

Section 3.13

Transportation and Circulation

Summary

Table 3.13-1 below provides a summary of the potential environmental impacts of the Proposed Project. With the implementation of the mitigation measures described within this section, some of the potential impacts listed would be reduced to less-than-significant levels. However, as shown in Table 3.13-1, the Proposed Project would have certain significant and unavoidable impacts to traffic, even with mitigation.

Table 3.13-1. Summary of Potentially Significant Traffic and Circulation Impacts

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
Impact TRA-1: Degradation of Intersection LOS as a Result of Construction-Generated Traffic	Significant	Mitigation Measure TRA-1: Develop and Implement a Traffic Control Plan	Less than Significant
Impact TRA-2: Interference with Emergency Access and Circulation as a Result of Construction-Generated Traffic	Significant	Mitigation Measure TRA-1: Develop and Implement a Traffic Control Plan	Less than Significant
Impact TRA-3: Inadequate Parking Facilities to Meet Construction-Related Parking Demands	Less than Significant	Mitigation not required	N/A
Impact TRA-4: Degradation of Intersection LOS as a Result of Project-Generated Traffic under Existing Plus Project Conditions	Less than Significant	Mitigation not required	N/A
Impact TRA-5: Degradation of Intersection LOS as a Result of Project-Generated Traffic under Existing Plus Project & Pending Intermodal Development Conditions	Significant	Mitigation Measure TRA-5: Roadway Improvements for Decoto Road/ 11th Street Intersection	Significant and Unavoidable

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
Impact TRA-6: Increase in Safety Hazards to Pedestrians/Bicyclists as a Result of a Design Features	Less than Significant	Mitigation not required	N/A
Impact TRA-7: Inadequate Emergency Access during Project Operation	Less than Significant	Mitigation not required.	N/A
Impact TRA-8: Increased Transit Demand	Less than Significant	Mitigation not required	N/A
Impact TRA-9: Conflict with an Adopted Plan Supporting Alternative Transportation	No Impact	Mitigation not required	N/A
Impact TRA-10: Inadequate Parking Supply to Meet Parking Demand during Project Operation	Less than Significant	Mitigation not required	N/A
Impact TRA-11: Degradation of Intersection LOS as a Result of Project-Generated Traffic under Future Cumulative Conditions	Significant	Mitigation Measure TRA-5: Roadway Improvements for Decoto Road/ 11th Street Intersection	Significant and Unavoidable
Impact TRA-12: Degradation of LOS on CMP/MTS Roadways as a Result of Project-Generated Traffic under Future Cumulative Conditions	Less than Significant	Mitigation not required.	N/A
Impact TRA-13: Potential Decrease in Rail Safety	Significant	Mitigation Measure TRA-13: Fence, Signage, and Rail Safety Education	Less than Significant

Introduction

This section provides information on traffic and circulation in the Proposed Project area. The regulatory setting and potential impacts of the Proposed Project on traffic, and mitigation measures are proposed to reduce impacts to a less-than-significant level where possible.

Sources of Information

The key source of data and information used in the preparation of this section was Fehr & Peers' transportation impact analysis (TIA) prepared for this EIR, which is contained in Appendix I. Additional data sources used in the preparation of this section include:

- Union City 2002 General Plan

- Intermodal Station District and Transit Facility Plan

Traffic Terminology

The quality of service provided by a roadway or intersection is typically measured in terms of three parameters.

- **Volume-to-capacity ratio (V/C):** The number of vehicles that travel on a transportation facility divided by the vehicular capacity of that facility (the number of vehicles the facility was designed to convey).
- **Delay:** The additional travel time experienced by a vehicle or traveler because of inability to travel at optimal speed and/or stops due to congestion or traffic control.
- **Level of service (LOS):** A scale used to determine the operating quality of a roadway segment or intersection based on V/C or average delay experienced by vehicles on the facility. The levels range from A to F, with LOS A representing free traffic flow and LOS F representing severe traffic congestion.

Table 3.13-2 shows the relationship between V/C ratio, delay, driving conditions and LOS.

Table 3.13-2. Volume to Capacity (V/C) Ratio, Delay, and Traffic Flow Conditions for LOS Designations

LOS	Approximate Maximum V/C	Average Delay (seconds per vehicle)		Traffic Flow Conditions
		Stop-Controlled Intersection	Signalized Intersection	
A	0.6	≤10	≤10	Free-flow operations; vehicles unimpeded in ability to maneuver in traffic stream.
B	0.7	11–15	11–20	Reasonable free-flow conditions; only slightly restricted ability to maneuver.
C	0.8	16–25	21–35	Flows still near free-flow speed but noticeably restricted ability to maneuver.
D	0.9	26–35	36–55	Speeds begin to decline; maneuverability limited and queues begin to form.
E	1.0	36–50	56–80	Operation at capacity of roadway; maneuverability extremely limited and queues form with any disruption.
F	>1.0	>50	>80	Failure conditions indicating breakdowns in vehicular flow with long queues forming at breakdown points.

Source: Transportation Research Board 2000.

Environmental Setting

Principal Roadways

Regional access for Union City is provided primarily via I-880 and Mission Boulevard (SR 238). The principal roadways in the Project Vicinity are described below.

- **Decoto Road**—A four-lane arterial adjacent to the project site, in a northeast-southwest orientation through Union City. It extends between Mission Boulevard and I-880, with bicycle lanes in each direction. West of I-880, Decoto Road is SR 84. For purposes of this analysis, Decoto Road is described as a north-south roadway.
- **Alvarado-Niles Road**—An east-west four-lane arterial that features bicycle lanes and sidewalks in both directions. Alvarado-Niles Road extends from the south side of I-880 through Union City. Within Fremont, the street name is shortened to Niles Road. This road terminates at the intersection of Niles Canyon Road/Mission Boulevard.
- **I-880**—An eight-lane, north-south freeway located west of the project site. According to 2004 Traffic Volumes by the California Department of Transportation (Caltrans), I-880 has an average daily, two-way traffic volume (ADT) of 204,000 vehicles near the project site. Access between the project site and I-880 is provided primarily via the Alvarado-Niles Road interchange.
- **Mission Boulevard (SR 238)**—A state highway located near the project site. Along its length, the number of travel lanes vary from four to six lanes. According to 2004 Traffic Volumes by Caltrans, SR 238 has an ADT of 30,500 vehicles in the vicinity of the project. To the north, Mission Boulevard serves as an interchange providing access between I-880 and I-580, and to the south Mission Boulevard is a conventional highway through Fremont, terminating at an interchange with I-680.
- **SR 84**—A four-lane freeway that provides regional access and follows a number of roadways near the site, including Mission Boulevard, Alvarado-Niles Road and Paseo Padre Parkway. According to 2004 Traffic Volumes by Caltrans, the ADT is 29,500 vehicles. There was a proposal by the Alameda County Transportation Authority (ACTA) to realign SR 84 between Mission Boulevard and Paseo Padre Parkway, near the project site. This realignment is now known as the planned East-West Connector.
- **Union Square**—A two-lane roadway that provides a connection between Alvarado-Niles Road and Decoto Road. This roadway provides vehicular access for the BART station and adjacent sites south of the station, including the Avalon Bay site.
- **11th Street**—A four-lane east-west roadway that will serve as the primary access route for the Project Site. It features bicycle lanes and twelve-foot wide sidewalks in both directions, with street and pedestrian lighting as well as a raised median. This street, which currently dead-ends just east of the

Proposed Project Site, will connect to the planned East-West Connector once that roadway is extended south to Paseo Padre Parkway.

Study Intersections

A total of 15 intersections were evaluated in the vicinity of the Proposed Project. Intersections 1–9 and 13 were evaluated for all scenarios, while intersections 10–12, 14, and 15 were evaluated for the Year 2035 scenarios only. The study intersections are listed below and shown on Figure 3.13-1.

1. Decoto Road/Mission Boulevard
2. Decoto Road/5th Street
3. Decoto Road/7th Street
4. Decoto Road/Cheeves Way
5. Decoto Road/11th Street
6. Decoto Road/ Station Way
7. Decoto Road/Meyers Drive/Union Square
8. Decoto Road/Alvarado-Niles Road
9. Mission Boulevard/Appian Way
10. 7th Street/East-West Connector
11. 11th Street/East-West Connector
12. Alvarado-Niles Road/East-West Connector
13. Alvarado-Niles Boulevard/Linda Drive
14. Paseo Padre Parkway/Isherwood Drive
15. Decoto Road/Paseo Padre Parkway

Existing Levels of Service on Affected Roadways

To determine if roadways in the Project Vicinity are operating acceptably under existing traffic conditions, Fehr & Peers conducted turning movement counts at intersections 1-9 in December 2007. Additionally, existing year intersection volumes of Alvarado-Niles Road and Linda Drive (#13) were obtained from traffic counts conducted in May 2010. Existing peak hour intersection LOS results are presented in Table 3.13-3. Under existing conditions, all study intersections operate at mid-LOS D or better during both peak travel times with the exception of the intersection of Decoto Road/Alvarado-Niles. At the time the traffic counts were completed, this intersection operated at LOS D (below mid-range) during both peak hours. Since LOS E is acceptable on Decoto Road, operations are acceptable at all locations under Existing Conditions. However, it should be noted that the City recently completed reconfiguration of the intersection of Alvarado Niles Road/Decoto Road to provide two separate left-turn lanes on each leg of the intersection, which increased traffic flow.

