4.8 TRANSPORTATION

Based on the analysis in the Initial Study (see Appendix A of this Draft EIR) and comments received in the scoping process, it was determined that construction and operation of the proposed project would not result in significant environmental impacts related to increased hazards create by design features or inadequate emergency access. Therefore, this chapter includes an evaluation of the potential consequences related to obstruction of a transportation plan or inconsistencies with CEQA Guidelines Section 15064.3, subdivision (b). This chapter also describes the environmental setting, including regulatory framework and existing mobility conditions in the project area.

The analysis in this chapter is based in part on the *Westport Cupertino – Transportation Analysis*, dated November 27, 2018, and the *Westport Cupertino – Stevens Creek Boulevard & SR 85 On Ramp Signalization Analysis,* dated September 18, 2019, prepared by Kimley-Horn and Associates. Complete copies of these reports are provided in Appendix H, Transportation Assessment, of this Draft EIR. A third-party peer review of these reports was completed by Hexagon Transportation Consultants. City staff also reviewed these reports.

4.8.1 ENVIRONMENTAL SETTING

4.8.1.1 REGULATORY FRAMEWORK

This section describes federal, State, regional, and local environmental laws and policies that are relevant to the California Environmental Quality Act (CEQA) review process for transportation.

State Regulations

On September 27, 2013, Senate Bill (SB) 743 was signed into law. The legislature found that with adoption of the Sustainable Communities and Climate Protection Act of 2008 (SB 375), the State had signaled its commitment to encourage land use and transportation planning decisions and investments that reduce vehicle miles traveled (VMT) and thereby contribute to the reduction of greenhouse gas (GHG) emissions, as required by the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32).

SB 743 started a process that could fundamentally change transportation impact analyses as part of CEQA compliance. These changes will include the elimination of auto delay, level of service (LOS), and similar measures of vehicular capacity or traffic congestion as the basis for determining the significant impacts of land use projects under CEQA. As part of the new CEQA Guidelines, the new criteria "shall promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses." The Office of Planning and Research (OPR) developed alternative metrics and thresholds based on VMT. Amendments to the CEQA Guidelines were certified by the Secretary of the Natural Resources Agency in December 2018, and automobile delay, as described solely by level of service (commonly referred to a LOS) or of similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment. There is an opt-in period until July 1, 2020, for agencies to adopt new VMT-based criteria. In the interim, automobile delay is still considered a significant

impact, and the City of Cupertino will continue to use the established level-of-service criteria (e.g., LOS A through LOS F), as described below, as well as VMT.

Regional Regulations

Santa Clara County Congestion Management Plan

The Santa Clara Valley Transportation Authority (VTA) establishes transportation plans that are incorporated into the larger Regional Transportation Plan (RTP). In Santa Clara County, the VTA is also the Congestion Management Agency (CMA) tasked with preparing a comprehensive transportation improvement program among local jurisdictions (i.e., the CMP) that describes the strategies to reduce traffic congestion and improve land use decision-making. VTA's latest CMP is the 2017 *Congestion Management Program*.[1] The CMP contains level-of-service standards for highways and arterials. The minimum level-of-service standard for Santa Clara County is LOS E, except for grandfathered facilities that had already reached LOS F. Because the level-of-service standards for Santa Clara County were established in October of 1991, any intersection operating at LOS F prior to the established 1991 level-of-service standards is not held to the minimum standard of LOS E.[2] Member Agencies, which are the cities and County of Santa Clara, must ensure that CMP roadways operate at or better than the minimum level-of-service standard or they face losing gas tax subventions. The VTA monitors the performance of the CMP facilities at a minimum of every two years. If the minimum level-of-service standards are not met, Member Agencies must develop multimodal improvement plans to address the congestion.[3]

The VTA presents transportation impact analysis (TIA) guidelines, most recently adopted in October 2014, for assessing the transportation and circulation impacts of development projects and identifying whether improvements are needed to adjacent roadways, bike facilities, sidewalks, and transit services affected by the proposed project. The TIA guidelines have been adopted by local agencies within Santa Clara County, and are applied to analyze the regional transportation system. Per the TIA guidelines, a TIA must be completed for CMP purposes for projects that meet or exceed the trip threshold of generating 100 or more net new weekday peak hour morning or AM (7:00 to 10:00 a.m.) and peak hour evening or PM (4:00 to 7:00 p.m.) commute times or weekend peak hour trips, including both inbound and outbound trips.

Plan Bay Area

Plan Bay Area 2040 is the Bay Area's current Regional Transportation Plan (RTP)/Sustainable Community Strategy (SCS) that was adopted jointly by the Association of Bay Area Government's (ABAG) and Metropolitan Transportation Commission (MTC) on July 26, 2017. As part of the implementing framework for *Plan Bay Area*, local governments, including Cupertino, have identified Priority Development Areas (PDAs) to focus growth.[4] PDAs are transit-oriented, infill development opportunity areas within existing

[1] Note that the 2018 CMP report is the latest version, but it is dated May 24, 2018. Thus, the 2017 CMP report was the latest version available when the study was prepared.

[2] Santa Clara County VTA, 2017, Congestion Management Plan, page 21.

[3] Santa Clara County VTA, 2017, Congestion Management Plan, page 25.

[4] City of Cupertino General Plan (Community Vision 2015-2040), Chapter 3, Land Use and Community Design Element, page LU-7.

communities. In addition to PDAs, *Plan Bay Area* identifies Transit Priority Areas (TPAs), which are areas within one-half mile of a major transit stop (15 minute or less service level frequency) that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations. An overarching goal of the regional *Plan Bay Area* 2040 is to concentrate development in areas where there are existing services and infrastructure rather than locating new growth in outlying areas where substantial transportation investments would be necessary to maximize energy conservation and achieve the per capita passenger vehicle, VMT, and associated GHG emissions reductions. The project site is located in a Santa Clara Valley Transportation Authority City Cores, Corridors & Station Areas PDA. Because the proposed project is in close proximity to existing employment centers, roadways, transit, and bicycle and pedestrian routes, it is also a designated TPA.[5] A TPA is defined as "an area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations.

Local Regulations

Cupertino General Plan

The Cupertino General Plan (Community Vision 2015-2040) includes policies that are relevant to transportation, which are applicable to the proposed project. The policies are identified in Chapter 5, Mobility, of the General Plan and listed in Table 4.8-1.

TABLE 4.8-1 GENERAL PLAN POLICIES RELEVANT TO TRANSPORTATION

Policy Number	Policy
Chapter 5, Mobility Element (M)	
Policy M-1.2	**Transportation Impact Analysis.** Participate in the development of new multi-modal analysis methods and impact thresholds as required by Senate Bill 743. However, until such impact thresholds are developed, continue to optimize mobility for all modes of transportation while striving to maintain the following intersection Levels of Service (LOS) at a.m. and p.m. peak traffic hours: ▪ Major intersections: LOS D ▪ Stevens Creek Boulevard and De Anza Boulevard: LOS E+ ▪ Stevens Creek Boulevard and Stelling Road: LOS E+ ▪ De Anza Boulevard and Bollinger Road: LOS E+
Policy M-2.3	**Connectivity.** Promote pedestrian and bicycle improvements that improve connectivity between planning areas, neighborhoods and services, and foster a sense of community.
Policy M-2.4	**Community Impacts.** Reduce traffic impacts and support alternative modes of transportation rather than constructing barriers to mobility. Do not close streets unless there is a demonstrated safety or over-whelming through traffic problem and there are no acceptable alternatives since street closures move the problem from one street to another.
Policy M-2.5	**Public Accessibility.** Ensure all new public and private streets are publicly accessible to improve walkability and reduce impacts on existing streets.

[5] *Plan Bay Area*, Association of Bay Area Governments (ABAG)/Metropolitan Transportation Commission (MTC) Priority Development Area (PDA) and Transit Priority Area (TPA) Map for CEQA Streamlining, https://www.planbayarea.org/pda-tpa-map, accessed on July 11, 2019.

