	0.8844	11		0.0808	0.8634	11
0.0150	0.9873	12	0.0493	0.9338	12		0.0560	0.9194	12
0.0073	0.9945	13	0.0305	0.9643	13		0.0359	0.9553	13
0.0033	0.9978	14	0.0176	0.9819	14		0.0213	0.9766	14
0.0014	0.9992	15	0.0094	0.9913	15		0.0118	0.9884	15
0.0005	0.9997	16	0.0047	0.9961	16		0.0062	0.9946	16
0.0002	0.9999	17	0.0022	0.9983	17		0.0030	0.9976	17
0.0001	1.0000	18	0.0010	0.9993	18 10		0.0014	0.9990	18
0.0000	1.0000	19 20	0.0004	0.9997	19 20		0.0006	0.9996	19 20
0.0000 0.0000	1.0000 1.0000	20 21	0.0002 0.0001	0.9999 1.0000	20 21		0.0003 0.0001	0.9998 0.9999	20 21
0.0000	1.0000	22	0.0001	1.0000	22		0.0001	1.0000	22
0.0000	1.0000	23	0.0000	1.0000	23		0.0000	1.0000	23
0.0000	1.0000	24	0.0000	1.0000	24		0.0000	1.0000	24
0.0000	1.0000	25	0.0000	1.0000	25		0.0000	1.0000	25
0.0000	1.0000	26	0.0000	1.0000	26		0.0000	1.0000	26
0.0000	1.0000	27	0.0000	1.0000	27		0.0000	1.0000	27
0.0000	1.0000	28	0.0000	1.0000	28		0.0000	1.0000	28
0.0000	1.0000	29	0.0000	1.0000	29		0.0000	1.0000	29
0.0000	1.0000	30	0.0000	1.0000	30		0.0000	1.0000	30
0.0000	1.0000	31	0.0000	1.0000	31		0.0000	1.0000	31
0.0000	1.0000	32	0.0000	1.0000	32		0.0000	1.0000	32
0.0000	1.0000	33	0.0000	1.0000	33		0.0000	1.0000	33
0.0000	1.0000	34	0.0000	1.0000	34		0.0000	1.0000	34
0.0000	1.0000	35	0.0000	1.0000	35		0.0000	1.0000	35
0.0000	1.0000	36	0.0000	1.0000	36		0.0000	1.0000	36
0.0000	1.0000	37	0.0000	1.0000	37		0.0000	1.0000	37
0.0000	1.0000	38	0.0000	1.0000	38		0.0000	1.0000	38
0.0000	1.0000	39	0.0000	1.0000	39		0.0000	1.0000	39
0.0000	1.0000	40	0.0000	1.0000	40		0.0000	1.0000	40
0.0000	1.0000	41	0.0000	1.0000	41		0.0000	1.0000	41
0.0000	1.0000	42	0.0000	1.0000	42		0.0000	1.0000	42
0.0000	1.0000	43	0.0000	1.0000	43		0.0000	1.0000	43
0.0000	1.0000	44	0.0000	1.0000	44		0.0000	1.0000	44
0.0000	1.0000	45	0.0000	1.0000	45		0.0000	1.0000	45
0.0000	1.0000	46	0.0000	1.0000	46		0.0000	1.0000	46
0.0000	1.0000	47	0.0000	1.0000	47		0.0000	1.0000	47
0.0000	1.0000	48	0.0000	1.0000	48		0.0000	1.0000	48
0.0000	1.0000	49 50	0.0000	1.0000	49 50		0.0000	1.0000	49 50
0.0000	1.0000	50 51	0.0000	1.0000	50 51		0.0000	1.0000	50 51
0.0000 0.0000	1.0000 1.0000	51 52	0.0000 0.0000	1.0000 1.0000	51 52		0.0000 0.0000	1.0000 1.0000	51 52
	1.0000	52 53	0.0000	1.0000	52 53				52 53
0.0000 0.0000	1.0000	53 54	0.0000	1.0000	53 54		0.0000 0.0000	1.0000 1.0000	53 54
0.0000	1.0000	5 4 55	0.0000	1.0000	5 4 55		0.0000	1.0000	55 55
0.0000	1.0000	56	0.0000	1.0000	56		0.0000	1.0000	56
0.0000	1.0000	57	0.0000	1.0000	57		0.0000	1.0000	57
0.0000	1.0000	58	0.0000	1.0000	58		0.0000	1.0000	58
0.0000	1.0000	59	0.0000	1.0000	59		0.0000	1.0000	59
0.0000	1.0000	60	0.0000	1.0000	60		0.0000	1.0000	60
0.0000	1.0000	61	0.0000	1.0000	61		0.0000	1.0000	61
0.0000	1.0000	62	0.0000	1.0000	62		0.0000	1.0000	62
0.0000	1.0000	63	0.0000	1.0000	63		0.0000	1.0000	63
0.0000	1.0000	64	0.0000	1.0000	64		0.0000	1.0000	64
0.0000	1.0000	65	0.0000	1.0000	65		0.0000	1.0000	65
						ŀ			

8.3

13

Winchester/Walgrove SBL Winchester/Walgrove SBL Winchester/Walgrove SBL AM AM AM Existing Conditions
Avg. Queue Per Lane in Veh= Background Conditions Avg. Queue Per Lane in Veh= Background Plus Project Conditions Avg. Queue Per Lane in Veh= Percentile = 95% 0.2 0.2