Table 3.13-3. Intersection Level of Service—Existing Conditions

Intersection	Control	AM Peak Hour		PM Peak Hour	
		Delay (seconds)	LOS	Delay (seconds)	LOS
Decoto Road/Mission Boulevard	Signal	18.5	B	16.9	B
Decoto Road/5 th Street	Signal	13.4	B	8.0	A
Decoto Road/7 th Street	Signal	13.4	B	9.8	A
Decoto Road/Cheeves Way ¹	N/A	N/A	N/A	N/A	N/A
Decoto Road/11 th Street	Signal	17.2	B	16.1	B
Decoto Road/Station Way ¹	NA	N/A	N/A	N/A	N/A
Decoto Road/Meyers Drive/Union Square	Signal	23.0	C	23.4	C
Decoto Road/Alvarado-Niles Road	Signal	47.9	D	54.2	D
Mission Boulevard/Appian Way	Signal	19.7	B	20.4	C
Alvarado-Niles Road/Linda Drive	Stop	19.0 (SB Left)	C	20.3 (SB Left)	C

Notes: LOS of mid-range D or better is acceptable at all locations, and LOS E is acceptable at study intersections located on Mission Boulevard, Decoto Road, and the planned East-West Connector.

¹ Planned intersection not yet in operation.

Source: Fehr & Peers Associates 2010.

Planned Roadway Improvements

As stated above, the City completed reconfiguration of the intersection of Alvarado Niles Road/Decoto Road to provide two separate left-turn lanes on each leg of the intersection. This reconfiguration was not in place when intersection volumes were counted in 2007, nor assumed as part of the existing conditions analysis. Therefore, it is included under Existing Plus Project conditions (Fehr & Peers 2010).

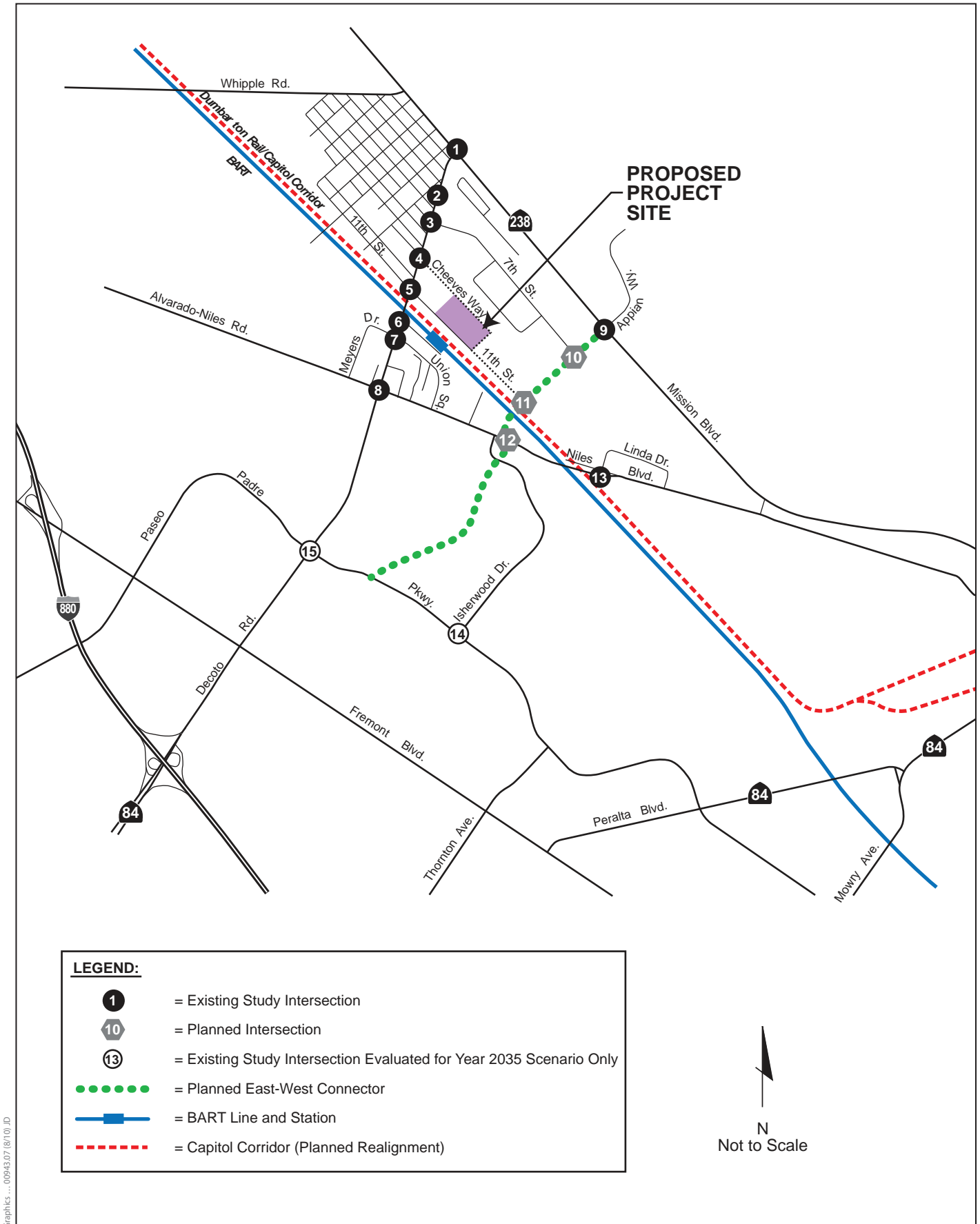
Additionally, as part of the Proposed Project, westbound 11th Street (approaching Decoto Road) would be reconfigured to include one left turn lane and one shared left-through-right turn lane.

Pedestrian and Bicycle Facilities

Existing Facilities

Sidewalks and the crosswalks at signalized intersections are generally provided on both sides of the street in the vicinity of the Project Site. Sidewalks at signalized intersections generally provide adequate access between the local neighborhood and pedestrian activity areas such as the Union City BART station and shopping plazas.

The existing bicycle facilities within Union City are primarily off-street bicycle and pedestrian trails following the Alameda and Dry Creek corridors. Most of



Graphics ... 0943.07 (8/10)_JD

Figure 3.13-1
Study Intersections and Roadway Network

these routes are not continuous throughout the City. However, there are dedicated bicycle lanes (Class II) on Alvarado-Niles Road, Decoto Road, and 11th Street, in both directions.

The *Alameda Countywide Bicycle Plan (2006)* includes information on existing bicycle and walking commute trips. For Union City, the Plan indicates that less than one percent of commute trips are by bicycle and about one percent of commute trips are by walking. Field observations by Fehr & Peers indicate that pedestrian activity is moderate (40 to 50 pedestrians per hour), and few bicyclists travel near the Alvarado-Niles Road/Decoto Road intersection (Fehr and Peers 2010).

Planned Facilities

The City's General Plan calls for construction of continuous Class II bicycle lanes on Union Square, between Decoto Road and Alvarado-Niles Road, which have been completed to the extent feasible. In the immediate project vicinity, pedestrian and bicycle circulation will be accommodated via the bicycle lanes and sidewalks on 11th Street. Bicycle lanes have already been constructed on 11th Street from Decoto Road to the dead end east of the project site. Class III (shared use) bicycle lanes are proposed on the anticipated East West Connector, which will be located east of the project site. Once the proposed East-West Connector is completed, 11th Street will be extended to reach it, providing further bicycle access to and from the project site, and to the proposed East-West Connector. Currently, sidewalks are provided on both sides of 11th Street and generally provide adequate access between the local neighborhood and pedestrian activity areas south of the project site.

Transit

The following section summarizes public transit service operating in the vicinity of the Project Site.

Dumbarton Express

- DB/DB1/DB3 (contracted to VTA) routes operate Monday through Friday between 5:20 AM and 7:31 PM with 15-minute to 90-minute headways. Service is provided between Union City BART and Palo Alto, including connecting with Caltrain at the Palo Alto Transit Center.

Union City Transit

- Route 1A (Alvarado-Niles) operates weekdays from 4:35 AM to 9:55 PM with 30-minute to 1-hour headways. Route 1A operates on Saturday from 7:05 AM to 6:55 PM and on Sunday from 8:05 AM to 5:55 PM with 1-hour headways.
- Route 1B (Alvarado-Niles) operates weekdays from 4:50 AM to 9:35 PM with 10-65 minute headways. Route 1B operates on Saturday from 7:35 AM

to 7:30 PM and on Sunday from 8:35 AM to 6:30 PM with 60 – 65 minute headways.

- Route 2 (Whipple) operates weekdays from 5:00 AM to 10:25 PM with 15-35minute headways, and Saturday for 7:00 AM to 7:25 PM with 25-35 minute headways.
- Route 3 (Almaden) operates weekdays from 5:00 AM to 10:05 PM with 1-hour headways, Saturday from 7:00 AM to 7:05 PM with 1-hour headways.
- Route 4 (Seven Hills) operates weekdays from 4:15 AM to 9:50 PM with 1-hour headways, Saturday from 7:15 AM to 6:50 PM with 1-hour headways.