TABLE 4.8-1 GENERAL PLAN POLICIES RELEVANT TO TRANSPORTATION

Policy Number	Policy
Policy M-3.2	**Development.** Require new development and redevelopment to increase connectivity through direct and safe pedestrian connections to public amenities, neighborhoods, shopping and employment destinations throughout the city.
Policy M-3.6	**Safe Spaces for Pedestrians.** Require parking lots to include clearly defined paths for pedestrians to provide a safe path to building entrances.
Policy M-3.8	**Bicycle Parking.** Require new development and redevelopment to provide public and private bicycle parking.
Policy M-7.1	**Multi-Modal Transportation Impact Analysis.** Follow guidelines set by VTA related to transportation impact analyses, while conforming to State goals for multi-modal performance targets.
Policy M-9.2	**Reduced Travel Demand.** Promote effective TDM programs for existing and new development.

Source: Cupertino General Plan (Community Vision 2015-2040).

Cupertino Municipal Code

The Cupertino Municipal Code (CMC) includes various directives to minimize adverse impacts to the transportation network. The provisions related to potential impacts from the proposed project are included in Title 11, Vehicles and Traffic, and Title 14, Streets, Sidewalks, and Landscaping, as follows:

- **Title 11, Vehicles and Traffic.** This title establishes regulations with respect to parking, bicycles, pedestrians, and circulation. Additionally, Title 11 establishes regulations governing roadway design features, such as speed bumps.
- **Chapter 14.02, Transportation Impact Fee Program.** This chapter assumes that new development will create additional demand on the City's existing transportation infrastructure, and requires all new development within the city to pay a Transportation Impact Fee, as a mitigation measure, to use as a funding sources for costs of the transportation improvements required to serve new development.

Cupertino Bicycle Transportation Plan

In 2016, the City of Cupertino adopted its *Bicycle Transportation Master Plan* (Bike Plan), which is a citywide plan to encourage bicycling as a safe, practical and healthy alternative to the use of the family car. The Bike Plan illustrates Cupertino's current bicycle network, identifies gaps in the network, and proposes improvement projects to address the identified gaps.[6] The 2016 Bike Plan includes standards for engineering, encouragement, education, and enforcement intended to improve the bicycle infrastructure in the city to enable people to bike to work and school, to utilize a bicycle to run errands, and to enjoy the health and environmental benefits that bicycling provides cyclists of every age.

Cupertino Pedestrian Transportation Plan

The *2018 Cupertino Pedestrian Transportation Plan* (Pedestrian Plan) contains goals, policies, and specific recommendations to increase the walkability of Cupertino, including the Pedestrian Guidelines. The Pedestrian Plan is a companion document to the Bike Plan. It includes specific recommendations to

[6] City of Cupertino, 2016 Bicycle Transportation Plan, Figure 3-7: Bikeway projects.

improve pedestrian conditions, which fall into four main categories: infrastructure and operations, evaluation and planning, education and enforcement, and project implementation.[7]

4.8.2 METHODOLOGY

This section presents the methods used to determine the impacts of the proposed project on the existing transportation network. This section describes the analysis methodologies, the applicable level of service standards, and VMT methodology.

The VTA TIA guidelines, dated October 2014, and the City of Cupertino guidelines and criteria were utilized in this analysis to determine project requirements and potential impacts. See Section 4.8-5, Thresholds of Significance, for details on the significance criteria. As discussed in more detail below in Section 4.8-5, Impact Discussion, under TRANS-1, the proposed project would generate approximately 47 net AM and negative 22 net PM peak hour trips and does not meet or exceed the VTA's threshold to prepare a TIA (see Table 4.8-5 below). Therefore, as stated at the beginning of this chapter, the two transportation memos were prepared by Kimley-Horn and Associates and reviewed by Hexagon Transportation Consultants and City staff, are the basis for this chapter. The two memos are provided in Appendix H of this Draft EIR.

4.8.2.1 STUDY INTERSECTIONS

Intersection #1: Stevens Creek Boulevard/Mary Avenue

The Stevens Creek Boulevard/Mary Avenue intersection #1 is a signalized intersection under the jurisdiction of the City of Cupertino. No improvements are proposed for this intersection. The trip generation, distribution, and assignment for the proposed project, and the level-of-service analysis for this intersection are discussed below in Section 4.8.5. Impact Discussion.

Existing peak hour traffic volumes at this study intersection were collected on Wednesday April 25, 2018.

Intersection #2: Stevens Creek Boulevard/SR-85 Northbound Ramp Terminal

The Stevens Creek Boulevard and State Route 85 (SR-85) North Bound Ramp Terminal intersection #2 is a partially signalized intersection under the jurisdiction of the City of Cupertino and Caltrans. This intersection is being evaluated in this EIR because the proposed project would include the installation of a Class IV separated bikeway on the portion of Stevens Creek Boulevard between Mary Avenue and the northbound SR-85 on-ramp. Pursuant to the conceptual Class IV separate bikeway design in the City's 2016 Bike Plan, the proposed project would reconfigure the existing westbound right-turn movement from Stevens Creek Boulevard onto the northbound SR-85 on ramp by installing a signal control to be activated by bicyclists and pedestrians for the westbound right-turn movement to accommodate the

[7] City of Cupertino, 2018 Pedestrian Transportation Plan, Table 5: Summary of Recommendations for Pedestrian-related Policies, Programs, and Practices.

proposed Class IV bikeway. The level-of-service and queuing analysis for this intersection are discussed below in Section 4.8.5, Impact Discussion.

Existing peak volumes at this study intersection were collected on May 22 and 23, 2019.

4.8.2.2 STUDY SCENARIOS

The following scenarios were analyzed for the two study intersections in the AM and PM peak hours:

- Existing without Project
- Existing plus Project
- Cumulative without Project
- Cumulative plus Project

The following scenarios were analyzed for the intersection #2 (Stevens Creek Boulevard/SR-85 Northbound Ramp Terminal) in the AM and PM peak hours:

- Existing plus Project and Signalized Conditions for the Westbound Right-turn Movement
- Cumulative plus Project and Signalized Conditions for the Westbound Right-turn Movement

4.8.2.3 LEVEL OF SERVICE

Traffic conditions at the two study intersections were evaluated using level of service. The 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. Intersection delay and level-of-service calculations were performed using Highway Capacity Manual (HCM) 2000 methodology in Synchro Version 9, which is consistent with TRAFFIX software. Synchro was used instead of TRAFFIX because it provides improved signal timing evaluation at the study intersection of Mary Avenue and Stevens Creek Boulevard. The correlation between average control delay and level of service at signalized intersections is shown in Table 4.8-2 below.

The level-of-service standards for each study intersection are as follows:

- Stevens Creek Boulevard/Mary Avenue (#1). The City of Cupertino level of service standard for signalized intersections is LOS D. Because the Stevens Creek Boulevard/Mary Avenue intersection is signalized, the level-of-service standard is LOS D or better.
- Stevens Creek Boulevard/SR-85 Northbound Ramp Terminal (#2). The VTA CMP states a LOS E, except for facilities grandfathered in at LOS F, is acceptable for both the AM and PM peak hour at a study intersection. Because the Stevens Creek Boulevard/SR-85 Northbound Ramp Terminal (#2) intersection is not identified as an intersection operating at LOS F, a minimum of the level-of-service standard of LOS E is acceptable for the study intersection, which is consistent with Caltrans' standards.

