





1520 W. San Carlos Street Mixed-Use Development



Transportation Analysis

Prepared for:

David J. Powers & Associates, Inc.



November 30, 2021 August 2, 2022









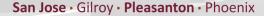


Hexagon Office: 8070 Santa Teresa Boulevard, Suite 230

Gilroy, CA 95020

Hexagon Job Number: 21LD10

Phone: 408.846.7410



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Executive Summary

This report presents the results of a Transportation Analysis (TA) for the proposed mixed-use development located at 1520 West San Carlos Street. The project site consists of four parcels (APNs 277-18-021, -024, -025, -026) and is located south of San Carlos Street and west of Willard Avenue in the City of San José. The project site is located within a designated Urban Village (West San Carlos) per the Envision San Jose 2040 General Plan. 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 all existing buildings on site with a mixed-use building consisting of 202256 residential units and approximately 15,14515,203 square feet of commercial space. Of the proposed total of 202256 residential units, 3039 units are proposed to be moderate-income affordable units and the remaining 172217 units would be market-rate units. On-site parking for all residential units and commercial space would be located in a garage with one basement level and one ground floor level. The garage would be accessible via one proposed full-access driveway along Willard Avenue.

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). Per the requirements of 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 residential component of the proposed project will meet all of the applicable VMT screening criteria for residential developments. The project site is located within a planned Growth Area (West San Carlos Urban Village) with low VMT per capita as identified by the City of San Jose and San Carlos Street, located along the north project frontage, is a high-quality transit corridor with VTA bus service headways of less than 15 minutes during peak commute periods. The proposed 15,14515,203 s.f. of commercial (retail) space is less than the 100,000 s.f. retail threshold screening criterion for local-serving retail. Therefore, the proposed residential and retail components of the project are anticipated to result in a less-than significant VMT impact and a detailed CEQA VMT transportation analysis is not required. However, a VMT evaluation for the project was completed using the *San José VMT Evaluation Tool* 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 (7.147.09) that is below the established threshold. Therefore, the proposed project would not result in an impact on the transportation system based on the City's VMT impact criteria.

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 West San Carlos 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 West San Carlos Urban Village goals and policies for the following reasons:

- The proposed residential uses for the project site are consistent with the Urban Village land use designation per the West San Carlos Urban Village plan.
- The project frontage along San Carlos Street will be consistent with planned streetscape design features per the West San Carlos Urban Village Plan.



- The project site is within walking distance (less than 100 feet) of bus stops on San Carlos Street.
- The project proposes to provide a paseo that enhances pedestrian and bicycle connections to other destinations within the urban village.

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 four signalized intersections and four 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 an additional $\frac{1,2801,522}{1,522}$ daily vehicle trips, with $\frac{85}{71}$ trips ($\frac{263}{5}$ inbound and $\frac{59}{48}$ outbound) occurring during the AM peak hour and $\frac{31}{4}$ 1 trips ($\frac{75}{63}$ inbound and $\frac{56}{48}$ outbound) occurring during the PM peak hour.

Future Intersection Operation Conditions

The operations analysis shows that all of the signalized 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.

Signal Warrant Analysis

A peak-hour traffic signal warrant check was conducted for the four unsignalized study intersections. The results indicate that projected traffic volumes at the study intersections will not meet the signal warrant checks under peak hour conditions with the project.

Intersection Queueing Analysis

The queues at high-demand movements will be served by the existing queue storage space under existing, background conditions, and background plus project conditions.

Neighborhood Interface

Due to the close proximity to San Carlos Street to the north and modern-day navigation and GPS services, most trips related to the proposed project are expected to utilize San Carlos Street to reach their destinations. However, it is possible that some trips related to the proposed project may utilize roadways identified by the City's Walking Audit Report to have traffic calming concerns (Willard Avenue, Douglas Street, and Page Street). Therefore, the project will be required to implement two radar speed signs along Willard Avenue as part of the project's mitigation of traffic calming concerns identified in the City's Walking Audit Report.



Site Access and On-Site Circulation

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.

Recommended Site Access and On-Site Circulation Improvements

- The proposed landscaping along Willard Avenue should be maintained so that the vision of drivers exiting the project driveway is not obstructed.
- On-street parking is currently provided along the project site frontage along Willard Avenue. Red curbs should be painted next to the project driveway to ensure that adequate sight distance is provided along the project driveway.
- The project applicant should discuss with city staff whether the ramp and proposed drive aisles are adequate, or if the project would be required to widen the ramp and/or drive aisles.
- Parking space widths (not shown on the site plan) also will need to be at least 8 feet wide to meet standards for compact parking spaces.
- Truck turning templates show that an SU-30 design vehicle would require a multi-point turn to
 access the loading dock if a 12-foot wide driveway is provided at the loading area. Providing a
 wider 16-foot wide driveway would allow for ingress and egress without a multi-point turn.
 Therefore, the City will require the loading area driveway to be a minimum of 16 feet wide.
- Trash bins should be wheeled out to Willard Avenue for garbage truck pickup. The designated pickup location should not inhibit access to the parking garage and loading area.

Parking Supply

Vehicular Parking

Based on the City's parking requirements, the project as currently proposed, would be required to provide a total of 425352 parking spaces before any reductions. The project is proposing to provide a total of 255261 parking spaces, which represents a 38.528% reduction in on-site parking spaces from the required baseline 425352 parking spaces. However, the project site is within the West San Carlos Urban Village and the project proposes to provide bicycle parking that will exceed the City's bicycle parking requirements. Therefore, the vehicle parking requirement would be reduced by 20% to 337282 vehicle parking spaces.

With the proposed <u>255261</u> on-site parking spaces, the project on-site parking will require an additional <u>18.5</u>% reduction in on-site parking spaces. Therefore, the project will need to submit and have approved a TDM plan for a total parking reduction of <u>328.5</u>%.

Bicycle Parking

The project site plan shows bicycle parking would be provided within a storage room located within the ground-floor parking leveldirectly along the Willard Avenue frontage and accessible via an internal walkway through the lobby. Per the site plan, a total of 71-77 spaces are provided within the storage room. The bicycle parking spaces proposed on-site will exceed the City's requirement for on-site bicycle parking and will encourage non-vehicular modes of travel to and from the site.

Pedestrian, Bicycle, and Transit Analysis

Pedestrian Facilities

Pedestrian generators in the project vicinity include commercial areas and bus stops along the San Carlos Street corridor. The project site is within the service boundaries of Trace Elementary School,



Herbert Hoover Middle School, and Lincoln High School, all of which are located on Dana Avenue approximately less than one mile from the project site. Existing sidewalks along San Carlos Street and Dana Avenue provide a pedestrian connection between the project site and pedestrian destinations in the project vicinity.

The project proposes to widen the existing 8-foot wide sidewalk along the north project frontage by 12 feet to a total width of 20 feet. The proposed sidewalk width will meet the minimum width required by the West San Carlos Urban Village Plan (Policy CS-4.4) which requires new developments to provide a 20-foot wide sidewalk along San Carlos Street. The sidewalk along the Willard Avenue project frontage is proposed to be 15 feet wide and will meet the minimum width required per Policy CS-4.5 for all other streets within the urban village.

Bicycle Facilities

The bikeways within the vicinity of the project site would remain unchanged under project conditions. The project would be directly served by a bike lane along its north project frontage on San Carlos Street, that runs between Leigh Avenue and Lincoln Avenue. A bike route also is located along Willard Avenue, south of the project site between Douglas Street and Scott Street.

The City's General Plan identifies a bicycle commute mode split target of 15 percent or more by the year 2040. This calculates to approximately 10 and 16 new bicycle trips generated by the project during the AM and PM peak hours, respectively. This level of bicycle mode share is a reasonable goal for the project.

The San Jose Better Bike Plan 2025 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:

- Leigh Avenue, between San Carlos Street and Moorpark Avenue
- Dana Avenue, north of San Carlos Street

Class III bike boulevards are planned for:

- Shasta Avenue, between San Carlos Street and Park Avenue
- Mayellen Avenue, between San Carlos Street and Scott Street

Class IV protected bike lanes are planned for:

- San Carlos Street, west of Leigh Avenue/Shasta Avenue
- Meridian Avenue, between Park Avenue and Willow Street
- Race Street, between The Alameda and Fruitdale Avenue
- Park Avenue, between Laurel Grove Lane and The Alameda

Project Pedestrian and Bicycle Facility Improvements

- The project will be required to install new ADA curb ramps at the southwest corner of Willard Avenue and San Carlos Street intersection, in coordination with the proposed Hyatt development.
- The project will be required to contribute towards the installation of a crosswalk along the east leg of the Buena Vista Avenue and San Carlos Street intersection via a signal modification.
- The project frontage on San Carlos Street must be designed so as to not inhibit the planned San Carlos Streetscape plan. The project also may be required to contribute towards the



implementation of the planned mid-block crossing of San Carlos Street at its intersection with Muller Place.

- An approximately 30-foot wide paseo is proposed along the south project frontage with pathways measuring at least 8 feet wide. The paseo will be required to be built to a design as approved by the City. The City will require an Irrevocable Offer of Dedication for Public Accessibility to be recorded against the property encompassing the paseo. The segment of paseo constructed as part of this development will connect to Buena Vista Avenue via a separate segment of paseo to be built as part of a separate development. The east end of the on-site segment provides direct access to sidewalks along Willard Avenue. The City will require the project to construct a raised crosswalk with bulbouts across Willard Avenue to provide pedestrian connectivity to the proposed public paseo entrance.
- The project will be required to make a monetary contribution (\$121 per linear foot) to the planned protected bike lane along the project's San Carlos Street frontage per the City of San Jose Better Bike Plan 2025. A protected bike lane along San Carlos Street would improve bicycle connectivity in the project vicinity and to other existing bicycle facilities. Additionally, installing a protected bike lane may encourage future residents and visitors to ride bikes rather than drive.

Transit Services

The project site is adequately served by the existing VTA transit services. The project site is primarily served by three VTA bus routes (Local Route 64B, Frequent Route 23 and Rapid Route 523).

Bus stops in the vicinity of the project site serve Frequent Route 23 and are located along both sides of San Carlos Street. An eastbound bus stop is located at the southeast corner of the Willard Avenue/San Carlos Street intersection, less than 70 feet walking distance from the project site. The nearest westbound bus stop is located at the northeast corner of the Buena Vista Avenue/San Carlos Street intersection, approximately 700 feet walking distance from the project site.

With the convenient location of the bus stops, it is assumed that some employees and residents of the proposed development would utilize the existing transit services. Applying an estimated three percent transit mode share, which is a conservative estimate that could be expected for the project, equates to a maximum of approximately three new transit riders during the peak hours. 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.

Transit Facility Improvements

San Carlos Street 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 San Carlos Street, the project shall be required to implement the following Grand Boulevard design principles:

- Provide a minimum 20 feet sidewalk width along its frontage on San Carlos Street
- Minimize driveway cuts to minimize transit delay
- Provide enhanced shelters for transit services

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 to any freeway segments in the area, freeway analysis for the CMP was not required.



Trip Reduction (TDM Program)

In order to be granted a reduction in required off-street parking per the West San Carlos Urban Village Plan, the project will be required to establish a TDM program that will reduce the parking demand for the project by 2838.5%. The TDM program should encourage multimodal travel and use of the extensive bus service and pedestrian/bicycle facilities in the immediate project area to the maximum extent possible. The applicant/property owner should manage the TDM program to ensure tenant employee participation. The project will be required to submit and have approved by the City its TDM program for reduction in off-street parking.



1. Introduction

This report presents the results of a Transportation Analysis (TA) for the proposed mixed-use development located at 1520 West San Carlos Street. The project site consists of four parcels (APNs 277-18-021, -024, -025, -026) and is located south of San Carlos Street and west of Willard Avenue in the City of San José. The project site location and the surrounding study area are shown on Figure 1. The project site is located within a designated Urban Village (West San Carlos) per the Envision San Jose 2040 General Plan. 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 all existing buildings on site with a mixed-use building consisting of 202256 residential units and approximately 15,14515,203 square feet of commercial space. Of the proposed total of 202256 residential units, 3039 units are proposed to be moderate-income affordable units and the remaining 172217 units would be market-rate units. On-site parking for all residential units and commercial space would be located in a garage with one basement level and one ground floor level. The garage would be accessible via one proposed full-access driveway along Willard Avenue. The project site plan is shown on Figure 2Figure 2.

Scope of Work

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). Per the requirements of 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

Council Policy 5-1

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



Figure 1 Site Location

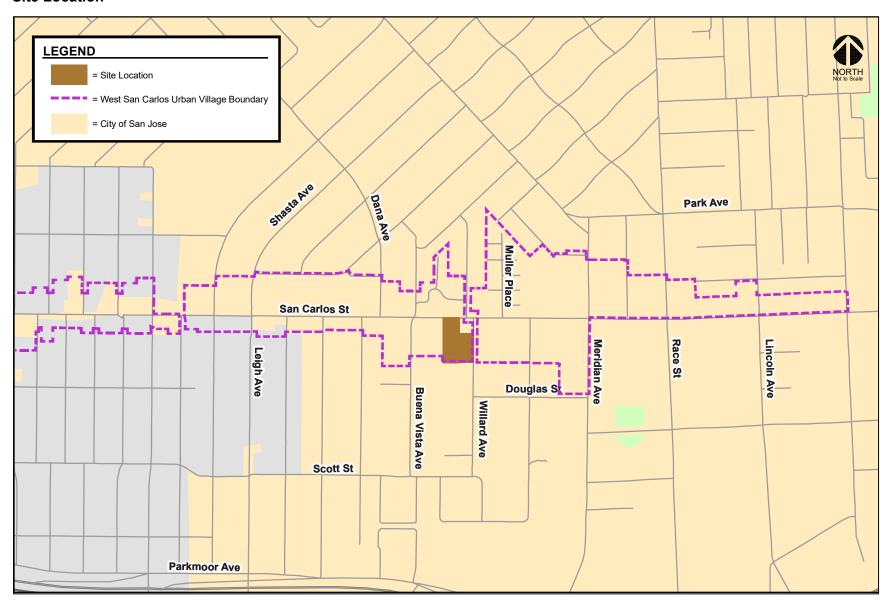
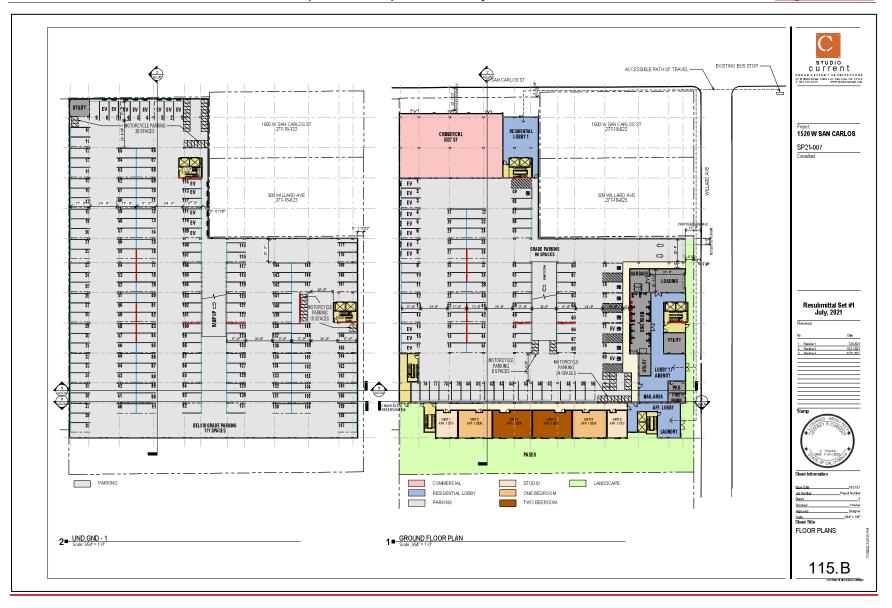


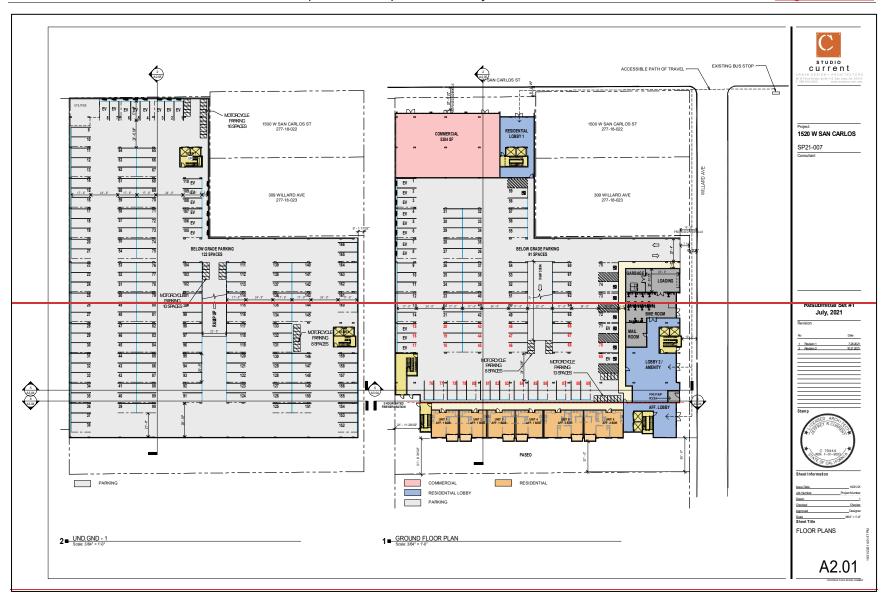


Figure 2 Proposed Site Plan











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.