AC Transit

- Route 97 (Union City BART – Hesperian Boulevard – Bay Fair BART) operates weekdays from 5:00 AM to 12:00 AM with 15-minute headways, and Saturday and Sundays 7:00 AM to 11:00 PM with 30 minute headways.
- Route 99 (Hayward BART – Mission Boulevard – Union City BART) operates weekdays and weekends from 5:30 AM to 11:00 PM with 30-minute headways.
- Route 216 (Mowry Avenue – Niles Boulevard) operates weekdays from 5:30 AM to 9:30 PM with 1-hour headways.
- Route 232 (Union City BART – Cedar Boulevard – New Park Mall) operates weekdays from 5:30 AM to 8:00 PM with 30-minute headways.
- Route 264 (Union City BART – NewPark Mall via Decoto Road) operates weekdays from 6:30 AM to 9:20 PM with 30 minute headways.
- Route 275 (Two-way loop: Union City BART) operates weekdays from 6:45 AM to 8:45 PM at 1 hour headways and weekends between 7:15 AM and 8:15 PM at 1 hour headways.
- Route 332 (New Park Mall – Union City BART – Fremont BART) operates weekends from 7:00 AM to 7:00 PM with 1-hour headways.
- Route 333 (Newark Flexible Service) operates weekdays from 7:00 PM to 1:00 AM with 1 hour headways.
- Route 345 (NewPark Mall to Fremont BART via Mowry Avenue) operates weekdays from 6:00 AM to 8:00 PM at 1 hour headways and weekends between 7:00 AM and 9:00 PM at 1 hour headways.
- Route 801 (All Nighter) operates weekdays and weekends between 11:30 PM and 6:00 AM at 1 hour headways.

Union City BART

- The Union City BART station (Fremont/Richmond and Fremont/Daly City Lines) is adjacent to the project site. The BART system operates from 4:00 AM to 1:30 AM on weekdays, 6:00 AM to 1:30 AM on Saturdays, and 8:00 AM to 1:30 AM on Sundays. Headways vary from 10 to 20 minutes

depending on the time of day and day of the week. Service to and from Daly City and San Francisco is offered weekdays from approximately 5:00 AM to 7:00 PM with 20-minute headways.

Airport

No aviation facility is located within the Project Vicinity. The nearest commercial aviation facilities are Oakland International Airport located in the city of Oakland, approximately 13 miles from the Project Area.

Emergency Access

The PG&E site, of which the Project Site is a part, is bordered on two sides by railroad tracks and on a third side (east of the site) by a channelized waterway. Emergency vehicle access is limited to the following locations:

- Emergency vehicles accessing the site from Decoto Road can enter the site via 11th Street or Cheeves Way. Access via Cheeves Way is also limited due to the raised median on Decoto Road.
- Emergency vehicles accessing the site from 11th Street can utilize a route through an adjoining residential neighborhood accessed via Linda Street/Niles Boulevard.

Parking

The City has installed two parking lots along 11th, including one lot located adjacent to the rear of the BART station, on the southerly side of 11th Street, and a second lot is located on Block 2. These parking lots are currently being utilized by BART patrons. Per the City's parking ordinance, as set forth in Chapter 18.38 of the Union City Municipal Code, new development must provide parking in the form of on- or offsite facilities. For apartment housing, the City requires a minimum of 1.5 covered and enclosed parking stalls per each unit; for ownership units the City requires 1.5 covered and enclosed parking stalls per each one bedroom or studio unit and 2 covered and enclosed parking stalls per each unit with two or more bedrooms.

For commercial districts, off-street parking is typically required, while for commercial offices, the City requires 1 parking stall per 200 square feet of office use.

Regulatory Setting

This section discusses local policies and regulations that are relevant to the analyses of transportation and circulation impacts of the Proposed Project.

Local

The Alameda County Congestion Management Program

The Alameda County Congestion Management Authority (CMA) is responsible for ensuring local government conformance to the countywide congestion management program (CMP), which requires that LOS performance standards be established and monitored biennially on all Alameda County CMP-designated and MTS roadways. The basic level of service standard within the designated roadway system is LOS E. CMA also requires that local jurisdictions address traffic operating conditions for development projects that are expected to generate 100 or more p.m. peak-hour trips (Alameda County Congestion Management Agency 2006).

The basic LOS standard adopted by the CMA for the CMP and Metropolitan Transportation (MTS) roadways segments, including I-880, is LOS E.

Union City General Plan

The Transportation Element of the Union City General Plan (General Plan) includes goals, policies, and implementation programs that address the for automobile travel, public transit, bicycle and pedestrian travel, parking, and goods movement in Union City. These goals and policies are as follows.

Transportation Element

Goal TR-A.1 To establish a safe, convenient, and efficient roadway system that minimizes peak hour traffic congestion.

Policy TR-A.1.1 The City shall prepare and adopt a Transit First policy to encourage and promote the use of public transit and provide alternatives to single-occupancy vehicles.

Policy TR-A.1.2 The City shall monitor traffic flow problems and shall, to the extent feasible, improve capacity through improvements such as traffic signals, intersection widening, lane configurations, and basic traffic controls.

Policy TR-A 1.3 The City shall continue to implement its policy that traffic Levels of Service (LOS) will not exceed mid-range LOS D at all signalized intersections on arterial and collector streets, with the exception of intersections on major regional routes, including I-880, Mission Boulevard (SR 238) and the Route 84/Decoto Road corridor. Levels of Service are described in Table TR-4.

Policy TR-A.1.4 The City shall periodically review the need for rail-street grade crossings, and shall construct grade separated crossings, such as on Whipple Road, Dyer Street, Decoto Road and Alvarado Boulevard as deemed necessary and financially feasible.

Policy TR-A.1.8 The City shall annually review emergency vehicle access on “designated” private property (areas required to provide fire and emergency vehicle access) and ensure property management maintains these access routes.

Policy TR-A.1.9 The City shall support the timely construction of the Route 84 extension as a partially depressed and at-grade parkway through the Station District to Mission Boulevard in order to resolve current circulation deficiencies, improve the area's regional access and visibility, and stimulate the market for region-serving retail, light industrial/service commercial, and office uses.

Policy TR-A.1.10 The City shall ensure that the design of Route 84, 7th Street, and 11th Street is completed in such a manner that the industrial uses in the Station District can gain direct access to the facility with minimum disturbance to other uses in the area.

Policy TR-A.1.11 The City shall develop contingency plans for early development of an east-west link through the Station District should the Route 84 construction be delayed.

Policy TR-A.1.12 The City shall petition railroad operators to consolidate all rail traffic within one right-of-way and abandon the eastern (former Southern Pacific) line to remove barriers that limit circulation and flexibility in the Station District and Decoto.

Policy TR-A.1.13 The City shall control the number of direct access points to Route 84, Mission Boulevard, Decoto Road, Union City Boulevard, Alvarado Boulevard, Dyer Street, Whipple Road and Alvarado-Niles Road to maintain traffic flow and minimize potential for accidents.

Goal TR-A.2 To keep the transportation system in balance with the land uses in Union City.

Policy TR-A.2.1 The City shall work with the City of Fremont, Caltrans, and the Alameda County Transportation Agency (ACTA) to complete the Route 84 extension between I-880 and Mission Boulevard.

Policy TR-A.2.6 The City shall prepare a circulation plan for the Station District to promote bicycle and pedestrian travel and facilitate movement through the area.

Policy TR-A.2.8 The City shall establish a transportation impact fee for all new and redevelopment projects to ensure fair share contributions to transportation improvements and continue to explore other funding sources to assist large-scale capital projects.

Policy TR-A.2.9 The City shall develop a transportation demand management (TDM) program for the Station District to discourage the use of single-occupancy vehicles and encourage the use of transit.

Goal TR-B.1 To provide an efficient, convenient public transportation system for residents and workers in Union City.

Policy TR-B.1.10 The City shall require new development to consider transit access in the design of the overall project.

Goal TR-B.2 To promote Union City as a major transit hub through development of a regional intermodal facility.

Policy TR-B.2.13 The City shall ensure that the design of 11th Street and the proposed SR 84 extension support the land uses in the Station District.

Goal TR-C.1 To create an institutional framework that supports bicycle and pedestrian travel through policy development, city staff and committee actions, and capital project implementation.

Policy TR-C.1.8 The City shall ensure that bicycle and pedestrian facilities (including on-street bicycle facilities, secure bicycle parking, safe pedestrian crossings, and continuous sidewalks or paths) are included in the Intermodal Station District and the Union Landing District, and these districts are well-connected to neighboring areas by bicycle and pedestrian facilities (reference policies CD-B.3.1, CD-B.1.9, ED-B.1.3, LU-B.2.3, TR-A.2.4, TR-A.2.6).

Goal TRC-2 To develop a comprehensive signed bicycle route network composed of Class I (paved off-street and multi-use trails), Class II (bicycle lanes), and Class III (shared-use roadways) facilities connecting all of Union City's neighborhoods and adjacent communities.

Policy TR-C.2.5 The City shall give priority to bicycle improvements that connect neighborhoods and job centers to the proposed Intermodal Station.

Goal TR-C.4 To create a continuous pedestrian network that meets ADA standards and allows pedestrians to safely and conveniently access parks and opens pace areas, transit centers, schools, shopping areas, public facilities, major employment centers, and other significant destinations.

Policy TR-C.4.6 The City shall give priority to pedestrian improvements that connect neighborhoods and job centers to the proposed Intermodal Station.

Goal TR-D.1 To provide convenient, aesthetically designed off-street parking areas and sufficient loading areas in commercial and industrial areas.