1

Percentile =

Percentile =

		Number of	ır			Number of			Number of
Individual	Cumulative	Queued		Individual	Cumulative	Queued	Individual	Cumulative	Queued
Probability	Probability	Vehicles		Probability	Probability	Vehicles	Probability	Probability	Vehicles
	•	0		•	•	0			0
0.8421	0.8421	0		0.8300	0.8300	0	0.8039	0.8039	0
0.1447	0.9868	1		0.1547	0.9847	1	0.1755	0.9794	1
0.0124	0.9993	2		0.0144	0.9991	2	0.0192	0.9985	2
0.0007	1.0000	3		0.0009	1.0000	3	0.0014	0.9999	3
0.0000	1.0000	4		0.0000	1.0000	4	0.0001	1.0000	4
0.0000	1.0000	5		0.0000	1.0000	5	0.0000	1.0000	5
0.0000	1.0000	6		0.0000	1.0000	6	0.0000	1.0000	6
0.0000	1.0000	7		0.0000	1.0000	7	0.0000	1.0000	7
0.0000	1.0000	8		0.0000	1.0000	8	0.0000	1.0000	8
0.0000	1.0000	9		0.0000	1.0000	9	0.0000	1.0000	9
0.0000	1.0000	10		0.0000	1.0000	10	0.0000	1.0000	10
0.0000	1.0000	11		0.0000	1.0000	11	0.0000	1.0000	11
0.0000	1.0000	12		0.0000	1.0000	12	0.0000	1.0000	12
0.0000	1.0000	13		0.0000	1.0000	13	0.0000	1.0000	13
0.0000	1.0000	14		0.0000	1.0000	14	0.0000	1.0000	14
0.0000	1.0000	15		0.0000	1.0000	15	0.0000	1.0000	15
				0.0000					
0.0000	1.0000	16			1.0000	16	0.0000	1.0000	16
0.0000	1.0000	17		0.0000	1.0000	17	0.0000	1.0000	17
0.0000	1.0000	18		0.0000	1.0000	18	0.0000	1.0000	18
0.0000	1.0000	19		0.0000	1.0000	19	0.0000	1.0000	19
0.0000	1.0000	20		0.0000	1.0000	20	0.0000	1.0000	20
0.0000	1.0000	21		0.0000	1.0000	21	0.0000	1.0000	21
0.0000	1.0000	22		0.0000	1.0000	22	0.0000	1.0000	22
0.0000	1.0000	23		0.0000	1.0000	23	0.0000	1.0000	23
0.0000	1.0000	24		0.0000	1.0000	24	0.0000	1.0000	24
0.0000	1.0000	25		0.0000	1.0000	25	0.0000	1.0000	25
0.0000	1.0000	26		0.0000	1.0000	26	0.0000	1.0000	26
0.0000	1.0000	27		0.0000	1.0000	27	0.0000	1.0000	27
0.0000	1.0000	28		0.0000	1.0000	28	0.0000	1.0000	28
0.0000	1.0000	29		0.0000	1.0000	29	0.0000	1.0000	29
0.0000	1.0000	30		0.0000	1.0000	30	0.0000	1.0000	30
0.0000	1.0000	31		0.0000	1.0000	31	0.0000	1.0000	31
0.0000	1.0000	32		0.0000	1.0000	32	0.0000	1.0000	32
		33				33			
0.0000	1.0000			0.0000	1.0000		0.0000	1.0000	33
0.0000	1.0000	34		0.0000	1.0000	34	0.0000	1.0000	34
0.0000	1.0000	35		0.0000	1.0000	35	0.0000	1.0000	35
0.0000	1.0000	36		0.0000	1.0000	36	0.0000	1.0000	36
0.0000	1.0000	37		0.0000	1.0000	37	0.0000	1.0000	37
0.0000	1.0000	38		0.0000	1.0000	38	0.0000	1.0000	38
0.0000	1.0000	39		0.0000	1.0000	39	0.0000	1.0000	39
0.0000	1.0000	40		0.0000	1.0000	40	0.0000	1.0000	40
0.0000	1.0000	41		0.0000	1.0000	41	0.0000	1.0000	41
0.0000	1.0000	42		0.0000	1.0000	42	0.0000	1.0000	42
0.0000	1.0000	43		0.0000	1.0000	43	0.0000	1.0000	43
0.0000	1.0000	44		0.0000	1.0000	44	0.0000	1.0000	44
0.0000	1.0000	45		0.0000	1.0000	45	0.0000	1.0000	45
0.0000	1.0000	46		0.0000	1.0000	46	0.0000	1.0000	46
0.0000	1.0000	47		0.0000	1.0000	47	0.0000	1.0000	47
0.0000	1.0000	48		0.0000	1.0000	48	0.0000	1.0000	48
0.0000	1.0000	49		0.0000	1.0000	49	0.0000	1.0000	49
0.0000	1.0000	50		0.0000	1.0000	50	0.0000	1.0000	50
0.0000	1.0000	51		0.0000	1.0000	51	0.0000	1.0000	51
0.0000	1.0000	52		0.0000	1.0000	52	0.0000	1.0000	52
0.0000	1.0000	53		0.0000	1.0000	53	0.0000	1.0000	53
0.0000	1.0000	53 54		0.0000	1.0000	53 54	0.0000	1.0000	53 54
	1.0000				1.0000		0.0000		
0.0000		55 56		0.0000		55 56		1.0000	55 56
0.0000	1.0000	56 57		0.0000	1.0000	56 57	0.0000	1.0000	56 57
0.0000	1.0000	57 50		0.0000	1.0000	57	0.0000	1.0000	57 50
0.0000	1.0000	58		0.0000	1.0000	58	0.0000	1.0000	58
0.0000	1.0000	59		0.0000	1.0000	59	0.0000	1.0000	59
0.0000	1.0000	60		0.0000	1.0000	60	0.0000	1.0000	60
0.0000	1.0000	61		0.0000	1.0000	61	0.0000	1.0000	61
0.0000	1.0000	62		0.0000	1.0000	62	0.0000	1.0000	62
0.0000	1.0000	63		0.0000	1.0000	63	0.0000	1.0000	63
0.0000	1.0000	64		0.0000	1.0000	64	0.0000	1.0000	64
0.0000	1.0000	65		0.0000	1.0000	65	0.0000	1.0000	65