In adherence to SB 743, the City of San Jose in March 2018 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.

General Plan Goals and Policies

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 be 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);

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.

The City of San Jose's Transportation Analysis Policy establishes procedures for determining project impacts on VMT based on project description, characteristics, and/or location. The City's VMT methodology also includes screening criteria that are used to identify types, characteristics, and/or locations of projects that would not exceed the CEQA thresholds of significance. If a project or a component of a mixed-use project meets the screening criteria, it is then presumed that the project or the component would result in a less-than-significant VMT impact and a VMT analysis is not required.

The residential component of the proposed project will meet all of the applicable VMT screening criteria for residential developments as described in further detail in Chapter 3. The project site is located within a planned Growth Area (West San Carlos Urban Village) with low VMT per capita as identified by the City of San Jose and San Carlos Street, located along the north project frontage, is a high-quality transit corridor with VTA bus service headways of less than 15 minutes during peak commute periods. The proposed 45,14515,203 s.f. of commercial (retail) space is less than the 100,000 s.f. retail threshold screening criterion for local-serving retail. Therefore, the proposed residential and retail components of the project are anticipated to result in a less-than significant VMT impact and a detailed CEQA VMT transportation analysis is not required. However, a VMT evaluation for the project was completed using the San José VMT Evaluation Tool for informational purposes and is presented in Chapter 3.

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.

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. The LTA is required per the City of San Jose Transportation Policy, however, the operational deficiencies identified as part of the LTA are not considered impacts per CEQA guidelines.

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 peak-hour intersection counts collected in September 2021.
- 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 the 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 I-880 and I-280. These facilities are described below.

I-880 is a six-lane freeway in the vicinity of the site. It extends north to Oakland and south to I-280 in San Jose, at which point it makes a transition into SR 17 to Santa Cruz. Access to the site is provided via its interchanges with Stevens Creek Boulevard and I-280.

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 into 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 ramps at Parkmoor Avenue. Access to and from southbound I-280 to the site is provided via ramps at Moorpark Avenue. Alternative access to I-280 is provided via an interchange at Meridian Avenue.

Local access to the site is provided by San Carlos Street/Stevens Creek Boulevard, Leigh Avenue/Shasta Avenue, Buena Vista Avenue, Willard Avenue, Muller Place, Meridian Avenue, Race Street, Douglas Street, and Scott Street. These roadways are described below.

San Carlos Street is a divided four-lane east-west major arterial roadway in the vicinity of the project site. It is a designated Grand Boulevard per the Envision San Jose 2040 General Plan. It extends from Downtown San Jose westward to I-880, at which point it makes a transition into Stevens Creek Boulevard to Cupertino. In the project vicinity, San Carlos Street has a posted speed limit of 35 mph with sidewalks, on-street parking, and bike lanes on both sides of the street. San Carlos Street runs along the north project frontage. Access to the project site is provided via Willard Avenue.

Leigh Avenue is a two-lane north-south minor arterial roadway that extends southward from San Carlos Street to Blossom Hill Road. It is a designated On-Street Primary Bicycle Facility per the Envision San Jose 2040 General Plan. North of San Carlos Street, Leigh Avenue makes a transition to Shasta Avenue. In the project vicinity, Leigh Avenue has a posted speed limit of 25 mph with sidewalks and onstreet parking on both sides of the street and no bike lanes. Access to the project site from Leigh Avenue is provided via San Carlos Street and Willard Avenue.

Buena Vista Avenue is a two-lane north-south residential roadway that extends between Martin Avenue and Scott Street. In the project vicinity, Buena Vista Avenue is a residential street with a speed limit of 25

mph with sidewalks and on-street parking on both sides of the street and no bike lanes. Access to the project site from Buena Vista Avenue is provided via San Carlos Street, Scott Street, and Willard Avenue.

S. Willard Avenue is a two-lane north-south residential roadway that extends between San Carlos Street and Chiechi Avenue. S. Willard Avenue is a residential street with a speed limit of 25 mph with sidewalks on both sides of the street and no bike lanes. On-street parking is provided along the southbound travel lane only. Willard Avenue runs along the east project frontage and would provide direct access to the project site via one driveway.

Muller Place is a two-lane residential roadway that extends north from San Carlos Street. The unsignalized intersection of Muller Place with San Carlos Street provides an opportunity for U-turns from the eastbound direction onto the westbound direction of San Carlos Street.

Meridian Avenue is generally a four-lane north-south minor arterial roadway that runs northward from Camden Avenue to Park Avenue. It is a designated Grand Boulevard per the Envision San Jose 2040 General Plan. The roadway narrows to two lanes between San Carlos Street and Park Avenue. Access to the project site from Meridian Avenue is provided via San Carlos Street, Scott Street, and Willard Avenue.

Race Street is a north-south roadway that runs northward from Fruitdale Avenue to The Alameda. It is a designated On-Street Primary Bicycle Facility per the Envision San Jose 2040 General Plan. It is a four-lane road between Saddle Rack Street and the I-280 off-ramp and a two-lane road north of Saddle Rack Street and south of the I-280 off-ramp. Bike lanes are provided along both sides of Race Street, between The Alameda and Park Avenue and between San Carlos Street and Parkmoor Avenue. Access to the project site from Race Street is provided via San Carlos Street and Willard Avenue.

Douglas Street is a two-lane east-west residential roadway that extends between Meridian Avenue and Willard Avenue. Douglas Street is a residential street with a speed limit of 25 mph with sidewalks on both sides of the street and no bike lanes. Access to the project site from Douglas Street is provided via Willard Avenue.

Scott Street is a two-lane east-west residential roadway that extends between Parkmoor Avenue and Willard Avenue. Scott Street is a residential street with a speed limit of 25 mph with sidewalks on both sides of the street and no bike lanes. Access to the project site from Scott Street is provided via Willard Avenue.

Existing Pedestrian, Bicycle and Transit Facilities

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

Existing Pedestrian Facilities

Pedestrian facilities near the project site consist mostly of sidewalks along the streets in the study area. Sidewalks are found along both sides of all streets near the project site including San Carlos Street and Willard Avenue. Other pedestrian facilities in the project area include crosswalks and pedestrian push buttons at all signalized study intersections. At the intersection of Buena Vista Avenue and San Carlos Street, marked crosswalks are located along the west, north, and south legs of the intersection. At the intersection of Meridian Avenue and San Carlos Street, crosswalks are located along all approaches. ADA-compliant curb ramps are located along most intersections within the project vicinity, with the exception of the ramp at the northeast corner of the project site (southwest corner of the S. Willard Avenue and San Carlos Street intersection).



Pedestrian generators in the project vicinity include commercial areas and bus stops along the San Carlos Street corridor. The project site is within the service boundaries of Trace Elementary School, Herbert Hoover Middle School, and Lincoln High School, all of which are located on Dana Avenue approximately ½-mile to ¾-mile from the project site. Existing sidewalks along San Carlos Street and Dana Avenue provide a pedestrian connection between the project site and pedestrian destinations in the project vicinity. 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 Bicycle Facilities

There are several bicycle facilities in the vicinity of the project site. Bicycle facilities are divided into the following three classes of relative significance:

Class I Bikeway (Bike Path). Class I bikeways are bike paths that are physically separated from motor vehicles and offer two-way bicycle travel on a separate path. The Los Gatos Creek Trail is located in the project area and is a continuous multi-purpose pathway for pedestrians and bicycles that is separated from motor vehicles. It begins at Vasona Lake County Park in the south and continues to Dupont Street in the north, all alongside Los Gatos Creek. Access to the Los Gatos Creek Trail system is located on Dupont Street, south of San Carlos Avenue, approximately 0.8-mile east of the project site.

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.

- San Carlos Street, between Leigh Avenue and Lincoln Avenue (including along the north project frontage)
- Park Avenue, along the entire length of the street
- Race Street, between The Alameda and Park Avenue; between San Carlos Street and Parkmoor Avenue
- Lincoln Avenue, between San Carlos Street and Minnesota Avenue

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.

- Dana Avenue, between San Carlos Street and Hedding Street
- Douglas Street, between Meridian Avenue and Willard Avenue
- Willard Avenue, between Douglas Street and Scott Street
- Scott Street, between Willard Avenue and Bascom Avenue
- Lincoln Avenue, between Park Avenue and San Carlos Street
- Auzerais Avenue, all segments east of Race Street without striped bike lanes

The existing bicycle facilities are shown in Figure 3Figure 3.

Existing Transit Services

Existing transit services in the study area are provided by the VTA and are shown on Figure 4Figure 4.

The Diridon Transit Center is located approximately 1.3-miles northeast of the project site, along Cahill Street. The Diridon Transit Center provides connections between local and regional bus routes, light rail lines, and commuter rail lines. Direct access to the Diridon Transit Center is provided via Local Route 64B.



VTA Bus Service

The project site is primarily served by three VTA bus routes (Local Route 64B, Frequent Route 23 and Rapid Route 523). These bus lines are listed in <u>Table 1</u>, including their terminus points and commute hour headways.

Table 1
Existing Transit Services

Route Description	Nearest Stop	Headway ¹
DeAnza College to Alum Rock Transit Center via Stevens Creek	San Carlos/Willard	10 min
McKee & White to Almaden Expressway & Camden	Race/San Carlos	30 - 40 min
Berryessa BART to Lockheed Martin via De Anza College	San Carlos/Meridian	30 min
N	McKee & White to Almaden Expressway & Camden	McKee & White to Almaden Expressway & Camden Race/San Carlos

Bus stops in the vicinity of the project site serve Frequent Route 23 and are located along both sides of San Carlos Street. An eastbound bus stop is located at the southeast corner of the Willard Avenue/San Carlos Street intersection, less than 70 feet walking distance from the project site. The nearest westbound bus stop is located at the northeast corner of the Buena Vista Avenue/San Carlos Street intersection, approximately 700 feet walking distance from the project site.

The nearest bus stops serving Rapid Route 523 are located along San Carlos Street near Meridian Avenue, approximately 1/4-mile from the project site.

The nearest bus stops serving Local Route 64B are located along Race Street near San Carlos Street, approximately 1/3-mile from the project site.

VTA Light Rail Transit (LRT) Service

The VTA currently operates the 42.2-mile VTA light rail line system extending from south San Jose through downtown to the northern areas of San Jose, Santa Clara, Milpitas, Mountain View and Sunnyvale. The nearest LRT station is located at the Diridon Transit Center. LRT service at the Diridon Transit Center is provided by the Green LRT line (Winchester – Old Ironsides). The Green LRT line provides service from the Winchester station in Campbell, through Downtown San Jose. A transfer point to the Blue LRT line (Santa Teresa – Baypointe) is provided at all Downtown stations, starting at the Convention Center LRT Station. From Downtown San Jose, the Green LRT line runs to north San Jose where it curves west and operates along the Tasman Corridor to Old Ironsides station, where a connection is provided to the Orange LRT line (Mountain View – Alum Rock).

Other Transit Services Near the Project Site

Additional local and express bus routes, as well as commuter rail services, are provided at the Diridon Transit Center. Services to regional destinations are provided by VTA Express Bus Route 168, Rapid Route 500, and the Amtrak Highway 17 Express. North of the Diridon Transit Center, the Rapid Route 522 stops at the SAP Center and provides service between Palo Alto and East San Jose with 12-minute headways.

Regional commuter rail services provided at the Diridon Transit Center include the following:

Caltrain Service

Commuter rail service between San Francisco and Gilroy is provided by Caltrain, which currently operates 92 weekday trains that carry approximately 47,000 riders on an average weekday. The Diridon



Figure 3
Existing Bicycle Facilities

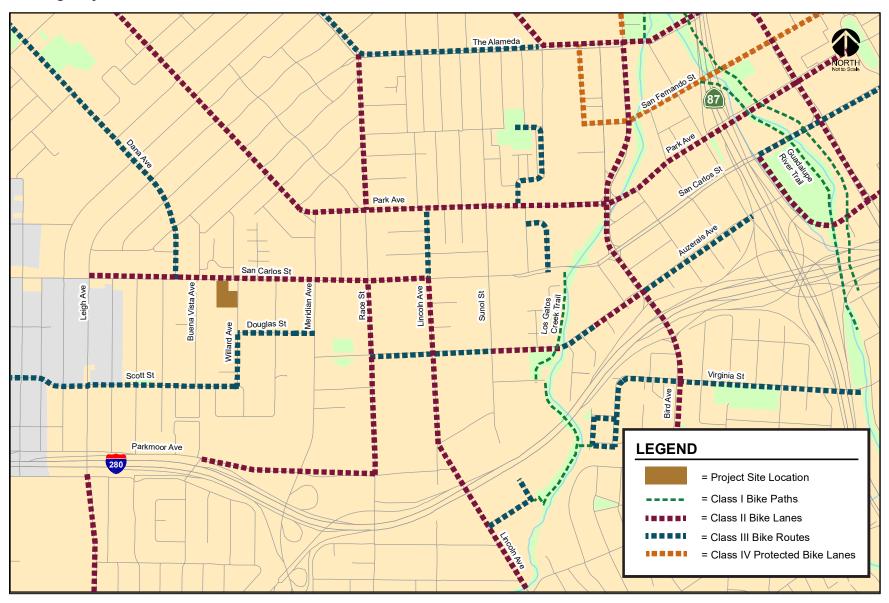




Figure 4
Existing Transit Services





station provides 581 parking spaces, as well as 16 bike racks, 48 bike lockers, and 27 Bay Wheels bike share docks. Trains stop frequently at the Diridon station between 4:28 AM and 10:30 PM in the northbound direction, and between 6:31 AM and 1:38 AM in the southbound direction. Caltrain provides passenger train service seven days a week and provides extended service to Morgan Hill and Gilroy during commute hours.

Altamont Corridor Express Service (ACE)

ACE provides commuter rail service between Stockton, Tracy, Pleasanton, and San Jose during commute hours, Monday through Friday. Service is limited to four westbound trips in the morning and four eastbound trips in the afternoon and evening with headways averaging 60 minutes. ACE trains stop at the Diridon Station between 6:32 AM and 9:17 AM in the westbound direction, and between 3:35 PM and 6:38 PM in the eastbound direction.

Amtrak Capitol Corridor

Amtrak provides daily commuter passenger train service along the 170-mile Capitol Corridor between the Sacramento region and the Bay Area, with stops in San Jose, Santa Clara, Fremont, Hayward, Oakland, Emeryville, Berkeley, Richmond, Martinez, Suisun City, Davis, Sacramento, Roseville, Rocklin, and Auburn. The Capitol Corridor trains stop at the San Jose Diridon Station seven times during the weekdays between approximately 7:37 AM and 9:05 PM in the westbound direction. In the eastbound direction, Amtrak stops at the Diridon Station seven times during the weekdays between 6:40 AM and 7:15 PM.



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.

CEQA Transportation Analysis Screening Criteria

The City of San Jose *Transportation Analysis Handbook* identifies screening criteria that determine whether a CEQA transportation analysis would be required for development projects. The criteria are based on the type of project, characteristics, and/or location. If a project or a component of a mixed-use project meets the City's screening criteria, it is presumed that the project would result in a less-than-significant transportation impact and a detailed 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

<u>Table 2</u> summarizes the screening criteria for each type of development project as identified in the City of San Jose Transportation Analysis Handbook. <u>Figure 5</u> and <u>Figure 6</u> 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.

Evaluation of Screening Criteria

The project site is located within a planned Growth Area (West San Carlos Urban Village) with low VMT per capita as identified by the City of San Jose and San Carlos Street, located along the north project frontage, is a high-quality transit corridor with VTA bus service headways of less than 15 minutes during peak commute periods. Per the City of San Jose VMT screening criteria, retail projects of 100,000 square feet or less are considered local-serving and do not require a detailed CEQA transportation analysis. The proposed 45,14515,203 s.f. of proposed retail space will be less than the local-serving threshold.

Therefore, both the residential and commercial land use components of the project are anticipated to result in less-than-significant VMT impacts and a CEQA-level transportation analysis that evaluates

Table 2 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.