Policy TR-D.1.3 The City shall promote shared parking arrangements and facilitate development of common parking facilities and structures through a parking district or similar provision in the Central Technology Center, the Alvarado Technology Center, Union Landing, the Station District, and whenever parking expansion is considered in impacted areas.

Goal TR-E.1 To coordinate transportation goals with those of the Land Use Element, the Housing Element, and the Economic Development Element.

Policy TR-E.1.1 The City shall consider transportation impacts, transportation mitigation measures and developer transportation fees when reviewing all proposed land use projects.

Policy TR-E.1.2 The City shall support mixed-use development, pedestrian-friendly environments, and higher density around the major transportation nodes.

Policy TR-E.1.4 The Station District land uses and design should minimize automobile dependence and maximize transit usage.

Intermodal Station District and Transit Facility Plan

The Intermodal Station District Plan and Transit Facility Plan (Station District Plan) is a comprehensive document that outlines the proposed future development of the Union City Bay Area Rapid Transit (BART) station and surrounding land uses into a series of commercial, retail, and residential transit-oriented facilities, collectively called the Station District. The Station District Plan does not include policies intended to guide project design; rather, it includes design recommendations and standards related to key building and design elements.

Union City General Plan Intersection Level of Service Standards

The General Plan (City of Union City 2002) states that traffic levels of service should not exceed mid-range LOS D at all signalized intersections on arterial and collector streets, with the exception of intersections on major regional routes, including I-880, Mission Boulevard (SR 238) and the Route 84 (i.e. East-West Connector)/Decoto Road corridor.

Significant traffic impacts at intersections are typically defined to occur when the addition of new project traffic causes traffic operating conditions to deteriorate from an acceptable level of service to an unacceptable level.

As noted above, the City's General Plan specifies that traffic levels of service of mid-range LOS D or above are acceptable at all signalized intersections on arterial and collector streets, with the exception of intersections on major regional routes, including I-880, Mission Boulevard, (SR 238), and the Route 84 (i.e. East-West Connector) and Decoto Road corridor. For study intersections located on major regional routes, LOS E is considered acceptable.

Project Impacts and Mitigation Measures

This section describes the impact analysis relating to traffic and circulation for the Proposed Project. It describes the methods used to determine the impacts of

the project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

Methods

The approach and methods used to determine Project impacts are described in the traffic impact study prepared for the Proposed Project by Fehr and Peers (Fehr and Peers 2010). Following is a summary of methods used to estimate the approximate number of trips generated by the Proposed Project; evaluate the effects of Project-added traffic under near-term, mid-term, and future cumulative development scenarios; and assess Project impacts on regional facilities and State highways.

Trip Generation

The 8th Edition of Trip Generation published by the Institute of Transportation Engineers (ITE) was used to develop trip generation rates for the residential land uses within the Project Site. The average trip generation rates published for mid-rise apartments are used for the Project since the Project size and layout best resembles this description. Additionally, the trip generation estimates for the business condominiums and retail land uses within the Project Site was obtained from previous Fehr and Peer traffic studies.

The trip generation rates used were adjusted based on the proximity of the Project site to the Union City Intermodal Station, as the Proposed Project's proximity to a major regional transit connection increases the likelihood of generating a higher proportion of pedestrian and bicycle traffic than if it were located in a more automobile-oriented environment. In addition, reductions were taken from each land use based on the forecasted number of internal trips (within the project site) and pass-by trips using the ITE Trip Generation Handbook methodology.

Consistent with previous analyses for the Union City Intermodal Station, a 10 percent trip reduction was applied to each land use for peak hour trips to assume higher transit usage for residents and visitors adjacent to the BART station. An additional 21 percent reduction was also applied to the retail land use to account for retail "pass-by" trips, which are trips that are already on the roadway network and subsequently enter the Project Site as an intermediate stop before the final destination. Pass-by trips are not specifically generated by the Project but were estimated using retail pass by trip rates from the ITE Trip Generation Handbook.

Development Scenarios

To determine the significance of traffic increases resulting from Project construction and operation, Fehr and Peers obtained data from previous traffic studies and EIRs to establish existing/baseline conditions (conditions without the Project), then compared these existing traffic volumes to future traffic volumes anticipated to occur under background conditions (conditions with the Project).

Specifically, the Project's effects on the local intersection and roadway network are analyzed with respect to the following near-term, mid-term, and future cumulative traffic conditions.

- Existing Plus Project Conditions—conditions resulting from the addition of Project trips to existing traffic volumes;
- Existing plus Project & Pending Intermodal Development –conditions resulting from the addition of Project trips, and trips generated by pending development of adjacent transit-oriented development (TOD) projects surrounding the BART station;
- Cumulative (Year 2035) With Project Conditions– the net change in trips between buildout of previously approved land uses on the Project Site and adjacent Intermodal sites and updated assumptions concerning the full, long-term buildout of the Union City Intermodal Project.

Project Impacts on CMP and MTS Roadways

The Alameda County Congestion Management Program requires the assessment of development-driven impacts on regional roadways. Since the Project would generate more than 100 “net new” PM peak hour trips, the CMP requires the use of the CMA Countywide Travel Demand Model (CMA Model) to assess the impacts on regional roadways in the Project Vicinity during AM and PM peak hours. Specifically, CMA's model was used to assess Project impacts on the CMP designated roadway system and on the MTS, which includes more roadways than the CMP system. The CMP and MTS roadways in the Project Vicinity include Decoto Road, Alvarado-Niles Road, Whipple Road, Mission Boulevard, Paseo Padre Parkway, I-880, and SR-84.

The current version of the CMA Model is based on Association of Bay Area Governments (ABAG) Projections 2005 land uses for 2015 and 2030. The traffic baseline and “plus project” forecasts for 2015 and 2030 were extracted for the CMP and MTS roadway segments from the CMA Model. Operations of the CMP/MTS freeway and surface street segments in the Project Vicinity were evaluated using a v/c ratio methodology.

Thresholds of Significance

For this analysis, an impact pertaining to Transportation and Circulation was considered significant under CEQA if it would result in any of the following environmental effects, which are based on professional practice and State CEQA Guidelines Appendix G (14 CCR 15000 et seq.).

- Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections);

- Cause, either individually or cumulatively, exceedance of a level-of-service standard established by the county congestion management agency for designated roads or highways;
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Result in inadequate emergency access;
- Result in inadequate parking capacity; and
- Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

For purposes of this analysis, the City set the LOS standard at mid-range LOS D (per the General Plan) for all signalized intersections on arterial and collector streets, with the exception of intersections on major regional routes, including I-880, Mission Boulevard, (SR 238), and the Route 84/Decoto Road corridor. Since the majority of the study intersections evaluated in this study are located on major regional routes, LOS E is considered acceptable at study intersections located on Mission Boulevard, Decoto Road, and the planned East-West Connector. Intersections would be considered to be operating unacceptably if levels of service below these standards are identified.

For unsignalized intersections, impacts will be considered significant if a signal warrant for an intersection is met.

For the purposes of this analysis, a significant impact on a CMP roadway segment would be said to occur if the addition of Project-related traffic would result in a LOS value worse than LOS E, except where the baseline condition of the roadway link is already LOS F. For those CMP roadway segments where the Baseline condition is LOS F, the impacts of the Project were considered significant if the contribution of Project-related traffic is at least three percent of the total traffic.

Impacts and Mitigation Measures

Impact TRA-1 Degradation of Intersection LOS as a Result of Construction-Generated Traffic

Construction of the Proposed Project would generate additional traffic at intersections in the Project Vicinity. Potentially significant sources of vehicular traffic during the construction phase of the Project would include construction worker commute trips, Project equipment deliveries, and hauling of materials such as concrete, fill, and excavation spoils.

As discussed in Chapter 2.0, Project Description, it is anticipated that the project area would be developed through a three phased process over a 10-year

timeframe (2012 to 2022), depending on market conditions. Project trips related to site preparation and grading as well as materials delivery would occur during the development phase. Construction worker commute trips would occur throughout the duration of construction. Although all of these trips would be temporary in nature and would be dispersed throughout the day, Project traffic could substantially degrade the level of service at an intersection within the Project study area. Furthermore, construction vehicles entering or exiting the site could result in temporary lane closures or cause temporary delays or stoppage of through traffic in the Project Vicinity, which could adversely affect local traffic circulation. Effects could be significant, particularly during peak hours.

Implementation of a traffic control plan to reduce peak hour traffic impacts, as described below in Mitigation Measure TRA-1, would reduce potential impacts from Project construction activities on level of service, traffic flow, and safety to a less-than-significant level. No additional mitigation is required.