0.2

1

Winchester/WalgroveWinchester/WalgroveWinchester/WalgroveSBLSBLSBLPMPMPM

Existing Conditions

Avg. Queue Per Lane in Veh=

Percentile = 95%

Background Conditions

Background Conditions

Background Plus Project Conditions

Avg. Queue Per Lane in Veh=

0.5

Avg. Queue Per Lane in Veh=

0.6

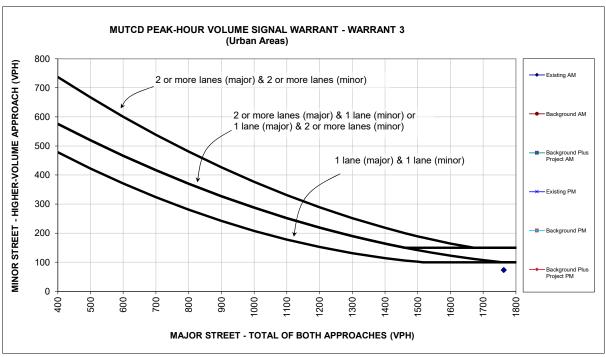
Percentile = 95%

Individual Cumulative Cumul			Number of			Number of	ľ			Number of
0.6128	Individual	Cumulative		Individual	Cumulative			Individual	Cumulative	
0.03091 0.9129 1	Probability	Probability	Vehicles	Probability	Probability	Vehicles		Probability	Probability	Vehicles
0.03091 0.9129 1	0.6120	0.6120	0	0.5050	0.5050	0		0.5524	0.5521	0
0.0735										
0.0120										
0.0015										
0.0001 1.0000 5										
0.0000										
0.0000										
0.0000										
0.0000										
0.0000										
0.0000										
0.0000	0.0000	1.0000	10	0.0000	1.0000			0.0000	1.0000	
0.0000	0.0000	1.0000	11	0.0000	1.0000	11		0.0000	1.0000	11
0.0000	0.0000	1.0000	12	0.0000	1.0000	12		0.0000	1.0000	12
0.0000	0.0000	1.0000	13	0.0000	1.0000	13		0.0000	1.0000	13
0.0000	0.0000	1.0000	14	0.0000				0.0000	1.0000	
0.0000	0.0000	1.0000		0.0000	1.0000			0.0000	1.0000	
0.0000										
0.0000										
0.0000										
0.0000										
0.0000										
0.0000										
0.0000										
0,0000										
0.0000										
0.0000										
0.0000 1.0000 27 0.0000 1.0000 27 0.0000 1.0000 27 0.0000 1.0000 28 0.0000 1.0000 28 0.0000 1.0000 29 0.0000 1.0000 30 0.0000 1.0000 30 0.0000 1.0000 30 0.0000 1.0000 31 0.0000 1.0000 31 0.0000 1.0000 32 0.0000 1.0000 32 0.0000 1.0000 32 0.0000 1.0000 32 0.0000 1.0000 33 0.0000 1.0000 33 0.0000 1.0000 34 0.0000 1.0000 34 0.0000 1.0000 34 0.0000 1.0000 34 0.0000 1.0000 35 0.0000 1.0000 35 0.0000 1.0000 36 0.0000 1.0000 36 0.0000 1.0000 37 0.0000 1.0000 37 0.0000 1.0000 37 0.0000 1.0000 37										
0.0000										
0.0000										
0.0000										
0.0000										
0.0000										
0.0000	0.0000			0.0000				0.0000	1.0000	
0.0000	0.0000	1.0000	32	0.0000	1.0000	32		0.0000	1.0000	32
0.0000	0.0000	1.0000	33	0.0000	1.0000			0.0000	1.0000	
0.0000	0.0000	1.0000	34	0.0000	1.0000	34		0.0000	1.0000	34
0.0000	0.0000	1.0000	35	0.0000	1.0000	35		0.0000	1.0000	35
0.0000	0.0000	1.0000	36	0.0000	1.0000			0.0000	1.0000	
0.0000										
0.0000										
0.0000										
0.0000										
0.0000 1.0000 42 0.0000 1.0000 42 0.0000 1.0000 42 0.0000 1.0000 43 0.0000 1.0000 43 0.0000 1.0000 43 0.0000 1.0000 44 0.0000 1.0000 44 0.0000 1.0000 44 0.0000 1.0000 45 0.0000 1.0000 45 0.0000 1.0000 46 0.0000 1.0000 46 0.0000 1.0000 46 0.0000 1.0000 47 0.0000 1.0000 47 0.0000 1.0000 47 0.0000 1.0000 47 0.0000 1.0000 48 0.0000 1.0000 48 0.0000 1.0000 48 0.0000 1.0000 48 0.0000 1.0000 48 0.0000 1.0000 49 0.0000 1.0000 49 0.0000 1.0000 49 0.0000 1.0000 50 0.0000 1.0000 50 0.0000 1.0000 50										
0.0000 1.0000 43 0.0000 1.0000 43 0.0000 1.0000 43 0.0000 1.0000 43 0.0000 1.0000 44 0.0000 1.0000 44 0.0000 1.0000 44 0.0000 1.0000 44 0.0000 1.0000 44 0.0000 1.0000 44 0.0000 1.0000 44 0.0000 1.0000 45 0.0000 1.0000 45 0.0000 1.0000 46 0.0000 1.0000 46 0.0000 1.0000 46 0.0000 1.0000 47 0.0000 1.0000 47 0.0000 1.0000 47 0.0000 1.0000 48 0.0000 1.0000 48 0.0000 1.0000 48 0.0000 1.0000 49 0.0000 1.0000 49 0.0000 1.0000 50 0.0000 1.0000 50 0.0000 1.0000 50 0.0000 1.0000 51 0.0000 1.0000 51 0.0000 1.0000 51<										
0.0000 1.0000 44 0.0000 1.0000 44 0.0000 1.0000 44 0.0000 1.0000 45 0.0000 1.0000 45 0.0000 1.0000 45 0.0000 1.0000 46 0.0000 1.0000 46 0.0000 1.0000 47 0.0000 1.0000 48 0.0000 1.0000 48 0.0000 1.0000 48 0.0000 1.0000 49 0.0000 1.0000 49 0.0000 1.0000 49 0.0000 1.0000 50 0.0000 1.0000 50 0.0000 1.0000 50 0.0000 1.0000 50 0.0000 1.0000 51 0.0000 1.0000 51 0.0000 1.0000 52 0.0000 1.0000 52 0.0000 1.0000 52 0.0000 1.0000 53 0.0000 1.0000 53 0.0000 1.0000 53 0.0000 1.0000 54 0.000										
0.0000 1.0000 45 0.0000 1.0000 45 0.0000 1.0000 45 0.0000 1.0000 46 0.0000 1.0000 46 0.0000 1.0000 46 0.0000 1.0000 47 0.0000 1.0000 47 0.0000 1.0000 47 0.0000 1.0000 48 0.0000 1.0000 48 0.0000 1.0000 48 0.0000 1.0000 49 0.0000 1.0000 49 0.0000 1.0000 49 0.0000 1.0000 50 0.0000 1.0000 50 0.0000 1.0000 50 0.0000 1.0000 51 0.0000 1.0000 51 0.0000 1.0000 51 0.0000 1.0000 52 0.0000 1.0000 52 0.0000 1.0000 52 0.0000 1.0000 53 0.0000 1.0000 53 0.0000 1.0000 53 0.0000 1.0000 54 0.000										
0.0000 1.0000 46 0.0000 1.0000 46 0.0000 1.0000 46 0.0000 1.0000 47 0.0000 1.0000 47 0.0000 1.0000 47 0.0000 1.0000 48 0.0000 1.0000 48 0.0000 1.0000 48 0.0000 1.0000 49 0.0000 1.0000 49 0.0000 1.0000 49 0.0000 1.0000 50 0.0000 1.0000 50 0.0000 1.0000 50 0.0000 1.0000 51 0.0000 1.0000 51 0.0000 1.0000 51 0.0000 1.0000 52 0.0000 1.0000 52 0.0000 1.0000 52 0.0000 1.0000 53 0.0000 1.0000 53 0.0000 1.0000 54 0.0000 1.0000 54 0.0000 1.0000 55 0.0000 1.0000 56 0.0000										
0.0000 1.0000 47 0.0000 1.0000 47 0.0000 1.0000 47 0.0000 1.0000 48 0.0000 1.0000 48 0.0000 1.0000 48 0.0000 1.0000 49 0.0000 1.0000 50 0.0000 1.0000 50 0.0000 1.0000 50 0.0000 1.0000 50 0.0000 1.0000 50 0.0000 1.0000 51 0.0000 1.0000 51 0.0000 1.0000 51 0.0000 1.0000 51 0.0000 1.0000 51 0.0000 1.0000 52 0.0000 1.0000 52 0.0000 1.0000 52 0.0000 1.0000 53 0.0000 1.0000 53 0.0000 1.0000 53 0.0000 1.0000 54 0.0000 1.0000 54 0.0000 1.0000 54 0.0000 1.0000 55 0.0000 1.0000 56 0.0000 1.0000										
0.0000 1.0000 48 0.0000 1.0000 48 0.0000 1.0000 48 0.0000 1.0000 49 0.0000 1.0000 49 0.0000 1.0000 49 0.0000 1.0000 50 0.0000 1.0000 50 0.0000 1.0000 50 0.0000 1.0000 51 0.0000 1.0000 51 0.0000 1.0000 51 0.0000 1.0000 52 0.0000 1.0000 52 0.0000 1.0000 52 0.0000 1.0000 53 0.0000 1.0000 53 0.0000 1.0000 53 0.0000 1.0000 54 0.0000 1.0000 54 0.0000 1.0000 54 0.0000 1.0000 55 0.0000 1.0000 55 0.0000 1.0000 56 0.0000 1.0000 56 0.0000 1.0000 57 0.0000 1.0000 57 0.0000 1.0000										
0.0000 1.0000 49 0.0000 1.0000 49 0.0000 1.0000 49 0.0000 1.0000 50 0.0000 1.0000 50 0.0000 1.0000 50 0.0000 1.0000 51 0.0000 1.0000 51 0.0000 1.0000 51 0.0000 1.0000 52 0.0000 1.0000 52 0.0000 1.0000 52 0.0000 1.0000 53 0.0000 1.0000 53 0.0000 1.0000 53 0.0000 1.0000 54 0.0000 1.0000 54 0.0000 1.0000 54 0.0000 1.0000 55 0.0000 1.0000 55 0.0000 1.0000 55 0.0000 1.0000 56 0.0000 1.0000 57 0.0000 1.0000 57 0.0000 1.0000 58 0.0000 1.0000 58 0.0000 1.0000 58 0.0000										
0.0000 1.0000 50 0.0000 1.0000 50 0.0000 1.0000 50 0.0000 1.0000 51 0.0000 1.0000 51 0.0000 1.0000 51 0.0000 1.0000 52 0.0000 1.0000 52 0.0000 1.0000 52 0.0000 1.0000 53 0.0000 1.0000 54 0.0000 1.0000 54 0.0000 1.0000 55 0.0000 1.0000 55 0.0000 1.0000 55 0.0000 1.0000 56 0.0000 1.0000 56 0.0000 1.0000 57 0.0000 1.0000 57 0.0000 1.0000 58 0.0000 1.0000 58 0.0000 1.0000 59 0.0000 1.0000 59 0.0000 1.0000 59 0.0000 1.0000 61 0.0000 1.0000 62 0.0000 1.0000 62 0.0000										
0.0000 1.0000 51 0.0000 1.0000 51 0.0000 1.0000 52 0.0000 1.0000 52 0.0000 1.0000 52 0.0000 1.0000 52 0.0000 1.0000 53 0.0000 1.0000 53 0.0000 1.0000 53 0.0000 1.0000 54 0.0000 1.0000 54 0.0000 1.0000 54 0.0000 1.0000 55 0.0000 1.0000 55 0.0000 1.0000 56 0.0000 1.0000 57 0.0000 1.0000 57 0.0000 1.0000 58 0.0000 1.0000 58 0.0000 1.0000 58 0.0000 1.0000 58 0.0000 1.0000 59 0.0000 1.0000 59 0.0000 1.0000 59 0.0000 1.0000 61 0.0000 1.0000 61 0.0000 1.0000 62 0.0000										
0.0000 1.0000 52 0.0000 1.0000 52 0.0000 1.0000 52 0.0000 1.0000 53 0.0000 1.0000 53 0.0000 1.0000 53 0.0000 1.0000 54 0.0000 1.0000 54 0.0000 1.0000 54 0.0000 1.0000 55 0.0000 1.0000 55 0.0000 1.0000 56 0.0000 1.0000 57 0.0000 1.0000 57 0.0000 1.0000 58 0.0000 1.0000 58 0.0000 1.0000 58 0.0000 1.0000 58 0.0000 1.0000 59 0.0000 1.0000 59 0.0000 1.0000 59 0.0000 1.0000 61 0.0000 1.0000 61 0.0000 1.0000 61 0.0000 1.0000 62 0.0000 1.0000 62 0.0000 1.0000 62 0.0000										
0.0000 1.0000 53 0.0000 1.0000 53 0.0000 1.0000 53 0.0000 1.0000 54 0.0000 1.0000 54 0.0000 1.0000 54 0.0000 1.0000 55 0.0000 1.0000 55 0.0000 1.0000 55 0.0000 1.0000 56 0.0000 1.0000 56 0.0000 1.0000 57 0.0000 1.0000 58 0.0000 1.0000 58 0.0000 1.0000 58 0.0000 1.0000 59 0.0000 1.0000 59 0.0000 1.0000 59 0.0000 1.0000 60 0.0000 1.0000 60 0.0000 1.0000 60 0.0000 1.0000 61 0.0000 1.0000 61 0.0000 1.0000 61 0.0000 1.0000 62 0.0000 1.0000 62 0.0000 1.0000 62 0.0000										
0.0000 1.0000 54 0.0000 1.0000 54 0.0000 1.0000 54 0.0000 1.0000 54 0.0000 1.0000 55 0.0000 1.0000 55 0.0000 1.0000 55 0.0000 1.0000 56 0.0000 1.0000 56 0.0000 1.0000 56 0.0000 1.0000 56 0.0000 1.0000 57 0.0000 1.0000 57 0.0000 1.0000 58 0.0000 1.0000 58 0.0000 1.0000 58 0.0000 1.0000 58 0.0000 1.0000 59 0.0000 1.0000 59 0.0000 1.0000 59 0.0000 1.0000 59 0.0000 1.0000 59 0.0000 1.0000 60 0.0000 1.0000 60 0.0000 1.0000 60 0.0000 1.0000 61 0.0000 1.0000 61 0.0000 1.0000 62 0.0000 1.0000 62 0.0000 1.0000 62<										
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$										
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$										
0.0000 1.0000 57 0.0000 1.0000 57 0.0000 1.0000 57 0.0000 1.0000 58 0.0000 1.0000 58 0.0000 1.0000 58 0.0000 1.0000 59 0.0000 1.0000 59 0.0000 1.0000 59 0.0000 1.0000 60 0.0000 1.0000 60 0.0000 1.0000 60 0.0000 1.0000 61 0.0000 1.0000 61 0.0000 1.0000 61 0.0000 1.0000 62 0.0000 1.0000 62 0.0000 1.0000 62 0.0000 1.0000 63 0.0000 1.0000 63 0.0000 1.0000 63 0.0000 1.0000 64 0.0000 1.0000 64 0.0000 1.0000 64										
0.0000 1.0000 58 0.0000 1.0000 58 0.0000 1.0000 58 0.0000 1.0000 59 0.0000 1.0000 59 0.0000 1.0000 59 0.0000 1.0000 60 0.0000 1.0000 60 0.0000 1.0000 60 0.0000 1.0000 61 0.0000 1.0000 61 0.0000 1.0000 61 0.0000 1.0000 62 0.0000 1.0000 62 0.0000 1.0000 62 0.0000 1.0000 63 0.0000 1.0000 63 0.0000 1.0000 63 0.0000 1.0000 64 0.0000 1.0000 64 0.0000 1.0000 64				0.0000						
0.0000 1.0000 58 0.0000 1.0000 58 0.0000 1.0000 58 0.0000 1.0000 59 0.0000 1.0000 59 0.0000 1.0000 59 0.0000 1.0000 60 0.0000 1.0000 60 0.0000 1.0000 60 0.0000 1.0000 61 0.0000 1.0000 61 0.0000 1.0000 61 0.0000 1.0000 62 0.0000 1.0000 62 0.0000 1.0000 62 0.0000 1.0000 63 0.0000 1.0000 63 0.0000 1.0000 63 0.0000 1.0000 64 0.0000 1.0000 64 0.0000 1.0000 64	0.0000	1.0000	57	0.0000				0.0000	1.0000	57
0.0000 1.0000 59 0.0000 1.0000 59 0.0000 1.0000 59 0.0000 1.0000 60 0.0000 1.0000 60 0.0000 1.0000 60 0.0000 1.0000 61 0.0000 1.0000 61 0.0000 1.0000 61 0.0000 1.0000 62 0.0000 1.0000 62 0.0000 1.0000 62 0.0000 1.0000 63 0.0000 1.0000 63 0.0000 1.0000 63 0.0000 1.0000 64 0.0000 1.0000 64 0.0000 1.0000 64	0.0000	1.0000		0.0000	1.0000			0.0000	1.0000	
0.0000 1.0000 60 0.0000 1.0000 60 0.0000 1.0000 60 0.0000 1.0000 61 0.0000 1.0000 61 0.0000 1.0000 61 0.0000 1.0000 62 0.0000 1.0000 62 0.0000 1.0000 62 0.0000 1.0000 63 0.0000 1.0000 63 0.0000 1.0000 63 0.0000 1.0000 64 0.0000 1.0000 64 0.0000 1.0000 64	0.0000	1.0000		0.0000				0.0000	1.0000	
0.0000 1.0000 61 0.0000 1.0000 61 0.0000 1.0000 61 0.0000 1.0000 62 0.0000 1.0000 62 0.0000 1.0000 62 0.0000 1.0000 63 0.0000 1.0000 63 0.0000 1.0000 63 0.0000 1.0000 64 0.0000 1.0000 64 0.0000 1.0000 64										
0.0000 1.0000 62 0.0000 1.0000 62 0.0000 1.0000 62 0.0000 1.0000 63 0.0000 1.0000 63 0.0000 1.0000 63 0.0000 1.0000 64 0.0000 1.0000 64 0.0000 1.0000 64										
0.0000 1.0000 63 0.0000 1.0000 63 0.0000 1.0000 63 0.0000 1.0000 64 0.0000 1.0000 64 0.0000 1.0000 64										
0.0000 1.0000 64 0.0000 1.0000 64 0.0000 1.0000 64										
	0.0000	1.0000	65	0.0000	1.0000	65		0.0000	1.0000	65