Figure 5 Low VMT per Capita Areas in San Jose

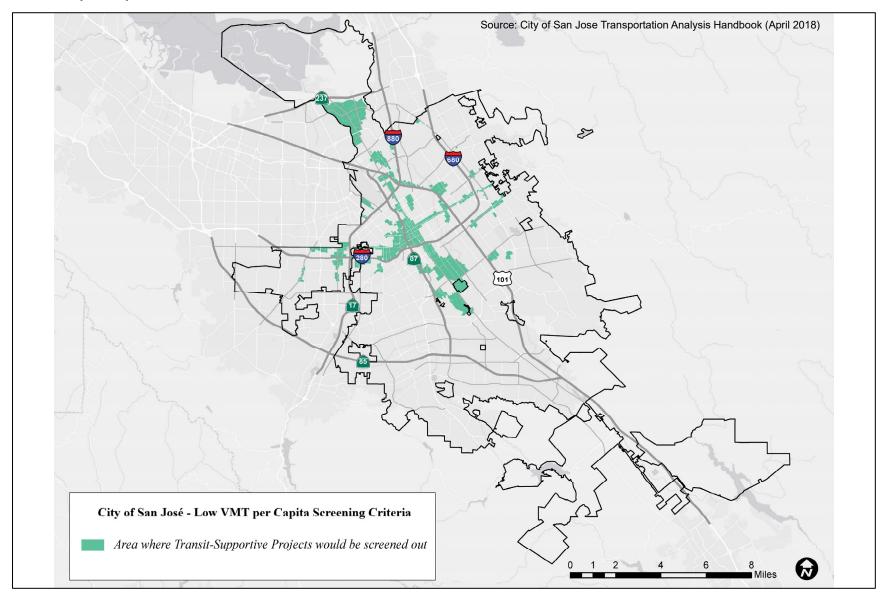
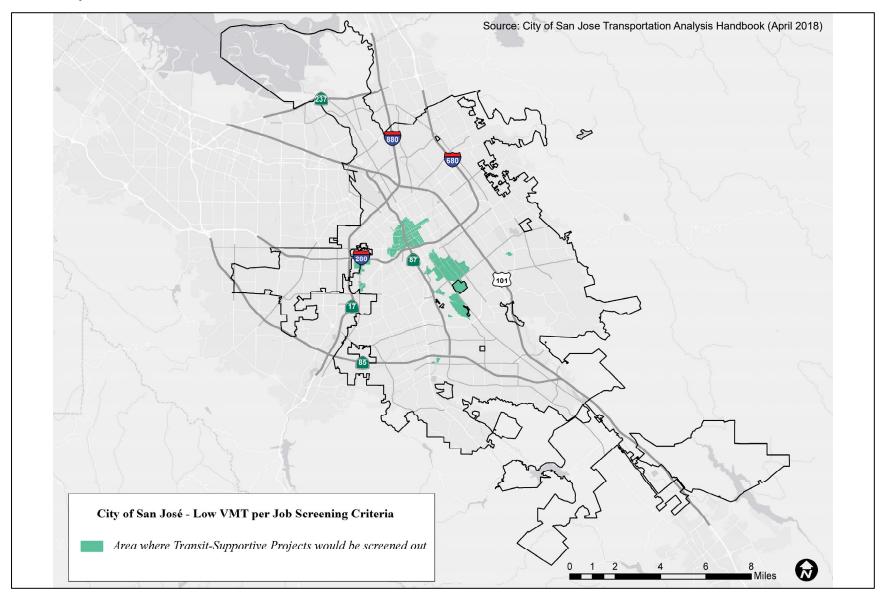




Figure 6 Low VMT per Job Areas in San Jose





the project's effects on VMT is not required. However, for informational purposes, a VMT evaluation for the project was completed and presented below.

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 West San Carlos 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 less than 100 feet from a bus stop serving VTA Frequent Route 23 near the intersection of Willard Avenue and San Carlos Street. San Carlos Street is considered a high-quality transit corridor due to Frequent Route 23 having headways of 15 minutes or less during peak commute hours.

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 (West San Carlos Street) with low VMT per capita (7.34 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 202256 units are proposed to be constructed on the 1.62-acre project site. The proposed development density will equate to 15822 units per acre, exceeding the required minimum of 35 units per acre. The proposed project also will meet the minimum 55 units per acre as required by the West San Carlos Urban Village Plan for the "Urban Village in the Mixed-Use Residential Character Area" land use.

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 West San Carlos Urban Village, which is subject to city-wide parking rates. The project proposes a total of 26155 parking spaces on-site which is less than the required 278-337 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 Evaluation Methodology and Criteria

Per Council Policy 5-1, the effects of the proposed project on VMT were evaluated using the methodology outlined in the City's *Transportation Analysis Handbook*. The City of San Jose defines VMT as the total miles of travel by personal motorized vehicles a project is expected to generate in a day. VMT is calculated using the Origin-Destination VMT method, which measures the full distance of personal motorized vehicle trips with one end within the project. A project's VMT is compared to established thresholds of significance based on the project location and type of development.

Typically, development projects that are farther from other, complementary land uses (such as a business park far from housing) and in areas without transit or active transportation infrastructure (bike lanes, sidewalks, etc.) generate more driving than development near complementary land uses with more robust transportation options. Therefore, developments located in a central business district with high density and diversity of complementary land uses and frequent transit services are expected to internalize trips and generate shorter and fewer vehicle trips than developments located in a suburban area with low density of residential developments and no transit service in the project vicinity.

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.

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 Forecasting (TDF) 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 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 greatest extent possible. The VMT evaluation tool evaluates a list of selected VMT reduction measures that can be applied to a project to reduce the project VMT. There are four strategy tiers whose effects on VMT can be calculated with the 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;
- 3. Parking measures that discourage personal motorized vehicle trips; and
- 4. Transportation demand management (TDM) measures that provide incentives and services to encourage alternatives to personal motorized vehicle trips.

The first three strategies – land use characteristics, multimodal network improvements, and parking – are physical design strategies that can be incorporated into the project design. TDM includes



programmatic measures that aim to reduce VMT by decreasing personal motorized vehicle mode share and by encouraging more walking, biking, and riding transit. TDM measures should be enforced through annual trip monitoring to assess the project's status in meeting the VMT reduction goals.

Baseline VMT Estimates

The thresholds of significance for residential and employment 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. Figure 7 and Figure 8 show the current VMT levels estimated by the City for residents and workers, respectively. 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. Figure 9 shows the current VMT levels estimated by the City for residents in the immediate project area.

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. <u>Table 3 Table 3</u> shows the VMT thresholds of significance for development projects, as established in the Transportation Analysis Policy.

Projects that include residential uses are said to create a significant adverse impact when the estimated project-generated VMT exceeds the existing citywide average VMT per capita minus 15 percent or existing regional average VMT per capita minus 15 percent, whichever is lower. Currently, the reported citywide average is 11.94 VMT per capita, which is less than the regional average. This equates to a significant impact threshold of 10.12 VMT per capita.

The proposed project consists mainly of a residential development with complementary commercial land use (retail use). However, it is anticipated that the commercial use component of the proposed project would not generate sufficient traffic to have an effect on the existing VMT per capita. Therefore, the VMT analysis of the proposed project is based on the residential component of the project.

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



Figure 7 VMT per Capita Heat Map in San Jose

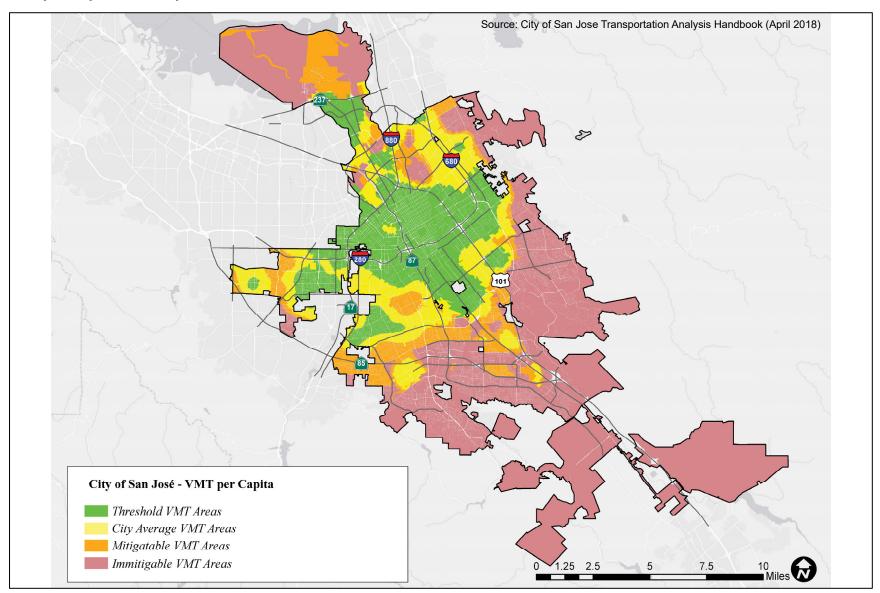




Figure 8 VMT per Job Heat Map in San Jose

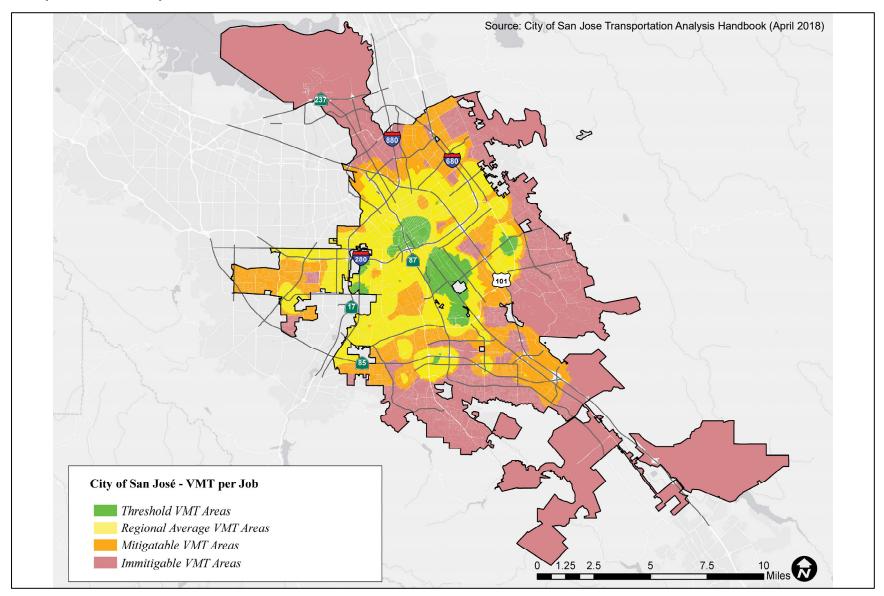




Figure 9
VMT per Capita Heat Map in Project Area





Table 3
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	
Industrial 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 thresholds listed above	
Mixed Uses	Evaluate each land use component of a mixed-use project independently, and apply the threshold of significance for each land use type included	Appropriate levels listed above	Appropriate thresholds listed above	
Change of Use or Additions to Existing Development	Evaluate the full site with the change of use or additions to existing development, and apply the threshold of significance for each project type included	Appropriate levels listed above	Appropriate thresholds listed above	
Area Plans	Evaluate each land use component of the area plan independently, and apply the threshold of significance for each land use type included	Appropriate levels listed above	Appropriate thresholds listed above	
Source: City of San José Transportation Analysis Handbook, April 2018.				

VMT Analysis

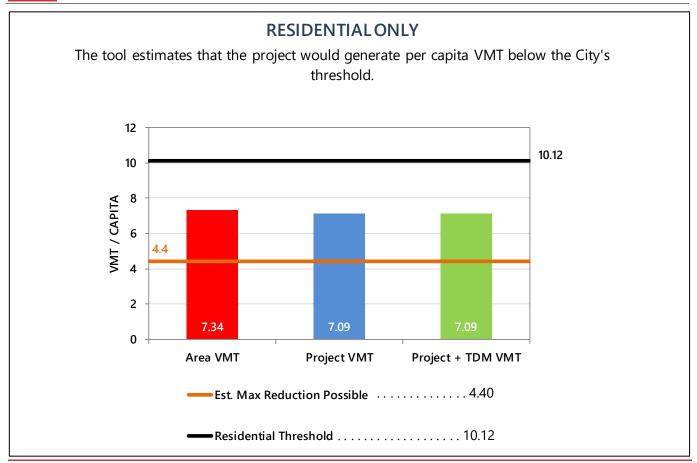
<u>Figure 10</u> Figure 10 presents a summary of the VMT evaluation generated by the City of San Jose's VMT Evaluation Tool for the proposed residential and retail mixed-use development.

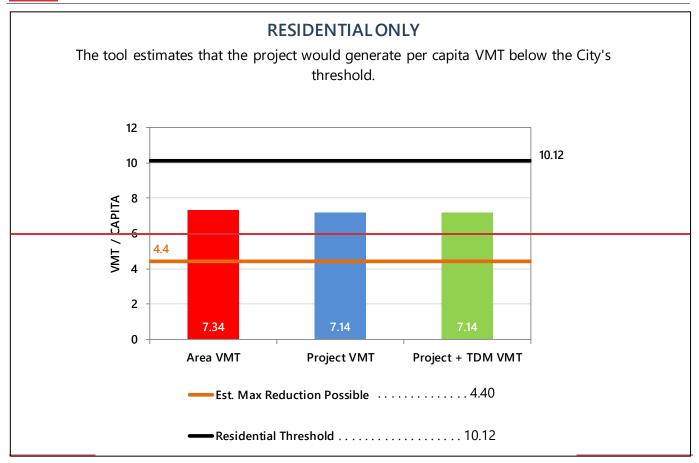
Existing VMT

The results of the VMT analysis using the VMT Evaluation tool indicate that the existing VMT for residential uses in the project vicinity is 7.34 per capita. As shown in Table 3, the current citywide average VMT for residential uses is 11.91 per capita. Therefore, the VMT levels of existing residential uses in the project vicinity are currently less than the average VMT levels. <a href="Appendix A Appendix A Appendix

Figure 10 VMT Analysis Summary







Project-Level VMT Impact Analysis

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

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 (7.0914) that is below the established threshold. Therefore, the proposed project would not result in an impact on the transportation system based on the City's VMT impact criteria.

The reduction in per-capita VMT could be indicative of the addition of residents to an area with extensive opportunities for the use of transit, bicycles, and other non-auto modes of travel. In addition, the project site is located within two miles of the Diridon Transit Center and is supported by major bus stops, and bicycle and pedestrian facilities in its immediate proximity. Therefore, a larger percentage of the residents of the project would likely use transit more regularly than the average transit usage for these land uses in other parts of the City. The increase in transit usage would result in a reduction in number and length of those trips that are added to the roadway system due to the proposed project.

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's goals and policies. Per the City's *Transportation Analysis Handbook*.

General Plan Goals & Policies

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 the 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 be 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);

The following chapter includes an evaluation of the project's effects on the surrounding multi-modal transportation facilities including transit, bicycle, and pedestrian facilities. The evaluation includes a review of the project to ensure that it does not prohibit the completion of planned improvement of multi-modal facilities and recommends potential project contributions towards the future improvement of the facilities. Therefore, based on the project description, the proposed project would be consistent with the Envision San José 2040 General Plan's long-range multi-modal goals and policies.

Urban Village Guidelines

The project site is located within the West San Carlos 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.



An Urban Village Plan that identifies goals to improve traffic flow, alternative transportation options, and reduce neighborhood cut-through traffic is developed and adopted by the City for each of the designated Urban Village areas. The plans typically identify policies and goals that may include the following:

- 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 a 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.

The West San Carlos Urban Village Plan identifies the following goals to improve alternative transportation options.

- Make transit a more desirable option within the Urban Village.
- Develop safe and direct pedestrian and bicycle connections (sidewalks or pathways) between transit stops and local destinations.
- Improve roadway crossings through high-visibility treatments and shorter crossing distances, especially where transit stops are located.
- Enhance the environment around transit stops and improve the overall transit rider/pedestrian/bicyclist experience at bus stops.

The project is consistent with the West San Carlos Urban Village goals and policies for the following reasons:

- The proposed residential uses for the project site are consistent with the Urban Village land use designation per the West San Carlos Urban Village plan.
- The project frontage along San Carlos Street will be consistent with planned streetscape design features per the West San Carlos Urban Village Plan.
- The project site is within walking distance (less than 100 feet) of bus stops on San Carlos Street.
- The project proposes to provide a paseo that enhances pedestrian and bicycle connections to other destinations within the urban village.

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 scenarios, 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.

The LTA supplements the CEQA VMT analysis and identifies transportation and traffic operational issues that may arise due to a development project. The LTA is required per the City of San Jose Transportation Policy, however, the determination of project impacts per CEQA requirements is based solely on the VMT analysis presented in the previous chapter. The LTA provides supplemental analysis for use by the City of San Jose in identifying potential improvement of the transportation system with a focus on improving multimodal travel.

Project Description

The project site is currently occupied by two commercial buildings (7,926 s.f.), 11 residential buildings and two service structures. As proposed, the development would consist of the replacement of all existing buildings on site with a mixed-use building consisting of 202256 residential units and approximately 15,14515,203 square feet of commercial space. Of the proposed total of 202256 residential units, 3039 units are proposed to be moderate-income affordable units and the remaining 172217 units would be market-rate units. A total of 255261 on-site parking spaces for all residential units and commercial space would be located in a garage with one basement level and one ground-floor level. The garage would be accessible via one proposed full-access driveway along Willard Avenue.

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 Multi-Family Housing – Mid Rise (Land Use 221) and Shopping Center (Land Use 820) as published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 10th Edition* (2017) were applied to the proposed number of residential units and commercial square footage, respectively. Based on the trip generation rates and the project size, it is estimated that, prior to any trip reductions, the proposed development would generate 10687 trips (3328 inbound and 7359 outbound) during the AM peak-hour and 17147 trips (9782 inbound and 7465 outbound) during the PM peak-hour.