Mitigation Measure TRA-1: Develop and Implement a Traffic Control Plan

The construction contractor will mitigate the Proposed Project's construction-related traffic impacts by developing and implementing a Traffic Control Plan as part of the overall Construction Management Plan, in accordance with City policies. The Traffic Control Plan will be implemented throughout the course of project construction, and will include the following elements:

- communication plan to notify transit providers, emergency service providers, residences, and businesses located in the project vicinity of the construction plans;
- identify roadway segments or intersections that are at, or approaching, LOS that exceeds local standards, and provide for construction-generated traffic to avoid these locations at the peak periods, either by traveling different routes or by traveling at non-peak times of day;
- restrict delivery of construction materials to between the hours of 8:00 a.m. and 3:00 p.m. to avoid more congested morning and evening hours;
- require that written notification be provided to contractors regarding appropriate routes to and from the construction site, and the weight and speed limits on local roads used to access the construction site;
- contain an access and circulation plan for use by emergency vehicles when lane closures and/or detours are in effect. If lane closures occur, provide advance notice to local fire and police departments to ensure that alternative evacuation and emergency routes are designed to maintain response times;
- provide for adequate parking for construction trucks, equipment, and construction workers within the designated staging areas throughout the construction period;
- require traffic controls on roadways adjacent to the project, including flag persons wearing bright orange or red vests and using a *Stop/Slow* paddle to control oncoming traffic. Construction warning signs should be posted in accordance with local standards or those set forth in the Manual on Uniform

Traffic Control Devices (Federal Highway Administration 2001), in advance of the construction area and at any intersection that provides access to the construction area; and

- specify that a sign be posted at all active construction areas giving the name and telephone number or e-mail address of the City staff person designated to receive complaints regarding construction traffic.

Impact TRA-2: Interference with Emergency Access and Circulation as a Result of Construction-Generated Traffic

During project construction, slow-moving construction vehicles could result in traffic safety hazards. Emergency access in the area could also be affected by Project construction; specifically, temporary lane closures and construction-related traffic could delay or obstruct the movement of emergency vehicles. This impact is considered less than significant with implementation of a traffic control plan under Mitigation Measure TRA-1, as described above. No additional mitigation is required.

Impact TRA-3: Inadequate Parking Facilities to Meet Construction-Related Parking Demands

The parking needs of construction workers and for heavy construction equipment would increase the demand for parking. However, these parking needs would be accommodated on the Project Site or within nearby City-owned lots. Therefore, this impact is considered less than significant. No mitigation measures are required.

Impact TRA-4: Degradation of Intersection LOS as a Result of Project-Generated Traffic under Existing Plus Project Conditions

Under Existing Plus Project conditions, the Project would generate 342 AM peak hour trips and 570 PM peak hour trips. Trip distribution for this analysis varies for commercial and residential uses, as detailed in Table 4 in the traffic impact study (refer to Appendix I; Fehr and Peers 2010).

As shown on Table 3.13-4, all study intersections would continue to operate acceptably with the addition of Project traffic. Therefore, impacts to study intersections under Existing Plus Project conditions would be less than significant. No mitigation is required.

Table 3.13-4. Intersection Levels of Service- Existing Plus Project Conditions

Intersection	Control ¹	Existing Conditions				Existing Plus Project Conditions			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay ²	LOS ³	Delay	LOS	Delay	LOS	Delay	LOS
1. Decoto Road/Mission Boulevard	Signal	18.5	B	16.9	B	19.3	B	19.8	B
2. Decoto Road/5th Street	Signal	13.4	B	8	A	13.7	B	5.2	A
3. Decoto Road/7th Street	Signal	13.4	B	9.8	A	13.8	B	9.8	A
4. Decoto Road/Cheeves Way	SSS (planned)					10.2	B	10.8	B
5. Decoto Road/11th Street (reconfigured as planned) ⁴	Signal					22.5	C	44.9	D
6. Decoto Road/Station Way	Signal (planned)								
7. Decoto Road/Meyers Drive/Union Square	Signal	23	C	23.4	C	23.6	C	24.5	C
8. Decoto Road/Alvarado-Niles Road (current configuration)	Signal	47.9	D	53.8	D				
8. Decoto Road/Alvarado-Niles Road (reconfigured as planned) ⁵	Signal					32.1	C	32.4	C
9. Mission Boulevard/Appian Way	Signal	19.7	C	20.1	C	19.9	B	20.8	C
13. Alvarado-Niles Road/Linda Road	SSS	19	C	20.3	C	19.4	C	21.1	C

Note: Bold indicates unacceptable operations (LOS of mid-range D or better is acceptable at all locations, and LOS E is acceptable at study intersections located on Mission Boulevard, Decoto Road and the planned East-West Connector).

¹ Signal = Signalized intersection; SSS = Side-street stop-controlled intersection

² Delay in seconds. Delay calculated consistent with methodology presented in the 2000 Highway Capacity Manual.

³ LOS = Level of Service

⁴ Assumes westbound shared right/through/left-turn lane as planned & optimized signal phasing.

⁵ Assumes intersection reconfiguration as currently planned (second left turn lane added for each approach).

Source: Fehr & Peers, 2010

Impact TRA-5: Degradation of Intersection LOS as a Result of Project-Generated Traffic under Existing plus Project & Pending Intermodal Development Conditions

Under the Existing plus Project & Pending Intermodal Development scenario, 1,104 AM peak hour trips and 1,064 PM peak hour trips would be generated. Trip distribution for this analysis varies for commercial and residential uses, as detailed in Table 5 in the traffic impact study (refer to Appendix I; Fehr and Peers 2010).

As shown on Table 3.13-5, all but one of the study intersections would operate acceptably (LOS D or better) under the Existing plus Project & Pending Intermodal Development scenario. The intersection of Decoto Road/11th Street would operate at LOS F during both the AM and PM peak hours, indicating unacceptable operations.

Table 3.13-5. Intersection Levels of Service- Existing Plus Project & Pending Intermodal Development

Intersection	Control ¹	Existing Conditions				Existing Plus Project Conditions				Existing Plus Project & Pending Intermodal Development			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay ²	LOS ³	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Decoto Road/Mission Boulevard	Signal	18.5	B	16.9	B	19.3	B	19.8	B	40.3	D	25.6	C
2. Decoto Road/ 5th Street	Signal	13.4	B	8	A	13.7	B	5.2	A	15	B	5.3	A
3. Decoto Road/7th Street	Signal	13.4	B	9.8	A	13.8	B	9.8	A	14.3	B	10.8	B
4. Decoto Road/Cheeves Way	SSS (planned)					10.2	B	10.8	B	13.8	B	14.5	B
5. Decoto Road/11th Street (current configuration)	Signal	17.2	B	16.1	B								
5. Decoto Road/11th Street (reconfigured as planned) ⁴	Signal					22.5	C	44.9	D	>80	F	>80	F
6. Decoto Road/ Station Way	Signal (planned)									3.8	A	5.8	A
7. Decoto Road/ Meyers Drive/Union Square	Signal	23	C	23.4	C	23.6	C	24.5	C	27.1	C	30.4	C
8. Decoto Road/Alvarado-Niles Road (current configuration)	Signal	47.9	D	53.8	D								
8. Decoto Road/Alvarado-Niles Road (reconfigured as planned) ⁵	Signal					32.1	C	32.4	C	35.4	D	37.1	D
9. Mission Boulevard/Appian Way	Signal	19.7	B	20.1	C	19.9	B	20.8	C	20.2	C	21.2	C
13. Alvarado-Niles Road/ Linda Road	SSS	19	C	20.3	C	19.4	C	21.1	C	21.7	C	23.4	C

Note: Bold indicates unacceptable operations.

¹ Signal = Signalized intersection; SSS = Side-street stop-controlled intersection

² Delay in seconds. Delay calculated consistent with methodology presented in the Highway Capacity Manual

³ LOS = Level of Service

⁴ Future scenarios assume westbound shared right/through/left-turn lanes as planned & optimized signal phasing

⁵ Future scenarios assume planned improvements (added left-turn lanes)

Source: Fehr & Peers 2010

This impact is considered significant. To mitigate for traffic impacts on the Decoto Road/11th Street intersection, the following potential measures were previously identified in the *Avalon at Union Station EIR*:

- A dedicated northbound right-turn lane for vehicles turning from Decoto Road on to 11th Street;
- Widen Decoto Road to three lanes in each direction; or
- An additional westbound lane on 11th Street (increase from three to four lanes approaching the intersection with Decoto Road).

These improvements were deemed undesirable by the City because widening the intersection was found to be inconsistent with the pedestrian-oriented environment envisioned for the Union City Intermodal Station and the above mitigation measures were considered infeasible.

The City has identified a feasible mitigation measure in conjunction with the Avalon Bay and Mid-Peninsula Housing project that was also listed as mitigations in the respective environmental documents for these projects. This measure would partially address, but not fully mitigate the delays at the Decoto Road/11th Street intersection while not adversely impacting pedestrian movements in the area.

Mitigation Measure TRA-5: Roadway Improvements for Decoto Road/11th Street Intersection

Extend the length of the southbound left-turn pocket on Decoto Road (approaching 11th Street), relocating the Decoto Road median and eliminating the northbound left-turn pocket from Decoto Road to westbound 10th; and install a northbound right-turn lane on Decoto Road, approaching Cheeves Way. The City will install the improvements but the Proposed Project will be required to pay its fair share similar to the Avalon Bay and Mid-Peninsula Housing projects.

Despite implementation of this measure, this impact would remain significant and unavoidable at Decoto Road/11th Street Avenue.

Impact TRA-6: Increase in Safety Hazards to Pedestrians/Bicyclists as a Result of a Design Feature

Due to its proximity to a major regional transit connection (BART), the Proposed Project is likely to generate a higher portion of bicycle and pedestrian traffic than if it were located in a more automobile-oriented environment.