TABLE 4.8-2 SIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS BASED ON CONTROL DELAY

Level of Service	Description	Average Control Delay (seconds per vehicle)
A	Signal progression is extremely favorable. Most Vehicles are during the green phase and do not stop at all. Short cycle lengths may also contribute to the very low vehicle delay.	10.0 or less
B+	Operations characterized by good progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average vehicle delay.	10.1 to 12.0
B		12.1 to 18.0
B-		18.1 to 20.0
C+	Higher delays may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though may still pass through the intersection without stopping.	20.1 to 23.0
C		23.1 to 32.0
C-		32.1 to 35.0
D+	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 39.0
D		39.1 to 51.0
D-		51.1 to 55.0
E+	This is considered to be the limit of acceptable delay. These high delay values generally indicate poor signal progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures occur frequently.	55.1 to 60.0
E		60.1 to 75.0
E-		75.1 to 80.0
F	This level of delay is considered unacceptable to most drivers. This condition often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major contribution causes of such delay levels.	greater than 80.0

Source: Transportation Research Board, 2000 Highway Capacity Manual (Washington, D.C., 2000) page 10 to 16. Santa Clara Valley Transportation Authority Traffic Level of Service Analysis Guidelines (June 2003), Table 2.

4.8.2.4 QUEUING

An intersection operations analysis was provided to identify potential impacts with respect to vehicular queuing at the Stevens Creek Boulevard/SR-85 North Bound Ramp Terminal intersection #2. The queuing analysis was prepared to determine the extent of vehicle queuing that would occur along westbound Stevens Creek Boulevard as a result of the project's proposed signal control for the westbound right-turn movement at the Stevens Creek Boulevard/SR-85 Northbound Ramp Terminal intersection #2 and to ensure that the intersection would accommodate the anticipated queue lengths so cars would not "spill" to the through lanes. If there is insufficient storage length, queues of vehicles may extend out of the lane making the intersection less efficient as the queue would block through vehicles from proceeding through the intersection.

Detailed intersection queuing calculations are provided in the 2019 *Westport Cupertino – SR 85 Interchange Analysis* provided in Appendix H of this Draft EIR. The 95th percentile queue lengths for intersection #2 were compared for the Existing plus Project conditions and Cumulative plus Project conditions. The 95th percentile queue length value indicates that a queue of this length or less would occur on 95 percent of the signal cycles that include a pedestrian or bicycle call.

A Simtraffic microsimulation model was prepared for the analysis. The model included the two adjacent intersections, 1) Stevens Creek Boulevard/Mary Avenue intersection #1 to the east and 2) Stevens Creek Boulevard/SR-85 southbound ramp terminal intersection to the west, which is not a study intersection.

These two intersections were included in the model in order to have accurate arrival patterns for the analysis of Stevens Creek Boulevard and SR-85 Northbound Ramp Terminal intersection #2, particularly the westbound right-turn movement.

SimTraffic software cannot accurately simulate this signal timing plan because of the random nature of pedestrian and bicycle arrivals/crossings. Thus, an equivalent simulation was developed that is more conservative and assumes a pedestrian or bicycle call with every green east-west phase. In addition, a pedestrian crossing time was used in the simulation, which is higher compared to a bicycle crossing time.

Queues would be generated by the vehicles stopping and waiting for a pedestrian or bicycle to cross when the right-turn arrow is red. Queue results of five SimTraffic simulations and HCM 2000 level-of-service results for the westbound right-turn lane were conducted for this analysis.

4.8.2.5 VEHICLE MILES TRAVELED

VMT is a useful metric in understanding the overall effects of a project on the transportation system. VMT is the sum of all the vehicle trips generated by a project multiplied by the lengths of their trips to and from the site on an average weekday. A vehicle driven 1 mile is 1 VMT. Therefore, a project with a higher VMT would have a greater environmental effect than a project with a low VMT.

The trip lengths vary by the land use type and the trip purpose. For example, a trip from a residence to a job may be longer than the trip from a residence to a neighborhood school. The VMT values stated below represent the full length of a given trip, and are not truncated at city, county, or region boundaries.

Many factors affect travel behavior and trip lengths such as density of land use, diversity of land uses, design of the transportation network, distance to high-quality transit, and demographics. Low-density development separated from other land uses and located in areas with poor access to transit generates more automobile travel and higher VMT compared to development located in urban areas with more access to transit.

Vehicle miles traveled (VMT) were calculated using California Emissions Estimator Model (CalEEMod).

4.8.2.6 TRIP REDUCTIONS AND CREDITS

The following describes the trip reductions and credits that apply to the proposed residential mixed-use project. The total trip reductions are shown below in Table 4.8-5 under impact discussion TRANS-1.

Internal Trip Capture Reductions

Internal trip capture is the portion of trips generated by a mixed-use development that both begin and end within the development. The importance of internal trip capture is that those trips satisfy a portion of the total development's trip generation and they do so without using the external road system. Internal trip capture was calculated using the *National Cooperative Highway Research Program Report 684*, dated 2011. This methodology estimates the number of trips that have both the origin and destination within the proposed development. These internal trips were then subtracted from the total gross trips. After

applying internal capture to the proposed project, reductions of 9 percent daily trips, 2 percent AM (3 percent in / 1 percent out), and 15 percent PM (13 percent in/ 17 percent out) were applied to gross trips.

Transit Priority Area Reductions

The proposed project would place housing on a site that is within 0.50 miles of a "major transit stop" as defined by CEQA Guidelines Section 15191[8] and the VTA.[9] The De Anza Transit Center located approximately 500 feet (0.10 miles) from the southeast corner of the project site and approximately 1,700 feet (0.31 miles) from the northwest corner of the project site, with six regular bus lines (23, 25, 53, 54, 55, and 81) and one rapid bus line (323), qualifies as a major transit stop. Route 23 and 25 have 10-minute frequency of service intervals at peak and mid-day times on weekdays (see Table 4.8-4 below).[10] According to VTA TIA Guidelines, a 2 percent trip reduction can be used for housing within 2,000 feet (0.38 miles) of a major bus stop.

Pass-by Trips Reductions

A pass-by trip is a trip that already exists on the transportation network that stops by the project site on the way to its original destination. For example, a driver that was going somewhere else decides to stop at the site on their way to their original destination. Because another use generated that trip and the project site did not directly generate the trip, pass-by trips are removed from the gross trip generation. A pass-by trip reduction of 26 trips for the proposed retail component of the proposed project was applied only to the PM peak hour based on average rates from Appendix E of the *Institute of Transportation Engineers (ITE) Trip Generation Handbook*, 3rd Edition.

Existing Oaks Shopping Center Credit

Because the proposed project is the redevelopment of a site that is currently operating, the trips that are currently being generated would be replaced with the new trips of the proposed project. The Oaks Shopping Center was 85 percent occupied over the last 2 years, and therefore 85 percent (2,287 trips) of the total existing 2,690 trips generated under the full buildout capacity (100 percent occupancy) of the shopping center[11] are credited to the proposed redevelopment project. It should be noted that if 100 percent occupancy was assumed for the existing shopping center, the trips credited would have been even higher. An 85 percent occupancy assumption is considered a conservative estimate since ITE is based on gross lease area, which typically includes unoccupied units between 5 percent and 15 percent.

[8] "CEQA Guidelines defines a major transit stop" means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

[9] The Santa Clara Valley Transportation Authority (VTA) defines a "major bus stop" as a stop where six or more buses per hour stop during the peak period and is also referred to as a "high-quality transit" area.

[10] Santa Clara Valley Transportation Authority, Bus Schedules for Bus 23, 25, 53, 54, 55, 81, and 323. http://www.vta.org/routes/, accessed June 11, 2019. Also see Table 1 in *Westport Cupertino – Transportation Analysis*, dated November 27, 2019, in Appendix H of this Draft EIR.

[11] Existing trips were calculated using the *ITE Trip Generation Manual*, 10th Edition.

Additionally, the existing shopping center currently experiences pass-by trips in the PM peak hour. Accordingly, 34 percent (78 trips) reduction of the total 230 PM peak hour trips is applied.