Appendix G Signal Warrant Check

1073S. Winchester Mixed-Use

3 . Winchester Boulevard and Walgrove Way



Source: Figure 4C-3 of the Manual on Unifrom Traffic Control and Devices (MUTCD) from California Department of Transportation (Caltrans).

^{* 150} vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

			roach nes 2 or More	Existing AM	Background AM	Background Plus Project AM
Major Street - Both Approaches	Winchester Boulevard		X	1763	1976	2000
Minor Street - Highest Approach	Walgrove Way	Х		73	73	73
Maximum warrant threshold for minor street volun	ne			100	100	100
Difference between warrant threshold & minor stre	eet volume			27	27	27
		10/				
		warra	nt Met?	No	No	No
		Аррі	roach nes 2 or More	Existing PM	Background PM	Background Plus S
Major Street - Both Approaches	Winchester Boulevard	Appi La	roach nes 2 or		₩d	snlc
Major Street - Both Approaches Minor Street - Highest Approach	Winchester Boulevard Walgrove Way	Appi La	roach nes 2 or More	Existing PM	Background PM	Background Plus Project PM
, ,,	Walgrove Way	Appi La One	roach nes 2 or More	Existing PM	Mackground PM	99 Background Plus 90 Project PM
Minor Street - Highest Approach	Walgrove Way	Appi La One	roach nes 2 or More	Wd bulling by 2246	Wackground PM 33	Background Plus Project PM

Appendix H Traffic Demand Management (TDM) Plan







1073 South Winchester Mixed-Use **Development**

Draft Transportation Demand Management (TDM) Plan

Prepared for:

Visrael 26, LLC.

March 10, 2020













Hexagon Transportation Consultants, Inc.