Planned pedestrian/bicyclist facilities include sidewalks on the Project's perimeter, with pedestrian bulb-outs, marked crosswalks at each intersection along 11th Street, a pedestrian promenade between Blocks 3 and 4, and a pedestrian connection from the existing BART Station to the Intermodal Station District that leads to a public plaza. The connection from the existing BART station to the public plaza is planned to extend across 11th Street to the pedestrian promenade, which extends to Cheeves Way. These connections will ultimately

provide a direct connection between the BART Station, adjacent land uses south of the BART Station, and the Proposed Project. With construction of the pedestrian connection between the Project Site and the BART station, pedestrians will no longer have to travel on Decoto Road to access the existing station from the station entrance located on the south side of the station. The City has commissioned a study to evaluate how this connection can be extended north to an adjacent site (i.e. Shelton site), which is located between the railroad tracks and the 7th Street Industrial Area. This site is zoned as RDC (Research and Development Campus) and is anticipated to accommodate high-density employment centers.

The Project would contribute to cumulative increases in vehicle and pedestrian volumes on Decoto Road, resulting in potential conflicts between motor vehicles and pedestrians. The existing marked crosswalks at 10th Street and Decoto Road are not controlled by traffic signals or stop signs. Additional traffic would pass through these crosswalk locations due to:

- Substantial increase in traffic volumes making a southbound left-turn from Decoto Road to 11th Street, inbound to the Project Site and adjacent Intermodal development sites; and
- A large portion of the Project's trips are expected to enter the site from Decoto Road at Cheeves Way, thus increasing northbound volumes on Decoto Road that would cross the crosswalks at 10th Street.

As a result, delays to pedestrians crossing at this location would increase, resulting in a corresponding increase in potential conflicts between motorists and pedestrians. Furthermore, the traffic volumes and number of travel lanes would exceed the threshold at which marked crosswalks at uncontrolled pedestrian crossing would be recommended without the provision of enhanced crosswalk treatments.

In addition, the Proposed Project would include an extension of Cheeves Way that would intersect Decoto Road approximately 60 to 100 feet south (west) of the railroad tracks. Installation of this roadway raises the possibility that pedestrians may cross Decoto Road at the new intersection with Cheeves Way, in order to continue north or south along the railroad track corridor.

City staff has indicated a preference for pedestrian and bicycle crossing to be accommodated at 11th Street, with elimination of the 10th Street crossing; however, even in the absence of this crossing, the existing Class II bicycle facilities currently provided on 11th street would be expected to sufficiently accommodate bicycle traffic in the vicinity of the project site. The City has also identified enhancements to the crosswalks at Fifth Street/Decoto Road, Seventh Street/Decoto Road, and Ninth Street/Decoto Road to facilitate pedestrian/bicyclist connections between the Decoto neighborhood and the Intermodal Station District, as well as Guy Emanuele Jr. Elementary School. City staff indicated that these improvements include the installation of high visibility crosswalks and pedestrian-timed signals (Fehr and Peers 2010).

At locations with significant pedestrian volumes, or locations adjacent to “pedestrian generators” (such as the BART Station), it is generally advisable to provide pedestrian crossing opportunities at intervals of 600 feet or less, thus allowing pedestrians to reach a crosswalk within a walking distance of 300 feet. Pedestrians desiring to cross at 10th Street and Decoto Road would be able to use the signalized crosswalk at 11th Street (located 300 feet south of the northernmost crosswalk at 10th Street) in order to cross Decoto. Therefore, the impact to pedestrian circulation at the 10th Street/Decoto Road intersection is less than significant.

Further north at Cheeves Way, it would be necessary for pedestrians desiring to cross Decoto Road to walk a distance of approximately 510 feet south to cross Decoto Road at 11th Street. However, this crossing location is very close to the railroad tracks, and serves relatively few pedestrian generators given the distance from the BART Station and adjacent development sites. Therefore, the volume of pedestrians desiring to cross Decoto Road at Cheeves Way will be relatively low, and the impact to pedestrian circulation at the Cheeves Way/Decoto Road intersection is less than significant.

Based on the findings described above, project impacts on pedestrian/bicycle circulation would be less than significant.

Impact TRA-7: Inadequate Emergency Access during Project Operation

As described in the Environmental Setting, access by emergency vehicles to the Project Site can be accommodated in three locations. The Project Site would be accessible by emergency vehicles on all sides due to a combination of new roads and a pedestrian promenade that would also provide emergency vehicle access. With respect to emergency access, the Fire Department has determined that the Project Site meets applicable requirements. Emergency vehicle access could be accommodated at the following locations:

- Emergency vehicles accessing the site from Decoto Road could enter via 11th Street or Cheeves Way (although access via Cheeves Way would be limited due to the raised median on Decoto);
- Emergency vehicles accessing the site from the east would be able to enter the site via 11th Street, with a planned extension of 11th Street to include a connection with the planned East-West Connector. Until such time as the East-West Connector is constructed, access from the east on 11th Street could be accommodated via a temporary, route through an adjoining residential neighborhood accessed via Linda Street/Niles Boulevard..

The closest Fire station to the Project Site is located on 7th Street, which is approximately ½ mile away. The Police Station is located on the corner of Alvarado-Niles Road and Royal Ann Drive, which is approximately 1 mile from the project site. Access to the site could be slowed due to the existing railroad tracks that cross Decoto Road. However, Fire Department staff has indicated that this has not been an issue for them in the past. In addition, if a problem does arise

regarding delayed response times due to impaired site access, the Fire Department would radio to nearby fire stations in other cities to respond or take an alternate route. This impact is therefore considered less than significant and no mitigation is required.

Impact TRA-8: Increased Transit Demand

The Proposed Project would be expected to increase ridership on local and regional transit systems. The location and density of the Proposed Project make it consistent with the City's policy of encouraging transit and other non-automobile trips. It's proximity to the Union City Intermodal Station will encourage transit trips on the systems that use the facility, including BART, Dumbarton Express, Union City Transit, and AC Transit. Furthermore, the transit analysis for the Union City General Plan Update EIR indicated that the increased ridership projected for BART, Union City Transit, and AC Transit would result in a less-than-significant impact on transit resources. As such, the Proposed Project is not expected to generate transit demand substantially greater than that assumed in the 2002 General Plan EIR for the Proposed Project Site and is therefore expected to have a less than significant impact on transit. No mitigation is required.

Impact TRA-9: Conflict with an Adopted Plan Supporting Alternative Transportation

As discussed above, the City's General Plan calls for construction of continuous Class II bicycle lanes on Union Square, between Decoto Road and Alvarado-Niles Road, which have been completed to the extent feasible. Bicycle lanes have already been constructed on 11th Street from Decoto Road to the dead end east of the project site. Once the proposed East-West Connector is completed, 11th Street will be extended to reach it, providing further bicycle access to and from the project site, and to the proposed East-West Connector. These existing and pending bicycle facilities are expected to sufficiently accommodate bicycle traffic in the vicinity of the project site. The project would not result in a physical conflict with any of these facilities and thus would not result in a conflict with the City's overall planned vision for bicycle circulation in the Station District or other areas of the City. Therefore, no impact would occur.

Impact TRA-10: Inadequate Parking Supply to Meet Parking Demand during Project Operation

Environmental impacts under CEQA occur when a project does not supply an adequate amount of parking spaces to meet peak parking demand, either on its own or in combination with existing parking supplies, and results in physical impacts on the environment through the construction of off-site parking improvements. For the purposes of this analysis, peak parking demand for residents and retail/commercial customers is addressed separately in the following sections.

Residential Parking Demand

For the proposed residential structures, the Project would include 1,430 parking spaces for residential uses and 133 guest spaces, which can be used to satisfy the residential parking demand for a total of 1,563 parking spaces. Based on parking demand data collected by the Institute of Transportation Engineers¹ (ITE), the average peak parking demand for low- and mid-rise apartments/condominiums (2-10 stories) in a suburban setting is 1.2 vehicles parked per unit during the daily peak. Therefore, peak parking demand would be 1,168 parking spaces. Since it is generally advisable to provide an additional 5-10 percent “buffer” above peak demand to accommodate higher than anticipated guest or service (cleaning services, etc.) parking, a total of approximately 1,280 parking spaces would be recommended for the residential component of the project (based on typical ITE suburban rates). With the proposed mix of residential and guest spaces, the project would satisfy peak parking demand based on ITE rates. It should also be noted that these rates are based on suburban settings that are not as well-served by public transit as the project site. As such, the project could expect reduced demand due to proximity to transit, linked trips, and internal trips; thus, actual parking demand generated by residences at the project site would likely be less than the ITE rates predict.

Although the project would meet the conservative ITE rates described above, the project would not meet the City’s parking standards for the Station Mixed Use Commercial (CSMU) Zoning District. These standards are found in Chapter 18.38 of the Union City Municipal Code and are defined as follows:

Residential Use (Ownership Units)

- a. One and one-half (1-1/2) covered and enclosed parking stalls per each one (1) bedroom or studio unit.
- b. Two (2) covered and enclosed parking stalls per each unit with two (2) or more bedrooms.
- c. A minimum of one (1) motorized cycle parking stall that is enclosed and weather-protected shall be provided for every twenty-five (25) units

The Zoning Ordinance also contains parking standards for rental units that requires 1.5 parking stalls for each unit irrespective of bedroom count. For purposes of this analysis, the residential parking standards for ownership units were utilized since they generate a higher parking demand.