4.8.3 EXISTING CONDITIONS

This section describes the existing transportation facilities in the project area, including the roadway network, bicycle and pedestrian facilities, public transit network, and current intersection and roadway segment operations. This section presents the existing conditions in the project area as they relate to the selected study intersections identified above.

4.8.3.1 EXISTING ROADWAYS

The project site is served by SR-85, an east-west freeway that extends from US 101 in south San José to US 101 in Mountain View. Within the city of Cupertino, SR-85 is generally a north-south oriented eight-lane freeway with six mixed-flow lanes and two carpool lanes, which are also known as high-occupancy vehicle (HOV) lanes. These lanes restrict use to vehicles with two or more persons, motorcycles, or special vehicles during the morning and evening peak commute hours (5:00 to 9:00 a.m. and 3:00 to 7:00 p.m.). Auxiliary lanes, which run from an entrance ramp to the next exit ramp, are only provided along SR-85 from Interstate 280 (I-280) to Stevens Creek Boulevard. Access to and from the city of Cupertino is provided via interchanges at I-280, Stevens Creek Boulevard, and South De Anza Boulevard. The key roadway segments within the project area are described below.

- Stevens Creek Boulevard is a six-lane divided roadway classified in the Cupertino General Plan Mobility Element as an "arterial" that begins at in the hills of Santa Clara County to the west and ends at Bascom Avenue in the east, where it continues as San Carlos Street. Stevens Creek Boulevard is mostly commercial and residential, and provides access to SR-85, I-280, and I-880. Stevens Creek Boulevard can be used to access locations west and east of Cupertino, such as rural Santa Clara County, San José, and Santa Clara. Access to the existing shopping center is available from Stevens Creek Boulevard.
- Mary Avenue is a two-lane undivided roadway classified in the Cupertino General Plan Mobility Element as a "neighborhood connector" roadway. It begins at Meteor Drive to the north and ends at Stevens Creek Boulevard to the south. Access to the existing shopping center is available from Mary Avenue via two driveways on the northern side of the project site.
- SR-85 Northbound On-Ramp is a two-lane on-ramp and leads to a roadway classified in the Cupertino General Plan Mobility Element as a "Freeway and Expressway" roadway. It begins at Stevens Creek Boulevard to the south and becomes an auxiliary lane to the north, where is ends at I-280. This roadway segment provides access to locations in northern Cupertino and beyond. There is no access to the project site from this location.

4.8.3.2 EXISTING WITHOUT PROJECT CONDITIONS

The existing conditions without the proposed project for intersections, pedestrian and bicycle facilities, as well as transit services are discussed below.

Existing without Project Intersection Operations

The results of the level of service and delay analysis for "Existing without Project" conditions are presented in Table 4.8-3. The results of the intersection level-of-service analysis show that both study intersections currently operate at LOS C during both the AM and PM peak hours of traffic, which is an acceptable level of service.

TABLE 4.8-3 EXISTING WITHOUT PROJECT INTERSECTION LEVEL OF SERVICE

ID #	Intersection	Jurisdiction	LOS Threshold[a]	Peak Hour[b]	Delay	LOS
1	Stevens Creek Boulevard/Mary Avenue	Cupertino	D	AM	31.5	C
				PM	34.9	C
2	Stevens Creek Boulevard/SR-85 NB Ramp Terminal	Caltrans	E	AM	30.0	C
				PM	24.7	C

Notes: NB = northbound.
a. LOS Threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service).
b. AM = morning peak hour, PM = evening peak hour.
Source: Kimley-Horn and Associates, Hexagon Transportation Consultants, 2018, 2019. (see Table 3 of the 2018 *Westport Cupertino – Transportation Analysis and* Table 1 of the 2019 *Westport Cupertino – SR 85 Interchange Analysis* provided in Appendix H of this Draft EIR).

Existing without Project Queuing

As previously stated, a queuing analysis was prepared to identify potential impacts with respect to vehicular queuing at the Stevens Creek Boulevard/SR-85 North Bound Ramp Terminal intersection #2. Currently, the westbound right turn has no signal and is referred to as being "free." In other words, the driver does not have to stop and is free to make the right turn heading northbound on SR-85. Under existing conditions, the north leg of this intersection has a two-stage crosswalk that allows a pedestrian or cyclist to cross the "free" westbound right-turn lane when there is a gap in traffic or traffic stops for them and wait on the small refuge median (island) provided. Only then can they cross the on-ramp lanes using the pedestrian signal-controlled crosswalk.

The 95th percentile queue for the westbound right turn is zero in Existing without Project conditions because the movement is a "free" right turn, and cars can perform the movement without stopping. Because vehicles currently yield to pedestrians using the two-stage crosswalk at the northbound on-ramp and the low bicycle and pedestrian volumes do not generate queues when vehicles yield to them as they cross the westbound right-turn movement.

Existing without Project Pedestrian, Bicycle, and Transit Facilities

Pedestrian Facilities

Pedestrian facilities consist of sidewalks, crosswalks, and pedestrian signals. Pedestrian connectivity immediately surrounding the project site is provided by a mostly complete network of sidewalks and crosswalks. Continuous sidewalks exist along both Mary Avenue and Stevens Creek Boulevard. The Stevens Creek Boulevard/Mary Avenue intersection #1 provides marked crossings for pedestrians and bikes on the intersection's north, east, and south legs. Additionally, a marked crosswalk with a flashing beacon on Mary Avenue provides access to the project site from the Cupertino Memorial Park and

Cupertino Senior Center. As previously stated, the Stevens Creek Boulevard/SR-85 North Bound Ramp Terminal intersection #2 has a two-stage crosswalk that allows a pedestrian to cross the "free" westbound right-turn lane when there is a gap in traffic or traffic stops for them and wait on the small refuge median (island) provided. Only then can they cross the on-ramp lanes using the pedestrian signal-controlled crosswalk. This two-stage crosswalk is also used by bicyclists in the same manner.

Bicycle Facilities

The 2016 Bike Plan includes recommendations for new improvements in the project vicinity. These improvements include a Class IV separated bikeway along Stevens Creek Boulevard, connecting the project site to the area west of SR-85; a Class I bike path on the west side of the project site connecting to Stevens Creek Boulevard to the south and Mary Avenue to the north, and a bike bridge over SR-85 connecting Mary Avenue to Alhambra Avenue.[12] The sections of the Class IV separated bikeway and Class I bike path would also serve as part of the greater Cupertino Loop Trail.[13] The proposed project, like all future developers, is required to contribute to implementing the recommended pedestrian and bike improvements in the project area. Bicycle facilities are categorized into the following types of bikeways:

- Class I Bike Path: A completely separated right-of-way for the exclusive use of bicycles and pedestrians, with crossflow minimized. Near the project site, Class I bike paths are provided on the Mary Avenue Bridge from Mary Avenue to Homestead Road.
- Class II Bike Lane: A striped bike lane for one-way bike travel on a street or highway that is designed for the exclusive use of cyclists with certain exceptions. For instance, right-turning vehicles must merge into the lane before turning. Class II bike lanes within the project area are on Mary Avenue and Stevens Creek Boulevard.
- Class III Bike Route: A route where cyclists share the road with motor vehicles. These can be streets with low traffic volumes that are well-suited for bicycling or arterials where it is infeasible to widen the roadway to provide a bike lane due to right-of-way or topographical constraints. Class III bikeways may also be defined by a wide curb lane and/or use of a shared use arrow stencil marking on the pavement, known as a "sharrow." No Class III bike routes are currently located in the project area.
- Class IV Separated Bikeway: A bikeway that is on-street and separated from vehicles traffic by a physical protection, includes a curb, on-street parking, flexible bollards, or concrete planters. No Class IV separated bikeways are currently located in the project area.

Public Transportation *Facilities*

Public transit service in Cupertino is provided by VTA-operated bus service and Caltrain-operated commuter heavy rail service.