Hexagon Office: 8070 Santa Teresa Boulevard, Suite 230

Gilroy, CA 95020

Hexagon Job Number: 19RD30

Phone: 408.846.7410



www.hextrans.com

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

Table of Contents

1. Introduction					
List of	Figures				
Figure 1	Project Site Location	3			
Figure 2	Project Site Plan	4			
Figure 3	Existing Bicycle Facilities	8			
Figure 4	Existing Transit Facilities	9			



1. Introduction

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 purpose of TDM is to (1) reduce the amount of trips 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 sustainable 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 parking reductions are achieved.

This TDM plan has been prepared for the proposed mixed-use development located at 1073 S. Winchester Boulevard to satisfy the requirements outlined in Section 20.90.220 of the San Jose Code of Ordinances. The ordinance allows developments to use up to a maximum of 50 percent parking reduction, so long as the following requirements are met:

- The reduction in parking will not adversely affect surrounding projects
- The reduction in parking will not rely upon or reduce the public parking supply
- The project provides a detailed TDM plan and demonstrates that the TDM program can be maintained indefinitely

This TDM Plan addresses all the requirements of the City's ordinance and includes TDM measures designed to reduce the proposed project's parking demand and trips by residents and office tenants. The TDM plan includes maintaining an online kiosk of trip-planning resources, providing 100 percent unbundled parking for all residential spaces, providing VTA SmartPasses to residential and commercial tenants, and providing adequate on-site bicycle storage.

Project Description

The project site is located along the west side of Winchester Boulevard, approximately 600 feet south of Williams Road and within a designated Urban Village (Winchester Boulevard). According to the Envision San Jose 2040 General Plan, an Urban Village strategy fosters:

- Mixed residential and employment activities that are attractive to an innovative workforce
- Revitalization of underutilized properties that have access to existing infrastructure
- Densities that support transit use, bicycling, and walking
- High-quality urban design



As proposed, the development would consist of the replacement of a 9,762-square-foot office building currently on-site with 61 condominium units and 17,970 square feet of office space. A total of 115 parking spaces will be provided on site. Access to and from the project site would be provided via one right-in/right-out driveway along Winchester Boulevard. The project site location and the surrounding study area are shown on Figure 1. The project site plan is shown on Figure 2.

Location and Proximity to Transit

The location of a project within an urban village promotes pedestrian and bicycle travel in a high-density area of complementary land uses.

The project site is located approximately 1.4 miles from the Hamilton LRT Station, at the interchange of SR 17 and Hamilton Avenue, which connects to the San Jose Diridon Station. Several VTA local and express route bus stops are located within walking distance of the project site. Chapter 2 describes the existing transit services in the study area.

Parking

Based on the City's standard parking requirements, the project is required to provide a total of 164 off-street parking spaces before any reductions. However, the project is located in the Winchester Urban Village. The Urban Village Overlay automatically allows for a 20 percent reduction in parking. With the 20 percent reduction, the required parking would be reduced to 131 spaces, consisting of 81 spaces for the residential use and 50 spaces for the office use. The project is proposing a total of 115 parking spaces, which would not meet the City's reduced parking requirements.

The proposed number of parking spaces represents a 30% reduction from the standard required number of spaces. With the 20% Urban Village reduction, the project requires an additional 10% reduction in on-site parking spaces. Therefore, the project will need to submit and have approved a TDM plan. The TDM plan will need to include at least three TDM measures specified in Subsections c and d of Section 20.90.220.A.1.

Report Organization

The remainder of this report is divided into two chapters. Chapter 2 describes the transportation facilities and services in the vicinity of the project site. Chapter 3 describes the TDM measures that would be implemented for the proposed project, including the program for implementing and monitoring the TDM plan.



Figure 1
Project Site Location

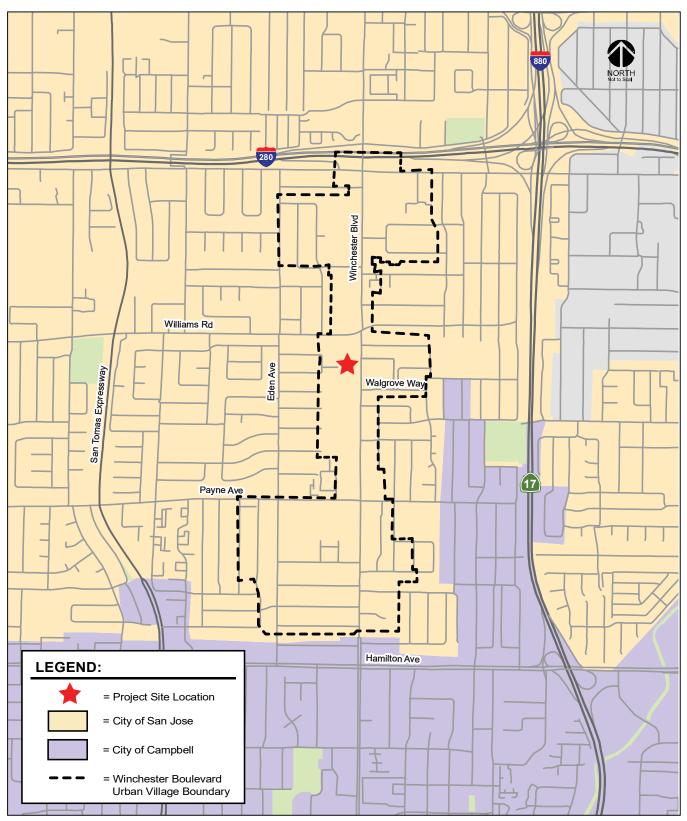
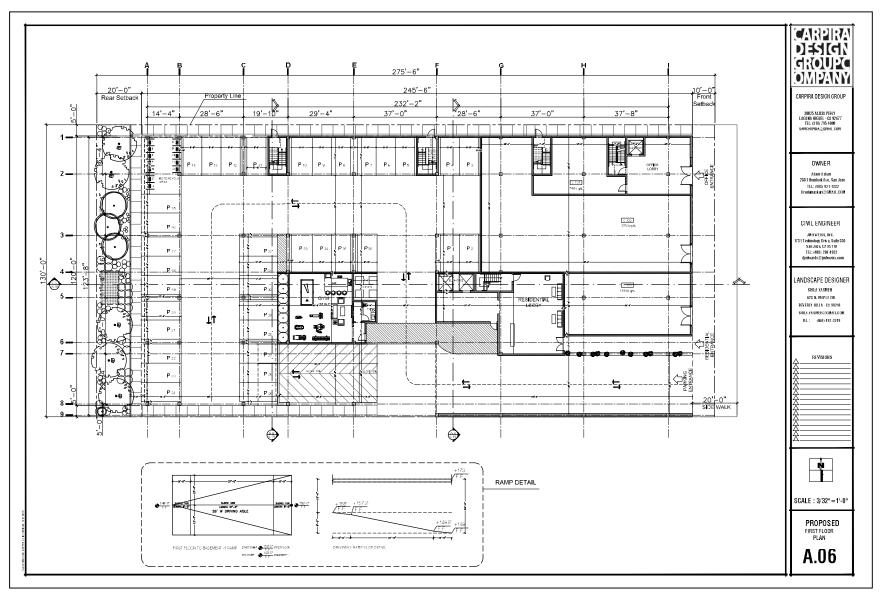




Figure 2 Project Site Plan





2.

Existing Transportation Facilities

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

Existing Roadway Network

Regional access to the project site is provided via SR 17 and I-280. These facilities are described below.

SR 17 is a six-lane freeway in the vicinity of the site. It extends from Santa Cruz to I-280 in San Jose, at which point it makes a transition to I-880 to Oakland. Access to the site is provided via its interchange with Hamilton Avenue.

I-280 is an eight-lane freeway in the vicinity of the site. It extends northwest to San Francisco and east to King Road in San Jose, at which point it makes a transition to I-680 to Oakland. North of I-880, I-280 has high occupancy vehicle (HOV) lanes in both directions. Access to and from northbound I-280 to the site is provided via its interchange with Winchester Boulevard and via SR 17 to Hamilton Avenue.

Local access to the site is provided by Winchester Boulevard, Moorpark Avenue, Williams Road, Payne Avenue, Hamilton Avenue, San Tomas Expressway, and Eden Avenue. These roadways are described below.