Trip Reductions

In accordance with San Jose's *Transportation Analysis Handbook* (November 20018, 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 retail, 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 15 percent trip reduction is applied for the housing/retail mixed use, based on the smaller retail 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 also 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 developments and retail uses within urban low-transit areas have a vehicle mode share of 87%. Thus, a 13% reduction was applied to the residential and retail trips generated by the proposed project.

Additionally, based on the San Jose VMT Evaluation Tool, the project is anticipated to generate 7.<u>0914</u> VMT per-capita in an area that currently generates approximately 7.34 VMT per-capita. It is assumed that every percent reduction from the existing per-capita VMT is equivalent to one percent reduction in peak-hour vehicle trips. Thus, the project trip estimates were reduced by <u>three_3.41</u> percent to reflect the reduction in peak hour trips.

Existing Site Trips

The existing commercial use on-site located on 1520 San Carlos Street are not estimated to generate a significant number of peak-hour trips due to limited on-site parking. It is likely that trips generated by these uses currently utilize on-street parking located along Willard Avenue and San Carlos Street, including along the project site frontages. As a conservative measure, no credit is applied to the project trip generation for the existing uses on-site.

Net Project Trips

After applying the ITE trip rates and appropriate trip reductions, it is estimated that the project would generate an additional 1,280 daily vehicle trips, with 8571 trips (263 inbound and 5948 outbound) occurring

during the AM peak hour and 13144 trips (6753 inbound and 5648 outbound) occurring during the PM peak hour. The project trip generation estimates are presented in Table 4.

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 11 shows the trip distribution pattern, and Figure 12 shows the net trip assignment of project traffic on the local transportation network.

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 four signalized intersections and four unsignalized intersections within the City of San Jose. Intersections were selected for study if the project is expected to add 10 vehicle trips per hour per lane to a signalized 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 ½ a mile and 1-mile radii from the project site are shown in Figure 13Figure 13. Based on the above criteria, the following City of San Jose study intersections were selected and are shown in Figure 11Figure 11.

- 1. Leigh Avenue and Scott Street (unsignalized)
- 2. Leigh Avenue/Shasta Avenue and San Carlos Street
- 3. Buena Vista Avenue and San Carlos Street
- 4. Willard Avenue and San Carlos Street (unsignalized)
- 5. Muller Place and San Carlos Street (unsignalized)
- 6. Meridian Avenue and San Carlos Street
- 7. Race Street and San Carlos Street
- 8. Meridian Avenue and Douglas Street (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:

Table 4
Project Trip Generation Estimates

												AM Pea	ak Hou	r			PM Pe	ak Hou	ır	
	ITE Land		% of Vehicle	VIV	IT⁴	%		Da	ily	Pk-Hr	Sp	lit		Trip		Pk-Hr	Split		Trip	
Land Use	Use Code	Location	Mode Share	Existing	Project	Reduction	Size	Rate	Trip	Rate	ln	Out	ln	Out	Total	Rate	In Out	In	Out	Total
Proposed Land Uses																				
Multifamily Housing (Mid-Rise) ¹	221						256 Dwelling Units	5.44	1,393	0.36	26%	74%	24	68	92	0.44	61% 39%	69	44	113
- Residential - Retail Internal Redu	ıction²								-86				-1	-1	-2			-5	-4	-9
- Location Based Reduction ³		Urban Low-Transi	t 87%			13%			-170				-3	-9	-12			-8	-5	-13
- VMT Reduction ⁴				7.34	7.09	3.41%			-39				-1	-2	-3			-2	-1	-3
Residential Sub-Total									1,098				19	56	75			54	34	88
Shopping Center ¹	820						15,203 Square Feet	37.75	574	0.94	62%	38%	9	5	14	3.81	48% 52%	28	30	58
- Residential - Retail Internal Redu	ıction ²					15%			-86				-1	-1	-2			-4	-5	-9
- Location Based Reduction ³		Urban Low-Transi	t 87%			13%			-63				-1	-1	-2			-3	-3	-6
Retail Sub-Total									424				7	3	10			21	22	43
Baseline Vehicle Trips (Before	Reductions	;)							1,967				33	73	106			97	74	171
Gross Project Trips After Red	ductions								1,522				26	59	85			75	56	131

Notes:



¹ Source: ITE *Trip Generation Manual*, 10th Edition 2017, average trip generation rates.

² As prescribed by the Transportation Impact Analysis Guidelines from VTA (October 2014), the maximum trip reduction for a mixed-use development project with residential and retail is equal to 15% off the smaller trip generator.

³ The 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 are 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 all of the other modes of travel besides vehicle.

⁴ VMT per capita for residential use. Existing and project VMTs were estimated using the City of San Jose VMT Evaluation Tool.

It is assumed that every percent reduction in VMT per-capita is equivalent to one percent reduction in peak-hour vehicle trips.

												AM Pea	k Hou	r			PM Pe	ak Hou	r	
	ITE Land		% of Vehicle	VIV	1T⁴	%		Da	ily	Pk-Hr	Sp	lit		Trip		Pk-Hr	Split		Trip	
Land Use	Use Code	Location	Mode Share	Existing	Project	Reduction	Size	Rate	Trip	Rate	ln	Out	ln	Out	Total	Rate	In Out	ln	Out	Total
Proposed Land Uses																				
Multifamily Housing (Mid-Rise) ¹	221						202 Dwelling Units	5.44	1,099	0.36	26%	74%	19	54	73	0.44	61% 39%	54	35	89
- Residential - Retail Internal Red	uction ²								-86				-1	-1	-2			-5	-4	-9
- Location Based Reduction ³		Urban Low-Transi	t 87%			13%			-132				-2	-7	-9			-6	-4	-10
- VMT Reduction ⁴				7.34	7.14	3%			-24				0	-1	-1			-1	-1	-2
Residential Sub-Total									857				16	45	61			42	26	68
Shopping Center 1	820						15,145 Square Feet	37.75	572	0.94	62%	38%	9	5	14	3.81	48% 52%	28	30	58
- Residential - Retail Internal Red	uction ²					15%			-86				-1	-1	-2			-4	-5	-9
- Location Rased Reduction ³		Urhan Low-Transi	t 87%			13%			-63				-1	-1	-2			-3	-3	-6
Retail Sub-Total									423				7	3	10			21	22	43
Baseline Vehicle Trips (Before	Reductions	;)							1,671				28	59	87			82	65	147
Gross Project Trips After Re	eductions								1,280				23	48	71			63	48	111

Notes:



¹ Source: ITE *Trip Generation Manual*, 10th Edition 2017, average trip generation rates.

² As prescribed by the Transportation Impact Analysis Guidelines from VTA (October 2014), the maximum trip reduction for a mixed-use development project with residential and retail is equal to 15% off the smaller trip generator.

³ The 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 are 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 all of the other modes of travel besides vehicle.

⁴ VMT per capita for residential use. Existing and project VMTs were estimated using the City of San Jose VMT Evaluation Tool. It is assumed that every percent reduction in VMT per-capita is equivalent to one percent reduction in peak-hour vehicle trips.

Figure 11 Project Trip Distribution

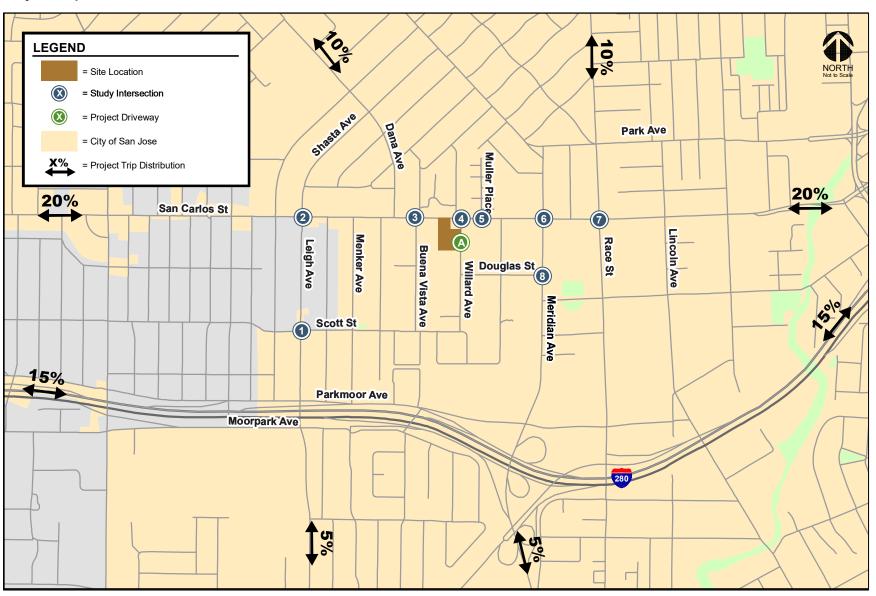
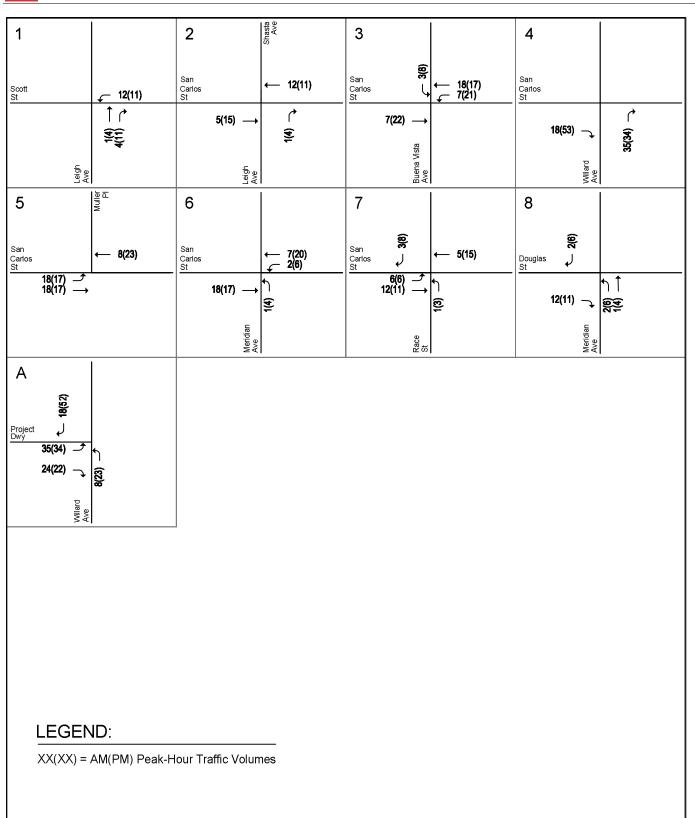




Figure 12 Net Project Trip Assignment



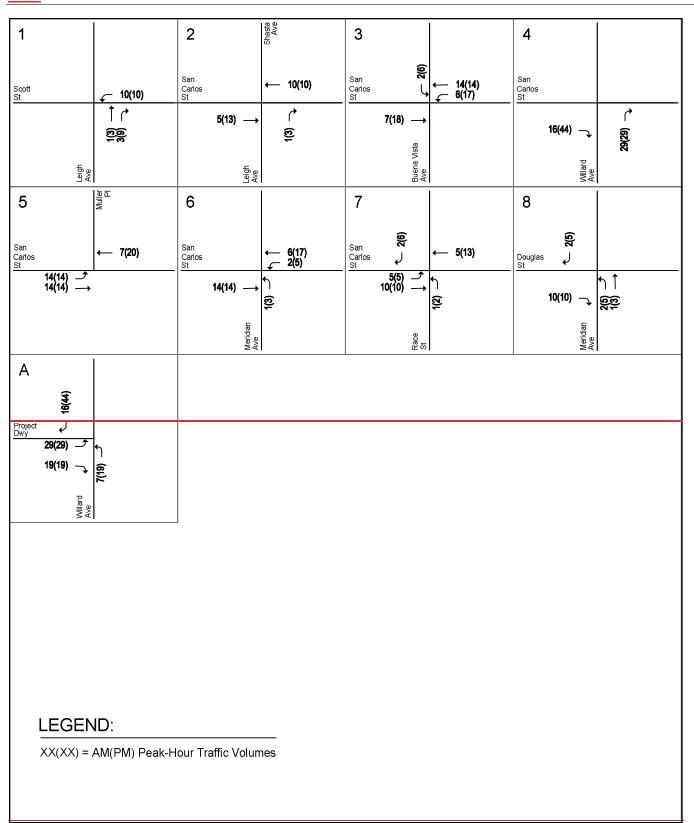
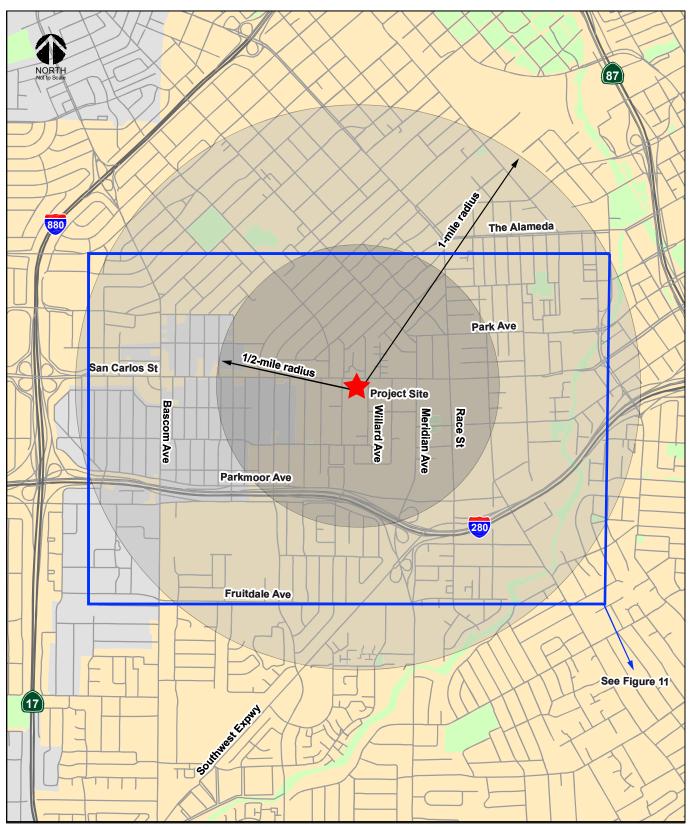


Figure 13 ½-Mile and 1-Mile Radii from Project Site



- 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 <u>Figure 14</u>. It is assumed in this analysis that the transportation network under background and background plus project conditions would be the same as the existing transportation network.

Traffic Volumes

Existing Conditions

Existing peak hour traffic volumes at all study intersections were obtained from new traffic counts conducted September 14, 2021. The existing peak-hour intersection volumes are shown on Figure 15. 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 <a href="Appendix DAppendix DAppendix

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 <a href="Figure 16-Figure 16-Figure 16-Figure 16-Figure 16-Figure 17-Figure 18-Figure 1

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

Level of Service Standards and Analysis Methodologies

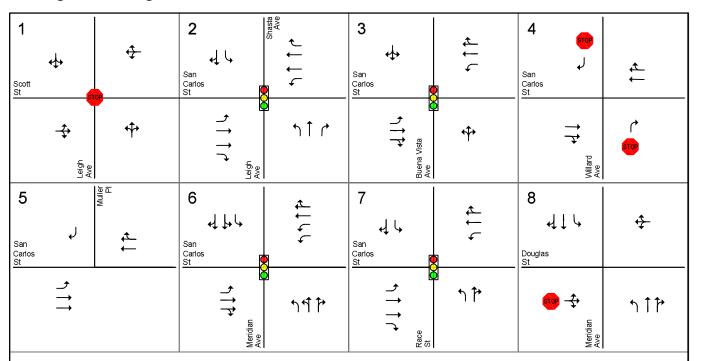
Traffic conditions at the study intersections were evaluated using level of service (LOS). *Level of Service* is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The analysis methods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

Signalized Intersections

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

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.