[12] City of Cupertino 2016 Bicycle Transportation Plan, Figure 3-7, Bikeway Projects, page 3-8.
[13] City of Cupertino 2016 Bicycle Transportation Plan, Figure 3-8, Cupertino Loop Trail, page 3-9.

Bus Service

Nearby transit services are shown in Table 4.8-4 as well as the destinations, distance to the project site, hours/days of operation, and service frequencies for transit services within walking distance. As previously described, the project site is within one-half mile of a "major transit stop" as defined by CEQA Guidelines Section 15191[14] and the VTA.[15]

TABLE 4.8-4 EXISTING TRANSIT SERVICE

Routes	From	To	Distance to Nearest Stop	Weekdays	
				Operating Hours[a]	Peak Headway[b]
VTA Local Bus Routes[c]					
23	De Anza College	Alum Rock Transit Center	0.25 miles	5:30 am to 1:00 am	10 minutes
25	De Anza College	Alum Rock Transit Center	0.4 miles	5:00 am to 11:30 pm	10 minutes
53	De Anza College	Sunnyvale Transit Center	0.4 miles	6:50 am to 7:10 pm	60 minutes
54	De Anza College	Lockheed Martin Transit Center	0.4 miles	6:00 am to 9:30 pm	30 minutes
55	De Anza College	Great America Parkway	0.4 miles	5:30 am to 11:00 pm	30 minutes
81	Moffett Field / Ames Center	San José State University	0.25 miles	6:00 am to 9:00 pm	30 minutes
Limited Bus Stop Routes					
323	Downtown San José	De Anza College	0.4 miles	7:00 am to 10:30 am	20 minutes

Notes: AM = morning commuter period; PM = evening commute period; VTA = Santa Clara Valley Transportation Authority
a. Operating hours consider earliest and latest stop at each bus lines closest stop to the project site.
b. Headways are defined as the time interval between two transit vehicles traveling in the same direction over the same route.
c. According to VTA, the Stevens Creek Boulevard will be served by Rapid Bus Line 523 by the end of 2019.
Source: Kimley-Horn and Associates, Hexagon Transportation Consultants, 2018. (see Table 1 of the *Westport Cupertino – Transportation Analysis*, provided in Appendix H of this Draft EIR.

Commuter Rail Service

Caltrain is a commuter heavy rail service that runs from downtown San Francisco (4th and King Streets) to downtown San Jose (Diridon Station), with a limited number of commute period trains running farther south to Gilroy. During commute periods, Caltrain offers express service ("Baby Bullet") between downtown San Jose and San Francisco. Currently, Baby Bullet service is provided both in the northbound and southbound directions during the morning and evening commute periods at the Mountain View Caltrain station. Baby Bullet trains serve the Sunnyvale Caltrain station in the northbound direction during the morning peak and in the southbound direction during the evening peak. The nearest Caltrain station to the project site is the Sunnyvale station, which is located approximately 4 miles to north of the project

[14] "CEQA Guidelines defines a major transit stop" means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

[15] The Santa Clara Valley Transportation Authority (VTA) defines a "major bus stop" as a stop where six or more buses per hour stop during the peak period and is also referred to as a "high-quality transit" area.

site. During the weekdays, service in the northbound direction begins at 4:40 a.m. and ends at 10:40 p.m. In the southbound direction, service at this station begins at 6:14 a.m. and ends at 1:20 a.m. During the weekends, northbound service begins at 7:10 a.m. and ends at 10:40 p.m. Southbound service begins at 9:40 a.m. and ends at 1:26 a.m. For passengers arriving by bicycle, there are 18 bike racks and 24 bicycle lockers. Vehicle parking at this location includes 122 parking spaces.

4.8.3.3 EXISTING TRIP GENERATION AND VEHICLE MILES TRAVELED

The existing shopping center generated trips are based on an 85 percent occupancy rate, which was the rate of occupancy during 2017 and 2018. (see Table 4.8-5 below). The existing shopping center has an approximate annual VMT of 2,782,747 miles.

4.8.4 THRESHOLDS OF SIGNIFICANCE

4.8.4.1 CEQA GUIDELINES APPENDIX G

An Initial Study was prepared for the proposed project (see Appendix A of this Draft EIR). Based on the analysis contained in the Initial Study and comments received during the scoping process, it was determined that development of the proposed project would not result in significant environmental impacts pursuant to the following significance standards and, therefore, are not discussed in this chapter.

- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.

Based on the Initial Study and comments received during the scoping process, it was determined that the proposed project could result in a potentially significant transportation impact if it would:

1. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
2. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

4.8.4.2 CUPERTINO INTERSECTION IMPACT CRITERIA

A project would create a significant adverse impact on traffic conditions at a signalized intersection in the city of Cupertino if for either AM or PM peak hour:

1. The level of service at the intersection under background conditions drops below its level of service standard when project traffic is added, or

2. The level of service at the intersection operates below its level-of-service standard under background conditions, and the addition of project traffic causes 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 (0.01) or more. An exception to this applies when the addition of project traffic reduces the amount of average delay for critical movements (i.e., the change in average delay for critical

movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by 1 percent (0.01) or more.

4.8.5 IMPACT DISCUSSION

TRANS-1 The proposed project would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

Trip Distribution and Assignments

The proposed project would have one access point from Stevens Creek Boulevard and three access points from Mary Avenue (see Figure 3-4 in Chapter 3, Project Description, of this Draft EIR.) The below-grade parking at Residential-Retail Building 1 would be accessed from the central access point on Mary Avenue.

Residential Trip Distribution

Residential project trips are not anticipated to use the central access points on Mary Avenue because they are for access to the retail uses. Trips were distributed throughout the roadway network with approximately 8 percent (AM and PM peak) of trips to/from the north on Mary Avenue and approximately 68 percent (AM and PM peak) of trips to/from the west on Stevens Creek Boulevard and approximately 24 percent (AM and PM peak) of trips to/from the east on Stevens Creek Boulevard. Figures 3 and 4 in the 2018 *Westport Cupertino – Transportation Analysis* and Figure 9 in 2019 *Westport Cupertino – SR 85 Interchange Analysis* provided in Appendix H of this Draft EIR show the distribution for residential trips and the proposed project trip assignment for AM and PM peak hour periods, respectively.

Retail Trip Distribution

Retail project trips are not anticipated to use the most northern access points on Mary Avenue because they are primarily for access to the residential units. Trips were distributed throughout the roadway network with approximately 35 percent (AM and PM peak) of trips to/from the north on Mary Avenue, approximately 30 percent (AM and PM peak) of trips to/from the west on Stevens Creek Boulevard, and approximately 30 percent (AM and PM peak) of trips to/from the east on Stevens Creek Boulevard. Approximately 5 percent (AM and PM peak) of the trips are anticipated to use Parkwood Drive (just north of the site). No trips were distributed at the driveway entrance to the Cupertino Senior Center and Cupertino Memorial Park because retail visitors are expected to walk to the stores using the crosswalk with a flashing beacon on Mary Avenue. The trips distributed along Mary Avenue are expected to already be on the roadway and are not new trips for the proposed project, because the existing site is currently used for retail purposes. Figures 5 and 6 in the 2018 *Westport Cupertino – Transportation Analysis* and Figure 8 in the 2019 *Westport Cupertino – SR 85 Interchange Analysis* provided in Appendix H of this Draft EIR show the distribution for retail trips and the proposed project trip assignment for AM and PM peak hour periods, respectively.

Trip Generation

The proposed project trip estimates before and after taking the trip reductions and credits described above in Section 4.8.2.5, Trip Reductions and Credits, are shown in Table 4.8-5. As shown the proposed project would generate 3 fewer (or negative 3) inbound trips and 50 new outbound trips during the AM peak hour, and 4 new inbound and 26 fewer (or negative 26) outbound trips during the PM peak hour.