Winchester Boulevard is a divided six-lane north-south roadway that runs from Los Gatos to Lincoln Street in Santa Clara. In the project vicinity, Winchester Boulevard has a posted speed limit of 35 mph with sidewalks on both sides of the street and on-street bike lanes between I-280 and Stevens Creek Boulevard. Direct access to and from the project site is provided via a right-in/right-out only driveway along Winchester Boulevard.

Moorpark Avenue is a four-lane east-west roadway that runs from Lawrence Expressway to Bascom Avenue. East of Bascom Avenue, Moorpark Avenue makes a transition into a three-lane one-way roadway to Leigh Avenue. Moorpark Avenue provides access to the project site via Winchester Boulevard.

Williams Road is a two-lane east-west roadway in the vicinity of the project site. It extends east from Moorpark Avenue to South Daniel Way, just east of Winchester Boulevard. Williams Road provides access to the project site via Winchester Boulevard.



Payne Avenue is a two-lane east-west roadway in the vicinity of the project site. It extends east from Saratoga Avenue to Almarida Drive, just east of Winchester Boulevard. Payne Avenue provides access to the project site via Winchester Boulevard.

Hamilton Avenue is a six-lane east-west roadway between Marathon Drive and Leigh Avenue. West of Marathon Drive, Hamilton Avenue narrows to a four-lane roadway and extends west to Campbell Avenue. East of Leigh Avenue, Hamilton Avenue narrows to a four-lane roadway and extends west to Meridian Avenue. Hamilton Avenue provides access to the project site via Winchester Boulevard.

San Tomas Expressway is a north-south expressway that begins at its interchange with US 101 and extends southward through Santa Clara and San Jose and into Campbell, where it transitions into Camden Avenue at SR 17. San Tomas Expressway provides access to and from the project site via Williams Road and Payne Avenue.

Eden Avenue is a two-lane north-south roadway in the vicinity of the project site. It extends north from Hamilton Avenue to Moorpark Avenue. Eden Avenue provides access to the project site via Williams Road and Payne Avenue.

Existing Bicycle and Pedestrian Facilities

Class II Bikeway (Bike Lane). Class II bikeways are striped bike lanes on roadways that are marked by signage and pavement markings. Within the vicinity of the project site, striped bike lanes are present on the following roadway segments.

- Winchester Boulevard, between Hamilton Avenue and Payne Avenue
- Winchester Boulevard, between Tisch Way and Stevens Creek Boulevard
- Hamilton Avenue, west of SR 17
- Payne Avenue, west of Winchester Boulevard
- Williams Road, west of Baywood Avenue
- Moopark Avenue, west of Thornton Way
- Monroe Street, between Tisch Way and Stevens Creek Boulevard

Class III Bikeway (Bike Route). Class III bikeways are bike routes and only have signs to help guide bicyclists on recommended routes to certain locations. In the vicinity of the project site, the following roadway segments are designated as bike routes.

- Payne Avenue, between Winchester Boulevard and Greenbriar Avenue
- Eden Avenue, between Impala Drive and Hamilton Avenue
- Milton Avenue, south of Hamilton Avenue
- Darryl Drive, between Hamilton Avenue and Payne Avenue
- Monroe Street, between Moopark Avenue and Williams Road
- Williams Road, between Baywood Avenue and Daniel Way
- Daniel Way, between Williams Road and Westfield Avenue
- Thornton Way, between Moorpark Avenue and Downing Avenue
- Central Avenue, bewteen Hamilton Avenue and Westfield Avenue
- Downing Avenue, east of SR 17

Although none of the residential streets near the project site (i.e., Cadillac Drive and Eden Avenue) provide bike lanes or are designated as bike routes, due to their low traffic volumes, many of them are conducive to bicycle usage. The existing bicycle facilities are shown in Figure 3.

The locations of three pedestrian footbridge crossings over freeways in vicinity of the project site are listed below and shown in Figure 3.



- SR 17 pedestrian footbridge connecting Westfield Avenue and Downing Avenue
- I-280 pedestrian footbridge connecting Moorpark Avenue and Cypress Avenue
- I-280 pedestrian footbridge connecting Moorpark Avenue and Tisch Way

Controlled crosswalks across Winchester Boulevard are provided near the project site at the signalized Williams Road and Payne Avenue intersections with Winchester Boulevard. Overall, the existing network of sidewalks and crosswalks provides good connectivity and provides pedestrians with safe routes to transit services and other points of interest in the area.

Existing Transit Service

Existing transit service to the study area is provided by the VTA and described below. The local bus routes near the project site are shown on Figure 4.

Frequent Route 25 runs from the De Anza College to Alum Rock Transit Center and operates from 5:00 AM to 12:30 AM on weekdays with 15- to 30-minute headways during commute periods. Route 25 operates along Winchester Boulevard and Williams Road in the project area. The closest bus stop is located approximately 600 north of the project site at the intersection of Winchester Boulevard and Williams Road.

Local Route 56 runs from Lockheed Martin to Tamien Station and operates from 5:00 AM to 10:30 PM on weekdays with 30-minute headways during commute periods. The closest bus stop is located approximately 0.9 mile from the project site at the intersection of Winchester Boulevard and Hamilton Avenue.

Frequent Route 60 runs from the BART Station in Milpitas to Winchester Station via SJC Airport and operates from 5:00 AM to 12:30 AM on weekdays with 15-minute headways during commute periods. Route 60 operates along Winchester Boulevard in the project area. The closest southbound and northbound bus stops to the project site are located at most approximately 300 feet away from the project site along Winchester Boulevard.

Express Route 101 runs from the Camden Avenue near Highway 85 to Stanford Research Park in Palo Alto and operates two northbound trips during the morning commute period and two southbound trips during the afternoon commute period with 50- to 60-minute headways. The closest bus stop is located approximately 0.9 mile from the project site at the intersection of Winchester Boulevard and Hamilton Avenue.

VTA Light Rail Transit (LRT) Service

LRT Green Line runs from the Winchester Transit Center in Campbell to Old Ironsides in Santa Clara and operates from 5:00 AM to 1:00 AM with 15-minute headways during the peak commute periods. The closest LRT station is located approximately 1.4 miles from the project site at the interchange of SR 17 and Hamilton Avenue.

LRT Route 902 connects to other services such as Caltrain, Amtrak, and ACE in downtown San Jose at the Diridon Transit Center.