Figure 14
Existing Lane Configurations



LEGEND:



= Signalized Intersection



= Stop Controlled Intersection

Figure 15 Existing Traffic Volumes

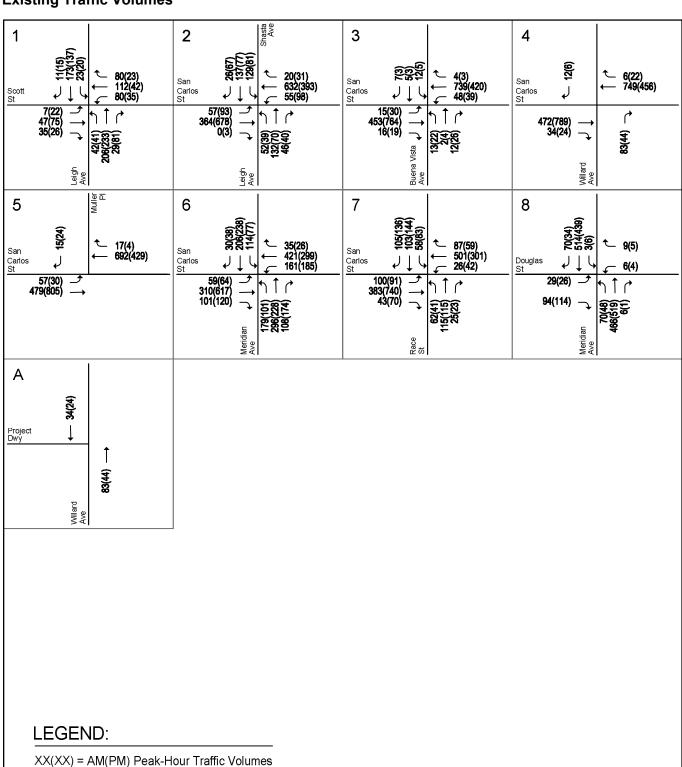


Figure 16
Background Traffic Volumes

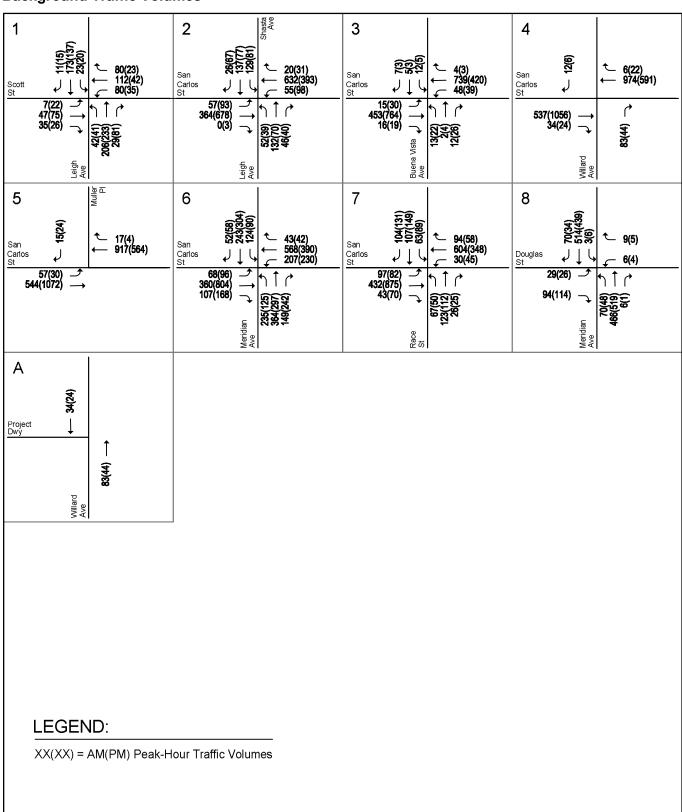
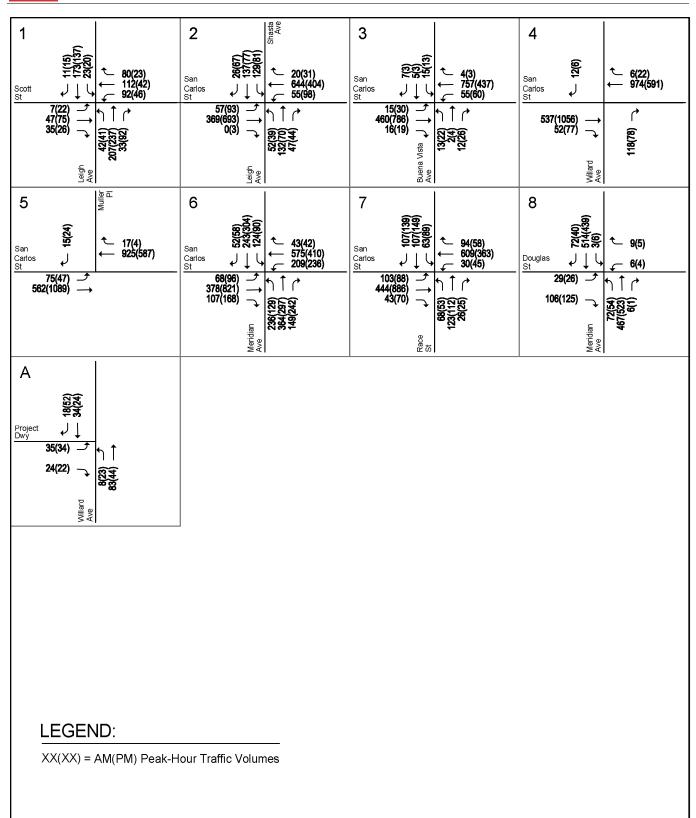


Figure 17 Background Plus Project Traffic Volumes



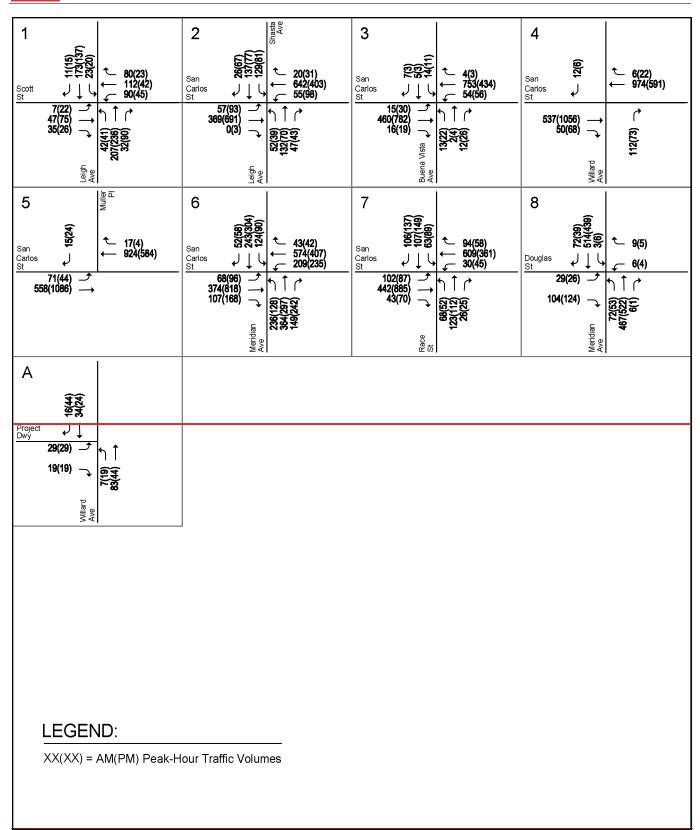


Table 5
Signalized Intersection Level of Service Definitions Based on Control Delay

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
	ransportation Research Board, 2000 Highway Capacity Manual. Tra uidelines, Santa Clara County Transportation Authority Congestion I	

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 6Table 6.

Existing Intersection Operation Conditions

Intersection levels of service were evaluated against applicable City of San Jose operations standards. The results of the level of service analysis show all 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 EAppendix E.

Future Intersection Operation Conditions

The operations analysis shows that all of the signalized 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 EAppendix E.

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 four unsignalized study intersections. The results indicate that projected traffic volumes at the study intersections will not meet the signal warrant checks under peak hour conditions with the project. The traffic signal warrant calculations are included in Appendix F.



Table 6
Intersection Level of Service Results

					Exist	ing	Backgr	ound	Ва	ckgro	ound Plus Pi	roject
Int.		LOS	Peak	Count	Avg.		Avg.		Avg.		Incr. In	Incr. In
#	Intersection	Standard	Hour	Date	Delay	LOS	Delay	LOS	Delay	LOS	Crit. Delay	Crit. V/C
2	Leigh Avenue/Shasta Avenue and San Carlos Street	D	AM	11/14/21	26.1	С	26.1	С	26.0	С	-0.2	0.003
			PM	11/14/21	28.2	С	28.2	С	27.9	С	-0.3	0.004
3	Buena Vista Avenue and San Carlos Street	D	AM	11/14/21	14.3	В	14.3	В	14.5	В	0.1	0.007
			PM	11/14/21	16.9	В	16.9	В	18.3	В	2.5	0.025
6	Meridian Avenue and San Carlos Street	D	AM	11/14/21	41.9	D	42.7	D	42.7	D	0.0	0.002
			PM	11/14/21	41.4	D	43.5	D	43.5	D	0.1	0.007
7	Race Street and San Carlos Street	D	AM	11/14/21	37.0	D	35.7	D	35.8	D	0.4	0.008
			PM	11/14/21	34.5	С	33.4	С	33.7	С	0.4	0.010

					Exist	ing	Backgr	ound	Ва	ckgro	ound Plus Pi	roject
Int.		LOS	Peak	Count	Avg.		Avg.		Avg.		Incr. In	Incr. In
#	Intersection	Standard	l Hour	Date	Delay	LOS	Delay	LOS	Delay	LOS	Crit. Delay	Crit. V/C
2	Leigh Avenue/Shasta Avenue and San Carlos Street	D	AM	11/14/21	26.1	С	26.1	С	26.0	С	-0.2	0.003
			PM	11/14/21	28.2	С	28.2	С	28.0	С	-0.2	0.004
3	Buena Vista Avenue and San Carlos Street	D	AM	11/14/21	14.3	В	14.3	В	14.4	В	0.1	0.005
			PM	11/14/21	16.9	В	16.9	В	18.0	В	2.1	0.020
6	Meridian Avenue and San Carlos Street	D	AM	11/14/21	41.9	D	42.7	D	42.7	D	0.0	0.002
			PM	11/14/21	41.4	D	43.5	D	43.5	D	0.1	0.006
7	Race Street and San Carlos Street	D	AM	11/14/21	37.0	D	35.7	D	35.8	D	0.4	0.006
			PM	11/14/21	34.5	С	33.4	С	33.6	С	0.3	0.008



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 hr per lane/signal cycles per hr)

The basis of the analysis is as follows: (1) the Poisson probability distribution is used to estimate the 95th percentile maximum number of queued vehicles for a particular left-turn movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the left-turn movement. This analysis thus provides a basis for estimating future turn pocket storage requirements at 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. The operations analysis is based on vehicle queuing for high-demand movements at intersections (see <u>Table 7</u>Table 7).

As shown in <u>Table 7</u>Table 7, the queues at high-demand movements will be served by the existing queue storage space under existing, background conditions, and background plus project conditions. The intersection queueing analysis calculations are included in Appendix G.

Neighborhood Interface

The City of San Jose Walking Audit Report was recently published as a study of eight areas in seven different districts around the City that represent areawide concerns for collision and pedestrian safety. One of the selected study areas is the Buena Vista neighborhood, which includes the proposed project site. The study area is bounded by San Carlos Road, Meridian Avenue, Parkmoor Avenue, and Leigh Avenue. The study presented the following summary of the area's collision history:

- In the five-year period between 2016 and 2020, there have been 57 collisions within the neighborhood
- Speeding was identified as a primary collision factor. Unsafe turn movements and vehicle right
 of way violations were the next most common collision factors.
- Three of these collisions within the neighborhood involved a bicyclist or pedestrian.

Queuing Analysis Summary



		Buena Vista/ San Carlos		ler/ Carlos
Measurement	WBL AM	WBL PM	EBL AM	EBL PM
	7.00		7 (10)	
Existing Conditions				
Cycle/Delay ¹ (sec)	130	140	9.3	8.3
Lanes	1	1	1	1
Volume (vph)	48	39	57 	30
Volume (vphpl)	48	39	57	30
Avg. Queue (veh/ln.)	2	2	0	0
Avg. Queue ² (ft./ln)	43	38	4	2
95th %. Queue (veh/ln.)	4	4	1	1
95th %. Queue (ft./ln)	100	100	25	25
Storage (ft./ In.)	150	150	175	175
Adequate (Y/N)	YES	YES	YES	YES
Background Conditions				
Cycle/Delay ¹ (sec)	130	140	10.3	8.7
Lanes	1	1	1	1
Volume (vph)	48	39	57	30
Volume (vphpl)	48	39	57	30
Avg. Queue (veh/ln.)	2	2	0	0
Avg. Queue ² (ft./ln)	43	38	4	2
95th %. Queue (veh/ln.)	4	4	1	1
95th %. Queue (ft./ln)	100	100	25	25
Storage (ft./ In.)	150	150	175	175
Adequate (Y/N)	YES	YES	YES	YES
Background Plus Project Conditions				
Cycle/Delay ¹ (sec)	130	140	10.4	8.8
Lanes	1	1	1	1
Volume (vph)	55	60	75	47
Volume (vphpl)	55	60	75	47
Avg. Queue (veh/ln.)	2	2	0	0
Avg. Queue ² (ft./ln)	50	58	5	3
95th %. Queue (veh/ln.)	5	5	1	1
95th %. Queue (ft./ln)	125	125	25	25
Storage (ft./ In.)	150	150	175	175
Adequate (Y/N)	YES	YES	YES	YES

¹ Vehicle queue calculations based on cycle length for signalized intersections.

² Assumes 25 feet per vehicle in the queue.

NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound, R = Right, T = Through, L = Left.

		Vista/ Carlos	Muller/ San Carlos		
Measurement	WBL AM	WBL PM	EBL AM	EBL PM	
Existing Conditions					
Cycle/Delay ¹ (sec)	130	140	9.3	8.3	
Lanes	1	1	1	1	
Volume (vph)	48	39	57	30	
Volume (vphpl)	48	39	57	30	
Avg. Queue (veh/ln.)	2	2	0	0	
Avg. Queue ² (ft./ln)	43	38	4	2	
95th %. Queue (veh/ln.)	4	4	1	1	
95th %. Queue (ft./ln)	100	100	25	25	
Storage (ft./ In.)	150	150	175	175	
Adequate (Y/N)	YES	YES	YES	YES	
Background Conditions					
Cycle/Delay ¹ (sec)	130	140	10.3	8.7	
Lanes	1	1	1	1	
Volume (vph)	48	39	57	30	
Volume (vphpl)	48	39	57	30	
Avg. Queue (veh/ln.)	2	2	0	0	
Avg. Queue ² (ft./ln)	43	38	4	2	
95th %. Queue (veh/ln.)	4	4	1	1	
95th %. Queue (ft./ln)	100	100	25	25	
Storage (ft./ ln.)	150	150	175	175	
Adequate (Y/N)	YES	YES	YES	YES	
Background Plus Project Conditions					
Cycle/Delay ¹ (sec)	130	140	10.4	8.8	
Lanes	1	1	1	1	
Volume (vph)	54	56	71	44	
Volume (vphpl)	54	56	71	44	
Avg. Queue (veh/ln.)	2	2	0	0	
Avg. Queue ² (ft./ln)	49	54	5	3	
95th %. Queue (veh/ln.)	4	5	1	1	
95th %. Queue (ft./ln)	100	125	25	25	
Storage (ft./ In.)	150	150	175	175	
Adequate (Y/N)	YES	YES	YES	YES	

¹ Vehicle queue calculations based on cycle length for signalized intersections.

² Assumes 25 feet per vehicle in the queue.

NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound, R = Right, T = Through, L = Left.

As part of the study's outreach efforts, members of the public provided comments regarding perceived safety issues within the neighborhood. The results of the survey are summarized in Figure 18. Of the issues identified in the survey, the following is most relevant to the proposed project:

 Willard Avenue, Douglas Street, and Page Street are used as cut-through routes to access Meridian Avenue. Speeding is a concern.

Due to the close proximity to San Carlos Street to the north and modern-day navigation and GPS services, most trips related to the proposed project are expected to utilize San Carlos Street to reach their destinations. However, it is possible that some trips related to the proposed project may utilize the above identified streets (Willard Avenue, Douglas Street, and Page Street) to reach destinations to the south. Therefore, the project will be required to implement two radar speed signs along Willard Avenue (locations shown on Figure 18) as part of the project's mitigation of traffic calming concerns identified in the City's Walking Audit Report.

Site Access and On-Site Circulation

The evaluation of site access and circulation is based on the October 21, July 1, 20224 site plan prepared by Studio Current. 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. The site plan is shown on Figure 19Figure 19.

Project Driveway Design

Vehicular access to the on-site parking garage would be provided via a full access driveway along the east project frontage on Willard Avenue, approximately 155 feet south of the Willard Avenue and San Carlos Street intersection. According to the City of San Jose Department of Transportation (DOT) Geometric Design Guidelines, the minimum width for a driveway serving a multi-family development is 20 feet wide. The proposed driveway is shown to be approximately 26 feet wide and therefore meets City standards. The project also proposes to provide a loading area directly adjacent to the garage entrance, which will be served by a proposed 12-foot wide driveway on Willard Avenue.