TABLE 4.8-5 PROJECT TRIP GENERATION ESTIMATES

	Daily	AM Peak Hour			PM Peak Hour		
Land Use	Trips	In	Out	Total	In	Out	Total
Proposed Uses[a]							
Townhomes and Rowhouses (88 units)	646	9	31	40	31	18	49
Residential-Retail Building 1 (115 units)	626	11	30	41	31	20	51
Residential-Retail Building 2 (Senior Housing) (39 units)	146	3	5	8	6	4	10
Residential-Retail Buildings (Retail) 20,000 square feet)	756	12	7	19	36	40	76
Total Project Trips Before Trip Reductions	***2,174***	***35***	***73***	***108***	***104***	***82***	***186***
Trip Reductions							
Internal Capture[b]	-186	-1	-1	-2	-14	-14	-28
Transit Priority Area (VTA Major Bus Stop)[c]	-28	-1	-1	-2	-1	-1	-2
Pass-By Trips for Proposed on-site Retail[d]	-26	0	0	0	-12	-14	-26
Total Project Trips After Trip Reductions	***1,934***	***33***	***71***	***104***	***77***	***53***	***130***
Existing Conditions Credits							
Oaks Shopping Center[e]	2,209	36	21	57	73	79	152
Net Project Trips	**-275**	**-3**	**50**	**47**	**4**	**-26**	**-22**

Notes:
a. Trip generation based on daily trip generation rates in the Institute of Transportation Engineers (ITE) Trip Generation Manual 10th Edition, which applies Code 220 for low-rise dwelling units; Code 221 for mid-rise dwelling units; Code 252 for senior units; and, Code 820 for retail.
b. Internal trip capture is the portion of trips generated by a mixed-use development that both begin and end within the development.
c. The Santa Clara Valley Transportation Authority permits a 2 percent credit for being located near a major transit facility.
d. A pass-by trip is a trip that already exists on the network. Pass-by trip rates are based on the ITE Trip Generation Appendix E 3rd Generation. Pass-by credits apply to the proposed project and to existing conditions.
e. The existing trips credited are a total of 85 percent (2,287 trips) of the maximum trips (2,690 trips) if the shopping center were fully occupied minus 34 percent (78 trips) of the total 230 PM peak hour trips that make up the by-pass credits which apply to the existing shopping center.
Source: Kimley-Horn and Associates, Hexagon Transportation Consultants, November 2018. (see Table 2 of the *Westport Cupertino – Transportation Analysis* in Appendix H of this Draft EIR).

Level of Service

Existing plus Project Conditions

Under Existing plus Project conditions, the intersection levels of service were calculated for the Stevens Creek Boulevard/Mary Avenue intersection #1 using existing lane geometry and traffic control because no improvements are proposed at this intersection. The intersection levels of service at the Stevens Creek Boulevard/SR-85 Northbound Ramp Terminal intersection #2 were calculated assuming the project's proposed signalized westbound right-turn configuration described above in Section 4.8.2.1, Study Intersections. Both intersections were evaluated with existing peak hour traffic volumes plus the traffic volumes added by the proposed project to evaluate the operating conditions of the intersections and identify potential impacts to the roadway system.

The results of the intersection level-of-service calculations for Existing plus Project conditions are presented in Table 4.8-6.[16] As shown both intersections would operate under acceptable level-of-service standards, LOS C. Therefore, the proposed project's impact at both intersections is considered *less than significant*.

TABLE 4.8-6 EXISTING PLUS PROJECT INTERSECTION LEVEL OF SERVICE RESULTS

					Existing without Project		Existing plus Project	
ID	Intersection	Jurisdiction	LOS Threshold[a]	Peak Hour[b]	Delay	LOS	Delay	LOS
1	Stevens Creek Boulevard/ Mary Avenue	Cupertino	D	AM	31.5	C	32.6	C
				PM	34.9	C	34.8	C
2	Stevens Creek Boulevard/ SR-85 NB Ramp Terminal	Caltrans	E	AM	30.0	C	34.3	C
				PM	24.7	C	23.0	C

Notes: NB = northbound
a. LOS Threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service).
b. AM = morning peak hour, PM = evening peak hour.
Source: Kimley-Horn and Associates, Hexagon Transportation Consultants, 2018, 2019. (see Table 4 of the 2018 *Westport Cupertino – Transportation Analysis and* Table 5 of the 2019 *Westport Cupertino – SR 85 Interchange Analysis* provided in Appendix H of this Draft EIR).

Cumulative without Project Conditions

Traffic operations were evaluated for 2040 Cumulative without Project conditions under the assumption that the Cumulative without Project conditions intersection geometry of the Stevens Creek Boulevard/Mary Avenue intersection #1 and Stevens Creek Boulevard/SR-85 Northbound Ramp Terminal intersection #2 would be the same as that under the Existing without Project conditions. The results of the intersection level-of-service calculations for Cumulative without Project conditions are presented in Table 4.8-7.

[16] This is for informational purposes only since the proposed project is not anticipated to be fully operational until 2023.

TABLE 4.8-7 CUMULATIVE WITHOUT PROJECT INTERSECTION LEVEL OF SERVICE RESULTS

ID	Intersection	Jurisdiction	LOS Threshold[a]	Peak Hour[b]	Existing without Project		Cumulative without Project	
					Delay	LOS	Delay	LOS
1	Stevens Creek Boulevard/ Mary Avenue	Cupertino	D	AM	31.5	C	47.7	D
				PM	34.9	C	46.3	D
2	Stevens Creek Boulevard/ NB SR 85 On/Off Ramps	Caltrans	E	AM	30.0	C	46.1	D
				PM	24.7	C	20.3	C

Notes: NB = northbound
a. LOS Threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service).
b. AM = morning peak hour, PM = evening peak hour.
Source: Kimley-Horn and Associates, Hexagon Transportation Consultants, 2018, 2019. (see Table 5 of the 2018 *Westport Cupertino – Transportation Analysis and* Table 5 of the 2019 *Westport Cupertino – SR 85 Interchange Analysis* provided in Appendix H of this Draft EIR).

As shown both intersections would operate under acceptable level-of-service standards, LOS D (intersection #1) and LOS D during AM peak hour and LOS C for PM peak hour (intersection #2). It should be noted that for intersection #2, the PM peak hour reported delay improved with Cumulative without Project conditions because the trips were predominately added to noncritical movements, which had a lower movement delay than the average intersection delay, and thereby decreases the overall average delay. Therefore, the proposed project's impact at both intersections would be *less than significant*.

Cumulative plus Project Conditions

For the Stevens Creek Boulevard/Mary Avenue intersection #1 and Stevens Creek Boulevard/SR-85 Northbound Ramp Terminal intersection #2, it is assumed that the Cumulative plus Project conditions intersection geometry would be the same as Existing plus Project conditions.

The results of the intersection level-of-service calculations for Cumulative conditions are presented in Table 4.8-8. As shown both intersections would operate under acceptable level-of-service standards, LOS D (intersection #1) and LOS C (intersection #2). Therefore, the proposed project's impact at both intersections would be *less than significant*.

TABLE 4.8-8 CUMULATIVE PLUS PROJECT INTERSECTION LEVEL OF SERVICE RESULTS

ID	Intersection	Jurisdiction	LOS Threshold[a]	Peak Hour[b]	Cumulative without Project		Cumulative plus Project	
					Delay	LOS	Delay	LOS
1	Stevens Creek Boulevard/ Mary Avenue	Cupertino	D	AM	47.7	D	49.1	D
				PM	46.3	D	46.3	D
2	Stevens Creek Boulevard / NB SR 85 On/Off Ramps	Caltrans	E	AM	46.1	D	47.6	D
				PM	20.3	C	24.7	C

Notes: NB = northbound
a. LOS Threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service).
b. AM = morning peak hour, PM = evening peak hour.
Source: Kimley-Horn and Associates, Hexagon Transportation Consultants, 2018, 2019. (see Table 6 of the 2018 *Westport Cupertino – Transportation Analysis and* Table 5 of the 2019 *Westport Cupertino – SR 85 Interchange Analysis* provided in Appendix H of this Draft EIR).