Figure 3
Existing Bicycle Facilities

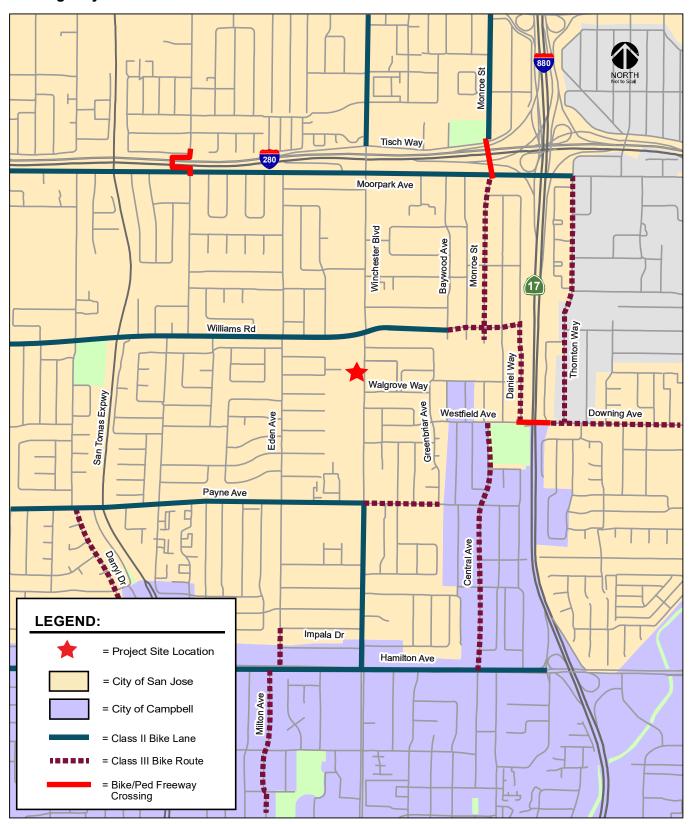
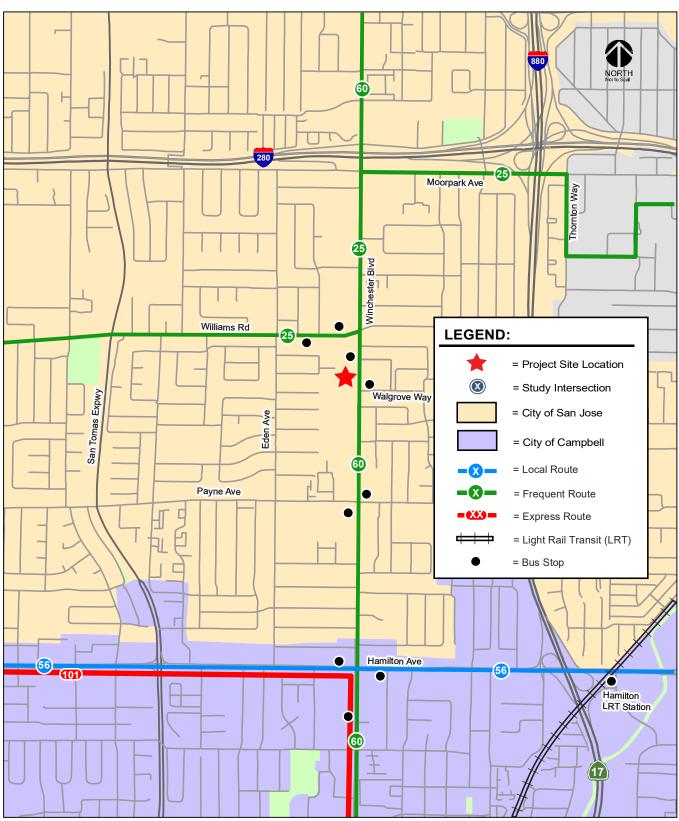




Figure 4
Existing Transit Facilities





3. TDM Plan

The TDM measures for the project were developed based on the parking reduction requirements outlined in Section 20.90.220 of the San Jose Code of Ordinances and were geared to meeting up to a 30 percent parking reduction.

Implementation of the proposed TDM measures would encourage future residents and office tenants to utilize alternative transportation modes (transit, bicycle, and carpool) to further reduce the SOV trips and parking demand generated by the project.

City of San Jose Parking Code

According to Section 20.90.220.A.1 of the San Jose Parking Code, a reduction in the required off-street vehicle parking spaces of up to 20 percent is automatically allowed if the provisions of Subsections a and b are met. A reduction of up to 50 percent may be authorized if the project conforms to the requirements specified in Subsections a and b, and implements at least three TDM measures specified in Subsections c and d. Section 20.90.220.A.1 is outlined below.

Section 20.90.220.A.1 – Reduction in Required Off-street Parking Spaces

A. Alternative transportation.

- 1. A reduction in the required off-street vehicle parking spaces of up to fifty percent may be authorized with a development permit or a development exception if no development permit is required, for structures or uses that conform to all of the following and implement a total of at least three transportation demand management (TDM) measures as specified in the following provisions:
 - a. The structure or use is located within two thousand feet of a proposed or an existing rail station or bus rapid transit station, or an area designated as a Neighborhood Business District, or as an Urban Village, or as an area subject to an area development policy in the city's general plan or the use is listed in Section 20.90.220G.; and
 - b. The structure or use provides bicycle parking spaces in conformance with the requirements of Table 20-90.
 - c. For any reduction in the required off-street parking spaces that is more than twenty percent, the project shall be required to implement a transportation demand



management (TDM) program that contains but is not limited to at least one of the following measures:

- i. Implement a carpool/vanpool or car-share program, e.g., carpool ridematching for employees, assistance with vanpool formation, provision of vanpool or car-share vehicles, etc. and assign car pool, van pool and carshare parking at the most desirable onsite locations at the ratio set forth in the development permit or development exception considering type of use; or
- ii. Develop a transit use incentive program for employees and tenants, such as on-site distribution of passes or subsidized transit passes for local transit system (participation in the region-wide Clipper Card or VTA EcoPass system will satisfy this requirement).
- d. In addition to the requirements above in Section 20.90.220.A.1.c. for any reduction in the required off-street parking spaces that is more than twenty percent, the project shall be required to implement a transportation demand management (TDM) program that contains but is not limited to at least two of the following measures:
 - i. Implement a carpool/vanpool or car-share program, e.g., carpool ridematching for employees, assistance with vanpool formation, provision of vanpool or car-share vehicles, etc. and assign car pool, van pool and carshare parking at the most desirable on-site locations; or
 - Develop a transit use incentive program for employees, such as on-site distribution of passes or subsidized transit passes for local transit system (participation in the region-wide Clipper Card or VTA EcoPass system will satisfy this requirement); or
 - iii. Provide preferential parking with charging facility for electric or alternativelyfueled vehicles; or
 - iv. Provide a guaranteed ride home program; or
 - v. Implement telecommuting and flexible work schedules; or
 - vi. Implement parking cash-out program for employees (non-driving employees receive transportation allowance equivalent to the value of subsidized parking); or
 - vii. Implement public information elements such as designation of an on-site TDM manager and education of employees regarding alternative transportation options; or
 - viii. Make available transportation during the day for emergency use by employees who commute on alternate transportation. (This service may be provided by access to company vehicles for private errands during the workday and/or combined with contractual or pre-paid use of taxicabs, shuttles, or other privately provided transportation); or
 - ix. Provide shuttle access to Caltrain stations; or
 - x. Provide or contract for on-site or nearby child-care services; or
 - xi. Incorporate on-site support services (food service, ATM, drycleaner, gymnasium, etc. where permitted in zoning districts); or
 - xii. Provide on-site showers and lockers: or



- xiii. Provide a bicycle-share program or free use of bicycles on-site that is available to all tenants of the site; or
- xiv. Unbundled parking; and
- e. For any project that requires a TDM program:
 - i. The decision maker for the project application shall first find in addition to other required findings that the project applicant has demonstrated that it can maintain the TDM program for the life of the project, and it is reasonably certain that the parking shall continue to be provided and maintained at the same location for the services of the building or use for which such parking is required, during the life of the building or use; and
 - ii. The decision maker for the project application also shall first find that the project applicant will provide replacement parking either on-site or off-site within reasonable walking distance for the parking required if the project fails to maintain a TDM program.

Compliance with the City Parking Code

The following sections describe how the project could comply with the City Parking Code.

Urban Village Area (Subsection A)

The project is located in a designated Urban Village area. Therefore, the project would conform to Subsection 20.90.220.A.1.a.

Bicycle Parking Requirement (Subsection B)

According to the City's Bicycle Parking Standards (Chapter 20.90, Table 20-210), the project is required to provide bicycle parking for the office building at a rate of one bicycle parking space per 4,000 square feet of office space and one bicycle parking space per four residential units. This equates to a total requirement of 20 bicycle parking spaces, of which 4 bicycle parking spaces would serve the office component and 16 bicycle parking spaces would serve the residential units. Of the required bicycle parking, City standards require that 80 and 40 percent be short-term bicycle spaces with 20 and 60 percent be secured long-term bicycle spaces for office and residential uses, respectively. Based on these requirements, the project would need to provide 9 short-term and 11 long-term bicycle parking spaces.

The project site plan indicates that bicycle storage areas to accommodate 46 bicycles will be located within the basement level of the parking garage. Therefore, the proposed bicycle parking on-site will exceed the City's requirements and encourage the use of non-auto modes of travel and minimize the demand for on-site parking. Therefore, the project would comply with Subsection 20.90.220.A.1.b.