Sight Distance

Adequate sight distance will be required at the project driveway along Willard Avenue. The project access point 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 Willard Avenue. 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. Willard Avenue does not have posted speed limits. It is assumed that the speed limits along Willard Avenue is 25 mph. The AASHTO stopping sight distance is 200 feet (based on a design speed of 30 mph). Thus, a driver must be able to see 200 feet in both directions to locate a sufficient gap to turn out of the driveway. The site plan shows new street trees added along the project frontage on Willard Avenue. The trees should be maintained



Figure 18
Walking Audit Report Summary of Concerns within the Buena Vista Neighborhood

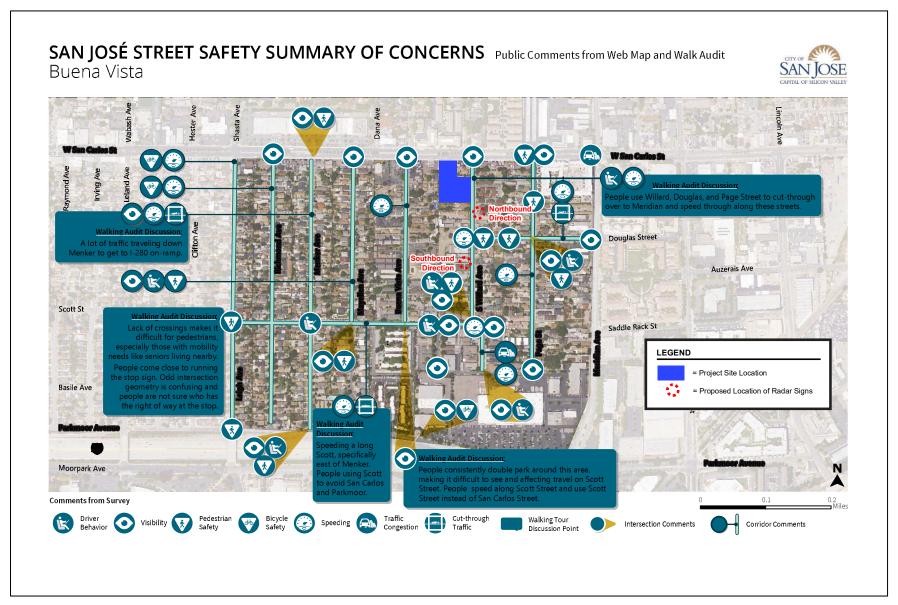
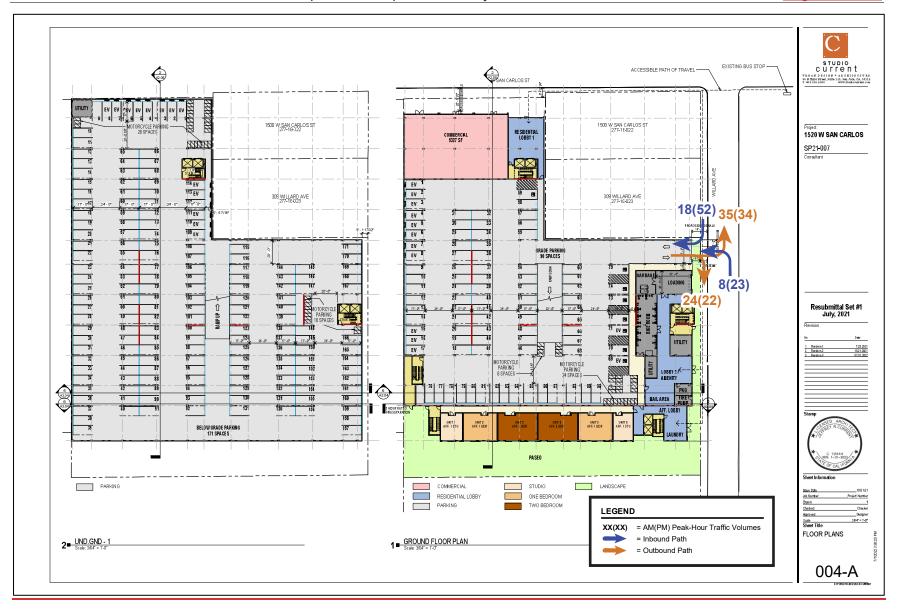


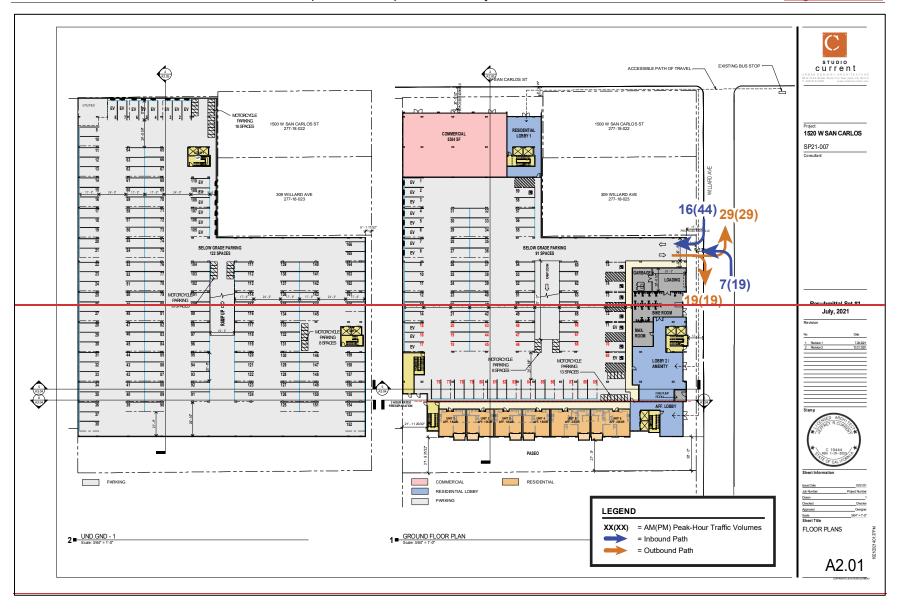


Figure 19
Project Trips at Site Driveways and On-Site Circulation











so that the vision of drivers existing the project driveway is not obstructed. Additionally, since on-street parking is permitted along the west side of Willard Avenue, red curb equal to a car length should be painted on both sides of the driveway to ensure exiting vehicles have proper sight distance of oncoming traffic.

Recommendation: The proposed landscaping along Willard Avenue should be maintained so that the vision of drivers exiting the project driveway is not obstructed.

Recommendation: On-street parking is currently provided along the project site frontage along Willard Avenue. Red curbs should be painted next to the project driveway to ensure that adequate sight distance is provided along the project driveway.

Project Driveway Operations

Based on the project trip generation and trip assignment, it is estimated that the project driveway will serve 263 inbound trips and 5948 outbound trips during the AM peak hour and 7563 inbound trips and 5648 outbound trips during the PM peak hour. The estimated project trips at the project site driveway are shown on Figure 19Figure 19.

The project driveway will provide full access to/from Willard Avenue. An estimated 49-23 northbound left-turning vehicles are projected to enter the driveway during the PM peak-hour. With an average arrival rate of one vehicle every three minutes, minimal left-turn queueing (up to one vehicle) is expected to form at the driveway during the PM peak-hour.

Entry gates are not indicated on the site plan. The first aisle of parking upon entering the garage is located approximately 80 feet from the garage entrance. The ramp to the basement level of parking is located approximately 120 feet from the garage entrance. Therefore, there is adequate space for four to five vehicles to queue upon entering the garage and inbound queueing onto Willard Avenue from the parking garage is not anticipated.

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. In general, the proposed site plan would provide vehicle traffic with adequate connectivity throughout the parking garage.

The project would provide 90-degree parking stalls at ground-floor level and within the below-ground parking level, as shown in Figure 19 Eigure 19. On-site drive aisles are shown to be 20 to 24 feet wide. All on-site drive aisles are shown to provide two-way access and must therefore provide a minimum 26-foot width to meet City standards. The proposed parking spaces are shown to be 17 feet long. The City identifies full-size parking spaces as 18 feet long and 9 feet wide and compact parking spaces as 16 feet long and 8 feet wide.

From the project driveway, a 20-foot wide drive aisle provides access to the ground-floor parking level which consists of 91 parking spaces along looped drive aisles. Access to the basement parking level is provided via a 22-foot wide ramp along the main entry drive aisle, approximately 120 feet west of the garage entrance. The basement parking level consists of 17122 parking spaces along looped drive aisles. There are no dead-ends within the parking garage, thus providing continuous circulation for vehicles.

Typical engineering standards require garage ramps to have no greater than a 20 percent grade, and slopes over 10% requires transition slopes so that vehicles do not "bottom out". The project site plan



does not indicate the slope of the ramps providing access to the basement parking level. Should the ramp be designed with a slope greater than 10%, the proposed ramp design should incorporate a transition slope based on typical engineering standards.

Recommendation: The project applicant should discuss with city staff whether the ramp and proposed drive aisles are adequate, or if the project would be required to widen the ramp and/or drive aisles.

Recommendation: Parking space widths (not shown on the site plan) also will need to be at least 8 feet wide to meet standards for compact parking spaces.

Truck and Emergency Vehicle Access

The parking garage entrance is proposed to have a vertical clearance of less than 10 feet. Firetrucks will not have access to the interior of the parking garage. Other large vehicles, such as delivery trucks and garbage trucks, would also not have access to the parking garage.

According to the City of San Jose Zoning Regulations, the project is not required to provide an off-street loading space for the residential nor the commercial uses. However, a loading area with roll-up door would be accessible directly along Willard Avenue and would be adjacent to (south of) the parking garage driveway. The site plan shows a proposed 12-foot wide driveway would serve the loading area. However, truck turning templates (Figure 20) show that an SU-30 design vehicle would require a multipoint turn to access the loading dock if a 12-foot wide driveway is provided at the loading area. Providing a wider 16-foot wide driveway (Figure 21) would allow for ingress and egress without a multi-point turn. Therefore, the City will require the loading area driveway to be a minimum of 16 feet wide.

The site plan shows trash enclosures located within the ground-floor parking level, behind the loading area. The parking level, however, would not provide garbage truck access, requiring trash bins to be wheeled out of the parking garage for pickup. Trash bins should be wheeled out to Willard Avenue for garbage truck pickup. The designated pickup location should not inhibit access to the parking garage and loading dock.

Parking Supply

Vehicular Parking

The project as proposed would construct 202256 multi-family residential units and 15,14515,203 s.f. of commercial space. Table 8 provides a summary of the required parking based on the City of San Jose off-street parking requirements (Section 20.90.060). Based on the City's parking requirements, the project as currently proposed, would be required to provide a total of 425354 parking spaces before any reductions.

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 West San Carlos Urban Village and the project proposes to provide bicycle parking that will exceed the City's bicycle parking requirements. Therefore, the vehicle parking



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requirement would be reduced by 20% to <u>337282</u> vehicle parking spaces. The project is proposing to provide a total of <u>255261</u> parking spaces, which represents a <u>328.5</u>% reduction in on-site parking spaces from the required baseline <u>425354</u> parking spaces.

Figure 20
Truck Turning Template – 12-foot Wide Driveway

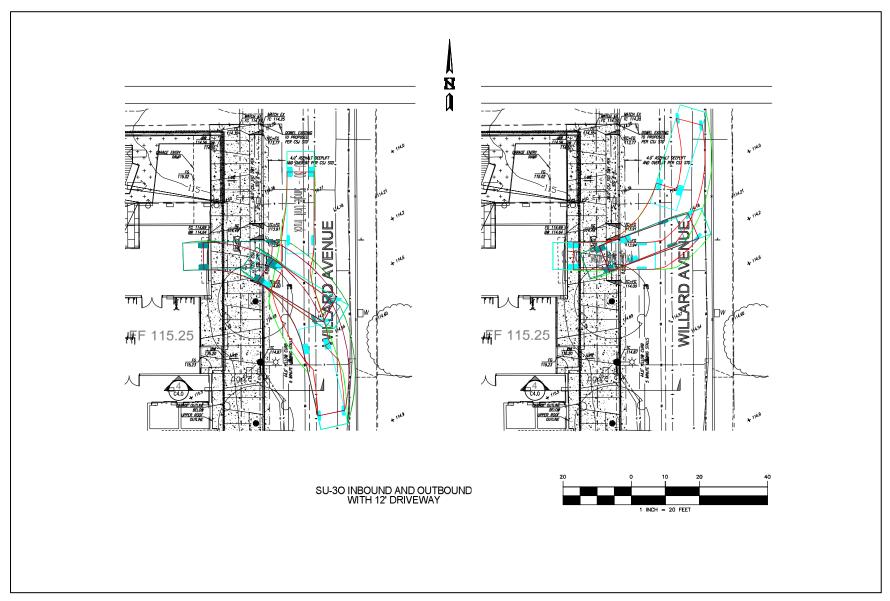




Figure 21
Truck Turning Template – 16-foot Wide Driveway

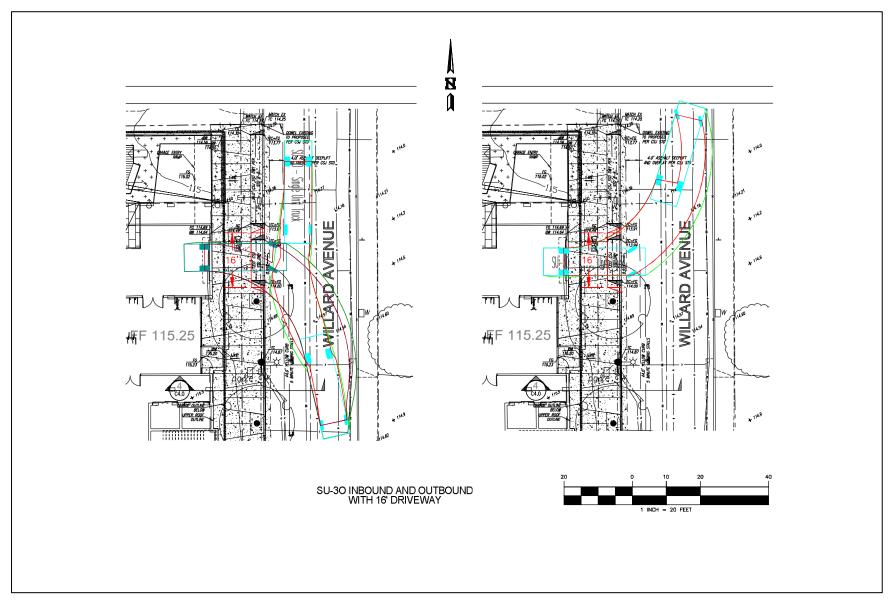




Table 8
Vehicle Parking Requirement

Proposed Project		Parking Requ	Required	Urban Village Required	Provided	
Proposed Use	Size	Land Use	Parking Ratio	Parking	Parking ³	Parking
Market Rate						
Studio/1-bedroom	145 units	Multiple dwelling residential	1.25 spaces per one-bedroom unit	181	144	
2-bedroom	72 units	Multiple dwelling residential	1.70 spaces per two-bedroom unit	122	97	
Sub-Total	217 units			303	241	
Affordable						
Studio/1-bedroom	27 units	Multiple dwelling residential	1.00 space per one-bedroom unit	27	21	
2-bedroom/3-bedroom	12 units	Multiple dwelling residential	1.50 spaces per two-bedroom unit	18	14	
Sub-Total	39 units			45	35	
Residential	256 units			348	276	
Retail	15,203 s.f.	Retail sales, goods and merchandise	1.00 space for 200 s.f. of floor area	77	61	
Total				425	337	261

Notes:

²The City of San Jose parking code requires 1.25, 1.70, and 2.0 on-site parking spaces for studio/one-bedroom, two-bedroom, and three-bedroom residential units, respectively. Per the State Housing Density Bonuses and Incentives Law (Government Code Section 65915), the City may not require the project to provide more than 1 on-site parking space for studio/one-bedroom residential units and 1.5 on-site parking spaces for two- and three-bedroom residential units.

Includes 20% allowable reduction of	of parking	requirement	in an	Urban '	Village.
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Proposed Pro	ject	Parking Requ	Required	Urban Village Required	Provided	
Proposed Use	Size	Land Use	Parking Ratio	Parking	Parking ³	Parking
Market Rate						
Studio/1-bedroom 2-bedroom Sub-Total	110 units 62 units 172 units	Multiple dwelling residential Multiple dwelling residential	1.25 spaces per one-bedroom unit 1.70 spaces per two-bedroom unit	138 105 243	110 <u>84</u> 194	
Affordable						
Studio/1-bedroom	20 units	Multiple dwelling residential	1.00 space per one-bedroom unit	20	16	
2-bedroom/3-bedroom <i>Sub-Total</i>	10 units 30 units	Multiple dwelling residential	1.50 spaces per two-bedroom unit	<u>15</u> 35	12 28	
Residential	202 units			278	222	
Retail	15,145 s.f.	Retail sales, goods and merchandise	1.00 space for 200 s.f. of floor area	76	60	
Total				354	282	255

Notes:

The project on-site parking will require an additional <u>18.5</u>% reduction in on-site parking spaces. Therefore, the project will need to submit and have approved a TDM plan for a total parking reduction of <u>38.5</u>28%. 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.

Per the 2016 California Building Code (CBC) Table 11B-208.2, seven ADA accessible spaces are required for projects with 201 to 300 parking spaces. Of the required accessible parking spaces, two van accessible space are required. The site plans indicate eight accessible spaces within the ground-floor parking level.

¹City of San Jose Zoning Ordinance (20.90.060, Table 20-210)

¹City of San Jose Zoning Ordinance (20.90.060, Table 20-210)

²The City of San Jose parking code requires 1.25, 1.70, and 2.0 on-site parking spaces for studio/one-bedroom, two-bedroom, and three-bedroom residential units, respectively. Per the State Housing Density Bonuses and Incentives Law (Government Code Section 65915), the City may not require the project to provide more than 1 on-site parking space for studio/one-bedroom residential units and 1.5 on-site parking spaces for two- and three-bedroom residential units.