Queuing

Existing plus Project and Signalized Conditions for the Westbound Right-turn Movement Conditions

For this scenario it was projected that the proposed project would increase bicycle and pedestrian volumes by 20 percent at the crosswalk. This is based on the assumption that the improved facility and the added residential units from the proposed project would generate more pedestrian and bicycle demand.

With the addition of the proposed signal control for the westbound right-turn movement, the cars would have a continuous green right-turn arrow until a cyclist or pedestrian arrives and activates the pedestrian or bike crossing signal, at which time a red right-turn arrow would stop the cars. Right turns on red would not be allowed for the westbound right-turn movement to prevent cars from yielding (instead of stopping) to pedestrians.

This pedestrian/bicycle signal call could only occur on the east-west signal phasing plan of the intersection when there are no other conflicting movements with the pedestrian and/or bicycle phase. Queues would only form in the westbound right-turn pocket when the right-turn arrow is red. Furthermore, to provide a conservative (i.e., worst case) evaluation, only a pedestrian signal was analyzed because a pedestrian crossing time is longer than a bicycle crossing time. A shorter bicycle crossing time would produce shorter vehicle queues in the westbound right-turn lane than would occur with a longer pedestrian crossing time.

Queues would be generated by the vehicles stopping and waiting for a pedestrian or bicycle to cross when they have triggered the light and the right-turn arrow is red. Queue results after the five SimTraffic mircosimulations and HCM 2000 level-of-service results for the westbound right-turn lane are shown in Table 4.8-9.[17] As shown previously in Table 4.8-6, the overall level-of-service for the entire intersection would remain at an acceptable LOS C and as shown in Table 4.8-9no operational issues would result from the estimated queue lengths in the AM and PM peak hour conditions at the Stevens Creek Boulevard and SR-85 Northbound Ramp Terminal intersection #2. A graphic representation of the queue lengths is show on Figure 13 in 2019 *Westport Cupertino – SR 85 Interchange Analysis,* provided in Appendix H of this Draft EIR. These increases would be minimal and would not be substantial enough to cause operational issues along Stevens Creek Boulevard. Therefore, the proposed project's impacts in Existing plus Project and Signalized Conditions for the Westbound Right-turn Movement conditions would be *less than significant.*

[17] The Simtraffic microsimulation model included two adjacent intersections (Stevens Creek Boulevard/Mary Avenue intersection #1 to the east and Stevens Creek Boulevard/SR-85 southbound ramp terminal intersection to the west in order to have accurate arrival patterns for the analysis of the Stevens Creek Boulevard and SR-85 Northbound Ramp Terminal Intersection #2, particularly the westbound right-turn movement. No analysis results were reported for these adjacent intersections, since the operations at these locations will remain unaffected with the proposed reconfiguration.

TABLE 4.8-9 EXISTING PLUS PROJECT SIGNALIZED CONDITIONS FOR THE WESTBOUND RIGHT-TURN MOVEMENT INTERSECTION LEVEL OF SERVICE AND QUEUEING RESULTS

					Existing plus Project		
ID	Intersection	Jurisdiction	LOS Threshold[a]	Peak Hour[b]	Delay	LOS[c]	Queue[d]
2	Stevens Creek Boulevard / SR-85 NB Ramp Terminal	Caltrans	E	AM	7.6	A	220 feet (9 cars)
				PM	8.0	A	243 feet (10 cars)

Notes: NB = northbound
a. LOS Threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service).
b. AM = morning peak hour, PM = evening peak hour.
c. Represents the level of service with the controlled light at the right-turn lane only.
d. Vehicle queues are the 95th percentile. The 95th percentile queue length value indicates that a queue of this length or less would occur on 95 percent of the signal cycles that include a pedestrian or bicycle call.
Source: Kimley-Horn and Associates, Hexagon Transportation Consultants, 2018, 2019. (see Table 4 of the 2018 *Westport Cupertino – Transportation Analysis and* Table 2 of the 2019 *Westport Cupertino – SR 85 Interchange Analysis* provided in Appendix H of this Draft EIR).

Cumulative plus Project and Signalized Conditions for the Westbound Right-turn Movement Conditions

Like the Existing plus Project and Signalized Conditions for the Westbound Right-turn Movement conditions discussed above, this scenario also assumes the project's proposed signal phasing conditions would be the same and that bicycle and pedestrian volumes would increase by 20 percent at the crosswalk with the proposed project.

Queue results after the five SimTraffic microsimulations and HCM 2000 level-of-service results for the westbound right-turn lane are shown in Table 4.8-10. As shown previously in Table 4.8-7, the overall level-of-service for the entire intersection would remain at an acceptable LOS D in the AM peak hour and LOS C in the PM peak hour. As shown in Table 4.8-10, no operational issues would result from the estimated queue lengths in the AM and PM peak hour conditions. A graphic representation of the queue lengths is shown on Figure 18 in 2019 *Westport Cupertino – SR 85 Interchange Analysis* provided in Appendix H of this Draft EIR. These increases would be minimal and would not be substantial enough to cause operational issues along Stevens Creek Boulevard. Therefore, the proposed project's impacts in Cumulative plus Project and Signalized Conditions for the Westbound Right-turn Movement conditions would be *less than significant.*

TABLE 4.8-10 CUMULATIVE PLUS PROJECT SIGNALIZED CONDITIONS FOR THE WESTBOUND RIGHT-TURN MOVEMENT INTERSECTION LEVEL OF SERVICE AND QUEUEING RESULTS

					Existing plus Project			Cumulative plus Project		
ID	Intersection	Jurisdiction	LOS Threshold[a]	Peak Hour[b]	Delay	LOS[c]	Queue[d]	Delay	LOS[c]	Queue[d]
2	Stevens Creek Boulevard / SR-85 NB Ramp Terminal	Caltrans	E	AM	7.6	A	220 feet (9 cars)	8.2	A	246 feet (10 cars)
				PM	8.0	A	243 feet (10 cars)	11.1	B	284 feet (12 cars)

Notes: NB = northbound
a. LOS Threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service).
b. AM = morning peak hour, PM = evening peak hour.
c. Represents the level of service with the controlled light at the right-turn lane only.
d. Vehicle queues are the 95th percentile. The 95th percentile queue length value indicates that a queue of this length or less would occur on 95 percent of the signal cycles that include a pedestrian or bicycle call.
Source: Kimley-Horn and Associates, Hexagon Transportation Consultants, 2018, 2019. (see Table 6 of the 2018 *Westport Cupertino – Transportation Analysis and* Table 4 of the 2019 *Westport Cupertino – SR 85 Interchange Analysis* provided in Appendix H of this Draft EIR).

Construction Traffic

Demolition and on-site construction as well as off-site improvements would take place in two phases over a 16-month period and is anticipated to be completed by the year 2023, subject to regulatory approval. During this period, the proposed project would generate changes to the existing transportation conditions by adding construction-related trips to the network and modifying the network to install off-site infrastructure improvements that implement the 2016 Bike Plan. New traffic would be generated by construction employees and construction activities, including haul trucks. Construction traffic is temporary and would generate fewer trips than the proposed projected trips during project operation. During the construction phase of the proposed bikeway, a portion of the lane on Steven's Creek Boulevard may be closed. However, like construction traffic, this would a temporary and short-term phase. As discussed above, the proposed project would not result in a significant impact at any study intersection.

Significance Without Mitigation: Less than significant.

Pedestrian Facilities

The proposed project is expected to increase the number of pedestrians using the existing sidewalks and crosswalks in the area by 20 percent. The proposed project includes an internal sidewalk and bicycle network, in addition to sidewalk modifications along Stevens Creek Boulevard and Mary Avenue. The sidewalk modifications would include detaching the sidewalk along Stevens Creek Boulevard and required modifications along Mary Avenue to facilitate on and offsite improvements.