Assuming approximately half of the dwelling units will be one bedroom or less and half will be two-or-more bedrooms, the Project would be required under the municipal code to provide 1,703 spaces for residential use, 140 more spaces than the Project is proposing. As stated above, environmental impacts under CEQA occur when a project does not supply an adequate amount of parking spaces to meet peak parking demand, and results in physical impacts on the environment through the construction of off-site parking improvements. Since it has been

¹ Institute of Transportation Engineers, Parking Generation, 3rd Edition, 2004. Although the project has a mix of low-, mid-, and high-rise apartments according to the ITE definitions, the mix of units is not known. However, the low- and mid-rise rate was used to provide a conservative estimate of parking demand. Condominiums are included in the ITE parking generation category.

demonstrated that the Project would meet conservative ITE parking demand rates for residential parking, it can be assumed that off-site parking improvements would not be necessary; thus, the related environmental effects would not occur. Additionally, in keeping with the project's intended purpose as a transit-oriented development and with the goals of the City's Transit First Policy as outlined in General Plan Goal TR-A.1.1, the Project's provision of residential parking below City standards would encourage residents to use alternate forms of transportation, which would reduce traffic-related environmental effects. As such, the Project's inability to meet the City's minimum parking standards is not, on its own, considered a significant environmental impact under CEQA.

Retail/Commercial Parking Demand

To satisfy parking demand generated by the proposed retail and commercial units, the City has committed to supplying public parking within the proposed development and has developed a comprehensive parking program for the area. The City has installed two parking lots along 11th Street that accommodate up to 689 spaces. The parking lot located adjacent to the rear of the BART station, on the southerly side of 11th Street, includes 333 parking spaces. A portion of these parking spaces (approximately 179 spaces) were developed as BART replacement parking associated with the Union City BART Station renovation and will need to be maintained for an additional 14 years. The second parking lot is located on Block 2 and includes approximately 356 parking spaces. These parking lots are currently being utilized by BART patrons but there is currently observed excess capacity on the weekdays and week-ends. In addition, the City has purchased 117 public stalls within a garage associated with an approved 157-unit multi-family project, located on Block 4, that has begun construction. It is anticipated that the garage will be operational prior to occupancy of the retail and commercial space within the project. Approximately 111 on-street parking spaces will also be provided along 11th Street, Cheeves Way, Berger Way and Galliano Way, that will also be installed prior to the occupancy of the retail and commercial space. The parking spaces along 11th Street have already been installed. The City owns several additional blocks within the project area that can be utilized for surface parking, if necessary.

Based on ITE parking demand rates, the retail and commercial components are likely to generate peak demand of approximately four to five spaces per thousand square feet, based on typical suburban parking demand for retail uses. Therefore, assuming the more conservative rate of five spaces per thousand square feet, the peak parking demand generated by 37,500 square feet of the commercial uses would be 188 spaces. Per Chapter 18.38, Station Mixed Use Commercial, and Chapter 18.36, Commercial Districts, of the Union City Zoning Ordinance, the City's parking requirement for the retail and commercial (i.e. office) components are five parking spaces per one thousand square feet of gross floor area, which is consistent with the ITE parking demand rates. As noted above, adequate public parking in the Project vicinity is available to satisfy the required parking demand for retail and commercial uses within the Project. As such, there will be sufficient parking to satisfy peak retail/commercial parking demand.

Overall, the Project would be capable of meeting peak parking demands for residents as well as retail and commercial customers, as demonstrated through a

comparison with applicable ITE demand rates. Impacts related to parking would therefore be less than significant, and no mitigation is required.

Impact TRA-11: Degradation of Intersection LOS as a Result of Project-Generated Traffic under Future Cumulative Conditions

The following analysis of Cumulative Baseline Conditions, which represents anticipated levels of traffic based on previously approved projects on the Project Site and adjacent intermodal sites, is presented for comparative purposes only and is not used to determine impacts. Rather, the determination of cumulative impacts is based on the difference between Existing Conditions, as presented in the Environmental Setting, and Cumulative Plus Project conditions, as presented in the subsequent section.

Cumulative (Year 2035) Baseline Conditions

Cumulative (Year 2035) Baseline Conditions would include trips generated by the Project in combination with full development of the Intermodal development sites adjacent to the BART station, as detailed in Table 6 in the traffic impact study (refer to Appendix I; Fehr and Peers 2010). Several intersections along Mission Boulevard, Alvarado-Niles Boulevard, the planned East-West Connector, and Decoto Road would operate at a level less than mid-range LOS D during one or both peak hours. However, as noted above, LOS E is considered acceptable at these locations. As such, these intersections would operate acceptably.

The following intersections would operate unacceptably during the AM and PM peak hours under Cumulative (Year 2035) Baseline conditions.

- Decoto Road/7th Street (LOS F during the PM peak hour)
- Decoto Road/11th Street (LOS F during the AM and PM peak hours)
- Alvarado Niles / Linda Drive (LOS F during the AM peak hour)
- Paseo Parkway / Isherwood Drive (LOS F during the AM and PM peak hours)

All other study intersections would operate acceptably under Cumulative (Year 2035) Baseline conditions. Additional discussion regarding these impacts is found in Fehr & Peers' TIA prepared for this EIR, which is contained in Appendix I.

Cumulative Plus Project Conditions

Under Cumulative Plus Project conditions, the Project, in combination with the adjacent development of the Union City Intermodal Station sites, would combine to generate 2,949 new AM peak hour trips and 2,863 new PM peak hour trips.

As shown on Table 3.13-6, the Decoto Road/7th Street intersection would operate worse than mid-range LOS D during PM peak hours; however, as noted above,

LOS E is considered acceptable at this location. As such, this intersection would operate acceptably.

The following intersections are forecast to operate unacceptably during the AM and PM peak hours under Cumulative (Year 2035) Baseline and With Project conditions.

- Decoto Road/11th Street
- Alvarado-Niles Boulevard/ Linda Drive (north intersection)
- Paseo Padre Parkway/Isherwood Drive

The Project contribution to cumulative impacts would be less than significant at the following two study intersections.

- **Alvarado-Niles Boulevard/Linda Drive (north intersection)**—Although intersection LOS would operate unacceptably under Year 2035 conditions in the AM and PM peak hours (based on delay experienced by the stop-controlled side street), the peak-hour volumes would not meet signal warrant criteria defined by the *Manual of Uniform Traffic Control Devices* (MUTCD). The project's cumulative impacts to this intersection would thus be less than significant. No mitigation is required.
- **Paseo Parkway/Isherwood Drive**—The intersection would operate at LOS F during the AM and PM peak hours. This LOS impact results from forecasted traffic volumes for vehicles making the northbound left-turn movement from northbound Isherwood Drive to westbound Paseo Parkway during the PM peak hour that would exceed the capacity of the northbound approach leg. The opposite movement would result in impacts during the AM peak hour, as vehicles making a right-turn from eastbound Paseo Parkway to southbound Isherwood are forecasted to exceed the capacity of the intersection.

This increase is not caused by Project trips, but is related to traffic diverted to the intersection following completion of the planned East-West Connector. At this intersection, the forecasted growth in northbound left-turn movements from Isherwood Drive to Paseo Parkway could not be accommodated by the intersection or downstream road network.

The Project would contribute a negative number of trips to the congested movements (to and from Isherwood), and less than 50 peak hour trips are expected to travel through the intersection during peak hours, out of a total forecasted intersection volume of over 4,300 trips during the PM peak hour. Therefore, the Project contribution to the forecasted cumulative impact at Paseo Parkway/Isherwood Drive is less than significant. No mitigation is required.

Table 3.13-6. Intersection Levels of Service—Cumulative with Project Conditions

Intersection	Control ¹	Existing Conditions				Cumulative (Year 2035) Baseline Conditions			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay ²	LOS ³	Delay	LOS	Delay	LOS	Delay	LOS
1. Decoto Road/Mission Boulevard	Signal	18.5	B	16.9	B	45.6	D	30.8	C
2. Decoto Road/ 5th Street	Signal	13.4	B	8	A	14.1	B	5.9	A
3. Decoto Road/7th Street	Signal	13.4	B	8	A	48.1	D	> 80.0	F
4. Decoto Road/Cheeves Way	SSS (planned)					10.7	B	27.7	D
5. Decoto Road/11th Street (current configuration)	Signal	17.6	B	16.1	B				
5. Decoto Road/11th Street (reconfigured as planned) ⁴	Signal					> 80.0	F	> 80.0	F
6. Decoto Road/ Station Way	Signal (planned)					22.8	C	22.5	C
7. Decoto Road/ Meyers Drive/Union Square	Signal	23	C	23.4	C	74.8	E	54.6	D
8. Decoto Road/Alvarado-Niles Road (current configuration)	Signal	47.9	D	53.8	D				
8. Decoto Road/Alvarado-Niles Road (reconfigured as planned) ⁵	Signal					48.1	D	68.7	E
9. Mission Boulevard/Appian Way	Signal	19.7	B	20.1	C	63.8	E	61	E
10. 7th Street/East-West Connector ⁶	Signal					52.7	D	19.8	B
11. 11th Street/East-West Connector ⁶	Signal					21.4	C	31.2	C
12. Alvarado-Niles Road/East-West Connector	Signal					51.1	D	61.3	E
13. Alvarado-Niles Road/ Linda Road ^{6,7}	SSS	19	C	20.3	C	>50	F	49.8	E
14. Paseo Padre Parkway/Isherwood Drive ⁶	Signal					>80	F	>80	F
15. Paseo Padre Parkway/Decoto Road ⁶	Signal					55	E	44.6	D

Note: Bold indicates unacceptable operations (LOS of mid-range D or better is acceptable at all locations, and LOS E is acceptable at study intersections located on Mission Boulevard, Decoto Road and the planned East-West Connector).