³Includes 20% allowable reduction of parking requirement in an Urban Village.

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 202256 residential units at a rate of one bicycle parking space per four residential units. For the proposed 15,14515,203 s.f. of commercial use, the rate is one bicycle parking space per 3,000 s.f. of floor area (Table 20-190). This equates to a total requirement of 6451 bicycle parking spaces for the residential use and 5 parking spaces for the commercial use. Of the required residential bicycle parking, City standards require that at least 60 percent be secured long-term bicycle spaces and at most 40 percent be short-term bicycle spaces. Of the required commercial bicycle parking, City standards require that at least 80 percent be short-term bicycle spaces and at most 20 percent be secured long-term bicycle spaces. The City's definition of short-term and long-term bicycle parking is described below. The required parking based on the City of San Jose bicycle parking requirements is summarized in Table 9Table 9 below.

City of San Jose Long-Term and Short-Term Bicycle Parking

Long-term bicycle parking facilities are secure bicycle storage facilities for tenants of a building that fully enclose and protect bicycles and may include:

 A covered, access-controlled enclosure such as a fenced and gated area with short-term bicycle parking facilities,

Table 9
Bicycle Parking Requirement

Proposed Project		City of San Jose	City of San Jose Parking Code ¹					
Land Use Size		Land Use	Parking Ratio	Short Long Term Term		Total		
Residential	256 units	Multiple dwelling residential	1.00 space per 4 residential units	25	39	64		
Retail	15,203 s.f.	Retail sales, goods and merchandise	1.00 space per 3,000 s.f. of floor area ²	4	1	5		
Total				29	40	69		

Notes

²City code requires a minimum of two short-term bicycle parking spaces and one long-term bicycle parking space

Proposed	l Project	City of San Jose	Parking Code ¹	Required Parkin		king	
Land Use Size		Land Use	Parking Ratio	Short Term	Long Term	Total	
Residential	202 units	Multiple dwelling residential	1.00 space per 4 residential units	20	31	51	
Retail	15, 145 s.f.	Retail sales, goods and merchandise	1.00 space per 3,000 s.f. of floor area ²	4	1	5	
Total				24	32	56	

Notes

- An access-controlled room with long-term bicycle parking facilities, and
- Individual bicycle lockers that securely enclose one bicycle per locker.

Short-term bicycle parking facilities are accessible and usable by visitors, guests, or business patrons and may include:

- · Permanently anchored bicycle racks,
- Covered, lockable enclosures with permanently anchored racks for bicycles,



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

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

²City code requires a minimum of two short-term bicycle parking spaces and one long-term bicycle parking space

- Lockable bicycle rooms with permanently anchored racks, and
- Lockable, permanently anchored bicycle lockers.

The project site plan shows bicycle parking would be provided within a storage room located directly along the Willard Avenue frontage within the ground-floor parking level and accessible via an internal walkway through the lobby. Per the site plan, a total of 7½ spaces are provided within the storage room. The bicycle parking spaces proposed on-site will exceed the City's requirement for on-site bicycle parking and will encourage non-vehicular modes of travel to and from the site.

Pedestrian, Bicycle, and Transit Analysis

All new development projects in San Jose should encourage multi-modal travel, consistent with the goals of the City's General Plan. It is the goal of the General Plan that all development projects accommodate and encourage the use of non-automobile transportation modes to achieve San Jose's mobility goals and reduce vehicle trip generation and vehicle miles traveled. In addition, the adopted City Bike Master Plan establishes goals, policies and actions to make bicycling a daily part of life in San Jose. The Master Plan includes designated bike lanes along all City streets, as well as on designated bike corridors. In order to further the goals of the City, pedestrian and bicycle facilities should be encouraged with new development projects.

The proposed project site is located within the West San Carlos Urban Village Boundary and fronts San Carlos Street, 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 the 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.
- 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 City's General Plan identifies both walk and bicycle commute mode split targets as 15 percent or more by the year 2040. This level of pedestrian and bicycle mode share is a reasonable goal for the project, particularly if bus services (including BRT) are utilized in combination with bicycle commuting.



In addition, the West San Carlos Urban Village Plan policies listed below provide for the enhancement of the pedestrian and bicycle environment and greater connectivity to the overall network.

Policy CS-1.1: Plan, design, and construct new transportation improvement projects to ensure safe, attractive, and well-maintained facilities for motorists, transit riders, bicyclists, pedestrians, and people of all abilities.

Policy CS-1.2: Encourage street design standards that balance mobility for all transportation modes.

Policy CS-2.1: Support right-of-way design and pedestrian amenities that make it easier to access transit services and encourage transit use as a viable alternative to driving.

Policy CS-2.2: Coordinate with VTA to implement the Stevens Creek high-capacity urban transit project including two high-capacity urban transit stations on West San Carlos Street.

Policy CS-3.1: Expand the bicycle network by adding Class II and Class III facilities within the Urban Village as per the San José Bike Plan.

Policy CS-3.2: Examine the feasibility of providing a bicycle route and traffic calming installations along MacArthur Avenue.

Policy CS-3.3: Implement safety improvements to existing bicycle routes in the Urban Village.

Policy CS-3.4: Enhance bicycle safety and environment by utilizing the most advanced technology (such as bicycle-friendly signal detection) and including bicycle parking at transit stops.

Policy CS-4.1: Create a pedestrian-friendly boulevard along West San Carlos Street and improve access to schools, parks, neighborhood services, and transit stops.

Policy CS-4.2: Consider multi-modal users in all pedestrian improvement projects and include safety elements such as lighted crosswalks and RRFB signals.

Policy CS-4.3: Improve the streetscape environment with crosswalks, wide Americans with Disabilities Act (ADA) accessible sidewalks, and amenities that enrich the pedestrian experience, such as landscape planters, broad canopy shade trees, improved lighting, and benches.

Policy CS-4.4: Provide 20-foot minimum sidewalk width along West San Carlos Street in all future development projects. Where the sidewalk in front of a development project falls short, the project must make up the difference so that the entire 20 feet is publicly-accessible and functions as a sidewalk.

Policy CS-4.5: All other streets should provide a 12- to 15-foot sidewalk width. Allow exceptions only in the case of economic hardship on shallow lots or constrained sites.

Pedestrian Facilities

Pedestrian facilities in the study area consist of sidewalks, crosswalks, and pedestrian signals at signalized intersections (see Chapter 2 for details).

Pedestrian generators in the project vicinity include commercial areas and bus stops along the San Carlos Street corridor. The project site is within the service boundaries of Trace Elementary School, Herbert Hoover Middle School, and Lincoln High School, all of which are located on Dana Avenue approximately less than one mile from the project site. Existing sidewalks along San Carlos Street and Dana Avenue provide a pedestrian connection between the project site and pedestrian destinations in the project vicinity.

Sidewalks, ADA Ramps, and Crosswalks

The project proposes to widen the existing 8-foot wide sidewalk along the north project frontage by 12 feet to a total width of 20 feet. The proposed sidewalk width will meet the minimum width required by the West San Carlos Urban Village Plan (Policy CS-4.4) which requires new developments to provide a 20-foot wide sidewalk along San Carlos Street. The sidewalk along the Willard Avenue project frontage is proposed to be 15 feet wide and will meet the minimum width required per Policy CS-4.5 for all other streets within the urban village.



There is a missing ADA-compliant ramp along the southwest corner of Willard Avenue and San Carlos Street intersection. The project will be required to reconstruct ADA-compliant ramps within the project's sphere. The project proposes to reconstruct the sidewalk along San Carlos Street and Willard Avenue. The project will be required to install new ADA curb ramps at the southwest corner of Willard Avenue and San Carlos Street intersection, in coordination with the proposed Hyatt development.

At the intersection of Buena Vista Avenue and San Carlos Street, there is no marked crosswalk across the east leg; therefore, access between the bus stop and the project site currently requires pedestrians to use the south, west, and north legs of the intersection. The City has indicated that the project will be required to contribute towards the installation of a crosswalk along the east leg of the Buena Vista Avenue and San Carlos Street intersection via a signal modification. The new crosswalk across San Carlos Street will provide a faster route to the westbound bus stop located on the north side of San Carlos Street compared to the shortest route currently possible using existing facilities. The signal modification will include the installation of high visibility crosswalks which will increase safety and comfort for pedestrians crossing San Carlos Street.

San Carlos Street Streetscape Plan

The West San Carlos Urban Village Plan includes a Streetscape Prioritization Plan (Appendix A of the Urban Village Plan) that identifies five streetscape improvement projects, some of which would benefit the project and adhere to the goals of the Envision 2040 General Plan. Of the planned facilities, a proposed mid-block crosswalk across San Carlos Street at Muller Place is most relevant to the project. The improvement includes:

- A pedestrian refuge island in the existing median surrounded by new planting, with a control for the rapid flashing beacon
- Curb extensions with ADA curb ramps on either end of the mid-block crosswalk.

In addition, the San Carlos Streetscape plan design allows for reduced travel lanes to provide parking lanes with street trees and bulb-outs to reduce crossing distances. The project frontage on San Carlos Street must be designed so as to not inhibit the planned San Carlos Streetscape plan. The project also may be required to contribute towards the implementation of the planned mid-block crossing of San Carlos Street at its intersection with Muller Place.

Paseo

Additionally, the plan recommends the installation of paseos which function as pedestrian- and bike-only circulation paths. The Plan identifies a "Potential Paseo" between Buena Vista Avenue and Meridian Avenue, along the south project frontage. The "Potential Paseo" category is used to designate lands that can be publicly- or privately owned that are intended to be programmed for active or passive linear open space. An approximately 30-foot wide paseo is proposed along the south project frontage with pathways measuring at least 8-9 feet wide. Additional amenities such as a play area and benches are shown on Figure 22Figure 22. The paseo will be required to be built to a design as approved by the City. The City will require an Irrevocable Offer of Dedication for Public Accessibility to be recorded against the property encompassing the paseo. In the interim, while the paseo is landlocked from the public right-of-way, it will remain private. The segment of paseo constructed as part of this development will connect to Buena Vista Avenue via a separate segment of paseo to be built as part of a separate development. The east end of the on-site segment provides direct access to sidewalks along Willard Avenue. The City will require the project to construct a raised crosswalk with bulbouts across Willard Avenue (as shown on the site plan) to provide pedestrian connectivity to the proposed public paseo entrance.

Bicycle Facilities

There are several bike facilities in the immediate vicinity of the project site (see Chapter 2 for details).



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The bikeways within the vicinity of the project site would remain unchanged under project conditions. The project would be directly served by a bike lane along its north project frontage on San Carlos Street, that runs between Leigh Avenue and Lincoln Avenue. A bike route also is located along Willard Avenue, south of the project site between Douglas Street and Scott Street.

As previously described, the City's General Plan identifies a bicycle commute mode split target of 15 percent or more by the year 2040. This calculates to approximately 10 and 16 new bicycle trips generated by the project during the AM and PM peak hours, respectively. This level of bicycle mode share is a reasonable goal for the project.

Planned Bicycle and Pedestrian Facility Improvements

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

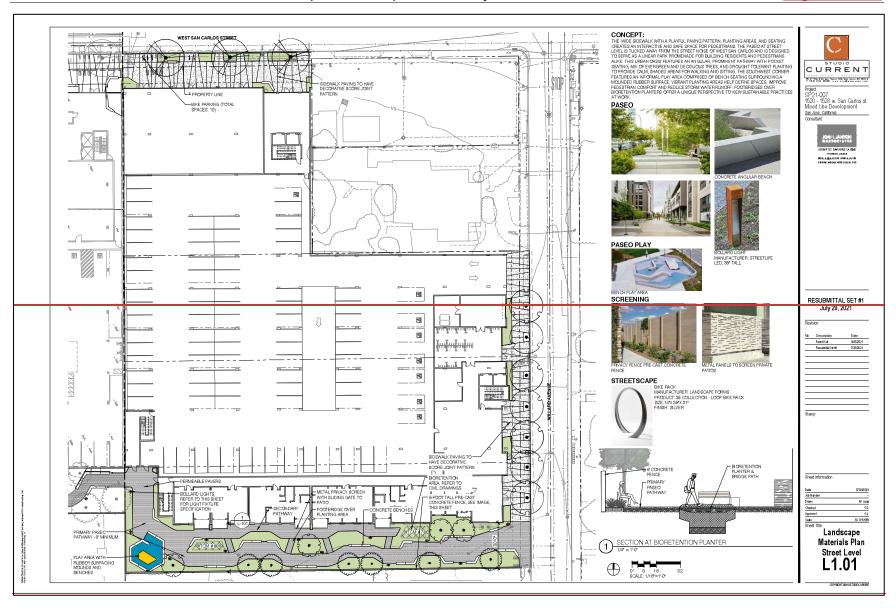
- Provide a continuous pedestrian and bicycle system to enhance connectivity throughout the City by completing missing segments.
- Build pedestrian and bicycle improvements at the same time as improvements for vehicular circulation.
- Give priority to pedestrian improvement projects that improve pedestrian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

The planned improvements discussed below are intended to reduce the identified project impacts to the roadway system by providing the project site with viable connections to surrounding pedestrian/bike and transit facilities and provide for a balanced transportation system as outlined in the Envision 2040 General Plan goals and policies. However, the full implementation of the improvements are beyond the means of the proposed project given that they may require right-of-way from adjacent properties.

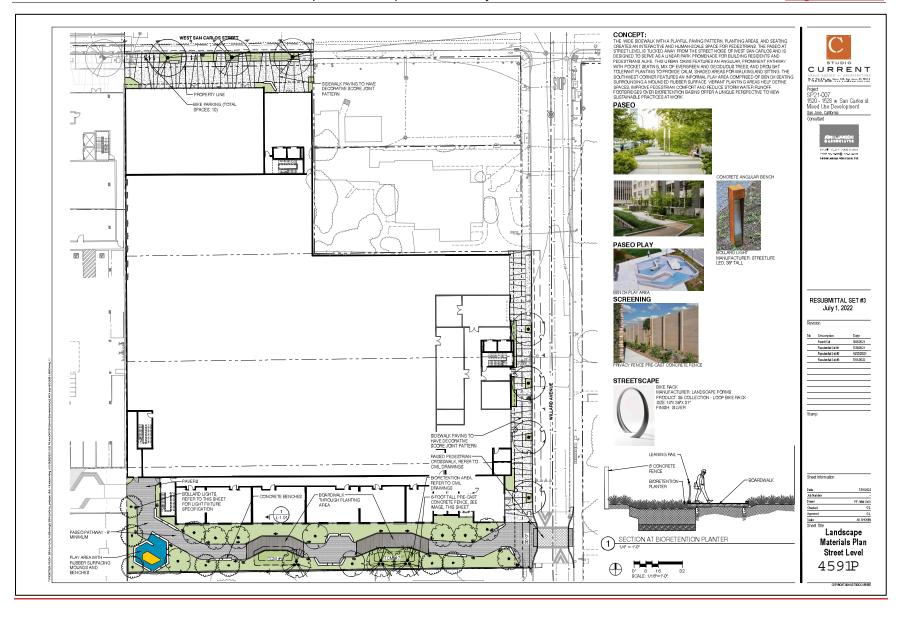


Figure 22 Proposed Paseo











The San Jose Better Bike Plan 2025 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:

- Leigh Avenue, between San Carlos Street and Moorpark Avenue
- Dana Avenue, north of San Carlos Street

Class III bike boulevards are planned for:

- Shasta Avenue, between San Carlos Street and Park Avenue
- Mayellen Avenue, between San Carlos Street and Scott Street

Class IV protected bike lanes are planned for:

- San Carlos Street, west of Leigh Avenue/Shasta Avenue
- Meridian Avenue, between Park Avenue and Willow Street
- Race Street, between The Alameda and Fruitdale Avenue
- Park Avenue, between Laurel Grove Lane and The Alameda

Project Pedestrian and Bicycle Facility Improvements

- The project will be required to install new ADA curb ramps at the southwest corner of Willard Avenue and San Carlos Street intersection, in coordination with the proposed Hyatt development.
- The project will be required to contribute towards the installation of a crosswalk along the east leg of the Buena Vista Avenue and San Carlos Street intersection via a signal modification.
- The project frontage on San Carlos Street must be designed so as to not inhibit the planned San Carlos Streetscape plan. The project also may be required to contribute towards the implementation of the planned mid-block crossing of San Carlos Street at its intersection with Muller Place.
- An approximately 30-foot wide paseo is proposed along the south project frontage with pathways measuring at least 8 feet wide. The paseo will be required to be built to a design as approved by the City. The City will require an Irrevocable Offer of Dedication for Public Accessibility to be recorded against the property encompassing the paseo. The segment of paseo constructed as part of this development will connect to Buena Vista Avenue via a separate segment of paseo to be built as part of a separate development. The east end of the on-site segment provides direct access to sidewalks along Willard Avenue. The City will require the project to construct a raised crosswalk with bulbouts across Willard Avenue to provide pedestrian connectivity to the proposed public paseo entrance.
- The project will be required to make a monetary contribution (\$121 per linear foot) to the planned protected bike lane along the project's San Carlos Street frontage per the City of San Jose Better Bike Plan 2025. A protected bike lane along San Carlos Street would improve bicycle connectivity in the project vicinity and to other existing bicycle facilities. Additionally, installing a protected bike lane may encourage future residents and visitors to ride bikes rather than drive.