The project site would continue to be accessible to pedestrians from Mary Avenue and Stevens Creek Boulevard, and on-site network would provide pedestrian and bicycle circulation within the project site. The overall network of sidewalks and crosswalks in the study area has adequate connectivity and provides pedestrians with safe routes to transit services and other points of interest in the vicinity of the project site. The proposed project would not eliminate or impede any existing pedestrian facilities, nor would it conflict with any of the goals and policies in the City's Pedestrian Plan.

Bicycle Facilities

There are existing bicycle facilities in the immediate vicinity of the project site. As described in the existing conditions section above, the 2016 Bike Plan includes recommendations for a new Class IV separated bikeway along Stevens Creek Boulevard, a new Class I bike path on the west side of the project site, and a bike bridge over SR-85 connecting Mary Avenue to Alhambra Avenue.[18]

As stated previously in this chapter, the proposed project would install a Class IV separated bikeway on the portion of Stevens Creek Boulevard between Mary Avenue and the northbound SR-85 on-ramp and the associated signal and reconfigured intersection features. This reconfiguration would convert the existing westbound "free" right-turn lane to a signal-controlled right-turn movement to allow for an exclusive,

[18] City of Cupertino 2016 Bicycle Transportation Plan, Figure 3-7, Bikeway Projects, page 3-8.

protected phase for pedestrians and cyclists to cross the on-ramp leg. The purpose of this reconfiguration is to increase pedestrian and bicycle safety when crossing the on-ramp leg. Figure 2 in the 2019 *Westport Cupertino – SR 85 Interchange Analysis* provided in Appendix H of this Draft EIR shows the proposed improvement. This would allow a pedestrian or cyclist to then cross the on-ramp in one phase (i.e., the current two-stage crossing procedure would be eliminated). For the purposes of this analysis the total crosswalk length was determined to be 85 feet, which requires approximately 25 seconds (at a walking speed of 3.5 feet per second) for the pedestrian clearance interval. Right turn on red would not be allowed for the westbound right-turn movement to prevent cars from yielding (instead of stopping) to pedestrians.

The proposed project would also install the Class I bike path on the western portion of the project site to connect Stevens Creek Boulevard to Mary Avenue and would include public access easements on the northwest and southwest corners of the project site to accommodate the bridge over SR-85 connecting Mary Avenue to Alhambra Avenue. The proposed project would not remove any bicycle facilities, nor would it conflict with any adopted plans or policies for new bicycle facilities. These sections of the Class IV separated bikeway and Class I bike path would also serve as part of the greater Cupertino Loop Trail.[19] The bridge would also be part of the greater Bike Boulevard in the city. [20] The vehicular access to the proposed project site would remain similar to the existing conditions and would not eliminate or impede the existing bicycle facilities.

The proposed project would include a total of 117 bicycle parking spaces, consisting of five Class 1 facilities for retail uses, 18 Class 2 facilities for retail uses, 78 Class 1 facilities for residential uses, and 16 Class 2 facilities for residential uses.[21] Bike facilities would be located adjacent to Buildings 1 and 2, in addition to within the proposed buildings. Therefore, the proposed project would not obstruct or hinder the implementation of the City's 2016 Bike Plan and would support the use of bicycling by providing adequate bike facilities for guests and employees.

Transit

The project site is served by existing VTA bus routes. The closest bus stops are located within 0.25 miles of the project site, providing access to local bus routes 23 and 81. Five additional bus routes are located approximately 0.4 miles from the project site, providing access to local buses 25, 53, 54, and 55, in addition to rapid transit route 323. The VTA has not established policies or significance criteria related to transit vehicle delay. The new transit trips generated by the proposed project are not expected to create a significant demand in excess of the capacity of the transit service that is currently provided.

The proposed project would also install a bus stop on the section of Stevens Creek Boulevard west of Mary Avenue and east of the SR-85 Northbound Ramp. The precise design-level details will need to be

[19] City of Cupertino 2016 Bicycle Transportation Plan, Figure 3-8, Cupertino Loop Trail, page 3-9.

[20] City of Cupertino 2016 Bicycle Transportation Plan, Figure 3-10, Bike Boulevard projects, page 3-11.

[21] Class 1 bicycle parking spaces include bicycle lockers or secure rooms and Class 2 bicycle parking spaces are publicly accessible bicycle racks.

coordinated with VTA and City of Cupertino. For this EIR, it is assumed the bus stop would include a concrete bus pad and bus shelter.

In summary, the proposed project would not exceed the City's level-of-service standards for vehicular transportation, and there would be adequate availability of alternative modes of travel including pedestrian, bicycle, and transit in the project area. The proposed project would not displace, modify, or interfere with any transit stop, sidewalk, or bicycle lanes. In addition, the proposed project would not generate a demand for transit that would exceed the capacity of the system. Therefore, the proposed project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. Accordingly, impacts would be *less than significant*.

Significance Without Mitigation: Less than significant.

TRANS-2 The proposed project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

CEQA Guidelines Section 15064.3 was added to the updated CEQA Guidelines on December 28, 2018. Section 15064.3 describes specific considerations for evaluating a project's transportation impacts. As stated in Section 15064.3(a), vehicle-miles traveled or VMT is the most appropriate measure of transportation impacts, and pursuant to Section 15064.3(b)(1) land use projects should be analyzed based on VMT.

The proposed project is a residential mixed-use development on an infill site recognized as a PDA and a TPA by the regional *Plan Bay Area* 2040 prepared by ABAG and MTC. An overarching goal of the regional *Plan Bay Area* 2040 is to concentrate development in areas where there are existing services and infrastructure rather than locating new growth in outlying areas where substantial transportation investments would be necessary to maximize energy conservation and achieve the per capita passenger vehicle, VMT, and associated GHG emissions reductions. In addition, the project site was evaluated in the General Plan EIR[22] as a High Priority Housing Element site by the City of Cupertino.

As discussed in the General Plan EIR, the VMT per capita is projected to increase from 10.5 to 10.9 under General Plan buildout conditions. The proposed project would construct a 242 residential units, and 20,000 square feet of retail space, which is consistent with the land use evaluated in the General Plan EIR, and therefore, would not directly result in any additional new population growth or employment growth beyond what was analyzed in the General Plan EIR. Accordingly, implementation of the proposed project would be consistent with and would have no effect on the VMT estimates presented in the General Plan EIR.

Project-specific VMT was determined using CalEEMod and was calculated for Existing and Existing plus Project conditions. As previously stated, the existing commercial space (71,250 square feet), with an 85 percent occupancy rate produces an approximate annual VMT of 2,782,747 miles, or a daily VMT of 7,624

[22] City of Cupertino General Plan (Community Vision 2015–2040, Appendix B: Housing Element Technical Report, 4.3 Environmental, Infrastructure & Public Service Constraints, page B-93.

miles. The proposed project would produce an approximate annual VMT of 2,662,683 miles, or a daily VMT of 7,295 miles. This would be a reduction of approximately 120,064 miles annually, or 329 miles daily.

The proposed project would be consistent with the analysis conducted in the General Plan EIR, and implementation of the proposed project would reduce VMT from the proposed project at the project site. Therefore, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b) and impacts would be *less than significant*.

Significance Without Mitigation: Less than significant.

4.8.6 CUMULATIVE IMPACTS

TRANS-3	**The proposed project, in combination with past, present, and reasonably foreseeable projects, would not result in additional cumulatively considerable impacts.**

The analysis of the proposed project, above, addresses cumulative impacts to the transportation network in the city and its surroundings; accordingly, cumulative impacts would be the same as those discussed above and no additional analysis is warranted.

Significance Without Mitigation: Less than significant.