¹ Signal = Signalized intersection SSS = Side-Street Stop

² Delay in seconds. Delay calculated consistent with the methodology presented in the 2000 Highway Capacity Manual.

³ LOS = Level of Service

⁴ Assumes westbound shared right/through/left-turn lane as planned & optimized signal phasing

⁵ Assumes intersection reconfiguration as currently planned (second left turn lane added for each approach)

⁶ LOS reported for this intersection was obtained from I-80 – SR 238 East-West Connector Traffic Operations Analysis, Dowling Associates, Inc, May 2008.

⁷ LOS is based on the average vehicle delay for the worst intersection approach, from the stop-controlled side street

Source: Fehr & Peers Associates, 2010.

The Proposed Project would make a significant contribution to cumulative traffic impacts at the following study intersection:

- **Decoto Road/11th Street**—The intersection would operate at LOS F during both peak hours. The impact would be primarily due to delay experienced by turning movements inbound and outbound to the project site from Decoto Road to 11th Street. The Project would add an amount of traffic to these movements that may be noticed by regular users of this facility (53 westbound left turn and 43 southbound left turns, or 14% and 7% of the movement volume, respectively, in the PM peak hours). Thus, the project's contribution would be considered significant.

Decreasing traffic delays at the Decoto/11th Street intersection would require improvements that increase capacity for movements in and out of the project site and/or provide alternate routes to access the northern half of the Union City Intermodal Station development area. As discussed above under Impact TRA-5, other potential measures to improve traffic operations at this intersection were also considered (including widening Decoto Road and adding lanes to 11th Street), but were found inconsistent with the pedestrian-oriented environment envisioned for the Union City Intermodal Station and these other mitigation measures are considered infeasible.

To mitigate for traffic impacts at the Decoto Road/11th Street intersection, an additional potential mitigation measure was identified.

- Construct an additional left-turn lane to the westbound approach, for a total of two. In addition, construct a right-turn pocket of 100 feet at minimum to the northbound approach and convert the existing shared through/right-turn lane to an exclusive through lane. Optimize the signal cycle length to 120 seconds. Modify the signal operation appropriately (e.g., northbound right-turn operates with overlap, prohibit southbound u-turns) and optimize the signal timing for 120 second cycle length operation.

With implementation of this measure, the intersection would continue to operate at LOS F during both the AM and PM peak hours. However, average intersection delays during both peak hours would be reduced to a level less than reported for the cumulative baseline (without project) scenario. Thus, this mitigation would reduce the traffic impact to less-than-significant levels but would potentially result in significant impacts to pedestrians. Pedestrians would experience increased delays due to the 120-second cycle length, and pedestrian crossing distances would increase following installation of additional turn lanes on Decoto Road. This would be inconsistent with the City's General Plan policies promoting pedestrian travel and inconsistent with the vision for a walkable environment in the area around the Intermodal Station. Therefore, given the incompatible nature of these improvements with respect to the City's vision for the intermodal development, this mitigation is considered infeasible.

The following feasible measure would partially address, but not fully mitigate the delays at the Decoto Road/11th Street intersection while not adversely impacting pedestrian movements in the area.

Mitigation Measure TRA-5: Roadway Improvements for Decoto Road/11th Street Intersection (same as above under Impact TRA-5)

Extend the length of the southbound left-turn pocket on Decoto Road (approaching 11th Street), relocating the Decoto Road median and eliminating the northbound left-turn pocket from Decoto Road to westbound 10th; and install a northbound right-turn lane on Decoto Road, approaching Cheeves Way. The project will be required to pay its fair share similar to the Avalon Bay and Mid-Peninsula Housing projects.

However, even with this mitigation, the project would have a considerable contribution to a significant cumulative traffic impact at Decoto Road/11th Street Avenue.

Impact TRA-12: Degradation of LOS on CMP/MTS Roadways as a Result of Project-Generated Traffic under Future Cumulative Conditions

Based on the CMA analysis, the Project would contribute increases in traffic congestion on CMP and MTS roadways in 2015 and 2030 (refer to Appendix A of the traffic impact study, which is presented in its entirety in Appendix I of this EIR; Fehr and Peers 2010). However, the Project would not cause a CMP or MTS roadway segment to degrade from LOS E or better to LOS F. The Project also would not increase the v/c ratio by more than 3 percent for roadway segments that would operate at LOS F without the Project. Therefore, Project impacts on regional arterials and freeway segments under future cumulative conditions are less than significant. No mitigation measures are required.

Impact TRA-13: Potential Decrease in Rail Safety

The Proposed Project will be located between the Niles Subdivision and Oakland Subdivision railways with active passenger and freight operations. In addition, the project will be located near the BART alignment. The project will also generate vehicle and pedestrian/bicycle traffic that will cross the Niles and Oakland railways along Decoto Road.

There is very limited local freight rail traffic on the Oakland Subdivision at present. However, as described in Table 4-1 in Chapter 4.0, there are plans to consolidate Capitol Corridor and Dumbarton Rail Corridor passenger rail service on the Oakland Subdivision in the future as well as potential diversion of additional freight service to the Niles Subdivision. Thus, the future cumulative condition includes passenger and freight rail service along these two railway lines in proximity to the Proposed Project.

Outside of the Union City BART Station, the BART alignment is fenced to prevent unauthorized ingress. In the Union City BART Station, signage and

access are controlled to provide for passenger safety. BART is grade-separated at Decoto Road. Thus, the project will not increase safety risks relative to BART.

At present, there is no fence along the northern side of the Oakland Subdivision or the southern side of the Niles Subdivision to prevent unauthorized access to the active railway line from the Proposed Project. The Design Guidelines (see Appendix C) include an 8-foot tubular steel fence north of Cheeves Way that will prevent egress from the project site to the Niles Subdivision. The project does not include any fencing improvements along the Oakland Subdivision because the project is not directly adjacent to this railway line. Potential uncontrolled ingress from residents and employees at the Proposed Project is considered a potentially significant impact that can be reduced to a less-than-significant level through Mitigation Measure TRA-13 below.

Along Decoto Road, the two railway crossings have street signage, signals, pavement markings, barrier gates, and raised medians (to prevent vehicles from going around the gates). Decoto Road has street lighting and sidewalks at both crossings. The Proposed Project will increase the volume of vehicle and pedestrian/bicycle traffic along Decoto Road at these crossings. As these rail crossings are well marked, located in well lit areas, and the presence of rail traffic will be an obvious feature to the new residents and employees, the increase in vehicle and pedestrian traffic along Decoto Road is not considered to be a significant decrease in rail safety at this location.

However, drivers along westbound 11th Street and westbound Cheeves Way do not currently have any signage on these streets indicating that railway crossings are present on Decoto Road. This is considered a potentially significant that can be reduced to a less than significant level through Mitigation Measure TRA-13 below.

Although the presence of railways will be a readily apparent feature to project residents and employees, the provision of education information is also recommended in Mitigation Measure TRA-13 as well. With the implementation of Mitigation Measure TRA-13, this potential impact would be mitigated to a less-than-significant level.

Mitigation Measure TRA-13 – Fence, Signage, and Rail Safety Education

The City, in cooperation with the Applicant, Capitol Corridor, Union Pacific, and BART shall require the implementation of the following:

- Fencing, wall or other suitable barrier shall be placed adjacent to the northern edge of the Oakland Subdivision between Decoto Road and the ACWD Line M facility with exception of the areas of the Intermodal Station. Fencing or other suitable barriers shall be of design and sufficient height to substantially deter ingress into the railway right of way. This improvement shall be required prior to increased passenger rail service along the Oakland Subdivision (e.g. Capitol Corridor and Dumbarton Rail Corridor service).

- Signage (in accordance with the Manual on Uniform Traffic Control Devices) shall be added to westbound 11th street indicating that the road ahead (Decoto Road) has railway crossings in both north and southbound directions. This improvement shall be required prior to occupancy of the Proposed Project.
- Signage shall be added to westbound Cheeves Way indicating that the road ahead (Decoto Road) has railway crossing in the northbound direction. This improvement shall be required prior to occupancy of the Proposed Project.
- Basic rail safety information packets shall be provided to residents and commercial users of the Proposed Project making them aware of the basic precautionary steps they can take to minimize risks when crossing the local railroads on Decoto Road.

Cumulative Impacts

The Proposed Project would contribute considerably to significant cumulative traffic impacts at the Decoto/11th Street intersection as described above. A mitigation measure (see Mitigation Measure TRA-5) has been added to the project but impacts will still remain significant. No additional improvements could feasibly be implemented because they would be inconsistent with the pedestrian-oriented environment envisioned for the Union City Intermodal Station and the City lacks suitable right-of-way to accommodate them. Therefore, traffic impacts at this intersection would remain significant and unavoidable.

Potential cumulative impacts to rail safety have been described above due to existing rail service and proposed changes in rail service and the Proposed Project bringing new residents and employees into the vicinity of active railway lines. However, due to current railway safety measures, project planned measures (e.g. barrier fencing along the Niles Subdivision), and proposed mitigation (see Mitigation Measure TRA-13), the project's contribution to the cumulative impact can be mitigated to a less than considerable level.

All other project contributions to cumulative transportation and circulation impacts are less than considerable or mitigable to a less than considerable for the reasons disclosed above in the project analysis.