Transit Services

The project site is primarily served by three VTA bus routes (Local Route 64B, Frequent Route 23 and Rapid Route 523).



Bus stops in the vicinity of the project site serve Frequent Route 23 and are located along both sides of San Carlos Street. An eastbound bus stop is located at the southeast corner of the Willard Avenue/San Carlos Street intersection, less than 70 feet walking distance from the project site. The nearest westbound bus stop is located at the northeast corner of the Buena Vista Avenue/San Carlos Street intersection, approximately 700 feet walking distance from the project site.

With the convenient location of the bus stops, it is assumed that some employees and residents of the proposed development would utilize the existing transit services. Applying an estimated three percent transit mode share, which is a conservative estimate that could be expected for the project, equates to a maximum of approximately three new transit riders during the peak hours. 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.

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 San Carlos Street/Stevens Creek Boulevard.

San Carlos Street 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 San Carlos Street, the project shall be required to implement the following Grand Boulevard design principles:

- Provide a minimum 20 feet sidewalk width along its frontage on San Carlos Street
- Minimize driveway cuts to minimize transit delay
- Provide enhanced shelters for transit services

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 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 <u>Table 10 Table 10</u>.



Table 10 Freeway Segment Capacity



						Existing	Capacity	/	Project Trip					
					Mixed-Flow Lane		HOV Lane			Mixed-Flow Lane		HOV	/ Lane	
				Peak	# of	Capacity	# of	Capacity	Total		% of		% of	
# I	Freeway	Segment	Direction	Hour	Lanes ¹	(vph)	Lanes ¹	(vph)	Volume	Volume	Capacity	Volume	Capacity	
1	SR 17	from Hamilton Avenue to I-280	NB	AM	3	6,900			1	1	0.01			
			NB	PM	3	6,900			3	3	0.04			
2	I-880	from I-280 to Stevens Creek Boulevard	NB	AM	3	6,900			2	2	0.03			
			NB	PM	3	6,900	-		2	2	0.03			
3	I-880	from Stevens Creek Boulevard to North Bascom Avenue	NB	AM	3	6,900			2	2	0.03			
			NB	PM	3	6,900			2	2	0.03			
4	I-280	from Winchester Boulevard to I-880	EB	AM	3	6,900	1	1,650	2	2	0.03	0	0.00	
			EB	PM	3	6,900	1	1,650	6	4	0.06	2	0.12	
5	I-280	from I-880 to Meridian Avenue	EB	AM	3	6,900	1	1,650	3	3	0.04	0	0.00	
			EB	PM	3	6,900	1	1,650	9	6	0.09	3	0.18	
6	I-280	from Meridian Avenue to I-880	WB	AM	3	6,900	1	1,650	7	5	0.07	2	0.12	
			WB	PM	3	6,900	1	1,650	7	6	0.09	1	0.06	
7	I-280	from I-880 to Winchester Boulevard	WB	AM	3	6,900	1	1,650	5	4	0.06	1	0.06	
			WB	PM	3	6,900	1	1,650	5	4	0.06	1	0.06	
8	I-880	from North Bascom Avenue to Stevens Creek Boulevard	SB	AM	3	6,900			1	1	0.01			
			SB	PM	3	6,900			3	3	0.04			
9	I-880	from Stevens Creek Boulevard to I-280	SB	AM	3	6,900			1	1	0.01			
			SB	PM	3	6,900			3	3	0.04			
10	SR 17	from I-280 to Hamilton Avenue	SB	AM	3	6,900	-		2	2	0.03			
			SB	PM	3	6,900			2	2	0.03			

¹ Source: Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2016.



				Existing Capacity						Project Trip					
					Mixed-Flow Lane		HOV Lane			Mixed-Flow Lane		HOV	/ Lane		
				Peak	# of	Capacity	# of	Capacity	Total		% of		% of		
#	Freeway	Segment	Direction	Hour	Lanes ¹	(vph)	Lanes ¹	(vph)	Volume	Volume	Capacity	Volume	Capacity		
1	SR 17	from Hamilton Avenue to I-280	NB	AM	3	6,900			1	1	0.01				
			NB	PM	3	6,900			3	3	0.04				
2	I-880	from I-280 to Stevens Creek Boulevard	NB	AM	3	6,900	-		2	2	0.03				
			NB	PM	3	6,900	-		2	2	0.03				
3	I-880	from Stevens Creek Boulevard to North Bascom Avenue	NB	AM	3	6,900			2	2	0.03				
			NB	PM	3	6,900			2	2	0.03				
4	I-280	from Winchester Boulevard to I-880	EB	AM	3	6,900	1	1,650	2	2	0.03	0	0.00		
			EB	PM	3	6,900	1	1,650	6	4	0.06	2	0.12		
5	I-280	from I-880 to Meridian Avenue	EB	AM	3	6,900	1	1,650	3	3	0.04	0	0.00		
			ĒB	Pivi	3	6,900	i	i,650	9	Ô	0.09	3	0.18		
6	I-280	from Meridian Avenue to I-880	WB	AM	3	6,900	1	1,650	7	5	0.07	2	0.12		
			WB	PM	3	6,900	1	1,650	7	6	0.09	1	0.06		
7	I-280	from I-880 to Winchester Boulevard	WB	AM	3	6,900	1	1,650	5	4	0.06	1	0.06		
			WB	PM	3	6,900	1	1,650	5	4	0.06	1	0.06		
8	I-880	from North Bascom Avenue to Stevens Creek Boulevard	SB	AM	3	6,900			1	1	0.01				
			SB	PM	3	6,900			3	3	0.04				
9	I-880	from Stevens Creek Boulevard to I-280	SB	AM	3	6,900			1	1	0.01				
			SB	PM	3	6,900			3	3	0.04				
10	SR 17	from I-280 to Hamilton Avenue	SB	AM	3	6,900			2	2	0.03				
			SB	PM	3	6,900			2	2	0.03				

¹ Source: Santa Clara Valley Transportation Authority Congestion Management Program Monitoring Study, 2016.



Trip Reduction (TDM Program)

In order to be granted a reduction in required off-street parking per the West San Carlos Urban Village Plan, the project will be required to establish a TDM program that will reduce the parking demand for the project by 38.528%. The TDM program should encourage multimodal travel and use of the extensive bus service and pedestrian/bicycle facilities in the immediate project area to the maximum extent possible. The applicant/property owner should manage the TDM program to ensure tenant employee participation. The project will be required to submit and have approved by the City its TDM program for reduction in off-street parking.



5. Conclusions

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's *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).

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 residential component of the proposed project will meet all of the applicable VMT screening criteria for residential developments. The project site is located within a planned Growth Area (West San Carlos Urban Village) with low VMT per capita as identified by the City of San Jose and San Carlos Street, located along the north project frontage, is a high-quality transit corridor with VTA bus service headways of less than 15 minutes during peak commute periods. The proposed 45,14515,203 s.f. of commercial (retail) space is less than the 100,000 s.f. retail threshold screening criterion for local-serving retail. Therefore, the proposed residential and retail components of the project are anticipated to result in a less-than significant VMT impact and a detailed CEQA VMT transportation analysis is not required. However, a VMT evaluation for the project was completed using the *San José VMT Evaluation Tool* 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 (7.147.09) that is below the established threshold. Therefore, the proposed project would not result in an impact on the transportation system based on the City's VMT impact criteria.

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 West San Carlos 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 West San Carlos Urban Village goals and policies for the following reasons:

- The proposed residential uses for the project site are consistent with the Urban Village land use designation per the West San Carlos Urban Village plan.
- The project frontage along San Carlos Street will be consistent with planned streetscape design features per the West San Carlos Urban Village Plan.
- The project site is within walking distance (less than 100 feet) of bus stops on San Carlos Street.
- The project proposes to provide a paseo that enhances pedestrian and bicycle connections to other destinations within the urban village.

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 four signalized intersections and four 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 an additional 4,2801,522 daily vehicle trips, with 85 trips (26 inbound and 59 outbound) occurring during the AM peak hour and 131 trips (75 inbound and 56 outbound) occurring during the PM peak hour. 71 trips (23 inbound and 48 outbound) occurring during the AM peak hour and 111 trips (63 inbound and 48 outbound) occurring during the PM peak hour.

Future Intersection Operation Conditions

The operations analysis shows that all of the signalized 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.

Signal Warrant Analysis

A peak-hour traffic signal warrant check was conducted for the four unsignalized study intersections. The results indicate that projected traffic volumes at the study intersections will not meet the signal warrant checks under peak hour conditions with the project.



Intersection Queueing Analysis

The queues at high-demand movements will be served by the existing queue storage space under existing, background conditions, and background plus project conditions.

Neighborhood Interface

Due to the close proximity to San Carlos Street to the north and modern-day navigation and GPS services, most trips related to the proposed project are expected to utilize San Carlos Street to reach their destinations. However, it is possible that some trips related to the proposed project may utilize roadways identified by the City's Walking Audit Report to have traffic calming concerns (Willard Avenue, Douglas Street, and Page Street). Therefore, the project will be required to implement two radar speed signs along Willard Avenue as part of the project's mitigation of traffic calming concerns identified in the City's Walking Audit Report.

Site Access and On-Site Circulation

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.

Recommended Site Access and On-Site Circulation Improvements

- The proposed landscaping along Willard Avenue should be maintained so that the vision of drivers exiting the project driveway is not obstructed.
- On-street parking is currently provided along the project site frontage along Willard Avenue. Red
 curbs should be painted next to the project driveway to ensure that adequate sight distance is
 provided along the project driveway.
- The project applicant should discuss with city staff whether the ramp and proposed drive aisles are adequate, or if the project would be required to widen the ramp and/or drive aisles.
- Parking space widths (not shown on the site plan) also will need to be at least 8 feet wide to meet standards for compact parking spaces.
- Truck turning templates show that an SU-30 design vehicle would require a multi-point turn to
 access the loading dock if a 12-foot wide driveway is provided at the loading area. Providing a
 wider 16-foot wide driveway would allow for ingress and egress without a multi-point turn.
 Therefore, the City will require the loading area driveway to be a minimum of 16 feet wide.
- Trash bins should be wheeled out to Willard Avenue for garbage truck pickup. The designated pickup location should not inhibit access to the parking garage and loading area.

Parking Supply

Vehicular Parking

Based on the City's parking requirements, the project as currently proposed, would be required to provide a total of 425352 parking spaces before any reductions. The project is proposing to provide a total of 255261 parking spaces, which represents a 328.5% reduction in on-site parking spaces from the required baseline 425352 parking spaces. However, the project site is within the West San Carlos Urban Village and the project proposes to provide bicycle parking that will exceed the City's bicycle parking requirements. Therefore, the vehicle parking requirement would be reduced by 20% to 282 vehicle parking spaces.

With the proposed <u>255261</u> on-site parking spaces, the project on-site parking will require an additional <u>18.5</u>% reduction in on-site parking spaces. Therefore, the project will need to submit and have approved a TDM plan for a total parking reduction of <u>328.5</u>%.

Bicycle Parking

The project site plan shows bicycle parking would be provided within a storage room located directly along the Willard Avenue frontage and accessible via the lobby. Per the site plan, a total of 7½4 spaces are provided within the storage room. The bicycle parking spaces proposed on-site will exceed the City's requirement for on-site bicycle parking and will encourage non-vehicular modes of travel to and from the site.

Pedestrian, Bicycle, and Transit Analysis

Pedestrian Facilities

Pedestrian generators in the project vicinity include commercial areas and bus stops along the San Carlos Street corridor. The project site is within the service boundaries of Trace Elementary School, Herbert Hoover Middle School, and Lincoln High School, all of which are located on Dana Avenue approximately less than one mile from the project site. Existing sidewalks along San Carlos Street and Dana Avenue provide a pedestrian connection between the project site and pedestrian destinations in the project vicinity.

The project proposes to widen the existing 8-foot wide sidewalk along the north project frontage by 12 feet to a total width of 20 feet. The proposed sidewalk width will meet the minimum width required by the West San Carlos Urban Village Plan (Policy CS-4.4) which requires new developments to provide a 20-foot wide sidewalk along San Carlos Street. The sidewalk along the Willard Avenue project frontage is proposed to be 15 feet wide and will meet the minimum width required per Policy CS-4.5 for all other streets within the urban village.

Bicycle Facilities

The bikeways within the vicinity of the project site would remain unchanged under project conditions. The project would be directly served by a bike lane along its north project frontage on San Carlos Street, that runs between Leigh Avenue and Lincoln Avenue. A bike route also is located along Willard Avenue, south of the project site between Douglas Street and Scott Street.

The City's General Plan identifies a bicycle commute mode split target of 15 percent or more by the year 2040. This calculates to approximately 10 and 16 new bicycle trips generated by the project during the AM and PM peak hours, respectively. This level of bicycle mode share is a reasonable goal for the project.

The San Jose Better Bike Plan 2025 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:

- Leigh Avenue, between San Carlos Street and Moorpark Avenue
- Dana Avenue, north of San Carlos Street

Class III bike boulevards are planned for:

- Shasta Avenue, between San Carlos Street and Park Avenue
- Mayellen Avenue, between San Carlos Street and Scott Street

Class IV protected bike lanes are planned for:

- San Carlos Street, west of Leigh Avenue/Shasta Avenue
- Meridian Avenue, between Park Avenue and Willow Street
- Race Street, between The Alameda and Fruitdale Avenue



• Park Avenue, between Laurel Grove Lane and The Alameda

Project Pedestrian and Bicycle Facility Improvements

- The project will be required to install new ADA curb ramps at the southwest corner of Willard Avenue and San Carlos Street intersection, in coordination with the proposed Hyatt development.
- The project will be required to contribute towards the installation of a crosswalk along the east leg of the Buena Vista Avenue and San Carlos Street intersection via a signal modification.
- The project frontage on San Carlos Street must be designed so as to not inhibit the planned San Carlos Streetscape plan. The project also may be required to contribute towards the implementation of the planned mid-block crossing of San Carlos Street at its intersection with Muller Place.
- An approximately 30-foot wide paseo is proposed along the south project frontage with pathways measuring at least 8 feet wide. The paseo will be required to be built to a design as approved by the City. The City will require an Irrevocable Offer of Dedication for Public Accessibility to be recorded against the property encompassing the paseo. The segment of paseo constructed as part of this development will connect to Buena Vista Avenue via a separate segment of paseo to be built as part of a separate development. The east end of the on-site segment provides direct access to sidewalks along Willard Avenue. The City will require the project to construct a raised crosswalk with bulbouts across Willard Avenue to provide pedestrian connectivity to the proposed public paseo entrance.
- The project will be required to make a monetary contribution (\$121 per linear foot) to the planned protected bike lane along the project's San Carlos Street frontage per the City of San Jose Better Bike Plan 2025. A protected bike lane along San Carlos Street would improve bicycle connectivity in the project vicinity and to other existing bicycle facilities. Additionally, installing a protected bike lane may encourage future residents and visitors to ride bikes rather than drive.

Transit Services

The project site is adequately served by the existing VTA transit services. The project site is primarily served by three VTA bus routes (Local Route 64B, Frequent Route 23 and Rapid Route 523).

Bus stops in the vicinity of the project site serve Frequent Route 23 and are located along both sides of San Carlos Street. An eastbound bus stop is located at the southeast corner of the Willard Avenue/San Carlos Street intersection, less than 70 feet walking distance from the project site. The nearest westbound bus stop is located at the northeast corner of the Buena Vista Avenue/San Carlos Street intersection, approximately 700 feet walking distance from the project site.

With the convenient location of the bus stops, it is assumed that some employees and residents of the proposed development would utilize the existing transit services. Applying an estimated three percent transit mode share, which is a conservative estimate that could be expected for the project, equates to a maximum of approximately three new transit riders during the peak hours. 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.

Transit Facility Improvements

San Carlos Street 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



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transit. Given that the project fronts San Carlos Street, the project shall be required to implement the following Grand Boulevard design principles:

- Provide a minimum 20 feet sidewalk width along its frontage on San Carlos Street
- Minimize driveway cuts to minimize transit delay
- Provide enhanced shelters for transit services

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 to any freeway segments in the area, freeway analysis for the CMP was not required.

Trip Reduction (TDM Program)

In order to be granted a reduction in required off-street parking per the West San Carlos Urban Village Plan, the project will be required to establish a TDM program that will reduce the parking demand for the project by 328.5%. The TDM program should encourage multimodal travel and use of the extensive bus service and pedestrian/bicycle facilities in the immediate project area to the maximum extent possible. The applicant/property owner should manage the TDM program to ensure tenant employee participation. The project will be required to submit and have approved by the City its TDM program for reduction in off-street parking.



1520 W. San Carlos Street Mixed-Use Development TA Technical Appendices

Appendix ASan Jose VMT Evaluation Tool Output Sheet

Appendix B Traffic Counts

Appendix C Approved Trips Inventory

Appendix D Volume Summary

Appendix EIntersection Level of Service Calculations

Appendix FSignal Warrant Analysis

Appendix G Queue Length Calculations