Vehicle Parking Requirement

The City of San Jose Zoning Code (Section 20.90.060) states that office uses are required to provide one parking space per 250 square feet of floor area. The required parking spaces for multi-family residential units is dependent on the living unit size. The project as proposed would construct 17,970 gross square feet of office space and 61 multi-family residential units. According to the City's Zoning Code, "Floor area" is defined as 85 percent of the "total gross floor area" of the building. Based on the City's parking requirements and the current project description, the project

would be required to provide a total of 164 off-street parking spaces consisting of 62 parking spaces for the office space and 102 parking spaces for the residential units before any reductions (see Table 1). However, the project is located in the Winchester Urban Village. The Urban Village Overlay



automatically allows for a 20 percent reduction in parking. With the 20 percent reduction, the required parking would be reduced to 131 spaces, consisting of 81 spaces for the residential use and 50 spaces for the office use. The project is proposing a total of 115 parking spaces, which would not meet the City's reduced parking requirements.

The proposed number of parking spaces represent a 30% reduction from the standard required number of spaces. With the 20% Urban Village reduction, the project requires an additional 10% reduction in on-site parking spaces. Therefore, the project will need to submit and have approved a TDM plan. The TDM plan will need to include at least three TDM measures specified in Subsections c and d of Section 20.90.220.A.1.

Recommended TDM Measures

The recommended TDM measures are intended to encourage residents and office employees to utilize alternative transportation modes available in the area to reduce single occupancy vehicle trips and parking demand generated by the project. The specific TDM measures that are recommended for the project are described below and are based on the measures specified in Subsections 20.90.220.A.1.c and d. Additionally, the project needs to ensure that the TDM plan will be maintained for the life of the project, which is in compliance with Subsection 20.90.220.A.1.e.

Online Kiosk

This TDM Plan recommends an online kiosk with information regarding non-auto transportation alternatives. The online kiosk will update key transportation information included in the welcome packets. Additionally, transportation news and commuter alerts will be posted online. Residents and commercial tenants should be able to access the kiosk from their desk at work, their home, or anywhere else. TDM-related links and information will be posted on this forum, and the Transportation Coordinator will have host permissions to send tenants email notifications pertaining to the TDM Plan and measures. The online kiosk will include information about all the measures, services, and facilities discussed in this Plan, including:

- A summary of VTA and Caltrain services and links to further information about their routes and schedules.
- Bicycling resources on 511.org.
- A local bikeways map.
- Information about ridematching services (511.org, Zimride, and TwoGo).
- A link to the many other trip planning resources available in the Bay Area such as Dadnab, the 511 Transit Trip Planner, real-time traffic conditions, etc.

The building developer would have responsibility for creating the website so that it is up and running as soon as the new building is ready for leasing. More specific information can be added later to reflect any programs specific to certain tenants.



Table 1 Vehicle Parking Requirements

Propose	Proposed Project City of San Jose Parking Code ¹		Required Parking		
Land Use	Size	Land Use	Parking Ratio	General	Urban Village ²
Residential Residential Residential	18 units 25 units 18 units 61 units	Multiple dwelling residential Multiple dwelling residential Multiple dwelling residential	1.25 spaces per one-bedroom unit1.70 spaces per two-bedroom unit2.00 spaces per three-bedroom unitTotal Required Residential Parking	23 43 36 102	18 34 81
Office	17,970 s.f.	Offices, business and admin	1.00 space per 250 s.f. of floor area ³ Total Required Parking	62 164	50 131

Notes:



¹City of San Jose Zoning Ordinance: Parking Spaces Required by Land Use

²Includes 20% allowable reduction of parking requirement in an Urban Village.

³According to the City's Zoning Code, "Floor area" is defined as 85 percent of the "total gross floor area" of the building.

Start New Search

Show Select Rail Stations/Stops

Trip Planning Resources

There are several free trip planning resources that tenants may not be aware of. Information on these services should be included in online kiosk for new residential tenants and future employees of the commercial uses. These include:

511 Transit Trip Planner

Online transit trip planning services are available to the greater San Francisco Bay Area through 511.org. Users enter their starting and ending points, and either the desired starting or ending trip time. The service can build an itinerary that best suits the user's preferences for the fastest trip, fewest transfers, or least walking.

511 Mobile

Many popular features from 511.org can be accessed using smart phones or mobile devices. With 511 Mobile, commuters can: (1) receive real-time transit departure predictions, (2) plan a public transit trip, (3) check real-time traffic conditions on the live traffic map, and (4) get current driving times for the most popular routes in the Bay Area.

511 Carpool Calculator

The 511 Carpool Calculator is a 511-sponsored online calculator that determines the cost of commuting by driving alone. Users input commute details such as the number of miles traveled to and from work, vehicle mileage, fuel cost, parking costs, and bridge tolls. The tool then calculates solo commuting costs and vehicle CO2 emissions, as well as the potential savings by adding carpool partners.

511 RideMatch

The 511 RideMatch service provides an interactive, on-demand system that helps commuters find carpools, vanpools or bicycle partners. This free car and vanpool ride matching service helps commuters find others with similar routes and travel patterns with whom they may share a ride. Registered users are provided with a list of other commuters near their employment or residential ZIP code along with the closest cross street, email, phone number, and hours they are available to commute to and from work. Participants are then able to select and contact others with whom they wish to commute. The service also provides a list of existing carpools and vanpools in their residential area that may have vacancies. Ride matching assistance is also available through a number of peer-to-peer matching programs, such as Zimride, which utilize social networks to match commuters.

Dadnab

Dadnab.com enables Bay Area commuters to get transit directions by text message. Users send a text message with their origin, destination, and optional departure or arrival time and Dadnab replies with a detailed itinerary listing which buses or trains to take, stop locations, and departure times.

Unbundled Parking

The project will provide 100 percent unbundled parking for all residential spaces. Unbundled parking means separating the cost of parking from residential leases and allowing residents to choose whether or not to lease a parking space. With this approach those tenants without a vehicle would not be required to pay for parking that they do not want or need. This is the most equitable approach and would free up parking for those tenants that require a space and are willing to pay for it. The parking



spaces will be priced to avoid tenants parking on the streets or in nearby parking lots. Unbundling residential parking costs from the cost of housing can reduce tenant vehicle ownership and parking demand and can be implemented on a month-to-month lease basis. With a lease, residents receive a monthly bill showing how much they are spending on a parking space and have the option to give up the space if they no longer need it.

Note that Policy TR-8.8 of the Envision San Jose 2040 General Plan calls for San Jose to "Promote use of unbundled private off-street parking associated with existing or new development, so that the sale or rental of a parking space is separated from the rental or sale price for a residential unit or for non-residential building square footage." In addition, Policy TR-10.1 states: "Explore development of a program... to require that parking spaces within new development in areas adjacent to transit and in all mixed-use projects be unbundled from rent or sale of the dwelling unit or building square footage."

Transit Subsidies

Subsidized transit passes are an extremely effective means of encouraging residents and employees to use transit rather than drive. Transit passes allow residents and employees to save money, as well as help them to avoid the stress of driving during commute periods. One way of doing this is to provide VTA SmartPasses to all residential tenants. SmartPasses will give tenants unlimited rides on VTA Bus, LRT and Express Bus service seven days a week. SmartPass is deeply discounted below the standard fares, making it an attractive low-cost benefit to residential communities.

Bicycle Programs

The project will provide adequate bicycle parking spaces for both the residential and commercial (office and retail) uses, per the City of San Jose Parking Code.

TDM Implementation and Monitoring

As previously stated, the primary purpose of the TDM plan is to reduce the proposed project's parking demand by up to 30 percent. Per Section 20.90.220 of the San Jose Code of Ordinances, monitoring progress would be necessary to ensure that the TDM measures are effective and continue to be successfully implemented.

The TDM plan would need to be re-evaluated annually for the life of the project. If it is determined that the 30 percent parking reduction is not being achieved (i.e., the on-site parking garage reaches full capacity), additional TDM measures would need to be introduced to ensure that the parking demand is being addressed by the project without the burden being placed on outside entities.

Conclusions

The TDM measures to be implemented by the project include planning and design measures related to the attributes of the site location, the site design, and on-site amenities. Such measures encourage walking, biking, and use of transit. The TDM plan includes maintaining an online kiosk of trip-planning resources, providing 100 percent unbundled parking for all residential spaces, providing VTA SmartPasses to residential and commercial tenants, and providing adequate on-site bicycle storage.

